



CITY OF LA PORTE DRAINAGE AND FLOODING COMMITTEE MEETING AGENDA

Notice is hereby given of a meeting of the Drainage and Flooding Committee of the City Council of the City of La Porte, to be held December 9, 2019, in the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, beginning at 5:00 pm to consider the following items of business.

1. **Call to order**
2. **PUBLIC COMMENTS** *(Generally limited to five minutes per person; in accordance with state law, the time may be reduced if there is a high number of speakers or other considerations.)*
3. **STATUTORY AGENDA**
 - (a) Presentation, discussion, and possible action to approve the minutes of the November 11, 2019, meeting. [Councilperson Martin, Chairman]
 - (b) Presentation, discussion, and possible action to receive report regarding Harris County Flood Control District's (HCFCD) and Harris County Precinct 2's current and future plans relating to flooding in the City of La Porte. [Lorenzo Wingate, City Engineer]
 - (c) Presentation, discussion, and possible action regarding the status of current drainage projects. [Lorenzo Wingate, P.E., C.F.M., City Engineer]
 - (d) Presentation, discussion, and possible action regarding additional drainage concerns and providing staff with direction. [Lorenzo Wingate, City Engineer]
4. **Set date for next Drainage and Flooding Committee Meeting**
5. **Committee Member Comments** *Hear announcements concerning matters appearing on the agenda; items of community interest; and/or inquiries of staff regarding specific factual information or existing policy from the Committee members and City staff, for which no formal action will be discussed or taken.*
6. **Adjournment**

Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact the City Secretary's office (281-470-5019), two working days prior to the meeting for appropriate arrangements.

Councilmembers may attend in numbers constituting a quorum. This is a Drainage and Flooding Committee Meeting at which there will be no deliberation or formal action taken by City Council as a governmental body.

CERTIFICATE

I, Lee Woodward, City Secretary, do hereby certify that a copy of the December 9, 2019, Drainage and Flooding Committee agenda was posted on the City Hall bulletin board, a place convenient and readily accessible to the general public at all times, and to the City's website, www.LaPorteTX.gov, in compliance with Chapter 551, Texas Government Code.

DATE OF
POSTING

TIME OF
POSTING
TAKEN DOWN

Lee Woodward

Lee Woodward, City Secretary

JAY MARTIN
Chairman

DANNY EARP
Vice-Chairman



CHUCK ENGELKEN
Member

STEVE GILLET
Alternate Member

MINUTES OF DRAINAGE AND FLOODING COMMITTEE MEETING HELD NOVEMBER 11, 2019

The Drainage and Flooding Committee of the City of La Porte met on Monday, November 11, 2019, at the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, at 5:15 p.m. to consider the following items of business:

Committee Members present: Jay Martin, Chuck Engelken, Danny Earp, *(Steve Gillett available if needed)*

Committee Members absent: None

Council-appointed officers present: Corby Alexander, City Manager, Clark T. Askins, Assistant City Attorney, Lee Woodward, City Secretary

Call to Order - Chairman Martin called the meeting to order at 5:15 p.m.

2. Statutory Agenda

- (a) **Approve the minutes of the October 14, 2019 meeting. [Jay Martin, Chairman]**

Committee member Earp moved to approve the minutes; the motion was adopted, 3-0.

3. Staff Reports

- (a) **Receive report regarding Harris County Flood Control District's current and future plans relating to flooding in the City of La Porte. [Lorenzo Wingate, City Engineer]**

City Engineer Lorenzo Wingate noted the Harris County Flood Control District was not able to attend the meeting but would that he would be meeting with Harris County Community Development on the 20th to discuss the \$3.2 million in grant funds. Mr. Askins reported on his legal research that the City could not withdraw from Harris County's drainage CCN for taxing purposes.

- (b) **Presentation, discussion, and possible action regarding the statue of current projects. [Lorenzo Wingate, City Engineer]**

Board member Earp moved to authorize the City Manager to begin independent design on projects 1-3 (Brookglen Flooding Mitigation Analysis, Bayside Terrace Drainage Improvements, and Lomax/F101-03-00 Drainage Chanel Improvements) in terms of priority; the motion was adopted, 3-0.

- (c) **Presentation, discussion, and possible action regarding additional drainage concerns and providing staff with direction. [Lorenzo Wingate, City Engineer]**

Board member Engelken noted during discussion of item b that the street drainage issue around Bay Area Boulevard had not yet been placed on the list.

- (d) **Presentation, discussion, and possible action regarding engineering services for the analysis of the Sens Road detention pond. [Lorenzo Wingate, City Engineer]**

City Engineer Lorenzo Wingate discussed the drainage systems and current flow and the proposal from 5engineering, llc [*sic*]; company principal Kelly Humphries, P.E. also answered questions from the Committee. The Committee expressed a desire to have the City Manager come back with options at the next meeting.

4. **Set date for next Drainage and Flooding Committee Meeting** - The next meeting date was set for December 9, 2019.

5. **Committee Member Comments** – There were no comments.

ADJOURN – The meeting was adjourned without objection at 5:50 p.m.

Lee Woodward, City Secretary



REQUEST FOR DRAINAGE & FLOODING COMMITTEE AGENDA ITEM

Agenda Date Requested: <u>December 9, 2019</u>
Requested By: <u>Lorenzo Wingate, P.E., C.F.M.</u>
Department: <u>Public Works</u>
<input checked="" type="radio"/> Report <input type="radio"/> Resolution <input type="radio"/> Ordinance

Appropriation	
Source of Funds:	_____
Account Number:	_____
Amount Budgeted:	_____
Amount Requested:	_____
Budgeted Item:	<input type="radio"/> Yes <input type="radio"/> No

Exhibits: HCFCD Drainage Network Map

SUMMARY

Receive report regarding Harris County Flood Control District's (HCFCD) and Harris County Precinct 2's current and future plans relating to flooding in the City of La Porte.

RECOMMENDED MOTION

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date

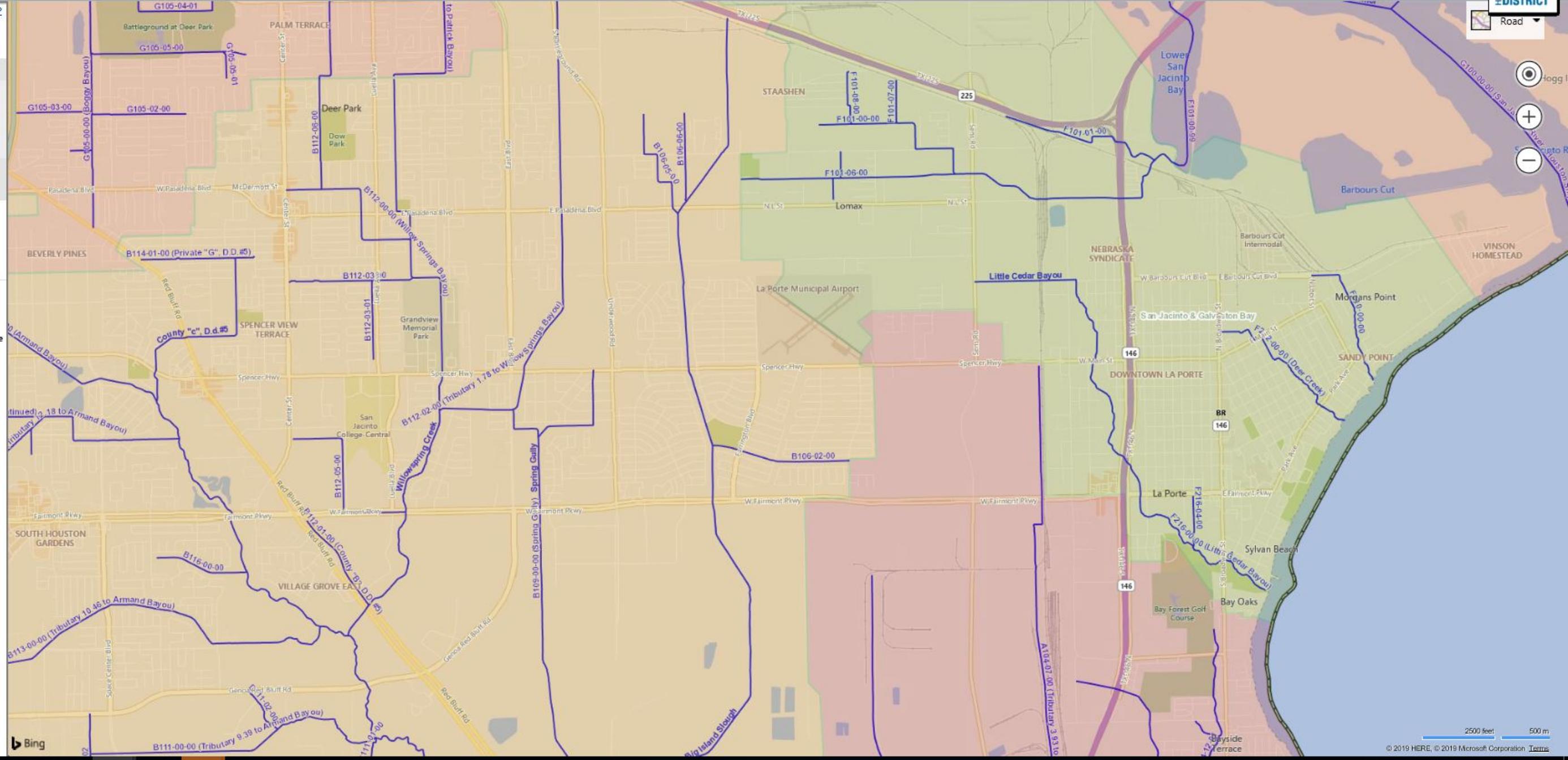
ADDRESS SEARCH [HELP](#)
Street Address, City, State, Zip Code
e.g. 8900 Northwest Fwy., Houston, TX 77092

MAP VIEW OPTIONS - Select One

- Mapped Floodplains
 - Floodway
 - 1% (100-year) Floodplain
 - 0.2% (500-year) Floodplain
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- Watersheds (color-coded)
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[Reset to County-Level View](#) [Disclaimer](#)

 An interactive mapping tool of the Harris County Flood District





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Exhibits: Project map
Project update chart
Harris County Drainage Network Map

SUMMARY

The December 9, 2019, City Council Meeting agenda includes a discussion item related to the Drainage Committee's desire to move forward with Brookglen Drainage Improvements, Bayside Terrace Improvements, and F101-06-00 (Pipeline Corridor) Improvements in lieu of waiting for grant funding.

Refer to attached exhibit(s) for updates on various drainage projects throughout the City.

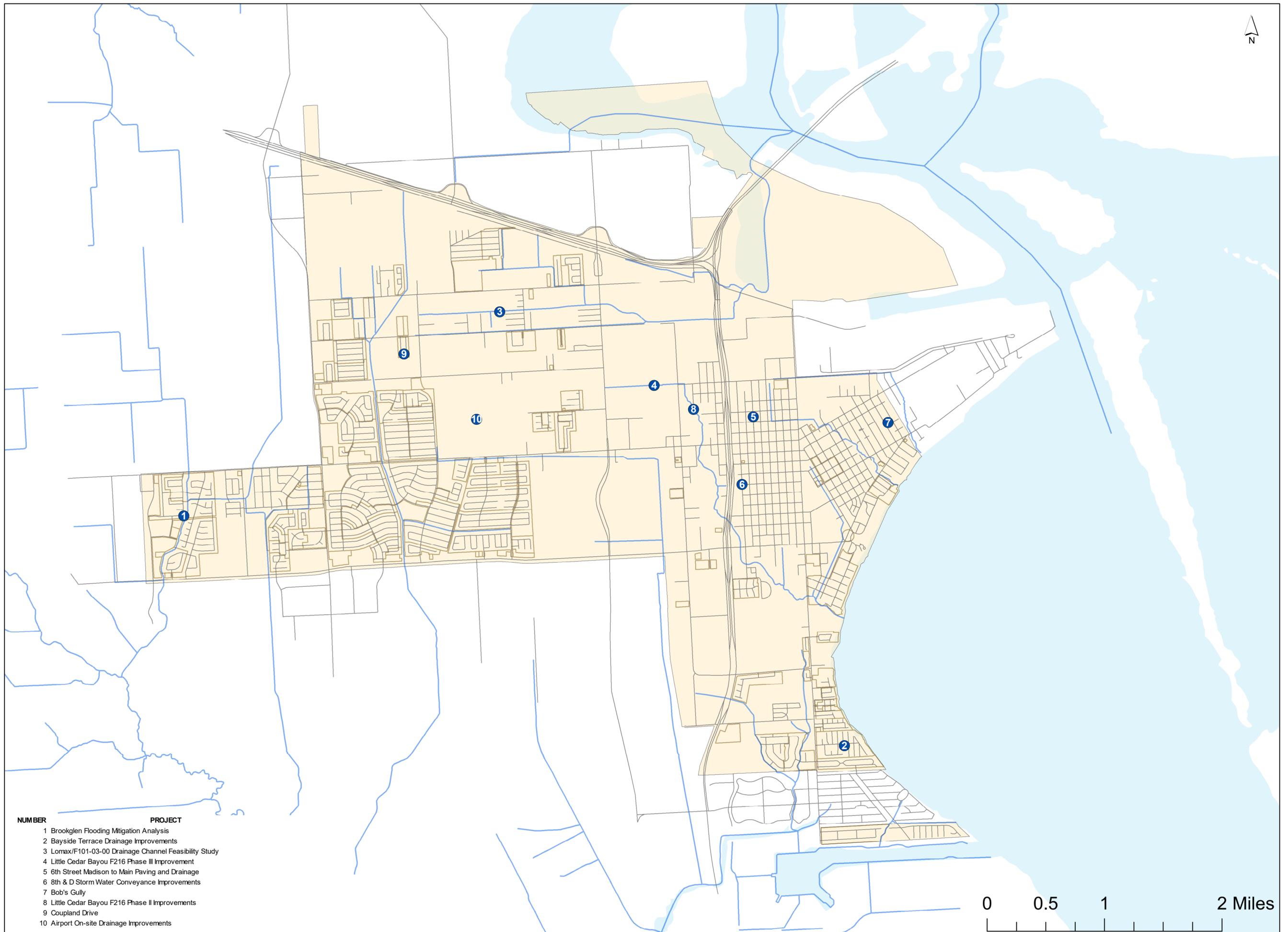
RECOMMENDED MOTION

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date

The City of La Porte Drainage Projects 2019



DRAINAGE PROJECTS

NO.	PROJECT	PROJECT MANAGER	DESCRIPTION	PROJECT PHASE (Feasibility/Preliminary Design/Final Design/Bidding/Construction)	Status	Potential Grant Funding	Potential COLP Cost Share	COLP Budgeted Amount	Estimated Completion Date	% Complete	On Schedule
1	Brookglen Flooding Mitigation Analysis	Public Works	The 2009 City-wide Drainage Study identifies the Brookglen subdivision as an area with significant drainage/flooding problems, attributed to a mixture of inadequate sewerage and insufficient channel capacity within the B112-00-00 Channel. Compounded improvements recommended within the City-wide Drainage Study could reduce the flood risk within the Brookglen area. This analysis would expand upon the recommendations provided within 2009 study.	Feasibility	Staff working with HCFCD to develop regional solution. HCFCD currently finalizing Technical Update. Staff submitted HMGP grant application for supplemental funding on October 17, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$4,000,021.50	\$1,000,005.38	\$275,000.00	March 2022	10%	No
2	Bayside Terrace Drainage Improvements	Public Works	Approximately 800 linear feet of RCP pipe, ranging in size from 15" to 24", exists within the Bayside Terrace Subdivision, which has not been properly maintained due to access issues attributed to limited access to infrastructure, provided within a five foot utility easement. Portions of Hamilton Street and Fondren Street utilize this system to convey stormwater to its outfall point of Galveston Bay. The system fails to function properly, causing flooding within the adjacent portion(s) of the subdivision. A proposed drainage study would discuss feasibility of rerouting this flows from the 800 feet of RCP, towards Bayside Dr. and utilizing the existing system within Bayside Dr. to convey the storm water within the existing system.	Feasibility	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020.	\$2,200,000.00	\$550,000.00	\$100,000.00	March 2022	0%	No
3	Lomax/F101-03-00 Drainage Channel Improvements	Public Works	Harris County Flood Control District's (HCFCD) F101-06-00 Channel system conveys storm water runoff from the Lomax area and ultimately outfalls into Lower San Jacinto Bay. The downstream section of the channel has been improved to ultimate capacity. An existing pipeline corridor, containing several pipelines located at depths ranging from approximately 2' to 18', cross the channel, limiting the depth of potential channel improvements. Moderate/heavy rain events, compounded with backwater conditions from this section of the channel, contributes to wide-spread flooding within the Lomax Area.	Feasibility	Staff submitted HMGP grant application for supplemental funding on November 26, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020. HCFCD has completed Technical Update and is in procurement phase for PER. Request to award engineering contract is anticipated to be placed on Januray 2020 Commissioner's Court meeting agenda by HCFCD.	\$3,200,155.00	\$800,038.75	\$150,000.00	March 2022	10%	No
4	Little Cedar Bayou F216 Phase III Improvements	Public Works	Phase I and Phase II Improvements to Little Cedar Bayou, from Hwy 146 to Madison, have either been completed or are currently awarded for construction. Phase I and Phase II improvements include, but are not limited to, excavating and disposing off- site soil as required for the new channel alignment, clearing and grubbing, demolition of existing structures, erosion control, and site restoration for approximately 5,533 LF of channel. Approximately 4,680 LF of channel remains unimproved upstream, with those improvements slated to be included within this project, to be considered Phase III. Survey data has been collected on this most upstream section. Routine maintenance of clearing overgrowth, trees, and obstructions; minor erosion control and slope stabilization; and desilting is planned to maintain existing conveyance capacity. Those maintenance operations are projected to begin late 4th quarter 2018 or early 1st quarter 2019 (calendar year). The following Phase III mitigation action is proposed, as recommended within the Hydraulic Analysis for Little Cedar Bayou Watershed HCFCD Unit F216-00-00: lowering the flow line of the Bayou 1 - 2 feet, from W. Madison to Sens Rd. Current channel side slopes would be modified to achieve 3:1 side slopes from W Madison St. to Sens Rd. An estimated 200,000 cubic yards are to be excavated from the channel. Over excavation is provided to yield sufficient storage volume in the pond after siltation and build-up in the pond bottom.	Feasibility	Staff submitted HMGP grant application for supplemental funding on December 20, 2018. Application pending TDEM selection. Awarded projects are anticipated to begin as early as January 2020. Staff has requested a budgetary proposal from consultant for Phase III improvements, including consideration of H Street drainage issue. Proposal expected week of Thanksgiving 2019.	\$2,500,000.00	\$625,000.00	\$825,000.00	March 2022	0%	No
5	6th Street Madison to Main Paving and Drainage	Public Works	The segment of 6th St from W. Madison St to W. Main St is considered part of Old La Porte, which was generally noted in the City-Wide Drainage Study as not having sufficient storm sewer capacity due to undersized storm sewer, undersized storm inlets, or not enough storm inlets. RPS-Klotz provided an analysis of the existing storm sewer system and identified problem areas within the project limits. Additional analysis is required to determine most efficient improvement alternative.	Feasibility	Executed contract with GLO effective March 9, 2019 through August 5, 2021. Consultant discussed preliminary modeling results with staff on 10/28/2019. Consultant proceeding with finalizing draft of PER. Staff received preliminary draft agreement for review from Harris County for \$3.4M allocation on 10/25/2019.	\$3,798,532.30	\$125,000.00	\$1,140,000.00	August 2021	3%	Yes
6	8th & D Storm Water Conveyance Improvements	Public Works	The area generally bounded by 8th Street to the west, Main Street to the north, 5th Street to the east, and D Street to the south experiences flooding during heavy rain events due to undersized culverts within the area. Increasing culvert sizes within the area will provide additional conveyance capacity within the existing open ditch system.	Preliminary Design	This project has been incorporated into the 7th Street Rehabilitation Project. Survey and PER authorized by council on June 10, 2019.	N/A	N/A	\$139,340 / \$1,850,000	June 2021	10%	Yes
7	Bob's Gully	Public Works	Obtained drainage easement along East B Street ROW in Morgan's Point from Boys and Girls Harbor. Coordinate with Harris County Flood Control & the Army Corp of Engineers to determine maintenance responsibilities. Consultant to provide technical memo analyzing channel capacity.	Feasibility	Analysis completed. Concluded that existing channel has capacity for current conditions.	N/A	N/A	\$50,000.00	September 2019	95%	Yes
8	Battleground Estates Phase II	Public Works	A proposed conditions hydraulic model was developed during the preliminary design for the N P Street Culvert Improvement Project, which recommended replacing the upstream portion of the existing composite structure at N P Street, with structures matching the downstream portion of the composite structure. That project allows for full utilization of the structure's capacity, as well as protect the channel during rainfall events that produce higher amounts of runoff. Per the recommendations of the Phase 1 report, a more detailed Phase 2 engineering analysis of segments F101-00-00 and F101-08-00, that are upstream of N P Street, as well as an evaluation of the roadside ditch drainage conduits within Battleground Estates should be performed to identify necessary improvements to address structural flooding within the area. The more detailed study would evaluate the impacts of culverts located upstream of N P Street, along F-101-00-00 resulting from the 10-, 50-, and 100-year rain event. Channel improvements, and increasing culvert sizes to provide sufficient capacity within culverts along the roadside ditches are the anticipated mitigation efforts.	Feasibility	Staff submitted HMGP grant application for supplemental funding on December 20, 2018. Project is on hold; awaiting supplemental grant funding.	\$880,500.00	\$220,125.00	\$65,000.00	August 2022	0%	No
9	Coupland Drive	Public Works	The proposed storm sewer improvements include re-sloping Coupland Drive to drain towards inlets located throughout the subdivision. The inlets will drain into proposed storm sewer ranging in size from 24" to 30" RCP. This storm sewer will then flow underneath the existing roadside ditch along L Street to a combined outfall with the existing roadside ditch to Big Island Slough. The proposed storm sewer underneath the existing ditch on L Street will be 42" RCP and the combined outfall will need to be a 60" RCP. These improvements will result in no net fill within the Big Island Slough 100-year floodplain. The proposed storm sewer was sized for the 5 year storm event, per the City of La Porte drainage criteria.	Preliminary Design	HDR is awaiting comments from TWDB before beginning 60% design. Construction to be incorporated into Lomax Lift Station Consolidation Project.	N/A	N/A	\$1,110,000.00	July 2022	30%	Yes

NO.	PROJECT	PROJECT MANAGER	DESCRIPTION	PROJECT PHASE (Feasibility/Preliminary Design/Final Design/Bidding/Construction)	Status	Potential Grant Funding	Potential COLP Cost Share	COLP Budgeted Amount	Estimated Completion Date	% Complete	On Schedule
10	Airport On-site Drainage Improvements	Public Works	On-site and offsite study determined there is no impact from airport drainage run off to the area north(Lomax) of the airport. The study determined there is impact to the Glen Meadows Subdivision. Onsite detention and increased capacity will be designed to mitigate the impact on Glen Meadows.	Bidding	Design phase has been completed. Bid opening held August 29, 2019.	\$2,200,000.00	\$244,500.00	\$248,467.00	March 2020	0%	Yes

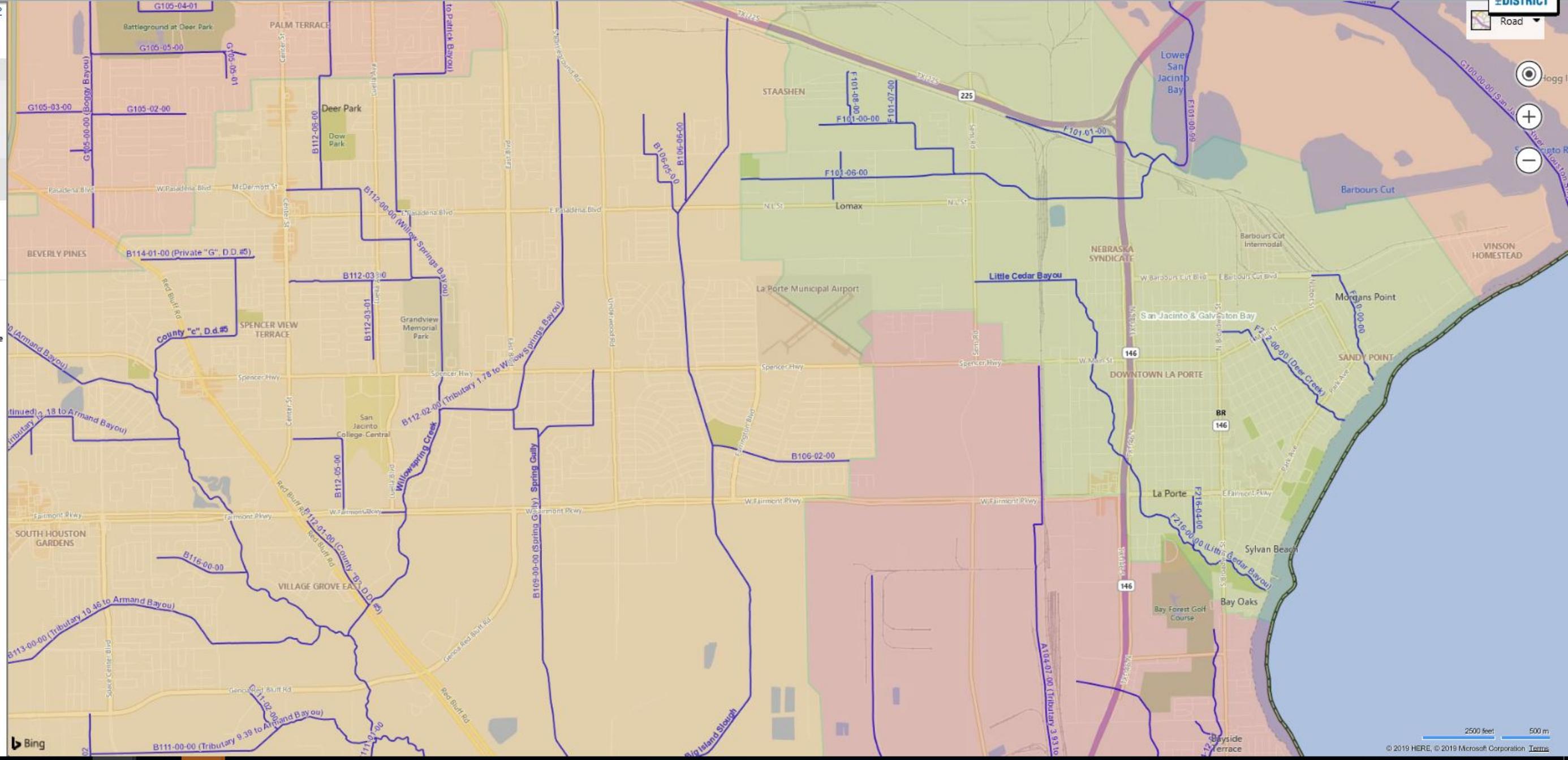
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Department: <u>Public Works</u>
<input checked="" type="radio"/> Report <input type="radio"/> Resolution <input type="radio"/> Ordinance

Exhibits: None

Appropriation	
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Budgeted Item:	<input type="radio"/> Yes <input type="radio"/> No

SUMMARY

Opportunity to discuss any drainage concerns not covered by previous items.

RECOMMENDED MOTION

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date