

**MINUTES OF  
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST  
OPERATIONS COMMITTEE MEETING  
HELD ON APRIL 5, 2012**

PRESENT: Louis Wittie, Chair  
Dave Barnes, Committee Member  
Timothy Doody, Committee Member  
Stephen Estopinal, Committee Member

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The Operations Committee of the Southeast Louisiana Flood Protection Authority-East (SLFPA-E or Authority) met on April 5, 2012, in Meeting Room 221, Orleans Levee District Franklin Administrative Complex, 6920 Franklin Avenue, New Orleans, Louisiana. Mr. Wittie called the meeting to order at 9:55 a.m.

**Opening Comments:** None

**Adoption of Agenda:** The agenda was adopted as presented.

**Approval of Minutes:** The minutes of the March 1, 2012 Operations Committee meeting were approved.

**Public Comments:** None.

**New Business:**

**A Briefing on American Society of Civil Engineers (ASCE) Report Card for Louisiana's Infrastructure: Levees.**

Chris Humphreys, PE, explained that this endeavor started in September, 2010, and lasted until December, 2011. The full report is available to the public on the ASCE website at [www.lasce.org](http://www.lasce.org). The levee committee consisted of volunteer members from ASCE, the consulting community, various agencies and academia. The committee depended on data provided by the levee districts. The grading criteria included Capacity, Condition, Funding, Operations and Maintenance (O&M), Public Safety and Resilience. Mr. Humphreys reviewed the grading criteria and the State's grades:

- Capacity was defined as the level of protection afforded relative to a 100-year flood event. Grade: D+
- Condition was based on regular U.S. Army Corps of Engineers (USACE) inspections judged as Acceptable, Minimally Acceptable and Unacceptable, and the system's performance. Grade: C-
- Funding was based on the availability of funds for O&M and for upgrades. Concerns were expressed about the availability of funding for O&M once the Hurricane and Storm Damage Risk Reduction System (HSDRRS) is completed. Grade: D+

- O&M included the availability of funds, personnel and equipment to perform regular maintenance. Concerns were expressed about the impact of the upgrades that are underway. Grade: C
- Public Safety was based on the ability of the system to meet 100-year flood protection under current design standards, capacity, condition and risk (population and critical infrastructure). The hurricane protection and river systems were included in the grading. Grade: D+
- Resilience is the ability to withstand overtopping and wave action without excessive erosion. It also included seepage and vegetation issues. Grade: C

A grade summary table was viewed with the overall grade of C- for the State and C+ for the SLFPA-E. Mr. Humphreys stated that he anticipates that this information will be helpful in dealing with funding and other issues. The East Jefferson, Lake Borgne Basin and Orleans Levee Districts were combined in the grading for the SLFPA-E. The greater New Orleans area levee districts were the only levee districts in the State that received a grade of A for Capacity. The SLFPA-E received the following individual grades: Capacity - A, Condition - B, Funding - C, O&M - B, Public Safety - C and Resilience - C. Projects that were underway were graded as if in place. Condition was based on whether the current design standards or the authorized standards were met.

Mr. Humphreys reviewed the overall recommendations for the State:

- Federal funding for O&M of new HSDRRS gates and pump station on navigable waterways and levee lifts.
- MRT only 89% complete, 70+ miles of levees are still below design grade – elevate levees.
- Federal funding to ensure hurricane protection levees below 100-year level are updated.

**B. Discussion of the preliminary elevation confirmation survey report by NTB Associates for the USACE’s monument “TED” at the Bayou Dupre structure.**

Lyles Budden with NTB Associates, Inc. (NTB) advised that NTB has provided the observational data on the permanent marker named TED. The final report has not yet been completed as some additional actions in the field must be completed in order to wrap up the project. A copy of the preliminary report was provided on observations based on a number of issues, including an 18 hour static observation on the points processed through OPUS, an independent base line process and a shot generated by broadcast through the Lica Net System. NTB would like to compare information generated through the Lica Net System and the Gulf Net System.

Mark Ballard with NTB explained that the three benchmarks nearest to TED were used and an 18 hour observation performed. The numbers provided in the spreadsheet were based on OPUS Geoid 03 and 09 elevations and a RTK elevation. He advised that NTB would like to take two additional RTK readings to have some redundancy. Mr. Estopinal commented that the elevation that was published for TED was given a standard deviation of one decimeter. He asked for NTB’s observation based on the

epoch upon which TED was established. Mr. Ballard responded that his observation on TED based on that particular epoch was 1.769. TED was reported at 1.753; therefore, there is about a 16 millimeter difference. Mr. Estopinal noted that this is well within a two centimeter confidence level. Therefore, it seems that TED was correctly valued at that epoch. Mr. Ballard pointed out that TED had not been observed since 2008. Mr. Estopinal commented that the OPUS solution (a 2002 epoch) with a Geoid 09 shows a change in TED of four centimeters, which would indicate a vertical movement and not a datum shift. The real time network (RTN) observations are on a modern datum. Mr. Ballard advised that the Gulf Net System will be used for verification. Mr. Estopinal observed that in terms of the new most modern datum, TED would be considered to be mis-valued four inches higher than its actual height. Mr. Ballard concurred and explained that the published value of TED is four inches higher than under the new datum definition. Additional observations will be needed in order to determine a reasonable assumption on whether this is a vertical displacement or datum shift.

Mr. Estopinal summarized that it seems that TED was appropriately valued. The plus or minus one decimeter for the standard deviation was appropriate for the observations. The standard deviation is about two centimeters. He commented that the mark used to put in the surge protection was more recent in its datum and observation and resulted in a difference of four inches between the floodwall and the surge barrier. A RTN observation for the St. Bernard floodwall would probably be about four inches lower than the published value. He pointed out that this is the result of being in a subsiding deltaic plane and datum shift. The floodwall was built to an elevation in accordance with the values in place at the time the construction commenced. He explained that elevations are dynamic and as time goes by the datum will shift; therefore, the values assigned to the top of the floodwall will change. Mr. Ballard offered to take an observation on the top of the floodwall. Robert Turner, SLFPA-E Regional Director, suggested tying into some of the monuments on the floodwall monoliths. Stevan Spencer, SLFPA-E Regional Chief Engineer, advised that the USACE will be taking at least three shots on top of all of the 2,500 monoliths in the Lake Borgne Basin Levee District and will take GPS readings on the shots.

### **C. Presentation on preliminary design of Lake Pontchartrain Seawall Erosion Project by Design Engineering, Inc.**

Wesley Mills with Design Engineering, Inc. (DEI) provided an update on the preliminary design for the Lake Pontchartrain Seawall Erosion Project. Reach 1B (3,440 LF) extends from a point east of Landry's Seafood Restaurant and continues east 300 feet past the Mardi Gras Fountain. Reach 1B includes three pedestrian crosswalks across Lakeshore Drive and one proposed decorative paved area front of Shelter No. 1. Reaches 4 and 5 (3,528 LF) start 200 feet west of Franklin Avenue and extend past Shelter No. 4. Reaches 4 and 5 include five pedestrian crosswalks and two proposed decorative paved areas with stamped colored concrete at the proposed site for Shelter No. 3 and at Shelter No. 4. The project includes two basic sections. The first section is a raised plaza section with an 8-ft. wide pedestrian walkway adjacent to the existing seawall. A decorative LED safety lighting system will be located 10 feet off of the seawall. Forty-nine LED lights will be installed along the pedestrian walkway on 18-ft. light poles with 100-ft. spacing on center. The raised plaza section will not be

represented at the crosswalks and the decorative paved areas. Benches will be staggered throughout the project. The project includes one-foot diameter concrete precast bollards to delineate the paved areas from the roadway with 6-ft. 8-in. spacing on center and offset six feet from Lakeshore Drive. The second section is a depressed area at the decorative areas and at the pedestrian crossings. The depressed section will expand 280 feet in the decorative areas and 200 linear feet (LF) at the pedestrian crosswalks in order to provide Americans with Disabilities Act (ADA) accessibility in lieu of the previously proposed observation area. The decorative area will include landscaping features. The proposed decorative paving and landscaping plan will mimic the paving and landscaping at the Mardi Gras Fountain.

Mr. Mills advised that the plans must be finalized and all required approvals obtained. The project schedule anticipates bidding for Reach 1B to take place in July, 2012, construction to begin in September, 2012, and completed in July, 2013. Reaches 4 and 5 will be bid upon the completion of Reach 1B.

Mr. Doody recommended that the DEI presentation be provided to the Non-Flood Protection Assets Authority.

#### **D. Presentation on AvGro Products, Mend and Crop/Turf.**

Randy Loup, CEO of AvGro Products, explained that AvGro is soil optimizing bio-tech company with a non-synthetic suite of products. AvGro products are used to establish and maintain turf having an all natural complex mineral structure that binds with soil particles, retains moisture, reduces leaching into ground water and regenerates the soil food-web. Mr. Loup discussed a levee demonstration project with the USACE on the Mississippi River Levee in Empire, LA, in September, 2009. Germination occurred on day 3, turf establishment was underway on day 5 and the turf was fully established 14 days after seeding. In addition, root mass and bio mass were increased. LSU studied AvGro for the USACE and recommended its use in soil with less than 4,000 salt particles per million. A JESCO/USACE report recommended use of Avelis technology (AvGro) on turf establishment in saline clays. Another trial concluded that AvGro increased soil moisture content by as much as 25 percent over controls and root length and root surface increased by 40 percent despite the reduction of nitrogen by 50 percent. AvGro reduces the need for synthetic fertilizer and decreases the need for moisture. AvGro is a soil amendment with no fertilizing properties. It is non-water soluble and reduces the need for fertilizing properties by 50 percent and increases the moisture retention by over 30 percent. Mr. Loup recommended that AvGro be applied once or twice each year after turf is established. The recommended product for maintenance (Soil Mend) costs \$2,250 per ton. During the establishment period one-half ton per acre (1,000 pounds) would be used (\$1,125 per acre) in the first year. Use of 500 pounds per acre is recommended for maintenance (\$575 per acre). Mr. Turner requested that Mr. Loup provide a list of projects where the products were used.

#### **E. Discussion of draft SLFPA-E Communications Plan.**

Ricardo Pineda and Kim Floyd with Kim Floyd Communications participated in the meeting via telephone conference.

Mr. Pineda advised that Ms. Floyd is part of the Schulkens-Floyd communications team, which was retained by the SLFPA-E to improve communications as provided in the Strategic Plan adopted by the Board in the summer of 2011. In accordance with Item IV - Goals and Objectives - Item B, the Board is to develop an effective communications plan with accountabilities to better communicate to the public through local and national media outlets. Ms. Floyd has taken the lead on developing a communications plan for the Board's consideration and collaborated with Mr. Turner on the plan. Mr. Pineda reviewed the draft plan several times prior to it being sent out. Ms. Floyd has a great deal of experience working with flood risk management agencies in California.

Ms. Floyd explained that as a part of the Authority's Strategic Plan that she and Steve Schulkens were tasked with the development of a Strategic Communications Plan. Specific mention was given to the need for the communication of residual flood risk and the public shared responsibility in flood risk reduction. Effective communication and community outreach are critical to the Authority's ability to build and maintain trust with the people who will pay for the on-going operations and maintenance (O&M) of the flood protection system.

Ms. Floyd advised that the planning process started with public opinion research. She and Mr. Schulkens conducted one-on-one interviews in April of 2010 with mid-level community business and civic leaders identified as important stakeholders to the Authority. A total of 18 stakeholders were interviewed in 13 interviews. The interviews were conducted to determine what the stakeholders knew about the Authority and its role in flood protection. Interview inquiries included current flood risks, awareness of actions to improve flood protection, understanding of the roles of the various Federal, State and local agencies involved in flood protection, opinions on the use of tax revenues for long term O&M of the flood protection system and the public's tolerance for tax proposals for O&M, and effective ways to share information with the public served. The interviews demonstrated that the Authority's role was not well understood. The stakeholders indicated that certain questions should be addressed, such as, what is the SLFPA-E, what are its goals and jurisdiction, when does it meet, and how does its work impact the various neighborhoods. It will be difficult for the Authority to meet its objectives of dealing with residual flood risks and having the support needed to gain the financial wherewithal to deal with O&M without answering these questions and establishing a solid foundation for awareness in the community. Three clear challenges emerge from the stakeholder interview process related to the Authority's purpose, mission and responsibilities.

Ms. Floyd stated that a number of opportunities are identified in the draft Strategic Communications Plan. There was some optimism amongst the stakeholders interviewed that the consolidated government system started with the formation of the SLFPA-E could lead to a more streamline, responsive and cost effective program for flood management in the region. The stakeholder interview findings were strongly considered in the development of the draft Strategic Communications Plan. The draft communications plan is very ambitious and was laid out to cover only the first year activities. It is a comprehensive look at the level of effort that the consultant considers is needed for the Authority to connect with the residents served. The goal and

objectives are to increase public awareness about the roles and responsibilities of the Authority in order to establish a foundation for the support of increased O&M funding.

Ms. Floyd explained that the plan starts with a recommendation for additional public opinion researched, especially concerning the Authority's future funding issues. Six focus groups with two groups in each of the three parishes are recommended. The findings of the focus groups should be considered when fleshing out the key messages. There is a need to further develop the contact stakeholder database. A fairly comprehensive database of nearly 200 community groups was developed in the process of targeting stakeholders for interviews. She commented on community group networking, the desire of these groups to partner with other agencies and share information and resources, and on the effectiveness of grass roots public outreach.

Ms. Floyd stated that the Authority currently has three communications firms under contract. The Board must first review the plan and determine whether it includes all of the required tasks. A final plan must be packaged. She suggested that the final plan be submitted to the consulted groups and that talk proposals and value added assistance be requested. The Authority should then move forward with implementation. Ms. Floyd stated that with the number of community resources at the Authority's disposal that the Authority's best investment would be to make someone on its staff responsible for community engagement as a full time activity or hire someone to be the Authority's community relations coordinator. This individual would consistently be out in the community networking with community groups and making the Authority a trusted, known commodity. At some point there may still be a need for assistance from a public relations consultant for dealing with tricky situations. The Strategic Communications Plan must be owned and implemented by the Authority. The draft plan as it is laid out is very personnel intensive and there are some direct costs associated with printing, graphic design and advertising. The direct costs for community outreach may potentially be offset with grants.

Ms. Floyd reviewed additional recommendations in the draft plan:

- Establishment of a Speakers' Bureau for the identification of multiple speakers and to ensure that all of the speakers are on the same page and have the appropriate materials.
- Building a Key Communicator Network by which information provided to community groups will be shared with other community groups in their networks.
- Small-group Stakeholder Meetings with neighborhood groups with shared interests.
- Elected and Staff Updates to strategically share information with elected officials and Federal, State and local governments about Authority activities.
- A Flood Risk Notice.
- Expansion of the Authority's web site.
- Development of an Emergency Communications Plan and protocol. Training can be obtained from FEMA through nomination by an emergency response agency.

Mr. Doody commented that the draft plan is very comprehensive. He asked that Ms. Floyd identify the most critical components of the plan that can be successfully

implemented so that the Board does not put into effect a plan that it may not be able to accomplish. Mr. Pineda pointed out the potential for FEMA grants for public outreach materials for pilot projects. Mr. Doody suggested that the plan be deferred until the May meeting. Ms. Floyd advised that she will prioritize the activities in the draft plan and submit this information to Mr. Turner for distribution.

The need for a communications plan for the tax proposition to renew the Orleans Levee District Special Levee Improvement Tax was discussed.

**F. Discussion of issuance of a Request for Qualifications for services in connection with FEMA certification of non-federal back levees in Orleans and St. Bernard Parishes.**

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Mr. Turner stated that he was seeking permission to advertise and issue a Request for Qualifications (RFQ) for services in connection with FEMA certification of the non-federal back levees in Orleans and St. Bernard Parishes. The USACE is doing a levee system evaluation report that will fulfill the certification requirements for the Federal levees. The USACE is also doing some work dealing with internal drainage and pump stations relating to the SELA Project. There is a question as to whether or not the USACE will be able to do anything with regards to a levee system evaluation of the non-federal levees. He asked that the Authority continue its pursuit of the non-federal levee issue on two tracks; i.e., 1) request that the USACE do a levee system evaluation report for the non-federal levees and 2) that the Authority be ready to engage a firm in the event that the USACE is not able to do this work. The non-certification of the non-federal levees will have a significant impact on base flood elevations in parts of Orleans and St. Bernard Parishes. The selected firm could start some of the necessary tasks and, if required, go forward with the full certification package. The process must be completed, including the repair of any problems detected, within a two year time period. The Authority is pursuing potential funding through several sources.

The Committee concurred with the advertisement of the RFQ as requested.

**G. Presentation by Atkins North America, Inc. on draft Levee Information Management System (LIMS) Strategic Implementation Plan.**

Tim Ledet, Project Manager with Atkins North America, Inc., provided an overview on the development of the Levee Information Management System (LIMS) Strategic Implementation Plan. The Strategic Implementation Plan is being funded through a Community Development Block Grant. The goal is to develop a strategic implementation plan that will set the framework for building the eventual system. Three overall actions were identified: meet with the eventual system stakeholders, analyze the input from the meetings and develop a plan. The plan will include a high level schedule and cost estimate. Key areas of focus include:

- Hosting of the system – Issues include whether the system will be hosted by the Authority, a levee district under the Authority’s jurisdiction or possibly the State, or the short term hosting by the contractor or another entity, and the purchase of

hardware and software. Standard costs are being developed and consideration is being given to staffing requirements to manage the system.

- Database software selection – Two main software packages are being considered, as well as costs for purchasing, maintaining and licensing the software. The skill set needed to manage the database software is also being considered.
- National Levee Database standard – The Authority expressed that the LIMS data system features be stored in the USACE National Levee Database schema.
- LIMS Front Page – Map Based – The map viewer mockup includes several potential Levee System Layers, including Real Time Gauge Data, Levee Watcher’s Input, Control Structure Status, Permit Tracking, Inspection Data/Reports, ROE/ROW/Easements and Closure Alerts.
- Modules:
  - Document Upload – includes attaching documents, drawings, as-built drawings to features on the map. Information can be captured, cataloged and queried.
  - Levee Inspections – The USACE’s Levee Inspection System data model can be followed. The inspection module will incorporate the data collected on a mobile application used to collection inspection data and photos and will have querying capabilities.
  - Permit Tracking – The Office of Coastal Protection and Restoration (OCPR) has begun an initiative to develop a permit tracking application as permits move through the system for approval. The OCPR plan will be monitored to determine how the SLFPA-E can have a direct connection to pull information that it is interested in tracking.
  - Operations and Maintenance tracking – Atkins is looking into the type of information that the levee districts would like to track and how to help manage the system.

Mr. Turner explained that the USACE has a tremendous amount of information stored in a management system; however, the Authority is unable to access this information system since it is located behind a firewall because of Homeland Security issues. The Authority is continuing its dialogue with the USACE on accessing the information. The USACE is willing to provide the raw information in a data dump.

Mr. Turner noted that a seminar entitled “Flood Control Solutions for Complex Flood Risk Reduction Systems” will be held on April 23, 2012, at the Lindy C. Boggs International Conference Center.

### **Levee District Reports:**

Written status reports were provided by the Lake Borgne Basin Levee District, Orleans Levee District and East Jefferson Levee District and are appended to the minutes.

There was no further business; therefore, the meeting was adjourned at 1:00 p.m.