



ACTIVE EARTH
ENGINEERING LTD

www.activeearth.ca

METRO VANCOUVER

201 – 3989 Henning Drive
Burnaby, BC V5C 6P8
Tel. 778-737-3488

VANCOUVER ISLAND

968 Meares Street
Victoria, BC V8V 3J4
Tel. 778-430-5475

FRASER VALLEY

304 – 2600 Gladys Avenue
Abbotsford, BC V2S 0E9
Tel. 778-752-2222

**ENVIRONMENTAL
MANAGEMENT PLAN**

**Bamberton Quarry
Permit Q-8-24
Malahat, BC**

PREPARED FOR

Coast Mountain Resources (2020) Ltd.
19923 80A Avenue
Langley, BC V2Y 0E2

PREPARED BY

Sam Powell, Dip. Tech.
Environmental Technician

REVIEWED BY

Marek Downarowicz, P.Geo.
Associate, Senior Geoscientist

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1 INTRODUCTION

Coast Mountain Resources (2020) Ltd. (CMR) has retained Active Earth Engineering Ltd. (Active Earth) to prepare an Environmental Management Plan (EMP) in relation to the quarry and aggregate production operation at the Bamberton Quarry, located on the Malahat on Vancouver Island (the "Site"). The quarry operates under an existing Ministry of Energy, Mines and Low Carbon Innovation (EMLI) Permit Q-8-45.

This Environmental Management Plan (EMP) summarizes the roles and responsibilities and for relevant parties involved in this Project and presents the relevant best management practices and mitigation measures for the identified potential environmental hazards.

1.1 EMP Objectives

This EMP has been prepared to serve as a guide to assist CMR, and any of their sub-contractors and sub-consultants, in operating the quarry in a manner that is environmentally responsible and complies with applicable environmental laws and regulations.

The EMP provides a framework for environmental monitoring, and for identifying and promoting environmental values, incorporating environmental protection measures into daily work activities, and establishing measures to identify, report and respond to environmentally significant issues and incidents.

The EMP should not be used to determine which parties are financially or contractually responsible for any particular tasks.

1.2 EMP Updates

The EMP has been prepared based on our understanding of the nature of the operation at the time of writing. Modifications may be required due to unforeseen circumstances encountered throughout the operation or to reflect changes to Site conditions as well as the project design and/or execution. The operation will be managed using an adaptive management approach, and all modifications to the EMP will be made available for review by CMR.

2 PROJECT INFORMATION

The following sections provide relevant project information pertaining to the operations.

2.1 Location

The Site is situated on the eastern slope of the Malahat Ridge on Vancouver Island, sloping down towards the Saanich Inlet. Mount Wood is located to the west of the Site and is the highest point in the surrounding area.

The Site is located approximately 4.5 km south of the town of Mill Bay on the southern end of Bamberton Road located directly east of Highway 1.

The attached Figure 1 and 2 illustrates the project location.

2.2 Facilities and General Operations

The facilities on-Site consist of a weigh scale and mobile offices on the northern portion of the quarry, and a crusher system centrally located in the quarry.

The operations on-Site generally consist of clearing brush and overburden, drilling and blasting bedrock, movement of blast rock into the crusher system, processing crushed rock through the crusher system in marketable aggregate, stockpiling and storage of materials, and distribution and sales of aggregate product.

2.3 Methods

This EMP is based on Site specific information including:

1. A detailed analysis of the Site Inventory;
2. Issues identification and risk analysis;
3. Preparation of an EMP; and
4. Implementation and monitoring of the EMP.

3 CONTACTS AND RESPONSIBILITIES

The key personnel and respective responsibilities are presented below.

3.1 Key Project Personnel

The current Project contact list is provided below. This list may be updated as the Project proceeds.

PROJECT CONTACT LIST

Company / Project Role	Name	Phone Number
Malahat Investment Corporation / Property Owner	Josh Handysides	(250) 929-1290
CMR – Operator	Kyle Dolan	(604) 605-2592
Active Earth – Environmental Consultant	Marek Downarowicz	(778) 430-5475

Additional emergency response contact information is provided in Section 10.1.

3.2 Operator Responsibilities

CMR, as the lessee and operator of the Site will be referred to as the Operator. The primary responsibility of the Operator is to ensure that the environmental protection objectives of applicable approvals/permits/conditions are met by ensuring that the requirements of this EMP, and other applicable conditions, are adhered to.

Responsibilities of the Operator include the following:

- Review the project EMP with their staff and sub-contractors prior to commencing works.
- Comply with the project permit and any other agency permits or licences issued for the project, as well as all other applicable federal, provincial and municipal laws, statutes, by-laws, regulations, orders and policies.
- The Operator must cooperate with the Environmental Consultant (EC). The Operator must comply with written or verbal instructions with respect to conducting activities in compliance with the mitigation measures outlined in the EMP.
- Correct deficiencies and any non-compliance issues upon direction from the EC, whether written or verbal. Corrections should be made as soon as reasonably possible, ideally within 24 hours of directions. The Property Owner, Operator, or Environmental Consultant shall notify relevant agencies immediately in the event of a non-compliance.
- Ensure that all on-Site Project staff have been oriented to the EMP and will maintain records of all oriented personnel.
- Relevant aspects of the EMP shall be discussed and documented as part of daily tailgate meetings.
- The Operator shall review and retain all environmental monitoring reports for record keeping and distribution to applicable regulators as needed.

3.3 Environmental Consultant Responsibilities

The primary responsibility of the EC is to ensure that the environmental protection objectives are communicated to the Operator, and that operations are regularly monitored in order to document and communicate compliance or non-compliance. The EC assists and supports the Operator, who is ultimately responsible for ensuring that the requirements of this EMP, and other applicable conditions, are adhered to.

Responsibilities of the EC include the following:

- The EC shall monitor compliance with the EMP and relevant permit conditions.
- Communicate the requirements of the EMP to project members.
- Provide advice in preparing for work activities in a manner that mitigates adverse effects.
- The EC has the authority to modify and/or halt any construction activity at any time if deemed necessary for the protection of the environment.

- Advise project members if operational activities have caused or are likely to cause an environmental incident and make recommendations for corrective action.
- Ensure that the Operator maintains on-Site copies of all documentation regarding environmental mitigation (e.g. this EMP).
- Liaise directly with project members and provide technical advice for the purpose of resolving situations that may impact the environment as they arise.
- Communicate with other project members as warranted to ensure that the respective parties comprehend any respond to any EC issues quickly and appropriately.
- Maintain complete records of activities related to the implementation of the EMP. This should include any measurements taken, observations, photographs and incident reports.
- EC shall notify the Operator immediately in the event of a non-compliance.

These responsibilities will be refined and/or expanded if operations conditions change, and a revised EMP will be issued as warranted.

Regarding the frequency of EC inspections during project construction the EC shall complete the following:

- Attend the EMP kick-off meeting and review EC obligations with the project members.
- Conduct monitoring site visits as warranted.
- Complete weekly monitoring site visits at minimum.
- Conduct additional site visits as needed during environmentally sensitive works.

We note that Active Earth shall act as EC for the quarry operation only if we are retained by the Operator to do so.

3.3.1 EC Training and Records

All on-Site Project staff are required to undergo an orientation session based on the EMP. The EC shall directly orient all of the project supervisors, and these supervisors will be responsible for orienting their respective on-Site team members.

4 RELEVANT ENVIRONMENTAL LEGISLATION

The following table lists applicable legislation and non-regulatory guidelines relating to environmental management at the Site. These documents were considered in the drafting of this EMP. This list is not exhaustive.

A brief description of how each document directly applies in the context of the overall Project is also provided.

APPLICABLE LEGISLATION AND NON-REGULATORY GUIDELINES

Document	Description	Applicability and Project Compliance
Federal Legislation		
Fisheries Act, R.S.C., 1985 as amended (particularly Sections 34 and 35)	General prohibition on the deposit of a harmful or deleterious substance into waters frequented by fish, and works or undertakings that result in harm to fish, unless authorized.	Act applies to the Project. Mitigation measures are currently in place, additional measures may be needed in the future as the quarry operations expand or change.
Migratory Bird Convention Act	Legal framework for the protection and conservation of migrating birds and their nests.	Act applies to the Project. No special mitigation measures currently required.
Species at Risk Act	To prevent the disappearance of wildlife species in Canada, and to support the recovery of wildlife species that are extirpated, endangered, or threatened, and to manage species of special concern.	Act applies to the Project. No special mitigation measures currently required.
Provincial Legislation		
BC Mines Act, RSBC 1996 Chapter 293	This act applies to all mines during exploration, development, construction, production, closure, reclamation and abandonment.	Act applies to the Project.
BC Environmental Management Act, S.B.C 2003, c. 53, as amended	Provides overall framework for protecting the quality of water, land and air.	Act applies to the Project. Project must be conducted in a manner that avoids harm to water, land, and air. Details provided throughout this EMP.
Contaminated Sites Regulation (CSR), B.C. Reg. 375/96, as amended	Provides standards for contaminated site assessment and remediation. This dictates the quality of fill soil allowed to be imported to the Site, and approvals required for import.	Regulation applies to the Project. The sub-surface conditions must not be negatively impacted to cause contamination. When importing or exporting soil or rock, routine testing should be conducting to ensure material meets applicable CSR standards.
Spill Reporting Regulation (SRR), B.C. Reg. 187/2017, as amended	Defines “spill” and includes requirements for reporting through the Emergency Management BC Program (formerly PEP).	Applies to the Project. See Section 10.3 for spill response plan details.
Guidelines and BMPs		

Document	Description	Applicability and Project Compliance
British Columbia Approved and Working Water Quality Guidelines (BCWQG) – BC ENV	Guidelines for Surface Water Quality	Applies to the Project. The Project must avoid impacts to surface water at concentrations exceeding the BCWQG.
Standards and Best Practices for Instream Works, 2004 Edition – BC ENV	Sets out provincial standards and recommended best practices for the planning, design and construction of instream projects.	Applies to the Project. No special mitigation measures required.

5 PROJECT MITIGATION MEASURES AND ENVIRONMENTAL SPECIFICATIONS

Mitigation measures, environmental practices, and/or specifications are provided for the following topics:

- Environmental Management Team Communication
- General Practices
- Site Access, Mobilization and Laydown Areas
- Air Quality
- Noise and Vibration
- Equipment & Machinery
- Contaminated Soil and Groundwater Management
- Vegetation and Wildlife Management

The following topics have been provided under separate cover:

- Dust Mitigation and Monitoring Plan
- Erosion and Sediment Control Plan
- Blasting Plan

5.1 Environmental Management Team Communication

The Environmental Management Team includes QEPs from Active Earth working in conjunction with CMR and CMR’s subcontractors and design subconsultants. The roles, responsibilities, and key contracts for the team members are detailed in Section 3, above.

All EC reports, all key EC observations, all non-compliance issues and events, and all other relevant environmental performance matters shall be communicated promptly to CMR. EC information will typically be communicated first to CMR for review and comment before sending out to applicable regulators, if warranted.

5.2 General Practices

Relevant general construction best practices are presented below:

- The Operator and crew supervisors/foremen shall review this EMP and the applicable guidelines prior to each project phase or new activity.
- The Operator will know how to properly install any protection measures and understand BMPs used on the project. Improperly installed measures do not perform their intended functions and subsequently do not provide environmental protection.
- The Operator shall stockpile, or have readily available, supplies to install mitigation measures promptly.
- The Operator and Site supervisors will be prepared to change existing measures and BMPs should they fail, or additional measures be required. The EC will be notified of any changes to ensure they are adequate and installed properly.

5.3 Site Access, Mobilization and Laydown Areas

The Site access, mobilization, and laydown plan is summarized below:

- During operation and construction phases, all trucks and equipment shall access the Site from Bamberton Road.
- During operation and construction phases, supplies, tools, materials, and equipment will be stored as necessary within the quarry area and on the adjacent private lands. All laydown shall occur above the HWM, on flat and stable land situated at least 15m from any waterbody.
- Spill mitigation measures applicable to all aspects of the operation, including mobilization and laydown, are detailed in Section 10.3.

5.4 Air Quality and Dust Control Plan

Air emissions such as vehicle/equipment exhaust, dust and vapours associated with construction and operation activities will be minimized and managed to avoid adverse health, safety, nuisance and other environmental effects on and off-site. General considerations are summarized below:

- Dust-generating activities will be minimized as much as possible, especially during windy periods. Dust suppression agents, if used, shall be approved by relevant regulators for use. Consideration of run off from any dust suppression agents, including water, will be considered for impacts to storm water management.
- The track out of vehicles from the Site will be managed (cleaning of roadways, etc.) in order to reduce the potential for the dispersion of material and debris as fugitive dust.
- Material loads entering or exiting the Site shall be covered as appropriate.
- No burning of oils, rubber, tires and any other material shall take place at the Site.

- Stationary emission sources (e.g. portable diesel generators, compressors, etc.) will be used only as necessary and turned off when not in use.
- Equipment and vehicles shall be turned off when not in active use; no idling will be permitted.
- All equipment, vehicles and stationary emission sources will be well-maintained and used at optimal loads to minimize emissions.
- Vehicles or equipment producing excessive exhaust will be repaired or replaced prior to being used on the Project.

Further details are provided below.

5.4.1 *Dust Control*

Dust control has been provided under separate cover (Dust Mitigation and Monitoring Plan).

5.4.2 *Odours and Fumes – Idle Reduction*

To mitigate the risks of excessive exhaust, all equipment and vehicles should be well-maintained and idle reduction measures should be implemented, including:

- Establishing entry/exit points for equipment and vehicles accessing the Site, to reduce on-Site congestion.
- Using automatic transfer switches on generators.
- Turning off vehicles and equipment when not active. Specifically, when “down times” will exceed 1 minute (light duty vehicles) or 5 minutes (heavy duty diesel vehicles), idle motorists should turn off their engines. Exceptions include idling to bring equipment to operating temperature, extreme weather (heat or cold), while operating auxiliary equipment that requires an idling engine, or other relevant activities.
- Vehicle staging areas and on-Site combustion engines should be located away from sensitive receptors (e.g. fresh air intakes and windows for any temporary Site office trailers).

These idle reduction procedures should be discussed and reinforced at regular Site Health & Safety Meetings and by posting signage on-Site.

If any personnel are required to work in close proximity to equipment exhaust points, hosing and/or fans shall be used to re-direct the exhaust. Relevant on-Site workers should have a properly fit-tested half-face dust mask on hand (i.e. on-Site), fitted with VOC cartridges. The mask shall be cleaned and inspected before use, as above. The Project is not considered to present a risk of generating other noxious odours or fumes.

5.5 Noise and Vibration

Noise generation and vibrations resulting from equipment and associated construction activities during construction will be addressed through the noise management practices summarized below:

- Operational activities shall be limited to Monday to Saturday between 7:00 a.m. and 7:00 p.m.
- There will be no blasting, excavation or crushing on Sundays and statutory holidays, without written authorization of an inspector
- All equipment shall be properly maintained to limit noise emissions and fitted with functioning exhaust and muffler systems. Machinery covers and equipment panels shall be well fitted and remain in place to muffle noise. Bolts and fasteners shall be tight to avoid rattling.
- Blasting is covered under a separate cover (Drill and Blast Overview) which outlines the blast planning and procedures for conducting blasting operations at the Bamberton Quarry.
- Berms and vegetation should be placed strategically around the quarry (buffer zone) to dampen noise travelling off-site. Trees and shrubs are preferable over grasses.
- Where possible, "low drops" for material being dumped will aid in reducing noise.
- Engines shall be turned off when not in use or reduced to limited idle (or as appropriate to reduce air emissions).

5.5.1 Noise Monitoring

Noise monitoring will be completed by a QEP as follows:

- Noise will be monitored using a digital decibel (Db) meter.
- During standard quarry operations noise will not exceed 90 Db at the point of reception outside the quarry in accordance with CVRD bylaw No. 3723.
- During blasting operations noise will not exceed 120 Db at the point of reception outside the quarry.
- Monitoring will occur on Site, adjacent to private residential lands and other potential receptors.
- Noise monitoring will be scheduled once a month generally during periods of increased activity such as blasting.

5.6 Equipment and Machinery

Equipment and machinery practices and mitigation measures are summarized below:

- Equipment and machinery shall be in good operating condition and maintained free of leaks, excess oil and grease, invasive species, and noxious weeds. Equipment will be checked daily for leaks or spills.

- Equipment will be operated at optimum rated loads and be turned off when not in use to minimize exhaust and noise emissions. Equipment producing excessive exhaust or noise shall be repaired or replaced.
- Refueling and light daily maintenance of equipment (e.g. greasing) shall occur on land and at least 30 m from any waterbody, where possible. Where 30 m is not possible, a location as far as possible from the waterbody will be chosen, taking into consideration topographic features and slope. The refueling area will have a spill containment kit immediately accessible and personnel will be knowledgeable in the use of the kit (see Section 11 for the Fuel Management Plan). The EC shall review the refueling area location prior to use.
- Major maintenance activities (engine servicing, hydraulic repairs, etc.) shall occur on-Site, however spill kits and best management practices must be followed at all times regardless of the distance to a waterbody. The Operator shall notify the EC if such work is necessary and will follow the directions and guidance provided by the EC (the EC will also conduct an inspection on every day of necessary major maintenance).
- A spill containment kit shall be readily accessible both on Site and on each piece of equipment in the event of a release of a deleterious substance to the environment. All members of the construction team shall be trained in the use of spill containment equipment/items. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must immediately be reported to the Emergency Management BC Program 24-hour phone line at 1-800-663-3456 (see Section 10.3 below for Spill Response Plan).
- Light spill will be reduced by pointing lights downward and placing task lighting as close to the work area as possible.

5.7 Concrete Works and Grouting

We understand that the project will not involve any significant concrete pouring/forming or grouting work.

5.8 SSF Area

The SSF area is a capped sub surface contaminated soil cell located on-Site, but outside the quarry footprint. This area is subject to the following conditions:

- The SSF area must not be disturbed. Care must be taken while blasting or quarrying adjacent to the area.
- No vehicle, equipment, or material storage is to take place in this area.
- The area should not be used as a roadway.
- No drilling is to take place in this area.

Should necessity require that these conditions be altered, it must be done with consent from the property owner and their qualified environmental/engineering consultant with agreement from the EC. Additional monitoring and management plans may be required should conditions change.

6 EROSION AND SEDIMENT CONTROL PLAN

An Erosion and Sediment Control Plan has been prepared under a separate cover. General ESC measure and BMPs are provided below.

The following lists specific applicable ESC measures and BMPs:

- Erosion and sediment control devices will be available for use on site. Prior to commencement of the work, the Operator must obtain sufficient quantities of silt fence, straw bales, sandbags, gravel, and polyethylene sheeting. These materials must be on-Site and available for installation prior to the commencement of any ground disturbance work.
- Construction team members shall be trained in the installation and use of the devices, as follows:
 - Silt fencing is to be installed effectively (e.g. keyed-in) along the banks of any watercourses, extending a minimum of 5 meters outside of the immediate working area to contain all sediment and/or run-off.
 - Vegetation or blanket covers should be used on berms and topsoil stockpiles, detention ponds to address storm-water surges.
 - Any catch basins within 30 meters of the working area must have approved inlet protection bags installed.
- If the Operator is unsure of how best to implement ESC measures, or has any questions or concerns, they must contact the EC.
- The EC must review installation and approve placement and use prior to work beginning. These measures will be inspected by the EC during the course of the construction and operation activities. Necessary repairs or additional installations are to be made by the Operator immediately if any damage occurs such that ESC is compromised, as directed by the EC.
- The Operator shall be prepared to quickly erect measures to minimize sediment entering receiving waters if necessary. The overall goal is to isolate the work area and prevent any potential sediment laden runoff from entering a waterbody or encroaching onto adjacent properties or roadways. The EC will check the Operator's readiness (e.g. staffing, equipment and available supplies) occasionally during regular EC inspections.
- The Operator shall minimize the area of soil exposed during winter months.
- Any surface water flow from the quarry that may discharge into local waters will be closely monitored to ensure they are not silt laden (<25mg/L TSS) or chemically toxic (BCWQG).
- Work which involves heavy machinery that is disturbing soils may be suspended during significant rainfall events (SRE), at the discretion of the EC. An SRE is typically determined as 25+mm rainfall within a 24-hour period.
- ESC Monitoring should occur weekly during the wet season (October to March) and bi-weekly during the dry season (April – September), and within a 24-hours of an SRE.

7 SOIL IMPORT AND MONITORING

If Site work will involve the import of soil (i.e. sands or gravels less than 2mm in diameter), we note the following:

- The EC shall review any available chemical data from the source facility, to determine whether the material is chemically suitable for import.
- Any imported soil must be within the relevant Industrial Land Use (IL) standards provided under the BC CSR.
- As approved soil is being imported and placed, the EC may collect representative samples for laboratory analysis of the typical Potential Contaminants of Concern (PCOCs) for general imported material, including Light and Heavy Extractible Petroleum Hydrocarbons (LEPHs, HEPHs), Polycyclic Aromatic Hydrocarbons (PAHs), and Metals, as extra due diligence to ensure the chemical quality of the soil is acceptable.
- Results of the sampling work shall be reported to the Operator and will be recorded. Any non-conforming imported soil shall be immediately removed.

8 WATER MANAGEMENT AND MONITORING

8.1 Water Management

Water management consists of the following key measures:

- Spill prevention, control and response procedures will be implemented to mitigate accidental contamination to the underlying groundwater. Spill kits, for various sizes of spills, will be stored on Site and personnel will be trained in the event of a spill. See Section 10.3 for more information on spills.
- Fuelling and fuel storage will occur in designated relatively impermeable areas at least 30m away from any surface water body and outside of the quarry. See Section 11 for more details on fuel management. This does not include marine fuelling or 3rd party refuelling companies.
- Whenever possible, overland flows will be diverted outside the quarry to mitigate mobilization of potentially environmentally harmful particles accumulating and pooling in the quarry and migrating into the groundwater table.
- Explosives should be stored a minimum of 30m away from any waterbodies.
- Runoff should be diverted around blast rock and aggregate stockpiles.
- All excess sediment laden aggregate wash water will be diverted into the sediment ponds to remove excess sediment.

8.1.1 Surface Water

In general, the quarry experiences minimal surface water run-off. During the rainy season, it has been observed that precipitation accumulating on the surface is quick to enter into the drainage

ditch network, settlement ponds, and infiltrate into the underlying bedrock or gravels. The primary man-made mechanisms for managing surface water are as follows:

- Drainage ditches
- Settlement Ponds

Two sets of drainage ditches have been constructed along the up-gradient side of the quarry to inhibit run-off entering the quarry. These ditches provide water storage capacity, divert the water outside of the quarry limits, and provide greater opportunity for infiltration. Drainage ditches must be inspected regularly during the wet season to ensure structural integrity and to check for possible blockages.

A settlement pond has been constructed adjacent to the crusher and wash plant. The primary function of this settlement pond is to manage and remove excess sediment from the wash plant water through settlement and infiltration. This settlement pond should be inspected and cleaned of sediment regularly to ensure proper functionality.

If any excess surface water run-off is observed to be flowing into the inlet or surrounding streams or creeks, the EC should be notified, emergency measures will need to be initiated to prevent any harm to the environment, and long-term prevention measures established.

Note that drainage ditches and settlement ponds will need to be relocated as the quarry expands, any changes to the current configuration of water management features should be discussed and agreed upon with the EC.

Once quarry activities commence to the south of Bamber Creek, additional water management infrastructure will be required consisting of drainage ditches and settlement ponds. These should be put in place before work quarrying commences in this area.

8.2 Water Monitoring

Water monitoring shall be conducted by the EC to ensure that no adverse impacts occur to the underlying aquifer and nearby waterbodies.

Active Earth proposes the following scope for monitoring the chemical quality of groundwater:

- Monitoring of groundwater levels in the upslope domestic wells (WTN 69043, 69045 and 109033), AE21-MW102, downgradient wells (MWA and MWB), any intact wells within the quarry footprint, as well as any groundwater monitoring wells installed in the future. The first year of monitoring will form the baseline readings. The locations of the monitoring wells are given in Figure 2. For wells within the quarry or down-gradient of the quarry, monitoring will occur quarterly. The following frequency is proposed for up-gradient wells:

Well ID	AE21-MW102	WTN 69043	WTN 69045	WTN 109033
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Type of Well	Dedicated Monitoring Well	Domestic Well in Use	Domestic Well Not in Use	Domestic Well in Use
Data Logger Readings	Daily	Hourly ¹	Daily	Hourly
Download (Year 1)	Monthly	Monthly	Monthly	Monthly
Download (Year 2) ²	Quarterly	Quarterly	Quarterly	Quarterly
Baseline Water Quality Sampling	yes	yes	yes	yes

1 - Hourly readings based on operating conditions of well where a well in use is being pumped to determine the effects of pumping on the water levels.

2 - Year 2 monitoring dependent on limited impacts to be determined during Year 1 monitoring.

- The domestic well (WTN 69043) is considered most at risk; the remaining wells are at greater distances from the west quarry wall. The well is listed at 70 m in depth (230 ft) and there is currently no information on the groundwater level for this well as it is not currently in use. Based on the low permeability and transmissivity of the bedrock aquifer, it is unlikely that any significant impacts to well will occur, however, the following presents our proposed monitoring plan.
- The wells listed in the table above will be monitored for groundwater levels using a data logger inserted into the well through a 25mm diameter PVC sounding tube installed by a provincially qualified pump installer. The data logger will be inserted into the well using direct-read cable where readings can be downloaded at the wellhead without further disturbance to the well. Inserting the dip tube can disturb sediment in the well, and as a result, the well will be disinfected following installation of the dip tube and the well will be pumped to open discharge following insertion of the dip tube.
- Permission to use the existing domestic wells for monitoring purposes will be required from each property owner.
- Quarterly monitoring of groundwater quality in down gradient wells and any intact wells in the quarry footprint. General parameters such as pH, turbidity, electrical conductivity and alkalinity will be recorded during sampling. A baseline will also be established in up-gradient wells. Groundwater samples should be analyzed for:
 - LEPH/HEPH/PAH and dissolved metals
 - Total nitrogen, nitrite, nitrate and ammonia
- In the case of unexpected drops in water levels or unexpected changes in groundwater chemistry in any of the wells, CMR will be notified, and operations will cease until the issue can be resolved.

The following is recommended to monitor surface water impacts:

- Quarterly monitoring of surface water quality in the 1st settlement pond and at the outlet discharging into the 2nd settlement pond, directly from the 2nd settlement pond, as well as any settlement ponds and outlets constructed in future phases. General parameters such as pH, turbidity, electrical conductivity and alkalinity will be recorded during sampling. Water samples should be analyzed for:
 - LEPH/HEPH/PAH and total metals
 - Total nitrogen, nitrite, nitrate and ammonia
- If surface water samples collected near or at a receiving environment exceed BC WQG for short-term (acute) or multiple times for long-term (chronic), CMR will be notified, and steps will be taken immediately to rectify the issue, including but not limited to the following:
 - Elimination or minimization of the source
 - Increasing efficacy of settlement ponds (clearing out sediment)
 - Adding a tertiary settlement pond
 - Adding active treatment

Water management features will be monitored and recorded by the EC during regular ESC monitoring.

All surface, groundwater, and SFE data will be compared to their applicable CSR or BCWQG standards and guidelines. Trends and evolution over time of surface and groundwater quality will be analyzed and monitored to predict and mitigate any problematic discharges to the receiving environment.

9 BLASTED ROCK MONITORING AND MANAGEMENT PLAN

Blasted rock should not be stored for more than 2 months before being crushed, unless precautions are taken such as directing run-off away from the blasted rock. Similarly, finished (aggregate) product should not be stored for more than 2 months, unless actively being used and or replenished. Stockpiles of material should be placed on surfaces where run-off is directed away from the stockpiles area. All stockpiles shall be placed on ground that is near horizontal, stable (not prone to subsidence or failure when loaded) and of sufficient strength and competency such that the stockpile remains stable.

To ensure the chemical composition of on-Site material does not pose a risk to the environment, the EC should conduct the following monitoring:

- Quarterly monitoring of on-Site stockpiled aggregate material. This equates to a frequency of roughly 1 test per 120,000m³. This frequency is considered appropriate due to the low potential for bedrock in the vicinity of the quarry to produce ARD. Aggregate material should be analysed for:
 - Acid Base Accounting Parameters (NP and MPA)

- Sulphate – Sulphur HCl leach (%)
- Dissolved metals through Shake Flask Extraction
- 4 Acid Digest – metals package, ICP-OES/ICP-MS finish

If new or previously untested rock types, including future expansion areas to the south, are encountered during the quarry operation, targeted additional ARD testing will be conducted to determine if the material is suitable for aggregate and to ensure proper management of the material.

If ARD is considered a risk, then the material will be deemed unsuitable for product and a plan to manage it will be put in place. This plan will be developed on a case-by-case basis but will generally consist of placing ARD waste rock above the water table and covered with clay/silt soil at 1 m in thickness. Ongoing down gradient monitoring will be established.

In addition to determining the NPR, results from the analysis listed above will be compared to the appropriate standards and guidelines (CSR, BCWQG) as well as elemental concentrations will be compared to compared to CRC Handbook of Chemistry and Physics 97th Edition abundance of elements in the earth’s crust and in the sea.

10 EMERGENCY RESPONSE

This section provides a comprehensive emergency response plan for the quarry operations and is intended to compliment and supplement the Operator’s detailed Health and Safety plan.

10.1 Emergency Communication

The following table summarizes key contact information for individuals and services that may be required in the event of an environmental emergency. This contact table should be posted at strategic locations on-Site and should be reviewed regularly to ensure it remains current and valid.

KEY CONTACT INFORMATION

SERVICE	CONTACT INFORMATION
Fire / Police / Ambulance EMERGENCY	911
Poison Control	1-800-567-8911
Emergency Management BC (Spill Reporting)	1-800-663-3456
Marine Oil Spill Report	1-800-645-7911
Canadian Coast Guard (Marine Pollution Reporting)	1-800-889-8852
Fisheries and Oceans Canada	1-866-845-6776 604-607-4186

SERVICE	CONTACT INFORMATION
WorkSafeBC	1-800-661-2112 1-866-922-4357 (after hours EMERGENCY) 1-604-273-7711 (after hours EMERGENCY)
BC Hydro (Electrical Emergency)	1-888-POWERON (1-888-769-3766)
Fortis BC (Natural Gas Emergency)	1-800-663-9911
Hydroforce Excavating Ltd (Vacuum Truck)	250-360-7630
MICO (Property Owner) Josh Handysides	250-701-1966
CMR (Operator) Kyle Dolan	604-207-0964 (office) 778-874-8891 (mobile)
Active Earth Engineering Ltd. (Environmental Consultant) Marek Downarowicz	778-430-5475 (office) 250-634-0693 (mobile)

In the event of any emergency:

1. All on-Site staff will be alerted using the method established by the Operator’s Health and Safety Plan.
2. All Site work shall cease.
3. Emergency services will be contacted as warranted.
4. All on-Site staff will gather at the established muster point, per the Operator’s Health and Safety Plan. This may exclude any staff that are directly involved in the immediate emergency response, as warranted.
5. For environmental emergencies, and specifically for spills, the Operator shall follow the procedures detailed below.
6. Relevant regulators will be notified as soon as is practical.

10.2 Environmental Emergency Plan

The following summarizes the potential environmental emergencies that may occur while construction is ongoing:

- Reportable spills of fuels or other harmful substances.
- Sediment laden water leaving the Site or entering a waterbody.
- Negative wildlife interactions.
- Observation of previously unidentified sensitive environmental features.

In the event of any Environmental Emergency, the Operator shall:

1. Immediately cease any work or activity that is contributing to the environmental emergency.
2. Notify the EC, for further assistance and direction.
3. Follow the Emergency Spill Response Plan (ESRP) detailed below, if the environmental emergency involves a spill.
4. Notify relevant regulators as soon as is practical.

10.3 Emergency Spill Response Plan

This section details the Project ESRP, which addresses the emergency procedures and contingency plan to be followed in the event of a spill occurring during construction. The procedures were developed with a specific emphasis on the protection of nearby creeks and the Saanich inlet.

This ESRP identifies the incident response procedures including communications, containment, clean-up, debriefing and follow-up reporting, and describes the spill abatement materials and equipment to be maintained on-Site.

10.3.1 Regulatory Framework

This ESRP has been developed to generally conform with the applicable sections of the following Guidelines:

- *BC Guidelines for Industry Emergency Response Plans* (revised from 1992) prepared by the BC Ministry of Environment as the key (lead) provincial agency under the BC Emergency Program Act and its regulation (Schedule 1) and by mandate.

The main purpose of the Guidelines is to promote the development of comprehensive and consistent emergency response plans by industry, in cooperation with the provincial government and local governments. Users have the responsibility of judging the extent to which the Guidelines apply to their specific situation.

Spill and emergency response management overlap substantially with the occupational health and safety procedures that will be implemented in compliance with the *Workers Compensation Act: Occupational Health and Safety Regulation (OHSR, 1997)*. Occupational health and safety aspects are addressed separately. Liaison will occur between safety personnel and environmental personnel to assure smooth coordination between health/safety requirements and environmental requirements. Generally, there is little conflict between occupational health and safety and environmental requirements. In the event of conflict, occupational health and safety requirements would generally supersede environmental requirements.

In addition to legislation and guidelines outlined previously, the ESRP considered the following key legislation and guidelines:

- Canadian Standards Association (CAN/CSA-Z73 1-03) Emergency Planning for Industry (2003);
- BC ENV Guidelines for Industry Emergency Response Plans (2002); and,
- Provincial Spill Reporting Regulation (SRR).

10.3.2 Potential Impacts

The greatest risk of spills on the Site will be from petroleum products such as fuels, hydraulic fluids and other such hydrocarbons (often flammable), and glycols (antifreeze). Spill size may vary from small quantities (e.g. drips from loose fittings) to moderate quantities (diesel, oil or hydraulic spills due to tank or hose ruptures). The risk of large spills is considered low (e.g. rupture of bulk re-fueling tank). Further considerations for fueling and fuel storage are provided in Section 11, below.

The extent of damage, or impact, caused by a spill is proportional to the quantity of material, the toxicity of the spilled substance, the receiving environment, and the amount of time required to identify the spill and respond with containment and clean-up. Contamination of land and/or water from spills can result in pollution of soil and groundwater. In addition, air quality can be impacted, particularly indoors or in confined spaces. Contamination can be lethal or sub-lethal to aquatic and terrestrial wildlife, and can degrade drinking water quality in the aquifer.

10.3.3 Emergency Spill Response Procedures

Classification

The appropriate response to an emergency is dependent upon the potential severity. The following classification levels are provided in order to help classify the potential severity of an incident, thereby guiding the response requirement:

- **Level 1:** minor spills requiring (an) on-site worker(s) to respond and take necessary individual or collective actions.
- **Level 2:** intermediate level spills requiring response by on-site or off-site trained staff but posing no danger to the public.
- **Level 3:** a major incident beyond the resources of a single facility, where there are subsidiary problems to complicate the situation such as fire, explosion, toxic compounds, and threat to life, property and the environment. Assistance will be required from local, regional, and/or provincial organizations. The media will be present and politicians at all levels will be requesting action.

The first step in the emergency response is classifying incidents and initiating an appropriate response.

Action Plan

The following presents the immediate steps required by the Operator in response to a spill:

- 1 Identify the type of emergency and associated injuries and/or casualties;
- 2 Locate the source of the spill, the immediate area of risk, and the potential for the situation to escalate;
- 3 Initiate evacuation procedures for non-essential personnel if needed;
- 4 Notify the EC and Implement procedures for the protection of personnel, property and the environment;
- 5 Alert the emergency response services and activate the appropriate warning system;
- 6 Mobilize resources to isolate the hazard; and
- 7 Begin clean-up procedures once all imminent hazards have been mitigated.

The EC and relevant regulators will evaluate the situation to determine if DFO must also be notified.

Depending on the level of risk, the evacuation may include all members of the public, non-essential staff, and/or all staff who are not suitably trained and actively involved in the spill assessment and clean-up process. A designated safe evacuation muster point will be established on-Site away from all active construction.

Equipment and vehicles may be required to be moved in order to access a spill area and undertake clean-up; this should occur only after the risks of such moving work have been assessed and deemed acceptable.

Spill Clean-Up Procedures

Spill clean-up procedures include the following:

- 1 Ensure safety in the spill area before entering;
- 2 Stop the flow of the hazardous material if it is safe to do so;
- 3 Secure and isolate the spill area;
- 4 Assess the situation (identify product, equipment involved, affected area, spill status, time of spill);
- 5 Review the Material Safety Data Sheets (MSDS) for the spilled product, if available. Do not proceed with clean-up unless the product and associated risks have been adequately identified.
- 6 Contact the appropriate personnel and external agencies if necessary;

- 7 Begin containing and recovering the spill with on-Site emergency spill equipment if it is safe to do so; and,
- 8 Complete the spill notification and reporting procedure.

Clean-up and Remediation Procedures

In the event of Level 1 spill, the clean-up may be handled by on-Site personnel. All Level 1 spills should be reported to the EC and relevant regulators on the same, or next, business day as the occurrence.

In the event of a Level 2 or Level 3 spill, Emergency Management BC (EMBC, formerly PEP) should be notified immediately by telephone. In addition, a contaminated site specialist should be retained to assess the impacts of the spill.

The material (e.g., soil) impacted as the result of a spill, as well as the spill abatement materials used to contain a spill, must be disposed to designated hazardous substances waste bin(s). Designated hazardous substances waste bin(s) will be identified with signage. As necessary, the contents of the bins will be disposed to a licensed facility and shall be transported by an appropriately licensed hauler. Manifests and/or bills of lading are required for all hazardous wastes transported off-Site.

Larger scale Site remediation may be required depending upon a variety of conditions including but not limited to the size of the spill; type of hazardous substance spilled; the time between release and identification of a spill; and the location of the spill. A contaminated site specialist (Active Earth) should determine whether or not site assessment and/or remediation is required. In the event that remediation is required, the party responsible for the spill will complete the work in accordance with applicable laws and regulations.

The contaminated site specialist may require the installation of groundwater monitoring wells and/or porewater sampling stations, to assess potential impacts and to develop an appropriate remediation strategy.

10.3.4 Spill Prevention and Risk Management

Spill Abatement Materials

Spill kits are to be readily available on the Site. At a minimum, each spill kit should contain sufficient hydrophobic absorbent material (e.g. oil absorbent pads and socks) to contain and clean up potential drips, leaks, or spills (e.g. ruptured hydraulic line), as well as gloves and heavy plastic bags to receive used absorbent materials and affected soils or wastes. Standard spill kits will contain the following, at minimum:

- 10 Absorbent Pads (15" x 18")

- 2 Absorbent Socks (2" x 4')
- 2 Disposal bags with Ties
- 1 Absorbent Sock (3" x 10')
- 1 Bag of granular cellulose
- Nitrile/chemical resistant gloves

Each piece of heavy equipment should be affixed with a small spill kit containing absorbent pads/socks, which may be used for "first response" in the event of a spill from the equipment.

Signage on each kit should identify the contents to ensure that kits are fully stocked. Signage should also be placed on-Site to identify the locations of the spill kits.

Risk Management

All Operator and staff working on the Project should develop an understanding of the risks associated with possible spills or environmental emergencies including consideration of the likelihood of a particular event occurring and its potential consequences. Specifically, all Operator and staff should be made aware of the need to protect the South Bay foreshore and water areas.

Risk management should include but will not be limited to:

- Identifying hazards of anticipated operational activities;
- Identifying potential failures or accidents (including frequency);
- If applicable, calculating the expected and upset quantity of material that could be released as a result of failures or accidents; and,
- Evaluating the consequences of such occurrences to the environment as well as to the safety of Site personnel and the public.

Typically, environmental hazard identification and risk assessment/analysis will be conducted as part of developing and formalizing work methods for specific operation activities. Measures to reduce or otherwise mitigate risk can be included in the analysis and communicated to personnel, in part to increase their awareness of the value of risk prevention.

Additional fuel management considerations are specified in Section 11.

Hazard Identification & Reporting

The purpose of hazard identification is to identify potential environmental damage that may result from a spill or incident. This includes assessment of Site factors, including but not limited to:

- Proximity to watercourses and other environmentally sensitive areas, storm water conveyances, and the potential for contamination to spread off-Site as a result of construction;
- Pathways to the environment (air, land, water) in the event of a spill, the potential effects of a spill on air and water quality and any potential dangers to fish and wildlife and human health;
- Access/egress for emergency vehicles and available area on-Site for the mobilization of clean-up equipment in the event of a spill;
- Up-to-date inventory of all deleterious, toxic and/or hazardous materials harmful to human health and/or the environment to be utilized during operation; and,
- A system to manage Material Safety Data Sheets (MSDS) for hazardous materials used on-Site.

Hazard identification should form part of tailgate meetings. If significant hazards are identified during pre-meetings, or during the course of work, this information should be communicated by the task supervisor to the Operator foreman.

Operator Responsibilities

As with all aspects of this EMP, sub-contractors shall be made aware of their responsibilities pertaining to spill prevention and risk management. These responsibilities will be communicated to supervisors as part of the EMP orientation, who will be tasked with relaying this information to their workers.

In addition, the Operator shall periodically check the condition of fuel tanks, fuel lines and hydraulic hoses on any equipment on-Site. The EC shall periodically confirm that the Operator is performing this task.

10.3.5 Spill Notification and Reporting

Notification Procedures

The notification/reporting pathway (i.e. Internal or External) will depend on the quantity (i.e. volume), type (i.e. substance/material) and the receiving environment (i.e. land, air or water) of the spill.

In the event of a reportable spill as defined in the Spill Reporting Regulations, the spill must be reported immediately to EMBC. Typically for hazardous materials such as those anticipated for this operation (e.g. Class 3 Flammable Liquids), the threshold for reporting spills to EMBC is 100 Litres. However, other substances Classes have significantly lower Reportable Volumes, such as

engine coolant (Class 6) at 5 Litres. The Reportable Volumes for all substances Classes are provided in Appendix B.

All spills that threaten or occur in an aquatic environment (Saanich Inlet) shall be reported to EMBC and DFO.

When there is doubt as to whether or not a spill exceeds EMBC notification/reporting thresholds, EMBC will be contacted.

Incident Notification Guidelines

In the event of an environmental incident (e.g. a spill), the individual reporting a spill to EMBC or other agency will typically be asked to provide the following information:

- Contact information of caller (e.g., name and telephone number);
- Contact name of individual or company that caused the spill/release;
- Location and estimated time of spill/release;
- Type and quantity of hazardous material spilled or released;
- The cause and effect of the spill/release;
- Details of actions taken or proposed to be taken to stop and/or contain the effects of the spill;
- A description of the spill location and the area surrounding the spill;
- The details of further action contemplated or required;
- The names of agencies on the scene; and
- The names of other persons or agencies contacted about the spill.

The contact numbers and the notification guidelines listed above will be posted on-Site at strategic areas.

Incident Reporting Guidelines

Following initial notification, the Operator shall provide a written incident report within 24 hours of the incident being controlled to such a degree that it no longer poses an acute risk to human health or the environment. The report shall be submitted to EMBC as required, and relevant regulators. If required, environmental incident reports will be submitted to other relevant agencies including the Cowichan Valley Regional District. Incident reports are expected to identify the reporting organization, date, time, location, hazardous materials involved, volume/quantity, cause and effect of the spill, and persons or organizations notified.

In addition, incident reports shall describe how the spill or release occurred, what remedial action was taken or is planned, and what actions will be implemented to prevent a recurrence.

Post Incident Evaluation/Debriefing

Following clean-up of a significant spill, such as a reportable spill under the Spill Reporting Regulation, a debriefing will be held with all personnel involved in the spill within 72 hours. The debriefing will normally include review of the following:

- Root cause of the spill;
- Measures to prevent the spill from occurring again;
- Review with associated personnel; and,
- Determine how the spill response could have been improved.

A more informal debriefing (e.g., one-on-one between foreman and worker) may be held for lesser spills as part of ongoing training in spill prevention and response. Follow up measures will be implemented to prevent recurrence.

10.4 Emergency Spill Response Plan Summary

This ESRP summary will be posted at strategic locations on the Site.

In response to a spill, immediately undertake the following steps:

1. Identify the type of emergency (Level 1, 2 or 3) and associated casualties;
 - **Level 1:** minor spills requiring (an) on-site worker(s) to respond and take necessary individual or collective actions.
 - **Level 2:** intermediate level spills requiring response by on-site or off-site trained staff but posing no danger to the public.
 - **Level 3:** a major incident beyond the resources of a single facility, where there are subsidiary problems to complicate the situation such as fire, explosion, toxic compounds, and threat to life, property and the environment. Assistance will be required from local, regional, and/or provincial organizations. The media will be present and politicians at all levels will be requesting action.
2. Initiate the appropriate response to an emergency dependent upon the potential severity.
3. Locate the source of the spill or emergency, the immediate area of risk and the potential for the situation to escalate.
4. Initiate evacuation procedures if needed, and implement procedures for the protection of personnel, property and the environment.
5. Alert the emergency response services and activate the appropriate warning system.

6. Contact EC and mobilize resources to isolate the hazard and begin clean-up procedures.
 - Ensure safety in the spill area before entering;
 - Stop the flow of the hazardous material if it is safe to do so;
 - Secure and isolate the spill area;
 - Assess the situation (identify product, equipment involved, affected area, spill status, time of spill);
 - Contact the appropriate personnel and external agencies if necessary; and,
 - Begin containing and recovering the spill with onsite emergency spill equipment if it is safe to do so.
7. Complete the spill notification and reporting procedure.

11 FUEL MANAGEMENT PLAN

Fuels and other petrochemical substances shall be managed as follows:

- No refuelling will occur within 30 m of any surface waterbody. Any refuelling that occurs on-Site should occur on a flat surface to minimize the risk of run-off. Where possible, on-Site refuelling should occur over a hard surface (concrete or asphalt). Locations shall be reviewed by the EC. This does not include marine refuelling or 3rd party refuelling companies.
- Extra precautions should be taken if fuels, oils, lubricants or other petrochemical products are to be stored within 30 m of any waterbody, such as readily available spill kits and best management practices followed at all times. Refueling equipment and tanks will be kept clean and maintained in good working order.
- No bulk fuel storage shall occur on-Site unless stored in a double walled tank (excluding vehicle/equipment individual fuel tanks). As such, secondary fuel containment facilities will not be required.
- Major maintenance activities (engine servicing, hydraulic repairs, etc.) shall occur on-Site, however spill kits and best management practices must be followed at all times regardless of the distance to a waterbody.
- All waste liquids and products (filters, oily rags, etc.) shall be removed from the Site on a regular basis and disposal records will be maintained on-Site.
- Spill kits will be available, as described above.

The Fuel Management Plan shall conform to the 2023 Fuel Guidelines (12th Edition), prepared by NorthWest Response Ltd, or any future editions.

12 MATERIAL STORAGE

The Operator shall store all imported materials within designated storage areas. Throughout the duration of the project and operation the Operator shall ensure that material is secured.

Dust suppression measures shall be implemented as warranted, including the use of hoses to moisten the material. Stockpiles of any fine-grained materials (not anticipated) should be covered during dry an/or windy weather.

Monitoring should include ongoing visual checks for presence of visible dust during the higher-risk activities listed above, particularly during periods of extended dry weather. If significant fugitive dust is visible on-Site (e.g. dust “clouds” are being generated), or is observed migrating off-Site, the generating activity shall be halted or modified, and dust suppression methods should be implemented or enhanced.

13 WASTE MANAGEMENT

The Operator shall give consideration to the end destination of all products and materials brought to their construction site. This will include hazardous wastes such as fuels and lubricants and their empty containers following use, as well as used oily rags and used spill kit products, but also non-hazardous construction wastes and general refuse (wood, cigarette butts, coffee cups, water bottles etc.).

Throughout the course of the operations, the Operator shall collect, handle and dispose of all waste materials and construction by-products appropriately, and in compliance with all relevant local, provincial, and federal legislation.

The Operator shall follow the best practices listed below:

- The Operator shall adhere to all applicable legislation with respect to the handling, transportation, and/or disposal of all materials related to this project (waste or otherwise). These regulations include (but are limited to) the BC Hazardous Waste Regulations, Spill Reporting Regulations, Workers Compensation Board Regulations, and the Transportation of Dangerous Goods Regulations.
- Hazardous wastes generated could include waste petroleum products (engine oils, lubricants) from machinery and equipment, spent batteries, solvents and cleaning agents, etc. The Operator shall provide labelled separate container(s) for potentially hazardous waste such as oily rags and hydrocarbon absorbent pads.
- All hydrocarbon products and other hazardous wastes potentially present during project activities will be identified and the associated Workplace Hazardous Materials Information System (WHMIS) and MSDS made available to all construction team members.
- All recyclable or compostable materials will be collected separately from general waste as per Cowichan Valley Regional District requirements.

- Transportation of all wastes, recyclables, and compostable materials, shall be performed in a manner which prevents littering during transit to the receiver facility.

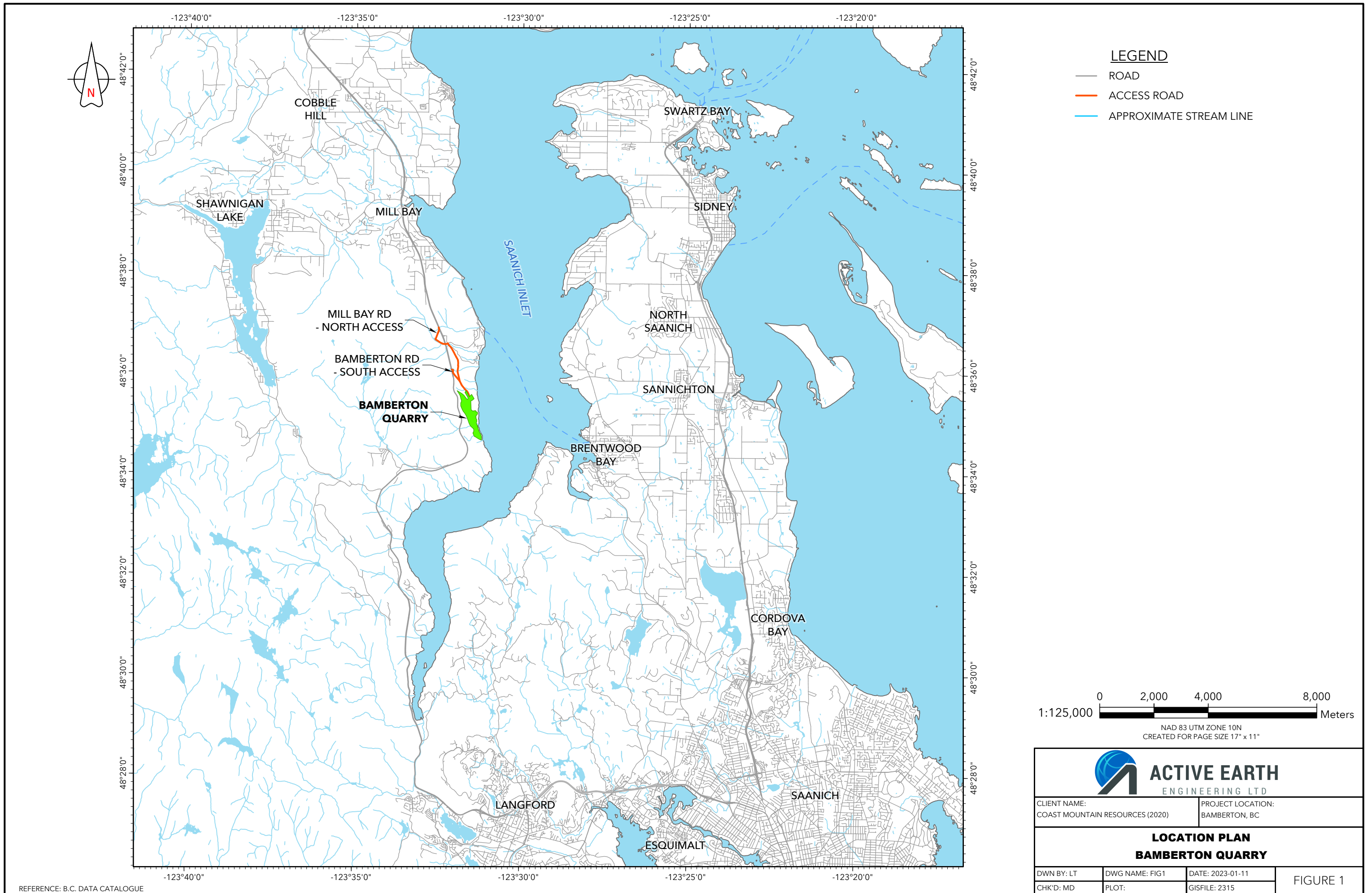
14 LIMITATIONS

The use of this report by anyone is subject to the following conditions and limitations:

1. This report has been prepared at the request of the client and for the specific use referred to herein. The client may rely on this report. It is not reasonable for any other party to rely on the contents of this report without first obtaining written authorization from the client and Active Earth Engineering Ltd.
2. Liability is expressly denied to any person other than the parties indicated above and those who obtain written consent. Accordingly, Active Earth Engineering Ltd. does not accept responsibility for any damage suffered by any such person as a result of decisions made or actions based on this report. Diligence by all intended users is assumed.
3. This report is believed to provide a reasonable representation of the general environmental condition at the Site; the environmental risks presented by the Project; and, appropriate mitigation measures to be implemented by the Operator. The conclusions and recommendations made in this report reflect Active Earth's best judgment in light of the information available at the time of reporting. Should additional information become available or Site conditions change, the conclusions and recommendations of this report may be subject to change.
4. Active Earth Engineering Ltd. has agreed to conduct various assessments and prepare this report as requested by the client named in the report for the use specified by the client, which is stated in the report. The client has agreed that the performance of this work and the report format are appropriate for the intended use.
5. Written consent from Active Earth Engineering Ltd. must be obtained before any part of the report can be used for any purpose by anyone other than the client and other intended users identified in the report. Liability to any other party or for any other use is expressly denied regardless of who pays Active Earth Engineering Ltd.'s fee. Written consent and approval of Active Earth Engineering Ltd. must also be obtained before the report (or any part of it) can be altered or conveyed to other parties or the public through prospectus, offering memoranda, advertising, public relations, news, sales or other media.

15 REFERENCES

1. Fisheries Act, R.S.C., 1985 as amended (<http://laws-lois.justice.gc.ca/eng/acts/f-14/>)
2. BC Riparian Areas Regulation (RAR), 2004 as amended (http://www.bclaws.ca/civix/document/id/complete/statreg/376_2004)
3. BC Water Sustainability Act (WSA) (<http://www.bclaws.ca/civix/document/id/complete/statreg/14015>)
4. BC Environmental Management Act, S.B.C 2003, c. 53, as amended (http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/03053_00)
5. BC Contaminated Sites Regulation (CSR), B.C. Reg. 375/96, as amended (http://www.bclaws.ca/Recon/document/ID/freeside/375_96_00)
6. BC Spill Reporting Regulation (SRR), B.C. Reg. 187/2017, as amended
7. Land Development Guidelines for the Protection of Aquatic Habitat, 1992 Edition, updated 1993 – DFO (<http://www.dfo-mpo.gc.ca/Library/165353.pdf>)
8. Urban Storm Water Guidelines and Best Management Practices for Protection of Fish and Fish Habitat – DFO (<http://www.dfo-mpo.gc.ca/Library/277967.pdf>)
9. British Columbia Approved and Working Water Quality Guidelines – BC ENV (<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-guidelines>)
10. Best Practices for Urban and Rural Development, 2004 Edition – BC ENV (http://www.env.gov.bc.ca/wld/documents/bmp/urban_ebmp/EBMP%20PDF%203.pdf)
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12. BC Wildlife Act (http://www.bclaws.ca/Recon/document/ID/freeside/00_96488_01)
13. Migratory Bird Convention Act (MBCA), 1994 as amended (<https://laws-lois.justice.gc.ca/eng/acts/m-7.01/page-1.html>)
14. Species at Risk Act (SARA), 2002 as amended (<https://laws-lois.justice.gc.ca/eng/acts/s-15.3/page-1.html>)



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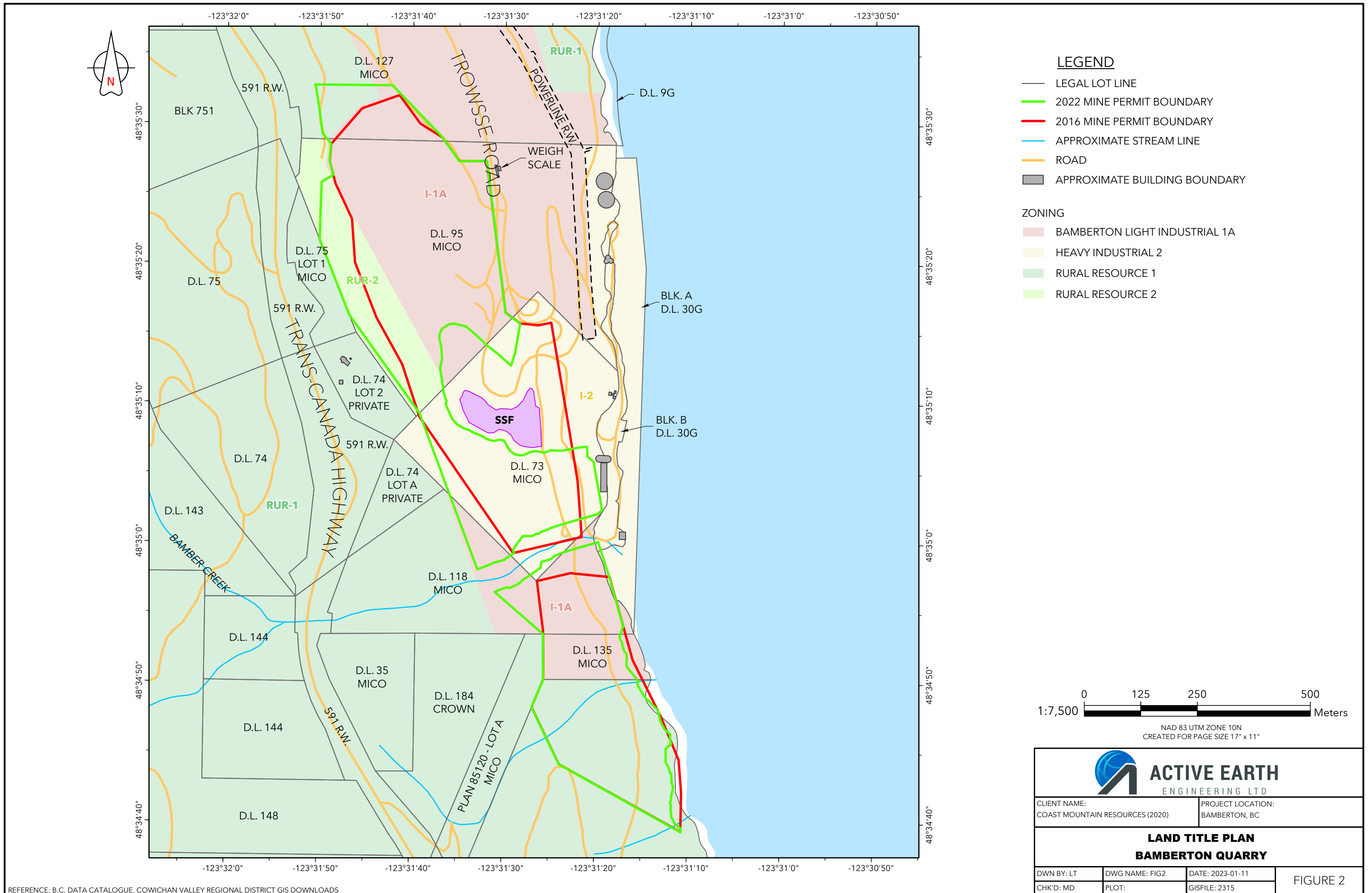


CLIENT NAME: COAST MOUNTAIN RESOURCES (2020)	PROJECT LOCATION: BAMBERTON, BC
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LOCATION PLAN
BAMBERTON QUARRY

DWN BY: LT	DWG NAME: FIG1	DATE: 2023-01-11
CHK'D: MD	PLOT:	GISFILE: 2315

FIGURE 1



REFERENCE: B.C. DATA CATALOGUE, COWICHAN VALLEY REGIONAL DISTRICT GIS DOWNLOADS

LEGEND


- LEGAL LOT LINE
- 2022 MINE PERMIT BOUNDARY
- 2016 MINE PERMIT BOUNDARY
- APPROXIMATE STREAM LINE
- ROAD
- APPROXIMATE BUILDING BOUNDARY

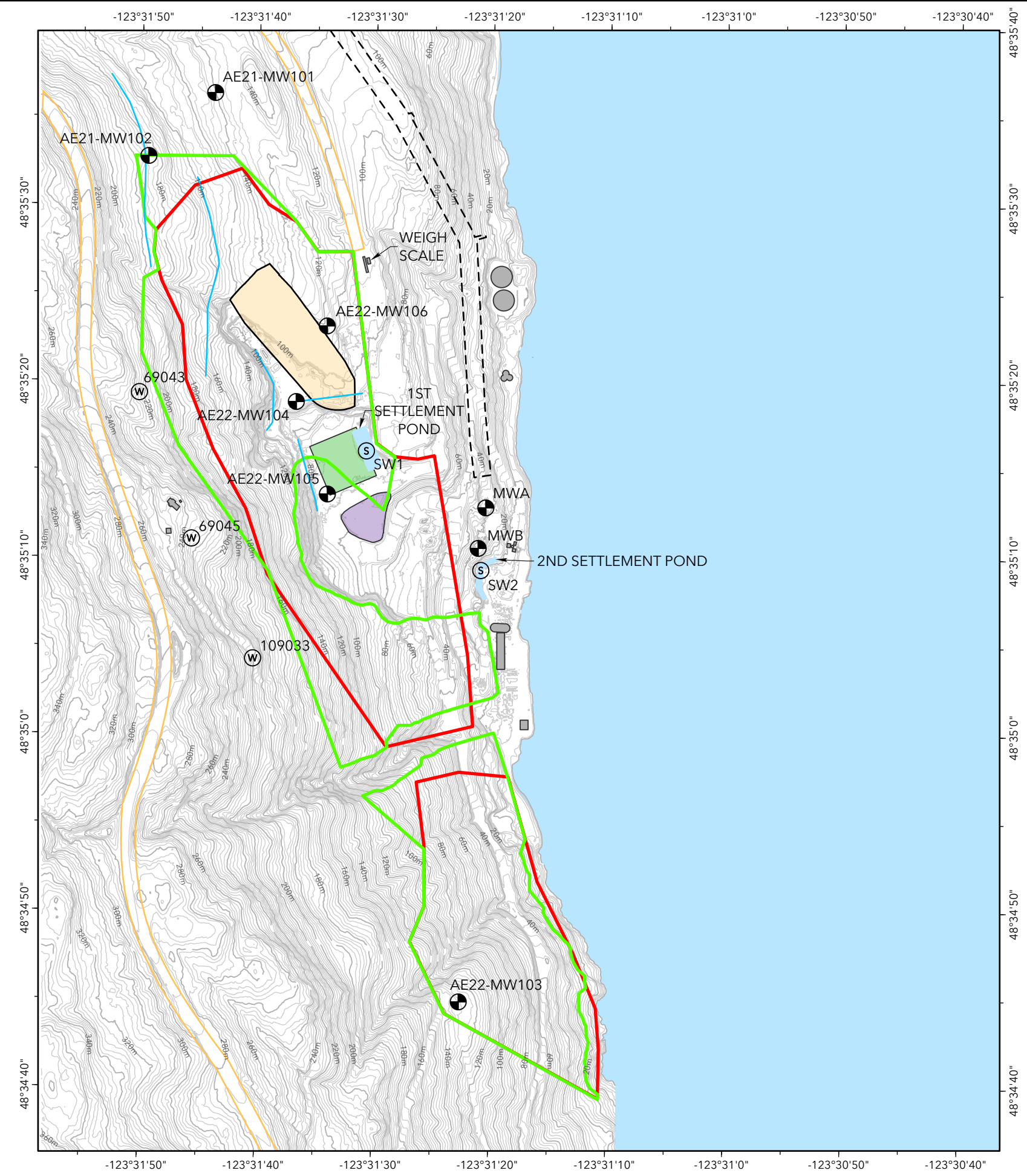
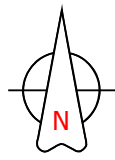
ZONING

- BAMBERTON LIGHT INDUSTRIAL 1A
- HEAVY INDUSTRIAL 2
- RURAL RESOURCE 1
- RURAL RESOURCE 2

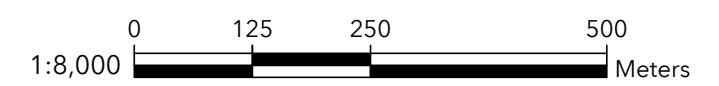
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 ACTIVE EARTH ENGINEERING LTD		CLIENT NAME: COAST MOUNTAIN RESOURCES (2020)		PROJECT LOCATION: BAMBERTON, BC	
		LAND TITLE PLAN BAMBERTON QUARRY			
DWN BY: LT	DWG NAME: FIG2	DATE: 2023-01-11	FIGURE 2		
CHK'D: MD	PLOT:	GISFILE: 2315			



- LEGEND**
- MONITORING WELL
 - SURFACE WATER SAMPLE
 - WATER WELL
 - CONTOUR (2m)
 - DRAINAGE DITCH
 - 2016 MINE PERMIT BOUNDARY
 - 2022 MINE PERMIT BOUNDARY
 - ROAD
 - APPROXIMATE BUILDING BOUNDARY
 - EXISTING DISTURBANCE
 - CRUSHER LOCATION
 - STOCKPILE



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CLIENT NAME: COAST MOUNTAIN RESOURCES (2020)	PROJECT LOCATION: BAMBERTON, BC
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**EXISTING SURFACE PLAN
BAMBERTON QUARRY**

DWN BY: LT	DWG NAME: FIG3	DATE: 2023-01-11	FIGURE 3
CHK'D: MD	PLOT:	GISFILE: 2315	

REFERENCE: B.C. DATA CATALOGUE, COWICHAN VALLEY REGIONAL DISTRICT GIS DOWNLOADS, CONTOUR DATA FROM TERRA REMOTE SENSING JULY 2015