

THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
ACTION ITEM

Item No.	<u>5A</u>
Date of Meeting	<u>June 5, 2018</u>

DATE: May 22, 2018

TO: Managing Members, The Northwest Seaport Alliance

FROM: John Wolfe, Chief Executive Officer

Sponsor: Jason Jordan, Director, Environmental and Planning Services

Project Manager: David Myers, Engineering Project Manager II

SUBJECT: East Sitcum Terminal (EST) Stormwater Improvements and North Intermodal Yard (NIM) Stormwater Treatment

A. ACTION REQUESTED

As referenced in NWSA Resolution No. 2016-04, Exhibit A, Delegation of Authority Master Policy, Paragraph 8.c.iii., states project costs exceeding \$300,000 require approval from Managing Members.

- a. Request project authorization in the amount \$1,145,000 for a total authorized amount of \$1,300,000, for work associated with the East Sitcum Terminal (EST) Stormwater Improvements, Master Identification No. 201054.01.
- b. Request project authorization in the amount \$932,500 for a total authorized amount of \$1,150,000, for work associated with the NIM Stormwater Treatment, Master Identification No. 201055.01.

B. SYNOPSIS

The EST Stormwater Improvements and NIM Stormwater Treatment system will ensure the Port's compliance with Department of Ecology stormwater permit requirements and satisfy the current level two corrective action at EST. This work is being completed to satisfy regulatory obligations concerning stormwater requirements on NWSA licensed properties, for which the Port of Tacoma is the permit-holder.

C. BACKGROUND

East Sitcum Terminal (EST): The Port of Tacoma's Industrial Stormwater General Permit (ISGP) for East Sitcum Terminal requires the Port of Tacoma to install treatment and complete routine cleaning activities on the system. In 2014 the Port installed five treatment vaults at EST to meet these permit requirements. In the summer of 2016, routine cleaning of the stormwater conveyance system identified structural deficiencies in many of the pipes. In

December 2016, the Port conducted a further investigation into the condition of the pipes which led to the replacement of 127 feet of pipe from the treatment vault to the nearest upstream manhole in Basin 1. Since the completion of this project in early 2017, the stormwater treatment system in Basin 1 has continued to plug with sediment, and sampling results for two out of four quarters in 2017 were above benchmarks associated with turbidity, TSS and zinc; this triggered a Level 2 Corrective Action response requirement under the ISGP. Further pipe investigations were completed in the fall 2017 which resulted in the discovery of more structural deficiencies in the legacy galvanized corrugated metal pipes (CMP). Galvanized pipe is a source of zinc.

This project will remove the remaining legacy CMP pipes in Basins 1 and 2, eliminate the source of zinc in these Basins and complete the ISGP Level 2 Corrective Action response requirement for the Port to implement structural best management practices.

Further investigations in Basins 3, 4 and 5 will be required in the future. It is anticipated that these investigations will result in subsequent legacy CMP pipe replacement projects.

North Intermodal Yard (NIM): In 2014, the Port was required to install stormwater treatment for the NIM, as part of a Level 3 Corrective Action under the ISGP for the NIM facility. At that time, the Port was not aware of any other discharge locations from the NIM, however a second discharge location was discovered as part of a recent survey effort. The newly discovered stormwater discharge point must also comply with the Port's ISGP obligation to install stormwater treatment where the discharge leaves the NIM site and enters the adjacent system, which is managed by the tenant, ITS. This project will fulfill that obligation by installing a treatment vault and membrane filter system at the discharge point.



D. PROJECT DESCRIPTION AND DETAILS

The EST Stormwater Improvements will replace approximately 1200 Lineal Feet (LF) of failing legacy CMP with new High Density Polyethylene Pipe (HDPE).

The NIM Stormwater Treatment will install a new stormwater treatment vault including a “Jellyfish membrane filter” and related piping and manhole structures to allow for treatment of approximately 23 acres of the NIM.

Project Objectives

These projects are being completed to ensure compliance with the Port of Tacoma's ISGP.

Scope of Work

The scope of work for the EST will include:

- Saw-cutting, removal and replacement of asphalt in areas of work
- Excavation and removal of existing soils (salvaged for reuse if possible)
- Dewatering
- Removal of existing CMP
- Installation of new HDPE
- Manhole connections
- Backfill and compaction (salvaged or imported material)
- Disposal of unsuitable soils (saturated or contaminated) and CMP

The scope of work for the NIM will include:

- Saw-cutting, removal and replacement of asphalt in areas of work
- Excavation and removal of existing soils (salvaged for reuse if possible)
- Dewatering
- Installation of new pipe, manholes, stormwater vault and treatment system
- Manhole connections
- Backfill and compaction (salvaged or imported material)
- Disposal of unsuitable soils (saturated or contaminated)

Schedule

Advertise Bids	June 29, 2018
Bids Due	July 20, 2018
Substantial Completion	October 19, 2018
Final Completion	November 30, 2018

E. FINANCIAL IMPLICATIONS

Project Cost Details

	This Request	Total Project Cost	Cost to Date	Remaining Cost
EST Stormwater Improvements	\$ 1,145,000	\$ 1,300,000	\$ 27,137	\$ 1,272,863
NIM Stormwater Treatment	\$ 932,500	\$ 1,150,000	\$ 109,006	\$ 1,040,994
Total	\$ 2,077,500	\$ 2,450,000	\$ 136,143	\$ 2,313,857

Source of Funds

The current Capital Investment Plan (CIP) has been adjusted to allocate \$1,300,000 for MID 201054.01 EST Stormwater Improvements and \$1,150,000 for MID 201055.01 NIM Stormwater Treatment System.

Financial Impact

MID 201054.01 EST project costs will be capitalized and depreciated over a 50-year period resulting in annual depreciation expense of \$26,000. MID 201055.01 NIM project costs will be capitalized and depreciated over a 20-year period resulting in annual depreciation expense of \$57,000. Depreciation expense for 2018 will be approximately \$4,000 and \$10,000, respectively, based on a project completion date of November 2018.

This investment is required to maintain ongoing revenue. Based on April financial results, East Sitcum Terminal has earned \$1.1 million in income before depreciation and is budgeted to earn \$2.5M in income before depreciation in 2018. The NIM has earned through April \$2.4 million in income before depreciation and is budgeted to earn \$9.1 million in income before depreciation in 2018.

F. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

EST – Alternative 1) Do nothing – this option will result in potential permit violations and allow a source of zinc to continue to leach into the stormwater system.

EST – Alternative 2) Slip-line existing pipes – this option could not be completed due to the current condition of the existing pipes. The lining material could not be installed in a manner that would ensure successful completion. This could result in additional work to repair or replace areas that were unsuccessful.

EST – Alternative 3) Replace failing legacy CMP pipe and ensure permit compliance.

EST – Alternative 3 is the recommended course.

NIM – Alternative 1) Do nothing – this option will result in potential permit violations and risks associated with untreated Port stormwater co-mingling with tenant stormwater.

NIM – Alternative 2) Install a “Jellyfish membrane filter” and related piping and manhole structures at the discharge point. This system has been installed at several other Port intermodal facilities and has a very good treatment history.

NIM – Alternative 2 is the recommended course.

G. ENVIRONMENTAL IMPACTS/REVIEW

Permitting: None.

Remediation: None.

Water Quality: Both components of work are Water Quality related as noted above.

Air Quality: None.

H. ATTACHMENTS TO THIS REQUEST

- Computer slide presentation.

I. PREVIOUS ACTIONS OR BRIEFINGS

<u>Date</u>	<u>Action</u>	<u>Amount</u>
May 1, 2018	Executive Authorization – EST Stormwater Improvements	\$155,000
May 2, 2018	Executive Authorization – NIM Stormwater Improvements	\$217,500
TOTAL		\$372,500