



PUBLIC DOCUMENTS

Temporary Use Permit F-01-25

Application



Application Form

Temporary Use Permit

Applicants are advised to consult with Planning Staff before submitting an application. Applications can be submitted by mail, in person at the RDBN office, or emailed to planning@rdbn.bc.ca.

1. APPLICANT

Property Owner(s):

Name(s): Albert Smedley

Company Name: Valley Lime Ltd.

Mailing Address: PO Box 380 Vanderhoof, BC V0J 3A0

Phone (Home): _____

Phone (Cell): _____

E-mail: _____

2. PROPERTY OWNER

Applicant/Agent (if you are an agent acting on behalf of a property owner please fill out this section and have the property owner complete section 3).

Name: Tracey Martin

Company Name: DWB Consulting Services Ltd.

Mailing Address: 1579 – 9th Avenue Prince George BC V2L 3R8

Phone (Home): _____

Phone (Cell): _____

Email: tmartin@dwiconsulting.ca

3. AGENT AUTHORIZATION

If the applicant is not the sole registered owner of the subject property, ALL owners of the subject property must sign the application below, or provide a signed letter, authorizing the applicant to act as agent on their behalf in regard to the application.

As owner(s) of the land described in this application, I/we authorize (please print) Tracey Martin to act as Applicant, and as our agent in this application.

Albert Smedley

Owner Name (print)

Signature

May 21 2025

Date

Owner Name (print)

Signature

Date

Owner Name (print)

Signature

Date

4. PROPERTY INFORMATION

Legal Description(s) of the land which is the subject of this Application (subject property):

License of Occupation No. 707218, covering PART OF BLOCK A, OF W1/2, DISTRICT LOT 5415 TOGETHER WITH PART OF DISTRICT LOT 5415, CARIBOO DISTRICT

Civic Address (House No., Street Name): N/A

Parcel Identifier (PID): N/A

Property Size(s): 11.3 ha (Hectares/Acres)

Existing Land Use:

(Describe all current uses that occur on the land under application, including a list of buildings and the use of each building.)

An inactive limestone quarry of 0.8 ha (from historical operations by Valley Lime) is currently located within the subject property. No buildings or structures are present on the subject property. Disturbances within the subject property include the existing quarry, a mine haul road, timber harvesting, old machine access trails, small excavations, and piles of overburden material.

Other than these disturbances, the subject property is forested and contains a limestone outcrop as its highest point. Access to the the subject property is via an existing road which runs 830 m south from Sackner Pit Road to the subject property.

Detailed land use information for the subject property (Permitted Mine Area) and access (Mine Access Road) are provided in the Quarry Management Plan, the Mine Access Road Management Plan and site plan drawings included with this application.

5. PROPOSED TEMPORARY USE

Reason for Application:

Describe the proposed temporary use in detail, including the following:

- The length of time the use is expected to occur.
- The activities proposed to occur on the property.
- Any buildings or structures proposed on the property.

Please also discuss why you consider the proposed development to be appropriate for the land under application.

If more space is needed use page 4 or attach separate pages to the application, or a letter if necessary.

A temporary use permit is required for 5 years to allow for the processing of limestone rock extracted within a the quarry owned by Valley Lime Ltd.

The property on which the quarry will be located is rural and is zoned Rural Resource (RR1). Aggregate processing is not permitted on properties zoned RR1, therefore, a Temporary Use Permit or rezoning is required to allow for aggregate processing at the quarry. Given the short length of planned quarry operation (5 years) and the reclamation land use objective (forestry), Valley Lime Ltd. is applying for a temporary use permit rather at this time.

The Mines Act Permit for the quarry allows for a total disturbance area of 5.25 ha, which encompasses the mine area (4.0 ha), processing area/ Infrastructure area (0.8 ha), access modifications (0.4 ha) and a settling pond (0.05 ha), if required. The processing/infrastructure area includes: staging crushing, screening, stockpiles and an office. No aggregate washing is allowed under the permit. No permanent infrastructure, buildings or other facilities are anticipated to be required during operation of the limestone quarry. An ATCO trailer will be utilized as an office and first aid station. Crushing, screening, weigh scale and material stockpiling will be limited to the staging and processing area. Existing roads will be upgraded and utilized to access the quarry area. Additional information on the quarry development, operation and reclamation are provided in the Quarry Management Plan and site plan drawings included with this application. The Mine Access Road Management Plan and site plan drawings included with this application provide additional information on access road upgrades, usage and reclamation.

6. APPLICATION FEES

An application fee as set out in Schedule A to the Regional District of Bulkley-Nechako Development Procedures Bylaw No. 1898, 2020 must accompany this application. An application is not considered complete and cannot be processed until the required application fee and information has been received by the Regional District.

Fees can be paid in the following ways:

- Cheques payable to the Regional District of Bulkley-Nechako
- Debit card or cash payments can be made at the RDBN office, 37 3rd Avenue, Burns Lake, BC.
- ETransfer to pay@rdbn.bc.ca (Include in message box what you are paying for)
- Credit card through [Option Pay](#) on the RDBN Webpage (fees will apply)

The following fees are required: Check the box that applies to your application

☒ Temporary Use Permit \$700

*Please note that the fee for an application to legalize an existing bylaw contravention is increased by an additional 50%.

7. SIGN NOTIFICATION REQUIREMENTS

Certain applications require that a sign be posted on the property to advise the community of the application. The sign can be provided by the property owner, or it can be rented from the Regional District of Bulkley-Nechako office (37-3rd Ave, Burns Lake) for a fee of \$25 plus a security deposit of \$75. The \$100 fee and deposit can be included with your application fee.

Do you wish to rent signage? ☐ Not applicable (to be confirmed by Planning Department)

☒ Yes, I will pay the sign fee now

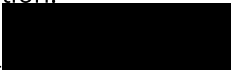
☐ No, I will provide my own signage

8. FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Personal information requested on this form is collected under the *Freedom of Information and Protection of Privacy Act* section 26(c) and will be used for the purpose of processing your application. Any information relating to the use and development of the land provided to the RDBN for consideration in relation to the application may be made available for review by any member of the public. If you have any questions about the collection and use of this information, please contact the RDBN Information and Privacy Coordinator at 1-800-320-3339.

9. DECLARATION

I, the undersigned, hereby declare that the attached information, provided with respect to this application is a true statement of facts, and authorize RDBN staff to conduct site inspections of the subject property for the purpose of confirming information submitted as part of this application, and for the purpose of processing this application.

 2025.05.22 12:14:27
-07'00'

Owner(s)/Agent Signature

Date

Owner(s)

Date

Owner(s)

Date

***To ensure your application is complete and that all items have been included with your application, see page 3 of the Temporary Use Permit brochure for the application checklist.**



DWB Consulting Services Ltd.

Valley Lime Ltd.

QUARRY MANAGEMENT PLAN



Prepared for: Valley Lime Ltd.

Attn: Albert Smedley
PO Box 380 Vanderhoof, BC
V0J 3A0

Prepared by: DWB Consulting Service Ltd.

Prince George Division
1579 – 9th Avenue Prince George BC V2L 3R8
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Date: 21.06.2024 | DWB file: 21556-164 PB | Revision: 4



Signature Page

DWB Consulting Services Ltd. is pleased to submit this report for your review. This report has been prepared using sound technical and professional judgement, based on our knowledge and experience, applicable regulatory framework, industry best management practices, and current understanding of project conditions, design, and project setting.

REPORT TITLE: Valley Lime Ltd. – Quarry Management Plan

PREPARED FOR: Valley Lime Ltd.

REVISION: 3

WRITTEN BY:

Kaila Ritchie, RPBio, PBIol
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REVIEWED BY:

Tracey Martin, PAg

REVISION HISTORY			
DATE	VERSION	REVIEW TYPE ¹	REVIEWED BY (NAME, COMPANY)
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11.12.2023	3	PROFESSIONAL	ALLAN CARSON, DWB
03.11.2024	3	PROFESSIONAL	LOUISA OUKIL, DWB
03.04.2024	3	PROFESSIONAL	TRACEY MARTIN, DWB
08.04.2024	3	PROFESSIONAL/EDITORIAL	ALEX JANZEN, DWB
17.04.2024	3	PROFESSIONAL	TRACEY MARTIN, DWB

¹ Editorial Review: Reviewed for formatting, grammar, spelling, etc.

Professional Review: Reviewed for content and professional signoff

Client Review: Reviewed by client

Regulatory Review: Reviewed by regulatory agency (i.e. DFO) if necessary

Peer Review: Reviewed for content and errors by peer

Disclaimer

This report was prepared and rendered solely for use by the client. By using this report, the client accepts this disclaimer in full. No person or party may utilize or rely on this document for any other purpose without written consent and approval from DWB Consulting Services Ltd (DWB). The information and recommendations presented in this report were based on the diligent review of available environmental review documents, including applicable permits, and available background environmental information using accepted professional practices and standards.

We do not represent, warrant, undertake or guarantee:

- That all project environmental-related information has been received.
- That regulations and standards of practices shall remain constant through the duration of the project.
- That the use of guidance in the report will lead to any particular outcome or result; or, in particular,
- That by using the guidance in the report, the client will be approved by the Province of BC for the applied works.

KEY CONTACTS

CONTACT	PHONE/EMAIL	ROLE/COMPANY
Albert Smedley	250-596-5633 (o) 250-567-0353 (m) asmedley@telus.net	President / Mine Manager / Supervisor

EMERGENCY CONTACTS

CONTACT	PHONE	CONTACT FOR:
Department of Fisheries and Oceans Canada (DFO)	1-800-465-4336	Emergencies pertaining to fisheries resources
Emergency Management BC	1-800-663-3456	Reportable Spills
BC Environment	1-800-663-7867	Provincial directory for general enquiries

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1.0 INTRODUCTION

Valley Lime Ltd. (Valley Lime) is proposing to mine and process limestone within the Cariboo District in the Omineca Region of British Columbia, east of Vanderhoof (the “Mine”). The Proposed Permitted Mine Area (PMA) is 11.3 ha and encompasses the new proposed quarry area (4.0 ha), and an Staging Area (crusher, screening, stockpiles, office; 0.8 ha). An existing quarry (from historical operations by Valley Lime) of 0.8 ha is located centrally within the proposed quarry area. The Mine area will be located within existing mineral claims 1096074 and 374380, both owned by Valley Lime. Valley Lime was issued a mines permit (Q-10-5) in 1984 but no recent Notice of Work (NoW) applications have been submitted.

DWB Consulting Services Ltd. (DWB) was retained by Valley Lime to prepare this Management Plan (MP) to provide guidance during development and operations and support the NoW submission to the Ministry of Energy, Mines, and Low Carbon Innovation (MEMLI) and the License of Occupation (LOO) submission to the Ministry of Water, Land and Resource Stewardship. The MP may be used to support other regulatory submissions required during development and operations as summarized in Section 1.3. This MP includes an environmental overview assessment (EOA) identifying sensitive environmental receptors that have potential to be impacted by development activities, including water features, fish presence, wildlife, and vegetation. The MP also includes measures to mitigate potential adverse effects due to the Mine including:

- Site Management;
- Environmental Monitoring;
- Erosion and Sediment Control;
- Reclamation;
- Water Management;
- Metal Leaching and Acid Rock Drainage;
- Wildlife Management;
- Invasive Plant Management;
- Heritage Resource Management Plan with Archaeological Chance Find Procedures;
- Waste Management & Contaminated Sites Management; and
- Spill Prevention and Response.

An additional Management Plan (DWB, 2024a) for the mine access road has also been developed for Valley Lime Ltd.

1.1 MINE SCOPE

Proposed activities for the Mine include:

- Remove and stockpile topsoil and overburden;
- Grading and vegetation clearing for processing areas (i.e., crushing, sorting, stockpiling) and mine haul road upgrade;
- Establish temporary facilities (i.e., main office, portable toilets, scale);
- Blasting, mineral extraction and processing; and
- Reclamation activities.

1.2 MINE LOCATION

The Mine is located within the Omineca Region and is approximately 20 km east of Vanderhoof, BC at 10U 451116 m E, 5982797 m N. The site can be accessed from Vanderhoof by taking Burrard Avenue north, turning right on Northside Road and travelling approximately 700 m to Sackner Road. Travel approximately 12.6 km along Sackner Road to Sackner Pit Road on the left. Travel along Sackner Pit Road for approximately 5.0 km to an Unnamed Road on the right. The Unnamed Road will hereby be referred to as the mine access road. Follow the mine access road for approximately 830 m to the mine haul road leading to the Mine. Refer to Figure 1 for an overview map of the Mine location and Appendix A for the Location Map (Drawing No. 21556-164-01) prepared by DWB (DWB, 2024b).

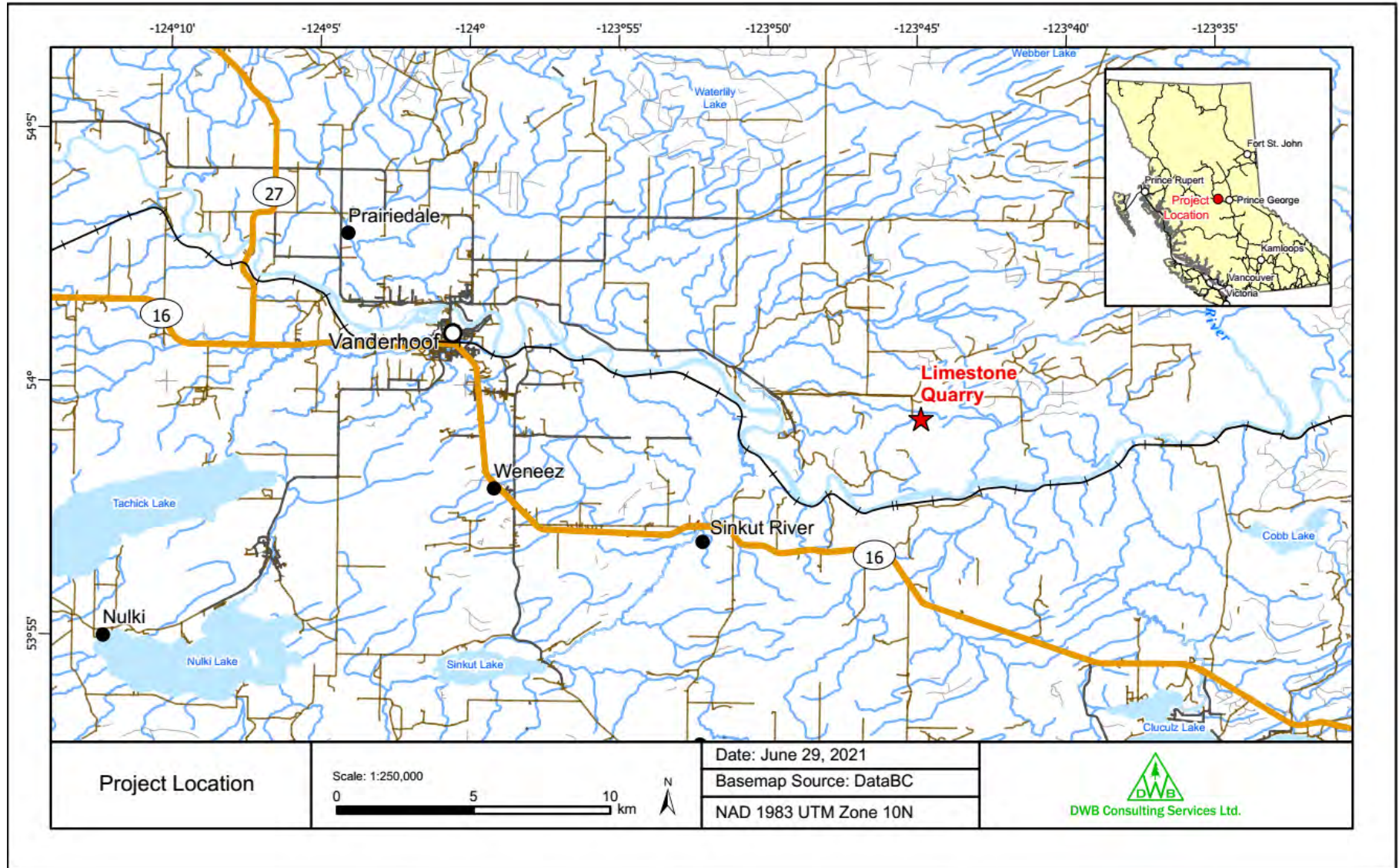


Figure 1. Overview Map of the Valley Lime Quarry.

1.3 REGULATORY APPROVALS

DWB will submit the following applications on Valley Lime's behalf:

- License of Occupation (LOO) for Aggregates & Quarry Materials – Construction Stone.
- Notice of Work Application and associated Design Drawings for the Mine to obtain a *Mines Act* Permit for Quarry: Industrial Mineral from MEMLI.
- Occupant License to Cut (OLTC) from the Ministry of Forests, for timber harvesting within the PMA.
- License of Occupation (LOO) for use and upgrading of the mine access road located outside the PMA.
- Temporary Use Permit and/or Rezoning from the Bulkley Nechako Regional District (BNRD) for processing gravel at the quarry.
- Transportation and Utility (TU) approval from the Agricultural Land Commission (ALC) for mine access road use within the Agricultural Land Reserve (ALR).
- Road Use Agreement with adjacent landowner where the mine access road is located on private land. A signed agreement was reached on April 5, 2024.

Additional permits/agreements required include:

- *Water Sustainability Act* (WSA) Notification of Authorized Changes for crossing structure installation at stream crossing on mine haul road during development.
- WSA Notification of Authorized Changes for crossing structure installation at stream crossing on mine haul road during reclamation.
- WSA Notification of Authorized Changes for crossing structure maintenance at stream crossing on mine access road during development.
- WSA Notification of Authorized Changes for crossing structure removal from stream crossing on mine access road during removal for reclamation.

1.4 ENVIRONMENTAL LEGISLATION AND REGULATIONS

The Mine will adhere to all applicable federal and provincial legislation and regulations including but not limited to:

- *Migratory Birds Convention Act* (MBCA);
- *Species at Risk Act* (SARA);
- *Forest and Range Practice Act* (FRPA);
- *Heritage Conservation Act* (HCA);
- *Water Sustainability Act* (WSA) and Regulation;
- *Lands Act*;
- *Mines Act*;
- *Wildlife Act*;
- *Transportation of Dangerous Goods Act* (TDGA) and Regulation;
- Occupational Health and Safety (OHS) Regulation;
- *Environmental Management Act*; and
- *Workers Compensation Act*.

1.5 ROLES AND RESPONSIBILITIES

Valley Lime and the Environmental Manager shall ensure that effective and clear lines of communication are firmly established at the beginning of the Mine and continue for the duration. Key Mine roles and their responsibilities are outlined below. Feedback mechanisms are incorporated to ensure that this MP will remain adaptive and improve according to additional information received by Valley Lime. Workers shall be notified of any revisions to this MP via debriefing meetings.

Mine Manager:

- Has the ultimate responsibility for the mine site.
- Provides manpower, equipment, and other assistance to ensure the protection of the environment.

Environmental Manager:

- Ensures compliance with all regulations, legislation, guidelines, permits and policies.
- Provides expertise for all decisions regarding the protection of the environment.
- Ensures appropriate monitoring and inspections are performed, as needed.

Environmental Monitor:

- Guides compliance with all regulations, legislation, guidelines, permits and policies.
- Conducts monitoring and inspections, as needed.
- May act as a liaison between the mine staff and the Environmental Manager.

Supervisor in Charge:

- Oversees day-to-day operations on Site.

Communication between the Mine Manager, Supervisor in Charge, Environmental Manager will be ongoing as potential environmental issues arise. Refer to Section 5.0 for further details.

2.0 ENVIRONMENTAL SETTING

To identify environmental features that have the potential to be impacted by the Mine, a desktop assessment was conducted for the existing quarry area. As the expansion boundaries had not been defined at time of the assessment, the search was extended to include the Localized Area (LA) defined as within a 1 km radius from the proposed quarry. The Regional Area (RA) extends 5 km from the quarry to encompass most environmental features that may potentially be influenced by the LA and existing quarry study areas, such as nearby waterbodies.

2.1 METHODOLOGY

A desktop assessment was conducted to identify any documented environmental resources within the existing quarry, LA, and RA, that could trigger regulatory requirements. A search of provincial databases was completed including:

- Habitat Wizard;
- iMapBC;
- Groundwater Wells and Aquifers;
- Explore by Location; and
- BC Conservation Data Centre.

A field assessment was conducted on September 16, 2022 by a crew of two including a professional biologist aided by an environmental technician. The assessment area included the existing quarry area, existing mine haul road that travels east-west towards the quarry, the proposed expansion area, proposed staging area, location of the two TRIM features identified during the desktop assessment, and 200 m of the mine access road that travels north-south leading to the mine haul road. The crew assessed the area for general vegetation types, wildlife, wildlife signs and habitat (dens, tracks, scat, etc.), water features, species-at-risk, and surveyed for any environmental features identified during the desktop assessment.

2.2 AQUATIC RESOURCES

2.2.1 Lakes

No lakes have been documented within the existing quarry area while several unnamed lakes have been identified within the LA. Based on ortho-imagery (Province of BC, 2024b), the unnamed water features within the LA observed west and south of the existing quarry may be wetland features as summarized in Section 2.2.3.

Several unnamed lakes and one named lake, Millard Lake (WSC:182-049000), have been identified within the RA. There is no documentation of fish presence within these features. Although no fish information is provided for these lakes, they are presumed to be fish-bearing until confirmed as otherwise, or presumed to have direct connectivity to fish-bearing streams and lakes in the RA.

2.2.2 Streams

According to a search of Habitat Wizard (Province of BC, 2024), there are two unnamed streams within the LA, both of which cross access roads for the Mine (Province of BC, 2022a, Province of BC, 2024).

The desktop review demonstrated the unnamed stream (Watershed code [WSC]:100-567134-213923-606728) to the west of the proposed quarry flows southwest through the processing area and across the mine haul road to the confluence with an unnamed stream (Watershed code [WSC]: 180-215400) approximately 2.0 km downstream. There are currently no fish species identified within these two unnamed streams (WSC: 100-567134-213923-606728 and 180-215400) located west of the PMA (Province of BC, 2024a). The desktop review demonstrated that the second unnamed stream (WSC: 100-567134-228865-686974) located north of the PMA flows to the west across the mine access road and confluences with Leona Creek (WSC: 180-227700) 6.7 km downstream. There are currently no fish species identified within the unnamed stream (WSC: 100-567134-228865-686974) and Leona Creek (WSC: 180-227700). Fish have not been documented in either stream identified within the LA, however, the fish-bearing Nechako River (WSC: 180) approximately 2.3 km downstream (and within the RA) of the northern feature (Province of BC, 2024b).

During the site assessment on September 16, 2022, no watercourses were identified within the surveyed area and there was no evidence of the two unnamed streams at the time of assessment. There were no signs of water, scour, channel definition, or alluvium; the areas where TRIM features were mapped on Habitat Wizard were fully vegetated. However, there is potential for ephemeral drainages and pooling in these feature areas due to topography. A culvert was identified along the mine access road where the northern unnamed stream crossed. There was no indication of scour, alluvium, or channel definition at the culvert crossing. There was no culvert identified on the mine haul road where the south unnamed stream was mapped as crossing the road.

Although there were no watercourses identified during the field assessment, and there is potential for ephemeral flow through these features as a result of the surrounding topography, therefore WSA Notification of Authorized Change permits will be required for the installation of crossings during access road development and reclamation (Section 1.3). In addition, as stream features are designated Environmentally Sensitive Areas (ESAs), in accordance with Section 2.5, a pre-disturbance assessment and ESA delineation will be conducted by a QEP. A 15 m riparian buffer will remain surrounding the western Unnamed Stream located within the PMA. Vegetation will be retained, and no works are to be conducted within this riparian buffer.

2.2.3 Wetlands

No wetlands were identified within the existing quarry area during the desktop assessment. There were two water features that may be potentially classified as wetlands identified using ortho imagery within the LA; approximately 600 m east and 650 m southeast of the existing quarry (Province of BC, 2024b). Habitat Wizard (Province of BC, 2024b) shows TRIM from the feature east of the quarry, that drains west across the LA and eventually into an unnamed stream. This connectivity was not observed at the September 16, 2022 site visit as summarized in Section 2.2.2.

Wetlands contain a wide diversity of life and support plants and animals, including many species/communities at risk.

2.2.4 Aquifers

The Groundwater Well and Aquifer mapping database was consulted to identify any known aquifers in the vicinity of the Mine area. The PMA resides on the North Nechako Terrace Bedrock aquifer (Aquifer number: 650) (Province of BC, 2024e). Aquifer 650 is 679 km² and overlain with bedrock, glacio-fluvial deposits and then finer-grained glacio-lacustrine deposits. The aquifer is considered to have medium vulnerability due to the thickness of overlying clay or till. There are small pockets where the clay and till are absent, with only sand and gravel above the aquifer, creating areas of high vulnerability. There are no government monitoring wells for this aquifer and few groundwater wells, however, the general inference of groundwater flow is south towards the Nechako River (Hinnell et al., 2020).

2.3 WILDLIFE

No dens, nests, amphibians, or reptiles were detected during the field assessment. There is avian nesting potential within the forested and shrubby habitat along the access roads and open areas. Additionally, the existing quarry area has potential snake habitat due to the amount of rock fissures and crevices that may be used by snakes to over-winter. No snakes were observed during the site assessment on September 16, 2022; however, detection can vary considerably with weather and time of year.

Sign of moose, deer, and bear in the form of pellets and foraging logs, and game trails, were observed during the Site visit on September 16, 2022.

2.3.1 At-Risk Wildlife Species

Species listed as threatened or endangered and their respective critical habitat have federal protection under the SARA. Red, blue, and yellow listed species are categories which designate the conservation priority for species within BC.

A search of the BC Conservation Data Centre (BC CDC, iMap, 2022) was conducted for known occurrences within the existing quarry, LA, and RA. Only one species was identified within the RA, White Sturgeon

(Upper Fraser Population) (*Acipenser transmontanus* pop. 5), which is listed as Endangered and is documented within the Nechako River (Province of BC, 2024a; Province of BC, 2024b).

The RA is also located within the Nulki Grizzly Bear (*Ursus arctos*) Population Unit (GBPU) which has a high conservation rank (MOECCS, 2020). The Grizzly bear is a blue listed wildlife species in BC and is a listed as Special Concern under SARA (Government of Canada, 2024).

2.4 VEGETATION

The Mine area is located within the Sub-Boreal Spruce (SBS) zone, dry-warm subzone (dw), variant 3 (SBSdw3) (Province of BC, 2024a). The forest in the SBSdw3 zone is very diverse and comprise of a mixture of Lodgepole pine (*Pinus contorta*), Douglas-fir (*Pseudotsuga menziesii*), hybrid white spruce (*Picea engelmannii* x *glauca*) with Lodgepole pine and/or Douglas-fir dominating on drier sites and hybrid white spruce dominating on wetter sites (Delong et al., 1993). The forest undergrowth in this zone is characterized by a various shrubs and herbs and a well-developed moss layer. Common shrub species may include velvet-leaved blueberry (*Vaccinium myrtilloides*), saskatoon (*Amelanchier alnifolia*), birch-leaved spirea (*Spiraea betulifolia*), prickly rose (*Rosa acicularis*), and soopolallie (*Shepherdia canadensis*). The climate for the SBSdw3 zone is characterized as the warmest variant of all the SBS zones in the region.

Based on the site assessment on September 16, 2022, west of the existing quarry, the canopy was comprised primarily of mature aspen and spruce and immature alder, with an understory of prickly wild rose, bunchberry (*Cornus canadensis*), and false solomon's-seal (*Maianthemum racemosum*). Pine was also observed north of the mine access road. There was little to no topsoil on the limestone outcrop, minimizing vegetation cover to primarily grasses, shrubs, and immature aspen. Typically, the ground was lower in elevation and wetter, resulting in slightly different species composition south of the mine access road.

2.4.1 Invasive Plants

Invasive plant species designated as noxious are regulated under the BC *Weed Control Act* and must be controlled by all land occupiers. Invasive species previously identified within the RA are included in Table 1.

Table 1. Invasive plant species previously documented within the RA (Province of BC, 2024b; NWIPC, 2024).

Scientific Name	Common Name	Species Map Code	Noxious Province-wide (Y/N)	Regionally Noxious (Y/N)	NWIPC Classification within the Nechako IPMA List
<i>Cirsium arvense</i>	Canada thistle	CT	Y	N	Low Priority
<i>Matricaria perforata</i>	Scentless chamomile	SH	Y	N	Low Priority
<i>Tanacetum vulgare</i>	Common tansy	TC	N	Y	High Priority
<i>Hieracium pratense</i>	Yellow hawkweed	YH	N	N	Low Priority
<i>Hieracium praealtum</i>	Queen devil hawkweed	QH	N	N	Not listed
<i>Hieracium aurantiacum</i>	Orange Hawkweed	OH	N	Y	Low Priority
<i>Leucanthemum vulgare</i>	Oxeye daisy	OD	N	N	Low Priority
<i>Tragopogon dubius</i>	Western Goat's Beard	WG	N	N	Not listed

Although no invasive plant species have been previously documented within the LA (Province of BC, 2024), oxeye daisy (*Leucanthemum vulgare*) and yellow hawkweed (*Hieracium pratense*) were identified during the site assessment on September 16, 2022. The spread of these species, and any other noxious species

identified, should be minimized by initiating best management practices (BMPs) as outlined in Section 12.0.

2.4.2 At-Risk Plant Species

There were no previously documented occurrences of species at risk within the existing quarry, LA, or RA (Province of BC, 2024c). During the site assessment, a potential Douglas-fir - lodgepole pine / clad lichens (*Pseudotsuga menziesii* - *Pinus contorta* / *Cladonia spp.*) plant community was identified in a small localized area within the proposed quarry boundary. This was the only location where Douglas-fir was identified during the field assessment. This plant community is blue listed according to the BC Conservation Data Centre (Province of BC, 2024c). During the pre-disturbance assessment, presence of the blue-listed plant community will be confirmed. If present, the blue-listed plant community will be delineated as a no-work zone by a QEP (Section 2.5). Following the pre-disturbance assessment, the QEP will also work with the Mine Manager to have Best Management Practices (BMPs) implemented to protection of the blue-listed plant community (such as installation of equipment barriers or flagging of a vegetative buffer around the no-work zone).

2.5 ENVIRONMENTALLY SENSITIVE AREAS

Environmentally Sensitive Areas (ESAs) are areas requiring special management and attention to protect resources, habitat, or species. ESAs contribute to the retention and/or creation of wildlife habitat, soil stability, water retention or recharge, vegetative cover, and similar vital ecological functions. ESAs may require additional protection and/or mitigation measures. A pre-disturbance assessment of the PMA and mine access road footprint will be conducted by a Qualified Environmental Professional (QEP) to identify ESAs prior to mine development works commencing. In addition, a Mine Access Road Management Plan (DWB, 2024b) which includes management of ESAs specific to road development works has been developed. The following are considered ESAs within and bordering the Mine:

- Stream features as defined under the WSA;
- Rare plant and plant communities;
- Occurrence of federal or provincial species of concern (i.e., red and blue-listed species and ecosystems); and
- Active wildlife dens and/or nests.

All ESA's and required mitigation will be reported to the Environmental Manager and/or designate(s). All ESA's identified within, and adjacent, to the PMA will require delineation in the field by a QEP and appropriate buffers installed and/or additional mitigation implemented. Methods of delineation (e.g., spray paint, flagging) will be documented and made clearly visible to all workers and representatives on site. All crew members will be informed of any ESA's previously identified within the Site prior to commencement of works. Any changes in status of current ESAs, or any new ESAs found as designated by the QEP will be documented, delineated, and communicated to all working personnel on Site.

2.5.1 Vegetation Clearing (Bird Nesting) Window

The best management strategy to maintain legal compliance and conserve bird populations during industrial development is to schedule work activities outside of the peak breeding period for birds. If construction is proposed during the peak breeding period, active bird nest surveys are recommended to reduce the risk of incidental harm and disturbance. Active nest surveys should be conducted under the supervision of an Appropriately Qualified Professional (AQP).

The majority of birds, eggs, and active nests are protected from incidental disturbance and harm under the Canada *Migratory Birds Convention Act* (MBCA) and the *BC Wildlife Act* on all land tenures. A number of bird species also have protection under SARA, where additional prohibitions may apply to nests and breeding habitat. Nests belonging to a bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and osprey (*Pandion haliaetus*) are protected under the *BC Wildlife Act* year-round, regardless of occupancy¹; if one of these nests requires removal, authorization by the province will be required after the nest occupancy status has been determined. Nests belonging to 18 species, including pileated woodpecker (*Dryocopus pileatus*) and great blue heron (*Ardea Herodias*), are protected year-round under the MBCA regardless of occupancy, unless the nest has remained unoccupied for a predetermined period of time². Unoccupied nests protected year-round under the MBCA may only be removed after a notification has been submitted to the Registry for Abandoned Nests³, and only if certain conditions or authorizations apply.

To reduce the risk of encountering and disturbing breeding birds, clearing and grubbing activities will be conducted during the least-risk period for nesting birds and outside of the peak breeding period for birds in the region. According to Environment and Climate Change Canada (ECCC), the peak nesting season for birds in the region that the site falls within, zone A4, is April 21- August 19; this window is based on less than 5% of birds actively nesting in forest and open habitat. Therefore, the timing window for vegetation clearing to occur is from **August 20 to April 20** (ECCC, 2024).

2.5.2 Amphibian Window

The *BC Wildlife Act* stipulates that it is an offence to harm, harass, or kill wildlife including amphibians and all their life stages. An Amphibian Timing Window has not been developed for the Omineca Region; however, the most sensitive times for most amphibian species within the Province of BC are from **April – May**. If amphibians are discovered within the Site at the time of development, a QEP should be contacted to determine the appropriate actions given the species and the phase of the works. If amphibians will be impacted by development activities, a salvage under the authorization of a provincial permit will be required.

2.5.3 Grizzly Bear Timing Windows

Grizzly bears travel considerably to find seasonal foods, mates and denning sites as resource availability differs by landscape (Table 2; MFLNRO, 2014).

Table 2. Typical seasonal habitat feature use by grizzly bears (MFLNRO, 2014).

Season	Start	End	Feature/habitat type	Activity
Mid- to late winter	January	March	Den Site	Birthing
Spring	April (March – May)	June	Wetland meadows	Feeding on early vegetation (graminoids, roots)

¹ A nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron, and burrowing owl are protected year-round under the *BC Wildlife Act*, unless authorized under a *Wildlife Act* permit (*Wildlife Act*, RSBC 1996, c 488).

² Refer to the Schedule 1 of the *Migratory Bird Regulations* for a complete list of species protected year-round under the Canada *Migratory Birds Convention Act*: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-105/page-7.html#h-1348335>

³ Environment and Climate Change Canada: 2022. Registry for Abandoned Nests. Available at: <https://www.permis-permits.ec.gc.ca/en/AbandonedNests>

Season	Start	End	Feature/habitat type	Activity
Spring	April (March-May)	June	Shorelines / estuaries / floodplain forests	Feeding on early vegetation (graminoids, roots, bark, etc.)
Spring	April (March-May)	June	Avalanche chutes	Feeding on early vegetation (Indian hellebore, roots, etc.)
Spring	April	June	Various / calving grounds	Interior bears feed on winter-weakened—and later, calving—ungulates (interior bears)
Late spring / summer	late-April	June	Various (including, but not limited to, exposed ridges)	Breeding
Summer	mid-June	August	Various—food sources are dispersed across landscape	Feeding on berries, bark, insects, small mammals, ungulates, carrion, etc.
Summer	July	September	Vaccinium and soopalalie patches (young cutblocks and other areas with significant berry crops)	Feeding on berries
Fall	mid-August	October (November)	Spawning grounds of stream/river systems	Feeding on spawning salmonids
Early winter	October (November)	November (December)	Den sites	Implantation of fertilized eggs
Winter	October (November)	April (March-May)	Den sites	Winter aestivation (“hibernation”)

Generally, in the spring, grizzly bears follow the receding snowline and will spend time in avalanche tracks, meadow and wetland complexes, riparian areas and estuaries to feed on vegetation (Gyug et al., 2004). Throughout the summer months, interior bears will use subalpine parkland meadows extensively for digging corms, hunting and feeding on berries and vegetation (Gyug et al., 2004). Other important foraging features include dry southern exposed slopes and an array of vegetation complexes, including early-seral and old-growth forest stands that produce substantial berry crops (MFLNRO, 2014). In the winter months, grizzly bears retreat to dens typically dug out on steep slopes where snow accumulates, however, hollow trees or crevices may also be used or modified for denning. Den sites may occur on well-drained slopes at high elevations and are often on north-facing slopes (although dens have been confirmed on all aspects) (MFLNRO, 2014). Most dens are selected under the cover of tall shrubs (birch or willow) or trees, whose root systems support the ceilings (Gyug et al., 2004). As grizzly bears are most sensitive during the denning season general sensitive periods are from October to April; this window will vary depending on timing of seasonal changes (MOECCS, 2019).

2.6 LAND USE

2.6.1 General Land Use

The LA is located on Crown Range land which is part of the Cariboo District. Agriculture and forestry form the basis of the economy in the general area. Agricultural fields, grazing land, and retired, harvested cut blocks comprise the majority of the LA. The proposed PMA is on Untitled Crown land (Cariboo District Lot 5415) within two mineral claims, 1096074 and 374380 held by Valley Lime. The PMA is surrounded by private land to the west and untitled Crown land to the north, east and south.

Several Agricultural Land Reserve (ALR) polygons are located within the LA and RA. ALR land is provincially designated agricultural use areas where non-agricultural uses are restricted. Any activities within an ALR must be compliant with the *BC Agricultural Land Commission Act*. Valley Lime's mineral claim 1095074 and proposed mine access road extends into ALR. The MPA is located outside of the ALR, therefore, no Mine activities will impact the ALR and no ALR approvals are required for the Mine. A transportation and Utility (TU) approval from the Agricultural Land Commission (ALC) is required for mine access road development and industrial use (Section 1.3). The TU application will be submitted to the ALC. The road will be developed and maintained in accordance with the Mine Access Road Management Plan (DWB, 2024a) to minimize impacts to the road and to the adjacent ALR areas. Following reclamation of the mine, the mine access road will be decommissioned and reclaimed to meet the end land use objective as described in the Road Management Plan (DWB, 2024a). Any requirements outlined within an ALC approval will also be met.

The mine haul road runs east-west and is entirely on Crown land, within Valley Lime's mineral tenure, and within the PMA. The mine access road (830 m) which runs north-south from Sackner Pit Road to the mine haul road is located along the eastern boundary of NE ¼ DL 1106 (private) and Block A of W ½ DL 5415 (crown). A Road Use Agreement with the private land owner has been obtained for the 122 m of mine access road located on private land and a LOO will be applied for to obtain tenure over the mine access road located on crown land. Additional details on mine access road management are provided in the Mine Access Road Management Plan (DWB, 2024a).

2.6.2 Parks, Protected Areas, Heritage Resources, and Indigenous Nations

An Area of Interest Evaluation Summary Report was generated for the PMA using the Natural Resource Online Services (NROS) Explore by Location mapping database (Province of BC, 2024d). The PMA exists within the region represented by Nak'azdli Band and Saik'uz (Stoney Creek) First Nation. An Archaeological Data Request for the PMA was submitted on October 17, 2022. A response was received on March 6, 2023 from the Archaeology Branch of the MoF confirming that there are no known archaeological sites recorded on the subject property. The Archaeology Branch did not identify a need for archaeological study or Provincial heritage permits at the time of the request. Refer to Appendix B for archaeological chance find procedures.

The Stuart River - Lower Site Provincial Park is within the RA and approximately 1 km east of the LA boundary. No other protected areas were identified within the RA, LA, or PMA.

3.0 POTENTIAL ENVIRONMENTAL IMPACTS

The PMA will encompass 11.3 ha, which will include areas for the crusher/screening/stock piling/office (0.8 ha), soil and overburden stockpiles (areas accounted for within expansion and crusher site areas), and

proposed quarry area (4.0 ha). There are existing disturbances within the PMA, including the existing quarry, access road, timber harvesting, old machine access trails, and small excavations (presumably from exploration). The area to the west of the existing quarry is generally flatter, and slopes to the south-southwest. The existing quarry area (0.8 ha) with the limestone outcrop is the highest point and slopes to the east, north and south.

Extraction and processing of limestone material at the Mine is expected to occur for a period of 5 years, at which point the Mines permit may be amended and operations continue and/or expand. Upon Mine completion, the Mine will be reclaimed to the standards outlined in Section 7.0. Operational activities at the Mine that may have an environmental impact include:

- Clearing and grubbing (topsoil loss, admixing, increased erosion and sedimentation risks);
- Ground excavation, extraction, processing, and transport of material;
- Installation of temporary facilities and utilities (main office, portable toilets etc.);
- Reclamation (re-sloping of banks of excavation area, removal of temporary facilities and utilities, grading of disturbed areas, spreading of top soil, re-seeding, and revegetation of all disturbed areas);
- Re-fuelling equipment, fuel storage, and the presence of heavy equipment on site;
- Dust from roads and processing;
- Erosion from soil and overburden stockpiles; and
- Waste management.

4.0 SITE MANAGEMENT PLAN

4.1 SITE OPERATIONS

The proposed operations are anticipated to cover a total of 5 years. It is understood that if any material changes (i.e., expansions to the permitted excavation or depth) are required during the 5 years, that a new NoW Application would be required. A maximum of 99,995 tonnes of limestone will be extracted over 5 years (Table 3) from the existing quarry and the expansion area. Conventional construction equipment (Section 4.3) will be used for the operation of the mine, no largescale mining equipment will be present.

Table 3. Limestone to be extracted per annum over 5 years

Year	Tonnes to be extracted
1	19,999
2	19,999
3	19,999
4	19,999
5	19,999
5 Year Total:	99,995

Following the pre-disturbance assessment conducted by a QEP (Section 2.5), vegetation removal, and topsoil stockpiling will commence within the PMA and access roads. Vegetation removal will be conducted in accordance with Section 6.2.1 to minimize erosion and sediment inputs to ESAs. Two topsoil stockpiles will be located within the proposed quarry area. The mine haul road will be upgraded to a 9 m wide running surface to comply with the requirements of the Health, Safety and Reclamation Code for Mines in BC (MEM, 2022). Refer to drawing 21556-164-05 (DWB, 2024) located in Appendix A for a cross section

of the road. A cross drain will be installed where the road crosses the ephemeral stream; refer to Section 2.2.2 for information on required permits.

An exposed outcrop of limestone rock on the surface approximately 20 m in height will be drilled with a tracked drill rig and blast charges will be installed in the bore holes for limestone extraction. Limestone extraction will begin from the southwest extraction boundary advancing generally in a northeast direction. Following blasting, rock will be removed and transported to the crusher/screening area. The working face of the limestone outcrop will be benched with a conceptual configuration of 7 m high and 15 m wide, with 1H:2V (Horizontal to Vertical) slopes on the vertical faces. The quarry will be sloped to direct surface water flow into a conceptual storm water pond located within the southwest quadrant of the proposed quarry area. Refer to the cross sections shown on drawing 21556-164-05 (DWB, 2024) located in Appendix A.

Following crushing and screening, extracted limestone will be hauled off site using the mine haul road. The mine haul road will be predominately used for hauling traffic, and road use will be dependent on work schedules and material volumes (refer to Section 4.2.3 and the Traffic Management Plan in Appendix C for additional details). The mine haul road will only be used Monday to Friday, 7 am to 5 pm from April to November. As work schedules may be dependent on weather and other site factors, there may be breaks in development where there is no traffic on this road.

4.2 SCHEDULE

The Mine will be in operation Monday to Friday, 7 am to 5 pm from April to November (weather depending). Works will commence following permit approval and will only occur during the day. Refer to Section 5.3 for winter shutdown procedures.

4.2.1 Infrastructure and Facilities

No permanent infrastructure or facilities are anticipated to be required during the 5-year operation of the limestone quarry. Existing roads will be utilized to access the Mine area, however, have not been maintained and will require upgrades. An ATCO trailer will be utilized as a main office which will provide space for the management and first aid station, and will be located within the office/crusher/screening area (laydown area).

4.2.2 Laydown Area

Laydown and processing areas have been proposed (Appendix A) west of the quarry and adjacent the east-west access road. Crushing, screening, weigh scale and material stockpiling will be limited to this laydown area. The site office and portable toilet will also be located in this designated area. No stream was identified in this area during the site assessment, however, there is the potential for seasonal pooling, particularly south of the mine access road. If ESAs are encountered during Mine development, as defined in Section 0, a QEP will be contacted to determine whether appropriate modifications and mitigation (i.e., established buffers). Clearing and grubbing works will follow the procedures outlined in Section 4.6 and will adhere to the timing windows specified in Section 2.5.1. Waste management guidelines will be followed, as per Section 15.0.

4.2.3 Access

Access to the quarry is via Sacker Pit Road, an existing mine access road running north-south, and the mine haul road (Section 2.6.1). The mine haul road starts at the boundary of the PMA and is proposed to be upgraded to be widened to 9 m. This road will be used for access into the office/crusher/processing

areas, and into the proposed quarry boundary. Traffic for quarry staff, and general visitors will be on this road. Improvements to this road will include upgrades and/or maintenance to the existing stream crossing and ditch lines to ensure compliance with the WSA (Section 1.3 and 2.2).

A Traffic Management Plan has been established for the quarry and is enclosed in Appendix C.

4.2.4 Water, Utilities and Fuel

Power at the Mine will be provided from diesel generators. Fuel will be stored in tidy tanks on the back of pickup trucks and no fuel will be stored on site. Fuel storage and re-fueling of equipment will follow the Spill Prevention and Response Procedures outlined in Section 16.0.

Water will be acquired from a third party with a licensed water source, transported to the Mine and stored at the laydown area for dust control and processing, as required. At this time, it is not anticipated that Valley Lime will need to obtain their own Short Term Water Use Permit.

Potable water will be obtained from a licenced drinking water source and will be delivered to the site.

4.3 EQUIPMENT

A variety of conventional construction equipment will be utilized and present on site (Table 4).

Table 4. Equipment to be used during mining development and operations.

Equipment	Quantity	Size (tonne)
Crushing/Screening Plant	1	
Weigh Scale	1	
Crawler Dozer	1	30
Front-end Loader	1	35
Excavator	2	20
Haul Truck	1	40
Tracked Rock Drill	1	
Pickup	1	1
Generator	1	

Equipment will be maintained in good working condition and will only be re-fueled in the designated areas. Fuel storage and re-fueling of equipment will follow the Spill Prevention and Response Procedures outlined in Section 17.0.

4.4 MATERIAL AND SOIL STOCKPILES

Limestone stockpiles will be located within the crushing and processing site (Appendix A). Limestone stockpiles will be carefully managed for dust (Section 8.0).

Soil and overburden salvaged during development of the laydown area will be stockpiled separately (if practical). Soil and overburden salvaged during mine expansion will be stockpiled closer to the excavation pit to minimize the loss of soil material from transport. Depending on the amount of topsoil present (very little closer to the limestone outcrop), topsoil may be excavated and stockpiled with the overburden material (not separated). Soil and overburden stockpiles will be carefully managed to minimize erosion, as outlined in Section 6.0, and shall be kept free of invasive plant material (Section 12.0). Topsoil and overburden will be used to reclaim the Site (Section 7.0).

4.5 BLASTING

Blasting will be required for the extraction of limestone. Prior to blasting commencing, bird nest and denning surveys will be conducted in accordance with Section 2.5. The limestone will be drilled with a tracked drill rig and blast charges will be installed in the bore holes for limestone extraction. Blasting procedures will be followed in accordance with the Health, Safety and Reclamation Code for Mines in British Columbia (MEM, 2022) and the OHS Regulations. No explosives will be stored at the Mine. Explosives will be transported to the Mine, when required and in accordance with the TDGA and Regulation and the OHS Regulations. Handling of explosives will be conducted by experienced/trained personnel, under the supervision/authorization of a certified blaster. All personnel working on site during blasting operations will be aware of communication signals prior to and after a blast as outlined in the OHS Regulations.

4.6 CLEARING, GRUBBING AND GRADING

Vegetation clearing will be required for mine haul road expansion, staging area development, and quarry expansion.

Clearing shall extend only to the designated limits of construction and marked with flagging/staking on site. Outside of the proposed excavation area, efforts should be made to leave root masses intact to reduce disturbance and associated sediment mobilization to the stream, as well as to promote natural vegetation establishment following the works. Prior to commencing operations, marked limits will be inspected by the Environmental Monitor who may amend them if deemed necessary. Clearing and grubbing within 15 m of the unnamed streams for road development will be minimized and will only be conducted under the direct supervision of the Environmental Monitor.

In addition to those procedures stated above, the following general procedures concerning clearing and grubbing practices will be followed:

- Conduct bird nest and denning surveys prior to clearing and grubbing (Section 2.5).
- Machinery is to arrive on site in a clean condition and is to be maintained free of fluid leaks, invasive species, and noxious weeds.
- Clearing and grubbing will only occur under dry or frozen conditions, when practicable.
- All vegetation growing outside of the marked/designated area for clearing and grubbing will be protected and retained.
- Root systems of cleared vegetation shall not be removed except in the area of cuts, fills or actual road surface (i.e., no grubbing outside fill lines will be permitted). If vegetation is unnecessarily disturbed, the exposed soil will be immediately seeded and mulched to reduce the potential for erosion and sediment.
- Any materials generated by clearing or grubbing, will not be burned onsite.
- Stripping and road bed material will be stockpiled more than 30 m from the watercourse.
- Immediately following completion of clearing and grubbing, the Erosion and Sediment Control (ESC) Plan will be implemented as per Section **Error! Reference source not found.**
- Any noxious weeds and invasive plants found throughout clearing and grubbing works will be managed in accordance to BMPs addressed in Section 12.0**Error! Reference source not found.**
- Works will be completed in a timely manner to completion to limit erosion potential of disturbed soils.

5.0 ENVIRONMENTAL MONITORING PLAN

Environmental monitoring will be required at varying frequencies during works depending on the environmental risk of activities being undertaken. Full time environmental monitoring will be required during high-risk activities such as vegetation clearing and road upgrading works in and around streams, or works conducted in close proximity to active wildlife features that may be identified during pre-disturbance surveys.

In addition to the pre-disturbance survey (Section 2.6), the Environmental Manager will conduct a site visit prior to the commencement of operations to determine if additional mitigation measures are required to meet the conditions of the least-risk timing windows (Section 2.6) and any ESA's that are encountered on Site. During each year of quarry operations, the Environmental Manager or delegate will conduct an inspection of the quarry prior to remobilization in the spring, and demobilization prior to winter shutdown (Section 5.3). Additional site visits may be required during freshet to address any potential ESC issues or concerns. A QEP may be required to conduct additional surveys during quarry operations and inspections, as necessary.

The Environmental Manager will hold an environmental kick-off meeting with the Mine Manager and Site operation staff to ensure all personnel are aware of the guidelines and procedures in the MP before the start of the Mine. The Environmental Manager will assign an onsite designate to ensure the guidelines in the MP are maintained and that communication remains consistent when any issues or changes to the MP occur. The Mine Manager will be in regular communication with the Environmental Manager and may require additional site inspections should an environmental incident occur, or if the risk-level of the Mine increases.

Duties of the Environmental Manager or delegate during site inspections may include, but not necessarily be limited to:

- Completing nest/wildlife surveys prior to clearing vegetation.
- Completing incident reports in cases of non-compliances.
- Creating an inventory of spill kits, checking for leaking equipment and spill response management.
- Conducting water quality monitoring as required.
- Liaising with various third-party professionals (i.e., the Environmental Manager, Mine Manager, Site Supervisor).
- Overseeing restoration activities and site cleanup.
- Producing a Daily Environmental Monitoring Report that summarizes activities, monitoring conducted, any issues which arise (e.g., spill), environmental items of note (e.g., nearby wildlife sighting), and photos.

5.1 ENVIRONMENTAL INCIDENT REPORTING

All environmental incidents are required to be reported to the Environmental Manager and designate(s) on site. An environmental incident is defined as:

- An emergency;
- Any leakage, spill, or release of hazardous liquid or gas;
- All wildlife encounters;
- Actions that lead to the spread of noxious weeds;
- Actions other than what was included in a plan that requires environmental remediation; and

- Actions that result in an exceedance or non-compliance circumstance with applicable environmental regulations and/or permits.

5.2 WORK STOPPAGE

The Environmental Manager and/or designate(s) have the authority to suspend or alter work for the period deemed necessary as a result of an environmental emergency, unfavourable work conditions, or failure to comply with the MP. Work stoppage is often associated with periods of extreme weather conditions and may extend for several days.

5.3 WINTER SHUTDOWN

The following procedures will be implemented for the winter shutdown period:

- All waste, fuels, and chemicals will be transported offsite and disposed of at the appropriate facilities in accordance with the Waste Management Plan (Section 15.0). No hazardous waste materials shall remain at the Mine for the period of time that operations will not be occurring;
- Any equipment that has the potential to leak or cause a spill will be removed from the Mine for the period of time that operations will not be occurring;
- The portable toilet will be pumped out and transported by a licensed hauler for disposal at an approved facility;
- Any ESC measures that have been installed will be inspected for functionality and reinforced, if necessary (Section 6.0);
- Soil stockpiles will be seeded with a weed-free seed mix to prevent erosion and the propagation of invasive plant species (Section 7.0);
- A barrier (e.g., gate) will be installed to prevent access to the Mine and will be closed and locked during the winter shutdown period.

The Environmental Manager or designate(s) will conduct a thorough site inspection prior to the seasonal closure of the Site.

6.0 EROSION AND SEDIMENT CONTROL PLAN

This ESCP identifies environmentally acceptable construction practices for erosion prevention and sediment control to ensure that water quality parameters are maintained at all times throughout the Mine. The following ESC measures have been prepared for access construction, development of the quarry and limestone processing. This ESCP has been developed utilizing the *National Guide to Erosion and Sediment Control on Roadway Projects* (Transportation Association of Canada, 2005).

6.1 GENERAL ESC MEASURES

The general principles of ESC that will be followed, include:

- Retain existing vegetation, wherever possible;
- Re-vegetate/protect denuded areas and exposed soils;
- Direct runoff away from denuded areas;
- Minimize the length and steepness of slopes where possible;
- Minimize runoff velocities and erosive energy;
- Retain eroded sediments on site;

- Appropriate sediment control methods will be employed, where necessary, and may include placement of erosion control matting, spring berms, sediment fences, or other available products to reduce sediment mobilization. Corrective measures will be implemented promptly;
- No equipment will enter flowing water, if encountered on site;
- Seeding and mulching of exposed soils that are to be exposed for a period greater than 30 days.

6.2 PROCEDURAL BEST MANAGEMENT PRACTICES (BMPs)

Procedural BMPs are non-structural procedures that can reduce erosion and sediment transport during construction. Planning can reduce the risks and costs associated with erosion and sedimentation as per the National Transportation Association of Canada guide to erosion and sediment control (Fifield, 2004).

6.2.1 Scheduling and Sequencing

The Mine Manager shall schedule and sequence the works to prevent erosion and sediment control issues, including:

- Scheduling works to coincide with drier conditions to help minimize the risk of erosion, where possible;
- Implement all permanent ESC BMPs prior to the start of intrusive works;
- Limit high impact activities (e.g., grubbing and stripping) to dry conditions; and
- Minimize vegetation removal and ground disturbance during any period of the Work.

6.2.2 ESC Contingency Planning

Valley Lime shall plan for ESC contingency measures in the event of adverse weather conditions including the implementation of additional ESC measures and/or halting operations if heavy or persistent rainfall is encountered. Following an extreme weather event (defined as >25 mm precipitation within any 24-hour period), Valley Lime shall inspect ESC measures and perform maintenance/modifications as required.

6.2.2.1 ESC Contingency Supplies

Contingency supplies shall be available at the laydown location at all times. The contingency supplies shall be stored in a manner that will protect them from the elements that would degrade the quality or function. Contingency supplies may include the following items:

- Rolled Erosion Control Matting;
- Sediment Fencing;
- Straw bales (certified weed-free);
- Straw/Fibre Wattles; and
- Wood stakes.

6.3 SURFACE WATER MANAGEMENT

To manage surface water originating from precipitation events, snow melt, and watered drainages during the Mine, the following water management may be followed:

- Divert clean water around the site wherever practical to reduce the quantity of water that must be managed on site;
- Keep drainage areas small to avoid the installation of complex erosion control measures; and

- Install water bars where required upon completion to direct runoff away from access roads and other areas.

A pre-construction assessment is recommended to assess the area in wet conditions (i.e., spring), particularly where two TRIM features were mapped on provincial databases, but not observed in the fall of 2022. Should these areas seasonally hold water, avoidance of these areas is recommended. However, should avoidance not be possible, consultation with a QEP is recommended to identify additional mitigation measures (i.e., installation of vegetation and no-work buffers, the use of sediment fencing etc.).

6.3.1 Water Quality Monitoring

Water quality monitoring will be conducted should water flow be present during environmental site inspections. When water quality monitoring is required, the following parameters will be checked:

- Measurement of upstream and downstream turbidity using a portable turbidity meter capable of measuring nephelometric turbidity units (NTU) (Table 5).
- Measurement of pH, Electrical Conductivity (EC) and temperature using a hand-held probe. Differences in pH and EC between upstream and downstream can help indicate the presence of a spill, or other issues.

Water quality monitoring will be completed on the basis of the *British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture* (MOECCS, 2023; Table 5).

Table 5. BC Approved Water Quality Guidelines (MOECCS, 2023).

<u>Clear Water (background < 8 NTU)</u> Induced turbidity should not exceed background levels by more than 8 NTU during any 24-hour period (hourly sampling preferred). For sediment inputs that last between 24 hours and 30 days (daily sampling preferred) the mean turbidity should not exceed background by more than 2 NTU. <u>Turbid/High Flow (background > 8 NTU)</u> Induced turbidity should not exceed background levels by more than 5 NTU at any time when background turbidity is between 8 and 50 NTU. When background exceeds 50 NTU, turbidity should not be increased by more than 10% of the measured background level at any one time. The accepted pH range in freshwater is 6.5 - 9.0.

Measurements will be taken upstream (background), midstream, and downstream of the Mine area. Additional locations may be determined by the Environmental Manager or delegate. If turbidity levels are found to be above acceptable standards (Table 5), additional mitigation measures and/or temporary work suspensions may be required. Significant differences in turbidity between upstream (background) and downstream will be managed using the ESC plan (Section 6.4).

6.4 EROSION AND SEDIMENT CONTROL MEASURES

6.4.1 Laydown Area

The laydown area shall be contained using visible boundaries to prevent storage of materials beyond the accepted boundaries. Valley Lime shall install, inspect, and maintain applicable ESC measures (e.g., sediment fencing, stockpile covers) in accordance with BMPs outlined in this plan.

6.4.2 Spoil Materials/Stockpiles

Topsoil and overburden will not be stockpiled during periods of inclement weather when the risk of soil loss or soil erosion is greater. Spoil material may be temporarily stockpiled during reclamation activities. To prevent erodible material from entering the surrounding environment, Valley Lime shall:

- Not place temporary or permanent stockpiles within 30 m of any drainage or watercourse.
- Cover, stabilize or revegetate any soil stockpiles that are to remain in place for more than 30 days.
- Place sediment fencing and additional protective measures, as required, around stockpiles where the potential exists for surface erosion.

6.4.3 Sediment Fences

Sediment fences allow water to pond and sediment particles to settle. Valley Lime shall proactively install and maintain sediment fences where sheet flow run-off is expected, or is occurring, and shall not use them within drainage channels or ditches. It is anticipated that minimal use of sediment fencing will be required for protection of ephemeral drainages (should they be observed). Sediment fences are more likely to be utilized around stockpiles and, as needed, during inclement weather conditions. Materials should be available on site for unforeseen circumstances.

At the discretion of the Environmental Manager, Valley Lime shall proactively install sediment fences in the following locations/situations:

- Around soil or overburden stockpiles;
- Along any temporary access roads;
- At any location where sedimentation is of concern, especially areas directly adjacent to watercourses or drainages; and
- Prior to inclement weather, such as heavy melting snow or rain.

Special attention will be paid to the maintenance requirements of any sediment fence installed. Sediment fences will be periodically assessed for functionality. Any sediment fences at risk of failure will be replaced. Should sediment or debris accumulation exceed 30 cm in depth from the bottom of the fencing, the sediment/debris will be excavated and removed.

6.4.4 Straw/Fibre Wattles

Straw/Fibre wattles may be used as an alternative to sediment fencing. They must be installed as required based on site conditions, according to the manufacturer's instructions. The wattles can be installed to intercept sheet flow, and used as emergency or temporary ditch checks. When used to protect water bodies from sediment inputs, they may be used as a diversionary device to direct sediment-laden flow away from the water body.

Straw/fibre wattles shall consist of bundled straw or coconut fibre wrapped in open-weave photo-degradable plastic netting, or bio-degradable fibre netting anchored into the soil with stakes along slope contours as a grade break to reduce erosion potential and sediment transport. Specific attention shall be given to ensuring the fibre roll is installed in an excavated trench, generally $\frac{2}{3}$ of the depth of the roll diameter, to reduce channelling/undermining below the fibre roll. On steep slopes, additional anchors may be required on the downslope side of the fibre roll. Additionally, adjacent rolls shall tightly abut to ensure water does not flow between them. Typical installation details are provided in Appendix D.

6.4.5 Ditches

Ditches along access roads will be maintained throughout operations and as per permit conditions. To minimize erosion and down-cutting, ditches will be vegetated or armoured using rolled erosion control matting (RECM) or hard armoured with rock.

Valley Lime shall:

- Horizontally track exposed soil along ditch slopes;
- As required, use vegetated swales for grades less than 2 %, armour ditch lines with riprap or erosion blankets for grades exceeding 2 % and maintain sumps and ditch lines through excavation of sediment buildup; and
- Place sediment removed from ditch-lines or sumps in a stable location with temporary ESC measures in place.

7.0 RECLAMATION PLAN

Upon completion of the Mine, all disturbed areas, including the mine haul road, will be reclaimed in accordance with permit conditions and to the Health, Safety and Reclamation Code for Mines in British Columbia (MEM, 2022). The overall objective of reclamation will be to prevent the risk of sediment mobilization, restore vegetation to a self-sustaining state, and create appropriate habitat for local wildlife.

Short-term reclamation measures to be implemented as needed throughout operations may include:

- Seeding soil stockpiles stored at the Mine to reduce the risk of erosion and propagation of invasive plant species. Establishing sufficient vegetative ground cover will be the most effective way of minimizing erosion from wind or surface water. A regionally appropriate, weed-free mix will be used.

Long-term reclamation measures to be implemented at the end of the 5-year period will include:

- Removing all equipment, facilities, fuel, chemicals, and waste from the Mine;
- Grading the quarry floor for positive drainage to mitigate accumulation of ponded water that could inhibit revegetation;
- Grading and loosening compacted soils in the Laydown Area and stockpile areas, and along the mine haul road.
- Spreading stockpiled soils (topsoil and subsoil) onto disturbed areas of the pit where soil has been removed, including all of the Laydown Area, the mine haul road and the portion of the quarry expansion area that is suitable for reclamation. For example, the quarry benches are not proposed to be revegetated, which is acceptable according to the Health, Safety and Reclamation Code for Mines in BC (MEM, 2022).
 - Soil stockpiles will be inspected prior to use to ensure the piles are free of invasive weed species;
- Stockpiled soils will be spread onto areas to be reclaimed to a minimum depth of 30cm. Prior to reclamation, a soil survey will be completed at the Mine to determine the average soil depth within undisturbed areas. The QEP will use the average soil depth in undisturbed areas around the Mine, along with the minimum recommended depth, to determine the most appropriate soil depth to target for soil application during reclamation activities;

- Coarse woody debris may be used to stabilize slopes to prevent erosion until vegetation establishes. Rolled erosion control matting (RECM) may be used as a secondary option to stabilize slopes (Appendix D);
- Seeding (by hand or ATV) all exposed soil in the Laydown Area, where topsoil is applied to the quarry area;
- Replanting trees in the Laydown Area and where stockpiled soils will be applied in the quarry area, and on the mine haul road as per the Stocking Standards for the area (MoF, 2021). The total area where stockpiled soils will be spread, and planting will occur, will depend on the volume of soil available for reclamation. This reclamation plan does not include, or propose, importing topsoil or mineral soil for revegetation efforts.
- Posting appropriate signage of recently reclaimed areas to ensure personnel and heavy equipment do not disturb recently seeded areas;
- To improve success of germination, the planted areas may require watering during periods of dry weather during the first two growing seasons, and
- To prevent disturbance, treated areas should be clearly delineated and access to the Mine restricted by decommissioning and revegetating access roads.

7.1 SOIL MANAGEMENT

Best Management Practices (BMP)s for soil salvage, stockpiling and replacement, will be employed during the operation and reclamation of the Mine. During development and operation, all soil salvage, stockpiling and replacement activities will be completed under the direction and supervision of the QEP. These BMPs are based on those identified within the Reclamation and Environmental Protection Handbook for Sand Gravel and Quarry Operations in British Columbia (MOTH, MEMPR and NRC, 1995) and the BMPs outlined in the Agricultural Land Commission (ALC) Policy P-13 (ALC, 2013).

According to the BC Soil Information Finder Tool (BC Gov, 2023), the agricultural capacity ratings identified for Mine area are Class 5 to 7, which are considered poor soil quality with limitations for agricultural crops; specific limitations identified for this area include topography, stoniness and adverse climate conditions. In addition, the BC Soil Survey data provided by the BC Soil Information Finder Tool identifies the soil texture on the western portion of the Mine area as silty clay to silty loam clay and moderately well drained. Utilizing this information, it is anticipated that soils salvaged during the development and operation of the Mine are likely to be limited in both quality and quantity.

7.1.1 Soil Salvage

Due to the likelihood of limited soil resources at the Mine, it will be of considerable importance for the QEP to work closely with equipment operators at the Mine to develop the best approach to salvaging soil resources. During salvage operations, the following general soil handling procedures will be implemented:

- Prior to initiating salvage operations, an assessment should be conducted within the target area to identify whether any noxious weeds are present. If so, any occurrences should be appropriately treated prior to soil salvage operations;
- Prior to initiating salvage operations, all equipment involved in the operations should be cleaned and free of any large soil particles and/or soil debris accumulated from any off-site areas, or from other activities at the Mine (e.g., road construction) to reduce the chances of introducing invasive plant species to the salvaged soil;

- Where it is possible to distinguish between soil layers, topsoil, subsoil and any overburden will be salvaged and stored separately, and separation between piles shall be no less than 3 m;
- Topsoil will be salvaged using an excavator with a clean-out bucket or possibly a dozer; and
- Topsoil should be salvaged during non-frozen conditions.

7.1.2 Stockpiled Soil

Designated areas for stockpiling soil resources salvaged from the Mine have been identified in the Site Map (Drawing No. 21556-164-04 Rev D) in Appendix A (DWB, 2024b) and are located next to the office/crusher/screening area along the western perimeter of the Mine, and at two other locations on the perimeter of the Proposed Quarry Area. During stockpiling activities, the following general soil handling procedures will be implemented:

- Where possible, progressive reclamation (implemented throughout operations) will be completed. As additional phases of mining open up new areas, soil salvaged from the new phase will be placed directly onto previously mined areas (previous phase) for reclamation, eliminating the need for stockpiling;
- Salvaged materials will be stockpiled within the designated stockpile area where they will not be disturbed by extraction activities during the life of the quarry;
- Stockpiled soils will be established in a manner that they will not be disturbed and will not impede site drainage. Drainage from, onto, and around the stockpiles, will be controlled by ditches, drains or intercepts as required. Specifically, surface water runoff from uphill will need to be directed away from the stockpiled soils to prevent soil erosion and transport;
- Stockpiles will be limited in height (2 to 3 meters). Higher stockpiles must not exceed a 3H:1V slope (horizontal: vertical);
- Stockpiled soil will not be removed from the property without written permission from MEMLI. The stockpiles will be constructed in a manner that the surface is shaped for least resistance to the local wind conditions and that promotes positive drainage. The stockpile surface should be sloped in a manner that reduces opportunities for water puddling or ponding and water infiltration into the pile;
- When adding to the stockpile, soil material should be free dumped onto the stockpile and should not be manipulated any further until it is used once again during reclamation;
- Vegetation cover, or another suitable soil erosion control measure will be established/applied to the soil stockpiles to protect the stockpiled soil from wind or water erosion. Where newly salvaged soil is placed onto existing stockpiles for storage, these areas should be seeded with a grass seed mix (See Section 7.3.3) immediately following placement. Seeding will also prevent noxious weeds from colonizing the stockpiles;
- Once stockpiles are completed, ensure the appropriate information regarding the stockpile is recorded and keep records of stockpiled soil readily available and up to date. Information collected for stockpiled soils will include estimated volume, general soil texture, height/depth, revegetation implemented and estimated storage timeline. Also provide a detailed description of equipment used to handle soils, how they were handled, weather conditions during handling and any lessons learned.

7.1.3 Soil Replacement

Once operations at the quarry are completed, stockpiled soils, and any other suitable soil materials (if available), will be applied to target areas to establish a plant medium on the surface.

Recommended depths for soil replacement are provided in the (ALC) Policy P-13 (ALC, 2013), which includes 20 to 30cm of topsoil and 30cm of subsoil. However, the Mine is not located on agricultural land and soil depths within undisturbed soils at the Mine are likely to be much shallower. Therefore, the minimum depths targeted for soil replacement at the Mine will include (from surface to at depth):

- 30cm soil (topsoil/subsoil combined) or 15cm topsoil and 15cm subsoil (if stockpiled separately);
- Backfill/overburden (variable thickness).

Prior to reclamation, a soil survey will be completed at the Mine to determine the average soil depth within undisturbed areas. The QEP will use the average soil depth in undisturbed areas around the Mine, along with the minimum recommended depth of 30cm, to determine the most appropriate soil depth to target for soil application during reclamation activities;

During soil replacement activities, the following practices will be implemented:

- Prior to soil placement, complete any ground preparation of the target reclaim areas. Consider the following:
 - Any compacted surfaces should be de-compacted by ripping;
 - Inspect the area for the presence of any invasive plants (particularly for areas that have been left undisturbed for long periods). Treat any invasive plant occurrences (see vegetation management plan) should be completed prior to soil placement;
 - If any wildlife habitat features are prescribed for the Mine area (e.g., rock or Coarse woody debris piles), construct the feature prior to soil placement;
- Where possible, any stockpiled soils will be replaced in the reverse order from which they were removed;
- Soil materials will be end-dumped and then spread and leveled utilizing low ground pressure equipment, such as tracked bulldozers;
- Vehicles and equipment will be restricted to designated roads or routes, so that follow-up ripping and subsoiling (decompaction) activities can be limited to these specific areas, and will limit soil compaction at the Mine;
- Random, repeated running of equipment over leveled areas shall be minimized wherever possible. Soil placement should occur with no more than 1 to 2 passes of equipment over the soil following placement;
- During placement, designated personnel should work closely with equipment operator(s) to ensure target depths are achieved. As the soil material is placed, the depth should be frequently checked using a metal bar with measured increments. The designated personnel should continually communicate with the equipment operator on the measured depths and make adjustments where needed, and
- Once soil placement is completed, revegetation should immediately follow. If revegetation is delayed, monitor the surface conditions of the soil placement area between the time of placement and the planned time for revegetation. If soil compaction or surface crusting occurs prior to revegetation, decompact the surface prior to revegetation.

Subsoil placement:

- Subsoil will be replaced in one lift;
- Once the subsoil is in place, the subsoil surface will be roughened as required, to hold topsoil in place following initial placement, and
- Should compaction occur, the affected areas will be ripped to the full depth of the replaced soil and then cross ripped perpendicular to the first direction.

Topsoil placement:

- Coarse fragments will be limited in the topsoil layer to less than 5%. Prior to replacement of the topsoil, if required, soils will be screened separately to remove coarse fragments. If the percentage of the coarse fragment content by volume is less than 5%, screening will not be necessary, and will be confirmed by a QEP;
- Should screening of the topsoil be required, it will be carried out under appropriate soil moisture conditions (not during rainfall events or periods where the soils are saturated), and
- Topsoil will be uniformly spread over the target reclaim areas.

7.2 BACKFILL PROCEDURES

During reclamation, no external fill is planned to be placed and spread throughout the pit area. However, any unused stockpile fill materials such as reject material may be pushed onto the pit floor and spread out. After closure work has been completed, the lands will be left in a safe and secure manner for the long-term with no projected maintenance.

7.3 REVEGETATION PLAN

The end land use objective for the Mine has been identified as Forestry and Wildlife Habitat. Therefore, this revegetation plan is designed to facilitate establishment of native plant communities that will provide erosion control, natural regeneration of native vegetation, and enhancement of wildlife habitat. Native species selected for revegetation were chosen based on a presumed pre-disturbance vegetation community for dw3 variant of the of SBS BGC zone (as described in Section 2.5) and their adaptability to anticipated conditions within reclaimed soils at the mine.

The total estimated area of the Mine, including all operations, is 5.6 ha. The total area includes all features identified in the PMA (Appendix A; DWB, 2023). A summary of these areas is provided in Table 6. The Mine Access Road reclamation and revegetation is described in the Mine Access Road Management Plan (DWB, 2024a).

Table 6. Total areas for Mine features.

FEATURE	ESTIMATED AREA (HA)	AREA ESTIMATED FOR RECLAMATION (HA)
Proposed Quarry Area	4.0	2.0
Staging Area	0.8	0.8
Mine Haul Road within the PMA	0.4 ¹	0.4 ¹
Total:	5.6	3.6

Note 1: The portion of the mine haul road that overlaps with the proposed quarry area is included within the estimated area for the proposed quarry area.

7.3.1 Plant Species Selection

Selection criteria

The criteria utilized for selecting plant species to re-establish vegetation cover are based on the objectives of controlling erosion and returning land capability. The criteria for species selection are as follows:

- Climatically adapted to the Site;
- Adapted to local (and anticipated) soil conditions;
- Useful for wildlife as browse and/or cover;
- Quick establishing;
- Minimize wind and surface water erosion;
- Help to improve soil fertility (e.g., species associated with nitrogen-fixing bacteria); and
- Low maintenance requirements.

The Site occurs within the SBSdw3 subzone variant (refer to Section 2.4). Therefore, the ecological plant communities identified in this subzone will be the target communities for reclamation and will provide the basis for plant species selection. Specifically, the selection focuses on pioneer plant species, particularly those known to establish during the early stages of ecological succession.

Generally, characteristics of plant communities present in the SBSdw3 subzone variant include (Delong et al., 1993):

- Early successional forest stands consisting of lodgepole pine and hybrid white spruce;
- Climax forests most commonly consisting of interior Douglas-fir, lodgepole pine, and hybrid white spruce with black spruce and hybrid white spruce dominating wetter sites and lodgepole pine and interior Douglas-fir dominating dry sites, and
- Common deciduous tree species and shrubs present include black cottonwood (*Populus trichocarpa* spp. *trichocarpa*), trembling aspen (*Populus tremuloides*), paper birch (*Betula papyrifera*), red-osier dogwood (*Cornus stolonifera*), prickly rose (*Rosa acicularis*), birch-leaved spirea (*Spiraea betulifolia*), Sitka alder (*Alnus alnobetula* spp. *sinuata*), pink spirea (*Spiraea douglasii*), twinflower (*Linnaea borealis*), kinnikinnick (*Arctostaphylos uva-ursi*) and dwarf blueberry (*Vaccinium caespitosum*).

Post-reclamation conditions at the Mine (e.g., position on the landscape, slope, aspect, soil chemistry, soil physical characteristics, and the nutrient and moisture regime) will influence the success of initial plantings. As a result of stockpiling and storage of topsoil, and the final surface to which these soils will be applied (i.e., bedrock), it is anticipated that overall conditions on the reclaimed surface following topsoil placement will range from xeric to subxeric soil moisture conditions and poor to moderate soil nutrient conditions. Moisture conditions ranging from mesic to hygric are anticipated along drainages. A formal assessment of physical and chemical properties of stockpiled topsoil and overburden prior to reclamation would help to refine the expected range of soil moisture and nutrient regimes on reclaimed surface.

Grass Cover

Immediately following the placement of overburden and topsoil on the reclaimed surfaces, an initial cover of native grasses (and potentially native legumes and forbs if available) will be established to help build soil organic matter and reduce the risk of wind and water erosion. Seed application will be performed

following slope texturing and/or topsoil placement and can be applied by hand or via ATV broadcast seeding.

A list of species recommended for native cover crop is outlined in Table 7.

Table 7. Recommended native grass, legume and forb species for cover crop seed mix.

COMMON NAME	SCIENTIFIC NAME	COMMENTS
Canada wildrye	<i>Elymus canadensis</i>	Dry to moist soils, steppe to montane
Canada bluegrass	<i>Poa compressa</i>	Dry to wet soils, lowland to montane
Hair bentgrass	<i>Agrostis scabra</i>	Dry to moist soils, lowland to subalpine
Rocky Mountain fescue	<i>Festuca saximontana</i>	Dry to moist soils, montane to subalpine
Slender wheatgrass	<i>Elymus trachycaulus</i>	Dry to moist soils, montane to alpine

The species were selected based on the following criteria:

- Known to naturally occur within central and northern BC;
- Found at elevations similar to the Site (range 770m to 800m);
- Adapted to establish within shallow or poorly developed soils;
- Adapted to a range of soil moisture conditions (xeric to hygric);
- Low to moderate competitiveness; and
- Commercially available.

Fall rye, a non-native grass, may be incorporated into the seed mixes to aid in the quick establishment of vegetation cover during the first growing season. Fall rye is a non-native grass that establishes more quickly than native grasses, can contribute to the development of soil organic matter and does not persist following the year of seeding.

7.3.2 Tree and Shrub Seedlings

Native trees and shrubs should be planted on all target reclaimed areas. Planting of native trees and shrubs can be performed concurrently with re-seeding efforts. Conditions on the reclaimed surface at the Site will favor early successional pioneer species that are tolerant of challenging growing conditions (i.e., low soil moisture retention and nutrient availability). Pioneer species contribute to organic matter content, quickly establish cover wildlife and create conditions for late successional species by providing shaded ground. Pioneer trees and shrubs species, known, or presumed, to occur at the Site are outline in Table 8.

Table 8. Pioneer tree and shrub species¹.

COMMON NAME	SCIENTIFIC NAME	COMMENTS ¹
Lodgepole pine	<i>Pinus contorta</i> var. <i>latifolia</i>	Pioneer conifer common throughout the region; naturally colonizing the Site and Plateau Quarry.
Sitka alder	<i>Alnus viridis</i> ssp. <i>sitchensis</i>	Colonizes disturbed sites where mineral soil has been exposed; naturally colonizing the Plateau Quarry.

¹ Information sourced from Delong et al, 1993.

Other native trees and shrubs that are not considered pioneer species, but are known, or presumed to occur at the Site, and would likely be successful candidates for planting are summarized in Table 9.

Table 9. Other native tree and shrub species.

COMMON NAME	SCIENTIFIC NAME	COMMENTS
paper birch	<i>Betula papyrifera</i>	Moist to mesic woodlands, clearcuts, burns and open areas; naturally colonizing the Site and Plateau Quarry.
prickly rose	<i>Rosa acicularis</i>	Open forests and open rocky and grassy slopes.
black cottonwood	<i>Populus trichocarpa</i> spp. <i>trichocarpa</i>	Often found colonizing disturbed areas; naturally colonizing the Plateau Quarry.
hybrid white spruce	<i>Picea glauca</i> x <i>engelmannii</i>	Often found colonizing disturbed areas; naturally colonizing the Site and Plateau Quarry.
red-osier dogwood	<i>Cornus Stolonifera</i>	Wet to mesic riparian areas and forest; naturally colonizing the Site and Plateau Quarry.

Planting both pioneer and climax successional tree and shrub species (with greater emphasis on pioneers) at the Mine will lead to the development of a sustainable vegetation cover that will assist in the re-establishment of a natural successional trajectory, which will meet the end land use objective.

7.3.3 Seeding and Planting Prescriptions

7.3.3.1 Seeding

A seed mix has been developed for establishing a cover crop at the Site. The mix is considered an upland seed mix, for dry to mesic soil moisture conditions. The seed mix is outlined in Table 10.

Table 10. Upland seed mix prescribed for dry to mesic soil moisture conditions.

COMMON NAME	SCIENTIFIC NAME	% WEIGHT SEED MIX
Rocky mountain fescue	<i>Festuca saximontana</i>	8
Canada wildrye	<i>Elymus canadensis</i>	34
Canada bluegrass	<i>Poa compressa</i>	2
Fringed brome	<i>bromus ciliatus</i>	29
Slender wheatgrass	<i>Elymus trachycaulus</i>	27
Application Rate: 41 kg/ha		

The recommended seeding rate is 1500 PLS (pure live seed)/m², which is equal to an application rate of 41 kg/ha. This application rate is intended to provide some erosion control while reducing the risk of establishing a competitive grass cover. Establishing a non-competitive cover crop will provide opportunities for native plant species to establish through natural dispersal vectors (e.g., wind, animals, surface water) and will reduce competition for planted tree and shrubs seedlings.

In addition to the application of the upland seed mix, an application of fall rye at a rate of 25 kg/ha is recommended to help provide quick establishment of vegetation cover during the first growing season.

The seed mix will be applied to the reclaimed areas by broadcast seeding, using either all-terrain vehicles with mounted seed spreaders and or by hand using belly-mounted seed spreaders.

7.3.3.2 Planting

A total of six native tree and shrub species have been identified for planting at the Site. The species prescribed, and the % composition for each species, are outlined in Table 11.

Table 11. Native tree and shrub planting prescription.

COMMON NAME	SCIENTIFIC NAME	COMPOSITION (%)
Trees		
lodgepole pine	<i>Pinus contorta</i> var. <i>latifolia</i>	50
hybrid white spruce	<i>Picea glauca</i> x <i>engelmannii</i>	20
black cottonwood	<i>Populus trichocarpa</i> spp. <i>trichocarpa</i>	20
paper birch	<i>Betula papyrifera</i>	10
Shrubs		
Sitka alder	<i>Alnus viridis</i> ssp. <i>sitchensis</i>	70
red-osier dogwood	<i>Cornus stolonifera</i>	30

The recommended planting density at the Mine is 2000 stems/ha; this includes 1500 stems/ha for trees and 500 stems/ha for shrubs. This is based on the highest target stocking standard BC (MOF, 2021) for establishment to free growing condition of preferred and acceptable tree species for SBSdw3 subzone variant of 1,200 stems/ha (BC MOF, 2000), as well an additional 800 stems/ha to account for potential mortality of seedlings planted within poor soils.

Seedlings will be planted throughout Mine, including the pit floor, reclaimed pit wall slope, and any disturbed ground around the perimeter of the pit. 50% of the proposed quarry area is estimated to be suitable/available for reclamation, whereas the remainder is assumed to be exposed limestone upon closure and/or not disturbed. Planting may be completed during the spring (June) or fall (September). A fall planting may need to take cold storage of seedlings into consideration during winter dormancy. Seedlings shall be obtained from a native plant nursery and/or commercial tree seedling nursery. Where possible, propagules (i.e., seeds and live stems) utilized for producing seedlings shall be obtained from the local area of the Mine or from a source that provides regionally appropriate seed (e.g., BC Tree Seed Centre).

Reforestation Technologies International (RTI) Fertilizer Planter Paks are recommended to be applied to all tree and shrub seedlings planted at the Site. Nutrient and moisture conditions in reclaimed soils are expected to be limiting. The use of RTI Planter Paks are likely to greatly increase the survival of planted seedlings by supplementing the soil around the seedling plugs with additional nutrients and organic matter. Consult with the product manufacturer and/or sales representative for the appropriate fertilizer blend for the site conditions.

Planting tree and shrub seedlings at the Site will follow typical tree seedling planting methods. Planters must be monitored to ensure all plugs are planted correctly (root ball is completely buried, roots are not bent, and soil is tight around the plug). Care must also be taken to ensure RTI Planter Paks are correctly applied (consult with manufacturer and/or sales representative on the current application specifications).

Browsing of shrubs from moose was observed at the Mine during the most recent site visit. To prevent planted seedling mortality from browsing, protection tubes should be installed with each of the seedlings at the Site.

7.4 RECLAMATION MONITORING

Valley Lime will retain a QEP to monitor revegetation success at 1, 3, and, 5 years post-operations. Additional seeding and/or planting may be required to supplement any loss. If reclamation activities are not successful by five years post-operations (i.e., seed has not germinated or planted trees have died off such that the minimum stocking standards have not been met), Valley Lime will re-assess the reclamation plan and revise as required and/or consult a QEP. Surface water quality monitoring is also proposed at 1,3-, and 5-years post-operations, to coincide with vegetation monitoring.

7.4.1 Vegetation Monitoring

To monitor vegetation establishment and natural ecological succession at the Mine, the following monitoring objectives and associated measures, or examples, are provided:

- Objective 1: Monitor health of tree and shrub seedlings:
 - Measures: seedling survival, seedling vigour, seedling height;
- Objective 2: Monitor the natural recruitment of native plant species:
 - Measure: native species richness;
- Objective 3: Identify, if present, any factors limiting natural recruitment of native plant species or the success of planted seedlings:
 - Examples: dense grass cover, herbivory, dense woody debris cover, compacted soil surface.

The endpoint of vegetation monitoring is reached once both of the following two objectives, and defined criteria, have been met:

- Objective 1: Vegetation cover is 'Self-sustaining':
 - Criteria:
 - Seedling mortality is no longer occurring, or if occurring, is due to natural processes, not related to any anthropogenic factors (e.g., planting/handling of seedlings, adverse soil conditions), or excessive herbivory;
 - Vegetation cover overall remains stable or is increasing (density and distribution);
 - Vegetation cover is resilient (evidence available suggests that the vegetation cover can survive periods of drought);
 - Natural recruitment of native species is continuous (occurring annually, and expected to continue to occur); recruitment is not limited by competition from existing vegetation cover, herbivory or surface conditions (e.g., soil compaction), and
 - Vegetation cover is species diverse (not a monoculture).
- Objective 2: Vegetation cover is following the natural successional trajectory that aims to satisfy the end land use objective:
 - Criteria:
 - Vegetation cover is dominated by pioneer tree and shrub species identified as early successional species of the target ecosystem (e.g., subzone/variant); vegetation cover also consists of late successional tree and shrub species of the target ecosystem;

- Vegetation cover does not consist of any significant cover of non-target species (e.g., invasive, agronomic, nuisance weeds); any cover of non-target species present is either declining or evidence available suggests cover will decline over time, and
- Any factors that have been identified as limiting natural succession (e.g., plant competition, surface conditions, herbivory) on reclaimed areas, or portions of reclaimed areas, have been addressed or are no longer limiting.

7.4.2 Surface Water Quality Monitoring

During the initial site assessment, previously identified TRIM features were assessed and defined stream channels were not present (Section 2.2.2). TRIM features will be assessed in conjunction with revegetation success monitoring at 1,3-, and 5-years post operations. Should surface water be present within TRIM features, water quality monitoring will be conducted to ensure surface water flow through the mine footprint is in accordance with the *British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture* (MOE, 2021). Should surface water be present within designated streams, water quality will be recorded within, upstream, and downstream, if possible. The exact locations of sampling will be field fit and will only be collected on crown land. If turbidity levels are found to be above acceptable standards (Table 4), additional mitigation measures may be required.

Should water quality monitoring be conducted, the parameters outlined in Section 6.3.1 will be verified.

8.0 PLAN

8.1 DUST CONTROL

Dust has been identified as a potential risk to air quality in the Mine area. Dust control planning for an aggregate operation includes both the site layout planning and the development of operational procedures to occur (MEM, 2002; Table 12).

Table 12. Dust control options (MEM, 2022)

CONTROL STRATEGIES	DUST CONTROL OPTIONS	BMPs AND MEASURES
SITE LAYOUT Minimize Dust Creation	• Minimize the height from which material falls • Surface roads with dust-free material • Lay out and construct stockpiles to minimize dust creation; use gentle slopes and avoid sharp changes of shape • Use crushing and screening plants within design capacity, • Use conveyors rather than haul-roads • Restrict dust generating activities to sheltered areas • Create 'sensitive zones' within which dusty activities are limited	• Berm • Drop Height • Tarps • Vegetation Cover • Wind Protection
OPERATIONS Control Escape	• Limit spillage by not overloading trucks • Enclose or provide wind protection for process plant, stockpiles • Install a dust removal system (bag system) for the plant • Use sprays and mists at dust sources • Fit outlets with cyclones, wet-scrubbers and filters • Insist on good maintenance and house keeping • Compact, grade, surface and maintain haul-roads • Fit dust extractors, filters and collectors on drilling rigs • Use wind-breaks/netting screens/semi-permeable fences • Limit drop heights	• Drop Height • Tarps • Vegetation Cover • Water Spray • Wind Protection • Wheel Washers • Hydroseeding • Speed limit • Dust skirt

	• Fit wind-boards/hoods at conveyors/transfer points • Reduce speeds and limit movement of vehicles, use upswept exhausts • Spray exposed surfaces (haul-roads, dormant faces and stockpiles) with binders • Vegetate exposed surfaces, such as overburden stockpiles, with quick growing plants • Pave and sweep haul-roads and other high use semi-permanent dusty surfaces • Shake dirt off trucks with rumble bars and provide vehicle washing facilities • Provide a surfaced road between vehicle washing facilities and site exit • Use closed or sheeted vehicles to carry dry material	
AIR QUALITY Dust Removal	• Use trees or shrubs around the site as coarse air filters • Place treed berms near dust generators, receptors or at the perimeter of the site • Use sprinklers, sprayers or mist, with or without additives	• Berm • Vegetation Cover • Water Spray
CESSATION	• Shut down the operation if, due to unique weather conditions, the extended dispersion of dust cannot be avoided	

Valley Lime shall implement measures to maintain air quality at, or near, ambient levels to address health and safety and to avoid significant deposition of airborne particulates into any watercourse in the area. In addition, the following measures will be implemented:

- Control dust and debris by wetting down dry materials with a water truck or applying calcium chloride (CaCl_2). The Safety Data Sheet (SDS) for CaCl_2 will be kept on site, if used;
- Prevent runoff from entering any drainage or watercourse;
- Obtain water from licenced water sources;
- Minimize dust creation during site layout and operational activities;
- Implement air quality measures that intercept airborne dust; and
- Temporary curtailment of dusty activities until adverse weather conditions subsides, if required.

A 50 m wide vegetated buffer will be retained around the operational areas within the PMA. This includes a vegetative buffer along the west side adjacent to the mine access road. In addition, a vegetative buffer will be maintained between the Proposed Quarry area and the Crusher/Screening Area which contains a 15 m riparian buffer around the stream. Vegetative buffers retained for dust control and ESA protection are depicted in the drawings in Appendix A.

8.2 AIR EMISSIONS CONTROL

The PMA is not in close proximity (≤ 100 m) to receptors that may be sensitive to emissions from combustion engines (e.g., occupied residences and livestock). However, to maintain air quality on site, the following idle times during periods of inactivity are recommended, as follows:

- Motor vehicles and light-duty diesel trucks – 1 minute
- Heavy duty diesel vehicles – 5 minutes
- Diesel vehicles involved in construction site passenger transportation – 10 minutes

Exemptions to the above times may be permitted, as follows:

- When vehicle or equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control.

- To bring the vehicle or equipment to the manufacturer's recommended operating temperature.
- When outdoor temperature is above 30°C or below 0°C, the operator or passengers are inside the vehicle with no auxiliary power sources available to provide temperature control.
- When it is necessary to operate auxiliary equipment located in or on the vehicle or equipment to accomplish the intended use of the vehicle or equipment.
- When the vehicle is detaching or exchanging a trailer.
- When the vehicle or equipment is being repaired, or engaged in repairing another vehicle, if idling is necessary for such repair.
- When the vehicle or equipment is queued for inspection, if idling is necessary for such inspection.
- For designated emergency vehicles or any vehicle or equipment assisting in police, fire or ambulance services.
- When defrosting or de-fogging windows.

9.0 WATER MANAGEMENT PLAN

9.1 GROUNDWATER

No groundwater wells have been documented within the PMA or adjacent areas to infer groundwater levels (Province of BC, 2024e). Quarrying activities and mining operations have the potential to impact groundwater by stripping vegetation and thereby increasing groundwater vulnerability and through accidental release of waste fluids (i.e., hydrocarbons). With quarry excavation proposed to the surrounding ground elevation (not sub-surface), it is not anticipated that groundwater will be encountered.

If groundwater is encountered the Environmental Manager will be contacted immediately (Section 2.5), and BMP's outlined in the *Aggregate Operators Handbook* (MEM, 2002) will be followed and a QEP will be consulted to determine whether additional measures are required to protect groundwater. To protect groundwater resources, Valley Lime shall follow waste management guidelines in Section 15.0 and Spill Prevention and Response procedures in Section 16.0.

9.2 SURFACE WATER

Surface water includes streams (as defined under the WSA) and water features, such as ponds, wetlands or human made reservoirs. No streams were identified during the site assessment; however, there is the potential for these low-lying areas to seasonally hold water. If these areas do hold water, activities that have the potential to impact them will adhere to the WSA and the *Health, Safety and Reclamation Code for Mines in British Columbia* (MEM, 2022). This includes a minimum 10 m setback away from water bodies, which is to be clearly marked using stakes, ribbons, or paint. No machinery or equipment will operate within the setback.

9.3 STORMWATER

Stormwater is the portion of rainfall or snowmelt that does not immediately percolate into the ground or evaporate. When flowing over exposed soils, this can pick up fine clays and silt which can negatively impact water quality off-site when not managed appropriately (MEM, 2002). Stormwater that collects within the Mine may have to be discharged; if so, storm water will be discharged into the vegetation where it can percolate into the ground. At no point, will stormwater be discharged into any water features

or drainages. A conceptual settling pond located down gradient of the quarry is proposed, to capture surface runoff from the quarry.

10.0 METAL LEACHING AND ACID ROCK DRAINAGE

The *Aggregate Operators Handbook* (MEM, 2002) defines metal leaching (ML) and acid rock drainage (ARD) as naturally occurring processes that can have negative impacts on the environment. The primary cause of ML and ARD are elevated concentrations of either sulphide minerals or their weathering products. The potential for ML and ARD should always be considered both prior to quarry development and during operations. Potential indicators include:

- Visible sulphide mineralization;
- Visible indications of sulphide oxidation;
- Hydrothermal alteration (rust or bleaches appearance in materials); and
- Proximity to a known metallic mineral deposit.

If evidence of ML/ARD is suspected on site, Valley Lime will immediately contact a QP to characterize the ARD/ML potential of the site prior to further development.

11.0 WILDLIFE MANAGEMENT PLAN

Encounters with wildlife may occur during operations, or during travel to and from the Mine. Once works commence, it is unlikely wildlife will enter the works due to noise, machinery, and the presence of human activity. Any wildlife observed during works will be recorded and any wildlife close encounters or concerns will be addressed, dealt with appropriately, and reported. BMPs for Site cleanliness and waste management (Section 15.0) will be followed to avoid attracting wildlife to the Mine.

The following are general restrictions and guidelines that are intended to protect personnel and wildlife during operations:

- Reduce speed on roads to the Mine to avoid collisions with wildlife;
- Firearms are not permitted. This includes the carrying of firearms in private vehicles to and from the activity sites on workdays;
- Feeding wildlife is prohibited, including during travel to and from the activity sites. Feeding wildlife is a violation of the *BC Wildlife Act*. Feeding wildlife may result in wildlife becoming attracted to human foods and habituated to human presence. This can lead to the creation of 'conflict wildlife' and can have serious consequences. This restriction includes bird feeders, as these may be an attractant to bears;
- Harassment of wildlife is prohibited. Harassment of wildlife can lead to the abandonment of habitat or the disruption of critical activities (e.g., nesting), and may result in injury to wildlife and/or humans. This restriction extends to both ground-based and air-based activities—harassment of wildlife from the air (e.g., low altitude circling) is also prohibited;
- The deliberate destruction or disruption of wildlife nests, eggs, dens, burrows, and the like, is prohibited, including during travel to and from the activity sites. This may also be a violation of the *BC Wildlife Act*, the *Migratory Birds Convention Act*, or the *Species at Risk Act*. The Environmental Manager or designate(s) will be aware of the importance of sensitive wildlife features, and instruct personnel to avoid the impact to known features by work-related activities

or personnel. This would include keeping knowledge of the location of features restricted to a limited number of personnel (to prevent vandalism);

- Hunting and fishing are prohibited when working on Site and during travel to and from the Site;
- Pets are prohibited, including during travel to and from the activity sites on workdays. This is a violation of the BC *Wildlife Act*. Pets (particularly dogs) may harass or kill wildlife, and may endanger humans during wildlife encounters (e.g., bear-dog interactions);
- Littering is prohibited. Garbage must be returned to temporary storage containers. The Environmental Manager or designate(s) must direct that litter, particularly food waste, found in and around the activity sites is removed and properly disposed of. Note that this includes organic wastes (e.g., orange peels, apple cores);
- All waste, including hydrocarbons and chemicals, will be sufficiently sealed on site to avoid attracting wildlife; and
- Personnel that observe conflict wildlife (e.g., bears, cougars, etc.) on, or in close proximity to the Mine will notify the Environmental Manager or designate(s) so that the appropriate local agency can be notified. Personnel will not attempt to engage with conflict wildlife on their own.

11.1 GRIZZLY BEAR MANAGEMENT

The threat of mining development to GPBU in BC and the specific region of the Nulki GBPU have both been determined to be overall low to negligible (MOECCS, 2020).

During the site assessment, no dens were identified and the surrounding habitat was not found to be suitable for denning as the area was generally flat, lacking north facing slopes, and had poor drainage. A total of 5.6 ha of vegetation will be cleared for mine development works. Grizzly bears will use dense forests as cover habitat which also provide higher quality forage sites (Gyung et al., 2004). Based on a desktop review of satellite imagery of ground cover surrounding the PMA as well as data collected from the site assessment, the habitat and vegetation was found to be suitable for forage and cover habitat. In addition, the Nechako, a salmon bearing river providing forage habitat is located 2.5 km south of the PMA.

To prevent human-wildlife encounters, measures listed in Section 11.0 will be implemented and bear awareness training will be required for all mine staff members. If grizzly bears or denning features are identified during wildlife surveys or during the life of the mine, measures will be implemented and a management plan will be developed by a QEP. Although periods of mine operations (April – November) generally do not overlap with the most sensitive periods for grizzly bears (i.e., denning season; MOECCS, 2019), this management plan may include no-work buffers and blasting restrictions for noise management (Section 2.5).

12.0 INVASIVE PLANT MANAGEMENT PLAN

Care should be taken to prevent the introduction and spread of noxious weeds. Invasive plants/noxious weeds are typically non-native plants that are responsible for reductions in crop yield and quality and they lead to environmental degradation through destruction of native plant and animal habitat.

Invasive plants were observed at the Mine during the site assessment (Section 2.4.1). Additionally, several invasive plant species have been previously documented along Highway 16 and within the LA. Therefore, the risk of transmission is higher due to the travel required to get to Site and the ground disturbance that will be a required component of pit operations. The Environmental Manager or designate(s) will inspect equipment tracks prior to mobilization and demobilization to reduce the risk of spreading invasive plant seed.

The *Best Practices for Managing Invasive Plants on Roadsides* pocket guide by MOTI (2019) may be used as a reference on site. General measures to ensure that invasive plant material is not spread or propagated throughout the Site include:

- Management of noxious weeds and invasive plant measures will be discussed during the kick-off meeting;
- All equipment will be washed clean of soil, seeds, and plant parts prior to entering the Site;
- All equipment will be manually cleaned with shovels and brooms to remove excessive vegetation and soil and may be inspected by the Environmental Manager prior to leaving Site;
- Avoid parking, turning around, or staging equipment in invasive plant infested areas;
- Retain desired vegetation, where possible;
- Do not dump overburden or soil infested with invasive plants where desirable vegetation is established; instead, dispose of infested waste to a designated disposal site;
- Use only clean fill material from an “invasive plant free” source. Dispose of soil containing invasive plants in an approved spoil pile. Regularly inspect all material sources to ensure they are invasive plant free;
- If soil is exposed, re-seeding will occur as quickly as possible to prevent the establishment of invasive species; use grass mixtures that are free of weeds, locally adapted, non-invasive, and quick to establish;
- Any observation of an invasive plant or noxious weed is to be reported to the Environmental Manager. Coordinates will be recorded and these sites will be flagged; and
- Valley Lime is responsible for inspecting any mulch supplies, should they be used, to ensure that it is certified weed-free.

13.0 HERITAGE RESOURCES MANAGEMENT PLAN

All archaeological resources found are managed through the *Heritage Conservation Act* (HCA) and the BC Archaeology Branch. The HCA states that an individual (or corporation) must not “damage, excavate, dig in or alter, or remove any heritage object” from a heritage site. If any items or features are discovered during any stage of operations, Valley Lime will immediately cease operations and notify the BC Archaeological Branch (phone - (250) 953-3334). Any items found are potentially protected under the *Heritage Conservation Act* and belong to the Province of B.C. Works will not resume within 30 m of the potential archaeological site until instructed to by the BC Archaeological Branch and/or an Archeologist. The same procedure will be applied for any paleontological items found on site.

An Archaeological Chance Find Procedure is included in Appendix B and will be adhered to should archaeological resources or human remains be found or suspected.

14.0 NOISE MANAGEMENT PLAN

Limestone crushing and processing activities have the potential to generate noise that can cause annoyance and disturb quality of life for nearby residents and wildlife. Factors that may exacerbate noise exposure can include early morning hours of operation, increased frequency of vehicle traffic, equipment engines, back-up alarms, drills, crushers, screens, material falling into the empty metal box of a haul truck, the 'body slap' of empty truck boxes, squealing of tracked vehicles, and even the rattle of loose hitches or boxes on trucks.

Controls to reduce noise exposure may include scheduling hours of operation during less disruptive periods, selecting appropriate equipment, constructing sound barriers and berms to contain noise and other options (MEM, 2002). The PMA is in a rural setting, surrounded by agricultural fields and forests and the nearest residence is approximately 2.8 km away (as the crow flies), thus noise generated from day-to-day operations is anticipated to have minor impacts. The Mine will be assessed prior to the start of operations to predict Mine noise and site-specific considerations. Based on the results, noise management control methods may be selected from the options listed in Table 13 (MEM, 2002).

Table 13. Noise control options (MEM, 2002)

MANAGEMENT OPTIONS	NOISE MANAGEMENT AND CONTROL METHODS	BMPs AND MEASURES
SITE LAYOUT Containment & Dampening	• Locate haul-roads away from ridge tops and in topographic lows • Place processing equipment within natural or excavated hollows, such as the pit or quarry floor • Minimize the fall height of material • Construct stockpiles to intercept point source and ambient noise • Use crushing and screening plants within their design capacity • Plan orientation of working faces to reflect noise into dampening areas • Use first stage operations to act as screening for noise sensitive areas and receptors • Group and position buildings to act as an acoustic barrier • Restrict noise generating activities to sheltered areas • Create 'sensitive zones' within which activities are limited	• Berm • Drop Height • Fences • Vegetative Cover • Straw Bale Wall • Treed Windbreaks
OPERATIONS Source Prevention & Escape	• Select low noise emission equipment • Ensure smooth road running surfaces • Start plants engines one at a time • Maintain, repair and lubricate equipment • Alert and train staff to reduce noise emissions • Limit drop heights during handling • Fit acoustic barriers to processing equipment • Minimize mobile equipment speeds • Use alternative non-audible back-up alarms • Vegetate exposed surfaces such as overburden mounds with quick growing ground cover and plants • Use rubber linings in chutes, dumpers and transfer points to reduce the noise of rock falling onto metal surfaces • Use simple baffles around washing drums and rubber mats around screening, crushing and coating plants • Switch off equipment when not in use • Avoid unnecessary revving of engines • Direct noise away from sensitive areas whenever possible, if the noise source is highly directional • Enclose sources of significant noise, such as conveyors and process plants • Keep truck tailgates closed where possible	• Drop Height • Equipment Selection • Fences • Vegetative Cover • Water Spray • Speed Limits
INTERCEPTION Ambient Reduction	• Retain and plant trees or shrubs around the site	• Berm • Fences

MANAGEMENT OPTIONS	NOISE MANAGEMENT AND CONTROL METHODS	BMPs AND MEASURES
	• Place treed berms near noise generation activities (source), receptors or at the perimeter of the site • Install acoustic fencing • Ensure there are no gaps in acoustic barriers, as noise will leak out	• Perimeter Planting • Vegetative Cover

15.0 WASTE MANAGEMENT PLAN

The BC *Environmental Management Act* and its relevant regulations govern issues of waste generation, reuse, recycling, transportation, and disposal. The four main principles of waste management in order of hierarchy are reduce, reuse, recycle and disposal. Waste management will comply with relevant regulatory requirements and institutional constraints. Commercially reasonable efforts will also be made to sort non-hazardous solid waste onsite for the purpose of reusing and recycling, when possible.

Waste associated with proposed aggregate extraction includes:

- Equipment fuel, oils, and lubricants;
- Sewage; and
- General waste materials, such as food waste, cardboard, and plastics.

Portable washrooms facilities will be used during works. Waste will be removed from site weekly and will be disposed of at appropriate disposal facilities. Vacuum trucks will be used to remove sewage from the portable facilities and sewage waste will be disposed of a licenced sewage disposal facility (i.e., a municipal waste water treatment facility). General refuse may be disposed of at the Vanderhoof Transfer Station (The Waste Transfer Station located at 650 Dump Rd). Hazardous waste (oily rags, oil filters, waste oil, etc.) will be collected in sealed drums in a designated location within the Laydown area, and will be disposed of at appropriate disposal facility by an appropriately licenced waste hauler. At the end of the work season, all portable washroom facilities will be removed from site.

15.1 GENERAL MITIGATION MEASURES

The following BMPs will be implemented for the handling, collection, storage, and disposal of waste materials:

- Good housekeeping practices will be instituted throughout the site operations and daily;
- Domestic waste will be stored in labelled, secure containers, and will not be permitted to be burned, buried, or discarded at the site;
- A portable toilet will be on site throughout operations. The portable toilet will be pumped out on a regular basis and transported by a licensed hauler for disposal at an approved facility;
- All wastes that have the potential to attract wildlife (i.e., food scraps) will be disposed of in animal-proof containers and will be removed from Site daily;
- Operating fluid wastes from equipment will be collected and sealed in drums, and will be recycled or disposed of at an appropriate waste facility that is approved to accept such waste;
- Collect all waste in properly labelled containers; and
- All recyclable waste should be disposed of into a labelled container and recycled or re-used when applicable.

15.2 HAZARDOUS WASTE MANAGEMENT

Valley Lime shall store, handle, and dispose of all hazardous waste discovered or generated on site in accordance with the BC *Hazardous Waste Regulation (HWR)* as per the *Environmental Management Act (EMA)* and the *TDGA*. Hazardous materials waste handling and management is pursuant to the BC *Workers Compensation Act*.

The following BMPs will be implemented for the handling, collection, storage, and disposal of hazardous waste materials:

- Store all hazardous materials in separate sealed drums labelled with the contents and placed in secondary containment;
- Maintain an up-to-date list of hazardous waste on-site. The list shall indicate what materials and their volumes are stored at the site, the material (e.g., liquid versus solid and liquid/oil, solid/batteries, solid/oil rags, etc.), and dates the materials were added to storage area; and
- Maintain hazardous waste storage areas clean and free of clutter for ease of access.
- Properly containing, labelling, and securing hazardous waste prior to transport offsite for disposal;
- Using only qualified transportation sub-contractors and waste receivers to transport or receive wastes; and
- Maintaining a manifest of all waste disposals for the works to provide for inspection.

16.0 SPILL PREVENTION AND RESPONSE PLAN

This section will be used to guide spill prevention and emergency response activities on site. Information provided in this section is based on the MWLAP Field Guide to Fuel Handling, Transportation and Storage (MWLAP, 2002). It should be stressed that safety, health, and welfare of the workers and the public are of the utmost importance, followed by protection of the environment. Valley Lime will ensure that all subcontractors are aware of their spill response procedures and will take responsibility for all spills should they occur.

Valley Lime's spill prevention and response procedures will comply with the applicable regulations and guidance, including BC Spill Reporting Regulation, BC *TDGA*, *A Field Guide to Fuel Handling, Transportation and Storage* (MWLAP, 2002), *Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia* (MOE, 2014), as well as federal Environmental Emergency Regulations. This plan provides information on:

- Responsibilities in case of a spill;
- Emergency spill response protocol;
- Spill Notification and reporting; and
- Best management practices.

16.1 SPILL PREVENTION

16.1.1 Potential Spill Sources

The following are the primary potential sources of reportable spills that could occur during Mine activities:

- Leaking or ruptured fuel tanks;
- Poor maintenance of secondary containment;
- Spills during refuelling of vehicles and equipment;

- Leaks from equipment or ruptured hoses; and
- Motor vehicle accidents on access roads.

16.1.2 General Measures for Spill Prevention and Containment

To mitigate the risk of spilled material from entering the terrestrial environment or stream systems along the access roads, Valley Lime shall:

- Clean all equipment before it arrives on site;
- Have equipment inspected for excessive grease or leaks by the Environmental Manager or designate(s) upon arrival and prior to the start of operations;
- Ensure equipment is regularly maintained and well-functioning;
- Store spill containment and cleanup kits capable of addressing significant spills:
 - o In all large equipment (e.g., excavators) and pickup trucks.
 - o At the refueling area.
 - o With an aquatic containment boom readily available for easy deployment in the event of an aquatic spill.
- Adequately train all operators and crew in Spill Response Procedures.

Valley Lime shall include the following primary protection/preventative measures for spill prevention and containment:

- Fuel and lubricants shall be delivered to Site as needed to properly maintain equipment;
- Impermeable, oil absorbent matting will be used when refueling and servicing equipment;
- Operators will control the refueling nozzle at all times while refueling equipment;
- Soil/gravels that are contaminated with petroleum, hydrocarbon, or other product will be collected and removed for appropriate disposal, regardless of how small of a spill volume;
- Equipment fuel or oil leaks shall be repaired as soon as discovered or otherwise removed from site until repairs have been completed;
- Maintain the emergency spill containment and cleanup kits at the site throughout the duration of the Mine. The kit shall have the capacity to clean up 100 % of a spill from a failure of the largest volume of a fuel or lubricant tank/system, plus an additional 10 %;
- Equipment containing biodegradable fluids shall have a record of this maintenance work available in the equipment and shall be made available for inspection as requested; and
- To prevent vandalism during periods of inactivity, keep all fuels, lubricants and toxic substances stored in locked structures.

Valley Lime shall implement and maintain additional measures, such as:

- Placing drip trays beneath stationary equipment that lacks secondary containment and other equipment parked overnight and not being used for extended periods of time to capture any spillage;
- For mobile storage of fuel, lubricants, or other toxic substances, secure within secondary containment and ensure container lids are tightly sealed;
- Have standard spill kits capable of capturing 125 % of potential spill volumes at all refuelling, lubrication, repair locations and within heavy equipment to allow immediate response to spills;
- Train all on site staff in hazardous material storage, handling requirements, and spill kit location and deployment;

- Refuel all vehicles and machinery at a designated refuelling location more than 30 m from any watercourse;
- Store all on-site fuel in tidy-tanks or in approved secondary containment facilities, with contents marked appropriately; and
- Secure all waste fuel or products (e.g., fuel filters) in spill-proof containers and dispose of in accordance with environmental regulations.

16.1.3 Fuel Storage

The refuelling area shall be located on flat and stable ground. Storage and transportation of hydrocarbons must be in accordance with the *TDGA* and the OHS Regulations (e.g., no smoking near fuel storage), in addition to the following:

- Hazardous or toxic products will not be stored within 30 m of any watercourse;
- Spill control is required for small containers of flammable and combustible liquids that have the potential to spill. The degree of spill control should be based on the level of risk;
- All containers must be maintained in good condition - not damaged, rusting, or leaking. Containers must be sealed with proper fitting lids, caps, bungs, or valves to prevent spills and leaks;
- All tanks, barrels and containers > 23 L containing hydrocarbons will be stored within impermeable containment, designed to contain 125 % of the volume of the largest container;
- Containers that are 23 litres or less must be stored and transported in an equipment box of a vehicle that can contain the total quantity of fuel in the container(s) should it leak or spill;
- Impermeable containment is required for mobile fuel storage (i.e., fuel trucks) when remaining overnight;
- The fuel storage area will be protected against vandalism and theft;
- A large spill kit will be kept at the refueling location;
- Drip trays will be stored at the refuelling area for refuelling events; and
- All small quantities of fuel, oils, and antifreeze shall be stored in separate drip trays and secured in an animal-proof container to prevent attracting wildlife.

16.1.4 Re-fueling Procedures

Valley Lime shall implement the following when refuelling:

- Refuelling will occur within the designated refuelling area at the Laydown area;
- Hoses and nozzles should be inspected regularly and be in good working order;
- The refuelling operator should be appropriately trained, and always stay with the nozzle during refuelling;
- Drip trays will be used to capture any spills;
- Fuel will be stored at least 30 m from a watercourse with secondary containment or in pickup trucks;
- Inspect and maintain the spill kit regularly;
- Inspect fuel storage containers regularly for leaks and excess oil grease; and
 - An inspection program for fuel storage and dispensing locations and equipment will be developed and implemented.
- In the event of a spill, the Environmental Manager will be contacted, and Spill Response Procedures will be implemented. A spill in water, regardless of the amount, must be reported to Emergency Management BC.

16.1.5 Spill Kit Contents

Valley Lime Ltd. shall supply and maintain fully stocked spill response kits. A list of spill kit contents and instruction sheet will be posted at the kit storage locations on site. Table 14 outlines the minimum content for spill kits.

Table 14. Spill kit contents.

For all pickup trucks, transport vehicles and equipment with on-board fuel capacity of 500 L or less, or a portable fuel tank with capacity of 500 L or less	
• Goggles • PVC Gloves • 10 absorbent pads	• 2 absorbent booms (3 m) • 1 container of emergency sealant • 3 heavy duty plastic bags
For all pickup trucks, transport vehicles and equipment with on-board fuel capacity of greater than 500 L, or a portable fuel tank with capacity of greater than 500 L	

Any equipment containing antifreeze must also carry additional water-soluble absorbent pads. Spill kit contents must be inspected at start-up and any time new equipment arrives onsite.

16.1.6 Safety Data Sheets

Valley Lime shall maintain current copies of Safety Data Sheets (SDS), for all chemical substances being used on site on site in a clearly marked binder. SDS identify information such as hazardous ingredients, fire and explosion hazard, reactivity data, toxicological properties, and first aid measures. The SDS binder will be readily available in the event of a spill or leak to determine any potential human health and environmental risks associated with the product.

16.2 SPILL RESPONSE

According to the Spill Reporting Regulation, if any amount of a substance listed in the Schedule to the Regulation is spilled into a “body of water” it must be reported to Emergency Management BC (1-800-663-3456) within 24 hours of the incident occurring. “Body of water” is defined as a) a stream, as defined in the WSA, b) an aquifer, as defined in the WSA, c) fish habitat, as defined in the Water Sustainability Regulation, BC Reg. 36/2016, and d) any of the following that could drain or empty directly into a body of water: i) a naturally formed pool of water other than one deferred to in a), b) or c) or ii) a ditch.

Valley Lime Ltd. shall implement the following general spill or leak practices in the event of a spill or leak:

- Do not touch or walk through spilled material;
- Stop the flow safely and quickly (if possible);
- Shut off machinery, pumps, valves etc.;
- Plug leaks (if possible);
- Remove or right containers;
- Do not smoke or use cell phones in the spill area;
- Prevent spilled materials from flowing away from the initial spill site or from flowing into any water features or drainage ditches;
- Eliminate all ignition sources;
- Flag/delineate area of spill; and
- If possible, turn leaking container so that gas escapes rather than liquid.

16.2.1 Response and Cleanup

In the event of a spill, Valley Lime shall implement the following Spill Response Procedures:

Note: Procedures will vary depending on the product and the location of the spill.

- Notify Environmental Manager immediately.
- Notify BC MOE for reportable spills (Emergency Management BC: 1-800-663-3456).
- Consult SDS to determine potential human health and environmental risks.
- Ensure appropriate personal protective equipment is worn during spill clean-up work.
- **Land-based spill:**
 - Use flagging tape to delineate the perimeter of the spill.
 - Construct containment ditches around the area of spill.
 - Use absorbent pads to remove the spilled material, disposing of the soiled absorbent materials into a drum or other sealed container.
 - Excavate the contaminated soil and dispose of in a drum or other sealed container. Drums of waste will be labeled to identify their contents and be stored in a spill containment area prior to being hauled off-site for disposal by a certified hauler to an authorized dumpsite for contaminated materials in accordance with disposal outlined in Section 15.2 Hazardous Waste Management.
- Following a spill, replenish all spill kits and equipment.
- Report the spill as per the incident reporting procedures.

16.2.2 Monitoring and Reporting

The Environmental Manager or designate will conduct monitoring on an as-needed basis in the event of a spill, within the spill area, and the surrounding receiving environment to determine appropriate remedial action. For a reportable spill, Valley Lime shall track effects pathways to ensure groundwater sources are protected. A copy of the spill report form is provided in Appendix E.

If the spill is a reportable emergency (refer to Appendix E), an investigation report and spill report form must be completed and forwarded to Emergency Management BC (1-800-663-3456) within 24 hours of the incident occurring. The company responsible for the spill must prepare the investigation and spill report. All spills, regardless of how minor, must be reported to the Environmental Manager and/or designate(s).

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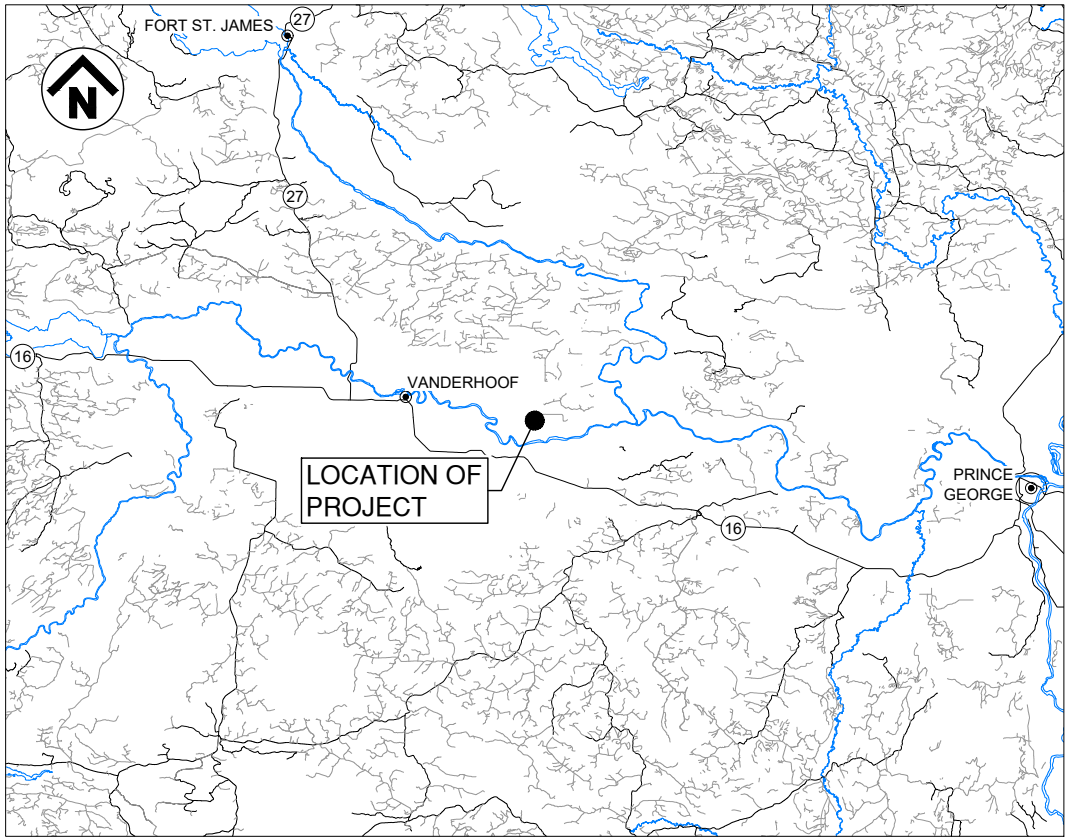
Appendix A

Proposed Limestone Quarry Drawings

VALLEY LIME LTD.

PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5) VANDERHOOF, BC.

Lat. 53° 59' 25.5" Long. 123° 44' 38.2"



KEY MAP
NTS

DRAWING LIST	
DRAWING NUMBER	DRAWING TITLE
21556-164-01	LOCATION MAP
21556-164-02	ACCESS MAP
21556-164-03	TENURE MAP
21556-164-04	SITE MAP
21556-164-05	SECTIONS

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CLIENT PROJECT CODE

DATE

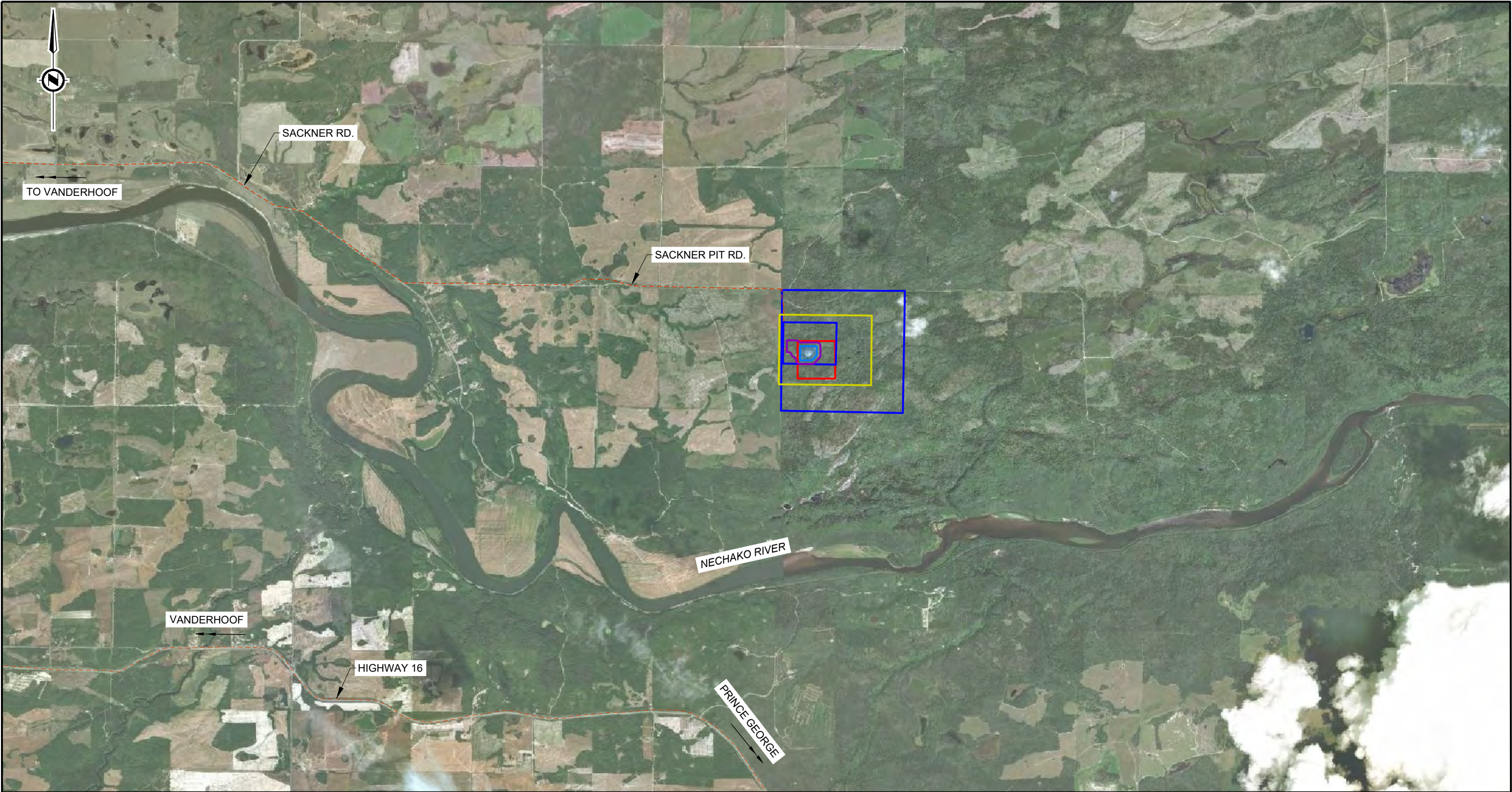
DRAWING NUMBER

REV

2024-03-27

21556-164-00

D



LOCATION MAP

GENERAL NOTES:

- 1. BASE IMAGE OBTAINED FROM: Microsoft Bing Imagery
- 2. ROAD NAMES OBTAINED FROM: Google Maps.
- 3. EXISTING BOUNDARIES FROM: iMapBC

- LEGEND:**
- EXISTING ROAD
 - MINERAL CLAIM 374380 (25 HECTARES)
 - MINERAL CLAIM 1095074 (114 HECTARES)
 - DISTRICT LOT 5415
 - PERMITTED MINE AREA
 - PROPOSED QUARRY AREA/BOUNDARY

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B	DEC 22	ISSUED FOR PERMITTING		BC	JCP	AJ	
C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS		BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING		BC	JCP	AJ	



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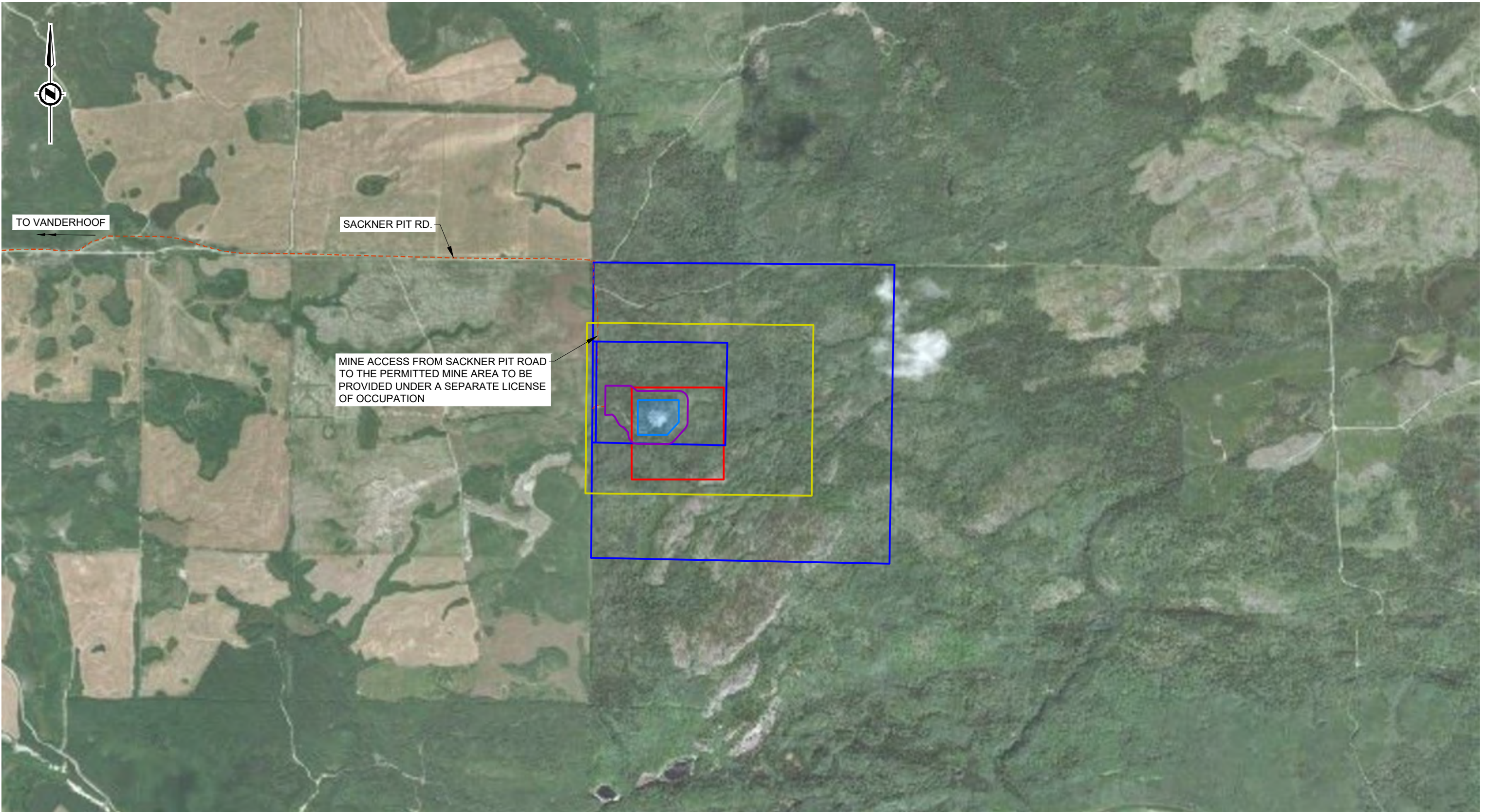
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QUALITY CONTROL: JCP DATE: 2021-06-09
QUALITY ASSURANCE: DATE
DRAWN: JH DATE: 2021-05-20

VALLEY LIME LTD.
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

LOCATION MAP

LATITUDE:	53° 59' 25.5"	NAD83	NORTHING:	5982711
LONGITUDE:	123° 44' 38.2"	10U	EASTING:	451224
DRAWING NUMBER				21556-164-01
REV				D

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LEGEND:

- EXISTING ROAD
- MINERAL CLAIM 374380 (25 HECTARES)
- MINERAL CLAIM 1095074 (114 HECTARES)
- DISTRICT LOT 5415
- PERMITTED MINE AREA
- PROPOSED QUARRY AREA/BOUNDARY

NOTES:

1. FOR GENERAL NOTES REFER TO DWG 21556-164-01

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C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS		BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING		BC	JCP	AJ	



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QUALITY CONTROL JCP DATE 2021-06-09

QUALITY ASSURANCE DATE

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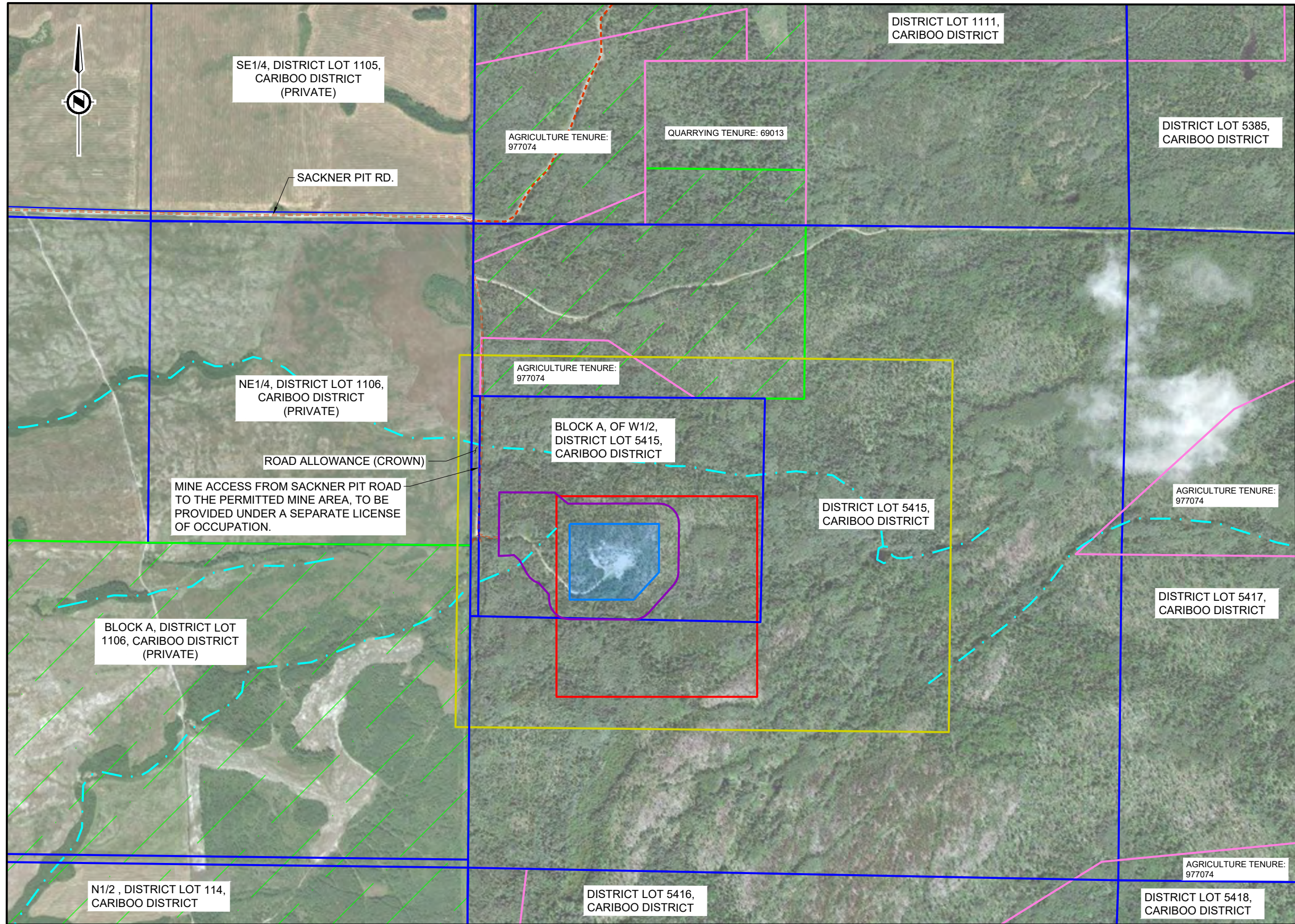
VALLEY LIME LTD.
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

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NOTES:

1. FOR GENERAL NOTES REFER TO DWG 21556-164-01

LEGEND:

- EXISTING ROAD
- MINERAL CLAIM 374380 (25 HECTARES)
- MINERAL CLAIM 1095074 (114 HECTARES)
- LAND ACT SURVEY PARCELS
- AGRICULTURE TENURE
- PERMITTED MINE AREA
- QUARRY TENURE
- EXISTING CREEK
- ALR ZONES

TENURE MAP

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QUALITY ASSURANCE: DATE
DRAWN: JH DATE: 2021-05-20

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PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

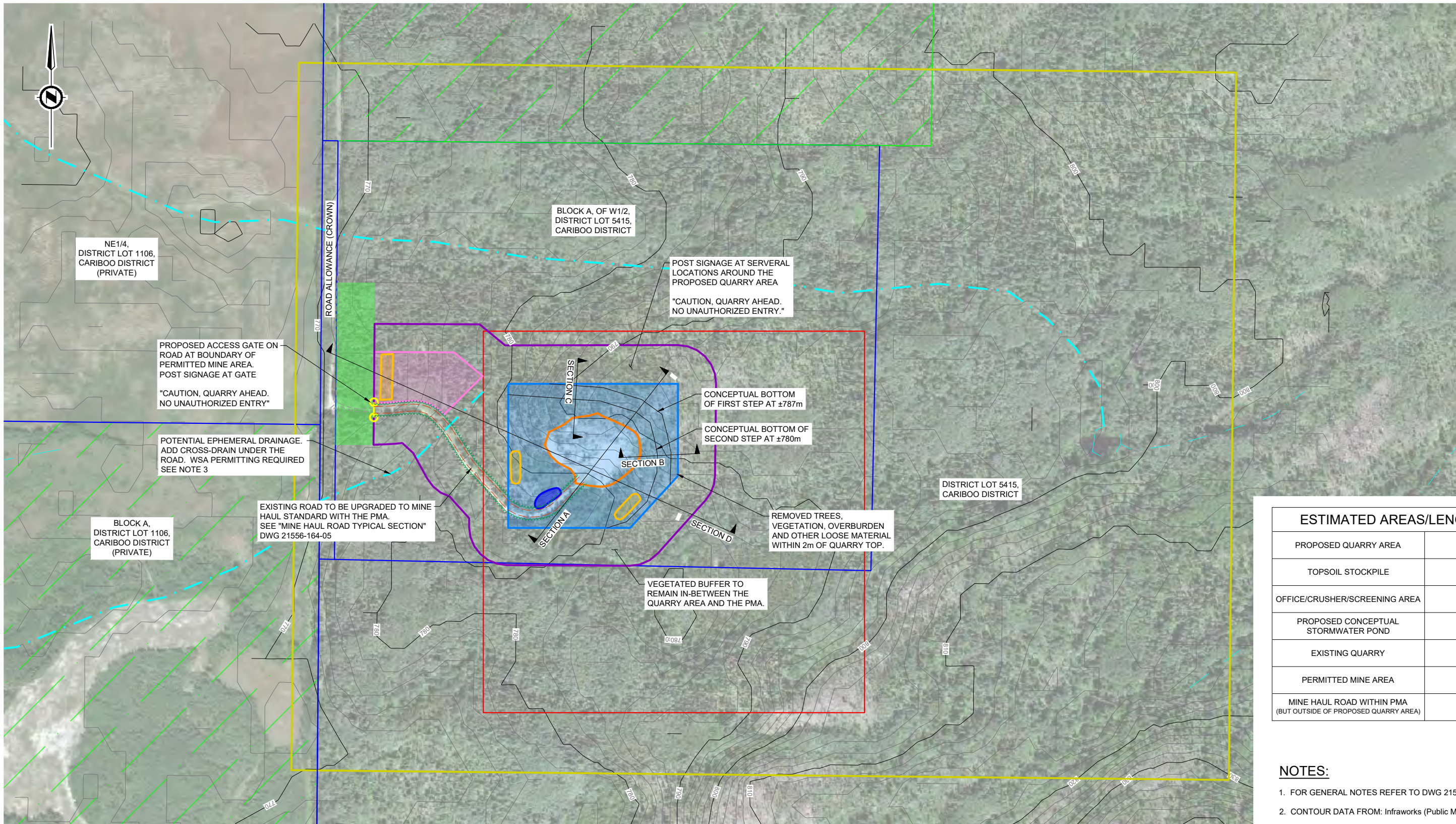
TENURE MAP

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123° 44' 38.2"				451224					

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LEGEND:

MINERAL CLAIM 374380 (25 HECTARES)	PROPOSED QUARRY AREA/BOUNDARY
MINERAL CLAIM 1095074 (114 HECTARES)	VEGETATED DUST & VISUAL BARRIER
EXISTING QUARRY BOUNDARY	TOPSOIL STOCKPILE
LAND ACT SURVEYED PARCELS	OFFICE/CRUSHER/SCREENING AREA
EXISTING ACCESS	PROPOSED CONCEPTUAL STORMWATER POND
EXISTING CREEK	ALR ZONES
PERMITTED MINE AREA	

SITE MAP

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ESTIMATED AREAS/LENGTHS	
PROPOSED QUARRY AREA	±4.0 ha
TOPSOIL STOCKPILE	±0.2 ha
OFFICE/CRUSHER/SCREENING AREA	±0.8 ha
PROPOSED CONCEPTUAL STORMWATER POND	±0.05 ha
EXISTING QUARRY	±0.8 ha
PERMITTED MINE AREA	±11.3 ha
MINE HAUL ROAD WITHIN PMA (BUT OUTSIDE OF PROPOSED QUARRY AREA)	±0.4 ha

NOTES:

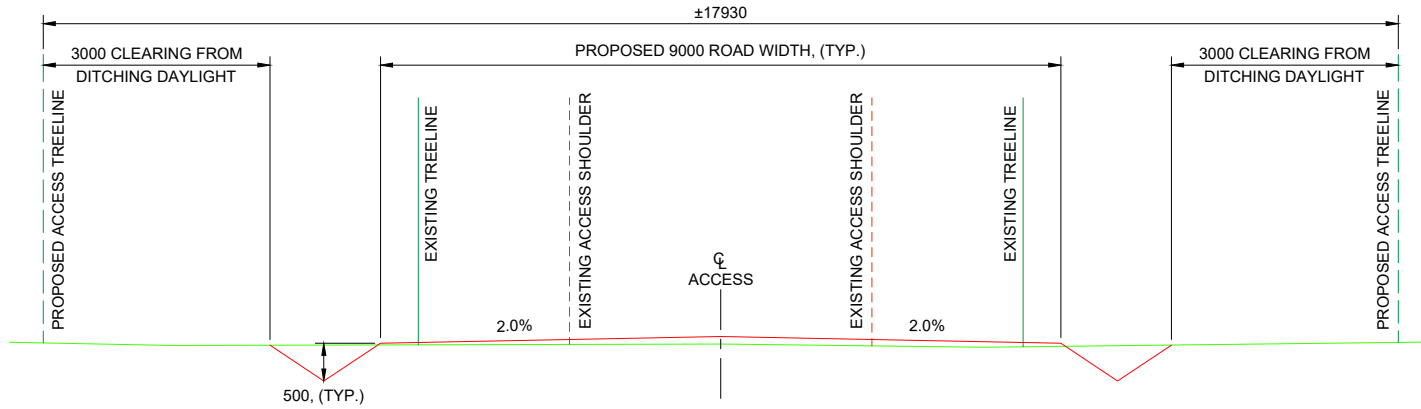
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- CONTOUR DATA FROM: Infracore (Public Model)
- REFER TO DWB REPORT "Valley Lime Quarry Management Plan" FOR DETAILS ON THIS APPLICATION.

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D	MAR 24	ISSUED FOR PERMITTING	BC	JCP	AJ		

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QUALITY CONTROL	JCP DATE 2021-06-09
QUALITY ASSURANCE	DATE
DRAWN	JH DATE 2021-05-20

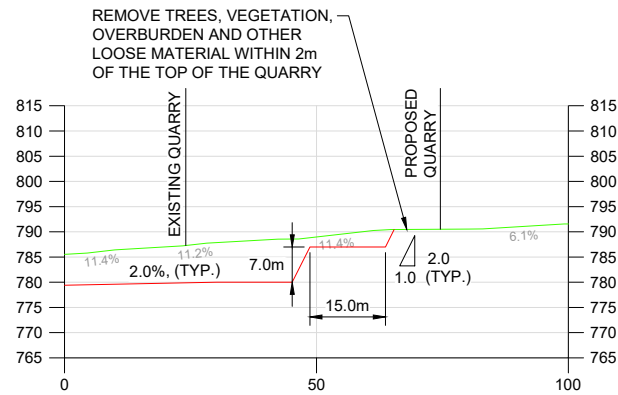
VALLEY LIME LTD.					
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)					
VANDERHOOF, BC					
SITE MAP					
LATITUDE:	53° 59' 25.5"	NAD83	NORTHING:	5982711	
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MINE HAUL ROAD TYPICAL SECTION (WITHIN PMA)

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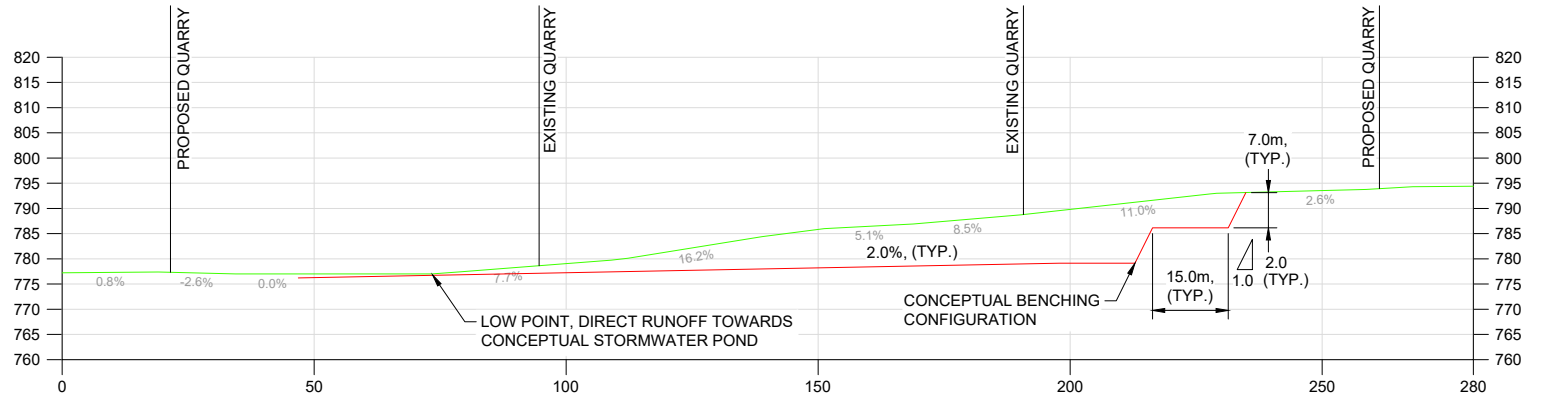


SECTION B

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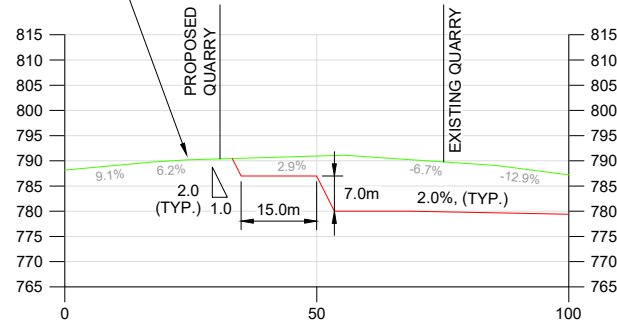
POST SIGNAGE AT SEVERAL LOCATIONS AROUND THE PROPOSED QUARRY AREA, (TYP.)

"CAUTION, QUARRY AHEAD. NO UNAUTHORIZED ENTRY."



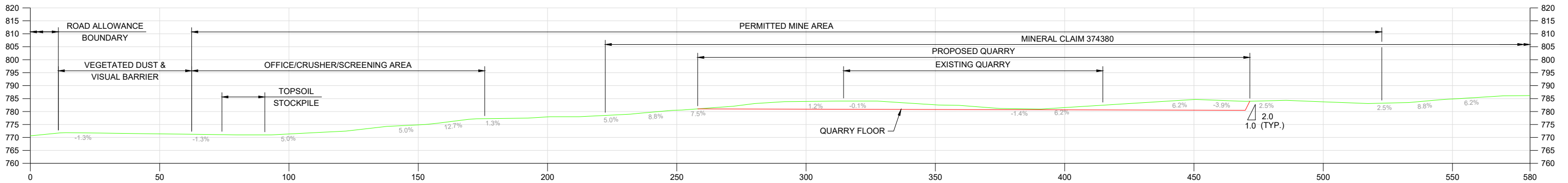
SECTION A

1:1500



SECTION C

1:1500



SECTION D

1:1500

LEGEND:

- EXISTING GROUND
- CONCEPTUAL BENCHING CONFIGURATION

NOTES:

- FOR GENERAL NOTES REFER TO DWG 21556-164-01
- TOPOGRAPHIC DATA OBTAINED FROM: Infracore (Public Model)
- DESIGN CODE:
HEALTH, SAFETY AND RECLAMATION CODE FOR MINES IN BRITISH COLUMBIA, NOVEMBER 2022
- PROPOSED BENCHING CONFIGURATION BASED ON MAINTAINING PIT FACE HEIGHT NOT MORE THAN 2m ABOVE REACH OF LOADING EQUIPMENT. DEERE 844K LOADER ADOPTED AT THIS STAGE.
- MINE HAUL ROAD: THREE TIMES THE WIDTH OF A STANDARD ON-HIGHWAY DUMP TRUCK PROVIDED.

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SCALE		AS NOTED		CAD FILENAME		21556-164 - CONTOUR SITE MAP & SECTIONS	
REV	DATE	DESCRIPTION	DRW	CHK	ENG	PLOT DATE	2024-04-09
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B	DEC 22	ISSUED FOR PERMITTING	BC	JCP	AJ		
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QUALITY CONTROL	JCP DATE 2021-06-09
QUALITY ASSURANCE	DATE
DRAWN	JH DATE 2021-05-20

VALLEY LIME LTD.			
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)			
VANDERHOOF, BC			
SECTION VIEWS			
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LONGITUDE:	123° 44' 38.2"	10U	EASTING: 451224
DRAWING NUMBER		21556-164-05	REV D

Appendix B

Archaeological Chance Find Procedure

Archaeological Chance Find Procedure

There are more than 32,000 archaeological sites currently recorded in British Columbia with many more being added to the provincial inventory every year. For this reason, it is very likely that you will encounter an archaeological site during your lifetime either knowingly or unknowingly. This protocol has been established to increase awareness of this important resource and to assist in planning future developments.

The remnants of British Columbia's earliest cultures are represented in today's landscape by a wide variety of site types, most of which are related to art, habitations, resource gathering and production, tool making, and traditional ceremonial or ritual activities. Some sites that may be immediately visible to a non-archaeologist include:

- Rock art, including pictographs and petroglyphs.
- Tree art and Culturally Modified Trees (CMT'S) such as bark stripping and planks.
- Surface features such as depressions created by former habitations, earthen fortifications, rock cairns, fish traps, clam gardens, burned rock and middens.
- Artifacts that have become visible on the land surface owing to erosion or recent land altering activity. These may be produced in a variety of materials such as stone, bone, antler, wood, or shell.
- Buried cultural remains that may be sighted in a cut-bank, excavation, eroded shoreline, or other exposed deposits

If you discover a site in the course of your work that you suspect may be a possible archaeological site;

- Stop all work in the area to avoid damaging the site.
- Do not disturb any archaeological remains that you may encounter.
- Report your discovery to your supervisor or if they are unavailable, the Company who will provide further instructions {Al Smedley @ 250-596-5633 (asmedley@telus.net)}
- If you are unable to contact a Company representative, please contact the Archaeology Branch by telephone at (250) 953-3334

If you discover what you suspect may be a possible human remains in the course of your work;

- Stop all work in the area to avoid damaging the site.
- Do not disturb any possible human remains that you may encounter.
- Report your discovery to your supervisor or if they are unavailable, the Company who will provide further instructions.
- If you are unable to contact a Company representative, and the suspected human remains appear to be current, contact the RCMP.
- If you are unable to contact a Company representative, please contact the Archaeology Branch by telephone at (250) 953-3334

The following steps will generally be followed

- The Coroner's Office and local policing authority are notified and the Coroner's Office determines whether the matter is of contemporary forensic concern.

- If the remains are not of forensic concern, the branch will attempt to facilitate disposition of the remains.
- If a cultural affiliation for the remains can be determined, the branch will contact an organization representing that cultural group. If the remains are of aboriginal ancestry, the branch will attempt to contact the relevant First Nation(s).
- Generally, if remains are still buried and are under no immediate threat of further disturbance, they will not be excavated or removed. If the remains have been partially or completely removed, the branch will facilitate disposition.
- The branch may arrange for a qualified anthropologist or archaeologist to provide an assessment of the remains.

Appendix C

Traffic Management Plan

Valley Lime Quarry

Traffic Management Plan

Legend

Install STOP sign for loaded trucks before they come onto Sackner Pit Road

Post signage to warn of industrial traffic and that "down" traffic has the Right of Way.

Start of Road LOO. Post radio frequency, calling instructions & MUST CALL.

Install STOP sign for traffic coming from the east

4m Wide Single Lane Road (Max 30km/h). Radio Controlled.

Proposed 30m pullout for traffic driving south (up)

Loaded trucks leaving the quarry heading north (down) have right of way

Install MUST CALL sign for down traffic to call

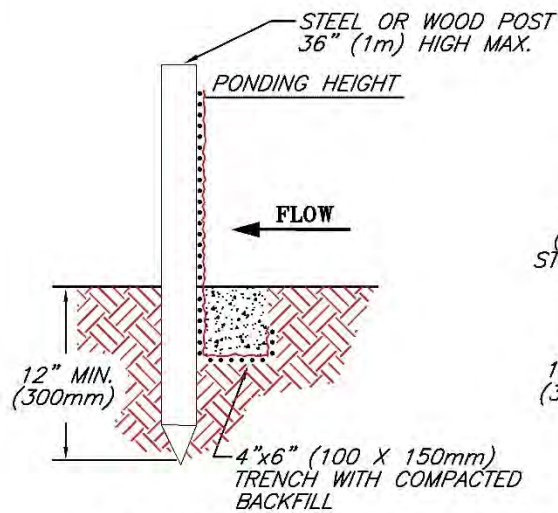
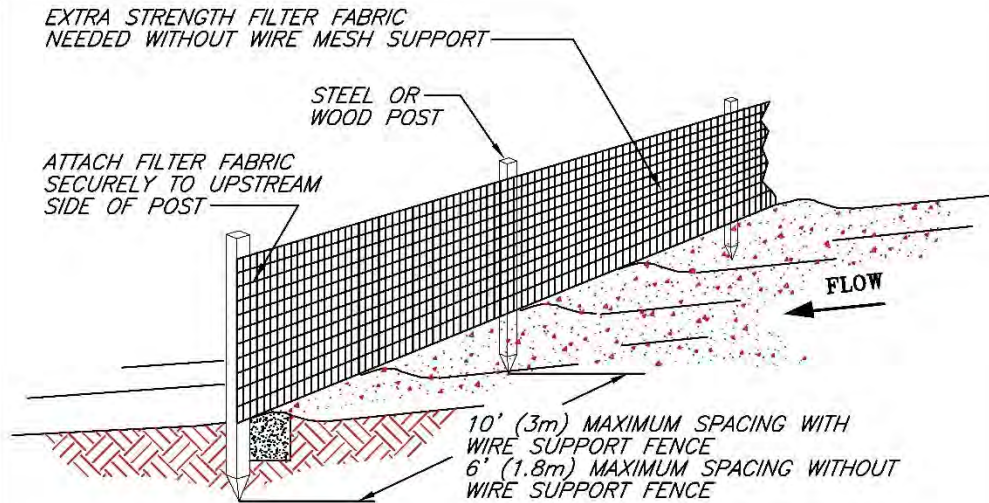
Permitted Mine Area

9m Wide Double Lane Haul Road (Max 30km/h). Radio Controlled.

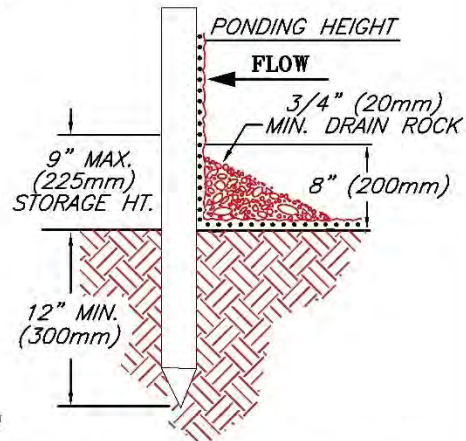


Appendix D

ESC Measures



TRENCH DETAIL



INSTALLATION WITHOUT TRENCHING

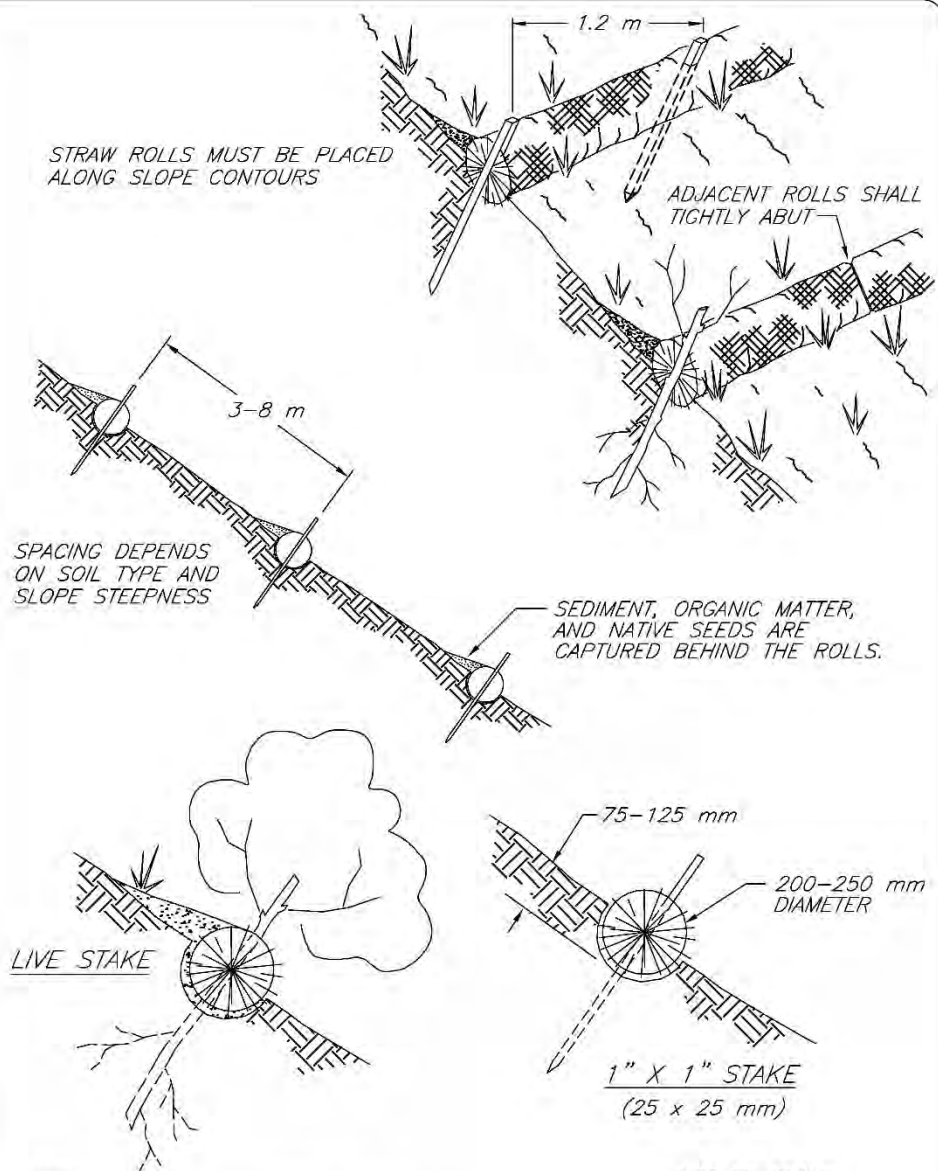
NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

NOT TO SCALE

SILT FENCE

From: Salix-Applied Earthcare - EROSION DRAW 3.0
1996 JOHN McCULLAH



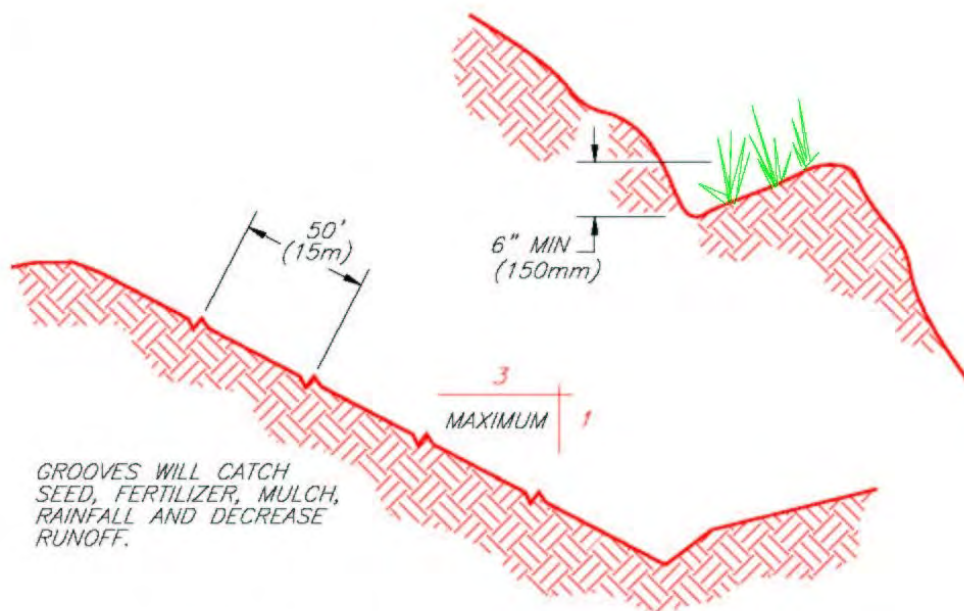
- NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 75-125 mm DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
 2. THIS FIGURE IS PROVIDED FOR GUIDANCE ONLY AND DOES NOT CONSTITUTE A DESIGN. A SITE SPECIFIC DESIGN IS REQUIRED FROM DESIGNER/ENGINEER.

NOT TO SCALE

STRAW ROLLS



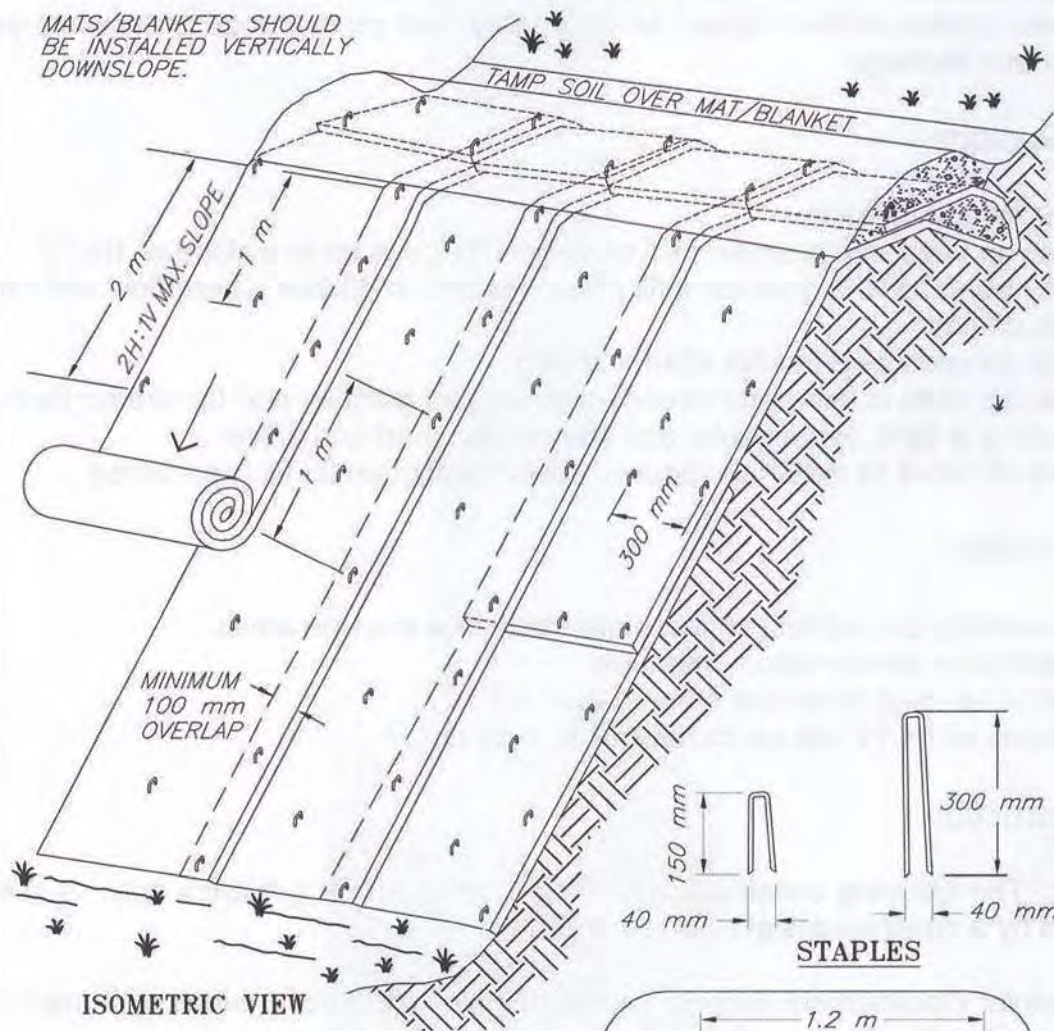
TRACKING



CONTOUR FURROWS

SURFACE ROUGHENING

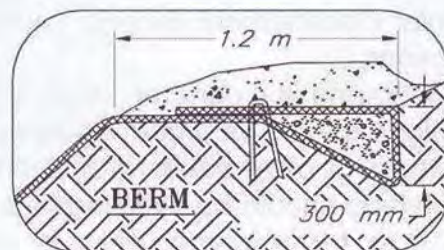
MATS/BANKETS SHOULD
BE INSTALLED VERTICALLY
DOWNSLOPE.



TYPICAL SLOPE SOIL STABILIZATION

NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BANKETS.
3. LAY BANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. CHECK SLOTS, STAKING, STAPLING AND OTHER CONSTRUCTION DETAILS PER MANUFACTURES SPECIFICATIONS.
5. THIS FIGURE IS PROVIDED FOR GUIDANCE ONLY AND DOES NOT CONSTITUTE A DESIGN. A SITE SPECIFIC DESIGN IS REQUIRED FROM DESIGNER/ENGINEER.



NOT TO SCALE

ROLLED EROSION CONTROL PRODUCTS (RECP) SLOPE INSTALLATION

Appendix E

Example Spill Report Form

Spill Report Form

Key Contacts:

Emergency Management BC (Reportable Emergency): **1-800-663-3456** (24 hour hotline)
 CANUTEC/Transport Canada Tel. (613) 996-6666
 Environment Canada Tel. (604) 666-0370

REPORTABLE QUANTITIES

Flammable Gas – i.e. propane	10 kg or 10 minutes
Non-flammable Gas – i.e. CO2	10 kg or 10 minutes
Flammable Liquids	100 litres
Corrosive liquid acids and caustics – i.e. battery acid	5 kg or 5 litres
Environmental hazardous substances – i.e. PCBs	1 kg or 1 litre
Oil and Waste	100 litres
Other substances – i.e. power wash water)	200 kg or 200 litres
Antifreeze	5 litres
Pesticides / Herbicides	1 kg or 1 litre

INCIDENT DETAILS

Date of Spill:	Material Spilled:
Reporter's Name:	UN # and Class:
Department:	Quantity Spilled:
Phone Number:	Location of Spill:
Address:	
Description of Spill:	
Cause of Spill:	
Remediation Actions Taken:	
Agencies Attending Scene (eg. Fire Dept. etc.):	
Employees/Contractors Attending Scene:	
Additional Information:	



DWB Consulting Services Ltd.

Valley Lime Ltd.

MINE ACCESS ROAD MANAGEMENT PLAN



Engineering | Environmental | Forestry

Prepared for: Valley Lime Ltd.

Attn: Albert Smedley
PO Box 380 Vanderhoof, BC
V0J 3A0

Prepared by: DWB Consulting Service Ltd.

Prince George Division
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Date: 23.04.2024 | DWB file: 21556-164 PB | Revision: 0



Signature Page

DWB Consulting Services Ltd. is pleased to submit this report for your review. This report has been prepared using sound technical and professional judgement, based on our knowledge and experience, applicable regulatory framework, industry best management practices, and current understanding of project conditions, design, and project setting.

REPORT TITLE: Valley Lime Ltd. – Mine Access Road Management Plan

PREPARED FOR: Valley Lime Ltd.

REVISION: 0

WRITTEN BY:

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REVIEWED BY:

Tracey Martin, PAg

REVISION HISTORY			
DATE	VERSION	REVIEW TYPE ¹	REVIEWED BY (NAME, COMPANY)
10.04.2024	0	PROFESSIONAL	ALLAN CARSON, DWB
19.04.2024	0	EDITORIAL/PEER	ANASTASIA IVANUSIC, DWB
23.04.2024	0	PROFESSIONAL	TRACEY MARTIN, DWB

¹ Editorial Review: Reviewed for formatting, grammar, spelling, etc.
Professional Review: Reviewed for content and professional signoff
Client Review: Reviewed by client
Regulatory Review: Reviewed by regulatory agency (i.e. DFO) if necessary
Peer Review: Reviewed for content and errors by peer

Disclaimer

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We do not represent, warrant, undertake or guarantee:

- That all project environmental-related information has been received.
- That regulations and standards of practices shall remain constant through the duration of the project.
- That the use of guidance in the report will lead to any particular outcome or result; or, in particular,
- That by using the guidance in the report, the client will be approved by the Province of BC contract holder for the applied works.

KEY CONTACTS

CONTACT	PHONE/EMAIL	ROLE/COMPANY
Albert Smedley	250-596-5633 (o) 250-567-0353 (m) asmedley@telus.net	President / Mine Manager / Supervisor/ Valley Lime Ltd.

EMERGENCY CONTACTS

CONTACT	PHONE	CONTACT FOR:
Department of Fisheries and Oceans Canada (DFO)	1-800-465-4336	Emergencies pertaining to fisheries resources
Emergency Management BC	1-800-663-3456	Reportable Spills
BC Environment	1-800-663-7867	Provincial directory for general enquiries

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1.0 INTRODUCTION

Valley Lime Ltd. (Valley Lime) is proposing to mine and process limestone within the Bulkley Nechako Regional District within the Omineca region of British Columbia, east of Vanderhoof. To access this mine Valley Lime is proposing to upgrade and use an existing access road (hereafter called the “mine access road”). The mine access road (830 m) runs north-south from Sackner Pit Road to an existing road located at the boundary of the Permitted Mine Area (PMA), hereafter referred to as the “mine haul road”. The mine access road does not enter the PMA that is being proposed by Valley Lime (DWB, 2024a). The mine access road is located along the eastern boundary of NE ¼ DL 1106 (private) and Block A of W ½ DL 5415 (crown). A portion of this road is within the Agricultural Land Reserve (ALR).

DWB Consulting Services Ltd. (DWB) has been retained by Valley Lime to prepare this Road Management Plan (RMP) to provide guidance during upgrades, use, maintenance and decommissioning/reclamation of the mine access road that supports required regulatory approvals (the “Work”). This RMP includes an Environmental Overview Assessment (EOA) identifying sensitive environmental receptors that have potential to be impacted by development activities, including water features, fish presence, wildlife, and vegetation. The RMP also includes measures to mitigate potential adverse effects due to the Work including:

- Site Management;
- Environmental Monitoring;
- Erosion and Sediment Control;
- Reclamation;
- Air Quality;
- Water Management;
- Wildlife Management;
- Invasive Plant Management;
- Heritage Resource Management Plan with Archaeological Chance Find Procedures;
- Noise Management
- Waste Management & Contaminated Sites Management; and
- Spill Prevention and Response.

DWB has prepared a site plan (Proposed Access to Limestone Quarry Vanderhoof, BC Access Plan; DWB, 2024a) that includes proposed location of road upgrades, lot boundaries, and land ownership status that is attached in Appendix A. A Valley Lime Quarry Traffic Management Plan (TMP) that shows signage and radio requirements for the mine access road and quarry haul road was prepared for Valley Lime Ltd. (DWB, 2024b) and is attached in Appendix B. A Management Plan and drawings for the quarry have also been developed for Valley Lime Ltd. (DWB, 2024c; DWB, 2024d).

1.1 WORK SCOPE

Proposed activities for the Work include:

- Vegetation clearing and grubbing required for access road widening;
- Stream crossing assessment with crossing upgrade potentially required for road widening and surface upgrades;
- Topsoil salvage and stockpiling prior to gravel placement for road widening;
- Ditching and gravel placement for road widening;

- Road grading, surface maintenance and dust control; and,
- Road deactivation and reclamation activities.

1.2 SITE LOCATION

The mine access road is located within the Omineca Region and is approximately 20 km east of Vanderhoof, BC at 10U 450775 m E, 5983631 m N. The site can be accessed from Vanderhoof by taking Burrard Avenue north, turning right on Northside Road and travelling approximately 700 m to Sackner Road. Travel approximately 12.6 km along Sackner Road to Sackner Pit Road on the left. Travel along Sackner Pit Road for approximately 5.0 km to the mine access road on the right. Refer to Figure 1 for an overview map of the quarry location and Appendix A for additional site location details.

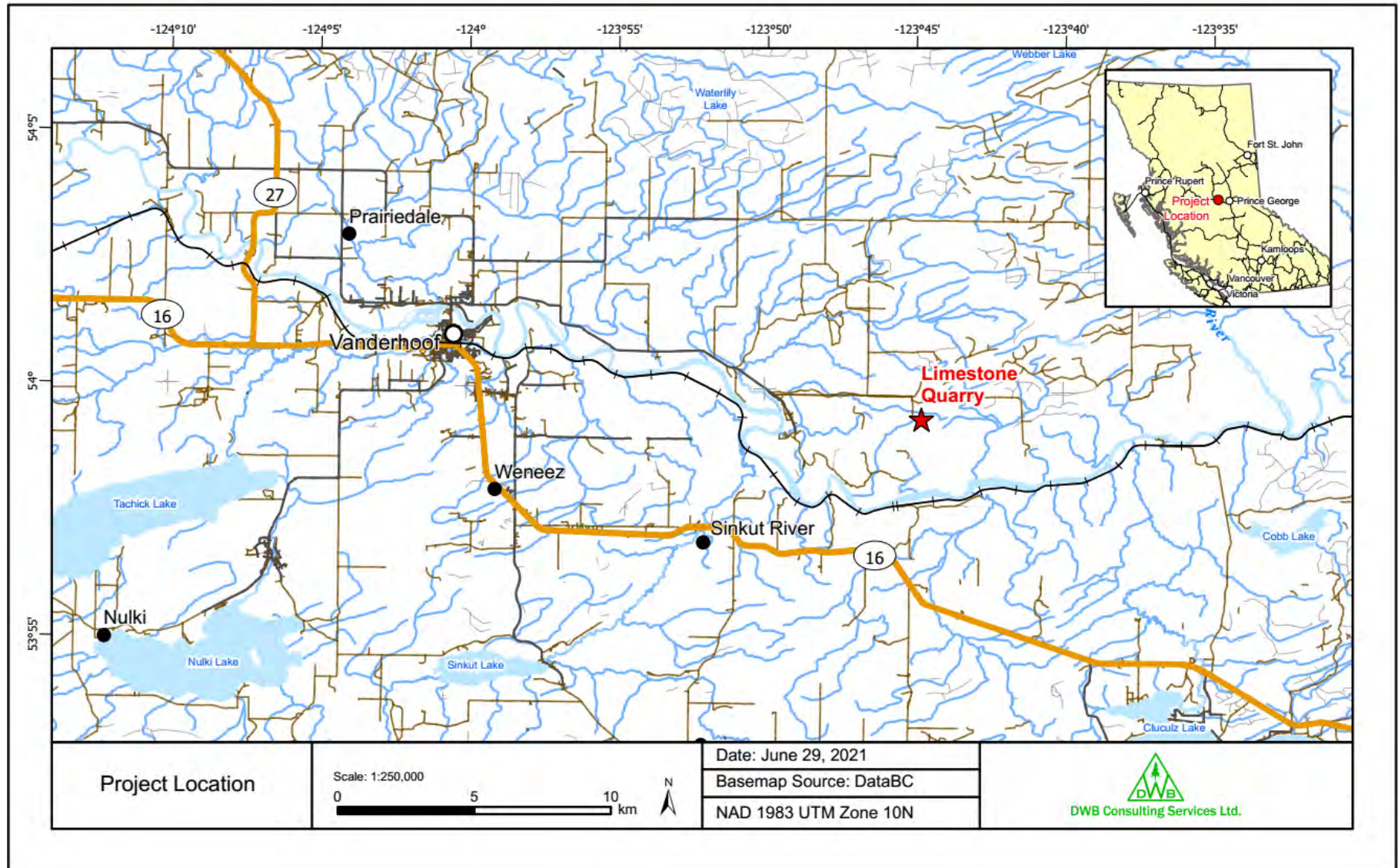


Figure 1: Overview Map of the Valley Lime Quarry location.

1.3 REGULATORY APPROVALS

The following permits and agreements will be required for the Works;

- License of Occupation (LOO) for upgrading, use and maintenance of the mine access road.
- Transportation and Utility (TU) approval from the Agricultural Land Commission (ALC) for mine access road use and upgrading within the Agricultural Land Reserve (ALR).
- Occupant License to Cut (OLTC) from the Ministry of Forests, for timber harvesting.
- Road user agreement with private landowner for northernmost section of the mine access road. A Road Use Agreement with the private land owner has been obtained for the 122 m of mine access road located on private land and a LOO will be applied for to obtain tenure over the 830 m of mine access road located on crown land.

Additional permits/agreements required include:

- WSA Notification of Authorized Changes for crossing structure maintenance at stream crossing on mine access road during development.
- WSA Notification of Authorized Changes for crossing structure removal from stream crossing on mine access road during removal for deactivation.

Valley Lime shall be responsible for acquisition of all permits/authorizations not submitted by DWB.

1.4 ENVIRONMENTAL LEGISLATION AND REGULATIONS

The Works will adhere to all applicable federal and provincial legislation and regulations including but not limited to:

- *Migratory Birds Convention Act* (MBCA);
- *Species at Risk Act* (SARA);
- *Forest and Range Practice Act* (FRPA);
- *Heritage Conservation Act* (HCA);
- *Water Sustainability Act* (WSA) and Regulation;
- *Lands Act*;
- *Wildlife Act*;
- *Transportation of Dangerous Goods Act* (TDGA) and Regulation;
- Occupational Health and Safety (OHS) Regulation; and
- *Workers Compensation Act*.

1.5 ROLES AND RESPONSIBILITIES

Valley Lime and the Environmental Manager shall ensure that effective and clear lines of communication are firmly established at the beginning of the Work and continue for the duration. Key personnel roles and their responsibilities are outlined below. Feedback mechanisms are incorporated to ensure that this RMP will remain adaptive and improve according to additional information received by Valley Lime. Workers shall be notified of any revisions to this RMP via debriefing meetings.

Mine Manager:

- Has the ultimate responsibility for the access road and mine site.

- Provides manpower, equipment, and other assistance to ensure the protection of the environment.

Environmental Manager:

- Ensures compliance with all regulations, legislation, guidelines, permits and policies.
- Provides expertise for all decisions regarding the protection of the environment.
- Ensures appropriate monitoring and inspections are performed, as needed.

Environmental Monitor:

- Guides compliance with all regulations, legislation, guidelines, permits and policies
- Conducts monitoring and inspections, as needed.
- May act as a liaison between the mine staff and the Environmental Manager.

Supervisor in Charge:

- Oversees day-to-day operations on Site.

Communication between the Mine Manager, Supervisor in Charge, Environmental Manager will be ongoing if/when potential environmental issues arise. Refer to Section 5.0 for further details.

2.0 ENVIRONMENTAL SETTING

To identify environmental features that have the potential to be impacted by the Works, a desktop and field assessment were conducted for the mine access road.

2.1 METHODOLOGY

A desktop assessment was conducted to identify any documented environmental resources within the mine access road area that could trigger regulatory requirements during the Work. A search of provincial databases was completed including:

- Habitat Wizard;
- iMapBC;
- Groundwater Wells and Aquifers;
- Explore by Location; and
- BC Conservation Data Centre.

A field assessment was conducted on September 16, 2022 by a crew of two including a professional biologist aided by an environmental technician. The assessment included traveling the length of the existing mine access road and assessing the 200 m of the mine access road from the TRIM feature identified during the desktop assessment to the existing mine haul road. The crew assessed the area for general vegetation types, wildlife, wildlife signs and habitat (i.e., dens, tracks, scat etc.), water features, species-at-risk, and surveyed for any environmental features identified during the desktop assessment. The proposed PMA was also assessed on September 16, 2022, the results of the assessment are provided in the Quarry Management Plan (DWB, 2024c).

2.2 AQUATIC RESOURCES

2.2.1 Lakes

No lakes have been documented within the Work area or the PMA while several unnamed water features have been identified within 1000 m of the PMA. Based on ortho-imagery (Province of BC, 2022a; Province of BC, 2022b), the unnamed water features observed west and south of the mine access road may be wetland features and are summarized in Section 2.2.3.

2.2.2 Streams

According to a search of Habitat Wizard (Province of BC, 2022b), there is an unnamed stream (WSC: 100-567134-228865-686974) located north of the PMA which flows to the west across the mine access road and confluences with Leona Creek (WSC: 180-227700) 6.7 km downstream. There are currently no fish species identified within the unnamed stream and Leona Creek. The desktop review identified a second unnamed stream (Watershed code [WSC]:100-567134-213923-606728) located to the south of the mine access road. This unnamed stream flows southwest from within the PMA to the confluence with an unnamed stream (Watershed code [WSC]: 180-215400) approximately 2.0 km downstream of the PMA. There are currently no fish species identified within these two unnamed streams (WSC: 100-567134-213923-606728 and 180-215400) located west of the PMA (Province of BC, 2022a, Province of BC, 2022b).

During the site assessment on September 16, 2022, no watercourses were identified within the surveyed area and there was no evidence of the two unnamed streams at the time of assessment. There were no signs of water, scour, channel definition, or alluvium; and the areas where stream features were mapped on Habitat Wizard were fully vegetated. A culvert was identified across the mine access road where the northern unnamed stream was mapped. There was no culvert identified on the mine haul road where the south unnamed stream was mapped as crossing the road.

Although there were no signs of water, scour, channel definition, or alluvium identified during the field assessment, there is potential for ephemeral flow through these features as a result of the surrounding topography; therefore, a WSA Notification of Authorized Change permits will be required for the installation of crossings during access road development and reclamation (Section 1.3). In addition, as stream features are designated Environmentally Sensitive Areas (ESAs), in accordance with Section 2.5, a pre-disturbance assessment and ESA delineation will be conducted by a QEP.

2.2.3 Wetlands

No wetlands were identified within the existing Work or PMA during the desktop assessment. There were two water features that may be potentially classified as wetlands identified using ortho imagery approximately 600 m east and 650 m southeast of the proposed quarry (Province of BC, 2022b). Habitat Wizard (Province of BC, 2022b). Wetlands contain a wide diversity of life and support plants and animals, and may include species/communities at risk. There is no documentation of fish presence within these features. Although no fish information is provided for these water features, they are presumed to be fish-bearing until confirmed as otherwise, or presumed to have direct connectivity to fish-bearing streams and lakes.

2.2.4 Aquifers

The Groundwater Well and Aquifer mapping database was consulted to identify any known aquifers in the vicinity of the Work area. The mine access road resides on the North Nechako Terrace Bedrock aquifer

(Aquifer number: 650) (Province of BC, 2022d). Aquifer 650 is 679 km² and overlain with bedrock, glacio-fluvial deposits and then finer-grained glacio-lacustrine deposits. The aquifer is considered to have medium vulnerability due to overall thickness of clay or till. There are small pockets where the clay and till are absent, with only sand and gravel above the aquifer, creating areas of high vulnerability. There are no government monitoring wells for this aquifer and few groundwater wells, however, the general inference of groundwater flow is south towards the Nechako River (Hinnell et al., 2020).

2.3 WILDLIFE

No dens, nests, amphibians, or reptiles were detected during the field assessment. There was avian nesting potential identified within the forested and shrubby habitat along the mine access road and open areas. Additionally, the existing quarry area has potential snake habitat due to the amount of rock fissures and crevices that may be used by snakes to over-winter. No snakes were observed during the site assessment on September 16, 2022; however, detection can vary considerably with weather and time of year.

Signs of moose, deer, and bear, in the form of pellets and foraging logs, and game trails, were observed during the Site visit on September 16, 2022.

2.3.1 At-Risk Wildlife Species

Species listed as threatened or endangered and their respective critical habitat have federal protection under the *Species at Risk Act* (SARA). Red, Blue, and Yellow listed species are categories which designate the conservation priority for species within BC.

A search of the BC Conservation Data Centre (BC CDC, iMap, 2022) was conducted for known occurrences within the existing Work area and PMA. Only one species was identified within a 5 km radius of the PMA, White Sturgeon (Upper Fraser Population) (*Acipenser transmontanus* pop. 5), which is listed as Endangered and is documented within the Nechako River (Province of BC, 2022a; Province of BC, 2022b).

The Work area and PMA are located within the range of the Nulki Grizzly Bear (*Ursus arctos*) Population Unit (GBPU) which has a high conservation rank (MOECCS, 2020). The Grizzly bear is a blue listed wildlife species in BC and is listed as Special Concern under SARA (Government of Canada, 2024).

2.4 VEGETATION

The Work area and PMA are located within the Sub-Boreal Spruce (SBS) zone, dry-warm subzone (dw), variant 3 (SBSdw3) (Province of BC, 2022a). The forest in the SBSdw3 zone is very diverse and comprise of a mixture of Lodgepole pine (*Pinus contorta*), Douglas-fir (*Pseudotsuga menziesii*), hybrid white spruce (*Picea engelmannii* x *glauca*) with Lodgepole pine and/or Douglas-fir dominating on drier sites and hybrid white spruce dominating on wetter sites (DeLong et al., 1993). The forest undergrowth in this zone is characterized by a various shrubs and herbs and a well-developed moss layer. Common shrub species may include velvet-leaved blueberry (*Vaccinium myrtilloides*), saskatoon (*Amelanchier alnifolia*), birch-leaved spirea (*Spiraea betulifolia*), prickly rose (*Rosa acicularis*), and soopolallie (*Shepherdia canadensis*). The climate for the SBSdw3 zone is characterized as the warmest variant of all the SBS zones in the region.

Based on the site assessment on September 16, 2022, west of the existing quarry, the canopy was comprised primarily of mature aspen and spruce and immature alder, with an understory of prickly wild rose, bunchberry (*Cornus canadensis*), and false solomon's-seal (*Maianthemum racemosum*). Pine was

also observed north of the mine access road. Typically, the ground was lower in elevation and wetter, resulting in slightly different species composition south of the mine access road.

2.4.1 Invasive Plants

Invasive plant species that are designated as noxious are regulated under the BC *Weed Control Act* and must be controlled by all land occupiers. Invasive species previously identified within 5 km of the Work area are included in Table 1.

Table 1. Invasive plant species previously documented within 5 km of the Work area (Province of BC, 2022a; NWIPC, 2020).

Scientific Name	Common Name	Species Map Code	Noxious Province-wide (Y/N)	Regionally Noxious (Y/N)	NWIPC Classification within the Nechako IPMA List
<i>Cirsium arvense</i>	Canada thistle	CT	Y	N	Low Priority
<i>Matricaria perforata</i>	Scentless chamomile	SH	Y	N	Low Priority
<i>Tanacetum vulgare</i>	Common tansy	TC	N	Y	High Priority
<i>Hieracium pratense</i>	Yellow hawkweed	YH	N	N	Low Priority
<i>Hieracium praealtum</i>	Queen devil hawkweed	QH	N	N	Not listed
<i>Hieracium aurantiacum</i>	Orange Hawkweed	OH	N	Y	Low Priority
<i>Leucanthemum vulgare</i>	Oxeye daisy	OD	N	N	Low Priority
<i>Tragopogon dubius</i>	Western Goat's Beard	WG	N	N	Not listed

Although no invasive plant species have been previously documented within the mine access road area (Province of BC, 2022a), oxeye daisy (*Leucanthemum vulgare*) and yellow hawkweed (*Hieracium pratense*) were identified during the field assessment on September 16, 2022. The spread of these species, and any other noxious species identified, should be minimized by initiating best management practices (BMPs) as outlined in Section 11.0.

2.4.2 At-Risk Plant Species

There were no previously documented occurrences of plant species at risk within the mine access road area, PMA or adjacent areas (Province of BC, 2022a). However, during the field assessment, a potential Douglas-fir - lodgepole pine / clad lichens (*Pseudotsuga menziesii* - *Pinus contorta* / *Cladonia spp.*) plant community was identified within the PMA. This was the only location where Douglas-fir was identified during the field assessment. This plant community is blue listed according to the BC Conservation Data Centre (Province of BC, 2022c). Refer to the Quarry Management Plan (DWB, 2024c) for additional details and management.

2.5 ENVIRONMENTALLY SENSITIVE AREAS

Environmentally Sensitive Areas (ESAs) are areas requiring special management and attention to protect resources, habitat, or species. ESAs contribute to the retention and/or creation of wildlife habitat, soil stability, water retention or recharge, vegetative cover, and similar vital ecological functions. ESAs may require additional protection and/or mitigation measures. A pre-disturbance assessment of the mine access road footprint will be conducted by a Qualified Environmental Professional (QEP) to identify ESAs prior to road use and widening works commencing. The following are considered ESAs within and bordering the Work:

- Any stream feature as defined under the WSA;

- Rare plant and plant communities;
- Occurrence of federal or provincial species of concern (i.e., red and blue-listed species and ecosystems); and
- Active wildlife dens and/or nests.

All ESA's and required mitigation will be reported to the Environmental Manager and/or designate(s). All ESA's identified within the Work area will require delineation in the field by a QEP and appropriate buffers installed and/or additional mitigation implemented. Methods of delineation (e.g., spray paint, flagging) will be documented and made clearly visible to all workers and representatives on site. All crew members will be informed of any ESA's previously identified within the Site prior to commencement of works. Any changes in status of current ESAs, or any new ESAs found as designated by the QEP will be documented, delineated, and communicated to all working personnel on site.

2.5.1 Vegetation Clearing (Bird Nesting) Window

The best management strategy to maintain legal compliance and conserve bird populations during industrial development is to schedule work activities outside of the peak breeding period for birds. If construction is proposed during the peak breeding period, active bird nest surveys are recommended to reduce the risk of incidental harm and disturbance. Active nest surveys should be conducted under the supervision of an Appropriately Qualified Professional (AQP).

The majority of birds, eggs, and active nests are protected from incidental disturbance and harm under the Canada *Migratory Birds Convention Act* (MBCA) and the *BC Wildlife Act* on all land tenures. A number of bird species also have protection under SARA, where additional prohibitions may apply to nests and breeding habitat. Nests belonging to a bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and osprey (*Pandion haliaetus*) are protected under the *BC Wildlife Act* year-round, regardless of occupancy¹; if one of these nests requires removal, authorization by the province will be required after the nest occupancy status has been determined. Nests belonging to 18 species, including pileated woodpecker (*Dryocopus pileatus*) and great blue heron (*Ardea Herodias*), are protected year-round under the MBCA regardless of occupancy, unless the nest has remained unoccupied for a predetermined period of time². Unoccupied nests protected year-round under the MBCA may only be removed after a notification has been submitted to the Registry for Abandoned Nests³, and only if certain conditions or authorizations apply.

To reduce the risk of encountering and disturbing breeding birds, clearing and grubbing activities will be conducted during the least-risk period for nesting birds and outside of the peak breeding period for birds in the region. According to Environment and Climate Change Canada (ECCC), the peak nesting season for birds in the region that the site falls within, zone A4, is April 21- August 19; this window is based on less than 5% of birds actively nesting in forest and open habitat. Therefore, the timing window for vegetation clearing to occur is from **August 20 to April 20** (ECCC, 2024).

¹ A nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron, and burrowing owl are protected year-round under the *BC Wildlife Act*, unless authorized under a *Wildlife Act* permit (*Wildlife Act*, RSBC 1996, c 488).

² Refer to the Schedule 1 of the *Migratory Bird Regulations* for a complete list of species protected year-round under the Canada *Migratory Birds Convention Act*: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-105/page-7.html#h-1348335>

³ Environment and Climate Change Canada: 2022. Registry for Abandoned Nests. Available at: [https://www.permits-
permits.ec.gc.ca/en/AbandonedNests](https://www.permits.ec.gc.ca/en/AbandonedNests)

2.5.2 Amphibian Window

The BC *Wildlife Act* stipulates that it is an offence to harm, harass, or kill wildlife including amphibians and all their life stages. An Amphibian Timing Window has not been developed for the Omineca Region; however, the most sensitive times for most amphibian species within the Province of BC are from **April – May**. If amphibians are discovered within the Site at the time of development, a QEP should be contacted to determine the appropriate actions given the species and the phase of the works. If amphibians will be impacted by Work activities, a salvage under the authorization of a provincial permit will be required.

2.5.3 Grizzly Bear Timing Windows

Grizzly bears travel considerably to find seasonal foods, mates and denning sites as resource availability differs by landscape (Table 2; MFLNRO, 2014).

Table 2. Typical seasonal habitat feature use by grizzly bears.

Season	Start	End	Feature/habitat type	Activity
Mid- to late winter	January	March	Den Site	Birthing
Spring	April (March – May)	June	Wetland meadows	Feeding on early vegetation (graminoids, roots)
Spring	April (March-May)	June	Shorelines / estuaries / floodplain forests	Feeding on early vegetation (graminoids, roots, bark, etc.)
Spring	April (March-May)	June	Avalanche chutes	Feeding on early vegetation (Indian hellebore, roots, etc.)
Spring	April	June	Various / calving grounds	Interior bears feed on winter-weakened—and later, calving—ungulates (interior bears)
Late spring / summer	late-April	June	Various (including, but not limited to, exposed ridges)	Breeding
Summer	mid-June	August	Various—food sources are dispersed across landscape	Feeding on berries, bark, insects, small mammals, ungulates, carrion, etc.
Summer	July	September	Vaccinium and soopalalie patches (young cutblocks and other areas with significant berry crops)	Feeding on berries
Fall	mid-August	October (November)	Spawning grounds of stream/river systems	Feeding on spawning salmonids
Early winter	October (November)	November (December)	Den sites	Implantation of fertilized eggs
Winter	October (November)	April (March-May)	Den sites	Winter aestivation (“hibernation”)

Generally, in the spring, grizzly bears follow the receding snowline and will spend time in avalanche tracks, meadow and wetland complexes, riparian areas and estuaries to feed on vegetation (Gyug et al., 2004). Throughout the summer months, interior bears will use subalpine parkland meadows extensively for digging corms, hunting and feeding on berries and vegetation (Gyug et al., 2004). Other important foraging features include dry southern exposed slopes and an array of vegetation complexes, including early-seral and old-growth forest stands that produce substantial berry crops (MFLNRO, 2014). In the winter months, grizzly bears retreat to dens typically dug out on steep slopes where snow accumulates, however, hollow trees or crevices may also be used or modified for denning. Den sites may occur on well-drained slopes at high elevations and are often on north-facing slopes (although dens have been confirmed on all aspects) (MFLNRO, 2014). Most dens are selected under the cover of tall shrubs (birch or willow) or trees, whose root systems support the ceilings (Gyug et al., 2004). As grizzly bears are most sensitive during the denning season general sensitive periods are from October to April; this window will vary depending on timing of seasonal changes (MOECCS, 2020).

2.5.4 Land Use

2.5.4.1 General Land Use

Valley Lime does not currently have tenure over the proposed mine access road location. The existing road which will be developed and used as the mine access road is located along the eastern boundary of NE ¼ DL 1106 (private) and Block A of W ½ DL 5415 (crown). A LOO is being applied for to obtain tenure over the 830 m of mine access road located on crown land and a Road Use Agreement with the private land owner has been obtained for the 122 m section of mine access road which crosses onto private land.

The surrounding area is comprised of Private Land and Crown Range land. Agriculture and forestry form the basis of the economy in the general area and grazing land and retired, harvested cut blocks occupy the local area. The proposed PMA to the southeast of the mine access road is on Untitled Crown land (Cariboo District Lot 5415) within two mineral claims, 1096074 and 374380.

Several Agricultural Land Reserves (ALR) polygons are located within the local area. ALR land is provincially designated agricultural use areas where non-agricultural uses are restricted. Any activities within an ALR must be compliant with the BC *Agricultural Land Commission Act*. The proposed mine access road extends into ALR as shown on the site plan in Appendix A. A Transportation and Utility (TU) approval from the ALC will be required for the 0.4 ha section of proposed mine access road in the ALR since the use, maintenance and upgrade of the road for the purpose of mine access is considered a non-agricultural use.

Agricultural Capability Ratings for ALR land in BC is available online from the BC Soil Information Finder (BC Gov, 2023). The area in which the mine access road is located has an Agricultural Capability Rating of 5DX, limited by undesirable soil conditions and cumulative and minor adverse conditions (ALC, 2024). The Class 5 capability rating is defined as land that has limitations that restrict its capability to producing perennial forage crops or other specially adapted crops (ALC, 2024).

Disturbance to vegetation and soils within the ALR will be minimized during road development and reclamation and agricultural soils will not be imported or removed from the ALR. The end land use objective for the portion of the mine access road located in the ALR that will be reclaimed (Appendix A) has been identified as forest land grazing/silvopasture (Dobb and Burton, 2013). Refer to section 7.0 for road reclamation details.

2.5.4.2 Parks, Protected Areas, Traditional Territories, and Reservations

An Area of Interest Evaluation Summary Report was generated for the PMA using the Natural Resource Online Services (NROS) Explore by Location mapping database (Province of BC, 2024a). The PMA exists within the region represented by Nak'azdli Band and Saik'uz (Stoney Creek) First Nation. An Archaeological Data Request for the PMA was submitted on October 17, 2022. A response was received on March 6, 2023 from the Archaeology Branch of the MOF confirming that there are no known archaeological sites recorded on the subject property. The Archaeology Branch did not identify a need for archaeological study or Provincial heritage permits at the time of the request. Refer to Appendix B for archaeological chance find procedures.

The Stuart River - Lower Site Provincial Park is within the RA and approximately 1 km east of the LA boundary. No other protected areas were identified within the RA, LA, or PMA.

3.0 POTENTIAL ENVIRONMENTAL IMPACTS

The mine access road will encompass 1.65 ha, which will include pullout areas. The existing mine access road is approximately 830 m long and 3.5 m wide, which will be widened to 4 m. Refer to design drawings in Appendix A for further details.

The mine access road will be in use throughout all mine activities. Extraction and processing of limestone material at the mine is expected to occur for a period of 5 years. Upon mine completion, the mine access road will be reclaimed to the standards outlined in Section 7.0. Operational activities on the mine access road that may have an environmental impact include:

- Clearing and grubbing for road widening (topsoil loss, admixing, increased erosion, and sedimentation risks);
- Transport of material and equipment from the mine on the mine access road;
- Reclamation and deactivation of the mine access road;
- Re-fuelling equipment, fuel storage, and the presence of heavy equipment;
- Dust from roads usage;
- Erosion from road surfaces and ditches; and
- Waste management.

4.0 SITE MANAGEMENT PLAN

4.1 SITE OPERATIONS

The proposed mine and access road operations are anticipated to be completed over a period of 5 years. It is understood that if the scope of mine access road development changes, a new LOO and revised Road Management Plan would be required.

4.2 SCHEDULE

The mine access road will be operational in conjunction with the mine. The mine access road will be used Monday to Friday, 7 am to 5 pm from April to November (weather depending). Works will commence following permit approval and will only occur during the day. Refer to Section 5.3 for winter shutdown procedures.

4.3 INFRASTRUCTURE AND FACILITIES

An ATCO trailer will be utilized as a main office, which will provide space for the management/administration services and a first aid station, and will be located within the PMA office/crusher/screen area (laydown area).

4.3.1 Laydown Area

The laydown area for the Work is proposed to be located within the PMA and outside of the mine access road Work area (Appendix A). The laydown will be located west on the west side of the PMA and will be accessed off of the mine access road via the mine haul road. The site office and portable toilet will also be located in this designated area. As this area is located within the PMA, operations within this area will follow the Quarry Management Plan (DWB, 2024c).

4.3.2 Access

Access to the mine access road will be gained from Sackner Pit Road. The mine access road is an existing road running north-south, to an existing road located within the boundary of the PMA (the mine haul road) (Appendix A). All traffic for quarry staff and visitors, equipment and haul trucks travelling to the and from the mine will utilize the mine access road to reach the PMA. The mine access road is anticipated to be one lane with pullout areas for passing. Improvements to this road may include upgrades and/or maintenance and deactivation of the existing stream crossing. Valley Lime will ensure compliance with the WSA (Section 1.3; Appendix A) prior to undertaking any work at the stream crossing. A Traffic Management Plan has been established for the use of the mine access roads (Appendix B).

4.3.3 Water and Fuel

Fuel will be stored in tidy tanks on the back of pickup trucks and no fuel will be stored on site. Fuel storage and re-fueling of equipment will follow the Spill Prevention and Response Procedures outlined in Section 15.0.

Water will be acquired from a third party with an off-site licensed water source to control for dust associated with road development. At this time, it is not anticipated that Valley Lime will need to obtain their own WSA Section 10 Short Term Water Use Permit.

4.4 EQUIPMENT

A variety of conventional construction equipment will be utilized for operations on site and are listed in Table 3.

Table 3. Equipment to be used during road development and operations.

Equipment	Quantity	Size (tonne)
Crawler Dozer	1	30
Excavator	2	20
Haul Truck	1	40
Grader	1	25
Pickup	1	1

All equipment will be maintained in good working condition and will only be re-fueled in the designated areas within the laydown area. Fuel storage in tidy tanks and re-fueling of equipment will follow the Spill Prevention and Response Procedures outlined in Section 15.0.

4.5 MATERIAL AND SOIL STOCKPILES

Soil and overburden salvaged during development of the mine access road will be stockpiled along the access road. Topsoil will be salvaged and stockpiled separately from overburden. **All topsoil and overburden from the section of road within the ALR will be handled and stored within the ALR. Soil from areas outside of the ALR will not be imported to the ALR.** These stockpiles will be managed to maximize topsoil retention and minimize erosion, as outlined in Section 6.0, and shall be kept free of invasive plant material (Section 11.0). Topsoil and overburden will be used to reclaim the mine access road ALR and non-ALR section the material was removed from (Section 7.0).

4.6 CLEARING, GRUBBING AND GRADING

Vegetation clearing will be required for mine access road expansion. Clearing shall extend only to the designated limits of construction and marked with flagging/staking on site. Prior to commencing operations, marked limits will be inspected by the Environmental Monitor who may amend them if deemed necessary. Clearing and grubbing within 15 m of the unnamed streams for road development will be minimized and will only be conducted under the direct supervision of the Environmental Monitor.

In addition to those procedures stated above, the following general procedures concerning clearing and grubbing practices will be followed:

- Conduct bird nest and denning surveys prior to clearing and grubbing (Section 2.5);
- Machinery is to arrive on site in a clean condition and is to be maintained free of fluid leaks, invasive species, and noxious weeds;
- Clearing and grubbing will only occur under dry or frozen conditions, when practicable;
- All vegetation growing outside of the marked/designated area for clearing and grubbing will be protected and retained;
- Root systems of cleared vegetation shall not be removed except in the area of cuts, fills or actual road surface (i.e., no grubbing outside fill lines will be permitted). If vegetation is unnecessarily disturbed, the exposed soil will be immediately seeded and mulched to reduce the potential for erosion and sediment;
- Any materials generated by clearing or grubbing, will not be burned onsite;
- Stripping and road bed material will be stockpiled more than 30 m from the watercourse;
- Immediately following completion of clearing and grubbing, the Erosion and Sediment Control (ESC) Plan will be implemented as per Section 6.0;
- Any noxious weeds and invasive plants found throughout clearing and grubbing works will be managed in accordance to BMPs addressed in Section 11 and
- Works will be completed in a timely manner to completion to limit erosion potential of disturbed soils.

5.0 ENVIRONMENTAL MONITORING PLAN

Environmental monitoring will be required at varying frequencies during works depending on the environmental risk of activities being undertaken. Full time environmental monitoring will be required during high-risk activities such as vegetation clearing and road upgrading works in and around streams, or works conducted in close proximity to active wildlife features that may be identified during pre-disturbance surveys.

In addition to the pre-disturbance survey (Section 2.5), the Environmental Manager or delegate will conduct a site visit prior to the commencement Work to determine if additional mitigation measures are required to meet the conditions of the least-risk timing windows (Section 2.6) and any ESA's that are encountered on Site. During each year of quarry operations, the Environmental Manager or delegate will conduct an inspection of the Work area prior to remobilization in the spring, and demobilization prior to winter shutdown (Section 5.3). The Environmental Manager or delegate may be required to conduct additional surveys during Work and inspections, as necessary.

The Environmental Manager or delegate will hold an environmental kick-off meeting with the Mine Manager and Site operation staff to ensure all personnel are aware of the guidelines and procedures in the Road Management Plan (RMP) before the start of the Work. The Environmental Manager will assign an onsite designate to ensure the guidelines in the RMP are maintained and that communication remains consistent when any issues or changes to the RMP occur. The Mine Manager will be in regular communication with the Environmental Manager and may require additional site inspections should an environmental incident occur.

Duties of the Environmental Manager or delegate during site inspections may include, but not necessarily be limited to:

- Completing nest/wildlife surveys prior to clearing vegetation;
- Completing incident reports in cases of non-compliances;
- Creating an inventory of spill kits, checking for leaking equipment and spill response management;
- Conducting water quality monitoring as required;
- Liaising with various third-party professionals (i.e., the Environmental Manager, Mine Manager, Site Supervisor);
- Overseeing restoration activities and site cleanup; and
- The produce a Daily Environmental Monitoring Report that summarizes activities, monitoring conducted, any issues which arise (e.g., spill), environmental items of note (e.g., nearby wildlife sighting), and photos.

5.1 ENVIRONMENTAL INCIDENT REPORTING

All environmental incidents are required to be reported to the Environmental Manager and designate(s) on site. An environmental incident is defined as:

- An emergency;
- Any leakage, spill, or release of hazardous liquid or gas;
- All wildlife encounters;
- Actions that lead to the spread of noxious weeds;
- Actions other than what was included in a plan that requires environmental remediation; and
- Actions that result in an exceedance or non-compliance circumstance with applicable environmental regulations and/or permits.

5.2 WORK STOPPAGE

The Environmental Manager and/or onsite designate have the authority to suspend or alter work for the period deemed necessary as a result of an environmental emergency, unfavourable work conditions, or failure to comply with the RMP. Work stoppage is often associated with periods of extreme weather conditions and may extend for several days.

5.3 WINTER SHUTDOWN

The following procedures will be implemented for the winter shutdown period:

- All waste, fuels, and chemicals will be transported offsite and disposed of at the appropriate facilities in accordance with the Waste Management Plan (Section 14.0). No hazardous waste materials shall remain onsite;
- Any equipment that has the potential to leak or cause a spill will be removed or repaired immediately;
- The portable toilet will be pumped out and transported by a licensed hauler for disposal at an approved facility;
- Any ESC measures that have been installed will be inspected for functionality and reinforced, if necessary (Section 6.0);
- Soil stockpiles will be seeded with a weed-free seed mix to prevent erosion and the propagation of invasive plant species (Section 6.0; 7.0; 11.0); and

The Environmental Manager or designate will conduct a thorough site inspection at the end of works.

6.0 EROSION AND SEDIMENT CONTROL PLAN

This ESCP identifies environmentally acceptable construction practices for erosion prevention and sediment control to ensure that water quality parameters are maintained at all times throughout the Works. The following ESC measures have been prepared for road construction. This ESCP has been developed utilizing the *National Guide to Erosion and Sediment Control on Roadway Projects* (Transportation Association of Canada, 2005).

6.1 GENERAL ESC MEASURES

The general principles of ESC that will be followed, include:

- Retain existing vegetation, wherever possible;
- Re-vegetate/protect denuded areas and exposed soils;
- Direct runoff away from denuded areas;
- Minimize the length and steepness of slopes where possible;
- Minimize runoff velocities and erosive energy;
- Retain eroded sediments on site;
- Appropriate sediment control methods will be employed, where necessary, and may include placement of erosion control matting, spring berms, sediment fences, or other available products to reduce sediment mobilization. Corrective measures will be implemented promptly;
- No equipment will enter flowing water, if encountered on site; and
- Seeding and mulching of exposed soils that are to be exposed for a period greater than 30 days.

6.2 PROCEDURAL BEST MANAGEMENT PRACTICES (BMPs)

Procedural BMPs are non-structural procedures that can reduce erosion and sediment transport during construction. Planning can reduce the risks and costs associated with erosion and sedimentation when implemented appropriately and as per the National Transportation Association of Canada guide to erosion and sediment control (Fifield, 2004).

6.2.1 Scheduling and Sequencing

The Mine Manager shall schedule and sequence the Works to prevent erosion and sediment control issues, including:

- Scheduling works to coincide with drier conditions to help minimize the risk of erosion, where possible;
- Implement all permanent ESC BMPs prior to the start of intrusive works;
- Limit high impact activities (e.g., grubbing and stripping) to dry conditions; and
- Minimize vegetation removal and ground disturbance during any period of the Work.

6.2.2 ESC Contingency Planning

Valley Lime shall plan for ESC contingency measures in the event of adverse weather conditions including the implementation of additional ESC measures and/or halting operations if heavy or persistent rainfall is encountered. Following an extreme weather event (defined as >25 mm precipitation within any 24-hour period), Valley Lime shall inspect ESC measures and perform maintenance/modifications as required.

6.2.2.1 ESC Contingency Supplies

Contingency supplies shall be available at the laydown location at all times. The contingency supplies shall be stored in a manner that will protect them from the elements that would degrade the quality or function. Contingency supplies may include the following items:

- Rolled Erosion Control Matting;
- Sediment Fencing;
- Straw bales (certified weed-free);
- Straw/Fibre Wattles; and
- Wood stakes

6.3 SURFACE WATER MANAGEMENT

To manage surface water originating from precipitation events, snow melt, and watered drainages during the Works, the following water management may be followed:

- Divert clean water around the site wherever practical to reduce the quantity of water that must be managed on site;
- Keep drainage areas small to avoid the installation of complex erosion control measures; and
- Install water bars where required upon completion to direct runoff away from access roads and other areas.

A pre-construction assessment is required to assess the area in wet conditions (i.e., spring), particularly where the streams were mapped on provincial databases, but not observed in the fall of 2022. Should these areas seasonally hold water, avoidance of these areas is recommended. However, should avoidance not be possible, consultation with a QEP is recommended to identify additional mitigation measures (i.e., installation of vegetation and no-work buffers, the use of sediment fencing etc.).

6.3.1 Water Quality Monitoring

Water quality monitoring will be conducted should water flow be present during environmental site inspections. When water quality monitoring is required, the following parameters will be checked:

- Measurement of upstream and downstream turbidity using a portable turbidity meter capable of measuring nephelometric turbidity units (NTU) (Table 4).
- Measurement of pH, Electrical Conductivity (EC) and temperature using a hand-held probe. Differences in pH and EC between upstream and downstream can help indicate the presence of a spill, or other issues.

Water quality monitoring will be completed on the basis of the *British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture* (MOE, 2021; Table 4).

Table 4. BC Approved Water Quality Guidelines (MOECCS, 2023).

<u>Clear Water (background < 8 NTU)</u> Induced turbidity should not exceed background levels by more than 8 NTU during any 24-hour period (hourly sampling preferred). For sediment inputs that last between 24 hours and 30 days (daily sampling preferred) the mean turbidity should not exceed background by more than 2 NTU.
<u>Turbid/High Flow (background > 8 NTU)</u> Induced turbidity should not exceed background levels by more than 5 NTU at any time when background turbidity is between 8 and 50 NTU. When background exceeds 50 NTU, turbidity should not be increased by more than 10% of the measured background level at any one time.
The accepted pH range in freshwater is 6.5 - 9.0.

Measurements will be taken upstream (background), midstream, and downstream of the mine access road. Additional locations may be determined by the Environmental Manager or delegate. If turbidity levels are found to be above acceptable standards (Table 4), additional mitigation measures and/or temporary work suspensions may be required. Significant differences in turbidity between upstream (background) and downstream will be managed using the ESC plan (Section 6.4).

6.4 EROSION AND SEDIMENT CONTROL MEASURES

6.4.1 Laydown Area

The laydown area shall be contained using visible boundaries to prevent storage of materials beyond the accepted boundaries. Valley Lime shall install, inspect, and maintain applicable ESC measures (e.g., sediment fencing, stockpile covers) in accordance with BMPs outlined in this plan and the Quarry Management Plan (DWB, 2024c).

6.4.2 Spoil Materials/Stockpiles

Topsoil and overburden will not be stockpiled during periods of inclement weather when the risk of soil loss or soil erosion is greater. Spoil material may be temporarily stockpiled during reclamation activities. To prevent erodible material from entering the surrounding environment, Valley Lime shall:

- Not place temporary or permanent stockpiles within 30 m of any drainage or watercourse;
- Cover, stabilize or revegetate any soil or topsoil stockpiles that are to remain in place for more than 30 days; and
- Place sediment fencing and additional protective measures, as required, around stockpiles where the potential exists for surface erosion.

6.4.3 Sediment Fences

Sediment fences allow water to pond and sediment particles to settle. Valley Lime shall proactively install and maintain sediment fences where sheet flow run-off is expected, or is occurring, and shall not use them within drainage channels or ditches. It is anticipated that minimal use of sediment fencing will be required for protection of ephemeral drainages (should they be observed). Sediment fences are more likely to be utilized around stockpiles and, as needed, during inclement weather conditions. Materials should be available on site for unforeseen circumstances.

At the discretion of Environmental Manager, Valley Lime shall proactively install sediment fences in the following locations/situations:

- Around soil or overburden stockpiles;
- Along any temporary access roads;
- At any location where sedimentation is of concern, especially areas directly adjacent to watercourses or drainages; and
- Prior to inclement weather, such as heavy melting snow or rain.

Special attention will be paid to the maintenance requirements of any sediment fence installed. Sediment fences will be periodically assessed for functionality. Any sediment fences at risk of failure will be replaced. Should sediment or debris accumulation exceed 30 cm in depth from the bottom of the fencing, the sediment/debris will be excavated and removed.

6.4.4 Straw/Fibre Wattles

Straw/Fibre wattles may be used as an alternative to sediment fencing. They must be installed as required based on site conditions, according to the manufacturer's instructions. The wattles can be installed to intercept sheet flow, and used as emergency or temporary ditch checks. When used to protect water bodies from sediment inputs, they may be used as a diversionary device to direct sediment-laden flow away from the water body.

Straw/fibre wattles shall consist of bundled straw or coconut fibre wrapped in open-weave photo-degradable plastic netting, or bio-degradable fibre netting anchored into the soil with stakes along slope contours as a grade break to reduce erosion potential and sediment transport. Specific attention shall be given to ensuring the fibre roll is installed in an excavated trench, generally $\frac{2}{3}$ of the depth of the roll diameter, to reduce channelling/undermining below the fibre roll. On steep slopes, additional anchors may be required on the downslope side of the fibre roll. Additionally, adjacent rolls shall tightly abut to ensure water does not flow between them. Typical installation details are provided in Appendix C.

6.4.5 Ditches

Ditches along the mine access road will be maintained throughout mine operations. To minimize erosion and down-cutting, ditches will be vegetated or armoured using rolled erosion control matting (RECM) or hard armouring with rock.

Valley Lime shall:

- Horizontally track exposed soil along ditch slopes;
- As required, use vegetated swales for grades less than 2 %, armour ditch lines with riprap or erosion blankets for grades exceeding 2 % and maintain sumps and ditch lines through excavation of sediment buildup; and

- Place sediment removed from ditch-lines or sumps in a stable location with temporary ESC measures in place.

7.0 RECLAMATION PLAN

Following development and reclamation activities at the mine, the mine access road will be deactivated and the western portion of the road, which is located within the ALR, will be reclaimed as in accordance with the ALC Policy P-13 (ALC, 2013). Deactivation and reclamation activities will follow best management practices outlined in this section and in accordance with the LOO permit conditions and the ALC Policy P-13 (ALC, 2013). The overall objective of deactivation and reclamation will be to prevent the risk of sediment mobilization, restore vegetation to a self-sustaining state, and create useable habitat for livestock grazing and local wildlife. Deactivation/reclamation measures related to the closure of the mine access road include:

- Removing all equipment, fuel, chemicals, and waste from the site;
- Leveling (i.e., elevation of the road base, ditches, and stockpiles will be reduced to the same elevation as the surrounding areas) and decompaction;
- Remove culvert at stream crossing, install cross ditch according to WSA permit, pull back road materials);
- Seeding and planting (by hand or ATV) all exposed soil along deactivated road, as required;
- Spreading any coarse woody debris (CWD) along access road which can be used to stabilize slopes to prevent erosion until vegetation establishes (Appendix C);
- Block/remove access to sections of the access road that have been reclaimed (e.g., cross ditch);
- Posting appropriate signage of recently reclaimed road areas to ensure personnel and heavy equipment do not disturb recently seeded areas;
- To prevent disturbance, treated areas should be clearly delineated and access to the mine restricted by decommissioning and revegetating access roads; and
- Care will be taken to prevent burial, or otherwise impact, of existing vegetation along the edge of the mine access road during deactivation/reclamation.

7.1 SOIL MANAGEMENT

Best Management Practices (BMP)s for soil salvage, stockpiling and replacement, will be employed during the construction, deactivation and reclamation of the mine access road. These BMPs are based on those identified within the Reclamation and Environmental Protection Handbook for Sand Gravel and Quarry Operations in British Columbia (MOTH, MEMPR and NRC, 1995) and the BMPs outlined in the ALC Policy P-13 (ALC, 2013).

7.1.1 Soil Salvage

Limited soil resources are anticipated to be available along the mine access road. Therefore, it will be of considerable importance for the QEP to work closely with equipment operators to develop the best approach to salvaging soil resources. During salvage operations, the following general soil handling procedures will be implemented:

- Prior to initiating salvage operations,

- An assessment should be conducted within the target area to identify whether any noxious weeds are present. If so, any occurrences should be appropriately treated prior to soil salvage operations;
 - All equipment involved in the operations should be cleaned and free of any large soil particles and/or soil debris accumulated from any off-site areas to reduce the chances of introducing invasive plant species to the salvaged soil;
- Where it is possible to distinguish between soil layers, topsoil, subsoil and any overburden will be salvaged and stored separately; separation between piles of soil salvaged from specific soil layers shall be no less than 3 m;
- Topsoil will be salvaged using an excavator with a clean-out bucket or possibly a dozer; and
- Topsoil should be salvaged during non-frozen conditions.
- All topsoil and overburden salvaged from the section of road within the ALR will be handled and stored in stockpiles within the ALR. Soil from areas outside of the ALR will not be imported to the ALR.

7.1.2 Stockpiled Soil

Topsoil and overburden will be stockpiled in windrows along the mine access road to reduce the amount of handling. During stockpiling activities, the following general soil handling procedures (where applicable) will be implemented:

- Salvaged materials will be stockpiled within the designated stockpile where they will not be disturbed by extraction activities during the life of the mine access road;
- Stockpiled soils will be established in a manner that will not be disturbed and will not impede site drainage. Drainage from, onto, and around the stockpiles, will be controlled by ditches, drains or intercepts as required. Specifically, surface water runoff from uphill will need to be directed away from the stockpiled soils to prevent erosion and transport onto the vegetated dust and visual barrier area;
- Stockpiles will be limited in height (2 to 3 m). Higher stockpiles must not exceed a 3H:1V slope (horizontal: vertical);
- Stockpiled soil will not be removed from the source property without written permission/application from the ALC;
- Construct stockpiles in a manner that the surface is shaped for least resistance to the local wind conditions and that promotes positive drainage. The stockpile surface should be sloped in a manner that reduces opportunities for water puddling or ponding and water infiltration into the pile;
- When adding to the stockpile, soil material should be free dumped onto the stockpile and should not be manipulated any further until it is used once again during reclamation;
- Stockpiles will be seeded and established with an appropriate plant cover or other suitable soil erosion control measure must be applied to protect the stockpiles from wind or water erosion. Where newly salvaged soil is placed onto existing stockpiles for storage, these areas should be seeded immediately following placement. Seeding will also reduce the potential for noxious weeds from colonizing the stockpiles;
- Once stockpiles are completed, ensure the appropriate information is recorded. This may include their location, total area, estimated volume, general soil texture, height/depth, revegetation

implemented and estimated storage timeline. Also provide a detailed description of equipment used to handle soils, how they were handled, weather conditions during handling and any lessons learned.

7.1.3 Soil Replacement

During deactivation of the mine access road, portions of the road that are located within the ALC will be reclaimed. For reclaimed areas, stockpiled soils, and any other suitable soil materials (if available), will be applied to deactivated/prepared road surface to establish a plant medium.

Recommended depths for soil replacement are provided in the ALC Policy P-13 (ALC, 2013), which includes 20 to 30 cm of topsoil and 30 cm of subsoil. However, soil depths within undisturbed soils along the roadway are likely to be much shallower. Therefore, the minimum depths targeted for soil replacement on the portion of the mine access road located within the ALC will include (from surface to at depth):

- 30 cm soil (topsoil/subsoil combined) or 15 cm topsoil and 15 cm subsoil (if stockpiled separately);
- Backfill/overburden (variable thickness).

Prior to reclamation, a soil survey will be completed at the mine to determine the average soil depth within undisturbed areas. The QEP will use the average soil depth in undisturbed areas around the mine, along with the minimum recommended depth of 30 cm, to determine the most appropriate soil depth to target for soil application during reclamation activities;

During soil replacement activities, the following practices will be implemented:

- Prior to soil placement, complete any ground preparation of the target reclaim areas. Consider the following:
 - Any compacted surfaces should be de-compacted by ripping;
 - Inspect the area for the presence of any invasive plants (particularly for areas that have been left undisturbed for long periods). Treat any invasive plant occurrences (see vegetation management plan) should be completed prior to soil placement;
- Where possible, any stockpiled soils will be replaced in the reverse order from which they were removed;
- Soil salvaged from within the ALR will be replaced only in areas within the ALR. Soil from areas outside of the ALR will not be imported to the ALR;
- Soil materials will be end-dumped and then spread and leveled utilizing low ground pressure equipment, such as tracked bulldozers;
- Random, repeated running of equipment over leveled areas shall be minimized wherever possible. Soil placement should occur with no more than 1 to 2 passes of equipment over the soil following placement;
- During placement, designated personnel should work closely with equipment operator(s) to ensure target depths are achieved. As the soil material is placed, the depth should be frequently checked using a metal bar with measured increments. The designated personnel should continually communicate with the equipment operator on the measured depths and make adjustments where needed, and
- Once soil placement is completed, revegetation should immediately follow. If revegetation is delayed, monitor the surface conditions of the soil placement area between the time of

placement and the planned time for revegetation. If soil compaction or surface crusting occurs prior to revegetation, decompact the surface prior to revegetation.

Subsoil placement:

- Subsoil will be replaced in one lift;
- Once the subsoil is in place, the subsoil surface will be roughened as required, to hold topsoil in place following initial placement, and
- Should compaction occur, the affected areas will be ripped to the full depth of the replaced soil and then cross ripped perpendicular to the first direction.

Topsoil placement:

- Coarse fragments will be limited in the topsoil layer to less than 5%. Prior to replacement of the topsoil, if required, soils will be screened separately to remove coarse fragments. If the percentage of the coarse fragment content by volume is less than 5%, screening will not be necessary, and will be confirmed by a QEP;
- Should screening of the topsoil be required, it will be carried out under appropriate soil moisture conditions (not during rainfall events or periods where the soils are saturated), and
- Topsoil will be uniformly spread over the target reclaim areas, which will include and any disturbed ground around within the Work area.

7.2 REVEGETATION PLAN

The end land use objective for the portion of the mine access road that will be reclaimed (located in the ALR; Appendix B) has been identified as forest land grazing/silvopasture (Dobb and Burton, 2013). This revegetation plan is designed to facilitate establishment of an agronomic forage crop and open forested habitat that will:

- Establish forage cover for cattle;
- Improve soil quality;
- Limit the introduction and spread of invasive plants, and
- Provide erosion control.

The total estimated area for the portion of the mine access road to be reclaimed is 0.4 ha. The remainder of the mine access road, 0.5 ha, will be deactivated and seeded with a roadside grass seed mix for erosion control.

7.2.1 Plant Species Selection

7.2.1.1 Species Selection

The criteria utilized for selecting plant species to re-establish vegetation cover are based on the primary objectives of establishing agricultural forage cover and open forest habitat, and providing erosion control.

Selection criteria for agronomic forage grass and legume species (Dobb and Burton, 2013) include:

- Climatically adapted to the Site (e.g., average annual precipitation of 550mm for Vanderhoof);
- Moderate to high value ratings for:
 - Forage quality;

- Ease of establishment;
- Winter hardiness;
- Erosion control; and
- Beneficial to soil fertilizer (e.g., species associated with nitrogen-fixing bacteria).

In addition to the outlined criteria, recommendations for common forage species identified in Selecting Suitable and Adaptive Dryland Forage Crops and Varieties for the Regional District Fraser Fort George (RDFFG) (Mori, 2023) were utilized in the selection of agronomic forage species for the Site.

Selection criteria for native trees to establish open forest cover (Delong et al., 1993) include:

- Naturally occurring with in the SBSdw3 subzone variant; and
- Pioneer species for the establishment of early seral forest cover.

7.2.1.2 Agronomic forage seeding

Immediately following the placement of overburden and/or topsoil on the reclaimed surfaces, the reclaimed areas will be seeded with an agronomic forage seed mix that will be establish a forage cover favorable for cattle grazing, aid in the development of soil organic matter and reduce the risk of wind and water erosion. Seed application will be performed following slope texturing and/or topsoil placement and can be applied by hand or via ATV broadcast seeding. A list of species recommended for native cover crop is outlined in Table 5.

Table 5. Recommended agronomic grass and legume species for establishing forage cover.

COMMON NAME	SCIENTIFIC NAME	COMMON FORAGE UTILIZED IN THE REGIONAL DISTRICT OF FRASER-FORT GEORGE	COMMENTS
Intermediate wheatgrass	<i>Thinopyrum intermedia</i>	No	High forage quality, ease of establishment, winter hardiness and erosion control.
tall fescue	<i>Festuca arundinacea</i>	Yes	High forage quality and grazing recovery.
smooth brome	<i>Bromus inermis</i>	Yes	High forage quality, winter hardiness and erosion control.
orchardgrass	<i>Dactylis glomerata</i>	Yes	High ease of establishment and grazing recovery.
timothy	<i>Phleum pratense</i>	Yes	High winter hardiness.
red clover	<i>Trifolium pratense</i>	Yes	Nitrogen fixing; High forage and ease of establishment.
alfalfa	<i>Medicago sativa</i>	Yes	Nitrogen fixing; High forage and ease of establishment.

Fall rye, a non-native grass, may be incorporated into the seed mixes to aid in the quick establishment of vegetation cover during the first growing season. Fall rye is a non-native grass that establishes more quickly than native grasses, can contribute to the development of soil organic matter and does not persist following the year of seeding.

7.2.1.3 Tree Seedlings

Native trees will be planted on all target reclaimed areas (i.e., same surfaces that will be re-seeded). Planting of native trees can be performed concurrently with re-seeding efforts. Conditions on the reclaimed surface at the Site will favor early successional pioneer species that are tolerant of challenging growing conditions (i.e., low soil moisture retention and nutrient availability). Pioneer species contribute

to organic matter content, quickly establish cover wildlife and create conditions for late successional species by providing shaded ground. Trees species (including pioneer) known to commonly occur at the Site, and likely be successful candidates for planting, are summarized in Table 6.

Table 6. Pioneer tree and shrub species¹.

COMMON NAME	SCIENTIFIC NAME	COMMENTS ¹
Lodgepole pine	<i>Pinus contorta</i> var. <i>latifolia</i>	Pioneer conifer common throughout the region; naturally colonizing the Site and Plateau Quarry.
hybrid white spruce	<i>Picea glauca</i> x <i>engelmannii</i>	Climax successional species, commonly occurring on wet to dry slopes, depressions, and along riparian areas of streams and wetlands;
Balsam poplar	<i>Populus balsamifera</i> spp. <i>balsamifera</i>	Climax successional species, common to moist uplands and floodplains; often establishing in disturbed soils/roadsides;

¹Information sourced from Delong et al, 1993.

7.2.2 Seeding and Planting Prescription

7.2.2.1 Agronomic Forage Seeding

A seed mix has been developed for establishing agronomic forage cover along the portion of the mine access road to be reclaimed (within the ALR). The mix is considered an upland seed mix, for dry to mesic soil moisture conditions. The seed mix is outlined in Table 7.

Table 7. Upland seed mix prescribed for dry to mesic soil moisture conditions.

COMMON NAME	SCIENTIFIC NAME	% WEIGHT SEED MIX
intermediate wheatgrass	<i>Thinopyrum intermedia</i>	49.8
tall fescue	<i>Festuca arundinacea</i>	19.3
smooth brome grass	<i>Bromus inermis</i>	12.9
orchardgrass	<i>Dactylis glomerata</i>	2.7
timothy	<i>Phleum pratense</i>	1.4
red clover	<i>Trifolium pratense</i>	9.6
alfalfa	<i>Medicago sativa</i>	4.4
Application Rate: 61 kg/ha		

The recommended seeding rate is 2000 pure live seed (PLS)/m², which is equal to an application rate of 61 kg/ha. This application rate is intended to establish a moderately dense forage crop, which will aid in erosion control and reduce the competitiveness of the forage crop for planted trees.

In addition to the application of the upland seed mix, an application of fall rye at a rate of 25 kg/ha is recommended to help provide quick establishment of vegetation cover during the first growing season.

The seed mix will be applied to the reclaimed areas by broadcast seeding, using either all-terrain vehicles with mounted seed spreaders and or by hand using belly-mounted seed spreaders.

7.2.2.2 Erosion Control Seeding

For the portion of the mine access road that will be deactivated, but not reclaimed, following deactivation, all disturbed areas will be seeded with an erosion control seed mix identified in the Handbook for Forest Roadside Erosion Control in BC (MOF, 1980) for the SBS. This mix will be used to revegetate upland areas

and adjacent drainages. The composition of the erosion control seed mix is outlined in Table 8 and the recommended application rate is 25 kg/ha.

Table 8. Upland seed mix prescribed for dry to mesic soil moisture conditions.

COMMON NAME	SCIENTIFIC NAME	% WEIGHT SEED MIX
perennial ryegrass	<i>Lolium perenne</i>	35
creeping red fescue	<i>Festuca rubra</i>	30
Canada bluegrass	<i>Poa compressa</i>	5
alfalfa	<i>Medicago sativa</i>	20
Alsike clover	<i>Trifolium hybridum</i>	10
Application Rate: 25 kg/ha		

In addition to the application of the upland seed mix, an application of fall rye at a rate of 25 kg/ha is recommended to help provide quick establishment of vegetation cover during the first growing season. The seed mix will be applied by broadcast seeding.

7.2.2.3 Planting

A total of three native tree species have been identified for planting along the portion of the mine access road to be reclaimed (within the ALR). The prescribed species and % composition are outlined in Table 9.

Table 9. Native tree planting prescription.

COMMON NAME	SCIENTIFIC NAME	COMPOSITION (%)
lodgepole pine	<i>Pinus contorta</i> var. <i>latifolia</i>	70
hybrid white spruce	<i>Picea glauca</i> x <i>engelmannii</i>	15
black cottonwood	<i>Populus trichocarpa</i> spp. <i>trichocarpa</i>	15

The recommended planting density for at the Site is 720 stems/ha is based on the minimum stocking standard (MSSp) for establishment to free growing condition of preferred and acceptable tree species for SBSdw3 subzone variant of 600 stems/ha (BC MOF, 2000), as well an additional 120 stems/ha (20% of MSSp) to account for potential mortality of seedlings planted within poor soils.

Seedlings planted at the Site will be competing with the agronomic forage cover for water and nutrient availability. To increase survival of planted seedlings within a competitive environment, large seedlings are prescribed. Seedlings stock type will be PSB 412A (approx. 12cm plug length) and will be 2+0 age. As the propagation of these seedlings is longer in duration compared to smaller stock types, seedlings should be ordered from a native plant nursery and/or commercial tree seedling nursery 3 years in advance of planting.

Seedlings will be planted throughout Site, including the pit floor and any disturbed ground around the perimeter of the pit. As an option, pit benches may also be reclaimed, but only if deemed safe and practical. Planting may be completed during the spring (June) or fall (September). A fall planting may need to take cold storage of seedlings into consideration during winter dormancy. Seedlings shall be obtained from a native plant nursery and/or commercial tree seedling nursery. Where possible, propagules (i.e., seeds and live stems) utilized for producing seedlings shall be obtained from the local area of the Site or from a source that provides regionally appropriate seed (e.g., BC Tree Seed Centre).

Reforestation Technologies International (RTI) Fertilizer Planter Paks are recommended to be applied to all tree seedlings planted at the site. Nutrient and moisture conditions in reclaimed soils are expected to be limiting. The use of RTI Planter Paks are likely to greatly increase the survival of planted seedlings by supplementing the soil around the seedling plugs with additional nutrients and organic matter. Consult with the product manufacturer and/or sales representative for the appropriate fertilizer blend for the site conditions.

Planting tree and shrub seedlings at the site will follow typical tree seedling planting methods. Planters must be monitored to ensure all plugs are planted correctly (root ball is completely buried, roots are not bent, and soil is tight around the plug). Care must also be taken to ensure RTI Planter Paks are correctly applied (consult with manufacturer and/or sales representative on the current application specifications).

As the seedling will have been overwintered during propagation, timing for planting will be in the spring (late May to early-June).

7.3 RECLAMATION MONITORING

Valley Lime will retain a QEP to monitor revegetation success at 1, 3, and, 5 years post-operations. Additional seeding and/or planting may be required to supplement any loss. If reclamation activities are not successful by five years post-operations (i.e., seed has not germinated or planted trees have died off such that the minimum stocking standards have not been met), Valley Lime will re-assess the reclamation plan and revise as required and/or consult a QEP.

7.3.1 Vegetation Monitoring

To monitor vegetation establishment and natural ecological succession of the mine access road, the following monitoring objectives and associated measures, or examples, are provided:

- Objective 1: Monitor health of tree and shrub seedlings:
 - Measures: seedling survival, seedling vigour, seedling height;
- Objective 2: Monitor the natural recruitment of native plant species:
 - Measure: native species richness;
- Objective 3: Identify, if present, any factors limiting natural recruitment of native plant species or the success of planted seedlings:
 - Examples: dense grass cover, herbivory, dense woody debris cover, compacted soil surface.

The endpoint of vegetation monitoring is reached once both of the following two objectives, and defined criteria, have been met:

- Objective 1: Vegetation cover is 'Self-sustaining':
 - Criteria:
 - Seedling mortality is no longer occurring, or if occurring, is due to natural processes, not related to any anthropogenic factors (e.g., planting/handling of seedlings, adverse soil conditions), or excessive herbivory;
 - Vegetation cover overall remains stable or is increasing (density and distribution);
 - Vegetation cover is resilient (evidence available suggests that the vegetation cover can survive periods of drought);

- Natural recruitment of native species is continuous (occurring annually, and expected to continue to occur); recruitment is not limited by competition from existing vegetation cover, herbivory or surface conditions (e.g., soil compaction), and
 - Vegetation cover is species diverse (not a monoculture).
- Objective 2: Vegetation cover is following the natural successional trajectory that aims to satisfy the end land use objective:
 - Criteria:
 - Vegetation cover is dominated by pioneer tree and shrub species identified as early successional species of the target ecosystem (e.g., subzone/variant); vegetation cover also consists of late successional tree and shrub species of the target ecosystem;
 - Vegetation cover does not consist of any significant cover of non-target species (e.g., invasive, agronomic, nuisance weeds); any cover of non-target species present is either declining or evidence available suggests cover will decline over time, and
 - Any factors that have been identified as limiting natural succession (e.g., plant competition, surface conditions, herbivory) on reclaimed areas, or portions of reclaimed areas, have been addressed or are no longer limiting.

7.3.2 Surface Water Quality Monitoring

During the initial site assessment, previously identified stream features were assessed and defined stream channels were not present (Section 2.2.2). The stream location will be assessed in conjunction with revegetation success monitoring at 1,3-, and 5-years post operations. Should surface water be present at the mapped stream location, water quality monitoring will be conducted to ensure surface water flow through the mine access road footprint is in accordance the *British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture* (MOE, 2021). Should surface water be present within designated streams, water quality will be recorded within, upstream, and downstream, of the mine access road. The exact locations of sampling will be field fit and will only be collected on crown land. If turbidity levels are found to be above acceptable standards (Table 4), additional mitigation measures may be required.

Should water quality monitoring be conducted, the following parameters outlined in Section 6.3.1 will be verified.

8.0 AIR QUALITY MANAGEMENT PLAN

8.1 DUST CONTROL

Dust has been identified as a potential risk to air quality in the Work area. Valley Lime shall implement measures to maintain air quality at, or near, ambient levels to address health and safety and to avoid significant deposition of airborne particulates into any watercourse in the area. In addition, the following measures will be implemented:

- Control dust and debris by wetting down dry materials with a water truck or applying calcium chloride (CaCl₂). The Safety Data Sheet (SDS) for CaCl₂ will be kept on site, if used;
- Prevent runoff from entering any drainage or watercourse;
- Obtain water from licenced water sources;

- Implement air quality measures that intercept airborne dust; and
- Temporary curtailment of activities causing dust until adverse weather conditions subside, if required.

8.2 AIR EMISSIONS CONTROL

The access roads are not in close proximity (≤ 100 m) to receptors that may be sensitive to emissions from combustion engines (e.g., occupied residences and livestock). However, to maintain air quality on site, the following idle times during periods of inactivity are recommended, as follows:

- Motor vehicles and light-duty diesel trucks – 1 minute
- Heavy duty diesel vehicles – 5 minutes
- Diesel vehicles involved in construction site passenger transportation – 10 minutes

Exemptions to the above times may be permitted, as follows:

- When vehicle or equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control.
- To bring the vehicle or equipment to the manufacturer's recommended operating temperature.
- When outdoor temperature is above 30°C or below 0°C, the operator or passengers are inside the vehicle with no auxiliary power sources available to provide temperature control.
- When it is necessary to operate auxiliary equipment located in or on the vehicle or equipment to accomplish the intended use of the vehicle or equipment.
- When the vehicle is detaching or exchanging a trailer.
- When the vehicle or equipment is being repaired, or engaged in repairing another vehicle, if idling is necessary for such repair.
- When the vehicle or equipment is queued for inspection, if idling is necessary for such inspection.
- For designated emergency vehicles or any vehicle or equipment assisting in police, fire or ambulance services.
- When defrosting or de-fogging windows.

9.0 WATER MANAGEMENT PLAN

9.1 GROUNDWATER

No groundwater wells have been documented within the Work area, PMA or adjacent areas to infer groundwater levels (Province of BC, 2022d). Groundwater is not anticipated to be encountered during works.

If groundwater is encountered the Environmental Manager will be contacted immediately (Section 2.5), and a QEP will be consulted to determine whether additional measures are required to protect groundwater. To protect groundwater resources, Valley Lime shall follow waste management guidelines in Section 14.0 and Spill Prevention and Response procedures in Section 15.0.

9.2 SURFACE WATER

Surface water includes streams (as defined under the WSA) and water features, such as ponds, wetlands or human made reservoirs. A culvert crossing was identified at the mapped unnamed stream location during the site assessment and while there were no signs of water, scour, channel definition, or alluvium;

there is potential for ephemeral drainage and pooling in this area due to topography. As such, WSA Notification of Authorized Changes for work will be obtained for all crossing structure work (widening, maintenance and deactivation) as activities have potential to impact the unnamed stream feature. This includes adhering to a minimum 10 m setback away from water bodies, which is to be clearly marked using stakes, ribbons, or paint. No machinery or equipment will operate within the setback.

9.3 STORMWATER

Stormwater is the portion of rainfall or snowmelt that does not immediately percolate into the ground or evaporate. When flowing over exposed soils, this can pick up fine clays and silt which can negatively impact water quality off-site when not managed appropriately. Stormwater that collects within the work area may have to be discharged; if so, storm water will be discharged into the vegetation where it can percolate into the ground. At no point, will stormwater be discharged into any water features or drainages.

10.0 WILDLIFE MANAGEMENT PLAN

Encounters with wildlife may occur during road development, or during travel to and from the work site. Any wildlife observed during works will be recorded and any wildlife close encounters or concerns will be managed with a QEP and reported. BMPs for Site cleanliness and waste management (Section 14.0) will be followed to avoid attracting wildlife to the work site.

The following are general restrictions and guidelines that are intended to protect personnel and wildlife during operations:

- Reduce speed on the mine access road to avoid collisions with wildlife;
- Firearms are not permitted. This includes the carrying of firearms in private vehicles to and from the activity sites on workdays;
- Feeding wildlife is prohibited, including during travel to and from the activity sites. Feeding wildlife is a violation of the *BC Wildlife Act*. Feeding wildlife may result in wildlife becoming attracted to human foods and habituated to human presence. This can lead to the creation of ‘conflict wildlife’ and can have serious consequences. This restriction includes bird feeders, as these may be an attractant to bears;
- Harassment of wildlife is prohibited. Harassment of wildlife can lead to the abandonment of habitat or the disruption of critical activities (e.g., nesting), and may result in injury to wildlife and/or humans. This restriction extends to both ground-based and air-based activities—harassment of wildlife from the air (e.g., low altitude circling) is also prohibited;
- The deliberate destruction or disruption of wildlife nests, eggs, dens, burrows, and the like, is prohibited, including during travel to and from the activity sites. This may also be a violation of the *BC Wildlife Act*, the *Migratory Birds Convention Act*, or the *Species at Risk Act*. The Environmental Manager or designate(s) will be aware of the importance of sensitive wildlife features, and instruct personnel to avoid the impact to known features by work-related activities or personnel. This would include keeping knowledge of the location of features restricted to a limited number of personnel (to prevent vandalism);
- Hunting and fishing are prohibited when working on Site and during travel to and from the Site;
- Pets are prohibited, including during travel to and from the activity sites on workdays. This is a violation of the *BC Wildlife Act*. Pets (particularly dogs) may harass or kill wildlife, and may endanger humans during wildlife encounters (e.g., bear-dog interactions);

- Littering is prohibited. Garbage must be returned to temporary storage containers. The Environmental Manager or designate(s) must direct that litter, particularly food waste, found in and around the activity sites is removed and properly disposed of. Note that this includes organic wastes (e.g., orange peels, apple cores);
- All waste, including hydrocarbons and chemicals, will be sufficiently sealed on site to avoid attracting wildlife; and
- Personnel that observe conflict wildlife (e.g., bears, cougars, etc.) on, or in close proximity to the Mine will notify the Environmental Manager or designate(s) so that the appropriate local agency can be notified. Personnel will not attempt to engage with conflict wildlife on their own.

10.1 GRIZZLY BEAR MANAGEMENT

The threat of mining development to GPBU in BC has been determined to be overall low to negligible (BC Government, 2019). The threat of mine development to the Nulki GPBU was also determined to be low (MOECCS, 2020). In addition, periods of mine operations (April – November) and subsequent mine access road usage generally do not overlap with the denning season which is the most sensitive period of Grizzly bears (MOECCS, 2020).

During the site assessment, the surrounding habitat was not found to be suitable for denning as the area was generally flat, lacking north facing slopes. Limited vegetation clearing will be required for widening of the existing road for development of the mine access road. Grizzly bears will use dense forests as cover habitat which also provide higher quality forage sites (Gyung et al., 2004). Based on a desktop review of satellite imagery and data collected from the site assessment, the habitat and vegetation were found to be suitable for forage and cover habitat. In addition, the Nechako, a salmon bearing river providing forage habitat is located approximately 2.5 km south of the mine access road. To prevent human-wildlife encounters, measures listed in Section 10.0 will be implemented. In additional bear-awareness training will be required for all mine staff members.

11.0 INVASIVE PLANT MANAGEMENT PLAN

Care should be taken to prevent the introduction and spread of noxious weeds. Invasive plants/noxious weeds are typically non-native plants that are responsible for reductions in crop yield and quality and they lead to environmental degradation through destruction of native plant and animal habitat.

Invasive plants were observed within the Work area and proposed PMA during the site assessment (Section 2.4.1). Additionally, several invasive plant species have been previously documented along Highway 16 and in the surrounding area. Therefore, the risk of transmission is higher due to the travel required to get to Site and the ground disturbance that will be a required component of road works. The Environmental Manager or designate(s) will inspect equipment tracks prior to mobilization and demobilization to reduce the risk of spreading invasive plant seed.

The *Best Practices for Managing Invasive Plants on Roadsides* pocket guide by MOTI (2019) may be used as a reference on site. General measures to ensure that invasive plant material is not spread or propagated throughout the Site include:

- Management of noxious weeds and invasive plant measures will be discussed during the kick-off meeting;
- All equipment will be washed or manually clean of soil, seeds, and plant parts prior to entering and leaving the Site;
- Avoid parking, turning around, or staging equipment in invasive plant infested areas;

- Retain desired vegetation, where possible;
- Do not place soil infested with invasive plants where desirable vegetation is established; instead, dispose at a designated disposal site;
- Use only clean fill material from an “invasive plant free” source. Dispose of soil containing invasive plants in an approved disposal site;
- If soil is exposed, re-seeding will occur as quickly as possible to prevent the establishment of invasive species; use grass mixtures that are free of weeds, locally adapted, non-invasive, and quick to establish;
- Any observation of an invasive plant or noxious weed is to be reported to the Environmental Manager. Coordinates will be taken and these sites will be flagged; and
- Valley Lime is responsible for inspecting any mulch supplies, should they be used, to ensure that it is certified weed-free.

12.0 HERITAGE RESOURCES MANAGEMENT PLAN

All archaeological resources found are managed through the *Heritage Conservation Act* (HCA) and the BC Archaeology Branch. The HCA states that an individual (or corporation) must not “damage, excavate, dig in or alter, or remove any heritage object” from a heritage site. If any items or features are discovered during any stage of operations, Valley Lime will immediately cease operations and notify the BC Archaeological Branch ((250) 953-3334). Any items found are potentially protected under the *Heritage Conservation Act* and belong to the Province of B.C. Works will not resume within 30 m of the potential archaeological site until instructed to by the BC Archaeological Branch and/or an Archeologist. The same procedure will be applied for any paleontological items found on site.

An Archaeological Chance Find Procedure is included in Appendix E and will be adhered to should archaeological resources or human remains be found or suspected.

13.0 NOISE MANAGEMENT PLAN

Road development activities have the potential to generate noise that may disturb nearby residents and wildlife, however, as the site is a rural setting it is anticipated to have only minor noise impacts. Controls to reduce noise exposure may include scheduling hours of operation during less disruptive periods and selecting appropriate equipment. The Work will be assessed prior to the start of operations to predict Work noise and site-specific considerations.

14.0 WASTE MANAGEMENT PLAN

The BC *Environmental Management Act* and its relevant regulations govern issues of waste generation, reuse, recycling, transportation, and disposal. The four main principles of waste management in order of hierarchy are reduce, reuse, recycle and disposal. Waste management will comply with relevant regulatory requirements and institutional constraints. Commercially reasonable efforts will also be made to sort non-hazardous solid waste onsite for the purpose of reusing and recycling, when possible.

Portable washrooms facilities stationed at the mine will be used during the Work. Waste will be removed from site daily and will be disposed of at appropriate disposal facilities. Vacuum trucks will be used to remove sewage from the portable facilities and sewage waste will be disposed of a licenced sewage disposal facility (i.e., a municipal waste water treatment facility). General refuse may be disposed of at the Vanderhoof Transfer Station (The Waste Transfer Station located at 650 Dump Rd). Hazardous waste

(oily rags, oil filters, waste oil, etc.) will be collected and disposed of at appropriate disposal facility by an appropriately licenced waste hauler. Portable washroom facilities will be removed from site when the Work has been completed.

14.1 GENERAL MITIGATION MEASURES

The following BMPs will be implemented for the handling, collection, storage, and disposal of waste materials:

- Good housekeeping practices will be instituted throughout the site operations and daily;
- Domestic waste will be stored in labelled, secure containers, and will not be permitted to be burned, buried, or discarded at the site;
- A portable toilet will be on site throughout operations. The portable toilet will be pumped out on a regular basis and transported by a licensed hauler for disposal at an approved facility;
- All wastes that have the potential to attract wildlife (i.e., food scraps) will be disposed of in animal-proof containers and will be removed from Site daily;
- Operating fluid wastes from equipment will be collected and sealed in drums, and will be recycled or disposed of at an appropriate waste facility that is approved to accept such waste;
- Collect all waste in properly labelled containers; and
- All recyclable waste should be disposed of into a labelled container and recycled or re-used when applicable.

14.2 HAZARDOUS WASTE MANAGEMENT

Valley Lime shall store, handle, and dispose of all hazardous waste discovered or generated on site in accordance with the *BC Hazardous Waste Regulation (HWR)* as per the *Environmental Management Act (EMA)* and the *TDGA*. Hazardous materials waste handling and management is pursuant to the *BC Workers Compensation Act*.

The following BMPs will be implemented for the handling, collection, storage, and disposal of hazardous waste materials:

- Store all hazardous materials in separate sealed drums labelled with the contents and placed in secondary containment;
- Maintain an up-to-date list of hazardous waste on-site. The list shall indicate what materials and their volumes are stored at the site, the material (e.g., liquid versus solid and liquid/oil, solid/batteries, solid/oil rags, etc.), and dates the materials were added to storage area; and
- Maintain hazardous waste storage areas clean and free of clutter for ease of access.
- Properly containing, labelling, and securing hazardous waste prior to transport offsite for disposal;
- Using only qualified transportation sub-contractors and waste receivers to transport or receive wastes; and
- Maintaining a manifest of all waste disposals and provide for inspection when requested.

15.0 SPILL PREVENTION AND RESPONSE PLAN

This section will be used to guide spill prevention and emergency response activities on site. Information provided in this section is based on the MWLAP Field Guide to Fuel Handling, Transportation and Storage (MWLAP, 2002). It should be stressed that safety, health, and welfare of the workers and the public are of the utmost importance, followed by protection of the environment. Valley Lime will ensure that all

subcontractors are aware of their spill response procedures and will take responsibility for all spills should they occur.

Valley Lime's spill prevention and response procedures will comply with the applicable regulations and guidance, including BC Spill Reporting Regulation, BC TDGA, *A Field Guide to Fuel Handling, Transportation and Storage* (MWLAP, 2002), *Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia* (MOE, 2014), as well as federal Environmental Emergency Regulations. This plan provides information on:

- Responsibilities in case of a spill;
- Emergency spill response protocol;
- Spill Notification and reporting; and
- Best management practices.

15.1 SPILL PREVENTION

15.1.1 Potential Spill Sources

The following are the primary potential sources of reportable spills that could occur during Work activities:

- Leaking or ruptured fuel tanks;
- Poor maintenance of secondary containment;
- Spills during refuelling of vehicles and equipment;
- Leaks from equipment or ruptured hoses; and
- Motor vehicle accidents on access roads.

15.1.2 General Measures for Spill Prevention and Containment

To mitigate the risk of spilled material from entering the terrestrial environment or stream systems along the access roads, Valley Lime shall:

- Clean all equipment before it arrives on site;
- Have equipment inspected for excessive grease or leaks by the Environmental Manager or designate(s) upon arrival and prior to the start of operations;
- Ensure equipment is regularly maintained and well-functioning;
- Store spill containment and cleanup kits capable of addressing significant spills:
 - In all large equipment (e.g., excavators) and pickup trucks.
 - At the refueling area.
 - With an aquatic containment boom readily available for easy deployment in the event of an aquatic spill.
- Adequately train all operators and crew in Spill Response Procedures.

Valley Lime shall include the following primary protection/preventative measures for spill prevention and containment:

- Fuel and lubricants shall be delivered to Site as needed to properly maintain equipment;
- Impermeable, oil absorbent matting will be used when refueling and servicing equipment;
- Operators will control the refueling nozzle at all times while refueling equipment;
- Soil/gravels that are contaminated with petroleum, hydrocarbon, or other product will be collected and removed for appropriate disposal, regardless of how small of a spill volume;

- Equipment fuel or oil leaks shall be repaired as soon as discovered or otherwise removed from site until repairs have been completed;
- Maintain the emergency spill containment and cleanup kits at the site throughout the duration of the Works. The kit shall have the capacity to clean up 100 % of a spill from a failure of the largest volume of a fuel or lubricant tank/system, plus an additional 10 %;
- Equipment containing biodegradable fluids shall have a record of this maintenance work available in the equipment and shall be made available for inspection as requested; and
- To prevent vandalism during periods of inactivity, keep all fuels, lubricants and toxic substances stored in locked structures.

Valley Lime shall implement and maintain additional measures, such as:

- Placing drip trays beneath stationary equipment that lacks secondary containment and other equipment parked overnight and not being used for extended periods of time to capture any spillage;
- For mobile storage of fuel, lubricants, or other toxic substances, secure within secondary containment and ensure container lids are tightly sealed;
- Have standard spill kits capable of capturing 125 % of potential spill volumes at all refuelling, lubrication, repair locations and within heavy equipment to allow immediate response to spills;
- Train all on site staff in hazardous material storage, handling requirements, and spill kit location and deployment;
- Refuel all vehicles and machinery at a designated refuelling location more than 30 m from any watercourse;
- Store all on-site fuel in tidy-tanks or in approved secondary containment facilities, with contents marked appropriately; and
- Secure all waste fuel or products (e.g., fuel filters) in spill-proof containers and dispose of in accordance with environmental regulations.

15.1.3 Fuel Storage

The refuelling area shall be located on flat and stable ground. Storage and transportation of hydrocarbons must be in accordance with the *TDGA* and the OHS Regulations (e.g., no smoking near fuel storage), in addition to the following:

- Hazardous or toxic products will not be stored within 30 m of any watercourse;
- Spill control is required for small containers of flammable and combustible liquids that have the potential to spill. The degree of spill control should be based on the level of risk;
- All containers must be maintained in good condition - not damaged, rusting, or leaking. Containers must be sealed with proper fitting lids, caps, bungs, or valves to prevent spills and leaks;
- All tanks, barrels and containers > 23 L containing hydrocarbons will be stored within impermeable containment, designed to contain 125 % of the volume of the largest container;
- Containers that are 23 litres or less must be stored and transported in an equipment box of a vehicle that can contain the total quantity of fuel in the container(s) should it leak or spill;
- Impermeable containment is required for mobile fuel storage (i.e., fuel trucks) when remaining overnight;
- The fuel storage area will be protected against vandalism and theft;
- A large spill kit will be kept at the refueling location;
- Drip trays will be stored at the refuelling area for refuelling events; and

- All small quantities of fuel, oils, and antifreeze shall be stored in separate drip trays and secured in an animal-proof container to prevent attracting wildlife.

15.1.4 Re-fueling Procedures

Valley Lime shall implement the following when refuelling:

- Refuelling will occur within the designated refuelling area at the Laydown area;
- Hoses and nozzles should be inspected regularly and be in good working order;
- The refuelling operator should be appropriately trained, and always stay with the nozzle during refuelling;
- Drip trays will be used to capture any spills;
- Fuel will be stored at least 30 m from a watercourse with secondary containment or in pickup trucks;
- Inspect and maintain the spill kit regularly;
- Inspect fuel storage containers regularly for leaks and excess oil grease; and
 - An inspection program for fuel storage and dispensing locations and equipment will be developed and implemented.
- In the event of a spill, the Environmental Manager will be contacted, and Spill Response Procedures will be implemented. A spill in water, regardless of the amount, must be reported to Emergency Management BC.

15.1.5 Spill Kit Contents

Valley Lime Ltd. shall supply and maintain fully stocked spill response kits. A list of spill kit contents and instruction sheet will be posted at the kit storage locations on site. Spill kits shall include the minimum content as outlined in Table 10 below.

Table 10. Spill kit contents.

For all pickup trucks, transport vehicles and equipment with on-board fuel capacity of 500 L or less, or a portable fuel tank with capacity of 500 L or less	
• Goggles • PVC Gloves • 10 absorbent pads	• 2 absorbent booms (3 m) • 1 container of emergency sealant • 3 heavy duty plastic bags
For all pickup trucks, transport vehicles and equipment with on-board fuel capacity of greater than 500 L, or a portable fuel tank with capacity of greater than 500 L	
• Goggles • PVC gloves • 20 absorbent pads	• 6 absorbent booms (3 m) • 1 container of emergency sealant • 5 heavy duty plastic bags

Any equipment containing antifreeze must also carry additional water-soluble absorbent pads. Spill kit contents must be inspected at start-up and any time new equipment arrives onsite.

15.1.6 Safety Data Sheets

Valley Lime shall maintain current copies of Safety Data Sheets (SDS), for all chemical substances being used on site on site in a clearly marked binder. SDS identify information such as hazardous ingredients, fire and explosion hazard, reactivity data, toxicological properties, and first aid measures. The SDS binder

will be readily available in the event of a spill or leak to determine any potential human health and environmental risks associated with the product.

15.2 SPILL RESPONSE

According to the Spill Reporting Regulation, if any amount of a substance listed in the Schedule to the Regulation is spilled into a “body of water” it must be reported to Emergency Management BC (1-800-663-3456) within 24 hours of the incident occurring. “Body of water” is defined as a) a stream, as defined in the WSA, b) an aquifer, as defined in the WSA, c) fish habitat, as defined in the Water Sustainability Regulation, BC Reg. 36/2016, and d) any of the following that could drain or empty directly into a body of water: i) a naturally formed pool of water other than one deferred to in a), b) or c) or ii) a ditch.

Valley Lime Ltd. shall implement the following general spill or leak practices in the event of a spill or leak:

- Do not touch or walk through spilled material;
- Stop the flow safely and quickly (if possible);
- Shut off machinery, pumps, valves etc.;
- Plug leaks (if possible);
- Remove or right containers;
- Do not smoke or use cell phones in the spill area;
- Prevent spilled materials from flowing away from the initial spill site or from flowing into any water features or drainage ditches;
- Eliminate all ignition sources;
- Flag/delineate area of spill; and
- If possible, turn leaking container so that gas escapes rather than liquid.

15.2.1 Response and Cleanup

In the event of a spill, Valley Lime shall implement the following Spill Response Procedures:

Note: Procedures will vary depending on the product and the location of the spill.

- Notify Environmental Manager immediately.
- Notify BC MOE for reportable spills (Emergency Management BC: 1-800-663-3456).
- Consult SDS to determine potential human health and environmental risks.
- Ensure appropriate personal protective equipment is worn during spill clean-up work.
- **Land-based spill:**
 - Use flagging tape to delineate the perimeter of the spill.
 - Construct containment ditches around the area of spill.
 - Use absorbent pads to remove the spilled material, disposing of the soiled absorbent materials into a drum or other sealed container.
 - Excavate the contaminated soil and dispose of in a drum or other sealed container. Drums of waste will be labeled to identify their contents and be stored in a spill containment area prior to being hauled off-site for disposal by a certified hauler to an authorized dumpsite for contaminated materials in accordance with disposal outlined in Section 15.2 Hazardous Waste Management.
- Following a spill, replenish all spill kits and equipment.
- Report the spill as per the incident reporting procedures.

15.2.2 Monitoring and Reporting

The Environmental Manager or designate will conduct monitoring on an as-needed basis in the event of a spill, within the spill area, and the surrounding receiving environment to determine appropriate remedial action. For a reportable spill, Valley Lime. shall track effects pathways to ensure groundwater sources are protected. A copy of the spill report form is provided in Appendix B.

If the spill is a reportable emergency (refer to Appendix B), an investigation report and spill report form must be completed and forwarded to Emergency Management BC (1-800-663-3456) within 24 hours of the incident occurring. The company responsible for the spill must prepare the investigation and spill report. All spills, regardless of how minor, must be reported to the Environmental Manager and/or designate(s).

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Appendix A

Site Plan Drawing

Appendix B

Quarry Traffic Management Plan

Valley Lime Quarry

Traffic Management Plan

Legend

Install STOP sign for loaded trucks before they come onto Sackner Pit Road

Post signage to warn of industrial traffic and that "down" traffic has the Right of Way.

Start of Road LOO. Post radio frequency, calling instructions & MUST CALL.

Install STOP sign for traffic coming from the east

4m Wide Single Lane Road (Max 30km/h). Radio Controlled.

Proposed 30m pullout for traffic driving south (up)

Loaded trucks leaving the quarry heading north (down) have right of way

Install MUST CALL sign for down traffic to call

Permitted Mine Area

9m Wide Double Lane Haul Road (Max 30km/h). Radio Controlled.



Appendix C

Example Spill Report Form

Spill Report Form

Key Contacts:

Emergency Management BC (Reportable Emergency): **1-800-663-3456** (24 hour hotline)
CANUTEC/Transport Canada Tel. (613) 996-6666
Environment Canada Tel. (604) 666-0370

REPORTABLE QUANTITIES

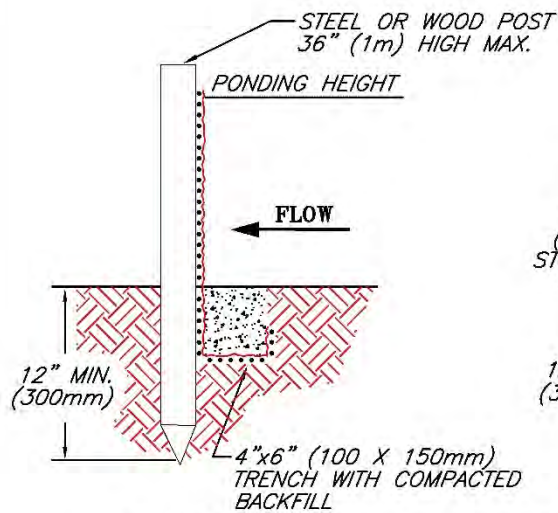
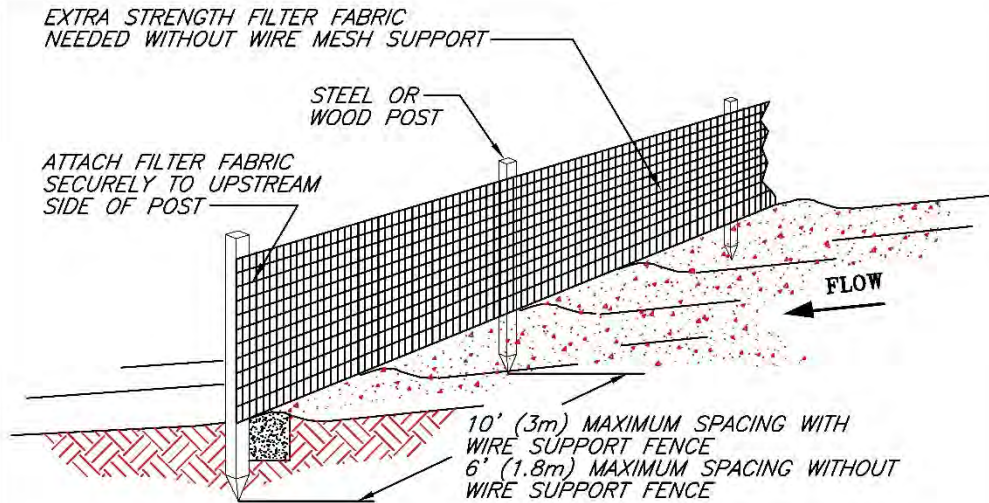
Flammable Gas – i.e. propane	10 kg or 10 minutes
Non-flammable Gas – i.e. CO2	10 kg or 10 minutes
Flammable Liquids	100 litres
Corrosive liquid acids and caustics – i.e. battery acid	5 kg or 5 litres
Environmental hazardous substances – i.e. PCBs	1 kg or 1 litre
Oil and Waste	100 litres
Other substances – i.e. power wash water)	200 kg or 200 litres
Antifreeze	5 litres
Pesticides / Herbicides	1 kg or 1 litre

INCIDENT DETAILS

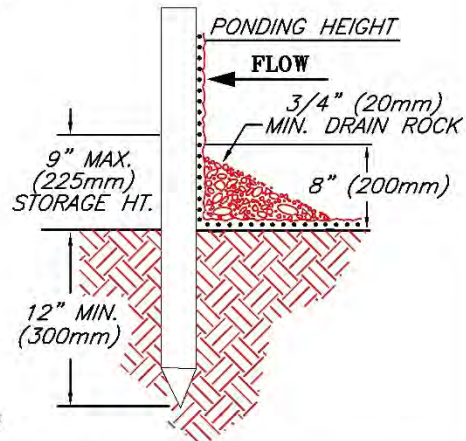
Date of Spill:	Material Spilled:
Reporter's Name:	UN # and Class:
Department:	Quantity Spilled:
Phone Number:	Location of Spill:
Address:	
Description of Spill:	
Cause of Spill:	
Remediation Actions Taken:	
Agencies Attending Scene (eg. Fire Dept. etc.):	
Employees/Contractors Attending Scene:	
Additional Information:	

Appendix D

ESC Measures



TRENCH DETAIL



INSTALLATION WITHOUT TRENCHING

NOTES:

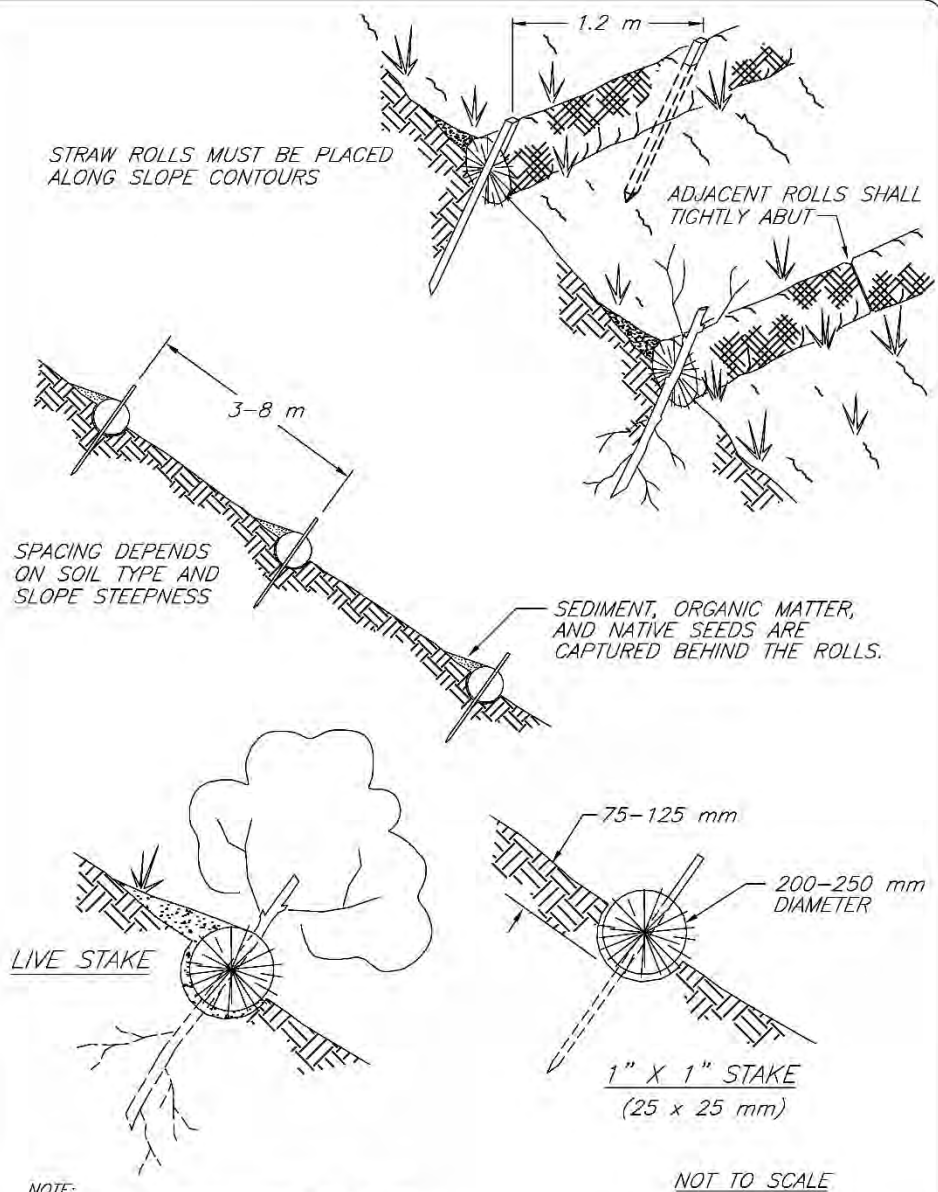
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

FILE: SILTFENC

NOT TO SCALE

SILT FENCE

From: Salix-Applied Earthcare - EROSION DRAW 3.0
1996 JOHN McCULLAH



- NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 75-125 mm DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
 2. THIS FIGURE IS PROVIDED FOR GUIDANCE ONLY AND DOES NOT CONSTITUTE A DESIGN. A SITE SPECIFIC DESIGN IS REQUIRED FROM DESIGNER/ENGINEER.

STRAW ROLLS

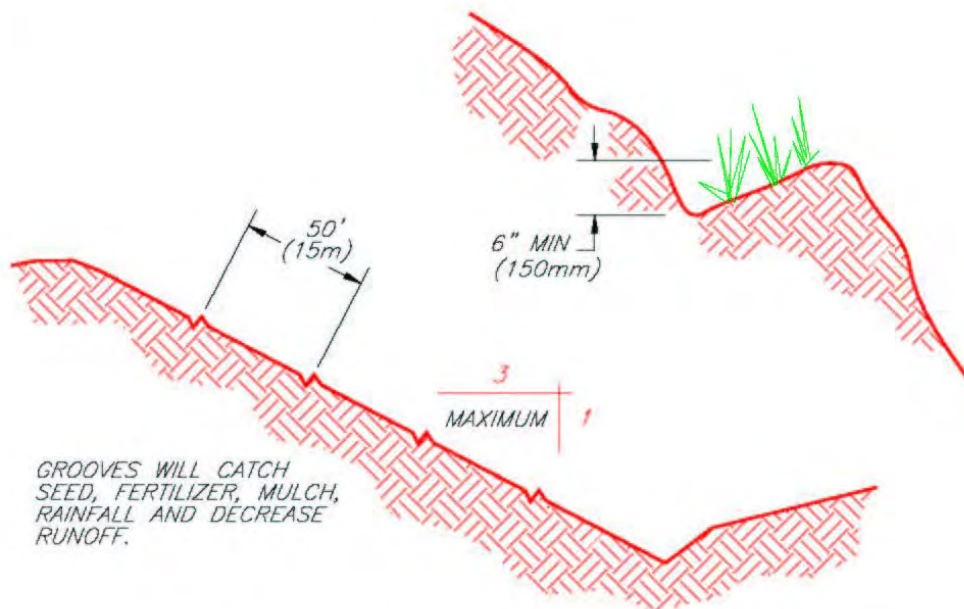
Alberta
TRANSPORTATION

B.M.P. #28a
Typical Section

0104-01-2321/BVP28A-A.dwg



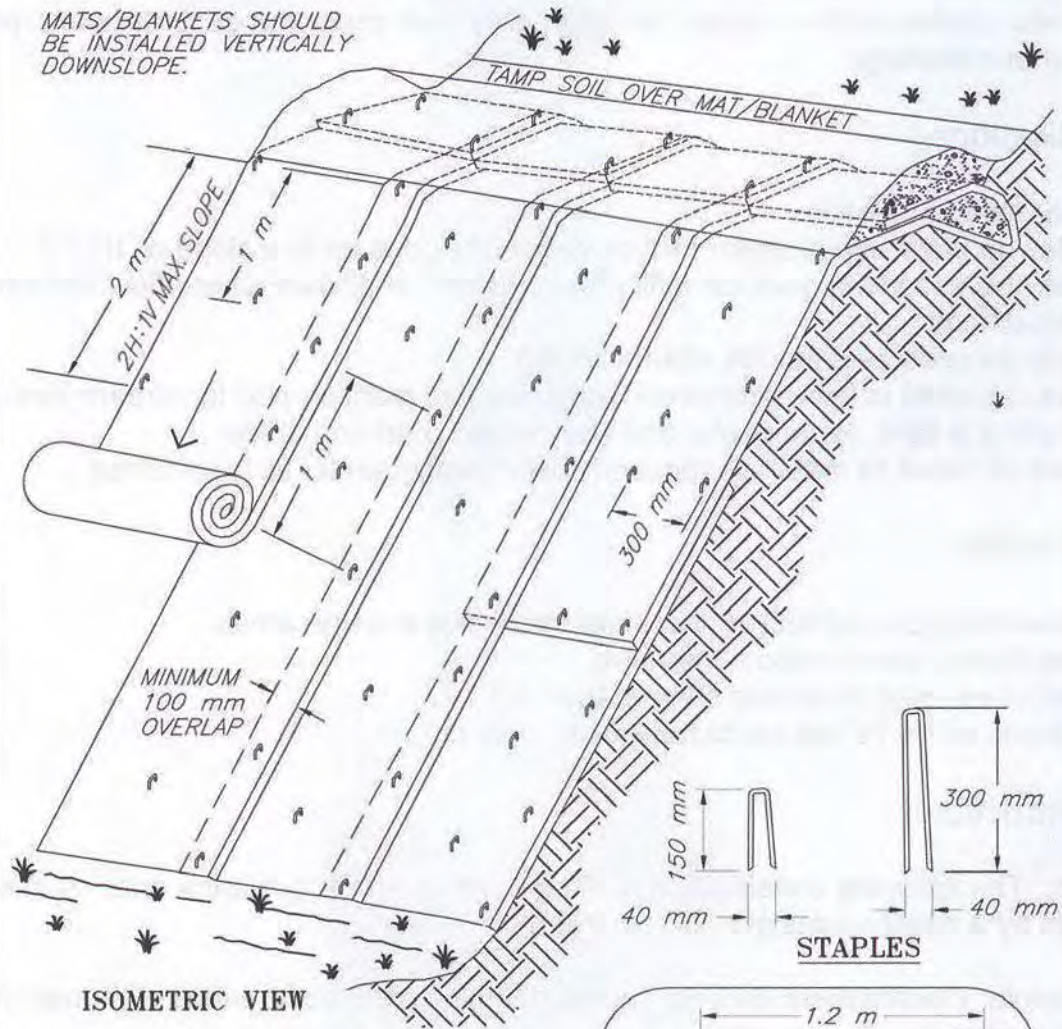
TRACKING



CONTOUR FURROWS

SURFACE ROUGHENING

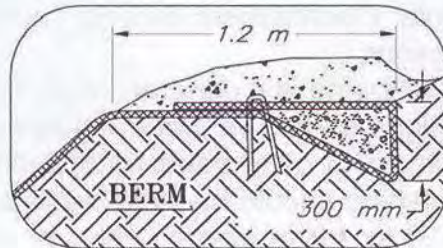
MATS/BANKETS SHOULD
BE INSTALLED VERTICALLY
DOWNSLOPE.



TYPICAL SLOPE SOIL STABILIZATION

NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BANKETS.
3. LAY BANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. CHECK SLOTS, STAKING, STAPLING AND OTHER CONSTRUCTION DETAILS PER MANUFACTURES SPECIFICATIONS.
5. THIS FIGURE IS PROVIDED FOR GUIDANCE ONLY AND DOES NOT CONSTITUTE A DESIGN. A SITE SPECIFIC DESIGN IS REQUIRED FROM DESIGNER/ENGINEER.



NOT TO SCALE

ROLLED EROSION CONTROL PRODUCTS (RECP) SLOPE INSTALLATION

Appendix E

Archaeological Chance Find Procedure

Archaeological Chance Find Procedure

There are more than 32,000 archaeological sites currently recorded in British Columbia with many more being added to the provincial inventory every year. For this reason, it is very likely that you will encounter an archaeological site during your lifetime either knowingly or unknowingly. This protocol has been established to increase awareness of this important resource and to assist in planning future developments.

The remnants of British Columbia's earliest cultures are represented in today's landscape by a wide variety of site types, most of which are related to art, habitations, resource gathering and production, tool making, and traditional ceremonial or ritual activities. Some sites that may be immediately visible to a non-archaeologist include:

- Rock art, including pictographs and petroglyphs.
- Tree art and Culturally Modified Trees (CMT'S) such as bark stripping and planks.
- Surface features such as depressions created by former habitations, earthen fortifications, rock cairns, fish traps, clam gardens, burned rock and middens.
- Artifacts that have become visible on the land surface owing to erosion or recent land altering activity. These may be produced in a variety of materials such as stone, bone, antler, wood, or shell.
- Buried cultural remains that may be sighted in a cut-bank, excavation, eroded shoreline, or other exposed deposits.

If you discover a site in the course of your work that you suspect may be a possible archaeological site;

- Stop all work in the area to avoid damaging the site.
- Do not disturb any archaeological remains that you may encounter.
- Report your discovery to your supervisor or if they are unavailable, the Company who will provide further instructions {Al Smedley @ 250-596-5633 (asmedley@telus.net)}
- If you are unable to contact a Company representative, please contact the Archaeology Branch by telephone at (250) 953-3334

If you discover what you suspect may be a possible human remains in the course of your work;

- Stop all work in the area to avoid damaging the site.
- Do not disturb any possible human remains that you may encounter.
- Report your discovery to your supervisor or if they are unavailable, the Company who will provide further instructions.
- If you are unable to contact a Company representative, and the suspected human remains appear to be current, contact the RCMP.
- If you are unable to contact a Company representative, please contact the Archaeology Branch by telephone at (250) 953-3334

The following steps will generally be followed

- The Coroner's Office and local policing authority are notified and the Coroner's Office determines whether the matter is of contemporary forensic concern.

- If the remains are not of forensic concern, the branch will attempt to facilitate disposition of the remains.
- If a cultural affiliation for the remains can be determined, the branch will contact an organization representing that cultural group. If the remains are of aboriginal ancestry, the branch will attempt to contact the relevant First Nation(s).
- Generally, if remains are still buried and are under no immediate threat of further disturbance, they will not be excavated or removed. If the remains have been partially or completely removed, the branch will facilitate disposition.
- The branch may arrange for a qualified anthropologist or archaeologist to provide an assessment of the remains.

Draft Temporary Use Permit



**REGIONAL DISTRICT OF BULKLEY-NECHAKO
TEMPORARY USE PERMIT NO. F-01-25**

ISSUED TO: Valley Lime Ltd.
PO Box 380
Vanderhoof, BC V0J 3A0

WITH RESPECT TO THE FOLLOWING LANDS:

Unaddressed Crown land, legally described as Block A of the West ½ of District Lot 5415, Cariboo District (PIN: 10034131)

1. This Temporary Use Permit authorizes the following temporary use:

The operation of a portable crushing unit and portable screening unit for processing aggregate mined from the subject property.
2. The temporary use identified in Section 1 may occur only in substantial accordance with the terms and provisions of this permit and the plans and specifications attached hereto as Schedule A.
3. The permit holder shall, as a condition of this permit, ensure the following:
 - a. Operation of the portable crushing unit and screening unit shall be limited to between April and November of each year.
 - b. Hours of operation for the portable crushing unit and screening unit shall be limited to 6:00 am to 6:00 pm, Monday to Saturday.
 - c. No permanent structures associated with the portable crushing unit and screening unit shall be built or placed within the Temporary Use Permit Area.
 - d. The portable crushing unit and screening unit shall not be set up on a permanent foundation.
 - e. Operation of the portable crushing unit and screening unit shall be limited to the "Temporary Use Permit Area" as identified in Schedule A.
4. This Permit authorizes the temporary use identified in Section 1 of this permit to occur only for a term of three years from the date of issuance of this permit.

If a term or provision of this permit is contravened or not met, or if the Applicant or property owner suffers or permits any act or thing to be done in contravention of or in violation of any term or provision of this permit, or refuses, omits, or neglects to fulfill, observe, carry out or perform any duty, obligation, matter or thing prescribed or imposed or required by this permit the

Applicant and/or property owner are in default of this permit, and the permit shall be void and of no use or effect.

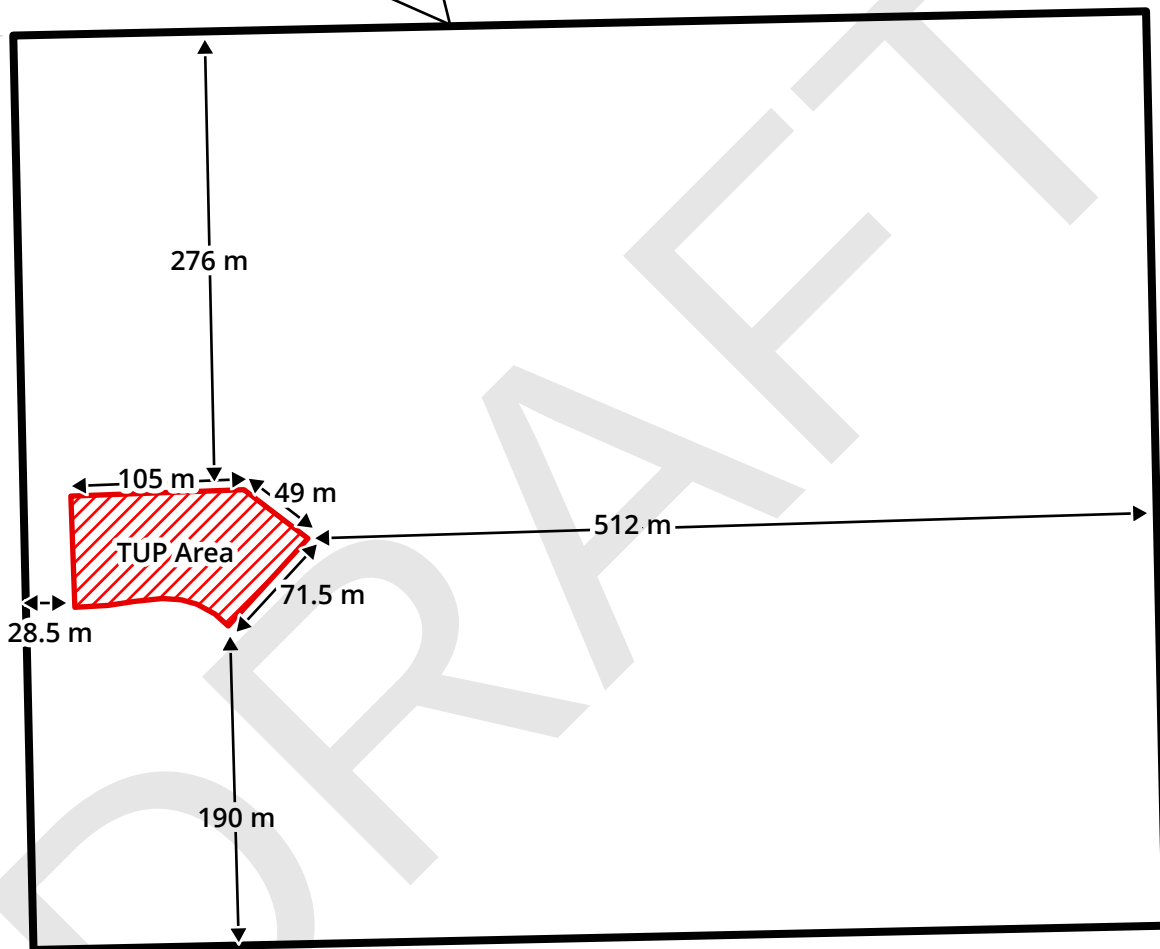
5. As a term of this permit the owner of the land must remove the crushing unit and screening unit from the land upon which the temporary use is occurring or has occurred within two months of the expiration date of this permit unless this permit is renewed by the Board.
6. This permit is not a building permit, nor does it relieve the owner or occupier from compliance with all other bylaws of the Regional District of Bulkley-Nechako applicable thereto, except as specifically varied or supplemented by this permit.

AUTHORIZING RESOLUTION passed by the Regional Board on the ____ day of _____, 2025.

PERMIT ISSUED on the ____ day of _____, 2025.

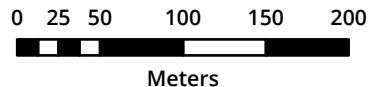
Corporate Administrator

Subject Property



TUP F-01-25: Schedule A
Regional District of Bulkley-Nechako
Produced: 2025-08-20

Lot Area: ≈ 37.69 ha
TUP Area: ≈ 0.84 ha



Referral Report



REGIONAL DISTRICT OF BULKLEY-NECHAKO

Planning Department Referral Report

File No. TUP F-01-25

(Amended September 24, 2025)

Written By: Cameron Kral, Planner

APPLICATION SUMMARY

Name of Agent / Owners: Tracey Martin, DWB Consulting Services Ltd. (Agent)
Valley Lime Ltd. (Applicant)

Electoral Area: Electoral Area F (Vanderhoof Rural)

Subject Property: Unaddressed Crown land, legally described as Block A of the West ½ of District Lot 5415, Cariboo District (PIN: 10034131)

OCP Designation: Resource (RE) Designation in "Vanderhoof Rural Official Community Plan Bylaw No. 1963, 2021" (the OCP)

Zoning: Rural Resource Zone (RR1) in "Regional District of Bulkley-Nechako Zoning Bylaw No. 1800, 2020" (the Zoning Bylaw)

Building Inspection Not within the Building Inspection Area

Fire Protection Not within a Fire Protection Area

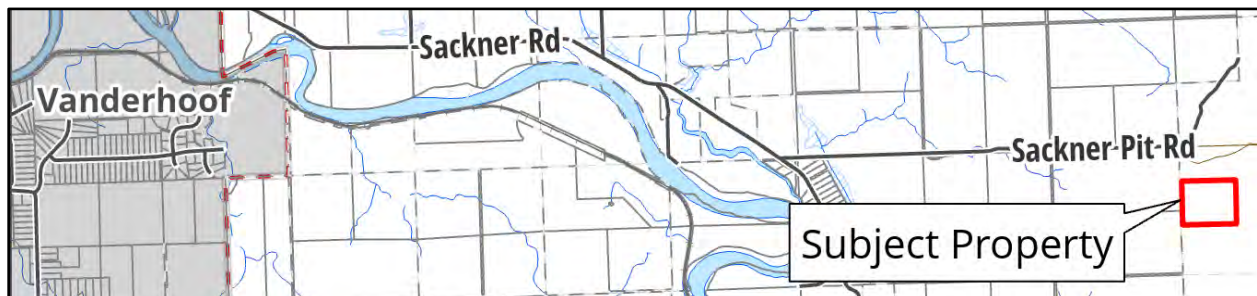
Existing Land Uses: Undeveloped Crown Land and Limestone Quarry (inactive)

Location: Approximately 11 km east of the District of Vanderhoof, off Sackner Pit Road (see map below).

Property Size: 37.69 ha (93.13 ac)

Proposed TUP Area: 0.8 ha (1.97 ac)

Location Map:



PROPOSAL

The applicant is requesting the issuance of a Temporary Use Permit (TUP) for three years to allow the operation of a portable crusher and screener on a 0.8 ha (1.97 ac) area on the subject property. The purpose of the request is to facilitate the development of a limestone quarry within the applicant's 11.3 ha (27.9 ac) Permitted Mine Area (see attached Applicant Submitted Drawings).

The applicant is proposing to extract up to 99,555 tonnes of material over a 5-year period. Operation of the quarry would involve blasting and conventional construction equipment to extract limestone from an exposed outcrop. The limestone material would then be transported to an onsite crushing/screening area for stockpiling and processing, before being hauled offsite along an existing mine access road through Crown land to Sackner Pit Road. The existing mine access road will be upgraded to accommodate the proposed quarry. The quarry is proposed to operate Monday to Friday, 7 am to 5 pm, April to November. No permanent infrastructure or facilities are proposed.

The applicant provided the attached Quarry Management Plan and Mine Access Road Management Plan which contain additional information, including environmental monitoring, reclamation, potential impacts, mitigation measures for dust, emissions, invasive plants, noise and waste for the proposed quarry and mine access road. The applicant also provided staff with copies of their Licences of Occupation for the proposed quarry and mine access road; an approved Mines Act Permit, an approved Ministry of Transportation and Transit Industrial Access Permit; and an ALC decision approving a section of the mine access road which crosses the ALR. Copies of these approvals are available from staff upon request.

The subject property is zoned Rural Resource Zone (RR1), which does not permit aggregate processing uses, including crushing and screening. Therefore, a TUP is required. Aggregate extraction, including blasting, cannot be regulated by the RDBN.

DISCUSSION

Site Details

The site is surrounded by undeveloped Crown land to the north, east and south, and private land to the west. Staff conducted a site visit on August 26, 2025 (see Attachments for Site Visit Photos). The proposed quarry is located on the site of an existing quarry that has been inactive since 1984. No buildings are located on the subject property. The site has not yet been cleared but there is some disturbance from the existing quarry. The proposed crushing/screening area would be located on the west side of the site towards the mine access road. A 50 m (164 ft) wide vegetation buffer is proposed to be maintained around the site (see Attachments for Site Plan). The nearest residence is located approximately 1.5 km west of the proposed crushing/screening area.

Official Community Plan

The subject property is designated Resource (RE) pursuant to the OCP. It is the intent of this designation to protect the resource values of the designated area and to minimize resource conflicts among recreation, grazing, mining and wildlife by discouraging settlement on Resource designated lands. OCP Policy 3.7.2(1) states:

"Only uses directly associated with agriculture and grazing, mineral or aggregate extraction, fish and wildlife management, wilderness oriented recreation, and necessary institutional, public, utility or transportation services use will be permitted in the Resource (RE) designation. A very limited amount of low density residential use may be permitted within this designation, where appropriate."

Temporary Use Permits Explained

A TUP allows a use not permitted by zoning to occur for up to three years, with the option for the applicant to request that the Board consider renewing the TUP for a maximum of three additional years. After the renewed TUP expires, the applicant can submit a new application to allow the use to continue.

The TUP must be in accordance with the policies identified in the Section 6.3 of the OCP, which allow for the issuance of a Temporary Use Permit on the following basis:

- (a) the proposed temporary use will not create an amount of traffic that will adversely affect the natural environment, or rural character of the area;*
- (b) the environment would not be negatively affected by the proposed temporary use;*
- (c) the proposed temporary use will not have adverse affects on neighbouring land uses or property owners;*
- (d) the need for security in the form of an irrevocable letter of credit with an automatic extension clause has been considered to ensure that the required decommissioning and reclamation is completed;*
- (e) the proposed temporary use does not require a significant amount of capital investment in a particular location; and,*
- (f) the proposed temporary use has the support of the Agricultural Land Commission through the approval of an application if the land is within the ALR.*

Referral and Approval Process

This application is being referred to the Electoral Area F Advisory Planning Commission, the District of Vanderhoof, and the Ministry of Transportation and Transit.

Notice of this application will be published on the Regional District's website, the Regional District's official Facebook page, and in the Vanderhoof Omineca Express informing the public of the time and location of the Board's consideration of the application, and their

ability to provide input to the Board in writing. Property owners and tenants within 100 metres of the subject property will be sent a similar notice. A sign must be placed on the subject property at least 10 days before the Board considers the permit. Comments received from the public or referral agencies will be presented to the Board for consideration.

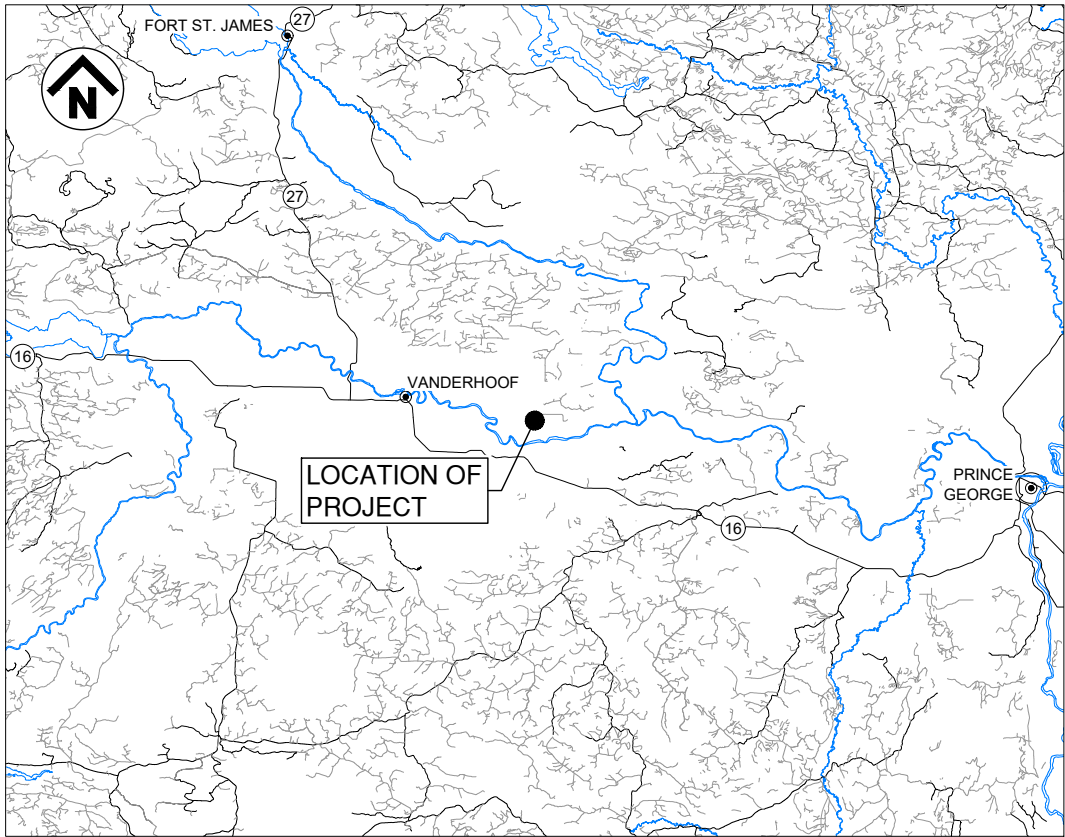
ATTACHMENTS

- Applicant Submitted Drawings.
- [Quarry Management Plan](#) (Link)
- [Mine Access Road Management Plan](#) (Link)
- [Site Visit Photos, August 26, 2025](#) (Link)

VALLEY LIME LTD.

PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5) VANDERHOOF, BC.

Lat. 53° 59' 25.5" Long. 123° 44' 38.2"



KEY MAP
NTS

DRAWING LIST	
DRAWING NUMBER	DRAWING TITLE
21556-164-01	LOCATION MAP
21556-164-02	ACCESS MAP
21556-164-03	TENURE MAP
21556-164-04	SITE MAP
21556-164-05	SECTIONS

ISSUED FOR PERMITTING

INTENDED TO BE PLOTTED ON 11"x17"
ANY COPIES or PDFS MAY NOT BE TO SCALE



DWB Consulting
Services Ltd.

Permit to Practice# 1000169

CLIENT PROJECT CODE

DATE

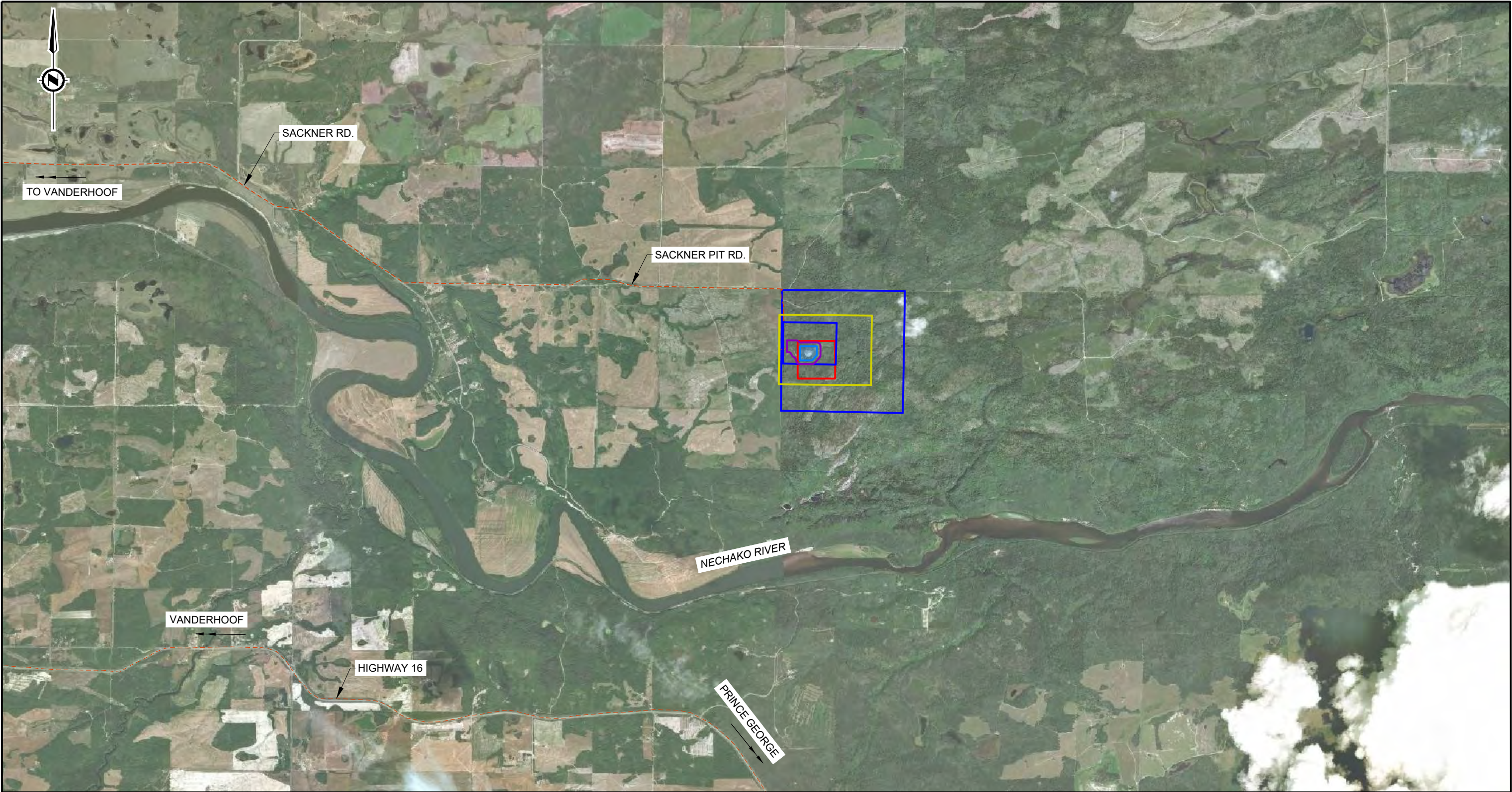
DRAWING NUMBER

REV

2024-03-27

21556-164-00

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LOCATION MAP

GENERAL NOTES:

- 1. BASE IMAGE OBTAINED FROM: Microsoft Bing Imagery
- 2. ROAD NAMES OBTAINED FROM: Google Maps.
- 3. EXISTING BOUNDARIES FROM: iMapBC

- LEGEND:**
- EXISTING ROAD
 - MINERAL CLAIM 374380 (25 HECTARES)
 - MINERAL CLAIM 1095074 (114 HECTARES)
 - DISTRICT LOT 5415
 - PERMITTED MINE AREA
 - PROPOSED QUARRY AREA/BOUNDARY

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ANY COPIES or PDFS MAY NOT BE TO SCALE

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B	DEC 22	ISSUED FOR PERMITTING		BC	JCP	AJ	
C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS		BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING		BC	JCP	AJ	



DWB Consulting Services Ltd.

1579 9th Avenue
Prince George, B.C.
V2L 3K8
Phone: (250) 562-5541 Fax: (250) 562-5561

DESIGNED

AJ

DATE

2021-05-20

QUALITY CONTROL

JCP

DATE

2021-06-09

QUALITY ASSURANCE

DATE

DRAWN

JH

DATE

2021-05-20

VALLEY LIME LTD.

PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)

VANDERHOOF, BC

LOCATION MAP

LATITUDE: 53° 59' 25.5"

NAD83

NORTHING: 5982711

LONGITUDE: 123° 44' 38.2"

10U

EASTING: 451224

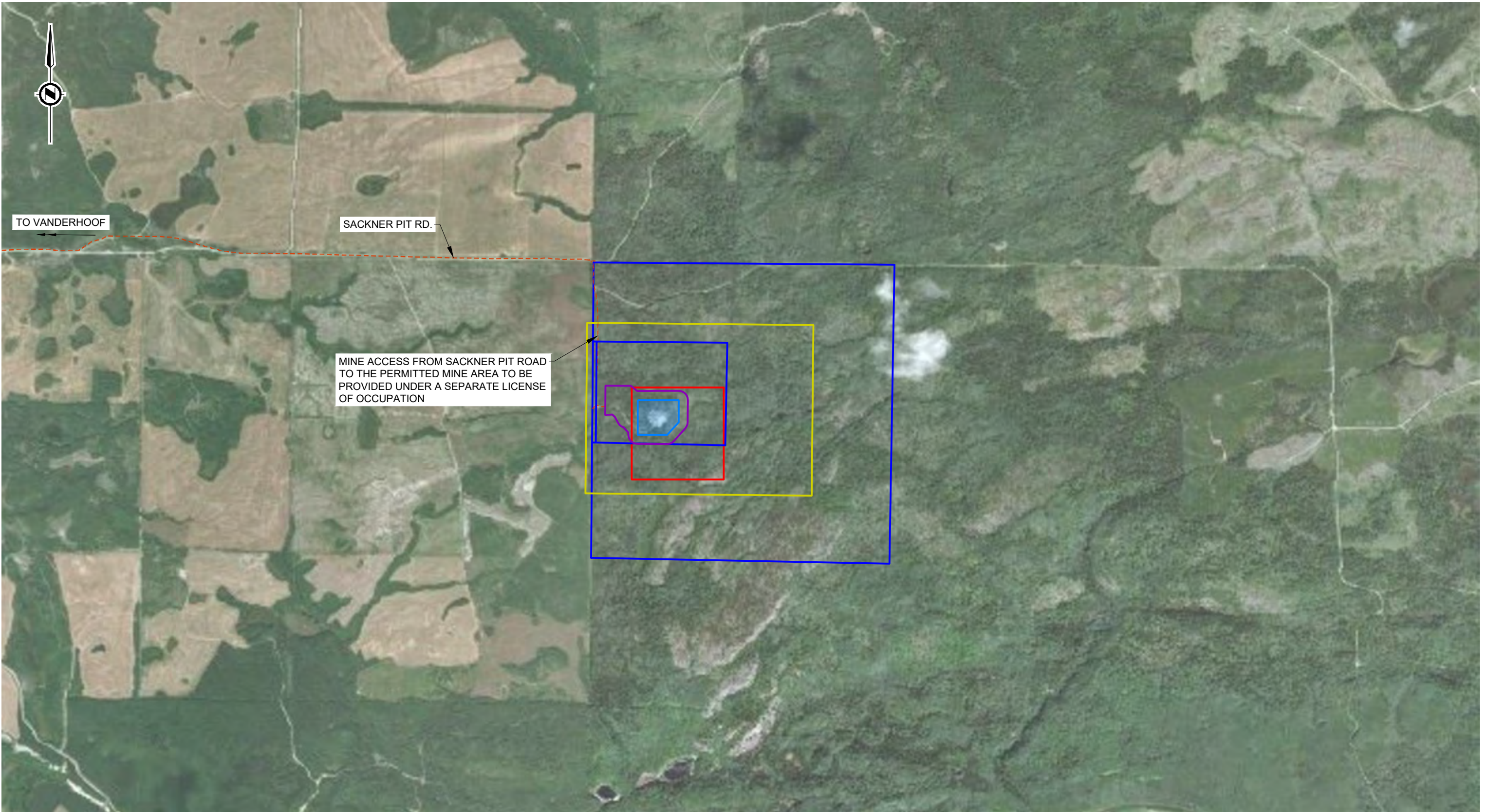
DRAWING NUMBER

21556-164-01

REV

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LEGEND:

- EXISTING ROAD
- MINERAL CLAIM 374380 (25 HECTARES)
- MINERAL CLAIM 1095074 (114 HECTARES)
- DISTRICT LOT 5415
- PERMITTED MINE AREA
- PROPOSED QUARRY AREA/BOUNDARY

NOTES:

1. FOR GENERAL NOTES REFER TO DWG 21556-164-01

ACCESS MAP

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C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS		BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING		BC	JCP	AJ	



DWB Consulting Services Ltd.
1579 9th Avenue
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Phone: (250) 562-5541 Fax: (250) 562-5561

DESIGNED: AJ DATE: 2021-05-20
QUALITY CONTROL: JCP DATE: 2021-06-09
QUALITY ASSURANCE: DATE
DRAWN: JH DATE: 2021-05-20

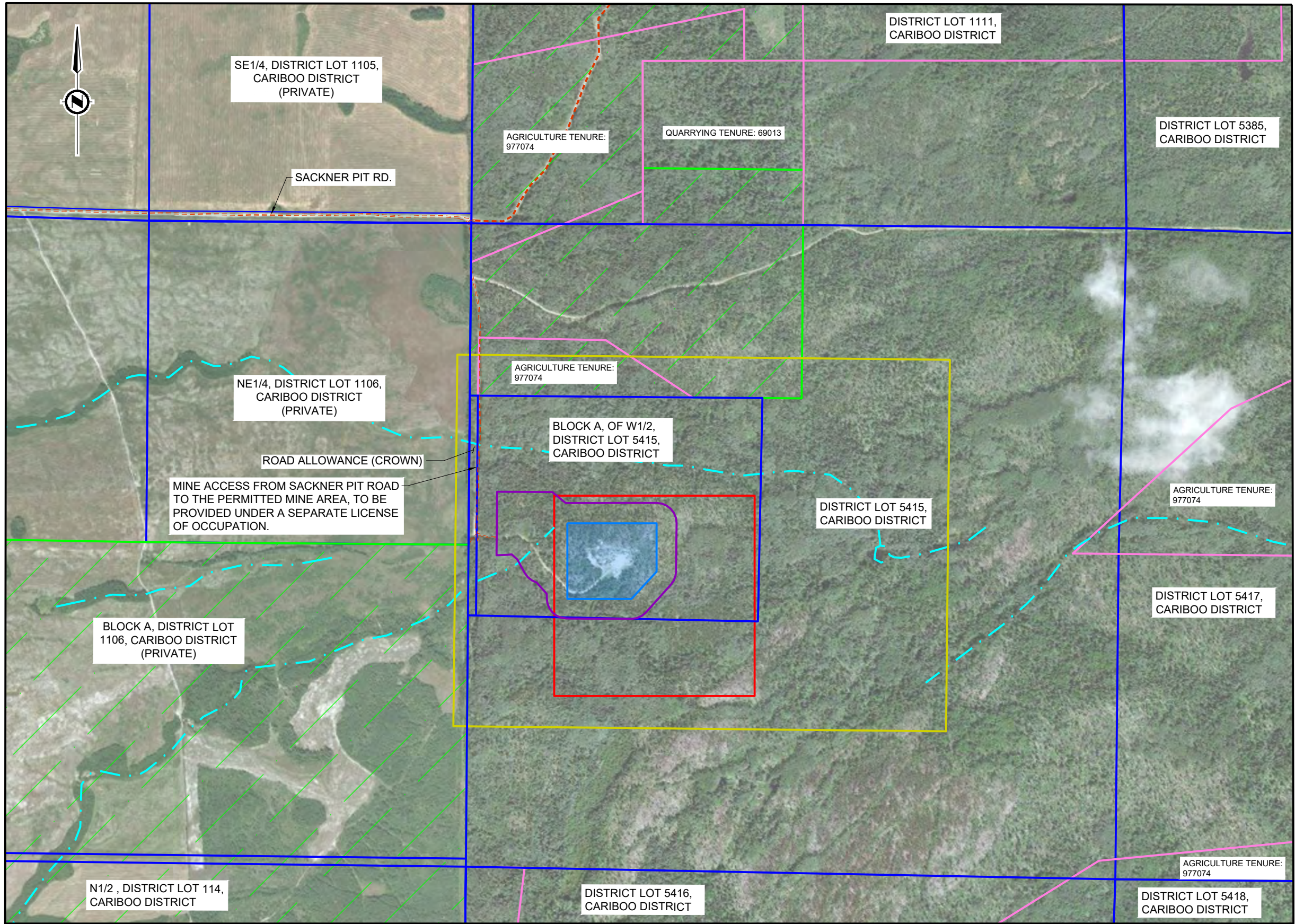
VALLEY LIME LTD.
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

ACCESS MAP				DRAWING NUMBER		REV
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LONGITUDE:	123° 44' 38.2"	10U	EASTING:	451224		

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ANY COPIES or PDFS MAY NOT BE TO SCALE

ISSUED FOR PERMITTING

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NOTES:

1. FOR GENERAL NOTES REFER TO DWG 21556-164-01

LEGEND:

- EXISTING ROAD
- MINERAL CLAIM 374380 (25 HECTARES)
- MINERAL CLAIM 1095074 (114 HECTARES)
- LAND ACT SURVEY PARCELS
- AGRICULTURE TENURE
- PERMITTED MINE AREA
- QUARRY TENURE
- EXISTING CREEK
- ALR ZONES

TENURE MAP

SCALE		0 50 1:10,000 250m		CAD FILENAME		21556-164 - TENURE MAP	
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C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS		BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING		BC	JCP	AJ	

DWB Consulting Services Ltd.
1579 9th Avenue
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Phone: (250) 562-5541 Fax: (250) 562-5561

DESIGNED: AJ DATE: 2021-05-20
QUALITY CONTROL: JCP DATE: 2021-06-09
QUALITY ASSURANCE: DATE
DRAWN: JH DATE: 2021-05-20

VALLEY LIME LTD.
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

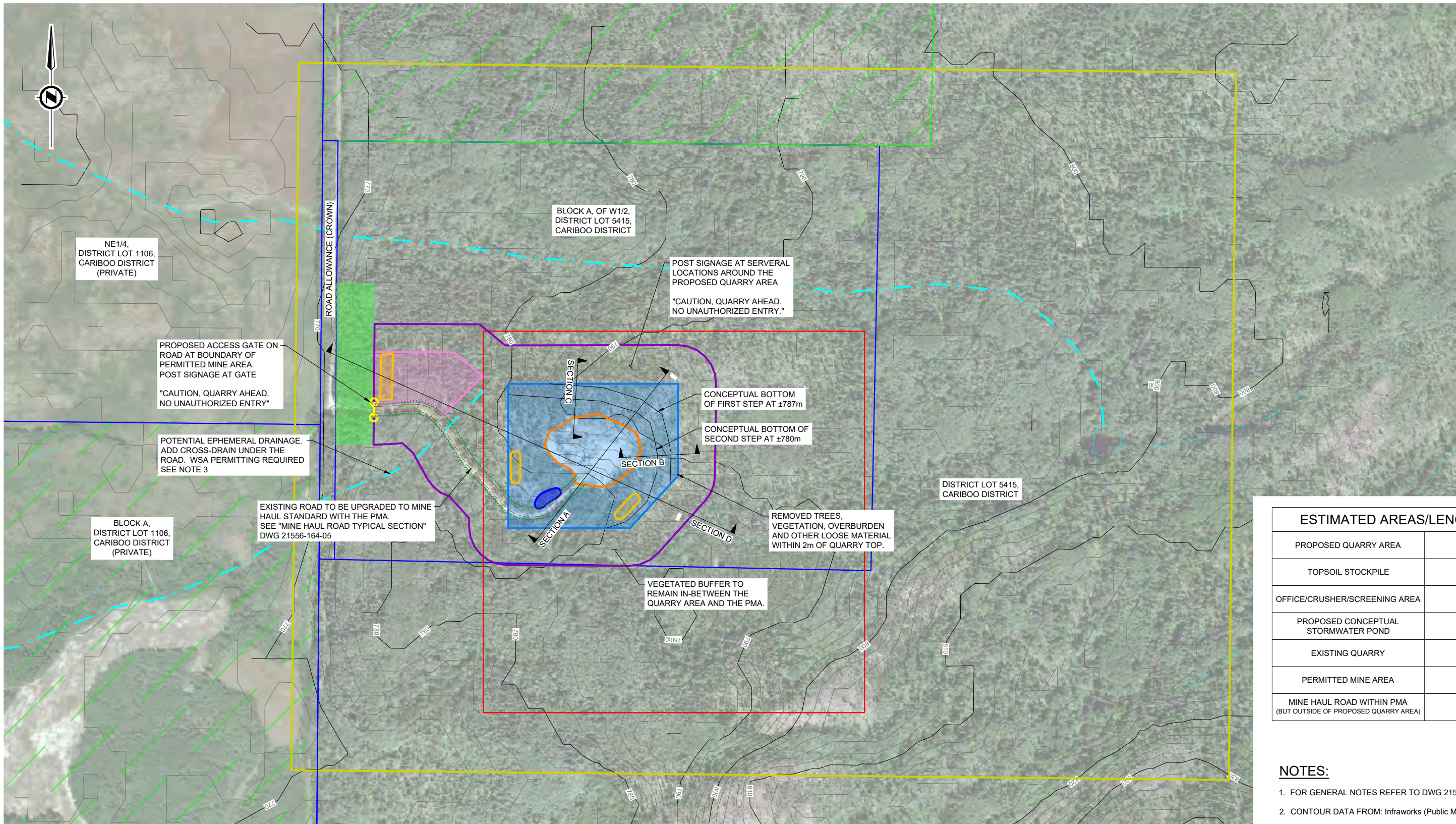
TENURE MAP

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LONGITUDE:				EASTING:					
123° 44' 38.2"				451224					

INTENDED TO BE PLOTTED ON 11"x17"
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ISSUED FOR PERMITTING

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LEGEND:

MINERAL CLAIM 374380 (25 HECTARES)	PROPOSED QUARRY AREA/BOUNDARY
MINERAL CLAIM 1095074 (114 HECTARES)	VEGETATED DUST & VISUAL BARRIER
EXISTING QUARRY BOUNDARY	TOPSOIL STOCKPILE
LAND ACT SURVEYED PARCELS	OFFICE/CRUSHER/SCREENING AREA
EXISTING ACCESS	PROPOSED CONCEPTUAL STORMWATER POND
EXISTING CREEK	ALR ZONES
PERMITTED MINE AREA	

SITE MAP

ISSUED FOR PERMITTING

ESTIMATED AREAS/LENGTHS

PROPOSED QUARRY AREA	±4.0 ha
TOPSOIL STOCKPILE	±0.2 ha
OFFICE/CRUSHER/SCREENING AREA	±0.8 ha
PROPOSED CONCEPTUAL STORMWATER POND	±0.05 ha
EXISTING QUARRY	±0.8 ha
PERMITTED MINE AREA	±11.3 ha
MINE HAUL ROAD WITHIN PMA (BUT OUTSIDE OF PROPOSED QUARRY AREA)	±0.4 ha

NOTES:

- FOR GENERAL NOTES REFER TO DWG 21556-164-01
- CONTOUR DATA FROM: Infracore (Public Model)
- REFER TO DWB REPORT "Valley Lime Quarry Management Plan" FOR DETAILS ON THIS APPLICATION.

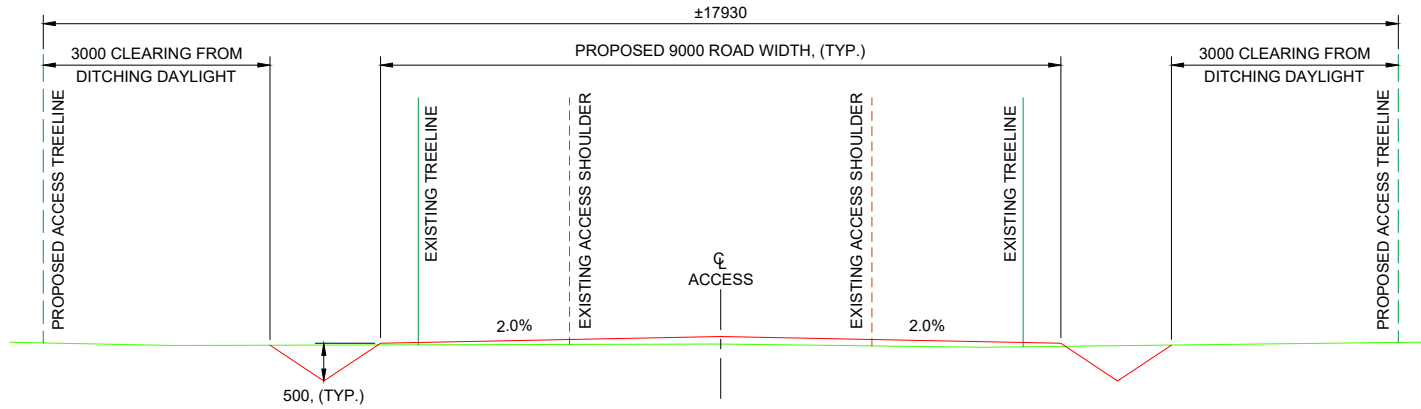
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C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS	BC	JCP	AJ	
D	MAR 24	ISSUED FOR PERMITTING	BC	JCP	AJ	

DWB Consulting Services Ltd.	
1579 9 th Avenue	
Prince George, B.C.	
V2L 3K6	
Phone: (250) 562-5541 Fax: (250) 562-5561	
DESIGNED	AJ DATE 2021-05-20
QUALITY CONTROL	JCP DATE 2021-06-09
QUALITY ASSURANCE	DATE
DRAWN	JH DATE 2021-05-20

VALLEY LIME LTD.
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)
VANDERHOOF, BC

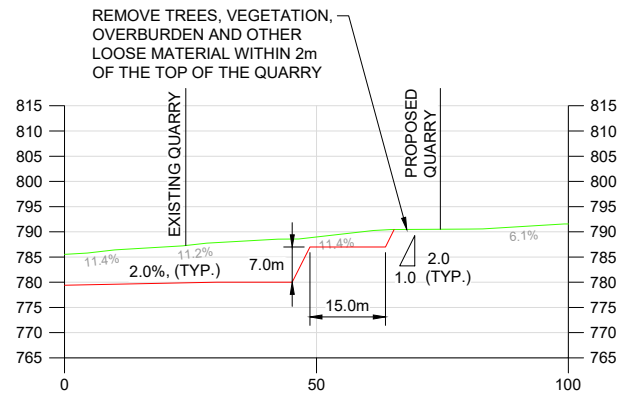
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LONGITUDE:	123° 44' 38.2"	10U	EASTING:	451224		D

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MINE HAUL ROAD TYPICAL SECTION (WITHIN PMA)

1:100

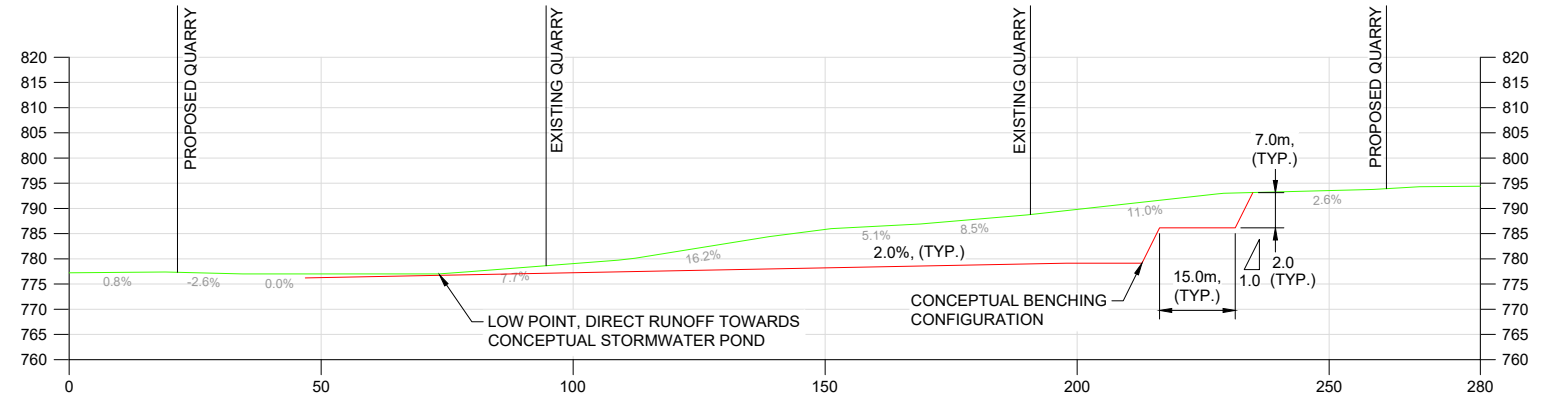


SECTION B

1:1500

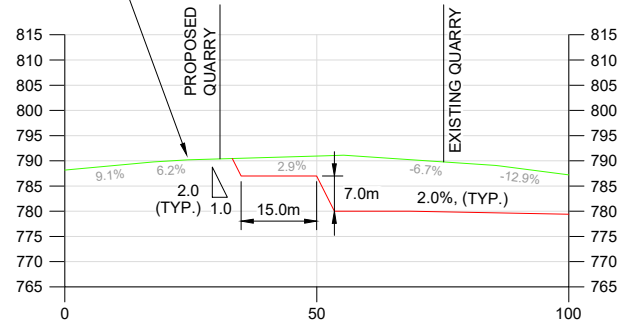
POST SIGNAGE AT SEVERAL LOCATIONS AROUND THE PROPOSED QUARRY AREA, (TYP.)

"CAUTION, QUARRY AHEAD. NO UNAUTHORIZED ENTRY."



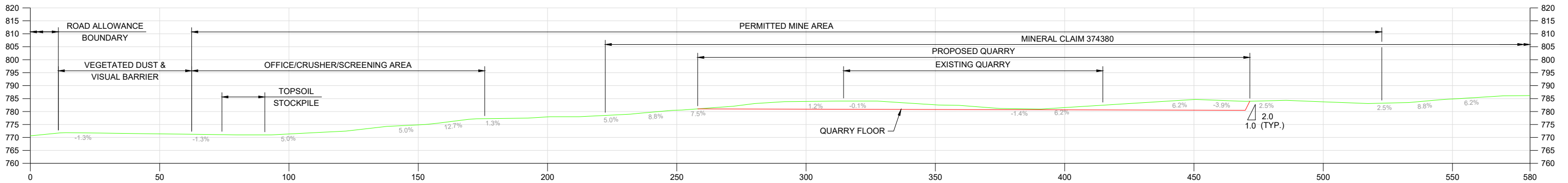
SECTION A

1:1500



SECTION C

1:1500



SECTION D

1:1500

LEGEND:

- EXISTING GROUND
- CONCEPTUAL BENCHING CONFIGURATION

NOTES:

- FOR GENERAL NOTES REFER TO DWG 21556-164-01
- TOPOGRAPHIC DATA OBTAINED FROM: Infracore (Public Model)
- DESIGN CODE:
HEALTH, SAFETY AND RECLAMATION CODE FOR MINES IN BRITISH COLUMBIA, NOVEMBER 2022
- PROPOSED BENCHING CONFIGURATION BASED ON MAINTAINING PIT FACE HEIGHT NOT MORE THAN 2m ABOVE REACH OF LOADING EQUIPMENT. DEERE 844K LOADER ADOPTED AT THIS STAGE.
- MINE HAUL ROAD: THREE TIMES THE WIDTH OF A STANDARD ON-HIGHWAY DUMP TRUCK PROVIDED.

INTENDED TO BE PLOTTED ON 11"x17"
ANY COPIES or PDFS MAY NOT BE TO SCALE

ISSUED FOR PERMITTING

SCALE		AS NOTED		CAD FILENAME		21556-164 - CONTOUR SITE MAP & SECTIONS	
REV	DATE	DESCRIPTION	DRW	CHK	ENG	PLOT DATE	2024-04-09
A	MAY 21	ISSUED FOR DISCUSSION	JH	JCP	AJ		
B	DEC 22	ISSUED FOR PERMITTING	BC	JCP	AJ		
C	JAN 23	ISSUED FOR PERMITTING, MINOR EDITS	BC	JCP	AJ		
D	MAR 24	ISSUED FOR PERMITTING	BC	JCP	AJ		

DWB Consulting Services Ltd.	
1579 9 th Avenue	
Prince George, B.C.	
V2L 3K6	
Phone: (250) 562-5541 Fax: (250) 562-5561	
DESIGNED	AJ DATE 2021-05-20
QUALITY CONTROL	JCP DATE 2021-06-09
QUALITY ASSURANCE	DATE
DRAWN	JH DATE 2021-05-20

VALLEY LIME LTD.			
PROPOSED LIMESTONE QUARRY (YEARS 0 TO 5)			
VANDERHOOF, BC			
SECTION VIEWS			
LATITUDE:	56° 59' 25.5"	NAD83	NORTHING: 5982711
LONGITUDE:	123° 44' 38.2"	10U	EASTING: 451224
DRAWING NUMBER		21556-164-05	REV D

TUP F-01-25 Site Visit Photos, August 26, 2025

Entrance to Existing Mine Access Road (right), south of Sackner Pit Road, south:



Entrance to Permitted Mine Area and existing Mine Haul Road, facing east from existing Mine Access Road:



Proposed TUP Area (undeveloped), facing northwest from existing Mine Haul Road:



Existing quarry site, within proposed quarry boundary, facing northeast:



Limestone outcrop, existing quarry site, facing northeast



Existing Mine Haul Road, facing southwest from existing quarry:



Existing Mine Access Road, facing north:



RDBN Board Report

Available October 17, 2025 on
the October 23, 2025 Board
Meeting Agenda online at:

[https://www.rdbn.bc.ca/departments/
administration/regional-board-committee-
meetings](https://www.rdbn.bc.ca/departments/administration/regional-board-committee-meetings)

Newspaper Advertisement



Notice of Application for Temporary Use Permit

Notice is hereby given that the Board of Directors of the Regional District of Bulkley-Nechako (the Board) will be considering the issuance of a Temporary Use Permit (TUP) at a meeting to be held during business hours on Thursday, October 23, 2025 in the Regional District of Bulkley-Nechako Board Room, 37 3rd Avenue, Burns Lake, BC. Pursuant to Section 493 of the Local Government Act, the RDBN Board may allow temporary uses for a period of three years or less, renewable for up to another three years, through the issuance of a TUP by Board resolution.

The purpose of the TUP is to allow aggregate processing, including the use of a portable crusher and screener, on the subject property in accordance with the terms outlined in the TUP. The subject property is legally described as Block A of the West ½ of District Lot 5415, Cariboo District (PIN 10034131) and is located approximately 11 kilometres east of the District of Vanderhoof, off Sackner Pit Road, as shown on the following location map. All persons who deem their interests to be affected by this application may deliver written submissions to the RDBN Office at 37 3rd Avenue, Burns Lake, BC; the Vanderhoof Municipal Office at 160 Connaught Street, Vanderhoof, BC; or by email to planning@rdbn.bc.ca. Written submissions must be received by the RDBN no later than 4:30 pm on Tuesday, October 21, 2025 to ensure consideration by the Board.

A copy of the proposed TUP and additional information may be inspected at the RDBN office at 37 3rd Avenue, or the Vanderhoof Municipal Office at 160 Connaught Street during regular business hours from October 10, 2025 to Thursday, October 23, 2025 (excluding weekends and statutory holidays) and online at www.rdbn.bc.ca/departments/planning/public-meetings.

For further information, please call the Regional District of Bulkley-Nechako Planning Department at 250-692-3195 or toll-free at 1-800-320-3339.



Referral Responses

(last updated October 10, 2025)

Advisory Planning Commission Meeting Minutes

Electoral Area F	Meeting Date: October 8, 2025 7:00 pm	Meeting Location: District of Vanderhoof Office
Attendance		
<u>APC Members</u> ☒ Mike Pritchard ☒ Henry Klassen ☒ Ben Rodts ☐ Barb Ephrom ☒ Kelly Gehrmann <u>Electoral Area Director</u> ☒ Director Shirley Moon ☒ Alternate Director Alex Kulchar <u>Other Attendees</u> ☒ Cameron Kral, Planner <i>Zoom.</i> ☐ _____ ☐ _____ ☐ _____		
Chairperson: <i>Henry</i>		Secretary: <i>Mike</i>
Call to Order: <i>7:00pm.</i>		
Agenda: 7:00 Election of Chair and Secretary 7:15-7:45 ✓ TUP F-01-25 ✓		<i>Tracy Martin Proponent</i>
Applications (Include application number, comments, and resolution) <u>RZ F-01-25</u> <i>Recommend acceptance.</i> <i>Motion to approve of the project with the following conditions</i> <i>1) to check on times of operation 0700-1700 or 0600 to 1800 M/S Ben/Kelly.</i> <i>2) to confirm the or deny the presence of Bats or snakes in the Limestone feature. If confirmed what mitigation measures will be applied</i> <i>3) Dust during transport of the limestone product should be addressed.</i> <i>Approved.</i>		
Meeting Adjourned:	Secretary Signature	

Sent: Tuesday, October 7, 2025 4:02 PM

To: Cameron Kral <cameron.kral@rdbn.bc.ca>

Cc: Development Approvals, Fort George TT:EX <DA.FortGeorge@gov.bc.ca>; Labarrere, Leah TT:EX <Leah.Labarrere@gov.bc.ca>

Subject: 2025-04465/TUP F-01-25

[EXTERNAL EMAIL] Please do not click on links on open attachments from unknown sources.

Good Afternoon Cameron,

The Ministry has reviewed the Temporary Use Permit TUP F-01-25 off of Sackner Pit Road.

The Ministry has no concerns with the land use, but has the following comments on the access for the applicant;

- Access point onto Sackner Pit requires an industrial/resource access permit prior to improvements or operations taking place
- While the intended use is April to November, Sackner Pit Road is load restricted annually during the spring until June/July which will impact operations.

I'll upload a copy of this e-mail to eDas to document the response and the DS team will correct the status in the system upon their return.

Let me know if you have any questions.

Regards,

Shaun Holahan
District Manager

Public Submissions

(No responses received as of
October 10, 2025)