PORT of vancouver | Vancouver Fraser Port Authority

PROJECT AND ENVIRONMENTAL REVIEW REPORT

PER NO. 20-007
FRASER SURREY PORT LANDS – TRANSPORTATION IMPROVEMENTS

Prepared for: Director, Project and Environmental Review

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PORT of vancouver Vancouver Fraser Port Authority	**VANCOUVER FRASER PORT AUTHORITY PROJECT AND ENVIRONMENTAL REVIEW REPORT**
PER No.:	**20-007**
Tenant:	**Vancouver Fraser Port Authority**
Project:	**Fraser Surrey Port Lands – Transportation Improvements**
Project Location	**Timberland Road - North and South, Surrey BC (DP World - Fraser Surrey)**
Vancouver Fraser Port Authority SID No.:	**SUR 360, 361 and 364**
Land Use Designation:	**Port Terminal**
Applicant(s):	**Vancouver Fraser Port Authority**
Applicant Address:	**999 Canada Place, Vancouver, BC V6C 3T4**
Category of Review:	**C**
Recommendation:	**That PER No. 20-007 for Fraser Surrey Port Lands – Transportation Improvements be approved.**

1 INTRODUCTION

The Vancouver Fraser Port Authority (the "Port Authority"), a federal port authority, manages lands under the purview of the *Canada Marine Act*, which imparts responsibilities for environmental protection. The Port Authority accordingly conducts project and environmental reviews of works and activities undertaken on these lands to ensure that the works and activities will not likely cause significant adverse environmental effects. This project and environmental review report documents the Port Authority's project and environmental review of PER No. 20-007: Fraser Surrey Port Lands – Transportation Improvements (the "Project") proposed by the Vancouver Fraser Port Authority (the "Applicant").

This project and environmental review was carried out to address the Port Authority's responsibilities under the *Canada Marine Act*, and to meet the requirements of the *Impact Assessment Act*, as applicable. The proposed Project is not a "designated project" under the *Impact Assessment Act* and an impact assessment as described in the *Impact Assessment Act* is not required. However, Port Authority authorization is required for the proposed Project to proceed and in such circumstances, where applicable, Section 82 of the *Impact Assessment Act* requires federal authorities to assure themselves that projects will not likely cause significant adverse environmental effects. The project and environmental review process is designed to provide that assurance. In addition, the Port Authority considers other interests, impacts and mitigations through the project and environmental review.

The project and environmental review considered the application along with supporting studies, assessments and consultations carried out or commissioned by the Applicant, as well as other information provided by the Applicant. In addition, this project and environmental review considered other information available to the Port Authority and other consultation carried out by the Port Authority. A full list of information sources germane to the review is provided in Appendix B.

This project and environmental review report is NOT a project authorization. This project and environmental review report summarizes the review outcome, and provides the basis for approval or denial. Should the project be approved, the report is accompanied by a project permit (the "Permit") and the conclusions described in this report require compliance with the conditions in the Permit.

2 PROJECT DESCRIPTION

The Applicant proposes to conduct road and rail improvements in the Fraser Surrey Port Lands (FSPL) area to alleviate traffic congestion and rail crossing delays, and improve overall traffic circulation. The Project site is located within the FSPL, which is an industrial area with 24/7 operations situated alongside Highway 17 at Tannery Road, bordering the municipalities of Surrey and Delta. The current road corridor is a dead-end industrial road that has multiple rail crossings, and services multiple tenants and a limited number of private property owners between Tannery Road in the north, and the Gunderson Slough area in the south.

The Project proposes to address current port traffic issues experienced along the one existing major thoroughfare within the FSPL area (the Robson Road -Timberland Road North Corridor), while anticipating future land use changes, by mitigating the impacts of growing trade on local communities.

The Project proposes to achieve this goal through various changes and upgrades to existing rail and road infrastructure in the area, such as road realignment and extension of existing roads that would result in the introduction of Timberland Road South as the main access road within FSPL.

There are three main components to the Project and these are detailed further in Section 2.1 Proposed Works. In brief, the Project proposes a number of at-grade railway crossing upgrades and installations at four VFPA-owned crossings and two crossings owned by Southern Railway of British Columbia, the upgrade and extension of Timberland Road South, upgrades to the Timberland Wye intersection, pavement rehabilitation and markings along Robson Road, as well as utilities and drainage improvements throughout the Project area.

2.1 Proposed Works

1. At-grade railway crossing upgrades and installation including:
    - Upgrades to six at-grade rail crossings (five of which will receive signal design upgrades and one receiving modifications to improve sightlines)
    - Installation of one new at-grade crossing across the lead tracks to the IDC Yard
    - Removal of two at-grade crossings along the spur line on Timberland Road North
2. Rehabilitation and extension of Timberland Road South, upgrades to the Timberland Wye including
    - Realignment of the Robson Road –Timberland Road corridor to use the Timberland Road South route
    - Construction of an extension to Timberland Road South (approximately 840 meters long, 15,600 square meters). Works include installation of median barriers, concrete curbing, fencing, gates, crash attenuators, driveways, signage, pavement markings and ditch infilling
    - Re-grading an area previously occupied by Canadian Pacific Railway to facilitate drainage (approximately 5,230 square meters)
    - Rehabilitation of the pavement along the existing Timberland Road South, Timberland Road North, and Timberland Wye Intersection, including localized road widening (approximately 660 meters long, 8,450 square meters)
    - Partially infilling the ditch west of the existing Timberland Road South to create a new westbound lane (approximately 580 meters long, 3,050 square meters)
    - Partially infilling the ditch at Timberland Road North to accommodate road widening (approximately 30 square meters)
    - Construction of a cul-de-sac (mill and overlay), gate, and driveway at Timberland Road North to disconnect general traffic and restrict public access from the remaining southern stretch of Timberland Road North (approximately 1,720 square meters)
    - Installation of new utilities, including stormwater infrastructure along the new Timberland Road South
    - Upgrades to the Timberland Wye intersection into a four-leg intersection with new traffic signals to improve safety and optimize traffic flow for new traffic patterns resulting from the Robson Road-Timberland Road corridor realignment

- Construction of a dedicated truck auxiliary lane (approximately 300 meters long) and installation of two new Vehicle Access Control System (VACS) gates
- Installation of new streetlights along Timberland Road South
- Installation and upgrades to electrical and security infrastructure, including relocation of CCTV cameras

3. Pavement rehabilitation and markings along Robson Road, including:
   - Rehabilitation of the pavement (profile mill and overlay) along Robson Road, including new pavement markings (approximately 1,320 m long, 17,460 square meters)
   - Installation of median barriers
   - Installation of one new storm catch basin
   - Placement of new pavement at Gunderson Road to widen the road (approximately 65 square meters)
   - Regrading of the gravel shoulders along Robson Road to promote drainage (approximately 2,740 square meters)
   - Installation of new streetlights along Robson Road
   - Installation of a fibre optic connection to existing BC Ministry of Transportation and Infrastructure equipment
   - Utilities and drainage improvements.

2.2 Proposed Construction Methods

Project construction is anticipated to include standard methods for road and at-grade rail crossings, such as removal of existing topsoil and vegetation, saw-cutting existing asphalt to accommodate roadway widening, excavation down to required grade for pipe installation and street lighting foundations.
The proposed works would utilize equipment such as excavators, pavers, compacters, crane trucks and other general construction equipment and tools.

The anticipated start is Q2 2022, with construction occurring in three phases and completion expected by Q4 2023.

Works will typically be carried out during the Port Authority's standard construction hours of 7:00 a.m. to 8:00 p.m., Monday to Saturday, excluding Sundays and public holidays. However, on occasion, specific construction and physical activities related to the Project would be required outside regular Port Authority working hours as they would have significant impact to local traffic if conducted during the day when traffic volumes are higher. These include works such as at-grade rail crossing construction and installation of intersection signals and lights, where works may be required Monday to Saturday between 8:00 p.m. and 7:00 a.m. If these activities are required, the Applicant must notify the Port Authority and affected tenants and stakeholders no less than 10 business days ahead of these activities commencing.

3 TECHNICAL REVIEW

The Port Authority has reviewed the application and has the following project considerations.

3.1 Planning

The Port Authority has reviewed the application and has the following land use comments.

The Vancouver Fraser Port Authority's Land Use Plan has a specific policy that applies to transportation infrastructure. This policy requires new infrastructure to comply with all transportation regulations and standards applicable to the Port Authority, while also considering the applicable policies, guidelines, and designs of the connecting road and rail authorities. New and upgraded transportation infrastructure within the Port Authority's jurisdiction should generally meet the following objectives:

- Support the goals, objectives, and policy directions contained within the Vancouver Fraser Port Authority Land Use Plan

- Encourage the orderly and efficient development of port lands over the long term in support of Canada's trade priorities
- Ensure the long-term ability to efficiently manage port-related road and rail traffic.

Given that the Project consists of road and rail improvements, and the applicability of the transportation infrastructure policy, the proposal meets the Port Authority planning requirements, based on the primary considerations of the land use designation and current land use policies.

3.1.1 Land Use Designation

As transportation infrastructure is permitted in all land use designation areas, the proposed road and rail improvements conform to the "Port Terminal" land use designation in the Vancouver Fraser Port Authority's Land Use Plan.

3.2 Engineering

The proposed Project intends to conduct a number of road and rail improvements in the FSPL area. The Port Authority has reviewed the PER application and the scope of the review included the design related components of the Project. The proposed Project has been designed by professional engineers licensed to practice in the Province of British Columbia and has been designed to applicable engineering standards.

The Port Authority requires the Applicant to ensure the following commitments are met:

- For existing underground and overhead services and utilities in the vicinity of the proposed works, locate all existing infrastructure, provide an Infrastructure Surveyed Data Drawing, exercise caution to avoid damaging infrastructure, remove any abandoned utilities and show final arrangement of services and utilities on the Record Drawings
- Submit Issued for Construction and Record Drawings

These are reflected in conditions No. 5, 16, 29 and 46 in the Permit.

The proposal meets the Port Authority engineering requirements, subject to adherence to the listed project and environmental conditions in the Permit.

3.3 Transportation

The proposed Project intends to conduct a number of transportation network improvements to road and rail infrastructure within the FSPL.

The main through road to/from Highway 17 to/from the Fraser Surrey Port Lands will be transitioned from Timberland Road North to Timberland Road South. Timberland Road South will then be realigned and associated works related to this realignment also undertaken. With the introduction of Timberland Road South as the main access road within FSPL and upgrades to the Timberland Wye intersection, road users will be able to avoid the conflicts with at-grade rail crossings that currently cause traffic issues in the area.

Construction of a cul-de-sac, gate, and driveway at terminus of Timberland Road North is also proposed in order to disconnect general traffic and restrict public access from the remaining southern stretch of Timberland Road North. Closing Timberland Road North at the cul-de-sac will allow the DPW Fraser Surrey Terminal to consolidate, and remove the need for the terminal internal traffic to cross Timberland Road North.

A dedicated truck auxiliary lane is proposed to change inbound container truck movements. Through this and the implementation of two Vehicle Access Control System (VACS) gates and an electronic queue management system, obstructions to other road users are anticipated to be eliminated. This will manage inbound truck traffic into DPW Fraser Surrey Terminal and streamline the traffic flow lane.

During construction, the Project's phasing will need to minimize impacts to existing tenant operations which may occur. As a contractor has not yet been selected, the Construction Traffic Management Plan submitted as part of the permit application is a draft document and has not been finalized. The Project phases developed are designed to minimize impacts to the traffic flow along the existing road corridor, maintaining continuous access for tenants and private residences (a few exist at Gunderson Slough). The phasing will also uphold security measures to accommodate ongoing tenant operations, including rail operations in the area.

The Port Authority has reviewed the application and requires the Applicant to submit a construction parking and traffic management plan. This is reflected in condition No. 20 in the Permit.

The proposal meets the Port Authority Transportation requirements, subject to adherence to the listed project and environmental conditions in the Permit.

3.4 Environment

The environmental review of the proposed Project is summarized in Section 7, Environmental Effects Review.

4 STAKEHOLDER CONSULTATION

The proposed Project was assessed to have potential impacts to stakeholders and the local community and consultation activities were determined to be required. The following sections describe the stakeholder and public engagement activities undertaken by the Applicant and the Port Authority as part of the project and environmental review.

4.1 Municipal Consultation

The proposed Project was assessed by the Port Authority to have potential impacts to municipal interests. A referral letter was sent to the following municipalities on June 4, 2021 notifying them of the proposed Project:

- City of Delta
- City of Surrey

The City of Delta responded with a request to meet and discuss the proposed Project. A meeting was held on July 5, 2021 to discuss a number of items with the municipality. The majority of the municipality's queries related to broader planning considerations of the Fraser Surrey Port Lands area in general, and not specific Project-related concerns. Additionally, the City of Delta had concerns related to potential compounding impacts of adjacent projects on emergency vehicle access, with specific reference made to PER No.17-108, which was a permit application for a new potash facility in the area. That application was withdrawn in late 2021.

The table below summarizes the comments received from the City of Delta and how they were considered as part of the project and environmental review. No comments were received from the City of Surrey.

Issue	Mitigations and Permit Conditions	Rationale
Impact of construction activities and the Project on emergency access. Additionally, concerns around more specific impacts to emergency access once project components of PER No. 17-108 are constructed ("Alaska Way Overpass").	No Project-specific conditions or mitigations required.	The City of Delta agreed the Project will improve emergency vehicle movements once on the Project site. The concerns regarding long-term emergency access to the area are related to a separate application that was withdrawn in 2021 and are therefore not relevant to this project. The Port Authority confirmed to the City of Delta that any future transportation infrastructure impacting emergency access would be

Issue	Mitigations and Permit Conditions	Rationale
		discussed with the City in future planning engagements.
Role of municipalities in the project and environmental review process.	None required.	The Port Authority confirmed with the City that during the project and environmental review of applications, formal letters are sent to those municipalities that are believed to be potentially impacted by the proposed project. These letters form part of a formal process of stakeholder engagement and the comments received during this process, including those received in meetings like the one requested by Delta, are considered prior to the Port Authority rendering a permit decision. Delta indicated a desire for other opportunities for engagement on projects and issues of mutual interest, which was noted.

4.2 Federal, Provincial, Regional Agency Consultation

The proposed Project was assessed by the Port Authority to be of potential interest to other regulatory agencies. A referral letter was sent to the following agencies on June 4, 2021 notifying them of the proposed Project:

- Transport Canada
- Metro Vancouver
- British Columbia Ministry of Transportation and Infrastructure

Metro Vancouver responded with comments and questions related to the proposed Project. There has been ongoing separate direct engagement between the Applicant and Metro Vancouver on detailed design aspects of the Project. As a result, a significant portion of the comments provided by Metro Vancouver as part of the project and environmental review engagement were related to those ongoing discussions. Therefore, only the relevant comments received and how they were considered as part of the project and environmental review are summarized in the table below.

Issue	Mitigations and Permit Conditions	Rationale
Provide details of the impact on Metro Vancouver owned water mains and if a construction haul road or access will be provided / improved, as currently the area where Metro Vancouver water mains are located leads to a dead end.	No conditions or mitigations required.	With the preliminary design to date, it is believed that all water mains within the Project area are owned by the Port Authority or the City of Surrey. Generally, the impacts on existing utilities is low, with no significant relocations or access required. In the next detailed design phase, all the utility conflicts will be confirmed, and the project team will work with applicable agencies to resolve any engineering concerns.
Additional details requested on the proposed at-grade rail crossings and their locations as there seems to be extensive work.	A condition has been added, requiring the Applicant to contact Metro Vancouver once detailed design details are	As a result of the federally-regulated rail crossing safety assessments, at-grade rail signal designs are being used to upgrade the existing crossings. The signal design will include Flashing

	available for works within 30 metres of their infrastructure.	Lights, Bells and Gates or Flashing Lights and Bells warning systems with Dual Tone Multi-Frequency. At this time, it is not expected that there will be conflicts between Metro Vancouver water infrastructure with the planned electrical installations of the proposed rail signals. During the detailed design phase, the rail signal designs will be finalized, and the project team will work with applicable agencies to resolve any engineering concerns.

4.3 Adjacent Tenant Consultation

The proposed Project was assessed to have potential impacts to adjacent Port Authority tenant operations. A referral letter was sent to the following Port Authority tenants on June 4, 2021 notifying them of the proposed Project:

- DP World Canada
- Canadian Pacific Railway
- Interfor Corp.
- Fraser Grain Terminal Ltd.
- Seaspan ULC
- Westran Intermodal Ltd.
- Mainland Construction Materials ULC
- 1212857 B.C. Ltd.
- 661010 B.C. Ltd.
- Brad Harris
- Data Audit Industries Inc.
- Donald Heron
- Elizabeth Teerink
- Foundex Explorations Ltd.
- Geco Marine Consulting Ltd.
- Glen Alstad
- Global Rigging & Transport Canada Corp.
- Groundworks Construction Ltd.
- James Vestad
- Leader Fishing Ltd.
- Lighthouse Harbour Ministries
- Robert Rezansoff
- New Westminster Longshoremen's Holding Society
- Nor-Del Custom Marine Ltd.
- R.D.M. Enterprises Ltd.
- Republic Services of British Columbia, Inc.
- Snowfall Fishing Co. Ltd.
- Southernstar Enterprises Inc.
- Stanley William Steer
- Stephen Ferguson
- Variety Marine Services Ltd.

DP World Canada responded with a request to discuss the proposed Project and potential impacts to future plans for their terminal, specifically impacts to the proposal for a new potash facility at their site, which was (at the time)

the subject of a permit application with the Port Authority (PER No. 17-108). The application for PER No. 17-108 was withdrawn in late 2021, therefore the concerns raised are no longer applicable.

No other comments from tenants were received.

As part of the public engagement process, the Applicant held an online public information session on July 8, 2021. Tenants in the area learned about the session through notification letters from the Applicant. Additional tenant feedback received during the Applicant-led information session is captured in **Section 5: Public Engagement**.

4.4 Port Community Liaison Committee – Delta Notification Activities

The proposed Project was assessed to be of potential interest to the Port Community Liaison Committee – Delta (PCLC). The Applicant presented the Project to PCLC on June 11, 2021.

PCLC had comments on the proposed Project. The table below summarizes the comments received and how they were considered as part of the project and environmental review.

Issue	Mitigations and Permit Conditions	Rationale
Involvement of Insurance Corporation of British Columbia (ICBC) in the design	None required.	The Applicant indicated ICBC data will be used as part of the detailed design phase. Other safety considerations include improved communication with the Port Authority's operation center, and installation of CCTV cameras.
Project funding	None required.	The Project is funded by the Government of Canada through the National Trade Corridors Fund and the port authority.
Potential use of sites at Fraser Surrey Port Lands by non-port tenants	None required.	Having a non-port tenant or use on the port authority's lands would not be consistent with the port authority's mandate under the Canada Marine Act The Applicant indicated the Project aims to improve transportation access in the area while considering the intensity of uses, e.g., rail, terminal, roadway.

The Port Authority has reviewed the record of consultation and related documents and is of the view that the Project has adequately addressed the concerns raised during stakeholder consultation.

5 PUBLIC ENGAGEMENT

To meet requirements of section 86 of the *Impact Assessment Act*, the Port Authority posted a description of the Project and notice of public participation to the Canadian Impact Assessment Registry to provide the public 30 calendar days to comment on the Project and provide community knowledge.

The comment period ran from June 16 to July 15, 2021. At the close of the 30 calendar day public comment period, no comments were received.

In addition to posting information about the Project on the Registry website, the Port Authority required the Applicant to conduct public engagement activities with a 25 business day public engagement period and host an

online public information session. The objective of public engagement as part of the permit review, is to solicit feedback from the public on the proposed Project, the completed technical studies, and proposed mitigations during construction and operation.

The Port Authority reviewed the record of public engagement, including all comments received and the Applicant's response to comments, in determining mitigation requirements and in making a decision on the proposed Project.

5.1 Summary of Public Engagement

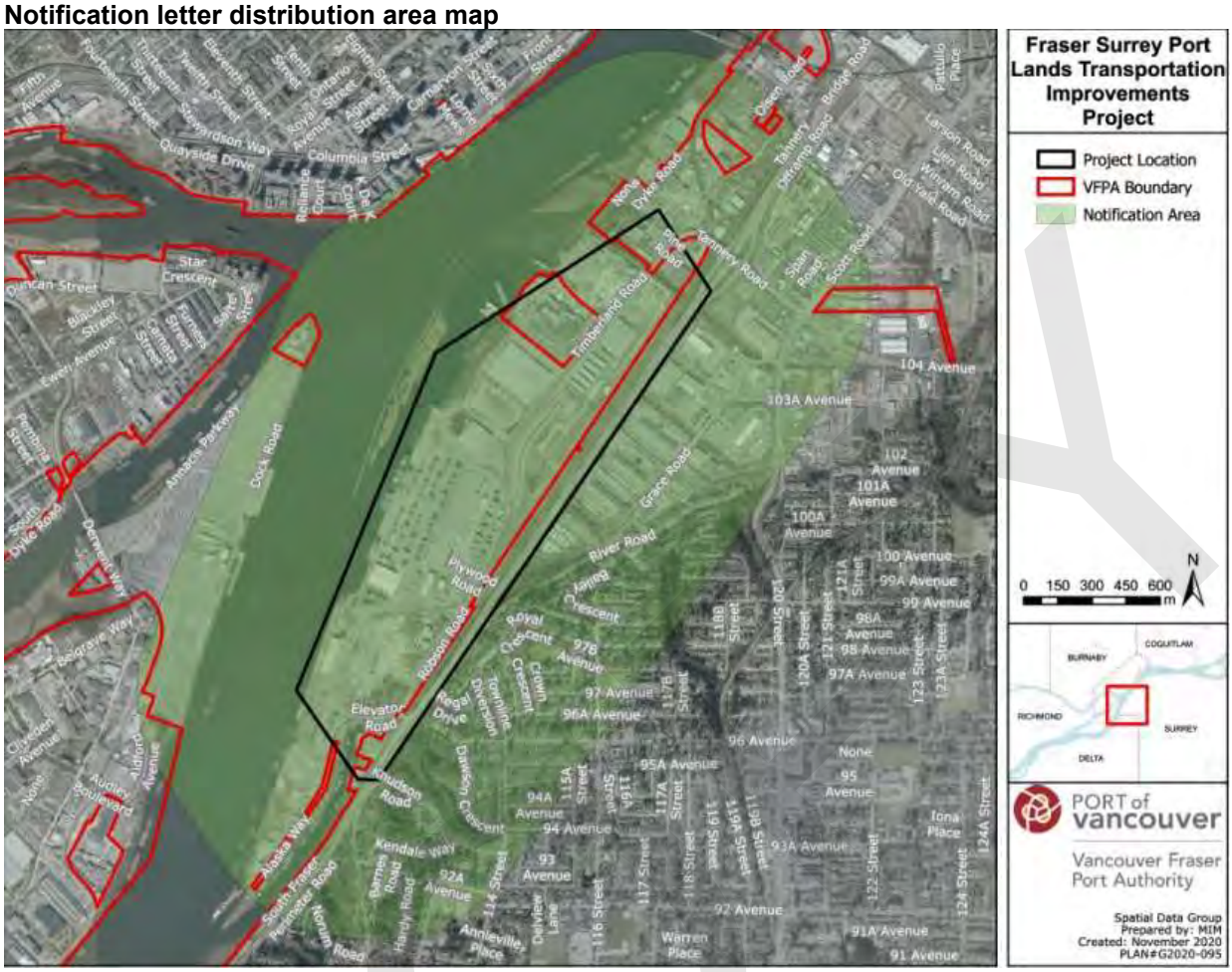
A description of the Project and proposed works, and supporting materials were posted to the Port Authority's website on May 21, 2021 for public review and comment. The website also included details of the Applicant's online public information session, and a link to the Applicant's engagement website for more information.

The Applicant-led public engagement period took place between June 16 and July 21, 2021. The Applicant undertook the following notification and engagement activities:

- Dedicated project webpage with project information (portvancouver.com/frasersurreyupgrades)
- Engagement webpage with engagement opportunities (portvancouver.com/frasersurreyengagement)
- Project fact sheet with key information about the Project
- Dedicated email address (FraserSurrey@portvancouver.com), telephone number (604.665.9004) and mailing address (100 The Pointe, 999 Canada Place, Vancouver) for inquiries and submissions
- Online questionnaire to collect public comments
- Paid ads on Facebook and LinkedIn between June 14 and July 21, 2021, two posts on Facebook and Twitter on June 16, and two posts on LinkedIn on June 16 and July 6, 2021
- Notification letters to property owners, businesses and residents in Surrey, on June 15, 2021
- Two print ads in the Surrey Now-Leader and North Delta Reporter on June 17, 2021
- E-newsletter to 19 email subscribers on July 7, 2021
- Online public information session on July 8, 2021, from 6:00 to 8:00 p.m., through Zoom
- Email notifications on July 15 and 20, 2021, to 72 Port of Vancouver tenants and businesses

The notification letter issued on June 15, 2021 included information about the proposed Project, the public engagement period, and opportunities to provide feedback. The notification area, shown in the following map, included 4,583 recipients within an approximate 700 metre radius of the Project site.

Notification letter distribution area map



The online public information session on July 8, 2021 provided an overview of the Port Authority and the Greater Vancouver Gateway 2030 Strategy, the proposed Project scope, location, rationale, benefits, timeline, design, construction and traffic management, and next steps. The Applicant had Project representatives available to answer questions. Port Authority employees from the Project and Environmental Review team also participated.

During the public engagement period, public participation was as follows:

- Seven (7) people attended the public information session
- 43 people completed the online questionnaire
- Two (2) comments via emails from the public, but only one within the scope of the Project

Comments from the public were mainly related to traffic impacts during construction, impacts to properties, impacts of rail-related activities, railway and crossing safety, public access, the public engagement process, and environmental impacts. Community knowledge was provided about the shifts for those who work and/or access the area, their priorities, modes and routes of travel, as well as considerations for the final design and the construction and traffic management plan, rail crossings and conditions for whistle cessation.

The Applicant provided a detailed summary of the public engagement process and all comments received in an engagement summary and consideration report, which included the Applicant's formal responses to public comments received, by theme. The Port Authority has reviewed the document and found it to be acceptable. This report was posted on the Port Authority and the Applicant's websites on August 20, 2021.

The table below summarizes issues raised by the public and Port of Vancouver tenants and businesses who participated in the public engagement process, and how they were considered by the Port Authority as part of the project and environmental review.

Issue	Mitigations and Permit Conditions	Rationale
Traffic impacts during construction, including anticipated reduction in traffic levels	Condition No. 20 of the Permit requires the Applicant to submit a construction parking and traffic management plan. Condition No. 18 of the Permit requires the Applicant to draft a construction communication plan that outlines how the Applicant will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The Applicant shall carry out the Project in accordance with both plans. Conditions No. 17 and 19 require the Applicant to provide a draft construction notification, and construction sign, and complete distribution and installation 10 business days before commencing construction or any physical activity.	The Applicant indicated its commitment to providing early and frequent communication about the construction parking and traffic management plan to those impacted, including mitigation measures, and potential temporary traffic changes during construction. Dynamic messaging signs will also be installed. Regarding anticipated reduction in traffic levels, the Applicant's traffic analysis memo recommends operational road network enhancements for increased travel time reliability.
Impacts to properties	Condition No. 18 of the Permit requires the Applicant to draft a construction communication plan that outlines how they will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The Applicant shall carry out the Project in accordance with the plan. Conditions No. 17 and 19 require the Applicant to provide a draft construction notification, and construction sign, and complete distribution and installation 10 business days before commencing construction or any physical activity.	The Applicant indicated it will work with affected tenants to understand property requirements, proactively share information, and contact appropriate staff at the properties to ensure employees and clients are informed about potential property impacts. The Applicant noted once the Project progresses to the detailed design phase, more information about specific impacts and mitigations will be shared via the Project e-newsletter.
Impacts of rail-related activities	Condition No. 18 of the Permit requires the Applicant to draft a construction communication plan that outlines how the Applicant will engage and communicate with the public from the date of permit issuance to the completion of construction. This plan would indicate how the Applicant would share information about impacts of rail-related activities, and about the construction parking and traffic management plan.	As the Project was in the preliminary design phase, and the construction parking and traffic management plan had not been finalized, the Applicant indicated its commitment to working directly with impacted businesses to ensure mitigation measures are implemented, and to sharing the construction parking and traffic management plan once finalized.

Issue	Mitigations and Permit Conditions	Rationale
Railway and crossing safety	None required.	The Applicant indicated safety improvements are a key priority of the Project, and they will be working directly with the Southern Railway of British Columbia as a key stakeholder to upgrade the rail crossings to meet federal standards. The Project includes installing and upgrading electrical and security infrastructure, e.g., CCTV cameras, street lighting.
VACS gates locations and public access	None required.	The Applicant highlighted new VACS gates will be installed on Timberland Road South, south east of the Timberland Wye intersection. The Applicant confirmed that existing public access will be maintained, there will be a through lane for those travelling into the FSPL that will not require a port pass, and Alaska Road will remain a public road.
Opportunities to provide feedback on the project	Condition No. 18 of the Permit requires the Applicant to draft a construction communication plan that outlines how they will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The Applicant shall carry out the Project in accordance with this plan.	The Port Authority is satisfied with the Applicant's public engagement approach during the application review. The Applicant indicated its commitment to continue proactive engagement and information sharing with those potentially impacted by the Project.
Environmental impacts	Condition No. 34 requires the Applicant to carry out the Project in accordance with the Construction Environmental Management Plan, and any subsequent updates.	As part of the PER process, a Construction Environmental Management Plan was developed. The plan describes how the site will be managed during construction such that the work does not result in adverse impacts to the environment and other factors, and includes potential project effects and mitigation measures.

The Port Authority has reviewed the record of public engagement, and provided that the mitigation measures and conditions outlined in the table above are included in the Permit, is of the view that the Project has adequately addressed the concerns raised during public engagement.

The proposed Project was assessed by the Port Authority to have potential impacts to community interests in the surrounding area during construction and upon completion. These include potential impacts such as noise, traffic, and dust.

As a result, the Applicant is required to send a construction notification to adjacent residents, tenants and businesses in Surrey, as shown in the previous notification distribution area map. The notification area is within approximately 700 metres of the Project site. The construction notification shall be distributed by the Applicant at least 10 business days prior to the start of the works. The construction notification will also be posted on the Port Authority's and the Applicant's websites.

These requirements are set out in condition Nos. 17 and 19 in the project permit.

In addition, as part of the Applicant's funding agreement with Transport Canada, they are required to install a Federal Funding Announcement sign 30 days in advance of works commencing. This would serve the additional purpose of notifying tenants and any traffic users of the transportation corridor of the upcoming works.

6 INDIGENOUS CONSULTATION

The Port Authority reviewed the proposed works and determined that the Project may have the potential to adversely impact Aboriginal or Treaty rights.

Best efforts were made to consult with the following Indigenous groups on the proposed Project:

- Cowichan Tribes
- Halalt First Nation
- Katzie First Nation
- Kwantlen First Nation
- Kwikwetlem First Nation
- Lyackson First Nation
- Musqueam Indian Band
- Penelakut Tribe
- Semiahmoo First Nation
- S'ólhTéméxw Stewardship Alliance, through the People of the River Referrals Office (PRRO)
- Stz'uminus First Nation
- Tsawwassen First Nation
- Tsleil-Waututh Nation
- Ts'uubaa-asatx First Nation (formerly Lake Cowichan First Nation

The following consultation activities were conducted:

- Project introduction letters sent
- Project meetings with Indigenous groups who requested meetings
- Participation funding agreements provided to Indigenous groups
- Draft PER application provided to Indigenous groups for review and comment
- Referral package provided for review including consultation letter and application package with appendices
- Regular project updates provided via email
- Invitation to Indigenous groups to participation in fieldwork for the geotechnical investigations and ecological study
- Response table provided to Indigenous groups who provided comments on the referral package

The table below summarize comments received by the Port Authority from Indigenous groups and how they were considered as part of the project and environmental review.

Issue	Mitigations and Permit Conditions	Rationale
Impacts of project on archaeological resources	The following permit conditions are included to address this concern: The Applicant shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to intrude into soils below	The Applicant will be required to follow the recommendations made in the Archaeological Overview Assessment (AOA) completed for the Project. Permit conditions will include archaeological monitoring for any ground disturbance in Zones 2 to 6, opportunity for interested Indigenous groups to monitor any ground

Issue	Mitigations and Permit Conditions	Rationale
	Zone 1 (i.e. ground disturbance into Zones 2 through Zone 6 as identified in the AOA). The Applicant shall provide opportunities for interested Indigenous groups to monitor and be present on the Project site at all times during ground disturbing activities with the potential to intrude into native soils below Zone 1 (i.e. ground disturbance into Zones 2 through Zone 6 as identified in the AOA). The Applicant shall submit an Archaeological Chance Find Procedure for the Project site to the Port Authority's satisfaction and/or confirm the adoption of the Vancouver Fraser Port Authority's Archaeological Chance Find Procedure. The Applicant shall carry out the Project in accordance with this procedure, and any subsequent updates made to the Port Authority's satisfaction.	disturbing work in Zones 2 to 6 and an Archaeological Chance Find Procedure must be in place prior to the start of Project works.
Disturbance to nesting birds by project construction	The following permit condition is included to address this concern: If there is potential to affect birds and/or their active nests and eggs, the Applicant shall conduct nest surveys. For any nests identified in surveys, a QEP shall confirm that the nest is not occupied by a species protected at that time of year under applicable legislation. To reduce the risk of Project-related harm, the Applicant should avoid certain physical activities during the general bird-breeding season, which falls between April 1 and July 31, or outside of this time span if occupied nests are present.	Nesting bird surveys will be completed prior to the start of Project work. Should any active nest be identified the appropriate nest management plan will be prepared by a Qualified Environmental Professional (QEP).
Request to avoid any in-stream works	None.	A Fisheries and Oceans Canada (DFO) *Fisheries Act* Authorization was not required for this Project. Works in any water body will be conducted when the water body is dry.

Issue	Mitigations and Permit Conditions	Rationale
Inclusion of Indigenous monitors for any in-stream/in-water works	The following permit condition is included to address this concern: The Applicant shall provide opportunities for interested Indigenous groups to monitor and be present on the Project site at all times during any in-stream/in-water works, should in-stream/in-water works be required for the Project.	Indigenous monitors will be required if any works in a water body cannot be conducted in the dry.
		20-007

The Port Authority has made a meaningful effort to consult with all potentially affected Indigenous groups. Based on the record of consultation, the Port Authority is of the view that the duty to consult has been met.

7 ENVIRONMENTAL EFFECTS REVIEW

To fulfill its responsibilities under the *Canada Marine Act* and the *Impact Assessment Act*, the Port Authority must make a determination on the potential environmental effects of a proposed project on Port Authority managed lands and waters prior to authorizing those works to proceed. To make that determination, the Port Authority considers the residual adverse effects of the Project, that is, the effects after mitigation measures have been taken into account.

This section of the project and environmental review report summarizes the environmental effects review conducted for the Project, and provides the environmental effects decision. The environmental review also considered the information provided in the previous sections of this report.

7.1 Scope of Environmental Review

The environmental review includes consideration of the potential environmental effects of the proposed Project, taking into account mitigation measures to avoid or reduce those effects. This review considered the Project components and physical activities described in Section 2.

The temporal scope of the review includes Project construction and operation.

The environmental review considered potential adverse environmental and social effects of the Project on 14 environmental components (e.g., species with special status, aquatic species and their habitat, recreational interests, etc.) and from accidents and malfunctions. These environmental components are aspects of the biophysical and socio-economic environment considered to have ecological, economic, social, cultural, archaeological, or historical importance.

Section 7.2 summarizes the results of the environmental effects review and proposed mitigations.

7.2 Environmental Effects and Mitigation Summary

The following table summarizes the potential environmental effects the Project could have on the identified environmental components.

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Air quality	■	☐	There is potential for adverse effects on air quality from equipment operation during construction activities. The Project is located entirely within an industrial area with existing truck and rail traffic. Best management practices to reduce potential adverse effects during construction will be implemented as detailed in the construction environmental management plan (CEMP). These include idling reduction where possible and when not in use, keeping equipment and materials clean to reduce dust nuisance, and using a street sweeper on a regular basis if dust accumulates or track out occurs. No new activities will occur during operation. With mitigation in place, residual adverse effects on air quality are expected to be not significant.	☐	■
Lighting	■	☐	The Project is located entirely within an industrial area with 24/7 operations. Project-related light sources are not likely to result in impacts to adjacent communities. New light fixtures will be oriented towards the road center illuminating only intended areas. With mitigation in place, residual effects due to lighting are expected to be not significant.	☐	■
Noise	■	☐	There is potential for adverse noise impacts during construction-related activities. Measures to reduce potential noise impacts are outlined in the CEMP and include maintaining mufflers and equipment in good order and reducing equipment idling as appropriate. No new activities will occur during operation. The dominant noise source in the Project area is traffic on the South Fraser Perimeter Road, located between the Project area and residences. With mitigation in place, residual adverse effects from Project-related noise are expected to be not significant.	☐	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Soils	■	☐	There is potential for adverse effects to soil quality resulting from construction activities. The Project is located entirely within an industrial area that has been subject to prior disturbance and historic fill placement. Mitigation measures to reduce the potential for adverse effects will be implemented as detailed in the CEMP, including appropriate containment, handling, and disposal of potentially contaminated soils and implementing a spill prevention and response plan prior to works. With mitigation in place, residual adverse effects on soils are expected to be not significant.	☐	■
Sediments	■	☐	There is potential for adverse effects to sediment quality resulting from construction activities such as vegetation removal, ditch infilling, discharge of stormwater, and accidental spills. Measures to reduce these impacts are outlined in the CEMP. Mitigation measures include installing silt fencing, visually monitoring for significant turbidity, ensuring surface water leaving the construction area meets standards outlined in the CEMP, and implementing a site specific spill prevention and response plan. With mitigation in place, residual adverse effects on sediments are expected to be not significant.	☐	■
Ground water	■	☐	There is potential for adverse effects to groundwater from spills during construction activities. Mitigation measures outlined in the CEMP will be implemented during construction to reduce adverse effects to groundwater. A spill prevention, containment and clean-up plan will be implemented prior to works. With mitigation in place, residual adverse effects on groundwater quality are expected to be not significant.	☐	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Surface water and water bodies	■	□	There is potential for adverse effects to surface water quality resulting from construction and operational activities. Approximately 3,050 square meters of a ditch west of Timberland Road South and 30 square meters of a ditch at Timberland Road North will be partially infilled. Mitigation measures to reduce the potential for adverse effects will be implemented as detailed in the CEMP. Measures include installing silt fencing to prevent the dispersal of silts and fines into aquatic environments and monitoring water bodies that discharge to the Fraser River. The Project will result in an increase in impervious surfaces and includes stormwater upgrades as outlined in the proposed Stormwater Pollution Prevention Plan. The upgrades will manage site stormwater during operation to match pre and post-development flows. Section 1 extends along Robson Road between Elevator Road and the IDC Yard track crossing. Section 2 extends from the IDC Yard track crossing to the new VAC gates just south of Timberland Road South. Section 3 extends from the new VAC gates, along South Timberland Road to the Timberland Wye junction and the Manson Canal. There are existing catch basins in Section 1, and one new catch basin will be added to the east side of Robson Road. These catch basins are considered to be sufficient to capture surface runoff for this section. The downstream storm sewer will not be upgraded as part of this Project as the Project will not increase the total flow over pre-development conditions in this section. Section 2 and 3 will each receive new catch basins that flow into a new storm sewer, along with additional storage to match pre and post-development flows. A flow control manhole and an oil-water separator (OWS) will be installed before connecting to the existing drainage network in Section 2, and at the outlet of the Section 3 storm sewer before discharge to Manson Canal. During operation, the stormwater collection and treatment systems will manage site stormwater and regular water quality monitoring of stormwater discharge will be conducted. With mitigation in place, residual adverse effects to surface water and water body quality are expected to be not significant.	□	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Species/habitat with special status Assessed under section 79 of the *Species at Risk Act*, as applicable	■	□	There is potential for adverse effects on species with special status during construction activities. The Project is located entirely within an industrial area with minimal vegetation and low habitat values. A desktop review identified three federally-listed plant species historically observed within the Project area: streambank lupine, Vancouver Island beggarticks, and two-edged water-starwort. No individuals of these plant species were identified during a field survey in April 2021. Critical habitat for streambank lupine has been designated in the Project area near Elevator Road, but is not anticipated to be affected by the Project. The Project is located in an area proposed as critical habitat for the federally-listed barn owl. Proposed critical foraging habitat for barn owl includes grassy ditches along existing roads and railway tracks. Approximately 3,300 square meters of riparian vegetation and 1,750 square meters of terrestrial vegetation may be removed due to road expansion, paving, ditch infilling, or affected by clearing and grubbing. Of this area, approximately 2,091 square meters is potential foraging habitat for barn owl. Other federally-listed birds with ranges that potentially overlap the Project site include great blue heron and the common nighthawk. Mitigation measures to reduce the potential for adverse effects will be implemented as detailed in the CEMP. These include conducting pre-construction surveys by an Environmental Monitor for sensitive environmental features related to bird, wildlife and plant species at risk prior to clearing of any vegetation, limiting vegetation clearing to that required for the Project, not removing active or inactive bird nests encountered during the works, and following the tree protection plan. Approximately 2,100 square meters of habitat will be enhanced by establishing grasslands or similar vegetation to address effects on barn owl foraging habitat. With mitigation in place, residual adverse effects on species/habitat with special status are expected to be not significant.	□	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Terrestrial resources (e.g., vegetation, wildlife, etc.)	■	☐	There is potential for adverse effects on terrestrial resources during construction activities. Approximately 3,300 square meters of riparian vegetation and 1,750 square meters of terrestrial vegetation may be removed due to road expansion, paving, ditch infilling, or affected by clearing and grubbing. Two bald eagle nests were observed during a site visit in April 2021. Mitigation measures to reduce the potential for adverse effects will be implemented as detailed in the CEMP. These include cleaning equipment from vegetative debris prior to entering the Project area, conducting pre-construction surveys by an Environmental Monitor prior to clearing vegetation, limiting vegetation clearing to that required for the Project, monitoring for signs of invasive species, revegetating exposed soils to as close to former condition as practical, implementing a tree protection plan, and if the area was previously covered with invasive or non-native plants to revegetate using native plants. A plan for replanting or seeding with native species will be implemented. With mitigation in place, residual adverse effects on terrestrial resources are expected to be not significant.	☐	■
Wetlands	☐	■	The Project is located entirely within an industrial site with no wetlands present. Wetland habitat is not anticipated to be affected by the Project.	☐	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Aquatic resources (e.g., aquatic plants, fish and fish habitat, waterbirds, marine mammals, etc.)	■	☐	Project-related activities have the potential to disturb aquatic species and fish habitat (e.g., through induced turbidity and other changes to water quality, displacement, and accidental spills). Two fish-bearing canals and a roadside ditch overlap the Project area. The two ditches being partially infilled as part of the Project are considered class B by the City of Surrey's stream classification system. Class B streams provide significant food/nutrient value, but are considered unlikely to have fish present at any time of year. Mitigation measures to reduce the potential for adverse effects will be implemented as detailed in the CEMP. Measures include having an Environmental Monitor on site for all environmentally sensitive activities, installing silt fencing along the boundary of the work area to prevent the dispersal of silts and fines into aquatic environments, and re-grading the site to stabilize disturbed areas and exposed soils as soon as possible following construction. During operation, the stormwater collection and treatment systems will manage site stormwater and regular water quality monitoring of stormwater discharge will be conducted. With mitigation in place, residual adverse effects to aquatic resources are expected to be not significant.	☐	■
Health and socio-economic conditions	☐	■	Based on the very low magnitude of residual effects on air and noise, the Project is not expected to cause adverse effects on health or socio-economic conditions of people, including Indigenous people.	☐	■
Archaeological, physical, and cultural heritage resources	■	☐	Ground disturbing activities with the potential to intrude into soils below Zone 1, as identified in the AOA, have the potential to impact unidentified archaeological resources. Mitigation measures include archaeological monitoring by a professional archaeologist for any ground disturbance in Zones 2 to 6, opportunities for interested Indigenous groups to monitor any ground disturbing work in Zones 2 to 6 and having an Archaeological Chance Find Procedure in place prior to the start of Project works. With these mitigation measures in place, residual adverse effects to archaeological, physical and cultural heritage resources are expected to be not significant.	☐	■

Environmental Component	Potential Adverse Effects?		Overview of Potential Adverse Effects, Mitigation Measures, and Residual Adverse Effects	Significant Residual Adverse Effects?	
	Yes	No		Yes	No
Accidents and malfunctions Assessed as required by the *Canada Marine Act*	■	☐	There is potential for adverse effects on surface water, soils, groundwater, and sediments from accidental equipment leaks or spills. Mitigation measures will be in place to reduce potential for adverse, Project-related effects due to accidents by implementing the measures outlined in the CEMP. With mitigation measures in place, the effect of an accident or malfunction on the environment, if it were to occur, is predicted to be not significant.	☐	■

Residual adverse effects (i.e., effects that remain with mitigation in place) were identified for the following environmental components:

- Air quality
- Lighting
- Noise
- Soils
- Sediments
- Groundwater
- Surface water and water bodies
- Species/habitat with special status
- Terrestrial resources
- Aquatic resources
- Archaeological, physical, and cultural heritage resources
- Accidents and malfunctions

Overall, the residual adverse effects of the Project on the environmental components are characterized as:

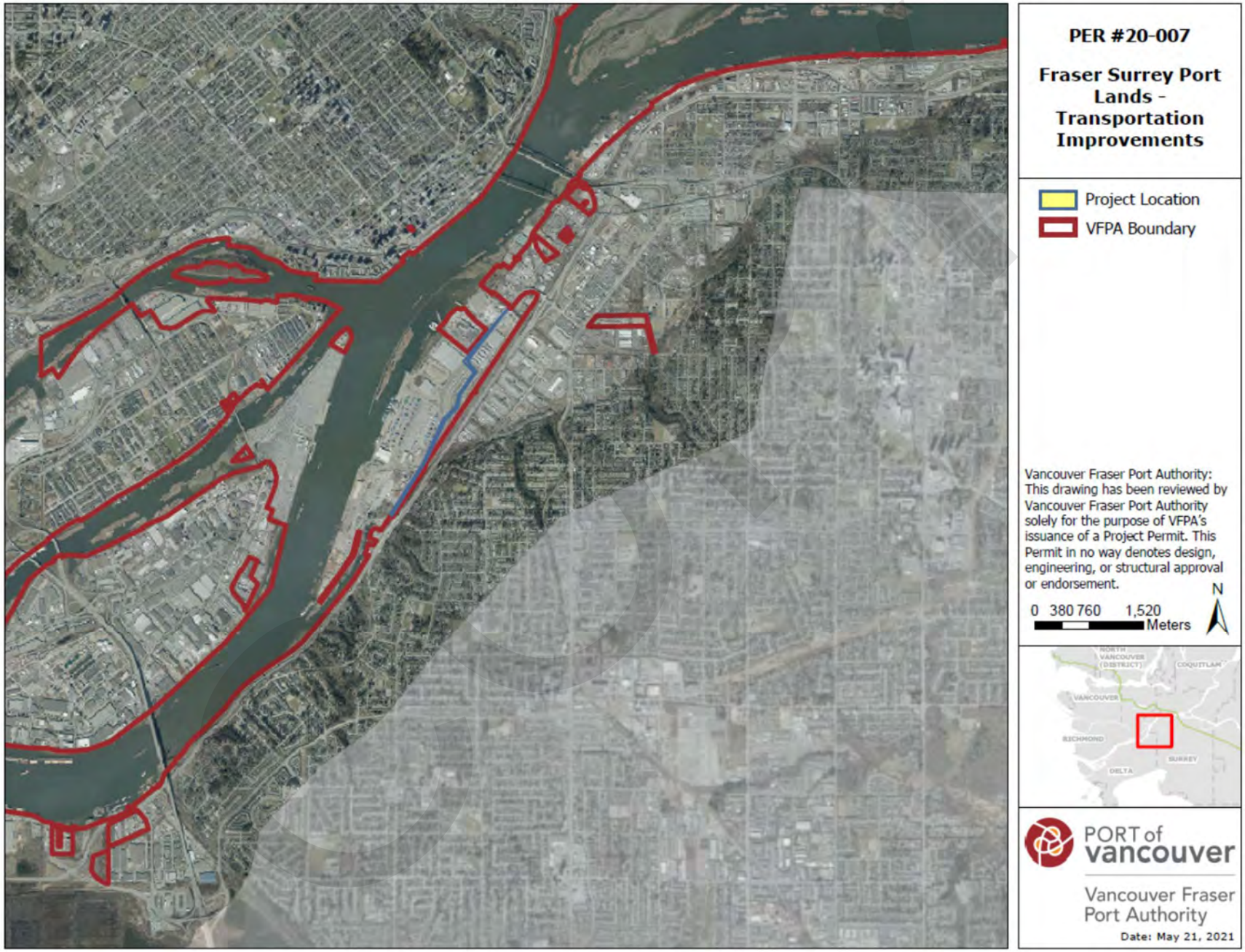
- Low in magnitude due to the location of the Project in an existing industrial area with effects on a small area of terrestrial resources, surface water and water bodies, and species/habitats with special status, the temporary nature of the construction activities, the implementation of a vegetation plan including enhancements to barn owl foraging habitat, and the implementation of a stormwater pollution and prevention plan to manage site runoff
- Local in geographic extent as effects will be limited to the Project site and immediate vicinity
- Short-term in duration because construction will be intermittent and temporary for approximately 34 months and unlikely to result in ongoing effects on air quality, lighting, noise, soils, or surface water once construction is complete
- Continuous in frequency during Project construction
- Reversible because residual adverse effects of the Project would be reversible in the future once the Project is decommissioned

Based on the characterization above, the mitigation measures proposed by the Applicant, and the permit conditions, the residual adverse effects from the Project are predicted to be not significant.

8 CONCLUSION

It is the recommendation of staff that this application be approved subject to conformance with the project and environmental conditions listed in project permit PER No. 20-007.

APPENDIX A
Location Plan


PER #20-007
Fraser Surrey Port Lands - Transportation Improvements
Project Location
VFPA Boundary
Vancouver Fraser Port Authority: This drawing has been reviewed by Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This Permit in no way denotes design, engineering, or structural approval or endorsement.
N
0 380 760 1,520
Meters
NORTH VANCOUVER (DISTRICT)
COQUITLAM
VANCOUVER
RICHMOND
SURREY
DELTA
PORT of vancouver
Vancouver Fraser Port Authority
Date: May 21, 2021

Canada

APPENDIX B
List of Information Sources

The port authority has relied on the following sources of information in the project and environmental review of the Project:

- Application form and materials submitted by Applicant between February 22, 2021 and May 30, 2022
- All Project correspondence from February 22, 2021 to May 30, 2022
- All plans and drawings labelled PER No.20-007-A to K

FRASER RIVER

WASHINGTON GROUP

MAINSON CANAL

DOCK ROAD

CATALYST PAPER

MAINLAND SAND AND GRAVEL

360-067-C-005
N TIMBERLAND ROAD

TMS TRANSPORTATION

TIMBERLAND WYE INTERSECTION

S TIMBERLAND ROAD

WESTRAN INTERMODAL

360-067-C-004

IDC YARD

DP WORLD FRASER SURREY

360-067-C-003

ROBSON ROAD

PLYWOOD DR

FRASER GRAIN TERMINAL

360-067-C-002

ELEVATOR ROAD

GUNDERSON ROAD

0+000 0+921 1+000 1+500 2+000 2+500 3+000 3+477 4+000 4+100 4+200 4+214 5+000 5+022 6+000 6+100 6+103 7+000 7+100 7+200 7+217 8+000 8+016 10+000 10+100 10+200 10+300

VFPA CITY OF SURREY

ROADS LEGEND

- ROBSON ROAD / ELEVATOR RD (INCLUDING ROUNDABOUT WITH GUNDERSON RD) MILL & OVERLAY
- ROBSON ROAD / ELEVATOR RD (INCLUDING ROUNDABOUT WITH GUNDERSON RD) MILL & OVERLAY
- IDC YARD NEW PAVEMENT CONSTRUCTION
- WESTRAN ACCESS TO IDC YARD NEW PAVEMENT CONSTRUCTION
- TIMBERLAND RD S. & TIMBERLAND RD N. & WYE INTERSECTION PAVEMENT REHABILITATION
- TIMBERLAND RD S & TIMBERLAND RD N. & WYE INTERSECTION NEW PAVEMENT CONSTRUCTION
- BULB (TIMBERLAND N.) PAVEMENT REHABILITATION
- BULB (TIMBERLAND N.) NEW PAVEMENT CONSTRUCTION
- SURFACE RESTORATION FOR CROSSING REMOVAL (TIMBERLAND N.)
- SURFACE RESTORATION FOR CROSSING REMOVAL (DOCK ROAD)
- CONCRETE APPROACH SLAB
- PROPOSED CONCRETE
- CONCRETE ROADSIDE BARRIER
- PROPOSED TUFF CURB
- FENCING
- PROPOSED CURB
- PROPOSED GUTTER
- ROAD BUFFER
- LICENSE/EASEMENT LINE
- PROPOSED ROAD CENTERLINE
- FINISHED GRADE OUTLINE (INCLUDING DITCH AND EMBANKMENT GRADING
- EXISTING BOTTOM OF DITCH (FROM SURVEY)
- DRIVEWAY ACCESS

0 30 1:3000 150m

VANCOUVER FRASER PORT AUTHORITY

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OVERALL PLAN
SCALE 1:3000

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00
2	VFPA PROJECT NO. 360-067

NOT FOR CONSTRUCTION
May 13, 2022

wsp

No.	Date	REVISION	Dr'n	Ch'd
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT
B	2021/11/15	ISSUED FOR 60% DESIGN	RC	MJ
C	2022/03/25	ISSUED FOR 90% DESIGN	RC	MJ
D	2022/05/13	ISSUED FOR 99% DESIGN	RC	MJ

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	R.CHANG
DRAWN BY	I.LOZADA
APPROVED	M.JACKSON
DATE	2022/05/13
SCALE	1:3000
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
PROJECT EXTENTS

SIZE	DWG.	SHEET	REV.
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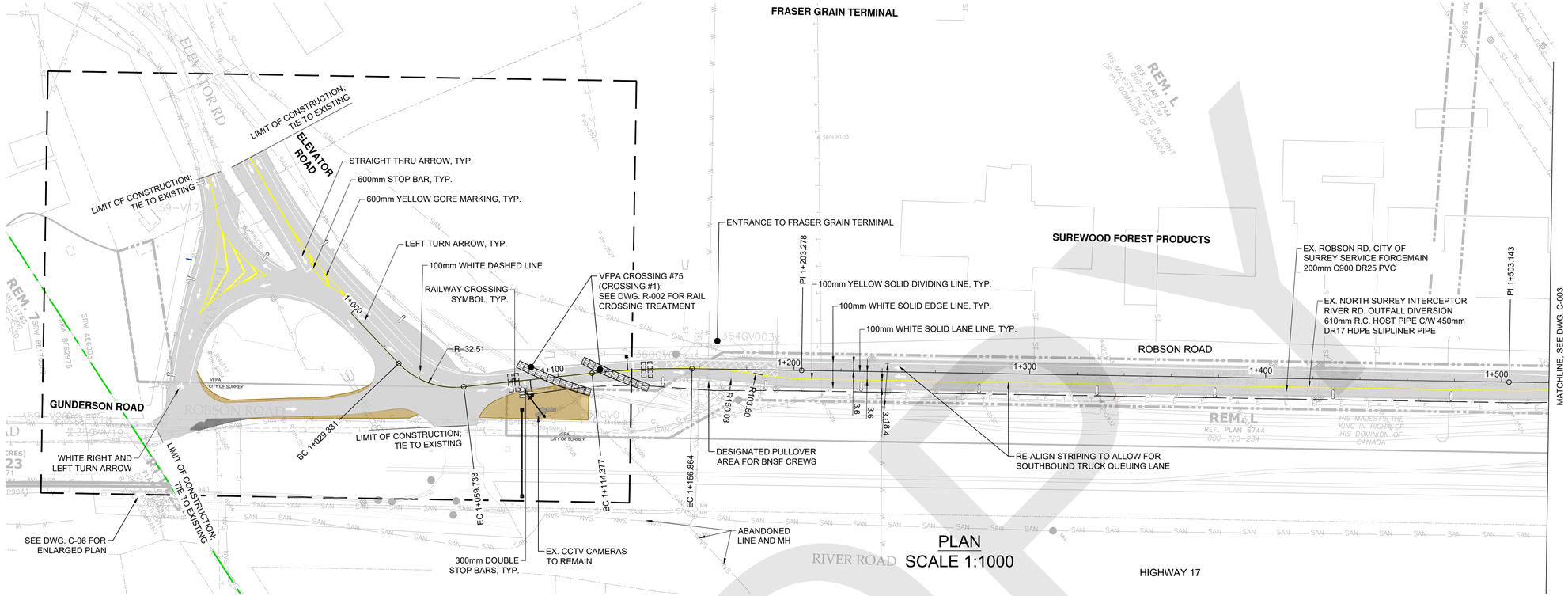

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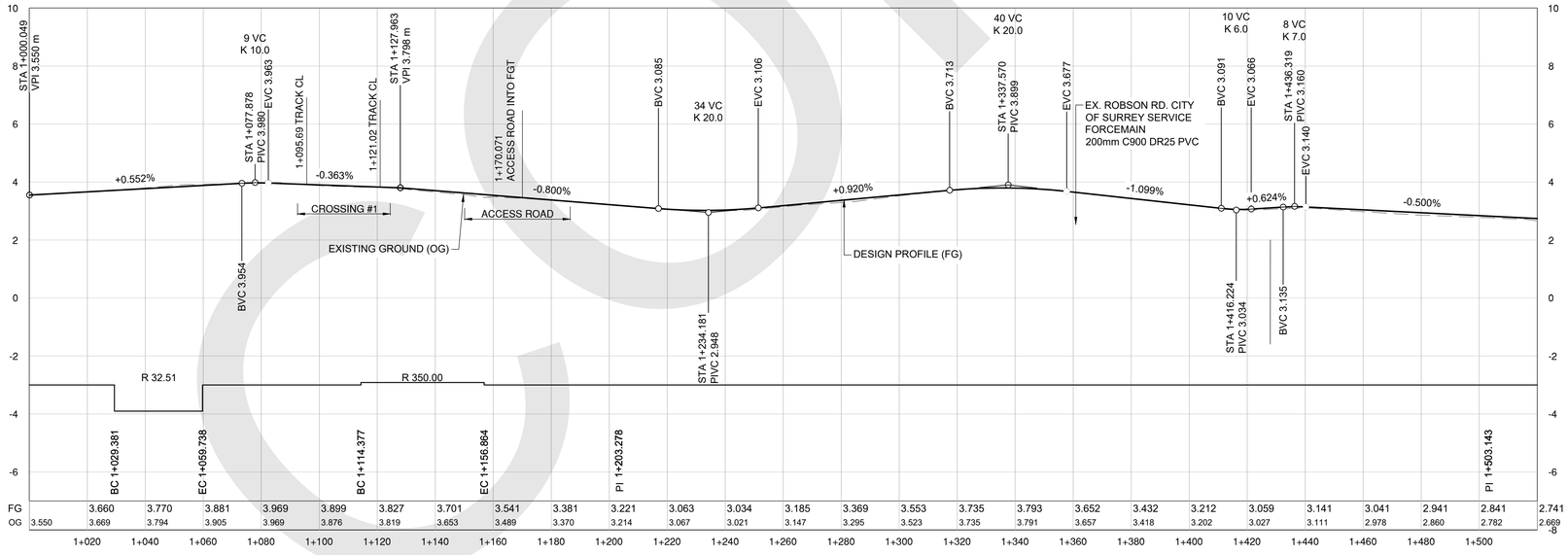

PROFILE
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V 1:100

LEGEND

- MILL & OVERLAY
- NEW PAVEMENT
- PAVEMENT REANIMATION AT TIMBERLAND ROAD SOUTH
- REGRADE EX. GRAVEL
- GRAVEL AREA
- CONCRETE ROADSIDE BARRIER
- FENCING
- CURB & GUTTER
- PROPERTY LINE
- LICENSE/EASEMENT LINE

0 10 1:1000 50m

0 10 H 1:1000 50m
0 1 V 1:100 5m

VANCOUVER FRASER PORT AUTHORITY

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NOT FOR CONSTRUCTION
April 29, 2021

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

No.	Date	REVISION	Dr'n	Ch'd
B	2021/01/07	ISSUED FOR METRO VANCOUVER	KY	VT
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/01/07
SCALE	1:1000
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
PLAN & PROFILE
STA. 1+000.000 TO STA. 1+520.000

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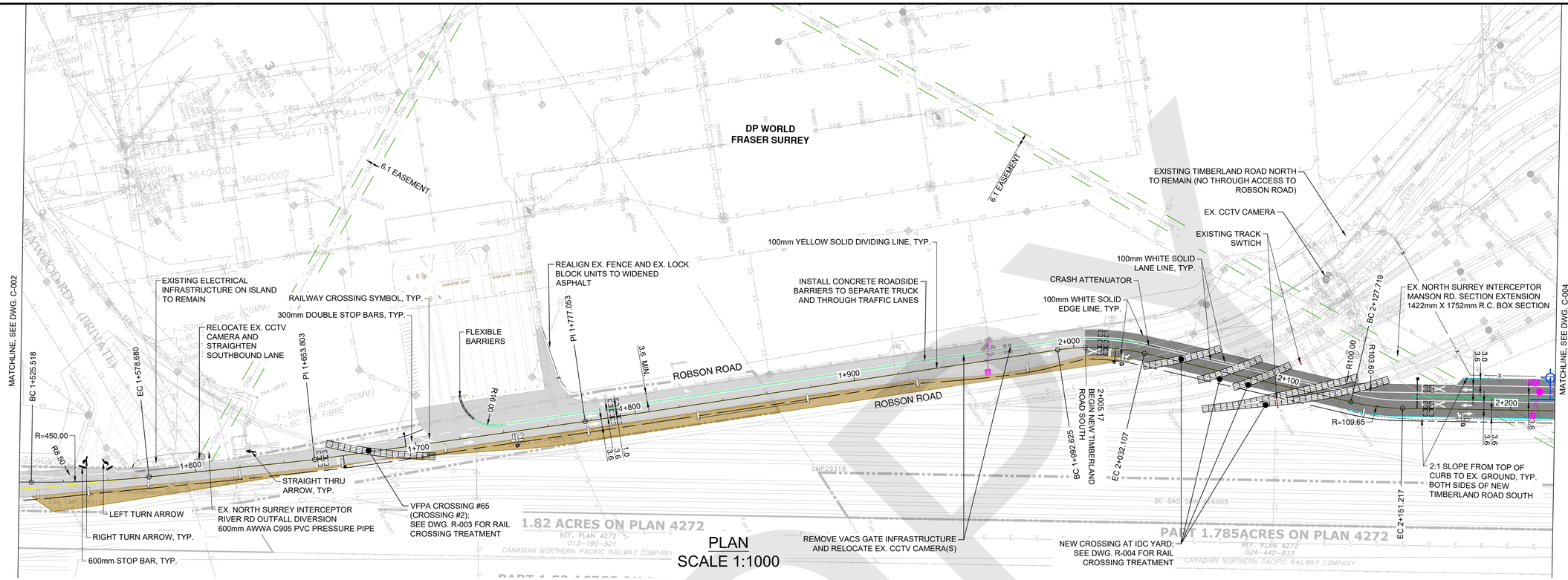

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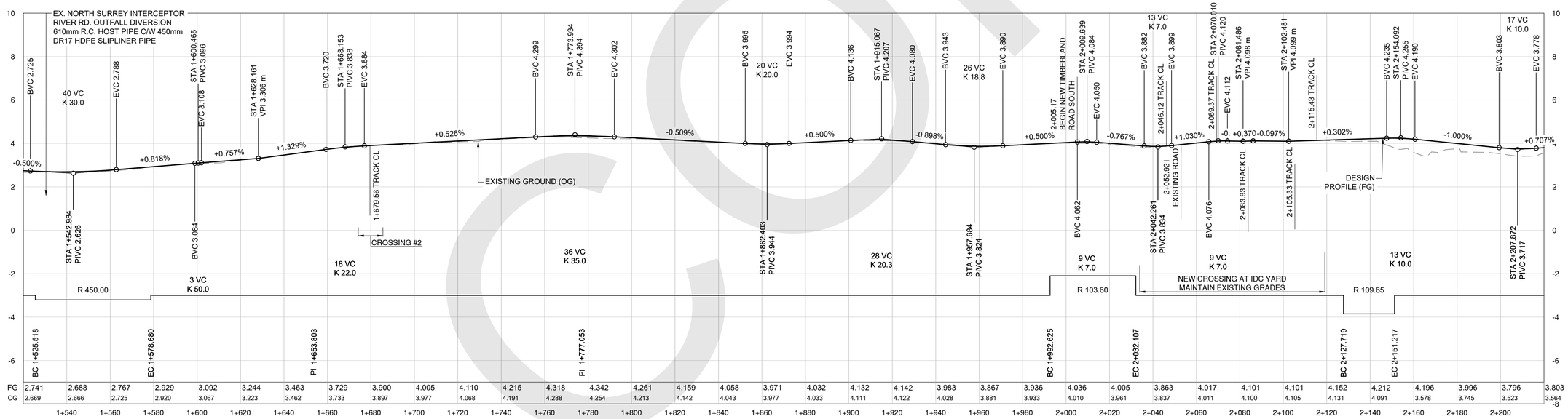

PROFILE
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V 1:100

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0 1 V 1:100 5m

VANCOUVER FRASER PORT AUTHORITY

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PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/04/23
SCALE	1:1000
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
PLAN & PROFILE
STA. 1+520.000 TO STA. 2+220.000

SIZE	DWG.	SHEET	REV.
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MATCHLINE, SEE DWG. C-003

MATCHLINE, SEE DWG. C-005

VFPA CROSSING #59 (CROSSING #3); SEE DWG. R-005 FOR RAIL CROSSING TREATMENT

VFPA CROSSING #57 (CROSSING #4); SEE DWG. R-006 FOR RAIL CROSSING TREATMENT

IDC YARD

VFPA CROSSING #54 (CROSSING #5); SEE DWG. R-007 FOR RAIL CROSSING TREATMENT

600mm YELLOW GORE MARKING, TYP.

100mm WHITE DASHED LINE, TYP.

1.5:1 SLOPE FROM TOP OF CURB TO EX. DITCH, TYP.

30km/hr ADVISORY CURVE 50km/hr

EMERGENCY ACCESS WITH SLIDING GATE

R=43.00

R46.00

BC 2+713.484

CRASH ATTENUATOR

ROLLOVER CURB AND GUTTER AND FLEXIBLE BOLLARDS AT VACS GATE FOR OVERSIZED VEHICLES

600mm STOP BAR, TYP.

MERGE ARROW, TYP.

VAC GATES

EC 2+649.449

EC 2+765.765

OVERHEAD DMS SIGN; SEE DETAIL ON DWG. C-011

WESTRAN ACCESSES

S TIMBERLAND ROAD

SEE DWG. C-07 FOR ENLARGED PLAN

INSTALL CONCRETE ROADSIDE BARRIERS TO SEPARATE TRUCK AND THROUGH TRAFFIC LANES

EX. NORTH SURREY INTERCEPTOR MANSON RD. SECTION EXTENSION 1422mm X 1752mm R.C. BOX SECTION

REGRADE POTENTIAL GRAVEL AREA TO FACILIATE DRAINAGE

SINGLE TRUCK AUX LANE w/ 3.0m SHOULDER

100mm WHITE SOLID EDGE LINE, TYP.

100mm WHITE SOLID LANE LINE, TYP.

100mm WHITE DASHED LINE, TYP.

600mm WHITE GORE MARKING, TYP.

BC 2+518.912

CRASH ATTENUATOR

R210.80

R207.20

R196.40

R170.00

R=115.00

DRIVEWAY AND ACCESS

ROBSON ROAD

2:1 SLOPE FROM BACK OF CURB TO EX. GROUND, TYP. BOTH SIDES ALONG NEW TIMBERLAND ROAD SOUTH

100mm YELLOW SOLID DIVIDING LINE, TYP.

INSTALL CONCRETE ROADSIDE BARRIERS TO SEPARATE TRUCK AND THROUGH TRAFFIC LANES

TRUCK REJECTION LANE

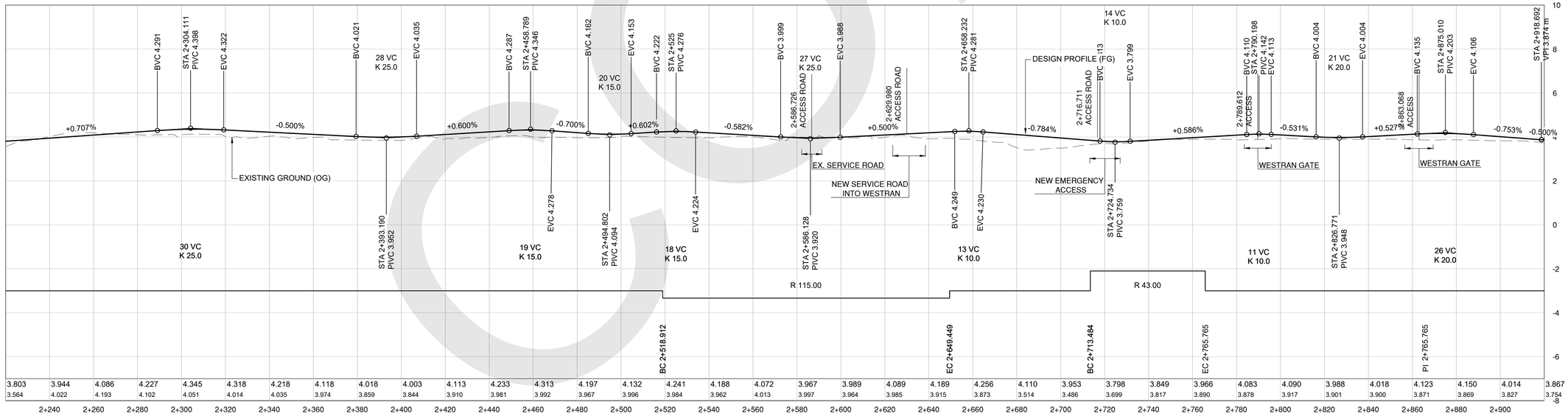
50km/hr 30km/hr ADVISORY CURVE

PLAN
SCALE 1:1000

0 10 1:1000 50m

LEGEND

- MILL & OVERLAY
- NEW PAVEMENT
- PAVEMENT REANIMATION AT TIMBERLAND ROAD SOUTH
- REGRADE EX. GRAVEL
- GRAVEL AREA
- CONCRETE ROADSIDE BARRIER
- FENCING
- CURB & GUTTER
- PROPERTY LINE
- LICENSE/EASEMENT LINE



PROFILE
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V 1:100

0 10 H 1:1000 50m
0 1 V 1:100 5m

VANCOUVER FRASER PORT AUTHORITY

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Ref.No. REFERENCE

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April 29, 2021

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A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/04/23
SCALE	1:1000
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
PLAN & PROFILE
STA. 2+220.000 TO STA. 2+920.000

SIZE D | DWG. C-004 | SHEET 4 of 34 | REV. C

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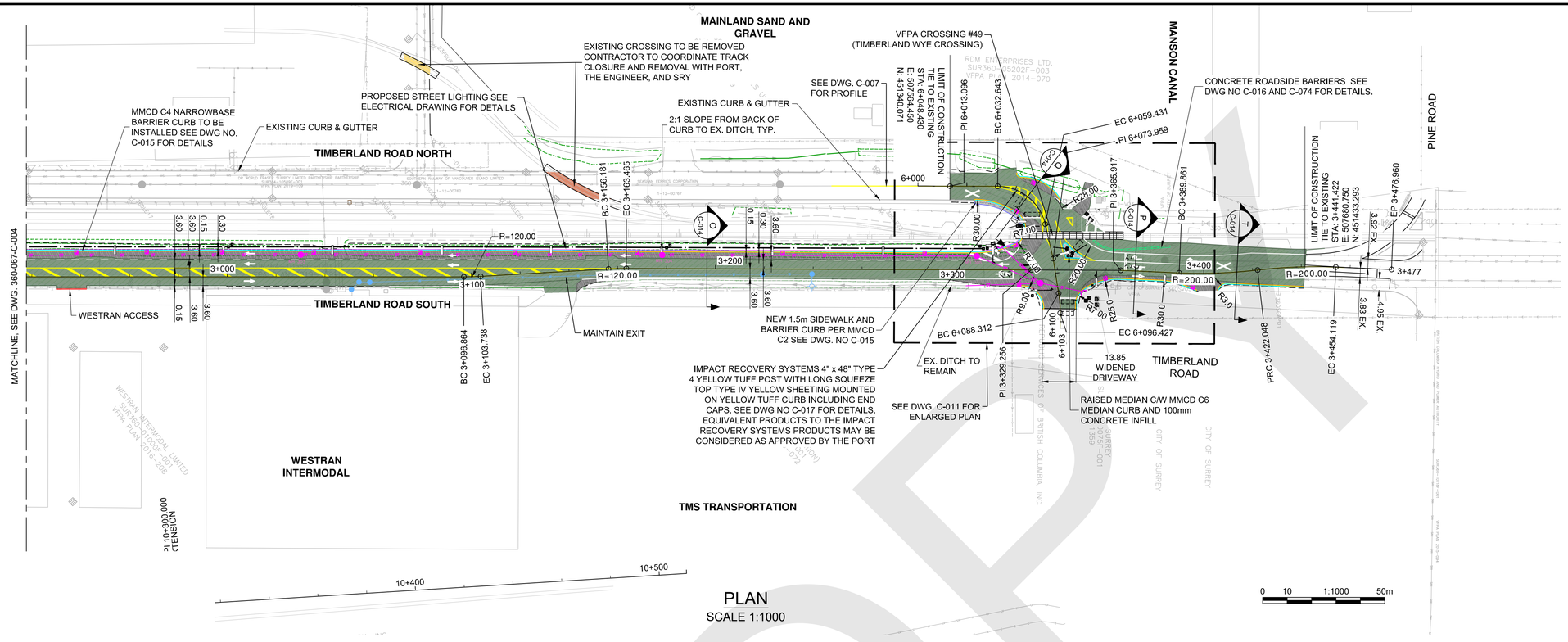
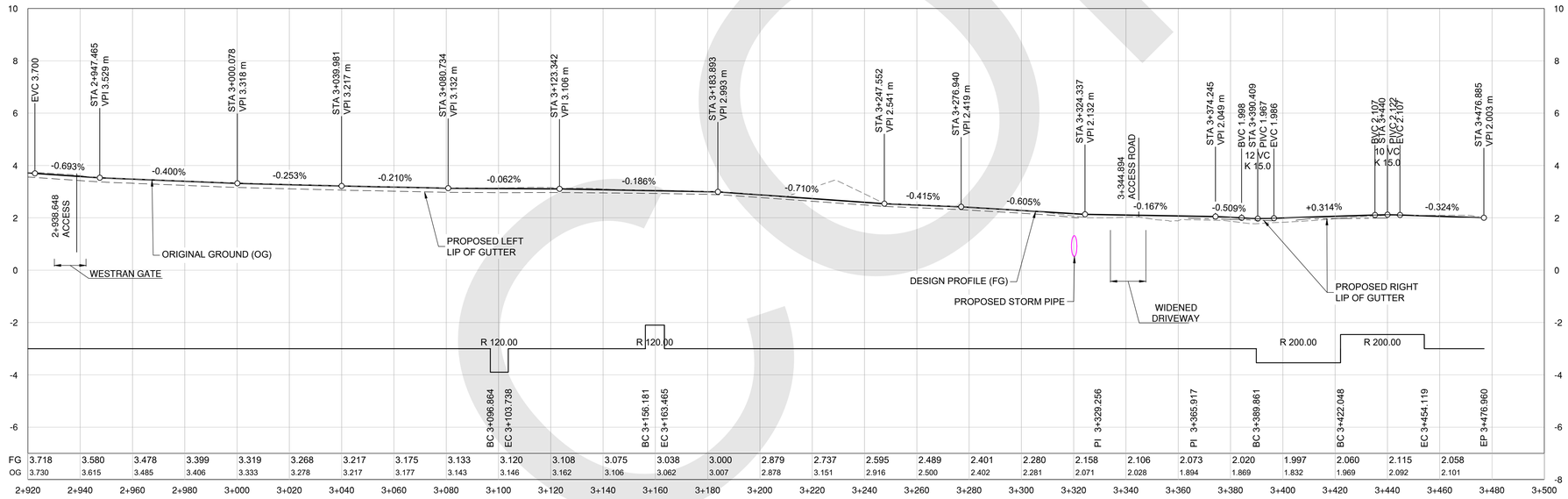


PLAN
SCALE 1:1000



PROFILE
SCALE H 1:1000
V 1:100

0 10 H 1:1000 50m
0 1 V 1:100 5m

LEGEND

TIMBERLAND RD S. & TIMBERLAND RD N. & WYE INTERSECTION PAVEMENT REHABILITATION	50mm SUPERPAVE 12.5 90mm SUPERPAVE 19 90mm SUPERPAVE 19 90MM SUPERPAVE 19 70mm SUPERPAVE 19 REMOVE +/- 230mm OF EX. PAVEMENT STRUCTURE
TIMBERLAND RD S. & TIMBERLAND RD N. & WYE INTERSECTION NEW PAVEMENT CONSTRUCTION	50mm SUPERPAVE 12.5 90mm SUPERPAVE 19 90mm SUPERPAVE 19 70mm SUPERPAVE 19 300mm GRANULAR BASE (19mm MINUS) 300mm GRANULAR SUBBASE (75mm MINUS)
SURFACE RESTORATION FOR CROSSING REMOVAL (TIMBERLAND N.)	50mm SUPERPAVE 12.5 50mm SUPERPAVE 19 50mm SUPERPAVE 19 300mm GRANULAR BASE (19mm MINUS)
SURFACE RESTORATION FOR CROSSING REMOVAL (DOCK ROAD)	40MM SUPERPAVE 12.5 40MM SUPERPAVE 19 50MM SUPERPAVE 19 300MM GRANULAR BASE (19MM MINUS)

REGRADE EX. GRAVEL
PROPOSED CONCRETE
CONCRETE ROADSIDE / MEDIAN BARRIER
PROPOSED TUFF CURB & FLEXIBLE DELINEATORS
PROPOSED FENCING
EXISTING FENCING
PROPOSED CURB
PROPOSED GUTTER
ROAD BUFFER
PROPOSED SIDEWALK
PROPERTY LINE
LICENSE/EASEMENT LINE
STORM & SEWER PIPE
MAIN WATER PIPE
EXISTING ROAD CENTERLINE
EXISTING ROAD
FINISHED GRADE OUTLINE (INCLUDING DITCH AND EMBANKMENT GRADING)
EXISTING BOTTOM OF DITCH (FROM SURVEY)
DRIVEWAY ACCESS
SECTION MARKER
PROPOSED LIGHT POLE
PROPOSED POWER AND COMMUNICATIONS CONDUITS

VANCOUVER FRASER PORT AUTHORITY

This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.

Ref.No.	REFERENCE
2	VFPA PROJECT NO. 360-067
1	WSP PROJECT NO. 20M-00758-00

NOT FOR CONSTRUCTION
May 13, 2022

No.	Date	REVISION	Dr'n	Ch'd
E	2022/05/13	ISSUED FOR 99% DESIGN	RC	MJ
D	2022/03/25	ISSUED FOR 90% DESIGN	RC	MJ
C	2021/11/15	ISSUED FOR 60% DESIGN	RC	MJ
B	2021/01/07	ISSUED FOR METRO VANCOUVER	KY	VT
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	R.CHANG
DRAWN BY	I.LOZADA
APPROVED	M.JACKSON
DATE	2022/05/13
SCALE	1:1000
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
PLAN & PROFILE
STA. 2+920.000 TO STA. 3+476.885

SIZE	DWG.	SHEET	REV.
D	360-067-C-005	5 of 69	E

DATE: 2022/05/04 - 10:43am
PATH: \\corp.pwan.net\in\NL_BLR_Projects\70120661-20M00758-VFPA FSPL Transportation Improvements\4 Models and Drawings\41 Highway\04 WIP\01 CAD\Production\C-002 to C-007 Plans & Profiles.dwg

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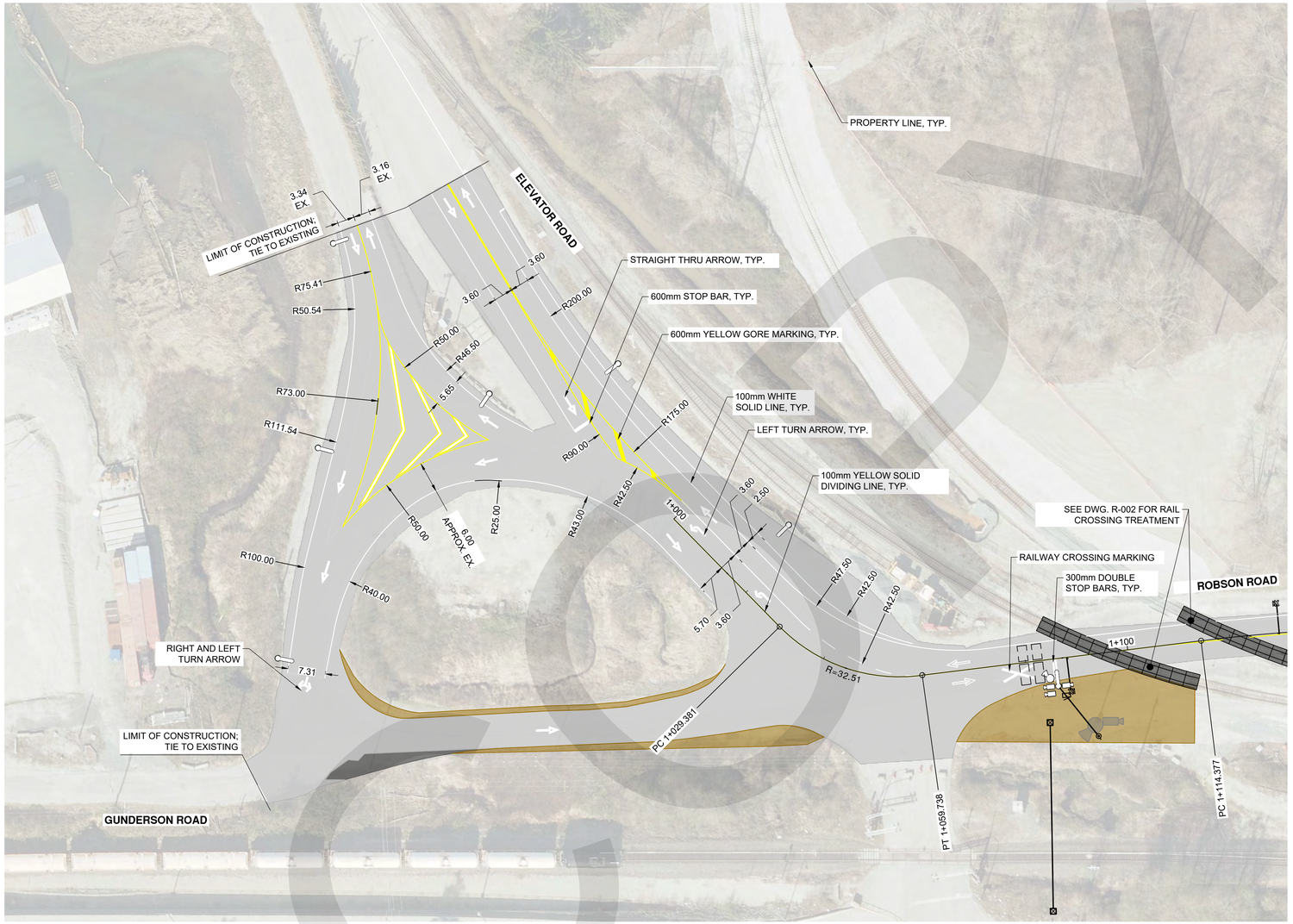

ENLARGED PLAN
SCALE 1:500

LEGEND

- MILL & OVERLAY
- NEW PAVEMENT
- PAVEMENT REANIMATION AT TIMBERLAND ROAD SOUTH
- REGRADE EX. GRAVEL
- GRAVEL AREA
- CONCRETE ROADSIDE BARRIER
- FENCING
- CURB & GUTTER
- PROPERTY LINE

0 5 1:500 25m

VANCOUVER FRASER PORT AUTHORITY

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NOT FOR CONSTRUCTION
April 29, 2021

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

No.	Date	REVISION	Dr'n	Ch'd
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2020/12/18
SCALE	1:500
PMV SITE	____

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
ENLARGED PLAN
TURNAROUND AREA

SIZE	DWG.	SHEET	REV.
D	C-006	6 of 34	A

TITLE BLOCK: DL-TB.dwg
DATE: 2021/04/29 - 8:52am
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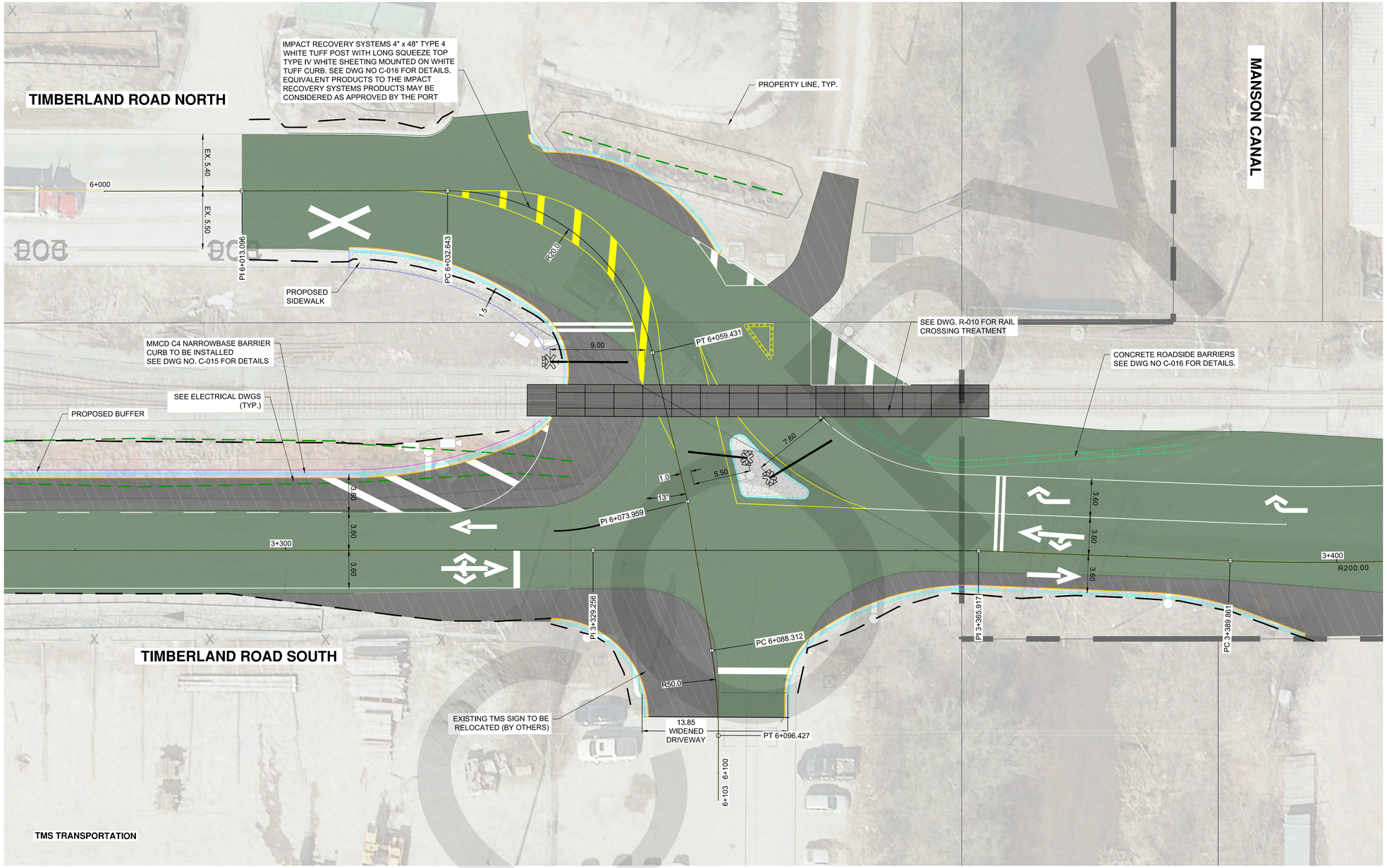

ENLARGED PLAN
SCALE 1:200

LEGEND

TIMBERLAND RD S. & TIMBERLAND RD N. & WYE INTERSECTION PAVEMENT REHABILITATION	50mm SUPERPAVE 12.5 90mm SUPERPAVE 19 90mm SUPERPAVE 19 90MM SUPERPAVE 19 70mm SUPERPAVE 19 REMOVE +/- 230mm OF EX. PAVEMENT STRUCTURE
TIMBERLAND RD S & TIMBERLAND RD N. & WYE INTERSECTION NEW PAVEMENT CONSTRUCTION	50mm SUPERPAVE 12.5 90mm SUPERPAVE 19 90mm SUPERPAVE 19 70mm SUPERPAVE 19 300mm GRANULAR BASE (19mm MINUS) 300mm GRANULAR SUBBASE (75mm MINUS)

- REGRADE EX. GRAVEL
- PROPOSED CONCRETE
- CONCRETE ROADSIDE / MEDIAN BARRIER
- PROPOSED TUFF CURB & FLEXIBLE DELINEATORS
- PROPOSED FENCING
- EXISTING FENCING
- PROPOSED CURB
- PROPOSED GUTTER
- PROPOSED SIDEWALK
- ROAD BUFFER
- PROPERTY LINE
- LICENSE/EASEMENT LINE
- STORM & SEWER PIPE
- MAIN WATER PIPE
- EXISTING ROAD CENTERLINE
- EXISTING ROAD
- FINISHED GRADE OUTLINE (INCLUDING DITCH AND EMBANKMENT GRADING)
- EXISTING BOTTOM OF DITCH (FROM SURVEY)
- DRIVEWAY ACCESS

0 2 1:200 10m

VANCOUVER FRASER PORT AUTHORITY

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Ref.No.	REFERENCE
2	VFPA PROJECT NO. 360-067
1	WSP PROJECT NO. 20M-00758-00

NOT FOR CONSTRUCTION
May 13, 2022

wsp

No.	Date	REVISION	Dr'n	Ch'd
B	2022/05/13	ISSUED FOR 99% DESIGN	RC	MJ
A	2022/03/04	ISSUED FOR 90% DESIGN	RC	MJ

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	R.CHANG
DRAWN BY	I. LOZADA
APPROVED	M.JACKSON
DATE	2022/05/13
SCALE	1:200
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
ENLARGED PLAN
ISLAND AREA

SIZE	DWG.	SHEET	REV.
D	360-067-C-011	11 of 69	B

DATE: 2022/05/04 – 10:50am
PATH: \\corp.pbwan.net\nn\NA_BLR_Projects\70120661-20M00758-VFPA FSPL Transportation Improvements\4 Models and Drawings\41 Highway\04 WIP\01 CAD\Production\C-008 to C-011 Enlarged Plans.dwg
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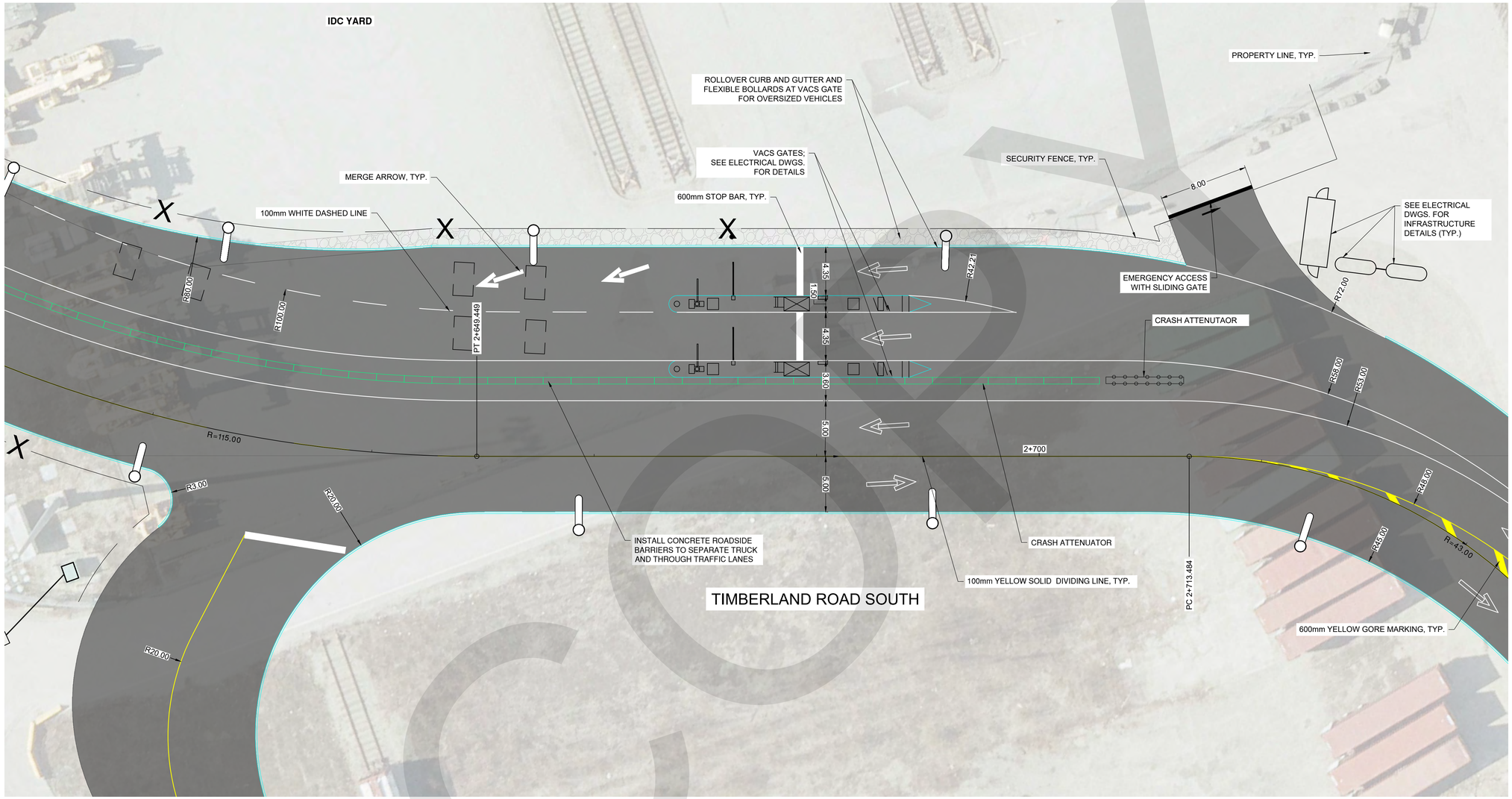

ENLARGED PLAN
SCALE 1:200

LEGEND

- MILL & OVERLAY
- NEW PAVEMENT
- PAVEMENT REANIMATION AT TIMBERLAND ROAD SOUTH
- REGRADE EX. GRAVEL
- GRAVEL AREA
- CONCRETE ROADSIDE BARRIER
- FENCING
- CURB & GUTTER
- PROPERTY LINE

0 2 1:200 10m

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NOT FOR CONSTRUCTION
April 29, 2021

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

No.	Date	REVISION	Dr'n	Ch'd
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2020/12/18
SCALE	1:200
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
ENLARGED PLAN
VAC GATES

SIZE	DWG.	SHEET	REV.
D	C-007	7 of 34	A

TITLE BLOCK DL-TB.dwg

DATE: 2021/04/29 - 8:53am
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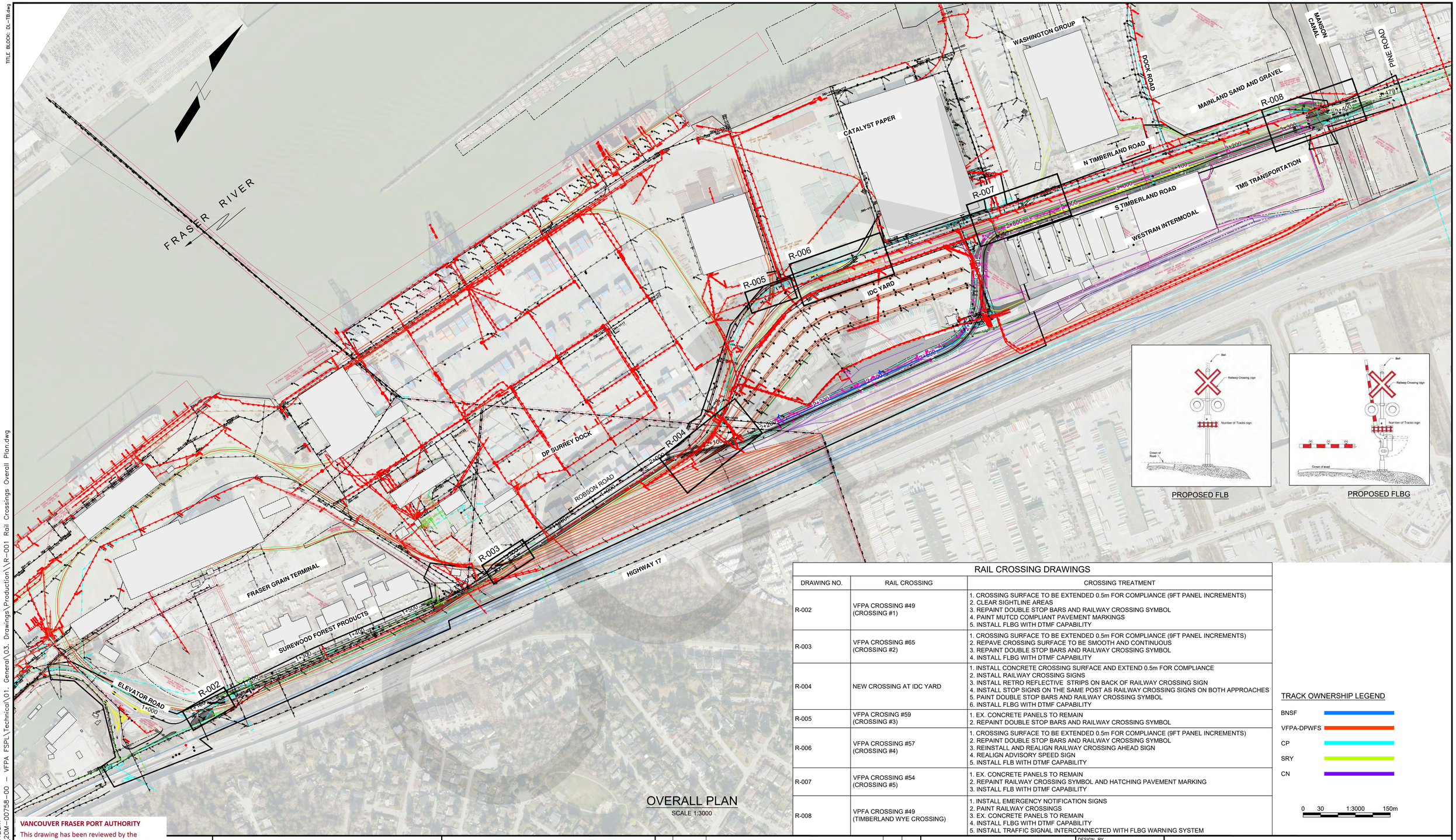


PROPOSED FLB

PROPOSED FLBG

OVERALL PLAN
SCALE 1:3000

RAIL CROSSING DRAWINGS

DRAWING NO.	RAIL CROSSING	CROSSING TREATMENT
R-002	VFPA CROSSING #49 (CROSSING #1)	1. CROSSING SURFACE TO BE EXTENDED 0.5m FOR COMPLIANCE (9FT PANEL INCREMENTS) 2. CLEAR SIGHTLINE AREAS 3. REPAINT DOUBLE STOP BARS AND RAILWAY CROSSING SYMBOL 4. PAINT MUTCD COMPLIANT PAVEMENT MARKINGS 5. INSTALL FLBG WITH DTMF CAPABILITY
R-003	VFPA CROSSING #65 (CROSSING #2)	1. CROSSING SURFACE TO BE EXTENDED 0.5m FOR COMPLIANCE (9FT PANEL INCREMENTS) 2. REPAVE CROSSING SURFACE TO BE SMOOTH AND CONTINUOUS 3. REPAINT DOUBLE STOP BARS AND RAILWAY CROSSING SYMBOL 4. INSTALL FLBG WITH DTMF CAPABILITY
R-004	NEW CROSSING AT IDC YARD	1. INSTALL CONCRETE CROSSING SURFACE AND EXTEND 0.5m FOR COMPLIANCE 2. INSTALL RAILWAY CROSSING SIGNS 3. INSTALL RETRO REFLECTIVE STRIPS ON BACK OF RAILWAY CROSSING SIGN 4. INSTALL STOP SIGNS ON THE SAME POST AS RAILWAY CROSSING SIGNS ON BOTH APPROACHES 5. PAINT DOUBLE STOP BARS AND RAILWAY CROSSING SYMBOL 6. INSTALL FLBG WITH DTMF CAPABILITY
R-005	VFPA CROSING #59 (CROSSING #3)	1. EX. CONCRETE PANELS TO REMAIN 2. REPAINT DOUBLE STOP BARS AND RAILWAY CROSSING SYMBOL
R-006	VFPA CROSSING #57 (CROSSING #4)	1. CROSSING SURFACE TO BE EXTENDED 0.5m FOR COMPLIANCE (9FT PANEL INCREMENTS) 2. REPAINT DOUBLE STOP BARS AND RAILWAY CROSSING SYMBOL 3. REINSTALL AND REALIGN RAILWAY CROSSING AHEAD SIGN 4. REALIGN ADVISORY SPEED SIGN 5. INSTALL FLB WITH DTMF CAPABILITY
R-007	VFPA CROSSING #54 (CROSSING #5)	1. EX. CONCRETE PANELS TO REMAIN 2. REPAINT RAILWAY CROSSING SYMBOL AND HATCHING PAVEMENT MARKING 3. INSTALL FLB WITH DTMF CAPABILITY
R-008	VFPA CROSSING #49 (TIMBERLAND WYE CROSSING)	1. INSTALL EMERGENCY NOTIFICATION SIGNS 2. PAINT RAILWAY CROSSINGS 3. EX. CONCRETE PANELS TO REMAIN 4. INSTALL FLBG WITH DTMF CAPABILITY 5. INSTALL TRAFFIC SIGNAL INTERCONNECTED WITH FLBG WARNING SYSTEM

TRACK OWNERSHIP LEGEND

- BNSF
- VFPA-DPWFS
- CP
- SRY
- CN

0 30 1:3000 150m

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

NOT FOR CONSTRUCTION
April 29, 2021

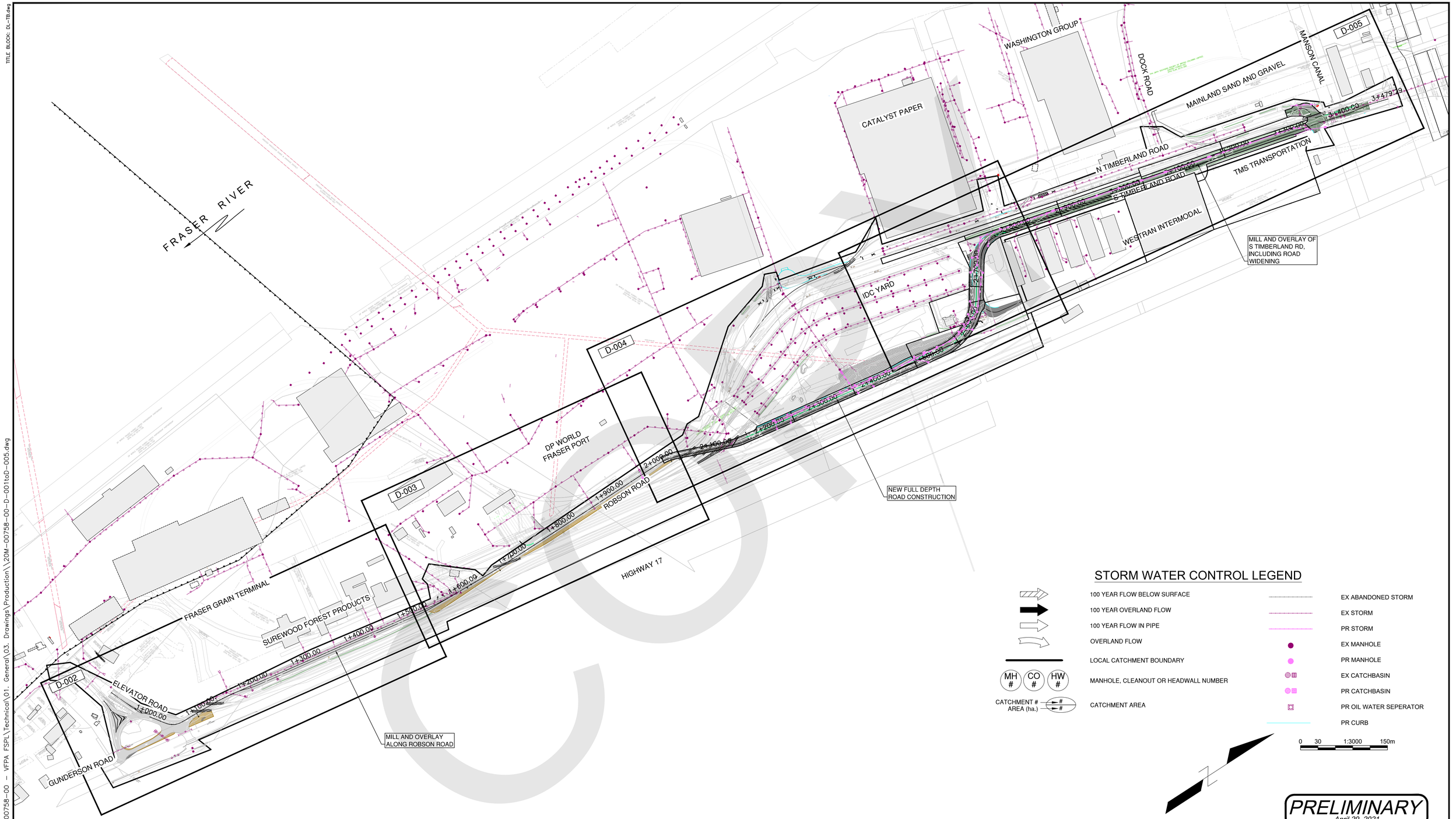
No.	Date	REVISION	Dr'n	Ch'd
B	2021/04/23	ISSUED FOR PER SUBMISSION	IL	VT
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/04/23
SCALE	1:3000
PMV SITE	

GREATER VANCOUVER GATEWAY 2030
FSPL TRANSPORTATION IMPROVEMENTS
AFFECTED AT-GRADE RAIL CROSSINGS
OVERALL SITE PLAN

SIZE	DWG.	SHEET	REV.
D	R-001	1 of 12	B



STORM WATER CONTROL LEGEND

- 100 YEAR FLOW BELOW SURFACE
- 100 YEAR OVERLAND FLOW
- 100 YEAR FLOW IN PIPE
- OVERLAND FLOW
- LOCAL CATCHMENT BOUNDARY
- MH # / CO # / HW # — MANHOLE, CLEANOUT OR HEADWALL NUMBER
- CATCHMENT # / AREA (ha.) — CATCHMENT AREA
- EX ABANDONED STORM
- EX STORM
- PR STORM
- EX MANHOLE
- PR MANHOLE
- EX CATCHBASIN
- PR CATCHBASIN
- PR OIL WATER SEPERATOR
- PR CURB

0 30 1:3000 150m

PRELIMINARY
April 29, 2021

VANCOUVER FRASER PORT AUTHORITY

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1	WSP PROJECT NO. 20M-00758-00
Ref.No.	REFERENCE

NOT FOR CONSTRUCTION
April 29, 2021

No.	Date	REVISION	Dr'n	Ch'd
B	2021/04/23	ISSUED FOR PER SUBMISSION	GJ	AL
A	20/12/18	ISSUED FOR 30% DESIGN	GJ	AL

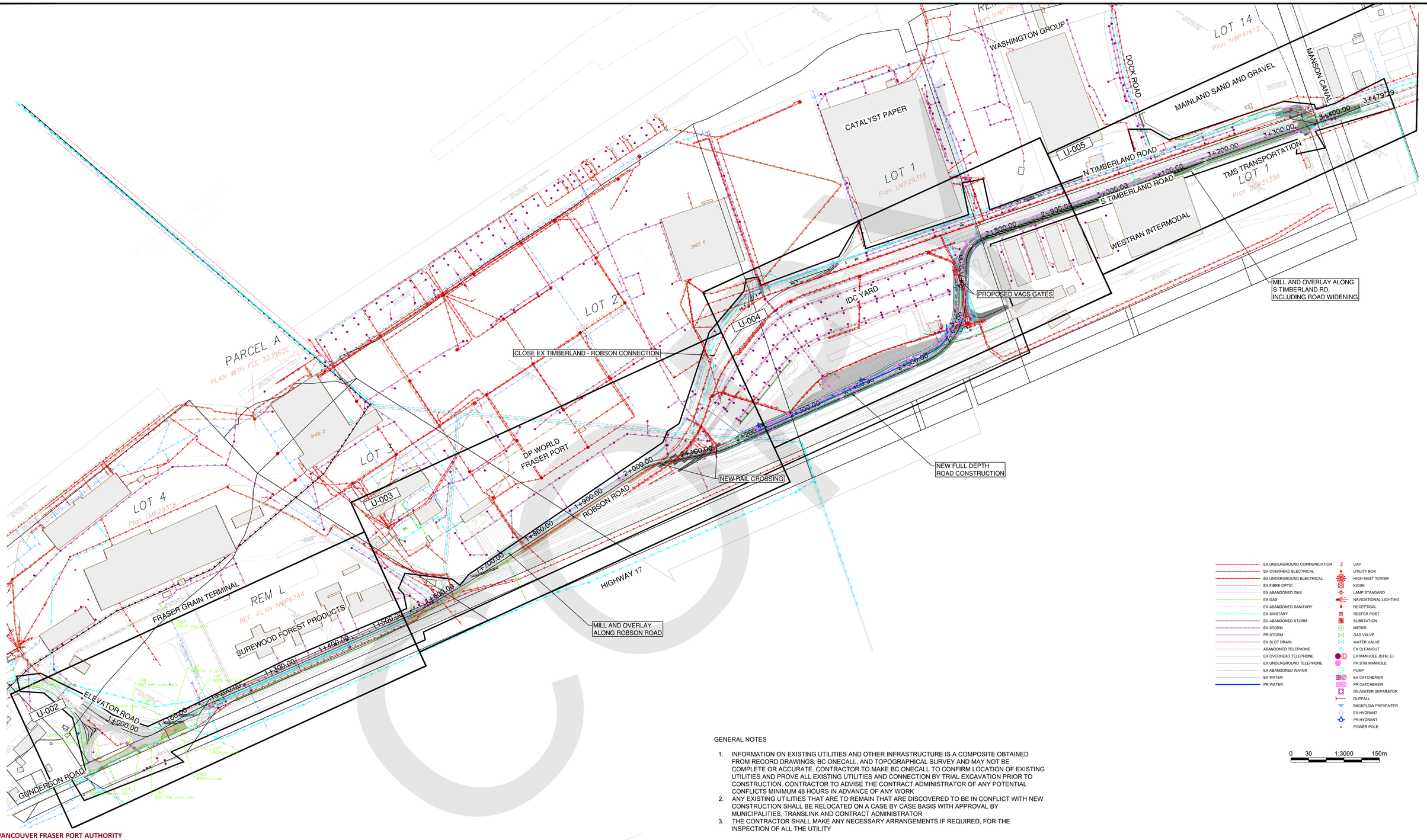
PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	A. LAW
DRAWN BY	G JUNG
APPROVED	R. MOORE
DATE	2021/04/23
SCALE	1:3000
PMV SITE	

GREATER VANCOUVER GATEWAY 2030
OPTION STUDY
FSPL TRANSPORTATION IMPROVEMENTS
STORMWATER MANAGEMENT PLAN (OVERALL)

SIZE	DWG.	SHEET	REV.
D	D-001	1 of 5	B

TITLE BLOCK DL-TB.dwg
DATE: 2021/04/29 - 9:50am
PATH: P:\50-20000TRS\20M-00758-00 - VFPA FSPL\Technical\01. General\03. Drawings\Production\20M-00758-00-D-001toD-005.dwg



- EX UNDERGROUND COMMUNICATION
- EX OVERHEAD ELECTRICAL
- EX UNDERGROUND ELECTRICAL
- EX FIBRE OPTIC
- EX ABANDONED GAS
- EX GAS
- EX ABANDONED SANITARY
- EX SANITARY
- EX ABANDONED STORM
- EX STORM
- PR STORM
- EX SLOT DRAIN
- ABANDONED TELEPHONE
- EX OVERHEAD TELEPHONE
- EX UNDERGROUND TELEPHONE
- EX ABANDONED WATER
- EX WATER
- PR WATER
- CAP
- UTILITY BOX
- HIGH MAST TOWER
- KIOSK
- LAMP STANDARD
- NAVIGATIONAL LIGHTING
- RECEPTICAL
- REEFER POST
- SUBSTATION
- METER
- GAS VALVE
- WATER VALVE
- EX CLEANOUT
- EX MANHOLE (STM, E)
- PR STM MANHOLE
- PUMP
- EX CATCHBASIN
- PR CATCHBASIN
- OIL/WATER SEPARATOR
- OUTFALL
- BACKFLOW PREVENTER
- EX HYDRANT
- PR HYDRANT
- POWER POLE

0 30 1:3000 150m

GENERAL NOTES

1. INFORMATION ON EXISTING UTILITIES AND OTHER INFRASTRUCTURE IS A COMPOSITE OBTAINED FROM RECORD DRAWINGS, BC ONECALL, AND TOPOGRAPHICAL SURVEY AND MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO MAKE BC ONECALL TO CONFIRM LOCATION OF EXISTING UTILITIES AND PROVE ALL EXISTING UTILITIES AND CONNECTION BY TRIAL EXCAVATION PRIOR TO CONSTRUCTION. CONTRACTOR TO ADVISE THE CONTRACT ADMINISTRATOR OF ANY POTENTIAL CONFLICTS MINIMUM 48 HOURS IN ADVANCE OF ANY WORK
2. ANY EXISTING UTILITIES THAT ARE TO REMAIN THAT ARE DISCOVERED TO BE IN CONFLICT WITH NEW CONSTRUCTION SHALL BE RELOCATED ON A CASE BY CASE BASIS WITH APPROVAL BY MUNICIPALITIES, TRANSLINK AND CONTRACT ADMINISTRATOR
3. THE CONTRACTOR SHALL MAKE ANY NECESSARY ARRANGEMENTS IF REQUIRED, FOR THE INSPECTION OF ALL THE UTILITY

VANCOUVER FRASER PORT AUTHORITY

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NOT FOR CONSTRUCTION
April 29, 2021

No.	Date	REVISION	Dr'n	Ch'd
B	2021/04/23	ISSUED FOR PER SUBMISSION	GJ	RM
A	20/12/18	ISSUED FOR 30% DESIGN	GJ	RM

PORT of vancouver
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

DESIGN BY	R. MOORE
DRAWN BY	G. JUNG
APPROVED	R. ROGERS
DATE	2021/04/23
SCALE	1:3000
PMV SITE	

GREATER VANCOUVER GATEWAY 2030 OPTION STUDY
FSPL TRANSPORTATION IMPROVEMENTS
UTILITY PLAN (OVERALL)

SIZE	DWG.	SHEET	REV.
D	U-001	1 of 5	B

DATE: 2021/04/29 – 9:47am
PATH: P:\50-20000TRS\20M-00758-00 – VFPA FSPL\Technical\01. General\03. Drawings\Production\\20M-00758-00-U-0001toU-005.dwg
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