

**MINUTES OF
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST
ENGINEERING ADVISORY COMMITTEE MEETING
HELD ON FEBRUARY 3, 2011**

PRESENT: Thomas Jackson, Chair
Stephen Estopinal, Vice Chair
George Losonsky
Louis Wittie

The Engineering Advisory Committee met on February 3, 2011, in the Second Floor Hall of the Lake Vista Community Center, 6500 Spanish Fort Blvd., New Orleans, Louisiana. Chairman Jackson called the meeting to order at 10:20 a.m.

Opening Comments: Mr. Jackson commented that Committee meetings will be held when there is a need to meet and that several items needed to be discussed this month.

Adoption of Agenda: The agenda was amended to move Item A under New Business after Public Comments. The amended agenda was unanimously adopted by roll call vote.

Approval of Minutes: The minutes of the December 7, 2010 Committee meeting were approved.

Public Comments: None.

New Business:

A. Report on I-wall construction along Hayne Boulevard (LPV 106).

Mr. Jackson stated that this item was placed on the agenda due to a concern expressed in an e-mail by Mr. Goins relative to a visual observation of the on-going work.

Angela Desoto Duncan with the U.S. Army Corps of Engineers (USACE) provided a report on the project. The Hayne Boulevard Levee is sandwiched between the existing railroad embankment and Hayne Boulevard. The toe of the levee on the protected side is the curb for Hayne Boulevard and the toe of the levee on the floodside is the toe of the railroad embankment. In some instances the toe goes into the railroad embankment. Levee work would have required the acquisition of either a part of Hayne Boulevard or the railroad, and neither of these solutions was amenable. The new Hurricane and Storm Damage Risk Reduction System (HSDRRS) criteria limit the use of an I-wall to four feet or less. The stickup above the levee crown on Hayne Boulevard is 18-inches. The sheetpile for the 18-inch stickup is 45-feet long, which cuts off the sand layer. The 45-ft. long sheetpile is required by the seepage analysis. A concrete cap will be put in place to cover the sheetpile and slope paving will be constructed between the I-wall and the railroad embankment to alleviate the need for grass maintenance. In addition to the massive railroad embankment, there is foreshore protection in the lake in this area.

Old Business:

A. Status of issue of corrosion protection of St. Bernard T-Walls.

Mr. Jackson stated that Rickey Brouillette with Office of Coastal Protection and Restoration (OCPR) advised that the State is proceeding in terms of gathering together a panel of experts to meet on this issue. Mr. Jackson requested that Robert Turner, Regional Director, represent the SLFPA-E at the meeting.

B. Outfall Canals – Status of task orders issued to Halcrow on review of USACE design and analysis of remediation work and on checking stability of existing conditions along the outfall canals, and update on meetings with S&WB.

Mr. Jackson commented that he received the report on the London Avenue Canal. Mr. Turner reported that, in general, Halcrow has determined that in the areas where the remediation work is being done and the areas where the 8-ft. safe water elevation was very close on existing walls, the tipping point is about elevation +10 to +11 feet. Halcrow was requested to prepare a map for both sides of each canal to show this point geographically along the canals. He pointed out that the controlling case may not always be global stability—in some cases it is heave associated with seepage on the protected side. Mr. Jackson asked whether Halcrow is checking failure towards the wet side. Mr. Turner explained that the global stability is being checked along the entire reach of each of the canals based upon the elevations that are now being used for low water elevations in the canals and there has not been a problem. He discussed some additional work that could be done by the contractor in one particular area to increase the factor of safety and advised that further information is being developed on this proposed work. The USACE has revised their plans for the area along the Orleans Avenue Canal between Harrison and Filmore Avenues to alleviate some concerns that were expressed.

Mr. Jackson reminded everyone that the USACE checked the stability of the outfall canal levees/floodwalls to elevation +8-ft. (the safe water elevation). The Engineering Advisory Committee asked the question, what would happen if the water level rose above elevation +8-ft.? The Committee is discovering that after the water level reaches elevation +10-ft., there is another 2½ to 2½-plus feet before the water can escape these retaining walls, and that the walls are not stable enough to contain the water to that additional height. The Committee adopted a motion to open discussions on addressing this problem. Potential solutions may include the placement of notches along the walls or a complete degrading of the walls to a level that would allow some freeboard above the safe water elevation. The reports by Halcrow suggest that the Committee's concerns are valid. Mr. Jackson recommended that a dialog be opened with the USACE and that the USACE be informed about these findings. He noted that Karen Durham-Aguilera, former Director of Task Force Hope, initially brought up the idea of lowering the walls at a USACE meeting. He pointed out that a spillover is a controllable situation; however, a breach is not controllable and could shut down the pumping system. Mr. Estopinal commented that he would like to see a review of the hydrology. The Committee discussed pumping capacities in relation to head conditions.

Mr. Estopinal recommended that the Committee pursue the degrading of the floodwall to a reasonable elevation with the USACE. He added that he wanted to see conveyance data on the outfall canals. Mr. Jackson stated that the meeting with the USACE should include its hydraulics section. He pointed out that the SLFPA-E's unofficial request to the USACE for a clean out template that coincides with the calculations of the current stability calculations should be kept in this mix. Mr. Jackson commented that he discussed the request for a template with Marcia St. Martin, Executive Director of the Sewerage and Water Board (S&WB), and that she agreed with the need for a template. This is basically the beginning of an agreement on rules of operation. He stated that other issues relative to the rules on operation of the outfall canals need to be addressed.

Mr. Jackson recommended that the SLFPA-E bring up its concerns and the findings of its consultant at the proposed meeting with the USACE. Mr. Losonsky commented that the USACE's response to the SLFPA-E up until this point has been based on conjecture and not based on analysis on their part. Mr. Jackson stated that he would also like to know the velocities for each of the canals. Mr. Turner was requested to set up the meeting with the USACE. The S&WB will be contacted about the meeting.

A motion was offered, seconded and unanimously adopted, to continue the discussion on the stability issues along the three outfall canals with the USACE's geotechnical and hydraulics sections.

Mr. Jackson asked that Halcrow provide an executive summary that would include all three outfall canals.

C. Issuance of Task Order with Taylor Engineering, Inc. on review of USACE Hurricane Surge Frequency Analysis.

Mr. Turner reported that the task order with Taylor Engineering, Inc. (Taylor) has been executed with a not to exceed cost of \$49,500. A copy of the task order is being sent to Board members. The task order was issued under the current ID-IQ contract with Taylor and can be modified as needed. Deliverables will be in the form of reports, tables and maps. The task order deals with the storm frequency analysis and risk communication work with the public on the HSDRRS and how it relates to the way the hydraulic modeling was done and how the storm surge and wave heights were calculated. The task order is broken into three parts:

- 1) A review of what was done by the USACE, including the frequency analysis, selection of the storms and the JPMOS method, and bringing that information to the Committee and Board.
- 2) Summarizing the HSDRRS design for the existing conditions once everything is constructed. Graphics will be used and maps generated showing all of the reaches within the Lake Pontchartrain & Vicinity Project and the storm surge and wave heights and overtopping rates for both the one percent and the point two percent chances of occurrence.
- 3) The estimation of the modified HSDRRS design height for point two percent overtopping criteria.

Mr. Losonsky requested that updates be provided at the Committee meetings on this task order.

D. Request for the USACE to provide a canal Template for future canal excavations in the London Avenue, Orleans Avenue and 17th Street Outfall Canals.

Item was discussed earlier in the meeting.

E. Investigation of the concept of lowering the height of the outfall canal floodwalls to some level determined appropriate above the safe water elevation of 8-ft.

Item was discussed earlier in the meeting.

New Business:

B. Discussion of seepage repairs at Pump Stations 2 and 3. (LBBLD)

Stuart Williamson, Lake Borgne Basin Levee District (LBBLD) Executive Director, explained that Waldemar S. Nelson and Company was selected to provide engineering services related to the seepage issue at Pump Stations 2 and 3. The selection of the firm was through a Request for Qualifications (RFQ) process that met FEMA requirements in order to be eligible for FEMA reimbursement. A meeting was held at the site with the consultant. The work will be divided into two phases. Geotechnical work will be required and Eustis Engineering will be utilized by the consultant. A proposal was received yesterday for preliminary investigations (phase one) to determine the type of design that will be needed with an estimated cost of \$36,000. A scope of work will be developed for the second phase, which will include the design work. Mr. Williamson stated that he would like to have the work completed before the next hurricane season; however, this will be a challenge.

The Committee briefly discussed the policies of the Board concerning the RFQ and selection processes, contracts and task orders. Mr. Jackson asked that written procedures be developed that would include information relative to contract periods for ID-IQ contracts and the obligation of a prime contractor to use a subcontractor when the qualifications of the subcontractor are used to meet the qualifications of the RFQ.

There was no further business; therefore, the meeting was adjourned at 11:30 a.m.