Cameron County Parks & Recreation Department Parking Improvement and Educational Pavilion at Beach Access #3 20-037-000-B745

Draft Report September 2021

Prepared By:

Joe E. Vega, Parks Director
Cameron County Parks & Recreation Department
33174 State Park Road 100-South
South Padre Island, Texas 78597

<u>JEVega@co.cameorn.tx.us</u>
956-761-3701

A REPORT FUNDED BY A TEXAS COAST MANAGEMENT PROGRAM GRANT APPROVED BY THE TEXAS GENERAL LAND OFFICE COMMISISONER PURSUANT TO NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

AWARD NO. NA19NOS4190106







Project Background:

South Padre Island is a unique tourist destination drawing millions of visitors every year. The Cameron County Parks & Recreation Department, as part of the implementation of the Coastal Parks Master Plan, is working to expand available public amenities at beach access points. Cameron County (the County) will use CMP Cycle 24 funds to make improvements to and enhance amenities at Beach Access #3.

These enhancements will occur as part of a three-phrase project by the County. During Phase I, the County will use County resources to expand the existing parking lot at Beach Access #3 to accommodate 142 cars and enhance public access to the beach. CMP Cycle 24 funds will be used for Phase II of the project and will acquire engineering services, develop architectural designs and initiate permitting to enhance amenities available at Beach Access #3. New amenities will include new pavilions, restrooms, community rinse stations and a new dune walkover. The County will ensure site designs stress the importance of green infrastructure and contain features such as permeable pavements, rain gardens, bioretention cells, rain harvesting, etc. Using green features will decrease the negative impact stormwater runoff can have on the beach-dune systems and decrease non-point source pollution to Cameron County beaches.

The third phase of this project will be the actual construction of the Beach Access#3 amenities. At this stage, County will partner with Texas A&M-Kingsville (TAMU-K) to complete Beach Access #3 enhancements. TAMU-K will assist with construction of the dune system and dune mitigation project. TAMU-K will propagate native dune vegetation at the Cameron County Native Plant Center and transplant the vegetation to the new dunes.



Task 1: Engineer Selection and Project Design

On February 18, 2020, Cameron County Commissioners Court approved the RFQ for advertising. On February 18, 2020, Cameron County solicited engineering services through a Request for Qualifications (RFQ) in accordance with state and local standards. The RFQ due date was March 17, 2020. The RFQ is advertise on the Brownsville Herald, Valley Morning Star and Texas Comptrollers of Public Accountants website.

On March 17, 2020, three firms responded to the RFQ: Hanson, LJA Engineering, Gomez Mendez Saenz, Inc., and Guzman & Muñoz.

On April 15, 2020, The Evaluation Committee met to review and score the proposals received from Hanson, LJA Engineering, Gomez Mendez Saenz, Inc., and Guzman & Muñoz for the Parking Improvement and Educational Pavilion at Beach Access #3. The Committee recommend Gomez, Mendez, Saenze, Inc. (GMS Architects) for the Architectural/ Engineering services on this project.

On April 28, 2020, the Cameron County Commissioners Court acknowledge the Tabulation Score Summary Recommendations by the Evaluation Committee. On April 28, 2020, the Commissioners Court awarded the Architectural/ Engineering Services to GMS for the Improvements to Cameron County Beach Access No.3 subject to Contract negotiations and approval by Commissioners Court.

On May 26, 2020, the Commissioners Court approved The Architectural/Engineering Agreement with GMS Architect.

On July 2, 2020, an official kick-off meeting was scheduled with GMS Architect to begin work on the site plan. The participants at the meeting included GMS Architects, Augusto Sanchez, Natural Resource Coordinator, Javier Hernandez, Parks Construction Foreman, and Joe E. Vega, Parks Director.

On July 13, 2020, GMS Architects provided a draft preliminary site plan to Cameron County for the Beach Access No.3 Improvements. The site plan was reviewed by the Cameron County team. The site plan was submitted to the GLO for review and comments.

On August 14, 2020, Cameron County Parks submitted the second preliminary designed to the GLO for approval.

On August 19, 2020, the GLO approved the preliminary design and the project may continue to work on the site designs for Beach Access #3.

On October 13, 2020, the site plan will be presented to Cameron County Commissioners Court for approval.

On February 10, 2021, Cameron County submitted the 50% plans completion to the Texas General Land Office to review and comment prior to moving forward with the completion of the 100% plans.

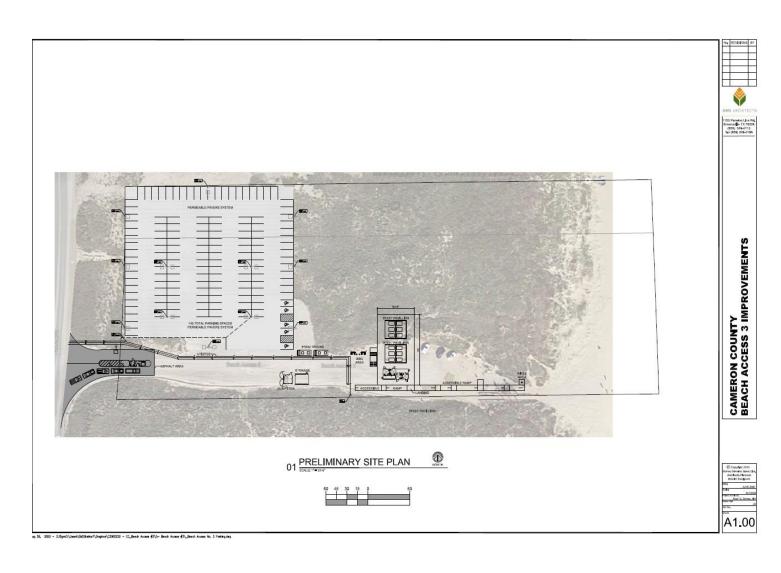
On March 29, 2021, Cameron County Parks & Recreation Department received comments on the 50% review plans from the Texas General Land Office. The Parks Department forward the comments to GMS Architects for their review.

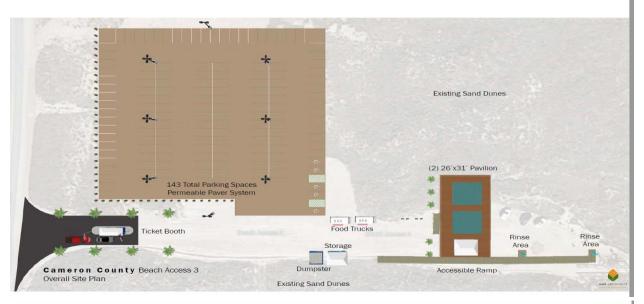
On May 19, 2021, Cameron County received additional comments from the TGLO on the 50% drawings.

On June 2, 2021, Cameron County submitted the revised set of 50% Review Plans to the TGLO addressing the comments from Texas General Land Office.

On June 2, 2021, Cameron County received notification from the GLO that they had no comments at this time. The contractor may proceed with the final design and engineering draft.

On July 27, 2021, the Cameron County Commissioners Court approved the 100% construction plans for the Improvements to Cameron County Beach Access No.3.







Cameron County Beach Access 3 Ticket Booth







Task 2: Permitting Application

On August 10, 2021, Cameron County submitted draft Beachfront Construction and Dune Protection Permit Application for the GLO to review.

On October 10, 2021, Cameron County submitted revised Beachfront Construction Draft Application 2 to the Texas General Land Office. The revised application addresses comments provided by the Texas General Land Office on August 23, 2021.

On December 08, 2021, Cameron County completed the revised LOV survey for Beach Access No.3.

On February 9, 2022, Cameron County submitted the revised Beachfront Construction and Dune Protection Application Draft 3to the Texas General Land Office for their review and approval.

On June 21, 2022Cameron County Commissioners Court approved revisions to the Cameron County Dune Protection and Beach Access Plan section IV.A.6 and the Cameron County Erosion Response Plan section 5.3.1 to reflect curb-and-gutter dimensions industry standard. The current plan states "Curbs shall not be wider than 6 inches or more than 10 inches high/deep". Standard dimensions are 12in high/deep. Revising this typographic error will better reflect current industry standard for curb-and-gutter to address the comments from the GLO on the revised Beachfront Construction and Dune Protection Application submitted on May 3, 2022.

On August 19, 2022, Cameron County received comments from the Texas General Land Office that allows to proceed with the beach front construction certificate and dune protection permit for the improvements to Beach Access No.3.

On August 31, 2022, the Cameron County Dune Protection Committee met and recommended for approval the beach front construction certificate and dune protection permit for the improvements to Beach Access No.3.

On September 13, 2022, Cameron County Commissioners Court approved the Beach Front Construction Certificate And Dune Protection Permit for the improvements to Beach Access No.3.

On September 13, 2022, Cameron County submitted the Beach Front Construction Certificate And Dune Protection Permit for the improvements to Beach Access No.3 to the Texas General Land Office.



THE COUNTY OF CAMERON

BEACHFRONT CONSTRUCTION CERTIFICATE AND DUNE PROTECTION PERMIT

A Beachfront Construction Certificate and Dune Protection Permit is hereby granted to Cameron County for the installation of an electrical pole adjacent to construct several public beach access amenities at Beach Access #3, including a pavilion, permeable pavement parking lot for 155 public beach parking spaces, and a new dune walkover. The County is proposing to adversely impact 1,191 cubic yards of dune volume sand and 12,990 square feet of dune vegetation and to provide mitigation and on-site compensation areas with 1,195 cubic yards of dune sand and 13,054 square feet of dune vegetation. The pavilion is located 240 feet landward from the line of vegetation and landward of the Building Setback Line. According to the Bureau of Economic Geology, the proposed construction is located in an area that is eroding at a rate of three to five feet per year.

On the 13 day of September 2022, in a regular meeting of the Cameron County Commissioners Court, it was voted on to approve the permit for Cameron County subject to the following:

- Cameron County will need to temporarily restrict public access to the beach at Beach Access #3 during the construction phase of the proposed improvements. Prior to any beach access closures, the County must request approval from the GLO and provide signage to redirect beach users to other access points during construction. The signage must be conspicuously posted and explain the nature and extent of modified vehicular controls, the location of free parking areas and access points, including access for disabled persons (31 Tex. Admin. Code §15.7(h)(1)(C).). The County must direct vehicular traffic to nearby free parking areas identified in the Cameron County Beach Access and Dune Protection Plan. The GLO recommends minimizing the duration of the public access restriction to the greatest extent possible.
- In the area landward of 230 feet from the line of vegetation, the County must ensure that
 only permeable materials are used outside the footprint of the pavilion [Cameron County
 Dune Protection & Beach Access Plan § IV(A)(3).]. Pervious concrete as proposed in the
 application materials and confirmed by the County is acceptable.

Dune Walkover

- The County may not damage, clear or remove any vegetation on either side of the dune walkover for the purpose of facilitating construction of the walkover [31 Tex. Admin. Code § 15.4(f)(1)]
- The County may not include lattice under each side of the walkover because it will
 prevent dunes from migrating.

- The seaward terminus of the walkover should be restricted to the most landward point of the public beach [31 Tex. Admin. Code § 15.7(g)(1)] and must not interfere with or otherwise restrict public use of the beach at normal high tides [31 Tex. Admin. Code § 15.7(g)(2)].
- The deck of the walkover must be of sufficient elevation to allow for the growth of dune vegetation and the migration of dunes to the greatest extent practicable [31 Tex. Admin. Code § 15.7(g)(3)]. The walkway height should be at least one to one and a half times its width (three feet minimum) to allow sunlight to reach vegetation underneath. If the County demonstrates it is not practicable to construct the proposed walkovers to meet adequate height requirements, the County may permit alternative design standards to allow the proposed dune walkover to exceed height and width restrictions to accommodate ADA access to the beach.
- The proposed dune walkover should be constructed to allow rain and sand to pass through the decking. The GLO recommends placing the slats that form the deck of the walkover at least ½-inch apart.
- Concrete may not be used to stabilize the base of the pilings [31 Tex. Admin. Code § 15.6(f)(3)].
- Construction of the proposed dune walkover should conform to the GLO's guidelines
 provided in the Dune Protection and Improvement Manual for the Texas Gulf Coast, and
 can be found on the GLO website at: http://www.glo.texas.gov/coast/coastal-management/forms/files/dune-protection-manual-gpb.pdf
- The County shall be required to relocate the walkover to follow any landward migration of the line of vegetation or seaward migration of the dunes [31 Tex. Admin. Code § 15.7(g)(4)]. After a major storm or any other event, the County shall be required to shorten the walkover to the appropriate length [31 Tex. Admin. Code § 15.7(g)(4)(A)]. This requirement shall be contained as a condition in any permit and certificate issued authorizing construction of walkovers [31 Tex. Admin. Code § 15.7(g)(4)(A).].
- The County shall post signs in areas where pedestrian traffic is high explaining the functions of dunes and the importance of vegetation in preserving dunes [31 Tex. Admin. Code § 15.4(f)(2)(B)(iv)].

Mitigation and Compensation

- Since a mitigation plan is required, the County must provide landowners immediately
 adjacent to the tract with notice of the hearing on the permit at least 10 days prior to the
 hearing [31 Tex. Admin. Code § 15.4(f).].
- The County shall locate restored dunes in the area extending no more than 20 feet seaward of the landward boundary of the public beach and shall ensure that the restoration area follows the natural migration of the vegetation line [31 Tex. Admin. Code § 15.7(e)(1).]. As proposed, the dune compensation areas appear to comply with

this requirement.

- The County shall not restore dunes, even within the 20-foot corridor, if the dune restoration project would restrict or interfere with public use of the beach at normal high tide [31 Tex. Admin. Code § 15.7(e)(2)].
- The County must begin mitigation and compensation for adverse effects to dunes and dune vegetation prior to or concurrent with the commencement of construction.
- The County is required to mitigate and compensate damage to dune vegetation so as to
 provide, when compared to the pre-existing dune vegetation, an equal or greater area of
 vegetative cover, an equal or greater degree of protection against damage to natural
 resources, and an equal or greater degree of protection against flood and erosion damage
 and other nuisance conditions to adjacent properties [31 Tex. Admin. Code § 15.4(f)(3)].
- The restored dunes and dune vegetation must be continuous with any surrounding naturally formed dunes and must approximate the natural position, contour, volume, elevation and vegetative cover of any naturally formed dunes in the restoration area [31 Tex. Admin. Code § 15.7(e)(3)].
- The County is required to conduct mitigation and compensation efforts continuously until the repaired, rehabilitated, and restored dunes and dune vegetation are equal or superior to the pre-existing dune vegetation. These efforts shall include preservation and maintenance of restoration activities pending completion of mitigation [31 Tex. Admin. Code § 15.4(g)(2)]. The County shall be deemed to have failed to achieve mitigation and compensation if a 1:1 ratio has not been achieved within three years after beginning mitigation and compensation efforts [31 Tex. Admin. Code § 15.4(g)(5).].
- The County shall determine a mitigation or compensation project complete when the dune restoration project's position, contour, volume, elevation, and vegetative cover matches or exceeds the surrounding naturally formed dunes [31 Tex. Admin. Code § 15.4(g)(3)]. The County shall provide written notification to the GLO after determining that mitigation and compensation is complete. The GLO may conduct a field inspection to verify compliance [31 Tex. Admin. Code § 15.4(g)(4)].

Miscellaneous

- The County must ensure the proposed activity will minimize impacts on natural hydrology and will not cause erosion of adjacent properties, critical dune areas, or the public beach [31 Tex. Admin. Code § 15.6(g)].
- The County shall not issue a permit or certificate that does not comply with FEMA's regulations governing construction in flood hazard areas [31 Tex. Admin. Code § 15.6(f)(1)].
- Activities presented in this permit application must be performed in accordance with the
 requirements of these comments, the permit, and state law and must be confirmed as
 allowable to be paid for with CMP Grant funding.

This permit must be kept at the site during the activities and its valid for three (years) and may be renewed for two (2) consecutive nine-day periods thereafter.

Signed on 13 day of September, 2022

Eddie Trevino Jr., County Judge

Attested B Sylvia Garza

Task 3: Project Monitoring and Reporting

All Monthly Progress have been submitted to the Texas General Land Office.

On August 10, 2021, Cameron County submitted Reimbursement Request No.1 in the \$83,333.50 to the Texas General Land Office.

On August 30, 2021, Cameron County received reimbursement for Request No.1 in the amount of \$50,000.10

On November 10 2021, Cameron County submitted Reimbursement Request No.2 in the \$83,324.50 to the Texas General Land Office.

On December 16, 2021, Cameron County received reimbursement for Request No.2 in the amount of \$44,999.90

On September 20, 2022, a draft report was submitted to the GLO for their review.

A Final Project Report and Closeout Forms were submitted on September 22, 2022