

11/26/2019

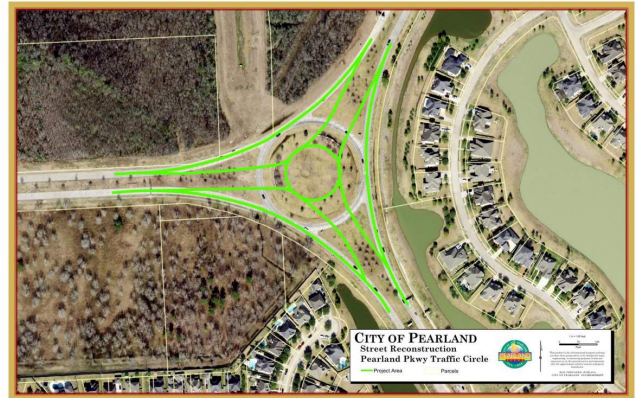
To: Mayor and City Council members

Another project in the 2019 bond issue for public investments, this at Pearland Parkway and McHard to improve traffic flow and safety, also getting ahead and preparing for additional traffic (+33%) that's coming. Clay



Pearland Parkway Traffic Circle Modifications

Scope: The project scope consists of the design and improvements to the existing rotary traffic circle at the intersection of Pearland Parkway and McHard to provide a more conventional geometry with a two-lane roundabout with an outside by-pass lane designed for higher speeds for the right turn movements. The project will also include the installation of sidewalks to connect existing gaps identified along the route and provide pedestrian connectivity.



Justification: Reconfiguration of the traffic rotary will improve traffic flows by providing for higher speed by-pass movements that result in a right existing movement and reduce conflicts resulting from the existing two-lane configuration. Reducing the traffic circle diameter by constructing a roundabout per Federal Highway Administration (FHWA) roundabout design criteria will provide the traffic calming effect needed to improve intersection safety.

Project Manager: Fatema Weekly

Designer: Alliance Transportation Group, Inc.

Contractor: N/A

Budget Info:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
General Obligation Bonds	TBS	3,272,000		3,272,000
General Obligation Bonds				-
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		3,272,000	-	3,272,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	389,404		389,404
Construction		2,200,000	2,200,000
Construction Management/Inspection			-
Construction Materials Testing		220,000	220,000
FF&E			-
Total Expenditures	389,404	2,420,000	2,809,404

Project Balance/Contingency			462,596
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Schedule Info:

	<i>Base Line</i>	<i>Current</i>
<i>Design Start</i>	July-19	July-19
<i>Bid Start</i>	January-20	April-20
<i>Construction Start</i>	June-20	
<i>Proposed Construction Completion</i>	August-21	

Rain Days: N/A

Highlights:

- The Design Engineer has completed a limited Phase I Environmental Site Assessment (ESA); the results did not reveal any Recognized Environmental Conditions (REC's) within or adjacent to the proposed roundabout project area.
- A Preliminary Drainage Analysis has started and indicates the existing storm sewer system will remain in place with the addition of inlets and storm sewer line extensions to accommodate the proposed roundabout layout and design.
- Annual Average daily traffic (AADT) counts represents the total traffic for a year and then divided by 365 days to obtain an Average Daily Traffic (ADT) on a roadway traveling in both directions per day. The chart below represents prior and projected ADT's for the project area both with and without the McHard Road extension:

Roadway	ADT			2041
	2018*	2021 Without Extension	2021 With Extension	
McHard Road	13,221	14,600	21,200	35,300
Pearland Parkway	30,542	33,700	37,000	61,600

*From TxDOT's Traffic Counts Database System.

43,763

58,200 +33%

Utilizing current and anticipated ADT's and current 2019 peak hour traffic counts (2,639 A.M./2,537 P.M.), as well as projected peak 2041 traffic counts (5,125 A.M./4,916 P.M.) the roundabout is being designed to provide for a safe and efficient movement of vehicular flow. The design also accounts for the anticipated increased traffic volumes turning to/from the McHard Road connection, which anticipates an increase of 274 vehicles on the roadway in the AM peak hours and 347 for PM peak hours.

- Utility coordination began to look at the layout and geometry of the roads to identify potential conflicts with existing utilities with the proposed improvements.
- Staff received a 30% plan set on November 7, 2019; City comments pending review with the project stakeholders.

Upcoming Work Items:

- Staff will return comments for the 30% plan set and advise the Engineer to continue with development of 60% PS&E.
- Design engineer will finalize and publish results of the drainage study for Staff review.
- The design engineer will continue development of a project phasing plan.

- Staff and design consultant will meet with the HOA to discuss proposed project design and plans for existing structures and landscaping currently located within the project limits.
- Staff will be working with Communications, Police Department and the consultant to develop educational material to inform the citizens how to utilize the new round-a-bout and its benefits.

Previous Memos: 6/20/19

Vicinity Map

