

Aggregates and Quarry Materials Application Requirements List.

TO ACCOMPANY ROCKRITE RESOURCE INC. QUARRY TENURE APPLICATION

1. End use of material. Rip rap, ballast, construction fill.
2. Site plan (see next page)
3. Management plan

Section A – PROJECT OVERVIEW.

-Purpose of the project is to provide quarry rock of various dimensions from 3 to 30 cm of natural Nicola group basalt for the local Kamloops and area construction industry.

-The proposed Ord Quarry will provide up to 7,000 cubic metres per year of material from a western extension of the already developed pit.

-Access is via a northerly spur off Farm road which lead to west Ord Road a short distance to the east. The spur will have a suitable locked gate preventing unauthorized vehicular access. Appropriate fencing and signage will be installed. Upon Project tenure and permitting approval development of the quarry will involve overburden removal of less than 500 cubic metres which will be stockpiled to the south or west of the proposed pit extension followed by surface blasting to develop the new pit. Subsequently the blasted rock will be sorted and stockpiled on the existing flat area below the quarry. The new quarry will develop a west face to minimize blast noise and flyrock issues with developed areas to the south and east.

Section B – PROJECT DESCRIPTION

I Description Of Work

-Investigative work completed. Several samples have been taken of the existing quarry for ARD determination. All samples indicate that the quarry rock is acid consuming (ARD report attached). The existing pit has stable walls and is in a tidy condition.

-Production is estimated to be less than 7,000 cubic metres per year

-Screening, crushing and washing is planned.

-Maximum height of working face is 10 metres

-Water is planned for dust control.

-The installation of fencing, gates and overburden removal will occur after final approval of the project and will take less than 1 month to complete. Quarry rock production will take place with key work such as blasting and rock mining timed to minimize disturbance.

II Present State of Land

-The land is crown land within the city of Kamloops with no improvements.

Immediately south of the proposed quarry site is private land with various zonings but adjacent to the area is predominately light industrial use including quarries and aggregate pits on the private land. An agricultural research facility lies south of Farm Road immediately south of the proposed quarry area.

-An abandoned, reclaimed quarry covering about 0.5 hectare lies in the south central part of the proposed quarry property, and below that to the southwest is a flat also reclaimed loading area covering about 1.0 hectares, which if the site of the proposed quarry.

- The vegetation is dry grassland

- The soil is a thin chernozem derived from a cobble-boulder glacial till. Approximately 10% of the area is outcrop.
- The topography is a moderate to locally steep south slope.
- The access road is blocked but is still in a usable condition. Part has been removed.
- There are no watercourses or springs on the proposed quarry site. In the spring surface runoff in several small gullies may occur.
- The water table is at least 10 metres below the proposed quarry site.
- The site is probably within the ALR. However the land is not used for any agricultural purposes.
- The area does not lie within the provincial forest.

III Reclamation Program

-The land use after reclamation will revert back to dry grassland with rocky outcrops. Reclamation will involve placing stored soil onto the flat areas of the quarry and loading area and seeding with local grass mixtures.

Section C – ADDITIONAL INFORMATION

I – Environmental

A Land Impacts – Surface disturbance will involve, re-leveling of reclaimed stockpile areas and reactivation of the reclaimed roads or establishing new roads to facilitate removal of thin overburden overlying the proposed quarry site using backhoe, bulldozer, and dump trucks. This material will be stockpiled downhill on a flat area below the quarry. The development of the quarry will involve creating a west face that will direct quarrying and blasting noise away from developed areas. The local landscape involved a series of north trending overall south sloping small ridges that will assist in the development of the quarry (see images attached).

- There are no known archaeological sites
- Materials used will include blasting agents, magnesium-calcium chloride for road dust suppression.
- Construction methods will involve the use of bulldozers, backhoes, and dump trucks to rehabilitate stockpile areas and roads. Also for removal of significant overburden a medium loader will also be used in the stockpile areas and to smooth roads in lieu of a grader.
- minimizing adverse impacts will involve timing of activities.

B Atmospheric Impacts

- Sound:** Steps to minimize noise 'pollution' during the development and excavation of the quarry will involve primarily activity timing (daily, weekly and seasonal) to minimize construction vehicle, drilling and blasting noise. Blasting will have to be times to minimize both local uses and air traffic due to the proximity of the Kamloops airport.
- Particulate suppression** in drilling, blasting, crushing-screening and material handling will involve the appropriate use of water.
- All equipment will have 'to code' exhaust systems to minimize NO₂, CO and other gaseous emissions and noise from engines.

C Aquatic impacts

-There are no known aquatic impacts. The site slopes towards developed land adjacent to Ord and Farm Roads which is ditched and drains into local storm catchments.

D Fish and Wildlife impacts

There are no known fish impacts. There would be little if any, wildlife impacts.

II Socio-Community

A Land Use: The proposed project will not affect existing land uses as the area already is used for similar purposes.

B. Socio-Community Conditions

The project will not adversely affect existing community services or infrastructure. The privately owned land south of the project area is zoned for industrial uses except for the Canadian agricultural research farm.

C. Public Health

The project will have minimal impact on public health. Waste disposal will be addressed on a daily or weekly basis. Site contamination due to fuel, coolant spills or blasting agent spills will involve contacting the appropriate local or Kamloops emergency response services to facilitate timely cleanup and disposal of the contaminants.

D. First Nations

We have initiated contact with the Kamloops Indian Band.

ORD QUARRY APPLICATION CO-
ORDINATES

NAME	LONG	LAT
NE1	120D 25' 54.3"	50D 43' 01.45"
E1	120D 25' 54.3"	50D 42' 56.50"
NW1	120D 26' 0.05"	50D 43' 01.45"
W1	120D 26' 12.30"	50D 42' 56.50"
W2	120D 26' 12.30w	50D 42' 58"

