



**VANCOUVER FRASER PORT AUTHORITY  
PROJECT AND ENVIRONMENTAL REVIEW  
PROJECT PERMIT**

<b>PER No.:</b>	<b>15-167</b>
<b>Applicant:</b>	<b>Vancouver Fraser Port Authority (VFPA) Habitat Enhancement Program (HEP)</b>
<b>Project:</b>	<b>Tsawwassen Eelgrass Project</b>
<b>Project Location:</b>	<b>Southeast of BC Ferries Tsawwassen Ferry Terminal</b>
<b>VFPA SID No.:</b>	<b>DELO34</b>
<b>Land Use Designation:</b>	<b>Land Use Plan to be amended. Port Water proposed.</b>
<b>Category of Review:</b>	<b>C</b>
<b>Date of Approval:</b>	<b>FEBRUARY 26, 2018</b>
<b>Date of Expiry:</b>	<b>DECEMBER 31, 2021</b>

**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 (VFPA) managed property:

- Constructing riprap perimeter berms at two sites (sites 1 and 2)
- Installing navigation markers (four in total) at each end of both perimeter berms
- Placing fill material within the constructed berms
- Transplanting donor stock eelgrass after a suitable period of substrate settlement

A small portion of site 2 is located on lands not administered by VFPA. This Permit only authorizes works and activities proposed to be undertaken on lands administered by VFPA.

**PROJECT AND ENVIRONMENTAL CONDITIONS**

The Vancouver Fraser Port Authority (VFPA) 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 67 of the *Canadian Environmental Assessment Act, 2012*.

If at any time the Applicant fails to comply with any of the project and environmental conditions set out in the Permit below, or if VFPA determines that the Applicant has provided any incomplete, incorrect or misleading information in relation to the Project, VFPA 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, VFPA 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 VFPA 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 Applicant to mitigate potential or foreseeable adverse environmental and other effects.**

No.	GENERAL CONDITIONS
1.	This Permit is granted subject to the fulfillment of all other requirements of VFPA, relating to the Project. Furthermore, prior to commencing construction or any other physical activities the Applicant shall ensure that it has complied with all other necessary legal requirements and that all necessary regulatory approvals have been obtained.
2.	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 VFPA has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.
3.	In consideration of the granting of this Permit by VFPA the Applicant agrees to indemnify and save harmless VFPA against any and all actions, claims, loss, damages or other expenses in any way arising or following from or caused by the granting of this Permit or the construction or operation of the Project as contemplated by this Permit.
4.	The Applicant shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with the Application submitted by the Applicant. The Applicant shall not carry out any other physical activities unless expressly authorized by VFPA.
5.	<p>The Applicant shall have due regard to the potential application of the <i>Migratory Birds Convention Act</i> (Canada) and/or the <i>Wildlife Act</i> (British Columbia). To reduce the risk of Project-related harm to birds and/or their active nests and eggs, the Applicant may wish to avoid certain physical activities during the general bird breeding season, which falls between <b>April 1 and July 31</b>, or outside of this time span if occupied nests are present. The Applicant shall exercise all due diligence to avoid causing harm to birds and/or their active nests and eggs.</p> <p>The Applicant shall also have due regard to nests of those species of birds protected by Applicable Law at all times of the year, regardless of the time of year or whether or not the nests are occupied. The Applicant should, where circumstances warrant, retain the services of qualified environmental professionals to assist in developing and undertaking appropriate bird nest surveys immediately before, during and after the general bird breeding season.</p>
6.	The Applicant and their contractor(s) shall make available employment, training and contract opportunities relating to Project construction to qualified members and/or businesses of interested Aboriginal groups.
7.	The Applicant shall cooperate fully with VFPA in respect of any review by VFPA of the Applicant's compliance with these conditions including, without limitation, providing any information or documentation required by VFPA.
8.	The Applicant shall make a copy of this Permit available to all employees, agents, contractors, licensees and invitees prior to commencing any physical activities. The Applicant shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with these conditions.
9.	The Applicant shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
10.	Unless otherwise noted, the Applicant shall submit all documents required for VFPA approval to <b>email: <a href="mailto:per@portvancouver.com">per@portvancouver.com</a>; fax: 1-866-284-4271 and referencing PER No.15-167.</b>

11.	<p>The Applicant shall submit a self-report to VFPA demonstrating compliance with conditions, as set out in the pre-populated self-report form provided by VFPA, at each of the following project phases:</p> <ul style="list-style-type: none"> <li>a) Prior to construction - 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) During construction - Self-report shall be submitted when construction is approximately 50% complete (not including eelgrass transplanting).</li> <li>c) Upon completion - Self-report shall be submitted within 60 business days of completion of construction (not including eelgrass transplanting).</li> </ul>	
	<b>CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b>	<b>SUBMISSION TIMING (business days)</b>
12.	The Applicant shall provide a Project construction schedule to VFPA identifying the anticipated start dates of berm construction, fill placement, and eelgrass transplanting. The Applicant shall notify VFPA of any material changes to the Project schedule and, upon request, shall provide an updated Project schedule.	40 days before commencing construction or any physical activities
13.	The Applicant shall notify the Harbour Master and VFPA Environmental Programs, email: Harbour_Master@portvancouver.com and EnvironmentalPrograms@portvancouver.com.	2 days before commencing construction or any physical activities
14.	The Applicant shall submit signed and sealed drawings for proposed works approved for construction by a professional engineer licensed to practice in the Province of British Columbia.	5 days before commencing construction or any physical activities
15.	The Applicant shall distribute a construction notice to residents and businesses in accordance with the VFPA-provided notification area map describing the works and activities, hours of operation, and contact information. The Applicant shall provide a copy of the draft construction notice for VFPA approval. The Applicant shall copy VFPA when construction notices are distributed.	10 days prior to distribution (the draft notice shall be provided for review) and 10 days before commencing construction or any physical activities (the notice shall be distributed)
16.	Prior to the commencement of any vessel-related activities, the Applicant shall contact the appropriate Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS) centre regarding the issuance of a Notice to Shipping (NOTSHIP) to advise the marine community of potential hazards associated with the Project.	As per Coast Guard requirements
17.	The Applicant shall complete a Project Agreement with Tsawwassen First Nation regarding the use of the Tsawwassen First Nation waterlot	2 days before commencing construction or any

	prior to construction activities within the Tsawwassen First Nation waterlot.	physical activities within the Tsawwassen First Nation waterlot
18.	The Applicant shall submit an environmental protection plan (EPP) to the satisfaction of VFPA. The EPP shall incorporate mitigation measures described in the Application submission and appropriate best management practices. Where those practices are in conflict with any listed in this Permit, VFPA shall be consulted for clarification.	10 days before commencing construction or any physical activities
19.	Prior to submitting the environmental protection plan to VFPA, the Applicant shall share a draft plan with Aboriginal groups, seek comments and incorporate feedback where appropriate.	30 days before commencing construction or any physical activities
<b>CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b>		
20.	Construction and physical activities related to the Project may be conducted <b>24 hours a day, 7 days a week as required by tidal conditions</b> . No construction works shall occur during statutory holidays. These hours shall not be modified without prior approval from VFPA.	
21.	The Applicant shall carry out the Project in compliance with the environmental protection plan (EPP) reviewed and accepted by VFPA, and any subsequent amendments.	
22.	The Project shall be monitored by a qualified environmental professional. The monitor shall be empowered in writing to direct works to ensure compliance with this Permit. Monitoring events shall occur when the environmental monitor deems it appropriate but in no case less than weekly, and shall be full time when works are under way that have a potential to have adverse effects on fish or fish habitat.	
23.	The environmental monitor shall provide monitoring reports to VFPA on a weekly basis or more frequently if circumstances warrant. VFPA reserves the right to rule on the adequacy of the monitoring and the content of the reports.	
24.	The Applicant may conduct in-water fill placement (including but not limited to riprap) in depths greater than -5.0 metres Chart Datum (CD) at daily low water during the least-risk work window for female egg-bearing Dungeness crab (April 1 to October 14). If the Applicant conducts in-water fill placement outside of this least-risk work window, an underwater survey must first be conducted by a qualified professional. If recommended by the qualified professional, salvage and relocation of adult Dungeness crabs must be completed in advance of fill material placement.	
25.	<p>The Applicant shall establish and monitor a safety zone of 1,000 m radius around construction activities taking place in designated critical habitat for Southern Resident Killer Whales (SRKW).</p> <p>During the least-risk work window for SRKW of November 1 to April 30 of any year, monitoring of the safety zone may be carried out by an officer of the bridge. Outside of the least-risk work window for SRKWs, the duties must be carried out by a qualified professional.</p> <p>Construction activities must be stopped if SRKW are present and will only resume after SRKW have not been observed for more than 30 minutes. Notification must also be provided</p>	

	to the DFO Observe, Records and Report Line at 1-800-465-4336 (or as amended or replaced from time to time).		
26.	<p>If construction occurs when visibility is reduced such that the monitor conducting observations cannot visually observe the entire safety zone, SRKW observations must be conducted using a hydrophone.</p> <p>All activities and works must be conducted and monitored in such a way that there is no sustained underwater noise over 160dB to minimize disturbance to SRKWs.</p>		
27.	The Applicant 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(3) of the <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35(1) of the <i>Fisheries Act</i> .		
28.	The Applicant shall ensure that all equipment is in good mechanical condition and maintained free of fluid leaks, invasive species, and noxious weeds.		
29.	The Applicant shall not permit barges or other vessels used during the project to ground on the foreshore or seabed or otherwise disturb the foreshore or seabed (including disturbance as a result of vessel propeller wash), excepting only such disturbance as is reasonably required resulting from the use of barge spuds.		
30.	Rock used in berm construction shall be from sources demonstrated to be clean and free of environmental contamination.		
31.	Piles shall be driven with a vibratory or drop hammer. In the event that a diesel or hydraulic hammer or other technology such as drilling is required to install the piles, VFPA shall be consulted for additional review and authorization in this regard prior to initiating the physical activities.		
32.	In the event that distressed, injured or dead fish are observed following the initiation of pile installation, the Applicant shall halt work immediately and contact VFPA.		
33.	The Applicant shall cap any exposed hollow pipe piles to prevent wildlife entrapment.		
34.	<p>During any vessel-related activities, the Applicant 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) As per the International Regulations for Preventing Collisions at Sea, 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. The Applicant shall plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations.</li> <li>e) During night hours, unless working 24 hours per day, the rig and associated equipment shall be moored outside the navigation channel and lit in accordance with all applicable regulations.</li> </ul>		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; text-align: center;"><b>CONDITIONS - UPON COMPLETION</b></td> <td style="width: 30%; text-align: center;"><b>SUBMISSION TIMING (Business Days)</b></td> </tr> </table>	<b>CONDITIONS - UPON COMPLETION</b>	<b>SUBMISSION TIMING (Business Days)</b>
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35.	The Applicant shall notify VFPA upon completion of the Project.	Within 10 days of completion
36.	The Applicant shall provide record drawings, in both AutoCAD and Adobe (PDF) format to VFPA.	Within 40 days of completion
37.	The Applicant shall conduct post-construction monitoring in accordance with the Post-Construction Monitoring Plan to confirm the sites are functioning as intended.	As described in the Post-Construction Monitoring Plan
<b>VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to VFPA.</b>		
<b>LENGTH OF PERMIT VALIDITY</b>		
The construction of the Project must be complete no later than <b>December 31, 2021</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 VFPA for consideration of an amendment to this Permit.</li> <li>• For an extension to the Expiry Date, the Applicant must apply in writing to VFPA no later than 30 days prior to that date.</li> </ul> <p><b>Failure to apply for an extension as required may, at the sole discretion of VFPA, result in termination of this Permit.</b></p>		

## PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 15-167 is approved by:

Original Copy Signed \_\_\_\_\_

February 26, 2018 \_\_\_\_\_

**DATE OF APPROVAL**

**CARRIE BROWN**  
**DIRECTOR, ENVIRONMENTAL PROGRAMS**

### CONTACT INFORMATION

Vancouver Fraser Port Authority (VFPA)  
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