

Date of Meeting: May 2, 2022
Item No: 9B



**THE NORTHWEST
SEAPORT ALLIANCE**
Gateway to Solutions

Project Authorization For T46 Substation #1 Replacement Project

Presenter: Arthur Kim, PMP
Capital Project Manager, POS

Project Authorization

T46 Substation #1 Replacement Project

1. For NWSA Managing Members to vote:

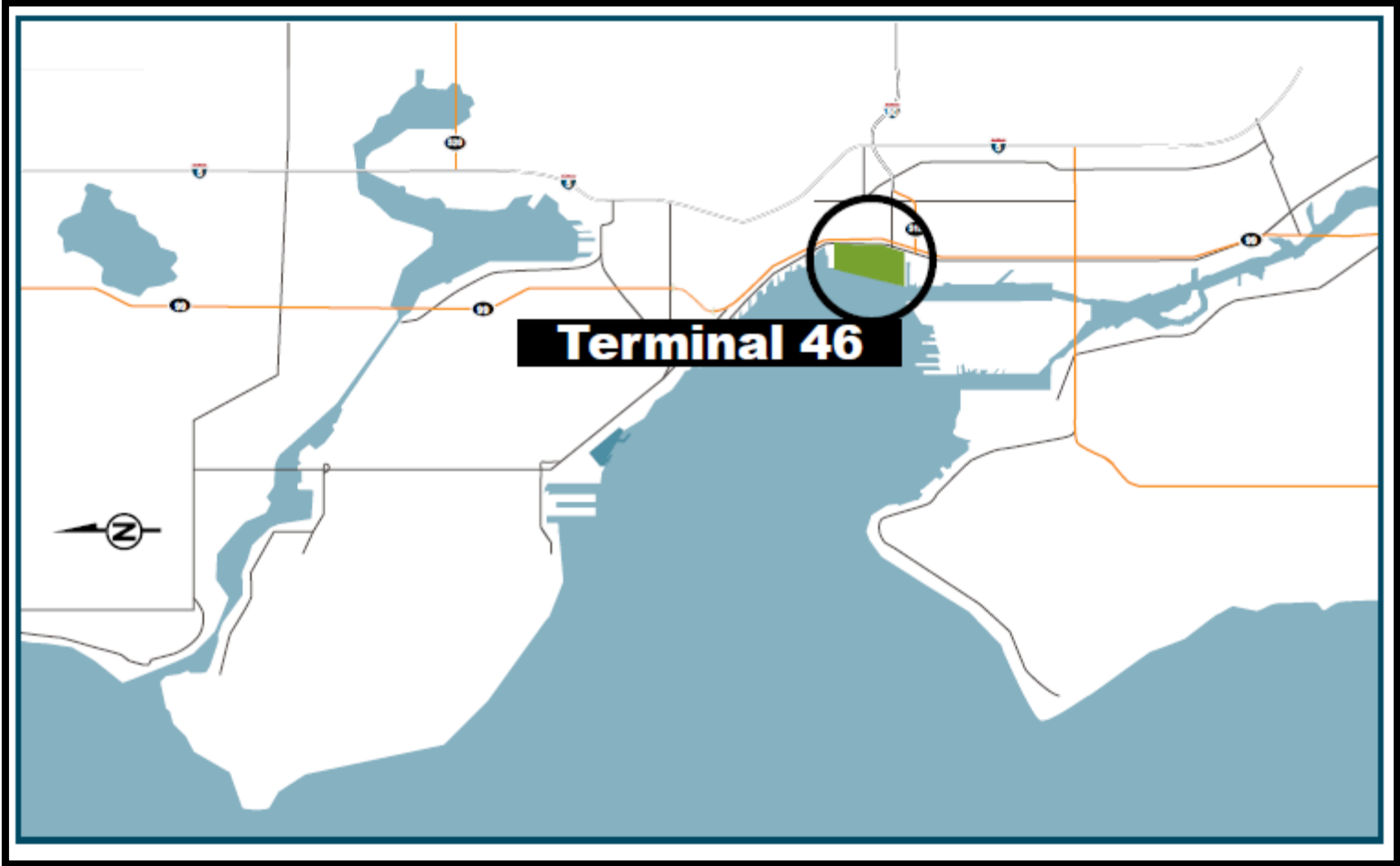
- a. As referenced in NWSA Resolution No. 2020-02, Master Policy, Paragraph 8.c.iv, Managing Member authorization is required to perform alternative public works.
 - i. Request authorization to use design-build as an alternative to design-bid-build for the T46 Substation No. 1 Replacement Project, Master Identification No. U00671
- b. As referenced in NWSA Resolution No. 2020-02, Exhibit A, Delegation of Authority Master Policy, Paragraph 8.c.iii., states project costs exceeding \$300,000 require approval from Managing Members.
 - i. Request Managing Members of The Northwest Seaport Alliance authorization for the Chief Executive Officer or their delegate to approve the total costs not to exceed \$6,700,000, 20% of which is to be allocated to the Port of Seattle for the replacement of Substation No. 1 located on Terminal 46 servicing both areas of Terminal 46 licensed to the NWSA and the Terminal 46 North Pier under Port of Seattle management, Master Identification No. U00671.

2. For Port of Seattle Commission only to vote:

- a. Request Port of Seattle Commission authorization for the Executive Director or their delegate to approve 20% of the total costs not to exceed \$1,340,000 for reimbursement to the NWSA for the replacement of Substation No. 1 located on Terminal 46 licensed to the NWSA and the Terminal 46 North Pier under Port of Seattle management, Master Identification No. U00671.



Terminal 46 – North Harbor



Summary

T46 Substation #1 Replacement Project

- **The total cost of the Substation #1 replacement will be shared 80% by the NWSA and 20% by the Port of Seattle.**
 - The substation has a 480-volt 3,000-amp capacity of which 600 amps are dedicated to Terminal 46 North Pier, which is Port of Seattle managed, equal to 20% of the total capacity.
 - The remaining amperage that services Terminal 46, licensed to the NWSA, is equal to 80% of the total capacity.
 - The NWSA will pay up front for the project and then be reimbursed by POS for 20% of the total cost accordingly.



Background

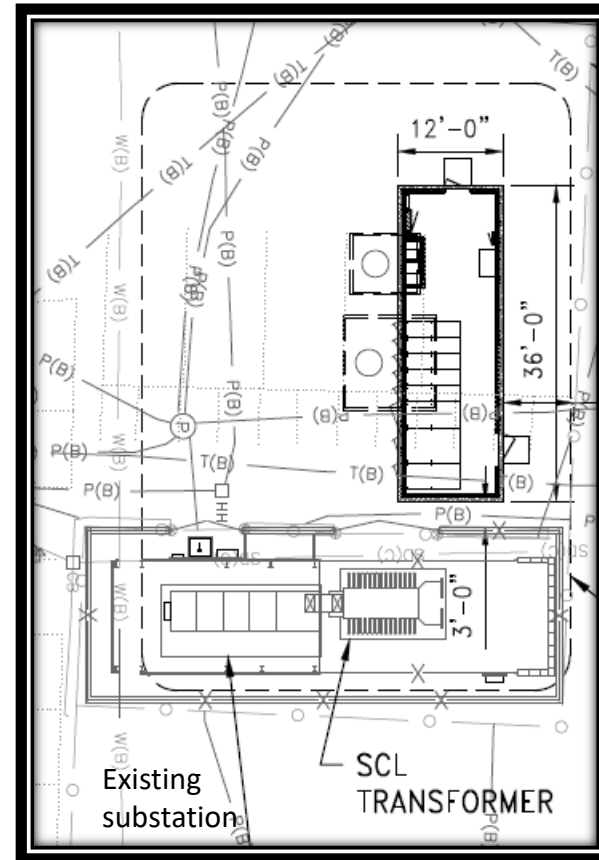
T46 Substation #1 Replacement Project

- **POS Engineering Memo from 2020**
 - Electrical equipment is unsafe, does not meet National Electric Code requirements, and at the end of its service life.
- **SCL Transformer Replacement**
 - Concurrently replace aging transformer that is past its service life.
- **Existing Substation #1 is approximately 25 years old**
 - Supports the Administration Building, T46 North Yard lighting, the Maintenance and Repair Building, T46 North Berth, Receiving Gate Precheck, USDA Inspection Platform, Stormwater System, and North Sewer Lift Station.
- **Design-Build**
 - Utilize design-build methodology to order long lead time parts earlier in the process to deliver project earlier & reduce the risk of power failure at T46.



Proposed T46 Substation #1 Replacement

- Initial design elements (POS)
- Design-Build (Contractor)
- Equipment procurement (Contractor)
- Construction & Installation (Contractor & SCL)
- Power connection & disconnection (Contractor, POS, and SCL)
- Demolition and removal (Contractor)



New substation to be installed adjacent to existing one.



Project Objectives

T46 Substation #1 Replacement Project

- Replace an aging, unserviceable, and unsafe substation at Terminal 46 in a timely manner to prevent inevitable failure.
- Coordinate project with Seattle City Light's new transformer to reduce the time and the need for temporary power.
- Prevent a major power disruption at Terminal 46.



Project Schedule

T46 Substation #1 Replacement Project

Activity	Timeframe
RFQ Issued - Advertise	June 27, 2022
RFP Issued - Advertise	September 14, 2022
Proposals Due	November 14, 2022
Notification of Intent Award	January 13, 2023
Design-Build Construction Completed	July 9, 2024



Source of Funds

T46 Substation #1 Replacement Project

- The estimated cost of the Pre-Design and Design-Build for this project is \$6,700,000
- The estimated budget for this project is \$6,700,000
- The current Capital Investment Plan (CIP) allocates \$3,269,000 for this project
- The cost of the replacement will be split 80% to the NWSA and 20% to POS.
- The NWSA Project cost will be capitalized and depreciated over 20 years resulting in annual depreciation of \$268,000
- The POS Project cost will be capitalized and depreciated over 20 years resulting in annual depreciation of \$67,000



Financial Summary

T46 Substation #1 Replacement Project

	This Request	Total Project Cost	Cost to Date	Remaining Cost
Procurement	\$ 100,000	\$ 100,000	\$ -	\$ 100,000
Pre-Design	\$ 250,000	\$ 250,000	\$ 75,000	\$ 175,000
Design & Construction	\$ 6,350,000	\$ 6,350,000	\$ -	\$ 6,350,000
Total NWSA (80%)	\$ 5,360,000	\$ 5,360,000	\$ 60,000	\$ 5,300,000
Total POS (20%)	\$ 1,340,000	\$ 1,340,000	\$ 15,000	\$ 1,325,000
Total Project Cost	\$ 6,700,000	\$ 6,700,000	\$ 75,000	\$ 6,625,000



Environmental Impacts/Review

T46 Substation #1 Replacement Project

Permitting:

- SEPA Review (Port)
- L&I Certification for prefabricated building/enclosure (Contractor obtains permit)
- City of Seattle Construction Permit (Contractor obtains permit as deferred submittal)
- City of Seattle Electrical Permit (Contractor obtains permit as deferred submittal)



Conclusion

T46 Substation #1 Replacement Project

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