



Staff Report

TO: Board of Harbor Commissioners

FROM: John Moren, Director of Operations

DATE: September 20, 2017

SUBJECT: Approve a Work Directive with Consultant GHD for Phase II of the Pillar Point Harbor West Trail Erosion Protection Project, Services for Final Design, Engineering, Bid Documents and Construction Support

Recommendation/Motion:

Motion: (i) Authorize the General Manager to execute a Work Directive with GHD for Phase II of the Pillar Point Harbor West Trail Erosion Protection Project, to include services for final design, engineering, bid documents and construction support, in accordance with the previously Board approved 2016 Professional Services Agreement, for an amount not-to-exceed \$249,722, as outlined in the attached proposal; (ii) establish a contract contingency in the amount of 10% of the contract amount for unanticipated additional expenses associated with the contract and authorize the General Manager to issue change orders up to the contingency amount.

Policy Implications:

Consistent with ongoing efforts to provide long term stability, functionality and safe public use of the West Trail while protecting natural resources.

Fiscal Implications/Budget Status:

On April 4, 2016, the Board approved a contract with GHD for an amount not-to-exceed \$184,086.00 for Phase I of the Pillar Point Harbor West Trail Erosion Protection Project, which included environmental compliance assistance with the repair of the damaged trail areas, confirmation of drainage conditions inland of the West Trail culvert, and to prepare and submit a Coastal Development Permit (CDP) application packet, pursuant to the conditions of the ECDP issued for the culvert repair. As of this date \$182,131 has been invoiced for work completed. The revised FY 17/18 budget has \$1,000,000 re-allocated for this Project, therefore, there will be no further impact on reserves.

Background:

Initially, in 2012 GHD was contracted to develop a Draft Condition Survey Report which identified eroded areas along the West Trail. In 2014 GHD was contracted to provide environmental services, prepare construction documents (plans, specifications, and estimate), and provide bidding and construction support services for the West Trail Project. While certain elements of this project were completed, the entire project was not finalized, as this Commission, in response to Coastal Commission actions, diverted efforts to an emergency repair of the West Trail at the drainage outlet culvert. This culvert under the West Trail was eroded to the point of rendering the trail unsafe for public use. The California Coastal Commission provided the San Mateo County Harbor District (SMCHD) with an Emergency Coastal Development Permit (ECPD) for the Emergency West Trail Repairs on July 28, 2015. This was a temporary repair approval with the understanding that the SMCHD would act to develop a plan to design a long-term method to protect the entire shoreline of the West Trail.







In April of 2016, after the emergency culvert repair was complete, the District again entered into an agreement with GHD for an amount not to exceed \$184,086 to provide Phase I consulting services, which included; preparation of Erosion Protection Alternatives, a Sea Level Rise/Erosion Study, Landside Drainage Study, prepare and submit a Coastal Development Permit application and an Agency Scoping Memorandum to be used for the West Trail shoreline protection.

The Phase I Agreement included an alternatives analysis, considering structural and bioengineering (i.e., “soft”) solutions to diminish wave energy, impacts from varying tides, and heavy rain events. Alternatives considered consisted of sheet pile wall, soil nail wall, retaining structures (e.g., stone rip rap, pre-cast concrete shoreline protection), planted areas, and/or a combination of soft and hard alternatives. Through thorough study, consultations with civic organizations, consultations with regulatory agencies and an extensive public outreach campaign, the District decided upon a combination of hard and soft alternatives, soil nail wall, planted areas and later beach nourishment.

Phase I deliverables and the CDP application, with supporting documents, as required by the ECDP, are nearing completion. GHD has now submitted a proposal for Phase II. The Phase II proposal, (attached) which includes below deliverables, will allow GHD to conduct the required additional studies for the ECDP, draft the project final technical specifications, and see the project through construction.

Phase II Deliverables

- Draft/Final Permit Application for Geotechnical Studies at West Trail
- Draft/Final Geotechnical Study
- Draft/Final Biological Resources Assessment Amendment
- Draft/Final Visual Simulations
- Draft/Final Hillside Erosion Implementation Plan
- Draft/Final CDP Application Package of Supplemental Materials
- Basis of Design Memorandum
- Draft 100% Design Submittal (Plans, Specifications and Cost Estimate)
- Final Construction Bid Documents (Plans, Technical and Front End Specifications and Cost Estimate)

The Phase II proposal for design, engineering, regulatory compliance and construction support will complete efforts to bring the Project to competitive bid through actual construction. The construction phase will follow bid acceptance and will include the construction of the selected hard/soft alternative, a soil nail, sculpted concrete shoreline protection wall and planted vegetation to prevent further hillside erosion.





The upper concrete swale which channels rain water to the mouth of the down pipe has suffered damage in several locations. Phase II design will include re-lining this concrete swale and further repair of the down-pipe top funnel, thus, returning full function.





Summary/Recommendation:

Staff recommends the Board authorize the General Manager to execute a Work Directive with GHD for Phase II of the Pillar Point Harbor West Trail Erosion Protection Project, to include services for final design, engineering, bid documents and construction support, in accordance with the previously Board approved 2016 Professional Services Agreement, for an amount not-to-exceed \$249,722 as outlined in attached proposal; (ii) establish a contract contingency in the amount of 10% of the contract amount for unanticipated additional expenses associated with the contract and authorize the General Manager to issue change orders up to the contingency amount.

Attachments:

1. [April 2016 GHD Phase I Agreement](#)
2. [Phase II GHD Proposal](#)
3. [GHD PowerPoint Presentation](#)