



# Industry Day

*Port of Alaska Modernization Program*

**October 17, 2023**

# Welcome & Introductions

Eric Adams,  
Program Manager, Jacobs



# Welcome

Industry Day is a voluntary meeting intended to build interest and excitement within the contracting community around the upcoming opportunity to construct a new terminal (T1) for Port of Alaska.



# Transparent Procurement



Everything described today and tomorrow will be made public for a transparent and fair procurement process.



All work is currently in draft form. Final documents will be released under a formal procurement request on the MOA website.



Questions will be answered to the best of our ability using general information that is available to the public.



# Agenda

- Opening Remarks
  - Port Director Steve Ribuffo
  - Municipal Manager Kent Kohlase
- Port of Alaska Modernization Program Overview
  - Eric Adams, Jacobs
- Procurement Process
  - Ronny McPherson, HDR
- Break for Lunch
  - 2 hours



# Agenda Continued

- Cargo Terminal 1 Design and Phasing
  - Craig Lewis, GHD-WSP Designer of Record
- Federal Permit Requirements
  - Eric Adams, Jacobs
- Project Challenges
  - John Daley, Port of Alaska
- Closing Remarks
  - Sarah Rygh, Jacobs
- Open Networking
  - Refreshments provided





# Port of Alaska Modernization Program | Industry Day

October 17, 2023



# Opening Remarks

Steve Ribuffo,  
Port of Alaska Director

Kent Kohlhase,  
Municipal Manager





# Port of Alaska

Vital to the State of Alaska



**5.2** MILLION

TONS OF FUEL AND CARGO IN 2022

**\$14.3** BILLION

IN STATEWIDE COMMERCIAL ACTIVITY IN 2019

HANDLES GOODS CONSUMED BY

**90%**

OF ALL ALASKA RESIDENTS STATEWIDE

**HALF**

OF ALL ALASKA  
INBOUND FREIGHT  
CROSSES  
ANCHORAGE'S DOCKS

**HALF**

OF ALL THE FREIGHT THAT  
CROSSES ANCHORAGE'S DOCKS ARE  
DELIVERED TO FINAL DESTINATIONS  
OUTSIDE OF ANCHORAGE

**75%**

OF ALL  
NON-PETROLEUM  
MARINE CARGO  
SHIPPED INTO ALASKA







# 3 FUNCTIONS



**COMMERCE**



**NATIONAL  
DEFENSE**



**DISASTER  
RESPONSE and  
RECOVERY**

# It Is Critical...

- That in your bidding you plan to NOT interfere with cargo operations that must continue on those portions of the existing facilities still open for operations to the greatest extent possible!



# Municipality of Anchorage

Plan of Finance

# PAMP Funding Overview

- PAMP will be funded through a combination of:
  - Federal and state grants
  - Port of Alaska funds
  - Low interest rate federal loan and Port Revenue Bonds
- At a **cost of \$1.9 billion**, the program is not yet fully funded.



**The Municipality of Anchorage is committed to providing the funding needed to complete Cargo Terminal 1.**

- Plan of Finance for the entire PAMP.
- Federal grant applications requesting \$102M for Cargo Terminal 1.
- State of Alaska allocated \$200M towards PAMP last year.
- Shortfall of State and Federal funding will be made up through the sale of Port of Alaska Revenue Bonds. Revenue Bonds will be repaid through the use of a tariff surcharge.







# Port of Alaska Modernization Program | Industry Day

October 17, 2023



# Port of Alaska Modernization Program Overview

Eric Adams,  
Program Manager, Jacobs



# Agenda

- What is PAMP?
- Why is PAMP is needed?
- Projects overview
- Resources



# What is PAMP?

The Port of Alaska Modernization Program defined



The Port of Alaska Modernization Program (or PAMP) was created in 2014 to provide **four new terminals** via a **phased approach** comprised of **multiple projects**.



# Goals of PAMP

**To replace Anchorage's ageing docks to allow the Port to continue its three critical functions:**

1. Serve as Alaska's key inbound cargo gateway
2. Operate critical national and defense infrastructure
3. Support the movement of consumer goods, industrial development and disaster recovery



# Why is PAMP Needed?

Safeguarding Alaska's most critical port functions for future generations

# Port of Alaska

- Port of Alaska is a critical transportation hub for the state, but the Port's four aging terminals have corroded and begun to split apart. Engineers estimate that they will need to begin applying restrictions to Port operations by 2025 – sooner if there is a large earthquake.
- Replacing existing Port facilities is key to ensuring the continued vitality of Alaska and food security for Alaskans.



Transportation hub that handles 75% of Alaska's inbound cargo.



Drives \$14 billion in statewide economic activity annually.



Supplies 90% of Alaskans with sustaining necessities.





# PAMP Benefits



Improved operational safety and efficiency.



Accommodations for modern shipping operations.



Improved resiliency to survive extreme seismic events and sustain ongoing cargo operations.



Food security for Alaskans.



Fuel and cement security for Alaskans.



# Food Security

- **Having reliable access to a sufficient quantity of affordable, nutritious food.**
- **95%** of the food Alaskans purchase is imported.
- Most grocery stores only have a food supply that will last **about one-week.**
- Port of Alaska handles more than **3.5 million tons** of food and other consumable goods.
- The Port's freight distribution reaches approximately **660,000 Alaskans** in more than **150 communities.**



# PAMP is Critical to Food Security

**A failure of the port terminals would severely harm Alaska's import supply chain and access to food throughout the State.**

- The existing Cargo Terminal 1 was constructed 55+ years ago and is nearing the end of its life.
- During a recent inspection, the majority of the structural piling damage was categorized as either “major” or “severe”, indicating the extreme vulnerability of the structure.



# New Cargo Terminals Ensure Food Security

- The next phase of the program is focused on **Cargo Terminal 1**. Completion of the first of two terminals ensures Port of Alaska can continue to receive food imports.
- Cargo Terminal 1 will be replaced with new, seismically capable structures built 140 feet seaward of the existing structure to:
  - Reduce sedimentation impact
  - Improve berthing safety
  - Allow for continued Port operations during construction



# Projects Overview

PAMP is comprised of eight projects

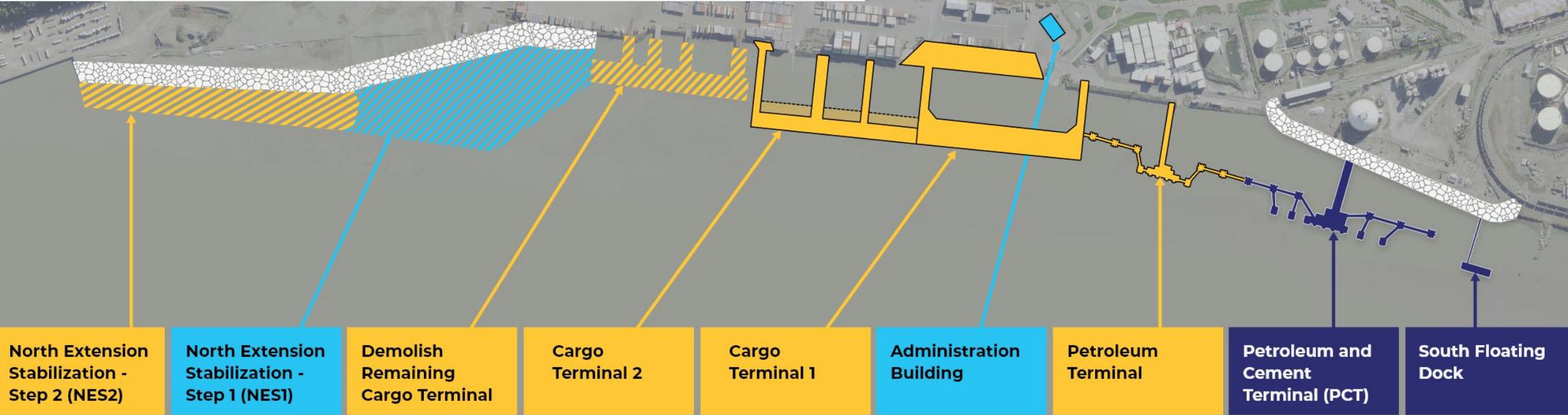
# PAMP Projects

PAMP is comprised of eight projects:

1. Petroleum and Cement Terminal (PCT) and South Floating Dock – **COMPLETED**
2. Administration Building – **IN PROGRESS**
3. North Extension Stabilization – Step 1 (NES1) – **IN PROGRESS**
4. Cargo Terminal 1 (T1) – **DESIGN UNDERWAY**
5. Cargo Terminal 2 (T2) – **PLANNED**
6. Petroleum Terminal (PT) – **PLANNED**
7. North Extension Stabilization – Step 2 (NES2) – **PLANNED**
8. Demolish Remaining Cargo Terminal – **PLANNED**



# PAMP Projects



● COMPLETED

● FUNDED AND IN-PROGRESS

● TIMING CONTINGENT ON AVAILABILITY OF FUNDING

■ DEMOLITION OR REMOVAL

*Final design is based on conceptual design and may be subject to change.*



# Completed Work

**The Petroleum and Cement Terminal (PCT)** and **South Floating Dock** were completed in 2022.

- The PCT is a pile-supported dock that serves as one of Port of Alaska's two petroleum terminals and is Alaska's only dock equipped with a bulk cement unloading and transfer system.
- Ensures the Port can meet Alaska's fuel and cement needs into the future.
- The new PCT was successfully funded with a collaborative combination of local (20%), state (60%), and federal (20%) funding.





# First Ship at the PCT

On May 9, 2023, the bulk cement carrier, Key West, became the first ship to utilize the newly constructed PCT.

*Fun fact: Off-loading the cement shipments can take between two to four weeks and is dependent on weather.*



# In-progress Work

Construction of the **Administration Building** is underway and timely completion will make way for the construction of the new cargo terminals.

- The existing Administration Building is located on the original deteriorated cargo terminal platform and will be demolished before cargo terminal construction.
- The new Administration Building is being constructed onshore and is anticipated to be completed in early 2024.

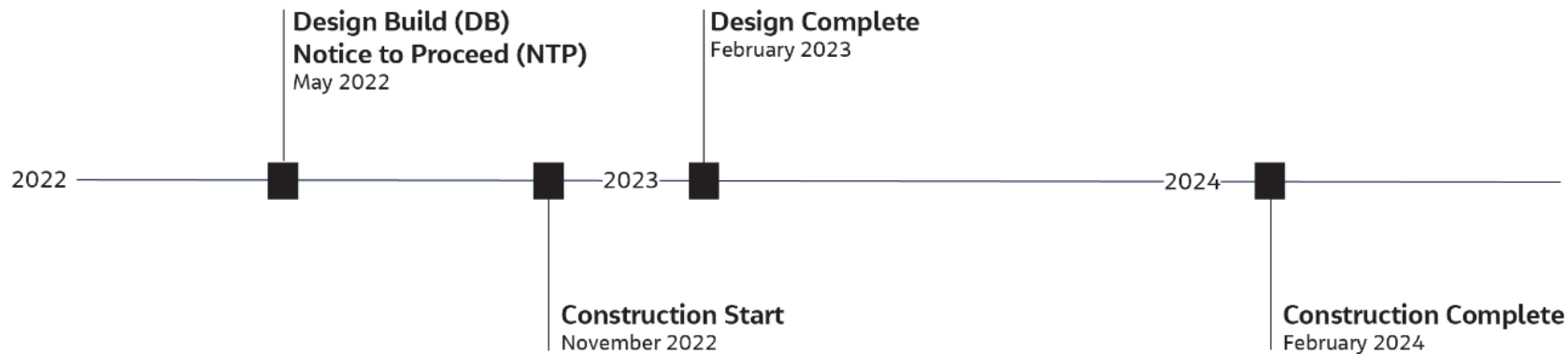


# Administration Building

- Notice to Proceed on May 12, 2022
- Crews broke ground in October 2022



## Administration Building Timeline



# In-progress Work

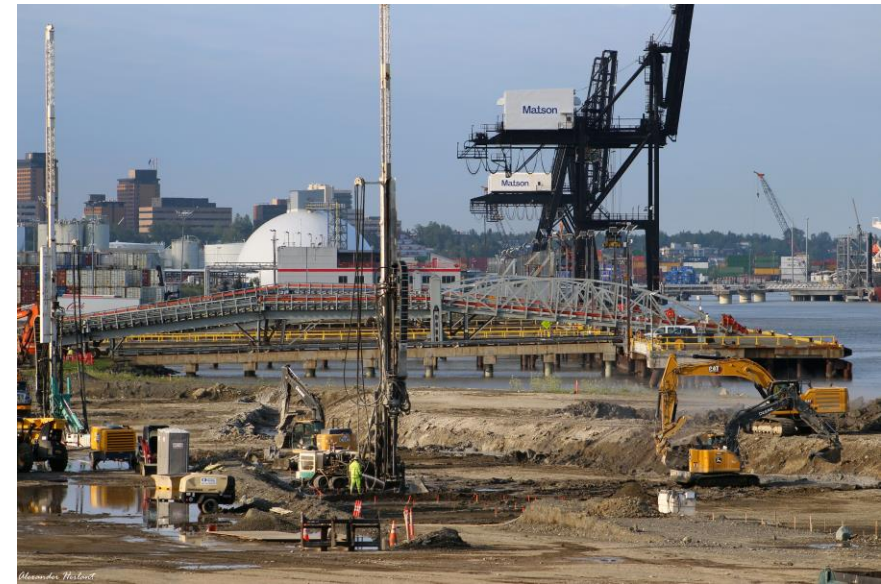
The **North Extension Stabilization – Step 1 (NES1)** project is underway and will stabilize a critical section of the North Extension directly adjacent to the shipping lane.

- Large amounts of sediment have encroached into the navigation lane, crowding the space needed for ships to dock at the cargo terminals.
- The first year of construction involves deep soil mixing to help stabilize the critical section of the North Extension.
- The second year of construction will involve demolishing the structure and stabilizing the shoreline.

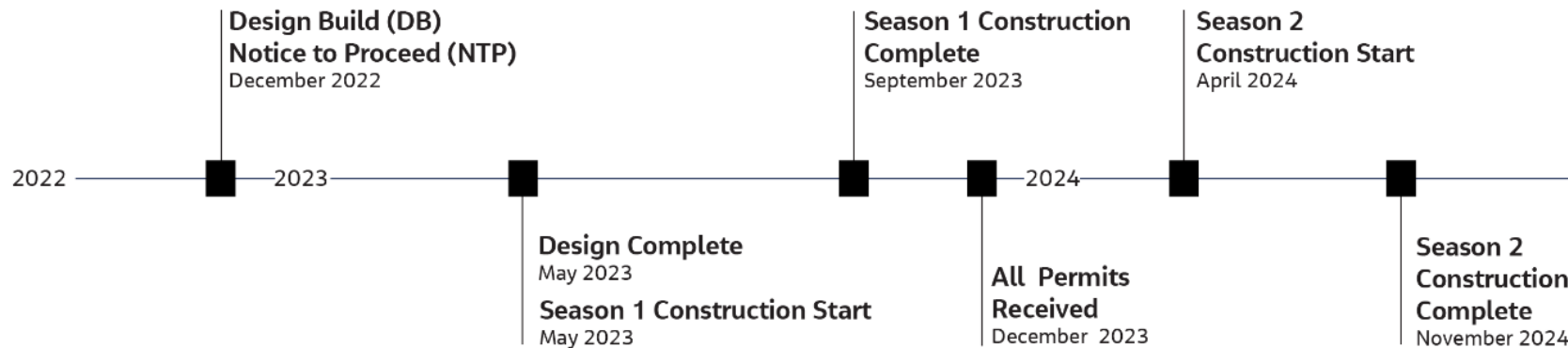


# North Extension Stabilization - Step 1

- Notice to Proceed on December 20, 2022
- Geotechnical investigation started February 2023
- Groundbreaking started in May 2023
- Awarded a \$68.7M FY22 grant through PIDP



## North Extension Step 1 Timeline



The next step of the program is focused on the cargo terminals



# Cargo Terminals 1 and 2

- Preliminary design was completed in late 2022.
- Engineers are working on final design for T1. IFC due early March 2024.
- The team is applying for local, state, and federal grants to obtain funding to build the terminals.
- Goal for construction contract of T1 is out for bid in March of 2024
- Construction will begin on Cargo Terminal 1 in 2025 and Cargo Terminal 2 in 2028.
- Will require compliance with BABA, PIDP and Mega Grants.



# Planning for Future Projects

- **Petroleum terminal:** Crews will replace the existing Petroleum, Oil and Lubricants Terminal 2 (POL2) with a new Petroleum Terminal (PT). The modernized PT will accommodate larger, more modern petroleum shipping vessels year-round.
- **North Extension Stabilization Step 2 (NES2):** Crews will demolish the sheet pile system and stabilize the shore for the rest of the North Extension.
- **Demolish remaining Cargo Terminal 3:** Since the remaining cargo terminal does not obstruct Port operations or construction of the new cargo terminals, it will be demolished at the end of the program.





# Resources

Want to learn more?

# Looking for more information or have questions?

- Visit the PAMP website: [modernization.portofalaska.com](https://modernization.portofalaska.com)
- Email: [portofalaska@anchorageak.gov](mailto:portofalaska@anchorageak.gov)
- Official documents to be released on [Muni.org](https://Muni.org)





Questions?





# Port of Alaska Modernization Program | Industry Day

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# Procurement Process Overview

Ronny McPherson,  
Procurement Lead



# Agenda

- Procurement Process
- Pre-qualification Criteria
- Procurement Schedule
- Questions & suggestions



# Procurement Process

- Municipality of Anchorage Process
  - Request for Proposals for pre-qualification
    - Using 65% design drawings
  - Invitation to Bid extended to qualified proposers
    - Using IFC drawings



# Evaluation Methods

- Step 1 Written Proposals: Pre-Qualify
  - Proposals with each criteria meeting or exceeding the minimum score will be considered "qualified."





# Evaluation Methods (Cont.)

- Step 2 Cost Proposal (Bid): Final Selection
  - Proposers with a qualified proposal will be formally invited to provide a bid.
  - Provided Issued for Construction Contract Documents
  - Prepare bids



# Evaluation Methods (Cont.)

- Low-bid will be the final selection criteria.
- Qualifications will not be used in the final selection.



# Pre-Qualification Criteria

## 1. Construction Methodology

- Request to provide general construction methodology and approach. Emphasis on construction schedule and defining key milestones.



# Pre-Qualification Criteria

## 2. Key Personnel

- Organization Chart
- Resumes
  - Contract Manager
  - Project Sponsor
  - Project Manager
  - Superintendent
  - Quality Manager
  - Safety Manager
- Potential Sub-Contractors



# Pre-Qualification Criteria (Cont.)

## 3. Technical Experience and Resources

- A. Pile driving experience
- B. Cold region and large tidal fluctuation experience (to include working in and around endangered species)
- C. Container terminal experience – interested in experience with crane rails, specialized deck construction, electrical and control systems, and seismic resiliency

- Three (3) examples of each category by prime and/or subcontractors.
- Tie key staff to these examples where possible.



# Pre-Qualification Criteria (Cont.)

## 4. Construction plant and equipment

- Request to describe key heavy and specialized equipment and capabilities. This section will include a standardized form to populate.



# Pre-Qualification Criteria (Cont.)

## 5. Health and Safety

- Request to provide proposers health and safety policies. This criteria will include a standardized form to populate.



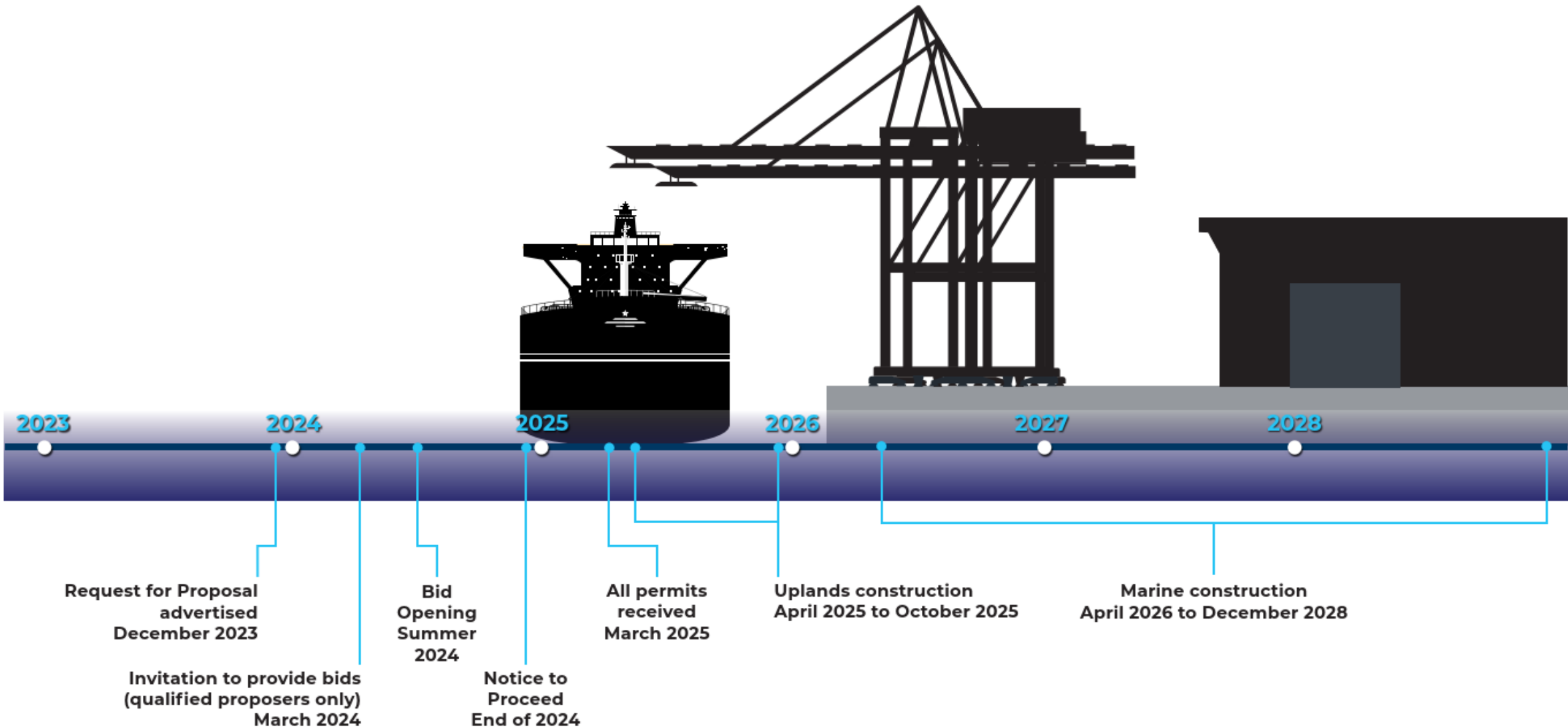
# Pre-Qualification Criteria (Cont.)

## 6. Financial and Legal Capabilities

- Request to provide proof of comprehensive liability insurance.
- Letter(s) from surety stating intention to bond the Project.
- Summary of details of any actual, pending, or potential legal proceedings. This section will include a standardized form to populate.









Questions?





**Lunch Break**  
Presentations will resume at 1:30 pm AK





*Alexander Herlant*

# Short Video



# Cargo Terminal 1 Design and Phasing

Craig Lewis,  
Cargo Terminal 1 Design Project Manager

GHD-WSP JV



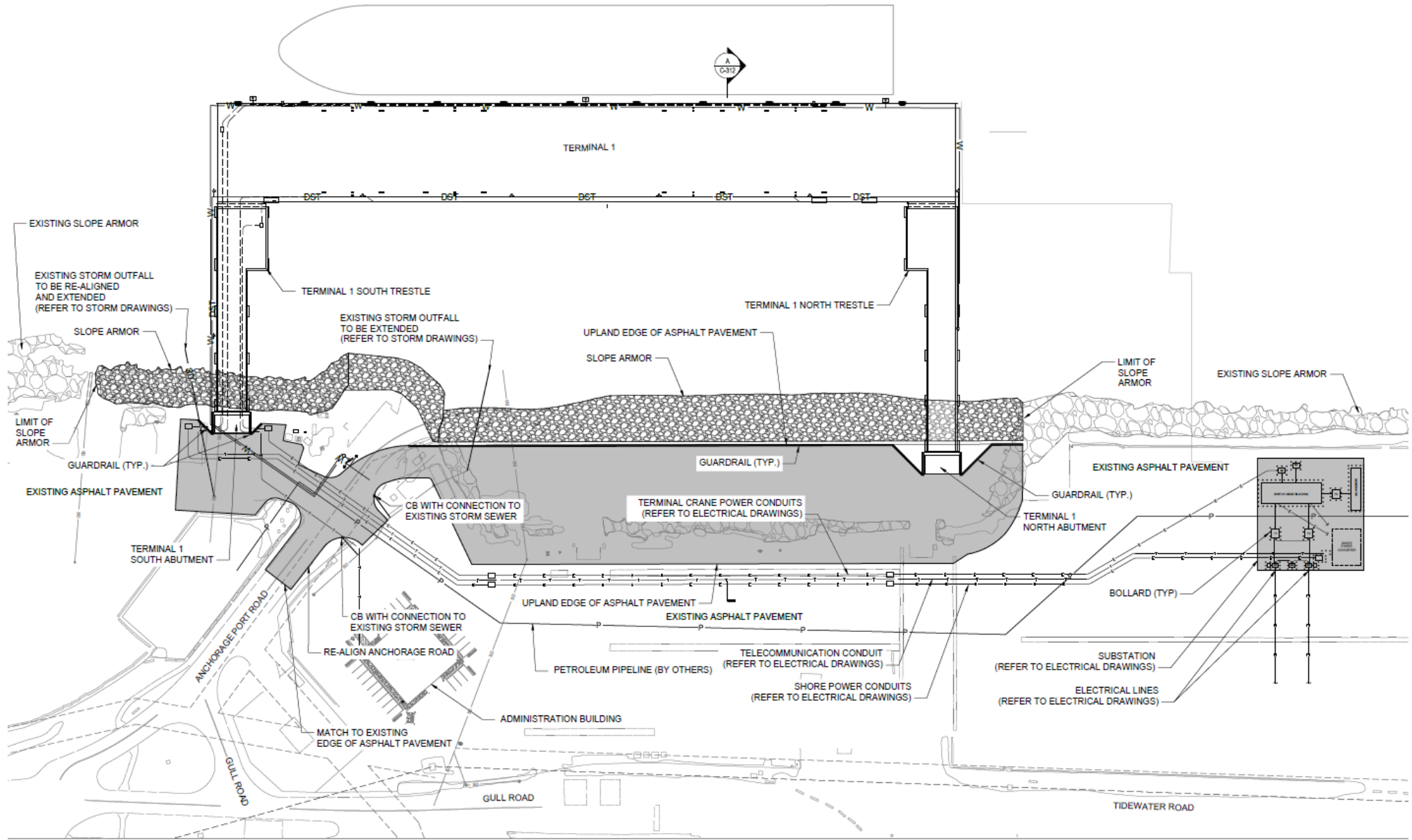
# Design Overview

Summary of Project Components

# Design Components

- T1 Project will replace the existing terminal with a seismically capable structure built approximately 140 feet seaward of the existing dock.
- Seaward terminal location will reduce sedimentation impact, improve berthing safety, and allow construction of the new terminal while the existing terminals remain operational.
- New T1 will support lift-on/lift-off and general cargo operations.
- Design and construction of T1 includes access trestles, ship-to-shore (STS) gantry crane accommodations, marine mooring appurtenances, servicing utilities, landside deep soil mixing (DSM) ground improvements, and adjacent site development.





**OVERALL SITE PLAN**  
SCALE: 1" = 60'

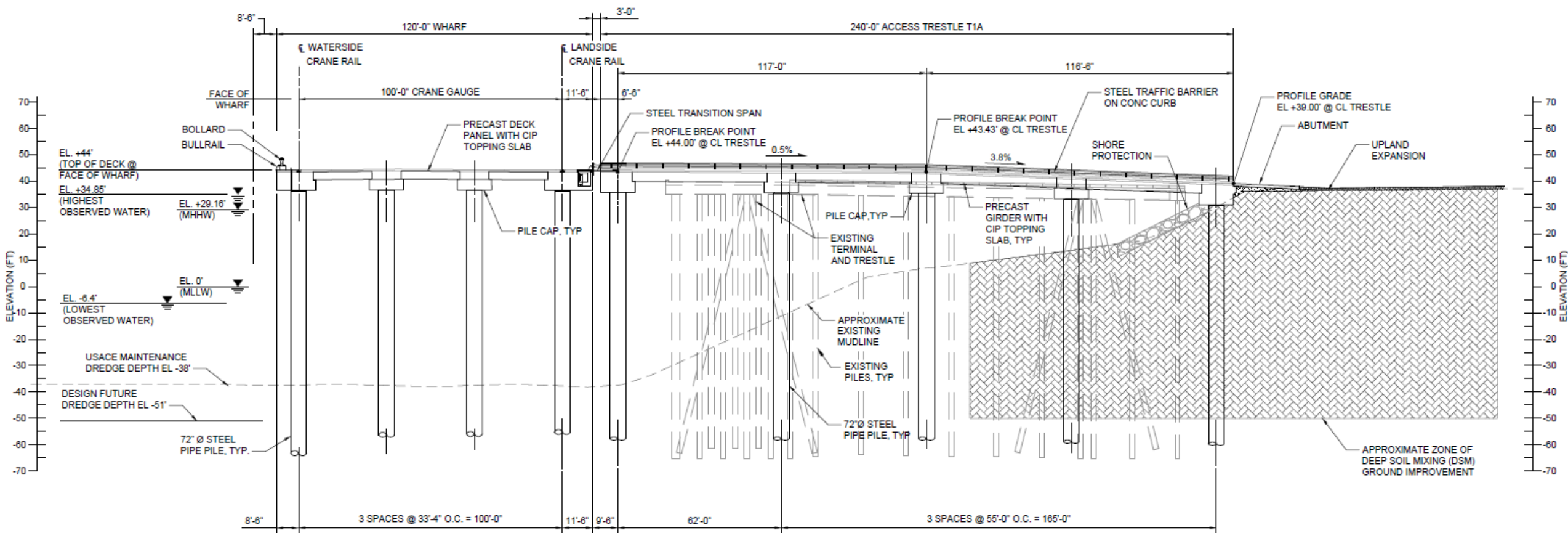


1" = 60' scale



**PORT of ALASKA**  
IN ANCHORAGE





**A** TYPICAL ELEVATION - SOUTH TRESTLE  
 SCALE: 1" = 20' T1-S-208



# Design Schedule

- 35% Design Submitted – September 2023
- 65% Design Submittal – November 2023
- 95% Design Submittal – January 2024
- Issued for Construction Submittal – March 2024



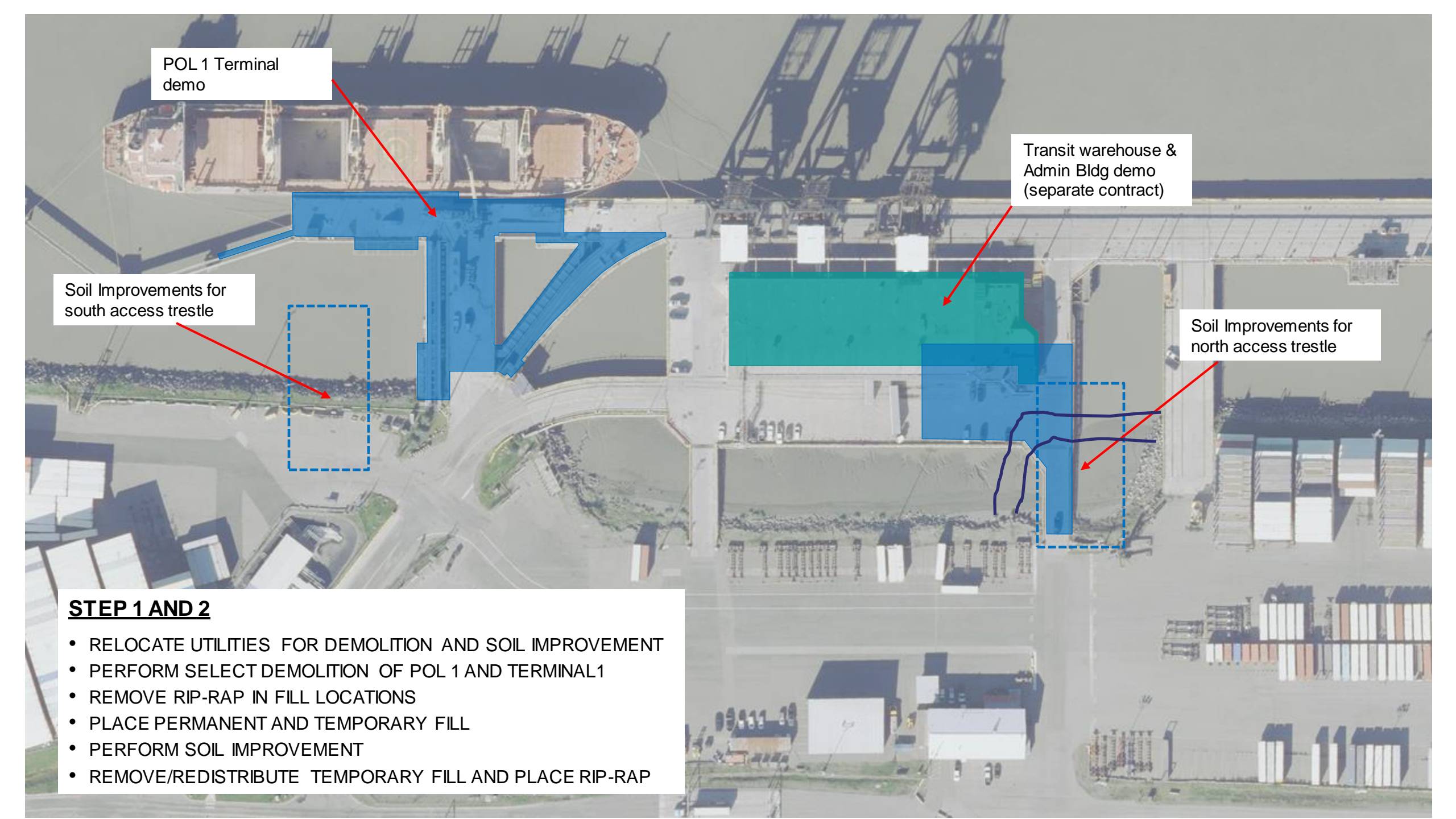
# Construction Phasing

Port must remain operational

# Phasing Goal & Constraints

- The Port must remain operational at all times.
- Port and Terminal Operators are motivated to be flexible in order to see the terminal built.
- Cargo ship calls are Sunday and Tuesday.
- Construction work window (due to ice and inclement weather) ~ April 1<sup>st</sup> through October 30<sup>th</sup>.
- In-water work windows dictated by the permits.
- Phasing that reduces schedule risk and increases certainty of completion by end of 2028 will be favorably viewed.





POL 1 Terminal  
demo

Transit warehouse &  
Admin Bldg demo  
(separate contract)

Soil Improvements for  
south access trestle

Soil Improvements for  
north access trestle

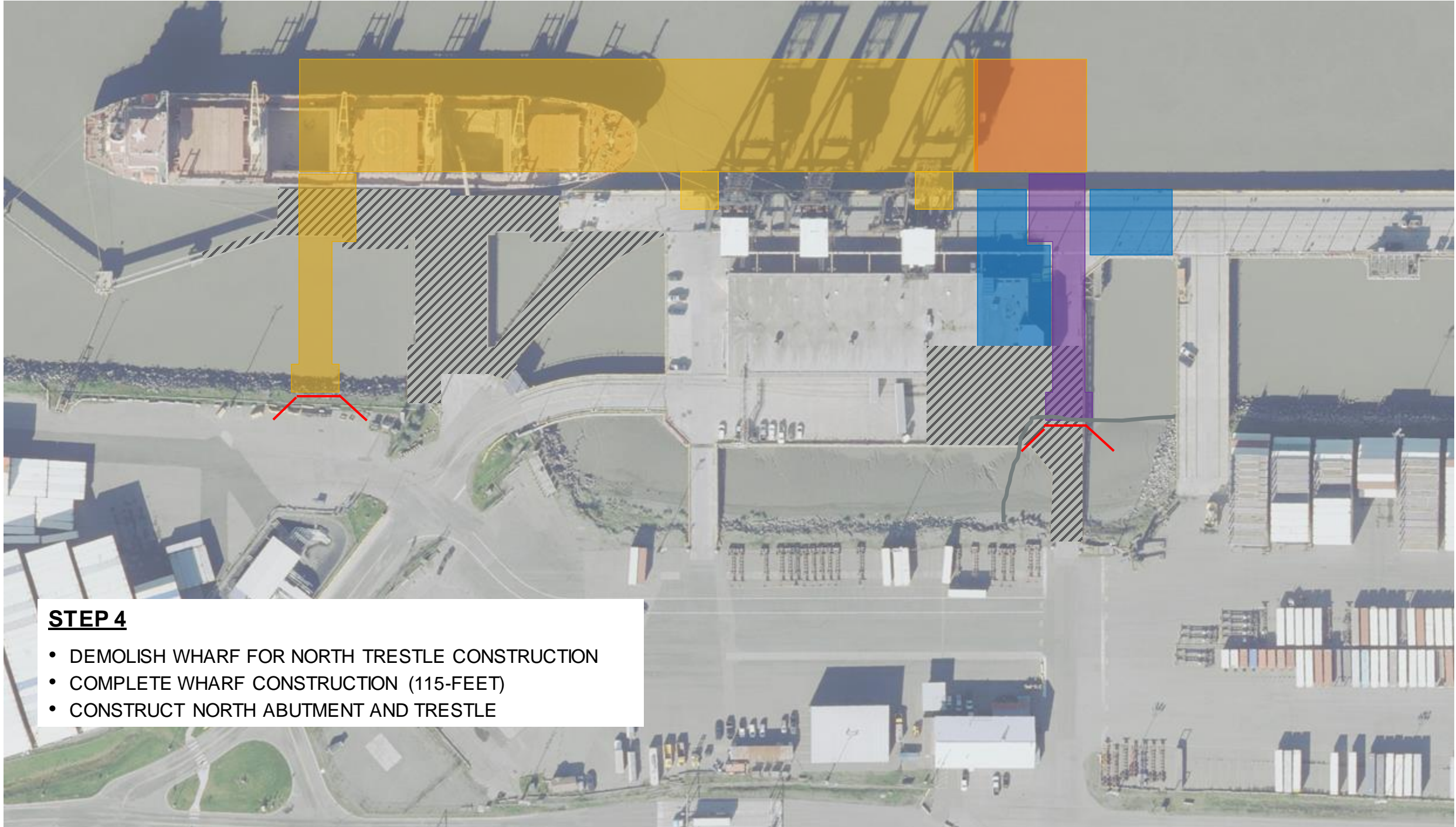
### **STEP 1 AND 2**

- RELOCATE UTILITIES FOR DEMOLITION AND SOIL IMPROVEMENT
- PERFORM SELECT DEMOLITION OF POL 1 AND TERMINAL1
- REMOVE RIP-RAP IN FILL LOCATIONS
- PLACE PERMANENT AND TEMPORARY FILL
- PERFORM SOIL IMPROVEMENT
- REMOVE/REDISTRIBUTE TEMPORARY FILL AND PLACE RIP-RAP



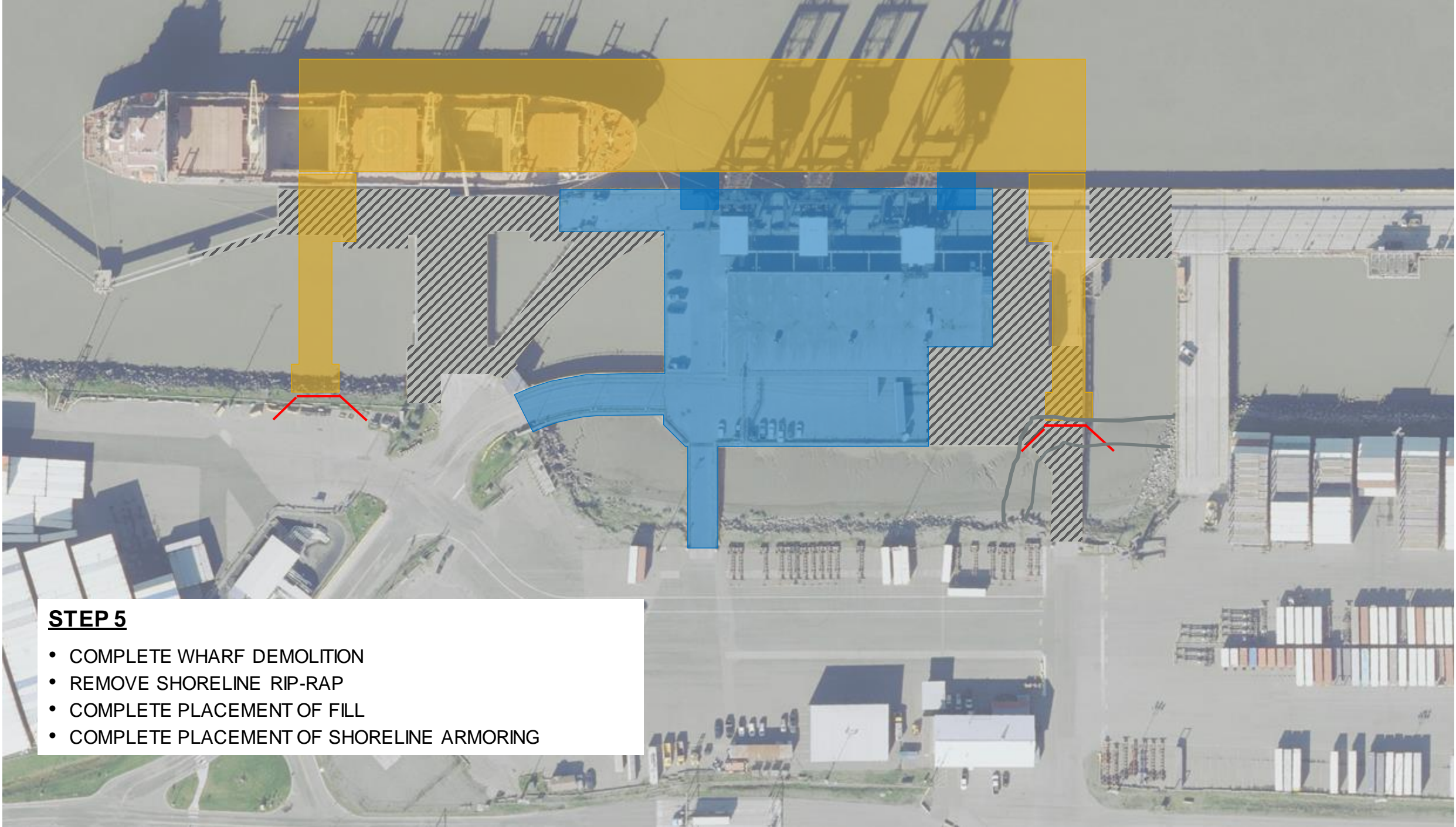
### **STEP 3**

- CONSTRUCT SOUTH ABUTMENT, TRESTLE AND WHARF (755-FEET)
- CONSTRUCT SOUTH DOLPHIN AND CATWALK
- INSTALL TEMPORARY TRANSFER SPANS
- TERMINAL1 WHARF WILL BE CAPABLE OF RECEIVING STS CRANES AT END OF STEP 3



**STEP 4**

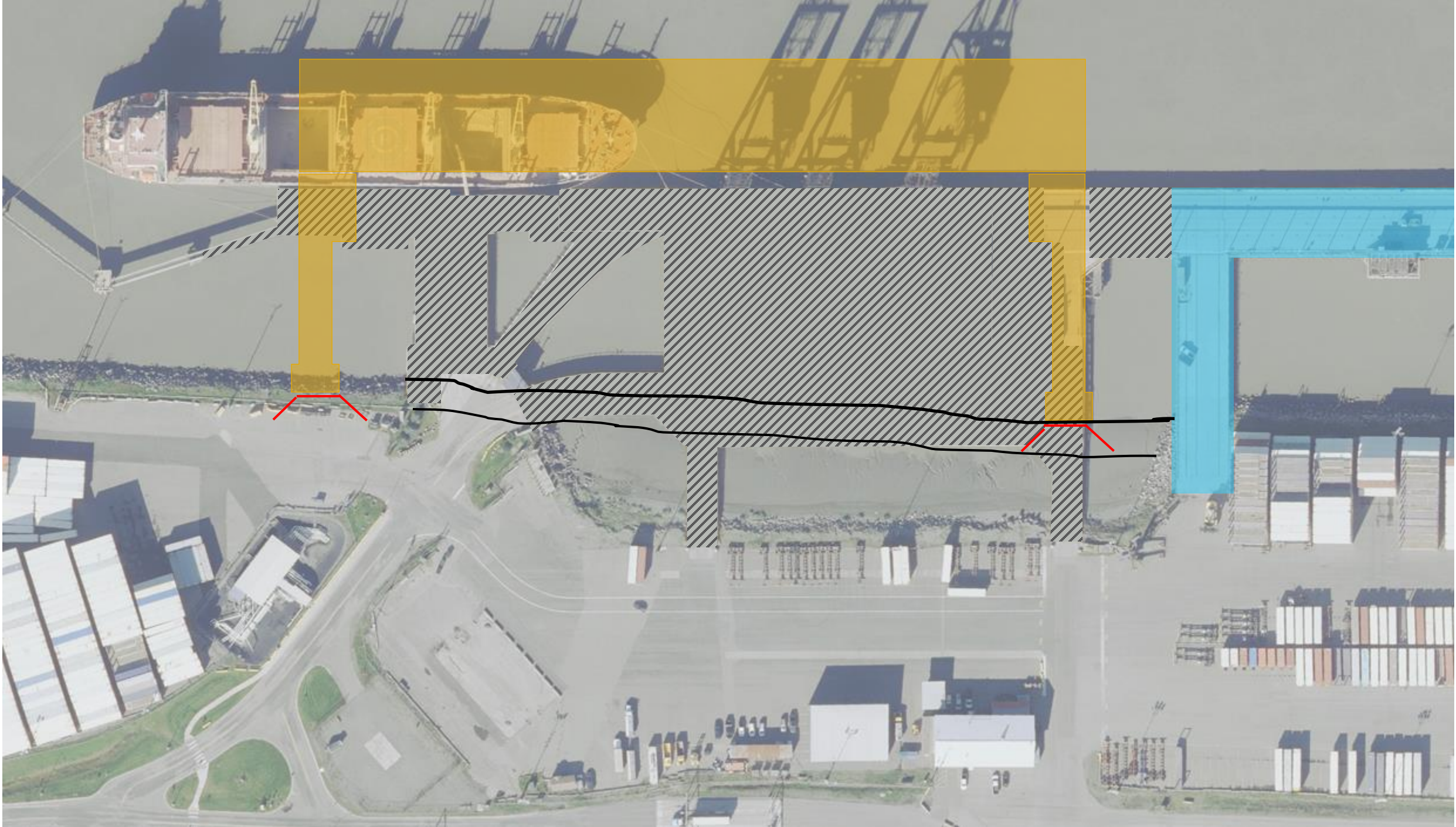
- DEMOLISH WHARF FOR NORTH TRESTLE CONSTRUCTION
- COMPLETE WHARF CONSTRUCTION (115-FEET)
- CONSTRUCT NORTH ABUTMENT AND TRESTLE



**STEP 5**

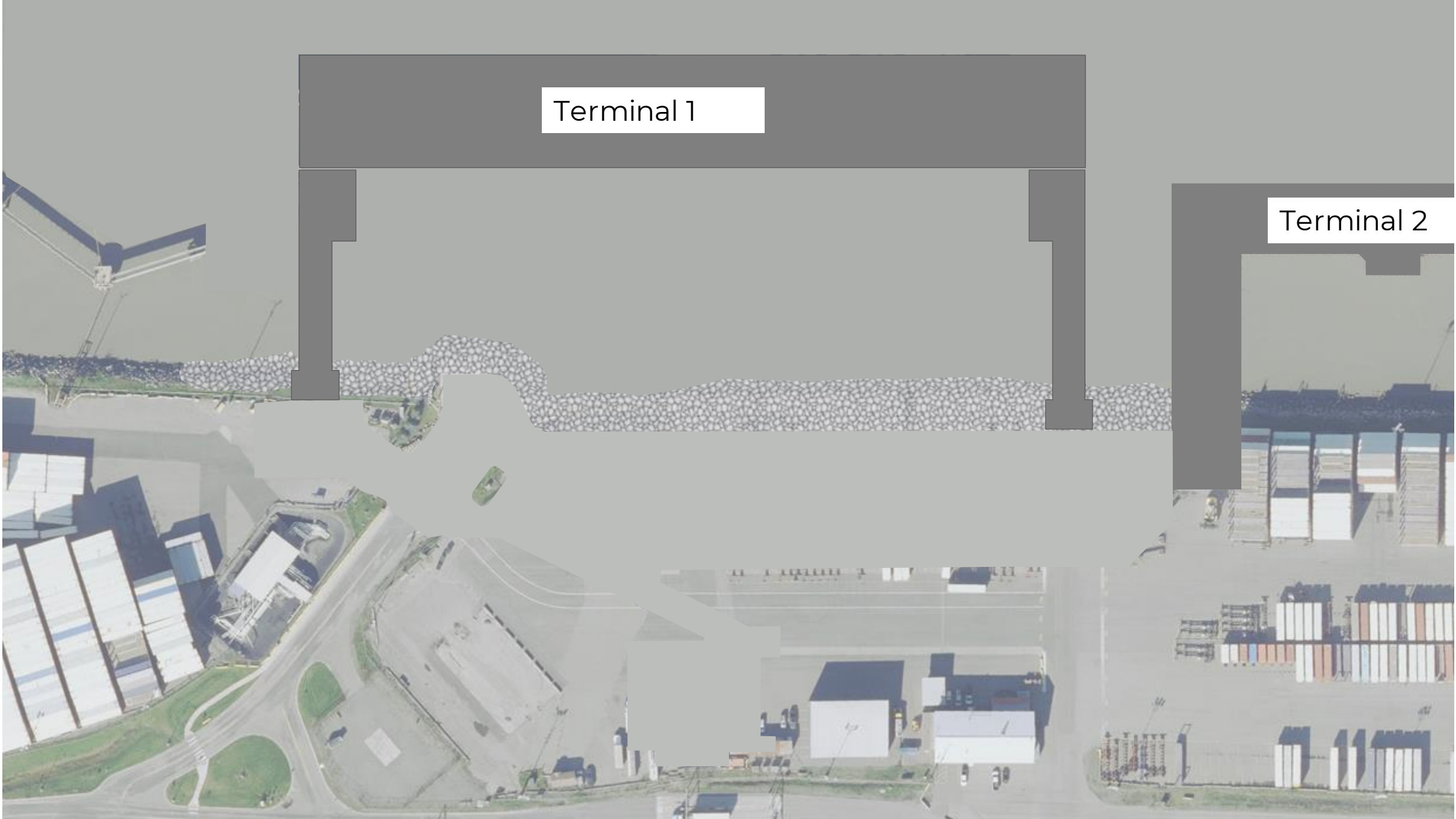
- COMPLETE WHARF DEMOLITION
- REMOVE SHORELINE RIP-RAP
- COMPLETE PLACEMENT OF FILL
- COMPLETE PLACEMENT OF SHORELINE ARMORING





Terminal 1

Terminal 2





Questions?





# Port of Alaska Modernization Program | Industry Day

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# Federal Permits

Eric Adams,  
Program Manager





# National Environmental Policy Act (NEPA)

Federal Agencies Requiring NEPA	NEPA Trigger
<b>USACE Regulatory (proposed Federal lead agency)</b>	Section 10/404 permit ESA Section 7 consultation
<b>USACE Civil Works</b>	Section 408 Permission and EA
<b>NMFS</b>	LOA, IHA and EA
<b>MARAD</b>	EA

# Marine Mammal Monitoring

The protection of marine species is a key priority for PAMP.

The development of measures to avoid, minimize and mitigate potential impacts on marine species is a critical objective.



# Quieting Construction Noise



Bubble curtains were created by positioning a circular sleeve and perforated ring around piles that were being driven for the PCT.



Air was pumped through the perforated ring to create a dense curtain of bubbles that diffused pile-driving noise.



Underwater sound monitoring equipment, known as hydrophones, are used to record sound levels during pile driving.





# Environmental Compliance at the Port of Alaska

- **Marine Mammal Observation (MMO) Program**
  - PCT 2020
    - 1,239 observation hours
    - 128 days, April - November
    - 98.4 shutdown hours
    - **Marine Mammals Observed:**
      - 987 beluga whale sightings
      - 340 harbor seal sightings
  - PCT 2021
    - 735 observation hours
    - 74 days, April – September
    - 97.0 shutdown hours
    - **Marine Mammals Observed:**
      - 512 beluga whale sightings
      - 220 harbor seal sightings





Questions?





# Port of Alaska Modernization Program | Industry Day

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# Project Challenges

John Daley,  
POA Engineering Manager



# Project Challenges

- Business
- Project Management
- Logistics
- Large Diameter Piling
- Seasonal
- Operational



# Business Challenges

- Bonding - Track Record / Possible JV – (Surety will act as a prequalification)
- Financing Operations – Cash Flow (Contractor risk)
- Healthy Business Relationships – Subs and Suppliers

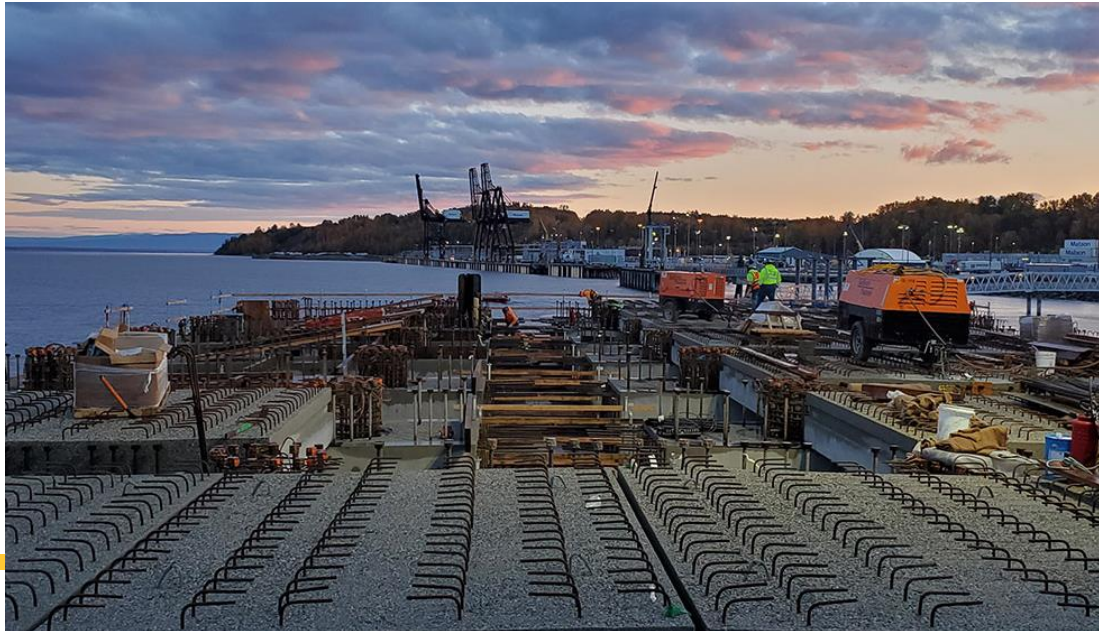


# Project Management Challenges

- Scheduling – P6
- Cost Management – Budgeting and Tracking
- Communications and Reporting – Weekly Meetings and Monthly Reporting

(Dedicated and focused PM team would help)





# Logistics

- Piling – Fabricated and coated large diameter piling
- Precast Concrete – Fabrication and sequencing delivery
- Material Barges – Sequenced delivery to minimize handling and on-site storage







# Pile Driving

- Large diameter piling
- Derick barge
- Pile hammer
- Template
- Working tides and currents
- Environmental compliance



# Pile Driving

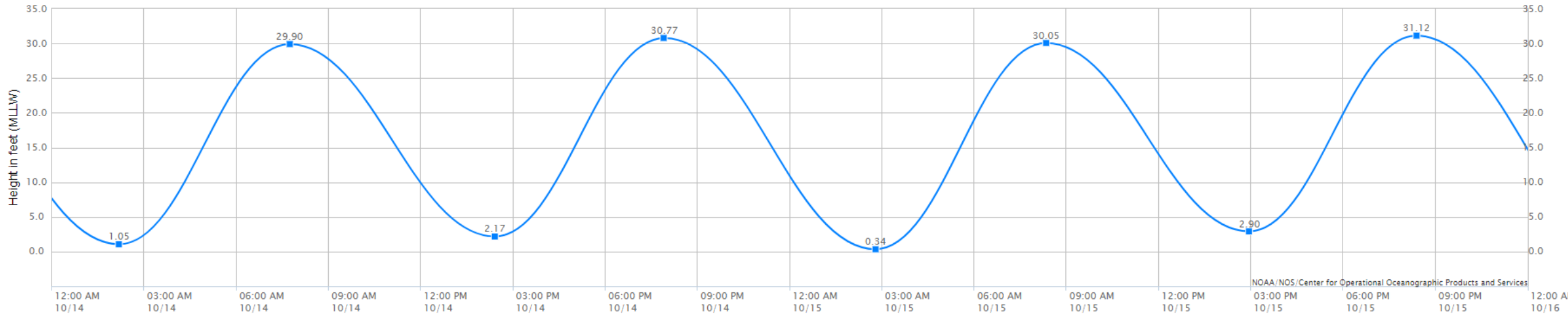
- Dock - 6' Diameter by 1.5" wall. Approx. 230 feet long. 130 ton. 136 each.
- Trestle - 6' Diameter by 1.5" wall. Approx. 200 feet long. 113 ton. 6 each.
- Trestle - 4' Diameter by 1.25" wall. Approx. 180' long. 56 ton. 18 each.
- Dolphin - 12' Diameter x 1.75". Approx. 200' long. 266 ton. 1 each.

*(All values preliminary and subject to change.)*



# Pile Driving – Tides – 30 feet

NOAA/NOS/CO-OPS  
Tide Predictions at 9455920, Anchorage AK  
From 2023/10/14 12:00 AM LST/LDT to 2023/10/15 11:59 PM LST/LDT



# Pile Driving – Current – 3.5 knots

Table 6-3. Design Recommended Depth-Averaged Current Speeds – Representative of Annual Maximum

Speed (knots)	150 Feet from Berth	375 Feet from Berth	1200 Feet from Berth	Mid Channel in Front of Terminal 1
Maximum Flood	3.0	3.4	4.4	6.3
Maximum Ebb	2.6	3.2	3.9	6.5
Cross-Channel	-	-	-	1.0

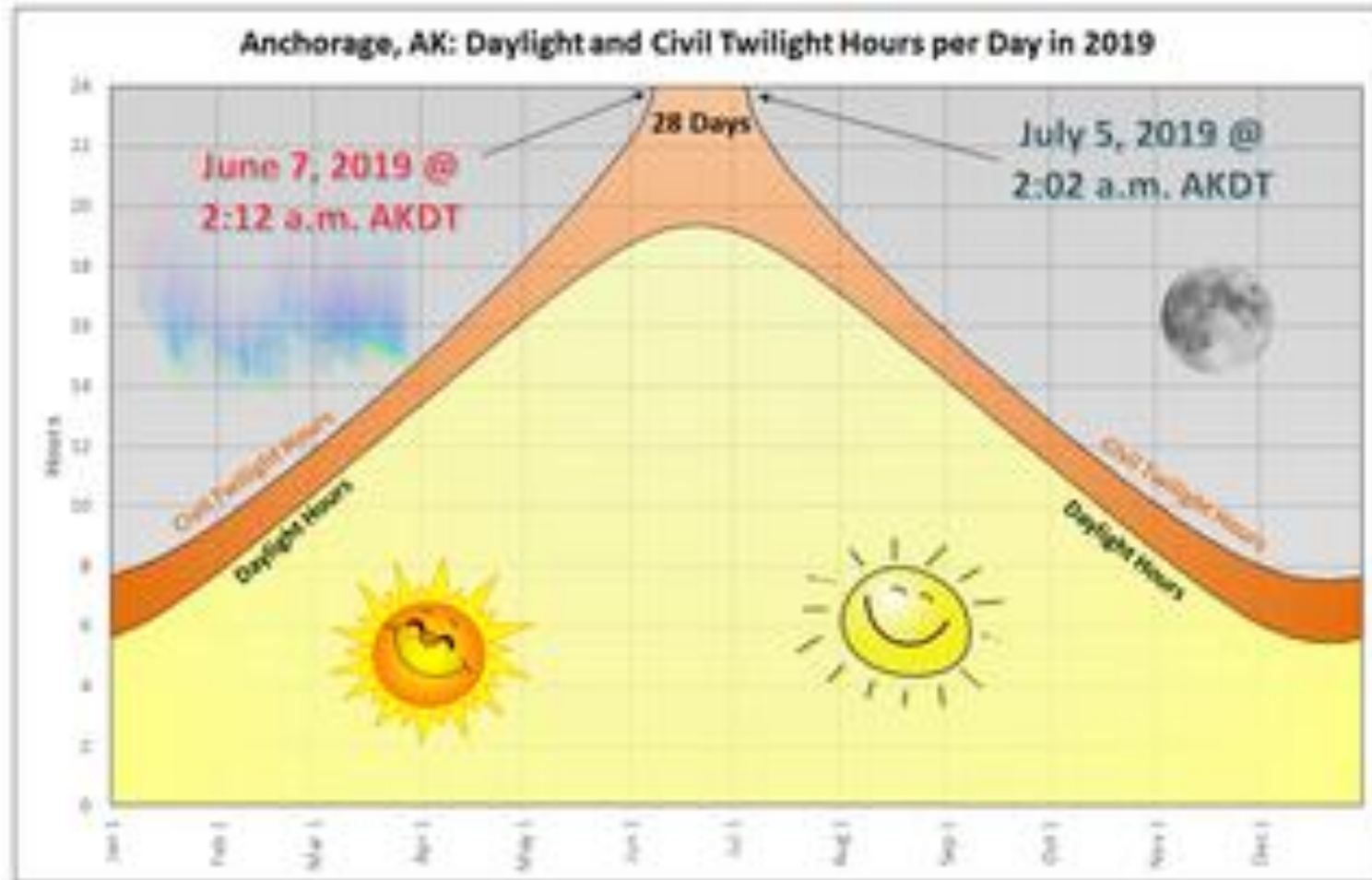


# Seasonal Challenges

- Ice out in spring
- Beluga whales in fall
- Ice and daylight issues in fall and winter



# Seasonal Challenges



# Seasonal Challenges – Sea Ice

- Ice is highly dependent on ambient temperature
  - Often formed in rivers and floated with tide
  - Typical first ice late November to early December
  - Typical ice out late March to early April
- USCG has Ice Navigation Rules



Commander  
United States Coast Guard  
Sector Anchorage

PO Box 5800  
JBER, AK 99505  
Staff Symbol: s  
Phone: 907-428-4144  
Fax: 907-428-4138

16710  
November 13, 2019

**CAPTAIN OF THE PORT, WESTERN ALASKA  
NAVIGATION SAFETY ADVISORY**

**OPERATING GUIDELINES FOR ICE CONDITIONS IN COOK INLET**



# Seasonal Challenges – Sea Ice

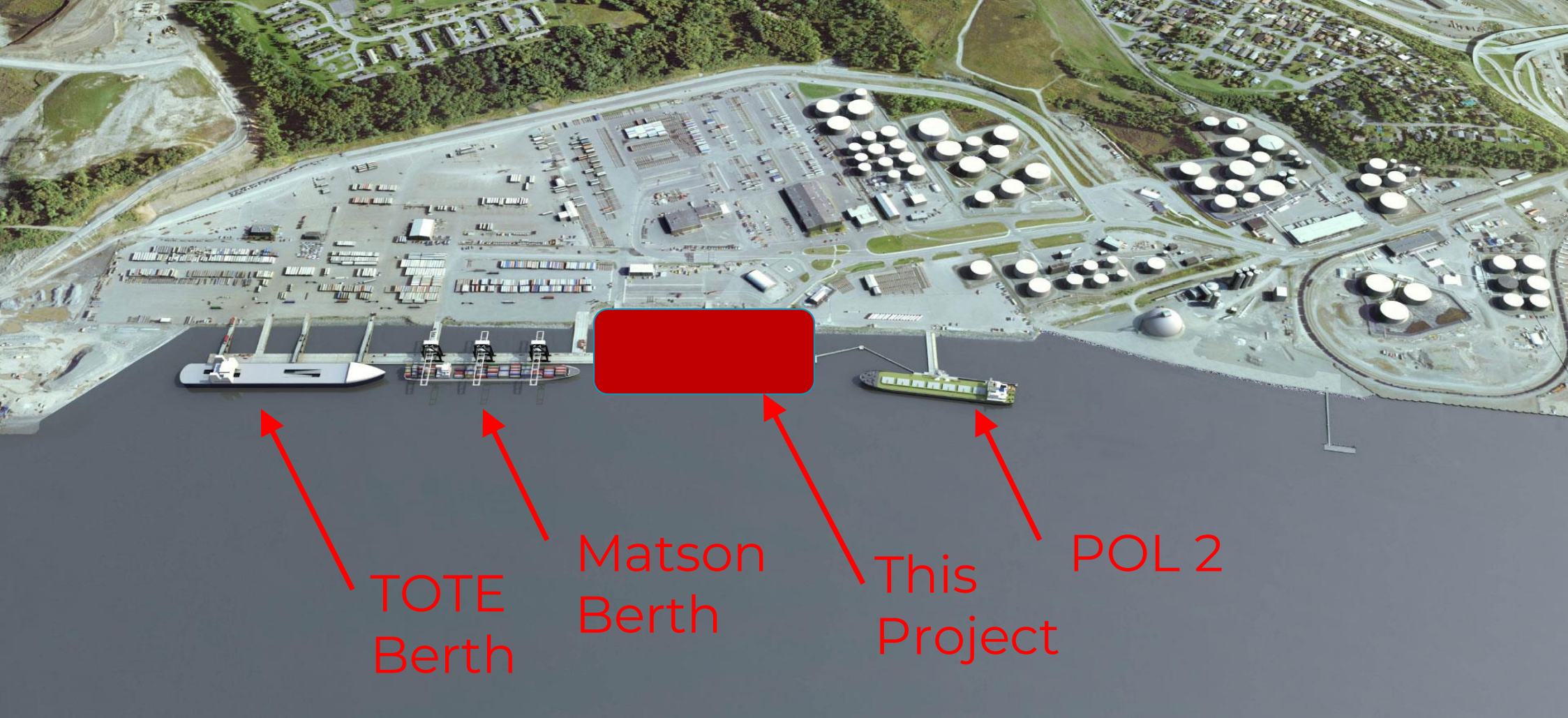




# Operational Challenges

Maintaining Port Operations

# Maintain Cargo Terminal 1 and POL 2 Operations

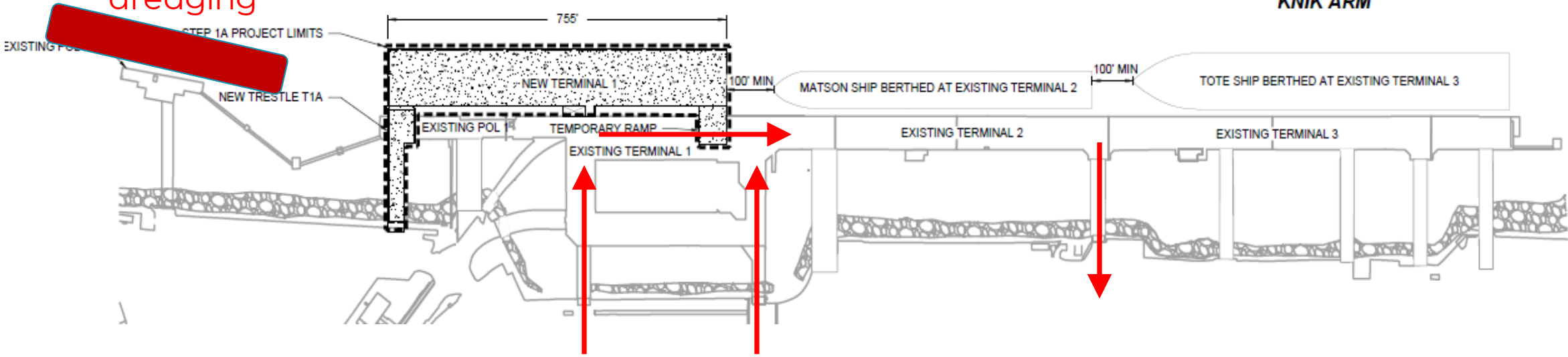


# Maintain Cargo Terminal 1 and POL 2 Operations



# Maintain Cargo Terminal 1 and POL 2 Operations

Maintain POL 2  
Access including  
dredging



Maintain Truck Traffic  
Typically, Tuesday and Sunday





# Maintain Cargo Terminal 1 Operations

- Matson
- Cruise ships
- Military



# Maintain POL 2 Operations





Questions?





# Port of Alaska Modernization Program | Industry Day

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# Closing Remarks

Sarah Rygh,  
Program Strategy Lead



# Transparent Procurement



Everything described today and tomorrow will be made public for a transparent and fair procurement process.



All work is currently in draft form. Final documents will be released under a formal procurement request on the MOA website.



Questions will be answered to the best of our ability using general information that is available to the public.



# Remember to Sign-up for a Port Tour!

Port of Alaska  
MODERNIZATION  
PROGRAM



## Port tour sign-up | October 18, 2023

- Port tour groups will **meet in the lobby of the Hotel Captain Cook near the entrance off 4<sup>th</sup> Avenue and the Whale's Tail restaurant 10-minutes before** your scheduled tour time.
- Please bring your **photo ID**.
- Dress for the weather and walking around the Port.

### Tour group 1 | 9:00 am – 10:30 am

Space	Name	Cellphone number
1		
2		
3		
4		
5		
6		

### Tour group 2 | 10:30 am – 12:00 pm

Space	Name	Cellphone number
1		
2		
3		
4		
5		
6		



# Stay Updated



HOME PROJECTS ENVIRONMENT PROGRAM OVERSIGHT FAQs PHOTOS LIBRARY **CONTRACTORS** CONNECT

## Cargo Terminal 1 Contracting

Industry Day  
 October 17 & 18, 2023 | Anchorage, AK  
 Register by October 8, 2023

**Registration for the event closed on October 8, 2023. If you missed the registration window, not to worry! Please connect with us at [portofalaska@anchorageak.gov](mailto:portofalaska@anchorageak.gov) and we will try to accommodate you to the best of our ability.**

Industry Day is a voluntary, pre-bid meeting that is intended to provide information to interested contractors for the upcoming Cargo Terminal 1 (or T1) project for Port of Alaska.

Port of Alaska, in partnership with the Municipality of Anchorage, is hosting this event to explain the Municipal contracting process; to describe the design and construction features of the project – including elements that are unique to working in Alaska and at the Port; to solicit contractor input prior to the start of the procurement process; to



Interested in staying up to date on the contracting process for Cargo Terminal 1?  
 Sign up for our mailing list.

Event Flyer



Registration List

Company	Role	Title	Company	Address	Contact Email
Alaska Marine Corporation	Site Owner	Operations Manager	Alaska, AK		<a href="mailto:jamison@alaskamarine.com">jamison@alaskamarine.com</a>
AKM Energy Services	Site Operator	Project Manager	Alaska, AK		<a href="mailto:kristen@akmservices.com">kristen@akmservices.com</a>
Alaska Marine Construction Services	Site Operator	Site Supervisor	Alaska, AK		<a href="mailto:info@alaskamarineconstruction.com">info@alaskamarineconstruction.com</a>
Alaska	Industry Member	Operations Manager	Alaska, AK		<a href="mailto:info@alaska.gov">info@alaska.gov</a>
Alaska	Site Operator	Engineer	Alaska, AK		<a href="mailto:info@alaska.gov">info@alaska.gov</a>
Alaska	Site Operator	Production Manager	Alaska, AK		<a href="mailto:info@alaska.gov">info@alaska.gov</a>
Alaska Marine Services	Site Operator	Operations Manager	Alaska, AK		<a href="mailto:info@alaskamarineservices.com">info@alaskamarineservices.com</a>
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Questions?





Thank You