



COMMISSIONER STREET RAIL EXPANSION



Contact List				
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Project & Environmental Review - Application Submission Requirements for Category C Projects

PER No. 21-042	Date: April 27, 2021	Date Revised: Month, day, year
Project:	Commissioner Street Rail Expansion	
Project Location:	CP Rail Yard parallel to Commissioner St, Vancouver	
Tenant:	CP Rail	
Land Use Designation:	Port Terminal	
Category of Review:	C	
Applicant: Chris Dane	Email: Chris_Dane@cpr.ca	Tel: 604-944-5829
Project Lead: Deborah Renn	Email: Deborah.Renn@portvancouver.com	Tel: 604-665-9561

The following Project Permit Application Submission Requirements are based on a preliminary review of the information provided by the Applicant during the preliminary review phase. Should changes be made by the Applicant to the project scope or proposed design, or new policies or legislation come into effect after receipt of this checklist, additional information may be required by the Vancouver Fraser Port Authority (Port Authority). Upon submission and review of a complete application, The Port Authority may also request additional information and studies as necessary to support the review process. Please note that all documents provided in support of Category D projects will be posted on the Port of Vancouver website. Any commercially sensitive documents which are not to be posted on the website must be brought to the Project Lead's attention and marked as Confidential. All documents provided shall be in PDF format, and shall be unsecured for ease of formatting and posting.

Brief description of Preliminary Project Inquiry (Proposed Project):

As part of the Burrard Inlet Road and Rail Improvement Program, CP Rail are proposing to expand on their existing rail infrastructure within the Commissioner Street transportation corridor by adding an additional two tracks to the north of the existing rail yard between the Commissioner Street overpass (McGill Street) in the east and Victoria Drive in the west. The additional tracks are intended to increase storage capacity and improve operations for existing Port of Vancouver rail customers.

The Project incorporates the following (note: the entire project area does not fall within Port Authority jurisdiction)

- Grading using heavy equipment, with material removed and delivered via dump truck
- Installation of two new rail tracks at 2,400m and 1,300m in length, using standard track materials such as welded rail, timber track ties, cut spikes, rail anchors, as well as ballast and sub-ballast for rail track bed
- Adjustment to existing rail spur that serves Columbia Containers, including upgrades to road level crossing
- Construction of a retaining wall at New Brighton Road
- Construction of associated turnouts and crossovers throughout the rail yard
- Utilities and infrastructure along the corridor are being assessed and their protection, relocation or upgrade may need to be incorporated into detailed design

Work is proposed to commence following the Commissioner Street road realignment work being completed by the Port Authority. The construction schedule is anticipated to include 6 months of grading, drainage and structural work, followed by 3 months of track construction and crossing modifications.

Project & Environmental Review Application Submission Requirements

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Section 1: General Submission Requirements		Required	
Application Form	Complete Category C/D application on Portal		<input checked="" type="checkbox"/>
Application Fee	Category C: \$13,125 includes GST. Please include the PER number (21-042) identified on the first page of this document with any fees or deposit payments submitted to the Port Authority.		<input checked="" type="checkbox"/>
Documentation Deposit	<ul style="list-style-type: none"> Deposit must be submitted at time of submission and is calculated based on 1% of construction value, or the portion of works within Port Authority's jurisdiction (\$1,500 minimum to \$10,000 maximum). 		<input checked="" type="checkbox"/>
Contact List	<ul style="list-style-type: none"> Provide one central contact list for all project team members, including name, title, address, and contact numbers. 		<input checked="" type="checkbox"/>
Section 2: Project Description Requirements		Req.	Comments
Include this in Portal application, or attach additional pages as required			
General Scope	<ul style="list-style-type: none"> Brief background of the applicant's company and business operations in the region. Description of the Project, including the purpose, use, and rationale. Description of the Project setting, including proximity to sensitive receptors such as schools or parks. Description of potential impacts to land, water, air, land and adjacent community and businesses, as a result of the project. List all studies that have been completed in support of the application. 	<input checked="" type="checkbox"/>	
Operations	<ul style="list-style-type: none"> Description of existing and proposed capacities and throughput including train traffic, hours of operations, peak hours. Description of any potential environmental and community impacts that may result from the construction or operation of the project, and proposed mitigation strategies. 	<input checked="" type="checkbox"/>	
Construction and/or Demolition	<ul style="list-style-type: none"> Proposed construction period (start and finish), hours, and method of construction and/ demolition. Description of construction staging activities, including how the work is proposed to be staged to minimize impacts to stakeholders, for example where equipment will be staged, how the Columbia spur would be replaced, and what impacts to the roadway might be (if any). If you anticipate the need to construct outside of the standard the port authority construction hours, this can be requested in the application. Should you propose this, provide the information outlined as required in Section 3 of our Guideline, available at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ Should this information not be provided at the time of application, the request can be processed at a later date, but will be subject to a permit amendment.	<input checked="" type="checkbox"/>	
Section 3: Drawing Requirements		Req.	Comments
Please provide one digital set of the following drawings in metric unless otherwise noted. The drawings shall be prepared by qualified professionals and delivered in PDF and AutoCAD format.			
Location Plan	<ul style="list-style-type: none"> Plan showing the relationship of the proposed Project to surrounding area at a 1:5000 scale 	<input checked="" type="checkbox"/>	

Site Plan	<ul style="list-style-type: none"> Lease and property boundaries, easements and right-of-ways. Location and dimensions of all existing and proposed buildings, structures, and equipment. Access points including roadways, driveways, parking areas, walkways, berths, gangways, docks. Area of demolition or construction staging/laydown area. 	<input checked="" type="checkbox"/>	
Lot Grading and Utilities	<ul style="list-style-type: none"> Separate plans showing existing and proposed utilities. Lot grading plan showing existing/proposed paving and drainage. Separate to two plans if required for clarity. Proposed modifications to utilities or systems (water, sewer, storm water, power, gas), both above and below ground. The Applicant is responsible for location of all existing utilities. the port authority will provide known utility information, but location of buried utilities must be confirmed by the applicant 	<input checked="" type="checkbox"/>	
Lighting Plan	<ul style="list-style-type: none"> Lighting shown on the site plan for all proposed exterior lighting including the location, type of bulbs, orientation, and level of illuminance. For further information, please review the Port Authority's Lighting Guideline, available at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	<input checked="" type="checkbox"/>	<i>If additional lighting is proposed to be installed as part of the project</i>
Rail	<ul style="list-style-type: none"> Existing and proposed rail tracks, switches, and other associated rail works. Description of the rail operations expected, and how rail cars are delivered to the site and managed while on the site. 	<input checked="" type="checkbox"/>	
Section 4: Required Studies and Reports		Req.	Comments
Must be prepared by qualified professionals in their respective fields			
Geotechnical Report	<ul style="list-style-type: none"> Description of site seismic and geologic hazards. Description of construction measures, precautions and corrective actions recommended for preventing structural damage and reducing the risk of terrestrial, marine and riparian geotechnical hazards to acceptable levels. Geotechnical investigation and assessment for new structures. 	<input checked="" type="checkbox"/>	
Rail Operations Plan	<ul style="list-style-type: none"> An assessment of the rail operations expected, including length and number of cars, average number and peak number of trains per day and total number of train cars that can be accommodated on site. Overview of how shunting or car switching is conducted or managed, and design speed for arriving and departing trains. Description of the design capacity and specifications for the rail components that are specified. 	<input checked="" type="checkbox"/>	<i>Description and detail of how CP intends to operate and utilize the yard tracks to service the South Shore terminals, after the new tracks are constructed.</i>
Noise and Vibration Study	<ul style="list-style-type: none"> An assessment of how the proposed development will affect the noise and vibration levels experienced by the adjacent community. For further information, please review the Port Authority's 	<input checked="" type="checkbox"/>	<i>Submit the Noise Assessment Project Score sheet (Appendix II)</i>

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	<p>Environmental Noise Assessment Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/</p>		<p><i>to determine if further noise assessment will be required.</i></p> <p><i>As an example equivalent study we direct you to the Pitt Meadows Road and Rail Improvement Project Noise and vibration study:</i> https://www.portvancouver.com/wp-content/uploads/2019/06/2020-09-04-Environmental-Noise-and-Vibration-Report-BKL-Pitt-Meadows-Road-and-Rail-Improvements-Project-1.pdf</p>
Archaeological Overview Assessment	<ul style="list-style-type: none"> Identify and assess archaeological resource potential or sensitivity within a proposed Project area. Provide recommendations concerning the appropriate methodology and scope of work for subsequent inventory and/or archaeological impact assessment studies. 	<input checked="" type="checkbox"/>	
Soil Management Plan	<ul style="list-style-type: none"> Outlines how the proponent will test for, appropriately handle, limit migration/run-off and dispose of contaminated soils. Required when dealing with properties with known or suspected contamination in the soil. 	<input checked="" type="checkbox"/>	<p><i>Should dewatering be required, the plan should also outline how groundwater from excavations will be contained, tested, treated, and discharged.</i></p>
Section 5: Notification, Consultation & Engagement		Req.	Comments
Indigenous Groups	<ul style="list-style-type: none"> The proposed Project will be assessed to determine whether any part of the proposed work has the potential to impact Indigenous rights. Confirmation of the requirement for Indigenous consultation will be provided upon acceptance and review of your completed Project Application. Provide all records of previous information sharing activities, agreements, or other interactions with Indigenous groups with respect to the proposed Project. Provide information on any known Indigenous interests in the Project area, if known. For further information, please review the Port Authority's Indigenous Consultation – Information for Applicants, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	<input checked="" type="checkbox"/>	
Stakeholders	<ul style="list-style-type: none"> The proposed Project may have an impact on stakeholder interests. The following stakeholder notification and/or consultation will be led by the Port Authority during application review phase with the involvement of 	<input checked="" type="checkbox"/>	

	<p>the Applicant at the request of the Port Authority (responding to stakeholders, attending meetings etc.).</p> <ul style="list-style-type: none"> ○ <i>City of Vancouver</i> ○ <i>Metro Vancouver</i> ○ <i>BC Hydro</i> ○ <i>Fortis BC</i> ○ <i>WCMRC</i> ○ <i>Columbia Containers</i> ○ <i>Mariner Seafoods</i> ○ <i>Saam Smit</i> ○ <i>Kiewit Ledcor TMEP Partnership</i> ○ <i>Lafarge Canada</i> <ul style="list-style-type: none"> • The Port Authority may revise the list of stakeholders upon acceptance and review of a complete Project Application. • For further information, please review the Port Authority's Stakeholder Consultation Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 		
Public	<ul style="list-style-type: none"> • The proposed Project may have an impact on adjacent community interests. As a result the Port Authority requires public engagement in order to solicit feedback from the public. The type of public engagement activities that are required to be led by the Applicant for this project includes: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Project webpage <input checked="" type="checkbox"/> Link to the Canadian Impact Assessment Registry post on the project webpage (link to be provided by the Port Authority) <input checked="" type="checkbox"/> Public notification of public engagement period and opportunities <input checked="" type="checkbox"/> Public engagement for a 25 business day period, which may include a feedback form (fillable online) or online questionnaire, and an online meeting/information session • Depending on the scope, public interest and potential impacts to the surrounding community, additional engagement activities may be required during the application review phase • For further information, please review the Port Authority's Public Engagement Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	<input checked="" type="checkbox"/>	<p><i>The project will be posted to the Canadian Impact Assessment Registry for a public comment period of 30 calendar days. The posting will be managed by the Port Authority and will be coordinated to coincide with the Applicant-led public engagement period.</i></p> <p><i>The requirement for an online meeting/information session with local residents and businesses will be confirmed once a complete application is received.</i></p>
Public Engagement Materials	<ul style="list-style-type: none"> • The following list of items provides the minimum public engagement requirements in the PER process. • All materials must be reviewed, approved and received by the Port Authority in final form prior to distribution to the public and the commencement of any engagement activities. • The Applicant is required to submit drafts of the following upon submission of a complete application: <ul style="list-style-type: none"> ○ Public Engagement Plan ○ Project website text and any online information ○ Draft email text to existing distribution lists (if applicable) ○ Public notification letter 	<input checked="" type="checkbox"/>	<p><i>The port authority will provide a notification area map for the public notification.</i></p> <p><i>The Port Authority will confirm additional public engagement materials, e.g., project overview document, once a complete application is received.</i></p>

	<ul style="list-style-type: none"> ○ Online questionnaire or feedback form (fillable online) ○ Presentation (to the Port Authority liaison committees) ○ Coloured renderings, schematics or other visual representations of the Project ○ Other materials to be used (e.g., videos, brochures, social media posts) as chosen by the Applicant <ul style="list-style-type: none"> • For further information, please review the Port Authority's Public Engagement Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 		
Completion of Public Engagement	<ul style="list-style-type: none"> • Upon completion of public engagement, the Applicant will be required to submit the following: <ul style="list-style-type: none"> ○ Public Engagement Summary and Consideration Report ○ Any additional information as required by staff • For further information, please review the Port Authority's Public Engagement Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	<input type="checkbox"/>	<i>The Public Engagement Summary and Consideration Report can either be two separate documents, or a combined document</i>
Port Community Liaison Committees	<ul style="list-style-type: none"> • The proposed Project will require a presentation to the following Port Community Liaison Committees: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> East Vancouver Port Lands (EVPL) Liaison Committee <input type="checkbox"/> North Shore Waterfront Liaison Committee <input type="checkbox"/> Port Community Liaison Committee – Delta <input checked="" type="checkbox"/> South Shore Community Liaison Committee • Submit draft presentation materials (i.e. presentation, brochures). • For further information, please review the Port Authority's Public Engagement Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	<input checked="" type="checkbox"/>	<i>The proposed project was assessed to be of interest to the EVPL and South Shore Community liaison committees.</i> <ul style="list-style-type: none"> • According to the EVPL Area Plan, the proposed project is classified as "yellow". At a minimum, this requires early notification to the liaison committee (completed on April 7, 2021) and a presentation during the application review (a date can be scheduled in consultation with the Applicant). • A presentation will also be required for the South Shore Community Liaison Committee during the application review (the next scheduled meeting is on June 8, 2021).
Construction Communications Plan	<ul style="list-style-type: none"> • The proposed Project may have an impact on the adjacent community during the construction period, and therefore the applicant may be required to notify area residents and the municipality prior to construction and/or demolition – in keeping with an approved Construction 		<i>This requirement would be confirmed as a permit condition, if the project is approved.</i>



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	<p>Communications Plan. Submission of a plan may be required at a later date determined by staff (not at the time of application).</p> <ul style="list-style-type: none"> The Plan should include a brief description of the proposed Project, background, construction timelines, considerations and challenges, engagement objectives, key audiences and stakeholders, key messages, contact information and public and stakeholder notification activities prior to construction and/or demolition. Also include a map of the notification area and mechanism to receive feedback and respond to/resolve issues that may be raised during construction. For further information, please review the Port Authority's Public Engagement Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	
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Notes

- This document is issued as a "draft" and will remain draft until the completeness stage. It may be updated and re-issued in final format at that time.
- Should there be other documents or supporting information required to support a complete application that are not listed in this checklist, the port authority reserves the right to request that information at any time.



Commissioner Street Rail Expansion (PER 21-042)



Category C – Table of Concordance

Project & Environmental Review (PER) Document

Section 1: General Submission Requirements

Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
Application Form	Appendix A: Category C/D Form	Application Form for Category C, D Reviews	<ul style="list-style-type: none"> A signed and completed Category C/D application form. 	Appendix A
Contact List	N/A	Contact List	<ul style="list-style-type: none"> Provide one central contact list for all project team members, including name, title, address, and contact numbers. 	Document Front-end

Section 2: Project Description

Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
General Scope	Project Description	Proponent Information	<ul style="list-style-type: none"> Brief Background of the applicant's company and business operations in the region. 	1.1
		Project Scope: Purpose and Rationale	<ul style="list-style-type: none"> Description of the Project, including the purpose, use, and rationale. 	1.2.1
		Project Scope: Project Setting	<ul style="list-style-type: none"> Description of the Project setting, including proximity to sensitive receptors such as schools or parks 	1.2.4
		Project Scope: Potential Project Impacts	<ul style="list-style-type: none"> Description of potential impacts to land, water, air and adjacent community and businesses, as a result of the project. 	1.2.5
		Project Scope: Supporting Studies	<ul style="list-style-type: none"> List all studies that have been completed in support of the application. 	1.2.6
Operations		Operations: Capacities and Throughput	<ul style="list-style-type: none"> Description of existing and proposed capacities and throughput including train traffic, hours of operations, peak hours. 	1.4



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		Operations: Community Impacts	<ul style="list-style-type: none"> Description of any potential environmental and community impacts that may result from the construction or operation of the project, and proposed mitigation strategies. 	1.4
Construction and/ or Demolition		Construction: Project Schedule	<ul style="list-style-type: none"> Proposed construction period (start and finish), hours, and method of construction and demolition. 	1.3.1
		Construction: Construction Hours	<ul style="list-style-type: none"> If needed, an application requesting to construct outside of standard VFPA construction hours can be submitted that includes information outlined in Section 3 of the Port's Guideline https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/ 	1.3.3
		Construction: Construction Activities	<ul style="list-style-type: none"> Description of construction staging activities, including how the work is proposed to be staged to minimize impacts to stakeholders, for example where equipment will be staged, how the Columbia spur would be replaced, and what impacts to the roadway might be (if any). 	1.3.2

Section 3: Drawing Requirements

Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
Location Plan	Project Scope	Figure 1: Location Plan	<ul style="list-style-type: none"> Plan showing the relationship of the proposed Project to surrounding area at a 1:5000 scale. 	1.2.2
Site Plan	Appendix B: Project Drawing Package	General Arrangement Drawing	<ul style="list-style-type: none"> Lease and property boundaries, easements and rights-of-way. 	Appendix B: Project Drawing Package – Drawing H362376-GA-100-S0-21
	Appendix B: Project Drawing Package	General Arrangement Drawing	<ul style="list-style-type: none"> Location and dimensions of all existing and proposed buildings, structures, and equipment. 	



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Project & Environmental Review (PER) Document

			<ul style="list-style-type: none"> Access points including roadways, driveways, parking areas, walkways, berths, gangways, docks. Area of demolition or construction staging/laydown area. 	
Lot Grading and Utilities	Appendix B: Project Drawing Package	Utilities	<ul style="list-style-type: none"> Separate plans showing existing and proposed utilities. 	Appendix B: Project Drawing Package – Drawings H362376-UT-100-S0-4400 to 4407, and H362376-RW-100-S0-7000 to 7057
	Appendix B: Project Drawing Package	Paving and Drainage	<ul style="list-style-type: none"> Lot grading plan showing existing/proposed paving and drainage. Separate to two plans if required for clarity. 	
	Appendix B: Project Drawing Package	Proposed Changes	<ul style="list-style-type: none"> Proposed modifications to utilities or systems (water, sewer, storm water, power, gas), both above and below ground. 	
Lighting Plan	Appendix B: Project Drawing Package	TBD IF NECESSARY	<ul style="list-style-type: none"> Lighting shown on the site plan for all proposed exterior lighting including the location, type of bulbs, orientation, and level of illuminance. <p><i>(Port Authority Comment: Please include only if additional lighting is to be installed as part of the Project. For further information, please review the Port Authority's Lighting Guideline, available at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/)</i></p>	N/A
Rail	Appendix B: Project Drawing Package	Crossing Locations	<ul style="list-style-type: none"> Existing and proposed rail tracks, switches, and other associated rail works. 	Appendix B: Project Drawing Package – Drawings H362376-RW-100-S0-4001 to 4008
	Project Description	Operations	<ul style="list-style-type: none"> Description of the rail operations expected, and how rail cars are delivered to the site and managed while on the site. 	1.4

Section 4: Required Studies and Reports

Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Documents
Geotechnical Report		N/A	<ul style="list-style-type: none"> Description of site seismic and geologic hazards. 	2.2





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Section 4: Required Studies and Reports				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Documents
	Appendix C: Geotechnical Reports Technical Studies (Summary)	Geotechnical Investigations	<ul style="list-style-type: none"> Description of construction measures, precautions and corrective actions recommended for preventing structural damage and reducing the risk of terrestrial, marine and riparian geotechnical hazards to acceptable levels. Geotechnical investigation and assessment for new structures. 	Appendix G
Rail Operations Plan	Appendix D: Rail Operations Plan Technical Studies (Summary)	N/A Rail Operations Plan	<ul style="list-style-type: none"> An assessment of the rail operations expected, including length and number of cars, average number and peak number of trains per day and total number of train cars that can be accommodated on site. <i>(Port Authority Comment: Description and detail of how CP intends to operate and utilize the yard tracks to service the South Shore terminals, after the new tracks are constructed.)</i> Overview of how shunting or car switching is conducted or managed, and design speed for arriving and departing trains. Description of the design capacity and specifications for the rail components that are specified. 	2.1 Appendix F
Noise and Vibration Study	Appendix E: Noise Assessment Screening Worksheet and Project Score Technical Studies (Summary)	N/A Noise and Vibrations Study	<ul style="list-style-type: none"> An assessment of how the proposed development will affect the noise levels experienced by the adjacent community. <i>(Port Authority Comment: Submit the Noise Assessment Project Score sheet (Appendix II) to determine if further noise assessment will be required. As an example equivalent study we direct you to the Pitt Meadows Road and Rail Improvement Project Noise and vibration study: https://www.portvancouver.com/wp-content/uploads/2019/06/2020-09-04-Environmental-Noise-and-Vibration-Report-BKL-Pitt-Meadows-Road-and-Rail-Improvements-Project-1.pdf.)</i> 	2.3 Appendix H



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Section 4: Required Studies and Reports				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Documents
Archaeological Overview Assessment	Appendix F: Archaeology	N/A	<ul style="list-style-type: none"> Identify and assess archaeological resource potential or sensitivity within a proposed Project area. 	2.4
	Technical Studies (Summary)	Archaeological Overview	<ul style="list-style-type: none"> Provide recommendations concerning the appropriate methodology and scope of work for subsequent inventory and/or archaeological impact assessment studies. 	Appendix I
Soil Management Plan	Appendix G: Soil Management Plan	N/A	<ul style="list-style-type: none"> Outlines how the proponent will test for, appropriately handle, limit migration/run-off and dispose of contaminated soils. 	2.6
	Technical Studies (Summary)	Soil Management	<ul style="list-style-type: none"> Required when dealing with properties with known or suspected contamination in the soil or sediment. <i>(Port Authority Comment: Should dewatering be required, the plan should also outline how groundwater from excavations will be contained, tested, treated, and discharged.)</i> 	Appendix K

Section 5: Notification, Consultation & Engagement				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
Indigenous Groups	Notification, Consultation & Engagement	Indigenous Groups	<ul style="list-style-type: none"> The proposed Project will be assessed to determine whether any part of the proposed work has the potential to impact Indigenous rights. 	3.1
			<ul style="list-style-type: none"> Confirmation of the requirement for Indigenous consultation will be provided upon acceptance and review of your completed Project Application. 	-
		Indigenous Groups: Summary of Engagement Activities	<ul style="list-style-type: none"> Provide all records of previous information sharing activities, agreements, or other interactions with Indigenous groups with respect to the proposed Project. 	3.1.4 Appendix L





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Section 5: Notification, Consultation & Engagement				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
		Indigenous Groups: Indigenous Communities Interested in the Project	<ul style="list-style-type: none"> Provide information on any known Indigenous interests in the Project area, if known. <p><i>(Port Authority Comment: For further information, please review the Port Authority's Indigenous Consultation – Information for Applicants, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/)</i></p>	3.1.4
Stakeholders		Stakeholders	<ul style="list-style-type: none"> The proposed Project may have an impact on stakeholder interests. The following stakeholder notification and/or consultation will be led by the Port Authority during application review phase with the involvement of the Applicant at the request of the Port Authority (responding to stakeholders, attending meetings etc.): <ul style="list-style-type: none"> o City of Vancouver o Metro Vancouver o BC Hydro o Fortis BC o WCMRC o Columbia Containers o Mariner Seafoods o Saam Smit o Kiewit Ledcor TMEP Partnership o Lafarge Canada <p><i>(Port Authority Comment: The Port Authority may revise the list of stakeholders upon acceptance and review of a complete Project Application.</i></p> <p><i>For further information, please review the Port Authority's Stakeholder Consultation Guideline, available online at: https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/)</i></p>	3.2



Commissioner Street Rail Expansion (PER 21-042)



Category C – Table of Concordance

Project & Environmental Review (PER) Document

Section 5: Notification, Consultation & Engagement				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
Public		Public	<ul style="list-style-type: none"> The proposed Project may have an impact on adjacent community interests. As a result the Port Authority requires public engagement in order to solicit feedback from the public. The type of public engagement activities that are required to be led by the Applicant for this project includes: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Project webpage <input checked="" type="checkbox"/> Link to the Canadian Impact Assessment Registry post on the project webpage (link to be provided by the Port Authority) <input checked="" type="checkbox"/> Public notification of public engagement period and opportunities <input checked="" type="checkbox"/> Public engagement for a 25 business day period, which may include a feedback form (fillable online) or online questionnaire, and an online meeting/information session. 	3.3
Public Engagement Materials		Public: Public Engagement Materials	<p><i>(Port Authority Comment: The following list of items provides the minimum public engagement requirements in the PER process. All materials must be reviewed, approved and received by the Port Authority in final form prior to distribution to the public and the commencement of any engagement activities.)</i></p> <ul style="list-style-type: none"> The Applicant is required to submit drafts of the following upon submission of a complete application: <ul style="list-style-type: none"> o Public Engagement Plan o Project website text and any online information o Draft email text to existing distribution lists (if applicable) o Public notification letter o Online questionnaire or feedback form (fillable online) o Presentation (to the Port Authority liaison committees) 	3.3.1 Appendix M



Commissioner Street Rail Expansion (PER 21-042)



Category C – Table of Concordance

Project & Environmental Review (PER) Document

Section 5: Notification, Consultation & Engagement				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
			<ul style="list-style-type: none"> o Coloured renderings, schematics or other visual representations of the Project o Other materials to be used (e.g., videos, brochures, social media posts) as chosen by the Applicant <p><i>(Port Authority Comment: The port authority will provide a notification area map for the public notification. The Port Authority will confirm additional public engagement materials, e.g., project overview document, once a complete application is received.)</i></p>	
Completion of Public Engagement			<ul style="list-style-type: none"> • Upon completion of public engagement, the Applicant will be required to submit the following: <ul style="list-style-type: none"> o Public Engagement Summary and Consideration Report o Any additional information as required by staff 	-
Port Community Liaison Committees		Public: Port Community Liaison Committees	<ul style="list-style-type: none"> • The proposed Project will require a presentation to the following Port Community Liaison Committees: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> East Vancouver Port Lands (EVPL) Liaison Committee <input checked="" type="checkbox"/> South Shore Community Liaison Committee • Submit draft presentation materials (i.e. presentation, brochures). <p><i>(Port Authority Comment: The proposed project was assessed to be of interest to the EVPL and South Shore Community liaison committees.</i></p> <ul style="list-style-type: none"> • <i>According to the EVPL Area Plan, the proposed project is classified as "yellow". At a minimum, this requires early notification to the liaison committee (completed on April 7, 2021) and a presentation during the application review (a date can be scheduled in consultation with the Applicant).</i> 	3.3.2



Commissioner Street Rail Expansion (PER 21-042)



Category C – Table of Concordance

Project & Environmental Review (PER) Document

Section 5: Notification, Consultation & Engagement				
Port Authority Checklist Item	PER Section Title	PER Sub-section Title	Port Authority Checklist Requirement Description	Section of PER Document
			<ul style="list-style-type: none"> A presentation will also be required for the South Shore Community Liaison Committee during the application review (the next scheduled meeting is on June 8, 2021). 	
Construction Communications Plan			<ul style="list-style-type: none"> The proposed Project may have an impact on the adjacent community during the construction period, and therefore the applicant is required to notify area residents and the municipality prior to construction and/or demolition – in keeping with an approved Construction Communications Plan. Submission of a plan may be required at a later date determined by staff (not at the time of application). The Plan should include a brief description of the proposed Project, background, construction timelines, considerations and challenges, engagement objectives, key audiences and stakeholders, key messages, contact information and public and stakeholder notification activities prior to construction and/or demolition. Also include a map of the notification area and mechanism to receive feedback and respond to/resolve issues during construction. <p><i>(Port Authority Comment: This requirement would be confirmed as a permit condition, if the project is approved.)</i></p>	

Administrative Miscellany

Project and Environmental Review Process

As a Partner of the Vancouver Fraser Port Authority (VFPA), CP has been completing rail projects in the Port of Vancouver for decades. The proposed **Commissioner Street Rail Expansion** (the “Project”), a component of the Burrard Inlet Road and Rail Improvement Program, is a project that has been contemplated for many years.

In early 2021, CP formally initiated the VFPA’s Project and Environmental Review (PER) Process for the Commissioner Street Rail Expansion following the approach described in the VFPA’s previous and current Application Guides (September, 2019 and May, 2021). A Preliminary Project Inquiry (PPI) document was submitted by CP (the Applicant) to the VFPA on March 12, 2021 and the project assigned PER No. 21-042. A Preliminary Project Review meeting was convened on April 1, 2021 where a project presentation was delivered by CP to the VFPA’s PER Team.

On April 27, 2021 the VFPA’s Project Lead informed CP of the completion of their preliminary review of the project and their determination that the application be reviewed as a Category C PER. An Application Submission Requirement Checklist for the proposed project was issued by the Project Lead. The Checklist is presented in the first pages of this document.

The Applicant has developed this Category C Application and Supporting Information Package, following the VFPA’s Guide, to address the project-specific submission requirements identified in the Checklist. The Table of Concordance that follows the Checklist, above, has been prepared to assist the reader in navigating the content of this application document and to demonstrate compliance in addressing the project-specific submission requirements of the Checklist and PER Team. This permit Application is being submitted electronically through the VFPA’s online Project Permit Portal as well as in paper format.

Project and Environmental Review Application Form

As requested in the PER 21-042 Checklist, a Category C/D Application Form has been completed and submitted through the VFPA’s online Project Permit Portal. A paper copy of the completed form is appended to this document as **Appendix A**.

Project and Environmental Review Fees

The PER 21-042 Checklist identifies two fees as being applicable to CP’s Category C Application for the Commissioner Street Rail Expansion Project: a non-refundable *Project Permit Application Fee* of \$13,125; and a *Documentation Deposit* calculated as 1% of the anticipated construction value (to a maximum of \$10,000). The Documentation Deposit is refunded when required record drawings documenting construction have been received by the VFPA and deemed satisfactory.

Cheques for both fees have been delivered to the VFPA.

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Appendix B.	Project 90% Drawing Package
Appendix C.	Environmental Constraints Analysis Report
Appendix D.	Construction Environmental Management Plan
Appendix E.	Integrated Contingency Plan: Emergency Preparedness and Response
Appendix F.	Rail Operations Plan
Appendix G.	Geotechnical Report
Appendix H.	Noise and Vibration Report
Appendix I.	Archaeological Overview Assessment
Appendix J.	Drainage Report
Appendix K.	Soil Quality/Management Report
Appendix L.	Indigenous Engagement Materials
Appendix M.	Public Engagement Materials



1.0 Project Description

1.1 Proponent Information

The project proponent (and Applicant) is Canadian Pacific Railway (CP) – a transcontinental railway in Canada and the United States with direct links to major ports on the west and east coasts. CP provides North American customers a competitive rail service with access to key markets in every corner of the globe. CP is growing with its customers, offering a suite of freight transportation services, logistics solutions and supply chain expertise.

The Proponent’s primary contact information is:

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Project Engineer – Projects & Public Works
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Email: Titilayo.Fatigun@cpr.ca

Kiley Gibson

Environmental Permitting Specialist
Canadian Pacific
7550 Ogden Dale Road SE
Calgary, AB T2C 4X9
Tel: (403) 319-6234
Email: Kiley.Gibson@cpr.ca

1.2 Project Scope

1.2.1 Purpose and Rationale

CP is proposing to expand their existing railway infrastructure to improve capacity and fluidity on the south shore of the Port of Vancouver in the vicinity of the Columbia Containers Terminal. The expansion is being undertaken as part of the Burrard Inlet Road and Rail Improvement Program and, more specifically, the Commissioner Street Road and Rail Realignment Project. Commissioner Street road improvements, led by the Vancouver Fraser Port Authority (VFPA), will improve truck traffic flow and the safe and efficient access to terminal facilities and make lands available for the installation of additional railway infrastructure by CP.

Rail improvements, the subject of this application, include the addition of two new yard tracks along the north side of CP’s existing East L Yard on CP’s Cascade Subdivision (sub). The reconfiguring of existing tracks, and addition of the two new tracks, will improve both mainline fluidity and switching operations of loaded and empty railcars between the CP track and the Columbia Containers Terminal, increase railcar storage capacity, support trade growth, and increase local and national jobs.

The proposed rail expansion project is funded by CP with financial support from the Government of Canada through the National Trade Corridors Fund.

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1.2.2 Project Location

The proposed Commissioner Street Rail Expansion (the 'Project') is located between Mile 125.37 and Mile 127.00 of the Cascade Sub in the City of Vancouver (see **Figure 1**). The western and eastern Project limits correspond approximately with the Victoria Drive alignment (49° 17' 06.41" N, 123° 03' 56.02" W) and the Commissioner Street overpass/McGill Street (49° 17' 22.69" N, 123° 02' 25.42" W), respectively.

Proposed new trackage will be situated north of the existing CP tracks generally along the current alignment of Commissioner Street. The Port Authority is presently undertaking the realignment of the privately owned and managed Commissioner Street to the north of its current alignment to accommodate the proposed rail expansion.

Portions of CP's new rail alignment will be situated outside of CP's right-of-way (ROW) on lands under the jurisdiction of the VFPA and the City of Vancouver. According to the VFPA's Online Interactive Land Use Mapping, all VFPA lands encroached upon by the Project are designated as "Port Terminal".

1.2.3 Project Components

The proposed Commissioner Street Rail Expansion will have the following elements:

- Protection, upgrade or relocation of existing buried utilities and infrastructure in conflict with the alignment;
- Two new yard tracks – L30 and L31 (approximately 2,400 m and 1,300 m in length, respectively);
- Adjustment of the existing Columbia Containers Limited (CCL) lead track to connect to the proposed L31 track including upgrades to the level crossing of Commissioner Street;
- A track shift below the Commissioner Street overpass to maintain five (5) tracks through the corridor;
- A retaining wall along New Brighton Road;
- A utility protection slab on Commissioner Street;
- Track derails including sliding derails;
- Turnouts and crossovers connecting the various yard tracks with the CP mainline and private customer trackage and
- Signals and warning system work.

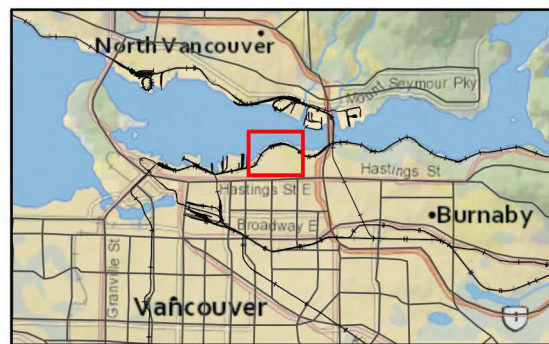
The location of key project components are identified in **Figure 2** and on the General Site Plan provided on page 7 (Plan No. H362376-GA-100-S0-2100) of the 90% design drawing package presented in **Appendix B**.

All new track will be constructed with CP standard track materials related to rail, ties, special track work, fasteners, plates, and track structure. The new tracks will be governed as yard tracks with a maximum operating speed of 15 miles per hour.



**CANADIAN PACIFIC
EAST L YARD EXPANSION PROJECT**

**FIGURE 1
PROJECT LOCATION**

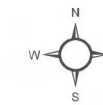
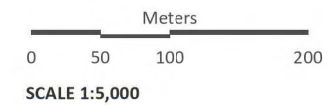


LEGEND

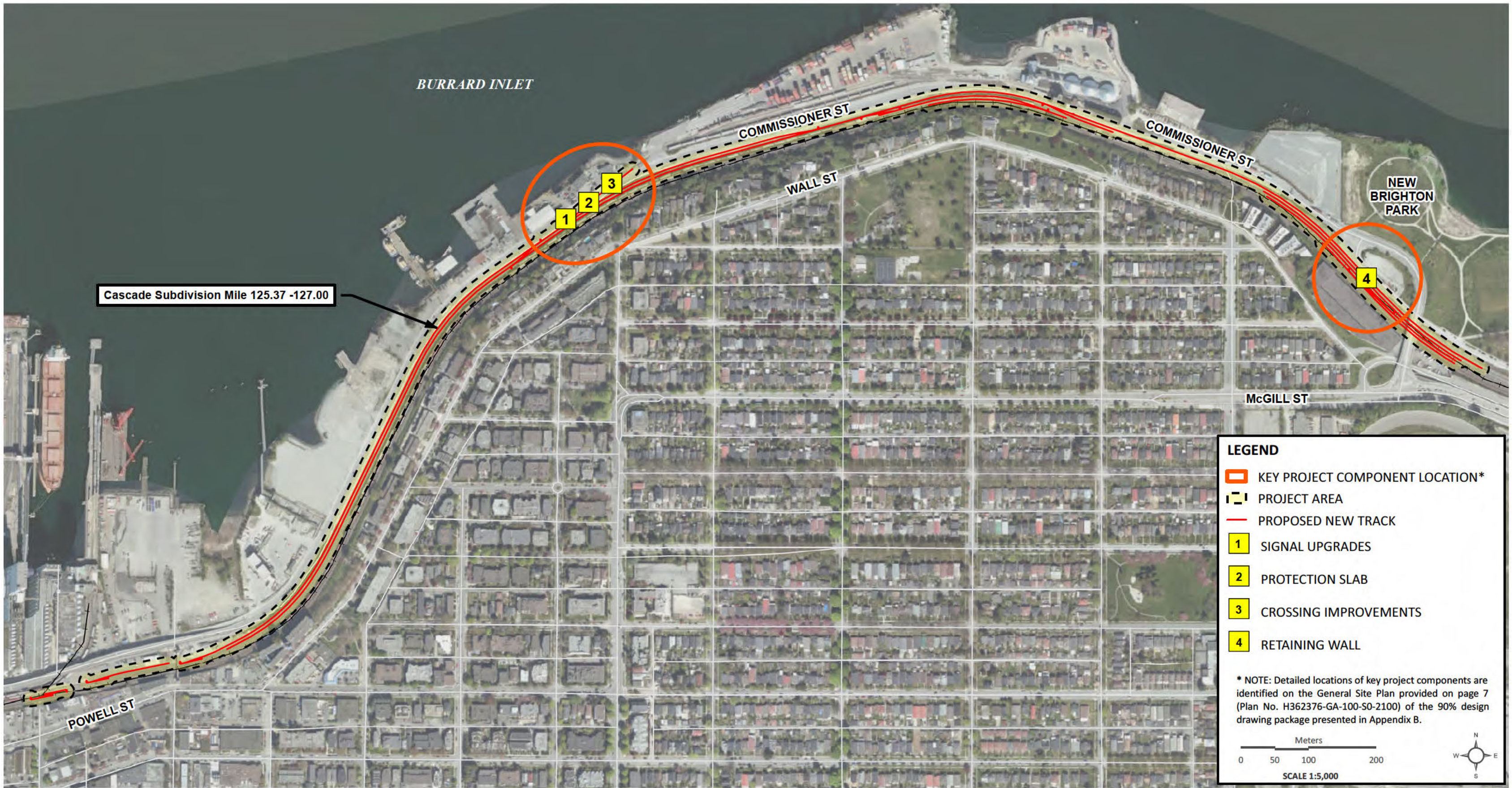
- PROJECT AREA
- PROPOSED NEW TRACK

MAP DRAWING INFORMATION:
ESRI Basemaps, Fresh Water Atlas, City of Vancouver

MAP CREATED BY: JL, RB
MAP CHECKED BY: JP, CM, PRHS
MAP PROJECTION: NAD 1983 UTM Zone 10N



PROJECT: 20-2321
STATUS: DRAFT
DATE: 2021-07-28



**CANADIAN PACIFIC
COMMISSIONER STREET RAIL EXPANSION**

**FIGURE 2
SITE PLAN - KEY PROJECT COMPONENT
LOCATIONS**



MAP CREATED BY: JL, RB
 MAP CHECKED BY: JP, CM, PRHS
 MAP PROJECTION: NAD 1983 UTM Zone 10N
 MAP DRAWING INFORMATION:
 ESRI Basemaps, Fresh Water Atlas, City of Vancouver



PROJECT: 21-2406
 STATUS: DRAFT
 DATE: 2021-09-23

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No permanent buildings or related building structures are proposed as part of the Commissioner Street Rail Expansion. During construction, CP anticipates that a small number of temporary structures will be required at the construction site in the form of a temporary office, a lunchroom trailer and portable toilets for workers.

No new roadways are required for construction or operation of the proposed Commissioner Street Rail Expansion. The existing CCL at-grade crossing will be adjusted with the CCL lead track. The crossing surface and crossing warning system will be upgraded with the new layout.

Drainage along the new trackage will be designed and installed to meet local drainage and environmental requirements and will be functionally unchanged from existing conditions.

The 90% design drawings of the proposed works are presented in **Appendix B**.

1.2.4 Project Setting

The historic shoreline of Burrard Inlet and surrounding areas have been inhabited and used by indigenous peoples who have resided in this territory for thousands of years. The proposed Project is situated on the traditional, ancestral, unceded territory of the Musqueam, Squamish and Tsleil-Waututh Nations. Other Indigenous communities with traditional territories may also assert traditional land uses that overlap with the Project area.

The Project is proposed within the VFPA's East Vancouver Port Lands (EVPL) sub-area of Planning Area 1 (Burrard Inlet South Shore) characterized by more than a century of rail, port industrial and residential land uses. Situated within the City of Vancouver, the industrial lands within the Project limits are federally owned and managed by the VFPA. CP owns and occupies the right-of-way that separates federal lands from private properties to the south that fall under the jurisdiction of the City. The City also owns portions of several road alignments that intersect the CP ROW. CP intends to enter into a land agreement with the VFPA to secure portions of federal lands situated beyond CP's ROW which the proposed tracks will occupy.

The full extent of the proposed Project alignment (or "Footprint") has been previously disturbed by port industrial development with large areas of the alignment currently or previously paved. An assessment of environmental features of the Project area was completed by Dillon Consulting Limited in September, 2020 and documented in an *Environmental Constraints Analysis Report*. Vegetated areas within the Project Footprint are small, isolated and infrequent. Vegetation lining Commissioner Street is almost exclusively introduced/landscaped or represented by native pioneer herbaceous and shrub species. Wildlife species are transient given the general absence of habitat and intensive level of port-related activity. There are no open water channels intersected by the proposed alignment and no direct interaction with Burrard Inlet. The extensive level of ground disturbance in the Project Footprint, that includes historical shoreline infill, road and rail base and extensive buried services and utilities, [REDACTED]

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The project will interface with many buried utilities and services. Utility owners affected by the Project include Metro Vancouver, Fortis, the City of Vancouver, and the VFPA. The Metro Vancouver Harbour East Interceptor Sewer, a combined storm and sanitary concrete sewer pipe, is the major utility impacted by the work as it is located within the within the Commissioner Street road alignment and is in conflict with the proposed L31 track and relocated Columbia Containers lead track.

North of the existing CP mainline tracks and Commissioner Street, the south shore of Burrard Inlet is largely developed with industrial and commercial Port-related tenants including but not limited to:

- Columbia Containers Terminal;
- Osprey Marine;
- Mariner Seafoods;
- SAAM SMIT Canada; and
- Lafarge Canada.

Many of these businesses operate on a 24/7 basis.

South and west of the Project area are some of Vancouver's oldest neighbourhoods - the residential areas of Hastings-Sunrise and Grandview-Woodland - now characterized as diverse neighbourhoods comprising low-medium density housing and abundant green spaces. Elevated above the Port lands, the residential properties of Wall Street offer spectacular views of Burrard Inlet and the North Shore but are particularly sensitive to impacts of Port operations. The steep slopes separating the CP ROW from residential properties are vegetated with an understory of invasive and non-native species. Sporadic native and some non-native tree species (coniferous and deciduous) are present on and at the top of the embankment (*i.e.*, south of the CP ROW) and are expected to provide habitat for wildlife species tolerant of urban environs.



PHOTO 1: SOUTHWEST VIEW OF WEST END OF PROJECT AREA AND SURROUNDING LAND USE

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Table 1 identifies receptors potentially sensitive to Project development activities (i.e., schools and parks) located proximate to the Project Area.

TABLE 1: POTENTIAL SENSITIVE RECEPTORS WITHIN 1.0 KM OF THE PROJECT AREA

Potential Receptor	Location	Approximate Distance from Project Area (km)
Parks		
New Brighton Park	East of the Project area	0.1 km
Burrard View Park	South of the Project area	0.1 km
Dusty Greenwell Park	South of the Project area	0.1 km
Trinity Park	South of the Project area	0.1 km
Hastings Park	South and east of the Project area	0.1 km
Cambridge Park	South of the Project area	0.1 km
Oxford Park	South of the Project area	0.1 km
McGill Park	South of the Project area	0.2 km
Pandora Park	South of the Project area	0.5 km
Callister Park	South of the Project area	0.6 km
Slidey Slides	South and east of the Project area	0.7 km
Empire Fields	South and east of the Project area	0.7 km
Templeton Park	South of the Project area	0.9 km
Salsbury Park	South and west of the Project area	0.9 km
Woodland Park	South and west of the Project area	1.0 km
Hastings Community Park	South of the Project area	1.0 km
Schools		
Tillicum Community School Annex	South of the Project area	0.4 km
Xpey' Elementary School	South of the Project area	0.5 km
Templeton Secondary School	South of the Project area	0.8 km
Hastings Community Elementary School	South of the Project area	1.0 km
Other Receptors		
Hastings Racecourse	South and east of the Project area	0.1 km
Pacific Coliseum Arena	South of the Project area	0.4 km
PNE Agrodome	South of the Project area	0.6 km
Playland at the PNE	South and east of the Project area	0.7 km

There are no hospitals, retirement homes or other similar receptors that may be considered sensitive to potential impacts of the Project situated within 1.0 km of the Project site.

1.2.5 Potential Project Impacts

The proposed Commissioner Street Rail Expansion is classified as a *Conditionally Approvable* (Yellow) Use per the 2007 EVPL Area Plan. Potential impacts to land, water, air and adjacent communities and businesses in the Project vicinity may be generated by the Project and will require mitigation to prevent,

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reduce or control adverse environmental effects. It is expected that many of these potential impacts will be temporary as they are associated with construction activities. They are anticipated to include:

- Potential changes to commercial vehicular traffic flows along Commissioner Street within the restricted access area of the Port;
- Potential changes to infrastructure risk levels from local geotechnical conditions;
- Potential interaction with buried infrastructure within the Port's industrial area and effects on Port tenants;
- Potential alteration of unregistered archaeological sites;
- Potential changes to downstream surface water quality;
- Potential changes to air quality in the vicinity of Commissioner Street including adjacent communities;
- Potential changes to existing noise levels affecting quality of life of community residents; and
- Potential effects on the safety of construction workers and employees of Port-leaseholder enterprises.

These and other potential Project-related effects of the proposed development on each component, recommended mitigation measures, and the anticipated likelihood of adverse residual effects of the Project are summarized below in **Table 2**. Where appropriate, the location of additional mitigation detail is referenced in the table.

Notably, no direct impacts are anticipated for the following environmental components:

- Fish and fish habitat;
- Species at risk or of Special Concern;
- Marine operations, marine user groups or navigation;
- Registered archaeological sites; and
- Views.

A *Construction Environmental Management Plan* (CEMP) has been completed to address the VFPA's Project and Environmental Review Application Submission Requirements. Specifically, the CEMP identifies potential impacts of construction of the Commissioner Street Rail Expansion and presents a suite of Best Management Practices that can be applied to mitigate these impacts. The CEMP is provided in **Appendix D**.

TABLE 2: SUMMARY OF POTENTIAL PROJECT EFFECTS, RECOMMENDED MITIGATION MEASURES AND ANTICIPATED RESIDUAL ADVERSE EFFECTS

Component	Potential Adverse Effects?		Overview of Potential Effects	Recommended Mitigation Measures	Significant Residual Adverse Effects?	
	Yes	No			Yes	No
Traffic	✓		<ul style="list-style-type: none"> ● Potential temporary negative effects (e.g., reduced speed zones, detours, lane closures) to commercial traffic/operations of port leaseholders using Commissioner Street may occur from the use of construction machinery and equipment. 	<ul style="list-style-type: none"> ● Mitigation measures to address potential effects of the Project on commercial traffic within the Port’s restricted access area are presented on Drawings H362376-RW-100-S0-8010 to H362376-RW-100-S0-80 in Appendix B. ● Traffic control to be performed per the contractor’s <i>Traffic Management Plan</i> which is subject to review by VFPA prior to construction. ● Where necessary, construction to occur outside of VFPAs Regular Work Hours (e.g., night time, Sunday) to minimize impact to commercial traffic/operations of port leaseholders. 		✓
Geotechnical	✓		<ul style="list-style-type: none"> ● Potential risks to structures and geotechnical hazards. 	<ul style="list-style-type: none"> ● Design and installation of proposed project components to be informed by geotechnical investigations and in compliance with applicable engineering standards to prevent risks to structures and other hazards. 		✓
Buried Infrastructure	✓		<ul style="list-style-type: none"> ● Potential disruption of services (e.g., water, gas) to local Port tenants. 	<ul style="list-style-type: none"> ● Utility locates to be completed prior to construction activity. ● Relocation of existing services to be completed in consultation with utility owner(s). ● Where necessary, construction to occur outside of VFPAs Regular Work Hours (e.g., night time, Sunday) to minimize impact to tenants. 		✓
Drainage	✓		<ul style="list-style-type: none"> ● Potential increase in stormwater management requirements. 	<ul style="list-style-type: none"> ● Proposed surface and subsurface drainage design will match existing drainage paths and run-off volume (i.e., pre-development conditions equal post-development conditions). 		✓
Air Quality	✓		<ul style="list-style-type: none"> ● Potential temporary negative effects to local air quality may occur from the use of construction machinery and equipment during construction activities (e.g., exhaust from construction equipment and vehicles). 	<ul style="list-style-type: none"> ● Mitigation measures to address potential effects of the Project on local air quality are presented in the Construction Environmental Management Plan (Appendix D) and include idle reduction protocols, proper inspection/maintenance of construction equipment, etc. 		✓
Surface Water	✓		<ul style="list-style-type: none"> ● Potential effects of construction activities on water quality (e.g., suspended solids) of downstream receiving waterbodies (i.e., Burrard Inlet). 	<ul style="list-style-type: none"> ● Mitigation measures to address potential effects of the Project on water quality of downstream waterbodies are presented in Section 4.7 of the Construction Environmental Management Plan (Appendix D) and include erosion and sediment control measures implemented during construction. 		✓
Ground Water		✓	<ul style="list-style-type: none"> ● Potential need to dewater and properly manage groundwater during construction. 	<ul style="list-style-type: none"> ● Mitigation measures to address appropriate dewatering and management of groundwater are presented in the Refined Soil Characterization/Management Report (Appendix K) and in the contractor’s <i>Dewatering and Water Management Plan</i>, if required. 		N/A
Soils	✓		<ul style="list-style-type: none"> ● Potential temporary negative effects of contaminated soils requiring excavation during construction. 	<ul style="list-style-type: none"> ● Mitigation measures to address potential effects of contaminated soils include appropriate handling, storage, transport and disposal procedures as described in the Soil Characterization/Management Report (Appendix K), Section 4.6 of the Construction Environmental Management Plan (Appendix D) and the contractor’s <i>Soil Management Plan</i>. 		✓
Species/ Habitats of Special Status		✓	<ul style="list-style-type: none"> ● None anticipated. 	<ul style="list-style-type: none"> ● Not applicable. 		✓
Aquatic Resources		✓	<ul style="list-style-type: none"> ● Not applicable. 	<ul style="list-style-type: none"> ● Not applicable. 		N/A
Terrestrial Resources		✓	<ul style="list-style-type: none"> ● None anticipated. 	<ul style="list-style-type: none"> ● Not applicable. 		✓
Archaeology/ Cultural Resources	✓		<ul style="list-style-type: none"> ● Potential effects of ground disturbance activities during construction on archaeological resource potential. 	<ul style="list-style-type: none"> ● A Chance-Find Procedure will be in place to stop work and notify interested Indigenous communities in the event of the unexpected discovery of archaeological resources. 		✓

Component	Potential Adverse Effects?		Overview of Potential Effects	Recommended Mitigation Measures	Significant Residual Adverse Effects?	
		✓				✓
Use of Lands/ Resources by Indigenous peoples		✓	<ul style="list-style-type: none"> None anticipated. 	<ul style="list-style-type: none"> Not applicable. 		✓
Noise and Vibration	✓		<ul style="list-style-type: none"> Potential temporary increases in noise and vibration levels (e.g., equipment noise, heavy trucks) experienced by residences of the adjacent community generated during construction activities. 	<ul style="list-style-type: none"> Mitigation measures to address potential increases in noise levels generated during construction are presented in the Construction Environmental Management Plan (Appendix D) and include appropriately scheduling the timing of noisy activities, muffling/shrouding of stationary equipment and the regular inspection/maintenance of construction equipment. 		✓
Lighting	✓		<ul style="list-style-type: none"> Potential temporary negative effects of lighting used for construction during night time periods (no new permanent lighting proposed). 	<ul style="list-style-type: none"> Mitigation measures to address potential effects of construction lighting are presented in the Construction Environmental Management Plan (Appendix D) and include the strategic positioning of lights to face away from residences. 		✓
Safety	✓		<ul style="list-style-type: none"> Potential negative effects of construction activities to construction worker safety. 	<ul style="list-style-type: none"> Construction Contractor to be responsible for the preparation of a <i>Health and Safety Plan</i> that will include appropriate measures to ensure that safe work practices are implemented during construction for the protection of workers and the public. 		✓

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The Project context for each potential residual effect of the Project is as follows:

- The **magnitude** of potential project effects is considered to be **low** given the scope of the proposed works (i.e., track construction), the availability of mitigation measures, and the temporary nature of construction;
- The **geographic extent** of potential project effects is generally **local** with the majority of impacts limited to the Project Footprint and area immediately adjacent;
- The **duration** of potential project effects is **short-term**, aligned with the expected 7 month construction window;
- The **frequency** of potential project effects will vary with specific construction activities but can be expected to be **continuous** throughout the construction period; and
- Potential project effects are considered to be **temporary** and will cease coincident with the conclusion of construction activities.

With the implementation of industry best management practices and the recommended mitigation measures presented in the Construction Environmental Management Plan (**Appendix D**) and other attachments to this application, residual adverse effects are not likely to result from the proposed Project.

CP has also developed an *Integrated Contingency Plan: Emergency Preparedness and Response* that addresses hazardous materials handling, spill prevention and emergency response planning. The document is provided in **Appendix E**.

1.2.6 Supporting Studies

A number of supporting technical studies have been completed during the planning and design stages of the Project. These studies support and supplement the information provided in this application and include the following:

- Archaeological Overview Assessment (Terra Archaeology, June 2020);
- Environmental Constraints Analysis Report (Dillon Consulting, September 2020);
- Initial Environmental Assessment (soil quality) – Canadian Pacific East Yard Track L30 (Core6 Environmental Ltd., Updated September 2021);
- Geotechnical Assessment for CP Commissioner Street Rail Expansion – L30 Track Technical Memo (Tetra Tech, June 2020, Updated September 2021);
- Construction Environmental Management Plan (Dillon Consulting, August 2021);
- Rail Operations Plan (CP, August 2021); and
- Noise and Vibration Study (Hemmera, September 2021).

All of these documents are appended to this application.

1.2.7 Property and Utility Agreements

As noted above, in several locations the proposed Project Footprint extends beyond the CP right-of-way into the jurisdictions of the Port Authority and City of Vancouver. As well, the proposed new track

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alignment interacts with numerous buried utilities owned and operated by public and private parties. Discussions to secure property and utility agreements have been initiated and ongoing for some time and will be concluded prior to the initiation of construction.

1.3 Construction

Construction of the proposed Project will begin upon issuance of Approvals from VFPA. Construction activities contemplated for the development of the two new yard tracks include: relocation and protection of buried infrastructure, minor excavation of unsuitable soils; placement and grading of structural fill, track construction, and roadway works. Construction activities will occur over the course of several project stages as described in the following sections.

Detailed design drawings of the proposed works are presented in **Appendix B**.

1.3.1 Project Schedule

Construction of the proposed Project will begin following completion of the Commissioner Street realignment project being undertaken by the VFPA, and subsequent issuance of Project approvals from the VFPA (currently anticipated for early 2022). Mobilization, site facilities and temporary working areas will be established prior to the initiation of construction. CP is anticipating mobilization/start of construction to occur in April 2022 and be completed by the end of October 2022 (i.e., construction duration of 7 months). CP anticipates 4 months of grading, drainage, and structural work, followed by 3 months of track construction and crossing modifications. A summary of the project schedule and milestones is provided in **Table 3** below.

TABLE 3: KEY PROJECT MILESTONES AND SCHEDULE

Project Activity Milestones	Anticipated Timing
Mobilization, start of construction ¹	April 11, 2022
New Viterra tracks (K09/K10) in service	August 23, 2022 (Viterra shutdown date TBD)
New CCL crossing in service	August 31, 2022
New L30/L31 tracks in service	October 27, 2022
End of construction	October 27, 2022
Demobilization	November 1, 2022
New service/lead track in service	January 1, 2023

¹ Mobilization, site facilities and temporary working areas, and access routes/track crossing

More specifically, construction will be delivered in stages, as outlined in the Staging drawings included in the Design Drawing package (see **Appendix B**), to allow the maintenance of service to all CP customers during construction. **Table 4** provides an overview of anticipated Project Stages. Of note, the anticipated duration of each construction stage is expected to vary based on the availability/capacity of the selected Contractor's resources.

TABLE 4: OVERVIEW OF CONSTRUCTION STAGES

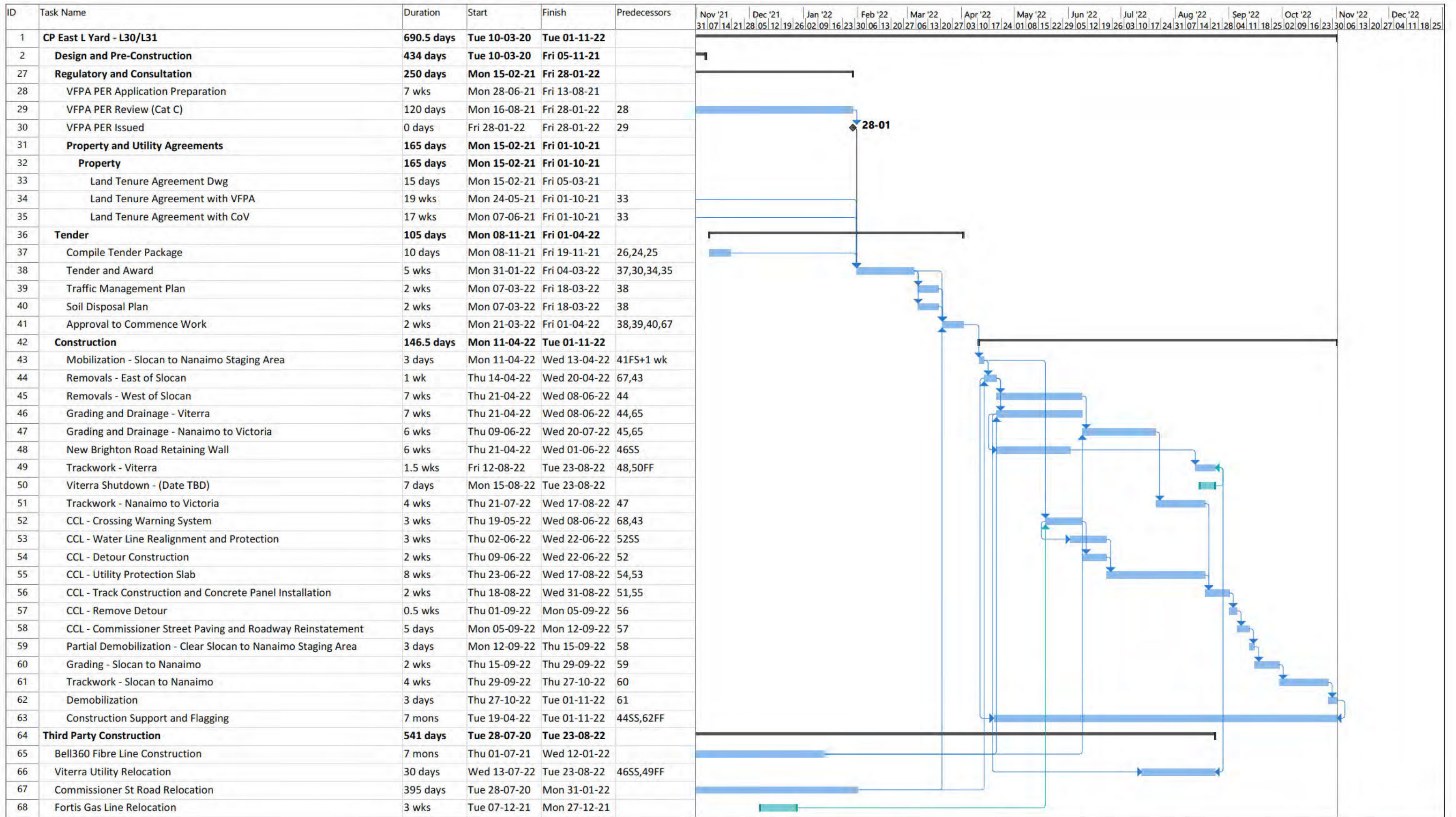
Construction Stage	Anticipated Stage Duration	Summary
Project Stage 1: Removals	8 weeks	Demolition and/or removal of curb, gutter, pavement, rail yard equipment, signage and buried utilities/infrastructure across Project Footprint to accommodate proposed construction. Excavation, handling and off-site disposal of soils deemed unsuitable due to geotechnical and/or quality standards.
Project Stage 2 and 9A: Grading, Drainage and Wall Installation	17 weeks	Construction of new track alignment comprising grading and drainage and wall installation, paving, etc. completed in three distinct sections: East end of project to Slocan Street; Slocan Street to west end of project; and Yard Track Tie In at CCL Track.
Project Stages 3 – 6, 8, 9B: Track Installation	14 weeks	Installation, relocation of track and associated rail infrastructure (e.g., crossovers, turnouts, derails) completed in multiple sections: K10/L30 Track; K01/K02 Track Shift (Viterra); K09/K10 Track Shift; L30/L31 Track; L30/L31 West Tie In; CCL Track Connection; and L30/L31 Track Completion.
Project Stage 7: Utility Works at Columbia Containers Track	3 weeks	Removal, relocation and installation of buried utilities and installation/commissioning of crossing warning system at Columbia Containers lead track crossing of Commissioner Street.

As noted, the initiation and completion of Project construction are contingent on the completion of the Port Authority's Commissioner Street realignment project, the securing of VFPA's PER approvals and property agreements, as well as the completion of grouting of Metro Vancouver's Harbour East Interceptor (by others).

The detailed Construction Schedule for the Commissioner Street Rail Expansion is presented in **Figure 3**.

1.3.2 Construction Activities

As requested in the VFPA's Application Checklist, a description of proposed construction activities for the Project is provided below and accompanies and complements the Project staging plans and schedule presented. Construction and traffic management is addressed.



Project: Preliminary Project Sch Date: Tue 03-08-21	Task	[Blue Bar]	Summary	[Black Bar]	Inactive Milestone	[Grey Bar]	Duration-only	[Green Bar]	Start-only	[Blue Bar]	External Milestone	[Diamond]	Manual Progress
	Spit	[Dotted Bar]	Project Summary	[Grey Bar]	Inactive Summary	[Grey Bar]	Manual Summary Rollup	[Green Bar]	Finish-only	[Blue Bar]	Deadline	[Green Plus]	
	Milestone	[Diamond]	Inactive Task	[Grey Bar]	Manual Task	[Green Bar]	Manual Summary	[Black Bar]	External Tasks	[Grey Bar]	Progress	[Blue Bar]	

Mobilization

The project begins with mobilization wherein the contractor will mobilize to the Main Staging Area located on Commissioner Street between Nanaimo Street and Slocan Street. Mobilization is expected to take three days and will require the contractor to secure the staging area from Commissioner Street traffic and construct site access points.

Removals

Once staging is complete the contractor will commence with removals over an 8-week period. Removals will include the excavation, handling and disposal of unsuitable soils. Standard construction equipment (e.g., backhoe, excavator) will excavate and load unsuitable soils directly into trucks for offsite disposal when possible. When direct loading and immediate offsite disposal is not possible, soil will be stockpiled in a manner that limits the potential for migration and runoff following industry-accepted environmental best practices and recommended site-specific practices. The contractor will develop the site-specific approach to soil handling/management for the Project. There will be minimal impact to the roadway during this time where the contractor may occasionally require use of the Roadway Staging Area.

Grading, Drainage and Wall Installation

Following removals, the contractor will begin with grading and drainage activities, installing all grading and drainage between Commissioner Street overpass to Slocan Street, and Nanaimo Street to Victoria Drive. Construction on the soldier pile retaining wall at New Brighton Road can also start at this point. Grading and drainage will require trucks to access the construction site via the various construction accesses constructed during mobilization. Traffic control may be required at site access points.

Track Installation

When the soldier pile retaining wall is complete, off-line construction of K10 can begin. K10, the same track as L30 east of Slocan Street, will be built long enough so it can act as a stub-end track allowing Viterra grain unloading operations to continue while the rest of the project is being constructed. Once the Viterra annual shutdown is in effect, the contractor will construct the turnout and crossover arrangements on K10, K09, K02, and K01 in a one-week timeframe so that Viterra is operational at the end of the shutdown. The Viterra derail cabinet and powered derails will also be relocated and wired during the shutdown period. The shutdown and off-line construction will take two weeks and will be hard-coded into the schedule based on Viterra's shutdown date. Ballast for the Viterra track works will be delivered by ballast train and stockpiled on site.

After the Viterra track is completed, the contractor will construct L31 and L30 between Nanaimo Street and Victoria Drive. This trackwork will take four weeks including the L31 connection at Victoria Drive and the crossover west of Nanaimo Street. The contractor will also install a crossover west of Victoria Drive within the CP corridor for track equipment to access L30 and L31.

CCL Lead Track Crossing

Once L31 and L30 are constructed west of Nanaimo Street the CCL construction works can begin. The new crossing warning system will be installed first to reduce traffic control measures as the detour will

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align with the crossing warning system. The contractor will also realign the water line in this stage, relocating the existing line to the edge of Commissioner Street, installing new protection for the water line, and relocating service connections on the north side of Commissioner Street. Once the crossing warning system and water line are complete the contractor will prepare a detour, diverting Port traffic south of the existing crossing.

The piled protection slab will be built with truck traffic diverted around the slab sections. The slab will be built in two sections due to its size and location in the middle of Commissioner Street. Piles will be installed, followed by excavation to bottom of slab where formwork and steel will be placed prior to the concrete pour. Steel plates, appropriately sized for Commissioner Street traffic, will be set in the asphalt over the curing protection slab to allow the contractor to shift traffic to the north side and prepare the protection slab south section. The contractor will begin track construction after the entire slab is complete, construction track grade and install track with the CCL turnout. The track will be tamped and lined sufficient for temporary timber crossing planks to be installed on it to allow traffic to travel over it. Wiring for the new crossing warning system will be performed with the new CCL turnout in place.

With traffic on the south detour, the contractor will disconnect the existing CCL lead track and reconnect to the new CCL lead. This will be done between services to ensure no disruptions to Columbia Containers. The contractor will install concrete crossing panels on the finished track and place temporary asphalt to allow traffic on the north detour. After switching traffic back to the north side, the contractor will install the remaining concrete panels and remove the rest of the disconnected CCL track including the L29 turnout. The detour will be removed and the roadway will be prepared for paving.

Demobilization and Project Area Restoration

With the CCL track in service, the complex components of the project will be complete and the contractor will demobilize the majority of their equipment from the Main Staging Area. The contractor will pave the rest of Commissioner Street and perform grading and drainage works between Nanaimo Street and Slocan Street before connecting L30 and L31 to the as-built tracks.

1.3.3 Working Hours

Project work is scheduled to occur weekly and within the Port of Vancouver's regular working hours period of Monday through Saturday between 7:00 am and 8:00 pm.

It is anticipated that extended work hours may be required to meet key Project timelines and minimize disruptions to traffic and operations of Port tenants. A formal request to the VFPA to conduct construction outside of regular work hours, following the VFPA's PER Guidelines (February 2021), will be prepared and submitted as appropriate.

1.4 Operations

Existing Rail Operations

Broadly, CP's yards in the vicinity of the Commissioner Street Rail corridor serve the important purpose of being used to stage rail cars for delivery to customer sites and to assemble rail cars into trains to leave the South Shore enroute to CP's Port Coquitlam Yard. Current capacity within the CP's L Yard is ~254 cars. Current operations in L Yard occur 24/7 with trains arriving and departing 24 hours/day.

The current track in and through the East L Yard is as follows:

Main Track	Track L28 – ~5380 feet
Track L27 – ~5600 feet	Track L29 – ~4300 feet

The layout of current main, yard and industrial/customer trackage is illustrated in Error! Reference source not found..

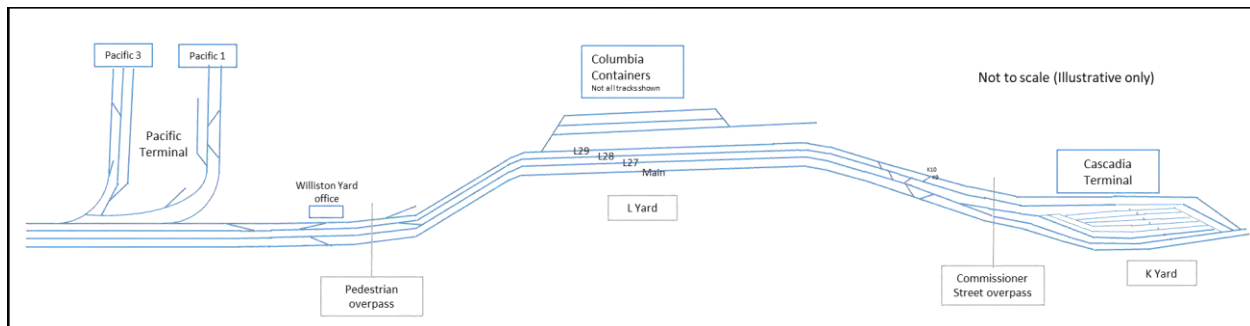


FIGURE 4: SCHEMATIC OF CURRENT CP TRACK LAYOUT IN THE VICINITY OF THE COMMISSIONER STREET RAIL EXPANSION PROJECT

The Main Track is a through track along the south side of the East L Yard and is used by freight trains and West Coast Express (WCE) trains that operate a scheduled morning and evening commuter service during the week. Freight trains, road switchers and locomotive consists (lite engine) operate on the Main Track throughout the day as a route to maneuver around cars that have been staged or are being switched on the other East L Yard tracks. The East L Yard tracks (i.e., Tracks 27, 28 and 29) are used for all commodities arriving and departing South Shore customer terminals. Each track provides specific operational roles such as storage and switching for both loaded and empty rail cars.

Train volumes in and through the East L Yard vary with the ebb and flow of the Canadian economy and seasonal peaks in imports and exports (e.g., intermodal imports, grain exports). Between 4 and 6 freight trains could arrive and depart through the East L Yard each day bringing rail cars to and from the South Shore grain, intermodal container and merchandise (canola oil and sugar) customers along the Waterfront. Train movements in the East L Yard are powered by standard 4-axle yard locomotives (2200 Horsepower (HP)) for switching. This is the main form of locomotive used at the Port. Standard six-axle road units (4400 HP) operate on the Main Track. Train speeds in and through the East L Yard are dependent on train type. Passenger train (i.e., WCE) speed both eastward and westward on the Main Track through the East L Yard is 40 miles per hour (mph). Freight train speed on the Main Track could be

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35 mph eastward and westward, however trains are normally yarding into tracks and travelling at slower yard track speeds. Freight operations in the East L Yard and K Yards do not exceed 15 mph. Coupling speed of cars is 4 mph.

Proposed Rail Operations

The proposed expansion of the CP's L Yard will provide an additional track footage of 9600 feet or capacity for 160 additional rail cars. Two new tracks are proposed (*i.e.*, L30 and L31). A schematic of the proposed layout of current main, yard and industrial/customer trackage is illustrated in **Figure 5**.

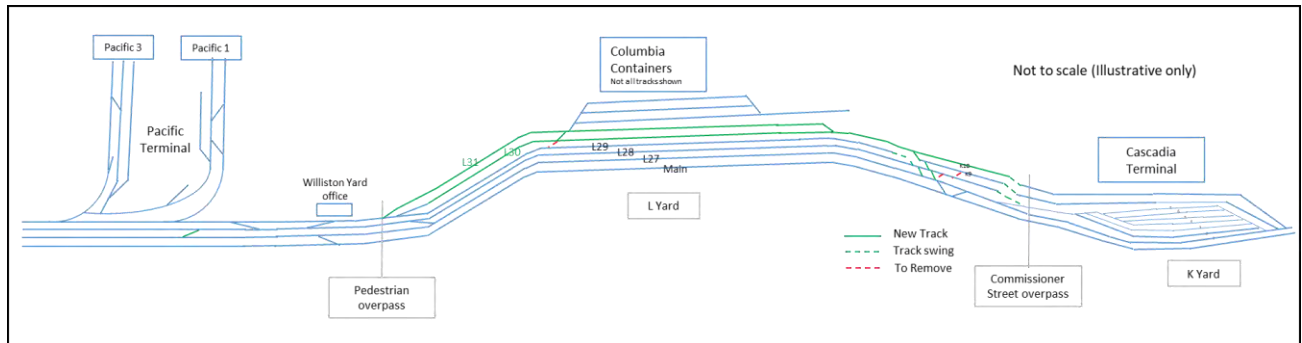


FIGURE 5: SCHEMATIC OF FUTURE CP TRACK LAYOUT IN THE VICINITY OF THE COMMISSIONER STREET RAIL EXPANSION PROJECT

The proposed track in and through the East L Yard is as follows:

- Main Track
- Track L27 – ~5600 feet
- Track L28 – ~5260 feet
- Track L29 – ~4180 feet
- Track L30 – ~5200 feet
- Track L31 – ~4300 feet
- New K Lead - ~350 feet

The construction of Tracks L30 and L31 provide functional operating tracks that create additional car capacity and free up other existing tracks for added South Shore capacity. The additional capacity creates the potential for single customer blocks of cars for South Shore customers to queue in Tracks L27 and L28 avoiding further switching resulting in more efficient service for both CP and its customers.

CP's proposed Commissioner Street Rail Expansion will improve the efficient movement of rail cars into and out of terminals and other rail-served customers on the South Shore of the Port of Vancouver. Train volumes arriving and departing the Port are not expected to increase as a result of the proposed Project, however the proposed Commissioner Street Rail expansion will allow:

- New capacity (~164 rail cars) to pull through longer trains on one long track;
- Larger blocks or cars for terminal customers; and
- Reduction in switching, cutting and double/triple handling of cars and redundant train movements.

No changes to current train volumes, timing of train arrivals/departures, motive power, train speeds, or operations management will occur as a result of the proposed Commissioner Street Rail Expansion.

2.0 Technical Studies

Detailed technical studies related to the proposed Commissioner Street Rail Expansion have been conducted since 2019 to assess current site conditions across the Project area, and to inform the design of the Project. A summary of each technical study is follows. Details are presented in separate reports that are appended to this application.

2.1 Rail Operations Plan

An optimized Rail Operations Plan will be implemented following construction of the proposed Commissioner Street Rail Expansion. With additional track footage of 9600 feet (capacity for 160 additional rail cars) provided by Tracks L30 and L31, combined with reconfiguration of existing yard trackage, efficiencies will be realized for both CP and rail-served customers on the Port's South Shore.

Tracks L30 and L31 will provide functional operating tracks that create additional car capacity and free up other existing tracks for added South Shore capacity. The additional capacity creates the potential for single customer blocks of cars for the South Shore customers to queue in Tracks L27 and L28 avoiding further switching resulting in more efficient service for both CP and its customers.

Track L31 will be multi-use (as all yard tracks are) and generate several key benefits. Specifically, Track L31 will serve as an independent switch lead to the Columbia Container site, serve as a headroom for pulling long trains through to spot at the Cascadia Terminal, and provide additional capacity for staging cars as required for all South Shore customers.

With the alignment and reconfiguration of L30 at the east end, a new connection to K yard will be created providing an isolated route to L30/L31. The crossovers and track connections at the east end of East L Yard and the west end of K Yard effectively adds one functional long track in this area maintaining access to L27 – L29 and providing additional capacity and routing alternatives.

Operations in the expanded Commissioner Street Rail corridor will more efficiently move rail cars into and out of terminals on the South Shore of the Port of Vancouver with less switching. Train volumes arriving and departing the Port are not expected to increase as a result of the proposed Project and other changes to operations, such as train speed, motive power and the timing of train arrivals/departures, are not expected.

The Rail Operations Plan is provided in **Appendix F**.

2.2 Geotechnical Investigations

Geotechnical investigations have been completed by TetraTech. Summary outcomes of the Geotechnical Report included in **Appendix G** are:

- Perform a site-specific subsurface exploration and prepare a geotechnical characterization for the site;
- Provide foundation assessment and track bed evaluation for the new tracks;
- Evaluate the foundation requirements for the retaining wall at New Brighton Road;
- Evaluate potential impacts on the Metro Vancouver sewer throughout the railway corridor;
- Evaluate potential impacts on the City of Vancouver sewer at Slocan St;
- Provide engineering analyses and recommendations for the protection slab at the Metro Vancouver sewer crossing; and
- Provide a geotechnical assessment for the existing decommissioned pavement structure within the track widening footprint.

The outcomes of the report were used to develop the detailed design. Utility protection limits were developed using estimated loading and settlement values, or omitted when these values were within the utility owner's tolerances. Short and long term settlement above the peat pocket (centered at station 2+180) will be used to manage track maintenance before defects appear.

2.3 Noise and Vibration Study

Per the PER Application Submission Requirements and since a project noise screening resulted in a score above 30 points, an Environmental Noise and Vibration Assessment was completed. The Project Score Sheet and Environmental Noise and Vibration Assessment are provided in **Appendix H**.

Noise modelling was conducted using the DataKustik CadnaA noise prediction software which follows international standard ISO 9613-2. Noise modelling considered changes in noise levels associated with changes in yard and corridor function and the addition of two new yard tracks L30 and L31. Changes in noise levels also include the realignment of Commissioner Street as the Project will use vacated land by the road realignment.

Based on a review of noise monitoring data from the VFPA and the Columbia Containers Terminal New Grain Transloading and Facility Silos Rebuild Project Environmental Noise Assessment, the existing sound environment is primarily influenced by rail activity and road traffic. Road traffic along Commissioner Street, Wall Street, and Powell Street were modelled based on available traffic data from the City of Vancouver. Rail activity was modelled based on estimated track operations and calibrated based on available noise measurement data.

The Project will result in a redistribution of yard function and added yard capacity that will avoid the need for multiple switches, reducing shunting activity in the yard. Based on model results, the Project is expected to result in insignificant changes in noise levels at all adjacent residences located south of the East L Yard.

Vibration levels experienced by the adjacent community were estimated using the vibration model developed by the United States Federal Transit Administration. Based on this vibration model, CP freight locomotive movements along the mainline track are expected to result in the highest vibration levels

relative to criteria. Existing vibration levels associated with CP freight locomotive movements along the mainline track are predicted to exceed the general vibration criteria at many of the adjacent residences located south of the East L Yard, suggesting that vibration may be perceptible in the community.

Predicted vibration levels with the Project are expected to remain the same as for existing conditions given that operations along the mainline track, which dominate the overall vibration footprint, will not change. Vibration levels associated with the two new yard tracks are expected to be substantially lower than those associated with the mainline track.

2.4 Archaeological Overview

[REDACTED]

[REDACTED]

[REDACTED]

A copy of the AOA Is included as **Appendix I**.

2.5 Drainage Review

A Drainage Review was completed by Hatch. The purpose of the drainage assessment was to outline the impact of the Commissioner Street Rail Expansion works. It includes both a hydrological and hydraulic assessment.

The hydrological assessment determined that the track expansion works will result in a negligible increase in impervious surface area. As a result, the peak runoff within the yard remains relatively unchanged when comparing the pre and post development conditions.

The proposed track design has various sections which are both above and below the road corridor. As part of the drainage strategy, the sections which are above the road corridor continue to drain as surface run-off to the existing road gutters while a new subsurface drainage network has been designed to accommodate runoff from the sections where the sub-ballast lies below the curb elevation. The proposed pipe network ties into the existing storm water network.

The post development 2-year and 5-year minor storm events were considered as part of the hydraulic analysis. The assessment is limited by the information gaps on capacity of the existing downstream network and outlets to the Burrard Inlet. It was found that the proposed subdrain network could accommodate 2-year storms and 5-year storms (including a 15% climate change factor) with some surcharge at a few downstream connecting points. As the run-off volumes are unchanged from the existing condition and surcharge occurs already within the existing Commissioner Street storm drainage network, this was deemed an existing condition and falls outside of this project's scope.

Refer to **Appendix J** for the Final Drainage Report

2.6 Soil Quality and Management

Core6 prepared a preliminary report in 2020 on soil classification throughout the Project area. Samples were taken at geotechnical borehole locations for efficiency. The preliminary results were scattered with pockets of contaminated soil being located between regions of clean soil. Core6 prepared more sample locations in 2021 based on actual grading quantities and depths, and used the preliminary findings to increase frequency in locations deemed as contaminated in the original report.

The refined report breaks down station ranges into RL-, IL-, and IL+ classifications and summarizes the volumes of each type of material. Contaminated soils have been identified at various locations throughout the Project area including in areas within the Port Authority's jurisdiction. Federal guidelines and provincial standards were both tested against to determine where soil could not remain on site (exceeds federal guidelines) and what landfill classification would be applied to the soil (based on provincial standards).

Dewatering may be required where substantial excavation occurs, and Core6 advises that testing and storage is required before releasing the water into an approved discharge point. The utility protection slab and water line realignment will be the deepest excavations within the project. This work is anticipated in the summer months. The water table is also located below the excavation depths suggesting dewatering should not be a concern. If dewatering does become a concern, the contractor will complete a *Dewatering and Water Management Plan*, which is suitable for the expected volume of water, for review. If water requires discharge from the site, it must be first analyzed with concentrations being compared to the applicable guidelines for discharge. If discharge requires a permit, testing will be completed in accordance with the requirements of the permit.

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Prior to starting construction, the contractor will complete a *Soil Management Plan* that addresses the handling, testing, management and disposal of contaminated soils for review. The Soil Management Plan will make reference to the Core6 report and describe the site-specific best management practices that will be utilized by the contractor to handle, manage and dispose of contaminated soils and limit migration/run-off from soils that require temporary storage. This Management Plan will allow the contractor to negotiate disposal pricing and is therefore advantageous to be completed after the tendering process.

The Refined Soil Characteristic Report is located in **Appendix K**.

3.0 Notification, Consultation & Engagement

CP has initiated, and continues, engagement activities with interested Indigenous communities, the VFPA and other Project stakeholders having operations and/or interests adjacent to the Project area. CP is committed to building and maintaining positive relationships with Indigenous communities and stakeholders through frequent and open communications.

CP has developed a Project-specific Engagement Plan to guide interactions with Indigenous communities having an interest in the Commissioner Street Rail Expansion. Principles and objectives of the Plan have also been used to guide interactions with other Project stakeholders. The Plan, and results of its implementation, is presented below.

Feedback received during Project engagement and consultation activities has been, or will be, integrated into the Project as appropriate. Examples of the integration of engagement feedback to-date include, but are not limited to:

- Mitigation measures to be implemented during geotechnical investigations and Project construction;
- Application document structure, format and content;
- Notification requirements for Project-related activities; and
- Design and construction considerations to address business, community, environmental and other concerns.

The CP Project Team will continue to solicit feedback from Indigenous communities, the VFPA and other Project stakeholders to understand possible concerns and involvement opportunities and integrate this information into the ongoing planning and implementation activities for the Commissioner Street Rail Expansion.

3.1 Indigenous Groups

3.1.1 Engagement Objectives

CP is committed to creating long-lasting relationships with Indigenous communities and helping to build a better understanding of how the company operates the railway. Through the project-specific Engagement Plan developed for the Commissioner Street Rail Expansion, CP seeks to:

- Provide information in a timely and effective manner;
- Encourage effective communication and open dialogue and discussion;
- Foster opportunities for collaboration and information sharing;
- Demonstrate ideas and concepts through practical examples;
- Respond to questions and information requests in a timely manner;
- Provide capacity for meaningful participation of interested communities;

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- Develop a deeper understanding of the communities CP works with and, in turn, share information about the organization including mandates, operational procedures, project team, etc.;
- Identify opportunities, where possible, for meaningful community benefit to local communities through CP's projects; and
- Identify procurement opportunities through project delivery.

3.1.2 Engagement Activities

The following tasks and activities form the basis of the CP Commissioner Street Rail Expansion Indigenous Engagement Plan.

Task 1: Identifying Potentially-Affected Indigenous Communities

CP and their Project Consultant leveraged recent guidance of the VFPA and other relevant agencies to determine the list of potentially affected Indigenous communities.

Task 2: Contact List and Background Research

A contact list was created from information compiled from the VFPA, other government agencies, and recent engagement activity experience. As community leaders, staff and representatives may change over the duration of the Project, the contact information has been updated periodically as required.

Research has been undertaken to identify any community consultation protocols and to gain a preliminary understanding of the historic use of the lands and information about the communities such as environmental priorities, traditional territories, etc.

Task 3: Project Notification Letter

Project Notification Letters were developed and distributed to all identified Indigenous communities via email and paper copy per the community's referrals process and circulation criteria.

Task 4: Follow-up

Systematic follow-up with each Indigenous community has been undertaken to confirm receipt of the Project Notification Letter, solicit preliminary interest or feedback regarding the project, and inquire if there is interest in the Project. CP is committed to meeting with any community expressing interest to more fully introduce the project.

Task 5: Ongoing Engagement Activities

Following Project Notification and follow-up, and based on specific responses, on-going engagement activities will be initiated specific to the needs of each interested community, if any. The Indigenous Communities Engagement Plan prepared for this project is dynamic and could include, but is not limited to, the following activities:

- One-on-one meetings;
- Distributing project information as it becomes available (ongoing);

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- Site visits;
- Responding to information requests;
- Capacity funding to support meaningful participation into project planning; and
- Development of Project specific work plans with Indigenous communities for participation in project planning and delivery.

The Indigenous Communities Engagement Plan will be updated and modified if and when new developments arise or new information becomes available. CP will continue to consult with Indigenous communities and will respond to any questions or concerns identified.

3.1.3 Indigenous Communities Notified

[REDACTED]	
[REDACTED]	
[REDACTED]	
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

3.1.4 Summary of Engagement Activities

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[Redacted text block]

[Redacted text block]

[Redacted text block]

3.1.5 Tracking Logs

[Redacted text block]

[Redacted text block]

[Redacted text block]

3.2 Stakeholders

CP has maintained formal and informal engagement with the VFPA since spring, 2018. In-person meetings have occurred periodically to update VFPA on project plans, progress, and Project-specific issues under the VFPA’s jurisdiction. This includes the VFPA’s Project and Environmental Review (PER) team, as well as VFPA Planning, Engineering and Real Estate staff.

Table 6 provides an overview of formal consultation activities that have been completed with the VFPA to date.

TABLE 6: GENERAL ENGAGEMENT AND CONSULTATION: VFPA

Date	Consultation/Engagement Summary
March 12, 2021	Submission of Preliminary Project Inquiry package to VFPA via the Port's online portal.
March 23, 2021	Confirmation with PER Project Lead of receipt of the Preliminary Project Inquiry package from Dillon Consulting.
March 25, 2021	Schedule coordination for Applicant presentation to VFPA PER Team with PER Project Lead.
April 1, 2021	Applicant presentation to VFPA PER Team.
April 27, 2021	Confirmation of preliminary review completion, application review Category determination, and receipt of PER Application Submission Requirement Checklist from PER Project Lead.
May 31, 2021	Discussion regarding expectation to monitor tracks/mitigate issues that may arise from excavating for the HEI grit chamber near CP Tracks.
June 30, 2021	Discussion on potentially abandoned or removed VFPA concrete sewer pipe at Trinity Street.
July 7, 2021	Discussion with VFPA/consultant re: need for the removal of HEI manhole MH11 risers at Slocan Street.
July 16, 2021	Discussion with VFPA CP's proposed staging plans and available vacant lots for use during construction.
July 29, 2021	Confirmation with PER Project Lead of applicable project application fees and amounts.
August 17, 2021	90% design drawings provided to Port's CSRR Team.
August 20, 2021	Request to VFPA Engineering for technical comments on select design items.

In their application submission checklist, the VFPA identified the following stakeholders whose interests may be impacted by the proposed Project, many of whom are adjacent tenants:

- City of Vancouver
- Metro Vancouver
- BC Hydro
- Mariner Seafoods
- Saam Smit
- Fortis BC
- WCMRC
- Columbia Containers
- Kiewit Ledcor TMEP Partnership
- Lafarge Canada.

TABLE 7: GENERAL ENGAGEMENT AND CONSULTATION: STAKEHOLDERS

Date	Consultation/Engagement Summary
April 20, 2021	Discussion with Fortis to relocate their gas line on VFPA property at Nanaimo Street. Fortis will execute this work on their own.
April 21, 2021	Meeting with the Metro Vancouver (MV) to discuss the Project regarding potential conflicts between the Metro Vancouver Harbour East Inceptor and the proposed East L Yard L30/L31 tracks.
June 25, 2021	Discussion with the City of Vancouver (CoV) regarding project effects on the combined CoV sewer at Slocan Street during track construction.
June 30, 2021	Consent received from the CoV to build a rail track over the existing combined CoV sewer.
August 17, 2021	90% design drawings provided to MV .

Date	Consultation/Engagement Summary
August 17, 2021	Meeting with MV (Frank Mucha) to discuss comment register, predecessor comments, and proposed protection at CCL crossing.
August 17, 2021	Discussion with Viterra regarding 90% design.

Notification and/or consultation activities are proposed to be led by the Port Authority during application review phase with the involvement of CP and its Project Team members at the request of the Port Authority.

In addition to stakeholder engagement being led by the Port Authority, CP has initiated preliminary discussions with Metro Vancouver, Viterra, City of Vancouver, and Bell, and will continue to engage with these stakeholders as the Project progresses. Other stakeholders that CP has identified in addition to the list provided by the port authority include Cascadia Port Management Corporation – Cascadia Terminal, and Transport Canada (related to Notice of Railway Works Regulation).

The VFPA and Project stakeholders will continue to be engaged and kept informed of on-going and future Project activities, as required.

3.3 Public

CP has prepared a Public Engagement Plan that outlines the proposed engagement activities associated with its effort to increase awareness of the Project, offer opportunities to provide meaningful input and understand and mitigate any potential effects.

Residents of the Hastings-Sunrise area will be engaged, in particular those immediately adjacent to the project area along Wall Street, and other interested members of the public. CP has not yet initiated any interaction with the general public.

Public health guidelines provided by the Provincial Health Officer will dictate whether engagement activities will take place online or in-person. The Public Engagement Plan assumes that engagement will take place online, but will be amended if deemed feasible closer to the engagement period.

3.3.1 Public Engagement Materials

Public engagement activities and associated materials include:

- **Information sessions:** One online information session, using the Zoom Webinar platform:
 - Links to the online information session registration pages available on the project webpage;
 - As a measure of security, participants would be asked to register in advance;
 - Format would include introductions and instructions on how to participate from a facilitator, a presentation providing a project overview, and a question-and-answer session led by a facilitator with the opportunity to provide written and oral questions and comments; and

- All written and oral feedback provided during the session would be included as part of the engagement summary materials.
- **Posting:** A posting to the Canadian Impact Assessment Registry for the duration of the engagement period, to be managed by the VFPA;
- **Project webpage:** Engagement materials posted on a project webpage [REDACTED] including:
 - [REDACTED] all applicable information on which public input is being sought, renderings, site plan, schematics and visual representations of the Project;
 - A presentation, to be used at online information sessions and committee meetings, [REDACTED];
 - An online feedback form, requesting input [REDACTED] and opportunity to provide open ended feedback; and
 - Links to online information sessions registration pages and to the Canadian Impact Assessment Registry posting.
- **Inquiry response:** Receiving and responding to phone inquiries and written inquiries via email and mail;
- **Summary materials:** Engagement summary materials including:
 - Public Engagement Summary Report, including a summary of all engagement activities and feedback; and
 - Consideration Report, including analysis and recommendations alongside a summary of feedback.

Before distribution to the public and commencement of engagement activities, all materials will be submitted to the Port Authority in final form for review and approval. Draft Public Engagement Materials are included as **Appendix M**.

3.3.2 Port Community Liaison Committees

Notification about the Project was provided to the East Vancouver Port Lands Liaison Committee (EVPLLC) on April 7, 2021 and the South Shore Community Liaison Committee (SSCLC) on June 8, 2021.

CP will provide a presentation to each of the EVPLLC and SSCLC. This will include:

- Coordination with the committees will take place early in the process to schedule the presentation in alignment with the committees' varied meeting schedules and using their preferred video-call platform;
- A presentation will be developed about the project, with consideration for information specific to the interests of each committee; and
- All feedback provided by the committee before, during and after the meeting will be included as part of the engagement summary materials.

The presentations will be provided to the Port Authority in final form for review and approval before being presented to the committees.

4.0 Closure

This application was prepared by Dillon Consulting Limited on behalf of CP and with input from CP and several CP contractors for the purpose, Project and site location outlined in this application. The structure and content of this application has been developed according to the general and project-specific guidance of the VFPA's Project and Environmental Review Process.

The Proponent's/Applicant's primary contacts should be contacted for clarification and/or further discussion of the application, as necessary.

CP looks forward to working through the approval process with the VFPA.

Appendix A

VFPA Category C Application Form



Appendix B

Project 90% Drawing Package



Appendix C

Environmental Constraints Analysis Report



Appendix D

Construction Environmental Management Plan



Appendix E

Integrated Contingency Plan: Emergency Preparedness and Response



Appendix F

Rail Operations Plan



Appendix G

Geotechnical Report



Appendix H

Noise and Vibration Report



Appendix I

Archaeological Overview Assessment



Appendix J

Drainage Report



Appendix K

Soil Quality/Management Report



Appendix L

Indigenous Engagement Materials



Appendix M

Public Engagement Materials

