



# Project and Environmental Review Permit

<b>PER No.:</b>	20-191
<b>Tenant/Permit Holder:</b>	Vancouver Fraser Port Authority – Planning and Development
<b>Project:</b>	Sterling Shipyard Remediation and Infill
<b>Project Location:</b>	2089 to 2095 Commissioner Street, Vancouver, BC
<b>Land Use Designation:</b>	Port Terminal
<b>Applicant:</b>	SNC Lavalin
<b>Category of Review:</b>	C
<b>Date of Expiry:</b>	November 30, 2026

### Project Description

For the purposes of this project permit, (the “Permit”), the Project is understood to include the following works on Vancouver Fraser Port Authority (“Port Authority”) property:

#### Site preparation

- Installation of erosion and sediment control measures
- Installation of a silt curtain around the in-water work area between the rock berm footprint and Burrard Inlet
- Removal of approximately 1,555 square metres of riparian vegetation, including several large trees
- Removal of wood and metal debris and other waste materials in the intertidal area
- Demolition of existing infrastructure, such as, lock block walls, sheet piles, timber cribs, anchors and anchor walls that might be buried
- Installation of temporary shoring around the east, west and south side of the Project area

#### Rock berm installation

- Dredging of the rock berm footprint to remove approximately 6,000 cubic metres of a liquefiable sand layer, to an approximate depth of 3.5 metres below the existing seafloor
- Installation of a rock berm, approximately 100 metres in length from east to west, and an elevation of approximately 8 metres
- Installation of a permanent retaining wall, at the northwest interface of the neighbouring site

#### Sediment remediation

- Excavation and dredging of approximately 12,000 cubic metres of contaminated substrate from the intertidal area of the site to an approximate depth of 5 metres below grade
- Dewatering dredged and excavated areas

#### Backfilling and grading

- Placement of approximately 41,000 cubic metres of engineered fill in both the intertidal and upland area to a rough elevation grade of approximately 6 metres
- Grading and vibro-compaction of the newly placed engineered fill
- Creation of a 0.5 metre berm along the western boundary of the infilled area
- Installation of an emergency stormwater overflow pipe through the rock berm to Burrard Inlet

#### Onsite habitat offsetting

- Creation of two riprap mounds in the subtidal zone immediately north of the rock berm to act as artificial reefs, totaling an area of approximately 1,280 square metres

- Installation of approximately 470 square metres of marine riparian vegetation on the southern edge of the rock berm
- Anchor approximately 15, 29-metre-long seeded kelp ropes, to the artificial reefs
- Placement of EConcrete armour blocks at the foot of the revetment wall as part of an EConcrete pilot project
- Long-term monitoring per the requirements of the *Fisheries Act* Authorization

Post remedial monitoring

- Installation of groundwater monitoring wells, for post remedial monitoring of groundwater

**Project and Environmental Conditions**

The Port Authority has undertaken and completed a review of the Project in accordance with the *Canada Marine Act* and Section 5 of the *Port Authorities Operations Regulations* and, as applicable, Section 82 of the *Impact Assessment Act*.

If at any time the Permit Holder fails to comply with any of the project and environmental conditions set out in the Permit below, or if the Port Authority determines that the Permit Holder has provided any incomplete, incorrect or misleading information in relation to the Project, the Port Authority may, in its sole and absolute discretion, cancel its authorization for the Project or change the project and environmental conditions to which such authorization is subject.

Pursuant to Section 29 of the *Port Authorities Operations Regulations*, the Port Authority may also cancel its authorization for the Project, or change the project and environmental conditions to which such authorization is subject, if new information is made available to the Port Authority at any time in relation to the potential adverse environmental and other effects of the Project.

**The following are the project and environmental conditions that must be followed by the Permit Holder to mitigate potential or foreseeable adverse environmental and other effects.**

Port Authority Guidelines and Record Drawing Standards referenced in this document can be located at:

<https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/>.

No.	General conditions
1.	The Permit Holder must have a valid lease, licence, or access agreement for the Project site prior to accessing the Project site or commencing construction or any other physical activities on the Project site. This Permit shall in no way limit any of the Permit Holder's obligations, or the Port Authority's rights, under such lease, licence, or access agreement.
2.	The Permit Holder shall at all times and in all respects, comply with and abide by all applicable statutes, laws, regulations and orders from time to time in force and effect, including all applicable environmental, labour and safety laws and regulations.
3.	This Permit in no way endorses or warrants the design, engineering, or construction of the Project and no person may rely upon this Permit for any purpose other than the fact that the Port Authority has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.
4.	The Permit Holder shall indemnify and save harmless the Port Authority in respect of all claims, losses, costs, fines, penalties or other liabilities, including legal fees, arising out of: (a) any bodily injury or death, property damage or any loss or damage arising out of or in any way connected with the Project; and (b) any breach by the Permit Holder of its obligations under this Permit.
5.	The Permit Holder is responsible for locating all existing site services and utilities, including any located underground. The Permit Holder shall provide an Infrastructure Surveyed Data Drawing that includes topographic, and utility locate data based on surveys in accordance with the Port Authority's Record Drawing Standards. The Permit Holder is responsible for repair or replacement of any damage to existing site services and utilities (including but not limited to the existing City of Vancouver storm outfall located on the adjacent property), to the satisfaction of the Port Authority, that result from construction and operation of the Project.
6.	The Permit Holder shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with applicable standards and specifications set out in the sections above, entitled Project Description and Information Sources, including the attached plans and drawings numbered <b>PER No. 20-191- A to I</b> . The Permit Holder shall not carry out any other physical activities unless expressly authorized by the Port Authority.
7.	The Permit Holder shall cooperate fully with the Port Authority in respect of any review by the Port Authority of the Permit Holder's compliance with this Permit, including providing information and documentation in a timely manner, as required by the Port Authority. The Permit Holder is solely responsible for demonstrating the Permit Holder's compliance with this Permit.
8.	The Permit Holder shall review the Permit with all employees, agents, contractors, licensees and invitees working on the Project site, prior to such parties participating in any construction or other physical activities on the Project site. The Permit Holder shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with this Permit.
9.	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
10.	Unless otherwise specified, the Permit Holder shall provide plans, documents, and notices required under this Permit to our compliance and monitoring portal at <a href="https://eper.portvancouver.com">https://eper.portvancouver.com</a> .
11.	Unless otherwise specified, all plans, schedules, and other Project-related documentation that the Permit Holder is required to provide under this Permit, and any subsequent updates, must be to the Port Authority's satisfaction.
12.	<p>The Permit Holder shall prepare and submit a self-report form to the Port Authority demonstrating compliance with conditions at each of the following project phases:</p> <ul style="list-style-type: none"> <li>a) Prior to construction Conditions (self-report shall be submitted a minimum of 15 business days prior to the commencement of construction, or any physical activities, to a maximum of 90 business days prior to construction, or any physical activities)</li> <li>b) Construction Conditions (self-report shall be submitted at 50% of construction)</li> </ul>

	c) Conditions Upon Project Completion (self-report shall be submitted within 60 business days of completion of construction)	
13.	The Port Authority shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice.	
14.	The Permit Holder must maintain and retain any records associated with, or produced by, actions or activities undertaken to achieve compliance or that indicate non-compliance with project permit conditions. These records must be made available at the request of the Port Authority.	
15.	All conditions in this Permit which expressly or by their nature survive expiration or termination of this Permit will remain in effect after the expiration or termination of this Permit.	
16.	The Permit Holder shall meet the <a href="#">Metro Vancouver Proximal Work Requirements</a> prior to any construction in proximity to Metro Vancouver's infrastructure. In addition, the Permit Holder shall not store equipment or stockpile material above Metro Vancouver infrastructure.	
<b>No.</b>	<b>Conditions - prior to commencing construction or any physical activities</b>	<b>Submission timing (business days)</b>
17.	The Permit Holder shall submit Issued For Construction Drawings for proposed works in accordance with the Port Authority's Record Drawing Standards. These drawings shall be signed and sealed and approved for construction by a professional engineer licensed to practice in the Province of British Columbia. In addition, these drawings shall be submitted in both AutoCAD and PDF format and shall be named according to the record drawing index numbering system set out at Section 2.10 of the Port Authority's Record Drawing Standards.	5 business days before commencing construction or any physical activities
18.	The Permit Holder shall submit a Geotechnical Instrumentation and Monitoring Plan to monitor potential settlement and damage of adjacent properties and assets due to construction activities. The Applicant shall carry out the Project in accordance with this monitoring plan and any subsequent updates.	20 business days before commencing backfilling activities
19.	The Permit Holder shall provide a draft construction notification to the Port Authority's satisfaction in accordance with the Port Authority's Public Engagement Guidelines.	20 business days before commencing construction or any physical activities, and before commencing works outside of standard hours (if required)
20.	The Permit Holder shall distribute a construction notification to residents and businesses in the area specified in the PER report. This shall be completed to the Port Authority's satisfaction. The Permit Holder shall notify the Port Authority when such distribution has been completed and upload construction notifications to its Project website.	10 business days before commencing construction or any physical activities, and 10 business days before commencing works outside of standard hours (if required)
21.	The Permit Holder shall submit a construction parking and traffic management plan to the Port Authority's satisfaction. The Permit Holder shall carry out the Project in accordance with the construction parking and traffic management plan, and any subsequent updates to the Port Authority's satisfaction.	20 business days before commencing

		construction or any physical activities
22.	<p>Prior to the commencement of any vessel-related activities, the Permit Holder shall contact Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS), (email: <a href="mailto:NAVWARN.MCTSPRinceRupert@innav.gc.ca">NAVWARN.MCTSPRinceRupert@innav.gc.ca</a> ; Phone: 250-627-3070) regarding the issuance of a Navigational Warning (NAVWARN) to advise the marine community of potential hazards associated with the Project. The Port Authority's Marine Operations department shall be copied on the request (<a href="mailto:navigation.review@portvancouver.com">navigation.review@portvancouver.com</a>).</p>	As per Coast Guard requirements
23.	<p>The Permit Holder shall submit a marine construction and staging plan to the Port Authority's satisfaction, which includes:</p> <ul style="list-style-type: none"> <li>a) Identification of navigation related hazards and risk mitigation measures</li> <li>b) Staging and construction areas</li> <li>c) Dates and hours of operations</li> <li>d) Description of activities taking place</li> <li>e) Participating equipment and vessels (dimensions must be included)</li> <li>f) Method of preferred communication with marine users</li> <li>g) Emergency contact information</li> <li>h) Special requests and/or additional information</li> </ul> <p>The Permit Holder shall carry out the Project in accordance with the marine construction and staging plan, including any subsequent updates made to the Port Authority's satisfaction.</p>	20 business days prior to commencing vessel-related construction activities
24.	<p>The Permit Holder shall provide a Project schedule to the Port Authority showing the anticipated start dates for all major phases of the Project as identified by the Port Authority. The Permit Holder shall notify the Port Authority of any material changes to the Project schedule and, upon request, shall provide an updated Project schedule.</p>	20 business days before commencing construction or any physical activities
25.	<p>The Permit Holder shall submit an updated Construction Environmental Management Plan to the Port Authority's satisfaction. The following plans shall be appended:</p> <ul style="list-style-type: none"> <li>a) Soil/substrate management plan</li> <li>b) Water quality management plan</li> <li>c) Dredge and excavation water management plan</li> <li>d) Invasive species management plan</li> </ul> <p>The Permit Holder shall carry out the Project in accordance with the Construction Environmental Management Plan, appended plans and any subsequent updates made to the Port Authority's satisfaction.</p>	20 business days prior to the start of construction or any physical activities
26.	<p>The Permit Holder shall submit a monitoring well plan to the Port Authority's satisfaction for the groundwater wells proposed for installation. The plan shall include the following:</p> <ul style="list-style-type: none"> <li>a) Number and location of wells</li> <li>b) Method of installation</li> <li>c) Post remedial performance monitoring and reporting plan</li> </ul>	20 business days before commencing construction on the monitoring wells

27.	<p>If there is potential to affect birds and/or their active nests and eggs, the Permit Holder shall conduct nest surveys. For any nests identified in surveys, a qualified environmental professional shall confirm that the nest is not occupied by a species protected at that time of year under applicable legislation. To reduce the risk of Project-related harm, the Permit Holder should avoid certain physical activities during the general bird breeding season, which falls between April 1 and July 31, or outside of this time span if occupied nests are present. Immediately prior to activities with the potential to affect birds and/or their active nests and eggs.</p>	<p>Immediately prior to activities with the potential to affect birds and/or their active nests and eggs.</p>
<p><b>No. Conditions - during construction or any physical activities</b></p>		
28.	<p>The Permit Holder shall notify the Port Authority upon commencement of construction, or any physical activities (e.g., mobilization to the Project site).</p>	
29.	<p>Where possible, general construction and physical activities related to the Project shall be conducted from <b>Monday to Saturday</b> between the hours of <b>7:00 a.m. and 8:00 p.m.</b> No construction and physical activities shall take place on Sundays or statutory holidays in the province of British Columbia or Canada.</p> <p>Some construction and physical activities depend on tidal conditions, therefore, work may need to take place outside of standard construction hours (Monday to Saturday 7:00 a.m. to 8:00 p.m., excluding Sundays or holidays). The Permit Holder shall submit a written request in line with the Guideline for Construction Outside of Regular Work Hours, to the Port Authority's satisfaction, no less than 30 business days prior to the desired start date of these activities.</p>	
30.	<p>The Permit Holder shall notify the Port Authority within two business days of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.</p>	
31.	<p>The Permit Holder shall remove all abandoned utilities (and, where practical, temporary shoring installed to facilitate excavation/dredging) from the Project site, both underground and aboveground. At locations of connection to municipal works (i.e., at property lines), the abandoned utilities shall be capped. The Permit Holder shall provide detailed drawings of abandoned utilities and capped connections in both AutoCAD and PDF format in accordance with the Port Authority's Record Drawing Standards.</p>	
32.	<p>The Permit Holder may place temporary construction trailers on the Project site while this Permit remains in effect, provided such trailers meet all of the criteria set out in the Port Authority's Temporary Construction Trailer Criteria, available at: <a href="https://www.portvancouver.com/permitting-and-reviews/building-permits/">https://www.portvancouver.com/permitting-and-reviews/building-permits/</a>. Should one or more of the criteria not be met, a Port Authority Building Permit is required.</p>	
33.	<p>During any vessel-related activities, the Permit Holder shall:</p> <ul style="list-style-type: none"> <li>a) Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers</li> <li>b) Exhibit the appropriate lights and day shapes at all times</li> <li>c) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary</li> <li>d) Be familiar with vessel movements in areas affected by the Project</li> <li>e) Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations</li> <li>f) During night hours, unless working 24 hours per day, ensure that the rig and associated equipment is moored outside the navigation channel and lit in accordance with all applicable regulations</li> </ul>	
34.	<p>The Permit Holder, or their contractor, shall engage a qualified environmental professional to monitor the Project in order to ensure that the works are carried out in compliance with this Permit. Monitoring</p>	

	events shall take place as required by the environmental monitor, the construction environmental management plan, or the Port Authority, provided that monitoring will be full time when works are underway that have the potential to adversely affect fish or fish habitat.	
35.	The Permit Holder shall provide environmental monitoring reports to the Port Authority as specified in the Construction Environmental Management Plan or more frequently if the Port Authority requires. In addition, a summary report for the whole monitoring period shall be forwarded to the Port Authority within 30 days of the conclusion of the monitoring period.	
36.	The Permit Holder shall decommission any groundwater monitoring wells encountered within the Project footprint in compliance with the requirements set out in appendix C of the Port Authority's construction environmental management plan guideline.	
37.	The Permit Holder shall ensure that groundwater monitoring wells installed as part of the Project are secured with a locked J-Plug.	
38.	Without limiting the generality of permit condition #2, the Permit Holder shall not, directly or indirectly: (a) deposit or permit the deposit of a deleterious substance of any type in water frequented by fish in a manner contrary to Section 36 of the <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35 of the <i>Fisheries Act</i> .	
39.	All non-road diesel equipment in use within Port Authority jurisdiction shall be reported as required under the Non-Road Diesel Equipment Program ( <a href="http://www.portvancouver.com/environment/air-energy-climate-action/cargo-handling-equipment/nrde/">http://www.portvancouver.com/environment/air-energy-climate-action/cargo-handling-equipment/nrde/</a> ).	
40.	The Permit Holder shall immediately notify Metro Vancouver of any actual or potential damage to Metro Vancouver infrastructure (including pipelines and outfalls) at: 604-985-1478	
41.	The Permit Holder shall carry out the Project in accordance with the Port Authority's Archaeological Chance Find Procedure, or a similar Archaeological Chance Find Procedure accepted in writing by the Port Authority at least two business days prior to commencing any groundbreaking activities, and any subsequent updates made to the Port Authority's satisfaction.	
42.	As outlined in the Construction Environmental Management Plan, the Permit Holder shall provide: <ul style="list-style-type: none"> <li>a) Environmental monitoring reports</li> <li>b) Post-remediation confirmatory sampling results</li> <li>c) Water quality management plan</li> </ul> to the Port Authority and Indigenous groups who requested to receive them.	
<b>No.</b>	<b>Conditions - upon completion</b>	<b>Submission timing (business days)</b>
43.	The Permit Holder shall notify the Port Authority upon completion of the Project.	Upon substantial completion
44.	The Permit Holder shall provide record drawings, including a Project site plan that clearly identifies the location of works, in both AutoCAD and PDF format (with an Engineers stamp where applicable) in accordance with the Port Authority's Record Drawing Standards. All drawings shall be named according to the record drawing index numbering system set out at Section 2.10 of the Port Authority's Record Drawing Standards.	Within 40 business days of completion
45.	The Permit Holder must contact the Database Information Office of the Canadian Hydrographic Service (CHS) at (250) 363-6360 or <a href="mailto:chsdatacentre@dfo-mpo.gc.ca">chsdatacentre@dfo-mpo.gc.ca</a> to arrange for the relevant CHS charts to be updated. The Port Authority's Marine Operations department shall be copied on the request ( <a href="mailto:navigation.review@portvancouver.com">navigation.review@portvancouver.com</a> ).	Within 40 business days of completion
46.	The Permit Holder shall submit a post-remedial groundwater and porewater monitoring plan to the Port Authority's satisfaction. The Permit Holder shall carry	Within 40 business days of completion

out the Project in accordance with the post-remedial groundwater and porewater monitoring plan, and any subsequent updates made to the port authority's satisfaction.
<b>The Port Authority reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to the Port Authority.</b>
<b>Length of permit validity</b>
The Project must commence by <b>September 30, 2024</b> (the "Commencement Date") and be completed no later than <b>October 31, 2026</b> (the "Expiry Date").
<b>Amendments</b>
<ul style="list-style-type: none"> <li>• Details of any material proposed changes to the Project, including days and hours when construction and any physical activities will be conducted, must be submitted to the port authority for consideration of an amendment to this Permit.</li> <li>• For an extension to the Commencement Date, the Permit Holder must apply to the port authority in writing no later than 40 business days prior to that date.</li> <li>• For an extension to the Expiry Date, the Permit Holder must apply in writing to the port authority no later than 40 business days prior to that date.</li> </ul> <p><b>Failure to apply for an extension as required may, at the sole discretion of the port authority, result in termination of this Permit.</b></p>

## PROJECT AND ENVIRONMENTAL REVIEW DECISION

In completing the project and environmental effects review, the port authority has reviewed and taken into account relevant information available on the proposed Project and has considered any adverse impact that the Project may have on the rights of Indigenous peoples, Indigenous knowledge, community knowledge, comments received from the public, and measures that would mitigate any significant adverse environmental effects of the Project. The Port Authority concludes that with the implementation of proposed mitigation measures and Permit conditions, the Project is not likely to cause significant adverse environmental effects.

The Port Authority concludes that the Project has appropriately addressed all identified concerns subject to conformance with the project and environmental conditions in the Permit.

Project Permit PER No. 20-191 is approved by:

---

**ANDREA MACLEOD**  
 DIRECTOR, PROJECT AND ENVIRONMENTAL REVIEW

---

**DATE OF APPROVAL**

### Contact information

Vancouver Fraser Port Authority  
 100 The Pointe, 999 Canada Place,  
 Vancouver BC V6C 3T4 Canada

Project & Environmental Review  
 Tel.: 604-665-9047  
 Fax: 1-866-284-4271  
 Email: [PER@portvancouver.com](mailto:PER@portvancouver.com)  
 Website: [www.portvancouver.com](http://www.portvancouver.com)



**After normal business hours:**

In the event of any land or marine construction incidents or concerns related to works carried out on-site under this permit, please contact the 24/7 Port Operations Centre 604-665-9086. In the event of an emergency requiring 'First Responders', please call 911 first.