1. Summary of Accomplishments

Accomplishments
The badly deteriorated gravel East Lot at the South Cove Parking Lot received a complete renovation with up-to-code features that improve parking efficiency, circulation, traffic and pedestrian safety, stormwater treatment, longevity of the facility; as well as a new public restroom. The following items were installed:

1. A soil stabilizer for increased project longevity (with a project life expectancy of 25 to 50 years).
2. A new bio-swale to treat stormwater before it enters the Bay.
3. New utilities: electric, water, irrigation, sanitary, and stormwater.
4. New public restroom with drinking fountains and outdoor washdown area (funded by a separate Cosco Grant, No. 33631).
5. New asphalt and striping for new accessible paths of travel, improved traffic circulation and pedestrian safety, and parking efficiency (an increase in parking from approximately 80 to 96 slots).
6. New concrete sidewalks and restroom plaza with accessibility features (curb cuts and detectable surfaces).
7. New windsurfing staging area with synthetic turf and new washdown spigots.

Recreational Benefits:
The renovation of the South Cove East Parking Lot is a vast improvement to the site. The parking lot is located at the nexus of several recreational destinations that draw up to 10,000 visitors per year: (1) the two public sailing clubs (Cal Sailing Club and Cal Adventures); (2) the three non-motorized small-boat public docks (servicing windsurfers, kayakers, paddle boarders, sailboats, swimmers, sight-seers and bird watchers, etc.); (3) the recently-constructed Bay Trail for bicyclists and pedestrians; (4) customers for the fishing charter boats and small-scale ferry boats; and (5) the City’s Shorebird Park and Nature Center. Also at the site is the City’s Adventure Playground, an outdoor do-it-yourself park for youth that recently drew a record 65,000 visitors in 2018.

The City also sponsors several annual special events at the Berkeley Marina that draw several thousand visitors that pass by the South Cove Parking Lot and new restroom via car, bicycle, and by foot. These
include the following: (1) the City’s July 4th fireworks celebration (up to 30,000 visitors); (2) the Bay Festival in April (5,000 visitors); (3) the International Kite Festival in July (up to 30,000 visitors); (4) the International Shoreline Cleanup Day in September (up to 1,800 volunteers); and more recently, (5) the new Winter on the Waterfront Festival in December (600 visitors). Smaller weekly special events include local Audubon birdwatching tours, the City’s Nature Center tours, as well as the daily use of the South Sailing Cove small boat docks by water recreation users. More recently, in 2017, a new small-scale ferry service began at the Berkeley Marina, bringing hundreds of new visitors to the South Cove Parking Lot area on a daily basis (by car, Uber, bicycle, scooter, and by foot).

2. Project Activities & Outcomes

Primary Activities (in order of installation)

a. The project to renovate the east parking lot at the South Sailing Cove and was publicly bid alongside the NFWF Cosco Busan project to construct a new public restroom. The combined contract costs for design, permitting, construction, construction management, and construction support administration for both projects was $2,453,278. Funding included $814,630 from the two Cosco Busan NFWF grants (including $214,630 from this grant), $500,000 from the State Coastal Conservancy, $160,000 from the Division of Boating and Waterways, and $978,648 from local City funds.

b. A Notice To Proceed (NTP) from the City was issued to Team Ghilotti on November 20, 2017, which initiated the construction document submittal process.

c. The contractor team, Team Ghilotti, took control of the site on December 4, 2017 and completed site demolition.

d. The underground utilities and soil compaction and stabilization work for the new restroom and renovated parking lot was completed by January 31, 2018.

e. The new public restroom was installed on February 8, 2018, funded by Cosco Grant No. 33631.

f. The concrete curb and ADA accessible sidewalk work for the new restroom and renovated parking lot was completed in late April, 2018.

g. The final asphalt paving and safety striping for the new restroom and renovated parking lot was completed in late May, 2018.

h. The grand-reopening ceremony for the entire South Cove Parking Lot Renovation and New Restroom Project was held on May 31, 2018, and the parking lot was opened to the public.

i. The power utility company (PG&E) installed the new electrical meters on October 30, 2018.

j. The final testing of the electrical system for the parking lot lights and irrigation system was completed on November 7, 2018.

Benefits

The City’s Marina Master Plan of 2003 called for the renovation of all parking lots at the Berkeley Marina. This grant enabled the City to complete the first major renovation of a parking lot since the current Berkeley Marina was constructed in the mid-1960’s. Based on the number of visitors to the South Cove area described in Item 2. Recreational Benefits above, a renovated parking lot and windsurfing staging area will allow the City to successfully meet the needs of a highly-used and extremely popular regional recreational destination at the waters of the San Francisco Bay.

Discrepancies/Benefits

There were no discrepancies between the project activities and the contract activities. However, there were two notable changes during project implementation.
Subsurfacing Grading

- **Discrepancy**: Despite a thorough geotechnical investigation of the site during the design phase, the grading and compaction operation encountered locations where the underlying water-saturated Bay mud soils were close to the surface. This situation required some unexpected off-haul of Bay mud soils to install the deep bioswale and its storm drain lines, as well as additional compaction by heavy equipment in selected areas (these change orders were covered by City contingency funds).

- **Benefit**: The City now has a much better understanding of the geotechnical conditions and groundwater levels at the landfill soils at the Berkeley Marina. The additional repairs to the soils now give the City greater confidence in the longevity of the project. This experience will greatly inform the budgeting and designs for renovations of the ten other parking lots and planned new public restrooms at the Berkeley Marina over the next decade. These renovations will vastly improve the visitor experience to the Berkeley Marina and will provide extensive environmental benefits in the form of stormwater treatment before it enters the bay, and the re-use of existing soils for the base layer of the renovated parking lots and new public restrooms, instead of off-hauling soils to landfills.

Electrical system

- **Discrepancy**: During the excavation of the site for the installation of new electrical lines for the new restroom and parking lot renovation, the power utility company (PG&E) discovered that their distribution lines to the site did not match their records, and were actually in the wrong locations, rendering them inaccessible to PG&E repair crews. In order to bring power to the parking lights and new public restroom, the distribution lines needed to be re-routed to a more accessible location.

- **Benefit**: While this was an unanticipated but necessary change order cost (covered by City contingency funds), it became an opportunity to re-design the new electrical system to improve service to the parking lot, restroom, and the adjacent public sailing clubs, and allow for increased electrical capacity for future activities. The sailing clubs are especially happy about this unanticipated benefit.

3. The Future

- In 2019, the City will conduct a new engineering study in partnership with the California Water Emergency Transportation Authority (WETA) to study the feasibility of a new public ferry service at the Berkeley Waterfront. This project could potentially transport over 800 commuters on a daily basis, and possible many more travelers for recreation and tourism at the Berkeley Waterfront and other locations throughout the San Francisco Bay.

- In addition, the City’s Marina Master Plan of 2003 calls for the renovation of all existing parking lots and existing restrooms, along with additional public restrooms at the Berkeley Marina. The City has begun the planning to fund this work over the next two decades.

- In addition, the City’s Marina Master Plan of 2003 also calls for the completion of the Bay Trail spur at the Berkeley Marina. To-date, the City has completed the first three segments of the five-segment trail, and plans to implement the remaining segments over the next decade.

4. Lessons Learned

- The water table at the South Cove Parking Lot site was higher than anticipated by the geotechnical survey results, and so additional excavation of wet soils should be anticipated for future parking lot projects at the Berkeley Marina.

- The records of existing power distribution lines from the local power utility (PG&E) might not be up-to-date, and so additional field surveys of existing utility lines should be done during the design phase.
5. Project Documents

• Photos included below

**POSTING OF FINAL REPORT:** This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as “PROTECTED” and provide an explanation and complete citation to the statutory or regulatory source for such protection.
Image 1: South Cove East Parking Lot – Prior to construction. A badly deteriorated gravel parking lot with poor conditions (drainage, striping, pedestrian safety, etc.). (Photo by R. Miller)

Image 2: South Cove East Parking Lot – Mid-way through construction. Subsoil is being graded and compacted to provide a strong structural base layer for the new asphalt. (Photo by D. Sheils)
Image 3: South Cove East Parking Lot – Excavating large trenches to install new storm drain pipes and pre-cast storm drain structures to drain new bioswales that remove pollutants from stormwater before it enters the San Francisco Bay. (Photo by D. Sheils)
Image 4: Example installation of new storm drain pipes. (Photo by D. Sheils)

Image 5: Example pre-cast storm drain structures. (Photo by D. Sheils)
Image 6: South Cove East Parking Lot – Installing the new concrete restroom plaza adjacent to ADA accessible parking slots to provide accessible paths of travel. (Photo by D. Sheils)

Image 7: South Cove East Parking Lot – Installing truncated dome detectable surfaces for the new accessible concrete sidewalk path of travel from the renovated parking lot to the new public restroom. (Photo by D. Sheils)
Image 8: South Cove East Parking Lot - Grading and compaction of the existing unconsolidated subsoils atop Bay muds to prepare the base layer for asphalt paving. (Photo by D. Sheils)

Image 9: South Cove East Parking Lot - Hardening the existing site soils with a soil stabilizer via water truck to create an eighteen inch structural base layer for the top asphalt layer. Re-using the existing soils greatly reduced the need to off-haul soils to the landfill. (Photo by D. Sheils)
Image 10: South Cove East Parking Lot - New asphalt paving atop the stabilized base layer. (Photo by D. Sheils)

Image 11: South Cove East Parking Lot - The full parking lot was paved in one day. Traffic and ADA striping came later after the asphalt cured. (Photo by D. Sheils)
Image 12: South Cove East Parking Lot and New Public Restroom - Renovation completed! Wide-angle site view looking southeast. (Photo by D. Sheils)

Image 13: South Cove East Parking Lot and New Public Restroom - Renovation completed! Closer photo facing southeast. (Photo by D. Sheils)
Image 14: South Cove East Parking Lot - Before renovation (looking south), the surface was deteriorated and over 40 years old. (Photo by D. Sheils)

Image 15: South Cove East Parking Lot - After renovation, there is a dedicated safety pathway from the windsurf staging area (foreground) to the docks at the waters edge (background). (Photo by D. Sheils)
Image 16: South Cove East Parking Lot - Before renovation (looking southwest), the surface could be soggy, dusty, bumpy, and chaotic. (Photo by R. Miller)

Image 17: South Cove East Parking Lot - After renovation (looking southwest), there is improved asphalt surface, drainage, striping, circulation, safety, windsurf area, and new public restroom. (Photo by D. Sheils)
Image 18: South Cove East Parking Lot - Before renovation (looking north), there was poor drainage. (Photo by R. Miller)

Image 19: South Cove East Parking Lot - After renovation (looking north), there are new stormwater bioswales, a dedicated path of travel to the windsurf staging area, ADA accessible parking spaces, and new striping for improved circulation and safety. (Photo by R. Miller)
Image 20: South Cove East Parking Lot - Before renovation (looking southwest), there was poor drainage, a dilapidated windsurfing staging area, and no public restroom. (Photo by D. Sheils)

Image 21: South Cove East Parking Lot - After renovation (looking west), there is a newly paved parking lot with new striping, accessible parking and paths of travel, new stormwater bioswales, and a new public restroom. (Photo by D. Sheils)
Image 22: South Cove East Parking Lot - Before Renovation the old windsurfing staging area was dilapidated carpet, had poor drainage, had leaking washdown hoses, and was an unsafe path to the docks. (Photo by R. Miller)

Image 23: South Cover East Parking Lot - After renovation, the new windsurfing staging area had improved drainage and washdown hoses, along with a dedicated path to the docks. (Photo by D. Sheils)
Image 24: South Cove Parking Lot and Restroom Project - Grand Re-opening ceremony with City Councilmembers and Mayor, Parks and Waterfront Commissioners, project staff, and the public, May 31, 2018. (Photo by D. Sheils)

Image 25: Total project funder support signage for the parking lot project and new restroom project (above drinking fountain). (Photo by R. Miller)