



Stanley Park Seawall Repairs - Phase 2

Contract Award

Park Board Committee Meeting
December 17, 2018



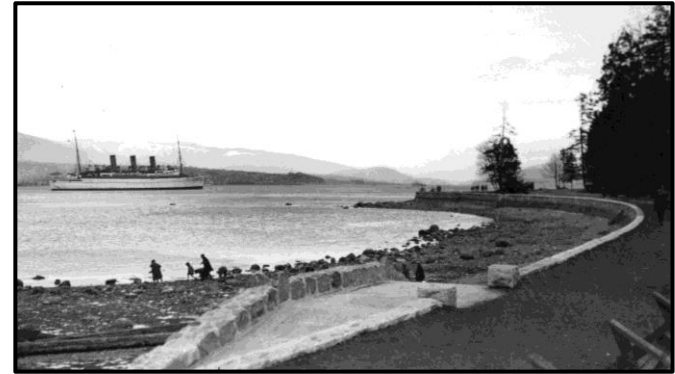
To seek Park Board approval to award the contract for construction of Phase 2 of the Stanley Park and English Bay Seawall Repairs (ITT PS20181254) to Polycrete Restorations Ltd.

- Background
- Project Details
- Procurement Overview
- Recommendations



Background

- 1916 Construction begins in Stanley Park
- 1917 1.2 km of seawall at English Bay is completed
- 1920 Work resumes after WWI spurred by unemployment during the depression
- 1950 Work resumes after WWII



▲ 1920 - Canadian Express, view from the seawall (CoV Archives)



▲ 1953 – Master mason James Cunningham at Siwash Rock (CoV Archives)

- 1963 Master stonemason James Cunningham passes away
- 1971 Construction of Stanley Park seawall is finished
- 1980 Loop around Stanley Park is declared complete
- 2010 Two portions of the seawall are reconstructed



- Is an essential part of the Stanley Park experience with over 9 million visitors a year
- Since 1980, seawall has been extended over 26 km, connecting more than a dozen waterfront parks and destinations



WorleyParsons (2013)

- Provided a baseline evaluation of entire seawall
- Identified common modes of damage and prioritized repairs
- Included two sections for reconstruction

Moffatt & Nichol (2016)

- Completed after 2015 storm event
- Provided an update on the current condition
- Used for the detailed design of the repairs

2010-2011

Seawall Replacement
(English Bay & Sunset Beach)



2015

Emergency Repairs



2018

Seawall Repairs (Phase 1)



Project Details



Minor repairs

- Repoint mortar joints
- Fill cavities with grout
- Replace missing stones
- Repair stairs



Major repairs

- Install reinforced concrete footings / rebuilding wall
- Shotcrete large cavities
- Place riprap scour protection at the toe of the wall



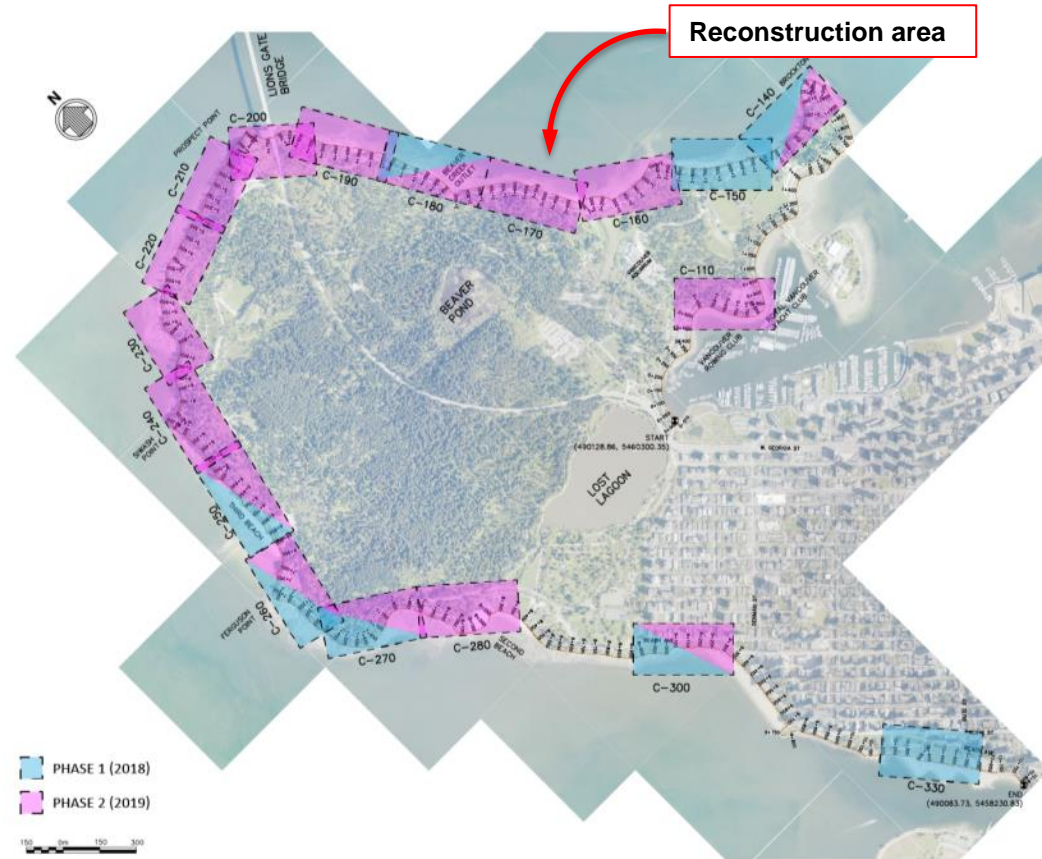
Phase 1 (2018)

- High priority repairs
- Completed spring and summer 2018
- \$1.3 million value and completed on budget



Phase 2 (2019)

- Remaining high priority repairs
- Includes a 50m reconstruction



9.1 Strategic Asset Management

- Extension of asset service life
- Preservation of heritage value

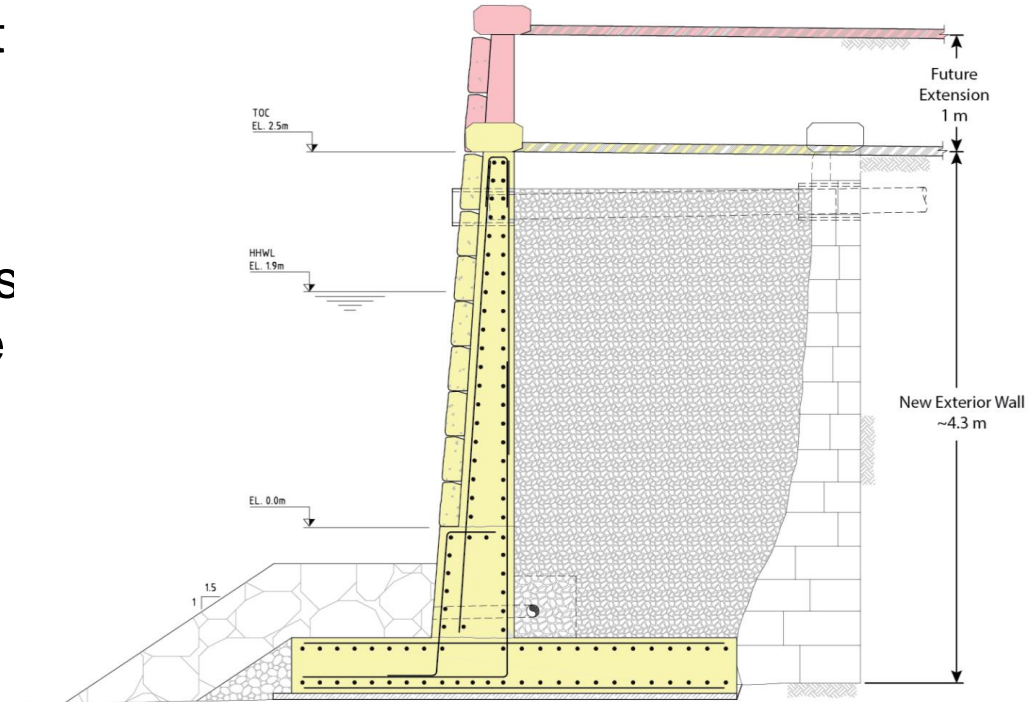
9.3 Sustainable Design

- Protection of the environment
- Resilience against climate change
- Enhancement of fish habitat



- MST engaged through Stanley Park Intergovernmental Working Group
- Archaeological Overview Assessment (AOA) completed
- During construction:
 - Archaeological monitoring
 - Chance Find Management Plan

- Repair high priority areas most affected by changing climate
- Make repairs more resilient through more durable materials and design (e.g. armouring toe of wall)
- Design new concrete walls for future height extension
- Extend the service life of the structure rather than replace



▲ Design of the new reinforced concrete seawall section which allows for future height extension

- Environmental Impact Assessment completed
- Environmental review conducted by DFO, Port of Vancouver, and Parks Canada: permits obtained
- Environmental Management Plan along with environmental monitoring to ensure compliance



- Seawall is a character-defining-element for Stanley Park National Historic Site
- Approach in accordance with *Standards and Guidelines for the Conservation of Historic Places in Canada*
- Repairs are physically and visually compatible but identifiable



Addition Construction Requirements

Traffic Management & Staging



Signage & Communication



Special Events



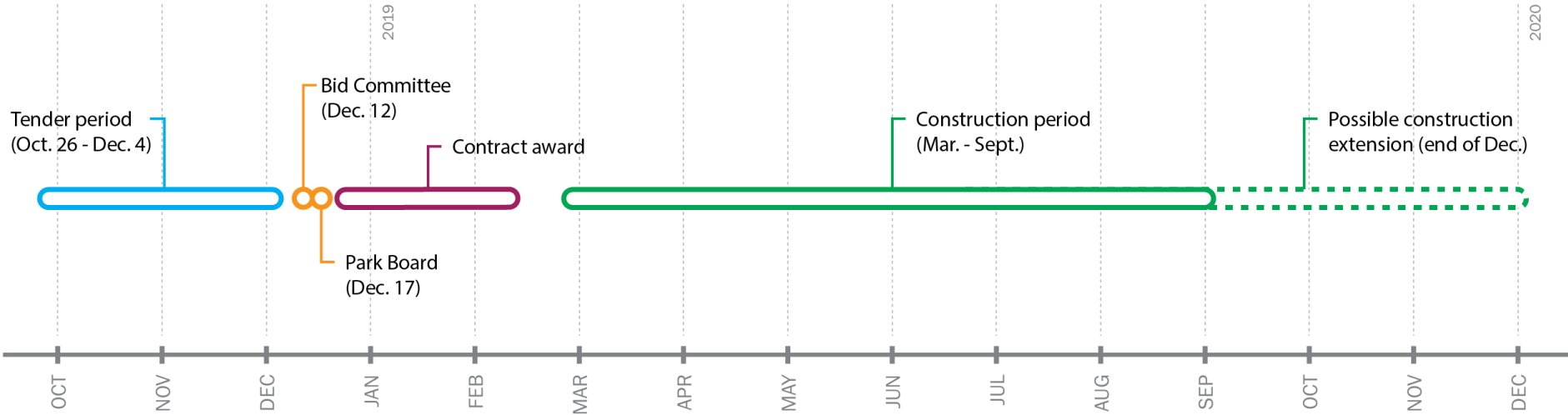
Noise & Vibration Management





Procurement Overview

Procurement & Construction Timeline



Procurement Process Results



- All vendors from Phase 1 were notified
- Base scope of work with alternate scope of work
- 3 bids received
- Polycrete Restoration Ltd. had the lowest compliant bid

Vendor	Base Price	Additional Scope Price	Total Price
Polycrete Restorations Ltd.	\$ 1,151,800	\$ 788,800	\$ 1,940,600
Golder Associates Ltd.	\$ 1,716,300	\$ 763,500	\$ 2,479,800
Industra Construction Corp.	\$ 2,052,966	\$ 1,575,021	\$ 3,627,987

- Contractor for Phase 1 of the project
- Completed Phase 1 on budget
- Local experience in heritage conservation
- Excellent financial condition and low risk with business continuity based on SCM checks
- Company established in 1978
- Specialist contractor for restoration of concrete structures
- Project management experience on major restoration projects
- Experience and capabilities to execute this work reviewed and vetted by Consultant

Recommendations



- A. THAT the Vancouver Park Board authorize staff to negotiate to enter into a contract with Polycrete Restorations Ltd., for Phase 2 of the repair and rehabilitation of the Stanley Park and English Bay seawall, for a term of approximately seven (7) months, with an estimated contract value of \$1,940,600.00, plus applicable taxes over the initial term, to be funded through 2018 Capital Budget.
- B. FURTHER THAT the Director of Legal Services, Chief Purchasing Official and Park Board General Manager be authorized to execute on behalf of the Board the contract contemplated by Recommendation A;
- C. THAT no legal rights or obligations will be created by Board adoption of Recommendations A and B above unless and until such contract is executed by the authorized signatories of the City as set out in these Recommendations.

