DETERMINATION OF NON-SIGNIFICANCE

Description:

Waterfront Park Reconstruction – Seattle Parks and Recreation (SPR) is proposing to rebuild the existing Waterfront Park located on Elliott Bay. The existing pier is 48,230 sq.ft. and is constructed of creosote-treated timber piles, monotube piles, steel H-Piles, and treated timber and concrete decking. The replacement pier will be 48,200 sq.ft. and includes the installation of up to 186 36-inch steel piles. The decking would consist of both pre-cast concrete panels and a cast-in-place concrete deck slab. The project also includes the installation of fill to serve as habitat enhancement. This fill comprises 120 cu.yds. over an area of approx. 2,000 sq.ft. adjacent to an existing substrate enhancement and marine mattresses adjacent to the seawall of approximately 150 cu.yds. installed over an area of approximately 2,000 linear feet. Work will take place on property owned by SPR and the Washington State Department of Natural Resources.

Proponent: Seattle Parks and Recreation

Location: Waterfront Park, 1401 Alaskan Way, Seattle, WA 98101

Lead agency: Seattle Parks and Recreation

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this DNS.			
This DNS is issued under 197-11-340(2); t proposal for 14 days from the date of publi			
Written comments must be submitted by _	MARCH	5	2020

Responsible official: Jesús Aguirre

Position/title: Superintendent, Seattle Parks and Recreation

Phone: 206-684-8022

Address: 100 Dexter Avenue North, Seattle, WA 98109

Date: 2/10/2020 Signature: Amtury

Please contact: David Graves, Strategic Advisor, Seattle Parks and Recreation if you have questions or comments about this determination. Phone: (206) 684-7048; Fax: (206) 233-3949; or, e-mail: david.graves@seattle.gov. You may appeal this determination to Office of the Hearing Examiner at PO Box 94729, Seattle, WA 98124-4729 or 700 Fifth Avenue, Suite 4000, Seattle, WA 98104 no later than 5:00 pm on MALLE Logo by Appeal Letter and \$85.00 fee. You should be prepared to make specific factual objection. Contact the Seattle Examiner to read or ask about the procedures for SEPA appeals.

City of Seattle

ANALYSIS AND DECISION OF THE SUPERINTENDENT OF SEATTLE PARKS AND RECREATION

Proposal Name: Waterfront Park Reconstruction

Address of Proposal: 1401 Alaskan Way, Seattle, WA 98101

SUMMARY OF PROPOSED ACTION

Seattle Parks and Recreation (SPR) is proposing to rebuild the existing Waterfront Park located on Elliott Bay. The existing pier is 48,230 sq.ft. and is constructed of creosote-treated timber piles, monotube piles, steel H-Piles, and treated timber and concrete decking. The replacement pier will be 48,200 sq.ft. and include the installation of up to 186 36-inch steel piles. The decking would consist of both pre-cast concrete panels and a cast-in-place concrete deck slab. The project also includes the installation of fill to serve as habitat enhancement. This fill comprises 120 cu.yds. over an area of approx. 2,000 sq.ft. adjacent to an existing substrate enhancement and marine mattresses adjacent to the seawall of approximately 150 cu.yds. installed over an area of approximately 2,000 linear feet. Work will take place on property owned by SPR and the Washington State Department of Natural Resources.

SEPA DETERMINATION: Determination of Non-Significance (DNS)

BACKGROUND DATA

Waterfront Park is an approximately 48,230 sq.ft. timber and concrete pier structure supported by a total of 490 creosote-treated timber piles, concrete filled steel monotube piles and steel H-piles on the waterfront of Elliott Bay located to the south of the Seattle Aquarium (Piers 59 and 60). It sits in the historic location of Pier 58 which was removed in 1965. Waterfront Park was a Forward Thrust project, constructed in the early 1970s as public space with connections to both the Aquarium to the north and Pier 57 to the south.

The pier is supported by creosote treated timber pilings, concrete filled monotube piles and steel H-piles spaced at approximately five (5) feet on center. On top of the pilings are timber or concrete pile caps which in turn support the timber or concrete decking. The bulk of the pier is comprised of timbers which have been treated with creosote to prolong their lives in the harsh marine environment. Overtime the pile caps have deteriorated and the pilings have also deteriorated such that the interior of the pile is either hollow or rotten and the only competent structure is around the edge. The Elliot Bay nearshore is used by juvenile salmonids from not only the Duwamish and Lake Washington systems but from rivers much further north and south of Seattle. Old timber piers such as Waterfront Park do not provide habitat that is favorable to juvenile salmonids. The pilings provide hiding places for predators and the pier itself shades the nearshore such that there is no light, no food resources and no places of refuge for the juveniles.

PROPOSAL DESCRIPTION

As noted above, the pier has become structurally unsound and is in need of reconstruction to make is useable for more than casual usage. Waterfront Park is being redesigned to improve access, safety, and flexibility in use, while offering expansive views of Elliott Bay and the Olympic Mountains. The project will demolish and remove the existing pier (48,320 square feet), including 490 piles (365 timber piles, 81 steel monotube piles that are filled with concrete, and 44 steel H-piles). The project will also demolish and remove associated railings, decking, stringers, pile caps, and bracing. During demolition, remnant piles and debris from previous pier configurations will also be removed to comply with Washington State Department of Natural Resources (DNR) lease terms. The number of remnant piles to be removed is unknown. The replacement pier will be 48,200 square feet and will include the installation of up to 186 permanent 36-inch diameter steel piles. The decking will consist of both pre-cast concrete panels and a cast-in-place concrete deck slab. The new park will feature a public plaza and restored and relocated water feature (Fitzgerald Fountain), a children's play area, seating areas, and a large lawn and trees to provide shade. Grating will be installed along the western edge of the pier (500 square feet) and along the southern corner of the pier at the nearshore (500 square feet).

Reconstructing the pier/park with a slightly smaller but more useable footprint would result in a net reduction in overwater cover of approximately 30 square feet. The reconstructed pier is also designed with an approximately 4,962-square-foot open water area to provide natural lighting of the shallow water habitat near the shore (located at approximately -10 feet MLLW) that would enhance nearshore habitat for a variety of species, such as juvenile salmon that use the nearshore area during migratory periods. A habitat mattress that is approximately 20 feet wide by 200 feet long by 2 feet thick (mattresses will be stacked two high) would be installed in this new open water area to facilitate recruitment of native invertebrate and algal species. A habitat mattress is a sturdy plastic mesh bag filled with stone that can be placed over existing substrate to bring the area to desired elevations. Each habitat mattress will be approximately 10 feet wide by 1 foot thick and 20 feet long and will be placed over approximately 4,000 square feet. Due to the new configuration, the replacement pier will cover up an existing habitat substrate patch (designated as Habitat Area A, consisting of pea gravel and shell mix) that was created as part of the Elliott Bay Seawall Project. To address loss of function of this habitat feature, the City will install an equal area of new habitat substrate enhancement to replicate the existing feature adjacent to Pier 58, further north. The new substrate enhancement will improve benthic habitat for juvenile crabs and other invertebrates and will generally improve productivity and support food web processes. The substrate enhancement will consist of an approximately 2,000 square foot, 2-foot thick layer of pea gravel and shell mix and will be located at elevations of approximately -28 feet MLLW.

The project includes the removal of existing piles and the installation of new piles. Installing the new 36-inch steel piles will also require the installation and removal of template piles (generally 24-inch circular steel piles connected by a structural steel frame) in order to guide the larger piles into correct position. While these template piles are not permanent, they result in additional vibratory pile driving, additional potential water quality impacts, and additional substrate disturbance. It is anticipated that approximately 4 template piles will be installed and removed for every 6 permanent piles (for a total of approximately 124 template piles driven and removed). Additionally, a few template piles may also be driven to temporarily secure the work barge adjacent to the piers instead of using anchors. Template piles are not included in the number of total new piles as they are temporary. Installing a temporary pile template to correctly position new structural piles is a standard practice for pier building. The template, which consists of two 24-inch pipe piles connected by a structural steel frame, is both installed and removed with a vibratory hammer; the contractor positions the template, installs a set of piles, then moves the template to a new area. Template piles typically do not need to be installed as deeply as the

structural piles; the necessary embedment will vary depending on the substrate conditions. Temporary piles are not proofed with an impact hammer.

A vibratory hammer will be used to remove the timber piles and other existing piles (steel pipe piles, steel monotube piles that are filled with concrete, and steel H-piles). Timber piles will be removed in whole, wherever possible, by pulling the piles while using the vibratory hammer. If a pile breaks above the mudline during removal, then an attempt will be made to pull the remainder of the pile in a way that minimizes disturbance of sediments such as by grabbing it with a clamshell bucket; otherwise, it will be cut below the mudline. Based on recent experience reconstructing Pier 62, it is expected that approximately ten percent (10%) of the timber piles will break during removal and will be retrieved with a clamshell bucket. All creosote-treated wood that is removed will be disposed of in accordance with appropriate regulations. Installing the 36-inch steel piles will require a vibratory hammer and an impact hammer. The steel piles will be installed with a vibratory hammer to the extent possible. An impact hammer will be used for proofing steel piles or when encountering obstructions or difficult ground conditions (anticipated to be less than 10 minutes for each steel pile). A vibratory hammer will also be used to install, remove, and adjust the template piles.

Overall the project will result in the removal of 365 existing creosote-treated piles, 81 steel monotube piles and 44 steel H-piles, plus any derelict piles in the work area, and the installation of up to 186 new steel pipe piles. The replacement steel piles are stronger than the existing timber and steel piles, so fewer are needed to support the new pier structures. However, the new piles will occupy a 36-inch diameter area of substrate instead of a 14-inch diameter area. It is anticipated that a majority of the material delivery and reconstruction of Waterfront Park will be conducted from barges.

ANALYSIS - SEPA

Initial disclosure of potential impacts from this project was made in the applicant's Environmental Checklist, dated December 13, 2019. The basis for this analysis and decision is formed from information in the Checklist, site visits and the lead agency's experience with review of similar projects.

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the proposal. City of Seattle codes and requirements, including the Stormwater, Grading & Drainage Control Code, Land Use Code, Shoreline Master Program, the Building Code and other construction codes; and applicable State and Federal regulations and permit requirements are expected to mitigate potential environmental impacts.

DECISION

This decision was made after the responsible official, on behalf of the lead agency, reviewed a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and final decision on application of SEPA's substantive authority and mitigation provisions. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

- (X) Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030(2)(C).
- () Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. AN EIS is required under RCW 43.21C.030(2)(C).

Signature:

David Graves, AICP

Strategic Advisor, Planning and Development Division

Seattle Parks and Recreation

Date:

February 6, 2020

STATE ENVIRONMENTAL POLICY ACT (SEPA) ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project, if applicable:

Waterfront Park Replacement Project

2. Name of applicant:

Seattle Parks and Recreation (SPR)

3. Address and phone number of applicant and contact person:

Contact:

David Graves

Phone:

(206) 684-7048

Address:

Seattle Parks and Recreation 300 Elliott Avenue W, Ste. 100

Seattle, WA 98119

4. Date checklist prepared:

December 13, 2019

5. Agency requesting checklist:

Seattle Parks and Recreation (SPR)

6. Proposed timing or schedule (including phasing, if applicable):

Construction is expected to start in Fall of 2021 and last up to 3 years.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no plans for future additions, expansions, or further activities related to or connected with this proposed project.

- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
 - Central Waterfront Master Parks Plan Final Environmental Impact Statement (EIS) (September 2006)
 - Timber Piling Inspection Report (WC1741) by Seattle Structural (2016)
 - Piers 57/58 Maintenance Plan Update: Waterfront Park Condition Assessment (WC2429) by Seattle Structural (2011)
 - Documentation of Endangered Species Act (ESA) Review, to be completed as part of U.S. Army Corps of Engineers permitting process

- Documentation of Section 106 Review, to be completed as part of U.S. Army Corps of Engineers permitting process
- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No, there are no known applications pending for government approvals or other proposals directly affecting the property covered by this proposal.

- 10. List any government approvals or permits that will be needed for your proposal, if known.
 - U.S. Army Corps of Engineers (USACE) Section 10 and Section 404 Permit
 - Washington Department of Ecology (Ecology) Section 401 Water Quality Certification
 - Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA)
 - City of Seattle Department of Construction and Inspections (SDCI) Building Permit
 - SDCI Shoreline Substantial Development Permit
 - SDCI Demolition Permit
 - National Oceanic and Atmospheric Administration (NOAA) incidental take authorization (Letter of Authorization)
- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The project will replace Waterfront Park on the Seattle waterfront; once reconstructed it will be known as "Pier 58" as it located in the historic location of that pier. The existing pier is 48,230 square feet (SF) and is constructed of creosote-treated timber piles, monotube piles, steel H-Piles, and treated timber and concrete decking. The park consists of two viewing platforms, coin-operated telescopes for viewing, benches, picnic tables, trees in planters, and the FitzGerald Fountain, a cast and welded bronze sculpture. The proposed project would demolish and remove the existing piles and decking, and replace them with concrete deck planks, concrete pile caps, and steel piling.

The replacement pier would be 48,200 SF and would include the installation of 186 permanent 36-inch steel piles. The decking would consist of both pre-cast concrete panels and a cast-in-place concrete deck slab. The new park would feature a public plaza, the existing relocated Fitzgerald Fountain, a water feature, a children's play area, seating areas, and a large lawn and trees to provide shade.

It is anticipated that a majority of the material delivery and reconstruction of Waterfront Park will be conducted from barges. There may be some material delivery to the pier from Alaskan Way. Temporary barriers will be located along the Elliott Bay Seawall to prevent public vehicular access to the piers during construction. Bollards may be required on the pier to protect grating and/or electrical service panels.

The footprint of Waterfront Park will be reconfigured to orient users of the pier to the west. The redesign of the pier will result in no net gain in overwater coverage. An open area of 5,000 square feet will be included in the northeast portion of the pier to increase light penetration in the nearshore, adjacent to the migratory salmonid corridor that was installed as part of SDOT's Elliott Bay Seawall Project. Grating will also be installed in the northwest and southeast corners of the pier.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located in Elliott Bay on the Seattle waterfront at the intersection of Union Street and Alaskan Way. The project is located in Section 31, Township 25N, Range 04E.

B. ENVIRONMENTAL ELEMENTS

1	Fa	rt	h

a.	General description of the site: [Check the applicable boxes]					
	⊠ Flat ⊠ Other: Ove	Rolling er water.	Hilly	Steep Slopes	☐ Mountainous	
b.	What is the s	teepest slope	on the site (ap	proximate percent slo	pe)?	
	There are no steep slopes located on the site.					
c.	What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.					
	Derek B. Boot	h, Aaron P. Wi		a <i>Progress Report</i> by Ka A. Shimel (2005), the proposits.		

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Yes, the project is entirely within a liquefaction-prone Environmentally Critical Area (ECA). A liquefaction-prone ECA is defined in the Seattle Municipal Code (SMC) ECA Code as a site with loose, saturated soil that loses the strength needed to support a building during earthquakes (SMC 25.09.020).

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of fill.

The project will remove the existing approximately 340 piles, which results in a total quantity of approximately 405 cubic yards of excavated material. The project will install up to 186 36-inch steel pipe piles, covering an area of approximately 1,314 SF.

The project also includes the installation of fill to serve as habitat enhancement. This fill comprises 120 cubic yards over an area of approximately 2,000 SF adjacent to an existing substrate enhancement that was installed as part of the Elliott Bay Seawall Replacement Project. The project will also install a marine mattress in the area of new open water at the northeast edge of the pier adjacent to the Elliott Bay Seawall (approximately 150 cubic yards installed over an area of approximately 2,000 linear feet).

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

The project is located entirely over and under water and will not result in any erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The footprint of the pier will be reconfigured, but the amount of impervious surface is expected to remain approximately the same. The addition of grating along with a slight reduction in overwater coverage will reduce the overall amount of impervious surface by 1,030 SF.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

In accordance with the City's Standard Specifications for Road, Bridge, and Municipal Construction and the Seattle Stormwater Code, the contractor will be required to submit a Construction Stormwater Erosion Control Plan (CSECP) to describe BMPs that will be implemented to reduce and control erosion during construction.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Construction:

The typical sources of emissions during project construction include:

- Fugitive dust generated during the excavation, grading, and other construction activities;
- Engine exhaust emissions from construction vehicles, work vehicles, and construction equipment;

- Increased motor vehicle emissions associated with increased traffic congestions during construction; and
- Volatile organic and odorous compounds emitted during concrete paving.

The total emissions and timing of the emissions from these sources will vary depending on the phasing of the project and construction methods.

The project is estimated to result in approximately 2,410 metric tons of carbon dioxide equivalents (MTCO2e), which accounts for the manufacture of decking materials, construction related emissions, and maintenance of the concrete decking over its expected life cycle.

This estimate was calculated using a conservative emissions factor of 50 MTCO2e per 1,000 square feet of replaced pier deck (48,200 SF). This factor was developed by King County from an analysis of several different life cycle assessments of the environmental impacts of roads. It is important to note that these studies estimated the embodied emissions for streets. Paving that includes sidewalks, which is more in line with how the pier will be used, will likely use less cement and hence have lower embodied emissions. During construction, there will be dust and exhaust emissions from construction equipment.

Operation:

Once the project is complete, operation of the pier will continue unchanged, and operation and maintenance are not expected to result in increased emissions to air.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or odor that may affect the proposed project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

During construction, impacts to air quality will be reduced and controlled through implementation of standard federal, state, and local emission control criteria, in accordance with the City's Standard Specifications for Road, Bridge, and Municipal Construction. The City's Standard Specifications require that contractors maintain air quality to comply with the National Emission Standards for Hazardous Air Pollutants.

Reducing air quality impacts during construction could involve such measures as minimizing vehicle and equipment idling to limit exhaust emissions.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Waterfront Park is located over Elliott Bay.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The project requires work in and over Elliott Bay.

 Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Up to 270 cubic yards of intertidal habitat substrate fill will be placed. These habitat enhancement materials will be barged or trucked in and placed using a barge-mounted hydraulic excavator that uses a bucket on the end of a hydraulic arm or land-based clamshell bucket. All material imported to the site will be clean and sourced from an approved off-site vendor.

The new piles will be steel pipe piles, which are hollow inside. However, the top 10 feet of the steel pipe pile would be filled in order to from a concrete plug to allow attachment of the pile cap, crossbeams, and pier deck to the steel pipe piles.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The project will not require surface water withdrawals or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

According the Federal Emergency Management Agency FEMA National Flood Insurance Program (NFIP) Flood Insurance Rate Map (FIRM) King County, Washington and Incorporated Areas Map, Map Number 53033C0630G (Preliminary as of February 1, 2013), the project area is located within the 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, the project does not involve the discharge of waste materials to surface waters.

b. Ground:

1) Will ground water be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The project does not involve withdrawals of water from a well, or discharges to groundwater.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The proposed project will not discharge waste materials into the ground.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater from the pier, which is a non-pollution generating surface, flows directly into Elliott Bay.

2) Could waste materials enter ground or surface waters? If so, generally describe.

During demolition, pieces of the timber decking and piles may break and enter the water. During construction, there is a potential that waste materials (e.g. oil and grease) from construction equipment, or paving materials could enter runoff from the site or directly enter Elliott Bay.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Once completed, stormwater from the piers will continue to run off directly into Elliott Bay. The project is not expected to alter or otherwise affect drainage patterns in the vicinity of the project.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Prior to project construction, the contractor will be required to develop a CSECP and Spill Plan that describe BMPs to be implemented to control stormwater and waste materials

flowing onto and from the site in accordance with the City's Standard Specifications for Road, Bridge, and Municipal Construction and the Seattle Stormwater Code. The project is designed to meet the current Seattle Stormwater Code requirements for new green stormwater infrastructure for flow control and treatment to the maximum extent feasible.

During demolition and construction, a containment boom will be deployed around active areas of construction to contain any debris, which would then be removed from the water.

4. Plants

a.	Types of vegetation found on the site: [Check the applicable boxes]					
	Deciduous trees: Evergreen trees: Shrubs Grass Pasture Crop or grain	☐ Alder ☐ Fir	☐ Maple ☐ Cedar	☐ Aspen ☐ Pine	☐ Other: (identify) ☐ Other: (identify)	
		s, or other per Cattail	manent crops Buttercup	Bulrush	Skunk cabbage	
	 Other: (identify) Water plants: to an aquatic habitat so rockweed, sea lettuce, native wireweed in the Other types of vegetal 	iridescent sea project area.	aweed, epiphyi	☐ milfoil ect, there is bul tic red algae, re	☑ Other: According I kelp, sugar kelp, ed algae, and non-	
b.	What kind and amou	ınt of vegetati	on will be rem	oved or altere	d?	
	Construction will likely is anticipated that thes complete, particularly provide.	se species wou	uld auickly reco	ilonize the area	ly present. However, it once construction is replaced pier will	
c.	List threatened or er	ndangered sp	ecies known t	o be on or nea	r the site.	
	There are no threaten	ed or endange	ered plants kno	wn to be on or	near the project site.	
d.	Proposed landscapi enhance vegetation	ng, use of nat on the site, if	tive plants, or any:	other measure	es to preserve or	
	The project will increa providing improved ha enhancement that wil	abitat for aquat	ic vegetation.	i ne project aisc) Includes substrate	
e.	List all noxious wee	ds and invasi	ve species kn	own to be on	or near the site.	

There are no noxious weeds or invasive plant species known to be on or near the site.

5. Animals

a.	Birds and animals which have been observed on or near the site or are known to be on or near the site: [Check the applicable boxes]						
	Birds: ☐ Hawk ☐ Heron ☒ Eagle ☒ Songbirds ☒ Other: Crows, pigeons, doves, starlings, robins, gulls, and house sparrows are common urban species that could occur in the project area.						
Mamma s: ☐ Deer ☐ Bear ☐ Elk ☐ Beaver ☐ Othe Rodents, including mice, rats, and squirrels, and raccoons are common urban species that could occur in the project area.							
	Fish : ⊠ Shellfish	⊠ Bass ⊠ Other: (ide	⊠ Salmon entify)	⊠ Trout	Herring		
b.	List any threa	atened or enda	angered speci	es known to b	e on or near the site.		
	Endangered species of potential occurrence in the vicinity of the project are Southern Resident killer whale (<i>Orcinus orca</i>) and Humpback whale (<i>Megaptera novaeangliae</i>). Threatened species of potential occurrence in the vicinity of the project are Marbled murrelet (<i>Brachyramphus marmoratus</i>), Bull trout (<i>Salvelinus confluentus</i>), Puget Sound/ESU Chinook salmon (<i>Oncorhynchus tshawytscha</i>), Stellar sea lion (<i>Eumetopias jubatus</i>), Puget Sound steelhead (<i>Oncorhynchus mykiss</i>), bocaccio (<i>Sebastes paucispinis</i>), canary rockfish (<i>Sebastes pinniger</i>), and yelloweye rockfish (<i>Sebastes ruberrimus</i>). The project area is also classified as critical habitat for the Southern Residen killer whale, Chinook salmon, and bull trout.						
C.	Is the sire par	rt of a migratio	on route? If so	o, explain.			

c. Is the sile part of a migration route? If so, exp

Salmon and bull trout are known to migrate through the project area. The project site is located within the North American Pacific Flyway, a migratory route for birds. However, the project site is in an urban environment and is unlikely to impact migratory bird species.

d. Proposed measures to preserve or enhance wildlife, if any:

The project will apply for incidental take of marine mammal species from NOAA Fisheries under the Marine Mammal Protection Act. Any take authorization will require mitigating measures and monitoring of marine mammal species during construction. The project will also be reviewed for compliance with the Endangered Species Act (ESA).

During construction, the project will employ BMPs to reduce sedimentation of the water and minimize noise impacts to wildlife.

Opening the nearshore will allow increased light adjacent to the existing salmonid migratory corridor. Reduction of the number of piles will allow additional light to reach under the pier. Areas of grating will also allow additional light to reach the surface of the water.

e. List any invasive animal species known to be on or near the site.

While several of the urban-dwelling animal species that may be found in the project area are introduced, non-native species (rats, pigeons, etc.), the proposed project is not expected to have any impacts to these animal species.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The completed project will not require any supplementary energy to operate. Electricity will be required for operation of the lighting and water fountain, but this will not represent a change from current conditions.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The project does not involve building structures or planting vegetation that will block access to the sun for adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No energy conservation features are included in the plans. The proposed project is not expected to result in energy impacts.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Potentially hazardous materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products. A spill of one of these substances could occur during construction as a result of either equipment failure or worker error.

1) Describe any known or possible contamination at the site from present or past uses.

According to sampling performed for the Elliott Bay Seawall Project Contaminated Materials Discipline Report, locations in and around the project site had sediment contaminated with heavy metals, PCBs, and PAHs. A review of the City of Seattle's GIS and Washington Department of Ecology's Facility/Site Database revealed no sites of potential concern in the vicinity of Waterfront Park. The wood piles currently

supporting the pier structures have been treated with creosote, which is leeching into the water.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no known existing hazardous chemicals or conditions that might affect project development and design. There are no known underground hazardous liquid or gas transmission pipelines located within the project area.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or a any time during the operating life of the project.

Potentially hazardous materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products.

4) Describe special emergency services that might be required.

Special emergency fire or medic services will not be required for the proposed project.

5) Proposed measures to reduce or control environmental health hazards, if any:

A Health and Safety Plan will be developed by the construction contractor before work commences. This plan will provide information on any toxic substances that may be associated with the project and will outline safe procedures for handling any of these substances.

A Spill Plan will be developed to control spills on site. Any contaminated materials that are encountered during construction will be contained and disposed of in a manner consistent with the level of contamination, in accordance with federal, state and local regulatory requirements, by a qualified contractor(s) and/or City staff.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There are no sources of noise that will affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise levels in the vicinity of construction will temporarily increase during construction activities. Noise from the project will include both airborne noise and

underwater noise, which can affect fish, marine mammals (including whales), and other marine species.

The new pier will be constructed of steel pipe piles which will be installed primarily using vibratory methods. The Pier 62 Replacement Project, currently under construction at the Seattle waterfront in and adjacent to Elliott Bay in the vicinity of Waterfront Park, included vibratory removal of timber piles, and impact and vibratory steel pipe pile driving.

For vibratory pile driving of steel piles, peak underwater sound levels averaged from 173 dB to 186 dB, with maximum peaks reaching up to 195 dB. Airborne sound levels for vibratory pile driving of steel sheet piles averaged between 108 dB and 111 dB, with maximum sound levels reaching up to 116 dB (Source: Pier 62 Project Acoustic Monitoring Season 2 (2018/2019) Report, The Greenbusch Group, Inc., July 19, 2019). It is expected that noise levels from these activities would be similar to noise produced during the replacement of Pier 62.

While most pile driving is expected to be accomplished using vibratory methods, certain circumstances could occur, such as obstructions or difficult ground conditions, that require impact driving. For the Pier 62 Project, impact driving steel piles produced peak underwater sound levels that averaged from 169 dB to 193 dB. Average airborne sound levels for impact pile driving of steel sheet piles ranged from 102 dB to 104 dB (Source: Pier 62 Project Acoustic Monitoring Season 2 (2018/2019) Report, The Greenbusch Group, Inc., July 19, 2019). It is expected that noise levels from any impact driving activity would be similar to noise produced during the replacement of Pier 62. Noise of this level could impact aquatic animal species.

After completion of the project, occasional noise from equipment used for on-going routine maintenance and repair will occur, but will be limited to 7 am to 10 pm weekdays and 9 am to 10 pm weekends.

There could be potential impacts due to noise from events, such as concerts, held on the new pier. These events would be required to obtain permits from SDCI for any noise out of compliance with the City's noise code. Operators of these events would have to comply with these permit conditions to minimize noise impacis.

Proposed measures to reduce or control noise impacts, if any:

The project will require a permit from the U.S. Army Corps of Engineers (USACE), which includes consultation under Section 7 of the Endangered Species Act. The project will also require compliance with the Marine Mammal Protection Act and consultation with the National Oceanic and Atmospheric Administration. SDOT will comply with all requirements and commitments that arise during these consultations to minimize impacts to protected aquatic animal species that could result from the proposed project.

Requirements will likely include noise monitoring to minimize and avoid impacts to cetaceans and other marine species during construction, but those measures and

others will be determined during permitting.

A noise variance from the Seattle Department of Construction and Inspections will also be required and will include limits to the time, duration, and frequency of noise that exceeds limits set forth in the SMC. These measures are meant to minimize impacts of noise on the surrounding area. SDOT will follow all policies procedures outlined in the noise variance.

The following measures could be used to minimize noise impacts during construction:

- Whenever possible, operation of heavy equipment and other noisy activities will be limited to non-sleeping hours.
- Effective mufflers will be installed and maintained on equipment.
- Equipment and vehicle staging areas will be located as far from residential areas as possible.
- Idling of power equipment will be minimized.

7. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Waterfront Park is owned and operated by SPR and is used as park land. The pier provides a place to view Elliott Bay and the Olympic Mountains to the west, and the Seattle skyline to the east.

Adjacent properties are zoned as Downtown Harborfront. The Seattle Aquarium is located to the north of Waterfront Park, and Pier 57, which houses the commercial development known as Miner's Landing, is located to the south. Miner's Landing includes restaurants and commercial recreational attractions.

The project will not affect current land uses on nearby or adjacent properties.

b. Has the site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

The site has not been used as working farmlands or working forest lands. The project area consists of a pier over marine waters.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

No, the project is located in an urban environment where there is no surrounding working farm or forest land.

c. Describe any structures on the site.

The existing Waterfront Park pier is constructed of creosote-treated timber piles, concrete piles, steel piles, and wood and concrete decking.

d. Will any structures be demolished? If so, what?

Yes, the project involves the demolition and removal of Waterfront Park.

e. What is the current zoning classification of the site?

The project area is zoned Downtown Harborfront.

f. What is the current comprehensive plan designation of the site?

According to the City of Seattle Comprehensive Plan Future Land Use Map (May, 2013) the site is designated as City-Owned Open Space.

g. If applicable, what is the current shoreline master program designation of the site?

The current shoreline master program designation of the site is Urban Harborfront.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes, parts of the project site have been categorized as flood-prone area, potential liquefaction area, and as wildlife habitat ECA.

i. Approximately how many people would reside or work in the completed project?

No people will reside or work within the completed project.

j. Approximately how many people would the completed project displace?

The project will not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable; the project will not displace any people.

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

No measures are proposed because the project will not result in changes to existing or planned land uses.

m. Proposed measures to ensure that the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Not applicable. There are no agricultural or forest lands of long-term commercial significance in the vicinity of the project.

8. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The project does not involve constructing any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The project does not eliminate any housing units.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable; the project will not add or eliminate any housing units and will not have housing impacts.

9. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The replaced piers will not represent a change in height from the current condition.

b. What views in the immediate vicinity would be altered or obstructed?

The project will not alter or obstruct any views.

c. Proposed measures to reduce or control aesthetic impacts, if any:

As no aesthetic impacts are expected from this project, no mitigation measures for aesthetic impacts are planned.

10. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The existing Waterfront Park is lit by 33 post-mounted globe lamps on the waterside edge of the park. The lighting design for the proposed pier is currently being developed but will include integrated rail lighting and low-voltage path lighting. The lighting design will require approval from SDCI and DNR and will be designed to minimize impacts to shoreline resources, including migratory birds, while ensuring the safety of park users.

If any construction work were to occur after daylight hours, the contractor might use portable lighting to illuminate work areas.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Lighting to enhance pedestrian safety is being considered as part of the reconstruction of the piers. The proposed lighting will be designed to not interfere with views.

c. What existing off-site sources of light or glare may affect your proposal?

There are no existing off-site sources of light or glare that will affect the project.

d. Proposed measures to reduce or control light and glare impacts, if any:

Because no impacts to light or glare will result from the proposed project, no measures to reduce or control impacts are proposed.

11. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The project site itself is a park, and the purpose of the project is to improve the condition of the pier to allow it to continue to function as park space.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Construction of the proposed project would temporarily displace recreational use of the existing pier. During construction, there would be no access to the pier. However, upon project completion, there will be an improved park available to the public.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The project will have a temporary impact on the access to Waterfront Park, but no measures to reduce or control those temporary impacts are proposed.

12. Historic and cultural preservation

a. Are there any buildings, structures, or sites located on or near the project site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

According to the Department of Archaeology and Historic Preservation (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD) online database, the closest site to the project area listed on the National

Register of Historic Places is the Milke Maru Arrival Site. The site is located adjacent to the project area on Alaskan Way between Union Street and University Street.

Waterfront Park was determined not eligible for listing on the NRHP in 2013 due to the loss of it defining characteristics, which formerly consisted of steel viewing towers and ramps. Pier 57, located south of Waterfront Park, is a designated City of Seattle Landmark, subject to protection by city ordinance. It has also been determined eligible for listing on the NRHP. Pier 59 (Seattle Aquarium) was determined not eligible for listing on the NRHP in 2009 due to alterations and lack of integrity.

There are several structures aged 45 years and older in the vicinity of the project area, but they have not been evaluated to determine their historic character.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

According to the *Elliott Bay Seawall Underwater Archaeological Survey Report* (September 2012), archaeologists identified areas of historic scatter underneath Pier 62/63. The scatter was determined ineligible for listing on the NRHP. There are no other known landmarks, features, or other evidence of historic use or occupation at the site.

The Seattle waterfront has long been used and occupied by the indigenous tribes of the area.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.

DAHP's WISAARD online database was reviewed to determine the presence of any NRHP-listed or eligible properties (including heritage barns and register districts) and historic aged properties in the project area. The City of Seattle's online list of landmarks and nominations was consulted to determine if any current or nominated city landmarks are located within the project area. Field reconnaissance was performed to determine if any landmarks, markers, or cemeteries were present in the project area.

Through the permitting process with the U.S. Army Corps of Engineers, SDOT and SPR will consult with DAHP and the State Historic Preservation Officer (SHPO) to determine the potential for impacts to cultural resources, and identify any mitigation, if required. Project review by the City of Seattle Landmarks Preservation Board will also address any potential impacts to adjacent designated City of Seattle Landmark sites, such as Pier 59.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance of resources. Please include plans for the above and any permits that may be required.

Through the permitting process with the U.S. Army Corps of Engineers, SDOT and SPR will consult with DAHP and the State Historic Preservation Officer (SHPO) to determine the potential for impacts to cultural resources, and identify any mitigation, if required. Any potential impacts to Pier 59 will be addressed through coordination with the City of Seattle Landmarks Preservation Board.

13. Transportation

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

Waterfront Park is located directly adjacent to Alaskan Way, which is well connected to the surrounding transportation system.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The project area is not directly served by public transit. The closest stop to the project area is located at 1st Avenue and Pike Street, which can be reached on foot.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or non-project proposal eliminate?

The existing project area does not include any parking spaces, and the replaced pier will not include any parking.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No, the project does not require new, or improvements to, roads, streets, pedestrian, bicycle, or any other transportation facility.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project will not use or occur in the immediate vicinity of water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

The proposed project is not expected to result in changes to the number of vehicular trips in the area. Construction-related traffic (i.e., large trucks and materials hauling) will occur temporarily during the construction period.

g. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The project is not expected to interfere with, affect, or be affected by the movement of agricultural or forest products.

h. Proposed measures to reduce or control transportation impacts, if any:

The following measures will be in place to reduce or control transportation impacts:

- SDOT will work to minimize disruptions and maintain adequate access during the construction phase.
- SDOT will inform adjacent property owners of work progress.
- SDOT will conduct public outreach before and during project construction to notify residents, businesses, local agencies, transit agencies, and other stakeholders of expected disruptions or changes in traffic flow.
- Temporary road closures will be minimized, and detour routes will have proper signage.
- The construction contractor will be required to submit a traffic control plan for approval by the City. The contractor will enforce the traffic control plan during construction.
- Alternative routes for pedestrians, bicyclists, and those with disabilities will be identified and marked clearly.
- Any proposed modifications to transit stops will be clearly marked.

14. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The project will have no impact on the need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Because the project will not impact public services, no measures to reduce or control impacts are proposed.

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15. Utilities

a.	Utilities currently available at the site, if any: [Check the applicable boxes]						
	Telephone	☐ Natural gas ☑ Sanitary sewer pression system	⊠ Water □ Septic system	Refuse service			
b.	 Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. 						
	No new utilities are proposed for the project, other than restoring utilities that are currently available on the piers.						
C. SI	GNATURE						
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision. Signature: Jill Macik, Senior Environmental Analyst							
Date 9	Submitted:	Seattle Department of Transp January 30, 2020	portation				

