

MINUTES OF
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST
OPERATIONS COMMITTEE MEETING
HELD ON JULY 9, 2008

PRESENT: Louis Wittie, Chair
Timothy Doody, Committee Member
Larry McKee, Committee Member

The Operations Committee met on July 9, 2008 in the Second Floor Hall of the Lake Vista Community Center, 6500 Spanish Fort Blvd., New Orleans, LA. Chairman Wittie called the meeting to order at 10:15 a.m.

Opening Comments: None.

Adoption of Agenda: The agenda was amended to include the discussion of utility relocations along Lakeshore Drive. The agenda was approved as amended.

Public Comments: None.

Discussion of Utility Relocations Along Lakeshore Drive.

Stevan Spencer, Orleans Levee District (O.L.D.) Executive Director, explained approximately six months ago the Topaz Street Floodgate was removed and replaced with an earthen levee, which was approved by a resolution of the Board. The City of New Orleans and local citizens concurred with this action because of traffic and security problems. The floodgate would have needed to be raised several feet to provide the 100 year level of protection had it not been replaced by the earthen levee. Relocation of several utilities was required, which included water lines and a 2-inch Entergy conduit that crossed the levee and powered the street lighting along Lakeshore Drive. The U.S. Army Corps of Engineers (USACE) determined that the relocation of the electrical line powering the lighting along Lakeshore Drive is not reimbursable. Entergy has taken the position that it is not responsible for the cost of this relocation. Attorneys for Entergy, the USACE, and the O.L.D. Non-Flood and Flood Divisions met yesterday, and each took a position that the entity they represent was not responsible for this relocation cost. The position of the O.L.D. Flood Division is that this relocation is a Non-Flood issue.

Louis Capo, O.L.D. Non-Flood Division Director, advised the estimated cost for this electrical utility relocation is \$80,000. He stated his understanding is that this may be a redundant line to supply power for Lakeshore Drive lighting and the businesses along the New Basin Canal—Entergy's thought being that in the event one line failed there would be a second line to supply power so that these businesses would not have to shut down. The Non-Flood Division does not have \$80,000 to fund this relocation, nor does it have funding for any of the other relocations that will be required along Lakeshore Drive. The estimated cost is between one-half to one million dollars to bring

all the utilities from the protected side to the Lakeshore Drive side of the levee. Entergy would like to move on this relocation within the next six to eight months.

Mr. Spencer explained that the Lakeshore Drive utility relocations (sewerage, water and electrical) are a result of the Lakefront levee raising. The utility providers are taking the position that they do not want to have any of their maintained facilities outside of flood protection. The Sewerage & Water Board, for example, wants to stop its maintained facilities on the protected side of the levee and make the owner responsible for the cost of running water and sewer lines over the levee and any required lift stations. A relocation at the owner's expense can be claimed and considered as a contribution towards local cost share credits.

Entergy will put in place a temporary aerial crossing over the levee until the permanent underground crossing is constructed. The lighting on Lakeshore Drive from Seabrook to West End only requires secondary voltage; however, high voltage is needed for the businesses along the New Basin Canal (West End) where two vaults are located. An upcoming issue will be the utility relocations that will be required when the Orleans Marina Floodwall is replaced.

Mr. Spencer explained that permits allowing the current electrical utility crossings could not be located. There was a general agreement between Entergy's predecessor and the Orleans Levee District at the time Lakeshore Subdivision was developed regarding street lighting; however, the agreement did not address levee crossings.

There was a brief discussion concerning the involvement of the Flood Division in the issue of Lakeshore Drive street lighting. Mr. Capo stated that since Lakeshore Drive is an evacuation route, the street lighting needed to be maintained. The Non-Flood Division maintains the Lakeshore Drive roadway. The USACE has indicated a section of Lakeshore Drive will be closed starting about the first of next year. Mr. Capo expressed concern about maintaining electrical power to the businesses.

Mr. Doody recommended that Mr. Capo contact the Division of Administration (DOA) and stress the importance of this utility relocation in order to keep the Non-Flood Division's tenants in operation and avoid potential litigation. He commented that Lakeshore Drive could operate and serve as an evacuation route without street lights.

Mr. Capo brought up the 1986 bond indenture in which Lakeshore Drive Improvements was listed. Mr. Doody pointed out that street lighting may possibly be addressed and potentially satisfy the intent of the bond indenture; however, this would not satisfy the needs of the businesses along the New Basin Canal.

It was pointed out that Entergy receives substantial revenues from Lakeshore Drive street lighting and should participate in this relocation cost. The O.L.D. has been attempting to obtain a decision on height requirements to accommodate the final levee elevation and theoretical section for 100 year protection. It was noted that the responsibility for relocation of utilities currently in place usually depends on the

language and requirements contained in the permit that was issued. These permits have changed and evolved over time. Reimbursement by the USACE can also sometimes depend on which was constructed first—the utility or flood protection. Entergy has indicated it is willing to enter into a long term payment plan for this cost.

Mr. Doody recommended that a deadline be set for a decision on the payment of this relocation cost so that the flood protection project will not be delayed and continued electrical service will be assured. If necessary, the responsibility for this relocation can be determined after the deadline and reimbursement of the cost sought from the responsible party. Mr. Spencer was requested to provide a deadline date.

Mr. Capo advised he would contact the DOA and its attorney today regarding this issue.

Discussion of Peer Review regarding the 17th Street Canal Seepage Problem.

Mr. Doody reviewed the status of this issue. The seepage problem has been on-going for some time and the USACE has done some initial work. SLFPAE asked the USACE, who readily agreed, to participate in a peer review in an attempt to identify the cause and whether the problem itself is a stability issue for the floodwall and levee. The CPRA had provided a small initial list of names for a peer review. The ASCE was also contacted and ultimately provided a list of approximately six names. Mr. McKee was requested to look at the list and lead the process. A discussion then ensued between Mr. Doody and Mr. McKee as to whether SLFPAE should undergo this process alone in order to keep the review truly independent. SLFPAE would then be in charge, set deadlines and have the peer review team responsible to SLFPAE.

Mr. McKee advised he contacted Julie LeBlanc with the USACE, who participated in a meeting with Mr. Doody and Mr. Jackson on May 30th at which some ground rules were laid out. The peer review team would review the geotechnical information, data and calculations available from the USACE, and either agree or disagree with the USACE's conclusions. If the peer review team disagrees with the USACE's conclusions, it would provide the reasons for the disagreement. Mr. McKee noted that additional names of structural and geotechnical people have been added to the list.

In order to expedite the process, Robert Turner, SLFAPE Regional Director, pointed out that authority could be obtained to hire the required professionals at a cost not to exceed \$20,000. A two phased process was considered. The first phase would be to determine whether the wall is stable and capable of supporting the anticipate loads in the 17th Street Canal, and the second phase would be an attempt to determine the source of the water. The USACE has amassed a considerable amount of data relative to the stability of the floodwall, including soil borings and as built-plans. A geotechnical engineer could determine whether additional tests are required for the analysis. In order to assure safety of the public, concerns about the stability of the floodwall should be put to rest first, and then the source of the water can be addressed.

Mr. Spencer pointed out the USACE performed an extensive stability study when it looked into the safe water elevations on the 17th Street Canal, and this information is readily available.

Colonel Jeffrey Bedey, Commander of the USACE Hurricane Protection Office, advised the USACE will make available to SFLAPE any and all information it has relative to the stability of the walls along the 17th Street Canal. He commented the USACE respected SLFPAE's right to have its own independent peer review and proceeded to discuss processes. He advised the USACE is currently working through and developing the processes that it will put in place and use in order to execute independent peer reviews consistent with WRDA 2007 and the requirements set out in Section 2034. He cited excerpts from Section 2034 and National Academies of Science (Chapter 4) Independent Review Principles and Considerations. He suggested that SLFPAE look very hard at the process that it puts in place to conduct the independent peer review so that it will have credibility and that it consider application of the National Academies of Science principles. The federal government is held to the National Academies of Science process for determining the scope and make up of an independent peer review team. He wanted to share this information with SLFAPE, along with some of the challenges being faced by the USACE in the development of its processes and procedures.

Mr. McKee agreed that the principles cited by Col. Bedey in general should be followed. However, in this situation the ability to act quickly with the selection of a team that the Authority is comfortable with and that as far as it can determine has no biases is needed.

SLFAPE and USACE representatives acknowledged that this is a public safety concern. Committee members discussed the need to accurately define the scope of services, the objectives and parameters of the review, and the need to expedite the review.

Mr. Turner pointed out what is anticipated being accomplished is an independent technical review of the USACE's information and data, much like a technical review of any submittal by the USACE. Should issues be presented as a result of the review that cannot be resolved between SFLAPE and the USACE, then conflict resolution could be done through the independent peer review process.

Col. Bedey brought up the London Avenue Load Test, which was a site specific load test, the second phase of which was a seep analysis. He suggested this data is also available for potential review. He discussed the need for parameters in the scope when using the term "stability of the wall". He reiterated the concern about public safety and explained the interim closure structures were constructed at the mouth of each of the three outfall canals due to the concern regarding the stability of the walls. The USACE has attempted to do its due diligence relative to the stability of the walls along their entire stretch on all three outfall canals and a report was generated. The USACE has acknowledged there is evidence of seepage in the vicinity of the 17th Street Canal breach site and an attempt is being made to determine whether there is a stability issue

and to find the source of that anomaly. The USACE has done some detailed and thorough analysis of this situation, which was presented to members of the Board. He advised that at this point in time there is no evidence to suggest that there is a stability problem below the canal's safe water level.

Mr. McKee offered a motion to recommend to the Board that it proceed with the employment of a structural engineer and a geotechnical engineer to review the data developed by the USACE and issue a report. This would be a technical review of information received from the USACE and a not-to-exceed amount of \$20,000 was set.

Mr. Turner recommended that a set of criteria tailored to this particular problem be developed in order to decide the qualifications desired for the professionals to be employed in this endeavor. An attempt must be made to assure that the individuals selected are not only independent from a standpoint of not having preconceived notions, but also have the qualifications determined necessary.

Mr. Doody recommended that a time table be developed and put in place. Mr. Turner advised he and Stevan Spencer would work on the time table and scope of work.

The motion offered by Mr. McKee was unanimously approved by the Committee.

Levee District Monthly Status Reports: (appended to minutes)

East Jefferson Levee District (EJLD):

Jonell Blowers reviewed the EJLD Monthly Status Report. In addition to the items listed in the report, it was noted that the cost to move Bea's Pavilion, which must be moved prior to the upcoming Reach 5 lift, is approximately \$25,000 and the pavilion may have to be moved again in several years. The cost to build the pavilion was approximately \$50,000; therefore, at this point the pavilion may be demolished. Comments were submitted on plans and specifications for the Bonnabel Breakwater and the project should begin in early 2009. Plans and specifications for the Fronting Protection for the Bonnabel and Suburban Pump Stations were recently received and comments are due shortly.

The EJLD Maintenance Department held a safety meeting which focused on hurricane preparation. The Department is continuing to inspect the Mississippi River Levee, moving debris from the slope pavement into piles for future pick-ups, and hauling material from the Bonnabel peninsula to difference locations along the lakefront to repair erosion from Katrina.

The second quarter DOTD levee inspection was completed at the end of May. The inspection report has been finalized and distributed. The EJLD continues to inspect and work with the USACE to resurface Reach 3, removing ruts and improving grass cover. The USACE's annual inspection of the EJLD system was completed June 12th and no major issues were noted.

The EJLD Police Department is continuing to patrol the Mississippi River Levee. Police and maintenance employees attended Levee Certification classes held in June in New Orleans. The Permitting Department is monitoring permitting activities. The EJLD continues to document all levee encroachments reach by reach as time allows.

Rights-of-ways documentation on the Mississippi River levee and other levees was briefly discussed.

Orleans Levee District (O.L.D.):

Stevan Spencer reviewed the O.L.D. Monthly Status of Activities (copy appended), along with the O.L.D. Monthly Status Report. He reported that the contractor for the IHNC Surge Reduction Project will be at the 30% submittal level for the bulkhead wall within a week. The height of the bulkhead is still to be looked into. Ownership of land is being determined and final right-of-way drawings are being prepared.

The replacement of the Orleans Marina Floodwall with a T-wall will result in the relocation of drainage, water and electrical utilities concurrent with the construction. This is a non-compensable cost that is the responsibility of the Non-Flood Division and will need to be addressed.

The Hurricane Levee Inspection was recently conducted over a two day period. Prior to this two-day inspection, O.L.D. personnel, accompanied at most times by DOTD personnel, conducted an in depth inspection of the hurricane protection system over a six week period by driving the levees, walking both sides of the floodwalls and operating all of the floodgates. The Mississippi River Levee Inspection has been completed. The inspection report is being finalized and will be issued soon.

Discussions are being held with DOTD concerning the Lakefront ramp crossings in Lake Terrace on the west side of the London Avenue Canal and at Rail Street on the issue of floodgates versus earthen ramps—the cost difference will be the responsibility of the local cost share partner. The USACE is putting together a schedule for the five ramp crossings located between the IHNC and London Avenue Canal, which are anticipated to be constructed concurrently for flood protection purposes.

Crossings are a major issue in reach LPV 109 (South Point to CSX Railroad). Raising of the I-10 on the bridge structure to cross over a T-wall is being considered at a cost of \$50 million versus an earthen ramp at a cost of \$75 million and compensability will be an issue. The present Highway 11 crossing is being looked at. The concept being considered for the I-10 bridge may also be applied to Highway 90.

Lake Borgne Basin Levee District (LBBLD):

Robert Turner reviewed the LBBLD Monthly Status Report. Indications from the Engineering Alternatives Report (EAR) are that a floodwall will be constructed across

Bayou Road with an elevated bridge crossing the floodwall so that it can be maintained as an open evacuation route. LA 300, which is approximately 500 feet away from and parallel to Bayou Road, will probably be closed with an earthen section or floodwall with emergency access for the fire station.

Mr. Turner provided a further report on the IHNC Surge Reduction Project. The USACE has released the contractor to order the large diameter concrete spun cast piles and the manufacturing of the piles can commence. A similar request is anticipated for the steel compression/batter piles. Performance of a full scale load test on a section of the wall after it is constructed, similar to the test that was done on the London Avenue Canal, is being discussed. Since the anticipated start date is September, the obtaining of at least a right-of-entry on lands required for construction is a major issue and the Authority is working closely with the State to get the rights-of-entry and rights-of-way in place. Reviews are being performed at least at a conceptual level of the IHNC design process and issues are being brought to the forefront to assure they are accounted for in the analysis. Mr. Spencer expressed his concern about the need for a structure at the Seabrook Bridge in order to prevent water from flowing in from the lake. Mr. Turner explained an analysis is being done on the existing earthen embankments and floodwalls along the IHNC to determine safe water levels. Models predict the lake surge levels for a 100 year event with the new barrier in place. If there is a problem maintaining these levels with the existing wall, it would be less expensive to construct a structure at Seabrook than to reconstruct the floodwalls along the IHNC. This decision will need to be made soon. Mr. Turner added that he would prefer a structure at Seabrook, which would provide redundancy in the system.

There was no further business, therefore, the meeting was adjourned at 12:45 p.m.