Solstice Alaska Consulting, Inc.
2607 Fairbanks Street, Suite B
Anchorage, AK 99503
907.929.5960

August 8, 2024

Randall Vigil
U.S. Army Corps of Engineers-Alaska District
CEPOA-RD, Juneau Field Office
P.O. Box 22270
Juneau, Alaska 99802-9998

Transmitted via email to: regpagemaster@usace.army.mil and Randal.P.Vigil@usace.army.mil

Subject: Turnagain Marine Construction
Seward Cruise Ship Passenger Dock and Terminal Facility Project
Section 404/10 Permit Application and Request for Designation to Conduct ESA and Section 106 Consultation

Dear Mr. Vigil:

Turnagain Marine Construction, on behalf of The Seward Company, proposes to remove the existing Alaska Railroad Corporation (ARRC) passenger dock and replace it with a new passenger dock at the head of Resurrection Bay. The proposed project would occur approximately two kilometers (1.24 miles) north of downtown Seward, within Southcentral Alaska (Township 1S, Section 03, Range 1W, Seward Meridian; U.S. Geological Survey Quadrangle Seward A-7 SE; latitude 60.119058 and longitude -149.428333). Solstice Alaska Consulting, Inc. (SolsticeAK) is assisting with permitting the project.

The proposed cruise ship dock and terminal facility would involve in-water construction, including the installation of piles, removal of dredged material from near the existing dock, and offshore disposal of dredged material. Construction is expected to begin in the Fall of 2025. Enclosed is a Department of Army Permit Application for the proposed project, a detailed project description, and project figures.

Endangered Species Act (ESA)-listed marine mammals, under the jurisdiction of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), may occur in the project area. With this letter, we request the U.S. Army Corps of Engineers (USACE) delegate SolsticeAK the authority to conduct formal ESA consultations with NMFS and USFWS on its behalf. Essential Fish Habitat exists in the project area and SolsticeAK requests approval to conduct consultation with NMFS to meet the requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

The proposed project would remove and replace the Dale R. Lindsey Railroad Intermodal Terminal, located on the Alaska Railroad Corporation Passenger Terminal Dock. Constructed in 1966, the dock is over 50 years old but was previously proposed to not be eligible under the National Register of Historic Places. With this letter, we also request USACE delegate SolsticeAK

the authority to conduct consultation with Alaska's State Historic Preservation Office and local Tribal entities under Section 106 of the National Historic Preservation Act. Please see further discussion in the attached project description.

If you have any questions or need additional information, please do not hesitate to call me at 907.929.5960 or email me at robin@solsticeak.com. Thank you for your efforts on this project.

Sincerely,

Robin Reich
Solstice Alaska Consulting, Inc.

Attachments: USACE Individual Application; Project Description; Project Figures
Copies: Chris Nielsen and Jason Davis, Turnagain

Attachment 1: USACE Individual Application

U.S. ARMY CORPS OF ENGINEERS

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 30-SEPTEMBER-2015

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Jason Middle - Last - Davis	First - Robin Middle - Last - Reich
Company - Turnagain Marine Construction	Company - Solstice Alaska Consulting, Inc.
E-mail Address -	E-mail Address - robin@solsticeak.com
6. APPLICANT'S ADDRESS:	9. AGENT'S ADDRESS:
Address- 8241 Diamond Hook Drive	Address- 2607 Fairbanks Street, Suite B
City - Anchorage State - AK Zip - 99507 Country - US	City - Anchorage State - AK Zip - 99503 Country - USA
7. APPLICANT'S PHONE NOs. w/AREA CODE	10. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business 907.261.8960 c. Fax	a. Residence b. Business 907.929.5960 c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Solstice Alaska Consulting, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Jason Davis Digitally signed by Jason Davis Date: 2024.08.08 10:15:48 -08'00' — SIGNATURE OF APPLICANT

2024-08-08 — DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

Seward Cruise Ship Passenger Dock and Terminal Facility Project

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable)
Upper Resurrection Bay	Address
15. LOCATION OF PROJECT	City - Seward State- AK Zip- 99664
Latitude: ◦N 60.119058 Longitude: ◦W -149.428333	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID Municipality Seward

Section - 03 Township - 01S Range - 01W, Seward Meridian

17. DIRECTIONS TO THE SITE

Coming into Seward via the Seward Highway, turn left on onto Port Avenue and drive for 0.4 miles, then turn right and go for 0.2 miles.

18. Nature of Activity (Description of project, include all features)

Please see attached project description.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Please see attached project description.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Please see attached project description.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
Alluvial and Gravel: 183,000		

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres N/A

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Please see attached project description.

24. Is Any Portion of the Work Already Complete? ☐ Yes ☒ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- Alaska Railroad Corporation PO Box 107500

City - Anchorage State - AK Zip - 99510

b. Address- City of Seward PO BOX 167

City - Seward State - AK Zip - 99664

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
NMFS	ESA and EFH Consul				
NMFS and USFWS	IHAs				
SHPO	NHPAConsultation				
ADEC	Water Qual Cert				

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work describ duly authorized agent of the applicant.

Jason Davis Digitally signed by Jason Davis Date: 2024.08.08 10:16:09 -08'00' — 2024-08-08

SIGNATURE OF APPLICANT DATE

SIGNATURE OF AGENT — 08.08.2024

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises 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 statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Attachment 2: Project Description

Turnagain Marine Construction
Seward Cruise Ship Passenger Dock and Terminal Facility Project
Resurrection Bay, Seward, Alaska,
August 2024

1 OVERVIEW

Turnagain Marine Construction (TMC) has been contracted by The Seward Company to remove the existing Alaska Railroad Corporation (ARRC) passenger dock and replace it with a new passenger dock at the head of Resurrection Bay. The dock's replacement would provide safe harbor for cruise ships during the visitor season and have the capability to support limited freight movement and utilities, if needed, during the offseason.

The proposed passenger dock would consist of one 300-foot by 50-foot pile supported fixed dock and one 780-foot by 100-foot floating dock structure supported by three float restraint dolphins, and two mooring dolphins, in marine waters. Construction would begin in September 2025 and continue through April 2026. Pile installation activities are expected to occur for a total of approximately 384 hours over 153, not necessarily consecutive, days. Dredging and offshore disposal activities would occur within the same time frame for a total of 1,440 hours over 120 days. No blasting is proposed as part of this project.

2 LOCATION

The proposed Seward Cruise Ship Passenger Dock and Terminal Facility Project (the Project) is located at the head of Resurrection Bay, approximately two kilometers (1.24 miles) north of downtown Seward on the Kenai Peninsula in Southcentral Alaska; Township 1S, Range 1W, Seward Meridian, U.S. Geological Survey Quadrangle Seward A-7 SE; latitude 60.119058 and longitude -149.428333.

Figure 1. Seward Cruise Ship Passenger Dock and Terminal Facility Project Location and Vicinity Map

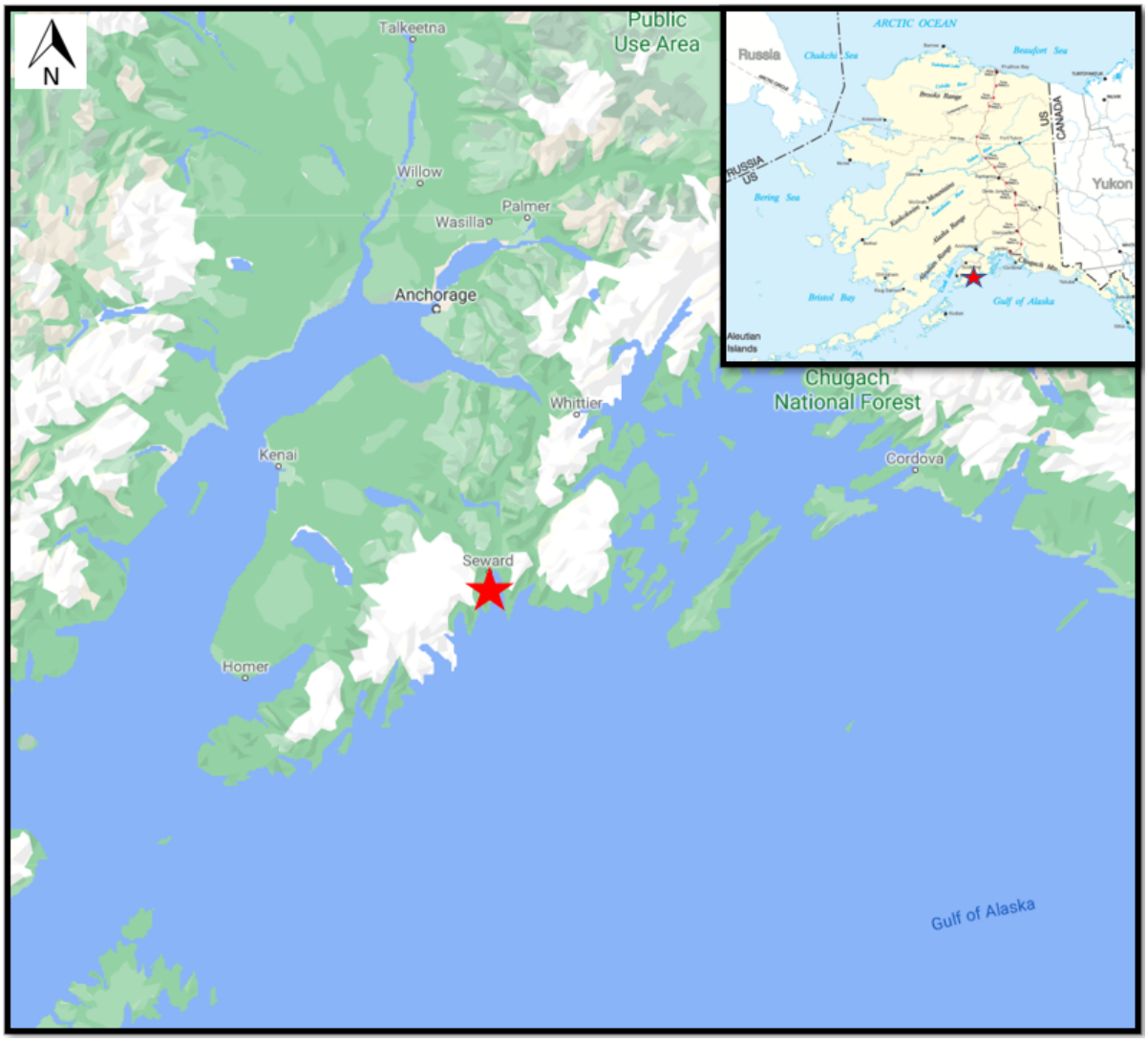
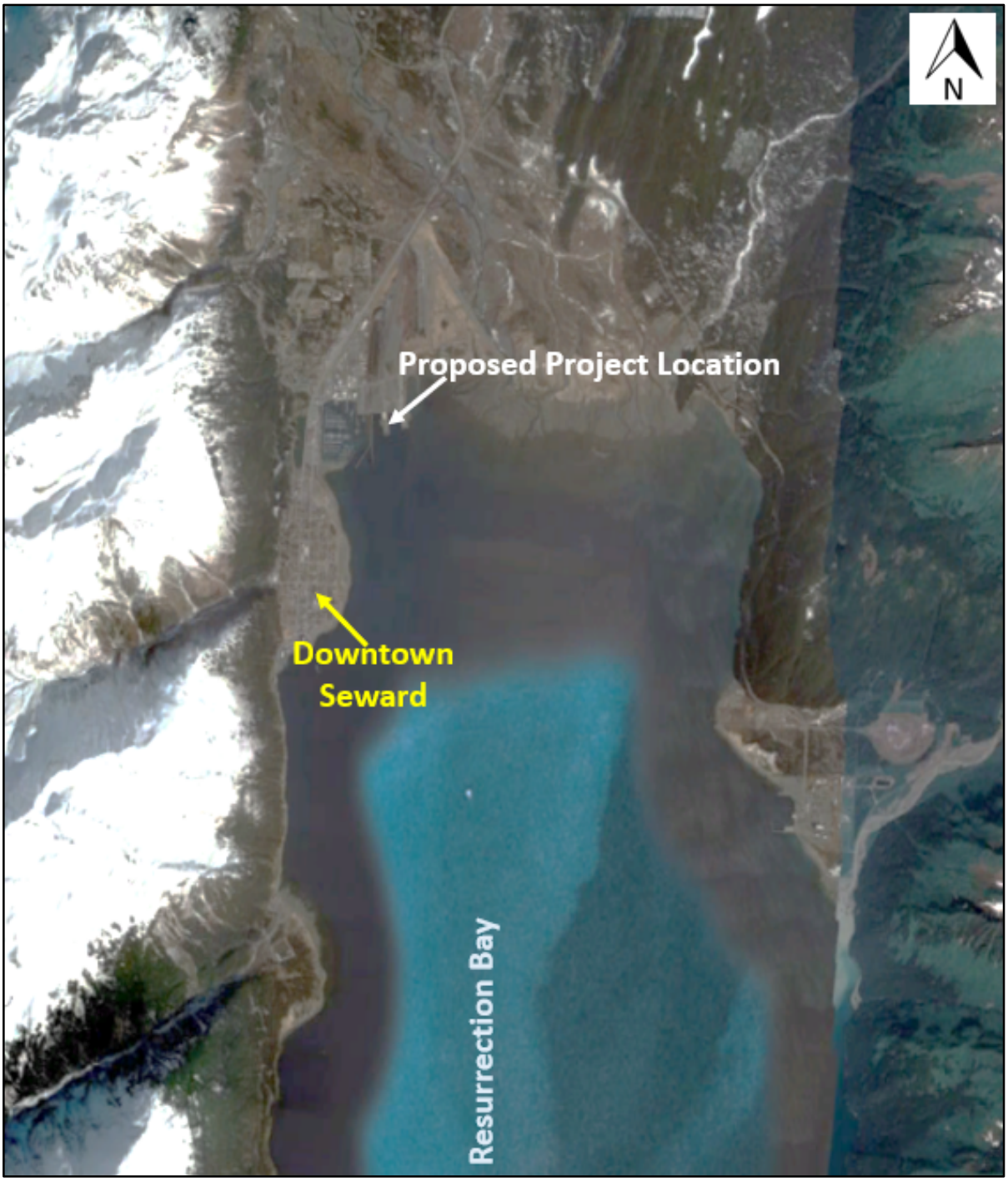


Figure 2. Location of the Seward Cruise Ship Passenger Dock and Terminal Facility Project



3 PURPOSE AND NEED

The purpose of the Project is to replace the ARRC Passenger Dock so that it can safely accommodate cruise ships. Constructed over 55 years ago, the dock has reached the end of its design life and needs to be replaced to maintain safety and function.

This project is needed to safely accommodate future cruise ships and their passengers in Seward. Accessible by road, rail, plane, and boat, Seward is the primary embarking and disembarking location for most tourists visiting Southcentral and Interior Alaska. In 2023, there were about 244,500 cruise passengers that purchased ARRC tickets which accounted for about 45% of the total passengers on ARRC trains in 2023 (ARRC 2024). In 2024, 104 cruise ships are expected to call at the Port of Seward (CLIA 2024). Cruises continue to be one of the fastest-growing sectors of tourism, and the cruise ship capacity forecast is to grow 19 percent in the next 4 years (CLIA 2024a).

4 PROPOSED ACTION

4.1 Existing Structure Removal

The project will remove:

- The existing passenger terminal building (26,555 square feet)
- The existing (out of water) dock fenders
- 1,820 steel piles (14-inch diameter) and 10 steel piles (20-inch diameter)
- The entire existing concrete deck
- Portions of the concrete pile caps
- Approximately 500 cubic yards (cy) of riprap obstructions
- Any navigation obstructions within 120 feet (ft) of the proposed dock area
- Approximately 183,000 cy of material (dredge) in the area along the existing dock

4.2 Dock Construction

The project will construct:

- 100 temporary 36-inch diameter steel piles to guide permanent piles into place
- 76 permanent 48-inch diameter steel piles
- 16 permanent 60-inch diameter steel piles
- 10 permanent 72-inch diameter steel piles

Additional project components include:

- Dock bull rail, fenders, mooring cleats, a pre-cast concrete surface, passenger walkway, hand rail, and mast lights (installed out of the water)

Figure 3. Seward Cruise Ship Passenger Dock and Terminal Facility Project Existing Dock Removal Activities

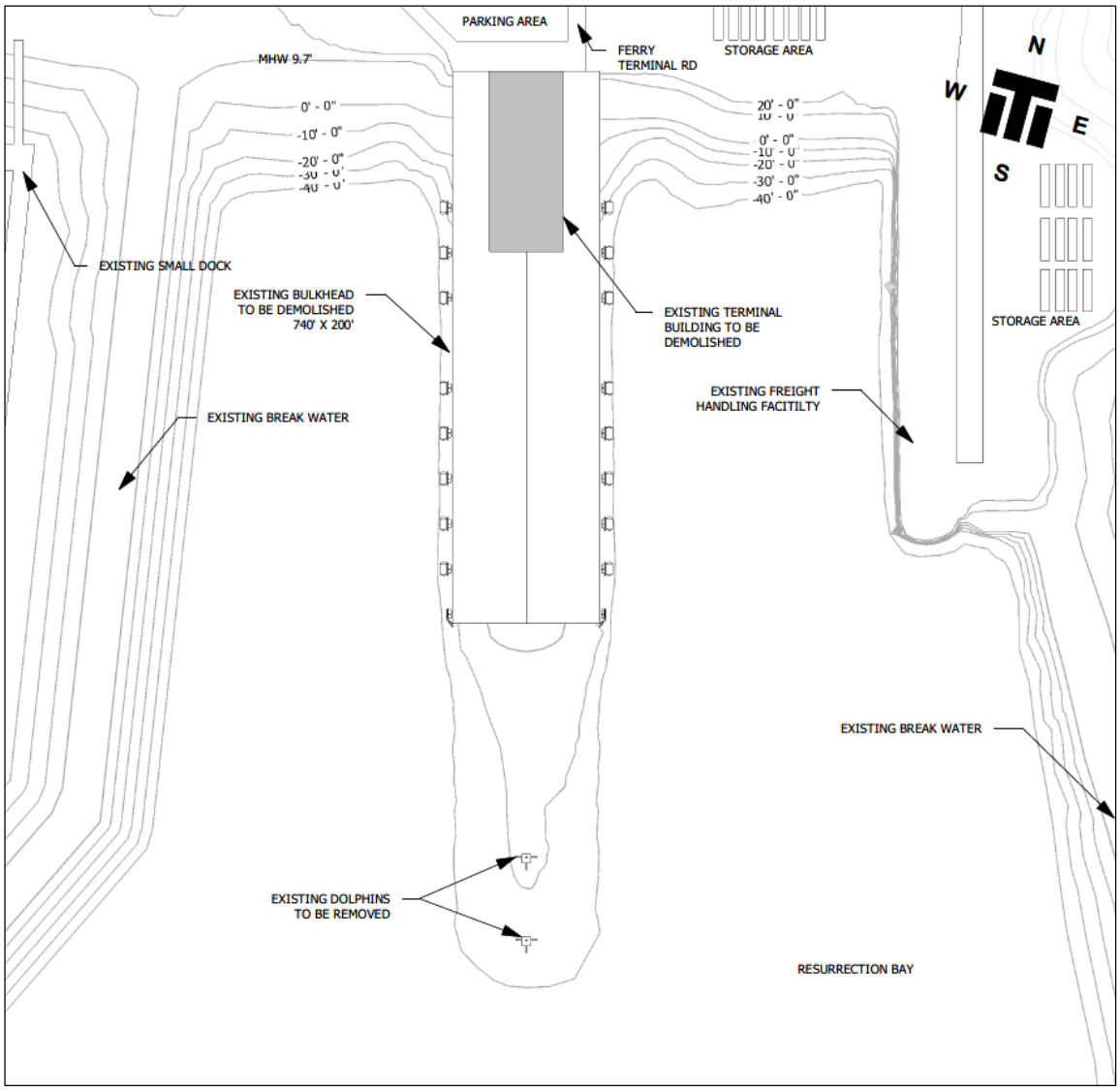
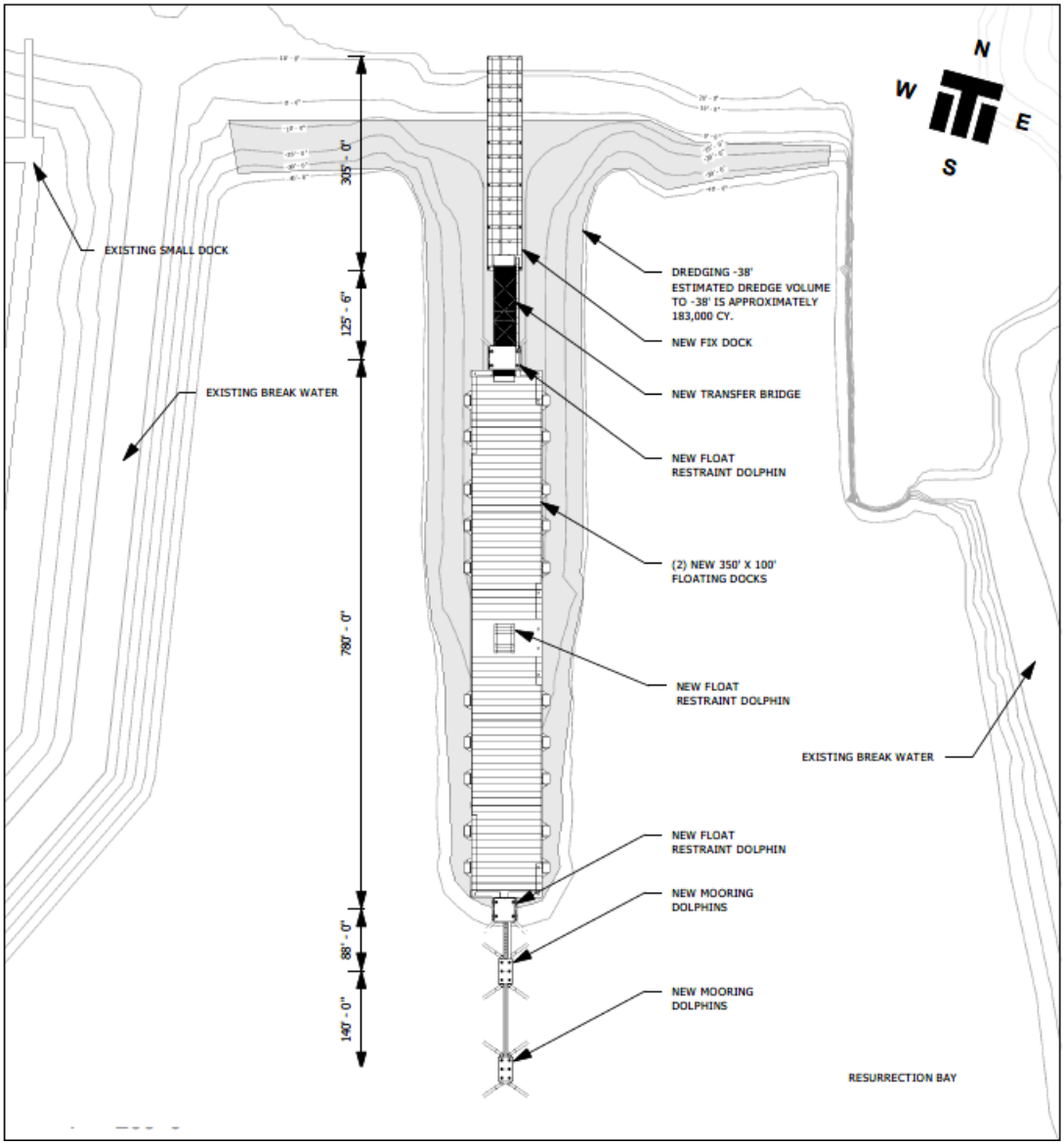


Figure 4. Seward Cruise Ship Passenger Dock and Terminal Facility Project Design



4.3 Construction Methods

Construction Vessels

The following vessels are expected to support construction and protected species monitoring:

- Two or three materials barges (approximately 250 ft by 76 ft by 15.5 ft) would transport materials from Seattle, Washington to the project site and be used onsite as a staging area during construction.
- One construction barge, the *Brightwater* crane barge (280 ft by 76 ft by 16 ft), and if necessary, a second, the *Swiftwater* crane barge (230 ft by 60 ft by 15.5 ft), would be onsite to support construction.
- Two 20-foot skiffs, with single 90 horsepower Honda outboard motors, would be transported to the project site on the crane barge to support construction and potentially marine mammal monitoring activities.

Transportation of Materials and Equipment

The construction barge would travel from Juneau, in Southeast Alaska, to the Seward project site at a speed of about 8 miles per hour. The materials barges would be towed from Seattle, Washington transporting materials to the project site. Both types of barges frequently travel the route to and from Alaska. Once at the project site, the construction barge would most likely be secured in place by spuds or they will use four 15,500 lb anchors. Two will be run onshore and placed ear existing rip rap slope, and two will be run offshore around 1,500-2,000 meters offshore past the new proposed mooring dolphins. The anchors would be below the surface and would not be a hazard to navigation. The materials barge would be tied to the construction barge and a crane on the construction barge would move materials from a staging barge to the construction barge and project site. Local barge moves to subsequent pile installation areas would occur in approximately 100-foot increments and at speeds of less than 2 miles per hour.

Transport of Workers to and from Work Platform

Construction workers would be transported from shore to the construction barge via skiff. Multiple shore-to-barge trips could occur during the day; however, the travel distance would be less than 1,000 feet and the area of travel would be relatively small and close to shore. As protected species observers may use a skiff to observe the action area, observer protocols, including potential skiff-based monitoring, will be developed in consultation with National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). Protocols will be described in the forthcoming Protected Species Monitoring and Mitigation Plan to be submitted with the NMFS biological assessment and Incidental Harassment Authorization (IHA) applications for the proposed project.

Other In-Water Construction and Heavy Machinery Activities

In addition to the activities described above, the proposed action will involve in-water construction and heavy machinery activities. These include using standard barges, tug boats, and positioning piles on the substrate using a crane (i.e., “stabbing the pile”).

Construction Equipment

Use of the following pile installation equipment is expected:

- Vibratory Hammer: ICE 44B/Static weight 12,250 pounds
- Diesel Impact Hammer: Delmag D46/Max Energy 107,280 feet-pounds
- Drilled shaft drill: Holte 100,000 feet-pounds top drive with down-the-hole (DTH) hammer and bit
- Dredging: *Swiftwater* or *Brightwater* crane barge with a 5 cy bucket

Dredging Methods

The basin at the Seward Passenger Dock is regularly dredged by ARRC to accommodate the draft of vessels calling the facility; however, due to the redepositing of sediment by natural ocean processes, approximately 183,000 cy of marine sediment, sands, and gravel along the

sides of the existing dock (approximately 1.10 acres) would need to be removed to maintain a depth of 38 feet below mean lower low water to accommodate the design vessels.[1]
All navigation obstructions within 120 feet of both sides of the proposed wharf will be removed either by dredging or, in the case of individual boulders, by simply lifting. In addition, approximately 500 cy of riprap obstructions along the shoreline of both sides of the existing dock will be removed. The dredged material will be removed with a crane-barge-based 5 cy bucket.

Dredge Disposal

Dredged materials would be disposal either at an upland location or at an approved offshore location. The proposed offshore dredge disposal site is located within the following coordinates: NE corner Latitude 60.0986°N., Longitude 149.421980°W., SE corner Latitude 60.10951°N, Longitude149.421980°W., SW corner Latitude 60.109851°N., Longitude 149.424471°W., NW corner Latitude 60.110812°N., Longitude 149.424471°W. This proposed site is located in Resurrection Bay, near Seward Alaska and is at a depth of at least -180 feet mean lower low water (MLLW).

Pile Instillation/Removal Methods:

Removal Methods:

The existing 14-inch (approximately 1,820 each) and 20-inch (approximately 10 each) diameter piles will be removed using the deadpull method via crane. If this proves not possible, the vibratory hammer will be used.

Installation Methods:

Pile templates would be constructed through vibrating temporary pilings into position. For the fixed dock, one to three temporary piles may be needed as a template for each section of the dock. Four to six temporary 36-inch diameter pilings may be needed as a template for each dolphin structure. Most temporary piles would be vibrated into place; however, up to 24 of these may require additional DTH drilling in locations where the bedrock is shallow. For each 36-inch temporary pile, an estimated 2 cy of drill cuttings would be produced during DTH drilling.

Using the templates as a guide for positioning the permanent pilings, the pilings would be vibrated into dense material. Each piling would then be driven to tip elevation using an impact hammer. Once piles achieve tip elevation, a DTH hammer would be placed inside the piling and a shaft would be drilled into the bedrock. The rock shaft would then be filled with concrete to anchor the pile to the bedrock.

The 76 permanent 48-inch diameter steel piles supporting the fixed dock and mooring dolphin would be vibrated to at least 24 feet below the mudline, then impacted. If required, up to 24 of these permanent 48-inch piles would then be drilled at least 10 feet deep into bedrock with a DTH drill and bit. For each 48-inch permanent pile, an estimated 10 cy of drill cuttings would be produced during DTH drilling.

[1] The design vessel is similar to the Norwegian Bliss (approximate LOA: 997 feet; beam: 136 feet; max draft: 29 feet; min draft: 27 feet) or the Quantum of the Seas (approximate LOA: 1,140 feet; beam: 136 feet; max draft: 29 feet; min draft: 27 feet).

The sixteen permanent 60-inch diameter steel piles and ten permanent 72-inch diameter steel piles would be vibrated and impacted through the soil layer to bedrock to support other dock components (dolphins). If required, up to eight permanent 60-inch and up to five 72-inch permanent piles would be then be drilled at least ten feet deep into the bedrock with a DTH drill and bit.

Construction Sequence

Construction would begin in September 2025 and continue into spring of 2026. In-water construction would begin with the demolition of the concrete deck and removal of 1,830 of the existing piles and dolphins. While demolition is being completed, construction of the new fixed and floating dock would begin use the following sequence:

1) Dredge approximately 183,000 cy of sediment (over approximately 120 days, potentially overlapping with installation of the mooring and restraint dolphins, this will include offshore disposal).
2) Install the fixed dock
    a. Vibrate in one to three temporary 36-inch diameter steel piles a minimum of 10 feet into the overburden to create a template to guide installation of permanent piles. It is anticipated that the placement of a few template piles may require DTH drilling.
    b. Weld a frame around the temporary piles.
    c. Within the frame, vibrate and impact hammer permanent 48-inch diameter steel piles into place. It is anticipated that up to 24 of the 48-inch piles may require DTH drilling.
    d. Remove the frame and temporary piles and install the subsequent soldier pile, repeating this process for the placement of all permanent fixed dock piles.
3) Install the restraint dolphins
    a. Vibrate four to six temporary 36-inch diameter steel piles a minimum of 10 feet into the overburden to create a template to guide installation of permanent piles. It is anticipated that a few template piles may require DTH drilling.
    b. Weld a frame around the temporary piles.
    c. For the first and last restraint dolphin, within the frame, vibrate, and impact hammer 60-inch or 72-inch diameter steel piles into place. It is anticipated that a few permanent restraint dolphin piles may require DTH drilling.
    d. Remove the frame and temporary piles and install the subsequent soldier pile, repeating this process for the placement of all permanent restraint dolphin piles.
4) Install the floating dock using the crane to lift and vessels to maneuver components into place
5) Install the transfer span set using the crane to lift and vessels to maneuver components into place
6) Install the mooring dolphins
    a. Vibrate in four to six temporary 36-inch diameter steel piles a minimum of 10 feet into the overburden to create a template to guide installation of permanent piles. It is anticipated that a few template piles may require DTH drilling.

b. Weld a frame around the temporary piles.
c. Within the frame, vibrate and impact hammer 48-inch diameter steel piles into place. It is anticipated that a few mooring dolphin piles may require DTH drilling.
d. Remove the frame and temporary piles and install the subsequent soldier pile, repeating this process for the placement of all permanent mooring dolphin piles.

Please see Table 1 for a conservative estimate of time required for pile instillation and removal. Table 2 provides a conservative estimate for the time required for dredging.

Table 1. Seward Cruise Ship Passenger Dock and Terminal Facility Project Pile Installation and Removal Summary

	Existing Pile Removal	Existing Pile Removal	Temporary Pile Installation	Temporary Pile Installation	Permanent Pile Installation	Permanent Pile Installation	Permanent Pile Installation
Diameter of Steel Piles	14	20	36	36	48	60	72
Number of Piles	1,820	10	100	100	76	16	10
Vibratory Pile Driving							
Total Quantity	1,820	10	100	100	76	16	10
Max # Piles Vibrated per Day	40	4	6	6	6	4	4
Vibratory Time per pile (minutes)	5 min	10 min	10 min	10 min	10 min	10 min	10 min
Vibratory Time per Day (minutes)	200 min	40 min	60 min	40 min	60 min	40 min	40 min
Number of Days	46	2.5	16.67	16.67	12	10.5	10.5
Vibratory Time Total (hours)	152 hours	1.67 hours	16.67 hours	16.67 hours	12 hours	7 hours	7 hours
Impact Pile Driving							
Total Quantity					72	16	10
Max # Piles Impact per Day					4	4	4
Number of Strikes per Pile					2,400	2,400	2,400
Impact Time per Pile (minutes)					60	60	60
Impact Time per Day					240 mis	240 min	240 min
Number of Days					18	4	2.5
Impact Time Total (hours)					72 hours	16 hours	10 hours
Down-The-Hole Drilling							
Total Quantity			24		24	8	5
Max # Piles Installed per Day			4		4	2	2
Strike Rate (average strikes per second)			15.5		13.5	10	10
Time Per Pile (minutes)			120 mi		150 min	240 min	360
Time Per Day (hours)			8 hours		10 hours	8 hours	12 hours
Number of Days			6		6	4	2.5
DTH Drilling Time Total (hours)			48 hours		6 hours	32 hours	60 hours

Table 2. Seward Cruise Ship Passenger Dock and Terminal Facility Project Dredging and Disposal Summary

Project Component	Description				
	Soil Type	Acre (acres)	Total Quantity (cubic yards)	Total Time (hours)	# of Days
Dredging	Alluvial and Gravel	1.10	183,000	1,440	120

5 DATES AND DURATION

Construction would begin in September 2025 and continue through April 2026. Pile installation activities are expected to occur for approximately 384 hours over 153, not necessarily consecutive, days. Most of the in-water work time, 206 hours over 92 days, would be spent vibratory pile driving. The total project timeline is not expected to last more than six months. The construction timeline takes into account the mobilization of materials and potential delays due to delayed material deliveries, equipment maintenance, inclement weather, and shutdowns that may occur to prevent impacts to marine mammals and avian species.

6 POTENTIAL IMPACTS

Wetlands and Waters of the United States

The Project would not impact coastal or freshwater wetlands. The Project would impact Resurrection Bay, a navigable water under Federal jurisdiction. In order to construct the new dock, the Project would install piles in an area previously developed by ARRC.

ESA and MMPA Protected Species

The NMFS Species Distribution Mapper and the USFWS Information for Planning and Conservation website were used to identify marine mammals, protected birds, invertebrates, and their critical habitat that may occur in the project vicinity. There are 17 protected species under NMFS jurisdiction and 3 protected species under USFWS jurisdiction that may occur in the project vicinity listed in Table 3 (NMFS 2024 and USFWS 2024a).

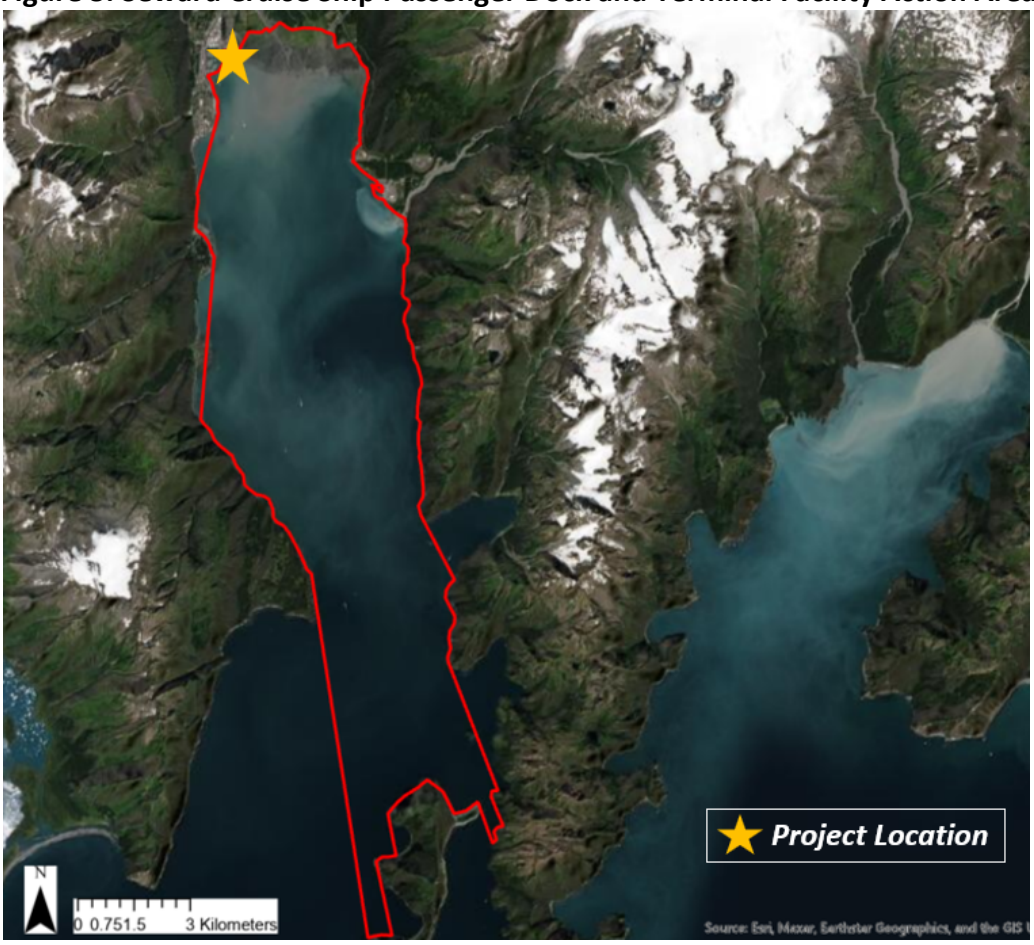
Five marine mammals, one invertebrate, and one avian species protected by the Endangered Species Act (ESA) may occur in the action area (Figure 5): endangered fin whale; endangered Western North Pacific Distinct Population Segment (DPS) humpback whale and threatened Mexico DPS humpback whale; endangered North Pacific right whale; endangered sperm whale; endangered western DPS (WDPS) Steller sea lion; proposed threatened sunflower sea star; and endangered short-tailed albatross. Of these species, critical habitat has been designated for the Mexico DPS and Western North Pacific DPS humpback whales and WDPS Steller sea lion. The other species listed in Table 3 are protected under the Marine Mammal Protection Act (MMPA).

Table 3. Protected Species that May Occur in the Project Vicinity

Species	Status Listing	Jurisdiction
Fin Whale (*Balaenoptera physalus*)	ESA Endangered	NMFS
Humpback Whale (*Megaptera novaeangliae*)	ESA Endangered (Western North Pacific DPS) and ESA Threatened (Mexico DPS)	NMFS
North Pacific Right Whale (*Eubalaena japjaponica)*	ESA Endangered	NMFS
Sperm Whale (*Physter macrocephalus*)	ESA Endangered	NMFS
Steller Sea Lion (WDPS; *Eumetopias jubatus*)	ESA Endangered	NMFS
Sunflower Sea Star (*Pycnopodia helianthoides)*	ESA Threatened (potentially)	NMFS
Short-tailed Albatross (*Phoebastria albatrus)*	ESA Endangered	USFWS
California Sea Lion (*Zalophus californianus*)	MMPA	NMFS
Dall's Porpoise (*Phocoenoides dalli*)	MMPA	NMFS
Gray Whale (*Eschrichtius robustus*)	MMPA	NMFS
Harbor Porpoise (*Phocoena phocoena*)	MMPA	NMFS
Harbor Seal (*Phoca vitulina*)	MMPA	NMFS
Killer Whale (*Orcinus orca*)	MMPA	NMFS
Minke Whale (*Balaenoptera acutorostrata*)	MMPA	NMFS
Northern Elephant Seal (*Mirounga angustirostris)*	MMPA	NMFS
Northern Fur Seal (*Callorhinus ursinus*)	MMPA	NMFS
Northern Sea Otter – Southcentral Alaska Stock (*Enhydra lutris kenyoni*)	MMPA	USFWS
Pacific Walrus (*Odobenus rosmarus*)	MMPS	USFWS
Pacific White-Sided Dolphin (*Lagenorhynchus obliquidens*)	MMPA	NMFS
Steller Sea Lion (EDPS; *E. jubatus*)	MMPA	NMFS

Source: NMFS 2024; USFW 2024a

Figure 5. Seward Cruise Ship Passenger Dock and Terminal Facility Action Area



To more accurately determine species that may occur in the action area (Figure 5) in Resurrection Bay, the following information was gathered and reviewed:

- Correspondence with tour boat operators based in Seward (Major Marine Tours 2024);
- Correspondence with biologists at the Alaska SeaLife Center (Alaska SeaLife Center 2024); and
- Correspondence with Kenai Fjords National Park (National Park Service [NPS] 2024).

Based on May 2024 consultation with Alaska SeaLife Center biologists, regarding the presence of marine mammals, avian, and sea star species in Resurrection Bay, the following are not expected to occur in the action area (Figure 5) during construction: Pacific white-sided dolphins, northern fur seals, eastern DPS Steller sea lions, Pacific walrus, and Short-tailed Albatross (Alaska SeaLife Center 2024).

Additionally, the following species, listed by the NMFS mapper and discussed during consultation with the Alaska SeaLife Center, Major Marine Tours, and Kenai Fjords National Park could occur in the Project vicinity:

- Humpback whales and killer whales are present year-round in Resurrection Bay with increased sightings during summer months. An increase in humpback whale bubble-net feeding activity has been observed from the end of June through July (Major Marine Tours 2024).
- Gray whales and fin whales are rarely sighted in upper Resurrection Bay, and gray whales have been sighted less frequently over the past few years (Major Marine Tours 2024).
- Northern sea otters are frequently seen around docks in upper Resurrection Bay (NPS 2024; Alaska SeaLife Center 2024).
- Harbor seals are common in Resurrection Bay year-round with consistent presence between the ARRC Passenger Terminal Dock and Resurrection River and other well documented haulouts (Alaska SeaLife Center 2024).
- Harbor porpoises are occasionally sighted near the harbor and are most frequent in the spring (NPS 2024).
- The other species listed in Table 3 are also known to occur in Resurrection Bay with varying frequency.

Because there are marine mammal species that frequent the project area, we expect to request Level B takes via the IHA process. To ensure compliance with ESA, Section 7 consultation will be completed with NMFS and USFWS for the ESA-listed species. Mitigation measures that arise from consultation will be implemented during construction.

Magnuson-Stevens Fishery Conservation and Management Act

Essential Fish Habitat

Upper Resurrection Bay is designated as Essential Fish Habitat (EFH) for forty-four species of fish, including all five species of Pacific salmon. Table 4 details EFH species that may occur in the project area during at least one phase of their life cycle (NMFS 2024a).

Table 4. Essential Fish Habitat Species Present in the Seward Cruise Ship Passenger Dock and Terminal Facility Project Area

Species	Life stage(s) Found at Location
Alaska Plaice (*Pleuronectes quadrituberculatus*)	Adult (summer), egg (summer), larvae (summer)
Alaska Skate (*Raja binoculata*)	Adult (fall/summer/winter), juvenile (summer)
Aleutian Skate (*Bathyraja aleutica*)	Adult (fall/spring/summer/sinter)
Arrowtooth Flounder (*Atheresthes stomias*)	Adult (fall/spring/summer/winter), juvenile (summer), larvae (summer)
Atka Mackerel (*Pleurogrammus monopterygius*)	Adult (fall/winter)
Bering Skate (*Beringraja binoculata*)	Adult (summer), juvenile (summer)

Bigmouth Sculpin (*Hemitripterus bolini*)	Adult (spring/summer/winter), juvenile (summer)
Black Rockfish (*Sebastes melanops*)	Adult (summer)
Blackspotted Rockfish (*S. melanostictus*)	Adult (summer), juvenile (summer)
Chinook Salmon (*Oncorhynchus tshawytscha*)	Marine immature adult, marine mature adult
Chum Salmon (*O. keta*)	Marine mature adult, marine immature adult, marine juvenile
Coho Salmon (*O. kisutch*)	Marine mature adult, marine juvenile
Dark Rockfish (*S. melanops*)	Adult (summer)
Dover Sole (*Solea solea*)	Adult (fall/spring/summer/winter), egg (Summer), juvenile (summer), larvae (summer)
Dusky Rockfish (*S. ciliatus*)	Adult (fall/spring/winter), juvenile (summer)
Flathead Sole (*Hippoglossoides elassodon*)	Adult (fall/spring/summer/winter), egg (summer), juvenile (summer), larvae (summer)
Great Sculpin (*Myoxocephalus polyacanthocephalus*)	Adult (summer), juvenile (summer)
Greenstriped Rockfish (*S. elongatus*)	Adult (summer)
Harlequin Rockfish (*S. variegatus*)	Adult (spring), juvenile (summer)
Longspine Thornyhead Rockfish (*S. altivelis*)	Adult (spring/summer)
Northern Rock Sole (*Lepidopsetta polyxystra*)	Adult (spring/summer/fall/ winter, larvae (summer)
Northern Rockfish (*S. polyspinis*)	Adult (fall/spring/winter), juvenile (summer)
Octopus (*Octopoda)*	Adult (fall/Spring/Summer/Winter)
Pacific Cod (*Gadus macrocephalus*)	Adult (Fall/Spring/Summer/Winter), Juvenile (Summer), and Larvae (Summer)
Pacific Ocean Perch (*S. alutus*)	Adult (Fall/Spring/Summer/Winter) and Larvae (Summer)
Pink Salmon (*O. gorbuscha*)	Marine Mature Adult and Marine Juvenile
Pygmy Rockfish (*S. wilsoni*)	Adult (Summer)
Quillback Rockfish (*S. maliger*)	Adult (Summer)
Redbanded Rockfish	Adult (Spring/Summer)

(*S. babcocki*)	
Redstriped Rockfish (*S. proriger*)	Adult (Summer) and Juvenile (Summer)
Rex Sole (*Glyptocephalus zachirus*)	Adult (Fall/Spring/Summer/Winter), Egg (Summer), Juvenile (Summer), and Larvae (Summer)
Rosethorn Rockfish *(S. helvomaculatus*)	Adult (Summer) and Juvenile (Summer)
Rougheye Rockfish (*S. aleutianus*)	Adult (Fall/Spring/Summer/Winter) and Juvenile (Summer)
Sablefish (*Anoplopoma fimbria*)	Adult (Fall/Spring/Summer/Winter), Juvenile (Summer), and Larvae (Summer)
Sharpchin Rockfish (*S. chrysomelas*)	Adult (Spring/Summer)
Shortraker Rockfish (*S. borealis*)	Adult (Fall/Spring) and Juvenile (Summer)
Shortspine Thornyhead Rockfish (*S. alascanus)*	Adult (Fall/Spring/Summer/Winter)
Silvergrey Rockfish (*S. brevispinis*)	Juvenile (Summer)
Sockeye Salmon (*O. nerka*)	Marine Mature Adult, Marine Immature Adult, and Marine Juvenile
Southern Rock Sole (*Lepidopsetta bilineata*)	Adult (Summer), Larvae (Summer)
Walleye Pollock (*Gadus chalcogrammus*)	Adult (Fall/Spring/Summer/Winter), Egg (Summer), Juvenile (Summer), and Larvae (Summer)
Yellow Irish Lord (*Hemilepidotus jordani*)	Adult (Fall/Spring/Winter) and Juvenile (Summer)
Yelloweye Rockfish (*S. ruberrimus*)	Adult (Fall/Spring/Summer) and Juvenile (Summer)
Yellowfin Sole (*Limanda aspera)*	Adult (Summer), Egg (Summer), and Juvenile (Summer)

Source: NMFS 2024a

Anadromous Streams

The habitat supported by the action area (Figure 7) include large populations of anadromous fish, such as all five species of Pacific salmon (NMFS 2024a). There are twelve documented anadromous fish streams in the project area (Table 5) (ADFG 2024). Each anadromous waterbody supports at least one species of Pacific salmon at varying life stages. Resurrection River (AWC: 231-30-10080) supports all five species if Pacific Salmon and provides spawning habitat for eulachon (not an EFH species). This makes the river a preferred site for harbor seals to forage and haul out year-round (ADFG 2024; Alaska SeaLife Center 2024).

Table 5. Anadromous Streams Present within the Action Area

Waterbody Name/ AWC Code	Species present	Distance from Project (km)
Fourth of July Creek (231-30-10130)	Co (p) and Chum Salmon (s)	6.3 southeast
231-30-10110	Chum (p), Co (p), Pink (p), and Sockeye Salmon (p)	5.3 southeast
231-30-10108	Pink Salmon (p)	4.3 southeast
231-30-10104	Pink (s) and Chum Salmon (s)	3.1 east
231-30-10096	Chum (p) and Pink Salmon (s)	2.84 east
Resurrection River (231-30-10080)	Chum (s), Co (s)(r), Chinook (p), Pink (s), and Sockeye Salmon(p) and Eulachon (s)	2.6 east
Airport Creek (231-30-10077)	Co (p), Sockeye (p), and Chum Salmon(p)	1.3 east
231-30-10075	Pink Salmon (s)	1.1 east
Scheffler Creek (231-30-10070)	Co (s), Pink (s), and Sockeye Salmon(p)	0.8 southwest
Tonsina Creek (231-30-10040)	Chum (s) and Pink Salmon(s)	7.6 southwest

Source: ADFG 2024 (p-present; s-spawning; r-rearing)

According to the ShoreZone Mapper (NMFS 2024b), the shoreline at the proposed dock site in Resurrection Bay has the following characteristics:

- Habitat Class: protected/partially mobile/sediment or rock sediment
- Coastal Class: man-made permeable
- Biological Wave Exposure: protected

The Project will not impact EFH within anadromous streams (the mouth of the closest stream is over 0.8 kilometers [0.5 miles] from the proposed dock site). Because dredging, and pile installation would occur in a previously disturbed industrial area and because of the mitigation measures listed below, the Project is not likely to adversely affect marine EFH.

Figure 6. Anadromous Streams Near the Seward Cruise Ship Passenger Dock and Terminal Facility Location

ADFG 2024

Contamination

In 2022, Resurrection Bay was listed as a Category 3 waterbody, meaning that water quality data was not sufficient enough to determine appropriate decision recommendations (ADEC 2024). According to the Environmental Protection Agency (EPA) in 2020, Resurrection River was not listed as impaired (EPA 2020).

The Alaska Department of Environmental Conservation (ADEC) contaminated sites database indicated that there are no active land-based contaminated sites in the vicinity of the Project. The two closest sites (Hazard ID: 25411 and 22982) are on the adjoining rail yard and have been confirmed as cleanup completed with institutional controls (ADEC 2024).

National Historic Preservation Act

The Dale R. Lindsey Railroad Intermodal Terminal (Seward Terminal Building; SEW-01551) that is located on the ARRC Passenger Terminal Dock is currently slated to be removed and replaced as a part of the proposed project. The dock was constructed in 1966 and is over 50 years old; the dock and the building on the dock were previously recommended to not be eligible under the NRHP individually (CRC 2022). Further consultation with the Alaska State Historic Preservation Office (SHPO) would be required to receive their concurrence on this finding.

7 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Water of the United State Mitigation Statements

Avoidance of Impacts to Waters of the United States

The purpose of the project is to construct a dock that accommodates large cruise ships and their passengers during summer months. The project is needed to provide safe harbor for large cruise ships docking in Seward. To meet the project purpose and need, construction must occur within waters of the United States. The project will be located within the already industrialized section of Resurrection Bay.

Minimization of Unavoidable Impacts to Waters of the United States, Including Wetlands:

The project uses the most compact design practicable (with the least number of piles and smallest size of piles) to minimize impacts to waters of the United States.

Compensation for Unavoidable Impacts too Waters of the United States

Marine disposal of dredged material is proposed and a small amount of drill cuttings during DTH drilling is proposed. The project footprint is within a previously developed area. Compensatory mitigation is expected and will be determined together with USACE through the permitting process.

Contaminated Site Avoidance and Mitigation Measures

In order to keep existing, but no longer active, contaminated soils and groundwater contained, a site workplan would be developed with ADEC prior to any ground-disturbing construction activities. The workplan would describe existing locations of previously active contamination sites and all construction personnel would be briefed on the approved workplan and appropriate prevention and response measures in the event contaminated soils or groundwater are encountered.

Protected Species and EFH Mitigation Measures

The following measures would be incorporated to avoid and minimize impacts to protected species and habitat:

General Construction Mitigation Measures

The Project uses the most compact design possible, while meeting the demands of the vessels that would use the facility.

- Wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol will not be used. If treated wood must be used, any wood that comes in contact with water will be treated with waterborne preservatives in

accordance with Best Management Practices developed by the Western Wood Preservers Institute. Treated wood will be inspected before installation to ensure that no superficial deposits of preservative material remain on the wood.

- Plans for avoiding, minimizing, and responding to releases of sediments, contaminants, fuels, oil, and other pollutants will be developed and implemented.
- Spill response equipment will be kept on-site during construction and operation.
- Floats or barges will not be grounded at any tidal stage.

General Pile Driving Measures

- The project uses a design that incorporates the smallest-diameter piles practicable while still minimizing the overall number of piles.
- Noise associated with in-water pile driving will be localized and temporary.
- A silt curtain will be employed during all DTH-drilling activities to contain drill spoils as much as possible to allow them to settle to the sea floor in the immediate area rather than increasing turbidity over a wider area.

Marine Mammal Mitigation Measures

A marine mammal mitigation and monitoring plan will be drafted for this project and will be modified as needed through the EFH and ESA consultation and IHA application process with NMFS and USFWS.

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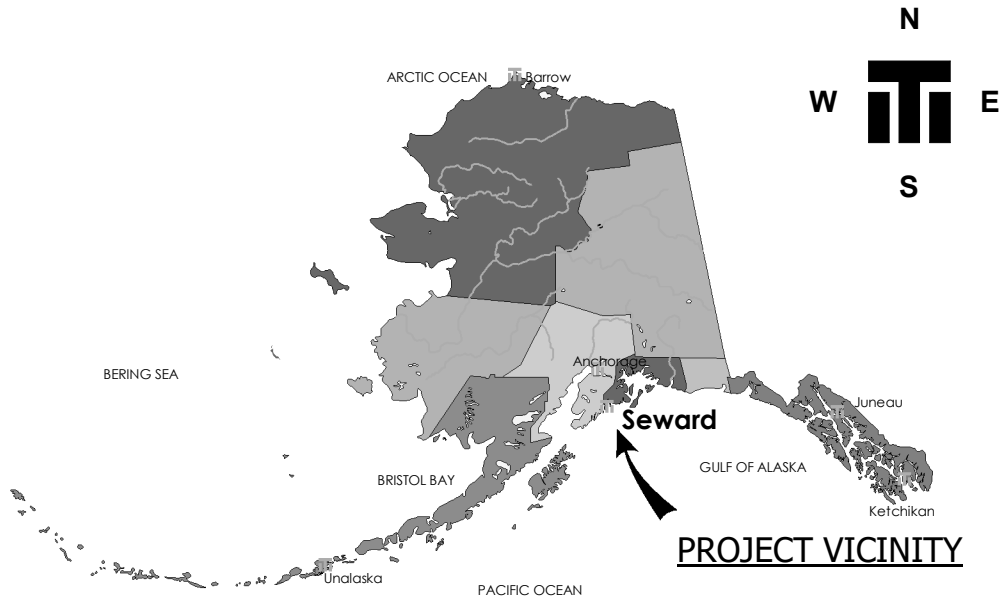
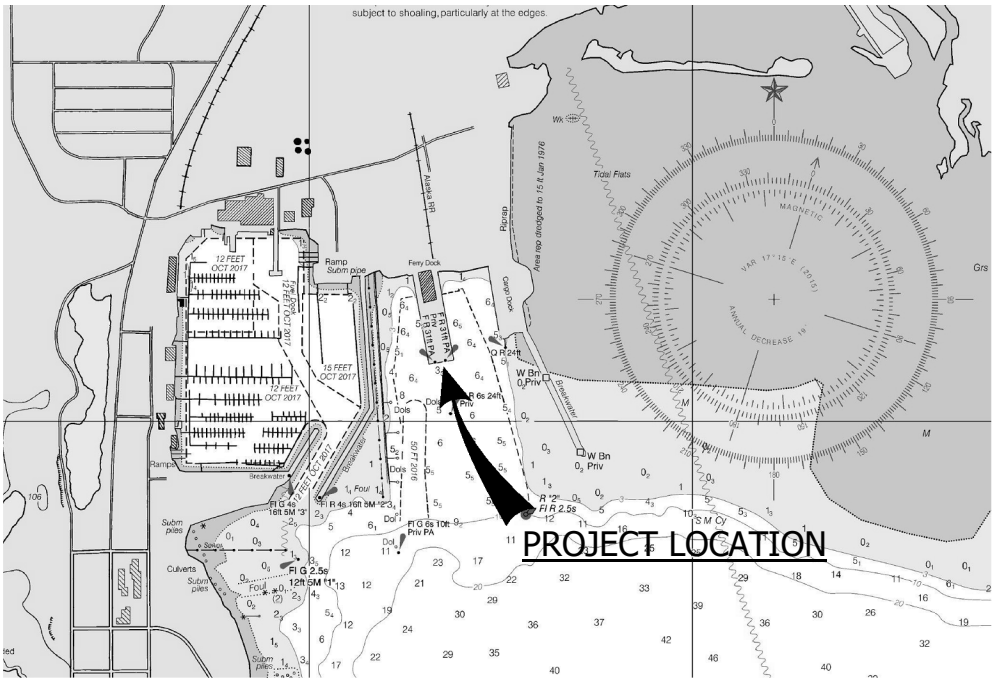
Attachment 3: Project Figures



PROJECT VICINITY



PROJECT LOCATION

TIDAL DATA	
EHW	+15.70'
HAT	+13.93'
MHHW	+10.63'
MHW	+9.71'
MLW	+1.38'
MLLW	0.00'
LAT	-3.53'
ELW	-5.01'

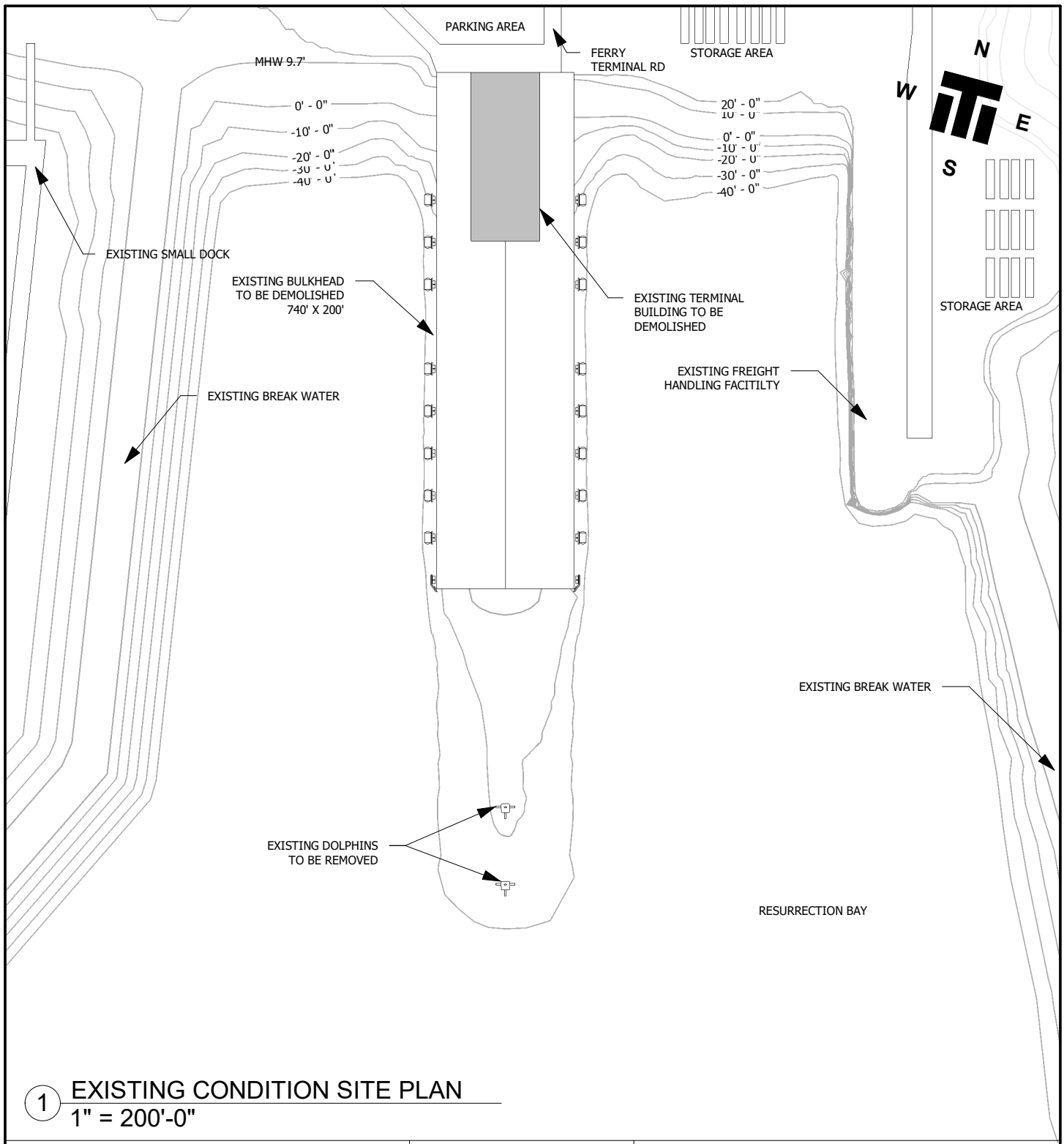
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

COVER SHEET

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 1



1 EXISTING CONDITION SITE PLAN
1" = 200'-0"

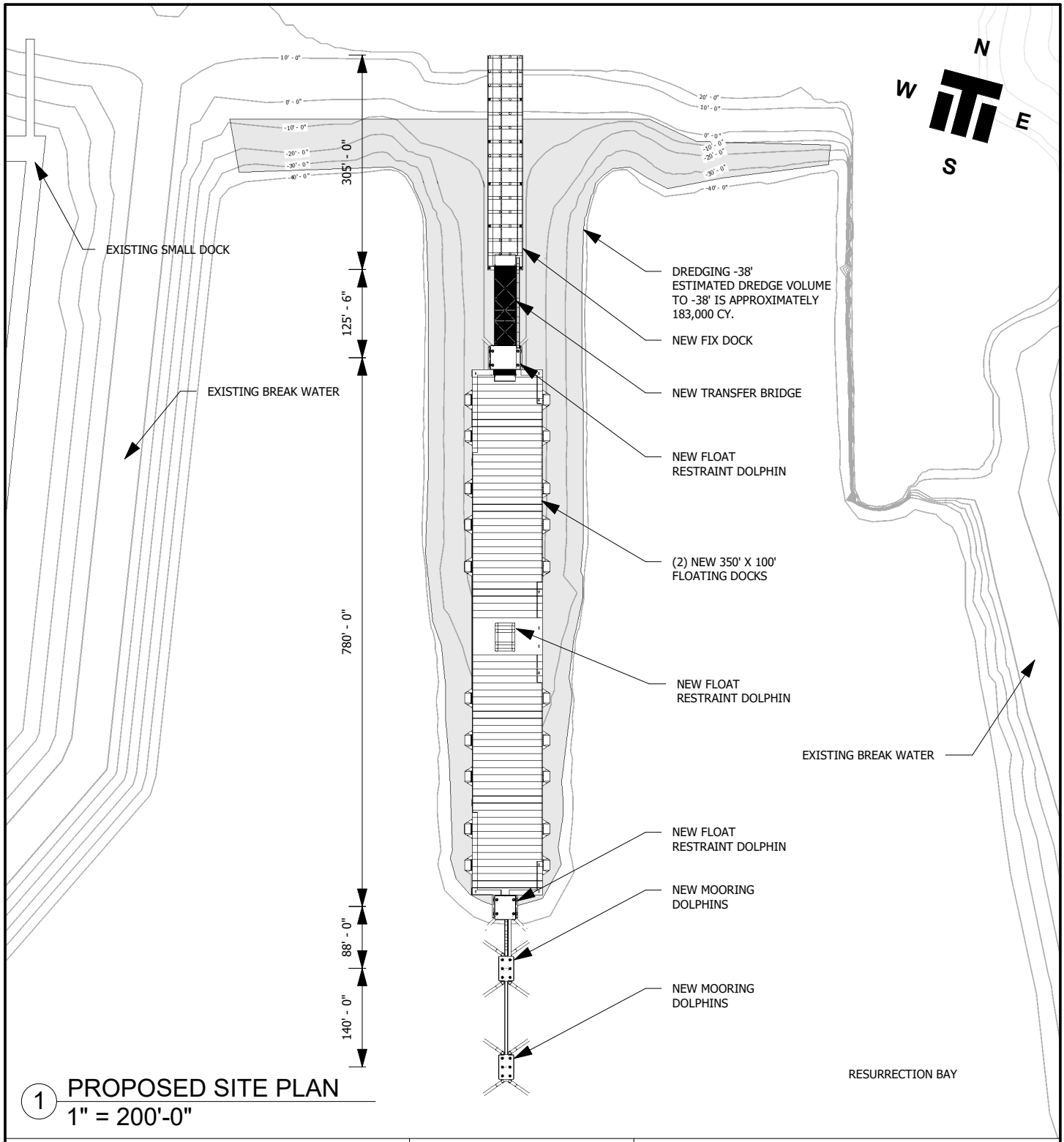
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

EXISTING DOCK CONDITON

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 2



1 PROPOSED SITE PLAN
1" = 200'-0"

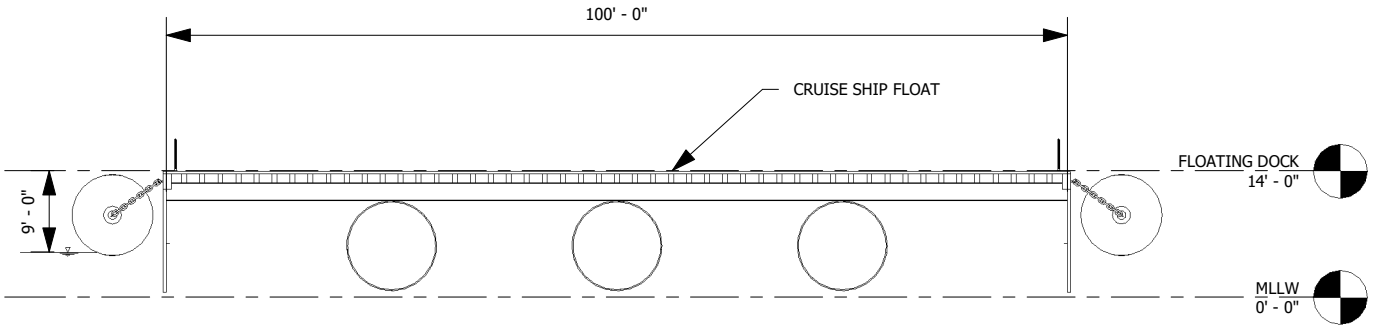
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

PROPOSED SITE PLAN

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 3



1 TYPICAL FLOATING DOCK SECTION
3/64" = 1'-0"

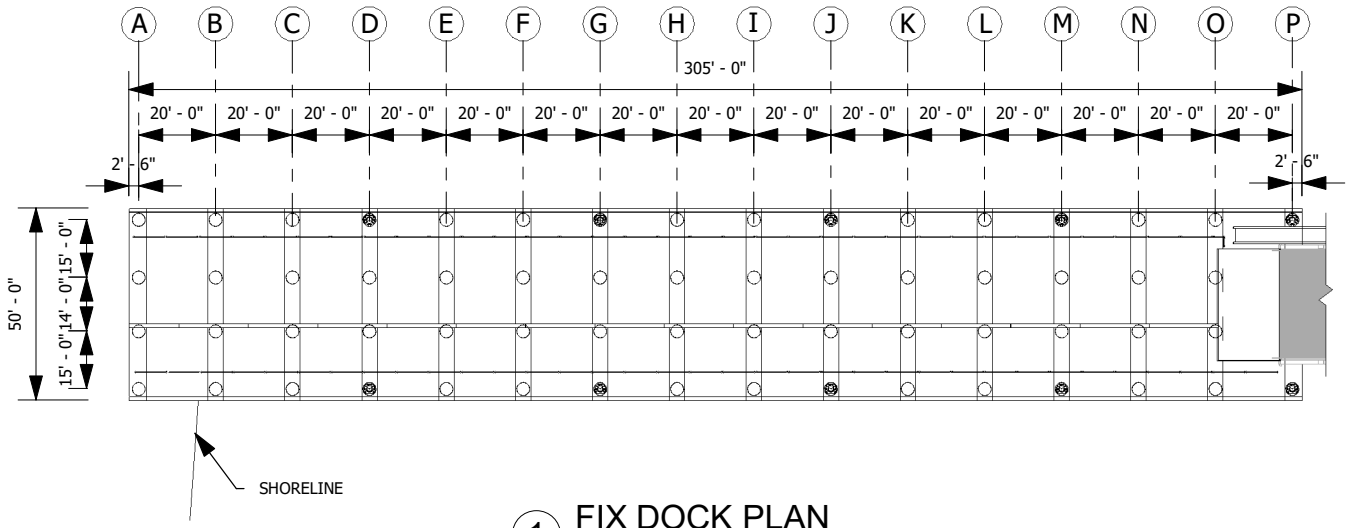
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

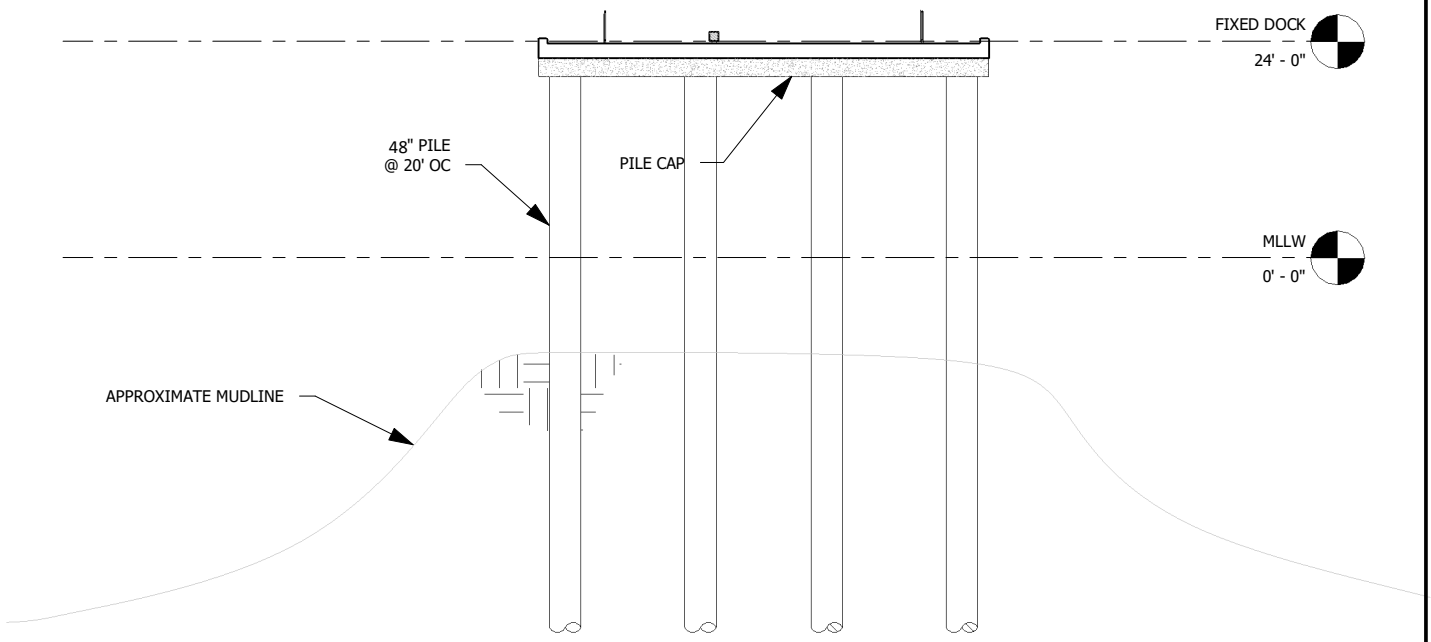
PROPOSED FLOATING DOCK SECTION

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 4



1 FIX DOCK PLAN
1" = 50'-0"



2 FIX DOCK SECTION
3/64" = 1'-0"

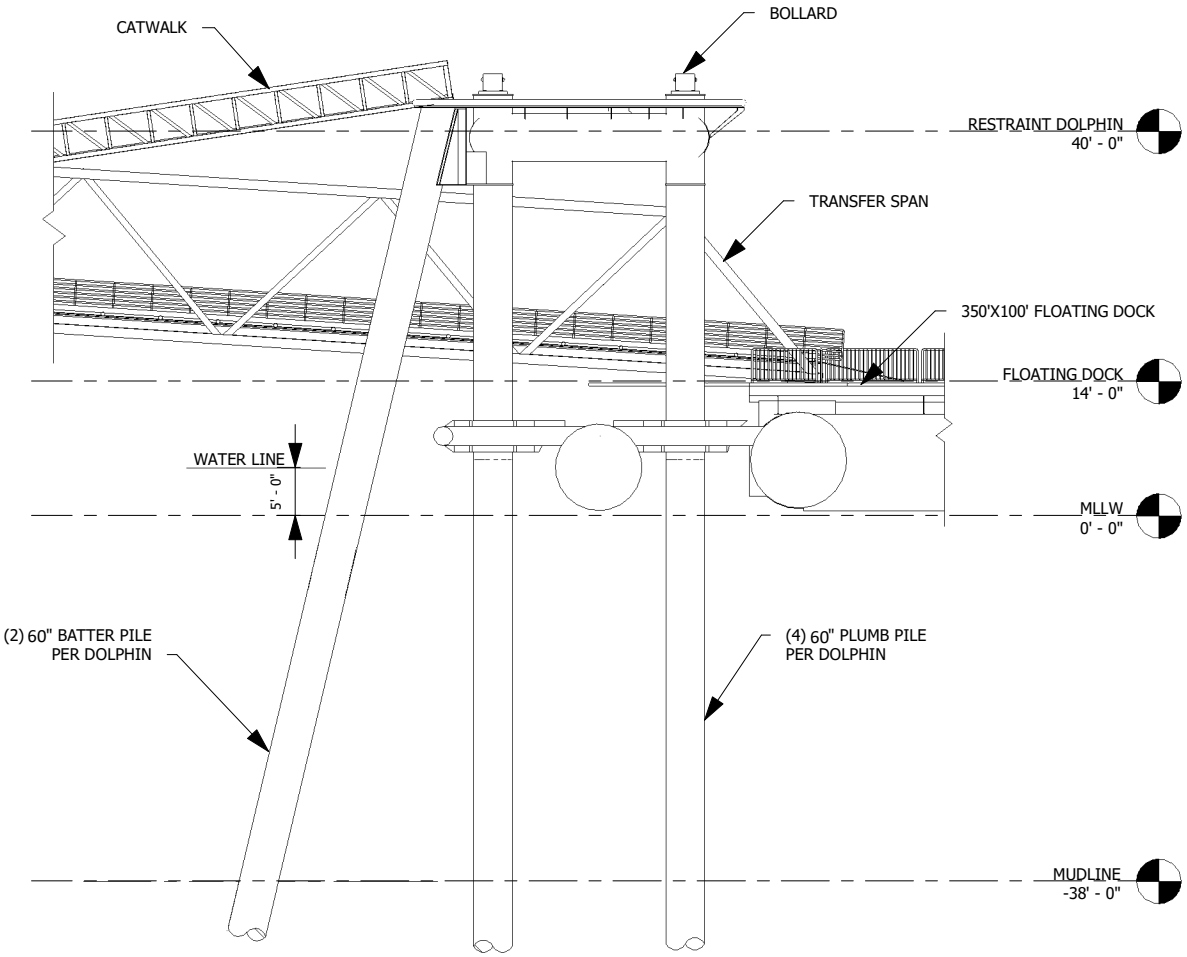
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

PROPOSED APPROACH TRESTLE

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 5



1 FLOAT RESTRAINT DOLPHIN ELEVATION
1" = 20'-0"

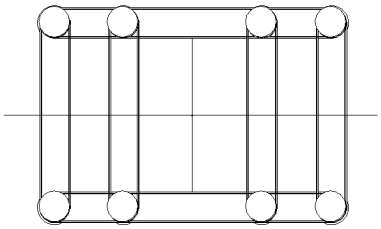
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

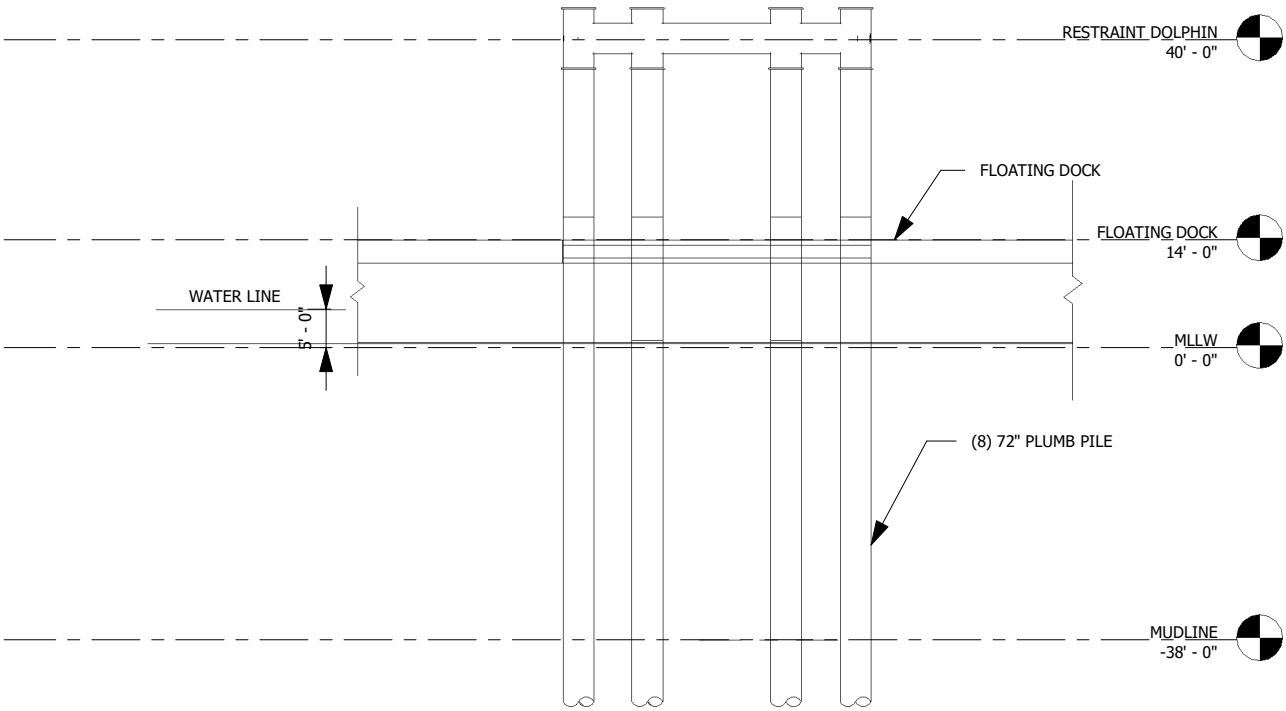
PROPOSED FLOAT RESTRAINT DOLPHIN

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 6



1 MIDDLE FLOAT RESTRAINT DOLPHIN PLAN
1" = 25'-0"



2 MIDDLE FLOAT RESTRAINT DOLPHIN ELEVATION
1" = 25'-0"

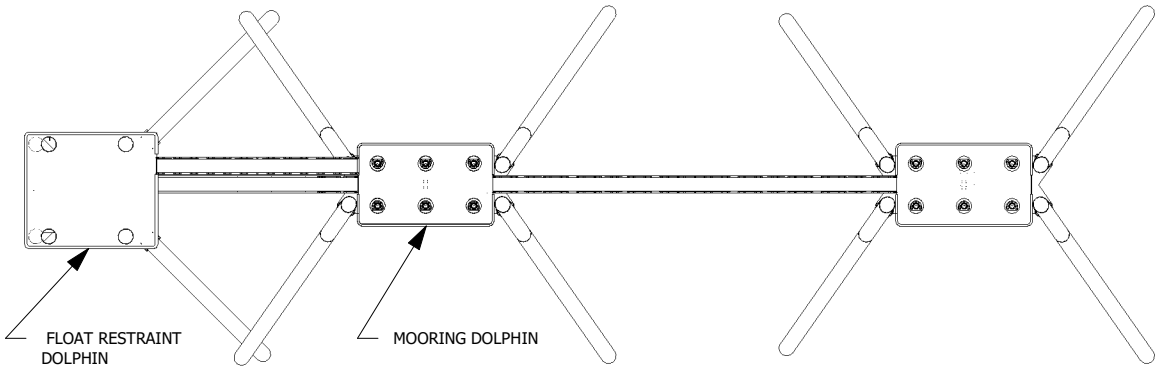
PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

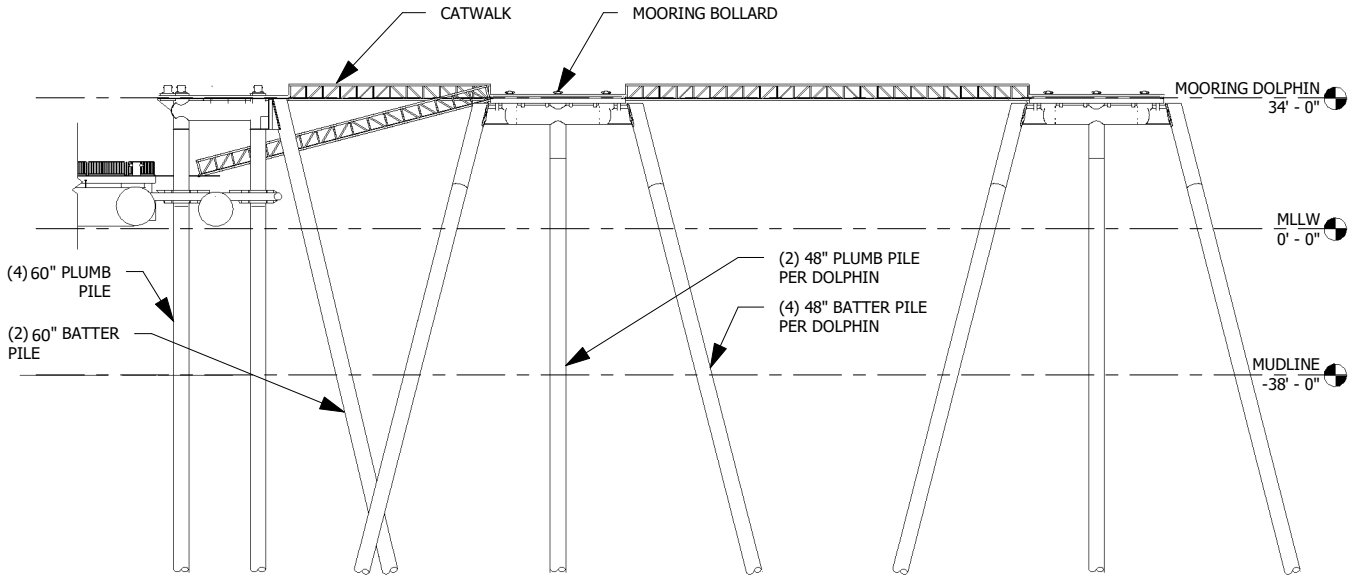
PROPOSED MIDDLE FLOAT RESTRAINT DOLPHIN

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 7



1 MOORING DOLPHIN PLAN
1" = 50'-0"



2 MOORING DOLPHIN ELEVATION
1" = 50'-0"

PURPOSE:
SEWARD CRUISE SHIP DOCK

DRAFT

PROPOSED MOORING DOLPHIN

JOB NO. 23-006

PROPOSED: TURNAGAIN MARINE
AT: SEWARD, ALASKA
WATERWAY: RESURRECTION BAY
APPLICATION BY: TURNAGAIN MARINE
DATE: JUN 05, 2024 SHEET: 8