



AGENDA MEMORANDUM

Action Item for the City Council Meeting of November 9, 2021

DATE: November 9, 2021

TO: Peter Zaroni, City Manager

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Construction Contract Award
Salt Flats Levee Improvements

CAPTION:

Motion awarding a construction contract to JM Davidson Inc., Aransas Pass, Texas, to perform repairs and improvements to the Salt Flats Levee, located in Council District 1, in an amount of \$903,679.00, with FY 2022 funding available from the Seawall Capital Fund.

SUMMARY:

This motion approves a construction contract for repairing Salt Flats Levee and replacing flap gates on the storm outfalls with new check valves. Also, replacing the retaining wall, making concrete repairs on the flood gates and repairing one of the storm outfalls are included in the scope of the project.

BACKGROUND AND PURPOSE:

The Salt Flats Levee is an integral part of the downtown flood protection system consisting of the following elements: Salt Flats Levee, Port Authority Wharf, Promenade, Museum Floodwall, U.S. Army Corps of Engineers (USACE) Bulkhead, Seawall and two storm water pump stations located at Kinney Street and Power Street. Collectively, they function as a system to protect downtown and the Sports, Entertainment, and Arts District from storm surge events.

The Salt Flat Levee prevents storm surge in the Ship Channel from entering the downtown area. It was originally referred to as the Backwater Levee and was part of the original Seawall construction project that was completed in 1941. The Salt Flats Levee was reconstructed in 1956 under a project by the Nueces County Engineering Department. The closure gates were subsequently upgraded in 2000, but the majority of the levee remains as is from 1956.

The Salt Flats Levee has numerous known deficiencies such as structural integrity of the retaining wall, the elevation of the levee some areas are below the recommended height, and some check

valves are old, have noticeable corrosion, and are not fully operational.

According to the 1985 Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA), the City’s downtown area was shown as largely protected against a 100-year flood event. Beginning in 2006, however, FEMA began to re-evaluate how protected areas are treated on FIRMs. The current approach by FEMA is to map the actual failure mechanisms that may occur in protected areas to determine Base Flood Elevations (BFEs). Unless system owners can prove that a system is protected against failure, one or more failure scenarios will be used to determine BFEs. One scenario being modeled by FEMA is a breach of the Salt Flats Levee. That failure scenario has the greatest potential to create flooding in downtown Corpus Christi and has the greatest impact on the proposed BFE.

Improvements to Salt Flats Levee have been programmed in the Seawall Capital Improvement Plan (CIP) for several years. The new Harbor Bridge project and changes in FEMA policy have prevented the project from previously moving forward. In addition to enhancing the level of protection afforded by the downtown flood protection system, correcting deficiencies with the Salt Flats Levee will allow the City to challenge FEMA’s levee breach scenario.

PROJECT TIMELINE:

2019 - 2021	2021 – 2021	2021-2022
August - July	August - October	December – April
Design	Bid/Award	Construction

The project will begin construction in December 2021 with anticipated completion by April 2022.

COMPETITIVE SOLICITATION PROCESS

The project was advertised for bids in August 2021. On September 16, 2021, City received bids from two bidders. The City analyzed the bids in accordance with the contract documents and determined JM Davidson Inc. is the lowest responsive and responsible bidder. A summary of the bids is provided below:

BID SUMMARY	
CONTRACTOR	BASE BID
JM Davidson Inc. Aransas Pass, TX	\$903,679.00
MB Western Industrial Contracting Houston, TX	\$975,129.00
<i>Engineer’s opinion of probable construction cost</i>	<i>\$764,712.63</i>

JM Davidson has previously completed the Shoreline Protection project for Port Aransas Marina Association, Replace Fishing Pier Project for Texas Parks and Wildlife and Marina and Docks Survey, Repair and Redesign Project for University of Texas Marine Institute and other projects in Texas. JM Davidson Inc. is currently working on the Cole Park Pier with the City of Corpus Christi.

ALTERNATIVES:

The alternative is not to award the construction contract to the low-bidder, JM Davidson Inc. Failure to correct deficiencies with Salt Flats Levee and properly protect the downtown flood area could result in severe flooding, jeopardize the City's FEMA certification process and affect insurance rates in the downtown area.

FISCAL IMPACT:

The fiscal impact in FY 2022 is an amount of \$903,679.00 with funding available from the Seawall CIP Fund. The FY 2021 CIP expenditures shows \$1,900,000.

FUNDING DETAIL:

Fund: **Seawall Sys CIP (Fund 3271)**
Mission Elem: SEAWALL (ME #707)
Project: Salt Flats Levee Improvements (Project No. E171117)
Account: Construction (550910)
Activity: E171117-01-3271-EXP
Amount: \$903,679.00

RECOMMENDATION:

City staff recommends awarding construction contract to JM Davidson Inc. for the Salt Flats Levee Improvements in the amount of \$ 903,679.00 with construction duration planned for 160 days from issuance of the Notice to Proceed with construction starting December 2021.

LIST OF SUPPORTING DOCUMENTS:

Location and Vicinity Maps
Bid Tab
CIP Page