



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8c

ACTION ITEM

Date of Meeting November 16, 2021

DATE: October 27, 2021
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: \$3,140,000
Total estimated project cost: \$3,450,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to advertise, award and execute a major public works contract and fund the construction phase of the Pier 69 Underdock Utilities Replacement Project in the amount of \$3,140,000. This request would increase the total project authorization to-date to \$3,450,000.

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 design service life. This project would replace the aging utilities. The replacement systems are designed to provide reliable services for the next 30 years. The design phase is expected to conclude in December and the project is ready to transition to the construction phase beginning January, 2022.

JUSTIFICATION

This project is an asset stewardship and revenue preservation project which would replace this essential utility infrastructure. The project team has explored design alternatives to minimize impacts on the environment and has selected 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.

Meeting Date: November 16, 2021

Diversity in Contracting

Diversity in Contracting has evaluated the planned construction activities and established a 10% WMBE aspirational goal.

DETAILS

This 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 final design and have carefully selected 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.

The December 2020 design funding commission action had anticipated construction funding authorization the second quarter of 2021. Due to the volatile construction materials pricing and construction labor related concerns associated with the pandemic, a decision was made to postpone the construction funding request and the construction contract advertisement to late 2021 to allow prices to stabilize and construction contract to be bid in a more favorable bidding time of the year.

Scope of Work

The following are the major elements of the underdock utility replacement project. 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

Meeting Date: November 16, 2021

Schedule

Activity

Commission Construction Funding Authorization	November, 2021
Construction Advertisement	January, 2022
Construction Start	2022 Quarter 2/3
In-Use Date	2023 Quarter 1

Cost Breakdown

	This Request	Total Project
Design	0	\$310,000
Construction	\$3,140,000	\$3,140,000
Total	\$3,140,000	\$3,450,000

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 utilities and install some replacement utilities above pier to increase resiliency.

Meeting Date: November 16, 2021

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 increase resiliency for some utilities by locating them out of the harsher under pier environment and thereby increase the service life for portions of the new systems

Cons:

- (1) Most utilities still need to remain under pier. For example sanitary sewer system is fed by gravity and significant challenges would be encountered and higher costs would result to convert to forced main systems. Also many utilities are located under the concrete apron (non-building portion of the pier) and though some of these could be relocated to the bullrail but they still would be subject to weather conditions.
- (2) Would require investment of capital funds

This is not the recommended alternative.

Alternative 4 – 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

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Current estimate	\$3,450,000	\$0	\$3,450,000
AUTHORIZATION			
Previous authorizations	\$310,000	0	\$310,000
Current request for authorization	\$3,140,000	0	\$3,140,000
Total authorizations, including this request	\$3,450,000	0	\$3,450,000
Remaining amount to be authorized	\$0	\$0	\$0

Meeting Date: November 16, 2021

Annual Budget Status and Source of Funds

The P69 Underdock Utilities Replacement project (C801102) is included in the 2021 Capital Plan with a cost of \$2.93M and has also been included in the 2022 Draft Plan of Finance with an estimated total cost of \$3.303M.

This project will be funded by the General Fund (45%) and the Airport Development Fund (55%).

Financial Analysis and Summary

Project cost for analysis	\$3,450,000
Business Unit (BU)	P69 Facilities Management
Effect on business performance (NOI after depreciation)	<ul style="list-style-type: none">• No incremental revenue or cost-savings associated with this project• Annual depreciation expense is estimated to increase by approximately \$115k 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

None.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

December 8, 2020 – Design funding authorization.