COMMISSION
AGENDA MEMORANDUM **Item No.** 8d

ACTION ITEM **Date of Meeting** December 8, 2020

DATE: November 30, 2020

TO: Stephen P. Metruck, Executive Director

FROM: Nick Milos, Manager, Corporate Facilities
Fred Chou, Capital Program Leader

SUBJECT: P69 Underdock Utility Replacement (CIP #C801102)

Amount of this request:	$85,000
Total estimated project cost:	$2,930,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to authorize $85,000 in design and permitting phase funding for the proposed underdock utility replacement at Pier 69. This funding request would increase the total project authorization to-date to $310,000, out of a preliminarily estimated total project cost of $2,930,000.

EXECUTIVE SUMMARY

Underdock and associated on-dock utilities such as domestic water, fire protection water, electrical power/shore power, communications, and sanitary sewer systems at Pier 69 are vital to building and dock operations for both the Port and our tenants. Most of these utilities are approaching 30 years of age, well exceeding the typical 20-year service life. This project would replace the aging utilities. The replacement systems would be designed to provide reliable services for the next 30 years.

JUSTIFICATION

This project is an asset stewardship and revenue preservation project which would replace this essential utility infrastructure. The project team is prepared to explore design alternatives to minimize impacts on the environment and would select durable materials to maximize the service life of the systems.

The project supports the Port's Century Agenda Goal 3, Responsibly Invest in the Economic Growth of the Region and all its Communities and Strategy 6, Be a Highly Effective Public Agency (New Goal).

Diversity in Contracting

The Port will be self-performing the design. WMBE aspirational goals for construction will be established during the design phase.

DETAILS

The project would replace aged underdock and associated on-dock utilities at Pier 69. These utilities include domestic water, fire protection water, electrical power/shore power, communications, and sanitary sewer systems. Most of these utilities are close to 30 years in age and have exceeded their 20-year design lives. The Port's Engineering Department conducted a comprehensive assessment of these utilities in 2019. The assessment noted that, while some utilities have been partially replaced in various locations over the years by Marine Maintenance, most of the utilities, associated supports/connections, and other related equipment are in poor or very poor condition and should be replaced.

The Port's Engineering Department has completed the preliminary design. During the final design phase additional focus will be made to carefully select durable materials that can withstand the harsh underdock environment over time and minimize the total cost of ownership. It is expected the design life for the replacement system would be at a minimum of 30 years and with some components up to 50 years.

Most of the utility replacement work will not be subject to in-water permitting; however, the project is within shoreline jurisdiction and will require a shoreline exemption from the city of Seattle. A segment of the sanitary sewer system will require additional in-water environmental permitting approvals. It is expected that the permit approval duration may take longer; however, staff will explore construction phasing opportunities during final design to address possible longer permit approval duration.

Scope of Work

The following are the major elements of the underdock utility replacement project and most of the work will be subject to tidal constraints and challenging underdock conditions.

- Replace underdock electrical power feeds/conduits to the building and bullrails, and some above dock panel/switches and transformer associated with the underdock system.
- Replace underdock potable water and fire protection mains serving the building and the bullrails, including associated valves, meters and enclosures.
- Replace underdock sanitary sewer piping.
- Replace underdock communications conduits/cabling.
- Replace associated underdock utility support infrastructure and anchorages.
- Remove abandoned underdock utilities.

Schedule

Activity

Commission design authorization	2020 Quarter 4
Final design and permitting start	2020 Quarter 4
Commission construction funding authorization	2021 Quarter 2
Construction start	2021 Quarter 3
In-use date	2022 Quarter 1/2

Cost Breakdown	This Request	Total Project
Design	$85,000	$310,000
Construction	0	$2,620,000
Total	$85,000	$2,930,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do nothing – continue to repair underdock and related utilities when problems occur.

Pros:

(1) Would preserve capital capacity for other priority projects and financial initiatives
(2) Would avoid temporary construction impacts to Pier 69 and tenant operations

Cons:

(1) Failures would continue to occur – the disruption to operations and costs of emergency repairs would be significant to both the Port and our tenants.

This is not the recommended alternative.

Alternative 2 – Replace the underdock and related utilities in a phased approach based on severity of conditions.

Pros:

(1) Would preserve some capital capacity for other priority projects and financial initiatives.
(2) Would avoid temporary construction impacts to portions of Pier 69 and tenant operations.

Cons:

(1) Failures would continue to occur – the disruption to operations and costs of emergency repairs would be significant to both the Port and our tenants.
(2) Completing the project in phases would result in higher combined project costs.

This is not the recommended alternative.

Alternative 3 – Replace the underdock and related utilities based on Port of Seattle Engineering Department's recommendations.

Pros:

(1) Would proactively replace the end-of-life underdock and associated utilities and preserve leasehold revenue.
(2) Would significantly decrease the risk of utility failures and the associated disruption to operations.
(3) Would improve asset stewardship by capitalizing on the opportunity to use more durable materials, thereby increasing the service life of the new systems.

Cons:

(1) Would require investment of capital funds.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$2,930,000	$0	$2,930,000
AUTHORIZATION			
Previous authorizations	$225,000	0	$225,000
Current request for authorization	$85,000	0	$85,000
Total authorizations, including this request	$310,000	0	$310,000
Remaining amount to be authorized	$2,620,000	$0	$2,620,000

Annual Budget Status and Source of Funds

The P69 Underdock Utilities Replacement project is included in the 2021 Plan of Finance with an estimated total cost of $2.9M.

This project will be funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	$2,930,000
Business Unit (BU)	P69 Facilities
Effect on business performance (NOI after depreciation)	• No incremental revenue or cost-savings associated with this project • Annual depreciation expense is estimated to increase by approximately $98k per year.
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

Future Revenues and Expenses (Total cost of ownership)

Future expenses include periodic inspection and maintenance costs as needed throughout the duration of the asset life.

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None.