

To: Electoral Area Services Committee

Date: 2018-02-15

From: Graham Daneluz, Deputy Director of Planning & Development File No: 4300-35-2017-02

Subject: Commercial Gravel Operation Permit 2017-02 (Laurmel Holdings), Area "G"

RECOMMENDATION

THAT the FVRD Board issue Commercial Gravel Operation Permit 2017-02 to Laurmel Holdings LTD for the Mainland Sand & Gravel quarry operation at 6850 Cox Road, FVRD Area "G"

STRATEGIC AREA(S) OF FOCUS

Foster a Strong & Diverse Economy
Support Healthy & Sustainable Community
Provide Responsive & Effective Public Services
Support Environmental Stewardship

BACKGROUND

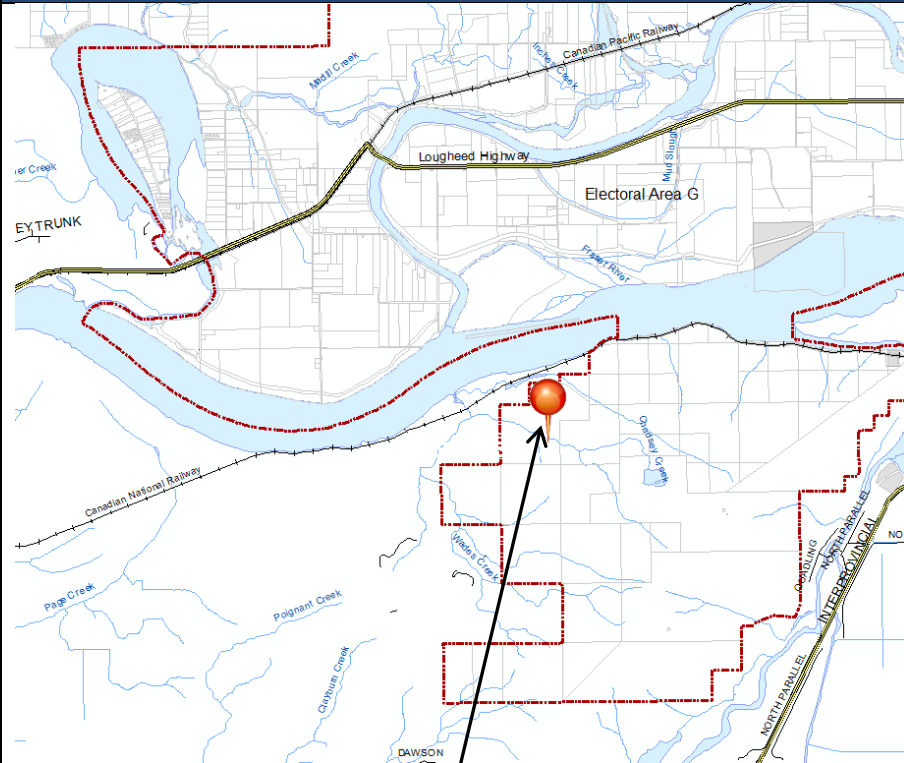
Laurmel Holdings LTD owns the land comprising Mainland Sand & Gravel's Cox Station Quarry, and certain surrounding parcels, on the north side of Sumas Mountain in Electoral Area "G". Laurmel Holdings has applied for a permit under *FVRD Commercial Gravel Operations Bylaw No. 1181*.

The aggregate quarry, operated by Mainland, straddles the boundary between the City of Abbotsford and FVRD Area "G". Commercial quarrying of aggregate has occurred at this general location since at least 1985 and aggregate production before then. According to the Mainland Sand & Gravel website:

Cox Station is a granite rock quarry manufacturing crushed stone via drilling and blasting solid rock. The site manufactures and supplies various grades of aggregate including rip rap, road bases, clear crushed rock, washed products including concrete and asphalt spec materials and synthetic turf field bases. The site has a barge ramp and a conveyor loadout for the loading of its products on to barges. Additionally, the quarry has two CN Rail Spur lines within the property providing the ability for rail car loading. Mainland Sand & Gravel supplies aggregate products to a market place stretching from Chilliwack to the Pacific Coast of British Columbia and Washington State from the Cox Station Quarry.¹

¹ Mainland Sand & Gravel. <http://www.mainlandsg.com/cox-station.php>. Accessed Feb/5, 2018.

Address: 6480 Cox Road, Area "G"



Location: 6480 Cox Road (Mainland Sand & Gravel)

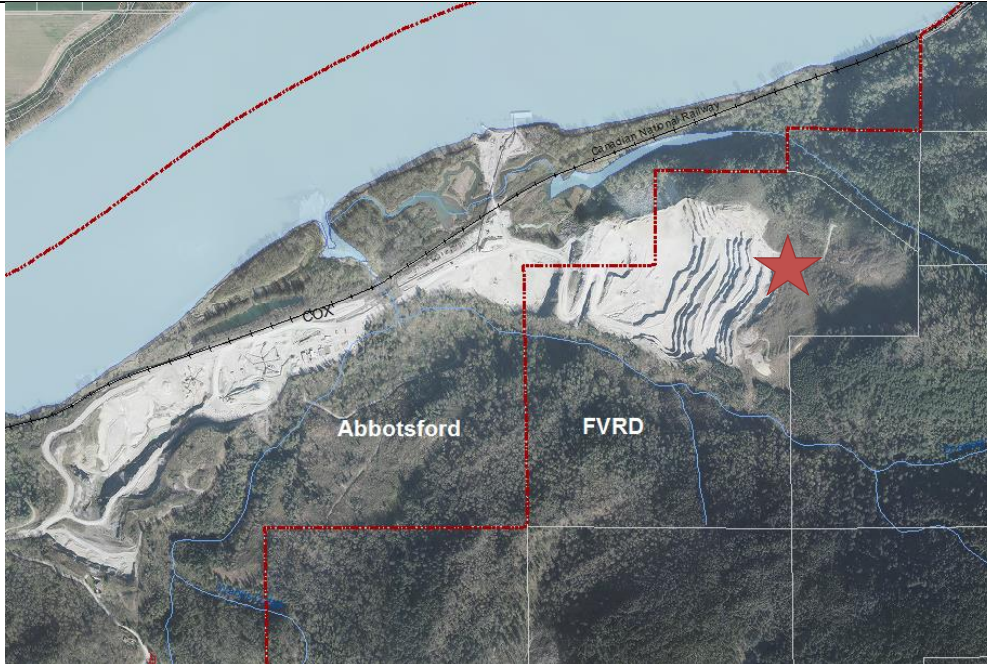
Owner	Laumel Holdings
Agent	Dani Miller, MS&G
EA	G
Zoning	LU/R-1 (Bylaw 500)
OCP	Limited Use
DPA	n/a
ALR	no

Comments:
 Legal: Block A, Sec 6&21, Twp 20 and DL944, Gp. 2 NWD
 PID: 024-939-901
 Folio: 734-01206.300
 The operation straddles the Abbotsford-FVRD Area "G" boundary on the north side of Sumas Mountain.

Neighbouring Lands

North : City of Abbotsford boundary, CN Railway, Fraser River foreshore

West: City of Abbotsford boundary, Mainland Sand & Gravel quarry



East : unnamed stream, Crown land

South: Chadsey Creek, Crown land

The current footprint of the mine is about 47 hectares. The estimated annual volume of aggregate to be removed is 1.5 to 3.0 million cubic metres annually. The current mine has an anticipated life of more than thirty years and expansion areas exist to the east which could extend its productive life for many more years.

The mine operates under Ministry of Energy & Mines Permit Q-7-68. It has not received a permit under FVRD's previous soil removal bylaws.

DISCUSSION

FVRD Plans & Bylaws

Official Community Plan

The subject property is designated LIMITED USE in *Fraser Valley Regional District Official Community Plan for Electoral Area "G" Bylaw No. 0866, 2008*. Resource Extraction and Resource Industrial Use are supported in the LIMITED USE designation.

The property is within Riparian Area Development Permit Area 2-G for the protection of the natural environment. The mine site is bounded on the northeast and southwest by streams draining the north side of Sumas Mountain. There is also a wetland area north of the mine site next to the CN rail line. As the extraction of mineral resources is not subject to the requirement for a Development Permit, no DP is required for the works. In any case, since all mining activity within the permit area is at least 30 metres from any watercourse it would be exempt.

Resource Extraction means the pulling out or drawing out of primary mineral resources and specifically includes mining, the extraction of aggregate materials, and associated local transportation uses.

Resource Industrial Use means the extraction, primary processing, and transport of products from primary natural resource materials. It includes gravel sorting and screening plants and similar related industries.

Section 14.2 of the OCP contains a variety of policies relating to aggregate operations. The table below summarised the policies and provides comments regarding their application to this site.

OCP Policy	Comment
14.2.3 Aggregate processing, which includes the use of machinery and equipment to wash, screen, crush, and size sand, gravel, aggregate and mineral resources, shall only occur where permitted by zoning.	At this time, processing activities occur in the portion of the mine site within the City of Abbotsford. In the future, Mainland intends to relocate the processing plant. If the new location is within Area G, rezoning will be required to allow processing.
14.2.5 New and existing aggregate operations shall employ an array of measures to mitigate off-site impacts, including but not limited to screening, noise deflection berms, enclosure of processing equipment, dust suppression systems, and blasting noise suppression.	A permit under <i>Bylaw 1181</i> will address noise, dust and screening.

14.2.7 All mining activities should maintain a thirty (30) metre 'no disturbance' riparian buffer from all watercourses and wetlands.	Mining activity is located at least 30 m from any stream or wetland.
14.2.10 The development, management and reclamation of aggregate operations should follow the best practices outlined in the Environmental Objectives and Best Management Practices for Aggregate Extraction and Aggregate Operators Best Management Practices Handbook for British Columbia.	This policy will be included as a permit condition in CGO Permit 2017-02.
14.2.11 All sand, gravel and other sites used for commercial or industrial extraction of aggregate minerals should have a plan, approved by the Chief Inspector of Mines, for the safe operation, abandonment, recontouring and reclamation of the site. Progressive reclamation is strongly encouraged.	The Ministry of Energy & Mines has issued a Mines Permit for the operation (Q-7-68). Reclamation is outside the scope of a permit under Bylaw 1181 but it is addressed in the Mines Permit.

Zoning

The subject property is zoned Limited Use/Rural-1 (LU/R-1) under *Sumas Mountain Rural Land Use By-law No. 500-1992*. Resource Extraction is not in the list of permitted uses in the LU/R-1 zone. However, the bylaw acknowledges that extracting gravel is not subject to local government zoning regulations and, as a result, it "may occur on land designated Limited Use/Resource."

At this time, processing activities occur in the portion of the mine site within the City of Abbotsford. In the future, Mainland intends to relocate the processing plant. If the new location is within, or partly within, Area G rezoning will be required to allow processing. FVRD CGO Permit 2017-02 will state that, "nothing in this permit allows or approves the processing or aggregates where aggregate processing is not a permitted use of the land under a valid and applicable zoning bylaw."

Commercial Gravel Operations Bylaw

FVRD Electoral Areas Commercial Gravel Operations Bylaw No. 1181, 2016 received the approval of the Minister of Mines and was subsequently adopted by the FVRD Board in September, 2016. The intent of the bylaw is to support a viable commercial aggregate extraction industry as a crucial component of the regional economy while mitigating impacts of aggregate operations on local communities. It does this by:

- mapping out Restricted Areas where new gravel operations are prohibited;
- identifying Community Areas where noise and dust emissions are regulated, monitored and reported on;
- requiring permits for commercial gravel operations; and,
- establishing annual volume-based fees which will support the administration of the bylaw and associated services provided by the FVRD.

The Mainland operation requires a permit under *Bylaw 1181*. The quarry is located within a Community Area (as defined in *Bylaw 1181*) here noise and dust emissions are regulated.

Community Impacts

FVRD Commercial Gravel Operations Bylaw No. 1181 is primarily aimed at managing the impacts of gravel operations on surrounding properties. Laurmel Holdings LTD has greatly reduced the potential for neighbourhood conflicts by purchasing adjacent properties as they have come up for sale. The closest residence is at least 1 km from the quarry processing plant. In addition, about 98% of aggregates produced at Mainland Sand & Gravel leave the mine by barge or rail and thus avoiding conflicts associated with hauling material by truck on local roads. The result is that the Mainland Sand & Gravel quarry has attracted very few bylaw enforcement complaints over the last 10 years.

Noise

FVRD Commercial Gravel Operations Bylaw No. 1181:

- requires the preparation of a Noise Control Plan to identify sources of noise within the operation and strategies for reducing noise emissions;
- caps daytime noise emissions at 60 dBA L_{eq} averaged over any one hour period and nighttime emissions at 50 dBA in Community Areas; and,
- requires monitoring and reporting of noise emissions.

Laurmel Holdings has submitted a Noise Control Plan and acoustical engineering reports which indicate that the noise emissions from the operation will comply with the bylaw. Specific measures they will take to control noise include:

- installing 'white noise' backup alarms on off-road vehicles that operate within the mine site;
- avoiding the use of diesel generators to power processing equipment;
- replacing wire mesh screens with polyurethane screens in the screening plant; and,
- maintaining processing equipment at least one kilometre from the nearest residence.

Dust

FVRD Commercial Gravel Operations Bylaw No. 1181:

- ensures the preparation of a Dust Control Plan to identify sources of dust within the operation and strategies for controlling dust emissions;
- prohibits nuisance dust emissions;
- establishes quantitative limits on dust emissions: (a) Dustfall over an average period of two (2) weeks in excess of 1.7 mg/(dm²-d); and, (b) Total Suspended Particulate Matter over an average period of twenty four (24) hours in excess of 120 µg/m³; and,
- requires monitoring and reporting of dust emissions.

Laurmel Holdings has submitted a Dust Control Plan and a fugitive dust study that addresses dust control procedures, best practices for dust management, monitoring, and corrective actions when required. Measures the mine will take to control dust include wetting material prior to being loaded, dumped or put through crushers or screen decks and specifically:

- wetting mine roads on dry days;
- pre-watering of freshly blasted material prior to loading in haul trucks;
- addition of water via large-droplet spray fans at the primary dump hopper; and,
- rewetting after each crusher and along conveyor runs where drying may occur.

The applicant has provided reports by qualified professionals which indicate that these measures are currently successful in keeping dust emissions within the thresholds set out in *Bylaw 1181*. Furthermore, Mainland is expecting to reconfigure its mining operation to reduce internal haul distances which would reduce dust emissions; internal haulage is a leading source of dust emissions.

Coordination with the City of Abbotsford

The Mainland Sand & Gravel Cox Station Quarry straddles the FVRD-City of Abbotsford boundary. As a result, approvals from both the City and FVRD are required. FVRD staff have been coordinating with City staff regarding this permit and City of Abbotsford requirements. No conflicts are anticipated. Staff will continue to coordinate regarding any issues that arise.

Next Steps

FVRD CGO Permit 2017-02 will be considered by the FVRD Board at its regular meeting on February 27, 2017. There is no requirement for a neighbourhood mail out. The City of Abbotsford has been advised of the CGO Permit and staff will continue to coordinate with City staff.

COST

An application fee of \$2,500.⁰⁰ was received.

CONCLUSION

The issuance of Commercial Gravel Operations Permit 2017-02 for the Mainland sand & Gravel operation on Sumas Mountain, Area "G" will benefit the surrounding community by establishing noise and dust restrictions, ongoing monitoring, and annual compliance reports. Annual fees paid by Mainland to FVRD will support the administration of Bylaw 1181, including compliance efforts. A copy of the draft permit is attached hereto.

COMMENTS BY:

Margaret Thornton, Director of Planning & Development

Reviewed and supported.

Mike Veenbaas, Director of Financial Services

Reviewed and supported.

Paul Gipps, Chief Administrative Officer

Not available for comment.