



GOMESA Project Closeout Report

Project Name: “*Recovering Access and Restoring Resilience at Stewart Beach Park on Galveston Island*”

Entity Name: Park Board of Trustees of the City of Galveston (Park Board)

GLO Contract #: 21-155-003-C875

Project Manager: Sheryl Rozier

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Date: October 26, 2022 (Final Report)

Total Project Period: Contract Term = February 1, 2021, to January 31, 2023

Introduction

The Park Board of Trustees of the City of Galveston (Park Board) used Coastal Management Program (CMP) Cycle 26 Gulf of Mexico Energy Security Act (GOMESA) to implement a drainage project at Stewart Beach Park in Galveston, Texas. This project and scope of work was also supported by funds from the City of Galveston Industrial Development Corporation. This project compliments a masterplan for the park produced in 2015, where drainage issues were highlighted as something that needed to be addressed for the success of the operations and recreation at Stewart Beach.

Project Background

The science behind this project is based on the previously completed engineering and design work by Atkins North America (Atkins). Through a feasibility study in 2016-2017 and engineering completed in 2019, the Park Board has funded research to develop this science-based application by analyzing what has occurred, developing responsive engineering-based design solutions to enhance resilience intended to reduce/or eliminate lost user days, and recapture previously lost access.

Stewart Beach has been a recognized landmark on Galveston Island since it opened to the public in the summer of 1941. Galveston Island hosts more than seven million visitors annually and, due to its proximity to the greater Houston area, the number of Stewart Beach visitors is only increasing. Unfortunately, it had become more difficult to access Stewart Beach. After rain events, there was frequently ponding/standing water at the entrances, within parking areas, and in Pavilion access areas within the park. Multiple factors contributed to this issue, including uncontrolled upland run-off, lack of features within the park to adequately control onsite water, seasonal heavy rains, higher tides, distant tropical events, subsidence, and sea level rise.

Project Summary

The goal of the project was to improve the drainage at Stewart Beach Park so that the public could continue to recreate and the Park Board could continue to manage the parking areas that provide revenue to run and maintain the park. Components of the project were to capture, clean and slow down the water through controlled flows.

- Elevating and improving the internal road to **capture** the water before it enters the park
- **Slow down** the water through percolation by adding on site material to create a slope that sheet flows to the south
- Direct the existing **uncontrolled** flow of run off through a series of **controlled** ditches and swales to prevent scour on the beach
- **Clean** the water with native dune vegetation in the swales and ditches before it reaches the Gulf

The project began with finalizing the engineering developed in 2019 for bidding and contracting; and conducting an Environmental Assessment (EA) of the project.

The project also installed five Americans with Disabilities Act (ADA) pedestrian beach access walkways and two emergency vehicular crossovers to provide public access to the beachfront.

Lucas Construction, Inc. was hired to implement the Atkins North America engineered plans and specifications. Project costs for base elements of the project are as follows:

- Engineering Design, Bidding & Contract Negotiations (GLO funded): \$70,912.74
- Environmental Assessment: \$50,379
- Construction (GLO funded): \$969,185.67

Project Activities

Task 1: Contract for Engineering, Design, and Environmental Review

Deliverable Name: Task 1	Date Due	Date submitted
1. Park Board scope of work, executed contract, and notice to proceed	5/7/2021	4/12/2021
2. Engineering/design specifications to GLO CMP for review prior to bid publication	6/30/2021	6/29/2021
3. Environmental Assessment Outline to GLO	5/31/2021	5/26/2021
4. Draft Environmental Assessment to GLO	8/30/2021	7/21/2021
5. Environmental Assessment approved by GLO	9/30/2021	8/18/2021

Task 2: Permitting/Coordination Implementation

Deliverable Name: Task 2	Date Due	Date submitted
1. Copy of Stewart Beach BCC/DPP Action Letter from the City of Galveston	5/31/2021	5/10/2021
2. Copy of the City of Galveston Building Permit for the ADA pedestrian & emergency vehicular access points	1/31/2022	1/31/2022
3. Temporary Public Access Restriction Schedule and Alternative Access Information	3/10/2022	3/10/21

Task 3: Public Solicitation and Award for Construction Services

Deliverable Name: Task 3	Date Due	Date submitted
1. Bid tabulations	2/9/2022	2/9/22
2. Executed construction contract	2/28/2022	2/24/22

Task 4: Construction

Deliverable Name: Task 4	Date Due	Date submitted
1. Construction oversight monthly progress meetings throughout construction due monthly	7/31/2022	On going
2. Construction completion, acceptance/punch-list complete	7/31/2022	7/29/2022
3. Photos before, during and after construction	7/31/2022	7/29/2022
4. Photos of temporary CMP and beach access closure signage	3/14/22	3/11/2022
5. Photos of permanent CMP signage	6/30/2022	6/8/2022
6. TAS certification of consistency	10/31/2022	8/1/2022

Task 5: Project Monitoring & Reporting

Deliverable Name: Task 5	Date Due	Date submitted
1. Monthly progress reports and requests for reimbursement	Ongoing	10 th of every month
2. Draft final report	10/1/2022 10/1/2022	10/18/2022
3. Final report	10/31/2022	10/26/22
4. GOMESA Performance Measures Report	10/31/2022	10/26/22

Pre-Construction Activities

In April 2021, Atkins began their work for the Environmental Assessment (EA). This task was completed by January 6, 2022.

At the February 2022 Park Board of Trustees meeting a construction contract was awarded to Lucas Construction Company, Inc. to implement the Atkins engineered drainage project at Stewart Beach. The Park Board held the project kick off meeting on March 1, 2022, and the project was immediately underway.

Lucas Construction was able to provide some initial cost savings to the Park Board at the beginning of the project, but costs were still higher than the grant agreement with the GLO.

The Park Board Project Manager contacted the GLO Grant Manager to discuss. The GLO was agreeable to fund 100% of the additional construction and ancillary costs of the project.

Construction Activities

In March 2022, the contractor mobilized on to the site, set up traffic control, erected necessary signage, staked benchmarks and utilities, began work on excavation and grading on the west side of the park, staked the crossover locations and began to drive piles for the crossovers.

In the month of April 2022, the contractor continued to drive piles for the crossovers. There was a shorebird egg nest sighting which required the contractor to cordon off an area around the nest. Over the course of the next few days another animal destroyed the nest. Atkins, the engineer of record, created a piling plan to track progress and conditions of the piles. The contractor began removing existing pavement on the internal road, milling pavement and mixing with a crushed concrete base. Concrete pipes, used for road culverts, were delivered and installation began. Lumber was delivered and the framing of the crossovers began.

In the month of May 2022 all roadwork was completed, short of a small pavement swale at the entry gate, remaining plantings were installed and the pedestrian and vehicular crossover framing was completed. All tasks went as planned and the contractor met their contractual obligation of being substantially complete by May 25, for the park to open for Memorial Day weekend to accept all guests and visitors.

In June 2022, the contractor wrapped up punch list items and turned the project over to the Park Board as completed.

In July 2022 final deliverables for construction were completed, with the TAS Certification outstanding.

In August 2022 the TAS Certification was provided, as the final deliverable for construction activities.

Substantial and Final Construction Activities

On April 11, 2022, Park Board Project Manager hosted General Land Office (GLO) Grant staff on site to review elements of the project that had been built to date. On May 23rd, the Atkins design team held a pre-substantial completion walkthrough of the project to provide Lucas Construction direction on any issues still remaining on site. All major project components, which will allow the Park Board to operate and invite our guests to the park for the Memorial Day Holiday are in place. Lucas met their substantial completion target date per the Park Board construction agreement.

Through the course of the project Atkins was on site to observe, inspect and provide written reports on project progress. They will also assist the Park Board over the next two years with the maintenance and monitoring plan for project success, implemented by Park Board staff. This will be paid for outside of the CMP grant with the GLO.

In the month of June 2022 Park Board staff provided an internal punch list for the contractor to tie up loose ends. The contractor continued to work on minor items that were not 100% complete on 5/25/22. At the end of June 2022 Atkins conducted a walk-through of the project to produce their post construction punch list of items for the contractor. By August 2022 construction was complete.

Lessons Learned

The Park Board has been extremely fortunate with grant awards through the Coastal Management Program. Two items that continuously trip us up on schedule and/or deliverables is City of Galveston building permitting and the TDLR/TAS process. These items are administered through outside agencies and it is difficult to estimate the time needed or items that may come into review once in process. We would recommend to any other recipients that they have planned out extra time for either of these endeavors for project completion and milestones.

Additionally, any building permits should be scheduled as a deliverable after the construction contract is issued, as it is more traditional for the contractor to pull those opposed to the grant applicant.

Additional Grant Information

Additional grant information and project photos can be found at:

[CMP 26 Contract 21-155-003-C875 SB Drainage](#)