THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
ACTION ITEM

Item No. 5C

Date of Meeting March 5, 2020

DATE: February 19, 2020

TO: Managing Members

FROM: John Wolfe, CEO

Sponsor: Tong Zhu, Chief Commercial Officer

Project Manager: Elly Bulega, Engineering Project Manager I

SUBJECT: Washington United Terminals (WUT) Utility Vault Upgrades

A. ACTION REQUESTED

As referenced in NWSA Resolution No. 2018-01, Exhibit A, Delegation of Authority Master Policy, Paragraph 8.c.iii., states project costs exceeding $300,000 require approval from Managing Members.

Requesting project authorization in the amount $1,160,000 for a total authorized amount of $1,310,000, for work associated with the Washington United Terminals (WUT) Utility Vault Upgrades, Master Identification No. 201090.01.

B. SYNOPSIS

The objective of this project is asset preservation at WUT in accordance with the NWSA lease obligation to repair and/or upgrade vaults on the terminal and to comply with Ecology's consent decree.

The asphalt in the drive aisle located behind the pier at WUT has experienced differential settlement, leading to equipment damaging the vault castings. This project will repair and upgrade the vaults by installing new castings within a reinforced concrete collar that will eliminate the settlement issues around the vaults, prevent future damage and improve yard operations. Making these repairs and upgrades is part of the NWSA's lease agreement with the tenant, and also keeps the Port compliant with Ecology's consent decree.

C. BACKGROUND

The current WUT terminal is a combination of the main yard that was constructed in 1998 and a 600-ft berth extension that was completed in 2009. The main yard is located on a low permeability asphalt environmental cap designed to minimize the intrusion of water to the slag below, preventing the release of arsenic into ground water. Per Ecology's 1994 Consent

Decree issued to the Port, the Port is to perform routine inspections, maintenance and repairs to the asphalt and catch basins, manhole and vaults structures to ensure the integrity of the cap.

In 2019 during routine Asphalt Concrete Pavement (ACP) cap maintenance repairs in the drive aisle adjacent the pier, the Port noted that the tenant had made improvements to some of the utility structures. The improvements included replacement of the lids that were split or cracked, and installation of concrete collars around the vaults. The tenant thought they were responsible for maintaining all the utility structures on the terminal instead of just the ones in backland (beyond the main drive aisle, behind the pier). In an effort to comply with Ecology's consent decree requirements and also eliminate safety hazards, the tenant proceeded with improvements that were the Port's responsibility. The tenant improvements had been designed below container yard standards which caused them to fail. The Port completed pavement repairs in those areas in accordance with the consent decree, however, repairs and upgrades to the utility structures (including the tenant's attempted improvements on other structures) still need to be completed to remain complaint with the consent decree.

Damage to the utility structures on terminals can result from a variety of issues, including stacking of hatch covers on vaults or differential settlement of the paving around the utility structures. Since completion of terminal construction, the yard has experienced normal settlement and a significant seismic event. This has led to differential settlement around the structures. Differential settlement occurs as the result of normal settlement of the soil over time juxtaposed against structurally reinforced utility structures that are designed to resist settlement. Settlement of the structures could result in system failures, leaks and outages. As the asphalt surrounding the structures settles, lids and castings are exposed to damage by yard equipment.

This project is located in the drive aisle adjacent to the pier, and includes upgrades to 63 structures including water valves, storm and sanitary sewer manholes, and electrical and communication vaults. All damaged castings will be replaced, and the existing undamaged casting will be reset within a structurally reinforced concrete collar. These concrete collars are designed to extend 2 feet beyond the perimeter of the vaults, thereby bridging the areas of concern created by the differential settlement. These collars will be set to match adjacent pavement elevations where cap repairs were completed in 2019. The same collar installation procedure will be used at pavement cap repairs planned to be completed in 2020.

PROJECT DESCRIPTION AND DETAILS

Project Objectives

Complete upgrades to 63 utility structures' lids and water valves lids in the drive aisle behind the pier at Washington United Terminals.

Scope of Work

Replace damaged or reuse undamaged utility lids at (Storm, Sanitary, Electrical and Communication) vaults.

The scope will include:

- Removal of existing pavement surrounding the utility vault lids extending to approximately 18 to 24 inches beyond the exterior wall of all vault(s).
- A new, reinforced, structural slab will be installed over each vault and around the ring and the lid.
- All electrical and communications lids are to be constructed with 38-inch diameter round lids with a 125,000 lb. rating.
- Where possible, existing lids which meet this criterion are to be salvaged and reused.
- In many areas, vaults are located in close proximity to one another, such that it is advantageous to design and construct a single slab to cover and support two or more vaults and lids.

Schedule

The design for slabs is nearly complete. Construction is scheduled to commence Spring 2020. No permitting is anticipated on the project. Project schedule is as follows:

Complete Design	March 2020
Advertise Bid	March 2020
Bid Opening	April 2020
Contract Award	April 2020
Substantial Completion Phase I	September 2020
Substantial Completion Phase II	June 2021

D. FINANCIAL IMPLICATIONS

Project Cost Details

	This Request	Total Project Cost	Cost to Date	Remaining Cost
Design	$ -	$ 150,000	$ 36,443	$ 113,557
Construction	$ 1,160,000	$ 1,160,000	$ -	$ 1,160,000
Total	**$ 1,160,000**	**$ 1,310,000**	**$ 36,443**	**$ 1,273,557**

Source of Funds

The current Capital Investment Plan (CIP) Budget allocates $1,376,000 for this project.

The differential costs associated with correcting the tenant's attempted improvements are included in the project cost estimate and the tenant has been notified of the NWSA's intent to file a claim for reimbursement of these differential costs, the sum of which will be determined upon project completion.

Financial Impact

Project costs will be capitalized and depreciated over an estimated useful life of 20 years. There will be no depreciation for 2020. The WUT terminal provided $9.9 million in operating income before depreciation in 2019. The 2020 budget assumes similar results. The 2021-2024 forecast includes $71,000 in annual depreciation from this project starting July 2021.

E. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

Alternative 1: Do nothing. The result of no action is that the tenant's equipment will continue damaging vault rings, lids and protective collars. Also, the Port holds the risk of violating Ecology's consent decree with ongoing water intrusion.

Alternative 2: Repair and/or upgrade the utility structures to prevent further damage. Maintain compliance with Ecology's consent decree.

Staff recommends Alternative 2.

F. ENVIRONMENTAL IMPACTS/REVIEW

Permitting:

No permitting is required on the project.

Remediation:

Not applicable.

Stormwater:

No water quality impacts are anticipated. Best Management Practices (BMPs) will be implemented to protect water during construction activities.

Air Quality:

Not applicable

G. ATTACHMENTS TO THIS REQUEST

- Computer slide presentation.

H. PREVIOUS ACTIONS OR BRIEFINGS

Date	Action	Amount
November 7, 2019	Executive Authorization	$150,000
TOTAL		**$150,000**