**THE NORTHWEST SEAPORT ALLIANCE**
**MEMORANDUM**

**MANAGING MEMBERS**
**ACTION ITEM**

**Item No.:** 10C
**Meeting Date:** October 30, 2026

**DATE:** October 30, 2026

**TO:** Managing Members

**FROM:** John Wolfe, CEO

**Sponsor: Jeff Belerud, Chief Operations Officer**
**Project Manager: Marcus Van Valen, Engineering Project Manager I**

**SUBJECT:** Pierce County Terminal & Washington United Terminal Bollard Upgrades Design Authorization

## A. ACTION REQUESTED

(1) Project authorization in the amount of $450,000, for a total authorized amount of $725,000, for work associated with the Pierce County Terminal (PCT) Bollard Upgrades Design Authorization, Project ID No. 201239.01.

(2) Project authorization in the amount of $480,000, for a total authorized amount of $755,000, for work associated with the Washington United Terminal (WUT) Bollard Upgrades Design Authorization, Project ID No. 201240.01.

## B. SYNOPSIS

Mooring studies commissioned by The Northwest Seaport Alliance (NWSA) in 2024 concluded that the existing bollards require capacity upgrades to safely accommodate future vessel berthing demands at Pierce County Terminal and Washington United Terminal. The requested action will fund the design phase of both projects.

## C. BACKGROUND

Pierce County Terminal and Washington United Terminal have undergone infrastructure improvements to accommodate larger vessels, including replacing the fender systems to absorb greater berthing loads. Cranes have been raised to accommodate larger ships at PCT, and WUT is in the process of ordering additional larger cranes. In addition, there are plans to deepen the Blair Waterway and the berth at WUT. However, these improvements will not increase the capacity of the existing mooring bollards or their supporting structures.

The NWSA commissioned mooring studies in 2024 to evaluate the ability of the existing bollard systems to accommodate larger vessels.

The studies identified the need to upgrade several bollards to support future berthing demands. Generally, the existing bollards were designed for vessels ranging from approximately 8,800 to 14,000 TEU and have a rated capacity of 125,000 lbs. To accommodate vessels between 14,000 and 20,000 TEU, industry guidance recommends bollard capacities of approximately 450,000 lbs. These projects will enhance mooring capacity, operational safety, and berthing flexibility while aligning the mooring systems with other terminal infrastructure improvements.

Previous authorizations funded initial investigations, assessments, and early design activities. This authorization will advance the projects through design, permitting, cost estimating, and preparation of bid documents for the required improvements.

## D. PROJECT DESCRIPTION AND DETAILS

Design of upgraded bollards at PCT and WUT.

### *Project Objectives*

- Provide effective mooring infrastructure for 20,000-TEU vessel service.
- Increase mooring capacity and operational flexibility.
- Support safe terminal operations.

### *Scope of Work*

This project will design and construct bollard upgrades at PCT and WUT, including site investigations, structural assessments, permitting, cost estimating, preparation of bid documents, procurement support, construction, and project closeout.

### *Scope of This Request*

Development of preliminary and final designs for new vessel mooring bollards at PCT and WUT.

This authorization encompasses only the design phase of each project.

The scope of work will include:

- Site investigations and bollard assessments
- Finalize basis of design reports
- Final design development
- Permitting and regulatory support
- Procurement and bid support

### *PCT Schedule*

| | |
|---|---|
| Complete Design | Q3 2027 |
| Advertise for Bid | Q4 2027 |
| Substantial Completion | Q4 2028 |
| Final Completion | Q1 2029 |

### *WUT Schedule*

| | |
|---|---|
| Complete Design | Q3 2027 |
| Advertise for Bid | Q4 2027 |
| Substantial Completion | Q4 2028 |
| Final Completion | Q1 2029 |

## E. FINANCIAL IMPLICATIONS

### *PCT Bollard Upgrades - Cost Details*

| | This Request | Total Project Cost | Cost to Date | Remaining Cost |
|---|---|---|---|---|
| Design | $450,000 | $625,000 | $175,000 | $450,000 |
| Construction | $0 | $4,740,000 | $0 | $4,740,000 |
| **Total** | **$450,000** | **$5,365,000** | **$175,000** | **$5,190,000** |

### *WUT Bollard Upgrades - Cost Details*

| | This Request | Total Project Cost | Cost to Date | Remaining Cost |
|---|---|---|---|---|
| Design | $480,000 | $660,000 | $180,000 | $480,000 |
| Construction | $0 | $7,600,000 | $0 | $7,600,000 |
| **Total** | **$480,000** | **$8,260,000** | **$180,000** | **$8,080,000** |

### *Source of Funds*

The funds for project will be provided by the Homeports through the standard capital project funding process. The 2027-2031 Capital Investment Plan (CIP) Budget allocates $5 million for the PCT project and $7.9 million for the WUT project.

### *Financial Impact*

The PCT is budgeted to generate an estimated $20 million in cash in 2027 and the WUT is budgeted to generate an estimated $15 million in cash in 2027.

Project costs will be capitalized upon completion and depreciated over ten years resulting in an estimated $536,000 and $827,000 depreciation per year, respectively.

## F. ENVIRONMENTAL IMPACTS/REVIEW

Permitting: Permitting requirements will be evaluated during the design, and all necessary permits will be obtained prior to construction.

Remediation: No remediation is anticipated as part of either project.

Stormwater: Stormwater treatment requirements will be evaluated and addressed during design.

Air Quality: No significant air quality impacts are expected from either project.

## PREVIOUS ACTIONS OR BRIEFINGS - PCT

| Date | Action | Amount |
|---|---|---|
| March 3, 2026 | Executive Authorization - Design | $175,000 |
| September 2, 2025 | Executive Authorization – Pre-Design | $100,000 |
| **TOTAL** | | **$275,000** |

## PREVIOUS ACTIONS OR BRIEFINGS - WUT

| Date | Action | Amount |
|---|---|---|
| March 3, 2026 | Executive Authorization - Design | $175,000 |
| September 2, 2025 | Executive Authorization – Pre-Design | $100,000 |
| **TOTAL** | | **$275,000** |

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# Pierce County Terminal (PCT) and Washington United Terminal (WUT) Bollard Upgrades Design Authorization

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Marcus Van Valen
Engineering Project Manager I

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## ACTION REQUESTED

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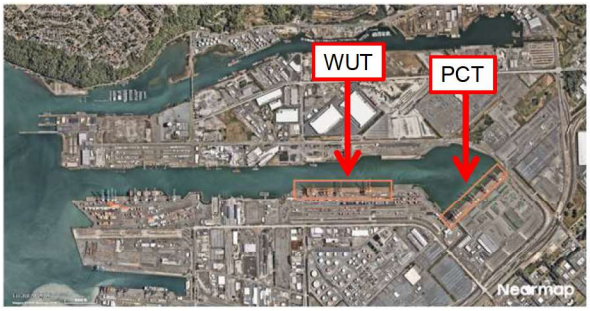
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# Background

- Several components of the PCT and WUT infrastructure have been improved to accommodate larger vessels, including:
  - Larger cranes
  - Upgraded fender systems
  - Deepening the Blair waterway




- Bollard improvements were not part of these other projects, creating a weak link in the overall capability of the mooring systems at PCT and WUT.

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# Background

Mooring studies completed in 2024 identified several bollards that would need to be upgraded to support future berthing demands.




Typical bollard at PCT



Typical bollard at WUT

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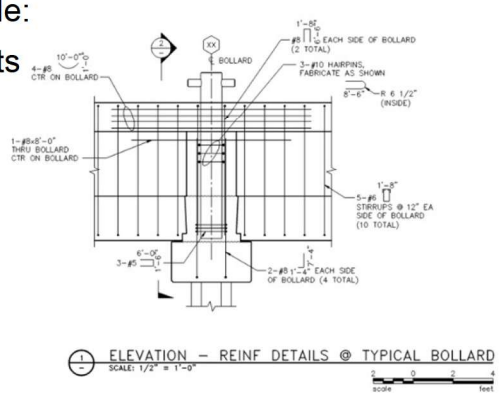
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# Project Description and Details

This project will design and construct bollard upgrades at PCT and WUT.

This authorization request encompasses only the design phase of each project

- The proposed design scope of work will include:
  - Site investigations and bollard assessments
  - Finalize basis of design reports
  - Final design development
  - Permitting and regulatory support
  - Procurement and bid support




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# Project Schedule

| Activity | Timeframe |
|---|---|
| Complete Design | Q3 2027 |
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| Substantial Completion | Q4 2028 |
| Final Completion | Q1 2029 |

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# Source of Funds and Financial Impact

The funds for project will be provided by the Homeports through the standard capital project funding process. The 2027-2031 Capital Investment Plan (CIP) Budget allocates $5 million for the PCT project and $7.9 million for the WUT project.

The PCT is budgeted to generate an estimated $20 million in cash in 2027 and the WUT is budgeted to generate an estimated $15 million in cash in 2027. Project costs will be capitalized upon completion and depreciated over ten years resulting in an estimated $536,000 and $827,000 depreciation per year, respectively.

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# Financial Summary

***PCT Bollard Upgrades - Cost Details***

| Item | Budget Estimate | Cost to Date | Remaining Cost |
|---|---|---|---|
| Design | $625,000 | $175,000 | $450,000 |
| Construction | $4,740,000 | $0 | $4,740,000 |
| Project Total: | $5,365,000 | $175,000 | $5,190,000 |

***WUT Bollard Upgrades - Cost Details***

| Item | Budget Estimate | Cost to Date | Remaining Cost |
|---|---|---|---|
| Design | $660,000 | $180,000 | $480,000 |
| Construction | $7,600,000 | $0 | $7,600,000 |
| Project Total: | $8,260,000 | $180,000 | $8,080,000 |

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# Environmental Impacts / Review

- **Permitting**: Permitting requirements will be evaluated during the design and all necessary permits will be obtained prior to construction.
- **Remediation**: No remediation is anticipated as part of either project.
- **Stormwater**: Stormwater treatment requirements will be evaluated and addressed during design.
- **Air Quality**: No significant air quality impacts are expected from either project.

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