

MINUTES OF THE SPECIAL WORK SESSION MEETING OF THE CITY COUNCIL OF THE CITY OF JERSEY VILLAGE, TEXAS, HELD ON MARCH 26, 2018 AT 5:30 P.M IN THE CIVIC CENTER AT 16327 LAKEVIEW DRIVE, JERSEY VILLAGE, TEXAS 77040.

A. The meeting was called to order by Mayor Ray at 5:32 p.m. with the following present:

Mayor, Justin Ray	City Manager, Austin Bleess
Council Member, Andrew Mitcham	City Secretary, Lorri Coody
Council Member, Greg Holden	
Council Member, Bobby Warren	
Council Member, Sheri Sheppard	
Council Member, Gary Wubbenhorst	

Council Member Holden was not present when the meeting was called to order, but joined the meeting in progress at 5:58 p.m.

Council Member Wubbenhorst was not present when the meeting was called to order, but joined the meeting in progress at 6:10 p.m.

Staff in attendance: Mark Bitz, Fire Chief; Kevin T. Hagerich, Director of Public Works; Matt Jones, Jersey Meadow Golf Course Golf Pro; and Bob Blevins, IT Director.

City Engineer, Frank Brooks, was present at this meeting.

B. Discuss and take appropriate action regarding the scope/design criteria for the Jersey Meadow Golf Course Berm Project as it relates to the Topographical Survey.

Mayor Ray began the item with overview remarks, stating that there were four (4) projects outlined in the Long Term Flood Recovery Study. They are as follows:

1. Wall Street Drainage
2. Golf Course Berm
3. Widening and Deepening White Oak Bayou
4. Elevation of Homes

He then called upon the City Manager, Austin Bleess, to give additional information concerning flood mitigation. City Manager Bleess told the Council that the County Commissioners Court has an item on their agenda tomorrow for the White Oak Bayou project. The agenda item is to authorize negotiation for the deepening and widening of White Oak Bayou from Tidwell to FM 1960. This includes the bayou through Jersey Village. It is just the E-100, not the E-127. But in speaking with Flood Control today they anticipate the design process to take about a year, and the construction process to take a year or so as well. Therefore, we should see progress on that happening in 2019.

Additionally, he told Council that earlier today he spoke with the Texas Water Development Board about the status of the City's grant application to elevate 17 homes. As a reminder, only \$90 million was allocated nationwide for these types of projects. Our total grant request was \$3,355,448, or nearly 4% of the total grant amount available.

In speaking with the State, he learned that the City's project has been "Identified for further review." Over the next two (2) months they will be giving the project another look before formally awarding the funds; but in the meantime the state will be readying the contracts

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necessary with the City to issue the funds once approved. Within the next 3-6 months the first phase of the elevation project will begin to move forward. This is great news concerning two projects of the Long Term Flood Recovery Plan that are moving forward!

After presenting this information, City Manager Bleess stated that the item posted for tonight's discussion concerns the scope/design criteria for the Jersey Meadow Golf Course Berm Project as it relates to the Topographical Survey. Background information for this item is as follows: The City has received the survey results from the Golf Course. The maps show where water would be contained depending on the different heights of the berm.

For example, a berm at the height of 107' would contain 105.6 acre feet of water. The Long Term Flood Recovery Plan had recommended a berm at a height of 108', which would have approximately 8" of freeboard. So the effective water level would have been 107.3'. The plan thought it would hold 152.5 acre feet of water.

If we dredge out some of the ponds or expand some of the ponds to use the dirt to help construct the berm that would create more space in them, thereby adding to the amount of water that could be contained. We could also look at adding a new pond where the old tennis courts used to be located.

One thought on the creation of the berm was to elevate the cart paths and use that as the berm. It may work well for a berm in some locations along the course, but certainly not all.

Based upon the survey results, and assuming a berm at the height of 107', we would anticipate the berm to be approximately 2' high along the majority of Rio Grande, and behind the homes on Village Drive. It also looks like we might need a berm of about 1' along the entrance driveway.

The City Engineer is present to help answer questions the Council may have on this. Tonight's goal is to accomplish a general path for the berm, and perhaps some ideas to incorporate it into the golf course. Next steps would be to get a construction cost estimate on a berm based upon our discussion tonight from the City Engineer.

Upon completing the introductory and background information, City Manager Bleess asked the City Engineer, Frank Brooks to explain the information he gathered in the topographical survey. Mr. Brooks explained that the golf course was surveyed with the goal of storing as much water as possible. Calculations showed the following:

- 104 Contour – 4.9 acre feet
- 105 Contour – 18.1 acre feet
- 106 Contour – 56.5 acre feet
- 106.5 Contour – 87.4 acre feet
- 107 Contour – 105.6 acre feet

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The 107 Contour puts about 6” of water in the maintenance barn during a flood event. This contour keeps water off the townhomes or south side of the course as well as homes on the southwest side and does not affect our neighbors.

In hearing this information from the City Engineer, City Council reviewed the elevation maps. During the review, Mr. Brooks explained that with a few modifications, the existing cart path could serve as a berm in some locations along the course. Council proceeded to ask questions about the information contained in the elevation maps. The City Engineer responded accordingly. Some of the issues that were discussed are as follows:

1. Safety in the event of a berm failure – Mr. Brooks explained that the maximum amount of water to be retained by the berm will be two feet. Therefore, the risk will not be catastrophic in the event that the berm fails. The water will merely drain. However, without the berm, there will be flooding.
2. Types of material for construction – Mr. Brooks explained that should the cart path be incorporated into the berm, the berm will be earthen with asphalt on top.
3. Where does the held water go – Mr. Brooks explained that the golf course has a drainage system to which a flap gate will be added. This gate will control the flow of water. When the water level of the bayou is up the gate will help retain the water on the golf course. When the water level of the bayou recedes, the gate will open and release the water.
4. Debris clogging drains – Mr. Brooks hopes that debris will not be an issue. He explained that the contour of the land slopes to the southwest corner of the course. This slope will funnel water to that area.
5. Renovating outfalls or the use of other control structures to prevent or plan for debris – Mr. Brooks told City Council that while renovating outfalls or adding other control structures are options that can be accomplished; these options are not a part of the design feature.

Council Member Gregg Holden joined the meeting in progress at 5:58 p.m.

6. Secondary Drains as opposed to another outfall – Mr. Brooks explained that additional drainage is needed for the ponds that will drain to the outfall.
7. Adding more ponds and dredging existing ponds deeper – Mr. Brooks stated that additional ponds can be used to create more holding capacity. At this point in the discussion, Council Member Mitcham handed out a map he created that depicts how the addition of ponds and/or the dredging of existing ponds could add more storage capacity. This map was study/reviewed by the Council.
8. Using the cart path as part of the berm. Mr. Brooks stated that in using the path, it will have to be raised one and half to two feet. He also told City Council that these improvements will not take on capacity from the Bayou or elsewhere. The improvements will just detain the water that falls on the golf course from going down Wall Street.

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9. The size of the berm – Mr. Brooks stated that the highest point will be at Rio Grande and Village with an elevation increase of 24” or two feet with the cart path being incorporated into the berm.

In closing the discussion with the City Engineer, Mr. Brooks told City Council that through this process of contours, it demonstrates that the berm will work.

Council then began discussion about the direction for staff and the criteria for the berm. It was determined that there will be at least a two-foot berm that tapers. The berm must:

1. Be effective;
2. Not impact others;
3. Be aesthetically pleasing and be comparable to the aesthetics of the community;
4. Not impact the playability of the golf course; and
5. Incorporate proper drainage away from homes along the golf course.

Council felt that a rendering of the berm was necessary in order to get an idea about how the berm will look in connection with the golf course and with the aesthetics of the community.

Council also discussed the concept of combining the Berm Project with the Wall Street Project. City Engineer Brooks explained that Wall Street is significantly lower than the golf course. In order to relieve Wall Street of flooding, a lower hydraulic system is needed to pump the water to the golf course. While street drainage improvements in the subdivision can be made, none will significantly improve flooding without a hydraulic pumping system. Council wondered how the pumping system would work. Mr. Brooks explained that conceptually the drainage from Wall Street and Carlsbad would be connected. A flap gate would be added to control the flow. A connector would also be added to direct the water to the old tennis court location where the hydraulic pump system would pump the water into the Harris County ditch. This pumping system would run off the City’s SCADA system. This system would have the capability of pumping a lot of water. Additionally, the pumping system could be used to pump water out of the golf course ponds prior to an event in order to provide more storage capacity.

Council wondered if we have the pumping system at Carlsbad and Wall Street if it would improve street flooding in the entire area. Mr. Brooks stated that his explanation was merely conceptual and the whole idea would need to be reviewed for the best location of the pumping system.

Council also discussed the size of the inlets. Mr. Brooks stated that increasing the size will help in certain areas. He added that flap gates on the inlets would double capacity.

Council discussed the costs. Current estimates are \$750,000 for the Berm Project and \$5M for the Wall Street Project. Council wondered if these costs could be offset by a pumping system. However, Mr. Brooks stated that without further review, he is not sure how much. Pumping would involve oversized pipe on Wall Street, while flap gates only permit water to

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go out and prevent taking on someone else's water. Additionally, widening and deepening the channel does not affect either of these projects.

Council Member Gary Wubbenhorst joined the meeting in progress at 6:10 p.m.

In completing the discussion, Council directed the City Manager to bring back the following information to City Council:

1. Cost of the berm design with a renderings;
2. Cost for Conceptual ideas to include adding a pumping station and adding and dredging ponds;
3. Cost for the Berm Project and Wall Street Project combined.

C. ADJOURN

With no further discussion, the meeting was adjourned at 6:30 p.m.

Lorri Coody, City Secretary

