



## AGENDA MEMORANDUM

June 18, 2018

Corpus Christi Business and Job Development Board Meeting

**DATE:** June 11, 2018

**TO:** President and Honorable Board Members,  
Corpus Christi Business and Job Development Corporation

**THROUGH:** Samuel "Keith" Selman, Interim City Manager

**FROM:** J.H. Edmonds, P.E., Director of Engineering Services  
JeffreyE@cctexas.com  
(361) 826-3500

### UPDATE

Engineering Services Monthly Project Updates

#### **STAFF PRESENTER(S):**

<b><u>Name</u></b>	<b><u>Title/Position</u></b>	<b><u>Department</u></b>
1. Jeff H. Edmonds, P.E.	Director	Engineering Services

#### **OUTSIDE PRESENTER(S):**

None.

#### **BACKGROUND:**

The current active projects are listed below with the monthly activity shown.

#### **PROGRESS FROM PREVIOUS MEETING:**

1. Barge Dock Improvements – Construction on-going and on schedule. Project should be substantially complete by the end of June 2018. Contractor and Construction Inspection Staff continue to work with American Bank Center staff to coordinate access to the Barge Dock during special events.
2. Repairs on Marina Breakwater at McGee Beach – Design on-going.
3. Corpus Christi Museum of Science and History Floodwall – Project will be re-RFQ'd, and a new consultant selected. The project scope may be expanded. City staff met with new POCCA staff points of contact on 05/22/18 regarding project coordination.
4. Salt Flats Levee Improvements – Project will be re-RFQ'd, and a new consultant selected.
5. Kinney and Power Street Pump Station Improvements – Design contract under negotiations. Anticipate presenting the design contract to the Type A Board in July 2018.
6. McGee Beach Nourishment/Boat Basin Dredging – Marina boat basin dredging will be incorporated into the Marina Breakwater at McGee Beach project as a contract amendment. Negotiations are underway; anticipate presenting the design contract amendment to the Type A Board in July 2018.

## **PROJECT SUMMARIES:**

### **1. Salt Flats Levee Project/ FEMA Mapping:**

#### **Project History:**

- In 2012 through 2014, the City submitted a FEMA Certification Guidance Document and began an assessment of the impact of FEMA's new FIRM maps.
- Beginning in 2015, Staff revised the engineer's scope to better adapt a strategy to support identifying existing flood protection deficiencies, corrective actions, and validation of the FEMA FIRM maps in lieu of "certifying" the systems. This is a result of the changes from FEMA moving from the Provisional Accreditation Levee (PAL) to the Levee Accreditation Mapping Procedure (LAMP).
- In 2015, Type A Board and City Council approved an MSA contract with HDR.
- A meeting was held with FEMA on August 26<sup>th</sup>, 2015 to discuss the LAMP and several task orders were negotiated. (See Task Orders Below)
- Task Order No. 2, a flood protection system vulnerabilities assessment, was conducted by the consultant and completed in 2016, and reviewed at the March 2016 Type A Board meeting. It is possible this can be re-opened at a later date.
- In 2016, the engineer prepared a proposal for Task Orders No. 3, 4, and 5 (see descriptions and project status below).

#### **Project Progress:**

- Task Order No. 1 - Update and Finalize Phase 2A Report – Salt Flat Levee Assessment:
  - Completed in previous years.
- Task Order No. 2 - LLPT Participation/Flood Protection System Vulnerabilities Identification:
  - Original scope of work was completed.
  - Additional issues related to the Salt Flats Levee vulnerabilities, such as erosion to the Salt Flats Levee channel that occurred at the location of the Broadway Wastewater Treatment Plant bypass pumping outfall, being addressed through this Task Order.
- Task Order No. 3 - Salt Flats Levee 2D Hydraulic Model:
  - Completed and sent to FEMA for comments in January 2017.
- Task Order No. 4 - Conceptual Design of Improvements for Salt Flat Levee:
  - Completed in Spring 2017. See Item 8 below for the design project.
  - An amendment was initiated and is now complete to verify any impacts from the New Harbor Bridge.
- Task Order No. 5 - Preliminary Design of Floodwall Replacement for Museum of Science and History:
  - Completed in April 2017.
  - See Item 6 below for the design project.

#### **Future Projects:**

- The City issued a RFQ to select consultants for six Type A Projects; two of the projects are for design of the improvements recommended thru Task Orders No. 4 & 5 of this project (see also Items 5 & 8 below). The City received RFQ submittals and the Award Letters were sent out in February 2017.

## 2. Barge Dock Project:

### Project History:

- The August 2012 contract with LJA (RVE) for **\$309,870.00**, defined their scope as a forensic assessment of the barge dock and the adjacent sloped seawall to pursue improvements identified in the 2012 CIP. The scope also included collaboration with the Barge Dock stakeholders to determine if the Barge Dock should continue to function as designed or if additional uses should be considered. The future CIP Funds identified at that time totaled **\$8,350,000**. The first phase of the assessment was completed by LJA (RVE) and they requested to move forward with the Wave Load Analysis and Structural Stability Analysis. However, because the Barge Dock usage will not change, the City decided to not pursue the Wave Load Analysis and Structural Analysis.
- The improvements originally were planned to include raising the elevation of the barge dock by 2', constructing a relief platform to prevent the new fill from surcharging the existing bulkhead, developing a stepped terrace area to reduce wave run-up onto the adjacent roadways during storms, and developing additional parking and other amenities.
- As of 2015, it was recommended that the deficiencies be corrected, and the major alterations be deferred to allow for more critical flood protection upgrades.
- August of 2015, Engineering Services initiated discussions with LJA (RVE), and developed a scope of work for repairs to address deficiencies identified during the condition assessment. Any further betterments to the barge dock are being put on hold until requirements can be better defined.
- The City received a final condition assessment report from the LJA (RVE). A proposal was also received and approved, and negotiations were finalized for the design phase services to make repairs to the barge dock (2016).
- The project was bid twice, and currently pending approval and award by City Council.
  - The first bids were significantly over budget due to ambiguities that were clarified on the second bid.
  - Second bid opening held on November 8, 2017; six bids were received.
  - Grace Paving & Construction, Inc., was the lowest responsive and responsible contractor with a base bid of \$466,115.01.
  - Including the 2 additive alternates brings the total bid to \$553,199.17.

### 2018 Progress:

- Engineering Services recommended award of the base bid and both additive alternates to Grace Paving & Construction, Inc. at the 01/15/17 Type A Board meeting.
  - Type A Board approved scope of improvements and recommending selected contractor.
- Construction contract approved by City Council on 02/13/18.
- Pre-construction meeting scheduled for 03/15/18.
- Construction started on 03/26/18 **and is on schedule. Should be substantially complete by the end of June 2018.**
  - Contractor and Construction Inspection staff coordinating with ABC staff to coordinate access to the Barge Dock during special events.

### **3. McGee Beach Re-nourishment/ Boat Basin Dredging Project:**

#### **Project History:**

- In 2014, funding was approved and the Coastal Erosion Planning and Response Act Project Cooperation Agreement (PCA) would allow for the GLO to develop a design for the nourishment of McGee Beach.
- In 2015, City staff met with GLO and the design consultant to discuss reducing beach re-nourishment demands to reduce cost and improve beach conditions. Based on the evaluations, McGee Beach re-nourishment could be deferred, and North Beach was scheduled for re-nourishment.
- August of 2015, Engineering Services staff met with GLO's consultant about planning and permitting. The City determined it may assume responsibility for this project from GLO and link it with other area project needs such as the boat basin dredging and breakwater repairs.
- A meeting was held during the month of September 2015 with Cameron Perry (HDR) to formulate a new dredging and beach re-nourishment project.
- In February 2016, HDR recommended that a feasibility study be conducted prior to initiating the design phase.
- Feasibility Study prepared by HDR was distributed to Type A Board in January 2017.
- Govind Development was the AE Selected through the RFQ process to prepare the McGee Beach re-nourishment plans.
- McGee Beach held up well during Hurricane Harvey.
- Monitoring continues; nourishment not currently warranted.

#### **2018 Progress:**

- Engineering Services Staff met with Marina staff to discuss the need for dredging within the Marina.
- Recommendation made to amend the Repair on Marina Breakwater at McGee Beach project to include dredging in the Marina.
  - LAN submitted a proposal on 03/29/18.
  - City staff negotiating the amendment. Anticipate bringing the design contract amendment to the Type A Board in **July 2018**.

### **4. Bayshore Park**

#### **Project History:**

- Type A Board was informed in June and July of 2016 of the synergy between the Bayshore Park (Bond 2008) project and the McGee Beach Pier and Breakwater and the Marina Dredging/McGee Beach re-nourishment project.
  - Bayshore Park scope included pier surface treatments and upgrades of up to \$454,000 but no structural repairs for the pier.
  - Breakwater Safety Improvements Study (see Item 4 above) estimated \$750,000 for structural repairs to the pier and walkway leading up to the Breakwater.
  - Plans include shade, landscape, and lighting upgrades for the pier.

#### **Project Progress:**

##### **Bayshore Park:**

- The City Engineer has approved the signed/sealed construction drawings for Phases 1, 2 and 3.

- The City has not yet received design submittals for the final design and cost estimate for the iconic signage for the park (as the re-naming process is underway).
- It was anticipated that the Bayshore Park construction will be complete by July 3<sup>rd</sup>, except for the aesthetic improvements to the pier (see the Pier subsection).
- Bayshore Park construction was substantially completed in Fall 2017. Final change order negotiations are underway.

#### Parking Lot:

- In January 2017, a request was made by Johnny Phillipello, CEO of Buc Days, to support the Bayshore Park project with additional funding to provide for the repairs and upgrades to the Old City Hall/Memorial Coliseum parking lot, which is currently not in the scope of Bayshore Park.
  - This parking lot is critical to Buc Days Carnival operations since they are no longer allowed to use the Great Lawn (old Memorial Coliseum Site) for large carnival rides due to the damage to the lawn and the irrigation system.
  - The City requested proposals from both Fulton-Coastcon (Bayshore Park contractor) and Grace Paving (one of the City's selected contractor for the IDIQ minor streets improvements) to provide an upgraded parking lot at this location.
  - The City will move forward with the best value option for the repair of that parking lot later this year after negotiations are concluded and if the budget source can be identified.
  - Budgetary support from the Type A board for the repair and upgrade to the parking lot was requested, as that scope could not be covered by the available 2008 Bond funds in the current design-build project.
  - This parking lot has been used in the past as temporary storage for boats from the Marina during hurricane surge events.
  - This parking lot is anticipated to be used in the future for other events, such as a park and ride facility to support events at the north end of the seawall or even North Beach.
- On February 20, 2017, the Corpus Christi Business and Job Development Corporation approved an appropriation of Type A funds in the amount of \$424,500 for improvements to the parking lot at the old Memorial Coliseum site. This project was requested by the Bayshore Park Task Force to enhance continuity and parking for the McGee Beach, Water's Edge Park, and Seawall. The work will be executed through the City's ongoing Minor Street Pavement Repairs IDIQ project. Work includes reconstruction of the parking lot, adjacent curbs and gutters, and lighting upgrades.
- On June 20, 2017, the City Council tabled the above item due to wanting more information from staff concerning the Bayshore Park Project.
- This item is scheduled to be presented to City Council on July 11<sup>th</sup> and 18<sup>th</sup>, 2017.
- Council approved the transfer of the budget to support the parking lot construction.
- Parking lot construction began in July 2017.
- Work complete in September 2017.

#### Pier:

- Jimmy Laurence (with Fulton-Coastcon Construction), who is the contracted structural engineer, worked through design issues for the new plate deck for the pier and walkway related to load capacity for improvements (March/April 2017).
- The actual amount for the structural repairs and walkway leading up to the Breakwater is \$586,326 (Fulton-Coastcon, contractor's actual proposal), which was approved by the Type A Board on their meeting of May 2017. This is additional to the \$454,000.

- Pier improvements include structural restoration, breakaway side panels to reduce sand migration, electrical service extension, lighting, additional shade structure and landscaping features to enhance the experience of visitors. This work creates an additional programmable special event space and provides better continuity between the Waterside Park, McGee Beach, and the Seawall.
- City Council had an agenda item on June 13<sup>th</sup> to consider the Change Order of \$586,326 for the structural repairs.
- On June 20, 2017, the City Council tabled the above item due to wanting more information from staff concerning the Bayshore Park Project.
- This item was presented to City Council on July 11<sup>th</sup> and 18<sup>th</sup>, 2017.
- Pier construction, under the recent approved Change Order, began in August 2017.
  - Unfortunately, after several weeks of work, it was discovered/determined that part of the Existing Pier could not be repaired and/or salvaged; about 1/3 to 1/2 of the Pier had to be demolished due to deterioration. Mid-November was the new scheduled completion date, pending no more inclement weather occurs.
- Pier construction is substantially complete; contractor is working to complete punch-list items identified from Owner's walk thru on November 20, 2017.
- A reconciliation Change Order (#2) is being processed as a \$0.00 change order and adding days to the contract. Additional work has been identified and included on this change order at no additional cost charges:
  - Run utilities to provide showers at the McGee beach area. These showers will include modification of the stairs from atop the seawall to each location by pouring new concrete over the existing steps and new Stainless-Steel handrails. The showers will sit at the bottom of the stairs to serve as a wash off area for beach goers.
  - Additional no cost change for covered pavilion at the multi-purpose courts. The cover will be a radius steel structure to provide a shaded/covered event space for patrons to enjoy.
  - 6 Ea. Regulation NCAA outdoor sand volleyball courts.
  - Islander Signage for Islander Pavilion and Islander Courts at Water's Edge as well as an Islander flag pole.
- City is waiting on the return of a signed Change Order #2 from Fulton Construction to route for processing.

## **5. Corpus Christi Museum of Science and History Floodwall**

### **Project History:**

- This recommended improvement is to construct a new floodwall (or a coastal structure) that would extend from the Promenade under the Harbor Bridge to the USACE Bulkhead. This project would also backfill the triangular area between the new wall and existing wall location, to make it function more like a coastal structure, and provide additional land area for future use.
  - AE Selected (HDR)
  - The proposed retaining wall alignment is across Port owned property. City Staff is working with the Port Staff to determine the City's land use options, which may include purchasing the property, leasing it, or a temporary or permanent easement.
- Type A Board unanimously approved the funding for and recommended City Council approve the contract with HDR for the design and construction documents for this project on 9/18/17.
  - This professional services contract includes survey, design, permitting, bid and construction phase services, and coordination with USACE.

- Coordination with Port of Corpus Christi Authority (POCCA) and the USACE required.
- Contract was presented to City Council on October 10th and October 17th for review, and the design contract was approved.
- City Council voted on 10/24/17 to reconsider the professional contract they approved on 10/17/17.
  - City Council members expressed concern that:
    - The proposed wall alignment is on POCCA property, and coordination has not been finalized prior to starting design.
    - The estimated construction costs are too high.
- City Staff has already started the coordination process with POCCA staff to determine the City's land options (purchase, lease, or an easement).
  - City Staff met with the POCCA Executive Director and the Deputy Executive Director on 12/18/17.
  - POCCA staff in attendance at the meeting did not foresee any issues with the proposed floodwall improvements in front of the museum.
  - POCCA and City staff agreed that the engineering staff of both entities would collaborate to work out the property use issues.
- Proposed schedule will be updated once the issues raised by City Council are addressed and the project is approved by City Council.

#### 2018 Progress:

- City and POCCA staff met on 02/16/18 to coordinate on this project.
- Selected AE consultant (HDR) requested revisions to contractual provisions. Selected consultant could not come to terms with City standard contract language. Project will be re-RFQ'd, and a new consultant selected.
- The project scope may be expanded.
- City and POCCA staff continue coordination efforts regarding proposed location of floodwall on POCCA owned property.
- City Planning group prepared example renderings that staff plans to share with the POCCA. These renderings show a connection from the Art Center area to the area in front of the Science and History Museum.
- Due to POCCA staff changes, City staff met with new POCCA staff points of contact on 05/22/18 regarding project coordination. City staff provided POCCA staff with the example renderings.

## **6. Seawall Capital Repairs**

#### Project History:

- The Corpus Christi Seawall was originally constructed from 1939 to 1942. With the initiation of the Seawall Maintenance sales and use tax, a major project was completed in 2007 to address advanced levels of deterioration of the Seawall system. That project was completed for a cost of \$43.4 million. The funding levels programmed in the CIP are anticipated to address routine maintenance issues. A subsequent major reconstruction is shown to occur after the expiration of the current one-eighth cent sales and use tax. This project will assess the seawall and develop and prioritize the maintenance repair activities.
  - AE Selected (Munoz Engineering)
- Engineering Services executed a small design contract with Munoz Engineering on 12/19/17 in the amount of \$17,280.
  - Anticipated project schedule is 3 months.

- Project scope includes:
  - Visual inspection of the Seawall,
  - Document findings in a report including photographs and map exhibits,
  - Provide maintenance program and prioritization of repair recommendations, and
  - Prepare Opinion of Probable Construction Costs for noted repairs.

#### 2018 Progress:

- Project Kickoff Meeting held on 01/03/18.
- Consultant inspected Seawall; Preliminary Report submitted 02/12/18.
- City comments provided to the Consultant.
- Final Report submitted 04/06/18.
- Presented inspection findings to the Type A Board at the April 2018 meeting.

### **7. Repair on Marina Breakwater at McGee Beach (Approval Process)**

#### Project History:

- Scope and Fee negotiations with the selected consultant (LAN) began in May 2017 and were placed on hold pending approval of the CIP funding. Previous CIP funding was recommended to be combined into the Bayshore Project to accelerate some of the rehab of the pier and walkway (see Item 4).
- The CIP for FY17-18 includes the remaining recommended improvements and was approved in September 2017.
- Proposed improvements consist of demolishing the existing elevated concrete cap and constructing a new breakwater concrete cap in its place. The existing rock breakwater and concrete cap will be repaired and raised. These improvements will help fortify the seawall against wave attack by preventing failure of the breakwater and excessive erosion of McGee Beach. Construction anticipated to consist of placing rock ballast (smaller stones) to fill gaps between the larger stones and provide a base for the new concrete cap, building the new cap wider (assumed to be 2 ft. wider) and higher (assumed to be 1 ft. higher) than original.
- AE Selected (LAN) through RFQ 2016-06.

#### 2018 Progress:

- Design contract approved by the Type A Board in February 2018.
- Design contract approved by City Council on 03/20/18.
- NTP sent to Consultant on 03/28/18.
- Project Kick-off Meeting held on 04/09/18.
- Recommendation made to amend the Repair on Marina Breakwater at McGee Beach project to include dredging in the Marina.
  - LAN submitted a proposal on 03/29/18.
  - City staff negotiating the amendment. Anticipate bringing the design contract amendment to the Type A Board in **July 2018**.

### **8. Salt Flats Levee Improvements (Re-RFQ)**

#### Project History:

- The Salt Flats Levee System (originally referred to as the Backwater Levee) is an integral component of the downtown flood protection system. The levee requires improvements and maintenance to ensure that the system will function as originally designed. The levee is susceptible to various models of failure. Based on a preliminary study by HDR, improvements are planned that would be sufficient to be certified by FEMA as a freeboard deficient reach.



This means that although the system would not afford the level of protection required to be prevent overtopping in a 100-year storm event, it would not be vulnerable to catastrophic failure. This project will prepare the construction plans for the proposed improvements.

- AE Selected (HDR) through RFQ 2016-06.

2018 Progress:

- Selected AE consultant (HDR) requested revisions to contractual provisions. Selected consultant could not come to terms with City standard contract language.
- Project will be re-RFQ'd, and a new consultant selected.

**9. Kinney and Power Street Pump Station Improvements (Approval Process)**

Project History:

- The downtown flood protection system relies on two pump stations, Power Street Pump Station and the Kinney Street Pump Station, to service this drainage basin during a significant storm event. Previous design and studies for Downtown Drainage projects included a new storm water concrete interceptor box with new inlets that was constructed in 2007 along Water Street to allow transfer of flows between the two stations, and upgrades of the Kinney Street pump station in 2009. Preliminary studies indicate that a third pump station is required to meet the 100-year event. This project evaluates the capacity of the existing 2 pump station to determine the feasibility of interim solutions to maximize the capacity at the Power Street Pump Station before adding the major investment of the third pump station. The project should include 2D modeling to better define the demands to enhance the reliability and capacity of the downtown storm water pumping system.
  - AE Selected (Urban) through RFQ 2016-06.

2018 Progress:

- Design contract under negotiations. Selected sub-consultant could not come to terms with City standard contract language. Prime consultant is working to find a replacement.
- Anticipate presenting the design contract to the Type A Board in **July 2018**.

**ATTACHMENTS:**

None