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

ACTION ITEM **Date of Meeting** March 28, 2023

DATE : March 10, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Joanna Hingle, Assistant Director of Engineering - Design
Laura Wolfe, Senior Environmental Program Manager

SUBJECT: **Contract to Develop Waterfront Design and Environmental Standards**

Amount of this request:	$500,000
Total estimated project cost:	$500,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to execute a consultant service agreement for an amount not to exceed $500,000 to provide services for the development of Waterfront Design and Environmental Standards.

EXECUTIVE SUMMARY

This request establishes a new Waterfront Development service agreement for a consultant to assist the Port in development of a system for the creation, implementation, and management of waterfront design and environmental standards, as well as an initial set of standard documents for waterfront projects. The design standards will then be managed by Port staff and will facilitate the revision or creation of future design standards by the Port or others as needed to respond to industry developments.

Currently, there are no published design standards for the Port's waterfront projects, which results in each project team determining what the criteria should be on a project-by-project basis. The proposed work under this service agreement represents an important process improvement and contributes to the Port's goal of being a highly effective public agency. Goals for the development of the standards include increasing consistency, increasing quality, and providing greater certainty for cost estimating across projects. Further, the standards will help manage the Port's limited resources by providing key project criteria up front rather than spending duplicative staff and design consultant time developing criteria for similar project types. Finally, under this service agreement, development of design standards will focus on equity and sustainability and ensure those principles are foundationally incorporated into all Port waterfront projects.

JUSTIFICATION

Development of Waterfront Design and Environmental standards is intended to serve four primary goals:

1. Provide increased consistency between projects
    a. Standards provide a way to maintain consistency in areas that are important to the Port, such as sustainability, performance, flexibility in use and maintainability. Standards are not generally intended to specify manufacturers, models, or other specifics that would require competition waivers. If this is deemed necessary for any particular highly-unique item, the competition waiver process would be coordinated with the Central Procurement Office.
2. Advance Port environmental and equity goals
    a. Establish minimum requirements that position Port environmental and equity goals at the foundation of design criteria and decisions.
    b. The Commission Policy Directive on the Sustainable Evaluation Framework (Resolution 3768) directs action to update and revise construction standards to reflect advancement in sustainable materials, energy efficiency, and sustainable design approaches. In this case, that requires the creation of standards where they do not currently exist.
3. Increase quality and efficiency for individual projects
    a. Identify preferred system types, reducing the need for repetitive Port staff design review input for each project.
    b. Streamline project decision-making and result in more efficient maintenance.
4. Provide greater estimating certainty
    a. Grow the database of costs for systems commonly used at the Port of Seattle.
    b. Reduce change orders due to Port-initiated design revisions.

The current lack of consistent design standards poses consistent challenges for project design and implementation:

1. High time and cost of project-based decision-making
    a. Designers, Project Managers (PMs), project stakeholders, and project sponsors must consider each design decision on a project-by-project basis, resulting in duplicative work.
        i. Example: Current City of Seattle buildings codes do not specify seismic design parameters for all port building types, requiring the Port and the Seattle Department of Construction and Inspections to determine and negotiate appropriate criteria.
        ii. Example: Pier and piling projects— a reoccurring project type—require engagement from Port environmental staff to confirm chemical ingredient restrictions on a project-by-project basis that pertain to all in-water projects. Standards and specifications for projects of this type would eliminate the need for repeated environmental engagement.

2. Inconsistent implementation of environmental sustainability principles across waterfront projects
    a. Without minimum standards, each project team implements independent systems without environmental performance requirements, resulting in inconsistent conservation and performance outcomes, or systems that may deviate from strategic guidance.
        i. Example: Project teams often evaluate Heating Ventilation and Cooling (HVAC) system types, materials, and other common project decisions on a case-by-case basis. Equipment that has lower up-front costs but is less efficient and has a shorter life cycle overall is often selected, wasting both energy and money in long-term costs. Standards would be designed with environmental and lifecycle cost performance, strategic commitments, and code compliance or exceedance in mind and minimize the need for unique project consideration.
3. Inconsistent application of Port initiatives
    a. Designers, PMs, and project sponsors may not implement choices that support broader strategic initiatives.
        i. Example: Power monitoring decisions for distribution substations are not always implemented consistently throughout all branches of a system, resulting in more manual work to gather full system data.

It is common for large organizations such as the Port of Seattle to have and implement design standards for infrastructure development. This project will bring the waterfront divisions into alignment with the Aviation division, which has existing standards and guidelines that streamline project design and maintenance by providing consistent direction early in the project lifecycle.

Diversity in Contracting

This contract represents an opportunity to meaningfully partner with small businesses and WMBE firms. We anticipate a goal of at least 20% WMBE utilization, assuming confirmation from the Diversity in Contracting group.

DETAILS

The project will develop Design and Environmental standards applicable to all Waterfront development projects to improve facility consistency and maintainability while foundationally incorporating equity and environmental sustainability into all Port projects. Maritime Environment and Sustainability, Port Engineering, and Marine Maintenance resources will work with consultants to complete the project, with the support and input of many other departments. Total project costs are estimated to be $500,000 over a two-year period. Funding for this project was included in the 2023-2027 capital budget and plan of finance.

Scope of Work

Work will include development of Waterfront Design and Environmental standards. Components of this work include, but are not limited to, the following:

(1) Identify industry norms, standards topic options, prioritization method, and implementation strategy
(2) Facilitate internal and external stakeholder meetings to identify recurring topics and build consensus
(3) Develop a Needs Assessment Report
(4) Develop a Standard section template and recommendations for standards document management
(5) Facilitate discussions on and make recommendations for authority decisions, variances, and implementation processes
(6) Develop Priority I Standards
(7) Develop an internal and external facing communication plan to introduce new standards
(8) Develop Priority II Standards

Schedule

This document and system development work is expected to be completed in phases over two years, 2023 and 2024.

Activity

Commission authorization	2023 Quarter 1
Procurement complete	2023 Quarter 3
Priority I Standards Complete	2024 Quarter 3
Priority II Standards Complete	2024 Quarter 4

Cost Breakdown	This Request	Total Project
Consultant support, 2023 (year 1)	$200,000	$200,000
Consultant support, 2024 (year 2)	$300,000	$300,000
Total	$500,000	$500,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not develop Waterfront Design and Environmental standards

Cost Implications: $0

Pros:

(1) Low-cost option
(2) No training required

Cons:

(1) Environmental sustainability and equity are only incorporated on a project-by-project basis as resources allow
(2) Building equipment, efficiency, and maintainability may be different for each building, increasing maintenance variability
(3) Port staff will spend significant time evaluating on small, typical projects in addition to complex opportunities that require unique consideration and design engagement
(4) Certain analyses common to multiple projects (material selection, design criteria, etc.) will be repeated for each project by Port and/or project consultant staff

This is not the recommended alternative.

Alternative 2 – Develop 4 to 8 Waterfront Design and Environmental standards on an expedited timeline. This would only allow for minimal inter-departmental or external collaboration. The number of standards developed may be higher or lower depending on the required depth of content for each selected topic.

Cost Implications: $250,000

Pros:

(1) Moderate-cost option
(2) Faster development timeline (one year)

Cons:

(1) Poor implementation may result from omitting a robust stakeholder engagement and training process
(2) Without adequate internal and external stakeholder engagement, tradeoffs may not be fully vetted, and standards may result in unintended consequences
(3) Without adequate cross-departmental collaboration, departments may produce conflicting standards
(4) If items are missed due to lack of engagement, Port staff will waste time focusing on small, typical projects instead of complex opportunities
(5) Will require additional work, contracting, to complete the project and fully develop waterfront design standards and specifications

This is not the recommended alternative.

Alternative 3 – Collaborate across departments to form consensus around standards, develop a communication and roll-out plan, and develop an initial set of 4 to 8 Waterfront Design and

Environmental standards for Waterfront projects. The number of standards developed may be higher or lower depending on the required depth of content for each selected topic.

Cost Implications: $500,000

Pros:

(1) Robust stakeholder engagement will work through several technical decisions, providing a clearer and more consistent design basis for projects, thereby saving staff effort in project development
(2) Environmental sustainability and equity will be incorporated on most projects through standardization
(3) Robust stakeholder engagement and training process will result in wide-spread, effective implementation of standards
(4) Creates efficiencies for Port staff by reducing focus on small, typical projects
(5) Robust stakeholder engagement will allow full vetting of tradeoffs, reducing likelihood of unintended consequences
(6) Building equipment, efficiency, and maintainability will be the same or similar for most construction, reducing maintenance variability

Cons:

(1) Highest cost option
(2) Slower development timeline (2 years)
(3) Requires challenging engagement and decision-making by the Port for implementation authority and process development

This is the recommended alternative.

FINANCIAL IMPLICATIONS

The financial impact of this work is most directly linked to the one-time cost of consultant support in developing the initial Waterfront design and Environmental standards system and content. The long-term benefit is seen in increasing the quality and maintainability of infrastructure while decreasing project design phase costs.

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$0	$500,000	$500,000
AUTHORIZATION			
Previous authorizations	0	0	0
Current request for authorization	0	$500,000	$500,000
Total authorizations, including this request	0	$500,000	$500,000
Remaining amount to be authorized	$0	$0	$0

Annual Budget Status and Source of Funds

A new 2-year budget request for this work was made and approved in the Maritime Environment & Sustainability budget. For 2023, the value request was for $151,000. To support the $200,000 expenditure anticipated in 2023, Engineering will be reallocating $49,000 to the effort. The 2024 budgets will include the additional $300,000.

Financial Analysis and Summary

Project cost for analysis	$500,000
Business Unit (BU)	Maritime Environment & Sustainability
Effect on business performance (NOI after depreciation)	N/A
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

Future Revenues and Expenses (Total cost of ownership)

Funding for this consultant service agreement will be through approved departmental operating expense. All Port staff support costs required to complete the scope of services will also be funded through approved operating expense budgets. While maintenance of the standards will be required to stay current with the industry and the Port's direction, the staff costs for doing so are anticipated to be less than the overall cost of more involved decision-making on each project.

ADDITIONAL BACKGROUND

None

ATTACHMENTS TO THIS REQUEST

None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None