

MEMORANDUM

April 6, 2018

TO: MEMBERS, PORT COMMISSION
Hon. Kimberly Brandon, President
Hon. Willie Adams, Vice President
Hon. Leslie Katz
Hon. Doreen Woo Ho

FROM: Elaine Forbes
Executive Director

SUBJECT: Request recommendation that the Capital Planning Committee and the Board of Supervisors take all necessary action to place a minimum \$350 million General Obligation Bond for Phase I of the Seawall Earthquake Safety and Disaster Prevention Program on the ballot for the November 2018 election

DIRECTOR'S RECOMMENDATION: Approve the Resolution

EXECUTIVE SUMMARY

The Port of San Francisco (Port) is requesting the Port Commission's consideration and recommendation that the Capital Planning Committee (CPC) and the Board of Supervisors take all necessary action to place a minimum \$350 million General Obligation Bond (GO Bond) for Phase I of the City's Seawall Earthquake Safety and Disaster Prevention Program (Seawall Program) on the ballot for the November 2018 election. If two-thirds of voters approve the proposed GO Bond measure, it will help fund planning, development, preliminary design, environmental approvals, final design and construction of improvements and repairs to address the Embarcadero Seawall's most immediate life-safety requirements. If funded, Phase I is slated for completion in 2026, or in eight years. The 2018 Seawall Earthquake Safety Bond (2018 Seawall Bond) will include strict standards of accountability, fiscal responsibility and transparency and will not increase property tax rates beyond their fiscal year 2006 levels.

VULNERABILITY OF THE EMBARCADERO SEAWALL

Spanning three miles from Fisherman's Wharf to Mission Creek, the Embarcadero Seawall (Seawall) is one of San Francisco's oldest pieces of infrastructure. The State of California constructed the Seawall a century ago, creating a deep water port and over

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500 acres of new land between San Francisco Bay and 1st Street. Recent analysis by the City of San Francisco (City) and the Port indicates that the Embarcadero Seawall will likely suffer significant damage during a major earthquake, causing widespread harm to the Embarcadero; historic buildings and piers; critical transportation, utility, and emergency response infrastructure; and the residents, workers, and visitors who depend on them. A major earthquake would likely cause the Seawall to move towards the Bay, potentially by as much as five feet. This seismic risk is compounded by the accelerating risk of flooding, which currently happens during high tides and larger storm events.

DEVELOPING A GENERAL OBLIGATION BOND

In 2016, the Office of Resilience and Capital Planning convened a Seawall Finance Working Group (SFWG) to analyze potential financing strategies and prepare a set of recommendations for the City and the Port to pursue to fund improvements to the Seawall. In an effort to reflect the diversity of the services that the Seawall supports, the SFWG included 11 members representing eight different City agencies, as well as a private sector expert in public finance strategy. The group considered 48 local, regional, state and federal funding sources and identified General Obligation Bond funding as a key tool to help finance the Seawall Program. The Capital Planning Committee (CPC) subsequently included a GO Bond for the Seawall in the City's 10-Year Capital Plan and the Port is now collaborating with CPC staff to place the 2018 Seawall Bond on the ballot for the November 2018 election.

The Port has prepared a GO Bond Report (see Attachment) that it will submit for approval to the Capital Planning Committee on April 16, 2018. The report provides information regarding the history of the Embarcadero Seawall and current earthquake and flood risks, the proposed Seawall Program, and a plan to expend GO Bond funds on a capital program that addresses the most urgent earthquake and flood risks. The Capital Planning Committee must recommend approval of the GO Bond Report to the Board of Supervisors before the Port may introduce a GO Bond ordinance and a related Resolution of Public Interest and Necessity to the Board of Supervisors.

GENERAL OBLIGATION BOND SCHEDULE

The Port provided an informational presentation of the proposed General Obligation Bond to the Capital Planning Committee on March 5, 2018.

The Port is currently seeking the Port Commission's recommendation that CPC and the Board of Supervisors place the GO Bond on the November 2018 ballot.

If approved, the Port will move forward with the following schedule for the GO Bond:

- April 16, 2018 – Capital Planning Committee (Action Item to approve the GO Bond Ordinance and related Resolution of Public Interest and Necessity and recommend approval to the Board of Supervisors)
- May 15, 2018 – Board of Supervisors (last day for introduction of GO Bond ordinance)
- November 6, 2018 – City and County of San Francisco General Election

STRATEGIC OBJECTIVES

This proposed GO Bond will support the goals of the Port's Strategic Plan as follows:

Engagement:

By leading an inclusive stakeholder process to develop goals and values and ensure consideration of all input during development and implementation of the Seawall Program.

Livability:

By increasing the proportion of funds spent by the Port on contract services performed by LBE firms.

Resiliency:

By leading the City's efforts to address threats from earthquakes and flood risk through research and infrastructure improvements to the Seawall and other Port property.

Sustainability:

By enhancing the environmental health of San Francisco Bay and its habitat with improvements to the Seawall; by limiting construction impacts and waste; and by sustainable design and construction best management practices.

Stability:

By seeking traditional and innovative funding solutions and by maximizing external investment.

BACKGROUND

The State of California constructed the Embarcadero Seawall a century ago to create a deep water port in San Francisco. The Seawall, which created over 500 acres of new land between San Francisco Bay and 1st Street, also sustains three miles of San Francisco waterfront, stretching from Fisherman's Wharf to Mission Creek. The Seawall supports historic piers, wharves, and buildings, including the Ferry Building. It underpins the Historic Embarcadero Promenade, iconic tourist destinations, recreation and park facilities, restaurants and local businesses, bringing an estimated 24 million people to the waterfront annually. The Seawall also supports key utility networks and infrastructure for the BART, Muni, and ferry transportation networks. Additionally, the Seawall serves as a critical area for emergency response and recovery and provides flood protection to downtown San Francisco. All told, the Seawall enables \$24.6 billion of economic activity and protects \$102.1 billion of property value.

In 2014, the City's Lifelines Council completed an Interdependency Study that identified the Embarcadero Seawall as one of the City's five most critical lifeline safety assets. Lifelines are defined as utilities that provide essential infrastructure services to the community and include water, wastewater, power, communication and transportation. The study concluded that the Seawall would be at risk of failure in an earthquake and recommended that the Port improve Seawall seismic safety while concurrently addressing sea level rise due to the effects of climate change. The report also

recommended that the Port conduct a more detailed multi-hazard risk assessment to refine analysis of the Seawall's vulnerabilities and inform project prioritization and design criteria.

In response to the Interdependency Study, the Port conducted preliminary seismic and flooding analyses in 2016. A broad, screening-level seismic analysis found that the Seawall is highly vulnerable to widespread damage from a major earthquake. Work to map flooding showed that the Seawall is also vulnerable to overtopping from storm events and high tides, with increasing flood risk as sea levels rise in the coming decades.

SEAWALL PROGRAM

The Port has engaged CH2M Hill/Arcadis as the project engineer for the Seawall Earthquake Safety and Disaster Prevention Program and is conducting a multi-hazard risk assessment to evaluate the combined risks of earthquakes and flooding to the Embarcadero Seawall and the neighborhoods and infrastructure that it protects. In the near-term the Port and CH2M are finalizing a program schedule and planning geotechnical investigations to gather enhanced information to support development of project alternatives.

Faced with a needed investment of up to \$5 billion over 30 years and recognizing the different timeframes for seismic and sea level rise risks, the Port is developing a program of phased implementation. The Seawall Program will include at least three phases:

- **Phase I:** Near-Term Actions to address life-safety and emergency response and recovery, planning, for actions to be taken from 2017-2026
- **Phase II:** Mid-Range Plans to advance seismic and flood projects that will provide greater reliability and stability of the waterfront, for actions to be taken in 2026-2050
- **Phase III:** Long-Term Vision, for actions to be taken in 2050-2100

Phasing the Program enables the Port to construct the most urgent safety improvements now while planning for longer range risks, opportunities, and constraints. The Port has adopted an aggressive schedule to complete repairs in the most vulnerable areas of the Embarcadero waterfront as soon as possible. Phase I project construction is scheduled to start in 2022 with completion by 2026. The schedule incorporates time for a robust stakeholder and public engagement process, including review and input, regulatory compliance, engineering design, and construction. Phasing the Seawall Program also will allow the City and the Port to continue to develop an array of sources to fund the full program need.

Approval of the 2018 Seawall Bond, will help the Port to complete program development, permitting, design, and construction of near-term actions, budgeted at \$500 million. The Port is currently identifying funding sources to support Phase I, including the potential for an increase in the 2018 Seawall Bond.

Seismic improvements that the 2018 Seawall Bond will fund may include: a) strengthening the ground below the Seawall, b) improving the ground landside of the Seawall, c) constructing a new Seawall, d) strengthening or replacing bulkhead walls and wharves located along the Embarcadero Promenade, and e) relocating or replacing critical utilities. The Port anticipates targeting initial improvements to limited areas of the waterfront, prioritizing life-safety and emergency response investments.

The Port, in close collaboration with the City, will develop plans for subsequent phases of the Seawall Program during Phase I. This work will be informed by Phase I visioning and project prioritization as well as the Port’s Waterfront Land Use Plan Update.

PROGRAM FUNDING DETAILS

As shown in **Figure 1**, Phase I of the Seawall Program consists of four stages, including 1) the Vulnerability Study (separately funded), 2) Planning, 3) Preliminary Design and Environmental Approvals, and 4) Final Design and Construction, with a total estimated cost of \$500 million.

Figure 1: Proposed Project Schedule, Phases and Funding Need (\$ millions)

Program Phase	Phase Years	Planned Activities	Annual Spending	Cumulative Cost
Vulnerability Study	2016	Vulnerability Study	\$ -	\$ -
Planning	2017	Project Management	\$ 0.5	\$ 0.5
	2018	Stakeholder Engagement	\$ 11.7	\$ 12.2
	2019	Planning Services	\$ 9.4	\$ 21.6
Preliminary Design	2020	Project Management	\$ 11.6	\$ 33.2
	2021	Stakeholder Engagement Environmental Approvals	\$ 29.7	\$ 62.9
	2022	Preliminary Design	\$ 92.0	\$ 154.9
Final Design and Construction	2023	Project Management	\$ 92.0	\$ 246.9
	2024	Stakeholder Engagement Final Design	\$ 91.9	\$ 338.8
	2025	Design Support Services Construction Management	\$ 91.9	\$ 430.7
	2026	Construction	\$ 69.3	\$ 500.0

Proposed Funding

The City proposes a minimum \$350 million GO Bond to partially fund Phase I of the Seawall Program over the next 8 years. Port staff is seeking Port Commission approval to request an increase in the bond amount if the Controller determines that additional bond capacity is available. As detailed in **Figure 2**, in addition to funding the Vulnerability Study (\$500,000), the Port and City have previously committed \$9.0 million in funding, including \$4.0 million from the City’s General Fund. The Port has requested

an additional \$5.0 million from the City’s General Fund for FY 2018-19. The Port is proposing to supplement this General Fund support with \$1.1 million in Port Capital funds to support early geotechnical investigation of the Seawall and adjacent ground. The \$9.0 million in General Fund support from the City’s Revolving Fund and the Port Capital contribution will be reimbursed from the first bond issuance should the 2018 Seawall Bond pass.

Figure 2: Proposed Funding

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Funding Sources											
Port Capital	\$2.9		\$1.1	(\$1.1)							
City Revolving Fund	\$1.0	\$3.0	\$5.0	(\$9.0)							
SFMTA Contribution	\$0.5	\$0.5									
Planning Dept Contribution	\$0.5	\$0.3	\$0.3								
2018 General Obligation Bond				\$110.0		\$190.0			\$50.0		
Other/Unknown Funding Sources									\$145.0		
Total Planned Sources	\$4.9	\$3.8	\$6.4	\$99.9	\$0.0	\$190.0	\$0.0	\$0.0	\$195.0	\$0.0	\$0.0

Plan of Finance

In 2016 the City convened a Seawall Finance Working Group to analyze potential project funding strategies and prepare a set of recommendations. Given the Seawall’s vast need, the SFWG realized that the City could not fund the Seawall Program through only local means and considered 48 different local, regional, state and federal funding sources. The group’s final report, issued in July 2017, organized its recommendations into three areas: primary, secondary and supplementary funding sources.

The primary recommendations for the Port and the City to pursue are listed below. The full report can be found at sfseawall.com.

Primary Recommendations

- A. **General Obligation (GO) Bonds** – currently proposed for the November 2018 ballot.
- B. **A Community Facilities District (CFD)** to fund sea-level rise adaptations and seismic mitigation measures on the Seawall.
- C. **Local Property Tax Increment Revenue** generated from Infrastructure Finance Districts (IFDs) on new development parcels on Port property.
- D. **State Property Tax Increment Revenue** generated from IFDs from new development on Port property, to be pursued through legislation at the State level.
- E. **State Resilience General Obligation (GO) Bond** funding pursued through legislation at the State level.
- F. **U.S. Army Corps of Engineers Funding** at the federal level through the CAP 103 Program and a General Investigation (initiated in June 2017).

The proposal for a GO Bond measure for the November 2018 election in San Francisco is consistent with the SFWG's recommendations. Additionally, Port staff is actively pursuing funding from the other sources, including the US Army Corps of Engineers, creation of an Infrastructure Financing District to capture tax increment and apply it to the project and a request for \$50 million from the State's General Fund in Fiscal Year 2018-19, to ensure adequate funding of this essential first phase of the Seawall Program.

CONCLUSION

The Seawall Earthquake Safety and Disaster Prevention Program is a critical effort toward improving the infrastructure that supports the City's northern waterfront. This proposed \$350 million investment will reduce the significant risk to life-safety in the event of an earthquake, support disaster response and recovery along the waterfront, improve current flood protection, and provide a stable foundation for future adaptation to sea level rise. An investment by the City today is a down payment on a program that will protect billions of dollars of economic and property value from the effects of earthquake and flooding.

RECOMMENDATION

Port staff is prepared to submit the 2018 Seawall Bond Report to the Capital Planning Committee and request CPC approval to introduce an ordinance and a related Resolution of Public Interest and Necessity to the Board of Supervisors placing a GO Bond measure on the ballot for the November 2018 election. Port staff requests the Port Commission to recommend that the Capital Planning Committee and the Board of Supervisors take all necessary action to approve the 2018 Seawall Earthquake Safety Program General Obligation Bond measure and place it on the November 6, 2018 ballot.

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Finance and Administration

And

Meghan Wallace, Finance & Procurement
Manager, Finance and Administration

For: Katharine Petrucione, Deputy Director
Finance and Administration

Attachment:

- I. 2018 Seawall Earthquake Safety Bond Report

**PORT COMMISSION
CITY AND COUNTY OF SAN FRANCISCO**

RESOLUTION NO. 18-25

- WHEREAS, the Port's Seawall, also known as the Northern Waterfront or Embarcadero Seawall, stretches just over three continuous miles from Pier 45 in the north to Mission Creek in the south, and is a significant Port and City asset that stabilizes filled land, provides shoreline protection, and supports historic piers and wharves; and
- WHEREAS, the Seawall is of advanced age, has settled and deteriorated, is vulnerable to earthquake damage, and may become functionally compromised as a flood protection structure for adjacent areas due to sea level rise and climate change; and
- WHEREAS, the Port, in cooperation with the Mayor and other City departments, established the Seawall Earthquake Safety and Disaster Prevention Program (Seawall Program), an effort the Port is leading, to plan, design, entitle, and construct one or more Seawall improvement projects that will significantly lower earthquake safety and flood damage risks; and
- WHEREAS, the Port is currently estimating total costs of Phase I of the Seawall Program at \$500 million subject to further investigation and planning; and
- WHEREAS, the Port has produced the 2018 Seawall Earthquake Safety Bond Report (Bond Report) detailing the Seawall Program and the need for immediate funding; and
- WHEREAS, staff seeks the Port Commission's recommendation that the Capital Planning Committee and Board of Supervisors place a minimum \$350 million Seawall Earthquake Safety and Disaster Prevention Program General Obligation Bond (GO Bond) measure on the ballot for the November 6, 2018 election; and
- WHEREAS, the Controller's Office is reviewing the City's bonding capacity and additional funding may be identified for the proposed GO Bond measure; and
- WHEREAS, the proposed GO Bond funds would help address the City's tremendous needs to repair, replace, and seismically upgrade the Seawall; and
- WHEREAS, staff recommends that the Port Commission recommend that the Capital Planning Committee and the Board of Supervisors place the GO Bond measure on the ballot for the November 2018 election; and

WHEREAS, the proposed Bond Report and GO Bond request must be approved by the Capital Planning Committee and the Board of Supervisors; now therefore, be it

RESOLVED, that the Port Commission hereby recommends that the Capital Planning Committee and Board of Supervisors place a minimum \$350 million Seawall Earthquake Safety GO Bond measure on the November 6, 2018 ballot; and, be it further.

RESOLVED, that the Port Commission hereby authorizes the Executive Director to request an increase in the GO Bond amount in the event the Controller determines that there is additional bonding capacity available to support the Seawall Program.

I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of April 10, 2018.

Secretary