

MINUTES
FORT BEND COUNTY LEVEE IMPROVEMENT DISTRICT NO. 14

August 28, 2018

The Board of Directors (the "Board") of Fort Bend County Levee Improvement District No. 14 (the "District") met in special session, open to the public, on the 28th day of August, 2018, at One Avalon Place, Sugar Land, Texas, inside the boundaries of the District, and the roll was called of the members of the Board:

Jeffrey Anderson	President
Sujeeth Draksharam	Vice President/ Assistant Secretary
Herbert Krog	Secretary/ Assistant Vice President

and all of said persons were present, thus constituting a quorum.

Also present at the meeting were Jason Kelly, Michael Moriarty, Craig W. Kalkomey and Gregg B. Haan of LJA Engineering, Inc. ("LJA"); Christina Perry of Myrtle Cruz, Inc. ("MC"); Greg Lentz of Masterson Advisors LLC ("Masterson"); and Angela Lutz and Veronica Seguin of Allen Boone Humphries Robinson LLP ("ABHR").

ENGINEERING MATTERS INCLUDING DISCUSS AND REVIEW COST ESTIMATES, AND FINANCING OPTIONS FOR IMPROVEMENTS

Director Anderson discussed the objective of the meeting including determining the necessary and appropriate projects and improvements to the District, financing or funding of the projects, discussion of a possible bond election, and anticipated future projects and improvements.

Ms. Lutz presented and reviewed a memorandum regarding the anticipated time line for the projects and a possible bond election, a copy of which is attached. It was noted the District has \$7,800,000 of authorized but unissued bonds.

Discussion ensued regarding potential projects and improvements and the timeline for a bond election. Discussion ensued regarding the District's available bonding capacity and the anticipated pump station project costs and concurred additional bond issuance authority will likely be necessary to fund future projects and improvements.

Ms. Lutz stated the District may need to hold a bond election and the voters may have to approve additional bonding capacity. Discussion ensued regarding the logistics and expenses associated with a bond election. Ms. Lutz reviewed a memorandum detailing information regarding a bond election, which is included in the Memorandum regarding bond election timeline.

The Board then reviewed and discussed the District's tax rate and the impact of issuing bonds.

Discussion ensued regarding possibly raising the District's levee. Mr. Kelly stated the estimated cost would be \$1,567,498. A copy of the levee raising cost analysis is attached. The Board discussed what actions would be necessary if they elected to raise the levee.

Discussion ensued regarding impacts to the District at various Brazos River levels. Mr. Kelly stated as the levee is currently designed, at Richmond Gage 59 feet forecasted during Hurricane Harvey, the lowest areas would have approximately eighteen inches of freeboard available. He stated if the levee is raised to a uniform height and provide a minimum of three feet of freeboard above Gage 59, the levee would have to be raised to elevation 81 feet, that would roughly equate to a 500-year event with an additional four feet at the lowest point on the levee.

Discussion ensued regarding purchasing additional flood fighting equipment or alternatives to raising the District's levee, including purchasing Tiger Dams or installing a wall. Mr. Kelly stated a Tiger Dam trailer with 3,000 linear feet of Tiger Dams costs \$150,000. He noted the trailer also includes a variety of equipment to be utilized in an emergency situation.

The Board discussed improvements and flood fighting preparation of other levee districts within Fort Bend County ("County").

The Board discussed possibly armoring the levee. Mr. Kelly stated the cost to do so would be approximately \$1,000,000 and would include armoring certain areas of the levee that could be more vulnerable to erosion. Mr. Kelly stated the Board could also consider coordinating with County to install timber piles to prevent sloughing and erosion in Ditch H. He stated the County has partnered with other levee districts and provided the labor and equipment if the district agreed to purchase the material. Discussion ensued regarding installing rip rap in areas that could slough or erode and it was noted rip rap would not likely be able to withstand the flow in the area and would likely not be an efficient deterrent to the erosion.

Mr. Kelly discussed and reviewed a document detailing the proposed pump station improvements, a copy of which is attached to the engineer's report and analyses. He discussed various options for improvements which would protect the District from 10, 25, 50 and 100-year events. Mr. Kelly then discussed the District's current capacity and the status of the design and plans for the new pump station. He noted the District's drainage and levee facilities meet all of the current Fort Bend County ("County") and Federal Emergency Management Agency ("FEMA") requirements. Director Draksharam discussed the possibility of County requirements changing and noted new levee districts may have different or additional requirements. Mr. Kelly stated the District's facilities as currently designed can manage an eight year flood and coincident

event. Discussion ensued regarding the District's capacity and the possibility of adding additional capacity.

The Board reviewed a diagram of pump station improvement components, a copy of which is included in the engineer's proposal. The Board concurred that the operator's sleeping quarters should be as far removed from the work area as possible. Director Draksharam discussed the pros and cons of a permanent pump station versus use of temporary pumps in an emergency event. The Board concurred it would like to proceed with construction of a permanent pump station to withstand at least a Category 3 hurricane. Mr. Kelly stated the current fence line will need to be expanded at the proposed location for installation for the permanent pump station to accommodate four forebays and up to five pumps and reviewed the estimated cost for the installation. Mr. Kelly stated all scenarios would include at least one back-up pump. He stated the District would need to obtain additional land from the Homeowners Association in order to install and construct the additional pump station and noted there would be additional costs associated with the acquisition of additional land.

Director Draksharam discussed possibly retro-fitting the current stop logs instead of installing sluice gates. He discussed the possible use of Gator Pumps during an emergency event and the need to have tractors on hand to operate the pumps. Director Draksharam discussed possible locations for the Gator Pumps and tractors to be staged during an emergency event. Mr. Kelly stated that numerous 90 horsepower Gator Pumps would be difficult to fit into the forebay at the District's current pump station. He noted there could be potential issues with the staging at the current pump station. Mr. Kelly stated the District may only get 2,000-3,000 gallons per minute pumped out of the lake if the Gator Pumps are staged in the forebay of the pump station. Director Draksharam stated he believes Gator Pumps would be beneficial to the District. Director Anderson stated obtaining tractors during an emergency event may be difficult and the County cannot guarantee tractors to the District.

Ms. Lutz asked the Board which pump station and pumping capacity options the Board would like Mr. Kelly prepare design specifications and bidding requirements for. She noted Mr. Kelly cannot proceed until the Board reaches a decision regarding the specific options for the design and capacity requirements for the pump station.

Director Draksharam stated he would like to review additional Gator Pump options. Mr. Kelly stated Gator Pumps may not be able to provide the District with the additional pumping capacity the Board desires, but noted he will provide costs for temporary pumps at the next regular meeting. Director Draksharam stated he believes the District should utilize Gator Pumps.

Discussion ensued regarding the District's current bonding capacity and the costs of various improvements and construction of additional facilities. The Board noted the desired improvements and facilities could cost approximately \$13,000,000.

Director Draksharam stated he would like to wait until the ATLAS 14 report is released before making a final decision regarding District improvements. After review and discussion, Director Krog moved to authorize LJA to proceed with the design and bid specifications for an additional pump station and necessary facilities to accommodate a 100-year event, but acknowledged the design may need to be altered once the ATLAS 14 recommendations are released. The motion died due to a lack of a second.

Mr. Kalkomey stated that Fort Bend County guideline changes based on ATLAS 14 may not be finalized and available until the second quarter of 2019. He noted it will likely only address occurrences up to a 10-year event. Mr. Kelly stated all of the pump station options presented would exceed the County's potential adoption of new ATLAS guidelines. Director Draksharam stated he believes the Board should wait until the ATLAS 14 guidelines are released. He stated he believes the District should consider raising the levee.

Discussion ensued regarding the actions the District can presently take to begin improvements. Mr. Kelly stated the District can work to obtain the land to the west of the proposed new pump station. After review and discussion, Director Anderson moved to authorize LJA to prepare an exhibit and take the necessary steps to begin acquisition of the property discussed. Director Draksharam seconded the motion, which passed unanimously.

There being no further business, the meeting was adjourned.

(SEAL)



Herbert P. Kelly
Secretary, Board of Directors

LIST OF ATTACHMENTS TO MINUTES

	<u>Page</u>
Memorandum regarding bond election timeline.....	1
Engineer's report, analyses and cost estimates for District improvements	2