Douglas Island Cruise Ship Terminal Project
Douglas Island, Stephens Passage, Alaska
Appendix A
July 2025

1 OVERVIEW

Turnagain Marine Construction (Turnagain) is proposing to construct two separate cruise ship berths and associated facilities on the western shore of Douglas Island in Stephens Passage, approximately 15 kilometers (km) northwest of downtown Juneau, Alaska. The proposed cruise ship terminal would provide safe harbor for cruise ships and accommodate passengers during the Southeast Alaska visitor season (late-April to mid-October), as well as assist in the reduction of congestion in downtown Juneau. Goldbelt, Inc. is the landowner and Solstice Alaska Consulting, Inc. is providing permitting support.

The Douglas Island Cruise Ship Terminal Project consists of offshore and adjacent onshore development. Offshore components of the proposed project include two new 500-foot (ft) by 50-ft cruise ship berths, a seaplane base, a multi-use harbor, a small boat launch, and a tour boat return. The offshore development would require the placement of 120 temporary and 345 permanent pilings. Onshore components of the proposed project would consist of parking and access roads, staff accommodations, visitor attractions, trails, lodging, and facilities to support the offshore development. This would occur over a three-year phased installation starting in spring of 2026.

2 LOCATION

The proposed Douglas Island Cruise Ship Terminal Project is located on the northwest side of Douglas Island within Stephens Passage in Southeast Alaska, approximately 15 km (9.3 miles) northwest of downtown Juneau (Township 041S, Range 66E, Sections 29 - 32; Copper River Meridian; U.S. Geological Survey Quadrangle Juneau A-2; latitude 58.290° and longitude -134.678°; Figure 1 and Figure 2; Sheet 1).

3 PURPOSE AND NEED

The purpose of this project is to construct two cruise ship berths on Douglas Island that can safely accommodate a class of increasingly larger cruise ships docking in Southeast Alaska.

Juneau is a main port-of-call for cruise ships in Alaska; 99 percent of ships visiting Southeast Alaska stop in Juneau (Cruise Lines International Association [CLIA] 2020). In 2024, cruise ships made 697 individual port calls in Juneau, bringing 1.68 million visitors (CLIA 2024a; Sabbaitini, M. 2024). Cruising is one of the fastest-growing sectors of tourism, and cruise ship capacity is forecast to grow 10 percent from 2024 to 2028 (CLIA 2024b). Already in 2019, cruise ships carrying 4,000-5,000 passengers began visiting Alaska. These ships carry twice as many passengers as those previously seen in Southeast Alaska. As this growth in cruising and cruise

ship size spreads throughout the tourism industry, it is anticipated that greater numbers of large cruise ships will stop in Juneau.

Currently, cruise ships visiting Juneau land downtown at the Port of Juneau in Gastineau Channel. Up to five ships, some carrying thousands of passengers, landing per day causes pedestrian congestion downtown and ship traffic in the port and Gastineau Channel. Ships of this size are difficult to maneuver at slow speeds; however, to dock at the Port of Juneau, cruise ships must transit and maneuver slowly in a busy, narrow section of Gastineau Channel.

This project, the construction of two large-class cruise ship berths and associated infrastructure on Douglas Island, is needed to safely accommodate cruise ships and their passengers cruising to and visiting Juneau. The project would relieve existing and future vessel, pedestrian, and vehicle congestion in the Port of Juneau and downtown, and reduce vessel traffic through Gastineau Channel, making transit to Juneau safer.

Figure 1. Douglas Island Cruise Ship Terminal Project Location and Vicinity Map

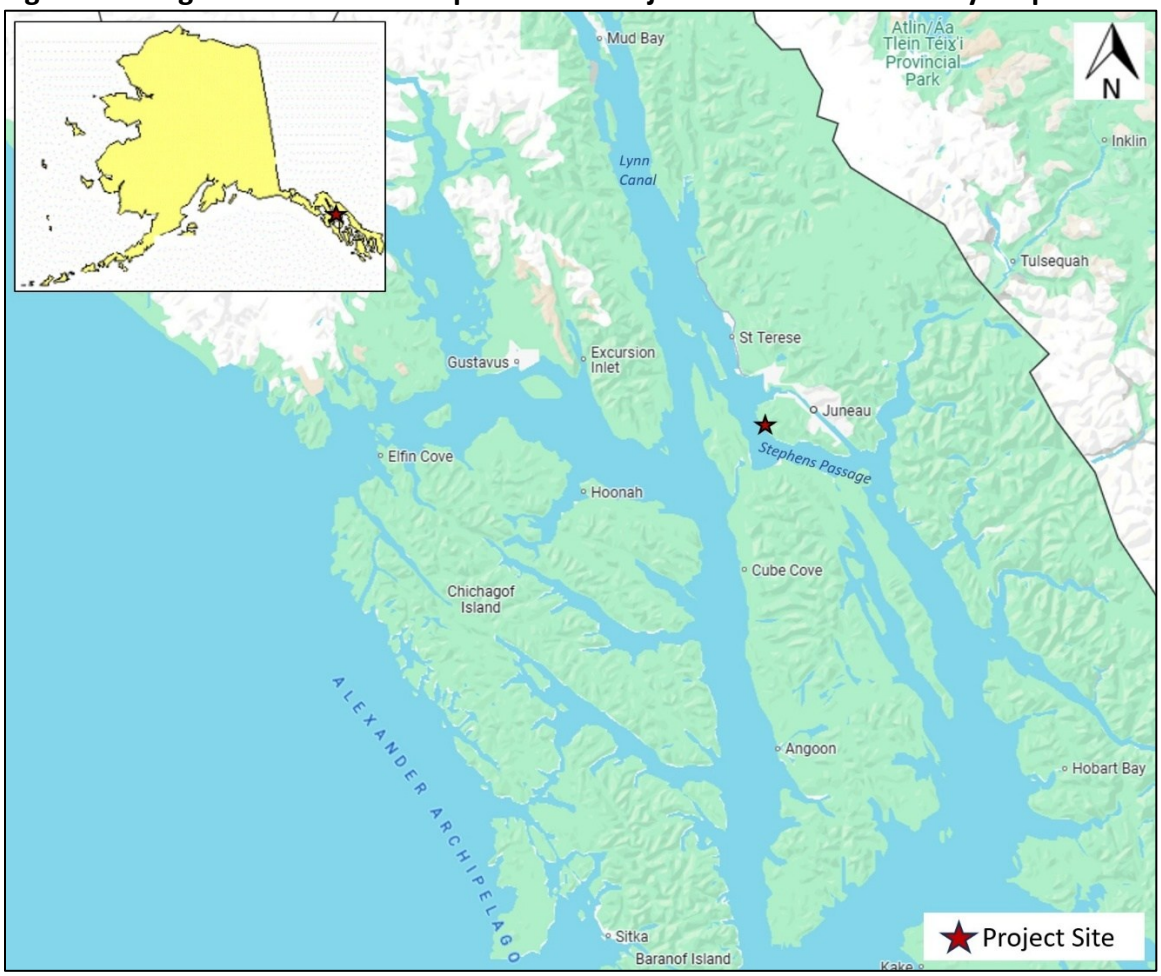


Figure 2. Douglas Island Cruise Ship Terminal Project Location

4 ALTERNATIVES

The Douglas Island Cruise Ship Terminal Project conceptual design options were developed to:

- build new docking terminals for Icon Class cruise ships; and
- expand visitor activities while reducing traffic to and from downtown Juneau.

Other alternatives were considered for this project as design progressed. Over time, TMC has worked to reduce the impact to wetlands and the overall impact of the project.

4.1 No Action Alternative

A no-action alternative was considered. Under this action, no cruise ship terminal or accompanying facilities would be constructed. This alternative was dismissed because it does not meet the purpose, to construct two cruise ship berths on Douglas Island that can safely accommodate large-class cruise ships, nor does it meet the need to relieve existing and future vessel, pedestrian, and vehicle congestion in the Port of Juneau and downtown.

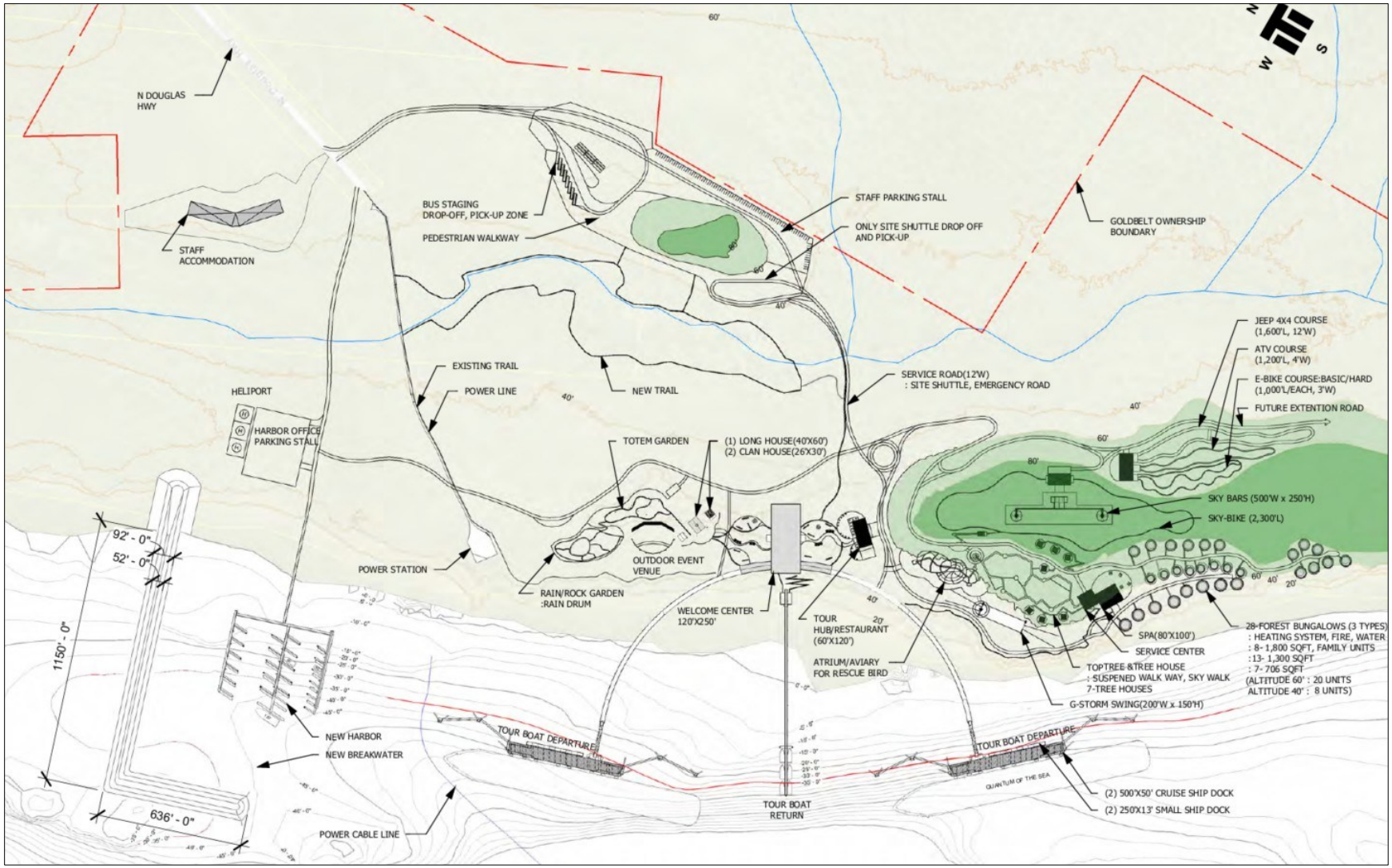
4.2 Alternative 1

Alternative 1 included onshore and offshore development on a greater scale than the proposed action alternative. This alternative's offshore development included two cruise ship berths, a tour return, a temporary use harbor, and a new breakwater. The tour boat return was located between, rather than to the south of, the two cruise ship berths, which would require installation of several more piles than the proposed action's tour boat return dock, and would have resulted in a much longer approach trestle. The multi-use harbor contained individual fingers for each vessel, and a rubble-mound breakwater would have been installed north of the harbor and cruise ship berths. Alternative 1 included installation of 120 temporary and 776 permanent steel piles.

Onshore development included road and trail access to the cruise ship berths, staff accommodations, bus staging and parking lots, a heliport, a welcome center, guest bungalows, a replica native village, and other guest amenities. The alternative differs from the existing development plan in number and location of forest bungalows and tree houses, the location of roads, and the inclusion of a heliport. In the existing development plan, some guest attractions proposed in this alternative have been removed or relocated. The design included the construction of a 15-ft tall, 18-seat swing attraction, a 250-ft tall rotating sky bar that would require additional clearing of trees, and different vehicle courses (for jeeps, all-terrain vehicles, and e-bikes). All of these attractions would have had additional wetlands impacts. The alternative also included a heliport with space for three helicopters for sightseeing tours. The heliport was intended as a base for tour helicopters to load and unload passengers close to the cruise ships.

After a team conducted wetlands survey in the area and discussion with the U.S. Army Corps of Engineers (USACE), this alternative was dismissed in favor of an alternative that would involve fewer wetlands impacts. Additionally, the number of piles and amount of fill in the marine environment were reduced to develop the proposed action alternative. See Figure 3.

Figure 3. Douglas Island Cruise Ship Terminal Alternative 1 Site Plan



5 PROPOSED ACTION

The proposed project includes offshore and onshore (Figure 4 and Figure 5) components. Offshore components of the project include two new cruise ship berths, a tour return dock, a new multi-use boat harbor, and a private boat launch. Onshore components such as a welcome center, visitor attractions, lodging, trails, access roads, and parking areas would be built to support the proposed offshore development. The entire project would be phased over a three-year time frame. These facilities are detailed below in Sections 5.1 and 5.2.

5.1 Offshore Development

The proposed project would construct the following components in the marine environment of Stephens Passage (Figure 4 and Appendix B):

- Two (2) pile-supported cruise ship docks (north and south berths)
- Multi-use harbor
- Concrete boat launch and dock
- Tour boat return dock

5.1.1 North Berth

The north berth would serve as a cruise ship moorage and access to onshore development. It would consist of a 500-ft by 50-ft floating cruise ship dock with a 250-ft by 14-ft small boat float, an 860-ft long curved approach trestle, a 155-ft by 15-ft transfer span, four mooring dolphins, two float restraint dolphins, and a series of connecting catwalks. See Appendix B (sheets 5, 11 – 17, and 22). These components would require the installation of the following steel piles:

- Sixty-two (62) 36-inch-diameter temporary piles to guide the permanent piles into place
- Sixty-six (66) 36-inch-diameter permanent piles (6 of which would be installed above the high tide line [HTL])
- Twenty-eight (28) 48-inch-diameter permanent piles

Additional project components include:

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

5.1.2 South Berth

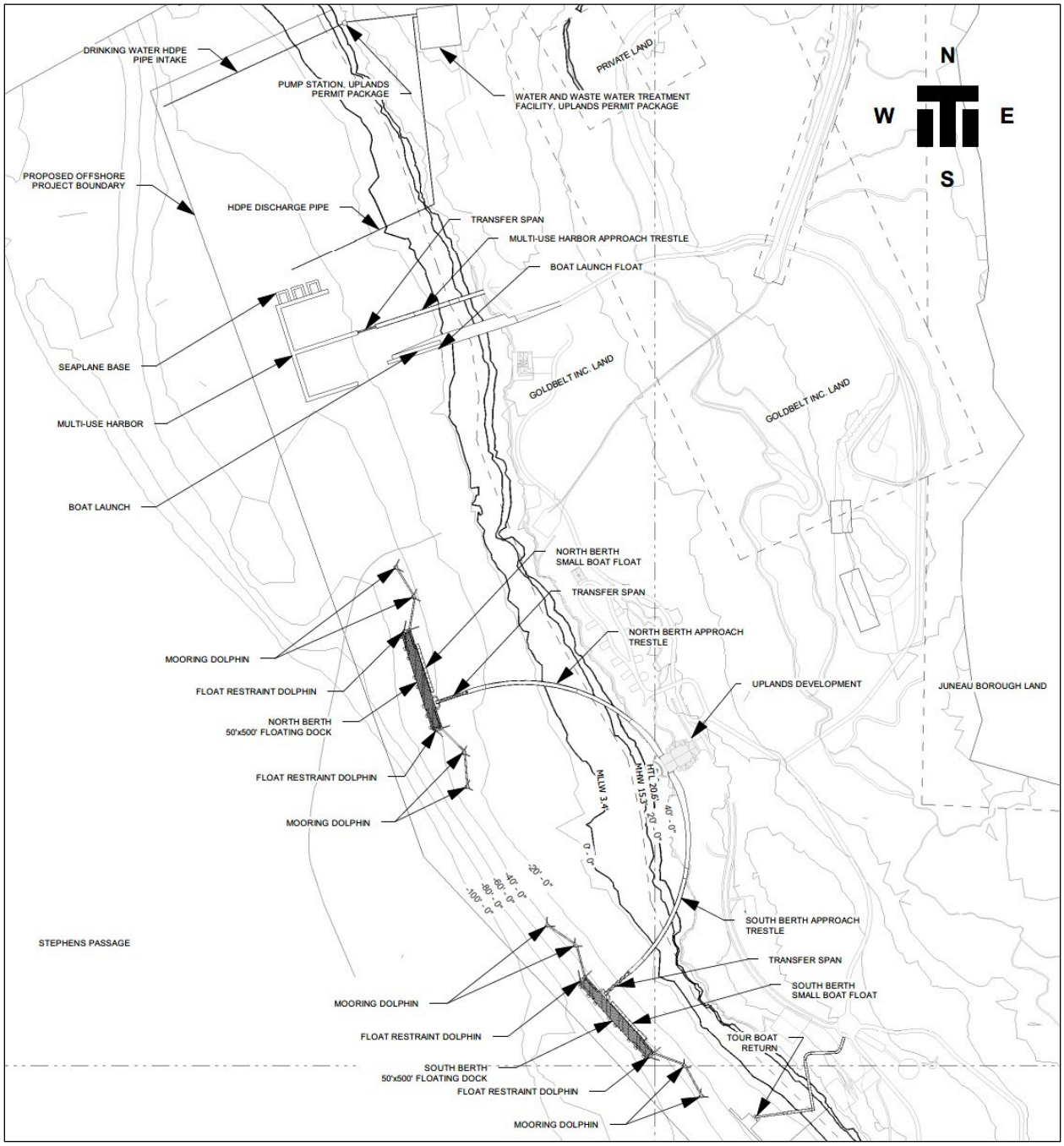
The south berth would serve as a cruise ship moorage and access to onshore facilities or commercial marine tours. It would consist of a 500-ft by 50-ft floating cruise ship dock with a 250-ft by 14-ft small boat float, a 620-ft long curved approach trestle, a 155-ft by 15-ft transfer span, four mooring dolphins, two float restraint dolphins, and a series of connecting catwalks. See Appendix B (sheets 6, 11 – 17, and 22). These components would require the installation of the following steel piles:

- Fifty (50) 36-inch-diameter temporary piles to guide the permanent piles into place
- Forty-eight (48) 36-inch-diameter piles (15 of which would be installed above the HTL)
- Twenty-eight (28) 48-inch-diameter piles

Additional project components include:

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

Figure 4. Douglas Island Cruise Ship Terminal Project Offshore Site Plan



5.1.3 Multi-Use Harbor

The multi-use harbor would consist of five connected floats (one 325-ft by 20-ft float, two 270-ft by 20-ft floats, and two 220-ft by 20-ft floats) to serve as a small boat harbor, seaplane base,

and fuel dock for commercial tour boats and planes that use the site. The multi-use harbor would be accessed by a 560-ft long approach trestle and a 100-ft long transfer span. See Appendix B (sheets 7, 18, and 22). These components would require the installation of the following steel piles:

- Twenty-eight (28) 36-inch-diameter temporary piles to guide the permanent piles into place
- Sixty (60) 24-inch-diameter piles
- Forty-two (42) 36-inch-diameter piles (6 of which would be installed above HTL)

Additional project components include:

- Dock bull rail, fenders, mooring cleats, and mast lights (installed out of water)

5.1.4 Concrete Boat Launch

The concrete boat launch would consist of a 35-ft wide pre-cast concrete plank for a single vehicle lane, sidewalk, and guardrail, and would be made up of both fill-supported and pile-supported components. The 735-ft long boat launch would be supported by structural fill to approximately -10 ft elevation (about 13 ft below mean lower low water [MLLW]). To place the fill, the area would be graded and backfilled to create the launch with 1:1.5 slopes and topped with about three ft of rip rap for slope protection. Steel piles would also be driven through the placed fill to support a float for temporary moorage that would be positioned on top of the boat launch. See Appendix B (sheets 7, 8, and 18 – 20). These components would require the following work and installation of the following steel piles:

- Grading below HTL (21,160 square ft [sq ft])
- Structural fill and slope protection below HTL (11,860 cubic yards [CY] and 58,548 sq ft)
- Sixteen (16) 24-inch-diameter piles

5.1.5 Tour Boat Return Dock

The tour boat return dock would serve as a temporary tour boat moorage and as an access point to onshore facilities for passengers returning from a commercial marine tour. It would consist of a 60-ft by 60-ft floating dock with two 80-ft by 12-ft floats on each end, a 400-ft long approach trestle, and a 155-ft long gangway connected to the floating dock. See Appendix B (sheets 9, 16, 17, and 22). These components would require installation of the following steel piles:

- Twenty-two (22) 36-inch-diameter temporary piles to guide the permanent piles into place
- Fifty-seven (57) 36-inch-diameter piles (9 of which would be installed above HTL)

Additional project components include:

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

5.1.6 Utilities

A drinking water intake pipe and wastewater discharge pipe would be installed in the marine environment as part of a water and wastewater treatment facility that would be constructed in

uplands adjacent to the shoreline to support facility needs. The drinking water intake would consist of an 835-ft long intertidal section and a 115-ft long offshore section. The wastewater discharge pipe would consist of a 430-ft long intertidal section and a 310-ft long offshore section. The intertidal sections for both pipes would involve dredging a 2-ft, 3-inch-deep trench in the seafloor and placing the pipe within the trench, encased by concrete ballasts every 30 ft along the pipe. The 8,855-sq ft trenched area (5,845-sq ft for the water intake trench and 3,010-sq ft for the outfall trench) would then be backfilled and mounded around the pipe and ballasts with bedding (select material, type A), dredged seafloor material, and then covered with a rip rap berm for scour protection. The offshore sections would consist of pipe placed on the seafloor encased by concrete pipe ballasts spaced every 30 ft. See Appendix B (sheets 3, 10, and 21). These components would require the following work:

- Dredging below HTL (685 CY and 8,855 sq ft)
- Fill below HTL (2,070 CY and 9,150 sq ft)

Table 1. Douglas Island Cruise Ship Terminal Project Offshore Components

Project Component	Area (sq ft)	Appendix B Sheets
North berth	25,000	5, 11 – 15
North berth small boat float	3,500	11
North trestle	17,200	16, 17
North transfer span	2,325	5, 22
South berth	25,000	6, 11 – 15
South berth small boat float	3,500	11
South trestle	12,200	6, 17
South transfer span	2,325	6, 22
Multi-use harbor	44,216	7, 18, 22
Concrete boat launch	16,580	7, 8, 18 – 20
Tour boat return dock	8,425	9, 16, 17, 22
Offshore utilities	8,855	3, 10, 21

5.2 Onshore Development

Onshore components of the project would be mostly constructed outside of wetlands, however some of the components would involve impacts to onshore freshwater wetlands. See Figure 5 and Appendix C.

The following components would be constructed in uplands on Douglas Island (Sections 5.2.1 through 5.2.2):

- Visitor attractions: welcome center, restaurants, theater, spa, shops, kayak center, replica village, treehouse building with elevated walkway, and shoreside villas
- Building pads G1 – G4 to contain: parking lots, tour bus staging areas, staff amenities (such as lodging, parking, and daycare), and utilities including an electrical substation and water/wastewater treatment plant

The following components would be constructed in both uplands and wetlands on Douglas Island (Sections 5.2.3 and 5.2.4):

- Visitor attractions: skybike ride
- Roads and trails

5.2.1 Visitor Attractions – Uplands

There would be several visitor attractions and associated buildings constructed near the shoreline on Douglas Island including a welcome center, two restaurants, a theater, a spa, shops, kayak rentals, a replica of an Alaska Native village, and shoreside villas. These would be situated above the HTL and would not involve wetlands impacts. See Figure 5 and Appendix C (sheets 2 and 9 – 13). These features would be connected by roads and pedestrian pathways that may include wetlands impacts (Section 5.2.4).

The welcome center would be a 24,000 sq ft, 50-ft tall building and would serve as a landing area for guests disembarking a ship; both the north and south berth trestles terminate at the welcome center. A mechanically-stabilized earth (MSE) retaining wall made up of retained granular fill would be placed above the HTL to support the welcome center structure and an overlook terrace.

Two restaurants ranging in size from 6,000 to 8,000 sq ft and about 40 ft tall would be constructed; one near the multi-use harbor and the other near the tour boat return dock. Both would be supported by a MSE retaining wall and feature an outdoor deck area. The theater and spa buildings would be approximately 8,000 sq ft and 40 ft tall. The spa would include a detached deck pad and be supported by a concrete retaining wall. Near the theater and spa buildings, there would be ten large (1,200 sq ft) and ten small (400 sq ft) retail-style buildings available for local vendors to rent. A 2,400 sq ft open-air stall for kayak gear storage and a path to the HTL to launch kayaks directly from the beach would be constructed.

The replica Alaska Native village would be constructed in the style of a traditional 1800's Tlingit village. The village would be made up of 11 buildings including a traditional long house, several clan houses, earth huts, a smoke house, a fish drying rack house, and buildings with traditional tools and canoe carving.

The Toptree building and associated 12-ft wide walkway would be supported by 24-inch-diameter piles and elevated approximately 20 ft off the ground. Where possible, the walkway would be tied into existing large trees to create a loop around the Toptree building.

Two types of shoreside villas would be constructed for visitor use: bungalows (240 sq ft) and treehouses (144 sq ft). Both would be placed on driven or drilled steel piles and would be elevated between 2 to 20 ft above existing ground level.

5.2.2 Building Pads – Uplands

There are four proposed building pads (G1 – G4) that would be constructed entirely in uplands. These would serve as the base for parking lots, bus staging, and staff buildings such as storage, housing, and daycare. Any buildings constructed on the pads would be placed a minimum of 25 ft from the edge of the pads. A typical pad section is shown in Appendix C (Sheet 4). See Table 2 and Appendix C (sheets 2, 4 and 44 – 47).

G1 pad would be located near the existing Douglas Highway, and be a central area for buses and shuttles to be staged and pick up and drop off guests. This pad would measure about

473,421 sq ft and a warehouse and potential future hydroponics building would be located on this pad. G2 pad would be located near the proposed boat launch and multi-use harbor. This pad would be approximately 462,394 sq ft and would include parking stalls to support small boat operations and a water/wastewater utilities building. G3 pad would be about 117,212 sq ft and would be constructed east of Peterson Creek. This pad would contain a parking lot and 150 units for staff housing. G4 pad would be about 50,675 sq ft, constructed to the west of the existing Douglas Highway, and contain a staff daycare center and parking lot.

5.2.3 Visitor Attractions – Wetlands

The skybike ride would feature a platform landing area, elevated 30 ft above existing ground level, that would function as a start and finish for the ride. The platform would be supported by 24-inch-diameter steel piles installed in uplands. The skybike loop would be about 2,300 ft long and made up of cables suspended 30 to 50 ft above ground between towers. Towers would be supported by two 12-inch-diameter steel piles that vary between 20 and 80 ft tall placed approximately 12 ft apart. They would be driven or drilled 10 to 30 ft into the ground, depending on location. Each tower would be supported by four guy wires anchored into the ground. Towers would be placed in both uplands and wetlands. At points along the ride, elevated viewing platforms would be installed on 12-inch-diameter steel piles. An elevated boardwalk would also be installed over wetlands in conjunction with the skybike structure and the elevated viewing platforms (Section 5.2.4). Up to 10 ft of clearing would occur on either side of the cables and platforms to make room for the skybike attraction. See Table 2 and Appendix C (sheets 2 and 8).

5.2.4 Roads and Trails

Several roads and trails would be constructed to connect the proposed facilities. Roads would be constructed within uplands as much as possible; however, Launch Road, Coach Road, Return Road, Welcome Way, and Backhouse Way would all involve wetlands impacts. Sections of roads constructed in wetlands would be approximately 32 ft wide with two 12-ft wide lanes and two 4-ft wide shoulders with 3:1 sideslopes. The roads would have a three percent slope from center. The structural section in wetlands would consist of a corduroy road made up of salvaged logs from clearing where available, overlain with six ft of type A selected material, six inches of D-1 leveling course, and two inches of hot mix asphalt (HMA). Culverts would be placed along all roadways to maintain wetlands connectivity and facilitate drainage. See Table 2 and Appendix C (sheets 2, 3 – 6, 14 – 25).

Launch Road would be an approximately 69,153-sq ft paved road with 64,110 sq ft in wetlands. It would connect the existing terminus of the Douglas Highway with the G2 pad, which would contain the boat launch parking lot. The road would involve construction of a 50-ft long, pile-supported single-span bridge over Peterson Creek. Rip-rap would be installed at either end of the bridge for scour protection, with some impacts below ordinary high water (OHW) at the west end of the bridge. See Appendix C (sheets 3 – 5 and 14 – 15).

Welcome Way would be an approximately 85,747-sq ft paved road with 9,087 sq ft of wetlands impacts. This road would connect Launch Road and Backhouse Way. See Appendix C (sheets 3, 4, and 16 – 18).

Return Road would be an approximately 71,447 sq ft paved road located entirely in wetlands. This road would connect the proposed Backhouse Way to the G1 pad and the bus parking lot. The road would involve construction of a 50-ft long, pile-supported single-span bridge over Peterson Creek. Rip-rap would be installed above and below OHW at either end of the bridge for scour protection. See Appendix C (sheets 3, 4, 6, 19, and 20).

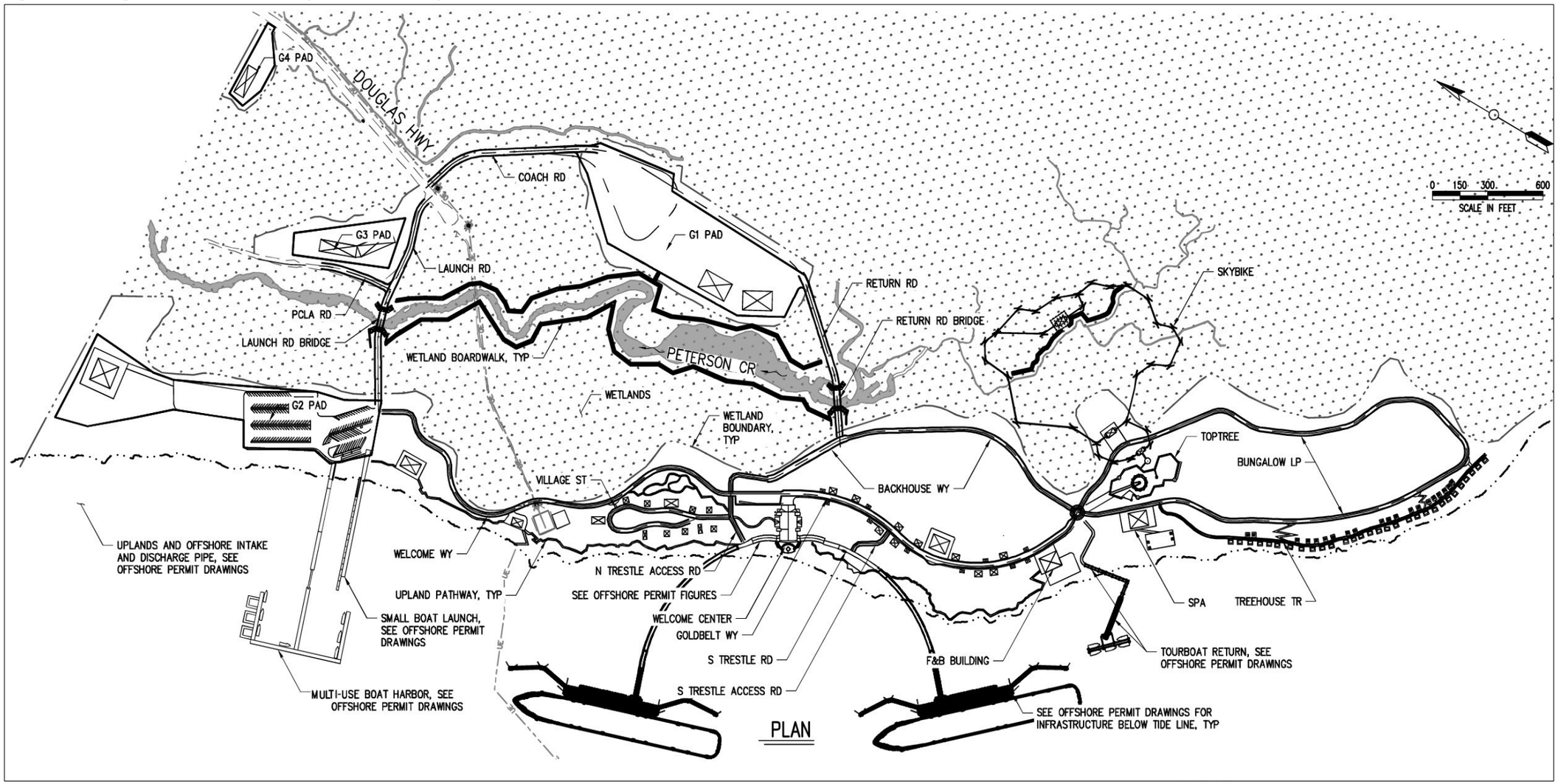
Coach Road would be an approximately 87,686-sq ft paved road located entirely in wetlands. It would connect the existing terminus of the Douglas Highway and the G1 pad, which contains the bus parking lot and staging areas. See Appendix C (sheets 3, 4, 21, and 22).

Backhouse Way would be an approximately 89,608-sq ft paved road with 10,214 sq ft of wetlands impacts. It would connect Welcome Way to Return Road and then travel south to meet Bungalow Loop and Goldbelt Way. See Appendix C (sheets 3, 4, and 23 – 25).

Main roads constructed in uplands (Goldbelt Way and Bungalow Loop) would be approximately 32 ft wide with two 12-ft wide lanes and two 4-ft wide shoulders with 2:1 sideslopes. The roads would have a three percent slope from center. Smaller roads constructed in uplands (Village Street, PCLA Road, North and South Trestle Roads) would be approximately 20 ft wide with two 10-ft wide lanes and 2:1 sideslopes and a three percent slope from center. See Appendix C (sheets 26 – 32, 37 – 43).

Due to variations in ground condition, the structural sections in uplands will vary. A geotextile separation would be placed either over existing ground or over a granular subbase, and 12 to 24 inches of type A selected material would be placed on top. This would be topped with six inches of D-1 leveling course and two inches of HMA. Culverts would be trenched in at intervals to maintain drainage and connectivity of wetlands. Culvert diameter and bury depth would vary based on location. Each culvert would be surrounded by a minimum six inches of bedding material. Road shoulders may contain utilities that will be installed per applicable codes and standards and will ensure that minimum cover and separation distances are met. This would include communications service, water service, electrical service, and sewer service. Typical sections for all roads are shown in Appendix C (sheets 3 and 4).

Figure 5. Douglas Island Cruise Ship Terminal Project Onshore Site Plan



There would be several paved or unpaved at-grade trails constructed in uplands, and sections of pile-supported boardwalk constructed in wetlands. Paved pathways would be 12 ft wide, with a two percent slope away from the center line and 2:1 sideslopes. Structural sections for trails in uplands are shown in Appendix C (Sheet 3). The wetlands boardwalks would be constructed on either side of Peterson Creek from Launch Road to Return Road, and in the middle of the skybike visitor attraction. Boardwalks would be 12 ft wide and supported by micro-pile or helical pile that are driven or drilled between 10 and 30 ft deep. Boardwalks would be made up of wooden slats placed ¼-inch to ½-inch apart. The boardwalks would be installed a minimum of 20 ft away from OHW of any stream. See Table 2 and Appendix C (Sheet 7).

Table 2. Douglas Island Cruise Ship Terminal Project Onshore Components

Project Component	Area, each (sq ft)	Appendix C Sheets
Welcome center	24,000	9
South restaurant	8,000	10
North restaurant	6,000	11
Spa	8,000	10
Theater	8,000	11
Retail shops, large (10)	1,200	11
Retail shops, small (10)	400	11
Kayak center	2,400	11
Village building, longhouse (1)	2,664	11
Village building, type 1 (1)	3,000	11
Village building, type 2 (7)	900	11
Village building, type 3 (2)	900	11
Shoreside villas, bungalows (30)	240	12
Shoreside villas, treehouses (20)	144	12
Electrical substation	5,625	17
Toptree building	on piles	13
Skybike ride	on piles	8
Pad #G1	473,421	4, 44
Warehouse	16,000	--
Hydroponics building	12,000	--
Pad #G2	462,394	4, 45
Water/wastewater building	40,000	--
Aviation center	4,000	--
Pad #G3	117,212	4, 46
Staff lodging, single (80)	250	--
Staff lodging, double (35)	325	--
Staff lodging, triple (25)	400	--
Staff lodging, suite (10)	500	--
Pad #G4	50,675	4, 47
Roads and Trails		
Wetlands boardwalks	on piles	7

Project Component	Area, each (sq ft)	Appendix C Sheets
Launch Road	69,153	3 – 5, 14, 15
Welcome Way	85,747	3, 4, 16 – 18
Return Road	71,447	3, 4, 6, 19, 20
Coach Road	87,686	3, 4, 21, 22
Backhouse Way	89,608	3, 4, 23 – 25
Goldbelt Way	95,378	3, 4, 26 – 28
Bungalow Loop	170,339	3, 4, 29 – 33
Treehouse Trail	52,566	3, 4, 34 – 36
Village Street	35,478	3, 4, 37, 38
North and South Trestle Access Road	14,700	3, 4, 39
North Trestle Road	12,021	3, 4, 40
South Trestle Road	17,310	3, 4, 41, 42
PCLA Road	16,066	3, 4, 43

5.3 Construction Methods

5.3.1 Construction Vessels

The following vessels are expected to support marine construction activities:

- Two (2) or three (3) 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 (1) 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 (2) 20-ft skiffs, with single 90 horsepower Honda outboard motors, would be transported to the project site on the crane barge.

5.3.2 Transportation of Materials and Equipment

The construction barge would travel to the Douglas Island project site at a speed of about eight 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 four 15,500-pound anchors. 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-ft increments and at speeds of less than two miles per hour. Equipment and materials may also be transported via road from Juneau along the Douglas Highway using the Douglas Island Bridge.

5.3.3 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 ft and the area of travel would be relatively small and close to shore.

5.3.4 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").

5.3.5 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 ft-pounds
- Drilled shaft drill: Holte 100,000 ft-pounds top drive with down-the-hole (DTH) hammer and bit
- In-water grading: *Swiftwater* or *Brightwater* crane barge

5.3.6 Fill Methods

Fill would be placed below the HTL to construct the concrete boat launch and to encase the submarine utilities (water intake and wastewater discharge) to anchor them to the seafloor. Fill would also be placed in freshwater wetlands to construct certain roads as part of the onshore development. Onshore filling operations would be supported by land-based construction equipment that would minimize tracking in wetlands and be stored and fueled outside of wetlands only. Material for fill would be obtained from on-site excavation whenever possible, or from existing local Juneau borrow sites as needed.

5.3.7 Grading/Dredging Methods

Approximately 21,160 sq ft of overburden below HTL to about -10 ft elevation (6.6 ft below MLLW) would be graded to create a level area to support the concrete boat launch. This would be accomplished with an excavator.

Dredging to construct the trenches for the intake and discharge utilities pipes would be completed from the shore side with excavator until below the intertidal area (-10 ft elevation) and then completed from the barge for the offshore area (-10 to -30 ft elevation).

5.3.8 Pile Installation/Removal Methods

A maximum of 165 (36-inch-diameter) template piles would be installed using a vibratory hammer and, as needed, a DTH drill to guide installation of the permanent piles. All template piles would be removed via vibratory hammer.

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

Table 3 and Table 4 identify timing associated with installation of new piles to support construction of the north berth, south berth, multi-use harbor, and tour boat return dock during each phase.

Table 3. Douglas Island Cruise Ship Terminal Project – Offshore Phase I Pile Table

	Temporary Pile Installation	Temporary Pile Removal	North Berth Trestle	North Berth Mooring Dolphins	North Berth Float Restraint Dolphins	South Berth Trestle
Diameter of Steel Pile (inches)	36	36	36	48	48	36
Number of Piles	80	80	66	16	12	24
Vibratory Pile Driving						
Total Quantity	80	80	66	16	12	24
Max # Piles Vibrated per Day	6	6	6	4	4	6
Vibratory Time per Pile (minutes)	10	10	10	10	10	10
Vibratory Time Total (hours)	14	14	11	3	2	4
Number of Vibratory Days (rounded)	14	14	11	4	3	4
Impact Pile Driving						
Total Quantity	--	--	66	16	12	24
Max # Piles Impacted per Day	--	--	4	4	4	4
# of Strikes per Pile	--	--	2,400	2,400	2,400	2,400
Impact Time per Pile (minutes)	--	--	60	60	60	60
Impact Time Total (hours)	--	--	66	16	12	24
Number of Impact Days (rounded)	--	--	17	4	3	6
DTH Pile Driving						
Total Quantity	80	--	66	16	12	24
Max # Piles Installed per Day	4	--	4	2	2	4
Strike Rate (strikes per second)	10	--	10	10	10	10
DTH Driving Time Per Pile (minutes)	150	--	150	240	240	150
DTH Driving Time Total (hours)	200	--	165	64	48	60
# of DTH Driving Days (rounded)	20	--	17	8	6	6

Table 4. Douglas Island Cruise Ship Terminal Project – Offshore Phase II Pile Table

	Temporary Pile Installation	Temporary Pile Removal	South Berth Trestle	South Berth Mooring Dolphins	South Berth Float Restraint Dolphins	Tour Return Dock Trestle	Tour Return Dock Float	Multi-Use Harbor Floats	Multi-Use Harbor Trestle	Boat Launch Moorage
Diameter of Steel Pile (inches)	36	36	36	48	48	36	36	24	36	24
Number of Piles	85	85	24	16	12	33	24	60	42	16
Vibratory Pile Driving										
Total Quantity	85	85	24	16	12	33	24	60	42	16
Max # Piles Vibrated per Day	6	6	6	4	4	4	4	4	4	4
Vibratory Time per Pile (minutes)	10	10	10	10	10	10	10	10	10	10
Vibratory Time Total (hours)	15	15	4	3	2	6	4	10	7	3
Number of Vibratory Days (rounded)	15	15	4	4	3	9	6	15	11	4
Impact Pile Driving										
Total Quantity	--	--	24	16	12	33	24	60	42	16
Max # Piles Impacted per Day	--	--	4	4	4	4	4	4	4	4
# of Strikes per Pile	--	--	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Impact Time per Pile (minutes)	--	--	60	60	60	60	60	60	60	60
Impact Time Total (hours)	--	--	24	16	12	33	24	60	42	16
Number of Impact Days (rounded)	--	--	6	4	3	9	6	15	11	4
DTH Pile Driving										
Total Quantity	85	--	24	16	12	33	24	60	42	16
Max # Piles Installed per Day	4	--	4	2	2	4	4	4	4	4
Strike Rate (strikes per second)	10	--	10	10	10	10	10	10	10	10
DTH Driving Time Per Pile (minutes)	150	--	150	240	240	150	150	120	150	120
DTH Driving Time Total (hours)	213	--	60	64	48	83	60	120	105	32
# of DTH Driving Days (rounded)	22	--	6	8	6	9	6	15	11	4

6 DATES AND DURATION

6.1 Offshore Development

Offshore construction to construct the cruise ship berths, multi-use harbor, and tour return dock would begin April 1, 2026, and continue to April 2028. Phase I of the offshore segment of the project would include installing the north berth dolphins and north berth trestle, and a portion of the south berth trestle (assume half of the piles for the south berth trestle would be installed in Phase I). Phase II would include installation of the remainder of the south berth trestle (assume half of the piles for the south berth trestle would be installed in Phase II), south berth dolphins, multi-use harbor, and tour boat return dock.

The total project timeline is not expected to last more than two years. 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.

6.2 Onshore Development

Construction of the onshore components of the project would begin in 2026 and would be phased over three to five years. Phase I would include installing emergency road access (which includes Launch Road, Coach Road, Welcome Way, Return Road, Coach Road, North and South Trestle Roads, and North and South Trestle Access Roads), the bus staging area (pad G1), boat launch parking area (pad G2), staff accommodations (pad G3), welcome center, and utilities. Phase II would construct the daycare center (pad G4), and visitor attractions such as restaurants, shoreside villas, retail buildings, Toptree building with walkway, wetlands boardwalks, and spa. Phase II would also construct connecting roadways. Phase III would construct the skybike attraction, theater, and the remainder of the proposed roads and trails.

7 POTENTIAL IMPACTS

7.1 WETLANDS AND WATERS OF THE UNITED STATES

7.1.1 Offshore Development

The marine side of the project would impact Stephens Passage, a navigable water under federal jurisdiction. In order to construct the new berths and associated facilities, the project would install piles and fill into the marine environment. Table 3 and Table 4 summarize the size and total number of piles that would be installed below HTL, and Table 5 summarizes the grading and fill quantities that would be required.

7.1.2 Onshore Development

ABR, Inc. performed a field survey for onshore wetlands and waters within the proposed project area in August 2024. They found 221.5 acres of wetlands, 15.3 acres of waters, and 164.7 acres of uplands in the study area. The wetlands and waters impacts listed below are based on this wetlands study (Appendix D). Total wetlands impacts from onshore project components are described in Table 6 and amount to approximately 5.6 acres of impacts to mostly Palustrine Seasonally Saturated Needle-leaved Evergreen Forest (PFO4B) wetlands.

The project would also have approximately 0.12 acres of impacts below OHW of Peterson Creek (R3UBH) to construct Launch Road and Return Road. See Table 6.

7.1.3 Temporary Construction Impacts

To construct components in wetlands, there would be equipment operation in wetlands within a 10-ft buffer around all project elements. All clearing outside of road prisms and for other project elements in wetlands (skybike, wetlands boardwalk) would be done above the ground surface and no grubbing would be required.

Table 5. Douglas Island Cruise Ship Terminal Project Offshore Waters Impacts

Project Component	Graded/dredged area below HTL (sq ft)	Graded/dredged volume below HTL (CY)	Fill area below HTL (sq ft)	Fill volume below HTL (CY)	Wetland type(s) impacted
Concrete boat launch	21,160	560	58,548	11,860	E2USN
Offshore utilities	8,855	685	9,150	2,070	E2USN
Total offshore waters impact	**30,015 (0.69 acre)**	**1,245**	**67,698 (1.55 acres)**	**13,930**	

Table 6. Douglas Island Cruise Ship Terminal Project Onshore Wetlands and Waters Impacts

Project Component	Wetlands impact area (sq ft)	Wetlands cut volume (CY)	Wetlands fill volume (CY)	Area below OHW (sq ft)	Fill below OHW (CY)	Cut below OHW (CY)	Wetland type(s) impacted
Skybike ride							
Piles for wetlands towers (48 x 12-inch-diameter)	38	120	120	0	0	0	PFO4B
Piles for wetlands platforms (36 x 24-inch-diameter)	113	126	126	0	0	0	PFO4B
Roads and Trails							
Launch Road	64,110	4,653	7,359	1,984	294	220	PFO4B, R3UBH
Coach Road	87,686	523	11,341	0	--	--	PFO4B
Return Road	71,447	2,825	11,537	3,080	456	342	PFO4B, R3UBH
Welcome Way	9,087	841	1,515	0	--	--	PFO4B, PSS4D
Backhouse Way	10,214	946	1,702	0	--	--	PFO4B
Piles for wetlands boardwalks (1,550 x 3-inch-diameter piles)	304	0	282	0	--	--	PFO4B
Total onshore wetlands impact	**242,999 (5.58 acres)**	**10,034**	**33,982**	**5,064 (0.12 acres)**	**750**	**562**	

7.2 FISH AND FISH HABITAT

7.2.1 Essential Fish Habitat

Northeastern Stephens Passage is designated as Essential Fish Habitat (EFH) for seventeen species of fish, including all five species of Pacific salmon. Table 7 details EFH species that may occur in the project area during at least one phase of their life cycle (National Marine Fisheries Service [NMFS] 2025a).

The NMFS Shorezone Mapper describes the proposed project site as a semi-protected/partially mobile/sediment or rock and sediment habitat class with mostly mixed sand and gravel beaches, some gravel beaches, and a small section of sheltered tide flats (NMFS 2025b).

Table 7. Fish Species with Designated Essential Fish Habitat in Stephens Passage

Species	Life stage(s) Found at Location
Alaska plaice (*Pleuronectes quadrituberculatus*)	egg (summer)
Arrowtooth flounder (*Atheresthes stomias*)	larvae (summer)
Chinook salmon (*Oncorhynchus tshawytscha*)	immature and mature adult
Chum salmon (*O. keta*)	immature and mature adult and juvenile
Coho salmon (*O. kisutch*)	mature adult and juvenile
Dover sole (*Solea solea*)	egg (summer)
Flathead sole (*Hippoglossoides elassodon*)	egg (summer)
Northern rock sole (*Lepidopsetta polyxystra*)	larvae (summer)
Pacific cod (*Gadus macrocephalus*)	larvae (summer)
Pacific ocean perch (*Sebastes alutus)*	larvae (summer)
Pink salmon (*O. gorbuscha*)	mature adult and juvenile
Rex sole (Glyptocephalus zachirus)	egg (summer), larvae (summer)
Sablefish (*Anoplopoma fimbria)*	larvae (summer)
Sockeye salmon (*O. nerka*)	immature and mature adult and juvenile
Southern rock sole (*Lepidopsetta bilineata*)	larvae (summer)
Walleye pollock (*Gadus chalcogrammus*)	egg (summer)
Yellowfin sole (*Limanda aspera)*	egg (summer)

7.2.2 Anadromous Streams

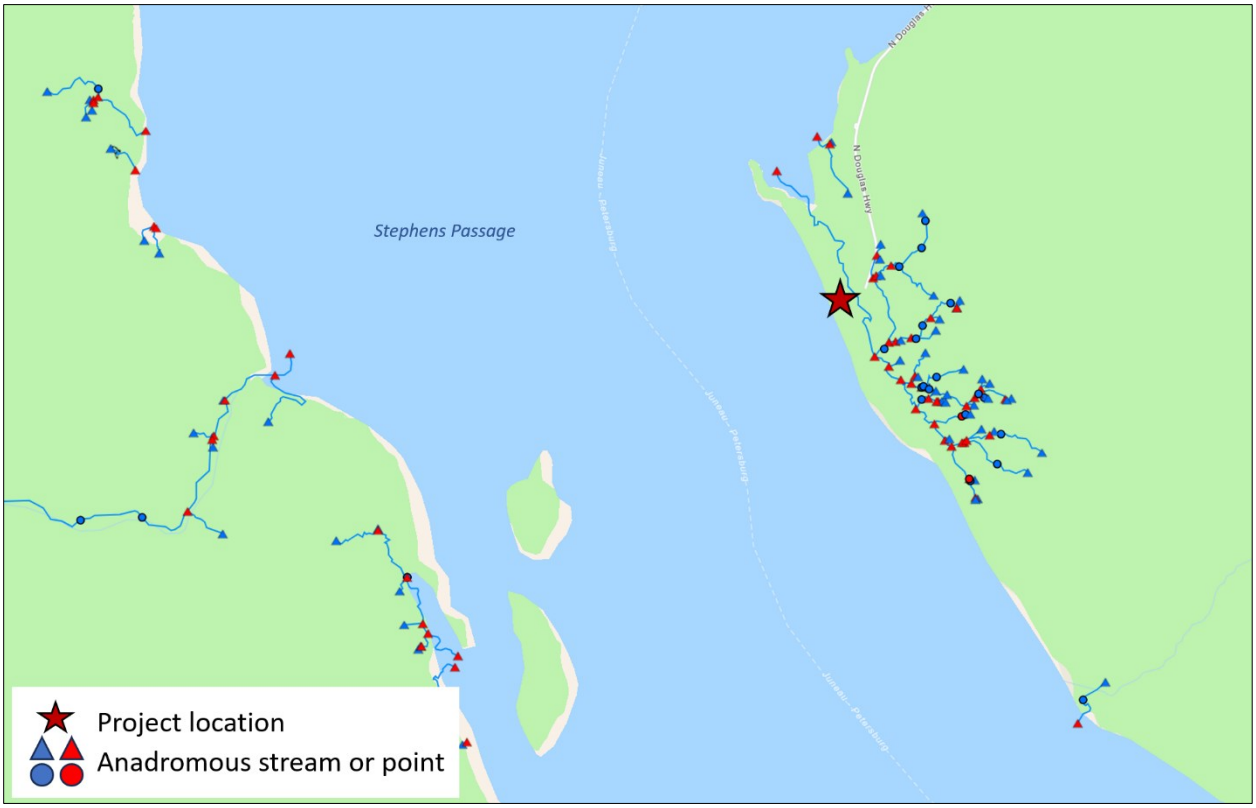
The habitat supported by the action area include populations of anadromous fish, such as all five species of Pacific salmon (NMFS 2025c). According to the Alaska Department of Fish and Game's (ADF&G) Anadromous Waters Catalog (AWC), there are sixteen documented anadromous fish streams in the vicinity of the project (ADF&G 2025). Each anadromous waterbody supports at least one species of Pacific salmon at varying life stages. Peterson Creek (AWC: 11-50-10750) supports three species of Pacific salmon and habitat for cutthroat trout and Dolly Varden. See Table 8 and Figure 6.

Table 8. Anadromous Streams Near the Project Area

Waterbody Name/AWC Code	Species present	Distance from Project
111-50-10750 (Peterson Creek)	chum (p), coho (s,r), pink (s), cutthroat trout (r), Dolly Varden (r)	0 km
111-50-10750-2027	coho (r), cutthroat trout (r), Dolly Varden (r)	0.10 km E
111-50-10750-2031	coho (r)	0.15 km E
111-50-10750-2033	coho (s,r), pink (s), cutthroat trout (p), Dolly Varden (p)	0.21 km E
111-50-10750-2035	coho (s,r), pink (s), cutthroat trout (r), Dolly Varden (r)	0.34 km SE
111-50-10750-2037	coho (r), cutthroat trout (r), Dolly Varden (r)	0.50 km SE
111-50-10750-2041	coho (r), pink (s),	0.71 km SE
111-50-10750-2042	coho (p), pink (p), cutthroat trout (r), Dolly Varden (r)	0.76 km SE
111-50-10746	coho (r)	1.03 km N
111-40-10600	chum (s), coho (p,r), pink (s), cutthroat trout (p), Dolly Varden (p)	4.63 km SE
111-40-10580	coho (p)	5.36 km SW
111-40-10580- 2011	coho (r)	5.36 km SW
111-40-10750-2007	coho (r)	5.42 km SW
111-40-10750-2003	coho (r)	5.44 km SW
111-40-1570	coho (r)	5.64 km SW
111-40-10530	coho (r)	5.84 km SW

p-present; s-spawning; r-rearing

Figure 6. Location of Anadromous Streams near the Project Area



7.3 NAVIGABILITY

The project would occur within Stephens Passage, a navigable water under federal jurisdiction. Coordination and consultation with the U.S. Coast Guard would occur to ensure that there would be no impacts to navigability near Douglas Island or within Stephens Passage from the project.

7.4 FLOODPLAINS

Most of the proposed project is within floodplains zone X, an area of minimal flood hazard. Special flood hazard areas subject to inundation by the one percent annual chance flood (100-year flood) that would be impacted by the proposed project are zone A near Peterson Creek and zone V, which is a coastal zone with a velocity hazard. As fill would be placed in floodplains to construct the Launch and Return Road bridges, a floodplain permit from the City and Borough of Juneau (CBJ) would be required prior to work in floodplains. A hydraulics and hydrology study is ongoing in the project area and would be completed prior to construction along with a no-rise certification from a hydrologist.

7.5 PROTECTED SPECIES

The NMFS Species Distribution Mapper and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation website were used to identify marine mammals, protected birds, invertebrate species, and their critical habitats that may occur in the project vicinity. There are two marine mammal species, one avian species, and one invertebrate (candidate) species protected by the Endangered Species Act (ESA) that may occur in the action

area: threatened Mexico distinct population segment (DPS) humpback whale, endangered Western stock Steller sea lion, endangered short-tailed albatross, and proposed threatened sunflower sea star. Other species protected by the Marine Mammal Protection Act (MMPA) and the Bald and Golden Eagle Protection Act (BGEPA) whose ranges overlap with the project area listed in Table 9 (NMFS 2025c and USFWS 2025).

Table 9. Protected Species with Ranges that Overlap with the Project Area

Species	Status Listing	Jurisdiction
Gray Whale (*Eschrichtius robustus)*	MMPA	NMFS
Minke Whale *(Balaenoptera acutorostrata)*	MMPA	NMFS
Humpback Whale (*Megaptera novaeangliae)*	ESA Threatened (Mexico DPS) MMPA (Hawaii DPS)	NMFS
Pacific White-Sided Dolphin (*Lagenorhynchus obliquidens)*	MMPA	NMFS
Killer Whale (*Orcinus orca)*	MMPA	NMFS
Harbor Porpoise (*Phocoena phocoena)*	MMPA	NMFS
Dall's Porpoise (*Phocoenoides dalli)*	MMPA	NMFS
Harbor Seal *(Phoca vitulina)*	MMPA	NMFS
Northern Elephant Seal (*Mirounga angustirostris*)	MMPA	NMFS
Steller Sea Lion (*Eumetopias jubatus)*	ESA Endangered (Western Stock) MMPA (Eastern Stock)	NMFS
Northern Sea Otter (*Enhydra lutris kenyoni*)	MMPA (Southeast Alaska Stock)	USFWS
Sunflower Sea Star (*Pycnopodia helianthoides)*	ESA Threatened (proposed)	NMFS
Short-tailed Albatross (*Phoebastria albatrus)*	ESA Endangered	USFWS
Bald Eagle (*Haliaeetus leucocephalus*)	BGEPA	USFWS

Source: NMFS 2025c; USFWS 2025

To more accurately determine protected species that may occur in Stephens Passage, the following information was gathered and reviewed: correspondence with tour boat operators based in Juneau; correspondence with NMFS' Auke Bay Laboratories headquarters at Lena Point; and marine mammal consultations for previous projects that have taken place in the area. Additionally, an eagle nest survey was performed in the project area in March 2025.

Based on these sources, the following species may occur in the project vicinity:

- Humpback whales and killer whales are present year-round in Stephens Passage with increased sightings during summer months (Allen Marine Tours 2024). High numbers of humpback whales are observed feeding May to September (Doroff 2024).
- Steller sea lions are seen on a frequent basis moving through the area in small groups of one to three animals (Allen Marine Tours 2024).
- Harbor seals are occasionally seen in the project area (Allen Marine Tours 2024).
- Northern elephant seals, while rare, are being sighted around Southeast Alaska with more frequency. An elephant seal was spotted in Juneau during the summer of 2024 on the north end of Shelter Island, 23 km north of the project site (Bletsch 2024). During a 2022 Alaska Department of Transportation and Public Facilities (DOT&PF) project in Ketchikan (460 km south of the project site) there were reported sightings of northern elephant seal on multiple days (DOT&PF 2023).
- Northern sea otters have been sighted more frequently over the past few years between 6 and 30 km from the project site (Allen Marine Tours 2024).
- Two old eagle nests with no signs of recent use were located in the project area (Figure 7). The nests are likely abandoned because the area is often buffeted by wind and not a great location for nesting birds (Schick 2025).

Information from these sources indicate that although possible, the following are not expected to occur in the action area during construction: gray whales, minke whales, Pacific white-sided dolphins, and short-tailed albatross. To ensure compliance with the ESA, MMPA, and BGEPA, consultation would be initiated with NMFS and USFWS. Mitigation measures that arise from consultation will be implemented during construction.

Figure 7. Results from Eagle Nest Survey in the Project Area

7.6 CONTAMINATION AND TIER 1 EVALUATION

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 closest site (Hazard ID 4063) is on the north end of Douglas Island about 4.2 miles northeast of the project. The site's status is listed as cleanup complete with institutional controls (ADEC 2024a). In 2022, Stephens Passage was listed as a Category 3 waterbody, meaning that water quality data was not sufficient enough to determine appropriate decision recommendations (ADEC 2024b).

7.6.1 Tier 1 Evaluation

Dredging/grading below HTL is proposed for both the concrete boat launch and installation of offshore utilities. The conceptual dredging plan for the project is described above in Sections 5.1.6 and 5.3.7, and project drawings showing these components and bathymetry are shown in Appendix B, sheets 3, 10, 19, and 21. The volumes and areas to be dredged and graded are quantified in Table 5. The material would not be removed but rather would be graded in place or used to backfill the utilities trenches with an excavator. More information about the composition of the material to be dredged will be obtained from pre-construction geotechnical surveys.

The site for the proposed project is on the western shore of Douglas Island, where there has been minimal development. Historically, there has not been any major logging, mining, or other industrial activity on the west side of the island. Land ownership on the island is a mix of public and private. Approximately 4,995 acres are publicly owned, while 2,999 acres are privately owned. The CBJ, Goldbelt, and the Bureau of Land Management are major land owners on the west side of the island. The Douglas Highway terminates within the project area about 0.3 mile east of the shoreline, and CBJ has an access road to a small materials site more than 0.5 mile from the shoreline and the proposed dredging area. To the northwest, there are a few houses and cabins near the mouth of Peterson Creek, which empties into Stephens Passage on the north shore of Douglas Island. There are recreational hiking trails in the area and a small electrical substation. There is an existing submarine fiber-optic cable route that leads from the west side of Douglas to other points in Southeast Alaska. There are no existing outfalls, storm drainages, or special aquatic sites near the proposed project site. The closest reported spill event to the project was about one mile northwest near Outer Point, where a spill of 0.01 gallons of diesel was reported in 2014 (ADEC 2025). The Alaska Marine Highway System ferry route passes by the project area when traveling from Juneau to Petersburg, Wrangell, and Ketchikan (DOT&PF 2025). According to the U.S. Geological Survey Nonindigenous Aquatic Species website, marine invasive species such as green crabs (*Carcinus Maenas*) and D. vex (*Didemnum vexillum*), an invasive marine sea squirt, have not been found on Douglas Island (USGS 2025). Within the project area, small infestations of non-native plant species such as common plantain (*Plantago major*), tall buttercup (*Ranunculus acris*), common chickweed (*Stellaria media*), reed canarygrass (*Phalaris arundinacea*), and alsike clover (*Trifolium hybridum*) have been reported (University of Alaska Anchorage 2025).

As the western shore of Douglas Island is mostly undeveloped and sources of contamination have not been identified in the area, it is unlikely that onshore or offshore contamination would

be encountered during construction activities, or that further testing would be needed prior to dredging activities.

7.7 CULTURAL AND HISTORIC RESOURCES

An archaeological survey was conducted within the project area in September 2024 (Cultural Resource Consultants 2024). No significant cultural resources were found in the area and therefore the proposed project is unlikely to affect any historic or cultural resources. However, a few culturally-modified trees (CMTs) were identified in the project area. One of the identified CMTs is within the project footprint and will be removed. Prior to construction, other CMTs in the project area will be identified and flagged. The construction contractor will be instructed to leave CMTs in place. Once designated to consult with the State Historic Preservation Officer and Tribes, Turnagain would meet Section 106 National Historic Preservation Act requirements.

7.8 LAND USE

The project is proposed on land owned by Goldbelt, Inc., zoned by CBJ for rural reserve use, and a conditional land use permit would be required for the proposed development.

7.9 TRAFFIC

The Douglas Island Bridge is the only existing road connecting Douglas Island to the rest of Juneau, and traffic getting to and from the island may be impacted by visitors at the proposed site leaving by bus to travel into Juneau. A forthcoming 2025 traffic study will examine potential impacts from the proposed action on Douglas Island traffic.

8 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

8.1 Water of the United States Mitigation Statements

8.1.1 Avoidance of Impacts to Waters of the United States

To meet the project purpose and need, construction must occur within waters of the United States. The project would be located within Stephens Passage and adjacent land that includes wetlands on Douglas Island. Onshore project components have been carefully designed to avoid wetlands as much as possible, and several project components have been considered and dismissed in order to reduce wetlands impacts from the project (see Section 4.2). Out of 44 acres of proposed onshore development, only 5.7 acres, or 13 percent, of the proposed development would occur within onshore wetlands.

8.1.2 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. Bridges over Peterson Creek have been designed to be single-span to minimize the amount of material placed below OHW of the creek. During construction, erosion and sediment will be controlled by using best management practices to reduce or limit stormwater runoff and other non-stormwater discharges into wetlands and waters.

8.1.3 Mitigation for Unavoidable Impacts to Waters of the United States

To compensate for impacts to 7.25 acres of wetlands and marine waters impacts (5.58 acres of palustrine, 0.12 acres of riverine, 1.55 acres of estuarine impacts), we propose purchase of credits from a wetlands mitigation bank or in-lieu fee program. Trillium Mitigation Bank, located on Prince of Wales Island in Southeast Alaska, appears to have universal wetland credits available for private commercial projects that would fit all three of these types, and the proposed project is within the bank's service area. In addition to Trillium, there are other banks listed in the Southeast Alaska service area that may also have available credits.

Additionally, the following minimization and mitigation measures are proposed:

- Construction limits would be staked and clearly demarcated.
- Natural vegetation would be retained wherever possible.
- Permanent erosion control measures (riprap aprons, embankment stabilization) would be installed.
- No stockpiles would be placed within wetland areas.
- During construction, wetland and stream water quality would be protected through best management practices, including:
    - Temporary and permanent stabilization measures would be initiated as soon as practicable by the contractor, but within at least 14 days on all portions of the site where construction activities have temporarily or permanently ceased. Stabilization measures include slope tracking, seeding, and mulch.
    - Sediment prevention measures (i.e. silt fence or other means) would be placed and maintained. These devices would remain in place until fill and other exposed earthwork attributable to the project are stabilized and revegetated.
    - Stabilized construction exits would be provided for vehicles leaving the work area.
    - Velocity dissipaters would be provided at all dewatering discharge points.
    - The work area would be isolated from flowing water; vehicle or equipment operation would be minimized in flowing water.
- 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.
- The project uses a design that incorporates the smallest-diameter piles practicable while still minimizing the overall number of piles.
- All proposed buildings will maintain a 50-ft setback from any anadromous streams.

- The project uses a design that incorporates the smallest-diameter piles practicable while still minimizing the overall number of piles.

8.2 Protected Species and EFH Mitigation Measures

A protected species monitoring and mitigation plan will be drafted for this project and will be modified as needed through the ESA and MMPA consultation processes with NMFS and USFWS. Consultation with NMFS will also be undertaken to minimize impacts to EFH from project activities. Work within anadromous streams would be timed as much as possible to avoid important life cycle stages for salmon which will be determined through the consultation and permitting process with NMFS and ADF&G.

8.3 Cultural and Historic Resources Mitigation Measures

Prior to construction, identified CMTs will be flagged and will be avoided. Turnagain will place signs next to selected trees that are close to the proposed project to inform visitors of their historical significance.

9 BLOCK 25. ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC. WHOSE PROPERTY ADJOINS THE WATERBODY

Table 10. Douglas Island Cruise Ship Terminal Project Addresses of Adjoining Property Owners

Name	Address	City, State, Zip
City and Borough of Juneau Lands and Resources	155 S Seward St	Juneau, AK 99801
Kevin McCray; Joshua G Wilson	14010 N Douglas Hwy	Juneau, AK 99801
Sierra Lammers	224 Gold St	Juneau, AK 99801
Julie Counceller	3152 Pioneer Ave	Juneau, AK 99801
Maureen Ocampos; Armenio Ocampos	83 Greenleaf St	Quincy, MA 02169
Daniel King; Melanie King	P.O. Box 240422	Douglas, AK 99824
Tristan A Walker-Andrews	1751 Evergreen Ave	Juneau, AK 99801
Stephen N Warta	713 St. Anns Ave	Douglas, AK 99824
Jonathan J Pearce; Emily J Pearce	P.O. Box 34964	Juneau, AK 99803
Connie Keithahn; Robert Michael Rawson	14040 N Douglas Hwy	Juneau, AK 99801
Marit K Carlson-Van Dort; Anya S Nelson	10518 Fox Farm Trail	Juneau, AK 99801

10 BLOCK 26. LIST OF OTHER CERTIFICATES OR APPROVALS/DENIALS FROM OTHER FEDERAL, STATE, OR LOCAL AGENCIES FOR WORK DESCRIBED IN THIS APPLICATION

Table 11. Douglas Island Cruise Ship Terminal Project List of Other Certificates or Approvals/Denials (Block 26)

Agency	Type Approval	Identification Number	Date Applied	Date Approved	Date Denied
Alaska Department of Environmental Conservation	Clean Water Act 401		Not yet applied		
Alaska Department of Environmental Conservation	Wastewater Discharge Permit		Not yet applied		
Alaska Department of Environmental Conservation	Construction General Permit		Not yet applied		
Alaska Department of Fish and Game	Fish Habitat Permit		Not yet applied		
Alaska Department of Natural Resources	Tidelands Lease	LAS 35741	March 11, 2025		
Alaska Department of Natural Resources	Temporary Water Use Authorization		Not yet applied		
City and Borough of Juneau	Conditional Land Use Permit		Not yet applied		
City and Borough of Juneau	Floodplains Development Permit		Not yet applied		
National Marine Fisheries Service	Incidental Harassment Authorization and Biological Opinion		Not yet applied		
National Marine Fisheries Service	Essential Fish Habitat Consultation		Not yet applied		
U.S. Fish and Wildlife Service	Incidental Harassment Authorization		Not yet applied		

Agency	Type Approval	Identification Number	Date Applied	Date Approved	Date Denied
U.S. Fish and Wildlife Service	Bald Eagle Nest Disturbance		Not yet applied		

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