MINUTES OF
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST
OPERATIONS COMMITTEE MEETING
HELD ON SEPTEMBER 20, 2018

PRESENT: Herbert I. Miller, Chair
Clay A. Cosse, Committee Member
Mark L. Morgan, Committee Member
Herbert T. Weysham, III, Committee Member

The Operations Committee of the Southeast Louisiana Flood Protection Authority-East (Authority or FPA) met on September 20, 2018, in the Franklin Avenue Administrative Complex, Meeting Room 201, 6920 Franklin Avenue, New Orleans, Louisiana. Mr. Miller called the meeting to order at 10:00 a.m.

Opening Comments: None.

Adoption of Agenda: The agenda was adopted by the Committee.

Approval of Minutes: The minutes of the August 16, 2018, Operations Committee meeting were approved.

Public Comments: None.

New Business:

A. U.S. Army Corps of Engineers update on Bellaire Drive seepage.

Stevan Spencer, Regional Chief Engineer, explained that the seepage is located on the east side of the 17th Street Canal south of the Hammond Highway Bridge in the Hurricane Katrina breach area. The U.S. Army Corps of Engineers (USACE) constructed a T-wall as remediation for the breach, excavated to remove the five or six houses on the site and placed granular fill. The seepage occurred after the USACE completed the work. The FPA retained consultants (Robert Bachus, Ph.D., P.E., D.GE, and Ray Martin, Ph.D., P.E, D.GE) to review the USACE's work. During the past year the USACE constructed a berm over the entire area; however, the seepage is still occurring. The USACE provided its report on the seepage, which was reviewed by the FPA's consultants and comments were provided to the USACE yesterday.

Mr. Miller commented that the USACE indicates that the seepage is nuisance seepage that is not a problem at this point and recommends a swell to collect the leaking water.

Chris Dunn, Assistant Chief of the USACE New Orleans District Engineering Division, explained that the USACE conducted its review process and developed its seepage analysis. The USACE's initial design (i.e., construction of the berm) was to restore the site to its preexisting conditions. The review process of the detailed analysis revealed

that additional work would be necessary. The report indicates that a small section of additional berm (roughly 25-ft. wide by 2-1/2-feet deep at the deepest point) needs to be added close to the floodwall along the full length of the site. The analysis shows that the northern half of the site is the critical area. The footprint of the scour hole caused by the breach of the floodwall during Katrina varied in size. The northern end the footprint was relatively narrow and at the southern end it intruded quite a bit into the protected side. Therefore, there is a constricted space at the northern end and a broad space at the southern end. In going through the seepage analysis, the USACE's team went back to the piezometer readings presented in the Bachus and Martin 2009 report and calibrated its models to the readings. When considering the different levels of constrain, the piezometer readings made more sense. From the original Bachus and Martin report, the heads measured at the northern end of the site were much greater than those at the southern end of the site. The report addresses a flow from northwest to southeast as a result of the piezometer readings. The USACE determined that additional material was needed for a canal elevation of 8-ft. to assure that it was well above the factor of safety for the additional checks conducted by the USACE. At some point in the future additional work will be needed to finish the USACE's original concept design. The USACE received the Bachus and Martin comments yesterday and its team is evaluating the comments. The USACE's team is finishing its comments on the Bachus and Martin report provided in June, 2018 and will provide its assessment to the FPA team. The next step is to conduct another meeting after all of the additional information has been exchanged. The additional work can then be performed or, if the dialogue results in the USACE taking a different direction, further steps can be discussed.

Mr. Morgan asked is the wall stable? Mr. Dunn replied, yes. Mr. Morgan asked whether recent investigations have been done of the flow patterns. Mr. Dunn responded that there are only a handful of piezometers at the site. The USACE, as a part of its detailed analysis, tried to take additional readings from the existing piezometers and took some additional soil samples with hand augers to verify the thickness of the clay blanket placed with the original T-wall construction. The data is presented in the report. Mr. Morgan commented that he assumed the piezometers readings were taken with the water flow at a steady, stable condition; however, the flow pattern will significantly increase when the PCCP pumps are operated. He asked would this have an effect on the seepage. Mr. Dunn responded that the heads in the canal would have the greatest impact and that he did not expect the movement in the canal to have an effect since the seepage still must filter through the soil under the floodwall.

Mr. Morgan commented on the FPA's consultants' assumptions and recommendations and that further investigations may be required as the assumptions were made by both teams based on older data.

Mr. Miller stated that the Committee received the USACE's report just a few minutes ago. However, in just looking at the review panel's final conclusions they do not disagree regarding the stability of the T-wall and acknowledge that uplift pressures will cause wet ground conditions and potentially impact the SWE. The review panel also

agrees that the initial and modified berms add weight and impermeable cover and with the recommendation to apply the berms over the entire breach area. The panel still recommends the installation of a drain to Bellaire Drive to minimize surface impacts and address public perception issues. Everyone is in agreement that the berm is not in danger of failing at this point and that the seepage is more of a nuisance; however, an agreement has not yet been reached regarding the solution to the problem. He encouraged the parties to meet as soon as possible and return with a recommendation that would deal with both the engineering solution and the public perception issue. He asked that Operations Committee members be advised regarding the meeting so that they can attend if they are available.

Mr. Spencer explained that there are three options for addressing the seepage: 1) stop it at the wall; 2) try to capture it, or 3) try to manage it. The FPA's consultants indicated that it would be difficult to stop the seepage due to the interlocks on the base and ends of the T-wall where it ties into the I-wall. The FPA's consultants support the concept of capturing the seepage with drains to remove the water from the site, which would address the public perception of a major, on-going problem. The USACE's concept is to contain the seepage and keep it below the ground as much as possible, thus reducing the flow of seepage into the street. The FPA's long term intention for the site (approximately eight lots) should be a consideration in determining a solution.

B. Discussion of requests for State of Louisiana Capital Outlay Program to fund certain projects for the Flood Protection Authority, East Jefferson Levee District, Lake Borgne Basin Levee District and Orleans Levee District for FY 2019-2020.

Derek Boese, Chief Administrative Officer, advised that each year the FPA and levee districts submit requests to the State of Louisiana for Capital Outlay Program (COP) funding. The requests are place in the queue and prioritized and evaluated. Wilma Heaton, Director of Governmental Affairs, will work with the appropriate parties so that the application packets are submitted in a timely manner.

Ms. Heaton explained that the projects included in the FY 2019-2020 funding requests were the result of a collaboration of senior staff and the various departments. The projects were determined to be priorities that are doable. The State does not have a windfall and receives over two billion dollars of funding requests each year. The State has about a $200 million line of credit. The FPA and levee districts may be able to obtain some planning and design monies; however, this would not be known unless the requests are submitted. In addition, this exercise places the FPA and levee districts in a position for potential Federal opportunities since COP applications will have quantified the projects with support from the elected officials. She recommended that the Board adopt the resolutions approving the COP funding requests.

Mr. Boese advised that an amendment is needed to the resolution approving the East Jefferson Levee District's COP funding request to increase the amount requested for the Jefferson Parish Lakefront Erosion Protection Repairs to $5 million and to indicate

that the project is for Reach 1 only. The request for the EJLD project is being modified based on preliminary information received from the FPA's consultant (CH2M Hill) as a result of an on-going study. COP funding for the projects listed in resolutions to be presented to the Board has been requested in prior years. The only additional project this year is the Lake Borgne Basin Levee District (LBBLD) safehouse, since the levee district does not currently have a safehouse facility. An estimate was used for the LBBLD safehouse based on information received from Jefferson Parish on the safehouses constructed for Jefferson Parish pump stations, which are of a similar design concept.

A motion was offered, seconded and unanimously adopted to recommend that the Board adopt the resolutions requesting COP funding for the FPA and levee districts for FY 2019-2020.

There was no further discussion; therefore, the meeting was adjourned at 10:20 a.m.