



City of Richmond

Report to Committee

To: General Purposes Committee

Date: April 26, 2016

From: John Irving, P.Eng. MPA
Director, Engineering

File: 10-6060-01/2016-Vol
01

Re: Vancouver Airport Fuel Delivery Project Environmental Assessment
Certificate Amendment

Staff Recommendation

That the comments regarding the Vancouver Airport Fuel Facility Corporation's application for amendment to the approved Vancouver Airport Fuel Delivery project's Environmental Assessment Certificate identified in the staff report titled "Vancouver Airport Fuel Delivery Project Environmental Assessment Certificate Amendment" dated April 26, 2016, from the Director, Engineering, be endorsed for submission to the BC Environmental Assessment Office.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

Att. 5

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Parks Services	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO

Staff Report

Origin

On December 12, 2013 the Minister of Environment and the Minister of Natural Gas Development issued a conditional Environmental Assessment Certificate (EAC) for the Vancouver Airport Fuel Delivery (VAFD) project. The certificate is contingent on the proponent meeting 64 conditions that came out of the environmental assessment process that are included in the certificate. The project proponent is Vancouver Airport Fuel Facilities Corporation (VAFFC).

Staff distributed a memo to the Mayor and Councillors titled “Vancouver Airport Fuel Delivery Project Permitting” dated April 25, 2016 (Attachment 1) that identifies the status of various permits and permissions required by the VAFFC for the VAFD project.

On April 18, 2016, the VAFFC submitted an application to the BC Environmental Assessment Office (BCEAO) to amend the EAC. This report identifies the key features of the amendment contents and review process. It also recommends a response to the BCEAO regarding the proposed amendment and the VAFD project in general.

Findings of Fact

Background

The VAFFC currently supplies jet fuel to YVR to meet peak daily demand of approximately 5.4 million litres per day and average daily demand of approximately 4.6 million litres per day. VAFFC currently receives approximately 80% of its annual jet fuel supply from the existing Kinder Morgan pipeline and the remaining 20% is brought in by tanker truck (approximately 1,000 tanker trucks per month) from Cherry Point in Washington State. The VAFD project definition document states that the project’s purpose is to increase jet fuel capacity to meet the current and future jet fuel needs at YVR.

The VAFD project will almost triple the VAFFC’s fuel storage capacity. VAFFC’s existing storage facilities on Sea Island have approximately 52 million litres and the VAFD’s proposed Fuel Receiving Facility (FRF) will add approximately 80 million litres of storage on Lulu Island in six tanks. The FRF site is large enough to add two more tanks with an estimated additional storage capacity of 27 million litres, which would bring the total RFR site to 107 million litres of jet fuel storage. Kinder Morgan facilities on Sea Island include approximately 7 million litres of existing jet fuel storage capacity.

Environmental Assessment

Review of the project under the Canadian Environmental Assessment Act process was triggered by the impact on navigable waters. VAFFC also made a voluntary request to “opt-in” to the BC Environmental Assessment process in 2011. As a result, the VAFD project completed a harmonized Federal and Provincial Environmental Assessment process led by the BCEAO.

The completed EAC was issued by the Minister of Environment and the Minister of Natural Gas Development on December 12, 2013. Port of Vancouver (PV) was the lead agency representing the federal government for the environmental assessment. In this capacity, PV agreed with BCEAO's determination that the project would not cause significant adverse environmental effects should mitigations outlined in the 64 conditions be applied.

Environmental Assessment Certificate Amendment Application

On April 18, 2016, the VAFFC submitted an application for an amendment to the EAC. Table 1 identifies the schedule for the amendment review process.

Table 1: EAC Amendment Review Process

Date	Activity
April 18, 2016	Application for Amendment to the EAC submitted to BCEAO
May 10, 2016	Deadline for Working Group Comments on the proposed amendment to the EAC (Comment period extended to May 20, 2016, for Richmond)
May 14 - June 4, 2016	Public Comment Period
Mid-June, 2016	Expected time period for VAFFC formal response to Working Group comments
Mid-July, 2016	BCEAO reviews responses/conducts focused issues resolution and prepares draft Amendment Referral Package
Early August 2016	BCEAO sends draft Amendment Referral Package to Working Group for 3 week review
August 2016	EAO considers comments and finalizes Amendment Referral Package for EAO's Executive Director decision

The BCEAO has verbally extended the comment period to May 20, 2016, for the City of Richmond.

The amendment document requests:

- Addition of pipeline routing options in North Richmond to include Bridgeport Road and River Road;
- Addition of pipeline routing option in South Richmond to include Williams Road and Savage Road;
- Addition of pipeline routing options on Vancouver Airport Authority Lands; and
- An increase in pipeline diameter from 300 mm to 350 mm.

Attachment 2 shows Figure 7 from the VAFFC application for amendment that identifies the additional pipeline route options.

Analysis

North Richmond Pipeline Alignment

The pipeline alignment in the approved EAC takes a circuitous route through North Richmond (Attachment 3) that the VAFD Certified Project Description refers to as the Bridgeport Trail. The proposed amendment includes two additional pipeline route options, Bridgeport Road (Attachment 4) and River Road.

Of the options presented, the Bridgeport Road option has the least negative impact to the City. This option parallels the existing Kinder Morgan pipeline limiting the impacts to future development to those already incurred by the existing pipeline.

The River Road option is an extension of the approved Bridgeport Trail option. Both the River Road option and the approved Bridgeport Trail option will have considerable negative impact to future development in North Richmond.

Adoption of the amendment as it is written will allow the VAFFC to choose from any of these options.

South Richmond Pipeline Alignment

The pipeline alignment in the approved EAC in South Richmond utilizes the unopened Francis Road dedication from the PV lands to Highway 99 (Attachment 5). The proposed amendment realigns the pipeline to the unopened Savage Road dedication from the Marine terminal to Francis Road. The Savage Road alignment is intended to improve pipeline compatibility with proposed development on the Ecowaste site.

Vancouver Airport Authority Lands Pipeline Alignment

The pipeline alignment in the approved EAC in the Vancouver Airport Authority Lands utilizes Grauer Road and an airside perimeter service road (Attachment 6). The proposed amendment includes an additional alignment on Sea Island between Bridgeport Road and Templeton Station Road to the fuel handling and storage facility on Sea Island.

Pipeline Diameter

The pipeline diameter in the approved EAC is 300 mm. The amendment includes an increase in pipeline diameter to 350 mm. The VAFFC has indicated that the increased diameter will improve system hydraulics and reduce pumping energy requirements, however the increased pipe diameter would allow for significantly increased flow with additional or larger pumps.

This increased flow potential and the tripling of jet fuel storage would create a facility capable of delivering jet fuel far in excess of YVR's current demand and raises a concern that the project could be used to sell jet fuel to other airports or users in the region. This is beyond the scope of the current BCEAO project approval.

Comments

Staff recommend that the following comments on the proposed EAC amendment be sent to the BCEAO:

1. That the City continues to oppose the development of the VAFD project in its current configuration and that options to deliver jet fuel directly to Sea Island be considered prior to implementation of the VAFD project.
2. That the pipeline route in North Richmond be limited to the Bridgeport Road option due to the significant negative impacts to the future development of North Richmond inherent in the Bridgeport Trail and River Road options.
3. That pipelines constructed in unopened municipal road dedications be constructed in a manner that does not impact the City's ability to build roads on these dedications in the future.
4. That the VAFD installations and pipeline be limited to supplying jet fuel to YVR.

Financial Impact

None

Conclusion

The VAFFC was issued a conditional EAC in December 2013 that identified overall VAFD system configuration and pipeline route. On April 18, 2016, the VAFFC applied to the BCEAO for an amendment to the approved EAC to include additional pipeline routes in North Richmond, South Richmond, and Sea Island as well as an increase in pipeline diameter from 300 mm to 350 mm. The BCEAO deadline for comments on the proposed amendment is May 20, 2016, extended for the City of Richmond from the original deadline of May 10, 2016. Staff recommend that Council endorse the comments in this report for submission to the BCEAO.



Lloyd Bie, P.Eng.
Manager, Engineering Planning
(604-276-4075)

LB:lb

- Att. 1: Vancouver Airport Fuel Delivery Project Permitting memo to Mayor and Councillors
2: Map of Proposed Pipeline Route Option Amendments
3: Map of Pipeline Route in North Richmond in Approved EAC
4: Map of Bridgeport Road Option
5: Map of Pipeline Route in South Richmond in Approved EAC
6: Map of Pipeline Route on Sea Island in Approved EAC



City of Richmond

Memorandum Engineering and Public Works Engineering

To: Mayor and Councillors **Date:** April 25, 2016

From: Lloyd Bie, P.Eng. **File:** 10-6060-01/2016-Vol 01
Manager, Engineering Planning

Re: **Vancouver Airport Fuel Delivery Project Permitting**

The purpose of this memorandum is to provide Council with an update on the status of the Vancouver Airport Fuel Facilities Corporation's (VAFFC) Vancouver Airport Fuel Delivery (VAFD) project.

The VAFD project includes three distinct elements:

- Marine Terminal
- Fuel Receiving Facility
- Pipeline

The proposed marine terminal is located at the eastern end of Williams Road (refer to Attachment 1). The upland site (15040 Williams Road) is owned by the VAFFC and is outside of the Port of Vancouver (PV) (formerly Port Metro Vancouver) controlled lands. The proposed fuel receiving facility is located at the east terminus of Williams Road on PV land.

Table 1 identifies permitting requirements and status for the VAFD project.

Table 1: VAFD Permitting Requirements

Permit	Facility	Status	Jurisdiction
Environmental Assessment Certificate (EAC)	All	Approved With Conditions (Dec 2013)	Federal Provincial
Environmental Assessment Certificate (EAC) Amendment	Pipeline	Amendment Submitted to BCEAO	Federal Provincial
Navigation Protection Program (NPP) Approval	Marine Terminal	No Application to Date by VAFFC	Federal (Transport Canada)
BC Oil and Gas Commission Approval	Pipeline	Application to BCOGC in May or June 2016	Provincial (BCOGC)
Port of Vancouver Project Permit	Fuel Receiving Facility	Approved with Conditions (Feb 2016)	Federal (PV)
Water Lot Lease	Marine Terminal	No Application to Date	Provincial (FLNRO)
Environmentally Sensitive Area Development Permit (ESA DP)	Marine Terminal	No Application to Date	Municipal
Building Permit (BP)	Marine Terminal	No Application to Date	Municipal

The VAFFC has an Environmental Assessment Certificate (EAC) that was approved by the BC Environmental Assessment Office (BCEAO) with 64 conditions. The Environmental Assessment process was significant to the VAFD project as it could not proceed without an EAC. The VAFFC submitted an amendment to the EAC on April 18, 2016 requesting to:

- Shift the northern pipeline route from Richmond roads to the provincially owned Bridgeport Road;
- Shift the southern pipeline alignment to better interface with the Ecowaste development; and
- Increase the diameter of the pipeline from 300 mm to 350 mm.

Comments from the City regarding the amendment will be accepted by the BCEAO until May 10, 2016. A report to Council on the amendment application and recommended comments is forthcoming.

The Navigation Protection Program (NPP) operates under Transport Canada and administers the Navigation Protection Act (NPA). The NPP updated and replaced the Navigable Waters Protection Act on April 1, 2014. The NPP's primary focus is evaluation of project impact on navigation and to minimize navigation hazards in navigable waters as per the NPA.

The VAFFC has indicated they will make an application to the BC Oil and Gas Commission (BCOGC) in May or June of 2016. The BCOGC review will primarily focus on the technical elements of the VAFD pipeline. Provided the pipeline and supporting infrastructure is technically sound, the project will receive approval from the BCOGC.

The fuel receiving facility received a project permit with a number of conditions from PV. The conditions indicate that the VAFFC are required to enter a servicing agreement with the City for municipal services such as utilities and road access.

As the marine terminal is proposed to be constructed in the Fraser River, a lease agreement between VAFFC and the Province of British Columbia will be required. The Ministry of Forests, Land and Natural Resource Operations (FLNRO) has been responsible for the water lot leases on most of the lower reaches of the Fraser River since PV chose not to renew the head lease in early 2015. Any modifications or new infrastructure within the waterlot will require approval from FLNRO. Additionally, should the construction of the marine terminal impact the dike, approval from the provincial Inspector of Dikes will be required. No municipal approval is required in this regard.

The marine terminal facility will impact the foreshore and will require an environmentally sensitive area (ESA) development permit (DP) from the City. The DP application would require screening for a Site Profile, and depending on site history the Ministry of Environment may further require an environmental investigation to determine the risk of previous contamination of the site.

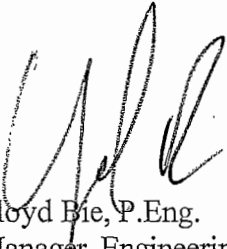
15040 Williams Road is currently zoned "I – Industrial" which permits the proposed marine terminal facility. No rezoning will be required for the proposed marine terminal.

Similar to building permits, the City does not have the discretion to simply refuse the ESA DP application for the marine terminal facility provided the application meets all of the statutory

April 25, 2016

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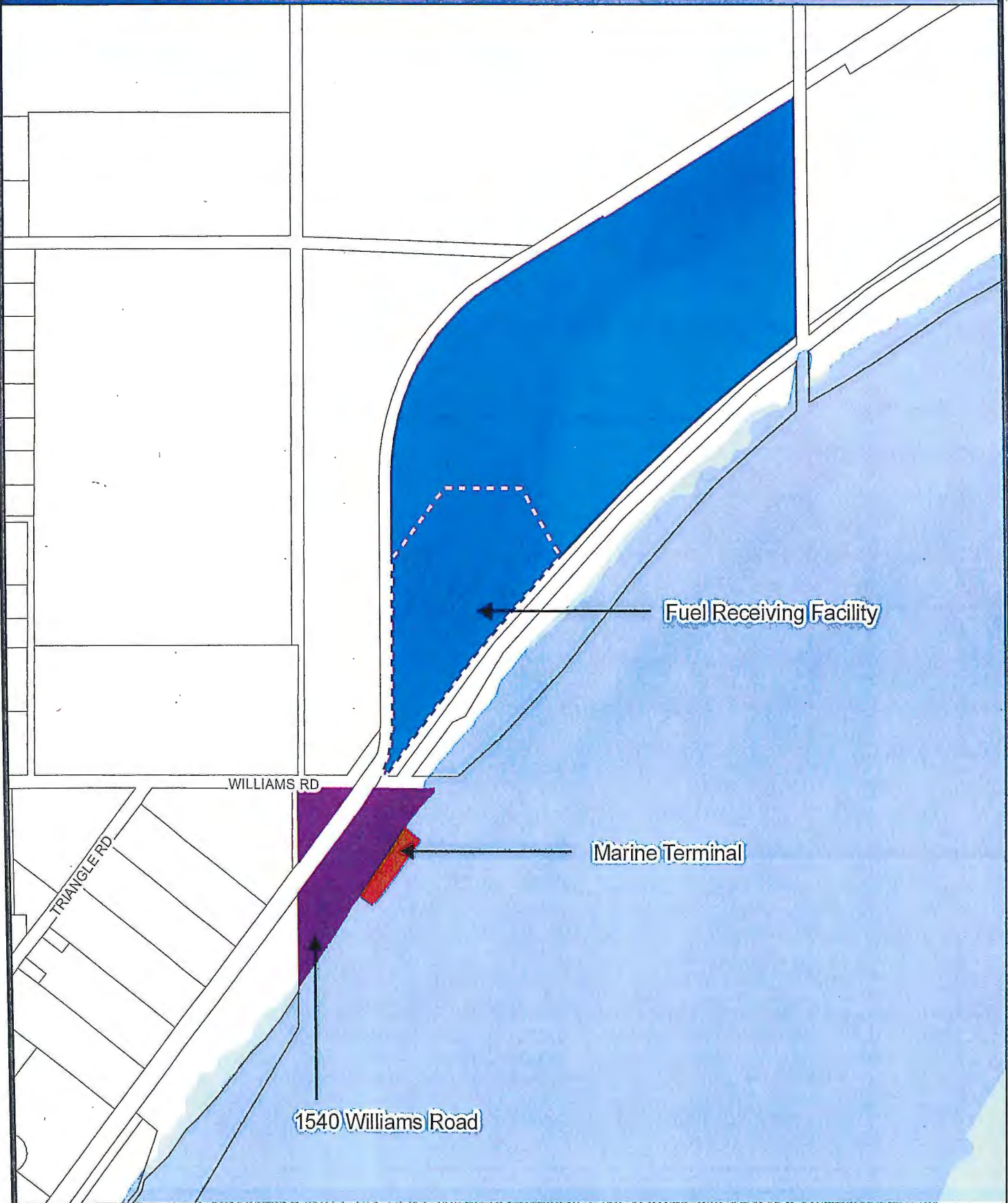
regulations and tests required to obtain the ESA DP. The VAFD project will continue toward implementation unless the Provincial or Federal government intervene or revoke the conditional Environmental Assessment Certificate or the VAFFC; cannot meet the conditions set out in the conditional Environmental Assessment Certificate.



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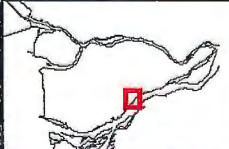
Legend

- FLNRO
- VAFFC OWNED

- Crown Federal Land - Vancouver Fraser Port Authority

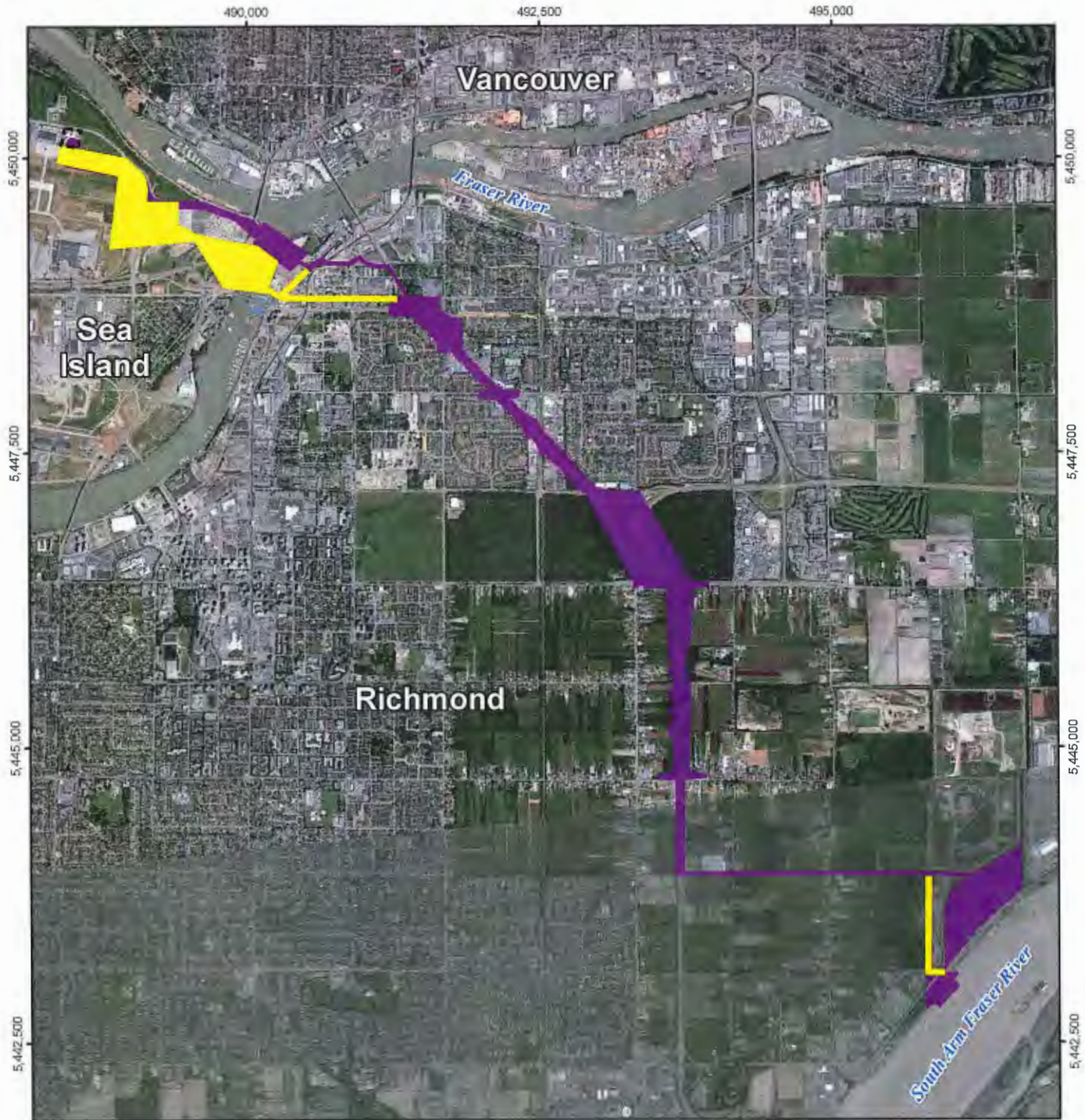
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Note:
The information shown on this map is compiled from various sources and the City makes no warranties, expressed or implied, as to the accuracy or completeness of the information. Users are reminded that lot sizes and legal descriptions must be confirmed at the Land Title office in New Westminster. This IS NOT a legal document, and is published for information and convenience purposes only.
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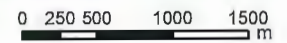
Print Date: April 8, 2016

Figure 7 Comparison of Requested Pipeline Corridor to Approved Pipeline Corridor.



Legend

- Approved Pipeline Corridor
- Requested Amendments to Pipeline Corridor
- VAFFC Existing Fuel Storage and Handling Facility



Scale: 1:50,000

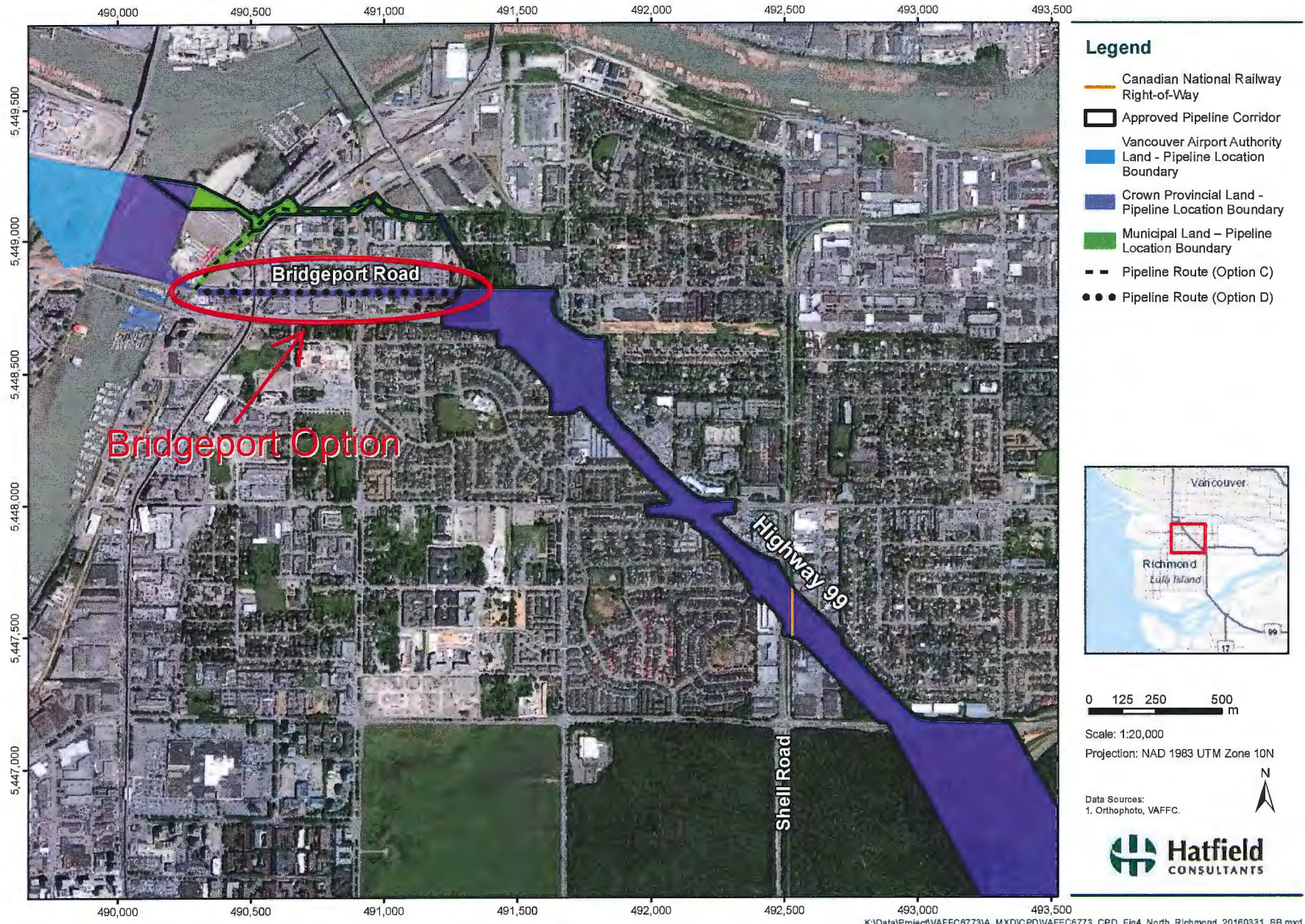
Projection: NAD 1983 UTM Zone 10N

- Data Sources:
1. Orthophoto, VAFFC.
 2. Background imagery, Esri Service Layer.





Attachment 4 Bridgeport Road Option



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