



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

ANCHORAGE
Regulatory Division (1145)
CEPOA-RD
Post Office Box 6898
JBER, Alaska 99506-0898

PUBLIC NOTICE DATE:	June 12, 2020
EXPIRATION DATE:	July 13, 2020
REFERENCE NUMBER:	POA-1922-00022-M27
WATERWAY:	Tongass Narrows

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States (U.S.) as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice (PN) should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the PN reference number listed above.

All comments should reach this office no later than the expiration date of this PN to become part of the record and be considered in the decision. Please contact Bryan Herczeg at (907) 753-2772, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at: bryan.a.herczeg@usace.army.mil if further information is desired concerning this notice.

APPLICANT: City of Ketchikan Ports and Harbors

AGENT: Anna Kopitov, PND Engineers, Inc., Seattle, WA

LOCATION: The project site is located within Section 30, T. 75 S., R. 91 E., Copper River Meridian; USGS Quad Map Ketchikan B-5; Latitude 55.342730° N., Longitude -131.651667° W.; in Ketchikan, Alaska.

PURPOSE: The applicant's stated purpose is to improve the safety and mooring capacity of Berth III for cruise ships and their passengers and provide safe transit and harbor for a Norwegian Breakaway Plus (Bliss) type class cruise ship vessel at Berth III.

PROPOSED WORK: The proposed project would install three new mooring dolphins (MD#2 north of Berth III, MD#3 and MD#4 to the south of Berth III), installation of a new catwalk between existing MD#1 and the proposed MD#2 and installation of dolphin caps on the new mooring dolphins. Construction activities generally include mobilization, erecting temporary weather structures and templates, pile driving and setting rock sockets and anchors using a down-the-hole (DTH) hammer (hereafter alternatively referred to as DTH hammered and DTH hammering) , pile splicing, pile-to-dolphin cap welding and setting the catwalk.

Work consists of installing, and subsequently removing, eight 30-inch temporary template piles, installing six 48-inch permanent dolphin piles for MD#2, three 36-inch permanent dolphin piles for MD#3, and three 36-inch permanent dolphin piles for MD#4 (See Table 1 below). Vibratory pile driving/hammering equipment will be specified as the primary installation method for the project and impact hammers will only be used to seat (secure) the pile tips into fractured bedrock ahead of the DTH hammering operations or if material is encountered that is too dense to penetrate with a vibratory hammer. DTH hammering for rock sockets and tensioned rock anchors will occur after the piles are driven. .

All of the piles, including the temporary template piles, will require DTH hammered rock sockets due to the limited overburden onsite and tensioned rock anchors to stabilize the piles. Materials to be discharged from each pile during DTH hammering includes overburden above bedrock consisting of sands with silt, gravel, and organic material and bedrock consisting of slate/argillite. The estimated total discharges into marine waters include 39 cubic yards of overburden material and 90 cubic yard of bedrock material.

DTH hammered holes and casings will be filled with grout after component installation. The total of 1,270 cubic feet of grout will be placed inside pilings, casings, and rock sockets. An off-site prefabricated steel dolphin cap will be set on top of the piles and welded to the cap. One new off-site prefabricated grated catwalk, approximately 60-feet in length and 275 square feet, will be set to provide access to the new MD#2. No in-water work is associated with the dolphin caps or the catwalk components.

Construction equipment is expected to consist of up to two crane barges, one material barge, and three work boats (each under 25 feet). Materials would be transported to the site using a tug/barge combination. Pile driving will be conducted from an anchored barge, utilizing vibratory and impact hammers to install and remove piles and DTH hammer to install rock sockets and tension anchors. The barges will remain anchored on-site during construction, making only minor adjustments in position as required to perform the work.

Table 1. Project Components

Location	Item	Size and Type	Quantity
MD#2	Dolphin and Fender Piles	48-inch (1.22 m) steel pipe piles	6
	Temporary Template Piles	30-inch (0.76 m) steel pipe piles	8
	Dolphin Caps		1
	Catwalk	60-feet (18.3-m) in length 275 square feet	1
MD#3	Dolphin Piles	36-inch (0.9 m) steel pipe piles	3
	Dolphin Caps		1
MD#4	Dolphin Piles	36-inch (0.9 m) steel pipe piles	3
	Dolphin Caps		1

All work would be performed in accordance with the enclosed plan (sheets 1-13), dated May 2020.

ADDITIONAL INFORMATION: The applicant has applied to the National Marine Fisheries Service (NMFS) for an Incidental Harassment Authorization (IHA) pursuant to the Marine Mammal Protection Act (MMPA). The following are available upon request: Additional details on the construction methods and sequence, a draft Biological Assessment, and a Marine Mammal Monitoring Mitigation Plan.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the U.S. from activities involving discharges of dredged or fill material.

a. Avoidance: Avoidance measures will be finalized via Endangered Species Act (ESA) Section 7 consultation and NMFS IHA process. Proposed measures are described in the Section 7 Biological Assessment (BA) and IHA application, including a marine mammal monitoring and mitigation plan.

b. Minimization: Minimization measures will be finalized via Endangered Species Act (ESA) Section 7 consultation and NMFS IHA process. Proposed measures are described in the Section 7 Biological Assessment (BA) and IHA application, including a marine mammal monitoring and mitigation plan.

c. Compensatory Mitigation: Given the proposed minimization measures and the minimal project footprint for each of the three mooring dolphins, compensatory mitigation should not be required for the project.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until

a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are cultural resources within the vicinity of the permit area. The permit area has been determined to be the project work limits within the waters of Tongass Narrows and the existing associated piers as identified on Sheet 1 of the project drawings. Consultation of the AHRS constitutes the extent of cultural resource investigations by the Corps of Engineers (Corps) at this time, and we are otherwise unaware of the presence of such resources. The Corps has made a No Historic Properties Affected (No Effect) determination for the proposed project. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work. The Corps is requesting the SHPO's concurrence with this determination.

ENDANGERED SPECIES: The project area is within the known or historic range of the humpback whale (*Megaptera novaeangliae*), Mexico (MX) Distinct Population Segment (DPS), a federal threatened species, and the fin whale (*Balaenoptera physalus*), a federal endangered species.

We have determined the described activity may affect the threatened humpback whale (*Megaptera novaeangliae*), MX DPS. We will initiate the appropriate consultation procedures under section 7 of the Endangered Species Act with the NMFS. Any comments they may have concerning endangered or threatened wildlife or their critical habitat will be considered in our final assessment of the described work.

NMFS issued a Proposed Rule to Designate Critical Habitat for the Central America, MX, and Western North Pacific DPS of Humpback whales (*Megaptera novaeangliae*) on October 9, 2019 (84 FR 54354). Proposed critical habitat Unit 10 Southeastern Alaska includes waters off the Ketchikan Gateway. However, the proposed critical habitat in the action area including Tongass Narrows, has been excluded due to national security concerns. We have determined the described activity would have no effect on the proposed critical habitat for Humpback whale (*Megaptera novaeangliae*) MX DPS under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with NMFS is required.

Although the Tongass Narrows portion of the Action Area is within the species range of the Fin whale (*Balaenoptera physalus*), it is not known to occur in these waters. We have determined the described activity would have no effect on the Fin whale (*Balaenoptera physalus*) under the Endangered Species Act of 1973 (87 Stat. 844). The no effect determination is based on the rarity and unlikely presence of these whales in Tongass

Narrows. Therefore, no consultation with NMFS is required. However, any comments they may have concerning endangered or threatened wildlife or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within the known range of: Chinook salmon (*Oncorhynchus tshawytscha*), Chum salmon (*Oncorhynchus keta*), Coho salmon (*Oncorhynchus kisutch*), Pink salmon (*Oncorhynchus gorbuscha*), Sockeye salmon (*Oncorhynchus nerka*) and potentially other Gulf of Alaska Groundfish species.

We have determined the described activity may adversely affect EFH in the project area for the above listed species EFH consultation with the NMFS will be initiated. Any comments or recommendations they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This PN serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands,

cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States – Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER

Wastewater Discharge Authorization Program (WDAP) / 401 Certification

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WDAP/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501-2617
PHONE: (907) 269-6285 | EMAIL: dec-401cert@alaska.gov

NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

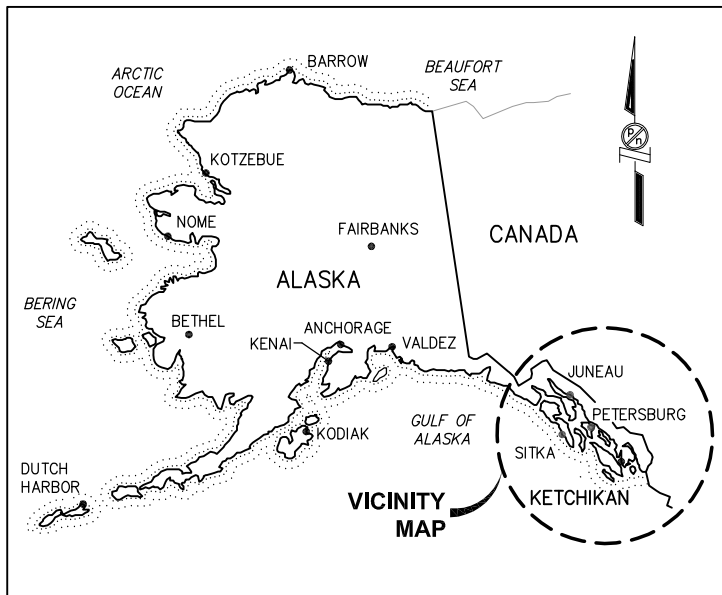
Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice (PN) Reference Number **POA-1922-00022-M27, Tongass Narrows**, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

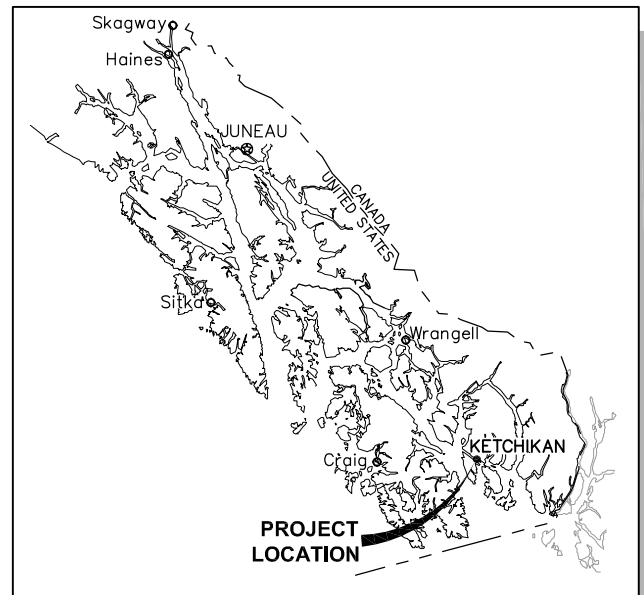
Any person desiring to comment on the project with respect to Water Quality Certification, may submit written comments to the address above or via email to dec-401cert@alaska.gov by the expiration date of the Corps of Engineer's Public Notice. All comments should include the PN reference number listed above. Mailed comments must be postmarked on or before the expiration date of the public notice.

Disability Reasonable Accommodation Notice

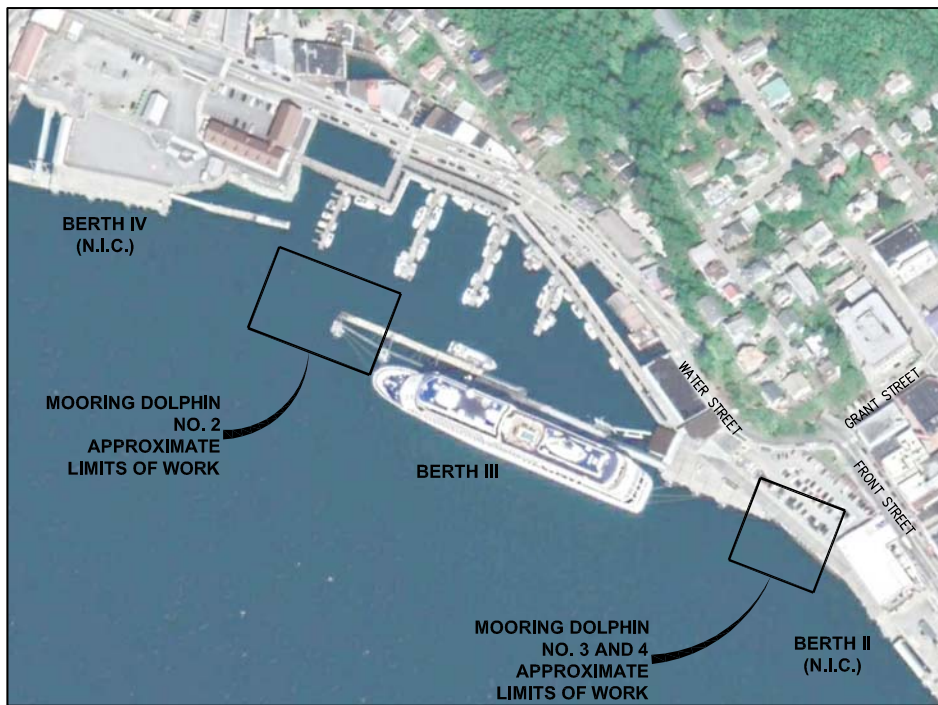
The State of Alaska, Department of Environmental Conservation complies with Title II of the Americans with Disabilities Act of 1990. If you are a person with a disability who may need special accommodation in order to participate in this public process, please contact Kate Orozco at 907-465-6171 or TDD Relay Service 1-800-770-8973/TTY or dial 711 within 5 days of the expiration date of this public notice to ensure that any necessary accommodations can be provided.



ALASKA KEY MAP



VICINITY MAP



LOCATION MAP

(EXISTING CONDITIONS)

TIDAL DATA	ELEV. (FT)
HIGHEST OBSERVED WATER LEVEL (12/2/1967)	+21.31
MEAN HIGHER HIGH WATER	+15.45
MEAN HIGH WATER	+14.55
MEAN SEA LEVEL	+8.07
MEAN TIDE LEVEL	+8.06
MEAN LOW WATER	+1.57
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER LEVEL (12/14/2008)	-5.27

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
PROJECT LOCATION**

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

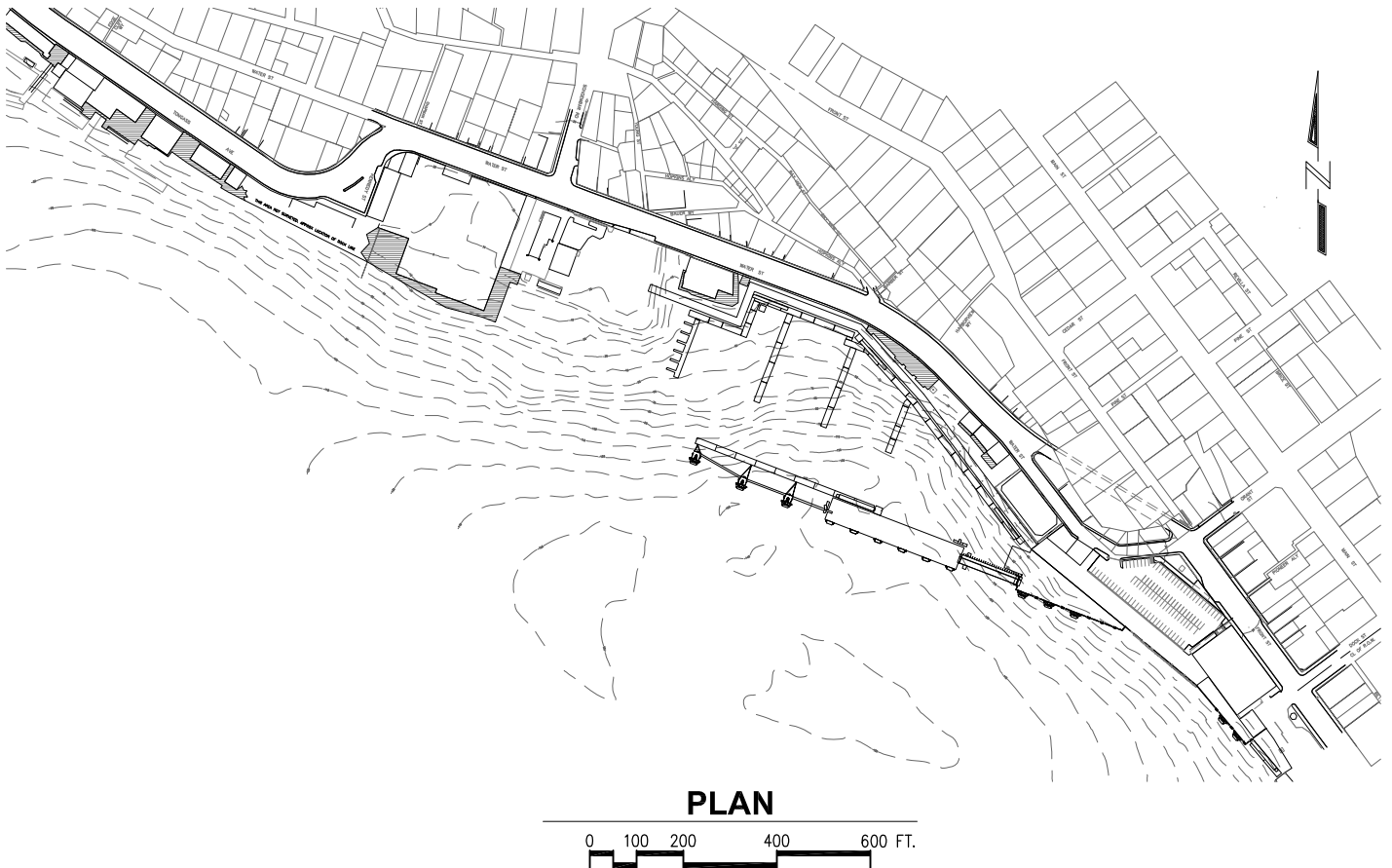
- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 1 of 13 DATE: MAY 2020

ADJACENT PROPERTY OWNERS

MAP #	OWNER	MAILING ADDRESS	PROPERTY ADDRESS
1	Island Wings Air Services LLC	PO Box 7432 Ketchikan AK 99901	1243/1245/1247 Tongass Ave.
2	Wyman-Webb Kerry L./Wyman, H. Ruth	1732 W 5th Street, Port Angeles, WA 98363	1225 Tongass Ave.
3	Talbots Inc	1101 Tongass, Ketchikan, AK 99901	Talbots, 1101 Tongass Ave.
4	Dima, Garnet E. & Charlene M.	1059 Water Stree, Ketchikan, AK 99901	1059 Water Street
5	Locke, Charity L./Brown, Wayne E. & Hope E.	1039 Water Street, Ketchikan, AK 99901	Water Front Storage, 1039 Water Street
6	Ketchikan Dock Company LLC	334 Front St Ketchikan AK 99901	05 Schoenbar CT
7	Survey Point Holdings Inc.	PO Box 8080 Ketchikan AK 99901	75/90 Schoenbar CT
8	K & B Real Estates LLC	PO Box 6883 Ketchikan AK 99901	
9	City of Ketchikan	334 Front Street, Ketchikan, AK 99901	Various
10	Jones-Weisel LLC	PO Box 5061 Ketchikan AK 99901	
11	Hansen Bay Company (Sockeye Sam's)	PO Box 5633 Ketchikan AK 99901	
12	Tongass Trading Company, Inc.	201 Dock St Ketchikan AK 99901	



PLAN

0 100 200 400 600 FT.

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 ADJACENT PROPERTY OWNERS

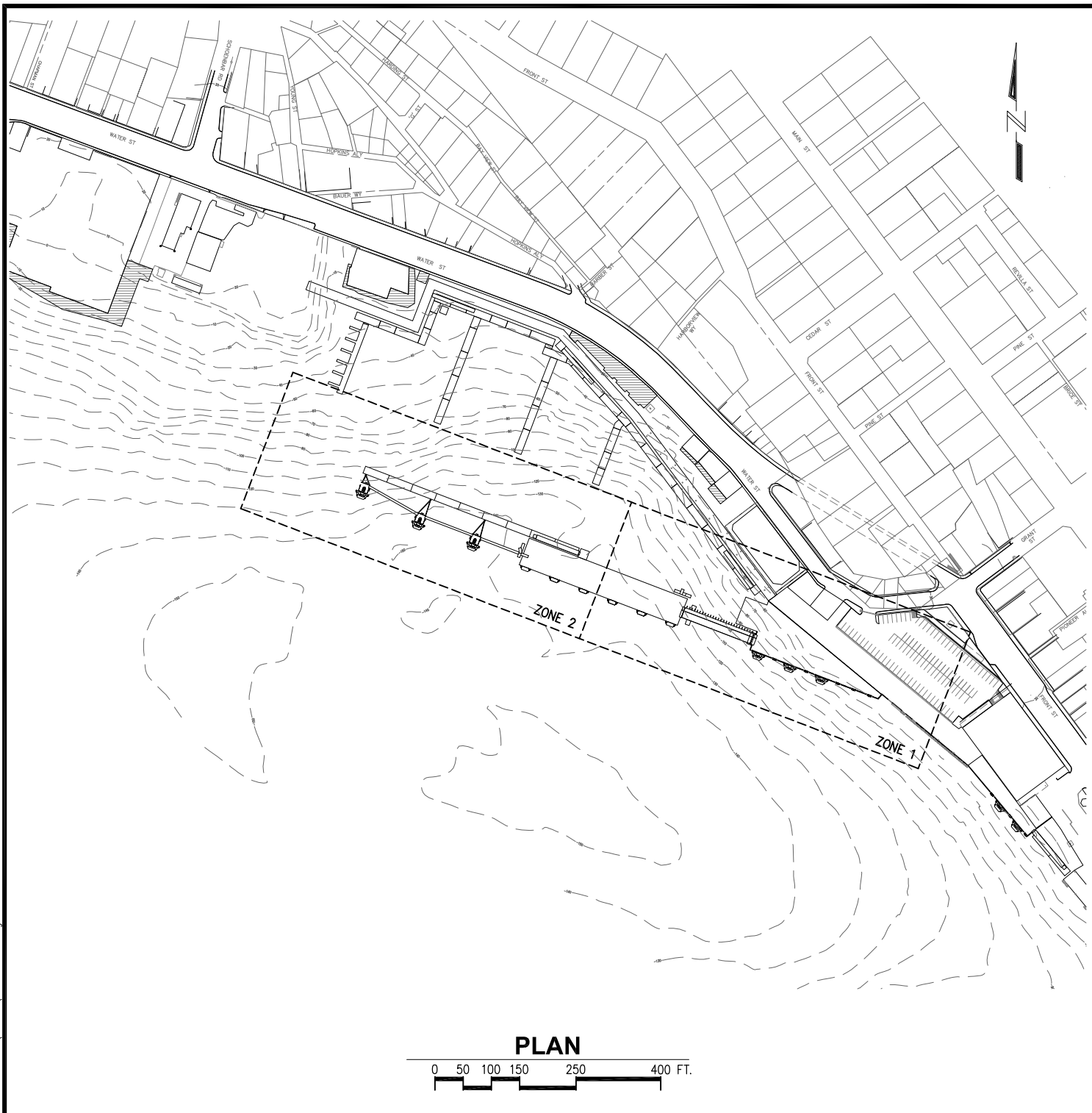
APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 2 of 13 DATE: MAY 2020



PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

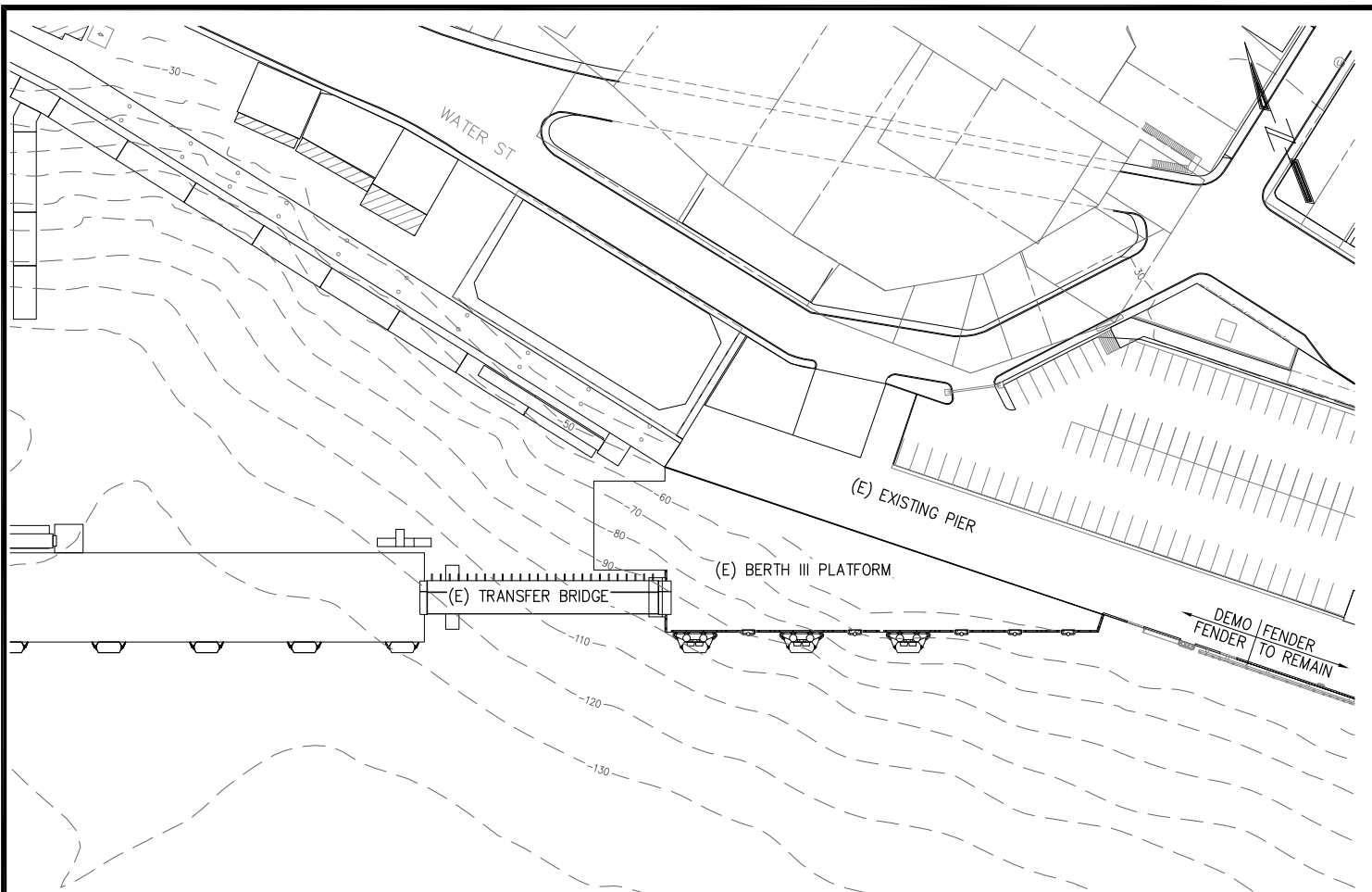
**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
EXISTING CONDITIONS
SITE PLAN**

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

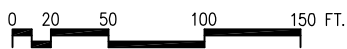
- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 3 of 13 DATE: MAY 2020



PLAN



PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

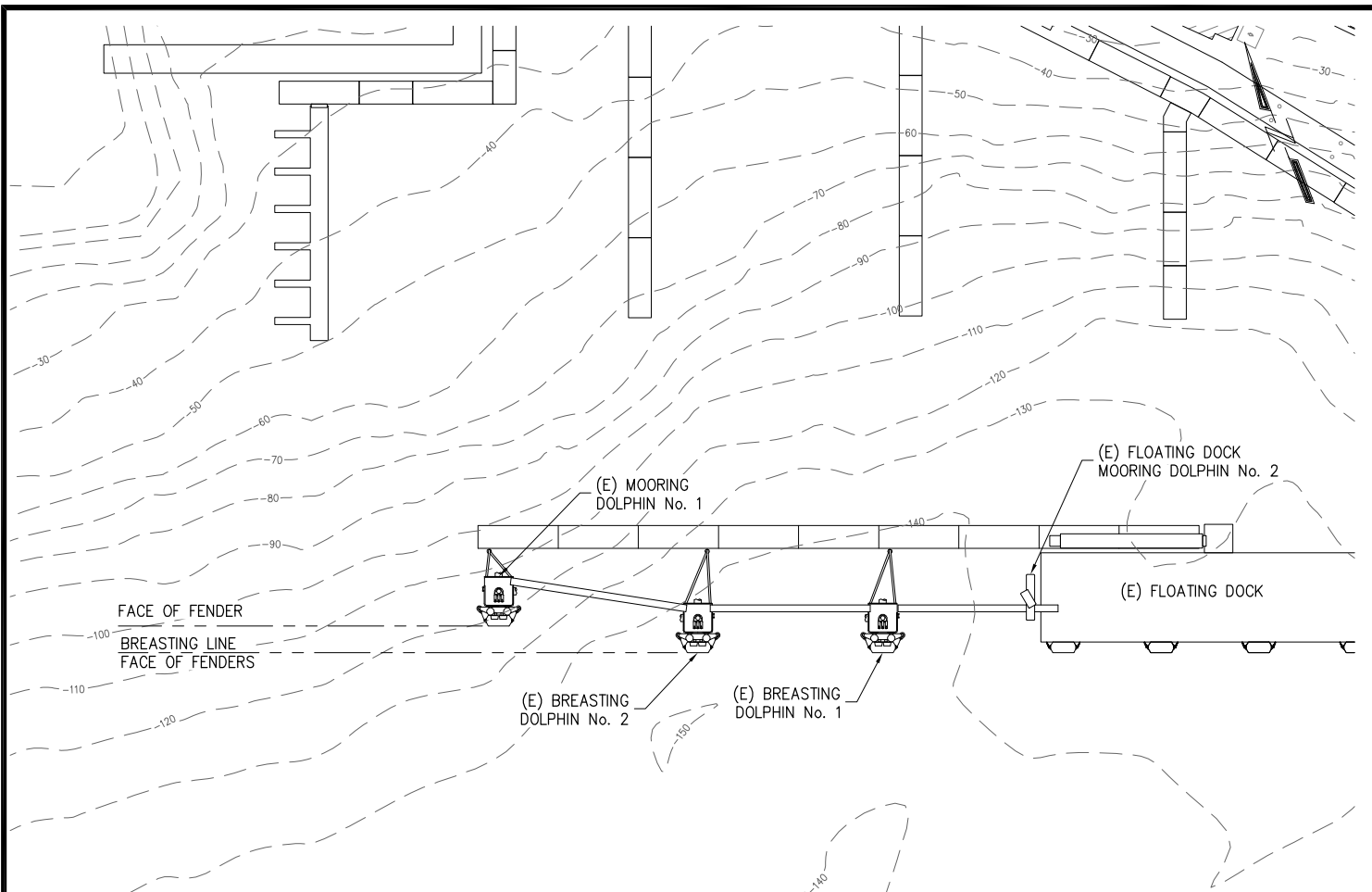
CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 DEMOLITION PLAN ZONE 1

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 4 of 13 DATE: MAY 2020



**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
DEMOLITION PLAN
ZONE 2**

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

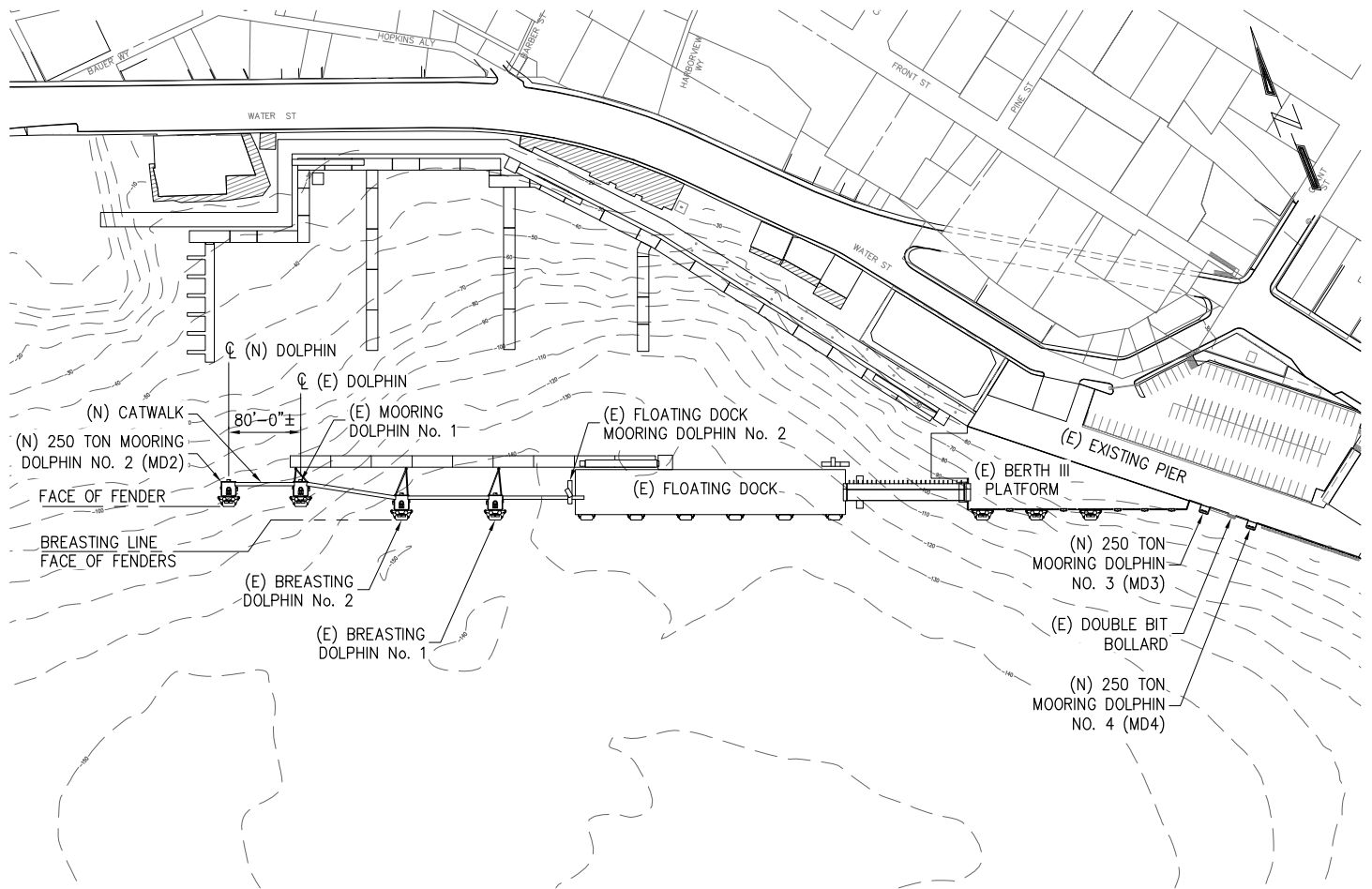
APPLICATION BY:

CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 5 of 13 DATE: MAY 2020



PLAN

0 50 100 200 300 FT.

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

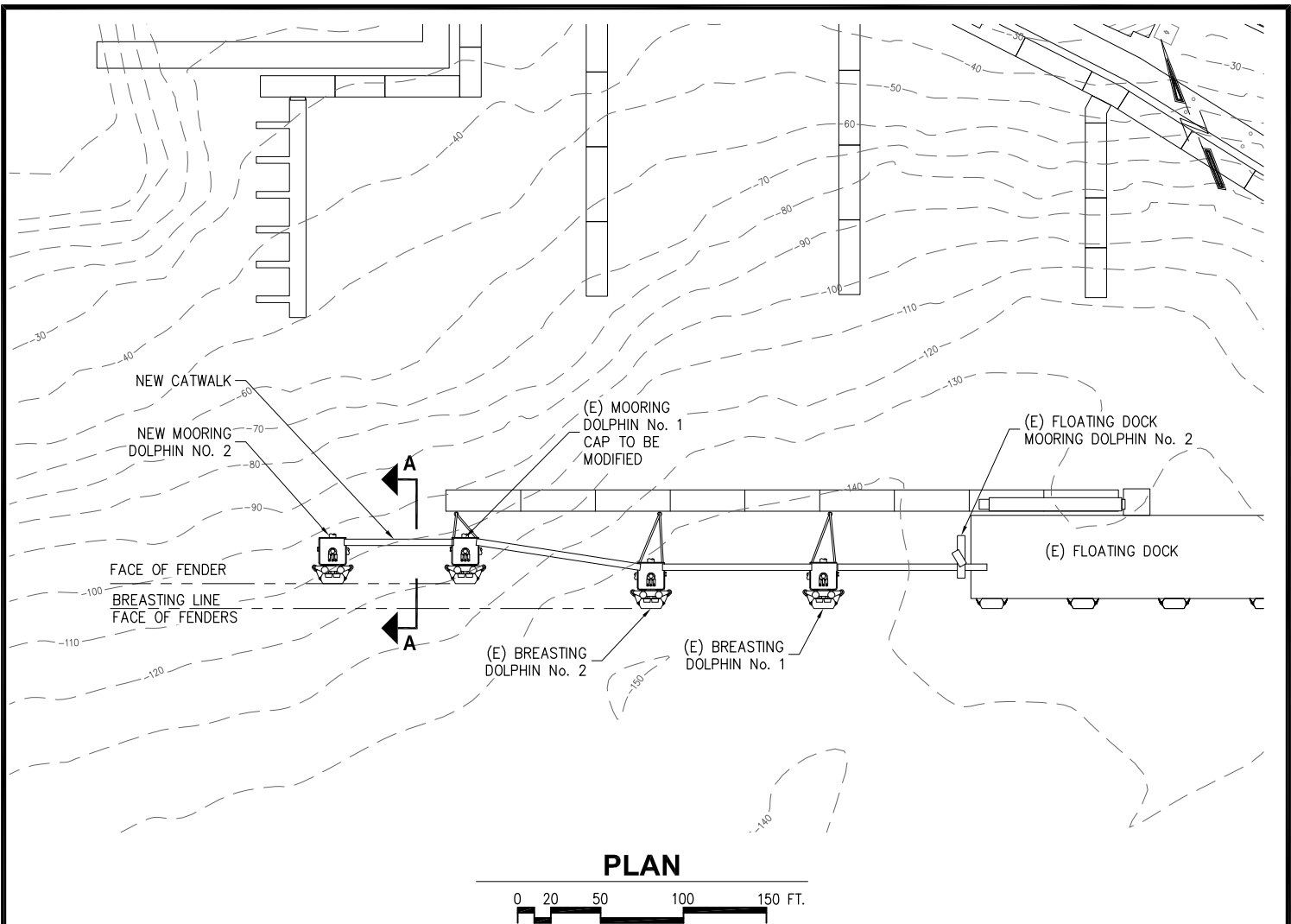
CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 PROPOSED SITE PLAN

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 6 of 13 DATE: MAY 2020



STRUCTURE SUMMARY				
LOCATION	LENGTH (FT)	WIDTH (FT)	No. OF PILES	PILE DIAMETER (IN)
MOORING DOLPHIN NO. 2	20	20	6	48
CATWALK	66	4	0	—

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

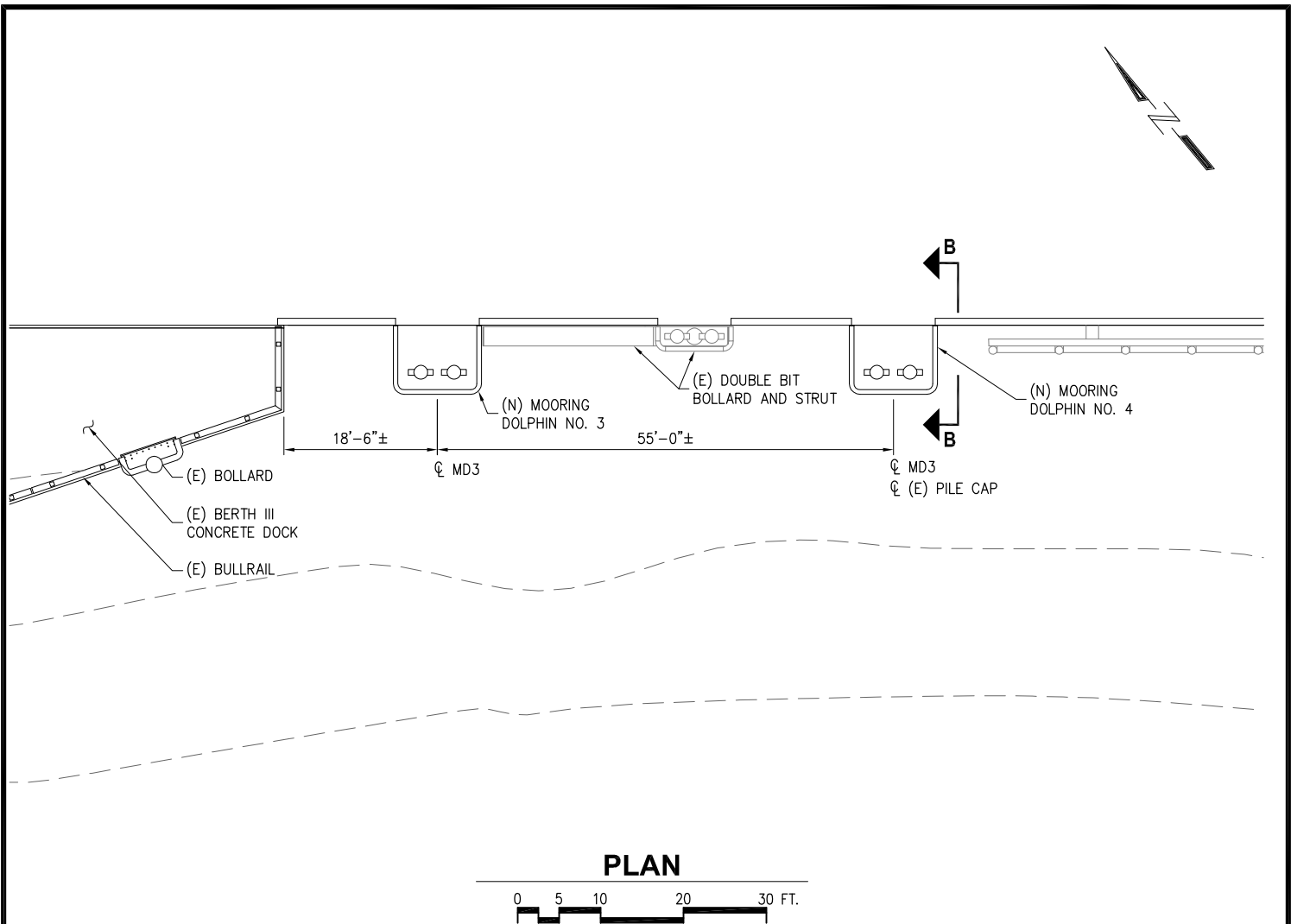
**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
MOORING DOLPHIN NO. 2
PLAN**

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
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IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 7 of 13 DATE: MAY 2020



STRUCTURE SUMMARY				
LOCATION	LENGTH (FT)	WIDTH (FT)	No. OF PILES	PILE DIAMETER (IN)
MOORING DOLPHIN NO. 3	10	10	3	36
MOORING DOLPHIN NO. 4	10	10	3	36

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

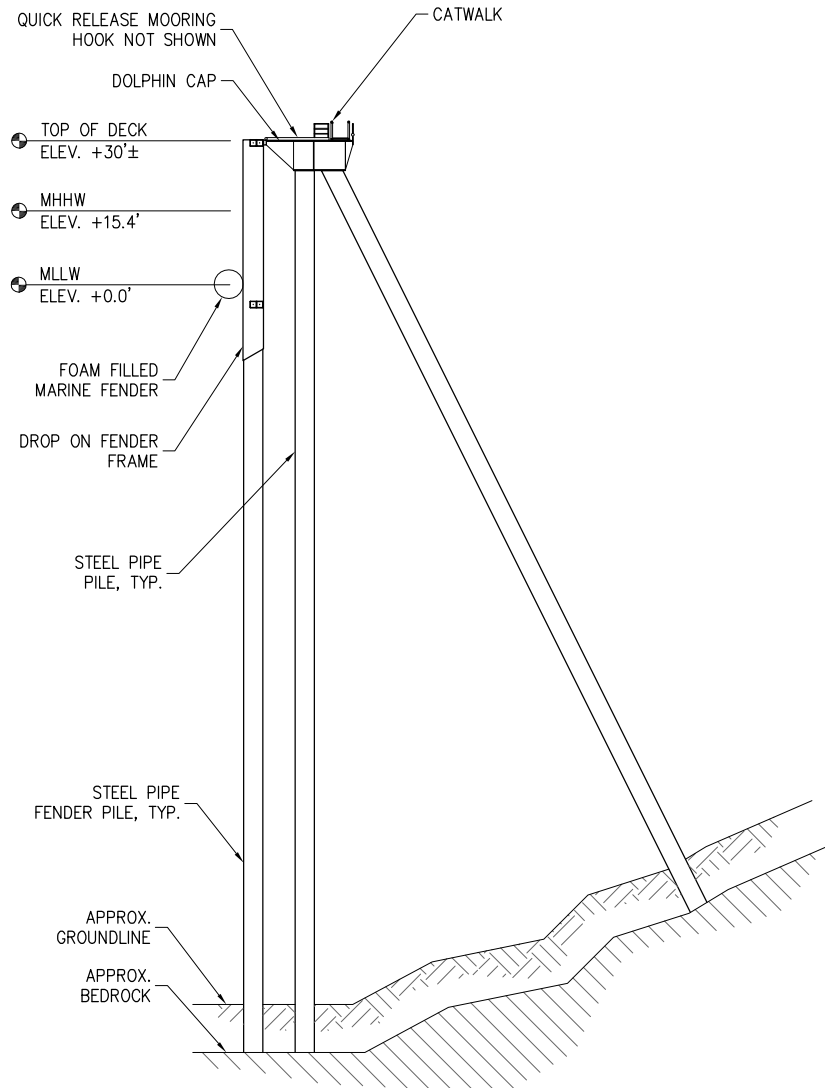
**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
MOORING DOLPHIN
NO. 3 AND 4 PLAN**

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
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IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 8 of 13 DATE: MAY 2020



SECTION A-A

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 MOORING DOLPHIN NO. 2 SECTION

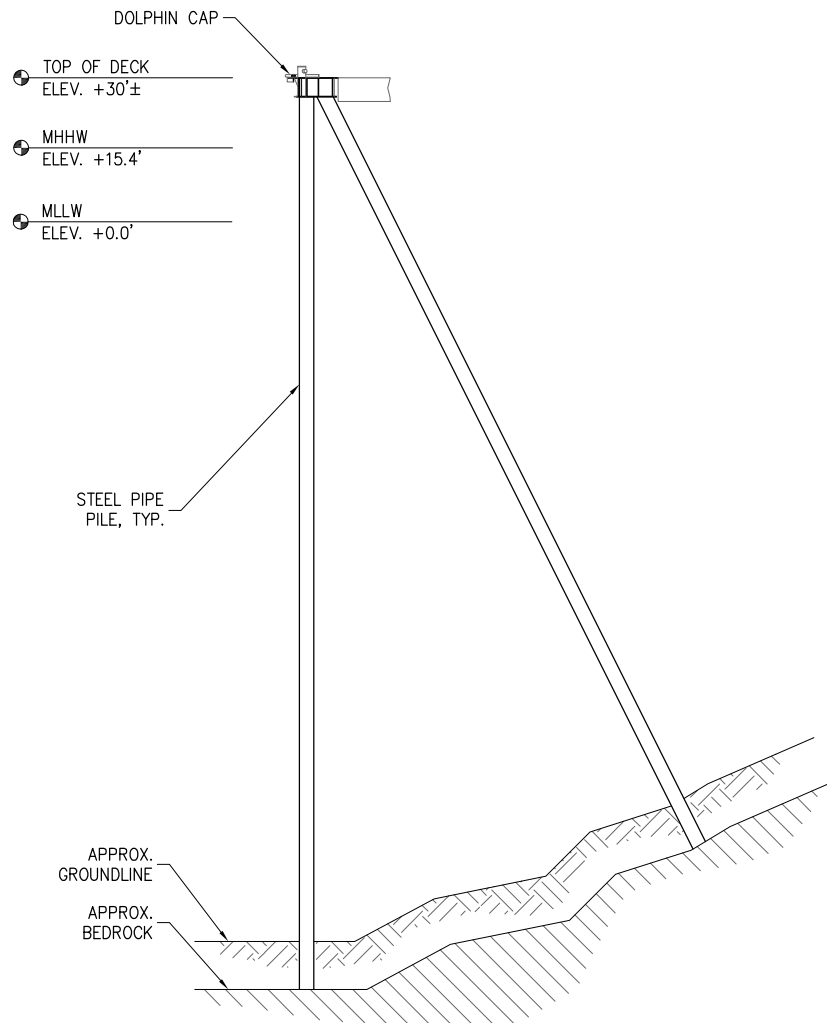
APPLICATION BY:
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334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

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IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 9 of 13 DATE: MAY 2020



SECTION B-B

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 MOORING DOLPHIN NO. 3 AND 4 SECTION

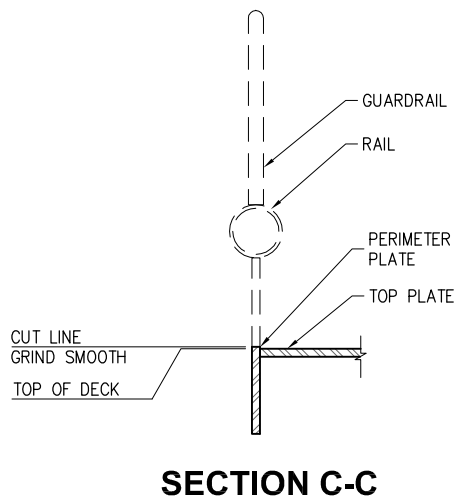
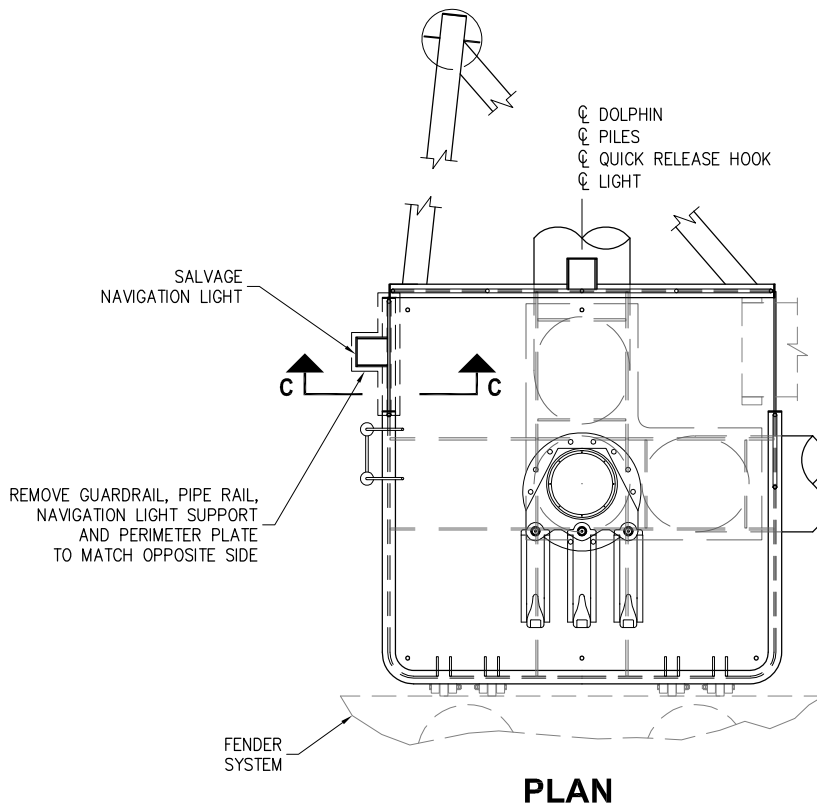
APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 10 of 13 DATE: MAY 2020



PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
EXISTING DOLPHIN NO. 1
MODIFICATION**

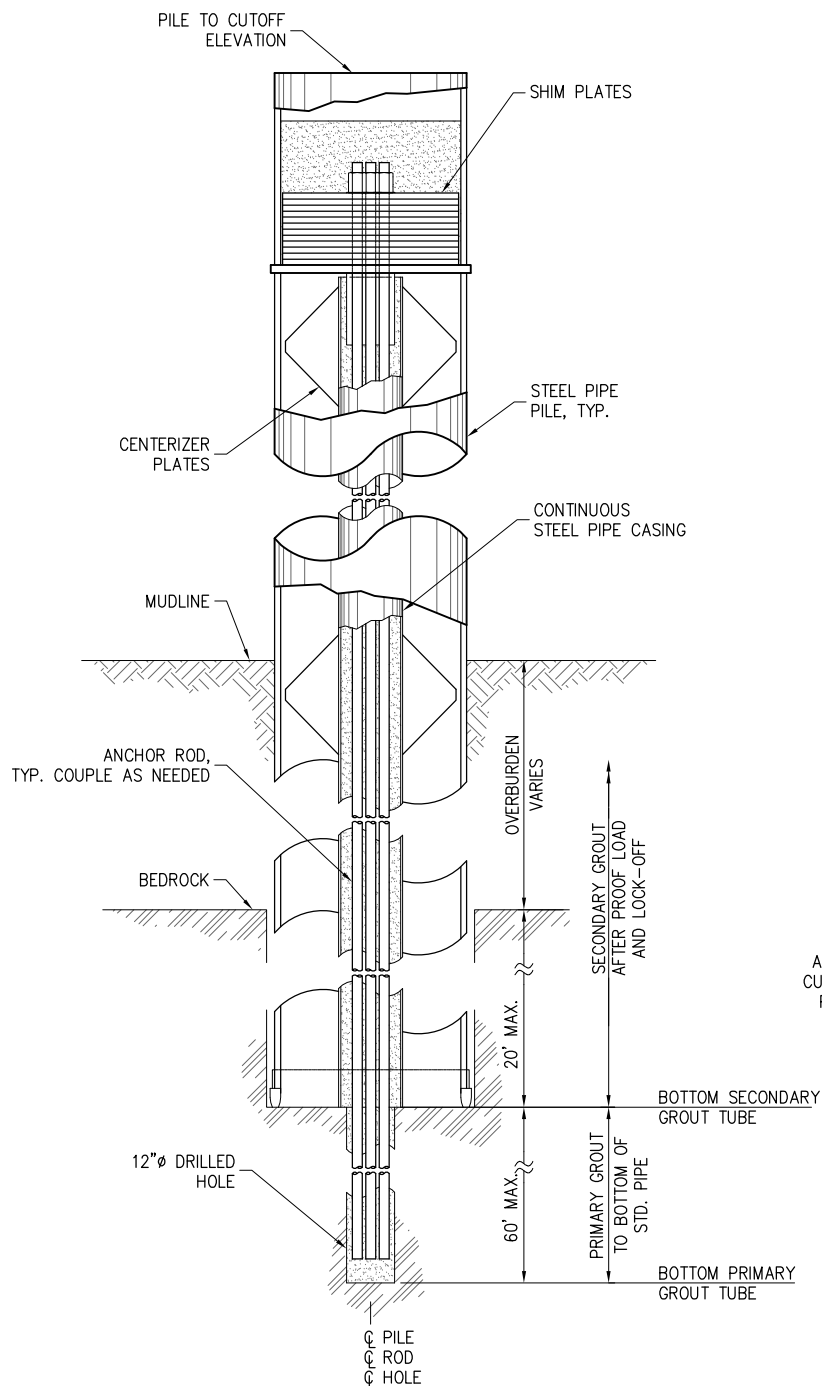
APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

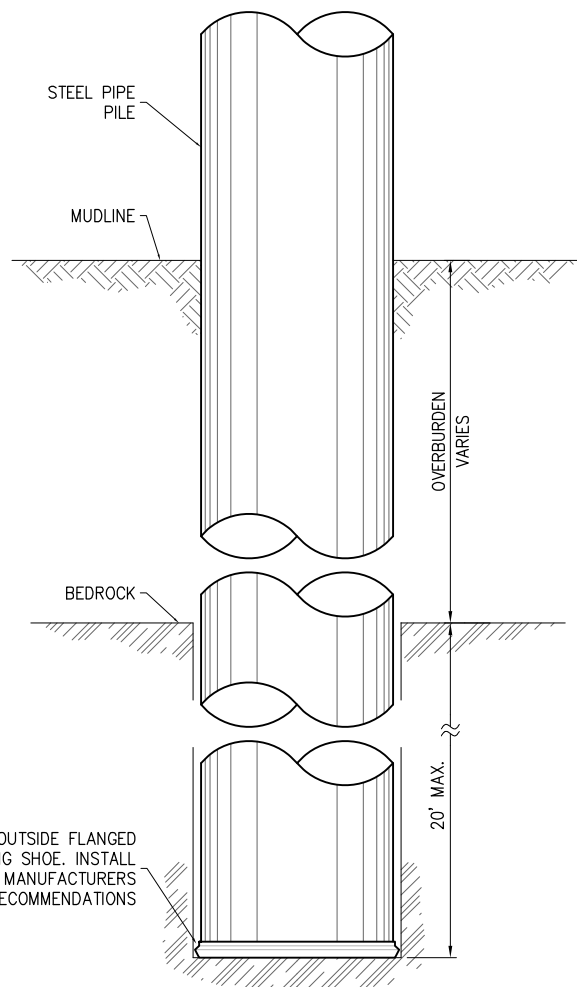
- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 11 of 13 DATE: MAY 2020



ROCK ANCHOR DETAIL



BEARING PILE DETAIL

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

**CITY OF KETCHIKAN
BERTH III MD NO. 2, 3 AND 4
PILE TIP DETAILS**

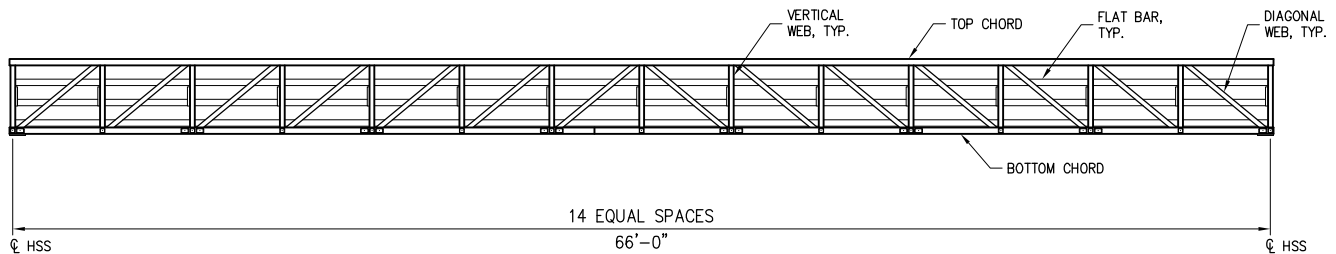
APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

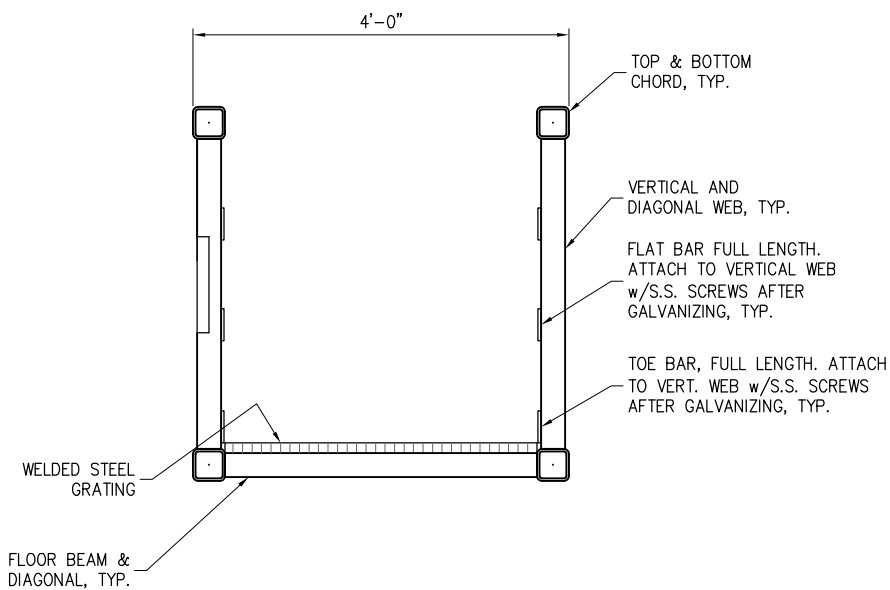
- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 12 of 13 DATE: MAY 2020



ELEVATION



TYPICAL SECTION

PURPOSE:

INCREASE CAPACITY OF BERTH III TO SUPPORT LARGER CLASS CRUISE SHIP VESSELS.

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

ADJACENT PROPERTY OWNERS:
SEE SHEET 2

CITY OF KETCHIKAN BERTH III MD NO. 2, 3 AND 4 MOORING DOLPHIN NO. 2 CATWALK

APPLICATION BY:
CITY OF KETCHIKAN
334 FRONT STREET
KETCHIKAN, AK 99901

PROPOSED:

- 1) ADD MOORING DOLPHIN NO. 2 (NORTH END OF BERTH III)
- 2) ADD MOORING DOLPHINS NO. 3 AND 4 (SOUTH END OF BERTH III)

IN: TONGASS NARROWS
AT: KETCHIKAN, AK

SHEET 13 of 13 DATE: MAY 2020