

Don Young Port of Alaska Modernization Program



BESS/Program Update – March 11, 2026
Senate Resource Committee

Agenda

- POA's Battery Energy Storage System (BESS)
- PAMP projects overview



A photograph of a construction site at dusk or dawn. Several large lattice-boom cranes are positioned on a concrete pier structure. The sky is a deep blue, and the water in the foreground is dark. The text 'Modernizing Port of Alaska's power system with a Battery Energy Storage System (BESS)' is overlaid in white, bold, sans-serif font across the center of the image.

Modernizing Port of Alaska's power system with a Battery Energy Storage System (BESS)

Goals of BESS

Phased implementation pathway of independently beneficial electrical infrastructure upgrades to achieve the following goals:

1. Improve the Port of Alaska power system resilience to maintain port operation and readiness during local and grid power outages.
2. Reduce Port-related energy costs by flattening power demand spikes, improving power quality and reducing demand-related charges to provide economic value for Port tenants.
3. Modernize cargo and fuel-handling operations.



First phase of the BESS

- Will purchase and install a battery system for an electrical substation supporting the new gantry cranes to be installed on the new Terminal 1.
- The new batteries will be used instead of a typical back-up generator.
- The electrical substation project is required to be operational prior to Terminal 1 completion.



Batteries will perform better than a generator system, they will:

Provide safer operation

- Provide backup power sufficient to park the cranes during primary power loss

Create greater efficiency

- Capture regenerative power from the cranes

Support smoother operation

- Support voltage stability during crane operations



Future phases of the BESS will:



Expand BESS to supply power services to all POA.



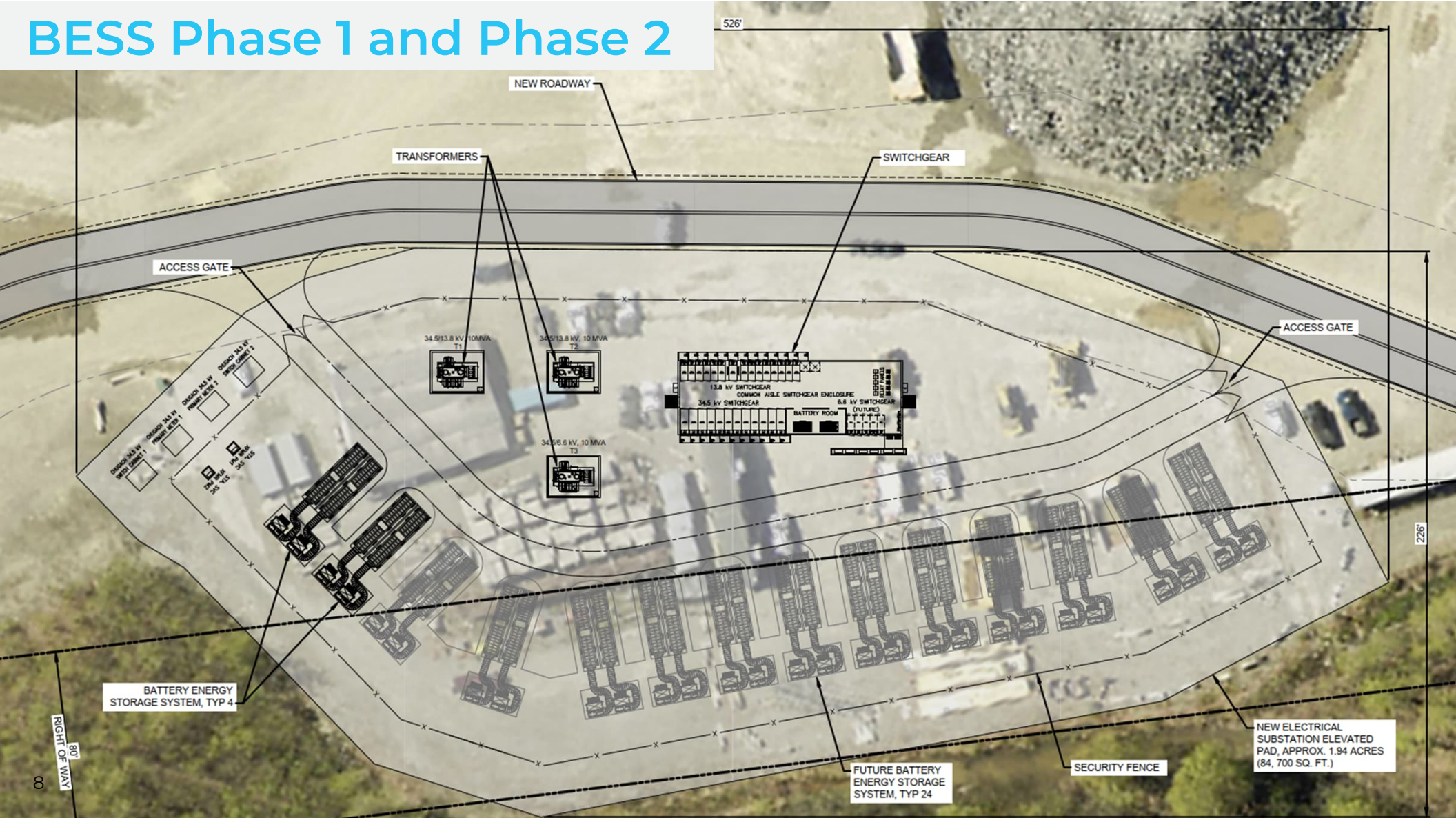
Allow for ongoing operations during grid outages.



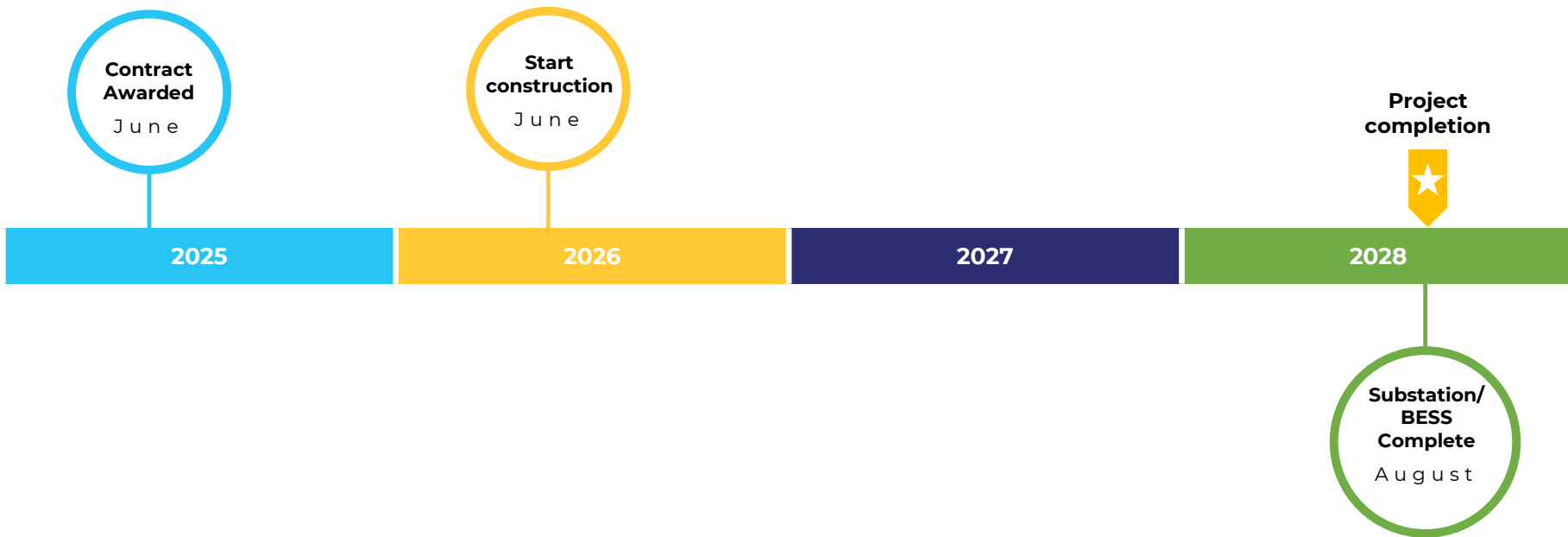
Enable grid services to Chugach Electric Association.



BESS Phase 1 and Phase 2



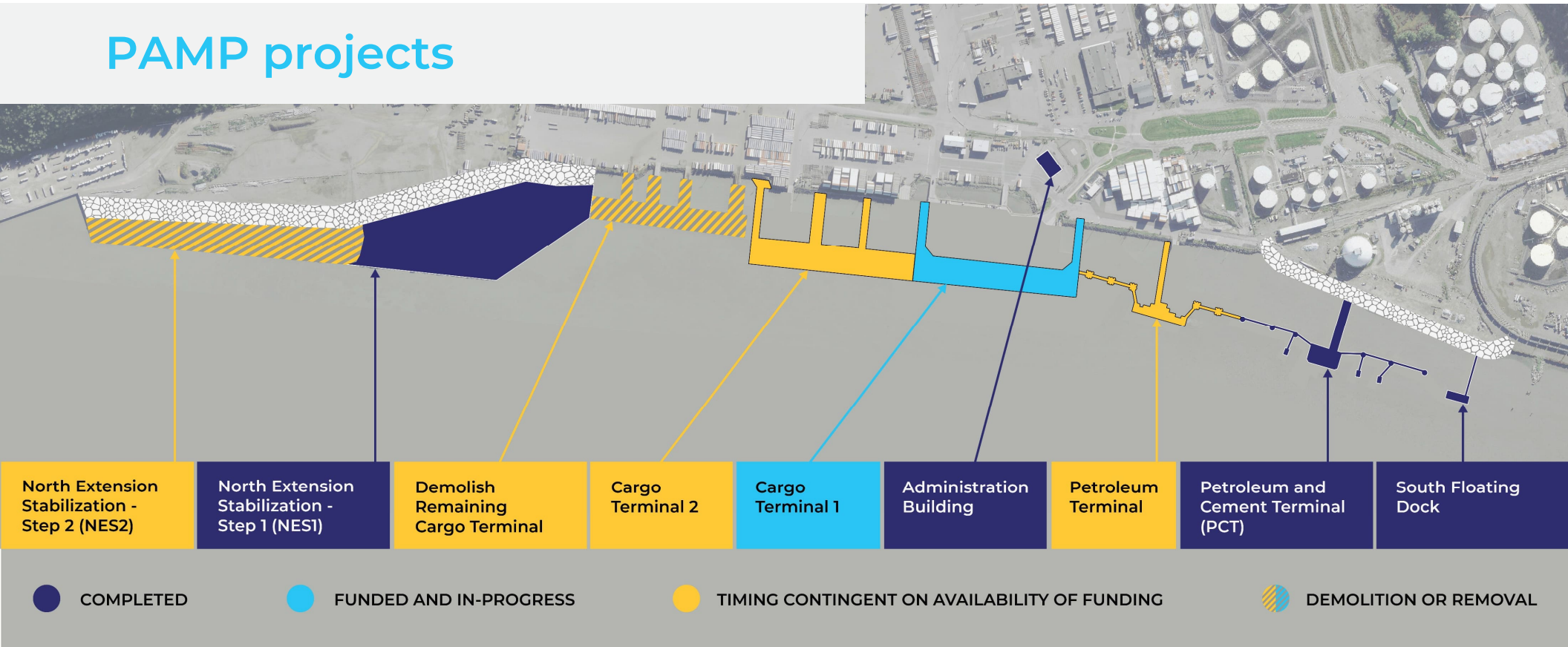
Electrical Substation/BESS design build project timeline Phase 1



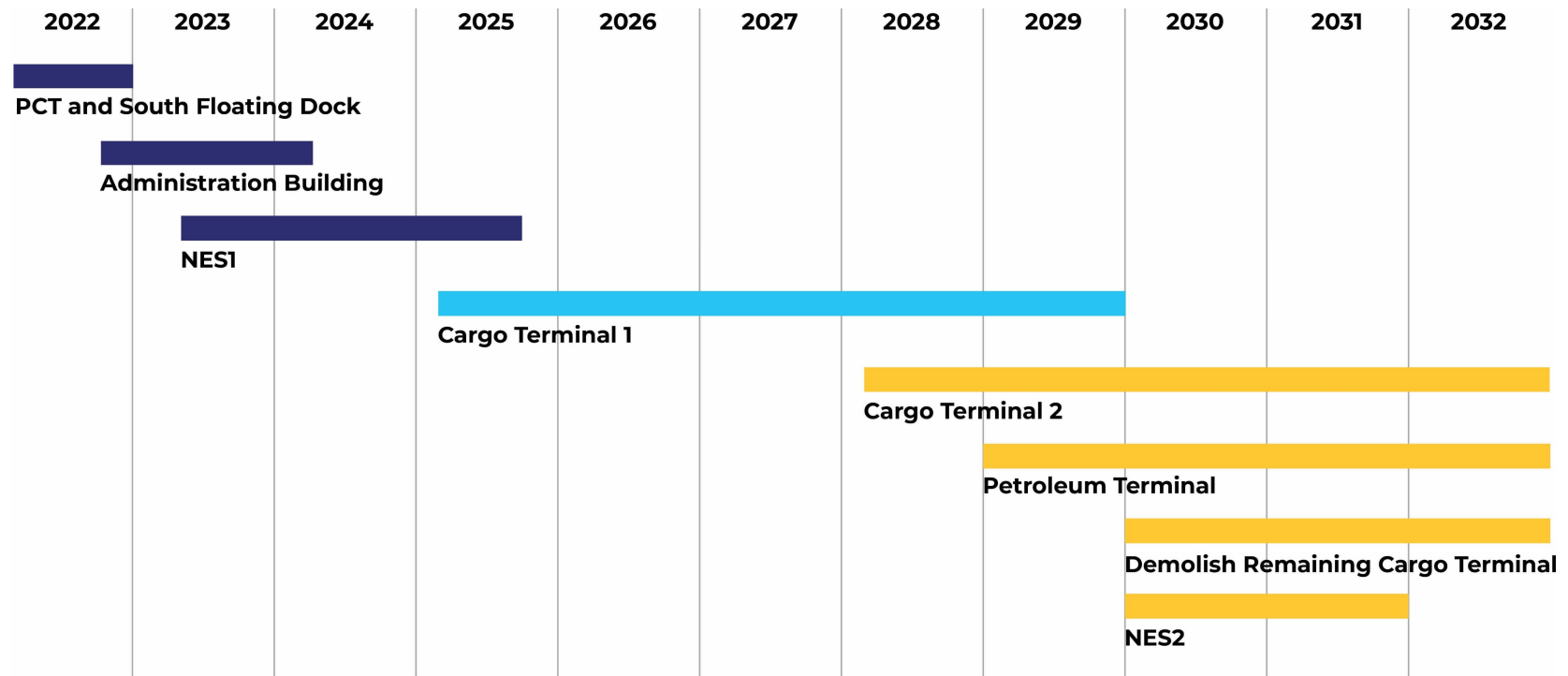
Forward Momentum on the PAMP

Current status of the Port of Alaska Modernization Program

PAMP projects



Program timeline



ALL DATES ARE SUBJECT TO CHANGE.

● COMPLETED

● FUNDED AND IN-PROGRESS

● TIMING CONTINGENT ON AVAILABILITY OF FUNDING



Completed work



Petroleum Cement Terminal

Completed in 2022

- The Petroleum Cement Terminal was the first of four terminals to be replaced by the PAMP.
- Located south of existing terminals to allow continuing operations without interruption.
- Serves both petroleum and cement transfer operations.



Administration Building

Completed in 2024

- A new administration building was constructed to replace the administration building on Terminal 2 slated for demolition.



North Extension Stabilization

Completed in 2025

- The North Extension Stabilization (NES1) has successfully stabilized the shoreline, widened the marine shipping lane, and increased safe vessel docking at the Cargo terminals.

2023: Deep soil mixing was completed to help stabilize the critical section of the North Extension.

2024: Demolished the failed structure and stabilized the shoreline.

2025: Finished the required dredging and complete the shoreline rock placement.





In-progress work



Cargo Terminals 1 and 2

- The new terminals will replace the existing ones with seismically capable structures built 140 feet seaward of the existing structure to reduce sedimentation impact, improve berthing safety, and allow for continued Port operations during construction.
- Both cargo terminals will support general cargo handling and operations and mooring for military and cruise ships.
- New Terminal 1 is being constructed further south of the existing terminals to allow for on-going Port operations.



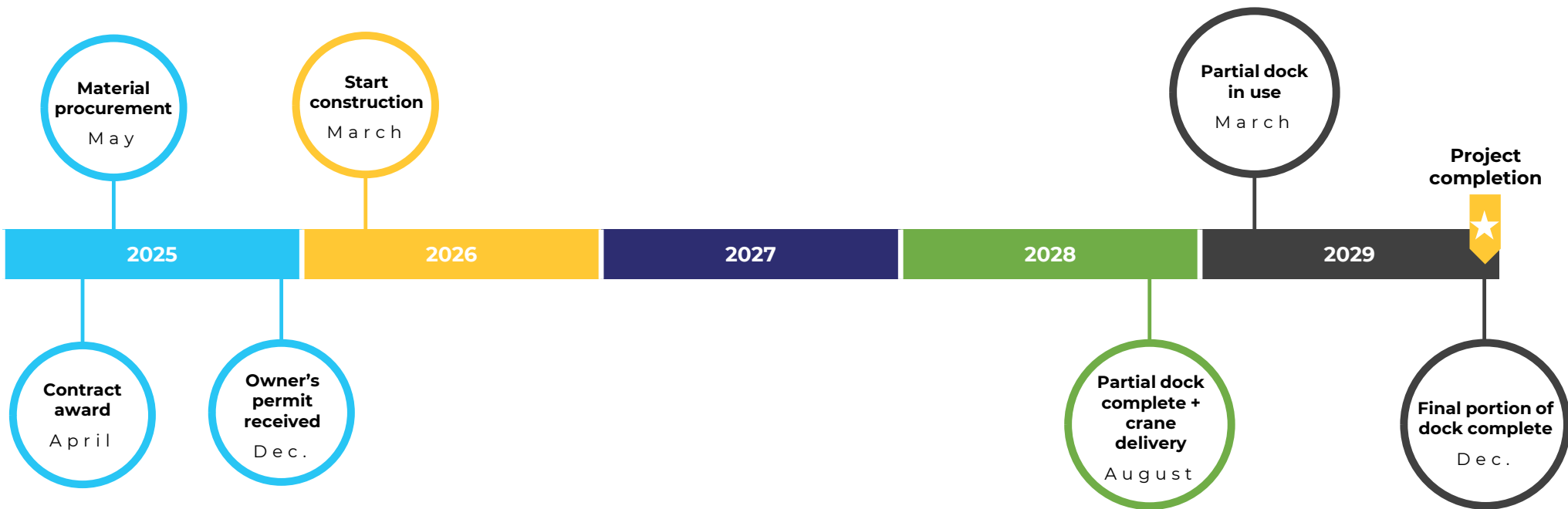
Rendering of completed cargo terminals

Status of Cargo Terminals 1 and 2

- Terminal 1 is being constructed first to allow Port operations to continue. The construction contract was awarded last year to allow adequate time for material procurement and workplan coordination. Construction kicks off next week Monday, March 16.
- Terminal 2 design was recently awarded with a contract kick-off meeting this week.



Cargo Terminal 1 timeline



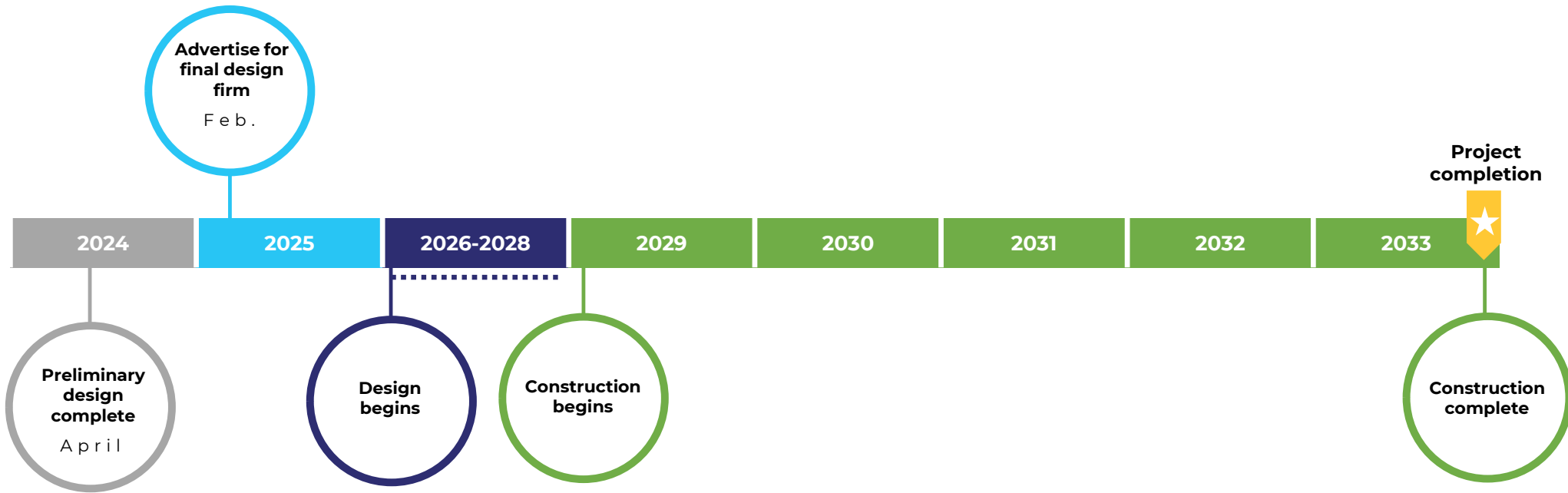


Cranes arrive Aug 2028 at high tide & rolled onto T1



T1 construction completed Q4 2029

Cargo Terminal 2 timeline



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 failing sheet pile system and stabilize the shore for the rest of the North Extension. This area is not expected to affect Port of Alaska operations.
- **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.



PAMP at completion



A photograph of a shipyard at dusk. The sky is a mix of purple, pink, and blue. In the foreground, the water is calm and reflects the lights from the shipyard. Several large cranes are visible, some with 'Matsen' written on them. There are also buildings and other structures in the background, some with lights on. The overall scene is industrial and serene.

Thank you