

JAY MARTIN
CHAIRMAN, COUNCILPERSON

MANDI WILLIAMS
COUNCILPERSON



CHUCK ENGELKEN
COUNCILPERSON
MAYOR PRO TEM
BILL BENTLEY
ALTERNATE, COUNCILPERSON

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 March 13, 2023, in the City Hall Council Chamber, 604 West Fairmont Parkway, La Porte, Texas, beginning at 5:00 pm to consider the following items of business.

Remote participation is available, also. Attend via a screen using this link:

<http://us02web.zoom.us/j/89760557875?pwd=MVJjcW1WYVJwRGtDVIE2TkVwUEdFZz09>.

Join by phone at 888-475-4499 or 877-853-5257. The meeting ID is 897 6055 7875 and the passcode is 454814.

1. **CALL TO ORDER**
2. **CITIZEN COMMENT** *(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 Drainage and Flooding Committee regular meeting held on February 13, 2023. [Councilperson Jay Martin, Chair]
 - (b) Presentation, discussion, and possible action regarding proposed phased drainage improvements within the Brooklen subdivision. [Lorenzo Wingate, Assistant Director of Public Works]
 - (c) Presentation, discussion, and possible action regarding status of 100-acre-foot detention pond project near the Pasadena Convention Center and Brookglen Subdivision, as established in amended interlocal agreement between the City of La Porte and the City of Pasadena. [Lorenzo Wingate, Assistant Director of Public Works]
 - (d) Presentation, discussion, and possible action regarding the Harris County Flood Control District's (HCFCD) and Harris County Precinct 2's current and future plans related to flooding in the City of La Porte. [Lorenzo Wingate, Assistant Director of Public Works]
 - (e) Presentation, discussion, and possible action regarding the status of current drainage projects. [Lorenzo Wingate, Assistant Director of Public Works]
 - (f) Presentation, discussion, and possible action to provide administrative staff of the City with direction, if necessary, regarding additional drainage concerns. [Lorenzo Wingate, Assistant Director of Public Works]
4. **SET NEXT MEETING**

5. **COMMITTEE COMMENT** *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. **ADJOURN**

If, during the course of the meeting and discussion of any items covered by this notice, the Drainage and Flooding Committee determines that a Closed or Executive Session of the Committee is required, then such closed meeting will be held as authorized by Texas Government Code, Chapter 551, Section 551.071 - consultation with counsel on legal matters; Section 551.072 - deliberation regarding purchase, exchange, lease or value of real property; Section 551.073 - deliberation regarding a prospective gift; Section 551.074 - personnel matters regarding the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; Section 551.076 - implementation of security personnel or devices; Section 551.087 - deliberation regarding economic development negotiation; Section 551.089 - deliberation regarding security devices or security audits, and/or other matters as authorized under the Texas Government Code. If a Closed or Executive Session is held in accordance with the Texas Government Code as set out above, the Drainage and Flooding Committee will reconvene in Open Session in order to take action, if necessary, on the items addressed during Executive Session.

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.

Pursuant to Texas Government Code Sec. 551.127, on a regular, non-emergency basis, members may attend and participate in the meeting remotely by video conference. Should that occur, a quorum of the members will be physically present at the location noted above on this agenda.

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 March 13, 2023, 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
COUNCILPERSON

MANDI WILLIAMS
COUNCILPERSON



CHUCK ENGELKEN
MAYOR PRO TEM

BILL BENTLEY, ALTERNATE
COUNCILPERSON

MINUTES OF THE DRAINAGE AND FLOODING COMMITTEE MEETING FEBRUARY 13, 2023

The Drainage and Flooding Committee of the City of La Porte met on Monday, February 13, 2023, at the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, at 5:00 p.m. to consider the following items of business:

Committee Members present: Chuck Engelken, Jay Martin, Mandi Williams

Committee Members attending remotely: None

Committee Members absent: Bill Bentley (alternate)

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

CALL TO ORDER – Chair Martin called the meeting to order at 5:00 p.m.

- 2. CITIZEN COMMENT** *(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.)*

There were no comments.

3. STATUTORY AGENDA

- a. Presentation, discussion, and possible action to approve the minutes of the Drainage and Flooding Committee regular meeting held on January 9, 2023. [Councilperson Jay Martin, Chair]**

Member Williams moved to approve the minutes; the motion was seconded by Member Engelken the motion was adopted, 3-0.

- b. Presentation, discussion, and possible action regarding the status 100-acre-foot detention pond project near the Pasadena Convention Center and Brookglen Subdivision, as established in amended interlocal agreement between the City of La Porte and the City of Pasadena. [Lorenzo Wingate, Assistant Director of Public Works]**

Mr. Wingate noted Rick Masters and Sarah Benavides, Senior Asst. Director of Public Works, of the City of Pasadena were present online. Mr. Wingate said the Corps of Engineers has come out and toured the site and given direction to the City of Pasadena, after which the Corps will issue a determination, which he expects in the next four weeks. Member Engelken requested information as to whether penalties may be imposed for further delays. Ms. Benavides confirmed dirt removal of fill material that had been added to the site has begun and should take another couple of weeks, and that then the Corps would have 30-60 days to make a final determination. Member Engelken asked that a timeline be prepared for the next meeting, from the amendment to the interlocal agreement through expected completion. Ms. Benavides agreed to supply the schedule.

- c. Presentation, discussion, and possible action regarding the Harris County Flood Control District's (HCFCD) and Harris County Precinct 2's current and future plans**

related to flooding in the City of La Porte. [Lorenzo Wingate, Assistant Director of Public Works]

Jonathan St. Romain provided an update on HCFCD projects. He noted design was being completed on Brookglen's north detention basin. Due to the project receiving federal funding, HCFCD is required to perform an environmental assessment (EA), prior to construction. Mr. St. Romain explained that HCFCD is in the process of procuring professional services to complete the environmental assessment. HCFCD expects to award the EA contract by early April. Construction is expected to begin following completion of the EA, possibly in late spring/early summer. Mr. St. Romain said HCFCD did not anticipate closing Gladwyne Lane, but all is pending on a series of events tied to letters of no objection from CenterPoint Energy. Mr. Wingate clarified that the detention ponds will provide mitigation as the drainage channels will not be improved. Member Engelken expressed additional concern about drainage impacts to Brookglen overall.

Mr. St. Romain said the Deer Creek F-212 project is in conceptual design and that, although it would need a Corps of Engineers designation, the work can and will be phased so a portion of the work can be bid this fall. Regarding F101-06 Channel Improvements, an additional study has confirmed some improvements to the west can be added for final design, once approved by the Harris County Commissioners Court and be bid and constructed in early 2024. Member Engelken asked that HCFCD provide better cleaning at the lots in Brookglen.

d. Presentation, discussion, and possible action regarding the status of current drainage projects. [Lorenzo Wingate, Assistant Director of Public Works]

Mr. Wingate said the City has applied for an additional grant through Precinct 2 for the Northside Drainage Improvements. He said there was also an item on tonight's Council agenda for additional funds for the Bayside Terrace project.

e. Presentation, discussion, and possible action to provide administrative staff of the City with direction, if necessary, regarding additional drainage concerns. [Lorenzo Wingate, Assistant Director of Public Works]

Member Williams addressed the lift stations in Lomax flooding raw sewage into the area during heavy rains.

4. SET NEXT MEETING

The next meeting was set for March 13, 2023.

5. COMMITTEE COMMENT – *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.*

Chair Martin thanked Sarah Benavides for attending on behalf of the City of Pasadena and Johnathan St. Romain for HCFCD.

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: March 13, 2023

Requested By: Lorenzo Wingate, Asst. Director

Department: Public Works

☒ Report ☐ Resolution ☐ Ordinance

Exhibits: Future Brookglen Improvements Presentation

Appropriation

Source of Funds: N/A

Account Number: N/A

Amount Budgeted: N/A

Amount Requested: N/A

Budgeted Item: ☐ Yes ☐ No

SUMMARY & RECOMMENDATION

The Brookglen subdivision is located within the Armand Bayou Watershed (HCFCD Unit No. B100-00-00). The Brookglen sub-division had significant FEMA flood insurance claims during a June 1981 storm, Tropical Storm Alison, and Hurricane Harvey, with over 100 structures inundated during each event. Post Tropical Storm Alison, the Harris County Flood Control District (HCFCD) began buying out structures within the neighborhood, to prevent future losses. 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. The combination of various improvements recommended within the City-wide Drainage Study are aimed at reducing the flood risk within the Brookglen area. Several of the recommended improvements within the various studies have been constructed, each providing incremental flood risk reduction within the Brookglen subdivision. In continuation of the phased approach to mitigating the flood risks within the Brookglen subdivision, a number of additional drainage improvements are proposed to further reduce the flood risks within the area. Proposed project include but are not limited to: two additional detention ponds on existing buyout lots; increased capacity within the local storm sewer system; and a 100-acre detention pond.

ACTION REQUIRED BY DRAINAGE AND FLOODING COMMITTEE

Receive and analyze the report to provide Staff with direction, as necessary.

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date

La Porte, Texas

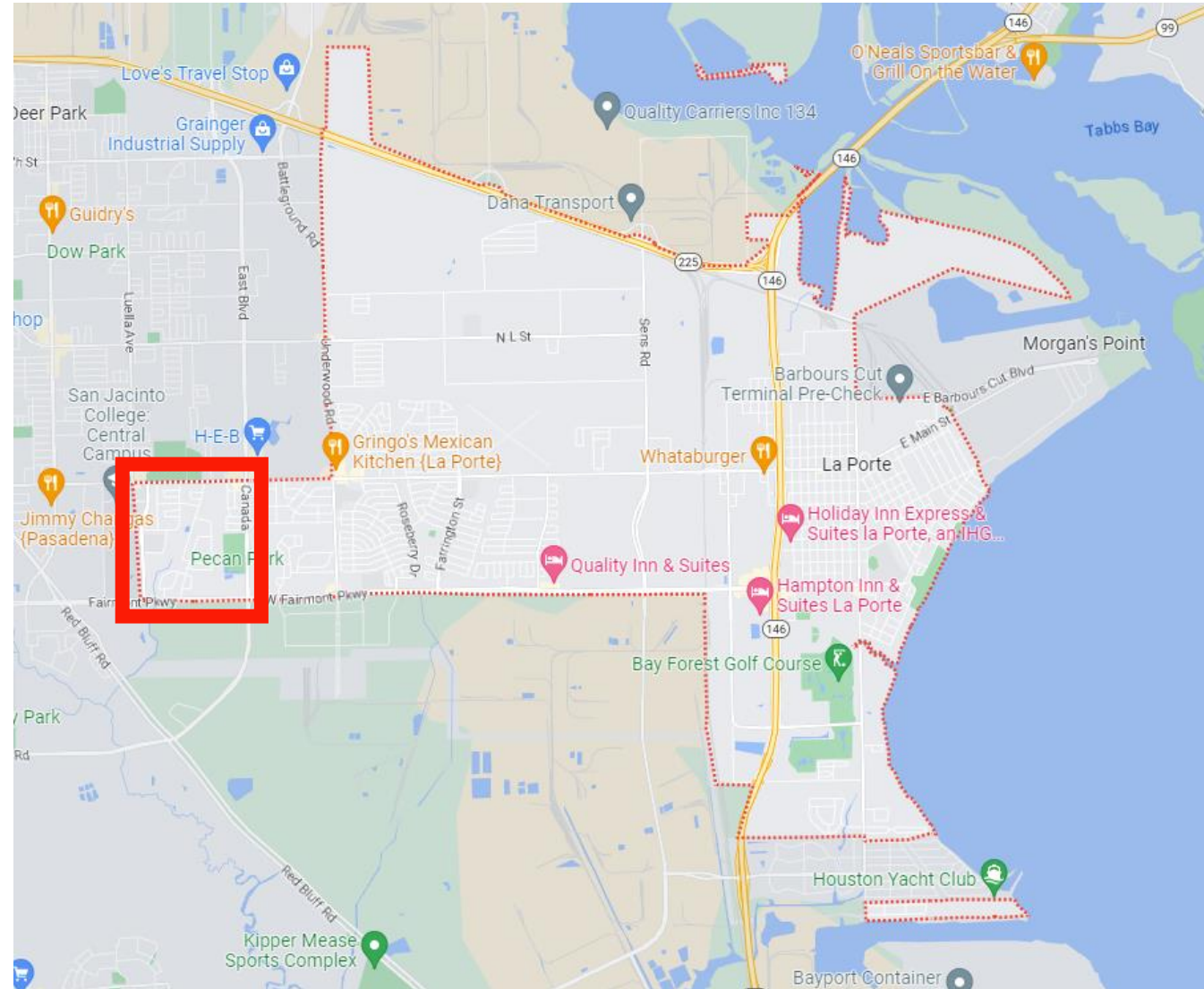
Brookglen Subdivision

La Porte Area Projects

March 13, 2023

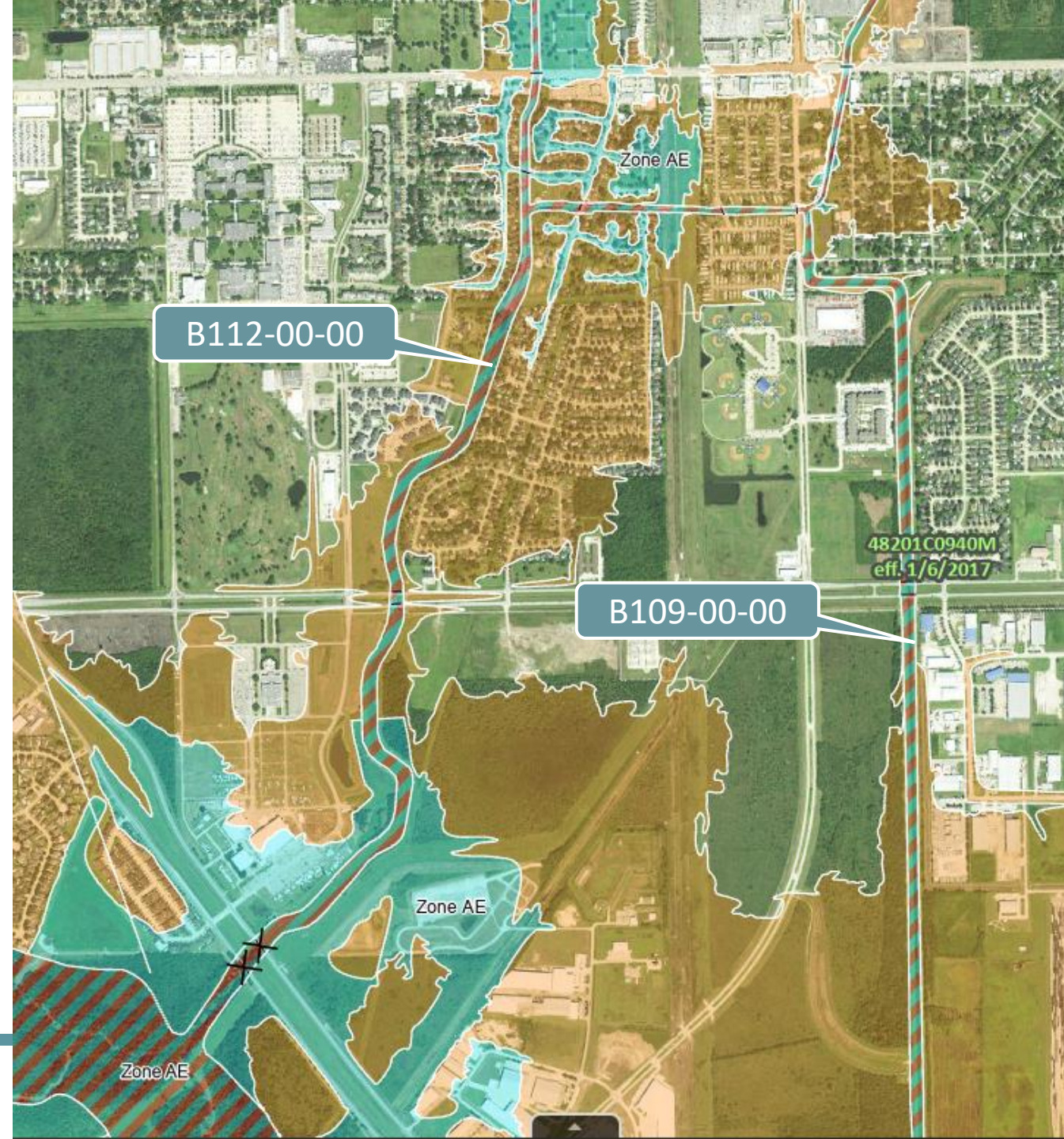
BROOKGLEN AREA

- Southeast side of City of La Porte
- Mostly residential neighborhood
- Bounded by Fairmont Parkway and Canada St.



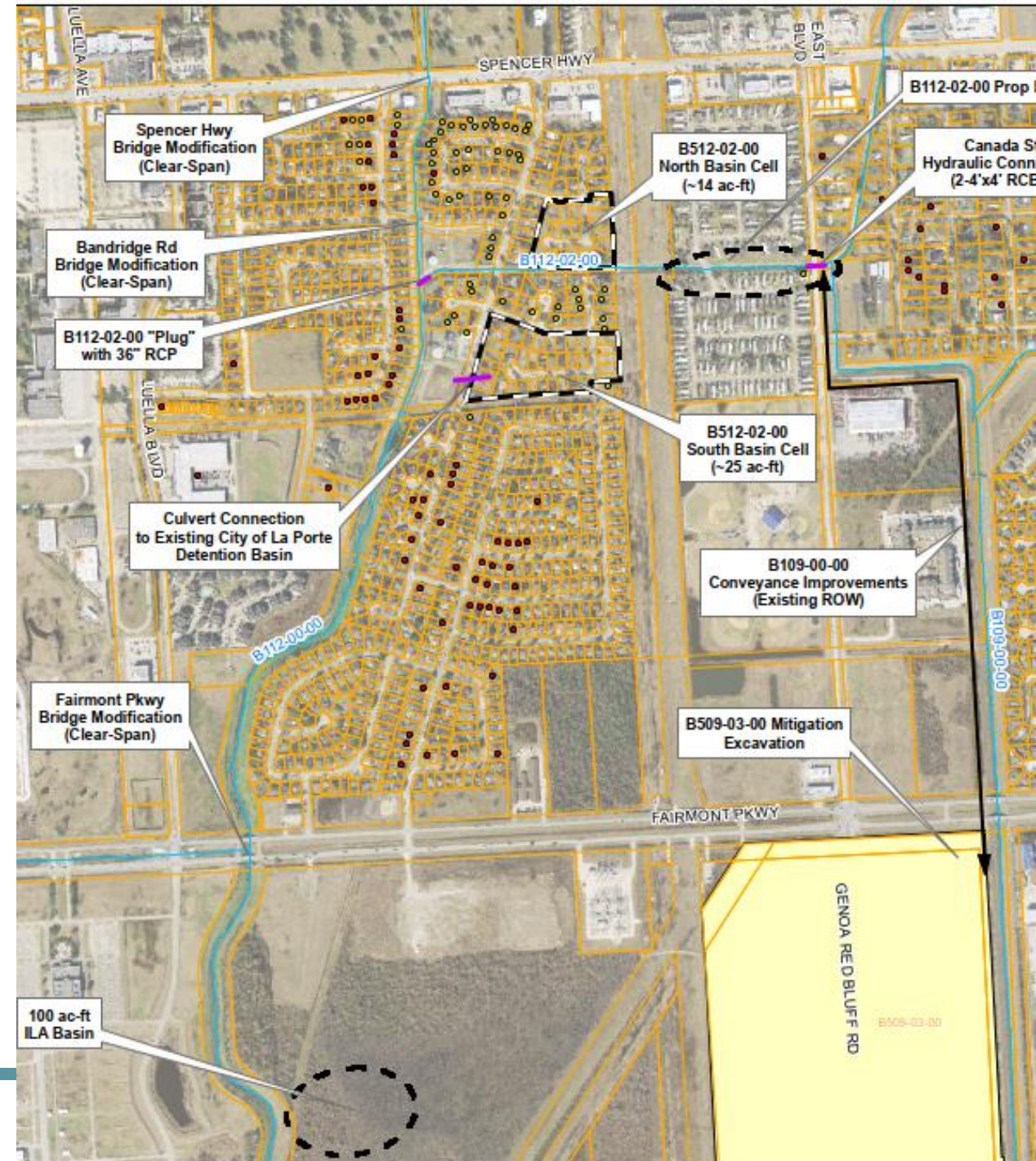
BROOKGLEN AREA

- HCFCF Channels B112-00-00 (west) and B109-00-00 (east)
- Majority of area in the effective 500-year (0.2% AEP) floodplain
- Local storm sewer that outfalls into B112-00-00



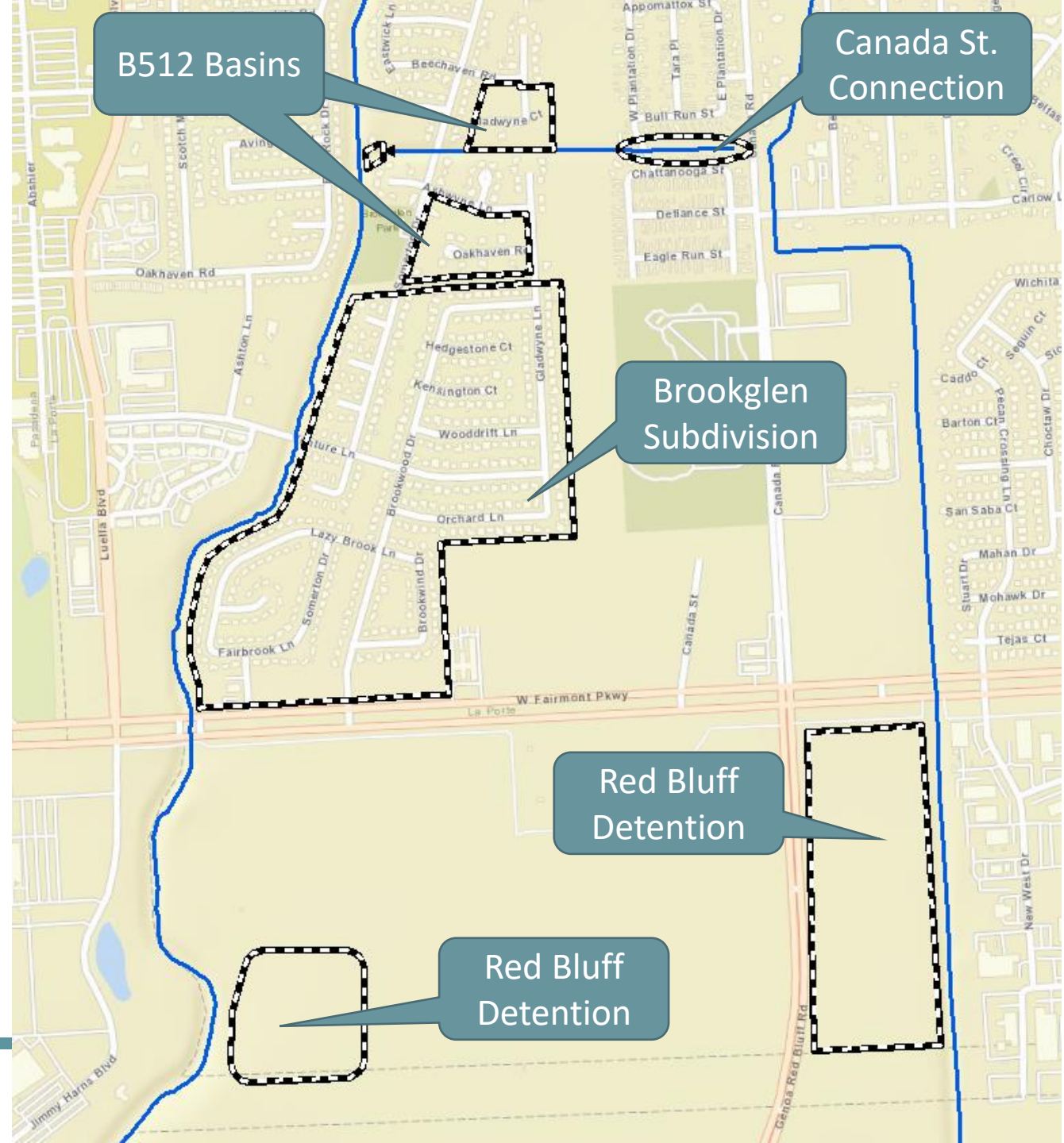
PREVIOUS STUDIES

- 2021 Watershed Study identified projects throughout Armand Bayou for improvement drainage
- Figure shows the recommendations from the study



ONGOING PROJECTS

- B512 Basins will reduce flows in B112-00-00 by providing mitigation storage
- Proposed Canada St. connection at B112-02-00 reduces flows by 15% in B112-00-00 in the 100-year event
- Brookglen subdivision drainage improvements will provide additional storm sewer capacity for reduction in local ponding
- Red Bluff Detention provides mitigation capacity for reduced floodplain downstream of Brookglen on B109-00-00
- 100-acre foot detention pond reduces elevations in B112-00-00 at Fairmont and may mitigate Brookglen improvements



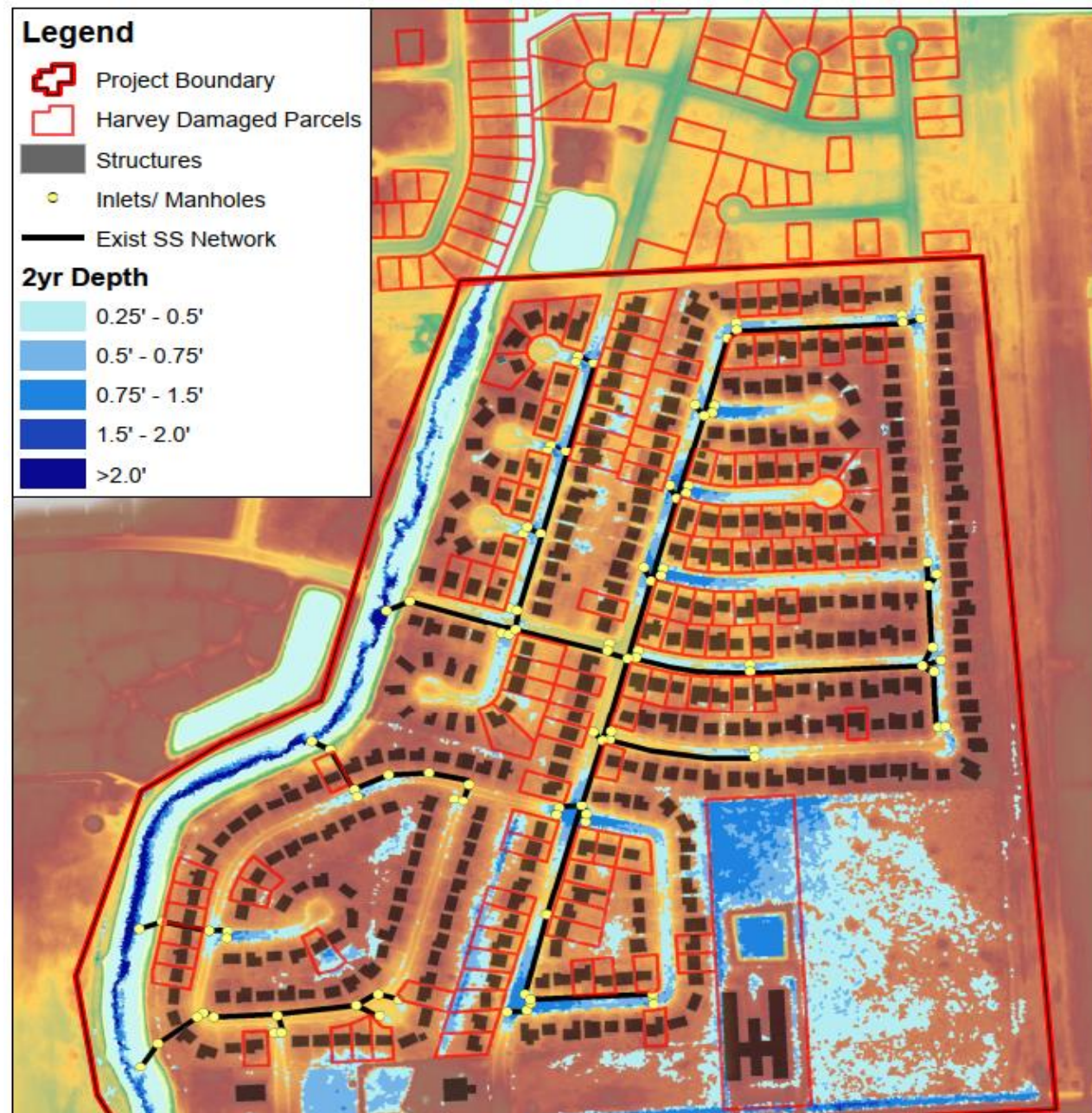
Brookglen Stormwater Detention Basin

- Two compartments
- North: 4.4 acres
- South: 9 acres



2-YEAR RESULTS

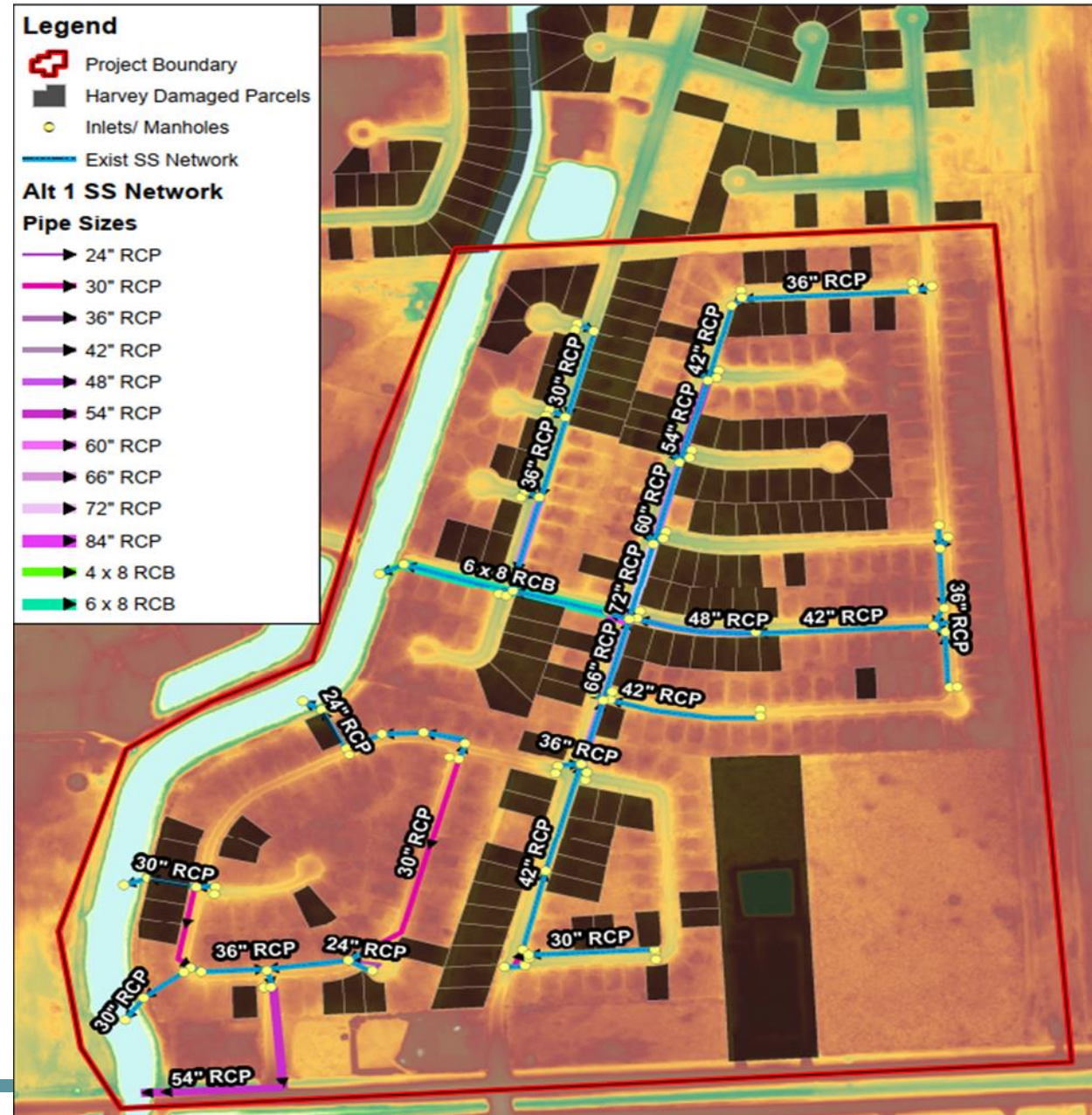
- Tailwater is high but channel is contained
- Ponding is mostly caused by storm sewer capacity
- Ponding depths up to 2' in portions of the neighborhood
- Flooding is mostly contained within the ROW



ALTERNATIVE 1

- Network has twice the capacity of the existing storm sewer
- Boxes for revised outfall on Venture Lane
- Re-routed network along Lazy Brook near Fairmont Pkwy
- Estimating 52 acre-feet of detention

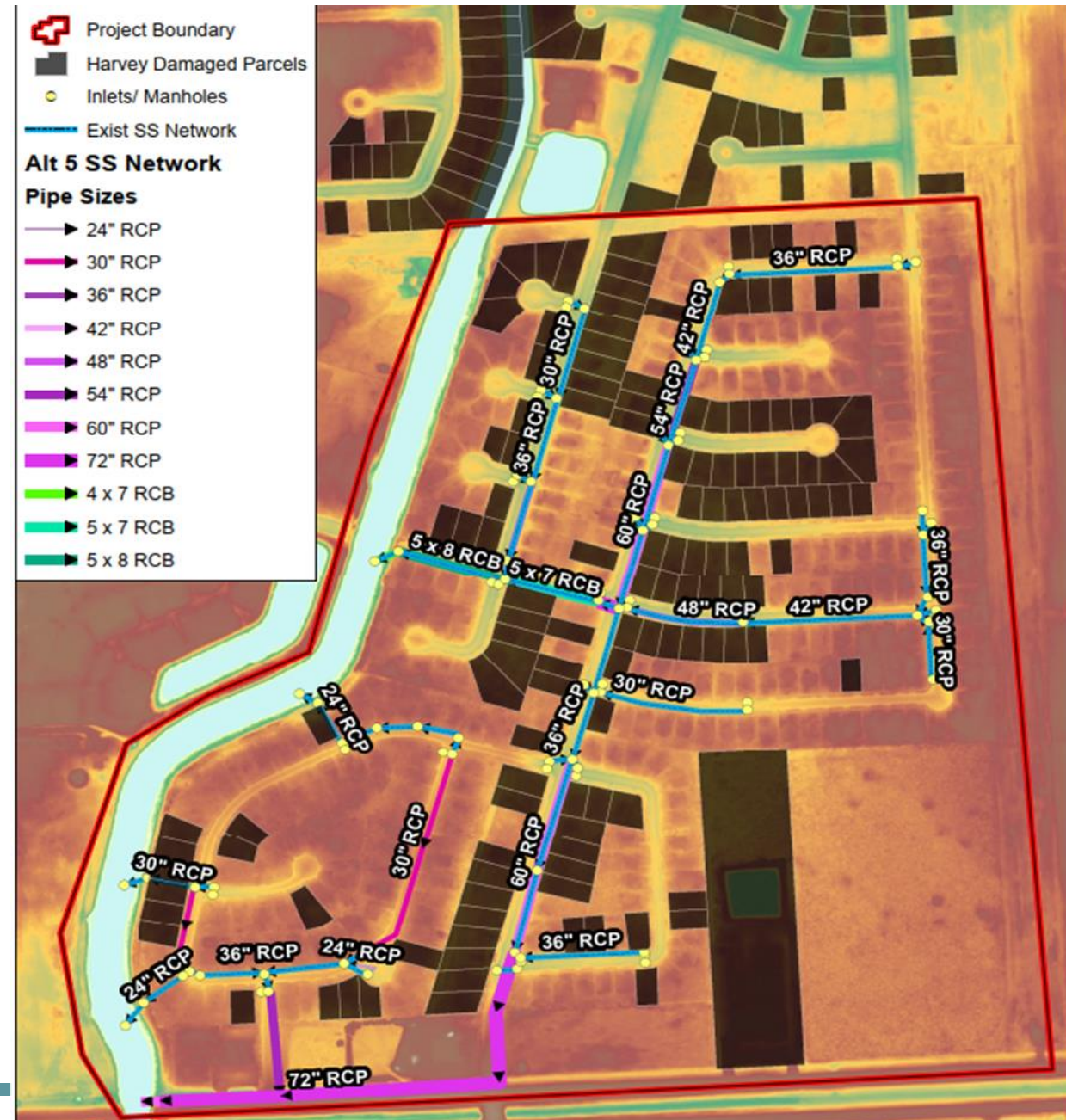
DRAFT



ALTERNATIVE 2

- Network has twice the capacity of the existing storm sewer
- Boxes for revised outfall on Venture Lane
- Re-routed network along Lazy Brook near Fairmont Pkwy
- Re-routed network south of Brookwood & Venture to outfall along Fairmont Pkwy
- Estimating 52 acre-feet of detention

DRAFT



Q&A



REQUEST FOR DRAINAGE & FLOODING COMMITTEE AGENDA ITEM

Agenda Date Requested: March 13, 2023
Requested By: Lorenzo Wingate, Asst. Director
Department: Public Works
☒ Report ☐ Resolution ☐ Ordinance

Exhibits: Project Timeline

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

SUMMARY & RECOMMENDATION

The City of Pasadena is preparing a wetlands delineation report to be submitted to the USACE as part of an Approved Jurisdictional Determination (AJD) request. The AJD was submitted to the USACE on October 5th, and the USACE is expected to respond within 120 days. The City of Pasadena has coordinated with the USACE and conducted an on-site wetlands inspection in late December. The City of Pasadena staff received comments from the USACE related to the observed condition of the site. The City of Pasadena has been working to address the USACE's comments regarding the site conditions, but progress was delayed due to unexpected disaster response efforts. The drainage impact analysis was submitted to HCFCD in mid-October and HCFCD approved the analysis on February 17th. Further project efforts are on-hold, pending the USACE determination.

ACTION REQUIRED BY DRAINAGE AND FLOODING COMMITTEE

Receive report, and provide staff with direction, as necessary.

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date



9900 Northwest Freeway
Houston, Texas 77092
346-286-4000
www.hcfc.org

January 6, 2023

Mr. Andrew Moore, P.E.
Halff Associates, Inc.
14800 St. Mary's Lane, Suite 160
Houston, TX 77079-2943
amoore@halff.com

SENT VIA ELECTRONIC MAIL: NO HARD COPY TO FOLLOW

RE: Project No. 2210120014
LaPorte Interlocal Detention Pond
HCFCD Unit B112-00-00; Key Map 578-G,H; Pct. 2

Dear Mr. Moore:

The referenced report has been reviewed pursuant to the HCFCD Policy, Criteria, and Procedure Manual and Section 3.02 of the *"Regulations of Harris County, Texas for the Approval and Acceptance of Infrastructure."* The goals of the review are to provide technical support to the Harris County Floodplain Administrator and to apply HCFCD policy and criteria where appropriate.

This review addresses issues regarding hydraulic and hydrologic drainage design criteria only. Design criteria regarding the site layout of the proposed development and drainage facilities will be reviewed upon submittal of site plans.

Our understanding of the report is described below. Please see the response contained within the *"Hydrologic & Hydraulic Technical Review"* section.

HCFCD Jurisdiction

HCFCD criteria applies because the project meets at least one of the following conditions:

- The project directly affects HCFCD Infrastructure.
- The project proposes infrastructure to be maintained by HCFCD.
- The project is located within a watershed where HCFCD has a regional project adopted by Harris County Commissioners Court.
- A technical review has been requested by Harris County.

Submittal Information

Submitted Report

LaPorte Interlocal Detention Pond
October 3, 2022

Consulting Engineer

Halff Associates, Inc.
14800 St. Mary's Lane, Suite 160
Houston, TX 77079-2943
TBPE Registration No. F-312
Andrew Moore, P.E.
TX P.E. # 124910

Project Summary

The City of Pasadena is proposing to develop a detention pond in order to satisfy an interlocal agreement between the City of Pasadena and the City of La Porte. The agreement between the cities involved the City of La Porte receiving a 99-acre tract from the City of Pasadena in exchange for a 73-acre tract. The City of Pasadena proposed drainage improvements within the 99-acre tract as a part of a planned redevelopment of the Pasadena Convention Center and Fairgrounds site, including the construction of a detention pond with a minimum of 100-acre feet of volume, as well as relocation of several driveways. The City of La Porte's primary interest is detention capacity provisions. The tract is mostly undeveloped and consists of grassy terrain. The proposed project, consisting of a single pond located along the southern portion of the tract, overlaps approximately 6.9 acres of potentially jurisdictional forested wetlands. The goal of the hydrologic and hydraulic analysis was to show no adverse impact on the existing floodplain as a result of the proposed detention pond.

Detention Summary

The following table identifies the detention summary provided within the report:

Project Name: LaPorte Interlocal Detention Pond		Date: 09-26-2022		
Detention Basin Service Area		99 acres		
Storm Event		10-Year	50-Year	500-Year
Flow	Maximum Allowable Outflow (cfs)	1994	3801	6489
	Maximum Outflow Provided (cfs)	1953	3742	6411
Pond Elevations (NAD 1983)	Finished Ground Elevation (ft)	7		
	Maximum Allowable Water Surface Based on	18		
		1-foot below Finished Ground Elev.		
	WSEL Calculated (ft)	10.82	12.00	18.12
Storage	Min. 100-Year Detention Storage Required (ac-ft)	100		
	Detention Storage Provided (ac-ft)	2.32	5.67	106.72
	Storage Rate Provided (ac-ft/ac)	1.08		
Outflow Structure	Outflow Pipe Size (in)	36		
	Outflow Velocity (ft/s)	7.78	10.74	11.39
	Weir Description	Concrete weir – crest 15.5 ft; 3.5 ft deep; 100 ft bottom width; 120 ft top width; 4:1 side slope		
	Drain Time – 500-Year (hours)	26		

Floodplain Related Information

According to FEMA FIRM Panel No. 48201C0940M, effective June 9, 2014, majority of the 100-year floodplain (Zone AE) to be contained within the channel except for small portions that extend over the west and east overbanks near the downstream side of the project area. The 500-year floodplain (Shaded Zone X) covers approximately half of the project area and generally coincides with the potentially jurisdictional wetlands submitted under an AJD to the USACE for evaluation.

Work in the effective FEMA floodway is not proposed in this project.

Please also note that the City of Pasadena is the Floodplain Administrator for the receiving waterways. All issues regarding local floodplain regulations must be coordinated through the City of Pasadena.

Report Findings

The report states, "*The proposed project will cause no adverse impact within the study limit for storm events up to and including the FEMA effective 0.2% chance exceedance event.*"

Hydrologic & Hydraulic Technical Review

HCFCFCD offers the following:

1. The weir side slope shown in the detention summary table is 4:1. Side slopes of overflow weir shall be 5:1 or flatter per Section 13.2 (Exhibit 13-1) of the HCFCFCD PCPM.
2. Please include 10- and 50-year events in the WSEL comparison in Table 7 or provide a WSEL comparison table for all storm events analyzed in the hydraulic modeling results in Appendix E to demonstrate no adverse impact.
3. Although the report included the future improvement plans proposed by the City of La Porte, the report should clearly state in the executive summary that more detailed analysis with supporting data for the future roadway, bridges and other drainage improvements will be required to submit to HCFCFCD for review and approval.
4. The callouts "Alt Detention Pond" in Exhibits 1-3 do not appear correct.
5. Explicitly state who will maintain the proposed detention pond.

Additional HCFCFCD Criteria

An additional 40 feet of drainage right-of-way is needed along B112-00-00 for future widening of the channel. Platting is the usual occasion for easement dedication. Easements can also be conveyed to HCFCFCD by a separate instrument recorded in the Harris County Deed Records.

Site plans must be submitted to HCFCFCD for review and signature.

All work proposed within existing and future HCFCFCD right-of-way must be designed and constructed in accordance with the HCFCFCD Policy, Criteria, and Procedure Manual.

Environmental Review & Permitting

The Harris County Flood Control District's Regulatory Compliance Department requires that proposed projects impacting regulated waters of the U.S. obtain and document the required U.S. Army Corps of Engineers permit(s) for any portions of the project located within any existing or proposed HCFCFCD right-of-way. The type of permit required (if any) must be stated on the site plans even if written permit authorization from the Corps of Engineers is not required. If written permit authorization is required, copies of approved Corps of Engineers permits must be submitted with the HCFCFCD *Notification of Construction in Right-of-Way* and submitted to the HCFCFCD Development Coordination and Inspection Department at least 48 hours prior to construction along with the *48-hour Pre-Construction Notification*.

January 6, 2023
Andrew Moore, P.E.
Halff Associates, Inc.

Page 4

Thank you for coordinating this project with the Flood Control District. If you have any questions regarding the technical comments, please contact Mr. Wen Zhang, P.E. via email at *Wen.Zhang@hcfcd.hctx.net*. For any other questions, you may contact me at *Stephania.Najda@hcfcd.hctx.net*.

Sincerely,

Stephania Najda, P.E.
Watershed Coordinator

SN:WZ:ag



REQUEST FOR DRAINAGE & FLOODING COMMITTEE AGENDA ITEM

Agenda Date Requested: March 13, 2023

Requested By: Lorenzo Wingate, Asst. Director

Department: Public Works

☒ Report ☐ Resolution ☐ Ordinance

Exhibits:

Appropriation

Source of Funds: N/A

Account Number: N/A

Amount Budgeted: N/A

Amount Requested: N/A

Budgeted Item: ☐ Yes ☐ No

SUMMARY & RECOMMENDATION

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

ACTION REQUIRED BY DRAINAGE AND FLOODING COMMITTEE

Receive report, and provide Staff with direction, as necessary.

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date



REQUEST FOR DRAINAGE & FLOODING COMMITTEE AGENDA ITEM

Agenda Date Requested: March 13, 2023

Requested By: Lorenzo Wingate, Asst. Director

Department: Public Works

☒ Report ☐ Resolution ☐ Ordinance

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

Appropriation

Source of Funds: N/A

Account Number: N/A

Amount Budgeted: N/A

Amount Requested: N/A

Budgeted Item: ☐ Yes ☐ No

SUMMARY & RECOMMENDATION

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

ACTION REQUIRED BY DRAINAGE AND FLOODING COMMITTEE

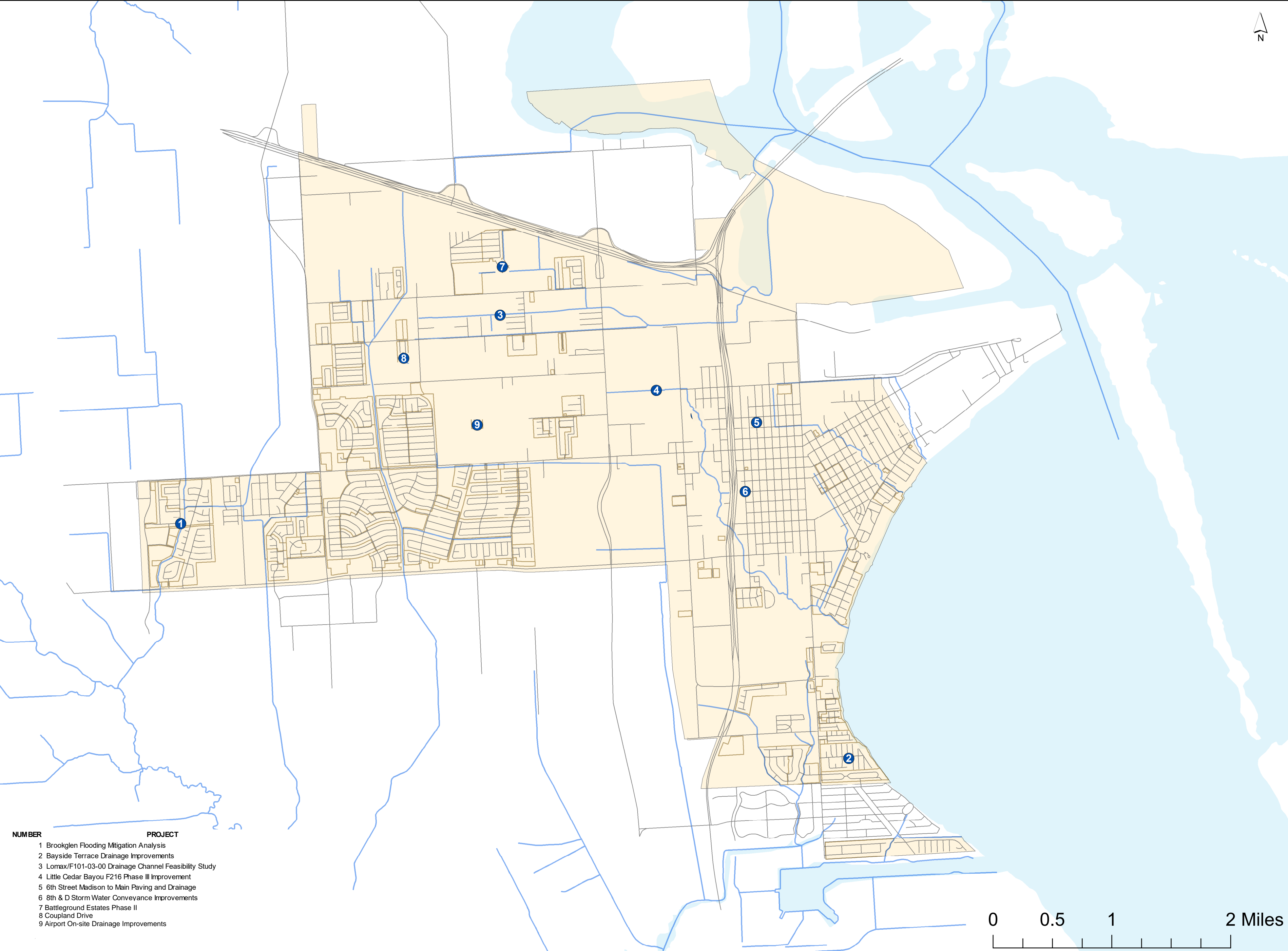
Receive report, and provide staff with direction, as necessary.

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date

The City of La Porte Drainage Projects 2019



DRAINAGE PROJECTS

*Estimated completion date references total project completion.

**% complete references percent completion of current project phase.

NO.	PROJECT	PROJECT MANAGER	DESCRIPTION	PROJECT PHASE (Feasibility/Preliminary Design/Final Design/Bidding/Construction)	Status	Anticipated Construction Cost	Potential Grant Funding	Potential COLP Cost Share	COLP Budgeted Amount	Estimated Completion Date	% Complete (Phase)	On Schedule
1	Brook glen Flooding Mitigation Analysis	HCFCF / Public Works	The 2000 City-wide Drainage Study identifies the Brook glen subdivision as an area with significant drainage 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 Brook glen area. This analysis would expand upon the recommendations provided within 2009 study.	HCFCF (NCRS) - Final Design; COLP - Feasibility/Preliminary Engineering	The existing conditions drainage model is being developed utilizing field data and record drawings. preliminary modeling results indicate that the existing storm sewer is undersized for current rainfall conditions. Modeling continues through next month, while survey data is being obtained. Final design is expected to begin upon completion of preliminary engineering, with a target construction start date of March 4, 2024. The project is expected to be completed by June 30, 2025.	\$11,400,010.00	GLO - \$4,000,000; Pct. 2 Partnership - \$2,900,023.28; ARPA - TBD;	Harris County - 24%; GLO - 33%; COLP - 42;	COLP - \$4,275,000	NCRS - TBD; Bond - TBD; COLP - TBD	NCRS - 35%; COLP - 0%	NCRS - Yes Bond - No COLP - TBD
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.	Bidding	The project solicitation is expected to be advertised in March. Project award is targeted for April 2023, with construction expected to begin by mid-June 2023.	\$8,821,834.36	Pct. 2 Partnership - \$2,982,496	Harris County - \$2,982,496; COLP - \$4,356,041	\$5,405,000.00	TBD	50%	No
3	Lomax/F101-03-00 Drainage Channel Improvements	HCFCF	Harris County Flood Control District's (HCFCF) 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	HCFCF extended the limits of the initial drainage study to include the area from Valleyview to Lomax School Road. New project limits are currently being evaluated by HCFCF to determine additional project options.	\$3,400,000.00	HCFCF Bond; ARPA - TBD	50/50	\$950,000.00	TBD	75%	No
4	Little Cedar Bayou F216 Phase III Improvements	HCFCF / 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 4,690 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 destilling 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 HCFCF Unit F216-00-00: lowering the low 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	The feasibility of several project options are being evaluated. The consultant is evaluating an additional project alternative that was not previously considered. The draft of the preliminary engineering report will be delayed, to allow for the new alternative to be evaluated. Staff, consultant, and HCFCF, participate in bi-weekly project status meeting to discuss project progression.	TBD	HCFCF Bond - \$8,000,000; ARPA - TBD	\$2,000,000.00	\$3,055,232.00	TBD	40%	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.	Phase 2 - Final Design	Drainage Impact Analysis is pending HCFCF approval. Staff is coordinating with HCFCF for mitigation credits. USACE has acknowledged receipt of pre-construction notice. Staff is awaiting further direction from HCFCF related to environmental clearances.	Phase 2 - \$3,400,000	Phase 2 - \$3,472,757	\$125,000.00	\$1,140,000.00	Phase 2 - TBD	Phase 2 - 90%	Phase 2 - 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.	Completed	This project has been incorporated into the 7th Street Rehabilitation Project. Construction activity began on September 13, 2021. Storm sewer related infrastructure is 100% complete.	\$4,800,000.00	N/A	N/A	\$4,867,000.00	February 2023	100%	Yes
7	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 I 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 F101-00-00 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 is re-considering utilization of ARPA funding on this project, as ARPA funding may be reallocated to higher priority projects.	TBD	ARPA - TBD	50/50	\$215,000.00	August 2023	0%	No
8	Coupland Drive	Public Works	The proposed storm sewer improvements include re-aligning 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 2 year storm event, per the City of La Porte drainage criteria.	Bidding	The bid solicitation advertised on September 15th, as part of the Lomax Lift Station Consolidation Project. Bid were received in December 2023, but exceeded the budgeted amount. The bid will be presented to Council, at the January 9th meeting, with a staff recommendation to reject the bid. Staff expects to rebid the project in the 1st quarter of 2023.	\$1,550,000.00	N/A	N/A	\$1,310,000.00	TBD	50%	Yes



REQUEST FOR DRAINAGE & FLOODING COMMITTEE AGENDA ITEM

Agenda Date Requested: March 13, 2023

Requested By: Lorenzo Wingate, Asst. Director

Department: Public Works

☒ Report ☐ Resolution ☐ Ordinance

Appropriation

Source of Funds: N/A

Account Number: N/A

Amount Budgeted: N/A

Amount Requested: N/A

Budgeted Item: ☐ Yes ☐ No

Exhibits:

SUMMARY & RECOMMENDATION

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

ACTION REQUIRED BY DRAINAGE AND FLOODING COMMITTEE

Receive report, and provide staff with direction, as necessary.

Approved for Drainage Committee Agenda

Corby D. Alexander, City Manager

Date