

Waterfront Smart Meters

Additional Program Funding

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CIP # C801269



Action Requested

Request Commission authorization for the Executive Director to:

1. Approve additional funding for design and construction of the Waterfront Smart Meters Program in the amount of \$4,000,000 for a total authorized amount of \$4,475,000.

Amount of this Request: \$4,000,000

Total Estimated Program Cost: \$13,000,000

Justification

- Support Port of Seattle's Century Agenda Goal to be the greenest, most energy efficient port in North America.
- Needed to meet city and state energy and greenhouse gas reporting requirements.
- Provide transparent calculation of Energy Use Intensity to meet WA Clean Building Performance Standard.
- Support cost recovery in the form of incentives for any Energy Efficiency Measures that need to be implemented.
- Provide efficient and safe energy-use data gathering and monitoring.
- Allow for better planning of future building energy efficiency projects.

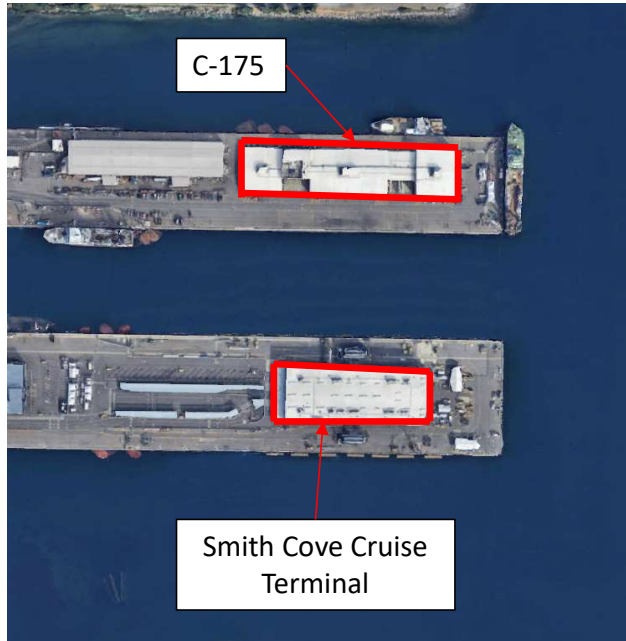
Project Scope

- Over a period of five years, the Maritime Division plans to install about 164 smart meters through the Waterfront Smart Meter Program.
- The phased implementation will allow for prioritization of facilities to meet city and state reporting requirements deadlines.
- First sites to receive smart meters are:
 - Phase 1 (Construction):
 - Pier 66 Conference Center and Cruise Terminal
 - Terminal 91 Smith Cove Cruise Terminal and C-175
 - World Trade Center West
 - Marine Maintenance Building A-1
 - Fishermen's Terminal C-15
 - Phase 2 (Design):
 - Fishermen's Terminal Campus
 - T91 Buildings A-1, C-155, and C-173
 - Maritime Industrial Center Building A-1
 - Pier 66 Anthony's Restaurant
 - Phase 3+ (Design):
 - TBD: Yet to be identified by Environmental Sustainability

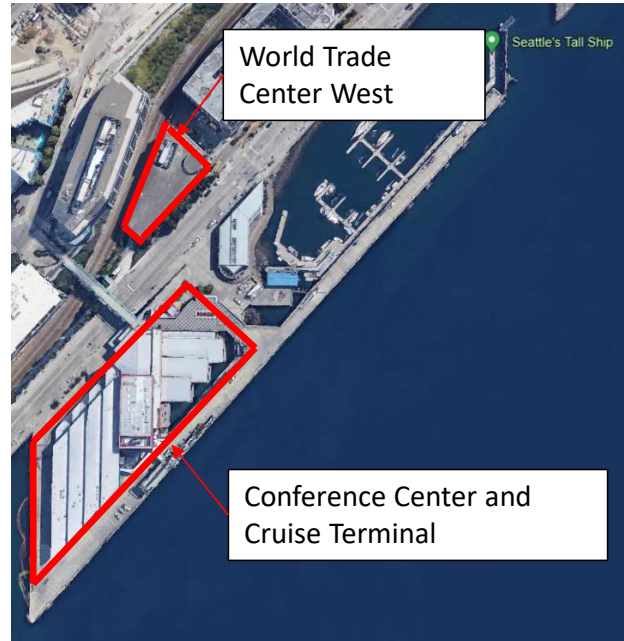
Project Location



Project Location – Phase 1



Terminal 91



World Trade Center West & Pier 66

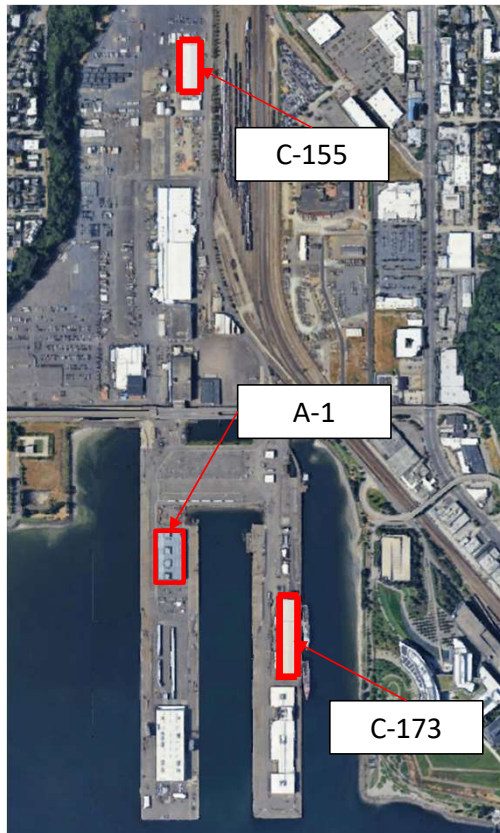


Marine Maintenance A-1

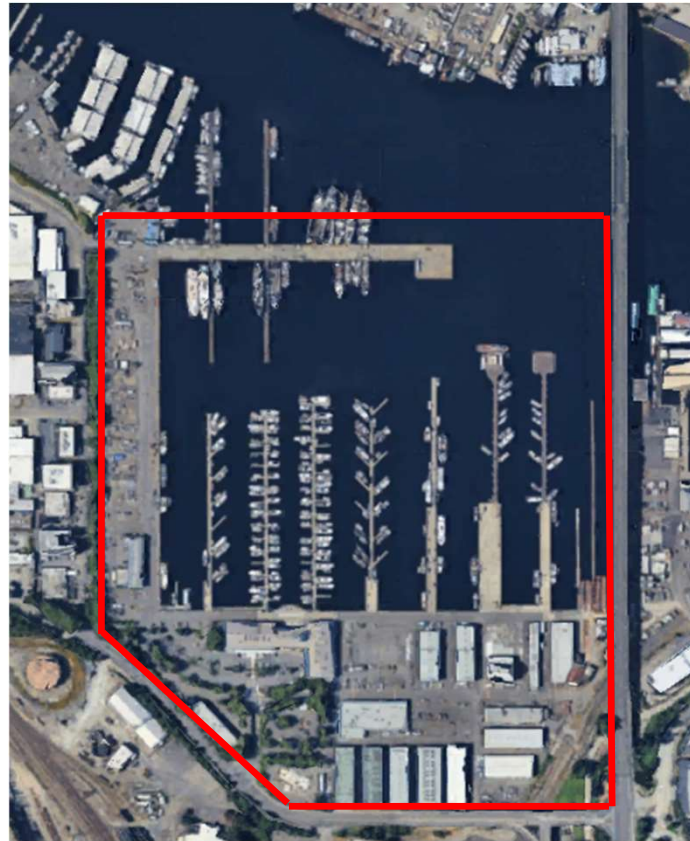


Fishermen's Terminal

Project Location – Phase 2



Terminal 91



Fishermen's Terminal Campus



Pier 66



Maritime Industrial Center

Additional Items and Outstanding Questions

- Interim EMS Provider and Network Hardware Design Support
 - Vitality is no longer the EMS provider. An EMS solution to be in place before installation of the Smart Meters.
 - ICT anticipates having the new EMS provider onboard within the next six months.
 - Design for smart meters will not be complete, and construction will not start, until EMS solution is implemented.
 - This will ensure newly installed smart meters are connected to the EMS and are remotely readable.

Risks and Opportunities

RISKS	DESCRIPTION	PROBABILITY	IMPACT	MITIGATION
Long Lead Items	Current estimated delivery time for smart meters is 6 weeks. This may increase over the coming months	Medium	Medium	Monitor lead times for smart meters. Port of Seattle
Power and Natural Gas Outages	Installation of meters will require outages to natural gas and electricity which may impact tenant operations	High	High	Schedule outages during non-standard working hours and only perform work that needs to be done during the outage to minimize impact to tenants
Interruptions to buildings/operations	Installation of conduit may occur in retail, cruise or other client facing spaces which may disrupt tenant business	High	Medium	Perform work at cruise terminal outside of cruise season. For meters which are located far away from the network gateway, consider using an LTE connection.
Implementation of EMS in Design and Construction	The design and construction need to account for the new smart meters communicating with an EMS to enable remote reading. Failure to include an EMS will result in “orphaned” smart meters.	High	High	Design of Phase 1 Smart Meters has been put on pause until an EMS solution is identified and accounted for in the design and construction to ensure smart meters are not “orphaned”. This is however delaying the project.

- Overall, smart meter installation has a low and manageable risk with significant benefits when complete.

Preliminary Schedule

Preliminary Design start	February 2024
Commission authorization for Phase 1 design	September 2024
Commission authorization for additional design/construction	August 2025
Procurement of new EMS complete (estimated – separate project)	Q1 2026
Smart Meters Construction Start (first phase)	Q2 2026
Smart Meters Construction Complete (first phase)	Q1 2027
Commission authorization for additional design/construction	Q2 2027
In-use date (all meters)	Q4 2029

Funding

Cost Estimate/Authorization Summary			
PROGRAM COST ESTIMATE	Capital	Expense	Total
Original Program Estimate	\$13,000,000	\$0	\$13,000,000
Current Change	\$0	\$0	\$0

AUTHORIZATION			
Previous authorizations	\$475,000	\$0	\$475,000
Current request for authorization	\$4,000,000	\$0	\$4,000,000
Total authorizations, including this request	\$4,475,000	\$0	\$4,475,000
Remaining amount to be authorized	\$8,525,000	\$0	\$8,525,000

Questions?