



Haines Borough Planning Commission Regular Meeting Agenda

COMMISSIONERS:

ROB GOLDBERG, CHAIR
LEE HEINMILLER, VICE-CHAIR
ROBERT VENABLES
HEATHER LENDE
DON TURNER III
BRENDA JOSEPHSON
ROB MILLER

Thursday, February 12, 2015 - 6:30 p.m.

Assembly Chambers, 213 Haines Hwy.

1. CALL TO ORDER / PLEDGE TO THE FLAG
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES: January 15, 2015
5. PUBLIC COMMENTS [Items not scheduled for public hearing]
6. CHAIRMAN'S REPORT
7. STAFF REPORT
 - A. Planning & Zoning Report
8. PUBLIC HEARINGS: None
9. UNFINISHED BUSINESS: None
10. NEW BUSINESS:
 - A. Historic District/Building Review:
 1. The Port Chilkoot Company – Access Ramp for Barracks Building #16 and #17 – Action Item: The Port Chilkoot Company requested the Planning Commission approve installation of an ADA compliant ramp for Barracks Buildings. The ramp will only be used during the summer visitor season. **Possible motion:** Approve the proposed access ramp.
 - B. Haines Borough Code Amendments: None
 - C. Project Updates: None
 - D. Other New Business:
 1. Classification of Borough Lands for Sale – Discussion Item: On Jan 14th, the planning commissioners Lende and Turner met with the Borough land department staff members, and evaluated the Borough-owned properties' suitability for future residential development. A summary of the discussion will be presented at the meeting.
 2. South Portage Cove Harbor Expansion Project – Discussion Item – PND has prepared the 35% design review submittal for the South Portage Cove Harbor Expansion project. The commission is invited to review and comment.
11. COMMISSION COMMENTS
12. CORRESPONDENCE
13. SCHEDULE MEETING DATE
 - A. Regular Meeting – Thursday, March 12, 2015 6:30 p.m.
14. ADJOURNMENT



**Haines Borough
Planning Commission Meeting
January 15, 2015
MINUTES**

Draft

1. **CALL TO ORDER/PLEDGE TO THE FLAG** – Chairman **Goldberg** called the meeting to order at 6:30 p.m. in Assembly Chambers and led the pledge to the flag.
2. **ROLL CALL** – **Present:** Chairman Rob **Goldberg**, Commissioners Lee **Heinmiller**, Robert **Venables**, Heather **Lende**, and Don **Turner III**.

Staff Present: David **Sosa**/Manager, Tracy **Cui**/Planning & Zoning Technician III, and Carlos **Jimenez**/Public Facilities Director.

Also Present: Mike **Case** (Assembly liaison), Joan **Snyder**, Diana **Lapham**, Lea **Harris**, Deb **Stanford**, Jim **Stanford**, Mike **Denker**, Zach **Jacobson**, Letitia **Hallett**, Chuck **Mitman**, Dana **Hallett**, Marianne **Rasmussen**, Greg **Rasmussen**, Aimee **Jacobson**, Becky **Hill**, Derek **Poinsette**, Dawn **Drotos**, Ray **Staska**, Christine **Nagy**, Randy **Konrad**, Carolyn **Weishahn**, etc.
3. **APPROVAL OF AGENDA**
Motion: **Venables** moved to “approve the agenda with removing Item 10D2.” **Turner** seconded it. The motion carried unanimously.
4. **APPROVAL OF MINUTES** – December 18, 2014 Regular Meeting Minutes
Motion: **Turner** moved to “approve the December 18, 2014 regular meeting minutes.” **Heinmiller** seconded it. The motion carried unanimously.
5. **PUBLIC COMMENTS**
Snyder expressed her concerns about the heavy equipment staging yard across from her residence on Mission Street. She said this is zoned commercial, and this is an industrial activity. **Goldberg** said the commission will discuss with staff, and explore solutions.
6. **CHAIRMAN’S REPORT** – None
7. **STAFF REPORTS**
 - A. **Planning & Zoning Staff Report**
Cui reported monthly updates on projects.

Cui brought zoning maps to the commission to verify the zoning classification for Roger Schnabel’s property is revised correctly. The commission decided to verify it when Schnabel applies for amending his resource extraction conditional use permit.

Cui provided the commission with a summary of the discussion that evaluates the Borough-owned properties’ suitability for future residential development. The commission decided to discuss it at the next regular meeting.
8. **PUBLIC HEARINGS** – None
9. **UNFINISHED BUSINESS** – None

10. NEW BUSINESS

- A. **Historic District/Building Review** – None
- B. **Haines Borough Code Amendments** – None
- C. **Project Updates** – None
- D. **Other New Business**

1. **Classification of Mosquito Lake School Property for Sale**

Stanford, Mitman, Zach Jacobson, Denker, Dana Hallett, Marianne Rasmussen, Weishahn, Harris, and others spoke against classifying the Borough-owned Mosquito Lake School for sale.

Sosa said student enrollment dropped below 10, resulting in the School District shutting down when funding was not received from the state, and there was no viable plan to keep the facility open. He explained that classifying the building for sale does not mean it will be sold. Selling Borough-owned properties requires a long public process.

Many residents said they just need more time to come up with a viable plan. They felt the Borough was moving too quickly toward the possibility of selling.

Sosa withdrew his request for the commission to recommend classifying the Mosquito Lake School property for sale, subject to a review in six months.

All of the commissioners spoke in favor of the Borough retaining ownership of the school. The commission agreed this needs a long-term solution to keep the facility open.

3. **Planning Commission Seat C and G Appointments**

Sundberg withdrew his request at the meeting.

Goldberg said both candidates are highly qualified.

Lende said **Josephson** has an extensive background in construction, finance, and business management; Miller, as a civil engineer, will bring considerable engineering knowledge to the commission.

Motion: **Lende** moved to “recommend for the mayor to appointment Brenda Josephson and Rob Miller to serve on the Planning Commission.” **Heinmiller** seconded it. The motion passed unanimously.

11. COMMISSION COMMENTS

Regarding J. **Snyder**’s complaint, the commission directed **Cui** to inform Ms. Snyder that the proposed use as a heavy equipment staging area is an allowable activity in the commercial zone. Suggestions were made to mitigate the negative impacts.

All commissioners spoke in favor of hard-copy meeting packets, instead of e-packets.

12. CORRESPONDENCE - None

13. SET MEETING DATES – The next regular Planning Commission meeting was scheduled for 6:30 p.m. on Thursday, February 12, 2015.

14. ADJOURNMENT– 8:07 p.m.

Staff Report for February 12, 2015

1. Permits Issued Since January, 2015

PERMIT ID	DATE	OWNER/AGENT	TAX ID	LOT	BLK	SUBDIVISION	DEVELOPMENT	ZONE
15-01	1/9/15	Roger Schnabel	C-MIS-0H-0100	1 - 8	H	Mission Sub.	Heavy Equipment Storage	C
15-02	1/30/15	Patricia Metcalf	C-HLR-03-03B0 & C-HLR-03-03C0	3B & 3C		Highland Resources Sub.	Lot Line Adjustment	SR

2. Enforcement Orders

- Political Signs: During the 01/13/15 Assembly meeting, the manager mentioned the continued presence of political signs and reinforced that this is against Borough code. The manager directed me to send notices out to the owners of properties where we are observing violations. The 1st attempt warning letters were sent out to 18 property owners on 01/27, 01/29, and 02/02. (see attached warning letter)

3. Projects

- American Institute of Certified Planners (AICP) Exam: My exam application was approved, and the Alaska Chapter awarded me an Alaska's 2015 Reduced Fee Scholarship. I scheduled to take the exam in Anchorage on May 16, 2015.
- Minor Amendment to the Temporary Residence Ordinance: Assembly liaison Mike Case captured a possible loophole in this draft ordinance. (see attachment with suggested changes)

4. Upcoming Public Hearing Items

- Borough-Owned Resource Extraction Site: The Borough is seeking a site within the townsite service area that may be developed as a gravel pit. Staff have selected a potential site, and will provide the commission with an analysis when it is ready.
- DOT Maintenance Station in Haines: PDC Engineering is working with the state DOT to design a maintenance station to be located in Haines. This would be a 32 feet tall building to replace an existing facility. The building site would be located on a parcel close to the intersection of Main and Union Streets. A height variance proposal is going to be submitted to allow the construction to be built within Haines Borough Code requirement of a 30 feet height restriction.
- Preliminary Long Plat – Hilltop Subdivision: A 34-acre long plat subdivision is currently under staff review.



HAINES BOROUGH
P.O. Box 1209
Haines, AK 99827-1209
907-766-2231 Ext. 29
907-766-2716 (fax)

January 23, 2015

Re: Political Sign(s) on Private Property

Dear Land Owner:

The Borough, in its ongoing efforts to provide a safe and well-maintained environment, addresses the posting and display of political signs in the sign ordinance. This letter is to remind you to remove the political sign(s) on your property. The role of the Borough is to keep our community clean and safe during election season and on a continuing basis throughout the year. With the start of each new election season, it brings concerns over the growing number of political signs placed throughout the Borough townsite service area. Sometimes these political signs can become an eyesore and even obstruct traffic. The following code is provided as an introduction to political sign regulations.

- Per Haines Borough Code (HBC) 18.90.060(H), political signs may be erected no more than 60 days prior to the election date and must be removed no later than seven days following the election date.
- Per HBC 18.30.070(B), if a violation is not corrected within ten business days, a penalty of \$100.00 shall be assessed. If a penalty is not paid within thirty (30) days, interest of 1.5% per month (18% annually) will accrue. If the penalty is not paid within one year, the sum will be added to the violator's property tax.

Borough staff is requesting you remove your political sign(s) **as soon as possible**. Please contact the Borough if you have any questions. Thank you very much for your cooperation.

Respectfully,

A handwritten signature in black ink, appearing to read "Tracy Cui".

Tracy Cui
Planning & Zoning Technician III

HAINES BOROUGH, ALASKA
ORDINANCE No. xx-xx-xxx

Draft

**AN ORDINANCE OF THE HAINES BOROUGH AMENDING HAINES BOROUGH CODE
TITLE 18 SECTION 18.60.020(H) TO CLARIFY THE TERMS OF TEMPORARY RESIDENCES**

BE IT ENACTED BY THE HAINES BOROUGH ASSEMBLY:

Section 1. Classification. This ordinance is of a general and permanent nature and the adopted amendment shall become a part of the Haines Borough Code.

Section 2. Severability. If any provision of this ordinance or any application thereof to any person or circumstance is held to be invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected thereby.

Section 3. Effective Date. This ordinance shall become effective immediately upon adoption.

Section 4. Purpose. This ordinance amends Title 18 Section 18.60.020(H) to clarify the terms of temporary residences.

NOTE: **Bolded/UNDERLINED** ITEMS ARE TO BE ADDED
STRIKETHROUGH ITEMS ARE DELETED

HBC 18.60.020 Specific approval criteria.

The following uses are subject to the preceding general criteria and these additional specific approval criteria:

...

H. Temporary Residence. Persons desiring to place a temporary residence, or a **trailer** or mobile home outside of a mobile home or RV park in the townsite service area for a temporary or interim occupancy over 15 days, shall apply for a temporary residence permit. ~~Permits for seven days or less will be at no charge and will not require connection to or payment for public water and sewer. Temporary residences remaining over 30 days will require a land use permit and where applicable, the standard monthly water and sewer charges will be levied, except by prior arrangement with the borough.~~ The intent of a temporary residence permit is to allow a temporary structure for residential use. This means one trailer, RV or mobile home may be occupied during construction of a permanent residence. A temporary residence permit may be granted if all the following requirements are met:

1. A valid land use permit for the permanent residence must be in effect during the entire time that the temporary dwelling is located on the site;

2. A trailer, RV or mobile home used as a temporary dwelling during the construction of a permanent residence must be located on the same lot or parcel;

Suggestion: replace with "RV". HBC defines "RV" includes "Motor home" and "Trailer".

3. The temporary dwelling must be transported to a sanitary dump station as needed to empty gray water and toilet waste tanks, be connected to public water and sewer if applicable, or be serviced by an approved DEC on-site wastewater system;

4. The temporary dwelling must meet the same setbacks applicable to permanent structures;

~~5. Temporary residence permits may be granted for a period of one year. One six-month extension of the temporary residence/trailer permit may be granted by the planning commission as long as the developer is complying with all requirements. Any temporary residence, trailer, recreational vehicle or mobile home being occupied by a person must be connected to public water and sewer and may be required to connect to the local electrical service. Garbage disposal facilities are required. A minimum of one off-street parking space will be required for a temporary residence.~~

6. The area surrounding the temporary residence/trailer shall be kept in a clean and sanitary condition.

Exception: a temporary residence may be occupied on private property located outside of a mobile home or RV park while remodeling or repairing the interior of an existing permanent residence. Any applicable requirements under this subsection shall apply.

THE PORT CHILKOOT COMPANY

Carl W. Heinmiller, President
Lee D. Heinmiller, Ex. Vice-President

Box 271
Haines, Alaska 99827

Phone (907) 766-2160

"Fort William H. Seward"
National Historic Landmark

January 23, 2015

Haines Borough Planning Commission
P. O. Box 1209
Haines, Alaska 99827

Dear Planning Commission:

Attached is our Building Permit Application for a handicap access ramp for Barracks Building #16 and #17. The proposed ramp is designed to be removed and stored on the porch deck in winter.

The Port Chilkoot Co. has recently received a small 50/50 grant from the Alaska Historical Commission to improve the porch of the Barracks and to install four historical interpretive signs on the porch walls. People will be able to read these historical signs while under the cover of the porch roof. To date we have stabilized the porch, reinstalled the original railings and rebuilt the stairs using the original granite base steps.

We have been working with the National Parks Service architects, and they have suggested the proposed location of the ramp as being most complimentary to the historic architecture of the building. They prepared the attached plans for the ADA ramp. The ramp will only be used in during the summer visitor season. It will be removed in the fall.

Thank you for your consideration of this application.

Sincerely,

Annette Smith
Annette Smith, Project Coordinator

Attachments



Haines Borough

Planning and Zoning

103 Third Ave. S., Haines, Alaska, 99827

Telephone: (907) 766-2231 * Fax: (907) 766-2716

APPLICATION FOR LAND USE PERMIT

I. Owner/Authorized Representative		Owner's Contractor(If Any)	
Name: <u>Annette Smith</u>		Name: <u>Port Chilkoot Co.</u>	
Mailing Address: <u>Box 1152</u>		Haines Borough Business License #: <u>62</u>	
Contact Phone: Day _____ Night _____		Alaska Business License #:	
Fax: _____		Contractor's License #:	
E-mail: _____		Mailing Address: <u>Box 271, Haines</u>	
		Contact Phone: Day _____ Night _____	
		Fax: <u>966-2160</u>	
		E-mail: _____	
II. Property Information			
Property Tax ID #: <u>C - PTC - OF - 0000</u>			
Size of Property: <u>2.30 Acres</u>			
Site Street Address: (If Any) _____			
Legal Description: Lot (s) <u>ALL</u> Block <u>F</u> Subdivision <u>Port Chilkoot Sub.</u>			
OR			
Parcel/Tract _____ Section _____ Township _____ Range _____			
[Attach additional sheets if necessary.]			
Zoning: <input type="checkbox"/> Waterfront <input type="checkbox"/> Single Residential <input type="checkbox"/> Rural Residential <input checked="" type="checkbox"/> Significant Structures Area			
<input type="checkbox"/> Rural Mixed Use <input type="checkbox"/> Multiple Residential <input type="checkbox"/> Heavy Industrial <input type="checkbox"/> Waterfront Industrial			
<input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial Light Commercial <input type="checkbox"/> Recreational <input type="checkbox"/> Mud Bay Zoning District			
<input type="checkbox"/> Lutak Zoning District <input type="checkbox"/> General Use			
III. Description of Work			
Type of Application (Check all that apply) <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial _____ sq. ft. _____ seating capacity if eating/drinking establishment <input type="checkbox"/> Industrial <input type="checkbox"/> Church <input type="checkbox"/> Other _____	Project Description (Check all that apply) <input type="checkbox"/> Single Family Dwelling <input type="checkbox"/> Change of Use <input type="checkbox"/> Multi-Family Dwelling Total # of Units _____ <input type="checkbox"/> Cabin <input type="checkbox"/> Addition <input type="checkbox"/> Accessory Structure <input checked="" type="checkbox"/> Other <u>Handicap Ramp</u>	Water Supply Existing or Proposed <input checked="" type="checkbox"/> None <input type="checkbox"/> Community well <input type="checkbox"/> Private well <input type="checkbox"/> Public Water System <input type="checkbox"/> Other _____	Sewage Disposal Existing or Proposed <input checked="" type="checkbox"/> None <input type="checkbox"/> Septic Tank <input type="checkbox"/> Holding Tank <input type="checkbox"/> Public Sewer System <input type="checkbox"/> Pit Privy <input type="checkbox"/> Composting Toilet <input type="checkbox"/> Other _____
Estimate Cost of Work: _____			

Land Use Requested For: (Describe the project, and use additional sheets if necessary)
CONSTRUCTION OF HANDICAPPED ACCESS RAMPTON PORCH OF EXISTING BARRACKS BLDG.
Required Attachments:
<input type="checkbox"/> Completed Application Form
<input type="checkbox"/> Site plan (see Attachment A) showing lot lines, building dimensions, setbacks, streets, etc.
<input type="checkbox"/> \$50 Non-Refundable Fee (Checks must be made payable to the Haines Borough)

IV. CERTIFICATION

I hereby certify that I am the owner or authorized representative of the property described above and that I petition for a land use permit in conformance with all of the provisions in the Haines Borough Code. I also certify that the site plan submitted is a complete and accurate plan showing any and all existing and proposed structures on the subject property. I understand that payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the proposed use. I also understand that all contract work on this project will be done by a contractor holding valid licenses issued by the State of Alaska and the Haines Borough. **I am aware that if I begin work prior to receiving permit approval, I may be assessed a penalty fee, as per HBC 18.30.070.**

Annette Smith 1-23-15
 Signature (Representatives must provide written proof of authorization) Date

PROVISIONS: The applicant is advised that issuance of this permit will not relieve responsibility of the owner or authorized representative to comply with the provisions of all laws and ordinances, including federal, state and local jurisdictions, which regulate construction and performance of construction, or with any private deed restrictions.

Office Use Only Below This Line

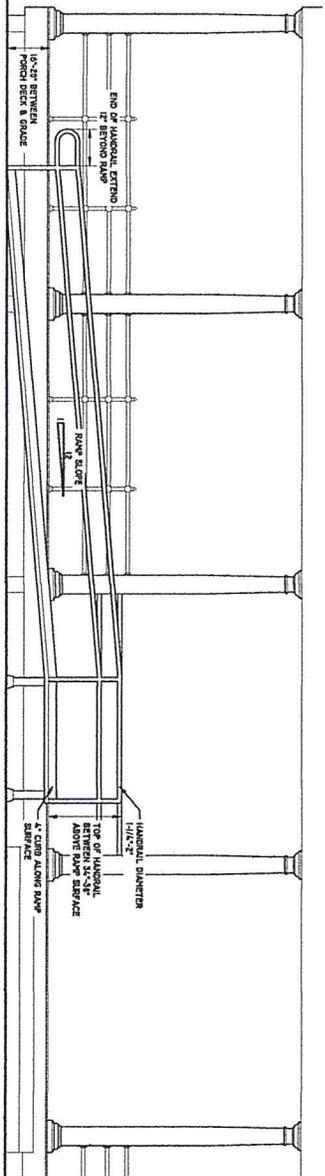
Non-Refundable Application Fee \$ _____	If Application is Complete: <input type="checkbox"/> Yes <input type="checkbox"/> No
Payment Method: _____	Notified Via: _____
Receipt #: _____	Notified By: _____
Received By: _____	Date: _____
Date: _____	
If application is approved: <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes,	If no,
Approved By: _____ Borough Manager/P&Z Tech/Designee	Denied By: _____ Borough Manager/P&Z Tech/Designee
Permit ID #: _____	Date: _____
Permit Effective Date: _____	Reason: _____

Notice of Right to Appeal: All decisions of the Borough Officials are appealable per HBC 18.30.050

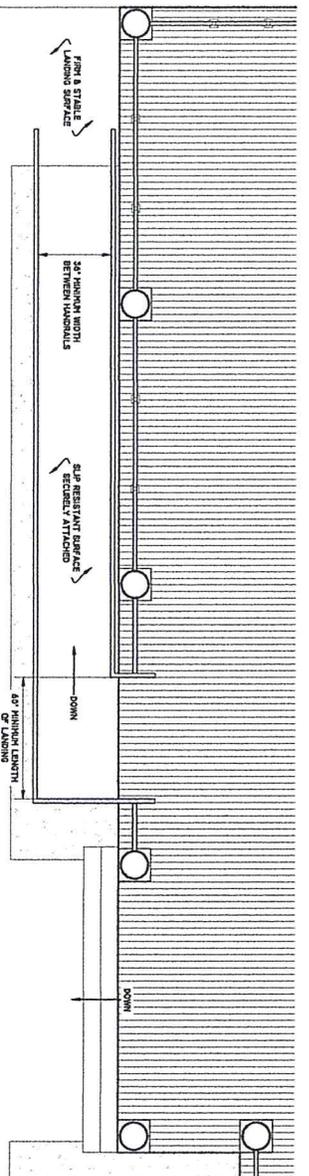
INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

FORT WILLIAM H. SEWARD - BARRACKS BUILDING 16 & 17

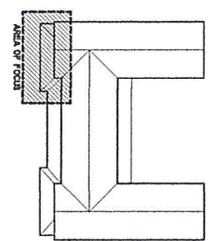
ACCESSIBILITY RAMP TO FRONT PORCH



SOUTH ELEVATION
1/2"=1'-0"
134



PORCH PLAN
1/2"=1'-0"
134



NOTES:

1. NEW STRUCTURE ADDED TO AN HISTORIC BUILDING SHOULD BE COMPATIBLE BUT DISTINGUISHABLE FROM HISTORIC FABRIC
2. AVOID CREATING A FALSE HISTORIC APPEARANCE OF RAMP
3. RAMP DESIGNED TO BE REMOVED DURING WINTER MONTHS
4. RAMP DESIGNED TO FOLLOW INTERNATIONAL BUILDING CODE (2009 ED.)
5. FOR RAMP RISE UNDER 30-INCHES, RAMP RISER:R1 = 1:12 TO < 1:10
6. LANDINGS AT TOP AND BOTTOM OF RAMP MUST BE LEVEL
7. LANDINGS SHALL BE AT LEAST AS WIDE AS THE RAMP RUN
8. LANDING LENGTH SHALL BE A MINIMUM OF 60-INCHES CLEAR
9. RAMP RISE IS GREATER THAN 6-INCHES, HANDRAILS ARE REQUIRED ON BOTH SIDES CONTINUOUS
10. HANDRAIL GRIPPING SURFACE TO BE SMOOTHLY TO POSTS
11. ENDS OF HANDRAILS SHALL BE RETURNED SMOOTHLY TO POSTS
12. NO WATER SHOULD ACCUMULATE ON WALKING SURFACES OF OUTDOOR RAMPS

DELINEATED BY: ANNIE HATSOV, NATIONAL PARK SERVICE, ALASKA REGIONAL OFFICE

RAMP DESIGN
FORT WILLIAM H. SEWARD - BARRACKS BUILDING
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

HAINES

BARRACKS NO. 16 & 17
FORT WILLIAM H. SEWARD

AK
SHEET 1 OF 1

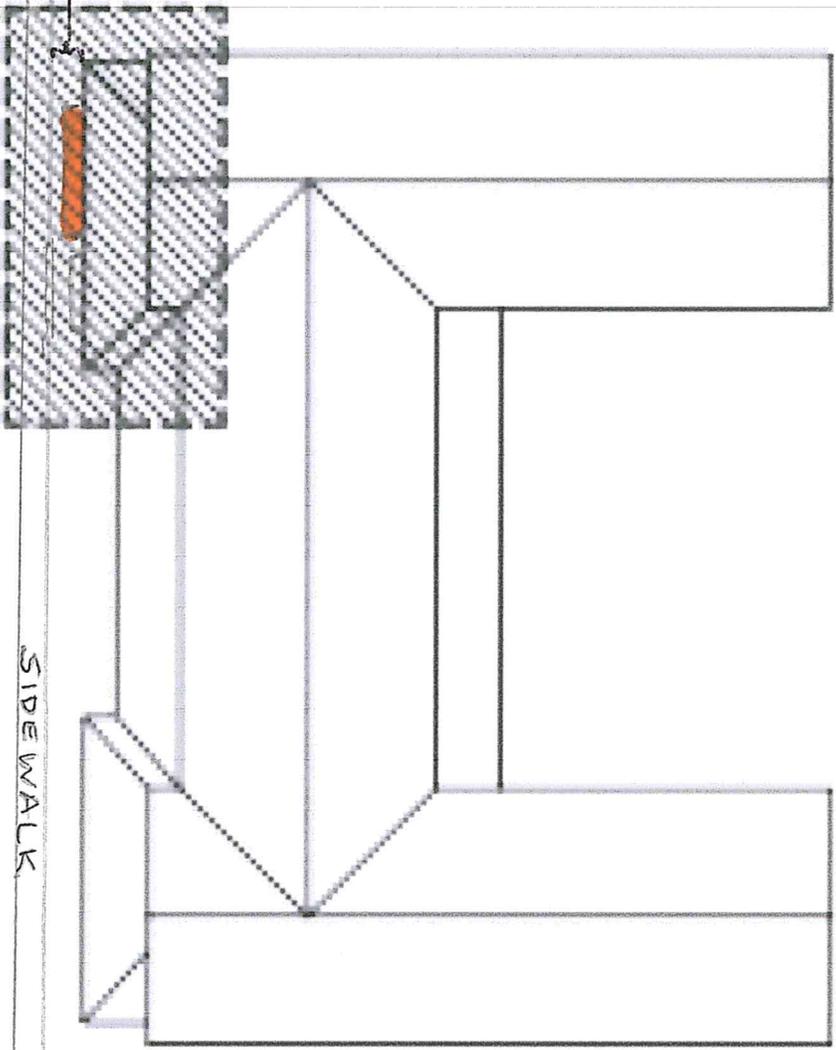
TOTEM STREET

AREA OF FOCUS

SIDEWALK

FORT SEWARD DRIVE

5' 2" Deck To sidewalk
Ramp will be 3'-4" wide



18.70.050 Historic buildings – Districts.

1. Fort William H. Seward Local Historic District.

a. Description of Appearance. The principal structures are: the barracks, officers' homes, quartermasters, hospital, fire hall, warehouses and the Port Chilkoot Dock. The structures are situated around the parade grounds set against a backdrop of majestic mountain peaks of the Chilkat Range, overlooking the scenic beauty of the waters of Portage Cove, a portion of the upper Lynn Canal.

b. Statement of Significance. Fort William H. Seward was established in 1898 and garrisoned in 1904; the principal buildings of Fort William H. Seward are the best surviving structures of the 11 military posts erected in Alaska to police the gold rushes of 1897 to 1904. The United States was involved in the boundary dispute with Canada and Fort William H. Seward was the only army post in Alaska between World Wars I and II. In 1945 the fort was closed and declared surplus. On April 4, 1947, a group of veterans arranged under the Port Chilkoot Company, through the War Assets Act, to purchase the fort. In the ensuing three years, it was determined that the quitclaim deed provided by the U.S. government was exercised three days after the expiration of the War Assets Act. An act of Congress was then required to formalize the transaction with Port Chilkoot Company. The act was passed in 1952. Fort William H. Seward was listed as part of the National Historic Site Register in 1972 and thereafter became a national historic landmark in 1978.

c. Geographical Area Defined. The boundaries of the Fort William H. Seward local historic district shall be defined as the exact boundaries certified by the United States National Park Service under authority of the Historic Sites Act adopted by Congress in 1935 and designated as a national landmark in 1978.

18.60.020 Specific approval criteria.

G. Historic Buildings. All development occurring within the significant structures area, or changes to any of the surveyed historic buildings, shall comply with specific requirements. When the commission determines that the development is one of the surveyed historic structures or the development has a material effect upon the general character of the district and any of the individual structures therein, the following shall apply:

1. Every reasonable effort shall be made to provide a compatible use for property that requires minimal alterations of the building, structure, or site and its environment, or to use a property for its originally intended purpose.
2. The developer shall be encouraged to retain the distinguishing original qualities or character of a building, structure, or site and its environment. The removal or alteration of any historic material or distinctive architectural features should be avoided whenever possible.

3. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

4. Distinctive stylistic features or examples of skilled craftsmanship that characterize a building, structure or site, shall be treated with sensitivity.

5. Deteriorated architectural features shall be repaired rather than replaced whenever possible. In the event replacement is necessary, the new materials should match the material being replaced in composition, design, color, texture and other visual qualities wherever possible. Repair or replacement of missing architectural features should be based on accurate duplications rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

6. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any rehabilitation project.

7. Contemporary design and use of contemporary materials for alterations and additions to existing buildings and properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size, scale, color, and character of the property, neighborhood or environment.

8. Wherever possible, additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure should not be impaired.

9. The commission shall have the authority to place design standards and requirements upon the developer prior to the issuance of the permit in order to enforce the historic preservation and rehabilitation standards herein. A design review committee may be appointed by the planning commission which shall consist of the following representatives: the planning commission chair, a planning commission member appointed by the commission, one member of the borough assembly as appointed by the assembly, and one at-large member who is a property owner in the SSA, appointed by the commission chair, specific to each application. The commission shall refer to the document "Fort William H. Seward, Haines, Alaska, Design Guidelines and Standards" prepared by Ron Kasprisin of the Alaskan Northern Studies Program, Department of Urban Design and Planning, University of Washington, Seattle, 1998, when setting out the design standards to be followed for buildings in the significant structures area. (See also [HBC 18.70.050](#).)



HAINES BOROUGH
Planning & Zoning
P.O. Box 1209
Haines, AK 99827-1209
907-766-2231 Ext. 23
907-766-2716 (fax)

February 5, 2015

To: Haines Borough Planning Commission

From: Tracy Cui, Planning & Zoning Tech III
Dean Olsen, Assessor

Re: Classification of Borough Lands for Sale

The Assembly requested that the Planning Commission identify Borough-owned properties that may be considered for future land sales. At the September 11th meeting the commission discussed various Borough properties that could be classified as potential land for sale. Several large sections of vacant borough land were considered. These properties included, (1) land on the north side of Mud Bay Road across from the Carr's Cove subdivision, extending to lower Small Tracts Road and the end of FAA road. (2) Land north of the Skyline subdivision. (3) Land near the end of Lutak Road on the south side of the Lutak River Bridge; and (4), land in Excursion Inlet.

During the November 13th meeting commissioners Heather Lende and Donnie Turner volunteered to be the representatives to conduct a site visit with the Assessor, Dean Olsen and Planning & Zoning Tech, Tracy Cui to investigate these properties and determine their suitability for development. The team met on January 14, 2015. After discussion and examination of available land the top three properties were evaluated and prioritized for this recommendation. The following three locations are listed along with their pros & cons, and with number one being the most favorable:

Parcel No. 1 (See attached map)

Pros:

- Located close to town
- Relatively close to existing public facilities
- Favorable topo features
- Southern exposure
- Close to recreational sites (future sledding hill & hiking trail linkage)

Cons:

- Split zoning (rural mixed use & general use)

Parcel No. 2 (See attached map)

Pros:

- Located close to town
- Relatively close to existing public facilities
- Located in residential area
- Great view
- Old pipeline access

Cons:

- Steep terrain
- Rocky topo causes higher development costs

- Parcel No. 3 (See attached map)

Pros:

- Great view
- Higher value

Cons:

- Potential development challenges related to archeological history of area
- Management of existing tours, resident brown bears, sport fishing and other recreational use is unestablished



2

3

1

N

Possible Borough Land Sale

December 17, 2014

PND 102029.10

Phil Benner
Harbormaster
Haines Borough
P.O. Box 1209
Haines, Alaska 99827

Re: South Portage Cove Harbor Expansion
35% Design review Submittal

Dear Mr. Benner:

PND has prepared the 35% design review submittal for the South Portage Cove Harbor Expansion project. Enclosed please find 10 sets of review documents for distribution to HB staff and the Port and Harbor Advisory Committee (PHAC). The submittal contains plans, project schedule and an updated cost estimate for the project at approximately 35% design completion.

Scope of Improvements

The scope of improvements under this phase of the project generally includes the following:

- 700 Ft Permeable Wave Barrier
- Entrance and basin dredging including inner harbor dredging along A & B Floats
- Rough graded parking area to allow upland disposal of a portion of the dredge spoils
- Relocation of existing sewer outfall line to allow dredging and wave barrier construction

Scope Issues

1. **Dredging Limits:** Please review the limits of dredging for the existing inner harbor basin carefully. We believe adjustments are necessary near the existing boat grid and boat launch ramp so those facilities are not undermined by the dredge slopes. We have adjusted the dredge limits near Float B to provide a minimum of 60' clear distance to the toe of slope along the shore in the vicinity of the future sheet pile bulkhead. We cannot plan for dredging to the face of the future bulkhead at this time due to potential undermining of the slopes leading to the parking lot. Dredging below the existing transient float off the fuel dock will be difficult unless the float is removed; therefore we will prepare plans to dredge up to the edge of the float unless directed otherwise.
2. **Wave Barrier:** The wave barrier design now follows a curved alignment rather than a tangent dogleg alignment. This is to reduce wave load to the structure, improve disbursement of reflected wave energy, and improve general aesthetics. The wave barrier also now ties into the existing rubble mound breakwater to close an opening in the protection system that otherwise would have allowed some wave energy to be transmitted into the expanded basin area from the north. We have not included a walkway on top of the wave barrier since there is no connection to shore and the costs would increase.

3. Upland Development: The uplands staging and parking area will be constructed by embanking approximately 30,000 cubic yards of sandy dredge materials from the harbor basin. We will designate which areas of the dredge basin contain the best material for beneficial reuse as fill embankment. This technique saves approximately \$400K in borrow material costs that otherwise would need to be hauled to the site to build the parking area. The plans contain two layouts for operational use. The summer use plan provides parking for 48 vehicles with boat trailers along with 40 car stalls. The winter use plan provides parking for 15 vehicles with boat trailers, 40 car stalls along with 22 each boat storage spaces measuring 20'x50'. The surface of the new parking area under this first project phase will be crushed gravel and it will be fairly easy to adjust the layout for summer and winter parking and boat storage needs.

Please also note that the current plan does not envision any changes to the existing Memorial Park features although the new uplands created for the harbor will surround the park on the water side. Future parking area finishes are anticipated to include sidewalks, curb and gutter, landscaping, restrooms, pavement and other amenities when funding allows. Further, it is wise to wait until the new fill has fully dewatered and settled before proceeding with the finish courses.

4. Sewer Line Relocation: The existing sewer outfall pipe is buried in a shallow trench below the harbor basin. Dredging activity will develop cuts nearly 25' deep in some locations there interfering with this line. We plan to dredge a portion of the basin while keeping the exiting line intact. Once the initial dredging is completed we will install a new sewer outfall line and connect into it near shore. Dredging will then resume for the remainder of the basin and the old line will be removed. The new line will be routed below the new wave barrier wall within a buried trench located between wave barrier vertical piles. We request the Borough's review of this general sequencing plan before proceeding to final design.

Geotechnical Investigation

PND has satisfactorily completed all remaining geotechnical investigations. The recent geotechnical data revealed that rock anchoring of the primary wave barrier bearing piles is not necessary. Competent granular soils were discovered to adequate depth well below the overlying clay to allow deep foundation piles to resist anticipated service loads within the dense soil. Bedrock was not contacted during the investigation.

Environmental Investigation and Dredge Material Characterization

PND and our subconsultants have satisfactorily completed the environmental sampling investigation and dredge material characterization reports. Lab results indicate that while some chemical "hits" were encountered, they were not at levels considered to be of concern to the regulatory agencies. We are optimistic that offshore disposal will be authorized by state and federal regulators who are currently reviewing the data.

Project Budget

The cost estimate has been updated for the current scope of improvements developed to a 35% design completion level and based on the results of the various site investigations. The total project budget including 10% contingency and indirect costs is estimated at \$19.96 million. Our current estimate is down approximately \$1.69 million since our February 2014 planning level budget, which was prepared prior to final design commencement and the second round of geotechnical investigations. The most significant cost reductions are due to increased certainty of the subsurface conditions and design adaptation to the conditions encountered during the investigations. This has reduced cost for pile foundations, embankment placement and project contingency.

State and Federal Permit Applications & Compensatory Mitigation Plan

Following HB review of this 35% design submittal, PND will make any necessary scope adjustments then submit state and federal permit applications. The application review process can take several months so it is recommended to submit the documentation as soon as possible. The agencies require that the applications include not only the proposed scope of improvements under the current design scope but also all foreseeable future inner harbor facilities. To that end, we encourage one final review of the proposed float layout plan so we can include the community's latest preferences.

PND has engaged environmental scientists at Hart Crowser (HC) to perform regulatory due diligence studies for the project. HC is in process of conducting the required Biological Assessment (BA) and an Ecological Functional Assessment (EFA). Due to the magnitude of overwater structures and new intertidal fill placed for the parking area, it is anticipated that conservation and mitigation measures will be required. HC will assist PND and the Borough to develop an appropriate Compensatory Mitigation Plan to offset the project impacts. We request the Borough's suggestions for any locally supported mitigation measures at your earliest possible convenience.

Project Schedule

An updated project schedule is enclosed. It demonstrates design completion and permit authorizations in May 2015 followed by construction bid solicitation in June and construction beginning in July 2015. Substantial completion is scheduled for November 2016. The design phase remains on schedule with the 65% design review package due on February 25. To meet that schedule we request your review comments to this 35% design submittal by December 31, 2014.

Public Meeting

PND is prepared to conduct a public meeting for the project if desired by the HB. Perhaps a presentation at a Port and Harbor Committee meeting in January would be appropriate. Please advise your preferences on this.

PND looks forward to receiving your comments to this 35% design review submittal and would like to schedule a review work session at your earliest convenience. Please feel free to contact us if you have any immediate questions or concerns regarding the project. We look forward to proceeding with the 65% final design review submittal.

Sincerely,
PND Engineers, Inc. | Juneau Office



Dick Somerville, P.E.
Vice President

Enclosures



HAINES BOROUGH
SOUTH PORTAGE COVE HARBOR EXPANSION
WAVE BARRIER, DREDGING, GRAVEL PARKING AREA &
SEWER LINE RELOCATION

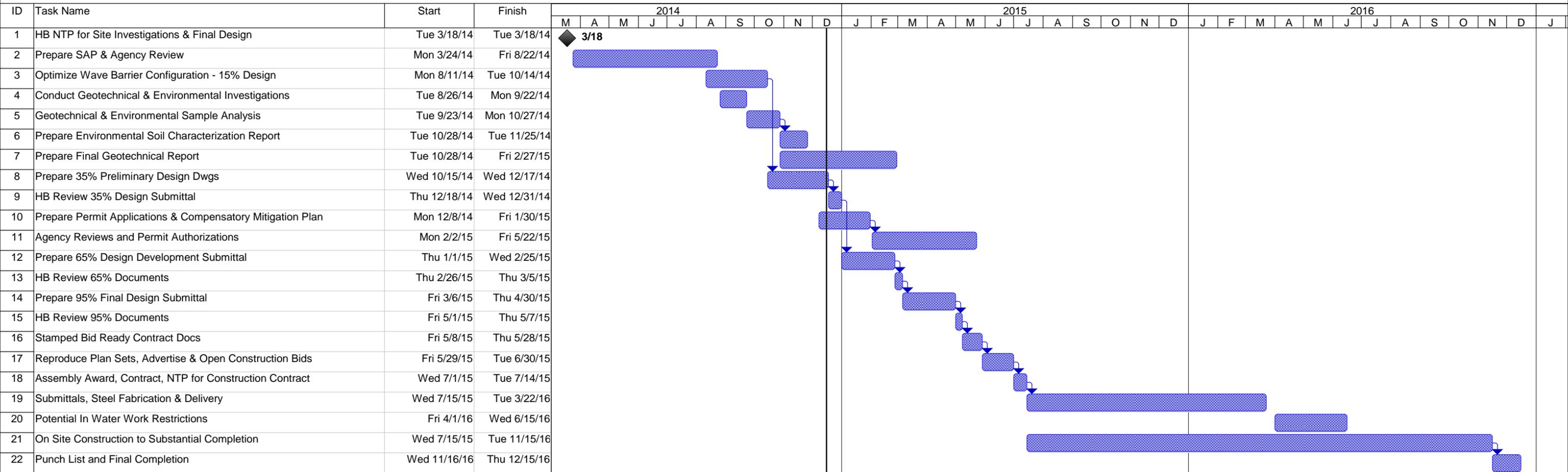


35% DESIGN COMPLETION - COST ESTIMATE
DECEMBER 17, 2014

Item	Item Description	Units	Quantity	Unit Cost	Amount
1505.1	Mobilization	LS	All Reqd	10%	\$1,333,850
2201.1	Clearing & Grubbing	AC	1.5	\$10,000	\$15,000
2202.1	Useable Excavation	CY	2,500	\$15	\$37,500
2202.2	Class A Shot Rock Borrow	CY	8,000	\$30	\$240,000
2202.3	Class B Shot Rock Borrow	CY	9,000	\$25	\$225,000
2204.1	Base Course, Grading C-1	CY	2,000	\$45	\$90,000
2205.1	Class II Armor Rock	CY	4,000	\$60	\$240,000
2205.2	Class III Armor Rock	CY	2,500	\$70	\$175,000
2501.1	Storm Drains	LS	All Reqd	\$75,000	\$75,000
2702.1	Construction Surveying	LS	All Reqd	\$150,000	\$150,000
2714.1	Geotextile Fabric	SY	15,000	\$5	\$75,000
2801.1	Relocate Sewer Outfall Line	LS	All Reqd	\$500,000	\$500,000
2881.1	Dredging and Offshore Disposal	CY	100,000	\$25	\$2,500,000
2881.2	Dredging and Onshore Placement at Parking Area	CY	30,000	\$35	\$1,050,000
2896.1	Furnish & Install Barrier Piles	EA	131	\$30,000	\$3,930,000
2896.2	Furnish & Install Bearing Piles	EA	44	\$65,000	\$2,860,000
2901.1	Furnish & Install Barrier Waler	LF	700	\$600	\$420,000
2901.2	Furnish & Install Bearing Caps & Connections	EA	22	\$23,000	\$506,000
2901.3	Wave Barrier Amenities - Fenders, Light, Armor Excavation, Misc.	LS	All Reqd	\$250,000	\$250,000
ESTIMATED CONSTRUCTION BID PRICE					\$14,672,350
CONTINGENCY & COMPENSATORY MITIGATION (10%)					\$1,467,235
PLANNING, ALTERNATIVES ANALYSIS & PUBLIC INVOLVEMENT					\$260,777
ENVIRONMENTAL INVESTIGATIONS, HABITAT STUDIES & PERMITTING					\$417,740
GEOTECHNICAL INVESTIGATIONS					\$878,946
SITE TOPOGRAPHIC & BATHYMETRIC SURVEYS					\$96,893
FINAL ENGINEERING DESIGN & BID READY CONTRACT DOCUMENTS					\$1,139,841
CONTRACT ADMIN & CONSTRUCTION INSPECTION					\$1,027,065
TOTAL RECOMMENDED PROJECT BUDGET					\$19,960,847

NOTE: Costs for the parking area assume a gravel surface. Future paving, sidewalks, curbs, utilities, landscaping, restrooms and lighting improvements are not included in this estimate. Pile anodes are not included in this estimate.

SOUTH PORTAGE COVE HARBOR EXPANSION PROJECT SCHEDULE WAVE BARRIER, DREDGING & PARKING AREA ROUGH GRADE



PND No. 102029
December 17, 2014

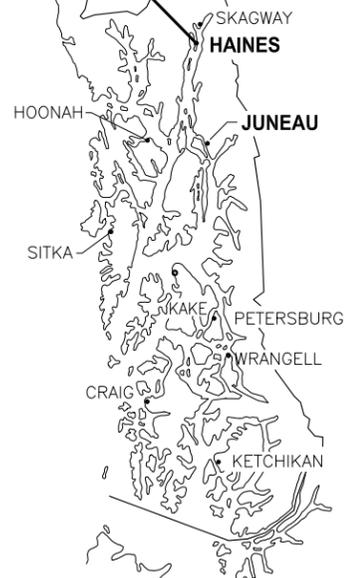
Task		Rolled Up Split		External Milestone		Duration-only		Progress	
Split		Rolled Up Milestone		Inactive Task		Manual Summary Rollup		Deadline	
Milestone		Rolled Up Progress		Inactive Milestone		Manual Summary			
Summary		External Tasks		Inactive Summary		Start-only			
Rolled Up Task		Project Summary		Manual Task		Finish-only			

HAINES BOROUGH SOUTH PORTAGE COVE HARBOR EXPANSION

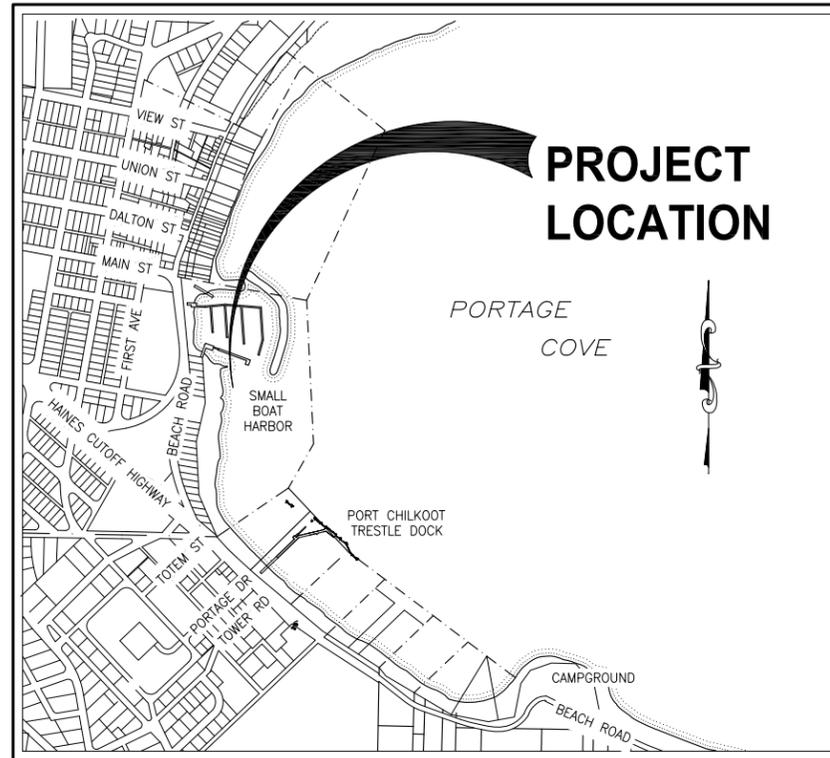


LOCATION
MAP

PROJECT
LOCATION



SOUTHEAST ALASKA



VICINITY MAP



TIDAL DATA	
HIGHEST OBSERVED WATER LEVEL (APPROX.)	= 26.1 FEET
EXTREME HIGH WATER	= 22.5 FEET
HIGH TIDE LINE	= 21.2 FEET
MEAN HIGH WATER	= 15.8 FEET
MEAN LOWER WATER	= 1.6 FEET
MEAN LOWER LOW WATER	= 0 FEET
MEAN LOWER LOW WATER (MLLW)	
LOWEST OBSERVED WATER LEVEL (APPROX.)	= -6.7 FEET

FROM: NOAA NOS/CO-OPS STATION ID:9452400 SKAGWAY, ALASKA

SHEET NO.	DWG. NO.	TITLE
GENERAL		
1	OF 19	1.01 COVER SHEET, VICINITY MAPS AND DRAWING INDEX
2	OF 19	1.02 GENERAL NOTES, LEGEND AND ABBREVIATIONS
3	OF 19	1.03 EXISTING CONDITIONS
4	OF 19	1.04 GENERAL SITE PLAN
5	OF 19	1.05 SITE DEVELOPMENT PLAN
6	OF 19	1.06 UPLANDS DEVELOPMENT PLAN SUMMER USE
7	OF 19	1.07 UPLANDS DEVELOPMENT PLAN WINTER USE
DREDGING, UPLANDS, AND SEWER LINE RELOCATION		
8	OF 19	2.01 DREDGING PLAN
9	OF 19	2.02 DREDGING SECTIONS
10	OF 19	2.03 DREDGING OFFSHORE DISPOSAL PLAN
11	OF 19	2.04 UPLAND SITE PLAN AND PROFILE
STRUCTURAL		
12	OF 19	3.01 WAVE BARRIER SITE PLAN
13	OF 19	3.02 WAVE BARRIER PARTIAL PLAN
14	OF 19	3.03 ELEVATION AND TYPICAL SECTION
15	OF 19	3.04 PILE SCHEDULE
16	OF 19	3.05 PILE SCHEDULE
17	OF 19	3.06 BARRIER PILES AND WALERS
18	OF 19	3.07 BEARING PILES AND BOX CAPS
19	OF 19	3.08 FENDER AND MARINE SIGNAL LIGHT

PROJECT SCHEDULE

DESCRIPTION	SCHEDULE
1. SUBSTANTIAL COMPLETION	11/15/16
2. FINAL COMPLETION OF ALL WORK UNDER THIS CONTRACT.	12/15/16

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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Juneau, Alaska 99801
Phone: 907-586-2093
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DESIGN: TCB CHECKED: CRS
DRAWN: PJD APPROVED: _____

SCALE: AS SHOWN

DATE: DEC. 2014

HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION

SHEET TITLE:
**COVER SHEET, VICINITY MAPS
AND DRAWING INDEX**

1.01

SHEET
1 OF 19

PND PROJECT NO.: 102029

GENERAL NOTES

1. EROSION AND POLLUTION CONTROL PLANS

THE CONTRACTOR SHALL DEVELOP AND SUBMIT FOR ENGINEER AND AGENCY REVIEW AND APPROVAL A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THIS PLAN SHALL INCLUDE AN EROSION AND SEDIMENT CONTROL PLAN BASED UPON THE CONTRACTOR'S SCHEDULING, EQUIPMENT AND WORK. TO THE GREATEST EXTENT POSSIBLE FOLLOW THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES (ADOT/PF) ALASKA STORM WATER POLLUTION PREVENTION PLAN GUIDE (ASWPPPG). THE PLAN SHALL CONSIDER FIRST PREVENTING EROSION, THEN MINIMIZING AND TRAPPING SEDIMENT PRIOR TO ITS ENTERING THE WATERWAYS. THE PLAN MUST ADDRESS THE SITE-SPECIFIC CONTROLS AND MANAGEMENT FOR THE CONSTRUCTION SITE AS WELL AS ALL MATERIAL SITES, WASTE DISPOSAL SITES AND AFFECTED AREAS. THE PLAN MUST INCORPORATE ALL THE REQUIREMENTS OF THE PROJECT PERMITS. BEST MANAGEMENT PRACTICES AS LISTED IN THE ASWPPPG SHALL BE USED.

THE CONTRACTOR SHALL PREPARE A HAZARDOUS MATERIAL CONTROL PLAN (HMCP) FOR THE HANDLING, STORAGE, CLEAN-UP AND DISPOSAL OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES. THE CONTRACTOR SHALL LIST AND GIVE LOCATIONS OF ALL HAZARDOUS MATERIALS, INCLUDING FIELD OFFICE MATERIALS, TO BE USED AND STORED ON-SITE AND THEIR ESTIMATED QUANTITIES. THE PLAN SHALL PROVIDE DETAILS FOR STORING THESE MATERIALS AS WELL AS DISPOSING WASTE PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS GENERATED BY THE PROJECT.

IDENTIFY THE LOCATIONS WHERE HAZARDOUS MATERIAL STORAGE, FUELING AND MAINTENANCE ACTIVITIES WILL TAKE PLACE. IF ON-SITE, DESCRIBE THE MAINTENANCE ACTIVITIES AND LIST ALL CONTROLS TO PREVENT THE ACCIDENTAL SPILLAGE OF OIL, PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS. DETAIL PROCEDURES FOR CONTAINMENT AND CLEANUP OF HAZARDOUS SUBSTANCES INCLUDING A LIST OF THE TYPES AND QUANTITIES OF EQUIPMENT AND MATERIALS AVAILABLE ON-SITE TO BE USED.

THE PLAN SHALL PROVIDE DETAILS FOR PREVENTION, CONTAINMENT, CLEAN-UP AND DISPOSAL OF SOIL AND WATER CONTAMINATED BY ACCIDENTAL SPILLS AND FOR UNEXPECTED CONTAMINATED SOIL AND WATER ENCOUNTERED DURING CONSTRUCTION.

2. MATCH EXISTING GRADES AT PROJECT LIMITS AND WHERE REQUIRED TO MATCH ELEVATIONS AT EXISTING ROADS.

3. THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY BE PRESENT HOWEVER ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY, PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ ALL EXCAVATIONS AT THE FOLLOWING TELEPHONE NUMBERS:

- WATER AND WASTE MATERIAL (907) 766-2237 OR 766-2200
- POWER AND LIGHT (AP&T) (907) 766-2331
- CATV (907) 766-2137
- TELEPHONE (GTE) (907) 766-2311

4. PROPERTY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION OR BETTER AT NO ADDITIONAL COST.

5. GRADING AND ALIGNMENT OF PIPE, STRUCTURES & FINAL SURFACING ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER TO FIT SITE CONDITIONS. GRADE ALL IMPROVEMENTS WITH POSITIVE DRAINAGE AWAY FROM STRUCTURES.

6. PROPERTY LINE LOCATIONS USED IN THESE PLANS ARE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY.

LEGEND

EXISTING	THIS PROJECT	
		TELEPHONE PEDESTAL
		TELEVISION PEDESTAL
		ELECTRICAL PEDESTAL
		OVERHEAD ELECTRICAL
		BURIED FUEL LINE
		ELECTRICAL (UNDERGROUND)
		WATER
		SANITARY SEWER
		RIGHT-OF-WAY
		COMMUNICATION (CABLE/TEL)
		STORM DRAIN
		FORCE MAIN
		ESTIMATION OF LAYER
		PROPERTY LINE
		GRADE BREAK
		GEOTEXTILE FABRIC
		GEOTEXTILE REINFORCEMENT
		GUY WIRE ANCHOR
		SURVEY CONTROL
		UTILITY POLE
		TELEPHONE VAULT
		BOLLARD
		CURB & GUTTER
		ELECTRICAL TRANSFORMER
		ELECTRICAL VAULT
		ELECTRICAL HANDHOLE
		FIRE HYDRANT
		LAYOUT POINT
		LIGHT POLE
		TRAFFIC SIGNAL
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		STORM DRAIN INLET
		SIGN
		TREE/VEGETATION
		WATER VALVE
		LAYOUT RADIUS
		PARKING KIOSK
		SWALE
		GUARDRAIL

ABBREVIATIONS

A	AT	H	HUB & TACK	Q	QUANTITY
@	ASBESTOS CEMENT PIPE	H&T	HEAVY DUTY	QTY	QUANTITY
AC	ASPHALT CONCRETE PAVEMENT	HD	HOT-DIPPED GALVANIZED	R	RADIUS
ACP	AMERICANS WITH DISABILITIES ACT	HDG	HIGH DENSITY POLYETHYLENE	RAD	RIM ELEVATION
ADA	ADJUSTABLE	HDPE	HORIZONTAL	RE	REFERENCE
ADJ	ASSOCIATED PILE AND FITTING CORP.	HORIZ	HOUSE	REF	REINFORCEMENT
APF	APPROXIMATE	HT	HEIGHT	REQD	REQUIRED
APPROX. or APPX.	ALASKA TIDELANDS SURVEY	HWY.	HIGHWAY	RET	RETAINING
ATS	AIR RELEASE VALVE	I	IN ACCORDANCE WITH	RO	ROUGH OPENING
AV	BEGINNING OF CURB CUT	IAW	INSIDE DIAMETER	ROW	RIGHT OF WAY
B	BUTTERFLY VALVE	ID	INVERT ELEVATION	S	SOUTH
BCC	BUILDING	IE	INCH	S	SCHEDULE
BFV	BEGINNING OF PROJECT	IN	IRON PIPE	SCHED/SCH	SCHEDULE
BLDG	BOTTOM	IP	INCLUDE (D) (ING)	SD	STORM DRAIN
BLDG	BOTTOM	INCL	INSULATE (D) (ION)	SDI	STORM DRAIN INLET STRUCTURE
BOP	BOTTOM	INSUL	INVERT	SDO	STORM DRAIN OUTLET STRUCTURE
BTM, BOT	C	INV	JUNCTION BOX	SDR	STANDARD DIMENSION RATIO
C	CURB & GUTTER	J	L	SF	SQUARE FOOT
C&G	CATCH BASIN	JB	POUNDS	SHLDR	SHOULDER
CB	CITY & BOROUGH OF JUNEAU	L	LINEAR FEET	SI	STREET INTERSECTION
CBJ	CAST IRON	LBS	LIVE LOAD	SPEC	SPECIFICATION (S)
CI	CONTROL JOINT	LF	LOCATION	SQ	SQUARE
CIP	CORRUGATED POLYETHYLENE PIPE	LL	LUMP SUM	SRB	SHOT ROCK BORROW
CJ	CLEAR	LOC	CORRUGATED METAL PIPE	SSC	SANITARY SEWER CONNECTION
CL	CLEANOUT	LS	CORPS OF ENGINEERS	SS	STAINLESS STEEL, SANITARY SEWER
CLR	COMMUNICATION	M	CONCRETE	SDMH	STORM DRAIN MANHOLE
CLR	COMPLETE PENETRATION	MAX	CONCRETE	SMH	SANITARY SEWER MANHOLE
CMP	CORNER	M.E.	CORRUGATED POLYETHYLENE PIPE	STA	STATION
CO	COUNTERSINK	MECH	CENTER	STD	STANDARD
C.O.E.	CUBIC YARD	MFR	DISSIMILAR PIPE COUPLING	STL	STEEL
COMM	DIAMETER	MH	DOUBLE	STRG	STRONG
CONC.	DEMOLITION	MJ	DEMOLITION	SW	SIDEWALK
CP	DEAD LOAD	MI	DUCTILE IRON PIPE	SWR	SEWER
CPEP/CPP	DIMENSION DOWN</td <td>MIN</td> <td>DETAIL</td> <td>SY</td> <td>SQUARE YARD</td>	MIN	DETAIL	SY	SQUARE YARD
COR	DOWN	MLLW	DETAIL	SYM	SYMMETRICAL
CSC	DETAIL	MSF	DISSIMILAR PIPE COUPLING	T	THICK
CTR	EAST	MSE	DIAMETER	t	TOP AND BOTTOM
CY	EACH	MTL	DOUBLE	T&B	TONGUE AND GROOVE
D	ECC	N	DEMOLITION	N	NORTH
DCP	EDGE OF CONCRETE	NFS	DEMOLITION	NTS	NOT TO SCALE
D/DIA	END OF CURB CUT	NIC	DEAD LOAD	O	OVERBURDEN
DBL	EXISTING GRADE	NO	DIP	OBD	ON CENTER
DEMO	EXPANSION JOINT	NTS	DUCTILE IRON PIPE	OC	OUTSIDE DIAMETER
DL	ELEVATION	O	DOWN	OD	ORIGINAL GOUND
DIP	ELECTRICAL	OB	DETAIL	OG	OVERHEAD ELECTRICAL
DL	END OF PAVEMENT	OC	DETAIL	OHE	OIL-WATER SEPARATOR
DIP	EQUAL	OD	DETAIL	OWS	OPPOSITE
DN	EQUIPMENT	OPP	DETAIL	P	PIPE
DTL	ESTIMATE	P	DETAIL	P	POINT OF CURVATURE, PIECE
E	EACH WAY	PC	DETAIL	P	PRECAST CONCRATE
E	EXCAVATE	PCC	DETAIL	PC	POINT OF COMPOUND CURVATURE
E	EXISTING	PE	DETAIL	PCC	POLYETHYLENE
EA.	FACE OF CURB	PED	DETAIL	PE	POLYPROPYLENE
EACH	FLOOR DRAIN	PER	DETAIL	PE	PROPERTY LINE, PLATE
EA.	FINISHED FLOOR	PERF	DETAIL	PE	POINT OF CURVE
EC	FINISHED GRADE	PI	DETAIL	PE	POLYPROPYLENE
ECC	FIRE HYDRANT, FLAT HEAD	PLWD	DETAIL	PE	POINT OF REVERSE CURVATURE
EG	FINISH (ED)	PL	DETAIL	PE	PROJECT
EG	FORCE MAIN SEWER	PL	DETAIL	PE	PARKING
EJ	FOUNDATION	POC	DETAIL	PE	PRESSURE REDUCING VALVE
EJ	FACE OF CURB	PP	DETAIL	PE	POUND PER SQUARE INCH
EL/ELEV	FOOT	PRC	DETAIL	PE	POINT, PRESSURE TREATED,
ELEVATION	FOOTING	PRJ	DETAIL	PE	POINT OF TANGENCY
ELECTRICAL	FLOWLINE OR FLANGE	PRKG	DETAIL	PE	POINT OF VERTICAL CURVATURE,
EOP	GALLON	PRV	DETAIL	PE	POLY-VINYL CHLORIDE
EQ	GALVANIZED	PSI	DETAIL	PE	POINT OF VERTICAL INTERSECTION
EQUIP	GRADE BREAK	PT	DETAIL	PE	
EST	GALLONS PER MINUTE	PVC	DETAIL	PE	
EW	GROUND	PVI	DETAIL	PE	
EXC	GATE VALVE		DETAIL	PE	
EXIST			DETAIL	PE	
F			DETAIL	PE	
FC			DETAIL	PE	
FD			DETAIL	PE	
FF			DETAIL	PE	
FG			DETAIL	PE	
FH			DETAIL	PE	
FIN			DETAIL	PE	
FM			DETAIL	PE	
FND			DETAIL	PE	
FOC			DETAIL	PE	
FT			DETAIL	PE	
FTG			DETAIL	PE	
FL			DETAIL	PE	
G			DETAIL	PE	
GAL			DETAIL	PE	
GALV			DETAIL	PE	
GB			DETAIL	PE	
GPM			DETAIL	PE	
GRD			DETAIL	PE	
GV			DETAIL	PE	

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

PND
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 Juneau, Alaska 99801
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DESIGN: TCB CHECKED: CRS
 DRAWN: KLL APPROVED:

SCALE: NTS

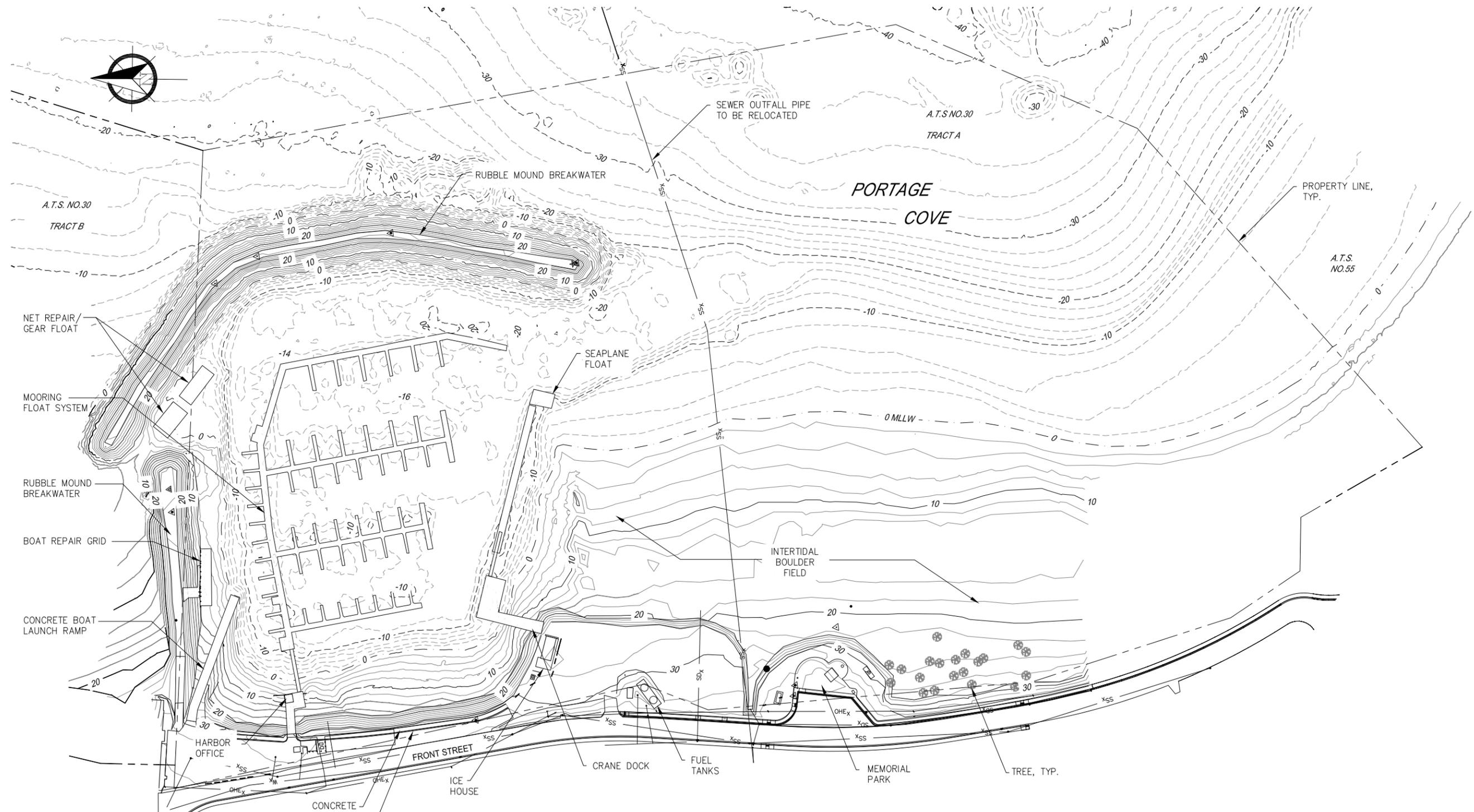
DATE: DEC. 2014

HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION

SHEET TITLE:
GENERAL NOTES, LEGEND AND
ABBREVIATIONS

PND PROJECT NO.: 102029

SHEET
2 OF 19
1.02



EXISTING CONDITIONS PLAN



35% DESIGN REVIEW SUBMITTAL



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DESIGN: _____ CHECKED: CRS SCALE: AS SHOWN
DRAWN: PJD APPROVED: _____

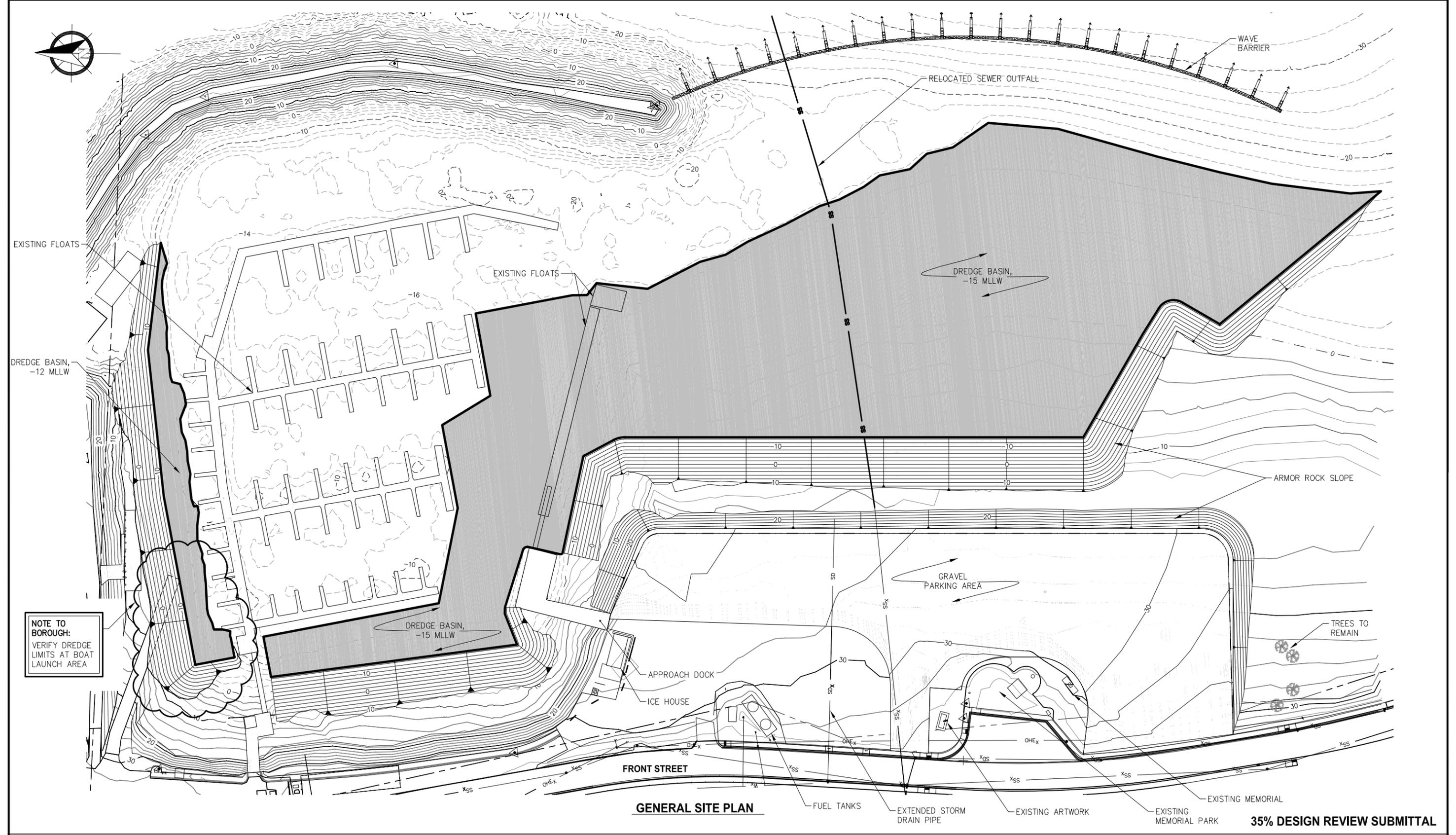
DATE: DEC. 2014

HAINES BOROUGH SOUTH PORTAGE COVE HARBOR EXPANSION

SHEET TITLE: **EXISTING CONDITIONS**

PND PROJECT NO.: 102029

1.03
SHEET 3 OF 19



GENERAL SITE PLAN

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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www.pndengineers.com

DESIGN: TCB CHECKED: CRS
DRAWN: PJD APPROVED: _____

SCALE: SCALE IN FEET
0 50 100 FT.

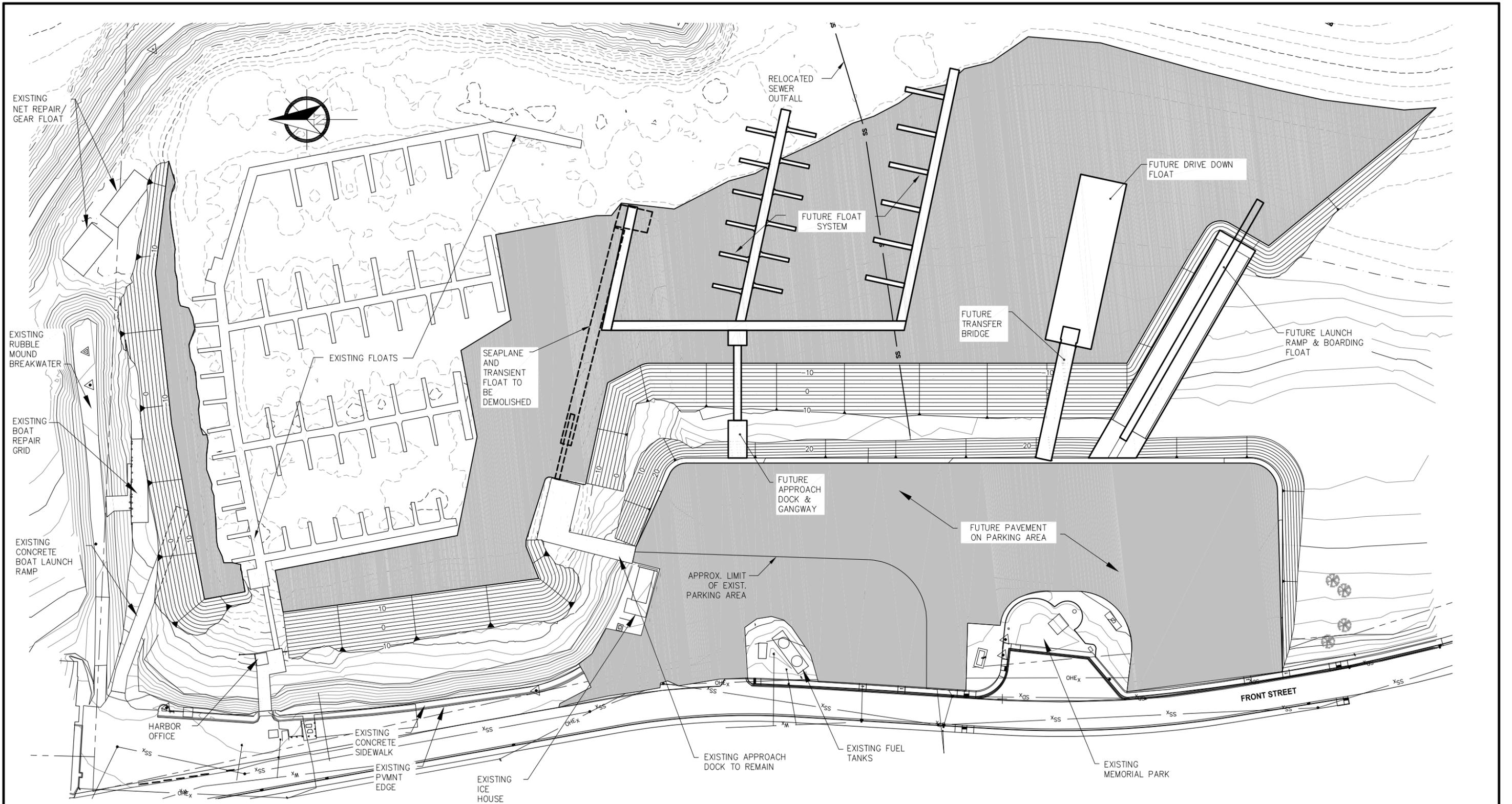
DATE: DEC. 2014

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
GENERAL SITE PLAN

PND PROJECT NO.: 102029

1.04
SHEET
4 OF 19



SITE DEVELOPMENT PLAN

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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Phone: 907-586-2093
Fax: 907-586-2099
www.pndengineers.com

DESIGN: TCB CHECKED: CRS SCALE: SCALE IN FEET
DRAWN: PJD APPROVED: _____ 0 50 100 FT.

DATE: DEC. 2014

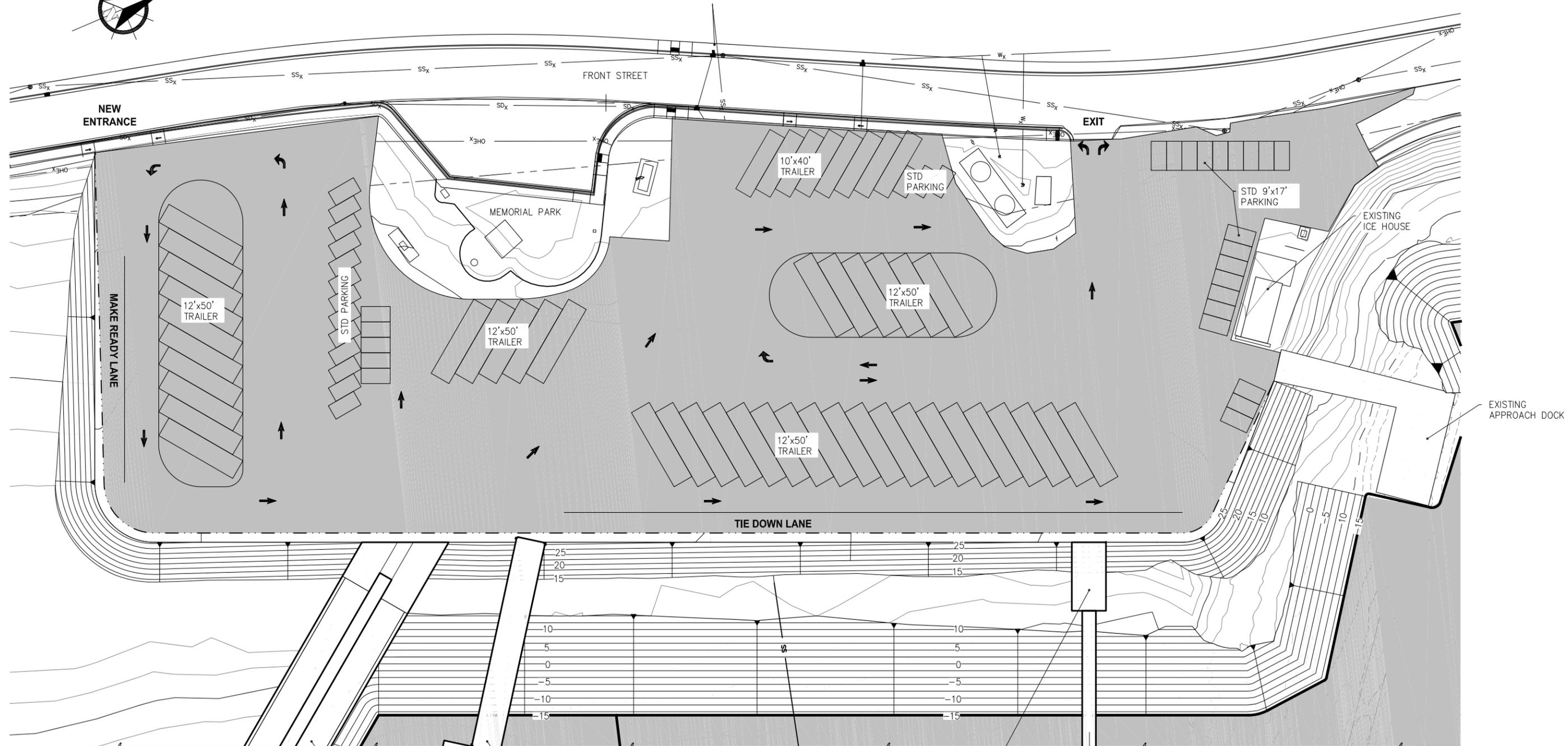
**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
SITE DEVELOPMENT PLAN

1.05

PND PROJECT NO.: 102029

SHEET
5 OF 19



**UPLAND PARKING AREA
CONCEPT PLAN**

PARKING SUMMARY	
SPACE SIZE	QUANTITY
12' x 50'	40
10' x 40'	8
9' x 17'	40

35% DESIGN REVIEW SUBMITTAL

FUTURE BOAT LAUNCH RAMP FUTURE DRIVE DOWN FLOAT/TRANSFER BRIDGE FUTURE APPROACH DOCK GANGWAY TO FUTURE FLOATS



REVISIONS					
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 Fax: 907-586-2099
 www.pndengineers.com

DESIGN: TCB CHECKED: CRS
 DRAWN: PJD APPROVED: _____

SCALE: SCALE IN FEET
 0 30 60 FT.

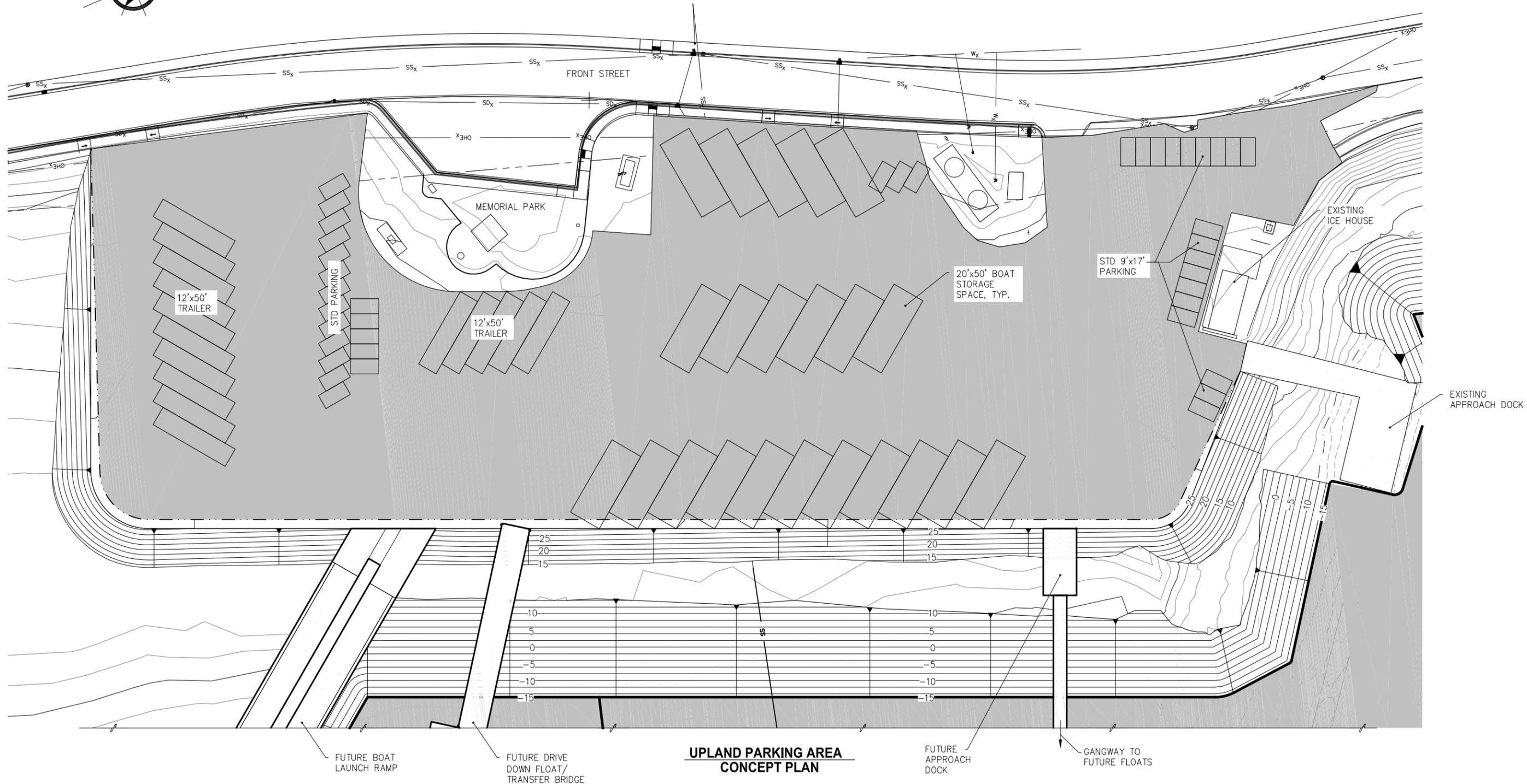
DATE: DEC. 2014

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
**UPLANDS DEVELOPMENT PLAN
SUMMER USE**

PND PROJECT NO.: 102029

1.06
SHEET OF 19



**UPLAND PARKING AREA
CONCEPT PLAN**

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REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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DESIGN: TCB CHECKED: CRS
DRAWN: _____ APPROVED: _____



DATE: DEC. 2014

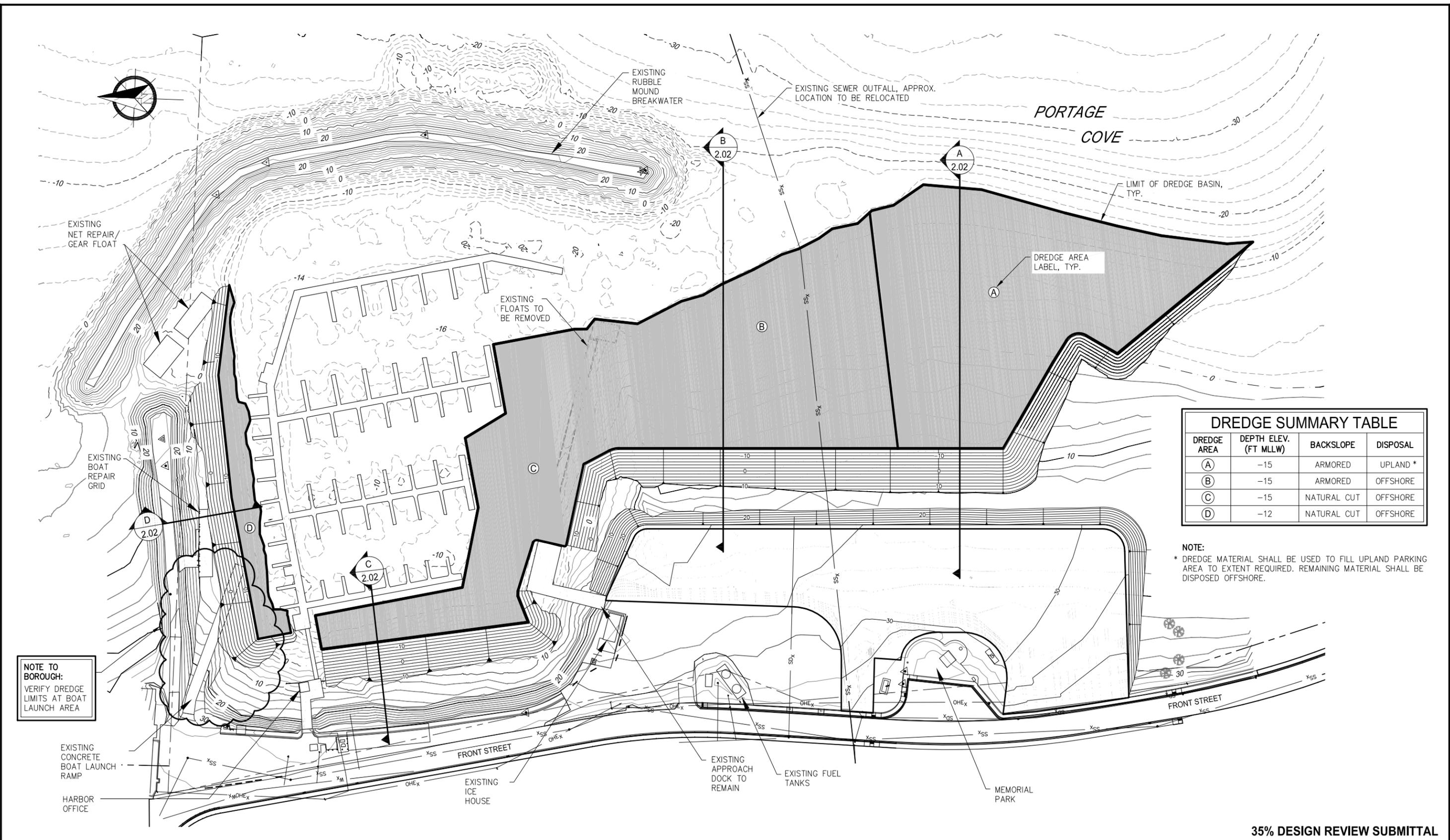
**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
**UPLANDS DEVELOPMENT PLAN
WINTER USE**

1.07

SHEET
7 OF 19

PND PROJECT NO.: 102029



DREDGE SUMMARY TABLE			
DREDGE AREA	DEPTH ELEV. (FT MLLW)	BACKSLOPE	DISPOSAL
(A)	-15	ARMORED	UPLAND *
(B)	-15	ARMORED	OFFSHORE
(C)	-15	NATURAL CUT	OFFSHORE
(D)	-12	NATURAL CUT	OFFSHORE

NOTE:
 * DREDGE MATERIAL SHALL BE USED TO FILL UPLAND PARKING AREA TO EXTENT REQUIRED. REMAINING MATERIAL SHALL BE DISPOSED OFFSHORE.

NOTE TO BOROUGH:
 VERIFY DREDGE LIMITS AT BOAT LAUNCH AREA

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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: _____ CHECKED: CRS
 DRAWN: PJD APPROVED: _____

SCALE: SCALE IN FEET
 0 60 120 FT.

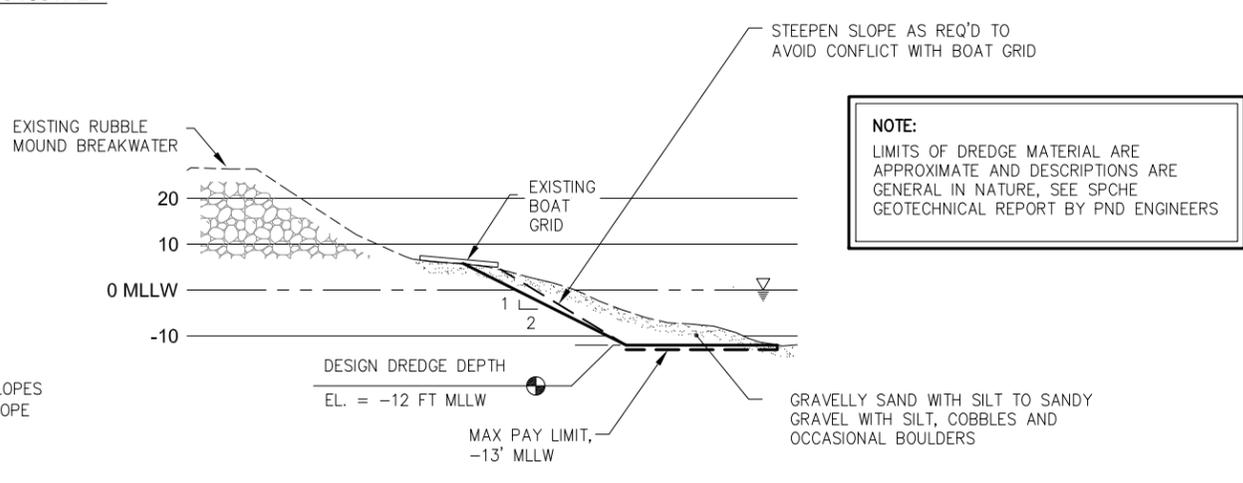
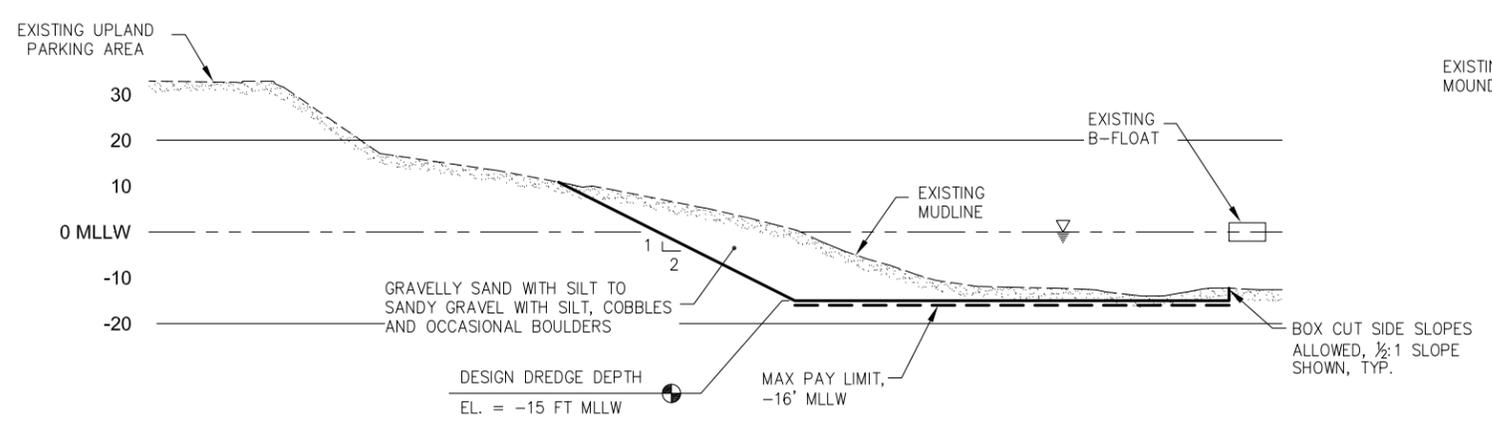
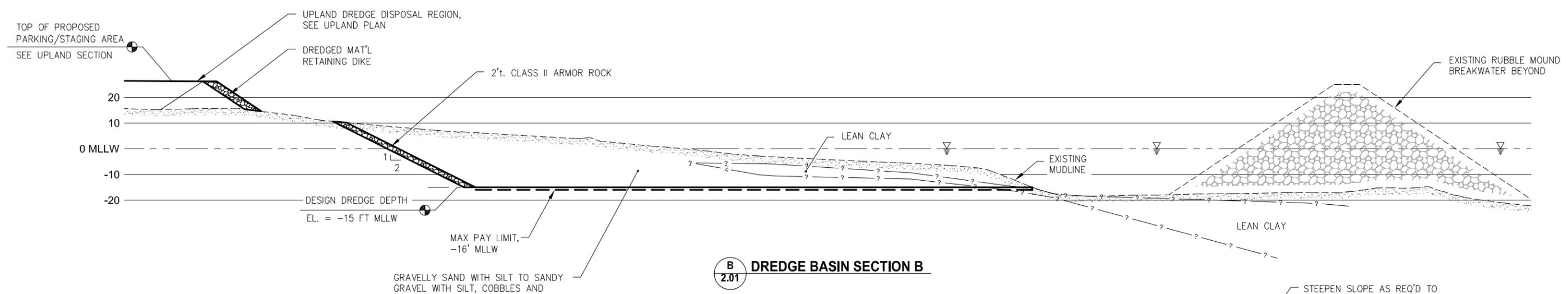
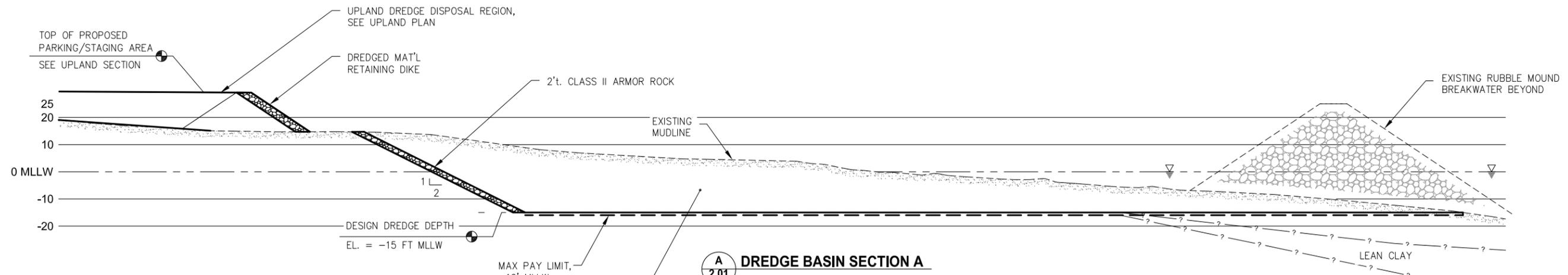
DATE: DEC. 2014

**HAINES BOROUGH
 SOUTH PORTAGE COVE
 HARBOR EXPANSION**

SHEET TITLE: **DREDGING PLAN**

PND PROJECT NO.: 102029

2.01
 SHEET
 8 OF 19



NOTE:
LIMITS OF DREDGE MATERIAL ARE APPROXIMATE AND DESCRIPTIONS ARE GENERAL IN NATURE, SEE SPICHE GEOTECHNICAL REPORT BY PND ENGINEERS

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REVISIONS					
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DESIGN: TCB CHECKED: CRS
DRAWN: PJD APPROVED: _____

SCALE: SCALE IN FEET
0 20 40 FT.

DATE: DEC. 2014

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
DREDGING SECTIONS

PND PROJECT NO.: 102029

2.02
SHEET
9 OF 19

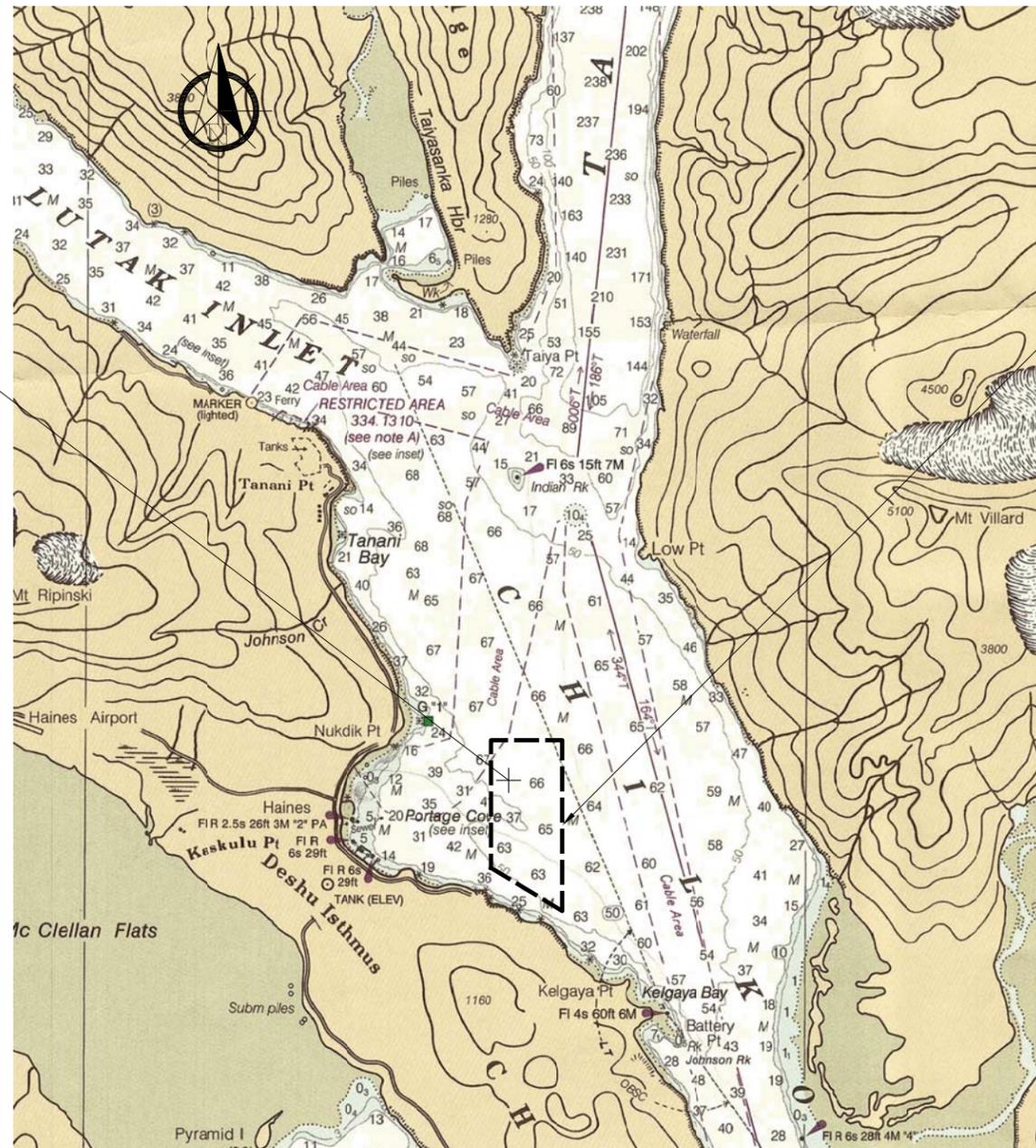
OFFSHORE DISPOSAL SITE
± 50 ACRES

OFFSHORE
DISPOSAL SITE CENTER:

LAT: N 59°14'18"

LONG: W 135°24'12"

NOTE:
CENTER LOCATION APPROXIMATE



PROPOSED DREDGE DISPOSAL
AREA

BATHYMETRY FROM: NOAA 17317
LYNN CANAL - SHERMAN POINT TO SKAGWAY

DISPOSAL SITE PLAN



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DESIGN: NJS CHECKED: CRS
DRAWN: PJD APPROVED: _____

SCALE:
AS SHOWN

DATE: DEC. 2014

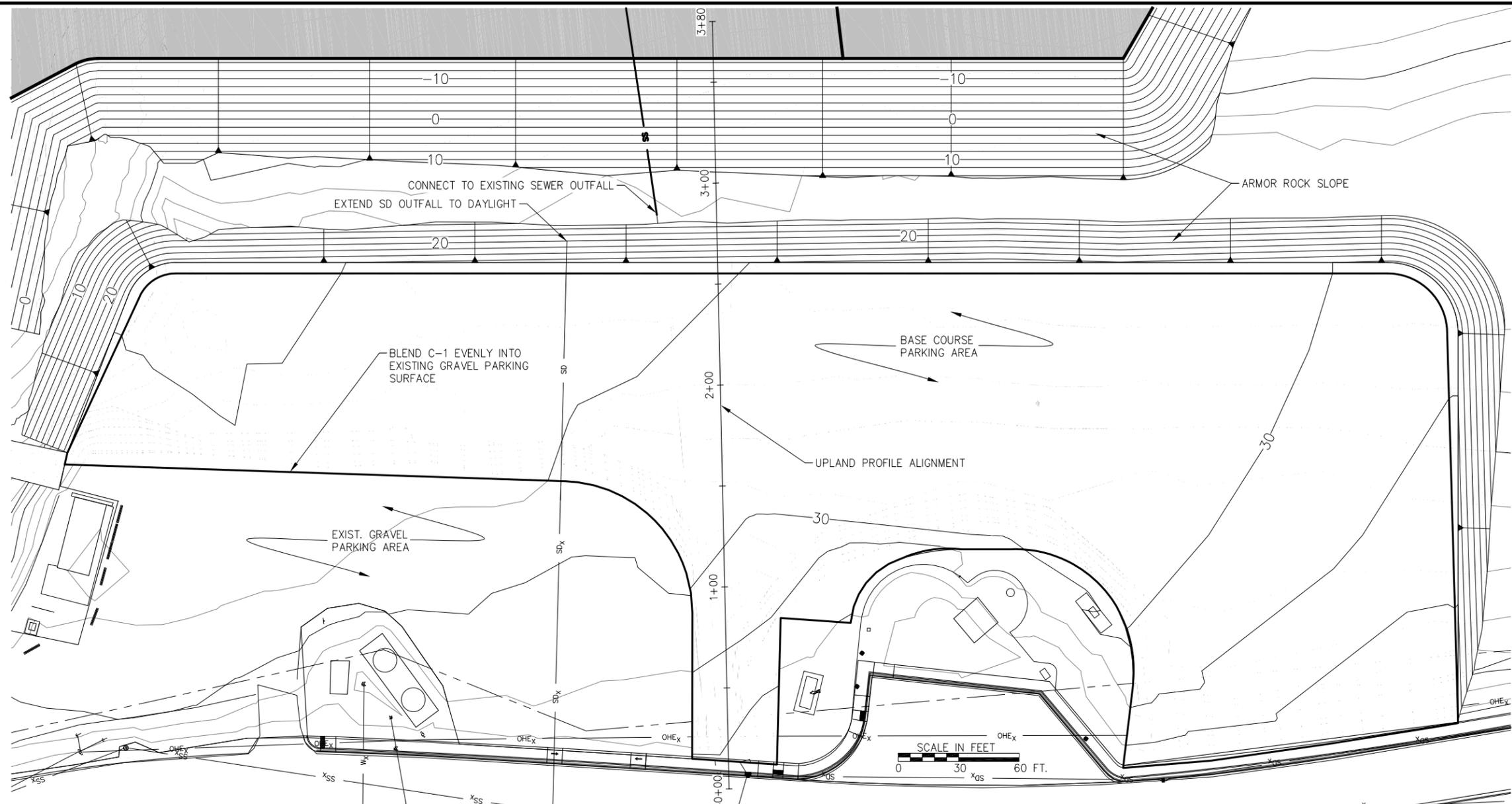
HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION

SHEET TITLE:
**DREDGING OFFSHORE
DISPOSAL SITE PLAN**

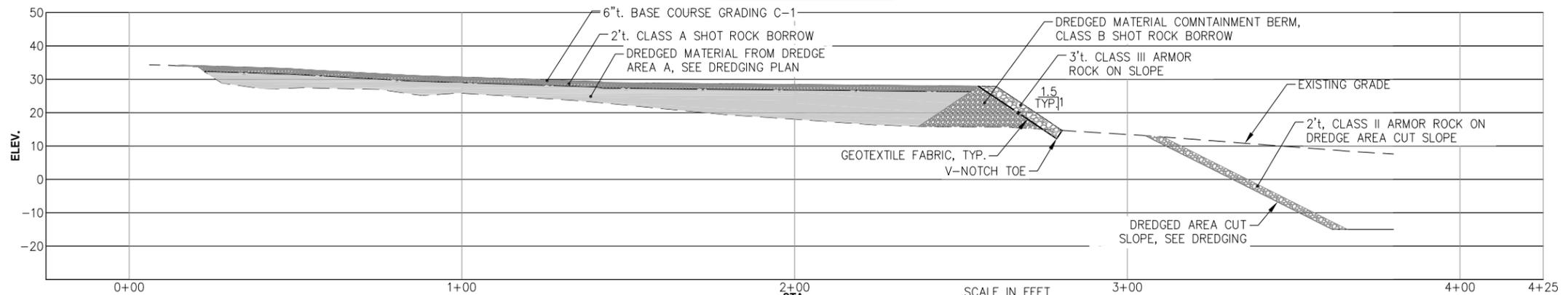
2.03

SHEET
10 OF 19

PND PROJECT NO.: 102029



UPLAND SITE PLAN



UPLAND PROFILE

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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DESIGN: TCB CHECKED: CRS
DRAWN: TCB APPROVED: _____

SCALE: AS SHOWN

DATE: DEC. 2014

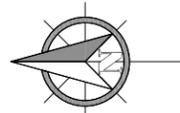
**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
UPLAND SITE PLAN AND PROFILE

2.04

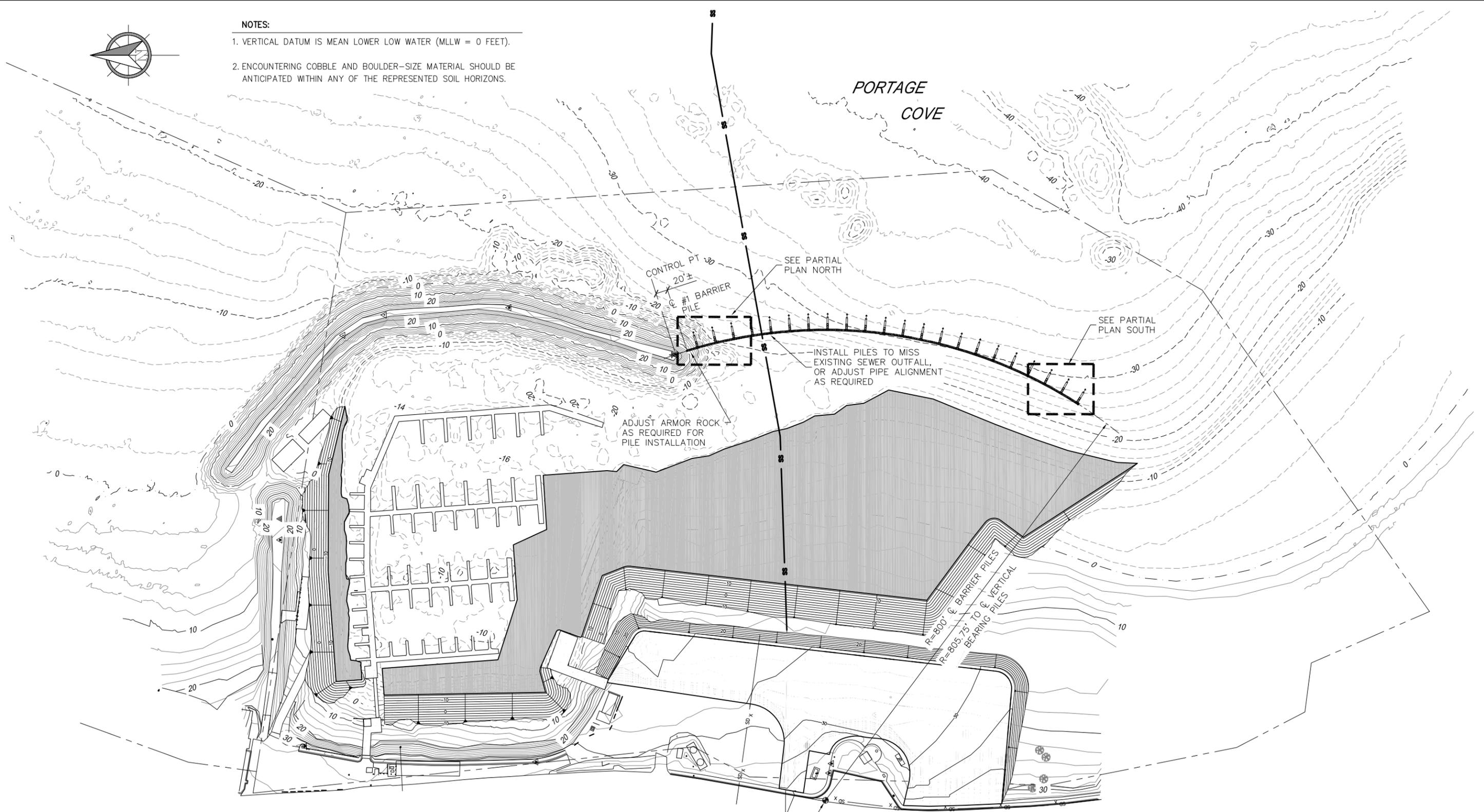
PND PROJECT NO.: 102029

SHEET
11 OF 19



NOTES:

1. VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW = 0 FEET).
2. ENCOUNTERING COBBLE AND BOULDER-SIZE MATERIAL SHOULD BE ANTICIPATED WITHIN ANY OF THE REPRESENTED SOIL HORIZONS.



WAVE BARRIER SITE PLAN

35% DESIGN REVIEW SUBMITTAL

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
WAVE BARRIER SITE PLAN

3.01

SHEET
12 OF 19

PND PROJECT NO.: 102029

DATE: DEC. 2014

REVISIONS

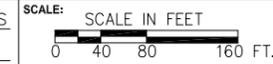
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

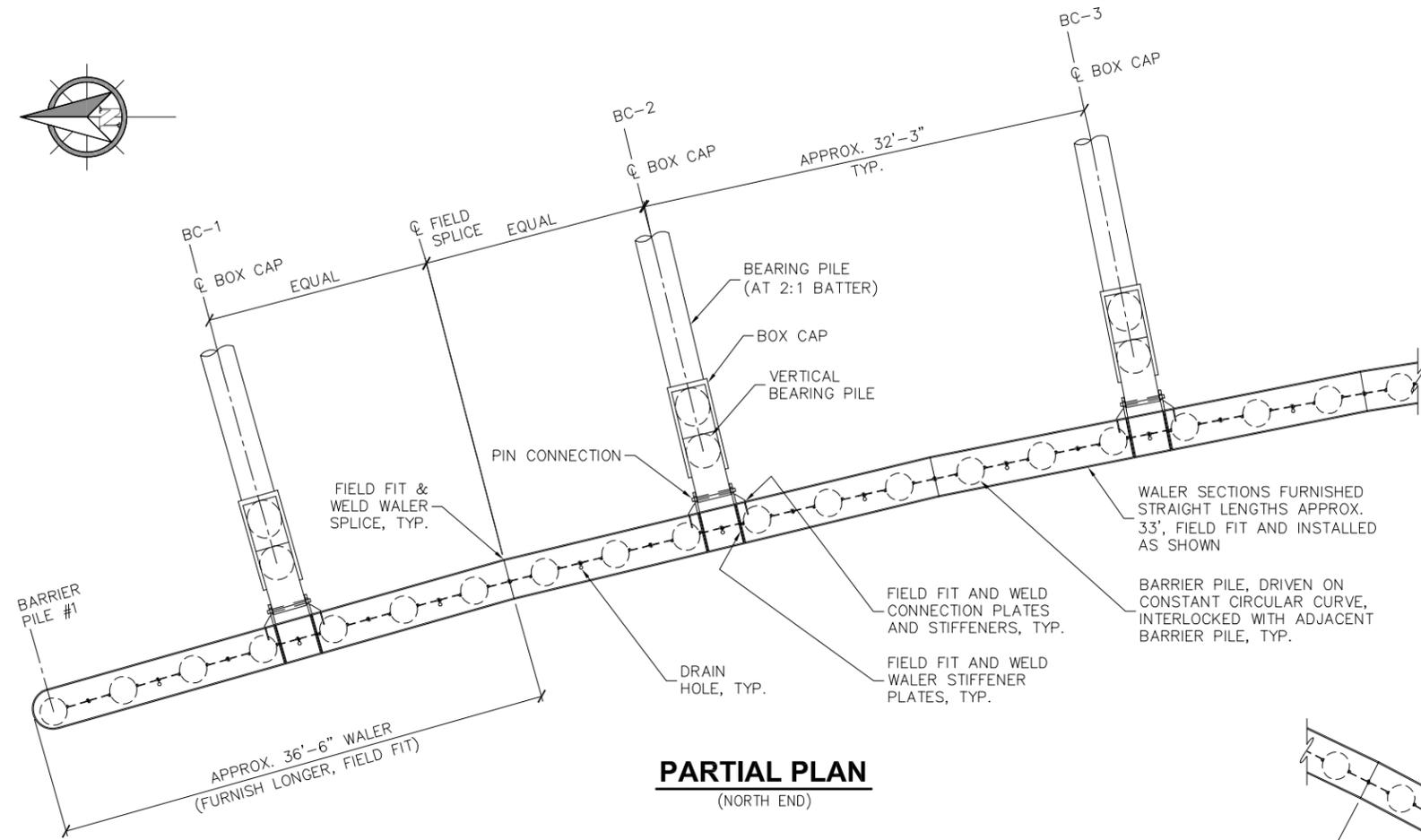
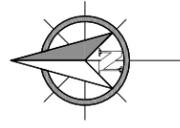


ENGINEERS, INC.

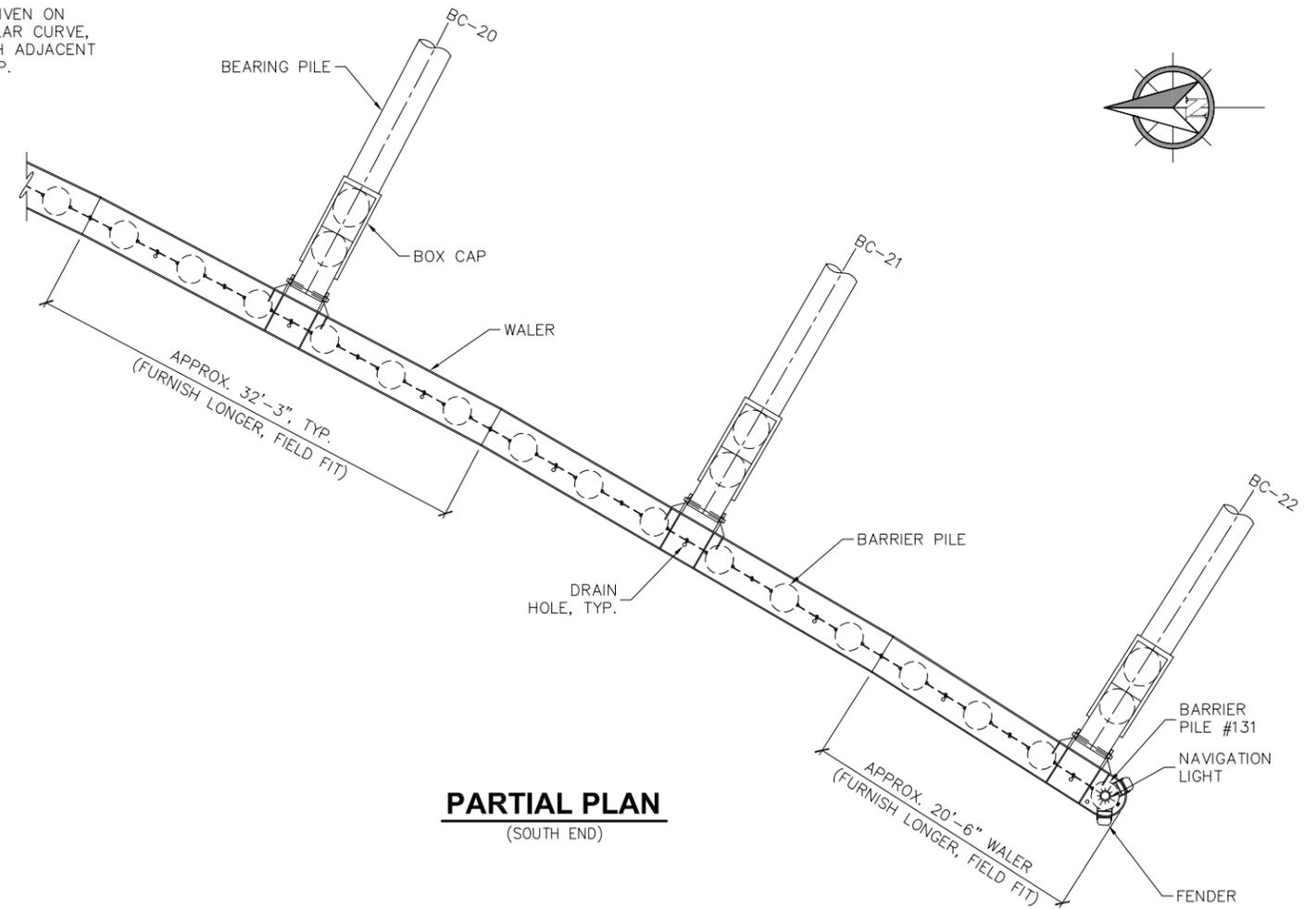
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DESIGN: JO CHECKED: CRS
DRAWN: DRH APPROVED: _____

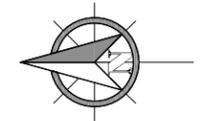




PARTIAL PLAN
(NORTH END)



PARTIAL PLAN
(SOUTH END)



35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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DESIGN: JO CHECKED: CRS
DRAWN: DRH APPROVED: _____

SCALE: SCALE IN FEET
0 6 12 FT.

DATE: DEC. 2014

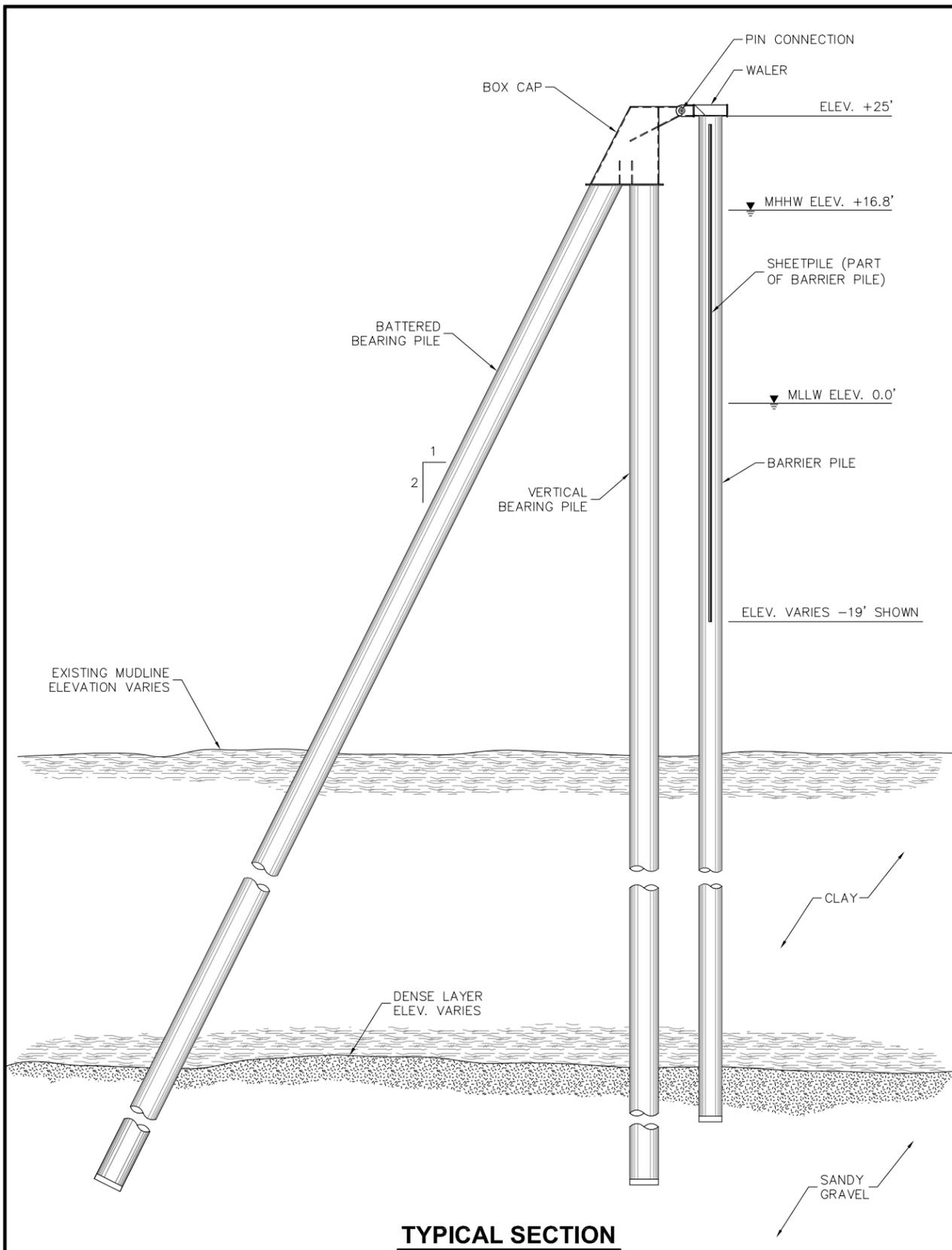
HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION

SHEET TITLE:
WAVE BARRIER PARTIAL PLAN

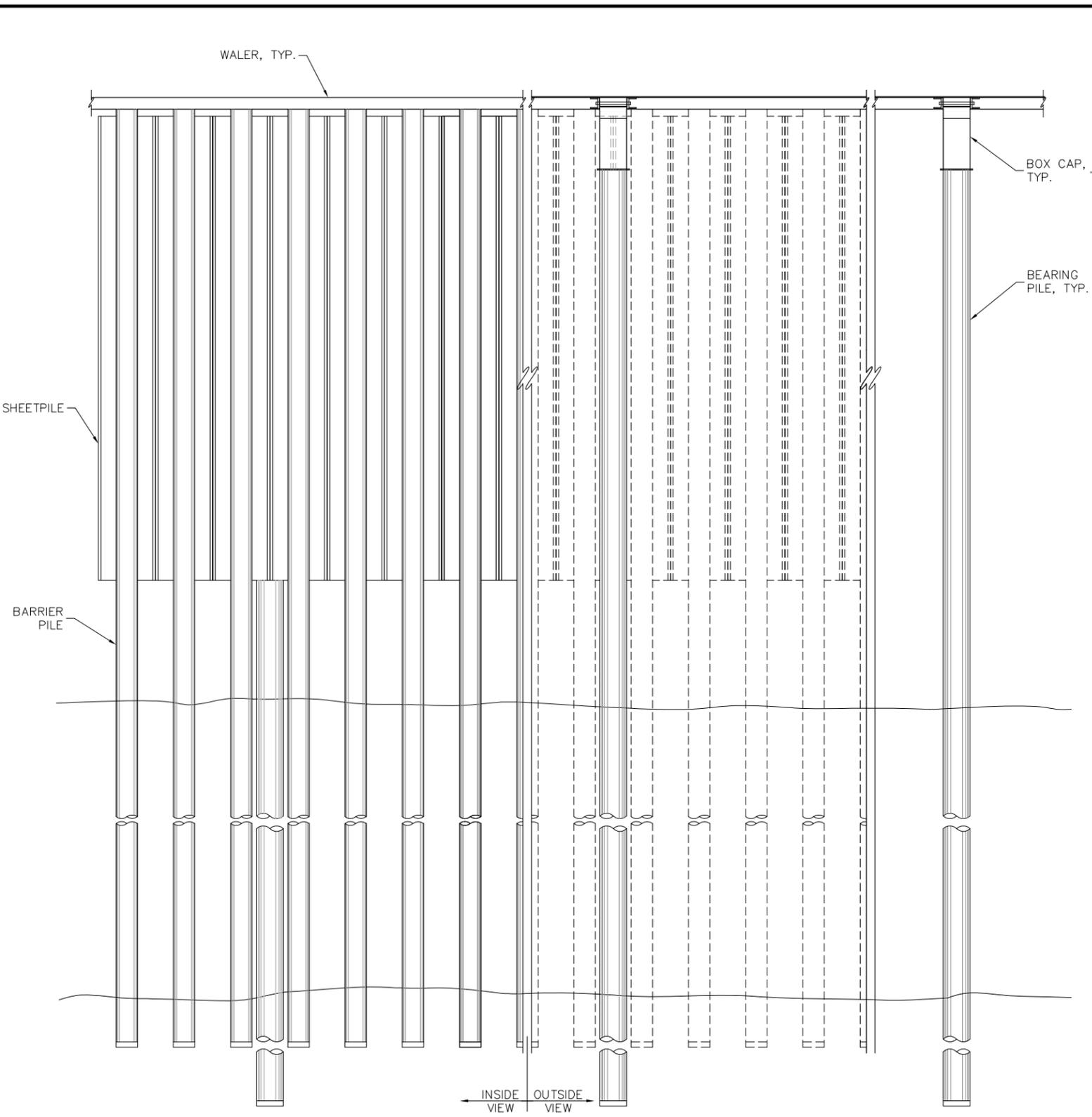
PN&D PROJECT NO.: 102029.10

3.02

SHEET
13 OF 19



TYPICAL SECTION



PARTIAL ELEVATION

35% DESIGN REVIEW SUBMITTAL



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: JO CHECKED: CRS
 DRAWN: DRH APPROVED: _____

SCALE: SCALE IN FEET
 0 6 12 FT.

DATE: DEC. 2014

HAINES BOROUGH SOUTH PORTAGE COVE HARBOR EXPANSION

SHEET TITLE: **ELEVATION AND TYPICAL SECTION**

PN&D PROJECT NO.: 102029.10

3.03
SHEET 14 OF 19

WAVE BARRIER PILE SCHEDULE								
Pile Location	Pile Size Diameter x Wall	Approx. Length (ft)	Approx. Length of Bare Pile (ft)	Approx. Length of Sheetpile (ft)	Tip Type	Approx. Tip Elevation (ft)	Design Compression Capacity	Comments
							(Allowable/Ultimate) (kips)	
1	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 one side of pile only*
2	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
3	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
4	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
5	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
6	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
7	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
8	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
9	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
10	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
11	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
12	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
13	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
14	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
15	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
16	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
17	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
18	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
19	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
20	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
21	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
22	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
23	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
24	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
25	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
26	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
27	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
28	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
29	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
30	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
31	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
32	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
33	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
34	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
35	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
36	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
37	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
38	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
39	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
40	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
41	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
42	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
43	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
44	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
45	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
46	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
47	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
48	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
49	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
50	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides

* PAY PARTICULAR ATTENTION TO INTERLOCK ORIENTATION

WAVE BARRIER PILE SCHEDULE (Cont.)								
Pile Location	Pile Size Diameter x Wall	Approx. Length (ft)	Approx. Length of Bare Pile (ft)	Approx. Length of Sheetpile (ft)	Tip Type	Approx. Tip Elevation (ft)	Design Compression Capacity	Comments
							(Allowable/Ultimate) (kips)	
51	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
52	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
53	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
54	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
55	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
56	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
57	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
58	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
59	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
60	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
61	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
62	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
63	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
64	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
65	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
66	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
67	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
68	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
69	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
70	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
71	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
72	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
73	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
74	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
75	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
76	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
77	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
78	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
79	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
80	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
81	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
82	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
83	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
84	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
85	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
86	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
87	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
88	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
89	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
90	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
91	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
92	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
93	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
94	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
95	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
96	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
97	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
98	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
99	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
100	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides

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REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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ENGINEERS, INC.

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www.pndengineers.com

DESIGN: JO CHECKED: CRS
DRAWN: DRH APPROVED: _____

SCALE: _____

DATE: DEC. 2014

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE:
PILE SCHEDULE

3.04
SHEET
15 OF 19

PN&D PROJECT NO.: 102029.10

WAVE BARRIER PILE SCHEDULE (Cont.)								
Pile Location	Pile Size Diameter x Wall	Approx. Length (ft)	Approx. Length of Bare Pile (ft)	Approx. Length of Sheetpile (ft)	Tip Type	Approx. Tip Elevation (ft)	Design Compression Capacity	Comments
							(Allowable/Ultimate) (kips)	
101	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
102	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
103	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
104	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
105	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
106	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
107	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
108	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
109	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
110	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
111	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
112	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
113	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
114	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
115	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
116	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
117	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
118	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
119	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
120	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
121	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
122	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
123	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
124	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
125	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
126	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
127	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
128	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
129	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
130	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 both sides
131	24"dia x 0.5"t	100	40		Open Shoe	-75	25/75	PS31 one side of pile only*

* PAY PARTICULAR ATTENTION TO INTERLOCK ORIENTATION

BEARING PILE SCHEDULE							
Pile Location	Pile Batter	Pile Size Diameter x Wall **	Approx. Length (ft) **	Approx. Length of Bare Pile (ft) **	Tip Type	Capacity (Allowable/Ultimate) (kips) **	
						Compression	Tension
BC-1	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-2	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-3	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-4	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-5	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-6	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-7	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-8	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-9	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-10	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-11	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-12	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-13	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-14	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-15	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-16	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-17	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-18	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-19	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-20	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-21	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		
BC-22	Vertical	30"dia x "t			Cutting Shoe		
	2:1	30"dia x "t			Cutting Shoe		

** PRELIMINARY BEARING PILE ASSUMPTIONS:

- ASSUME 3/4"t WALL PILES
- ASSUME 160' TO 200' LONG PILES
- ASSUME BOTTOM 100' BARE (NO GALV.)
- COMPRESSION AND TENSION CAPACITIES REQUIRED STILL IN DEVELOPMENT. DATA IN TABLE WILL BE COMPLETED AS DESIGN DEVELOPS.

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REVISIONS					
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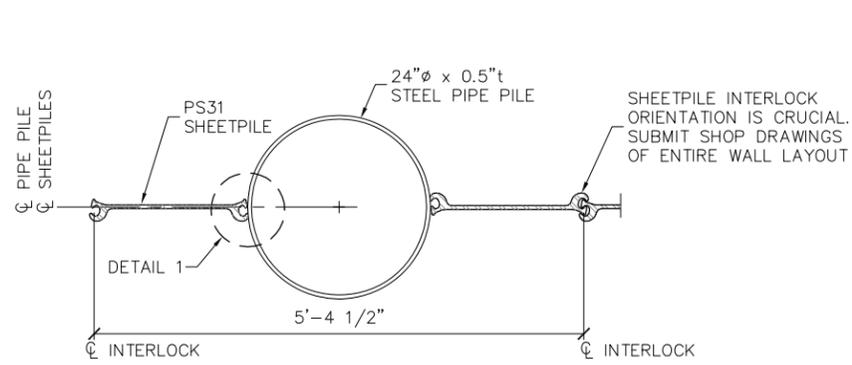
DATE: DEC. 2014

**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

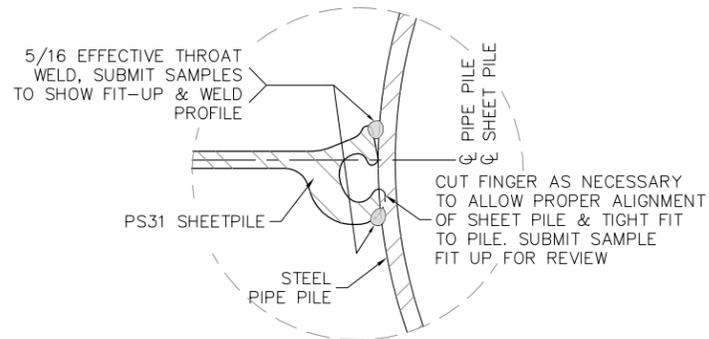
SHEET TITLE:
PILE SCHEDULE

3.05
SHEET
16 OF 19

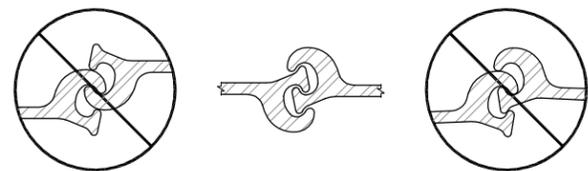
PN&D PROJECT NO.: 102029.10



TYPICAL BARRIER PILE



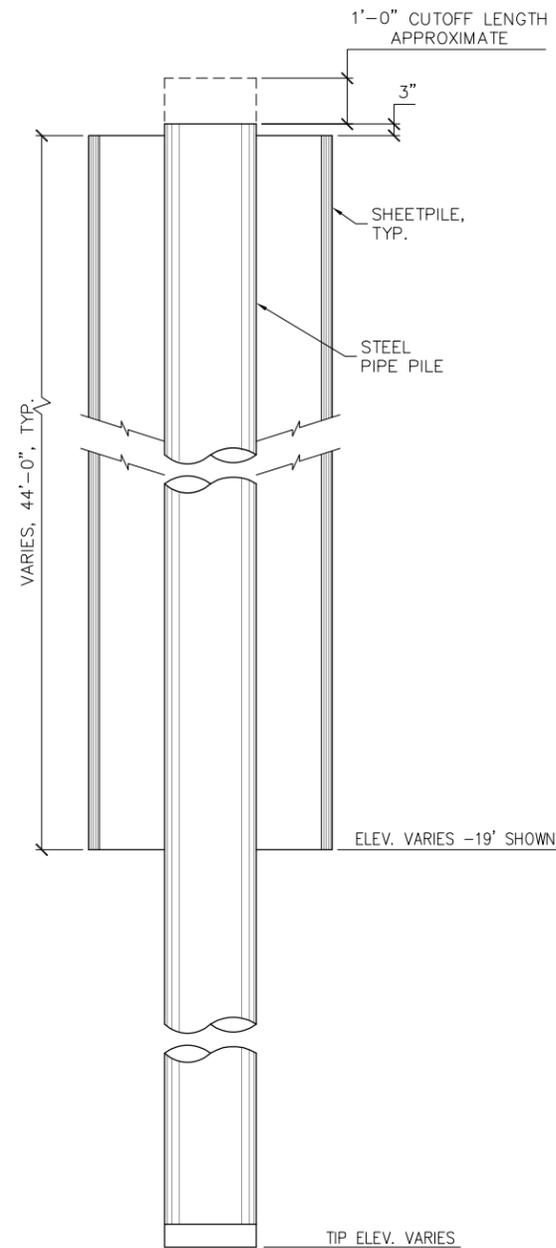
DETAIL 1



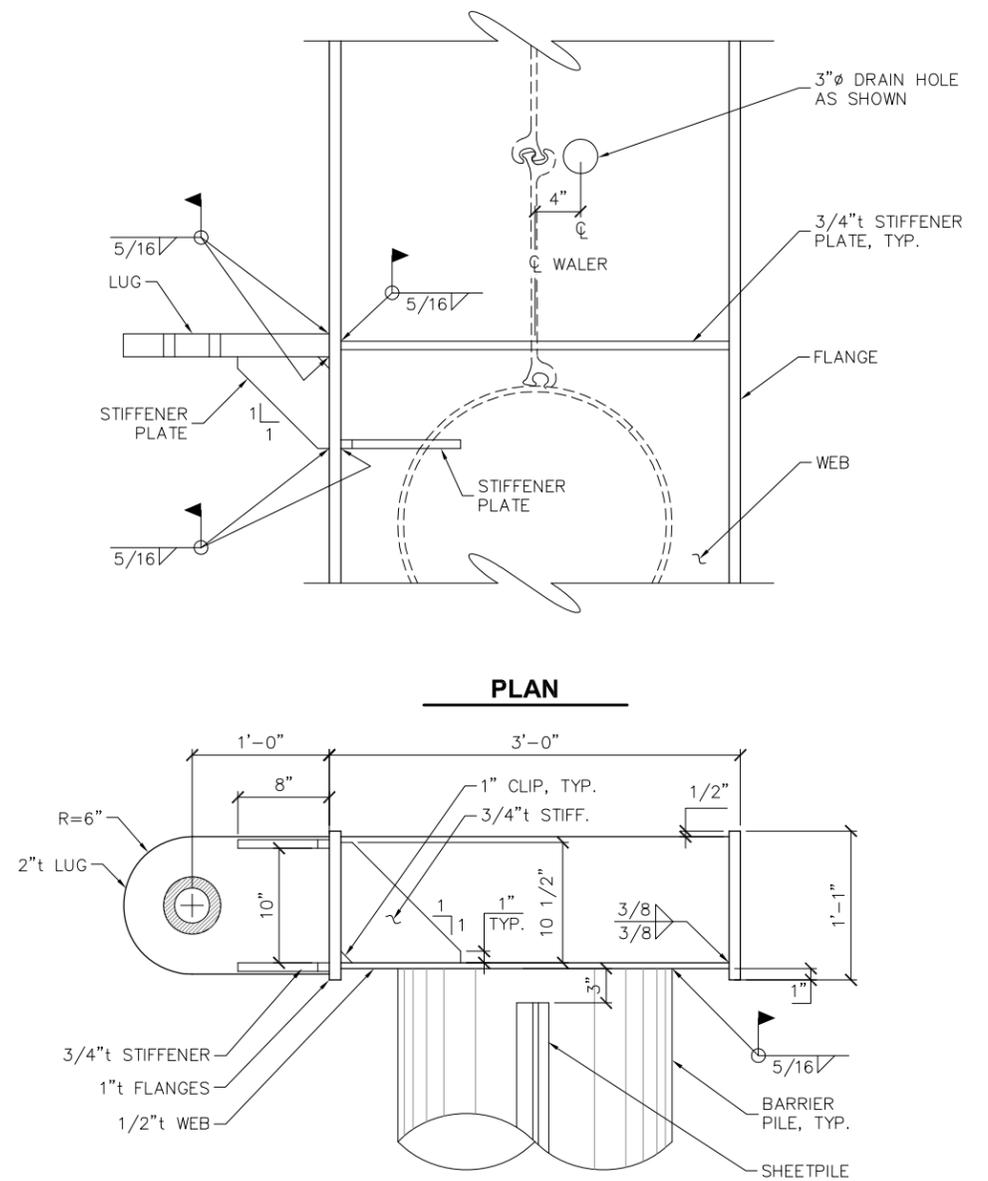
INCORRECT CORRECT INCORRECT

SHEETPILE INTERLOCK DETAILS

NOTE: ORIENTATION OF INTERLOCKS IS CRITICAL, VIEW SHOWN FROM TOP.



TYPICAL WAVE BARRIER PILE



PLAN

ELEVATION

WALER DETAILS

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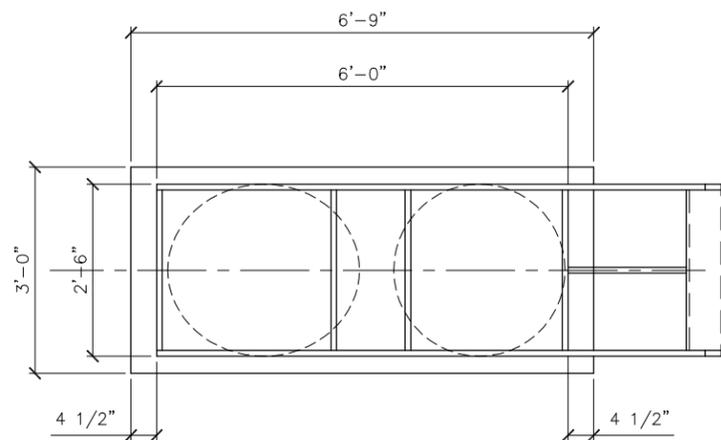
**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE: **BARRIER PILES
AND WALERS**

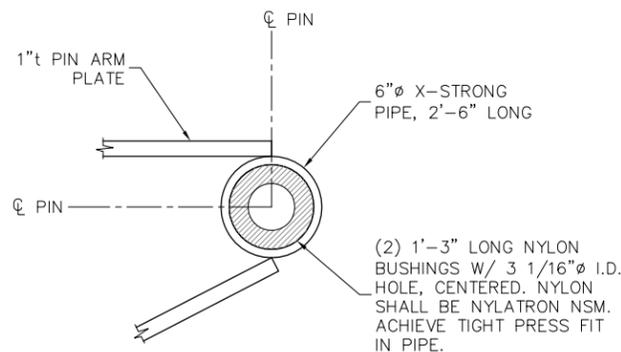
PN&D PROJECT NO.: 102029.10

3.06

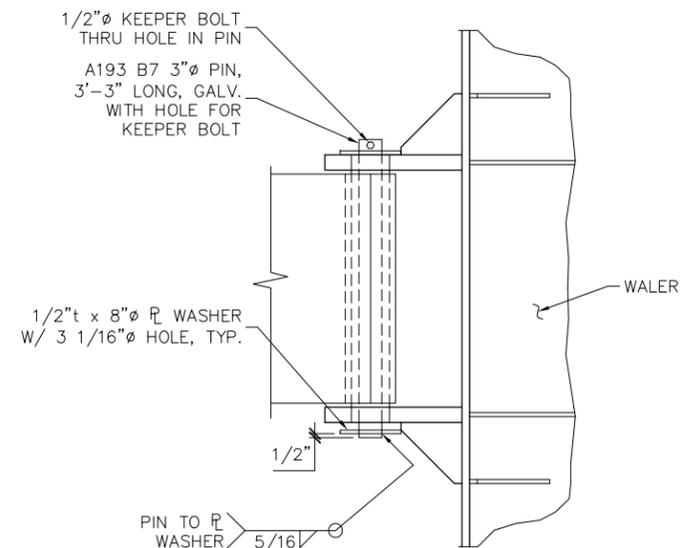
SHEET
17 OF 19



PLAN

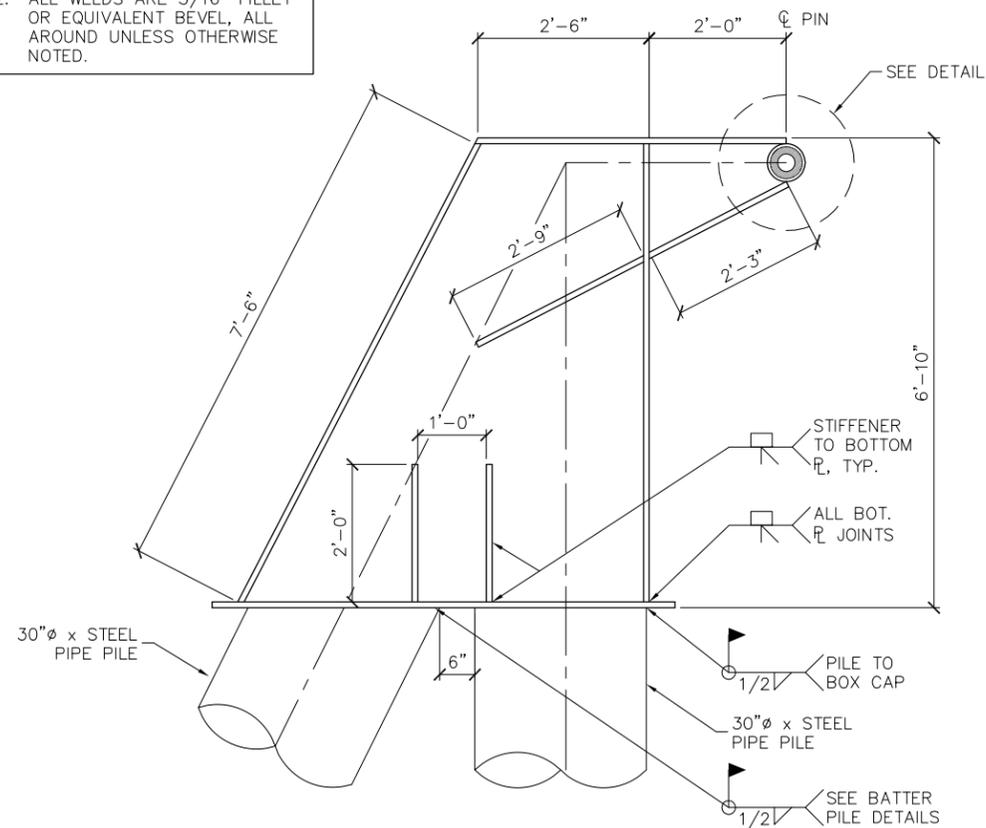


DETAIL

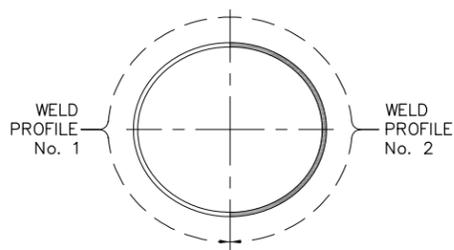


PIN CONNECTION PLAN

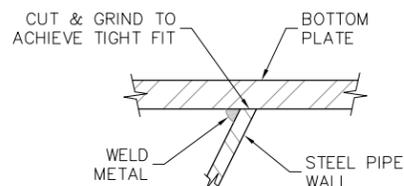
NOTE:
 1. ALL PLATE IS 1"t UNLESS OTHERWISE NOTED.
 2. ALL WELDS ARE 5/16" FILLET OR EQUIVALENT BEVEL, ALL AROUND UNLESS OTHERWISE NOTED.



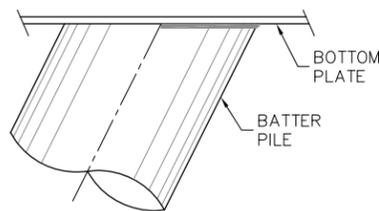
**ELEVATION
BOX CAP**



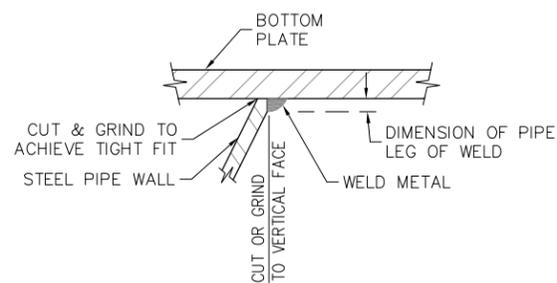
PLAN



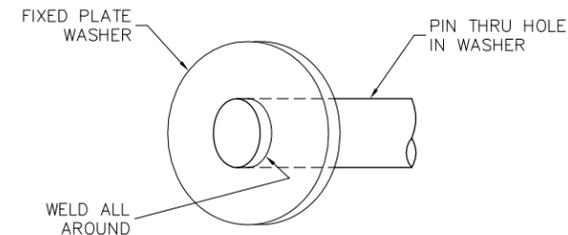
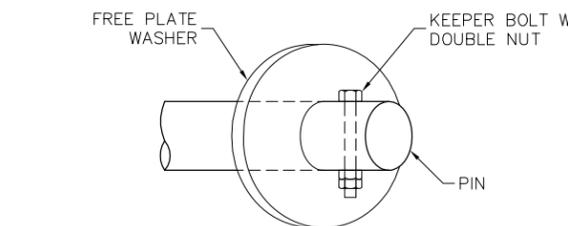
**No. 1
WELD PROFILE**



SIDE VIEW



**No. 2
WELD PROFILE**



PIN CONNECTION DETAILS

**BATTER PILE WELD
(ALL BATTER PILES)**

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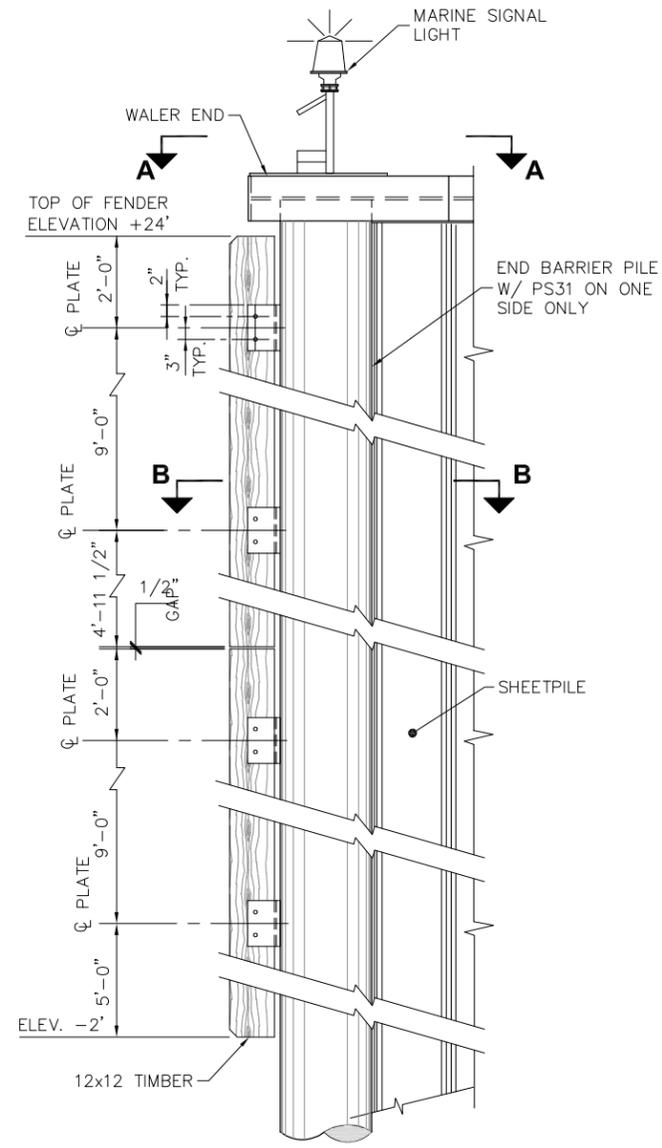
HAINES BOROUGH
 SOUTH PORTAGE COVE
 HARBOR EXPANSION

SHEET TITLE: **BEARING PILES
AND BOX CAPS**

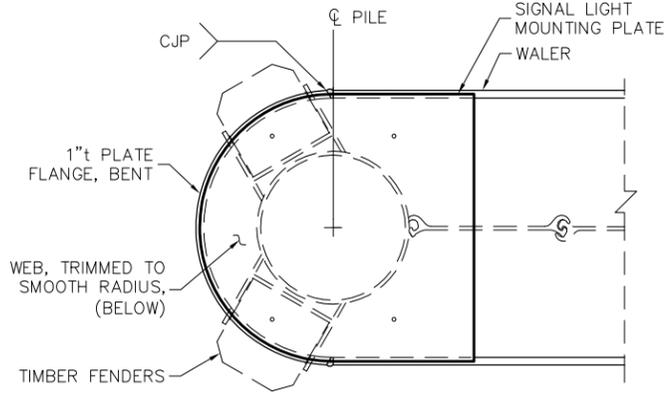
PN&D PROJECT NO.: 102029.10

3.07

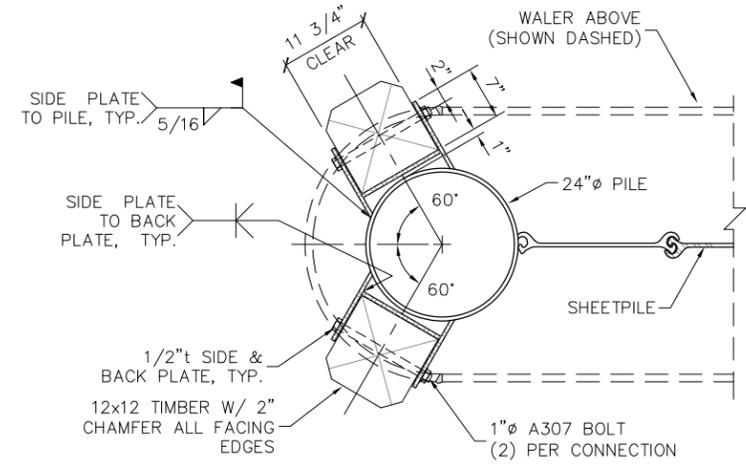
SHEET
18 OF 19



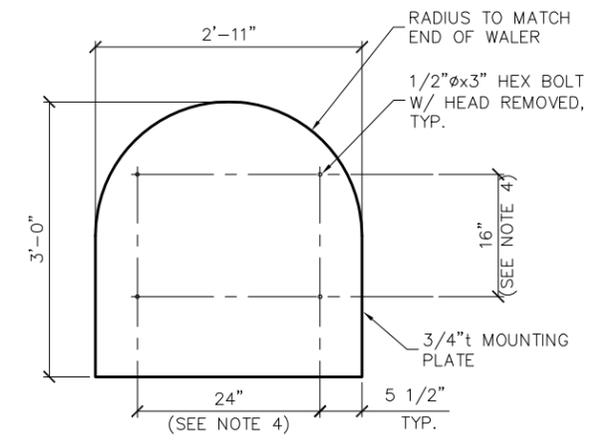
PARTIAL ELEVATION



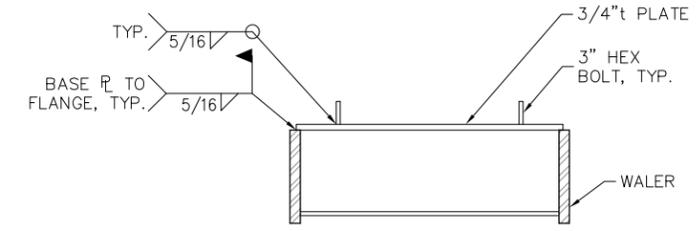
VIEW A-A
END CAP AT SOUTH
END OF WAVE BARRIER



VIEW B-B
END CAP AT SOUTH
END OF WAVE BARRIER



PLAN



SECTION

**NAVIGATION LIGHT
BASE PLATE**

NAVIGATION LIGHT NOTES:

- 1) ALL METALS AND HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A123 OR A153 AS APPROPRIATE.
- 2) BOLTS SHALL BE ASTM A325. STEEL PLATE SHALL BE A MINIMUM ASTM A36.
- 3) TIDELAND SIGNAL CORP. SOLA-CHAN MARINE SIGNAL LIGHT. ML-155 ON 4' PEDESTAL WITH 10W SOLAR MODULE OR APPROVED EQUAL, INCLUDING ON 12V SECONDARY ENERGY CELL AND MAXIFALO-60 LED FLASHER SET AT 0.4 SEC. "ON" AND 3.6 SEC. "OFF" (15 FLASHES/MINUTE) VISIBLE FOR MIN. 2 NM. COLOR AND FLASH PATTERN PER US COAST GUARD PERMIT REQUIREMENTS.
- 4) CENTER MARINE SIGNAL LIGHT ON BASE PLATE. CONTRACTOR TO VERIFY BOLT PATTERN AND SPACING ON LIGHT BASE.
- 5) ORIENT SOLAR PANEL FACING SOUTH.



MARINE SIGNAL LIGHT

FENDER

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**HAINES BOROUGH
SOUTH PORTAGE COVE
HARBOR EXPANSION**

SHEET TITLE: **FENDER AND MARINE
SIGNAL LIGHT**

PN&D PROJECT NO.: 102029.10

3.08
SHEET
19 OF 19