

CITY COUNCIL - CITY OF JERSEY VILLAGE, TEXAS - AGENDA REQUEST

AGENDA DATE: December 18, 2017 **AGENDA ITEM:** Work Session

AGENDA SUBJECT: Golf Course Berm and Gray Water Projects

Department/Prepared By: Austin Bless **Date Submitted:** December 13, 2017

BUDGETARY IMPACT:	Required Expenditure:	\$0
	Amount Budgeted:	\$0
	Appropriation Required:	\$0

ATTACHMENTS: [Berm Project Information](#) from Long Term Flood Recovery Plan

BACKGROUND INFORMATION:

Tonight we are here to discuss the Golf Course Berm Project and the Gray Water Project. These are two separate projects that have been somewhat tied together, but by no means have to be completed at the same time.

Berm Project

The Berm project was recommended in the Long Term Flood Recovery Plan. The berm, at an elevation of 107.3, and an average elevation of 103.8, would provide for 6,641,390 cubic feet of space. (The berm was proposed at 108 feet to allow for the necessary freeboard, the water would be at 107.3 feet). That equates to approximately 49.7 million gallons of water. The berm project would lower the water surface elevation (WSE) of the bayou at Lakeview Drive by 0.05 inches in a 100-year storm. In a 100 year storm it would prevent 7 homes from being flooded.

The full flow summary, WSE comparisons, Structural Inventory Damages Summary, and flooded homes summary, as presented in the study, is attached here for easy reference.

The 2003 study from Brooks and Sparks recommended a berm with a top elevation of approximately 111.5 ft. It also recommended a minimum slope of 4:1 on the exterior side, and a 5:1 slope on the interior side.

The first thing that would need to be done before the berm project could begin would be to have a survey of the golf course done to ensure we know all of the elevations. That is necessary to know how high the berm would have to be at any given spot and how much water would be retained on the golf course.

The Golf Course Berm Project is necessary in order to accommodate the increased flow into the bayou system that would occur because of the increased drainage in the Wall Street Neighborhood. We cannot put more water into the bayou without retaining water somewhere else.

We should also ask the question of whether or not building to the 100-year storm is enough protection. The Houston area has seen a 500-year flood event each of the past three years. NOAA is considering adding up to 5 inches of rain to the typical 100-year storm classification. They will issue their final report in May.

