

601 Tremont - P. O. Box 1080 Galveston Island, Texas 77550 (Phone) 409-797-5000 (Toll Free) 1-888-GAL-ISLE (Fax) 409-762-8911 www.galvestonparkboard.org

October 28, 2014

City of Galveston City Council Industrial Development Corporation C/o Brandon Cook, Chief of Staff City Hall Galveston, Texas

Honorable City of Galveston Council and IDC Committee Members,

The Park Board of Trustees, in collaboration with the Texas General Land Office and the US Army Corp of Engineers (USACE) Galveston District, respectfully submit for your consideration an application for funding for a proposed Beach Nourishment project from 61st to 103rd along Seawall Boulevard. The details of said project are attached for your review and edification.

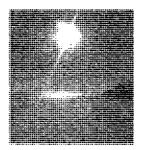
Also attached you will find copies of two resolutions that support this project. The first resolution originates from the Galveston Island Park Board of Trustees, committing the Park Board to serve as local coordinator and partial funder for the project. The second is submitted by the Galveston County Beach Erosion Task Force, a multijurisdictional body whose mission is to advocate for the common good by coordinating an effective response to erosion along Galveston County's beaches.

The opportunity to partake in the US ACE beneficial dredge program has arisen suddenly and is tied to a very rigorous and inflexible dredge cycle schedule. For this reason we are moving aggressively towards seeking support from partner organizations for the funding, which must be committed by Dec. 31, 2014. Funding must be made available by March of 2015 in order to comply with the USACE requirements.

We trust that you will look favorably upon this solicitation for funding which we believe will be highly beneficial for the development of new economic opportunities in Galveston. We are available to answer any additional questions that you may have regarding the same.

Respectfully,

Melvin Williams Chairman Galveston Island Park Board of Trustees



Chairman Jerry Mohn

Vice-Chairman Peggy Zahler

> Secretary John Lee Jr.

Members

County of Galveston

City of Galveston

City of Jamaica Beach

City of Galveston Park Board of Trustees

West Galveston Island **Property Owners** Association

Pirates Property Owners Association

Gilchrist Community Association

Bolivar Peninsula **Chamber of Commerce**

Administrative Office Address

Old County Courthouse 722 Moody

Galveston, Texas 77550

Galveston County Beach Erosion Task Force

BENEFICIAL USE OF DREDGED MATERIAL (BUDM) BEACH NOURISHMENT PROJECT BETWEEN 61ST TO 103RD STREET

WHEREAS, the U.S. Army Corp of Engineers (USACE) has the responsibility to maintain the many federal navigation channels adjacent to Galveston Island in compliance with the federal law to utilize the "least cost" method of disposal that often results in millions of cubic yards of beach quality material being dumped offshore or buried behind levees within dredged material disposal areas; and,

WHEREAS, the City of Galveston is a sand starved barrier island with approximately 32 miles of gulf facing shoreline and is confronted daily with the issue of beach erosion resulting in the loss of valuable recreational beach area and habitat for native species of wildlife; and,

WHEREAS, the USACE's dredged material disposal areas have shrinking capacities and lifespans, requiring ongoing maintenance, and the acquisition of new areas when older disposal areas cannot be expanded or maintained; and,

WHEREAS, the Texas General Land Office has an existing Memorandum of Agreement (MOA) with the USACE to place dredged material back onto the beach, and has agreed to extend that MOA to the Galveston Park Board for the purposes of a Beneficial Use of Dredged Material Project between 61st and 103rd street; and,

WHEREAS, the USACE estimates there is approximately 1,000,000 cubic yards of material that must be dredged from the entrance to the Houston-Galveston ship channel during the next maintenance dredging cycle in the spring and summer of 2015; and,

WHEREAS, the incremental cost for beach placement of BUDM projects is often one-fifth that of traditional truck haul beach neurishment projects, and the USACE has a recurring need to beneficially dispose of its dredged material; and,

WHEREAS, independent economists have concluded "From a fiscal perspective, beach restoration and re-nourishment in Galveston is ultimately a revenue generating activity. Increased economic activity associated with the availability of beaches within Galveston produces substantial gains in overall tourism, benefiting companies, residents, and the city alike."

NOW THEREFORE, BE IT RESOLVED the Galveston County Beach Erosion Task Force declares it's support of; and endorsement for the Beneficial Use of Dredged Material to restore the beaches along Galveston Island and specifically the proposed BUDM beach nourishment project from 61st street to 103rd street along Seawall Boulevard, and seeks the aid and support of all citizens and their elected officials at the Local, State and Federal level in the implementation of this critical program.

Upon Motion, Second and Unanimous Approval This Resolution of Support is Hereby Executed on Behalf of the Galveston County Beach Erosion Task Force on October 8, 2014.

Mr/Jerry Mohn, Chairman

Galveston County Beach Erosion Task Force

John Lee Jr., Secretary

ATTEST:

Date

Adalveston County Beach Erosion Task Force

Mission:

To promote the common good and general welfare of the residents, property owners, visitors and community of Galveston County by coordinating and linthering their common interest in an effective response to crosion of the beaches of Galveston County.



601 Tremont ~ P. O. Box 1080 Galveston Island, Texas 77550 (Phone) 409-797-5000 (Toli Free) 1-888-GAL-ISLE (Fax) 409-762-891i www.galvestonparkboard.org

US ARMY CORPS OF ENGINEERS BENEFICIAL USE DREDGE PROJECT RESOLUTION OF SUPPORT

Whereas, Galvestonians cherish our shared coastal heritage and recognize that protecting and restoring coastal natural resources is essential to sustaining our economy and way of life; and

Whereas, Galveston Island beaches are 'sand starved', lacking the sediment material necessary to maintain a balanced sand budget along the coastline and thus leading to the erosion of the Galveston coast; and

Whereas, the Park Board of Trustees has actively sought to engage the US Army Corps of Engineers in the placement of beach quality sand dredge material on Galveston beaches, instead of depositing this material off shore; and

Whereas, the Texas General Land Office and the US Army Corps of Engineers Galveston District already have entered into a Support Agreement to place beneficial dredge use material of beach quality sand on the Texas coast, and

Whereas, the Texas General Land Office, Coastal Resources department has demonstrated solidarity with the Park Board of Trustees in developing and implementing beach nourishment projects along the Galveston seawall; and

Whereas, engineering models show that the placement of sand between 61st and 103rd would help to stabilize the coastline and nourish west end beaches; and

Whereas, there is significant tourism, residential and economic activity west of the 61st corridor along the seawall and on the Island's west end; and

Whereas, tourism is a key economic driver of business sales, employment and tax revenue on Galveston Island; and

Whereas, market research pertaining to Galveston's tourism product indicates that the "beach is by far the top of mind association with Galveston"; and

Whereas, the Park Board of Trustees manages the Island's most popular beach parks as stipulated in the City of Galveston Beach Access Plan; and

Whereas, the Park Board of Trustees dedicates \$1.00 from the sale of each \$8.00 beach user fee charged at Island beach parks for the ongoing nourishment of Galveston Island beaches;

10/6/14 Page 1 of 2



601 Tremont ~ P. O. Box 1080 Galveston Isfand, Texas 77550 (Phone) 409-797-8000 (Toll Free) 1+888-GAL-TSLE (Fax) 409-762-8911 www.galvestonparkboard.org

Now therefore let It be resolved by the Galveston Island Park Board of Trustees that the Park Board supports the proposed 61st to 103rd street beneficial use dredge placement project proposed by the US Army Corps of Engineers Galveston district, and to this end will dedicate organizational resources to the realization of the project, including up to one million five hundred thousand dollars (\$1,500,000) to the project and is actively working to identify and commit the total additional funding for the realization of the project.

BOAP DATE £1G

Chair

Secretary/Treasurer

Attest:

Lut

Board Reporter



10/6/14 Page 2 of 2

BMAC Regular Meeting 10.31.2014

City of Galveston IDC Galveston Park Board of Trustees U.S. Army Corp of Engineers

Beneficial Use of Dredged Material Beach Nourishment 61st Street to 103rd Street Brief Project Description

I. Background / Project Location

Beginning 500ft. west of 61^{st} street moving west toward 103^{rd} street. Material is proposed to be placed in three (3) distinct cells, each approximately 4,400 linear feet in length (subject to revision) resulting in a placement footprint of approximately 13,200 linear feet. A placement project of this size and in this location, would almost match the linear footage of the beach area found from 10^{th} to 61^{st} street. The area west of 61^{st} street is preferred due to the timing of this beneficial use opportunity occurring during the summer tourist season and the comparatively lower number of visitors to the Island in this area that would be affected by this project.

II. <u>Material / Cost</u>

Sediment is to be dredged from the Galveston entrance channel as part of the U.S. Army Corp of Engineers (USACE) ongoing maintenance responsibilities to support navigation in federal channels. The USACE is required by federal law to dispose of the material in the least cost manner; and includes offshore disposal. This project proposes to fund the cost of placing the material on the beach (incremental cost) rather than it being dumped offshore. The USACE estimates the quantity of material available for placement is approximately 1,000,000 cubic yards; with very unofficial tentative cost estimates of \$4.00 per cubic yard for placement west of 61^{st} street. This compares to a truck haul typical "upland" sand price of \$25 - \$35 per cubic yard. The final costs for placement of the dredged material will be based on the actual bids received by the USACE. Given the estimated volume of material to be dredged, and the proposed footprint; would result in an approximate project density of 75 cu/yds. per linear foot.

III. <u>Methodology</u>

It is anticipated the USACE will utilize a hopper dredge to perform the maintenance activities. The hopper dredge will perform the maintenance activities by drawing the material up from the channel into storage cavities (hoppers) within the ship and once full (approximately 10,000 cubic yards) will sail with the material to a pump out station beginning approximately 500ft. west of 61st street where it will be connected to the discharge pipe and the material will be discharged into the placement area; and the process will be repeated until the entrance channel has been cleared.

IV. <u>Tentative Project Timeframe</u>

The USACE is completing their internal project review in very early October 2014, and anticipates publishing bidding information in early March 2015 with the intent to award the contract in early April 2015. It is anticipated the project will begin construction in May 2015 and potentially be active into July 2015.

V. <u>Funding Partners</u>

If approved, the proposed project has three primary partners to fund the incremental cost to transport the material from the ship channel to the beach area. The USACE includes a contingency fund built into the project to protect from cost overuns at 25% of the potential project cost. The contingency fund can be returned to the local sponsors if it is not utilized during the project.

Partner	Contribution	黀	Tentative Project Cost Breakdown	
City of Galveston IDC	\$ 3,000,000.00		Approximate Volume of Material	1,000,000 cu/yds.
Galveston Park Board	\$ 1,500,000.00		Approximate Cost per cubic yard	x \$4.00
General Land Office	\$ 500,000.00		Approximate Project total w/o contingency	\$ 4,000,000.00
~Incremental Cost	\$ 5,000,000.00		+Contingency Requirement 25% (USACE)	+\$1,000,000.00
			Approximate Project Total	~\$5,000,000.00

Beach Nourishment Project 61st street to 103rd street October 1, 2014 Page Three

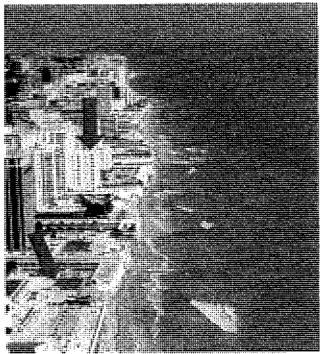
activities will over time benefit the public beach easement west of the seawall. The area west of 61st street has historically had a sandy beach fronting the seawall but with the landfall of Hurricane Carla

VIII. Benefits to Adjacent Areas and the Miami Beach example (continued)

in 1961 that beach area was lost. Similarly, beaches at the west end of the seawall were much wider in previous years and afforded visitors the "luxury" of driving down the sloped end of the seawall and directly onto the beach. It is hoped that over time and with sequential beneficial use opportunities those beach areas will again regain their former width.

It is important to recognize the benefits of sand beaches to day visitors and those staying overnight. Perhaps no other example tells the story better than that of Miami Beach that experienced a 500 to 1 cost benefit ratio as a result of the nourishment project.

Miami Beach Activity Pre- and Post- Beach Nourishment			
Pre Beach Nourishment	Post Beach Nourishment		
~8,000,000 Visitors	~21,000,000 Visitors		
Beaches Eroded	Restored Beaches		
Hotel Occupancy 25% - 32%	Hotel Occupancy 77% - 84%		
Declining Values	\$11B Beach Visitor Revenue (annually)		
Business Closings	Created a 30 year Economic Boom		



Pre- Headh Neurisbroent



Post Beach Nourishment