Request for Clean Water Act
Section 401 Water Quality Certification
Washington State Department of Ecology
Phone: (360) 407-6076 or E-mail: ecyrefedpermits@ecy.wa.gov

AGENCY USE ONLY

Date Received: 9/12/2023
Aquatics ID No.: 139947
Team: HQ
Valid Request: 9/18/2023

This Section 401 Water Quality Certification (WQC) Request form identifies information needed in order to review and process a Section 401 WQC Request. Please see Department of Ecology's (Ecology) webpage for more information about the Section 401 WQC Request process.

Submit this Section 401 WQC Request form along with a Joint Aquatic Resources Permit Application (JARPA) and supporting information[1] to ecyrefedpermits@ecy.wa.gov and copy the federal permitting agency.

A. Federal Permit or License Reference Number, if known: NWS-2022-473,

Department of Ecology (Ecology) Aquatics ID Number, if known: 139947

Project Name: Bowman Bay Pier Replacement **County**: Skagit

B. Project Proponent Name: Washington State Parks and Recreation Commission

C. Documentation showing that the Pre-Filing Meeting Request was submitted at least 30 days prior to submitting this Section 401 WQC Request. Attach either of the following:

- ■ E-mail acknowledgement of receipt from Ecology
- ■ Copy of previously submitted Pre-Filing Meeting Request Form

D. A completed, signed, and dated JARPA should be submitted with this form.

Did you attach a JARPA? ■ Yes ☐ No

E. The following is a list of documents needed for Ecology's WQC review, along with a brief explanation. Depending on the project, additional information may be requested.

Please let us know what information you are submitting with this WQC request form.

Required for all projects:

1. State Environmental Policy Act (SEPA) determination and/or checklist:
   - ■ Final SEPA determination attached
   - ☐ SEPA determination pending
   - ☐ Exempt from SEPA (see SEPA Guidance)
   - ☐ SEPA is not required (e.g., federal agency projects)

[1] To submit documents over 25MB, e-mail ecyrefedpermits@ecy.wa.gov to request a secure link.

To request an ADA accommodation, contact Ecology by phone at (360) 407-6076 or email at ecyrefedpermits@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility.
For Relay Service or TTY call 711 or 877-833-6341.

Si necesita este formulario en español, por favor, llámenos a (360) 407-6076
o envíenos un correo electrónico a: ecyrefedpermits@ecy.wa.gov

2. Project drawings attached:
   - ☒ Vicinity map
   - ☐ Plan view
   - ☐ Cross-section(s)
   - ☒ Plan set
   - ☐ Other:_____

3. Best management practices and construction methodology, provided in the attached:
   - ☒ JARPA
   - ☒ Water Quality Monitoring and Protection Plan (WQMPP)
   - ☒ Project drawings, sheets:_____
   - ☐ Mitigation Plan pages:_____
   - ☐ Other document(s): _____

   Notes:
   - This is needed for in-water work (below ordinary high water mark), including wetlands.
   - Describe best management practices to be implemented to protect water quality.
   - Describe construction sequencing and methodology.

4. Water quality monitoring, provided in the attached:
   - ☐ Water Quality Monitoring Plan (WQMP).
   - ☒ Water Quality Monitoring and Protection Plan (WQMPP is similar to WQMP, but includes best management practices).
   - ☐ Other (please identify location, such as JARPA, Part 8):_____

   Notes:
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - A plan is needed when conducting work in a waterbody (e.g., creek, ditch, river, lake, pond, marine, estuarine).
   - Include water quality parameters such as turbidity, oil sheen, pH (e.g., poured in-place concrete, concrete demolition), etc.
   - See State Water Quality Standards for Surface Waters (Chapter 173-201A-200 or -210 WAC)
   - If needed, templates are available.

Required depending on the project type:

5. Erosion and sediment control for upland work (above ordinary high water mark) that addresses stormwater during construction and long-term:

   This information is included in the attached:
   - ☒ JARPA
   - ☒ Project drawings, sheets:_____
   - ☐ Stormwater Pollution Prevention Plan, pages:_____
   - ☐ Mitigation Plan, pages:_____
   - ☐ Other document(s): _____

6. Wetland report, including the attached:
   - ☐ Wetland delineation report
   - ☐ Delineation data sheets
   - ☐ Wetland rating forms

Notes:

- Needed when there is a discharge (dewatering, excavation or fill) to wetlands.
- Report needs to include both a wetland delineation and rating.
- Include delineation data sheets and rating forms.
- For more information see wetland delineation resources and hiring a qualified wetland professional.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.

7. Mitigation, avoidance and minimization
   - ☐ Wetland avoidance and minimization checklist
   - ☒ Other aquatic resource avoidance and minimization demonstration
   - ☐ Mitigation Plan
   - ☐ Other:_____

   Notes:
   - Wetland avoidance and minimization webpage.

8. Mitigation plan, provided in the attached:
   - ☐ Riparian Planting and Monitoring Plan (Needed when riparian vegetation is removed or modified)
   - ☐ Wetland or stream/other aquatic resource Mitigation Plan
   - ☐ Wetland Mitigation Bank Use Plan (use when proposing mitigation bank use)
   - ☐ In-Lieu Fee (ILF) Use Plan (use when proposing ILF mitigation)
   - ☐ Project drawings, sheets:_____
   - ☐ Other:_____

   Notes:
   - Needed to offset impacts to wetland, stream, marine, or other aquatic habitat.
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - For more information, see wetland compensatory mitigation.

9. Dredging
   - ☐ Dredging Plan attached
   - ☐ Suitability Determination attached

   Notes:
   - Needed when sediments will be dredged for maintenance, navigation, or other purposes.
   - Covers in-water disposal and sediment anti-degradation.
   - Dredging Plan should include dredge footprint and depth, dredge type, best management. practices, disposal plan, off-loading plan for upland disposal, etc.
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - For informationon suitability determinations, see Dredged Material Management Office.

10. Dewatering
    - ☐ Dewatering Plan attached

    Notes:
    - Needed for complex in-water work or management of excavated/dredged material.

- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
- May also be required for some excavation projects.

F. Required Certification Statements:

The project proponent hereby certifies that all information contained herein is true, accurate, and complete, to the best of my knowledge and belief.

Initial JB

The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Initial JB

Signature: Boyd, Joelene (PARKS) Digitally signed by Boyd, Joelene (PARKS) Date: 2023.09.12 10:12:55 -07'00' Date: 9/12/2023

Print Name: Joelene Boyd

WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form[1,2] [help]

US Army Corps of Engineers ®
Seattle District

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

AGENCY USE ONLY

Date received: 9/12/2023 edoc
Rec'd Section 401 Req Form

Agency reference #: _____

Tax Parcel #(s): _____

_____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
Washington State Parks Bowman Bay Pier Replacement

Part 2–Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Gibson, Jonathan C.			
2b. Organization (If applicable)			
Washington State Parks and Recreation Commission			
2c. Mailing Address (Street or PO Box)			
220 N. Walnut Street			
2d. City, State, Zip			
Burlington, WA 98233-1138			
2e. Phone (1)	**2f.** Phone (2)	**2g.** Fax	**2h.** E-mail
(360) 707-8264			jonathan.gibson@parks.wa.gov

[1]Additional forms may be required for the following permits:
- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

[2]To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [help]

3a. Name (Last, First, Middle)			
Boyd, Joelene			
3b. Organization (If applicable)			
Washington State Parks and Recreation Commission			
3c. Mailing Address (Street or PO Box)			
220 N. Walnut Street			
3d. City, State, Zip			
Burlington, WA 98233-1138			
3e. Phone (1)	**3f.** Phone (2)	**3g.** Fax	**3h.** E-mail
(360) 855-5533			Joelene.Boyd@PARKS.WA.GOV

Part 4–Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [help]

☒ Same as applicant. (Skip to Part 5.)

☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☐ There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

☐ Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	**4f.** Phone (2)	**4g.** Fax	**4h.** E-mail

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☐ There are multiple project locations (e.g. linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]

☐ Private
☐ Federal
☒ Publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☒ Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]

4399 Bowman Bay Road

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Anacortes, WA 98221

5d. County [help]

Skagit

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
	23	34N	01E

5f. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

48.415461 N lat. / -122.650661 W long.

5g. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

P19603

5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)
STATE OF WASHINGTON PARKS & RECREATION	4399 BOWMAN BAY ROAD ANACORTES, WA 98221	P19600

5i. List all wetlands on or adjacent to the project location. [help]

Unnamed wetland

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Bowman Bay, Puget Sound

5k. Is any part of the project area within a 100-year floodplain? [help]

☒ Yes ☐ No ☐ Don't know The area is mapped as Zone V-4 for coastal flooding on the DFIRM map.

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

Terrestrial habitat within the action area is characterized by lawn, woodlands, and a wetland. Park infrastructure includes a parking area, benches, a restroom building, and trails. Conifer-dominated forest habitat surrounds the lawn and parking lot.

In 2015, the Northwest Straits Foundation, Skagit County Marine Resources Committee (MRC), and State Parks partnered to restore 540 lf of shoreline and 0.60 acres of beach at Bowman Bay Deception Pass State Park (CGC 2014). Riprap was removed from 540 feet of the shoreline, with the exception of armoring under the pier. Beach nourishment, including beachgrass and backshore community restoration, was completed and continues to be monitored and maintained. The remaining riprap toe is at approximately +10 MLLW and rises to +14 MLLW, above Mean High Water (MHW) +7.07 MLLW and High Tide Line (HTL) +9.07 MLLW.

Coastal Geologic Services, Inc. (CGS) completed a characterization of the Bowman Bay shoreline for the bulkhead removal and nearshore enhancement project (Blue et al 2014). Landward of the ordinary high water mark (OHWM), the Action Area contains open lawn, a parking area, trails, benches, a restroom facility, a septic system, drainage culverts, and forest habitat. Bowman Bay beach faces west-southwest and is exposed to Rosario Strait and the Strait of Juan de Fuca. CGS concluded that the current shoreline has not changed significantly since its first mapping in 1885. A bedrock headland on the southern end of the bay shelters the beach from the straits to some degree. The beach is characterized as a mixed sand and gravel substrate with a moderately steep slope of 5:1 to 6:1; H:V (Blue et al 2014).

Bowman Bay ranges in width from approximately 0.3 to 0.5 miles wide, with shallow water depths to approximately -20 ft MLLW. Rocky marine topography extends north to south within the bay, and several rock formations are located at the mouth of the bay (e.g., Coffin Rocks and Bird Rocks). The nearshore is documented smelt spawning habitat (DNR 2021). The intertidal zone encompasses the area from the +9.07 MLLW[3] to -3.73 MLLW. The shallow subtidal zone encompasses the area from -3.73 MLLW to -10 MLLW.

A macroalgae and eelgrass habitat survey was conducted at Bowman Bay by MSA, Inc during August 2020 in accordance with WDFW and USACE Eelgrass/Macroalgae Habitat Interim Survey Guidelines (2008) (MSA 2020). Substrate consisted of pebble and sand in the upper intertidal zone with sand throughout the remaining survey area. Areas of macroalgae consist of:

- *Ulva* 5-30%
- *Sarcodiotheca* 5-10%
- *Porphyra* 5%
- *Gracilaria* 5-40%
- foliose reds 5-10%.

A bed of *Zostera marina* was observed extending from approximately 200 to 350 ft from the survey baseline along the shore. The eelgrass bed was observed with densities of 0 to 7.7 shoots per 0.25 m^2. Fourteen (14) small patches were observed with shoot counts ranging from 2 to 50 shoots (Figure 5l, updated 2021).

[3] The HTL was determined by examining predicted tides over a 10-year period (for years 2022 through 2031). The highest ten tides were selected and averaged, resulting in +9.07 MLLW. This HTL likely encompasses spring high tides and other high tides that occur with periodic frequency and does not include storm surges in which there is a departure from the normal or predicted reach of the tide. It is likely an overestimation of the HTL; however, physical indicators could not be reviewed because Bowman Beach was closed, during the writing of this BA, to protect a northern elephant mother and seal pup.

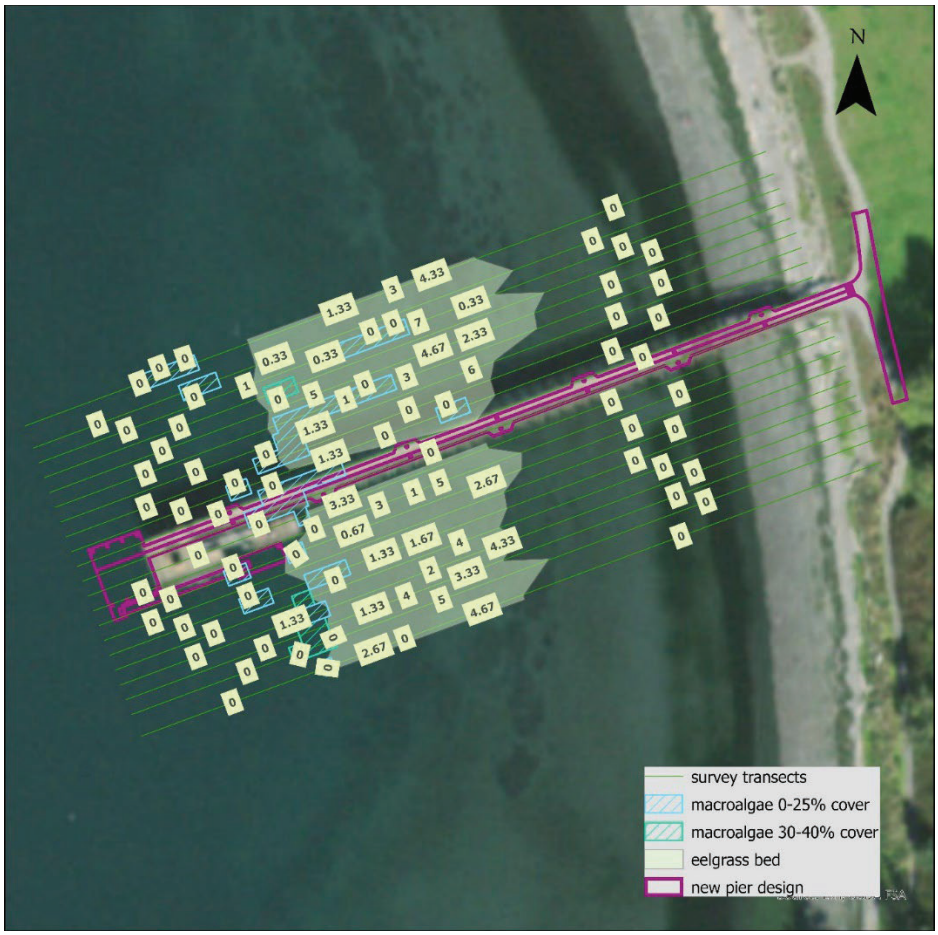


Figure 5l. Eelgrass and macroalgae habitat survey showing the existing and new pier design (Source: MSA 2020).

References:
Blue, A. Johannessen, J. MacLennan, A. et al. 2014. Coastal Geologic Services, Inc. Prepared for the Northwest Straits Foundation and Skagit County Marine Resources Committee.

Washington Department of Natural Resources. 2021. Forage Fish Spawning Map - Washington State. Accessed online at https://www.arcgis.com/home/webmap/viewer.html?webmap=19b8f74e2d41470cbd80b1af8dedd6b3 on.
_____. 2021.

MSA. 2020. Bowman Bay Pier Replacement Habitat Report. Prepared for PND Engineers, Inc. September 2020.

5m. Describe how the property is currently used. [help]

The property is currently a state park managed by Washington State Parks and Recreation Commission (State Parks). The project area is located within Deception Pass State Park. The site is a public state park, Bowman Bay; recreation activities include boating, kayaking, hiking, bird watching, picnicking and camping. The floating dock is used for small vessel docking and limited to day use. The Bowman Bay portion of the park includes a long pocket beach measuring 2,100 ft, a boat launch, interpretive buildings, and a timber pier. The existing use is not expected to change as a result of the proposed project.

5n. Describe how the adjacent properties are currently used. [help]

The project area is located within Deception Pass State Park, which encompasses over 3,854 acres and by Washington State Parks for public use. The site includes trails, a boat ramp, buoys for boats, a pier, camping, kayaking, and fishing.

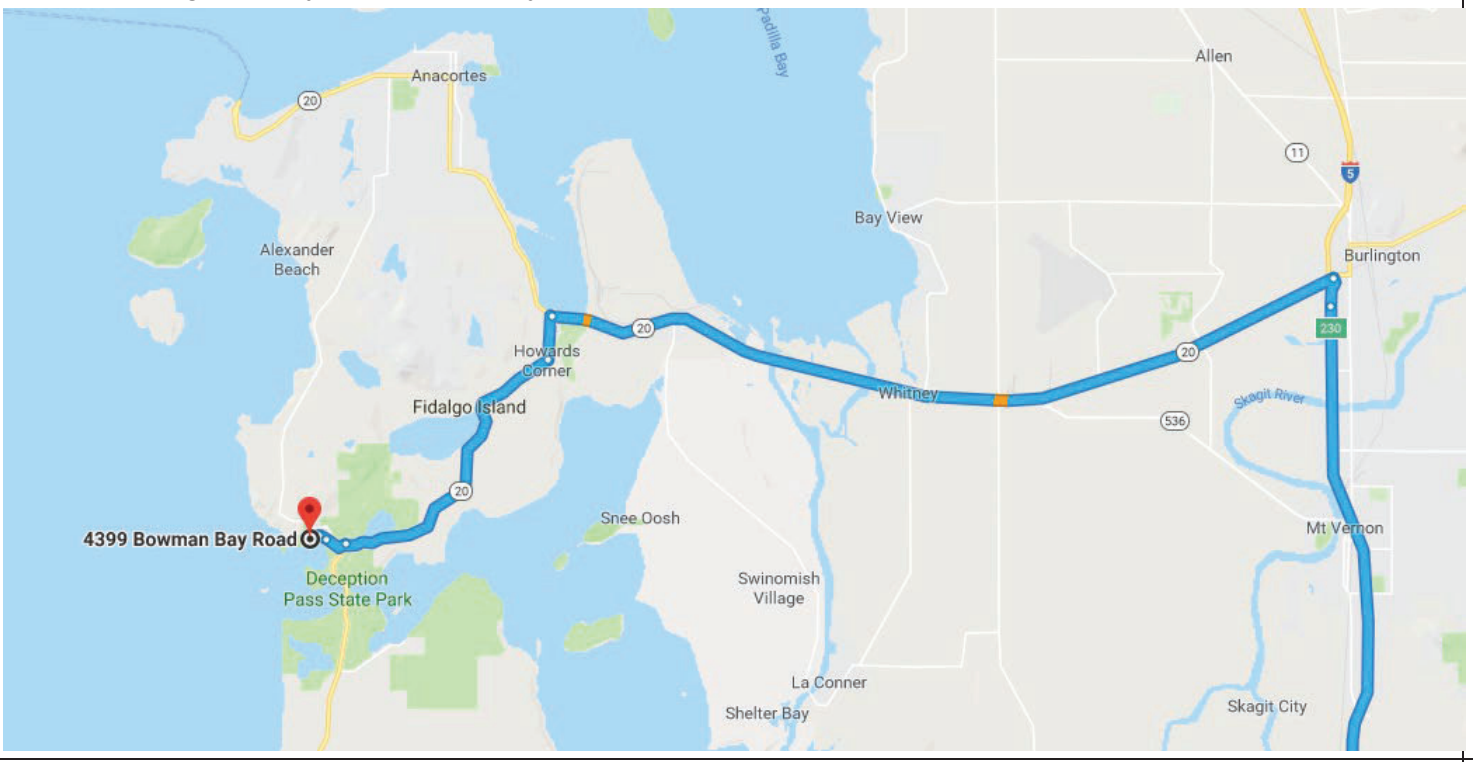
5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help],

The uplands consist of an expansive open lawn, large parking area, trail, waterfront benches, restroom facilities, septic system, drainage culverts, interpretive buildings and other park infrastructure. The project site includes a timber pier, dock and gangway. The pier and floating dock are used for recreational boater use and shoreline access, fishing, experience overwater views of Puget Sound. The public can use the floating dock for day use moorage or to launch small craft like remote control operated boats. A restroom building is in the parking lot east of the pier. There are picnic shelters and other buildings in the area. In addition to these structures, there is a buried concrete cylinder near the existing abutment, a fence, rip rap on the beach, and a small interpretive sign near the existing abutment that will be moved along with the realignment of the fence and trail.

The surrounding buildings, restrooms and concrete boat ramp are in functional condition. However, the beach and bay structures including a timber pier with a small floating dock and ramp that extends approximately 450 ft from the upper beach to intertidal area of the park has reached the end of its design and serviceable life. Storms over the past two years have resulted in significant damage to the pier rendering it closed to the public due to its decrepit and unsafe condition. In February 2022, approximately 60 feet of the overhead pier structure was removed (NWS-2021-1152) as it was structurally failing and posed a threat to the public while accessing the shoreline.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

1. From I-5 N take exit 230 for WA-20 toward Burlington/Anacortes/Skagit Airport
2. Turn right onto Rosario Rd
3. Turn left onto Bowman Bay Rd
4. Turn right to stay on Bowman Bay Rd



Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [help]

The Bowman Bay Pier, on the southwest tip of Fidalgo Island, includes an abutment, creosote timber pier, floating timber dock, and gangway that has reached the end of its useful life and has been structurally damaged during recent 2020 and 2021 storms. State Parks proposes to demolish and replace the existing facility with new materials that have less impact on the environment and provide better light penetration to the surrounding aquatic environment. Additionally, as part of the project rip-rap (~40 cubic yards (cy) along 50 lf) will be removed (above HTL and MHW) restoring connectivity along entire length of the Bowman Bay shoreline, a documented forage fish spawning beach. The new pier will also be compliant with Americans with Disabilities Act (ADA) regulations and provide ADA access. The footprint of the existing pier facility is 6,932 square feet (sf) and is made of solid timbers. The replacement facility is 6,372 sf and will be made of modern materials that includes grated surfacing throughout. In sum, the project will result in a reduction in overwater footprint by 560 sf (not including light penetrating surfaces).

6b. Describe the purpose of the project and why you want or need to perform it. [help]

The existing facility has reached the end of its useful life and is structurally failing. Additionally, approximately 60 ft of the overhead pier structure (guardrail, decking, stringers, pile caps and batter piles that were not self-supporting) were removed in February 2022 as the structure was unstable and identified as a risk to public safety. In order to minimize risk to the environment and maintain public access and recreation State Parks proposes to replace the existing pier and dock facility with modern materials to minimize environmental impact, restore and reconnect shoreline processes and provide ADA access. The purpose of the proposed action is to:

- restore public access and recreational use of the Bowman Bay Pier by replacing the existing, failing timber pier, gangway, day use floating dock,
- broaden public use of the pier by replacing the existing pier with an Americans with Disabilities Act (ADA) compliant pier, gangway, float, and access trail and
- enhance nearshore habitat by removing creosote-treated timber piles, shoreline armoring (riprap), adding beach nourishment (above HTL and MHW), and reducing overwater shading of the nearshore habitat, such as minimizing and avoiding impacts to eelgrass beds.

6c. Indicate the project category. (Check all that apply) [help]

☐ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☒ Recreational

☒ Maintenance ☒ Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [help]

☐ Aquaculture	☐ Culvert	☒ Float	☐ Retaining Wall (upland)
☐ Bank Stabilization	☐ Dam / Weir	☐ Floating Home	☐ Road
☐ Boat House	☐ Dike / Levee / Jetty	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat Launch	☐ Ditch	☐ Land Clearing	☐ Stairs
☐ Boat Lift	☒ Dock / Pier	☐ Marina / Moorage	☐ Stormwater facility
☐ Bridge	☐ Dredging	☐ Mining	☐ Swimming Pool
☐ Bulkhead	☒ Fence	☐ Outfall Structure	☐ Utility Line
☐ Buoy	☐ Ferry Terminal	☒ Piling/Dolphin	
☐ Channel Modification	☐ Fishway	☐ Raft	

☒ Other: ADA-compliance, removing shoreline armoring

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

Detailed Project Description

The proposed action consists of demolition and disposal of the existing, failing pier, gangway, floating dock, and abutment and the construction of a replacement pier, abutment, gangway, and floating dock with materials meeting current construction standards. The current pier's east/west orientation will be maintained; however, the replacement pier was designed to extend further west, so the structure is in the Deeper Shore Zone, to avoid and minimize impacts to eelgrass, macroalgae and overall reduction in overwater coverage in the photic zone. The trail leading to the pier will be adjusted landward to allow for ADA accessibility. Please refer to project drawings.

PIER DEMOLITION

Recent storms, during the winter of 2021, further damaged the pier, as evidenced by at least one additional missing pile and buckling of the deck. The most recent damage required the removal of approximately 60 feet of pier, including guardrail, decking, stringers, pile caps and any piles that were not self-supporting (i.e., batter piles) after the overhead structure was removed. Please refer to NWS-2021-1152.

The existing and remaining pier (6,400 sf) and timber floating dock (384 sf) will be removed and disposed of at an approved upland disposal site. The steel gangway (120 sf) will be removed and recycled. Demolition includes removing 156 creosote-treated timber 12-inch diameter piles, two 12-inch diameter steel piles, and 90 timber braces, measuring 18 feet by 10 inches by 4 inches. Piles will be extracted wholly wherever possible, using vibratory hammer extraction method, consistent with the Washington Department of Natural Resources (DNR) Creosote Removal Program and Best Management Practices for Pile Removal and Disposal (2017). A crane mounted barge will be used to remove a majority of the piles (at high tide) avoiding anchoring or "spudding" in eelgrass. Piles that are close to the shoreline will be removed by land-based equipment operating above the HTL with ground protection measures in place. No equipment will be operating below HTL or on the beach during piling removal. If a pile breaks above the mudline during removal, an attempt will be made to pull the remainder of the pile in a way that minimizes disturbance of sediments; otherwise, the pile will be cut below the mudline. Depth of piling to be cut below mudline will follow WDFW provisions included in the HPA permit if they vary from DNR's BMPs for piling removal. All creosote-treated timber will be disposed of in accordance with 1) appropriate regulations and permits and 2) following DNR's BMPs for pile removal (2017).

Approximately 156 creosote-treated piles and two steel piles will be removed. Three of the timber piles are encased in concrete and will also be removed. Table 6e-1 shows the number of piles in each shore zone that will be extracted. Please refer to Tables 6e-2, through Tables 6e-6 for a summary existing pier components and shore zone.

Table 6e-1. Number of timber and steel piles extracted by each shore zone.

Existing pile size and type	Shore Zone				
	Riparian	Upper	Lower	Deep	Total
	HAT (+9.17) to 130 feet landward	HAT to +5 MLLW	+5 MLLW to -10 MLLW	-10 MLLW waterward or limits of SAV	
12.75-in creosote treated timber piles	5	10	108	33	156
12-in steel piles	0	0	2	0	2

The floating dock and gangway will be lifted out of the water by a crane and placed on a salvage barge. The existing timber decking will be dismantled using an upland or barge-based crane. A vibratory hammer operated from a crane on a barge or from an upland location will be used for pile removal. Materials will be removed from the site using a salvage barge or by stockpiling materials in an approved, confined upland area for salvage or breakdown and disposal.

A turbidity curtain will be installed around the project area for all demolition activities A debris boom around the pier to capture decking or materials for disposal. No materials will be allowed to enter the water, shoreline, or upland habitats during demolition activities.

Riprap Removal

The new pier abutment will not require shoreline armoring for erosion control. Approximately 50 cy (600 sf, 50 lf) of riprap will be removed from the upper shore zone using a land-based excavator equipped with a thumb bucket, a closed clamshell bucket or similar equipment that will allow for clean excavation.

PIER REPLACEMENT

Pile Installation: Replacement steel piles will be installed using a vibratory hammer suspended from an upland or barge-based crane. The use of an impact hammer is not anticipated; however, an impact hammer may be used to test the bearing capacity of the steel piles. The number of strikes will depend upon soil characteristics but no more than 50 strikes per pile are anticipated. An unconfined bubble curtain will be employed during impact hammer proofing.

A total of 27 piles will be installed: 22 steel pipe piles measuring 18-inch diameter by approximately 80 ft long to support the new pier (below HTL); two 12.75-inch diameter steel piles (above HTL) to support the abutment; and three 12.75-inch steel piles (below HTL) to restrain the floating dock. All new piles will be galvanized to protect against saltwater corrosion.

Table 6e-2. Number of new steel piles by shore zone

New pile size and type	Shore Zone				
	Riparian	Upper	Lower	Deep	Total
	HAT (+9.17) to 130 feet landward	HAT to +5 MLLW	+5 MLLW to -10 MLLW	-10 MLLW waterward or limits of SAV	
12.75-in steel pile	2	0	2	1	5
18-in steel pile	0	2	12	8	22

Pier Construction: The new deck material will consist of functional grating and will be supported by 24-inch tall by 13-inch wide beams on each side of the deck. The new pier will be 8 ft wide by 512 ft long. The pier includes seven bump-outs, each measuring 60 sf each, and a viewing area measuring approximately 34 ft by 40 ft (1,360 sf) at the western end of the pier. The total area of the new pier will be approximately 5,668 sf. The deck surface will consist of 100-percent functional grating material with a minimum of 60-percent open area. Open benches that allow light penetration are proposed in the bump out areas.

New Abutment: A new abutment will be set back approximately 20 ft landward from the existing abutment, above the HTL. The new abutment requires two 12.75-inch steel piles by approximately 20 ft in length to ensure bearing. The abutment will be constructed in the riparian shore zone.

Table 6e-3 Abutment cut and fill above and below the HTL and OHW

Project element	Work item	Above HTL/OHW Volume Area	Below HTL/OHW Volume Area
abutment	Excavation (cut)	60 cy 600 sf	0 cy 0 sf
	Reinforce concrete (fill)	3.2 cy 47.5 sf	0 cy 0 sf
	Pile supports	0 cy 0 sf	1.3 cy 1.8 sf

Gangway: The new ADA-compliant gangway provides access to the floating dock, measures approximately 80 ft by 4 ft (320 sf); the gangway will have functional grating with at least 50 percent open area and includes a 42-inch tall railing for safety. The gangway will be fabricated off-site and lifted into place using a barge-based crane and secured using hand tools.

Floating Dock: The proposed floating dock, measuring 32 ft by 12 ft (384 sf), will be installed at the end of the gangway. The dock will be fabricated off-site at an upland location and lifted into place using a barge-based crane and restrained in place by the float piles. The deck surface will be 100-percent grating with a minimum of 50-percent open area once the dock is built. Flotation tubs placed under the dock will provide a freeboard of 17.5 inches. There are eight flotation eight tubs: four measuring 4 ft by 4 ft and four measuring 4 ft by 3 ft.

Table 6e-4 Summary of existing and new pier components by shore zone (square feet).

EXISTING PIER					
Zone	**Riparian**	**Upper**	**Lower**	**Deep**	**Total (square feet)**
Structure	**HAT +9 to +140 ft**	**HAT +9 to +5 MLLW**	**+5 MLLW to -10 MLLW**	**-10 MLLW waterward or limits of SAV**	
Pier	220	337	4,478	1,365	6,400
Gangway			60	60	120
Float			384		384
Riprap	600 (50 cubic yards)		0	0	600 (50 cubic yards)
Trail	534				534
NEW PIER					
Pier	300	256	3,550	1,562	5,668
Gangway				320	320
Float			384		384
Riprap	0	0	0	0	0
Beach Nourishment (above HTL)	600 (40 cubic yards)				600 (40 cubic yards)
Trail (above HTL)	387				387

Table 6e-5 Summary of total and net overwater coverage including functional grating (square feet).

Pier	Existing (total square feet)	New Functional Grating (total square feet)	Percent light-permeable	Net Change (square feet)
Deck	6,400 solid	5,668	60%	-4,133
Gangway[1]	148 grated	320	50%	+86
Floating Dock	384 solid	384	50%	-192
Total Reduction				**-4,239**

[1]Assumes 50-percent open area for both existing and new gangway.

Trail Modification: As the new abutment will be adjusted landward, the shoreline trail leading to the pier entrance will be modified. This will entail moving the 10-ft-wide path onto the existing lawn and restoring the waterward area of the former trail alignment. The length of trail to be realigned is 100 lf. The trail gravel will be reused and augmented as necessary, and the existing trail to be decommissioned will be revegetated with native plant species known to succeed in the location. The trail modification will be within the riparian shore zone, as defined by the Puget Sound Nearshore "Conservation Calculator" User Guide (Ehinger et al, no date).

Table 6e-6 Cut and fill amounts for decommissioned and new trail sections.

Project element	Work item	Above HTL/OHW Volume Area	Below HTL/OHW Volume Area
Trail	Decommission/Restore existing trail	13 cy 534 sq ft	0 cy 0 sq ft
	New trail cut (from lawn)	10 cy 387 sq ft	0 cy 0 sq ft
	New trail area fill[1]	10 cy 387 sq ft	0 cy 0 sq ft
[1]The gravel cut from the decommissioned trail may be reused for the new trail area.			

Planting Plan

Planting of the decommissioned trail will be consistent with the 2015 Bowman Bay Bulkhead Removal and Nearshore Enhancement Project specifications. Two planting zones will be established: dune grass community beginning at +11 MLLW to +14.3 feet MLLW and a backshore community beginning at +14.3 MLLW extending landward to the edge of the new trail. Site preparation above +14.3 feet MLLW could include an application of a weed-free topsoil mix to a 6-inch depth, placed on disturbed areas to match adjacent grade. Plant selection will be dependent on availability and State Parks Natural Resource Manager site-specific knowledge.

The dune grass community will include native grasses, such as dune wild rye (*Leymus mollis*), spaced at 3-feet centers (on center (O.C.). Planting will occur in the spring, after plants emerge from dormancy, and construction is completed. The backshore community will include low-growing native herbaceous species and shrubs. Shrubs will be spaced approximately 1 stem per 9 to 16 square feet and take into consideration view corridors and travel routes. Spacing of herbaceous plants will be designated in the field, and planting will take place in the fall after construction is completed.

Table 6e-7 Planting plan with community and species palette.

Community/zone	Common name *Scientific Name*	Spacing	Comments
Dune Grass	dune wild rye *Leymus mollis*	3' O.C.	Bare-root plugs will be planted in spring when grasses emerge from dormancy. Seeds, if available, could be broadcast in the fall.
	beach lupine *Lupinus littoralis*	3-4 ' O.C	Planted in spring. Plants will be transplanted from pots.
	sea plantain *Plantago maritima*	Determined at time of planting	Planted in spring. Seeding in fall, if seeds are available.
Backshore herbaceous/shrub	coastal strawberry *Fragaria chiloensis*	Determined on site at time of planting.	Soils may be amended with topsoil, topped with mulch. Plants will be transplanted from pots. Size will be dependent upon availability. Planting will be in spring as plants are emerge from dormancy.
	beach pea *Latheryrus maritimus*		
	sea plantain *Plantago maritima*		
	Nootka rose *Rosa nutkana*	3'4' O.C.	
	oceanspray *Holodiscus bicolor*	3'4' O.C.	
	tall Oregon grape *Mahonia aquifolium*	3'4' O.C.	

Plantings will be maintained by State Parks for survival. Temporary fencing may be erected to protect plantings.

Beach Nourishment

After removal of the rock armoring from Bowman Beach, sediments suitable for forage fish spawning will be imported and the shoreline will be regraded to a natural grade, above HTL and MHW. Approximately 40 cubic yards of beach nourishment material suitable for forage fish spawning and similar in composition to Bowman Beach substrate will be used. Imported material will not contain silty or clay type soils and shall not be angular rock. Imported gravel will be consistent with WDFW specifications, as follows:

Table 6e-8 Beach nourishment specifications (WDFW 2015).

Sieve Size	Percent Passing by Weight
1-inch	100
1/2-inch	80 to 100
3/8-inch	40 to 80
Less than 3/8-inch	0 to 40

The beach slope will be reshaped similar to adjoining beach area or graded to 5:1 slope waterward for approximately 25 lineal feet. Approximately 40 cubic yards of gravel will be used to restore the beach above the HTL.

EQUIPMENT

Equipment and supplies will be delivered to the project using existing upland access routes and overwater by barge. The proposed pier replacement includes in-water and over-water work and work from the upland area adjacent to the pier.

The following equipment is anticipated for use during the project:

- Two barges, one for the crane and a second as a salvage and supply barge.
- Tug
- Crane
- Closed clamshell bucket
- Supporting work vessel, e.g., work skiff
- Vibratory hammer and
- Impact hammer for proofing
- A small excavator
- Hand tools (e.g., shovels, drills, hammers)

SCHEDULE AND SEQUENCE

The project is anticipated to begin after all permits and approvals are secured. In-water and over-water construction activities are expected to take approximately 8 weeks to complete. All in-water work is anticipated during the, approved in-water work window, July 16 to February 15.

The project construction activities will follow the sequence below:

1. Mobilize to site
2. Install BMPs (e.g., turbidity curtain, tarps)
3. Stage materials at an approved upland location
4. Dismantle and dispose of existing pier structure,
5. Remove existing timber piles
6. Remove riprap
7. Install new piles
8. Install new abutment
9. Install new pier spans and decking
10. Install floating dock and gangway
11. Supplement beach sediments (beach nourishment)
12. Realign trail and revegetate disturbed uplands
13. Remove BMPs

6f. What are the anticipated start and end dates for project construction? (Month/Year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

Start Date: July 16, 2023 End Date: February 15, 2027 ☐ See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

6h. Will any portion of the project receive federal funding? [help]

- **If yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☐ Check here if there are wetlands or wetland buffers on or adjacent to the project area. (If there are none, skip to Part 8.) [help]

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☒ Not applicable

The wetland in proximity to the project area will not be affected by the proposed project.

7b. Will the project impact wetlands? [help]

☐ Yes ☒ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☐ Yes ☒ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- **If Yes**, submit the report, including data sheets, with the JARPA package.

☐ Yes ☒ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- **If Yes**, submit the wetland rating forms and figures with the JARPA package.

☐ Yes ☒ No ☐ Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- **If Yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

There will be no impacts to wetlands.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

There will be no impacts to wetlands.

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)

[1] If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.
[2] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
[3] Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.
[4] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

There will be no fill material in wetlands.

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

There will be no wetland excavation activities.

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

The project includes the following design measures to reduce and avoid adverse impacts to the aquatic environment:

- The replacement facility (dock, pier, gangway) reduces the overall overwater footprint by approximately 560 sf.
- The replacement pier is narrower by approximately 4.5 ft which reduces overwater impact to the aquatic environment and sensitive eelgrass and macroalgae beds.
- The replacement pier will extend further into the bay's deep water habitat (Deeper Shore Zone) to avoid impacts to eelgrass and macroalgae.
- The abutment will be shifted landward 20 ft to allow for hard shoreline armor (riprap) removal and restoration of shoreline processes.
- Functional grated decking will be incorporated throughout the facility to allow for increased light penetration to the aquatic environment.
- Creosote piles will be removed and replaced with steel piles. There will be a 70-percent reduction of in-water structures, from 117 sf (156 piles) to 35.2 sf (27 piles), after the timber piles are replaced.

The following measures will be implemented to avoid and minimize adverse impacts to the aquatic environment during construction activities:

In-water Work Measures

- In-water work will be conducted only during the approved in-water work window for marine waters of Bowman Bay. The anticipated construction window for in-water work in Bowman Bay is July 16 to February 15 to protect salmon and bull trout. Following WDFW requirements, a forage fish spawning survey may be required prior to construction.
- The contractor will install a floating boom with a two-foot skirt around the construction site to catch debris and prevent it from falling into the water.
- Pile driving will only occur during daytime hours. Please refer to species-specific measures for marbled murrelet timing below.
- The contractor will not allow work barges to ground out or anchor in eelgrass.
- Washington Department of Natural Resources (DNR) Creosote Removal Program and Best Management Practices for Pile Removal and Disposal (2017) will be implemented to avoid releasing creosote or disturbing sediment.
- A vibratory hammer will be used to remove and install piles. An impact hammer (proofing) will only be used if the vibratory hammer fails to drive the pile to the final 10 ft. The contractor will install an unconfined bubble curtain during all impact hammer use.
- The contractor will comply with Washington State Water Quality Standards (Washington Administrative Code [WAC]173-201A), including but not limited to:
- Petroleum products, fresh cement, lime, concrete, chemicals, or other toxic or deleterious materials will not be allowed to enter surface waters.
- No oil, fuels, or chemicals may be discharged to surface waters, or onto land where there is a potential for reentry into surface waters.
- Fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc., will be checked regularly for leaks, and materials will be maintained and stored properly to prevent spills.

- Contractor will check equipment for leaks and other problems that could result in the discharge of petroleum-based products or other material into the waters of Bowman Bay before using equipment in or near water.
- The contractor will prepare and implement a spill prevention, control, and countermeasures (SPCC) plan during all demolition and construction operations. A copy of the plan with any updates will be maintained at the work site.
- The SPCC plan will outline BMPs, responsive actions in the event of a spill or release, and notification and reporting procedures. The plan will also outline management elements, such as personnel responsibilities, project site security, site inspections, and training.
- The SPCC plan will outline the measures to prevent the release or spread of hazardous materials found onsite or encountered during construction but not identified in contract documents. This includes any hazardous materials that are stored, used, or generated on site during construction activities. These items include but are not limited to gasoline, diesel fuel, oils, and chemicals.
- Applicable spill response equipment and material designated in the SPCC plan will be maintained at the job site.
- Corrective actions will be taken in the event of any discharge of oil, fuel, or chemicals into the water, including:
- Containment and cleanup efforts will begin immediately upon discovery of the spill and be completed in an expeditious manner in accordance with all local, state, and federal regulations. Spill response will take precedence over normal work. Cleanup will include proper disposal of any spilled material and used cleanup material.
- Oil-absorbent materials will be present on site for use in the event of a spill or if any oil product is observed in the water.
- The cause of the spill will be ascertained, and appropriate actions taken to prevent further incidents or environmental damage.
- Spills will be reported to the Washington State Department of Ecology's (Ecology) Northwest Regional Spill Response Office at (206) 594-0000.
- Waste materials will be disposed of in an appropriate manner consistent with applicable local, state, and federal regulations.
- Demolition and construction materials will not be stored where wave action or upland runoff can cause materials to enter surface waters.

Pile Removal and Installation Measures

- The contractor will implement Washington Department of Natural Resources Derelict Piling Removal Best Management Practices for Pile Removal & Disposal. Guidelines available online at https://www.dnr.wa.gov/publications/aqr_rest_pileremoval_bmp_nmfs .pdf Measures include but are not limited to:
- The timber piles will be removed using a pulling method and a vibratory hammer and will not be intentionally broken by twisting or bending.
- The piles will be removed in a single, slow, and continuous motion to minimize sediment disturbance and turbidity in the water column.
- If a pile breaks above or below the mudline, it will be cut consistent with agency-approved guidelines.
- The contractor will install a full depth turbidity curtain around the pile extraction area to minimize the spread of creosote-contaminated sediments.
- Creosote from extracted piles will be prevented from re-entering the water.
- All debris will be retrieved and disposed of properly by the contractor.
- A debris boom or other appropriate methods will be placed under the pier timber decking during removal to capture debris, such as splinters, sawdust, and nails.
- Removed piles, stubs, and attached sediments will be contained on the support barge and not be allowed to enter marine waters.
- If piles are placed directly on the barge and not in a container, the storage area will consist of a row of hay or straw bales, filter fabric, or similar material placed around the perimeter of the barge to prevent debris from entering Bowman Bay.
- Removed timber piles will not be hosed off or otherwise cleaned.

- All creosote-treated material, pile stubs, and associated sediments (including sawdust from cutting timber piles) will be contained and disposed of by the contractor in a landfill approved to accept these types of materials. The contractor will retain receipts of creosote-treated timber disposal with the total creosote timber disposal weight recorded.

Land-based Construction Measures

- All work areas will be clearly marked and delineated to establish the work limits associated with access, staging, and construction.
- The staging area (used for activities such as equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) will be established in a location and manner that will prevent contaminants like petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
- The contractor will not operate motorized equipment below the HTL, except for over water work from the barge with applicable BMPs noted above.
- The contractor will not stage materials waterward of the HTL except for over water work from the barge with applicable BMPs.
- The contractor will check equipment daily for leaks and complete any required repairs before using the equipment in or near water.
- The contractor will implement erosion and sediment control best management practices. Erosion control materials will be composed of 100% biodegradable materials.
- Erosion control materials will be certified free of noxious weeds and their seeds.
- The contractor and staff will not allow trash to accumulate at the project site and will dispose of all trash at an appropriate upland disposal location.
- A tarp or other methods will be used to prevent sawdust, trimmings, drill shaving and other debris from contacting waters of the state and prevent contamination of soil and habitat.
- In-water work will be conducted during the approved WDFW and USACE in-water work window for marine waters of Bowman Bay: anticipated July 16 to February 15 to avoid adverse effects to listed fish species.
- WDFW may require a forage fish spawning survey two weeks prior to construction.
- A marine mammal and marbled murrelet monitoring plan will be implemented during all vibratory and impact hammer pile installation and removal activities. Monitoring and management responses will include, but not be limited to:
- During marbled murrelet breeding season (April 1 to September 23), pile removal and installation activities will be limited to two hours after sunrise to two hours before sunset to avoid affects to breeding marbled murrelet.
- Pile installation and removal will not commence or will be suspended temporarily if any ESA-listed marine mammal or marbled murrelet is observed within an area that could potentially affect the animal.
- A bubble curtain will be installed during impact pile proofing to reduce underwater sound levels.
- Existing abutment and riprap removal will be conducted in the dry during low tide. Installation of the replacement abutment or other work requiring access to the shoreline will be conducted in the dry during low tide.
- If work waterward of the HTL requires moving natural habitat features such as logs or large rocks, these habitat features will be returned near the same location after project completion.
- The pier, gangway, and dock will be constructed of functional grating with a minimum 50-percent open area to avoid shading the underlying marine substrate.
- There will be at least 7 ft maintained between the float and the sea bottom.
- The pier, gangway, and float will be designed to avoid eelgrass habitat to the maximum extent practicable.
- Riprap removal equipment will include a closed clamshell bucket for clean extraction and to prevent fall back to the extent practicable. Equipment will be based landward of the HTL; no construction equipment will be allowed to access the beach or operate from below HTL.
- Coordination with WDFW to determine if a forage fish spawning survey is required. The forage fish spawning survey will be completed by a qualified biologist approved by WDFW prior to construction in coordination with WDFW area habitat biologist.
- Existing abutment and riprap removal will be conducted in the dry during low tide. Construction equipment will not be permitted below the HTL and will operate at or above +14 ft MLLW.

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]

- **If Yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

The proposed action will benefit listed species, nearshore habitat, and designated critical habitat because the habitat conditions will be greatly improved and potential adverse effects during construction will be temporary and of short duration.

The following mitigation measures are proposed to reduce effects to listed species and designated critical habitat:

- Vibratory hammer methods will be the primary method for pile extraction and installation.
- The new pier will be designed to avoid eelgrass and macroalgae to the maximum extent practicable.
- Overshading of the marine substrate will be decreased by approximately 62 percent, restoring habitat availability to listed species by 4,239 sf.
- Approximately 156 creosote-treated piles will be removed from the aquatic habitat, which includes designated critical habitat. This includes removal of creosote-treated timbers that have broken and are found on the seafloor or have washed up onto Bowman Bay beach within the project area.
- The decommissioned trail, approximately 584 sf, will be restored with native vegetation, as described above in 6e.
- The remaining hard shore armoring (rip-rap) will be removed from Bowman Bay allowing for complete restoration of the shoreline and return of shoreline and nearshore processes along the entire length of Bowman Bay.
- Approximately 40 cubic yards of sediment suitable for fish spawning will be used to restore an approximately 600 sf trench left by the removal of the riprap.

By removing creosote-treated timbers, the proposed action is consistent with DNR and NMFS goals for improving Puget Sound nearshore habitat conditions. Studies show that herring eggs exposed to creosote have a high mortality rate (DNR 2021); chemicals associated with creosote are known to increase disease and alter growth and reproductive function in English sole. These chemicals affect juvenile salmonids that migrate through contaminated estuaries by reducing their growth and altering immune function. Forage fish and crustaceans are important prey species for salmon and marbled murrelet, and salmonids, in turn, are important prey species for southern resident killer whale. State Parks will remove this source of toxic chemicals and prevent creosote from washing up onto shorelines. This will improve the quality of the nearshore habitat (e.g., eelgrass, spawning habitat) for listed species, designated critical habitat, and prey species.

Although the proposed action will be within the 25-ft buffer of eelgrass, any effects to eelgrass (and macroalgae) will be minimal and insignificant and result in a reduction of existing effects. The project was designed specifically to avoid eelgrass, which includes moving the pier and floating dock to deeper water and a narrower pier; thus reducing effects from boats, fishers, and crabbers, and by reducing the overwater footprint and shading to benefit the underlying marine substrate. Conservation measures including the installation of a turbidity curtain will minimize any effects during construction. Increased light penetration will be accomplished by reducing the width of the pier by approximately 4.5 ft and using functional grating. In addition, the remaining 50 cy of riprap will be removed from the beach, which will both restore valuable surf smelt spawning habitat, approximately 600 sf, and restore Bowman Beach shoreline processes. The riprap serves a habitat barrier, and its removal will improve the beach connectivity and increase habitat. The proposed conservation measures will reduce, minimize, and avoid impacts to eelgrass. Removing creosote and overwater structures will benefit

eelgrass and result in improved recruitment of eelgrass and macroalgae. The proposed action will result in long term benefits to eelgrass habitat.

The Bowman Bay upland area is designated critical habitat for Taylor's checkerspot butterfly. The existing habitat is characterized by a narrow, approximately 15 to 20 ft restored nearshore habitat and a large open grass area. As part of the project, this area, approximately 584 sf, will be replanted with native grasses, forbs, and shrubs. This restoration will result in a net gain of 147 sf of habitat. Upon removal of riprap, sediments suitable for forage fish spawning will be added to enhance approximately 600 sf shoreline habitat affected by the removal of riprap .

Puget Sound Nearshore Conservation Calculator

In 2020, NMFS released the Puget Sound Nearshore Conservation Calculator (calculator) for the purpose of evaluating project impacts. The conservation calculator was developed by NMFS to quantify permanent habitat impacts of proposed infrastructure projects and any benefits of project to habitat. The calculator generates habitat debits or credits based on inputs from the project elements (e.g., number of existing piles removed, removal of creosote-treated timber, number of new piles). The calculator determines changes in habitat value representing habitat impacts as debits, and habitat improvements as credits. Accordingly, the calculator was utilized to evaluate the impacts and benefits to the nearshore habitat. The results demonstrate, after entering existing pier and new structures, a debit of -147 and a credit of 554. An additional credit of 3 points was applied for removal of riprap shoreline armoring. This leaves the project with a net credit of 410 points. (Please refer to the Biological Assessment, Appendix D). The results of the conservation calculator further demonstrate that this project will result in beneficial effects of habitat improvements.

For the reasons described above, including the results of the conservation calculator, the project will result in beneficial effects and a net gain to listed species, habitat, and designated critical habitat such that no compensatory mitigation is warranted.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [help]

A mitigation plan was not prepared. Please refer to 8c for rationale.

8e. Summarize impact(s) to each waterbody in the table below. [help]

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Creosote-treated timber pile removal	Bowman Bay	In	Permanent	245 cy MHW 272 cy HTL	122 sf
Creosote-treated timber pile removal	Bowman Bay	In	Temporary Duration: up to 8 days	(see above)	(see above)
Steel pile installation	Bowman Bay	In	Permanent	93 cy MHW 101 cy HTL	34 sf
Steel pile installation	Bowman Bay	In	Temporary Duration: up to 16 days	(see above)	(see above)
Riprap removal	Bowman Bay Beach	In	Permanent	50 cy	600 sf

		Adjacent, above the HTL, within floodplain			
Riprap removal	Bowman Bay Beach	In Adjacent, above the HTL, within floodplain	Temporary Duration: up to 2 days	(see above)	(see above)
Beach Nourishment	Bowman Bay Beach	In floodplain; above HTL	Permanent	40 cy	600 sf
Beach Nourishment	Bowman Bay Beach	In floodplain; above HTL	Temporary Duration: up to 2 days	(see above)	(see above)
Creosote-treated timber pier removal	Bowman Bay	In/over	Permanent	Not applicable	Solid 6,400 sf
Creosote-treated timber pier removal	Bowman Bay	In/over	Temporary Duration: up to 8 days	Not applicable	(see above)
Grated Steel pier installation	Bowman Bay	In/over	Permanent	Not applicable	5,668 sf 60% functional grating Net 3,401 sf
Grated Steel pier installation	Bowman Bay	In/over	Temporary Duration: up to 10 days	Not applicable	(see above)
Float removal	Bowman Bay	In	Permanent	Not applicable	Solid 384 sf
Float removal	Bowman Bay	In	Temporary Duration: 1 day	Not applicable	(see above)
New float installation	Bowman Bay	In	Permanent	Not applicable	384 sf 50% functional grating Net 192 sf
New float installation	Bowman Bay	In	Temporary Duration: 1 day	Not applicable	(see above)
Steel gangway removal	Bowman Bay	In/over	Permanent	Not applicable	148 sf
Steel gangway removal	Bowman Bay	In/over	Temporary Duration: 1 day	Not applicable	(see above)
Steel gangway installation	Bowman Bay	In/over	Permanent	Not applicable	320 sf 50% functional grating Net 160 sf
Steel gangway installation	Bowman Bay	In/over	Temporary Duration: 1 day	Not applicable	(see above)
Abutment (cut)	Bowman Bay	Adjacent	Permanent	Above HTL/OHW 60 cy	Above HTL/OHW 600 sf
Abutment (fill)[4]	Bowman Bay	Adjacent	Temporary Duration: 2 days	Above HTL/OHW 3.2 cy	Above HTL/OHW 47.5 sf
Abutment (fill)[5]	Bowman Bay	Adjacent	Permanent	Above HTL/OHW 1.3 cy	Above HTL/OHW 1.8 sf
Abutment (fill)[5]	Bowman Bay	Adjacent	Temporary Duration: 2 days	(see above)	(see above)
Existing Trail (cut)	Bowman Bay	Adjacent	Permanent	Above HTL/OHW 13 cy	Above HTL/OHW 534 sf
Existing Trail (cut)	Bowman Bay	Adjacent	Temporary Duration: 3 days	(see above)	(see above)
New trail cut (lawn)	Bowman Bay	Adjacent	Permanent	Above HTL/OHW 10 cy	Above HTL/OHW 387 sf

New trail cut (lawn)	Bowman Bay	Adjacent	Temporary Duration: 3 days	(see above)	(see above)
New trail area fill	Bowman Bay	Adjacent	Permanent	Above HTL/OHW 10 cy	Above HTL/OHW 387 sf
New trail area fill	Bowman Bay	Adjacent	Temporary Duration: 3 days	(see above)	(see above)

[1] If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.
[2] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.
[3] Indicate the days, months, or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.
[4]This represents the reinforced concrete for the abutment.
[5]This represents pile supports.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

After removal of the rock armoring from Bowman Beach, sediments suitable for forage fish spawning will be imported and the shoreline will be regraded to a natural grade above HTL. Approximately 40 cubic yards of beach nourishment material suitable for forage fish spawning and similar in composition to Bowman Beach substrate will be used. Imported material will not contain silty or clay type soils and shall not be angular rock. Imported gravel will be consistent with WDFW specifications, as follows:

Table 8f-1 Beach nourishment specifications (WDFW 2015).

Sieve Size	Percent Passing by Weight
1-inch	100
1/2-inch	80 to 100
3/8-inch	40 to 80
Less than 3/8-inch	0 to 40

The beach will be reshaped similar to adjoining beach area or graded to 5:1 slope waterward for approximately 25 lineal feet. Approximately 40 cubic yards of suitable sediment will be required to restore the beach; beach nourishment will be placed above the HTL.

Existing trail material will be reused for the new trail sections and amended if necessary.

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

Approximately 50 cubic yards (600 sf, 50 lf) of riprap will be removed from the upper shore zone and above HTL using a land based crane.

An excavator will be used for the cut into the bank for the abutment and for the new and existing trail excavation (Table 8g-1). The gravel trail material will be reused to the extent practicable. Disposal of the cut lawn area will be determined by the State Parks Natural Resource Manager or disposed of by the contractor at an appropriate disposal site.

Table 8g. Trail and abutment excavation quantities.

Project element	Work item	Above HTL/OHW Volume Area	Below HTL/OHW Volume Area
Trail	Decommission existing trail	13 cy 534 sq ft	0 cy 0 sq ft
	New trail cut (from lawn)	10 cy 387 sq ft	0 cy 0 sq ft
	New trail area fill[1]	10 cy 387 sq ft	0 cy 0 sq ft
abutment	Excavation (cut)	Volume cy 60 Area sq ft 600	Volume cy 0 Area sq ft 0
	Reinforce concrete (fill)	Volume cy 3.2 Area sq ft 47.5	Volume cy 0 Area sq ft 0
	Pile supports	Volume cy 0 Area sq ft 0	Volume cy 1.3 Area sq ft 1.8

1The gravel cut from the decommissioned trail may be reused for the new trail area.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]

Agency Name	Contact Name	Phone	Most Recent Date of Contact
Skagit County Planning & Development	Leah Forbes, Jack Moore	360-416-1320	July 29, 2021
USACE	Kelly Werdick	206-764-6883	April 14, 2022
USFWS	Adam Griesemer		February 8, 2022
WDFW	Marcus Reaves	360-466-4345 ext. 251	April 12, 2022
WDNR	Ross Zimmerman	360-707-1355	April 12, 2022

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help]

- **If Yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d.

☐ Yes ☒ No

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

17110019

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up to find the WRIA #.

WRIA 3 Lower Skagit/Samish

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

- Go to https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria for the standards.

☒ Yes ☐ No ☐ Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]

- If you don't know, contact the local planning department.
- For more information, go to: https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases.

☐ Urban ☐ Natural ☒ Aquatic ☐ Conservancy ☐ Other:

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/forest-practices-water-typing for the Forest Practices Water Typing System.

☒ Shoreline ☒ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If No**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Name of manual: _____

9i. Does the project site have known contaminated sediment? [help]

- **If Yes**, please describe below.

☐ Yes ☒ No

9j. If you know what the property was used for in the past, describe below. [help]

Historic use of Bowman Bay Park includes work by the Civilian Conservation Corps in the 1930's and 1940's and a fish hatchery and marine biology station operated by the Washington Department of Fisheries since 1947. The hatchery and marine biology station have since been removed.

The project area has been in use as a recreation area as part of Deception Bay State Park.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If Yes**, attach it to your JARPA package.

☐ Yes ☒ No, State Parks is planning on conducting a survey and will submit report when it is available.

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

Federal ESA listed species that may occur in project area and that may be affected by the proposed work include:

Within Bowman Bay:

1. Marbled murrelet (*Brachyramphus marmoratus*), Threatened
2. Bull trout (*Salvelinus confluentus*), Threatened and designated critical habitat
3. Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*) and designated critical habitat
4. Puget Sound steelhead (*Oncorhynchus. m. irideus*)
5. Bocaccio (*Sebastes paucispinis*) and designated nearshore critical habitat

Outside of Bowman Bay:

1. Southern Resident killer whale (*Orcinus orca*) and designated critical habitat
2. Humpback whale (*Megaptera novaeangliae*)

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]

Species

1. Surf smelt (*Hypomesus pretiosus*)
2. Red sea urchin (*Strongylocentrotus franciscanus*)
3. Pinto abalone (*Haliotis kamtschatkana*)
4. Townsend's big-eared bat (*Corynorhinus townsendii*)

Habitats

1. Biodiversity areas and corridor
2. Estuarine and marine wetland

Bowman Bay has been documented by Washington Department of Fish and Wildlife (WDFW) as surf smelt spawning grounds and by U.S. Fish and Wildlife Service as critical and essential habitat for foraging and migrating bull trout. Essential Fish Habitat (EFH) for Pacific salmon species (Chinook, pink (*Oncorhynchus gorbuscha*), and coho salmon (*Oncorhynchus kisutch*)). Bowman Bay is also extensively used by juvenile salmon. Eelgrass and macroalgae are in the project area.

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.oria.wa.gov/opas/.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on agency addresses for completed JARPA.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to https://ecology.wa.gov/regulations-permits/SEPA-environmental-review.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☒ A SEPA determination is pending with (lead agency). The expected decision date is June 8, 2022.

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt? _____

☐ Other: _____

☐ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☐ Substantial Development ☐ Conditional Use ☐ Variance

☒ Shoreline Exemption Type (explain): WAC-173-27-040(2)(b) Normal Maintenance. The proposed project replaces an existing decrepit pier consisting of solid decking and creosote-treated timbers with a new pier consisting of steel structures, functional grating, and reduced overwater coverage. The repair is consistent with WAC-173-27-040(2)(b) definition to restore a development to a state comparable to its original condition, and the repair is the common method of repair for this type of structure. The replacement improves conditions of Bowman Bay, provides ADA access and restores public use of the pier.

Other City/County permits:

☒ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☒ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption – Attach Exemption Form

Washington Department of Natural Resources:

☒ Aquatic Use Authorization

Complete JARPA Attachment E and submit a check for $25 payable to the Washington Department of Natural Resources. **Do not send cash.**

Washington Department of Ecology:

☐ Section 401 Water Quality Certification ☐ Non-Federally Regulated Waters

FEDERAL AND TRIBAL GOVERNMENT

United States Department of the Army (U.S. Army Corps of Engineers):

☐ Section 404 (discharges into waters of the U.S.) ☒ Section 10 (work in navigable waters)

United States Coast Guard:

For projects or bridges over waters of the United States, contact the U.S. Coast Guard at: d13-pf-d13bridges@uscg.mil

☐ Bridge Permit ☒ Private Aids to Navigation (or other non-bridge permits)

United States Environmental Protection Agency:

☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) on tribal lands where tribes do not have treatment as a state (TAS)

Tribal Permits: (Check with the tribe to see if there are other tribal permits, e.g., Tribal Environmental Protection Act, Shoreline Permits, Hydraulic Project Permits, or other in addition to CWA Section 401 WQC)

☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) where the tribe has treatment as a state (TAS).

Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. JCG (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. JCG (initial)

Jonathan C. Gibson	Gibson, Jonathan (Parks) Digitally signed by Gibson, Jonathan (Parks) Date: 2022.06.02 18:53:01 -07'00'	June 2, 2022
Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Joelene Boyd		June 3, 2022
Authorized Agent Printed Name	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant) [help]

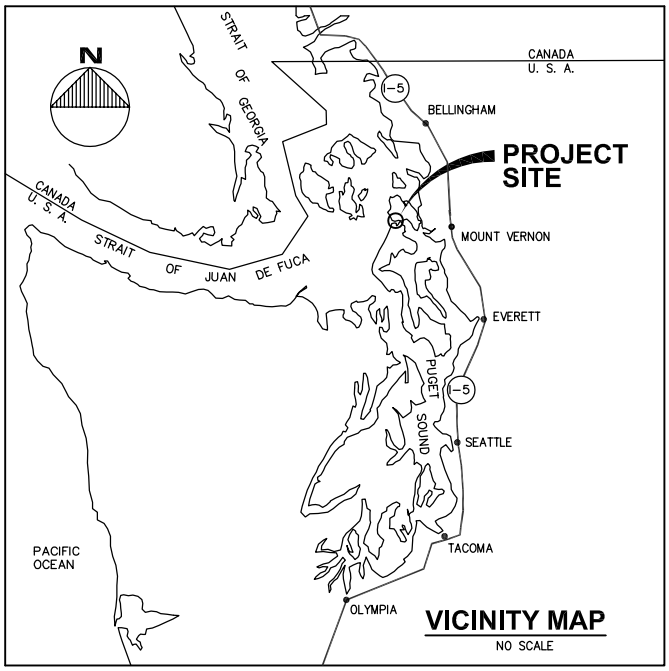
Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name	Property Owner Signature	Date

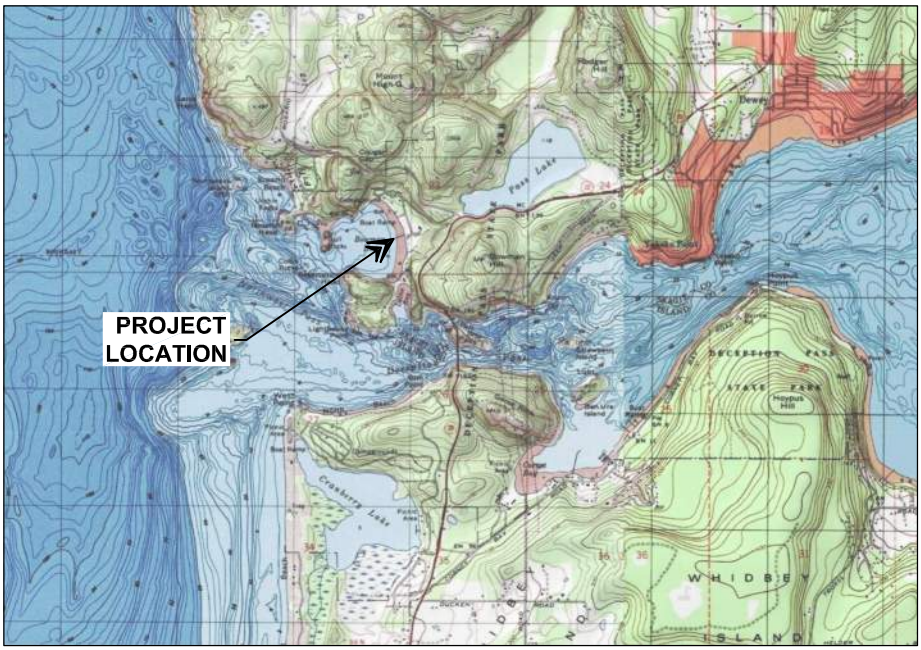
18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2018



VICINITY MAP
NO SCALE

TIDAL INFORMATION	
EXTREME HIGH WATER (EHW)	+10.50'
ORDINARY HIGH WATER (OHW)	+10.00'
HIGH TIDE LINE (HTL)	+9.07'
MEAN HIGHER HIGH WATER (MHHW)	+7.72'
MEAN HIGH WATER (MHW)	+7.07'
MEAN LOW WATER (MLW)	+2.45'
MEAN LOWER LOW WATER (MLLW)	0.00'
EXTREME LOW WATER (ELW)	−3.73'



LOCATION MAP
NOT TO SCALE

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT DECEPTION PASS STATE PARK

PROJECT LOCATION

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 1 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-01.dwg

EXISTING PIER PLAN

0 25 50 75 150 225 FT.

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT DECEPTION PASS STATE PARK

EXISTING PLAN

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

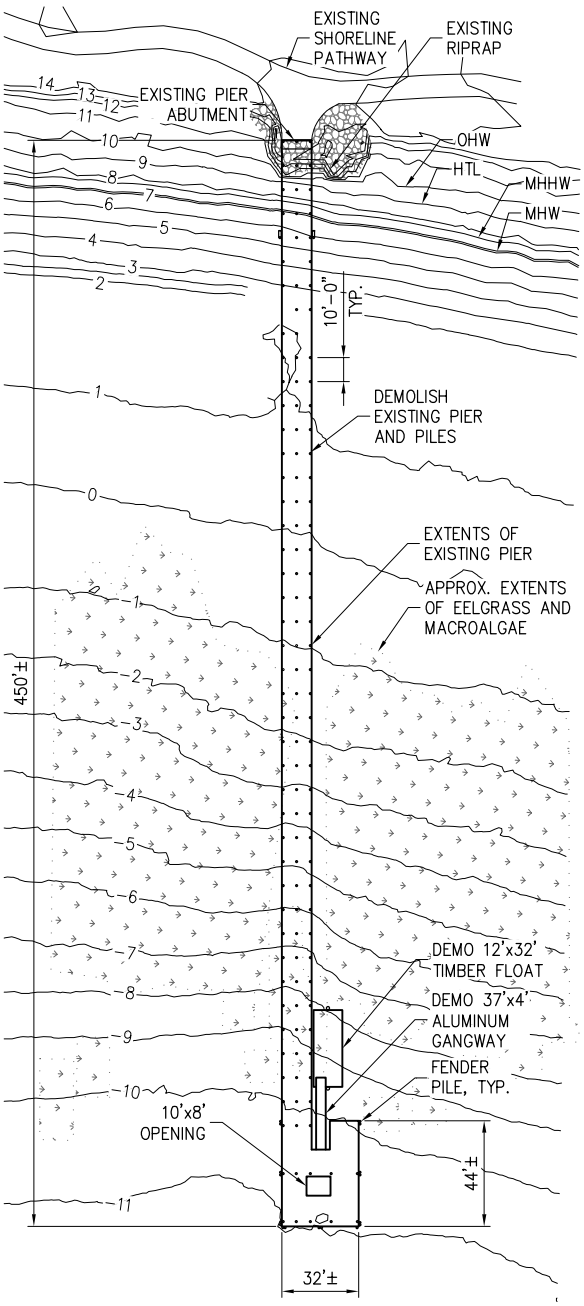
IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 2 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-02.dwg



EXISTING PIER PLAN

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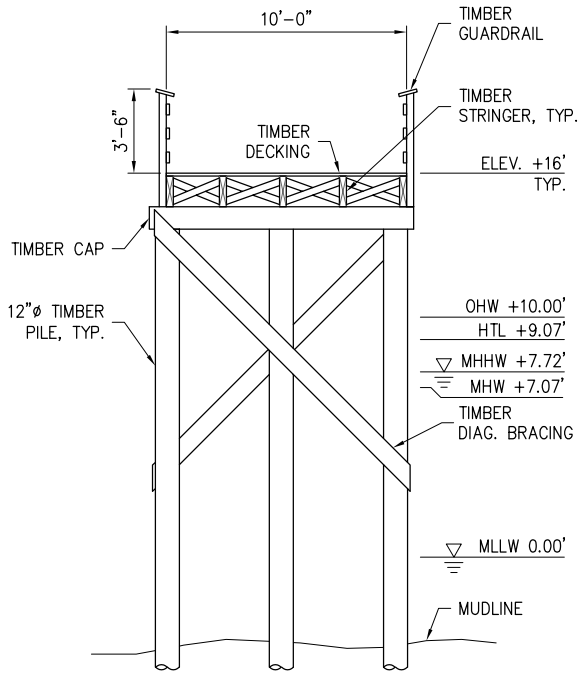


TYPICAL EXISTING SECTION

TO BE DEMOLISHED

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT DECEPTION PASS STATE PARK

EXISTING PIER

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

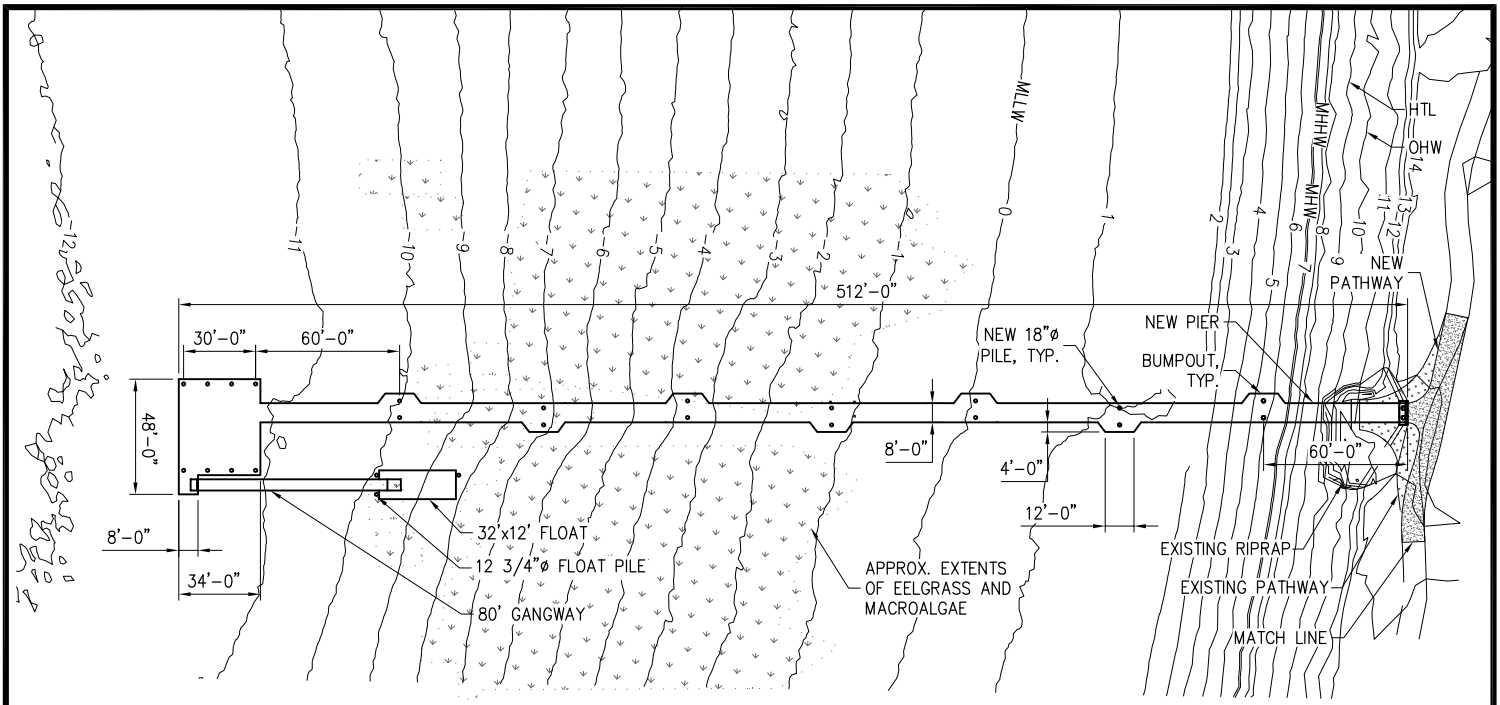
IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

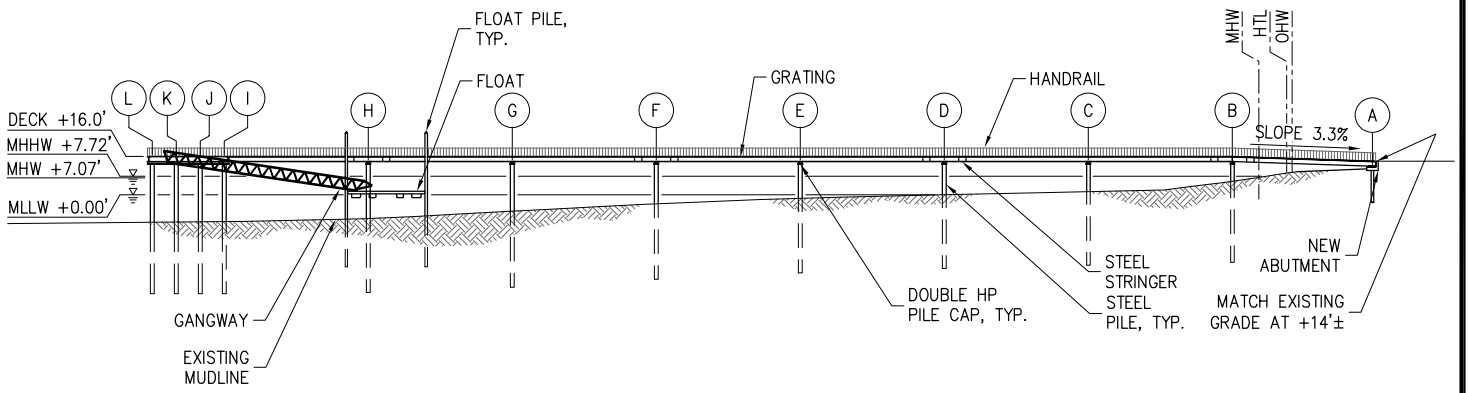
APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 3 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-03.dwg



PLAN



ELEVATION

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT DECEPTION PASS STATE PARK

NEW PIER

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

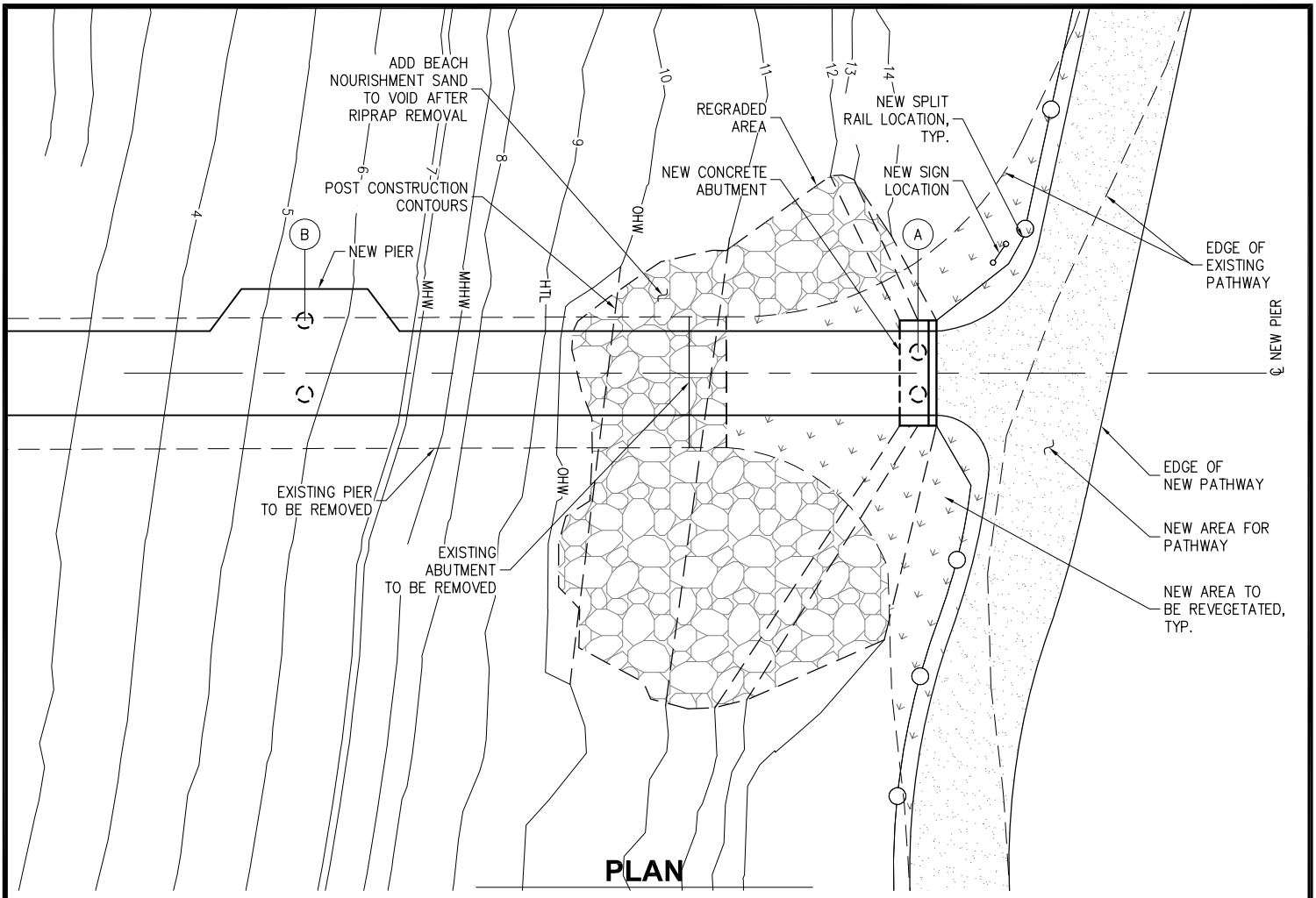
IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

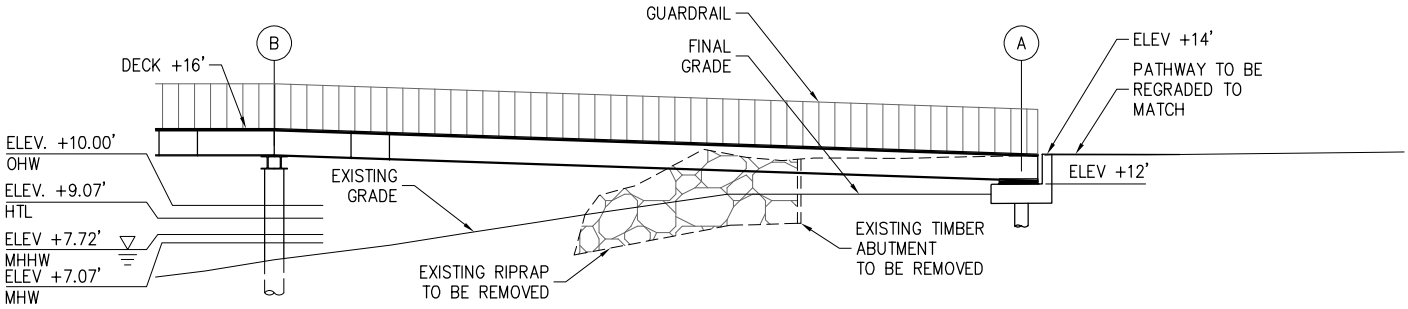
APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 4 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-04.dwg



PLAN



ELEVATION

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT
DECEPTION PASS STATE PARK
PATHWAY RECONFIG.

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

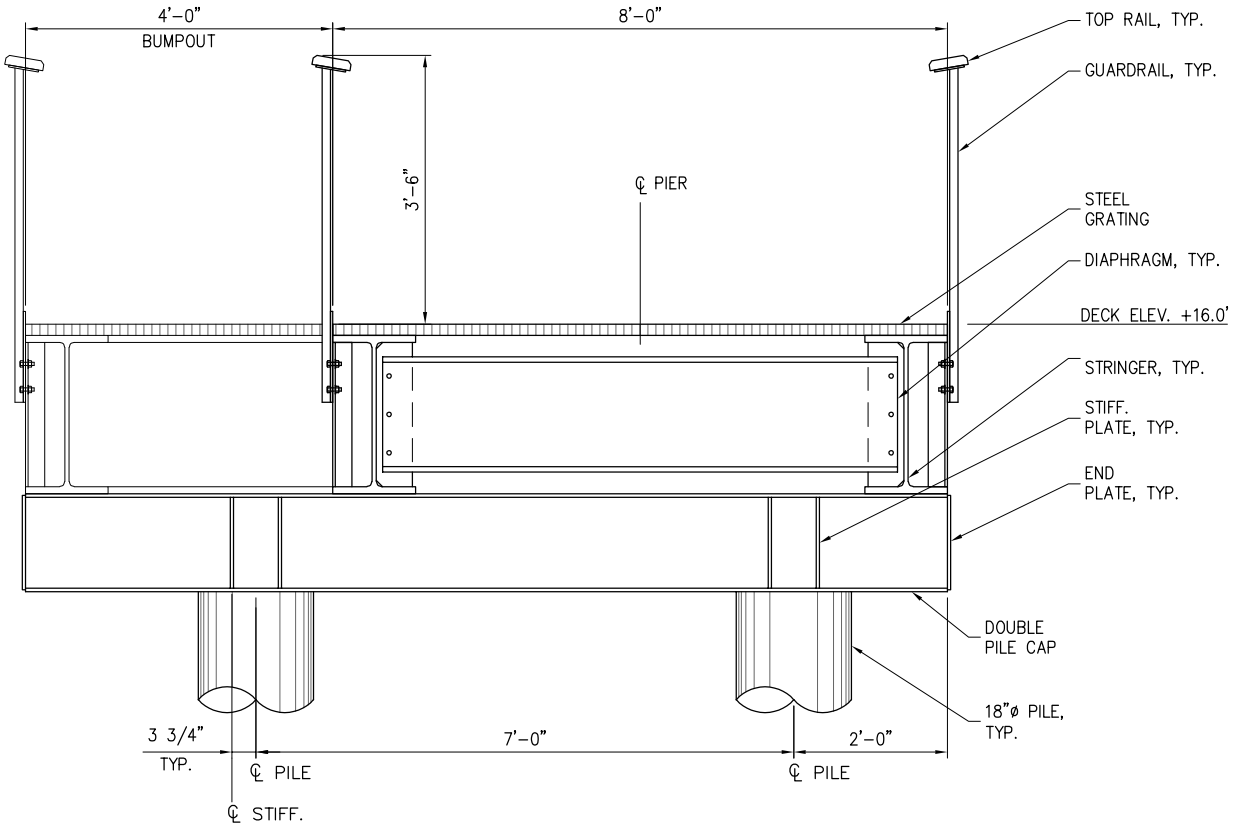
IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 5 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-05.dwg



PIER CROSS SECTION WITH BUMPOUT

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT DECEPTION PASS STATE PARK

NEW PIER

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504–2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

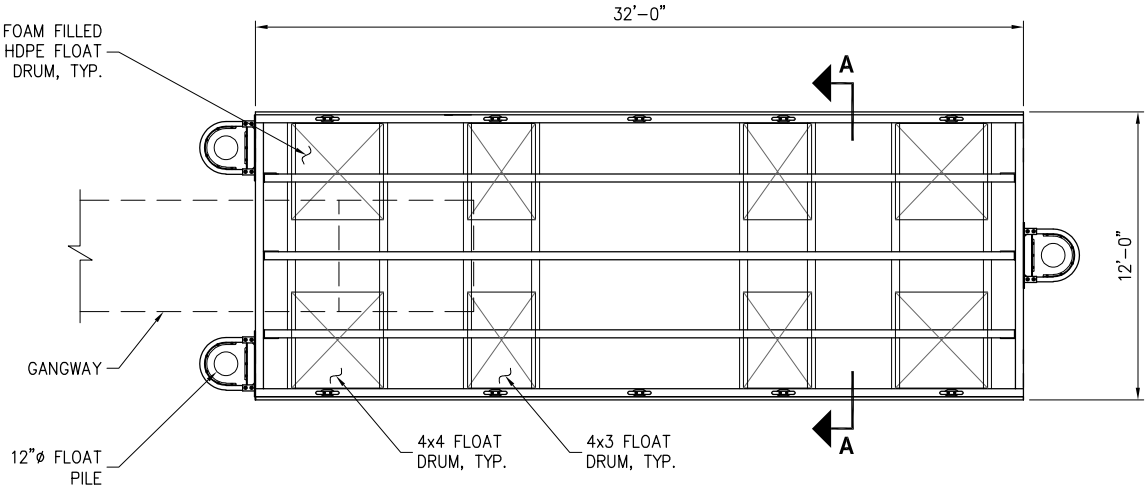
IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

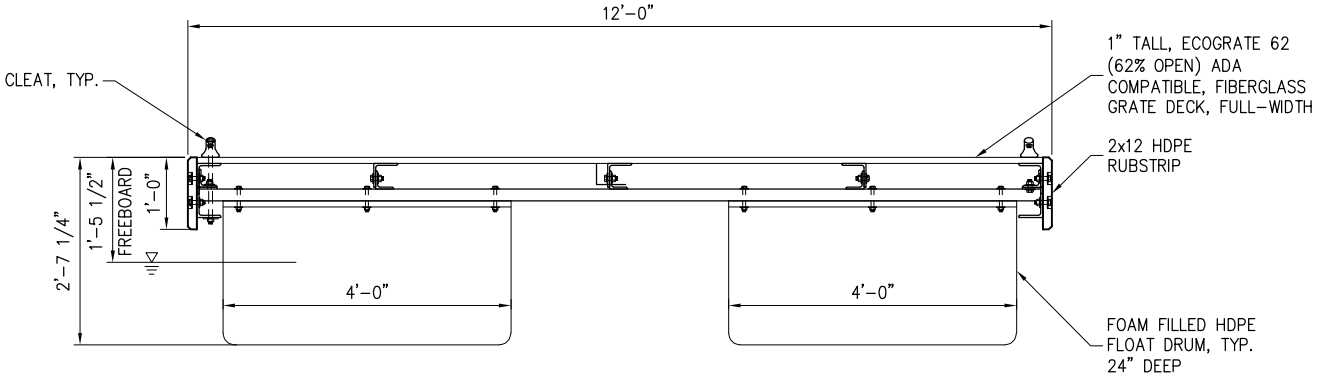
APPLICATION BY:
WASHINGTON STATE PARKS
& REC. COMMISSION

SHEET 6 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 – Bowman Bay Pier WSP\Pier Permit\184076–05.dwg



PLAN



SECTION A-A

PURPOSE:
RECREATIONAL FACILITY.

DATUM: 0.0' M.L.L.W.

ADJACENT PROPERTY OWNERS:
N/A

LAT: 48° 24' 55.6" N

LONG: 122° 39' 2.8" W

BOWMAN BAY PIER REPLACEMENT
DECEPTION PASS STATE PARK
NEW FLOATING DOCK

WASH STATE PARKS & REC. COMMISSION
P.O. BOX 42650
OLYMPIA, WA 98504-2650

PROPOSED:
RECONSTRUCTION OF EXISTING PIER.

IN: BOWMAN BAY

AT: SKAGIT COUNTY, WA
TWP. 34N, RNG 1E, SEC. 23 W.M.

APPLICATION BY:
WASHINGTON STATE PARKS & REC. COMMISSION

SHEET 7 **of** 7 **DATE:** MAY 2022

Drawings\2018\184076 - Bowman Bay Pier WSP\Pier Permit\184076-06.dwg