

**CITY OF INGLESIDE
REGULAR CITY COUNCIL MEETING
AGENDA
APRIL 9, 2024
6:30 PM**

Notice is hereby given that the Ingleside City Council will hold a Regular City Council Meeting on April 9, 2024, at 6:30 PM. The Meeting will be held in person at City Hall, 2671 San Angelo Street, Ingleside, Texas. Members of the public can view the meeting via live stream at <https://inglesidetx.gov/>.

With respect to any subject matter set forth below, the City Council may take action, unless otherwise expressly indicated with respect to any particular subject matter.

Opening Agenda

1. Call Meeting to Order.
2. Roll Call.
3. Invocation.
4. Pledge of Allegiance.

5. Citizen Comments and Reports.

Persons wishing to address the Council and who have registered using the Citizen Participation Form will have up to three minutes to speak. In accordance with the Open Meetings Act, Council may not discuss or take action on any item that has not been posted on the agenda. While civil public criticism is not prohibited; disorderly conduct or disturbance of the peace as prohibited by law shall be cause for the chair to terminate the offender's time to speak.

6. Staff Comments and Reports.

The Council may discuss any subject which is specifically listed under this item.

- a. Council Comments and Reports.
- b. Announcements of Community Interest and/or upcoming events.
- c. Update to the City Council on the formation of the Sports Fields Committee.
- d. Update on Tree City USA Designation

Presentations

7. Presentation of a donation from the Ingleside Chamber of Commerce to the City of Ingleside for the Animal Control Facility.

Consent Agenda

All consent agenda items listed are considered to be routine by the City Council and will be enacted by one

motion. There will be no separate discussion of the items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

8. Deliberate and take appropriate action regarding the issuance of a Special Use Permit to Gypsy M/C International Corpus Christi Chapter for the usage of the front circle of Live Oak Park from May 2, 2024, through May 5, 2024.
9. Deliberate and take appropriate action regarding acceptance of the HOT Funds Post Event Form from the Ingleside Chamber of Commerce for their Round Up Days & Music Festival Event held March 23-25, 2024, and payment of \$60,500 to close out the event.
10. Deliberate and take appropriate action on a resolution appointing/reappointing members to the Board of Adjustment.
11. Deliberate and take appropriate action on the second reading of an Ordinance amending Ingleside Code of Ordinances Chapter 14-Animal Control and providing for effective date, reading, severance, and publication.
12. Deliberate and take appropriate action on the Regular Meeting Minutes of March 26, 2024.

Executive Session

13. Closed Session
City Council will meet in Closed Session pursuant to the provisions of Chapter 551 of the Texas Government Code, in accordance with the authority contained in:
 - A. Section 551.087 Deliberation regarding Economic Development Negotiations
 - B. Section 551.071 Consultation with Attorney
14. Open Session
City Council will reconvene in Open Session at which time action on the matter(s) discussed in Closed Session may be considered.
 - A. Section 551.087 Deliberation regarding Economic Development Negotiations
 - B. Section 551.071 Consultation with Attorney

Public Hearing

The City Council shall call a public hearing on each item below in this section. Any person wishing to address the City Council on these items should please come forward when that public hearing is called.

Regular Agenda

15. Deliberate and take appropriate action for an amendment to the Little League Agreement.
16. Deliberate and take appropriate action on first reading of an Ordinance adopting the Drainage Master Plan, an element of the Comprehensive Master Plan of the City of Ingleside; Amending conflicting provisions of the City Comprehensive Plan, and further providing for

effective date, reading, severance, and publication.

17. Deliberate and take appropriate action regarding the purchase of a digital sign for tourism/information at a location near the Humble Station Community Center using HOT Funds.
18. Deliberate and take appropriate action on an Interlocal Cooperation Agreement between the Ingleside Independent School District and the City of Ingleside for two School Resource Officers.
19. Deliberate and take appropriate action on first reading of an Ordinance altering the prima facie speed limits established for vehicles under the provisions of SEC. 545-356, Texas Transportation Code, upon the basis of an engineering and traffic investigation, upon certain streets and highways, or parts thereof, within the corporate limits of the City of Ingleside, as set out in the Ordinance; and Providing a penalty of a fine in an amount of not less than twenty five dollars (\$25.00) or more than five hundred dollars (\$500.00) for violation of this Ordinance; and providing for effective date, reading severance, and publication.
20. Deliberate and take appropriate action on authorizing Staff to use City Council Discretionary Funds to purchase retention binders to maintain historical documents.
21. Deliberate and take appropriate action on a first and only reading of an Ordinance amending the Fiscal Year 2023-2024 Budget for the City of Ingleside, Texas, for the use of Council Discretionary funds for the purchase of retention binders to maintain historical documents.
22. Items to consider for placement on future agendas.
23. Adjourn.

Special Accommodations

This facility is wheelchair accessible and there are special parking spaces near the main entrance. Request for accommodations or special services must be made 48 hours prior to this meeting. Please contact City Secretary's Office at (361) 776-2517 or Fax (361) 776-1027 or email citycouncilquestions@inglesidetx.gov for further information.

With respect to any subject matter set forth, the City Council may meet in Closed Executive Session, if and to the extent allowed by Chapter 551 of the Texas Government Code, including, but not limited to, any of the following sections of Chapter 551: Section 551.071 Consultations with Attorney, Section 551.072 Deliberation about Real Property, Section 551.073 Deliberation regarding Prospective Gift, Section 551.074 Personnel Matters, Section 551.087 Deliberation regarding Economic Development Negotiations, and Section 551.089 Deliberation regarding Security Devices Or Security Audits.

Certification

I, Ruby Beaven, certify that the above notice of this Regular Meeting of the City Council was posted on the City Hall bulletin board at 2671 San Angelo Street, Ingleside, Texas on April 04, 2024 by 4:30 p.m.



Ruby Beaven, City Secretary

This public notice was removed from the official posting board at the Ingleside City Hall on the following:

Date: _____

Time: _____

By: _____

City Secretary's Office
City of Ingleside, Texas

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 6.a

Council Comments and Reports.

SUBMITTED BY: Ruby Beaven, City Secretary

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

FISCAL ANALYSIS:

RECOMMENDATION:

ATTACHMENTS:

None

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 6.b

Announcements of Community Interest and/or upcoming events.

SUBMITTED BY:

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

- A. Boards & Commissions Volunteers Needed
 - B. Crawfish Cook-Off, Ingleside, April 19-20
 - C. Ingleside Rotary Club Fishing Tournament, April 27
 - D. Smokin' Tires & Light'n Fires, Ingleside, May 31-June 1
 - E. Best of the Bay Fishing Tournament Scholarship Fundraiser, Ingleside, July 26-27
-

FISCAL ANALYSIS:

N/A

RECOMMENDATION:

Information Only.

ATTACHMENTS:

1. Community Events



Volunteers Needed!

Looking for an opportunity to serve your community?

You can find additional information like qualifications, duties, terms and an application at

<http://inglesidetx.gov/297/Boards-Commissions>.

Please email your completed application and/or questions to the City Secretary at citysecretary@inglesidetx.gov.



SAVE THE DATE





INGLESIDE ROTARY CLUB



FISHING TOURNAMENT

BOAT | PIER | WADE | SURF | JETTY | KAYAK

PROCEEDS BENEFIT INGLESIDE ROTARY CLUB SCHOLARSHIPS

**ENTRY FEE
\$200**



SATURDAY, APRIL 27TH



WEIGH-IN: 2:00 PM - 4:00 PM

INGLESIDE BOAT RAMP

Cove Park
Ingleside, TX



For complete information & registration visit:

<https://sites.google.com/a/inglesideisd.org/fishing-tourney/home>

For more information, contact:

Troy Mircovich 361-790-6260



May 31st -June 1st 2024

Lots of swag, prizes, raffles and more.



The Ingleside Chamber of Commerce is excited to announce our partnership with Best of the Bay. Together we will bring you a Saltwater Fishing Tournament you won't forget. Join us on July 26th and 27th at Cove Park Ingleside, TX.

The 2024 10th Annual Best of the Bay Fishing Tournament is dedicated to raising scholarship money to benefit the incoming senior class of local High Schools. The opportunities that we provide will help the seniors with the rigorous expenses of college. Through our scholarships we can help our youth further their education. With your help and participation, we can achieve these goals together. We look forward to seeing you and thanks again for your support.

The Ingleside Chamber, Best of the Bay and Fin Addict Angler Foundation presents Family Fishing Day at Cove Park. Register your kids for a day of fishing at Cove Park, it's Free! Fill out the form and email it to the chamber office: Inglesidetxchamber@gmail.com

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 6.c

Update to the City Council on the formation of the Sports Fields Committee.

SUBMITTED BY: Gary Paredez, Director of Infrastructure Services

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The City Council directed staff to research the formation of a committee to offer recommendations on the maintenance and upkeep of the sports fields. The attached list was compiled for possible candidates for this committee. All the local associations (softball, little league, soccer, and football) have been contacted. At the time of drafting this update there were only two representatives that had shown interest in serving on the committee.

FISCAL ANALYSIS:

N/A

RECOMMENDATION:

N/A for informational purposes only.

ATTACHMENTS:

1. Sports Fields Committee Candidates

Sports Fields Committee Candidates

Softball- Abel Salazar

Little League- Victor Moreno

Soccer- Gerald Crain

Football-Eric Rodgers

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 6.d

Update on Tree City USA Designation

SUBMITTED BY: Brenton Lewis, City Manager

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The City of Ingleside staff, with assistance from other agencies and citizens, prepared the Tree City USA application through the Arbor Day Foundation. The City submitted the application on November 9, 2023. Requirements to become a Tree City USA are as follows:

1. Maintaining a tree board or department – Addressed in Ordinance #2023-17
2. Having a community tree ordinance – Adopted September 12, 2023
3. Spending at least \$2 per capita on urban forestry – \$20,000
4. Celebrating Arbor Day - Scheduled for November 3, 2023 (Arbor Day in Texas).

The City received notification of the Tree City USA designation on March 28, 2024.

FISCAL ANALYSIS:

Cost of various Tree City USA materials.

RECOMMENDATION:

Report Only

ATTACHMENTS:

1. Tree City USA



Arbor Day Foundation Names Ingleside a Tree City USA

Ingleside, Texas March 28, 2024, was named a 2023 Tree City USA by the Arbor Day Foundation in honor of its commitment to effective urban forest management.

The Tree City USA program is sponsored by the Arbor Day Foundation in partnership with the U.S. Forest Service and the National Association of State Foresters.

Ingleside achieved Tree City USA recognition by meeting the program's four requirements: a tree board or department, a tree-care ordinance, an annual community forestry budget of at least \$2 per capita and an Arbor Day observance and proclamation.

"Everyone benefits when elected officials, volunteers and committed citizens in communities like Ingleside make smart investments in urban forests," said Dan Lambe, chief executive of the Arbor Day Foundation. "Trees bring shade to our homes and beauty to our neighborhoods, along with numerous economic, social and environmental benefits."

Trees are assets to a community when properly planted and maintained. They help to improve the visual appeal of a neighborhood, increase property values, reduce home cooling costs, remove air pollutants and provide wildlife habitat, among many other benefits.

More information on the program is available at arborday.org/TreeCityUSA.

ABOUT THE ARBOR DAY FOUNDATION: The Arbor Day Foundation is a million-member nonprofit conservation and education organization with the mission to inspire people to plant, nurture, and celebrate trees. More information is available at arborday.org.

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 7

Presentation of a donation from the Ingleside Chamber of Commerce to the City of Ingleside for the Animal Control Facility.

SUBMITTED BY: Brenton Lewis, City Manager

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The Ingleside Chamber of Commerce representative(s) will be in attendance to present to the City a donation for the Animal Control Facility. Once the donation is presented, an Ordinance will be placed on the next regular agenda for consideration to accept the donation and to amend the budget and designate the donation in the Animal Control budget.

FISCAL ANALYSIS:

Receipt of a donation to be identified as a revenue for the Animal Control budget.

RECOMMENDATION:

Receipt of the donation from the Ingleside Chamber of Commerce.

ATTACHMENTS:

None

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 8

Deliberate and take appropriate action regarding the issuance of a Special Use Permit to Gypsy M/C International Corpus Christi Chapter for the usage of the front circle of Live Oak Park from May 2, 2024, through May 5, 2024.

SUBMITTED BY: Leticia Mejia, Director of Human Resources

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The Gypsy M/C International Corpus Christi Chapter, a not-for-profit organization, is requesting the use of Live Oak Park for their annual “Cinco de Mayo” rally. This is one of the Gypsy M/C International Corpus Christi Chapter's biggest fundraisers and proudly supports our community organizations, which include The Good Samaritans Rescue Mission, which is one of the largest homeless shelters in the Coastal Bend. The Corpus Chapter will be hosting “Cinco de Mayo” as a three-day event, and they are hoping to continue to host this event at Live Oak Park.

Due to the distances that some of the members travel, Thursday evening was included for camping and setting up in the park, May 3rd. See attached request letter and flyer from Gypsy International Corpus Christi Chapter requesting a Special Use Permit for the usage of the front circle of Live Oak Park. (There will be no conflict with Little League baseball games in the back half of the park.) Also, attached is a Special Use Permit application from Jennifer Hunter of Gypsy M/C/ International Corpus Christi Chapter for the intended use of the front circle of Live Oak Park for May 2nd – 5th, 2024.

FISCAL ANALYSIS:

No funding required.

RECOMMENDATION:

Staff request Council to approve the Special Use Park Permit.

ATTACHMENTS:

1. Gypsy Letter of Intent-2024
2. Corpus Cinco De Mayo 2024_20231015_0001
3. Park map for event
4. Gypsy Special Use Park Permit 2024

Gypsy M/C International

Corpus Christi Chapter

City of Ingleside Parks and Recreation
2671 San Angelo
Ingleside, TX 78362
ATTN: Park Events Coordinator and City Manager
(361)776-3438

Subject: Letter of Intent for use of Live Oak Park on May 2nd, 3rd, 4th, and 5th 2024.

Good day,

The Gypsy M/C International Corpus Christi Chapter, a not-for-profit organization, is requesting use of your park once again for our annual “Cinco De Mayo” rally as we have done in the past with your city’s support. This is one of our biggest fundraisers that proudly supports our community organizations to include The Good Samaritans Rescue Mission that is one of the largest homeless shelters on the Coastal Bend. The Corpus Chapter will be hosting “Cinco de Mayo” as a three-day event and we are hoping to continue to host this event at the Live Oak Park in Ingleside Texas.

Due to the distances that some of the member’s travel, we are including Thursday evening for camping and set up in the park, May 3rd. The submission of this Letter of Intent, is our request for the use of Live Oak Park for the stated weekend. During the run, there will be Live entertainment and functions, so requesting a need for the stage at the park for the weekend if one is available.

Thank you for your continued support for our fundraisers. If you have any questions, please contact me.

Sincerely,

Patrick Lahti aka Gypsy Grasshopper
Gypsy M/C Corpus Christi Chapter President
(210) 585-1121
patrick.lahti1@gmail.com

Attachment: 2024 Cinco De Mayo run flyer.

GYPSY MC INTERNATIONAL CORPUS CHRISTI CHAPTER PRESENTS

MAY 3RD, 4TH, AND 5TH 2024

Pre-Registration:

Adults \$20 (Ends April 26th) Gate Registration:
Opens at **NOON** Friday
Opens at **10 am** on
Saturday: Adults: \$25
Kids 10-16: \$10
Ages 9 & Under FREE!!

Registration Fee

Includes:

FUN Run (BAY LOOP)
Usual GYPSY Refreshments
*Camping ~ Games ~ Fun
*Run Patch (Limited Quantity)
*Adult & Kids Games



For more information, Contact:

Gypsy Crusher AKA Jennifer (361)660-6709
or
Gypsy Grasshopper AKA Patrick (210) 585-1121

Friday: Register, Set-up
Camp, Enjoy
Refreshments, Music,
Food, and Friends

Saturday:

FUN RUN: 10:30am ~ First
Bike Out 12:00pm ~ Last
Bike Out
3:00pm ~ Last Bike In

Events:

2:30pm ~ Kids Events
3:30pm ~ People Events
4:30pm ~ Bike Events
6:30pm ~ Awards
7:00pm ~
Raffles/Drawings
8:00pm – Music
Sunday:
8:00am ~CMA
"Leave Camp by Noon"

LIVE OAK PARK

SHERRY AVE, INGLESIDE, TX 78362

All Vendors Must Pre-Register: Vendor Fee of \$40 and Donation of Auction Item
VENDORS POC: Crusher aka Jennifer 3616606709

No Weapons ~ No Firearms ~ No Fireworks ~ No Attitudes ~ No Pets

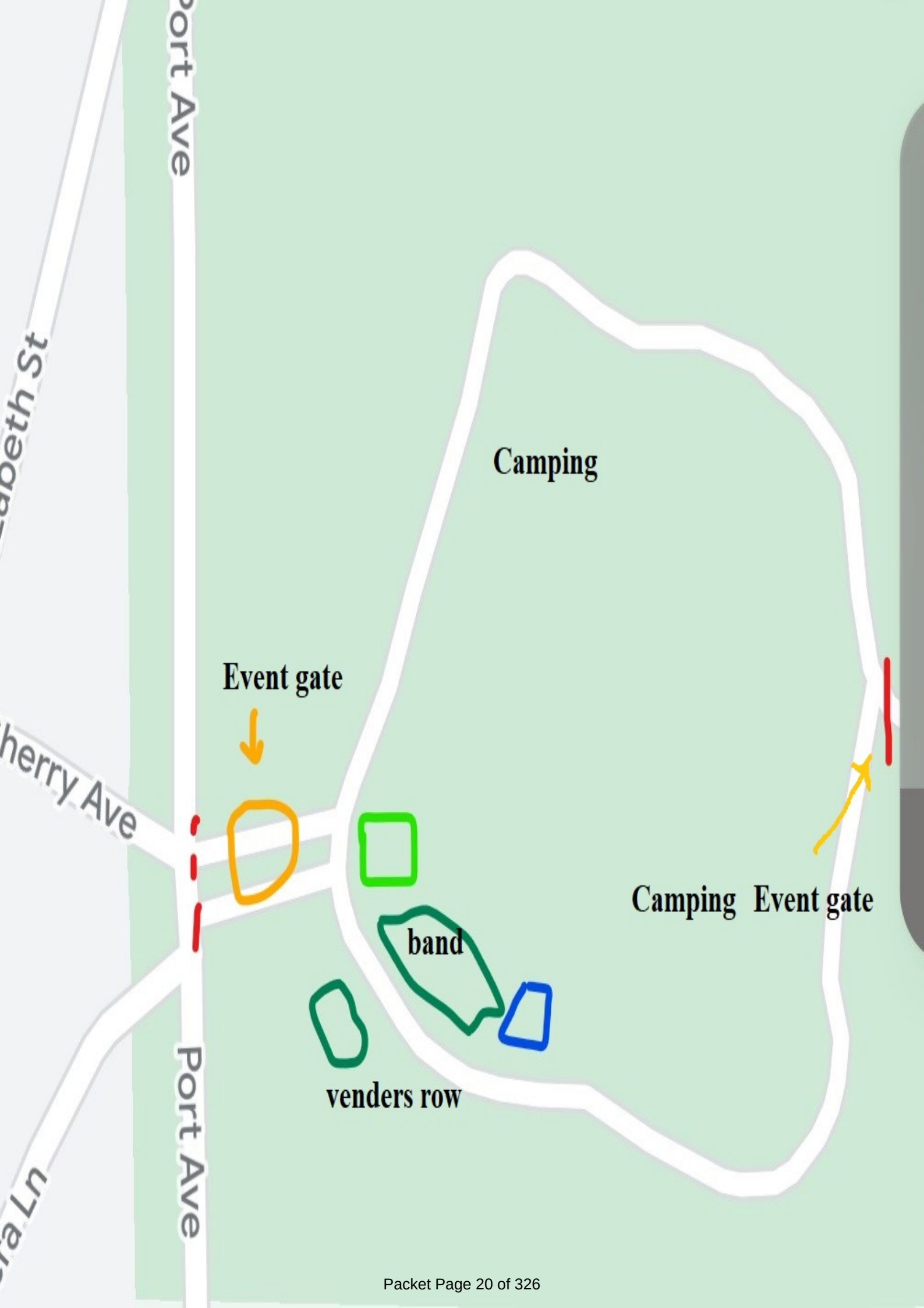
Mail Preregistration to be received no later than April 26th 2024. Make Checks or Money Orders to:
International Gypsy MC Corpus Christi Chapter, P.O. Box 18482, Corpus Christi, TX 78418

RIDER: _____ **CLUB:** _____

PASSENGER(S): _____

ADDRESS: _____ **CITY:** _____ **STATE:** ____ **ZIP:** _____

***IF REGISTRATING A CHAPTER PLEASE INDICATE NUMBER OF MEMBERS UNDER PASSENGER(S) AND ON THE CHECK/M.O.**



Event gate

Camping

Camping Event gate

band

venders row



City of Ingleside

PO Drawer 400, Ingleside, TX 78362
Attn: Community Events
Phone: 361-776-3438
Email: ParksandRec@inglesidetx.gov

Special Use Permit

Name of Organization: Gypsy M/C International-Corpus Christi Chapter Non-Profit? ☒ Yes ☐ No
Your Name: Patrick Lahti aka Grasshopper HOT Fund Application? ☐ Yes ☒ No
Address: P.O. Box 18482 City Corpus Christi Zip 78418
Phone (include area code): (210)585-1121 Email: patrick.lahti1@gmail.com
Date of Event: May 2nd, 3rd, 4th, 5th Estimated Attendance: 150-300

Facility Requested:

- ☐ Cove Park
☐ Faith Park
☐ Garden Center ☐ Dixie Diegel Fields ☐ Other: _____
☐ Humble Community Center
☒ Live Oak Park
☐ Disc Golf ☐ Bennie Diegel Fields ☐ Other: _____
☐ N.O. Simmons Park
☐ Basketball Pavilion ☐ Parking Lot ☐ Picnic Pavilion
☐ Soccer Fields ☐ Football Fields ☐ Other: _____
☐ Whitney Lake Park

Special Use Activities (check all that apply):

- ☒ Extended Hours of Park Operation
☒ Overnight Camping
☒ Relaxation of Noise Ordinance Standards
☒ Sale and/or Consumption of Intoxicating Beverages (limit of 48 hours)
☒ Street and/or Sidewalk Closure

Specific time special use activity will take place: 12pm May 3rd to 12pm May 5th

Indicate set-up and take-down times: Start set-up 5pm May 2nd, take down 12pm May 5th

Note: Applicant *must* obtain the signature of the Director of Community Events to confirm the requested facility is available on the requested date/time.

Leticia M. Lopez
Director of Community Events Signature

It is understood that the renter/user of Ingleside community facilities at all times indemnify, defend, and hold harmless the City of Ingleside, Texas, its officers, employees and contractors from and against any and all claims, damages, losses and expenses of whatever nature, including attorney fees, in any manner connected with, related to, or as a result of any actions or inaction associated with the usage or rental of Ingleside facilities. You will be responsible for cleanup and any damages incurred by your event.

Signature of Adult Applicant: *[Signature]*

Date: 03/13/24

This Special Use Permit was authorized by City Council on the _____ day of _____, 20____

Mayor's Signature _____

Date _____

Note: If signed by the Mayor, this document authorizes the Special Use Permit. Additional contracts may be necessary based on the facility selected. Contact the Community Events Department to verify.

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 9

Deliberate and take appropriate action regarding acceptance of the HOT Funds Post Event Form from the Ingleside Chamber of Commerce for their Round Up Days & Music Festival Event held March 23-25, 2024, and payment of \$60,500 to close out the event.

SUBMITTED BY: Jodi Carr, Director of Economic Development

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

City Council approved the original HOT Fund Application for the Ingleside chamber of Commerce Round Up Days & Music Fest on 9-12-23, in the amount of \$60,500. The Post Event Form has been reconciled and expenses verified to ensure compliance with the state statutes. There is documented proof of 21 hotel rooms. The Ingleside Chamber of Commerce should be paid \$60,500 from HOT Funds to close out this event for 2024.

FISCAL ANALYSIS:

\$60,500 was included in the FY 23/24 HOT Funds Budget for Ingleside Chamber of Commerce Round Up Days & Music Fest in account 21-500-620.

RECOMMENDATION:

Staff recommends acceptance of the HOT Funds Post Event Form and payment of \$60,500 to the Ingleside Chamber of Commerce.

ATTACHMENTS:

1. Post Event RountUp24

21-500-620

POST EVENT REPORT FORM

**Note: You are required to submit copies of the documentation showing hotel room nights associated with your event with your Post Event Report.*

Date: 3/28/2024

ORGANIZATION INFORMATION

Name of Organization: Ingleside Chamber of Commerce & Visitor Center
Address: 2809 Main Street / PO BOX 686
City, State, Zip: Ingleside, TX 78362
Contact Name: Barbara Gregg
Contact Phone Number: 361-776-2906

PROJECT OR EVENT

Name of Event or Project: Ingleside Round Up Days & Music Festival
Date of Event or Project: March 22, 23, 24, 2024
Primary Location of Event or Project: 2867 Ave J (N.O. Simmons Park) Ingleside, TX
Primary Purpose of Funded Event/Project: To draw visitors to Ingleside
Amount Received from Hotel Occupancy Tax Funds: \$60,500.00
Amount Used from Hotel Occupancy Tax Funds: \$60,500.00

How many years have you held this Event or Project? 52 yrs

Event Funding Information

1. Actual percentage of funded Event costs covered by hotel occupancy tax: 100%
2. Actual percentage of Facility costs covered by hotel occupancy tax (if applicable): _____
3. Actual percentage of Staff costs covered by hotel occupancy tax (if applicable): _____
4. If staff costs were covered, estimate of actual hours staff spent on funded Event: _____
5. Did the event charge admission? Was there a net profit from this event? If there was a Net profit, what was the amount and how is it being used?

Yes, \$5.00 per person, Kids 8 & under / Military Free. \$50,000. It will be used to fund other events and to give back to the community

*60,500 approved by Council 9-12-23
in FY 23/24 Budget*

Event Attendance Information

1. How many people did you predict would attend this Event? (Number submitted in application for hotel occupancy tax funds): 10,000
2. What would you estimate was the actual attendance at the event? 10,000
3. How many room nights were generated at Ingleside hotels, motels, or bed & breakfasts by attendees of this Event or Project? 2 nights, 21 rooms
4. If this Event has been funded by hotel occupancy tax in the last three years, how many room nights were generated at Ingleside hotels, motels, or bed & breakfasts by attendees of this Event or Project?
Last Year 22
Two Years Ago 21
Three Years ago no-event Covid
5. What method did you use to determine the number of people who booked rooms at Ingleside hotels, motels, or bed & breakfasts (e.g.; room block usage, information, survey of hoteliers, etc.)? Free entry into Round Up Days for those who stayed at the hotels

6. Was a room block established for this Event at an area hotel(hotels) NO, and if so, did the room block fill. _____ If the room block did not fill, how many rooms were picked up? _____

Event Promotion Information

1. Please check all efforts your organization actually used to promote this Event and how much was actually spent in each category:

Newspaper:	\$ _____
Radio:	\$ <u>4,000</u>
TV:	\$ <u>6,000</u>
Press Release	\$ _____
Other	\$ _____

2. Did you include a link to the Ingleside Visitor's Center or other source on your promotional handouts and in your website for booking hotel nights during this event? yes
3. Did you negotiate a special rate or hotel/event package to attract overnight stays? no

4. What new marketing initiatives did you utilize to promote hotel and convention activity for this Event?
Posted on social media and website advertising hotels in Ingleside

5. Please attach samples of documents showing how the City of Ingleside was recognized in your advertising/promotional campaign.
6. Please attach at least one sample of all forms of advertising/promotion used in your campaign. If the sample itself does not indicate the medium (radio, TV, print, or mail) used or where the advertising took place (e.g. a city's newspaper, or a radio spot that does not indicate the city where the spot was played), please include other information that would show location of the advertising and medium utilized.

Sporting Related Events

1. If the Event funded by hotel occupancy tax was a sporting-related function/facility, how many individuals actually participated in this event? _____
2. If the event was a sporting-related function/facility, how many of the participants were from another city or county? _____
3. If the event was a sporting-related function/facility, quantify how the activity substantially increased economic activity at hotel and motels within the city or its vicinity?

Additional Event Information

What Ingleside businesses did you utilize for food, supplies, materials, printing, etc?

Please Submit no later than 60 days after the event to:

City of Ingleside Attn:
Economic Development Director
P.O. Drawer 400
Ingleside, TX 78362

21 Rooms

JK

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 10

Deliberate and take appropriate action on a resolution appointing/reappointing members to the Board of Adjustment.

SUBMITTED BY: Gene Delauro, Interim Building Official

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

At this time, there is a need to appoint Board Members to the Board of Adjustment. Christina DeRay has expressed a desire and willingness to serve on the board as a regular member. Currently, the Board of Adjustment does not have enough members to establish a quorum to conduct a meeting per Section 10.06 of the City Charter, which requires a minimum of 4 members for a quorum. Accordingly, no member recommendation for the Board of Adjustment can be provided at this time.

FISCAL ANALYSIS:

None

RECOMMENDATION:

Staff recommends the City Council appoint Christina DeRay to the Board of Adjustment.

ATTACHMENTS:

1. Letter of Interest - BOA
2. PROPOSED BOA Members 2023
3. Resolution - Appointments BOA_DRAFT

Letter of interest for the Board of Adjustments

My name is Christina DeRay, and I would like to be considered for service on the Board of Adjustments. I have been a very happy resident of Ingleside, TX for the past 6 years. My husband and I moved our family here after we lost our home to hurricane Harvey in Rockport. We grew up in Rockport and have deep ties there, so moving to Ingleside was a difficult decision for us. It has proven to be one of the best decisions we could have made for our growing family. I absolutely love it here and want nothing more than to see Ingleside grow and prosper. Ingleside has been a blessing to our family, and I would like to return the favor and serve Ingleside in any and every way possible. At the moment I also serve on the Street Advisory Group. Thank you for your consideration.

Christina L. DeRay
2161 Capeheart St
Ingleside, TX 78362
361-813-8487

BOARD OF ADJUSTMENT – 2023 - CURRENT

REGULAR PLACE NAME	1 ST TERM	2 ND TERM	ODD/EVEN
1 MIKE FRANCESCO	01/01/21 – 12/31/22	01/01/23 – 12/31/24	ODD
2 MICHAEL MORGAN	01/01/23 – 12/31/24		ODD
3 ASHLEY WIRZ	01/01/23 – 12/31/24		ODD
4 VACANT	01/01/24 – 12/31/25		EVEN
5 VACANT	01/01/24 – 12/31/25		EVEN
ALTERNATE PLACE NAME	1 ST TERM	2 ND TERM	ODD/EVEN
6 VACANT	01/01/24 – 12/31/25		EVEN
7 VACANT	01/01/24 – 12/31/25		EVEN
8 VACANT	01/01/23 – 12/31/24		ODD
9 VACANT	01/01/23 – 12/31/24		ODD

BOARD OF ADJUSTMENT – 2023 - PROPOSED

REGULAR PLACE NAME	1 ST TERM	2 ND TERM	ODD/EVEN
1 MIKE FRANCESCO	01/01/21 – 12/31/22	01/01/23 – 12/31/24	ODD
2 MICHAEL MORGAN	01/01/23 – 12/31/24		ODD
3 ASHLEY WIRZ	01/01/23 – 12/31/24		ODD
4 CHRISTINA DERAY	04/09/24 – 12/31/25		EVEN
5 VACANT	01/01/24 – 12/31/25		EVEN
ALTERNATE PLACE NAME	1 ST TERM	2 ND TERM	ODD/EVEN
6 VACANT	01/01/24 – 12/31/25		EVEN
7 VACANT	01/01/24 – 12/31/25		EVEN
8 VACANT	01/01/23 – 12/31/24		ODD
9 VACANT	01/01/23 – 12/31/24		ODD

Updated March 25, 2024

RESOLUTION NO. 2024-_____

**A RESOLUTION APPOINTING/REAPPOINTING MEMBERS TO THE
BOARD OF ADJUSTMENT.**

WHEREAS, the Board of Adjustments was created by City Charter Article X, Section 10.06 with Members that have two (2) year staggered terms with term limits of two (2) consecutive terms.; and

WHEREAS, at this time, there is a need to appoint or reappoint Board Members; and

WHEREAS, Christina DeRay has expressed a desire and willingness to serve a first term as a Regular Member.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF INGLESIDE, COUNTY OF SAN PATRICIO, STATE OF TEXAS:

Section 1. The matter and facts recited in the preamble hereof are found and determined to be true and correct.

Section 2. Mike Francesco is continuing to serve his/her second consecutive term as a Regular Member to the Board of Adjustment, Position 1, with his/her term beginning on January 1, 2023 to December 31, 2024.

Section 3. Michael Morgan is continuing to serve his/her first consecutive term as a Regular Member of the Board of Adjustment, Position 2, with his/her term beginning on January 1, 2023 to December 31, 2024.

Section 4. Ashley Wirz is continuing to serve his/her first consecutive term as a Regular Member of the Board of Adjustment, Position 3, with his/her term beginning on January 1, 2023 to December 31, 2024.

Section 5. Christina DeRay is appointed to serve his/her second consecutive term as a Regular Member to the Board of Adjustment, Position 4, with his/her term beginning on April 9, 2024 to December 31, 2025.

Section 6. Vacant, Position 5, to be filled at a later date.

Section 7. Vacant, Position 6, to be filled at a later date.

Section 8. Vacant, Position 7, to be filled at a later date.

Section 9. Vacant, Position 8, to be filled at a later date.

Section 10. Vacant, Position 9, to be filled at a later date.

PASSED, RESOLVED, APPROVED, AND ADOPTED this 9th day of April, 2024, by 00 (ayes) to 00 (nays) with 00 abstentions by a vote of the City Council of the City of Ingleside, Texas.

CITY OF INGLESIDE, TEXAS

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City secretary

DRAFT

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 11

Deliberate and take appropriate action on the second reading of an Ordinance amending Ingleside Code of Ordinances Chapter 14-Animal Control and providing for effective date, reading, severance, and publication.

SUBMITTED BY: Tammy Burr, Police Chief

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The City of Ingleside Animal Control Unit, under the supervision of the Ingleside Police Department, has determined that to respond to the changes in animal control and protection that are required by law, it is necessary to update Ingleside Code of Ordinances, Chapter 14-Animal Control. This update is needed to better protect the health, safety, and welfare of the citizens of Ingleside, and to comply with existing law.

First Reading of Ordinance was March 26, 2024, passed to second reading with minor changes.

FISCAL ANALYSIS:

N/A

RECOMMENDATION:

Staff recommends final approval of Ordinance.

ATTACHMENTS:

1. DRAFT - Ingleside Animal Ordinances -Second Reading 4-9-24

ORDINANCE 2024-_____
AN ORDINANCE AMENDING INGLESIDE CODE OF ORDINANCES,
CHAPTER 14-ANIMAL CONTROL
AND PROVIDING FOR EFFECTIVE DATE, READING, SEVERANCE, AND
PUBLICATION.

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF INGLESIDE,
COUNTY OF SAN PATRICIO, STATE OF TEXAS:**

SECTION 1. AMENDMENT. Chapter 14 – Animal Control is hereby amended to read as follows,

CHAPTER 14 – ANIMAL CONTROL

ARTICLE I – GENERAL PROVISIONS

Sec. 14-1. – Purpose.

It is the intent and purpose of this chapter to provide a safe and healthy environment within the city limits for both animals and residents. While a resident may own and keep animals within the city limits, the conduct of those animals and the conditions in which the animals are kept should not infringe on the surrounding residences and businesses.

Sec. 14-2. – Enforcement.

- (a) Enforcement of this chapter shall be the primary responsibility of the Animal Control Officers; however; Peace Officers, and other persons/agencies designated by the city may also enforce provisions of this chapter.
- (b) It is a violation of this chapter to interfere with, obstruct, resist, or oppose any officer while such person is apprehending an animal or performing any other duties.
- (c) Any Animal Control Officers, Peace Officers, or other persons/agencies designated by the city has the right to pursue and apprehend animals running at large onto private property while enforcing the provisions of this chapter. The use of catchpoles, cages, live traps, bite sticks, tasers, or other animal related equipment is authorized to be used.

Sec. 14-3. – Penalty.

- (a) Any person, firm, or corporation who violates, disobeys, omits, or refuses to comply with, or who resists enforcement of any of the provisions of this chapter shall be punished. Each violation of this chapter shall be deemed a separate offense and each day that violation exists shall constitute a separate offense.
- (b) This penalty should not be construed as exclusive, and the city shall be authorized to pursue all other criminal and civil remedies to which it is entitled to under the authority of other ordinances or State law.

Sec. 14-4. – Culpable Mental State.

Unless specifically provided in this chapter, an offense under this chapter shall not require a culpable mental state. It is the intent of this chapter to impose strict liability for any violation of this chapter.

Sec. 14-5. – Definitions.

Adequate Shelter: shall be a structure having, three (3) sides, and a roof; must be large enough to allow the animal to stand, sit, lay down, and make a full rotation and must provide protection from inclement weather

Animal: any living vertebrate, creature, domestic or wild, other than Homo Sapiens.

Animal Control Officer: a person who is employed, appointed, or otherwise engaged primarily to enforce laws relating to animal control and who is not a peace officer.

At Large: not contained within an owners' property or residence by means of fence, cage, kennel, leash or lead; or not contained on a leash with an owner who is immediately, physically, visually or obviously present and in competent command.

Cat: a male or female of any feline species, domesticated and feral/stray.

Collar: any collar constructed of nylon, leather, or similar material, specifically designed to be used for a cat or dog.

Dangerous Dog: makes an unprovoked attack on a person or animal that causes bodily injury and occurs in a place other than an enclosure in which the dog was being kept and that was reasonably certain to prevent the dog from leaving the enclosure on its' own; or commits unprovoked acts in a place other than an enclosure in which the dog was being kept and that was reasonably certain to prevent the dog from leaving the enclosure on its' own and those acts cause a person to believe that the dog will attack and cause bodily injury to that person.

Days: shall mean calendar days.

Dog: a male or female of any canine species, domesticated and feral/stray.

Feral: in a wild state, especially after escape from captivity or domestication.

Fowl: any live bird, including ostriches, rheas, cassowaries, and emus.

Impound: temporary confinement.

Limit Law: a "Limit Law" is a restriction on the number of animals an owner or household may own.

Livestock: shall include, but is not limited to, cattle, horses, donkeys, or mules.

Local Rabies Control Authority (LRCA): the officer designated to enforce State and local standards for rabies control as well as rules adopted in Texas Health and Safety Code, Chapter 826, Rabies, Section 826.045, Area Rabies Quarantine.

Microchip: a permanent method of electronic identification implanted under the skin between the shoulder blades in the back of the neck; each microchip has a unique number and can be detected using a microchip scanner.

Owner: any person(s) who owns or who is in care, custody, and control of an animal; also applies to person(s) who knowingly allows animals to remain in their care, custody, control, or on their property for a minimum of three (3) consecutive days or provides food, water, shelter, or veterinary care for any amount of time.

Peafowl: shall include, but is not limited to, peacocks and pheasant.

Poultry: shall include, but is not limited to, chickens, turkeys, ducks, geese, or other domestic fowl.

Quarantine: strict confinement of an animal specified in an order by a department or its designee either on the private premises of the animal's owner or at a facility approved by a department or its designee and under restraint, closed cage or paddock or in any other manner approved by a department or its designee.

Rabies: an acute viral disease of human and animal affecting the central nervous system and usually transmitted through saliva.

Small Animals: shall include, but is not limited to, rabbits, rats, mice, hamsters, gerbils, guinea pigs, pygmy hedgehogs, or sugar gliders.

Small Livestock: shall include, but is not limited to, goats, sheep, or pigs.

Sterilization: the surgical removal of the reproductive organs or the nonsurgical methods and techniques approved by the United States Food and Drug Administration or the United States Department of Agriculture to permanently render an animal unable to reproduce.

Stray: being loose, or wandering all-by-itself.

Transport: to take or carry from one place to another via vehicle, aircraft, or ship.

Wildlife: shall include, but not limited to, skunks, raccoons, opossums, foxes, and coyotes.

ARTICLE II – CATS AND DOGS

Sec. 14-6. – Dogs At Large.

It shall be unlawful for an owner to allow domesticated dogs to run at large. All domesticated dogs on public property shall be properly contained on a leash with an owner who is immediately, physically, visually or obviously present and in competent command.

- (a) When at large, any dog who displays fierce, dangerous or vicious propensities or has bitten, scratched, or otherwise attacked any person or other animal and is unable to be caught, impounded or identified shall be destroyed without prior notice to the owner.
- (b) When at large, any dog found to be injured to the extent that it is past recovery, in the opinion of an Animal Control Officer, Peace Officer, or other persons/agencies designated by the city, shall be destroyed by such persons if the animal or owner is not able to be identified in a timely manner; also applies to injured domesticated/stray/feral cats.
- (c) An offense under this section is a Class C misdemeanor.

Sec. 14-7. – Rabies Vaccine.

It shall be unlawful for an owner to keep a domesticated cat or dog, over the age of four (4) months, unless such cat or dog has been immunized against rabies in accordance with State law.

- (a) The rabies vaccination shall be administered by a licensed veterinarian in the state of Texas and the cat or dog is not considered current until thirty (30) days have elapsed from the vaccination date.
- (b) Rabies Tags shall be publicly displayed on a collar when the cat or dog is in public.
- (c) Rabies documentation shall be made accessible to any Animal Control Officer, Peace Officer, or other persons/agencies designated by the city when asked; failure to provide documentation shall deem the cat or dog as unvaccinated.
- (d) Owners having cats or dogs contained on private property are subject to rabies vaccination questioning if said cat or dog is in plain view from a public area.
- (e) An offense under this section is a Class C misdemeanor.

Sec. 14-8. – Unauthorized Removal of Tags or Collars.

It shall be unlawful for anyone, other than the owner of, Animal Control Officers, Peace Officers, or other persons/agencies designated by the city, to remove tags or a collar from a cat or dog as required by this section.

- (a) An offense under this section is a Class C misdemeanor.

Sec. 14-9. – Cat and Dog Sterilization.

It shall be unlawful for an owner to adopt a domesticated cat or dog from the animal shelter without having said cat or dog sterilized.

- (a) Upon adoption a sterilization agreement shall be signed indicating the date in which the cat or dog is to be sterilized.
- (b) Cats and dogs which have not been sterilized are subject to reclamation; an owner shall not prevent, obstruct, or interfere with reclamation.
- (c) An offense under this section is a Class C misdemeanor.

Sec. 14-10. – Vehicle Containment.

It shall be unlawful for an owner to contain their cat or dog in a vehicle on any roadway, alley, park, public premises, or private property in the following ways:

- (a) Moving Vehicles:
 - 1. No owner shall transport a cat or dog unless said cat or dog is properly contained in an enclosure used to transport people or, if in the bed of a vehicle, in a vented container or cage, by chain or rope, or other device cross tied to prevent falling, jumping, or strangling.
 - 2. No owner shall permit their cat or dog to ride in the drivers' seat or in the front or rear dashboards.
- (b) Parked Vehicles:
 - 1. No owner shall leave a cat or dog unattended for longer than five (5) minutes, regardless of weather conditions, windows cracked/rolled down, air conditioner running, etc.
 - 2. Animal Control Officers, Peace Officers, or other persons/agencies designated by the city are authorized to use reasonable force, including the breaking of a side window, to remove a cat or dog whenever it appears the health, safety, and welfare of said cat or dog is or soon will be endangered.
- (c) An offense under this section is a Class C Misdemeanor.

Sec. 14-11. – Unlawful Restraint.

It shall be unlawful for an owner to leave a dog outside and unattended by the use of a restraint:

- (a) Unless the owner provides access to:
 - 1. Adequate Shelter;
 - 2. An area that allows the dog to avoid standing water and exposure to excessive animal waste;
 - 3. Shade from direct sunlight;
 - 4. Potable water;
- (b) Between the hours of 10pm-6am;
- (c) Within five hundred (500) feet of the premises of a school;
- (d) In the case of extreme weather conditions, including, but not limited to conditions in which:
 - 1. The actual or effective outdoor temperature is below thirty-two (32) degrees Fahrenheit
 - 2. A heat advisory has been issued by a local or state authority or jurisdiction
 - 3. A hurricane, tropical storm, or tornado warning has been issued for the jurisdiction by the National Weather Service.
- (e) A restraint that unreasonably limits a dog's movement, such as:
 - 1. Uses a collar that is pinch-type, prong-type, or choke-type or that is not properly fitted;
 - 2. Is a length shorter than the greater of:
 - i. Five (5) times the length of the dog, as measured from the tip of the nose to the base of the tail

- ii. Ten (10) feet;
 - 3. Attached to a collar or harness not properly fitted;
 - 4. Is in an unsafe condition;
 - 5. Causes injury to the dog;
 - 6. Is locked by any type of lock;
 - 7. Has weights attached; or
 - 8. Is a chain of any thickness/length.
- (f) This section does not apply to:
- 1. A dog lawfully restrained to a running line, pulley, or trolley system;
 - 2. A dog lawfully restrained in compliance with requirements of a camping or recreational area as defined by a federal, state, or local authority or jurisdiction;
 - 3. A dog unlawfully restrained for a reasonable period, not to exceed three (3) hours in a twenty-four (24) hour period;
 - 4. A dog unlawfully restrained for no longer than is necessary for the owner to complete a temporary task that requires unlawful restraint;
 - 5. A dog lawfully restrained while the owner is engaged in, or actively training for, an activity that is conducted pursuant to a valid license issued by the state ID the activity for which the license is issued is associated with the use or presence of a cat or dog;
 - 6. A dog lawfully restrained while the owner is engaged in conduct directly related to the business of shepherding or herding cattle or livestock;
 - 7. A dog lawfully restrained while the owner is engaged in conduct directly related to the business of cultivating agricultural products, if the restraint is reasonably necessary for the safety of the cat or dog.
- (g) If an owner fails to comply with this section in respect to more than one (1) dog, each dog constitutes a separate offense.
- (h) This section does not apply to a dog being walked on a hand-held leash.
- (i) An offense under this section is a Class C misdemeanor.

Sec. 14-12. – Cat and Dog Limit Law.

It shall be unlawful for an owner residing in the city limits to own more than six (6) domesticated cats or dogs, in any combination. Households with multiple owners shall not own more than six (6) domesticated cats or dogs, in any combination.

- (a) Owners or households owning/having more than six (6) domesticated cats or dogs, prior to the effective date of this section, shall be allowed to keep all said domesticated cats or dogs so as long as the following criteria is met:
 - 1. The owner shall contact Animal Control and advise of the number of domesticated cats or dogs in their possession and provide the following information: owner name, address, phone number AND domesticated animal type, sex, age, color, sterilization status and rabies vaccination status. This needs to be completed no later than thirty (30) days after the effective date of this section.
 - 2. The owner shall ensure all cats or dogs have a current rabies vaccination no later than thirty (30) days after the effective date of this section.
 - 3. The owner shall annually maintain rabies vaccination for all cats and dogs under this section.
- (b) Owners or households found to be in violation of this section shall be given a seventy-two (72) hour written notice to remove said cat or dog from the city limits.

- (c) This section does not apply to owners with approved breeding permits from the Texas Department of Licensing and Regulation (TDLR).
 - 1. TDLR Permit documentation shall be made accessible to any Animal Control Officer, Peace Officer, or other persons/agencies designated by the city when asked; failure to provide documentation shall revoke this exception.
- (d) An offense under this section is a Class C misdemeanor.

Sec. 14-13. – Dangerous Dog.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control a dangerous dog within the city limits.

- (a) Dangerous dog investigations may be prompted by citizen complaints or by any Animal Control Officers, Peace Officers, or other persons/agencies designated by the city.
- (b) Dangerous dog investigations shall be conducted within ten (10) days of the receipt of a valid complaint and the owner shall be given written notice of the investigation within twenty-four (24) hours.
- (c) All investigations shall be conducted in accordance with State law.
- (d) Dogs under investigation shall be quarantined at the animal control facility for the duration of the ten (10) day investigation at the owners' expense.
- (e) Owners shall receive written notice of the investigation results within seventy-two (72) hours of the tenth (10th) day following the investigation.
- (f) All applicable fees shall be paid prior to the release of any dog to their owner and the owner shall immediately comply with the written notice or by 5pm (Central Standard Time) of the date listed on the written notice.
- (g) Any owner wanting to appeal the written notice shall surrender their dog to the animal control facility until the hearing is held at their own expense.
- (h) Any dog deemed dangerous and found within the city limits shall immediately be seized by Animal Control Officers, Peace Officers, or other persons/agencies designated by the city, without notice to the owner.
- (i) An offense under this section is a Class C misdemeanor.

Sec. 14-14. – Dog on Animal Attack and Investigation.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control within the city limits a dog that is known to repeatedly attack other animals. These animals include, but are not limited to, cats, dogs, livestock, small livestock, poultry, peafowl, or small animals.

- (a) Dog on Animal Attack investigations may be prompted by citizen complaints or by any Animal Control Officers, Peace Officers, or other persons/agencies designated by the city.
- (b) Dog on Animal Attack investigations shall be conducted within ten (10) days of the receipt of a complaint and the owner shall be given written notice of the investigation within twenty-four (24) hours.
- (c) Dogs under investigation shall be quarantined at the animal control facility for the duration of the ten (10) day investigation at the owners' expense.
- (d) Owners shall receive written notice of the investigation results within seventy-two (72) hours of the tenth (10th) day following the investigation.
- (e) All applicable fees shall be paid prior to the release of any dog to their owner and the owner shall immediately comply with the written notice or by 5pm (Central Standard Time) of the date listed on the written notice.

- (f) Any dog deemed to have repeatedly attacked other animals found within the city limits shall immediately be seized by Animal Control Officers, Peace Officers, or other persons/agencies designated by the city, without notice to the owner.
- (g) An offense under this section is a Class C misdemeanor.

Sec. 14-15. – Guard Dogs.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control within the city limits a guard dog unless:

- (a) The owner of a guard dog notifies the Ingleside Police Department, the Ingleside Fire Department, Tri-County EMS, City Hall and any other first responder agency/city department that may have or need to access the premise for emergency services/city services.
- (d) An offense under this section is a Class C misdemeanor.

Sec. 14-16. – Rabies Quarantine.

All cats and dogs having bitten or scratched a person shall be rabies quarantined per the instruction of the Local Rabies Control Authority (LRCA) and in accordance with Texas Health and Safety Code, Chapter 826, Rabies.

- (a) Cats and dogs needing to be rabies quarantined shall be observed for a period of not less than ten (10) days and turned over to the LRCA or an Animal Control Officer immediately.
- (b) Owners shall receive written notice of the rabies quarantine within twenty-four (24) hours of the incident.
- (c) Rabies Quarantine shall be conducted in accordance with State law.
- (d) Cats and dogs shall be rabies quarantined at the owners' expense.
- (e) Upon completion of the rabies quarantine, cats and dogs shall be released back to the owner if no clinical signs of rabies have been observed and applicable fees have been paid.
- (f) Owners and victims shall receive written notice of the results of the rabies quarantine within seventy-two (72) hours of the tenth (10th) day following the completion of the rabies quarantine.
- (g) Any cat or dog showing clinical signs of rabies during the rabies quarantine period shall immediately be destroyed and tested.
- (h) If the cat or dog is unowned, or if at any time during rabies quarantine ownership is renounced, the animal may be destroyed and tested for rabies.
- (i) An offense under this section is a Class C misdemeanor.

Sec. 14-17. – Feral and Stray Cat Trapping.

It shall be unlawful for a person to shoot, kill or hunt feral and stray cats. Feral and stray cats may be trapped on private property to remedy nuisance issues.

- (a) Trapping.
 - 1. Traps shall be checked, by the person setting the trap, at least once every twelve (12) hours.
 - 2. The use of steel-jawed spring traps, mechanical jaw traps, snares, or leg hold traps are prohibited.
 - 3. A person may notify Animal Control Officers to have feral and stray cats removed or contact local shelters or organizations who may take the cat.
 - 4. Humane care shall be provided for any trapped cats including food, water, and shelter until removed.
 - 5. An unauthorized person shall not relocate feral and stray cats within the city limits.

6. An unauthorized person shall not euthanize feral and stray cats.
 7. Any Animal Control Officer, Peace Officer, or other persons/agencies designated by the city may shoot, kill, hunt, and relocate feral and stray cats if necessary and authorized by Animal Control Officer or Peace Officer.
- (b) An offense under this section is a Class C misdemeanor.

Sec. 14-18. – Cat or Dog Inspection.

Any Animal Control Officers, Peace Officers, or other persons/agencies designated by the city may inspect any cats or dogs or any visible premises where cats or dogs are kept, owned or maintained as long as said cats or dogs are within plain view.

Sec. 14-19. – Cat or Dog Seizure.

Any Animal Control Officers, Peace Officers, or other persons/agencies designated by the city shall seize any cat or dog in violation of this chapter regardless if an owner is present or notified. All cats or dogs shall be impounded at the animal control facility and are subject to current processes, procedures and dispositions.

ARTICLE III – LIVESTOCK, SMALL LIVESTOCK, POULTRY, PEAFAWL AND SMALL ANIMALS.

Sec. 14-20. – Permit Required.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control within the city limits livestock, small livestock, peafowl, or small animals without an approved permit.

- (a) Initial livestock, small livestock, peafowl, or small animal permits shall be obtained prior to the keeping, owning, maintaining, or use of livestock, small livestock, or small animals.
- (b) Applicable fees are required to complete permit application.
- (c) Adequate shelter for livestock, small livestock, peafowl, or small animals shall be provided and livestock, small livestock, peafowl, or small animals shall not come within seventy-five (75) feet of a neighboring structure serving as a residence or business, unless said structure belongs to the owner obtaining the permit.
- (d) This section is not applicable for livestock, small livestock, peafowl, or small animals kept in completely enclosed structures or fenced facilities or properties on two (2) acres or more.
- (e) Livestock, small livestock, peafowl, or small animal permits are valid for twelve (12) months from the date of issuance.
- (f) Renewal of livestock, small livestock, peafowl, or small animal permits shall be completed within thirty (30) days of expiration of previous permit.
- (g) Livestock, small livestock, peafowl, or small animal permit documentation shall be made accessible to any Animal Control Officer, Peace Officer, or other persons/agencies designated by the city when asked; failure to provide documentation shall deem the livestock, small livestock, peafowl, or small animals as unpermitted.
- (h) Owners having livestock, small livestock, peafowl, or small animals contained on private property are subject to permit questioning if said livestock, small livestock, peafowl, or small animals are in plain view from a public area.
- (i) Livestock, small livestock, peafowl, or small animal violations including, but not limited to, not obtaining an approved permit, at large, public nuisance, limit law, or failure to provide adequate shelter or water, shall result in the revocation of any and all livestock, small livestock,

peafowl, or small animal permits for a minimum of twelve (12) months, but not to exceed twenty-four (24) months.

- (j) Owners shall be given thirty (30) day's notice to remove livestock, small livestock, peafowl and small animals from the city limits once a permit has been revoked and or the animals be deemed as unpermitted.
- (k) An offense under this section is a Class C misdemeanor.

Sec. 14-21. – Livestock, Small Livestock, Poultry, Peafowl and Small Animal Inspection.

An owner having livestock, small livestock, poultry, peafowl, or small animals on their property are subject to inspection with or without an approved livestock, small livestock, poultry, peafowl, or small animal permit. Inspections shall be completed by an Animal Control Officer at a reasonable time of day and only with consent of an owner. In the event consent is not given, an administrative code enforcement search warrant must be obtained.

Sec. 14-22. – Roosters.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control within the city limits roosters unless:

- (a) The owner keeps said roosters on a premise with two (2) or more acres, and
- (b) Roosters shall not be kept within an enclosure within seventy-five (75) feet of a neighboring structure serving as a residence or business, unless said structure belongs to the owner.
- (c) Owners or households found to be in violation of this section shall be given a seventy-two (72) hour written notice to remove any roosters from the city limits.
- (d) An offense under this section is a Class C misdemeanor.

Sec. 14-23. – Livestock, Small Livestock, Poultry, Peafowl and Small Animal Limit Law.

The City of Ingleside will not restrict the number of Livestock, Small Livestock, Poultry, Peafowl and Small Animals owners or households may have in the city limits.

- (a) If Animal Control, or any other agency/department, receives complaints regarding the livestock, small livestock, poultry, peafowl and small animals, said complaints will be investigated.
- (b) If complaints are valid and causing a nuisance to the community, community members and/or causing cruelty to said livestock, small livestock, poultry, peafowl and small animals, the Animal Control Department has the authority to revoke any permits obtained.
- (c) An offense under this section is a Class C misdemeanor.

Sec. 14-24. – Livestock, Small Livestock, Poultry, Peafowl, and Small Animals At Large and Grazing.

Except as specifically provided in this chapter, an owner may not allow livestock, small livestock, poultry, peafowl, or small animals to run at large. Livestock, small livestock, poultry, peafowl, or small animals shall not be on any public property.

- (a) Owners of livestock, small livestock, poultry, peafowl, or small animals, determined to be at large, shall be liable for injuries and damages to persons or property other than their own.
- (b) When at large, any livestock, small livestock, poultry, peafowl, or small animals who displays fierce, dangerous or vicious propensities or has bitten, scratched, or otherwise attacked any person or other animal and is unable to be identified shall be destroyed without notice to the owner.

- (c) When at large, any livestock, small livestock, poultry, peafowl, or small animals found to be injured to the extent that it is past recovery, in the opinion of an Animal Control Officer, Peace Officer, or other persons/agencies designated by the city, shall be destroyed by such persons if the animal or owner is not able to be identified in a timely manner.
- (d) It shall be unlawful for an owner to stake livestock or small livestock near any roadway, alley, park, or public premises for the purpose of grazing.
- (e) An offense under this section is a Class C misdemeanor.

ARTICLE IV – OTHER.

Sec. 14-25. – Public Nuisance.

It shall be unlawful for an owner to allow their animal(s) to create a public nuisance. This section applies to all animals regulated by this chapter and any animals who meet any of the following criteria:

- (a) Frequent, habitual, or offensive meowing, barking, crying, yelping, howling, crowing or other noise;
- (b) Improper collecting and disposing of all feces, trash and debris related to, or caused by, any category of animal on public property or on private property other than their own;
- (c) Allows feces to accumulate on one's own private property, thus creating overpowering smell or offensive sight if viewed in plain view from a public or neighboring area;
- (d) Attacking other animals including, but not limited to, cats, dogs, livestock, small livestock, poultry, peafowl, or small animals;
- (e) Obstructing the flow of traffic;
- (f) Molests passing vehicles, bicyclists, scooters, walkers, or joggers;
- (g) More than three (3) at large violations within six (6) consecutive months for the same animal(s).
- (h) More than two (2) rabies vaccination violations within six (6) consecutive months for the same cat or dog;
- (i) More than three (3) impoundments at the animal control facility within six (6) consecutive months for the same cat or dog.
- (j) Owners who have received three (3) or more public nuisance violations within twelve (12) consecutive months for the same animal shall be given a seventy-two (72) hour written notice to remove said animal from the city limits.
- (k) An offense under this section is a Class C misdemeanor.

Sec. 14-26. – Adequate Shelter and Water.

This section applies to all animals, except stray cats, regulated by this chapter.

- (a) All animals shall have access to adequate shelter twenty-four (24) hours a day/ seven (7) days a week.
 - 1. The use of a single shelter is acceptable as long as it allows all animals individually, or cohabitating, to stand, sit, laydown, and make a full rotation if all are inside at the same time.
- (b) All animals shall have access to adequate water twenty-four (24) hours a day/ seven (7) days a week.
 - 1. Water shall be clean and debris free.
 - 2. The container in which the water is kept shall be large enough to contain enough water for the time the animals will be outside and shall be within reach of said animal(s).
- (c) Cats and dogs contained outside for longer than ten (10) minutes, with or without an owner who is immediately, physically, visually or obviously present and in competent command, shall adhere to this section.

- (d) Cats and dogs shall not be contained upon any open, unfenced, vacant lot, land, or property.
- (e) Dogs shall not be restrained in such a manner that would enable said dog to cross over a sidewalk, roadway, alley or into a park, or public/private premises.
- (f) An offense under this section is a Class C Misdemeanor.

Sec. 14-27. – Animals for Sale.

This section applies to all animals regulated by this chapter.

- (a) It shall be unlawful for any person to display or offer for sale or offer to give away any animal in a public place, including highways, streets, sidewalks, alleys or parks within the city limits.
- (b) It shall be unlawful for any person to sell or deliver in quantities of less than five (5) live chickens, ducklings, goslings or rabbits to any person within the period of ten (10) days prior to Easter Sunday within the city limits.
- (c) It shall be unlawful for any person to give away or offer to give away any live animal as a prize for, or as an inducement to enter any contest, game or other competition, or as an inducement to enter a place of amusement; or offer such animal as an incentive to enter into any business agreement whereby the offer was for the purpose of attracting trade.
- (d) It shall be unlawful for any person to sell, offer for sale, barter or display any living animals which have been dye, colored or otherwise treated so as to impart to it an artificial color.
- (f) An offense under this section is a Class C Misdemeanor.

Sec. 14-28. – Prohibited Animals.

It shall be unlawful for an owner to keep, own, maintain, use or have in their possession or on a premise under their control (landlord/tenant) within the city limits any of the following unless permitted by a state or federal agency:

- (a) Class Reptiles: Family Helodermatidea (the venomous lizards) and all Varanidae (monitor); order Ophidia, family Boidoe (boas, pythons, anacondas) family Hydrophiidae (marine snakes); family Viperidae (rattlesnakes, pit vipers and true vipers); family Elapidae (coral snakes, cobras and mambas); family Colubridae, Dispholidus Typus (boomslang), Cyclagras gigas (water cobra), Boiga dendrophila (mangrove snake) and Kertlandii (twig snake) only, order Crocodilia (crocodiles, alligators and gavials);
- (b) Class Aves: Order Falconiforms, (such as hawks, eagles and vultures) and subdivision Rapitae (such as ostriches, rheas, cassowaries and emus);
- (c) Class Mammalia: Order Carnivora, (the family felidae) except household cats: the family Canidae (such as wolves, dingos, coyotes and jackals), except dogs: the family Mustelidae (such as weasels, skunks, martins, mink badgers): family procyonidae (raccoon); family Ursidae (such as bears); and order Marsupialia (such as kangaroos, opossums); order Chiroptera (bats); order Edentata (such as sloths, anteaters and armadillos); order Proboscidea (elephants); order Primata (such as monkeys, chimpanzees, gorillas and lemurs); order Rodentia (such as porcupines); and order Ungulata (such as antelope, deer, bison and camels);
- (d) Class Amphibia: Poisonous frogs;
- (e) Class Arachnida: Order Scorpiones (scorpions); order Araneae, genus, Loxosceles (recluse spiders such as brown recluse spider); order Araneae, genus, Latrodectus (such as black widow, red widow and brown or gray widow spiders)
- (f) Dangerous Wild Animals per Chapter 822, Regulation of Animals, Section 822.101(4), Dangerous Wild Animals;
- (g) any hybrid of an animal listed in this section.
- (h) An offense under this section is a Class C misdemeanor.

Sec. 14-29. – Wildlife.

Wildlife may be lawfully trapped on private property to remedy nuisance issues.

(a) Trapping.

1. Traps shall be checked, by the person setting the trap, at least once every twelve (12) hours.
2. The use of steel-jawed spring traps, mechanical jaw traps, snares, or leg hold traps are prohibited.
3. A person shall notify Animal Control Officers to have trapped wildlife removed, released, or euthanized.
4. Humane care shall be provided for any trapped wildlife including food, water, and shelter until removed by an Animal Control Officer.
5. An unauthorized person shall not relocate or euthanize wildlife.

(b) Injured Wildlife.

1. A person may notify Animal Control Officers to have the wildlife removed or contact local rehabilitation organizations.
2. An unauthorized person shall not relocate or euthanize injured wildlife.

(c) Any Animal Control Officer, Peace Officer, or other persons/agencies designated by the city may shoot, kill, hunt, relocate, and euthanize wildlife if necessary and authorized by Animal Control Officer or Peace Officer.

(d) An offense under this section is a Class C misdemeanor.

ARTICLE V – ANIMAL CONTROL PERSONNEL, DUTIES AND FACILITY.

Sec. 14-30. – Personnel and Duties.

(a) Animal Control Officers.

1. Shall enforce State animal laws and this chapter.
2. Shall properly cite for violations of State law and this chapter.
3. Shall apprehend animals found in violation of this chapter.
4. Shall properly file complaints for violations of state Law and this chapter.
5. Shall properly maintain the animal control facility in accordance with State law and Standard Operating Procedures.
6. Shall properly care for animals at the animal control facility.
7. Shall charge owners for services conducted through the animal control facility.

(b) Local Rabies Control Authority (LRCA).

1. Shall enforce State standards for rabies control.
2. Shall enforce local standards for rabies control.
3. Shall enforce rules adopted in Texas Health and Safety Code, Chapter 826, Rabies, Section 826.045, Area Rabies Quarantine.

Sec. 14-31. – Animal Control Facility.

Animals seized under this chapter shall be transported to the animal control facility and processed in accordance with the Standard Operating Procedures and Fees and Fine Schedule of the animal control facility.

(a) Standard Operating Procedures.

1. shall be posted at the animal control facility and are available upon request.

(b) Fees and Fine Schedule.

1. shall be posted at the animal control facility and are available upon request.

Sec. 14-32. – Tampering with Animal Control Facility and Equipment.

(a) Animal Control Facility.

1. No person shall enter or attempt to enter the animal control facility without proper authority or consent.
2. No person shall remove or attempt to remove animals or items from the animal control facility.
3. No person shall tamper with or damage the animal control facility.

(b) Animal Control Equipment.

1. No person shall remove or attempt to remove animal control equipment regardless of where it is located.
2. No person shall tamper with or damage animal control equipment regardless of where it is located.

(c) An offense under this section is a Class C misdemeanor.

Sec. 14-33. – Appeal and Hearing.

An owner may appeal any decisions made by Animal Control Officers, Peace Officers, or other persons/agencies designated by the city as it pertains to sections regarding the removal of cats, dogs, livestock, small livestock, poultry, peafowl, or small animals, bees, hives, colonies, and apiaries from the city limits. An appeal shall be made to the Municipal Court no later than the tenth (10th) day upon receiving written notice.

Sec. 14-34. – Fees and Fine Schedule.

(a) Adoption Fees – adoption fees are non-refundable

1. Cats – \$25.00
2. Dogs – \$25.00
3. All animals adopted are subject to microchip services at the expense of the owner if not microchipped prior to adoption

(b) Pet Wellness Services – must be paid in full prior to appointment

1. Microchips - \$15.00

(c) Impoundment – must be paid in full prior to reclaim

1. 1st Impound - \$20.00 (plus daily rate)
2. 2nd or More Impound - \$30.00 (plus daily rate)
3. Daily Rate - \$20.00 (same prices for full and half days)
4. All animals impounded are subject to microchip services at the expense of the owner if not microchipped at time of impoundment

(d) Quarantine – must be paid in full prior to release

1. Rabies Quarantine – fee is subject to current pricing with Ingleside Animal Hospital
2. Dangerous Dog Investigation - \$200.00 (plus microchip fee)
3. Dog on Animal Attack Investigation - \$200.00 (plus microchip fee)

(e) Permit Fee – must be paid in full prior to appointment

1. Livestock, Small Livestock, & Poultry - \$10.00 (non-refundable if permit is not approved)
2. Small Animal - \$10.00 (non-refundable if permit is not approved)

SECTION 2. EFFECTIVE DATE. As provided by Article III, Section 3. 11. 0 of the Charter of the City of Ingleside, this ordinance shall be effective upon adoption and, in addition, if any

penalty, fine or forfeiture is imposed by this ordinance, then this ordinance shall be effective only after publication of this ordinance in its entirety or in summary form once in the official newspaper of the City of Ingleside.

SECTION 3. READING. As provided by Article III, Section 3. 11. B of the Charter of the City of Ingleside, this ordinance or the caption of it shall be read at two city council meetings with at least two weeks elapsing between each reading.

SECTION 4. SEVERANCE. If any part of this ordinance is invalid or void or is declared to be so, then said part shall be severed from the balance of this ordinance and said invalidity shall not affect the balance of this ordinance, the balance of the ordinance to be read as if said invalid or void portion thereof were not included.

SECTION 5. PUBLICATION. If and as required by Article III, Section 3. 11. 0 of the Charter of the City of Ingleside, the caption of this ordinance shall be published one time in the official newspaper of the City of Ingleside, San Patricio County, Texas.

Passed, Ordained, Approved, and Adopted this _____ day of _____, 2024.

CITY OF INGLESIDE

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City Secretary

First Reading: **MARCH 26, 2024**

Second Reading: _____

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 12

Deliberate and take appropriate action on the Regular Meeting Minutes of March 26, 2024.

SUBMITTED BY: Ruby Beaven, City Secretary

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

Please see the accompanying minutes:

Regular Meeting Minutes of March 26, 2024

FISCAL ANALYSIS:

N/A

RECOMMENDATION:

Staff recommends approval of the meeting minutes, as presented.

ATTACHMENTS:

1. 2024, 03-26 Regular Council Minutes_DRAFT

**CITY OF INGLESIDE
REGULAR CITY COUNCIL MEETING
MINUTES
MARCH 26, 2024
6:30 P.M.**

Opening Agenda

1. Call Meeting to order.

The Regular Council Meeting of the City of Ingleside was called to order by Mayor Adame at 6:30 p.m. on March 26, 2024, at Humble Station Community Center, 2821 Main St., Ingleside, TX and live video streaming.

2. Roll Call.

With Council Members present a quorum was established.

Council Members Present: Steve Diehl, Stewart Wilson, David Pruitt, John Salinas, Mayor Pro-Tem Tracy Long, Julio Salinas, and Mayor Adame.

3. Invocation.

Council Member Pruitt led the invocation.

4. Pledge of Allegiance.

Mayor Adame led the Pledge of Allegiance to the U.S. flag.

5. Citizen Comments and Reports

Gerald Crain, 2959 Pen oak Ave, addressed the Council about the soccer fields at N. O. Simmons Park, sent pictures to the Council Members, spoke with the City Manager and Director of Infrastructure Services about not using the football field anymore, and moving back behind the basketball court to be safer for the teams that come into play.

Teresa Flores, 2586 Ave A, addressed the Council about the lack of the School Resource Officer, contract back from attorney, and giving a reminder that it is state mandated to have School Resource Officers.

Jennifer Klidies, 2079 Glenwood Dr., addressed the Council about Item #11, chicken coops not being taller than six (6) feet and being five (5) feet from the fence, and how stray cats need to be spayed and neutered as well.

Vicky Cook, 3009 Lakeview West Dr., addressed the Council about the Faith Park basketball court, giving suggestions on having this for events, and the possibility of bringing people into the city.

Serapio Coronado, 2038 Jenica Dr., addressed the Council about a neighbor burning tree stumps and rubbish in their back yard, the burning being all day, was told that there was no burn ordinance in the city, and suggested that there be a burn ordinance.

Chuck Sullivan, addressed the Council about police harassment, highest taxed business in the city, and how the Texas Rangers will be filing charges.

Sarah Crumbley, 2476 Henrietta Place, addressed the Council about a rooster problem, cats in neighborhood having mange, and Animal Control not picking up stray and/or sick cats.

Courtney Shane, 2181 Capeheart St., addressed the Council about her interview with the Mayor and would like to do the same with all the Council Members due to the great feedback she received from citizens, and suggested that the city has their own farmed market like other cities do.

Martha Habluetzel, 3508 Ave A, wanted to speak on Item #16, but left before Council got to the item.

6. Staff Comments and Reports

A. Council Comments and Reports

Council Member Diehl stated that he had requested staff to combine the Council Comments and Reports and Announcements of Community Interest into the Staff Comments and Reports section of the agenda.

B. Announcements of Community Interest and/or upcoming events.

No discussion was held on this item.

C. City of Ingleside expenditures paid over \$3,000.00 for the period of February 2024.

No discussion was held on this item.

D. City of Ingleside monthly financial report as of February 2024.

No discussion was held on this item.

E. Update on SH 200.

Director of Infrastructure Services Paredez addressed the Council about attending the open house that was held in Gregory. Director Paredez informed the Council that he did speak directly with TxDOT official Robert Isassi and was informed that SH 200 was not dead. Was informed that the project was project to be \$12M, with TxDOT having \$6M. Mayor Adame stated that he will not support taxpayer money going towards SH 200.

F. General Projects Update.

Council Member John Salinas made a comment on how the Animal Shelter is coming together and appreciates the pictures that are being shown on social media sites.

G. Update on acceptance of the City of Ingleside Annual Financial Report for the Year Ended September 30, 2023.

No discussion was held on this item.

Presentations

7. Team Elite recognition.

Elain Rogers gave a presentation on the Elite Training Facility and the owner, Jordan Pinney. Jordan Pinney thanked the Council for letting them speak and introduced the kids for their accomplishments. Mr. Pinney stated that they would like to be more involved with the City and assist the community in any way possible.

Consent Agenda

8. Deliberate and take appropriate action on the Regular Meeting Minutes of March 12, 2024.

Motion: Council Member Pruitt made a motion to approve the Consent Agenda as presented. Council Member John Salinas seconded the motion. Motion carried with all present voting in favor.

Mayor Adame requested that Executive Session be moved after Regular Agenda.

Executive Session

9. Closed Session

City Council will meet in Closed Session pursuant to the provision of Chapter 551 of the Texas Government Code, in accordance with the authority contained in:

- A. Section 551.087 Deliberation regarding Economic Development Negotiations**
- B. Section 551.071 Consultation with Attorney**
- C. Section 551.074 Personnel Matters – City Manager Lewis**

At 8:41 p.m. Mayor Adame convened the Ingleside City Council into a closed session pursuant to provision of Chapter 551 of the Texas Government Code, in accordance with the authority contained in Section 551.087 Deliberation regarding Economic Development Negotiations – Update on ongoing industry and retail negotiations, Section 551.071 Consultation with Attorney, and Section 551.074 Personnel Matters – City Manager Lewis.

10. City Council will reconvene in Open Session at which time action on the matters discussed in Closed Session may be considered.

- A. Section 551.087 Deliberation regarding Economic Development Negotiations – Update on ongoing industry and retail negotiations**
- B. Section 551.071 Consultation with Attorney**
- C. Section 551.074 Personnel Matters – City Manager Lewis**

At 9:44 p.m. Mayor Adame reconvened the Ingleside City Council into an open session pursuant to provision of Chapter 551 of the Texas Government Code to take any action necessary related to the executive session noted herein, or regular agenda items, noted above, and/or related items.

Item A: No Action taken.

Item B: No Action taken.

Item C: No Action taken.

Public Hearing

No Public Hearing presented for this meeting.

Regular Agenda

11. Tabled 3/12/2024 Deliberate and take appropriate action on the first reading of an Ordinance amending Ingleside Code of Ordinances Chapter 14-Animal Control and Animals.

Discussion was held between Council Members, City Manager Lewis, Police Chief Burr, and Animal Control Officer Otwell about minor changes being done to clarify definitions and typos, dangerous dog, insurance, and stray cats.

Motion: Mayor Pro-Tem Long made a motion to pass to second reading, with minor changes, of an Ordinance amending Ingleside Code of Ordinances Chapter 14-Animal Control and Animals. Council Member Pruitt seconded the motion. Motion carried with all present voting in favor.

12. Deliberate and take appropriate action on City Ordinances Chapter 18 – Buildings and Building Regulations, Chapter 30 – Environment, Chapter 50 – Streets, Sidewalks and Other Public Places and Chapter 62 – Traffic & Vehicles where needed to provide staff with adequate procedures and requirements for enforcement of right of way management.

Discussion was held between Council Members, City Manager Lewis, and Interim Building Official Delauro about making the ordinances respectable, adding more Code Compliance Officers, property rights, adding facts so citizens can better understand, and it being a series of small steps to enforce ordinances.

No Action taken.

13. Deliberate and take appropriate action on the final pay application for the Faith Park Multipurpose Ballfields

Discussion was held between the Council Members, City Manager Lewis, Director of Infrastructure Services Paredez about the ballfields being complete, the walking trail and Garden Center still needing to be completed, batting cages will not interfere with the walking trail, solar lighting along the walking trail, bringing projects back as a whole and not in sections, and wanting to know how much money is left from the project.

Motion: Mayor Adame made a motion to approve the final pay application for the Faith Park Multipurpose Ballfields. Council Member John Salinas seconded the motion. Motion carried with all present voting in favor.

14. Deliberate and take appropriate action to request the Ingleside Development Corporation take on as a Project funding for the purchase of a digital sign located at N. O. Simmons Park.

Discussion was held between Council Members, City Manager Lewis, and Director of Economic Development Carr about how the cite location can provide information to citizens better, the location being at N. O. Simmons Park along the fence line that already has electrical, the Information Technology Department overseeing the sign, and 4B money takes several steps and this is the first step.

Motion: Council Member Pruitt made a motion to approve staff in requesting the Ingleside Development Corporation take on as a Project funding for the purchase of a digital sign located at N. O. Simmons Park. Council Member John Salinas seconded the motion. Motion carried with all present voting in favor.

15. Deliberate and take appropriate action on a Request for Qualifications (RFQ) for city employee's Health Benefits.

Discussion was held between Council Members and City Manager Lewis about the RFQ for brokers, surveys being done by employees, the recommendation of staying with the current Health Benefits that the City has, and keeping options open while negotiating for Health Benefits.

Motion: Council Member Diehl made a motion to go with staff recommendation of staying with the current Health Benefits that the City has. Council Member Wilson seconded the motion. Motion carried with all present voting in favor.

16. Deliberate and take appropriate action on a Resolution establishing the Beautification Committee, outlining duties, and appointing members.

Proposed Resolution 2024-16.

Discussion was held between Council Members and City Manager Lewis about business owners participating in the committee, working with the Garden Club, bringing back more recommendations, having one staff member be on the committee but the rest be business owners, and the committee being an advisory committee and not being an authority committee.

No Action taken.

17. Items to consider for placement on future agendas.

Mayor Adame asked Staff to amend the Ingleside Little League contract to help with cleaning the bathrooms on Tuesdays and Fridays.

Mayor Adame requested a plan for field and grants to move the soccer fields.

Council Member Diehl requested that contracts be looked at, under the discretion of the City Manager.

Council Member Diehl asked about programs, and small job fair, for school kids.

Council Member Diehl requested options for a City Hall complex.

Council Member John Salinas requested that the Cove Park Advisory Group be placed on a future agenda for a drawing and presentation.

Council Member Julio Salinas requested that the budget be looked into for possible sponsorships for little leagues and clubs.

Council Member Julio Salinas requested an update on the School Resource Officer.

Council Member Julio Salinas requested that new locations be looked at for events.

18. Adjourn.

Mayor Adame adjourned the regular meeting of the City of Ingleside at 9:53 p.m.

APPROVED:

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City Secretary

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 15

Deliberate and take appropriate action for an amendment to the Little League Agreement.

SUBMITTED BY: Brenton Lewis, City Manager

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The City of Ingleside and the Ingleside Little League entered into a facility use agreement on March 12, 2024. The city facilities were described as the Benny Diegle Baseball Complex, located at Live Oak Park in Ingleside. Since the facilities are under the control of the League and are only open during times of League use. The League agreed to be responsible for cleaning, which includes the following: to clear the fields, restrooms, and bleachers of trash and equipment following each game. Trash will be placed in trash cans which will be provided by the City. All paper products, including but not limited to, shall be furnished by the League. Paper products are defined as hand soap, toilet paper, paper towels, etc.

FISCAL ANALYSIS:

Cost of staff to clean restrooms.

RECOMMENDATION:

Staff recommends approval of the amendment to the Little League Agreement, as presented.

ATTACHMENTS:

1. Little League Agreement Amendment
2. 2024, 03-14 Ingleside Little League_Ingleside Little League



**FACILITY USAGE AGREEMENT AMENDMENT
THE CITY OF INGLESIDE AND INGLESIDE LITTLE LEAGUE**

THIS AMENDMENT (the “Amendment”) is made by and between the Ingleside Little League (the “League”) and the City of Ingleside (the “City”), parties to the Facility Usage Agreement dated March 12, 2024 (the “Agreement”).

The Agreement is amended as follows:

Cleaning:

The League agrees to clear the fields, restrooms, and bleachers of trash and equipment following each game. Trash will be placed in trash cans which will be provided by the City. All paper products including but not limited to shall be furnished by the League. Paper products are defined as hand soap, toilet paper, paper towels, etc.

The City agrees to assist the League in cleaning the restrooms on Tuesdays and Fridays.

Except as set forth in this Amendment, the Agreement is unaffected and shall continue in full force and effect in accordance with the terms. If there is conflict between this Amendment and the Agreement or any earlier Amendment, the terms of this amendment will prevail.

EXECUTED effective the ____ day of _____.

CITY OF INGLESIDE, TEXAS

CITY OF INGLESIDE, TEXAS

Pedro Oscar Adame, Mayor

Brenton B, Lewis, City Manager

ATTEST:

Ruby Beaven, City Secretary

INGLESIDE LITTLE LEAGUE

Ingleside, Texas 78362

Victor Moreno, President



**FACILITY USAGE AGREEMENT
THE CITY OF INGLESIDE AND INGLESIDE LITTLE LEAGUE**

The City of Ingleside grants: to the Ingleside Little League the use of city facilities described as the Benny Diegel Baseball Complex, located at Live Oak Park in Ingleside, TX for the following periods:

TERMS OF AGREEMENT: March 12, 2024, through December 31, 2024. At the expiration of this contract, the League will vacate the premises entirely, including the removal of personal property from the concession stand.

For the remainder of this contract, the Ingleside Little League shall be referred to as "The League" and the City of Ingleside shall be referred to as "The City".

The League shall have exclusive use of said facilities during dates shown above. The League will in no way restrict public access to the park or to the fields, nor charge a fee for public viewing of games. The City reserves the right to use the fields when no games or practices are scheduled for the length of this contract. The City will provide ample notice for use of the fields for special city events. The hours of operation of the League will be Monday through Friday from 4:00 p.m. until 10:00 p.m., Saturdays, from 8:00 a.m. until 10:00 p.m. and Sundays at any time when tournaments are scheduled between the hours of 8:00 a.m. and 9:00 p.m.

The City reserves the right to inspect the fields, restrooms, and facilities at any time. The league will be responsible for the care and maintenance of the field during the season. Field maintenance shall consist of, but not limited to:

- Grade the infield so water drains off the field after rainfall.
- Regularly drag and rake the field to maintain the infield grade and prevent ruts and puddles from forming that could impede playability and present safety hazards.
- Clearly and thoroughly communicate proper baseball field care and etiquette to everyone using the field.
- Provide the soil with the nutrients it needs to stay healthy.
- Water the grass according to the soil's dryness and overall moisture retention.
- With every mow, ensure the grass maintains at least one-third of its growth to prevent decline.
- Schedule regular mowings so you can keep the baseball field grass at its desired height without removing more than one-third of its growth.
- Examine and maintain the baseball field before and after every use and ensure it isn't used when wet.

- Perform general maintenance and repairs on structures around the field to ensure their proper function and safety for both spectators and participants, including fences, dugouts, bleachers, and other miscellaneous structures.

Outfield

- Ensure at least 75% of the field is covered with turfgrass.
- Check that there are no bare spots that leave hard soil exposed.
- Ensure no standing water is on the field.
- Make sure turfgrass has a uniform color, density, and height.
- Remove any burrs, thistles, and thorns.
- Fix any gopher holes, mounds, or ruts.
- Communicate the importance of caring for the outfield grass to coaches and parents.

Infield

- Ensure the clay is loose enough and not too coarse for safe sliding but not so loose that it impedes traction.
- Checking that the running paths are level and the bases; home plate and pitcher's rubber are securely anchored.
- Removing lip or soil buildup between the infield and outfield boundary.
- Ensuring the skinned area is dry – and if not, facilitating proper drainage.
- Postponing play if the soil sticks to your shoes.
- Making sure the pitcher's mound, batter's box, and home plate areas are in good condition and conform to league requirements.

No field maintenance equipment shall be visible while not in use. Any desired field alterations (baselines, chalking, pitcher's mound, and home plate), repairs or improvement beyond the normal routine maintenance must have prior written approval from the City's Director of Infrastructure Services and will be accomplished in accordance with all City ordinances and codes. The City will mow and edge the fence line inside and out, not the base paths the fields at a minimum once every two weeks. The League has permission to mow or trim the fields more often, if it so desires, if the mowing heights are approved by and scheduled with the Director of Infrastructure Services. The City agrees to maintain the fields during the time that a Facility Usage Agreement is not in effect with the League.

Improvements and Repairs:

Improvements made will become City property, unless otherwise agreed to in writing with the approval of the City Manager. No improvements may be removed without prior written approval from the Director of Infrastructure Services. Examples of improvements include, but are not limited to the following: lights, light poles, light fixtures, scoreboards, and associated control boxes, bleachers, and fencing.

The City agrees, at City expense, to provide adequate restroom facilities for the league use. The City will provide restrooms, lighting, gate facility keys, and concession keys to the League, and the League agrees to lock the facilities at the close of each day's game. Keys must be returned within seven (7) days of the end of the contract. The league must leave a key deposit of \$90 per key in the form of a check or money order.

Cleaning:

The League agrees to clear the fields, restrooms, and bleachers of trash and equipment following each game. Trash will be placed in trash cans which will be provided by the City. All paper products including but not limited to shall be furnished by the League. Paper products are defined as hand soap, toilet paper, paper towels, etc.

Additional Provisions:

The League shall provide items #1 and #2 to the City before the agreement is in effect and use of the facility is permitted. Item #3 must be received prior to league games being played at the facility. The league shall provide the following items to the City as a prerequisite for use of City facilities:

1. 1) The League agrees to carry liability insurance in the amounts of \$1,000,000.00 (one million) per person and \$1,000,000.00 (one million) per occurrence naming the City of Ingleside as additional insured, insuring the League against liabilities and claims occurring during the term of this agreement and related to the use, occupancy, possession, maintenance or repair of the facilities by the League and by Little League Auxiliary and agrees to provide City with proof of such insurance coverage before the beginning of the season.
2. A listing of all coaches and assistant coaches who have successfully passed a background check administered by Little League Baseball and Softball, Inc or an approved agency that conducts background checks that is current within the current calendar year. The City of Ingleside requires any coach who coaches on their property to have successfully completed a background check. Failure to comply with this requirement constitutes a violation of this contract.
3. A season schedule of games and notify the Director of Infrastructure Services in written form (by e-mail) of any rescheduling of games by at least one entire business day prior to when the rescheduled game(s) is/are scheduled to be played. A schedule of league games must be received ten days prior to any league games being held. Practices may take place at the facility prior to the receipt of the schedule; however, no official games may be played until the schedule has been received.
4. There will be no subleasing of fields. All inquiries for subleasing of the fields must be referred to the City for approval or disapproval at the City's discretion.
5. The League must maintain its charter with the Little League Association. It must maintain its financial viability and must keep and maintain accurate, current financial records in accordance with sound accounting and financial management practices and must, on request of the City, make available to the City of inspection and copying all such records.
6. Any and all personal property remaining on the premises at the time of expiration of this contract will become the property of the City.

Miscellaneous

If, for any reason, any section, paragraph, subdivision, clause, phrase word or provision of this agreement shall be held invalid or unconstitutional by final judgement of a Court of competent jurisdiction, it shall not affect any other section, paragraph, subdivision, clause, phrase, word or provision of this contract, for it is the definite intent of the parties hereto that every section, paragraph , subdivision, clause, phrase, word and provision hereto be given full force and effect for its purpose.

Termination of Agreement

Notwithstanding any other provision of this Agreement the City of Ingleside and/or the Ingleside Little League may terminate the Agreement on a no-fault basis at any time by giving the other party 30 days' notice in writing. This Agreement constitutes the entire agreement between the City of Ingleside and the League. The League releases and agrees to indemnify and hold harmless the City of Ingleside, its employees, officers, and agents from any and all liability for any claim or claims as a result of the use of a City owned facility.

Any failure of the League to adhere to this contract after any violation have been reported by the City to the League, may result in this facility usage agreement being terminated immediately.

EXECUTED effective the 12th day of March 2024.

CITY OF INGLESIDE, TEXAS



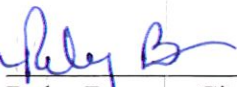
Pedro Oscar Adame, Mayor

CITY OF INGLESIDE, TEXAS



Brenton B, Lewis, City Manager

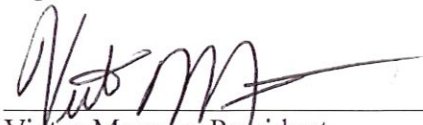
ATTEST:



Ruby Beaven, City Secretary

INGLESIDE LITTLE LEAGUE

Ingleside, Texas 78362



Victor Moreno, President

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 16

Deliberate and take appropriate action on first reading of an Ordinance adopting the Drainage Master Plan, an element of the Comprehensive Master Plan of the City of Ingleside; Amending conflicting provisions of the City Comprehensive Plan, and further providing for effective date, reading, severance, and publication.

SUBMITTED BY: Gary Paredez, Director of Infrastructure Services

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The Freese & Nichols Engineering firm was the firm selected by the City Council to generate the City's drainage master plan. An assessment was made on all the drainage infrastructure throughout the City. Freese & Nichols put together a master plan draft report that was submitted to City Council and City staff for input. All the responses have been incorporated into the final draft that will serve as a guide for the maintenance and upkeep of the drainage avenues.

FISCAL ANALYSIS:

N/A.

RECOMMENDATION:

Staff recommends approval of the first reading for the Drainage Master Plan, as presented.

ATTACHMENTS:

1. Ord 2024-XX Drainage Master Plan
2. 2024 04 01 Ingleside DMP Report_Final to Council

ORDINANCE NO. 2024-XX

AN ORDINANCE ADOPTING THE DRAINAGE MASTER PLAN, AN ELEMENT OF THE COMPREHENSIVE MASTER PLAN OF THE CITY OF INGLESIDE; AMENDING CONFLICTING PROVISIONS OF THE CITY COMPREHENSIVE PLAN, AND FURTHER PROVIDING FOR EFFECTIVE DATE, READING, SEVERANCE, AND PUBLICATION.

WHEREAS, the City Council adopted the Ingleside Comprehensive Master plan on January 12, 2016 (Resolution 2016-01); and

WHEREAS, the Comprehensive Master Plan allows for additional plans or documents as additions to the Comprehensive Master Plan to meet the needs of the City as warranted; and

WHEREAS, the City Council desires to develop a Drainage Master Plan and incorporate it as an element of the Comprehensive Master Plan; and

WHEREAS, the Staff has forwarded the City Council its recommendations regarding the Drainage Master Plan; and

WHEREAS, the City Council has determined that the adoption of the Drainage Master Plan, an element of the Comprehensive Master Plan of the City of Ingleside, would best serve public health, necessity, and convenience and the general welfare of the City of Ingleside and its citizen.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF INGLESIDE, COUNTY OF SAN PATRICIO, STATE OF TEXAS:

Section 1. That the matter of facts recited in the preamble hereof are found and determined to be true and correct.

Section 2. That the City of Ingleside Drainage Master Plan established the key capital project needs based on analysis of the existing storm drainage systems as well as future land use conditions.

Section 3. That the Comprehensive Master Plan is amended by the adoption of the Drainage Master Plan, a copy of which is hereto attached, and except as changed by this ordinance, all other portions of the Comprehensive Master Plan remain in full force and effect.

Section 4. Effective Date. As provided by Article III, Section 3.11C of the Charter of the City of Ingleside, this ordinance shall be effective upon adoption and, in addition, if any penalty, fine or forfeiture is imposed by this ordinance, then this ordinance shall be effective only after publication of this ordinance in its entirety or in summary form once in the official newspaper of the City of Ingleside.

Section 5. Reading. As provided by Article III, Section 3.11.B of the Charter of the City of Ingleside, this ordinance or the caption of it shall be read at two City Council meetings with at

least two weeks elapsing between each reading.

Section 6. Severance. If any part of this ordinance is invalid or void or is declared to be so, then said part shall be severed from the balance of this ordinance and said invalidity shall not affect the balance of this ordinance, the balance of the ordinance to be read as if said invalid or void portion thereof were not included.

Section 7. Publication. As provided by Article III. Section 3.11C, this ordinance shall be published one time in the official newspaper of the City of Ingleside, San Patricio County, Texas, which publication shall contain the caption of this ordinance stating in substance the purposes of same.

PASSED, ORDAINED, APPROVED AND ADOPTED this XXth day of April, 2024.

CITY OF INGLESIDE, TEXAS

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City Secretary

First Reading: April 09, 2024

Second Reading:

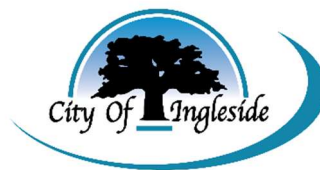


CITY OF INGLESIDE DRAINAGE MASTER PLAN

Prepared for:

City of Ingleside

April 1, 2024



Prepared by: **FREESE AND NICHOLS, INC.**

800 N. Shoreline Blvd. Suite 1600N
Corpus Christi, Texas 78401
361-561-6500

CITY OF INGLESIDE DRAINAGE MASTER PLAN

Prepared for:

City of Ingleside

April 1, 2024



Sarah West 04/01/2024

FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144

Prepared by: **FREESE AND NICHOLS, INC.**

800 N. Shoreline Blvd. Suite 1600N
Corpus Christi, Texas 78401
361-561-6500

ING21605

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
1 INTRODUCTION	4
1.1 Purpose of Study and Approach	4
1.2 Previous Planning Efforts	5
1.2.1 2016 Comprehensive Master Plan	5
1.2.2 2018 San Patricio County Hazard Mitigation Plan	5
1.2.3 2020 Transportation Master Plan	6
1.2.4 2021 Parks, Recreation and Open Space Master Plan	7
2 STORMWATER MASTER PLAN DEVELOPMENT	7
2.1 Pre-Project Conditions	7
2.1.1 Open Channels – HEC-RAS Modeling	8
2.1.2 Local Systems – ICM Modeling	9
2.2 Problem Area Identification	10
2.3 Project Development	12
2.3.1 Proposed Capital Improvement Projects	13
2.3.2 Small Projects List	61
2.4 Opinion Of Probable Project Costs	62
3 PROJECT PRIORITIZATION	63
3.1 Identification of Ranking Criteria	64
3.2 Criteria Weighting	64
3.3 Criteria Scoring	65
3.3.1 Life and Safety	65
3.3.2 Property Damage	66
3.3.3 Road Level of Service	66
3.3.4 Planning Linkages	67
3.3.5 Project Cost	67
3.4 Project Scoring and Ranking	68
4 GIS DATABASE DEVELOPMENT	69
4.1 Data Collection	69
5 MAINTENANCE PLAN	70
5.1 Key Maintenance Locations	70

5.2	Maintenance Recommendations	72
6	STORMWATER CRITERIA REVIEW AND BEST MANAGEMENT PRACTICES.....	73
7	FUNDING ASSESSMENT.....	78
7.1	General Obligation Bonds (GO Bonds)	78
7.1.1	Purpose	78
7.1.2	Constraints	79
7.1.3	Benefits	79
7.1.4	Potential Applications.....	79
7.1.5	Potential Roadblocks	79
7.2	State and Federal Grants	80
7.2.1	Purpose	80
7.2.2	Constraints	84
7.2.3	Benefits	87
7.2.4	Potential Applications.....	89
7.2.5	Potential Roadblocks	90
7.3	4B Sales Tax Fund	92
7.3.1	Purpose	92
7.3.2	Constraints	92
7.3.3	Benefits	93
7.3.4	Potential Applications.....	93
7.3.5	Potential Roadblocks	93
7.4	Establishment of Special Districts.....	94
7.5	Stormwater Utility Fee	97
7.6	General Fund	98
7.7	Certificates of Obligation (CO Bonds).....	99
7.8	Community Development Corporation (CDC).....	99
7.9	Texas Capital Fund Infrastructure Program (EDA/TEDC)	100
7.10	Clean Water State Revolving Loan Fund (EPA/TWDB)	100
7.11	Project Funding Matrix	101
7.12	Conclusion	104

LIST OF TABLES

Table ES-1: Project Ranking	ES-2
Table 2-1: Storm Event Correlation Table.....	8
Table 2-2: Humble Ditch Improvements - Summary of Results	16
Table 2-3: Kenny Lane/Whitney Lake Infrastructure - Summary of Results	21

Table 2-4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Summary of Results.....	26
Table 2-5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Summary of Results.....	31
Table 2-6: Nystrom Addition Drainage Improvements - Summary of Results	36
Table 2-7: Parkside Terrace Subdivision Drainage Improvements - Summary of Results.....	41
Table 2-8: Villanova Place Drainage Improvements - Summary of Results.....	48
Table 2-9: Humble Addition and Avenue B Drainage Improvements - Summary of Results	54
Table 2-10: Live Oak Ditch - Summary of Results	59
Table 2-11: OPPC Summary by Project Site	63
Table 3-1: Pairwise Evaluation Criteria Ranking Results.....	65
Table 3-2: Life and Safety Scoring.....	66
Table 3-3: Property Damage Scoring	66
Table 3-4: Road Level of Service Scoring	67
Table 3-5: Planning Linkages Scoring.....	67
Table 3-6: Project Cost Scoring	68
Table 3-7: Project Ranking	68
Table 7-1: CIP Funding Matrix.....	103
Table 7-2: Conservative Scenario Debt Service	104
Table 7-3: Optimized Grant-Assisted Scenario Debt Service.....	104

LIST OF FIGURES

Figure ES-1: Proposed Project Sites	ES-3
Figure 2-1: Existing Inundation Depth Results and Problem Areas for 5-Year Storm Event.....	11
Figure 2-2: Humble Ditch Improvements - Existing Conditions Flooding Extents.....	14
Figure 2-3: Humble Ditch Improvements - Proposed Drainage Improvements.....	15
Figure 2-4: Kenny Lane/Whitney Lake Infrastructure - Existing Conditions Flooding Extents.....	18
Figure 2-5: Kenny Lane/Whitney Lake Infrastructure - Proposed Drainage Improvements.....	19
Figure 2-6: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Existing Conditions Flooding Extents	23
Figure 2-7: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Proposed Drainage Improvements	25
Figure 2-8: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Existing Conditions Flooding Extents	29
Figure 2-9: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Proposed Drainage Improvements	30
Figure 2-10: Nystrom Addition Drainage Improvements - Existing Conditions Flooding Extents	33
Figure 2-11: Nystrom Addition Drainage Improvements - Proposed Drainage Improvements...	35
Figure 2-12: Parkside Terrace Subdivision Drainage Improvements - Existing Conditions Flooding Extents	39
Figure 2-13: Parkside Terrace Subdivision Drainage Improvements - Proposed Drainage Improvements.....	40
Figure 2-14: Villanova Place Drainage Improvements - Existing Conditions Flooding Extents	44

Figure 2-15: Villanova Place Drainage Improvements - Proposed Drainage Improvements	47
Figure 2-16: Humble Addition and Avenue B Drainage Improvements - Existing Conditions Flooding Extents.....	51
Figure 2-17: Humble Addition and Avenue B Drainage Improvements - Proposed Drainage Improvements.....	53
Figure 2-18: Live Oak Ditch - Existing Conditions Flooding Extents.....	57
Figure 2-19: Live Oak Ditch - Proposed Drainage Improvements	58
Figure 5-1: Key Maintenance Locations.....	72

APPENDICES

Appendix A: City of Ingleside Drainage Area Map and Existing Drainage Channels Map
Appendix B: Inundation Maps
Appendix C: One-Page CIP Summary Sheets
Appendix D: Opinion of Probable Project Costs
Appendix E: Stormwater Structures Type Guide and Condition Rating Guide
Appendix F: City of Ingleside Standard Stormwater Construction Details
Appendix G: Project Ranking
Appendix H: Funding Source Matrix
Appendix I: Summaries of Public and Stakeholder Engagement Activities
Appendix J: Small Projects Memorandum
Appendix K: Hydrologic and Hydraulic Methodologies Memorandum

EXECUTIVE SUMMARY

The Ingleside Drainage Master Plan was prepared to assist the City of Ingleside (City) in identifying key capital project needs based on analysis of the existing storm drainage system as well as future land use conditions. The planning effort reviewed existing problem areas, evaluated existing storm drainage system capacity, and defined recommended improvements to address continued growth and development, resulting in recommendations for adding storm water projects to the City's Capital Improvement Plan (CIP).

A total of ten problem area sites were identified based on the existing conditions modeling. After discussions with City staff and City Council, nine potential projects were selected for further analysis (Site 2 did not progress to further analysis and CIP development). **Figure ES-1** shows the location of each of these proposed CIP projects. Preliminary improvements were proposed to mitigate flooding in the problem areas, and some are recommended to be constructed in a phased approach.

A project cost was developed for each CIP based on 2023 dollars. It should be noted that the proposed improvements are not based on detailed engineering analysis or design. Rather they are based on field visits, review of existing data, and limited modeling and calculations. Each project cost includes engineering costs to perform field investigations and to develop the final design.

The projects were prioritized according to a ranking system developed through coordination with City staff, which is based on five weighted criteria (life and safety, property damage, road level of service, planning linkages, and project cost). Criteria weighting was developed using a "pairwise" methodology that compares each criterion to all other criteria to determine what is most important to the City. The following summarizes the results of this exercise.

- Life and Safety (Criteria Weight = 30%) - based on depth of flooding within the project limits, where deeper flooding depths are assigned higher points.
- Property Damage (Criteria Weight = 25%) - based on the number of potentially inundated structures within a project extent based on modeling.
- Road Level of Service (Criteria Weight = 20%) - based on road classification (e.g., arterial, local, etc.), with a project's score being higher for roadways that have higher volumes of traffic.

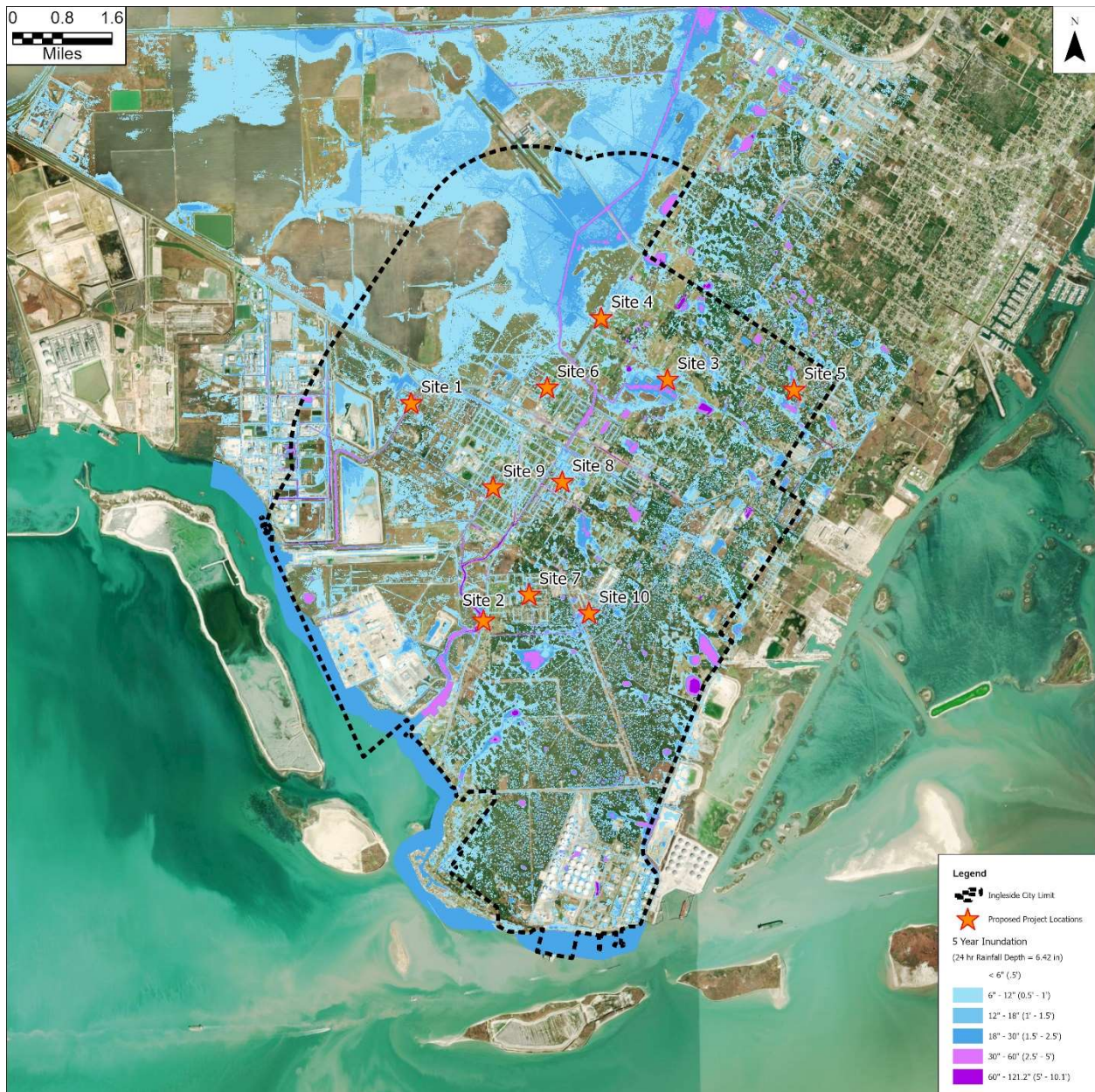
- Planning Linkages (Criteria Weight = 15%) - based on if the drainage project can be incorporated as part of another project identified in one of the City's master plans (Parks, Recreation and Open Space Master Plan; Transportation Master Plan; Comprehensive Plan; or San Patricio County Hazard Mitigation Plan).
- Project Cost (Criteria Weight = 10%) - based on the estimate of total project cost, with lower-cost projects receiving the highest points.

The projects were organized and ranked within a Microsoft Excel spreadsheet. **Table ES-1** lists the proposed CIP projects, their cost, score, and rank. A detailed breakdown of the city-wide ranking of the drainage CIPs and associated project costs is provided in **Appendix G**. One-page summary sheets of each recommended CIP are included in **Appendix C**.

Table ES-1: Project Ranking

Project Name	Project Cost	Project Score	Project Ranking
Site 1: Humble Ditch Improvements	\$ 10,227,900	2.70	6
Site 3: Kenny Lane/Whitney Lake Infrastructure	\$ 2,876,083	2.96	3
Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane	\$ 15,869,600	2.45	7
Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street	\$ 1,019,800	2.40	8
Site 6: Nystrom Addition Drainage Improvements	\$ 2,823,800	1.95	9
Site 7: Parkside Terrace Subdivision Drainage Improvements	\$ 9,148,800	2.71	5
Site 8: Villanova Place Drainage Improvements	\$ 10,075,000	2.75	4
Site 9: Humble Addition and Avenue B Drainage Improvements	\$ 5,362,300	3.10	2
Site 10: Live Oak Ditch	\$ 16,188,700	3.50	1

Figure ES-1: Proposed Project Sites



Note: Site 2 did not progress to further analysis and CIP development.

1 INTRODUCTION

In June 2022, the City of Ingleside (City) authorized Freese and Nichols, Inc. (FNI) to provide professional engineering services for developing the City of Ingleside's Drainage Master Plan. The Drainage Master Plan will support the goals presented in the City's Comprehensive Master Plan by providing proposed stormwater system improvements and maintenance recommendations, management recommendations to reduce erosion and improve water quality, and a prioritized list of projects that reflect the City's commitment to resolving existing flooding issues while preparing for continued growth.

1.1 PURPOSE OF STUDY AND APPROACH

The Ingleside Drainage Master Plan was prepared to assist the City in evaluating the existing conditions of selected stormwater infrastructure and to develop prioritized capital improvement projects (CIPs) to address problem areas identified as part of the drainage master planning process. All identified problem areas were discussed with City staff to obtain their observations on the identified areas, and compared to the citizen input received through the Virtual Open House community outreach process. Meetings were also held with local stakeholders (TxDOT, San Patricio County Drainage District, and the City of Aransas Pass) to obtain their input on issues they have noted and opportunities for collaboration. Summaries of these meetings are included in **Appendix I**. Additional information on the Virtual Open House process is included in **Section 2.2** and **Section 2.3**.

The evaluation of existing conditions consisted of reviewing various sources of data (such as past studies, Geographical Information System (GIS) data, as-builts, models) and site visits to develop conceptual drainage CIPs. Data from various drainage studies performed in the past were provided to FNI by the City.

For each problem area, at least one conceptual solution and cost estimate was developed to encompass the CIP. The results were used to develop an implementation plan for the City to prioritize improvements. FNI also developed ranking criteria and a scoring system to enable the City to prioritize these CIPs. The developed drainage CIPs were organized in a Microsoft Excel spreadsheet where they can be stored and recalled, with an easy-to-use interface allowing the City to build upon the database in the future.

1.2 PREVIOUS PLANNING EFFORTS

The City of Ingleside has already locally completed or regionally participated in several master planning efforts. This section summarizes the current effective plans. **Section 2.3.1** documents planning linkages to these previous planning efforts for each of the proposed capital improvement projects.

1.2.1 2016 Comprehensive Master Plan

The 2016 Comprehensive Master Plan's (CMP) purpose was to set the stage for the long-range development of the City. The powers granted under Texas Local Government Code Section 213 allow for the promotion of sound development. The CMP describes the City's vision and principles, in part, to tailor future development to the community's needs.

Drainage was noted as a community challenge in the CMP. There is a desire to address this challenge and verify that City standards for curb/gutter, streets and drainage are appropriate for all areas. Improved drainage infrastructure would help with three main concerns: residential development, hazard mitigation, and alignment with other master plans that improve quality of life.

Some of the drainage-related policies and recommendations included:

- Reducing runoff contamination
- Encouraging the development of greenbelts in combination with drainage facilities
- Improving drainage conditions according to proximity to the coast
- Considering ultimate development in the area
- Instituting regulations that protect drainage and improve long-term drainage performance
- Providing floodplain management to reduce erosion, peak flows and poor water quality
- Implementing a systematic maintenance program for water, wastewater, drainage and streets

1.2.2 2018 San Patricio County Hazard Mitigation Plan

San Patricio County's location in the lower Gulf Coast is prone to a wide array of natural hazards that disrupt safety, property, and the local economy. It is impossible to completely prevent natural hazards from taking place, but with proper planning, measures to reduce long-term risks can be implemented. The focus of the 2018 San Patricio County Hazard Mitigation Plan (HMP) was to address vulnerabilities,

minimize the costs of disaster response and recovery, and protect human life by identifying and implementing hazard mitigation actions.

The HMP identified a variety of County-wide recommended actions, such as developing a hazards education program, adopting disaster resistant building codes, and implementing a tree trimming program to clear branches from rights-of-way, among others. A series of 17 actions specific to the City of Ingleside were included in the HMP. These include recommendations such as:

- Improve drainage and implement drainage right-of-way on California Street.
- Adopt and implement a program to regularly clean and repair stormwater drains, and upgrade undersized stormwater drains to improve drainage and reduce flooding.
- Undertake a comprehensive study of flood risk and flood reduction alternatives with the assistance of the US Army Corps of Engineers (USACE) and implement feasible alternatives for flood reduction.
- Implement Avenue B drainage project improvements.

1.2.3 2020 Transportation Master Plan

Transportation master planning addresses public infrastructure (e.g., construction and maintenance of streets), plans for the reduction of congestion, understands and applies alternate modes of mobility, and identifies tools to preserve future corridors. Ingleside's 2020 Transportation Master Plan (TMP) included an existing conditions assessment, proposed street classifications, proposed maintenance plan, and a proposed plan for transportation and mobility throughout the City.

The TMP noted that roadway and mobility improvements should incorporate drainage (and other utility) improvements, when possible, to use the City's limited financial resources most efficiently. Additionally, the TMP discussed the concept of block-by-block infrastructure repair, which includes upgrades and/or addressing any necessary repairs to all utilities within a block to a point where no infrastructure improvements will be needed for the design life. Consistent maintenance of the City's drainage system will help create a longer life cycle for the streets of Ingleside. The TMP also has crossover relevance with the 2021 Parks, Recreation and Open Space Master Plan in that drainage alignments may help better facilitate pedestrian and bicycle connectivity between park facilities.

1.2.4 2021 Parks, Recreation and Open Space Master Plan

The 2021 Parks, Recreation and Open Space Master Plan (PROSMP) guides the long-term vision for the City's parks and recreation system. The PROSMP summarizes the needs and recommended improvements to the parks and recreation system for the following five to ten years. Recommendations include park improvements and new facilities, programming and events, connectivity and accessibility, natural resources, safety and maintenance, and funding and partnerships.

While PROSMP recommendations focus on parks and recreation, there may be opportunities to improve parks and drainage through the same project. For example, trail corridors often run parallel to drainage channels. Conversely, it is also important to ensure that parks and drainage improvements are complementary. For example, one of the City's parks, Whitney Lake, is a constructed wetland with integrated water quality and habitat benefits. As park improvements are considered, it is important to ensure that drainage and stormwater benefits are upheld on the site if not improved.

2 STORMWATER MASTER PLAN DEVELOPMENT

2.1 PRE-PROJECT CONDITIONS

Prior to developing the models for pre-project conditions, a modeling strategy was developed to identify consistent hydrologic and hydraulic modeling nomenclature, practices, parameters, and criteria to be used throughout the analyses. A methodology memorandum (**Appendix K**) was submitted to City staff to document the planned approach and included a map of 100-year storm event HEC-RAS 2D model results indicating flood risk hotspots within the city limits, and a drainage area map that covered the full city limits. The flood risk hotspots exhibit included in the memorandum has since been refined with more detailed modeling, and all exhibits included in this report reflect those refinements and now display the 5-year storm event results. For easier reference, the drainage area map included in the memorandum is included in this report as **Appendix A, Exhibit 1**. Additionally, a new exhibit was developed based on City staff input to show the existing channel infrastructure within the City with channel names identified (**Appendix A, Exhibit 2**).

All analyses were run for the 5-year, 10-year, 25-year, 100-year and 500-year storm events. **Table 2-1** correlates the return period of various storm events to how many inches of rainfall that equates to in a 24-hour period. Additional storm events are included in the table for future reference even though not all

storm events were analyzed as part of the Drainage Master Plan project. Rainfall precipitation values are sourced from the NOAA Atlas 14 Precipitation Frequency Data Server at the centroid of the city limits.

Table 2-1: Storm Event Correlation Table

Storm Event (year)	24-hour Rainfall Depth (inches)
2	4.76
5	6.42
10	7.93
25	10.20
50	11.70
100	14.20
500	19.80

2.1.1 Open Channels – HEC-RAS Modeling

The City’s primary open channel systems include Humble Ditch, Kinney Bayou, and McCampbell Slough. A two-dimensional (2D) HEC-RAS model was developed for the entire City, including the City’s extraterritorial jurisdiction (ETJ). The 2D HEC-RAS program was selected due to its capability to model riverine systems and surface water. Base Level Engineering (BLE) HEC-RAS models were requested from the Texas Water Development Board (TWDB) to aid in the creation of the City of Ingleside HEC-RAS models. These HEC-RAS models were modified as necessary to meet the needs and criteria of the City of Ingleside.

The information used to update the HEC-RAS models included a combination of readily available data and data developed through hydrologic analysis. Readily available data included data requested from the City of Ingleside, land cover data obtained from the National Land Cover Database (NLCD) from the Multi-Resolution Land Characteristics Consortium website, DEM data obtained from USGS using the 3DEP LidarExplorer website, and soil data from the USGS Web Soil Survey website. Existing land use data was manually categorized for highly developed areas based on aerial imagery. The manually categorized area was merged with NLCD land use data to provide full land use coverage within the HEC-RAS model boundary. The HEC-HMS hydrologic modeling program was used to remove infiltration losses and develop precipitation excess data using NOAA Atlas 14 precipitation depths. This precipitation excess data was used for the HEC-RAS models as the rainfall input data.

Once developed, the HEC-RAS model was run for the following scenarios.

- Existing Conditions – This is a snapshot of current drainage conditions in the City of Ingleside.
 - Where necessary and available, the HEC-RAS model used existing City stormwater infrastructure data, survey, as-built plans, and construction plans, to create an up-to-date existing conditions model.
 - Existing land use data was manually categorized for areas within the HEC-RAS model boundary based on aerial imagery from January 2023.
 - Model results showed overtopping of several roadways, and back-flow of some channels was observed. These results were confirmed by City of Ingleside staff during the Existing Conditions Meeting.
 - Model results were also validated through a comparison of Hurricane Harvey high water marks collected by the USGS at the power plant and at Cove Park. Based on NOAA radar rainfall records, Hurricane Harvey was comparable to a 100-yr, 24-hr SCS design event at the boat ramp and a 50-yr design event at the power plant. Results of the existing conditions HEC-RAS model for these events showed validation of the high water marks to within six inches.
- Future Conditions – This is a look forward to the City of Ingleside once it is completely built out.
 - Future conditions are based on the future land use map developed as part of the City's Comprehensive Plan and assumes no additional stormwater improvements are made.
 - Model results showed the future condition results paralleled existing conditions. However, most issues identified in the existing conditions were exacerbated, attributable to an increase in impervious cover.

2.1.2 Local Systems – ICM Modeling

An Infoworks Integrated Catchment Model (ICM) was developed for the local systems, which generally constitute the developed areas of Ingleside with underground storm drain systems. The ICM program was selected due to its capability to model underground drainage systems and their relationship to surface water. The HEC-HMS hydrologic modeling program was used to remove infiltration losses and develop precipitation excess data using NOAA Atlas 14 precipitation depths. This precipitation excess data was used for the ICM models as the rainfall input data.

Once developed, the ICM model was run for the following scenarios.

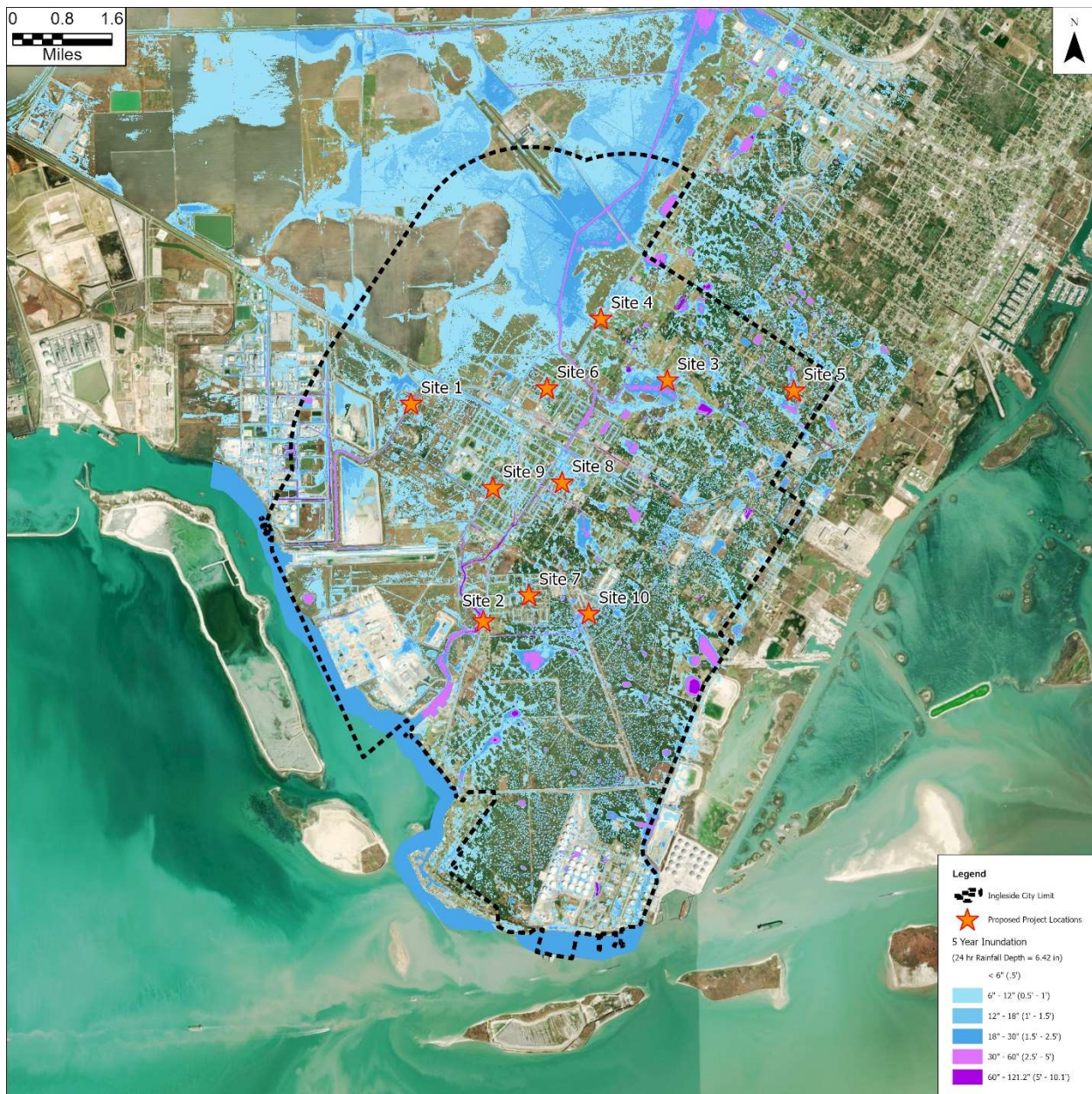
- Existing Conditions – This is a snapshot of current drainage conditions in the City of Ingleside.
 - The ICM model used existing city stormwater infrastructure data as well as data from CCTV, survey, as-builts plans, and construction plans to create an up-to-date existing conditions model.
 - Existing land use data was manually categorized for areas within the ICM model boundary based on aerial imagery from January 2023.
 - Model results showed flooding in numerous neighborhoods, homes, and streets due to the insufficient capacity of stormwater systems. These results were confirmed by City of Ingleside staff during the Existing Conditions Meeting.
- Future Conditions – This is a look forward to the City of Ingleside once it is completely built out.
 - Future conditions are based on the future land use map developed as part of the City's Comprehensive Plan and assumes no additional stormwater improvements are made.
 - Model results showed the future condition results paralleled existing conditions. However, most issues identified in the existing conditions were exacerbated, attributable to an increase in impervious cover.

2.2 PROBLEM AREA IDENTIFICATION

Based on the existing buildout conditions and future buildout conditions modeling, numerous inundation hotspots were noted across the City. After compiling the problem areas, FNI developed a preliminary problem area location map and site identification numbers (see the list below and **Figure 2-1**).

- Site 1: Humble Ditch and West Main area
- Site 2: Kinney Bayou overtopping of SH 1069 between North Street and Port Avenue
- Site 3: Kenny Lane/Whitney Lake area
- Site 4: SH 1069 between McCampbell Slough and Mooney Lane
- Site 5: Long-term ponding in the northern section of Ingleside
- Site 6: Inundation in the Nystrom Addition neighborhood
- Site 7: Inundation in the Parkside Terrace subdivision
- Site 8: Inundation in the Villanova Place subdivision
- Site 9: Inundation in the Humble Addition neighborhood and along Avenue B
- Site 10: Planning for future development on the south side of Ingleside near Achievement Boulevard and 8th Street

Figure 2-1: Existing Inundation Depth Results and Problem Areas for 5-Year Storm Event



Note: Site 2 did not progress to further analysis and CIP development.

These ten potential CIP project locations were developed based on the most severely inundated areas that appeared to be impacting a significant number of residents and public roadways. The identified problem areas were reviewed with City staff and also validated by public input received through the Virtual Open House #1 (VOH-1), which provided opportunities for people to learn about the Drainage Master Plan process and provide input about their experiences with flooding in Ingleside. VOH-1 activities included an introductory video, a public survey, and an interactive map. Eight survey responses were

received, and 31 comments were added to the interactive map. Responses are summarized in **Appendix I.2**.

The maximum number of projects scoped for modeling in this Drainage Master Plan was nine projects. To pare down the list, discussions were held with City staff and a recommendation was made to City Council to not progress Site 2 forward into the CIP development phase. Although modeling shows potential for inundation of SH 1069 under future buildout conditions at Site 2, City staff reported they have not seen this occur or be an issue in the past. However, flooding is known to occur under existing conditions in the other nine sites that were noted, so those sites were progressed to the CIP development phase.

2.3 PROJECT DEVELOPMENT

This task included the development of improvement alternatives to address identified flood prone areas. The alternatives in fully developed areas considered retrofit and upsizing of existing systems, whereas alternatives in undeveloped areas reflect anticipated development to allow planning of drainage infrastructure ahead of development, which will be necessary to accommodate future flows.

Preliminary improvements were proposed to mitigate these drainage problems and to develop the CIPs. The CIPs range from small projects that may be able to be implemented by City crews to large projects that will require a contractor. Ultimately, the City can break out or combine various elements of the different CIPs as needed to make the best use of City funds.

In addition to the larger, capital projects, a list of small drainage projects was also developed. These small projects are typically maintenance focused and can likely be completed by City staff (see **Section 2.3.2** and **Appendix J**).

It should be noted that the proposed improvements are not based on detailed engineering analysis or design. Rather they are based on field visits, review of existing data, and limited modeling and calculations. A detailed hydrologic and hydraulic impact analysis should be performed during final design to ensure the recommended improvements will not cause adverse impacts upstream or downstream of the project site.

These nine CIP projects developed for this drainage master plan were reviewed with City staff, presented to City Council, and shared publicly for community input through the Virtual Open House #2 (VOH-2). The purpose of VOH-2 was to give the people living and working in the community an opportunity to provide feedback on the proposed projects. The VOH-2 website included an overview map of the projects,

summaries of the existing problems, summaries of the proposed improvements, and figures providing a schematic of the proposed improvements. Seventeen comments were received from a total of seven individuals (based on unique IP addresses). Responses are summarized in **Appendix I.3**.

2.3.1 Proposed Capital Improvement Projects

A total of nine project sites were analyzed for a potential drainage project that would reduce inundation during the 5-year storm event. The baseline was set by determining the depth of inundation and the number of potentially impacted structures during the 5-year storm event and based on existing land use conditions. Analysis of the effectiveness of the proposed improvements was determined based on:

- Inundation depth reduction.
- The number of structures removed from the potentially inundated areas. (Analysis assumed all structures have a finished floor elevation of at least 6-inches above the topographic surface. If inundation depths intersecting a structure were greater than 6-inches of depth, the structure was assumed to be inundated.)
- Reduction in the length of impassable roadway, defined as roadway inundated to a depth of greater than 6-inches.

Based on the analyses, the project limits were refined, and the following list of projects was developed.

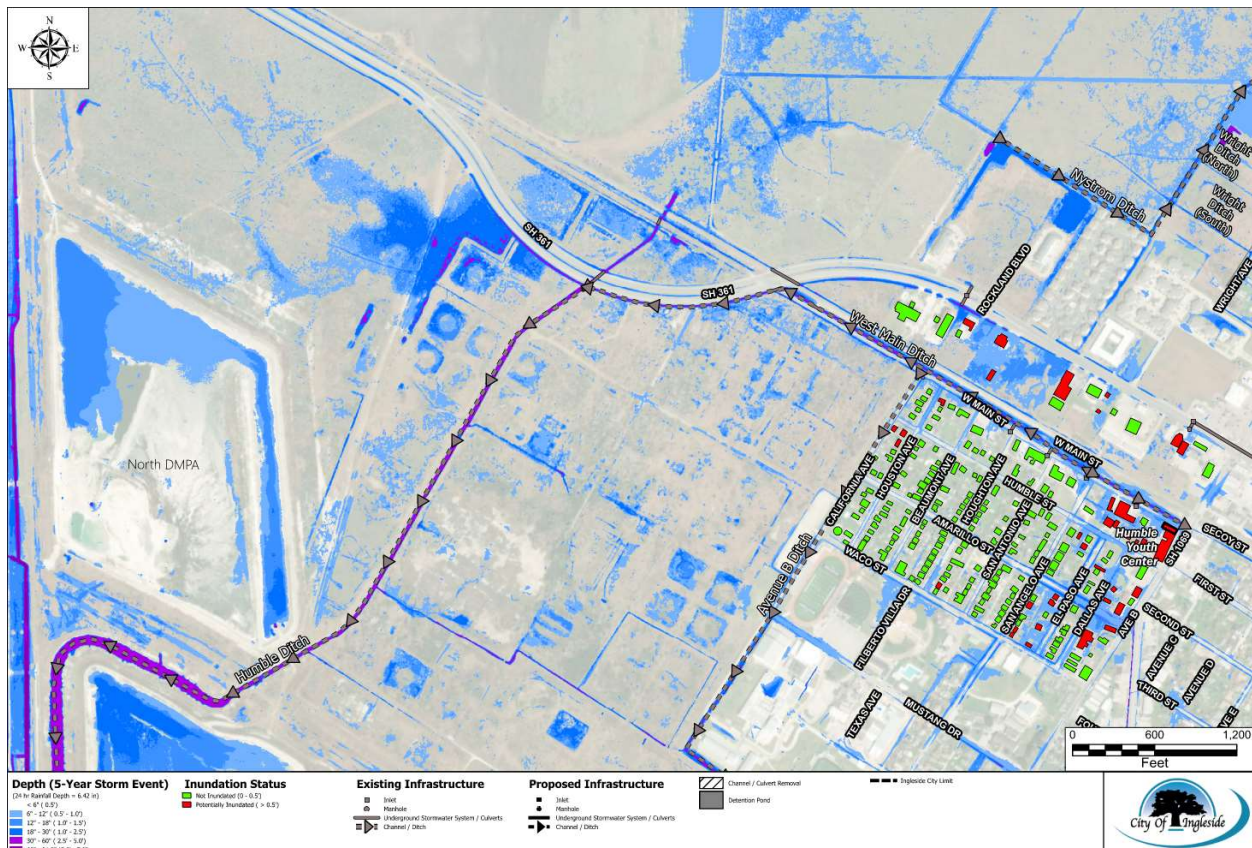
- Site 1: Humble Ditch Improvements
- Site 3: Kenny Lane/Whitney Lake Infrastructure
- Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane
- Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street
- Site 6: Nystrom Addition Drainage Improvements
- Site 7: Parkside Terrace Subdivision Drainage Improvements
- Site 8: Villanova Place Drainage Improvements
- Site 9: Humble Addition and Avenue B Drainage Improvements
- Site 10: Live Oak Ditch

Each project area is summarized as a one-page document located in **Appendix C**, and in the following subsections.

2.3.1.1 Site 1: Humble Ditch Improvements

Existing problem: West Main Street experiences flooding that overtops the road and limits access to and from the adjacent business, including the Humble Youth Center, during even the smaller storm events. City staff indicated that cars driving along West Main Street cause waves that send water into the Humble Youth Center building. Flooding issues in the West Main Street area are exacerbated due to backflow in the upstream section of the Humble Ditch. This backflow is represented in the model and has been confirmed by City staff. Water near the Humble Youth Center also seems to be relatively isolated from the drainage systems which causes lack of flow and ponding along West Main Street. These flooding issues can result in road and building damage. The existing inundation extents are shown in **Figure 2-2** and in **Appendix B.1A**.

Figure 2-2: Humble Ditch Improvements - Existing Conditions Flooding Extents



Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: Improve approximately 5,000 linear feet of the Humble Ditch. Improvements include regrading the Humble Ditch from the south edge of State Highway 361 (SH 361) to approximately halfway between the Dredge Material Placement Area (DMPA) cells,

and concrete lining the channel. Proposed dimensions include a 20-foot bottom width with the top width being restrained by the San Patricio County Drainage District easements. These improvements will allow the Humble Ditch to flow in the original intended direction and relieve some ponding in between SH 361 and West Main Street. The proposed improvements do not entirely prevent ponding along West Main Street, but improving the drainage downstream of the problem area does reduce the amount of time ponding occurs along West Main Street. also, improving the Humble Ditch cannot entirely alleviate the flooding at the Humble Youth Center, so flood protection systems for the building itself should be considered to prevent water damage to the building. Proposed improvements are shown in **Figure 2- 3** and in **Appendix B.1B**.

Figure 2- 3: Humble Ditch Improvements - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood extents in the area between SH 361 and West Main Street and a reduction in the amount of time the West Main Street system is inundated. The HEC-RAS models indicate that the proposed alternatives may decrease the extent or depth of flooding in nearby areas, but almost no significant positive impacts are noted near the Humble Youth Center. Several different proposed improvement scenarios were analyzed, but the greatest beneficial impacts were attributed to improvements to the Humble Ditch, which reduced backflow into the West Main

Ditch and reduced the amount of time the West Main Street systems were inundated. **Table 2-2** summarizes the results.

Table 2-2: Humble Ditch Improvements - Summary of Results

Site 1: Humble Ditch Improvements			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	72.3	65.7	92.0
Inundated Roadway (> 6" depth; LF)	10,812	10,443	13,707
Number of Potentially Inundated Structures (> 6" depth)	37	36	58
Maximum Flood Depth (ft)	1.22	1.17	1.40
Length of Time Inundated (hrs)	34.00	33.00	43.25
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	91.9	87.2	109.8
Inundated Roadway (> 6" depth; LF)	14,148	13,590	17,077
Number of Potentially Inundated Structures (> 6" depth)	55	55	70
Maximum Flood Depth (ft)	1.45	1.39	1.62
Length of Time Inundated (hrs)	41.25	40.25	48.50
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	116.7	111.9	133.9
Inundated Roadway (> 6" depth; LF)	18,974	17,943	20,540
Number of Potentially Inundated Structures (> 6" depth)	86	80	101
Maximum Flood Depth (ft)	1.81	1.68	1.94
Length of Time Inundated (hrs)	50.75	49.75	60.25
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	153.4	153.3	167.9
Inundated Roadway (> 6" depth; LF)	24,363	24,316	25,340
Number of Potentially Inundated Structures (> 6" depth)	125	125	133
Maximum Flood Depth (ft)	2.20	2.22	2.31
Length of Time Inundated (hrs)	69.25	68.50	71.00
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	183.1	184.3	196.7
Inundated Roadway (> 6" depth; LF)	28,066	28,062	29,277
Number of Potentially Inundated Structures (> 6" depth)	146	145	154
Maximum Flood Depth (ft)	2.46	2.50	2.59
Length of Time Inundated (hrs)	72.25	71.50	73.50

Project Considerations: The San Patricio County Drainage District (SPCDD) is responsible for channel maintenance and improvements on the Humble Ditch. The proposed improvements to Humble Ditch should be achievable within the existing SPCDD drainage easement, but this should be confirmed during final design. The locations of any utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. There are several oil, gas, highly volatile liquid pipelines and a major water transmission line crossing the Humble Ditch at unknown depths. Coordination with these private and public pipeline owners will be required during project development and construction. No permitting requirements are anticipated.

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

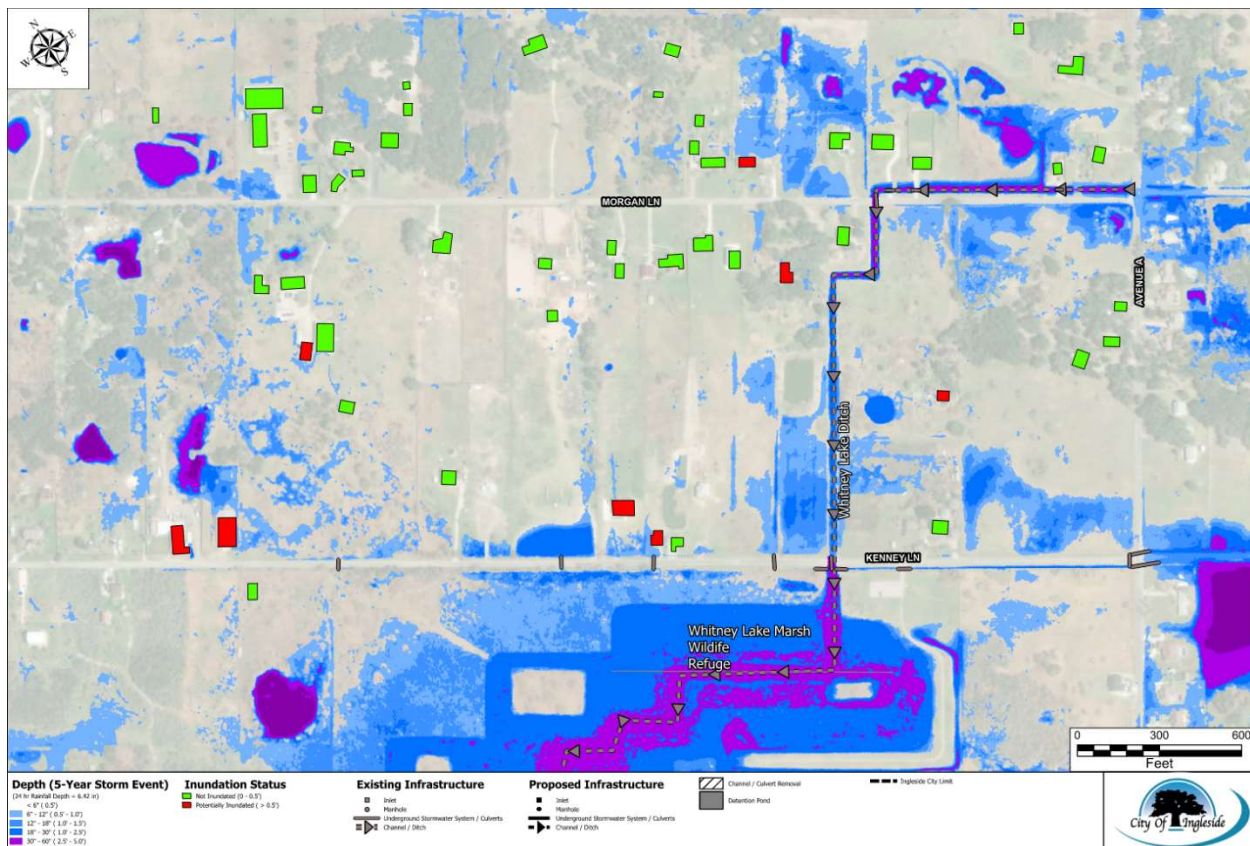
- **2016 Comprehensive Master Plan (CMP):**
The CMP highlights a need for improved flood control measures and includes infrastructure policies to implement varying methods for stormwater drainage management. While there are no specific projects recommended in the CMP, the proposed Humble Ditch improvements help to implement its high-level policies.
- **2018 San Patricio County Hazard Mitigation Plan (HMP):**
The HMP recommended County-wide and Ingleside-specific mitigation actions to reduce the negative impacts of natural hazards. The proposed Humble Ditch improvements help support proposed action #7 for the City of Ingleside to undertake a comprehensive study of flood risk and implement feasible alternatives for flood reduction.
- **2020 Transportation Master Plan (TMP):**
The TMP recommends combining street and utility projects whenever possible. However, this project includes minimal work along a roadway, so there are no strong plan linkages to the TMP.
- **2021 Parks, Recreation and Open Space Master Plan (PROSMP):**
The Humble Youth Center provides a variety of recreational camps and programs and is the only City-run recreation facility for youth. It is safe to assume that the ability of the Center to provide these programs can be inhibited by flooding conditions. This project

will help to reduce the flooding impact on the Center and thus support recreation options for the community. In addition to implementing the Humble Ditch improvements, the City should also consider flood protection systems for the building to best protect this recreation resource from storm events.

2.3.1.2 Site 3: Kenny Lane/Whitney Lake Infrastructure

Existing problem: Residential properties along Kenny Lane are flooding during even small storm events. Additionally, Kenny Lane experiences roadway overtopping during the 100-year or larger storm events. There are no existing roadside ditches and only one property on Kenny Lane has a driveway culvert. Existing cross culverts are limited and undersized due to lack of cover. Flooding events can limit residents' ability to leave their homes, pose a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. The existing inundation extents are shown in **Figure 2-4** and in **Appendix B.2A**.

Figure 2- 4: Kenny Lane/Whitney Lake Infrastructure - Existing Conditions Flooding Extents



Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: At the onset of this project, there were already plans for improvements along Kenny Lane. Proposed improvements in the Kenny Lane Construction Plans provided by the City were modeled. This includes approximately 440 linear feet of 15-inch reinforced concrete pipe (RCP) culverts along Kenny Lane to provide flow from the north side to the south side of Kenny Lane. Proposed improvements are shown in **Figure 2-5** and in **Appendix B.2B**. The following additional alternatives were analyzed to determine if further improvements were warranted, but none proved to be substantially more effective than the improvements in the Kenny Lane Construction Plans.

- Modeled culverts in the same plan configuration as the current construction plans, but extended the outfall into Whitney Lake instead of the south side of Kenny Lane
- Concrete-lined the upstream section of the channel between Morgan Lane and Kenny Lane
- Added culverts on the east side of the main culvert crossing under Kenny Lane to relieve the northeast area

Figure 2- 5: Kenny Lane/Whitney Lake Infrastructure - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed Kenny Lane Construction Plan Improvements include reductions in drainage time. Only minor depth and extent reductions were observed. Similar trends were observed for the alternative with the culverts directly draining to the lake. Upstream channel improvements had insignificant changes to the Kenny Lane area and only slightly decreased water surface elevation and extent for a few houses on Morgan Lane. Cross culverts on the east side of the main Kenny Lane culvert only provide small relief to a couple of houses northeast of the culvert. **Table 2-3** summarizes the modeling results for proposed improvements (based on the Kenny Lane Construction Plans).

Table 2- 3: Kenny Lane/Whitney Lake Infrastructure - Summary of Results

Site 3: Kenny Lane/Whitney Lake Infrastructure			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	63.8	63.6	78.9
Inundated Roadway (> 6" depth; LF)	83	83	196
Number of Potentially Inundated Structures (> 6" depth)	8	7	13
Maximum Flood Depth (ft)	1.65	1.43	1.76
Length of Time Inundated (hrs)	28.75	28.75	33.75
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	78.9	78.5	92.7
Inundated Roadway (> 6" depth; LF)	232	234	624
Number of Potentially Inundated Structures (> 6" depth)	12	12	13
Maximum Flood Depth (ft)	1.83	1.79	2.4
Length of Time Inundated (hrs)	33.00	33.00	37.75
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	97.3	96.7	108.0
Inundated Roadway (> 6" depth; LF)	988	914	1,869
Number of Potentially Inundated Structures (> 6" depth)	14	14	16
Maximum Flood Depth (ft)	2.65	2.57	2.81
Length of Time Inundated (hrs)	37.25	37.25	42.25
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	120.0	119.8	129.4
Inundated Roadway (> 6" depth; LF)	3,092	3,092	3,508
Number of Potentially Inundated Structures (> 6" depth)	20	20	23
Maximum Flood Depth (ft)	3.23	3.23	3.46
Length of Time Inundated (hrs)	41.50	41.50	46.50
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	142.5	142.4	149.3
Inundated Roadway (> 6" depth; LF)	4,576	4,576	5,012
Number of Potentially Inundated Structures (> 6" depth)	26	26	29
Maximum Flood Depth (ft)	3.93	3.93	4.1
Length of Time Inundated (hrs)	45.75	45.75	50.25

Project Considerations: The proposed improvements have already been incorporated into the Kenny Lane Construction Plans. No utility conflicts are anticipated, and no drainage easement acquisition or permitting is required.

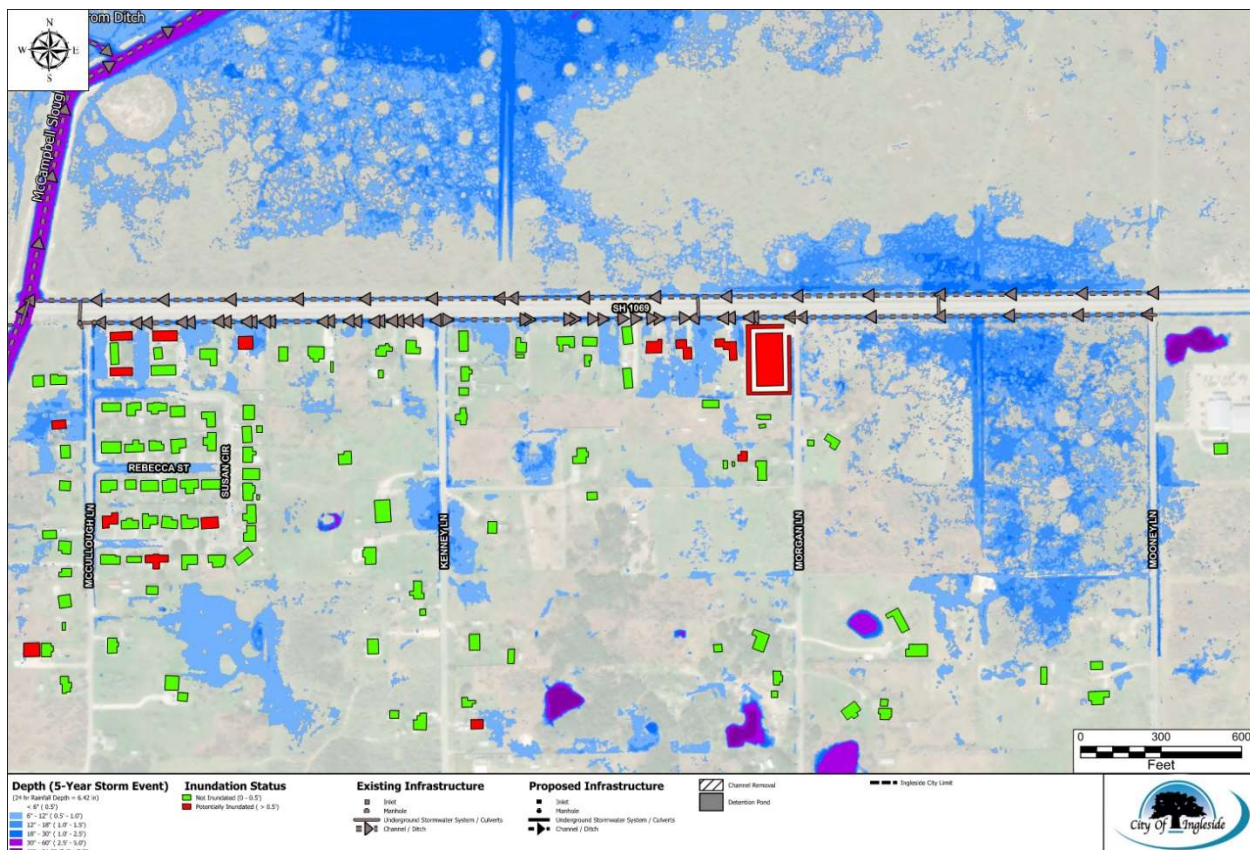
Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

- **2016 Comprehensive Master Plan (CMP):**
Improving flood control is a policy listed in the CMP. The proposed Kenny Lane/Whitney Lake infrastructure improvements will help to reduce flood depths in the area, thus supporting the CMP policy.
- **2018 San Patricio County Hazard Mitigation Plan (HMP):**
The Kenny Lane/Whitney Lake infrastructure improvements do not address any site-specific actions in the HMP, but do support action #7 for the City of Ingleside to implement feasible alternatives for flood reduction.
- **2020 Transportation Master Plan (TMP):**
The Thoroughfare Plan in the TMP illustrates Kenny Lane as a proposed Minor Collector. It is not clear if this means that the road will be upsized in the future. If so, roadway improvements will need to complement the proposed flood reduction infrastructure. Regardless, if any current roadway work is needed in the areas of proposed drainage improvements, the TMP policies recommend combining it with the drainage project to the extent feasible to best use City resources.
- **2021 Parks, Recreation and Open Space Master Plan (PROSMP):**
The Kenny Lane/Whitney Lake infrastructure improvements are located adjacent to the northeastern boundary of Whitney Lake, which is a City park and a constructed wetland. Allowing stormwater drainage to move into the park rather than pond on the north side of Kenny Lane complements the park's purpose. However, the PROSMP identified various proposed improvements to the park, one of which is a loop trail around the property. When the City proceeds with the loop trail, it will be important to verify that the trail routing and design complements the proposed Kenny Lane/Whitney Lake infrastructure.

2.3.1.3 Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane

Existing problem: State Highway 1069 (SH 1069) is acting as a barrier that causes water surface elevations to rise on the east side of the highway, resulting in inundation of properties east of SH 1069 between McCampbell Slough and Mooney Lane. The ponding caused by the road can lead to lack of accessibility to the properties in the area, pose a safety concern if emergency services are unable to safely access inundated properties, and could potentially result in damage to structures. Existing cross culverts and roadside ditches on either side of SH 1069 do not have enough capacity to efficiently move flow to McCampbell Slough. The existing inundation extents are shown in **Figure 2-6** and in **Appendix B.3A**.

Figure 2-6: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Existing Conditions Flooding Extents



Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: The roadside ditches along SH 1069 will be improved, additional culverts will be constructed under SH 1069 to move stormwater more efficiently from the east side to the west side of the highway, and a new detention pond will be constructed. Proposed improvements are shown in **Figure 2-7** and in **Appendix B.3B**.

- Construct approximately 3,452 linear feet of 4-foot bottom width, concrete-lined roadside ditch along the west side of SH 1069. The concrete lined ditch is assumed to daylight to existing ground at a slope of 3 horizontal to 1 vertical (3H:1V). Top width varies due to differences in existing ground elevations.
- Construct approximately 1,610 linear feet of 3-foot bottom width grass-lined ditch improvements along the east side of SH 1069. Grass-lined ditches between Morgan Lane and Mooney Lane are assumed to daylight to existing ground at a slope of 3H:1V, while remaining grass-lined ditches daylight at a rate of 5H:1V. Top width varies due to differences in existing ground elevations.
- Culverts to move water from east to west of SH 1069 will be placed in strategic locations. Ditches on the east side of the road will be graded to send flow to the cross culverts.
- The west side ditch will be graded to send flow from the cross culverts to McCampbell Slough.
- A detention pond is also recommended on the corner of SH 1069 and Mooney Lane due to the general lack of flow in the area. A gravity drained detention pond would not be deep enough to provide significant drainage benefits; therefore, a pumped detention pond of approximately 48 acre-feet is proposed for this site.

Figure 2-7: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood depth, and minor reductions in the number of potentially inundated structures, the potentially inundated area extents, and length of inundated roadway. **Table 2-4** summarizes the modeling results for SH 1069 between McCampbell Slough and Mooney Lane.

Table 2-4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane - Summary of Results

Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	125.5	122.4	168.0
Inundated Roadway (> 6" depth; LF)	5,931	5,909	7,565
Number of Potentially Inundated Structures (> 6" depth)	16	12	30
Maximum Flood Depth (ft)	1.43	1.05	1.64
Length of Time Inundated (hrs)	33.50	33.50	51.75
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	171.2	164.2	203.6
Inundated Roadway (> 6" depth; LF)	7,460	7,408	8,877
Number of Potentially Inundated Structures (> 6" depth)	28	24	45
Maximum Flood Depth (ft)	1.64	1.28	1.82
Length of Time Inundated (hrs)	35.00	34.75	53.50
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	220.7	211.7	250.8
Inundated Roadway (> 6" depth; LF)	9,668	9,410	11,019
Number of Potentially Inundated Structures (> 6" depth)	47	39	54
Maximum Flood Depth (ft)	1.92	1.58	2.17
Length of Time Inundated (hrs)	36.75	36.75	55.75
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	303.2	297.6	333.5
Inundated Roadway (> 6" depth; LF)	13,315	12,795	15,777
Number of Potentially Inundated Structures (> 6" depth)	73	70	87
Maximum Flood Depth (ft)	2.48	2.20	2.67
Length of Time Inundated (hrs)	39.75	39.75	58.75
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	381.5	381.4	404.6
Inundated Roadway (> 6" depth; LF)	19,486	19,478	21,853
Number of Potentially Inundated Structures (> 6" depth)	99	99	108
Maximum Flood Depth (ft)	2.96	2.95	3.1
Length of Time Inundated (hrs)	43.75	43.00	63.25

Project Considerations: Coordination with and project approval by TxDOT will be required to achieve the proposed project. Land acquisition for the proposed detention pond will be required. City staff should also confirm that the proposed improvements along SH 1069 can be constructed within the TxDOT ROW, or if additional drainage easements will need to be obtained from the adjacent property owners. Natural gas, oil, and wastewater pipelines may cause construction conflicts. Locations of utilities in the area should be confirmed during the design process to ensure no conflicts exist with the proposed drainage improvements. Water quality improvements should be incorporated into the detention pond during final design. A USACE Nationwide Permit (NWP 43) may be required for this project due to the project tie-in at McCampbell Slough and should be confirmed during final design. Phasing of this project could be considered starting with the most downstream portions of the project.

- Phase 1 – Roadside ditch improvements and culverts crossing SH 1069
- Phase 2 – Detention pond

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

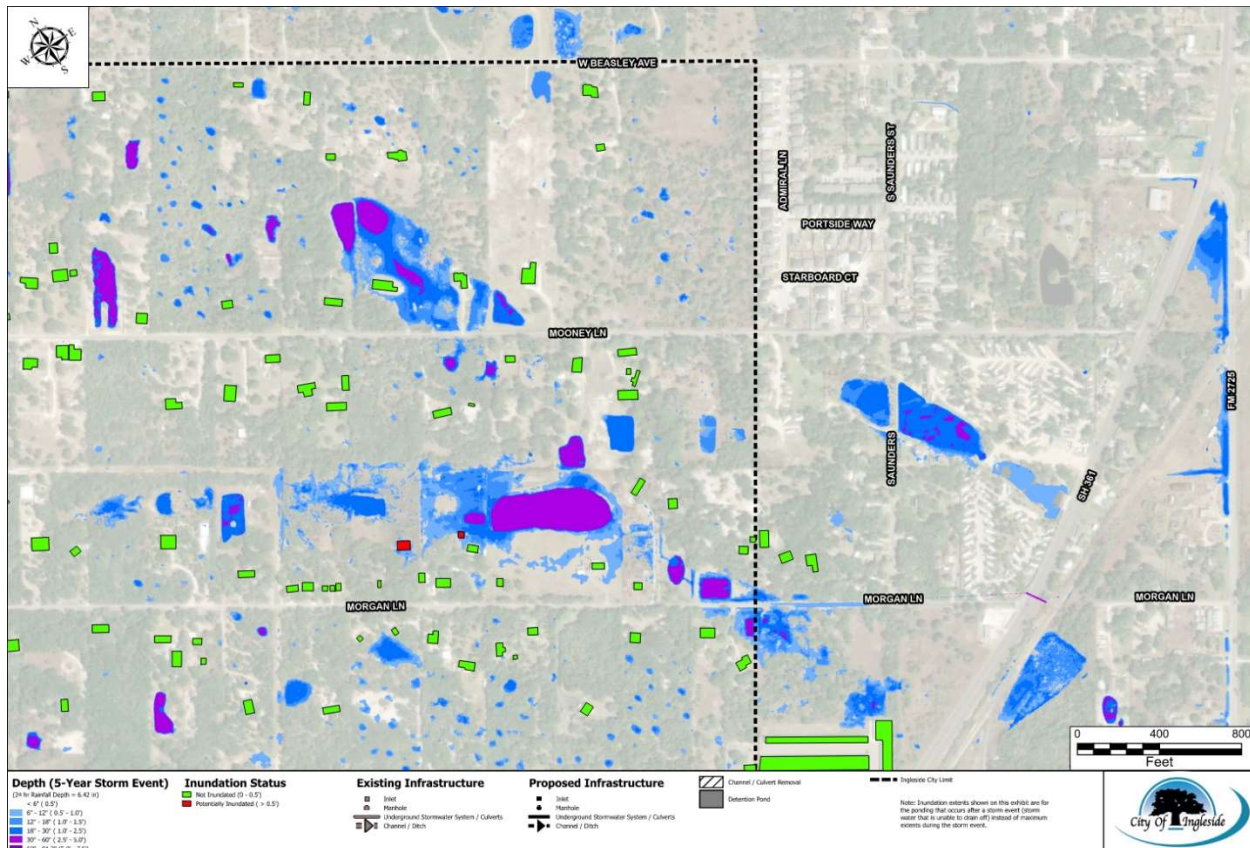
- 2016 Comprehensive Master Plan (CMP):
The CMP identified policies to improve flood control as well as the need to partner with TxDOT on roadway projects. By reducing maximum flood depths and the number of potentially inundated structures, as well as coordinating with TxDOT on the improvements along SH 1069, this project is helping to implement multiple policies in the CMP.
- 2018 San Patricio County Hazard Mitigation Plan (HMP):
There are no site-specific actions items in the HMP near the SH 1069 drainage improvements. However, by improving drainage conditions, this project is helping to support action #7 for the City of Ingleside to implement feasible alternatives for flood reduction.

- 2020 Transportation Master Plan (TMP):
The recommended maintenance program in the TMP calls for pairing transportation improvements with other utility improvements. Many of the SH 1069 drainage improvements run parallel to the road. These improvements will reduce the number of inundated roadways. As an existing primary arterial road, this is especially important. If other roadway work is needed in the areas of proposed drainage improvements, it should be completed with the drainage project to the extent feasible to best use City resources.
- 2021 Parks, Recreation and Open Space Master Plan:
The proposed SH 1069 drainage improvements are not near any existing or proposed parks or recreation amenities or facilities, so there are no strong plan linkages to the PROSMP.

2.3.1.4 Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street

Existing problem: Stormwater is ponding on residential lots on both sides of Mooney Lane between Avenue A and South Saunders Street. Water stands on the lots for extended periods of time even after most areas have drained. This long-term ponding has been observed in the HEC-RAS model and confirmed by City staff and public comments during the Virtual Open House #1. This creates potential health concerns and inconveniences for nearby homeowners. The existing inundation extents are shown in **Figure 2-8** and in **Appendix B.4A**.

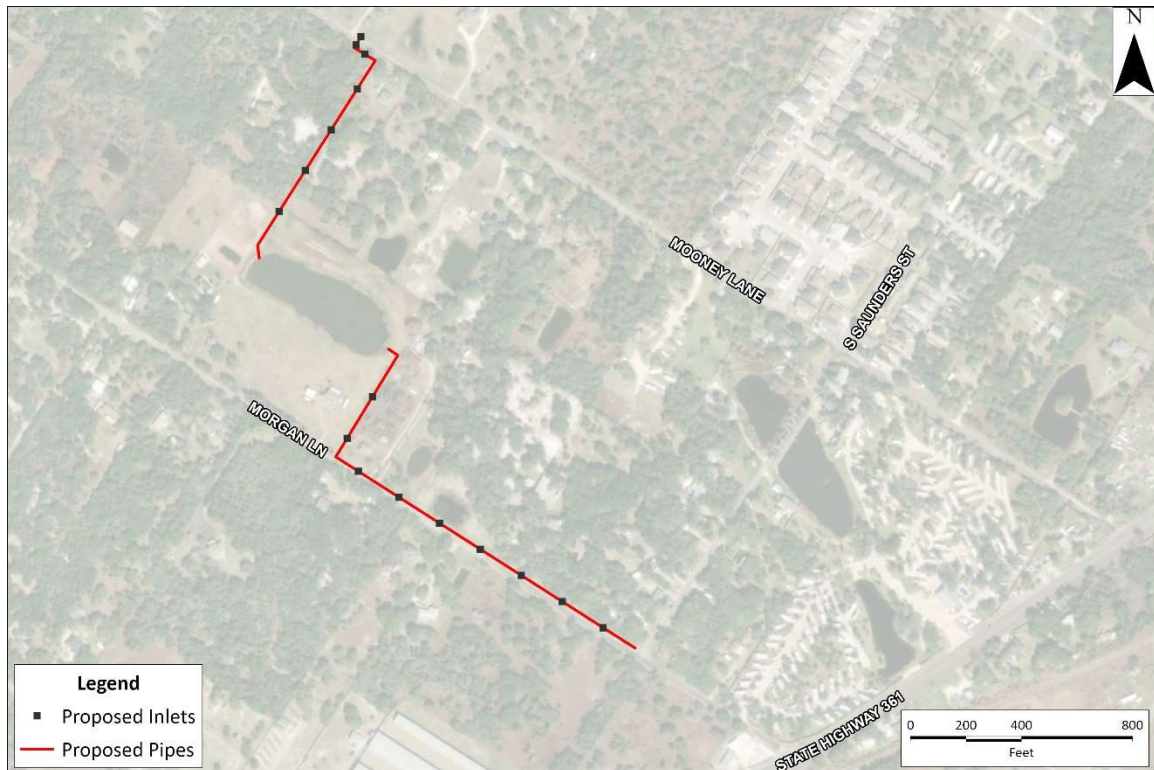
**Figure 2-8: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Existing Conditions
Flooding Extents**



Note: Flooding extents based on existing land use conditions and the 5-year storm event. Inundation extents shown are for the ponding that occurs after a storm event (stormwater that is unable to drain off) instead of maximum extents during the storm event.

Proposed Improvements: Construct approximately 2,585 linear feet of 15-inch PVC pipe to connect flow from the ponded areas north of Mooney Lane to the existing pond south of Mooney Lane. An outfall pipe will be added to the pond south of Mooney Lane, which will drain to an existing TxDOT or City of Aransas Pass inlet near the intersection of Morgan Lane and South Saunders Street, which appears to drain along Morgan Lane to a TxDOT culvert under SH 361. Grate or post inlets will be installed along the new pipes at an interval of 175 feet to help drain the area. Proposed improvements are shown in **Figure 2-9** and in **Appendix B.4B**.

Figure 2-9: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in drainage time. Based on the modeling results, there were areas that never drain off after a storm event (water would inundate the lots until it could evaporate or infiltrate into the soil). This proposed project significantly decreases the amount of time these properties experience inundation and provides a mechanism for the properties to drain after a storm event. **Table 2-5** summarizes the modeling results for the Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street project.

Table 2-5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street - Summary of Results

Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	29.5	18.8	29.1
Inundated Roadway (> 6" depth; LF)	192	79	184
Number of Potentially Inundated Structures (> 6" depth)	3	3	3
Maximum Flood Depth (ft)	2.92	1.31	2.91
Length of Time Inundated (hrs)	N/A	92.00	N/A
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	30.7	19.1	30.0
Inundated Roadway (> 6" depth; LF)	192	81	186
Number of Potentially Inundated Structures (> 6" depth)	3	3	4
Maximum Flood Depth (ft)	2.95	1.38	2.91
Length of Time Inundated (hrs)	N/A	94.50	N/A
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	31.4	19.6	30.0
Inundated Roadway (> 6" depth; LF)	192	83	186
Number of Potentially Inundated Structures (> 6" depth)	4	3	4
Maximum Flood Depth (ft)	2.95	1.33	2.95
Length of Time Inundated (hrs)	N/A	99.75	N/A
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	31.4	19.9	30.0
Inundated Roadway (> 6" depth; LF)	192	89	186
Number of Potentially Inundated Structures (> 6" depth)	4	3	4
Maximum Flood Depth (ft)	2.95	1.42	2.95
Length of Time Inundated (hrs)	N/A	102.75	N/A
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	31.4	20.2	30.1
Inundated Roadway (> 6" depth; LF)	192	99	186
Number of Potentially Inundated Structures (> 6" depth)	4	3	4
Maximum Flood Depth (ft)	2.95	1.44	2.95
Length of Time Inundated (hrs)	N/A	128.75	N/A

Note: N/A values indicate the ponding never drained off.

Project Considerations: To achieve the proposed improvements, drainage easements across private properties will be required. The proposed system ties into existing TxDOT or City of Aransas Pass infrastructure. Therefore, coordination with and project approval by TxDOT or Aransas Pass will be required. Natural gas, oil, and wastewater pipelines may cause construction conflicts. Locations of utilities in the area should be confirmed during the design process to ensure no conflicts with the proposed drainage improvements. No permitting requirements are anticipated.

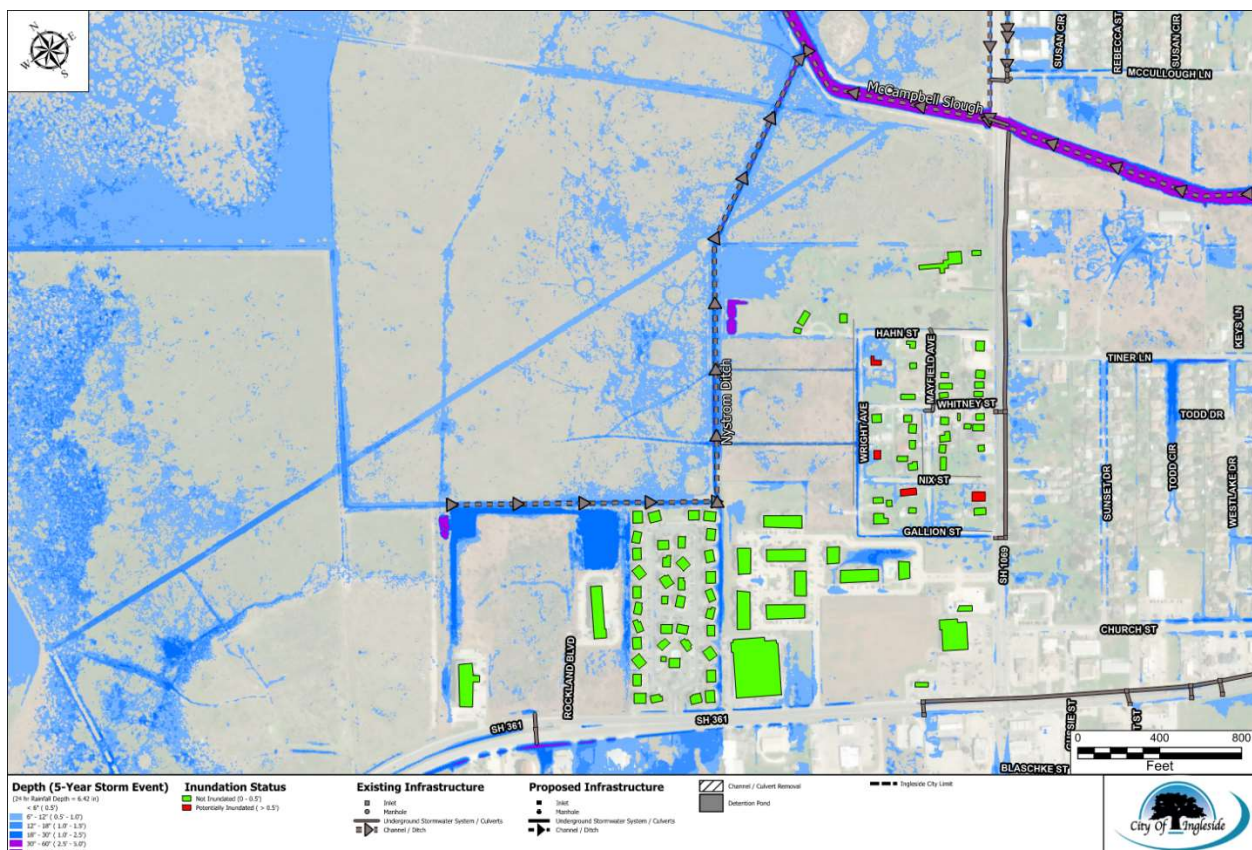
Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

- **2016 Comprehensive Master Plan (CMP):**
The CMP documented community concern about flooding in residential areas. The proposed drainage improvements at this site will help to address these community concerns, thus supporting the CMP.
- **2018 San Patricio County Hazard Mitigation Plan (HMP):**
There are no site-specific actions items in the HMP near the Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street drainage improvements. However, by improving drainage conditions, this project is helping to support action #7 for the City of Ingleside to implement feasible alternatives for flood reduction.
- **2020 Transportation Master Plan (TMP):**
Some of this project's drainage improvements will run along a road. If other roadway work is needed in the areas of proposed drainage improvements, it should be completed with the drainage project to the extent feasible to best use City resources.
- **2021 Parks, Recreation and Open Space Master Plan (PROSMP):**
The proposed Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street drainage improvements are not near any existing or proposed parks or recreation amenities or facilities, so there are no strong plan linkages to the PROSMP.

2.3.1.5 Site 6: Nystrom Addition Drainage Improvements

Existing problem: Residential properties in the Nystrom Addition neighborhood are flooding during even small storm events. Additionally, the neighborhood streets (Gallion Street, Wright Avenue, Hahn Street, Whitney Street, Nix Street, and Mayfield Avenue) experience overtopping during storm events. Existing roadside ditches throughout the neighborhood do not have enough capacity to efficiently move flow to the two outfall ditches to the west (Wright Ditch (North) and Wright Ditch (South)), and the outfall ditches (Wright Ditch (North), Wright Ditch (South), and Nystrom Ditch) are also undersized. These instances of flooding can limit residents' ability to leave their homes during a flood event, pose a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. The existing inundation extents are shown in **Figure 2-10** and in **Appendix B.5A**.

Figure 2-10: Nystrom Addition Drainage Improvements - Existing Conditions Flooding Extents

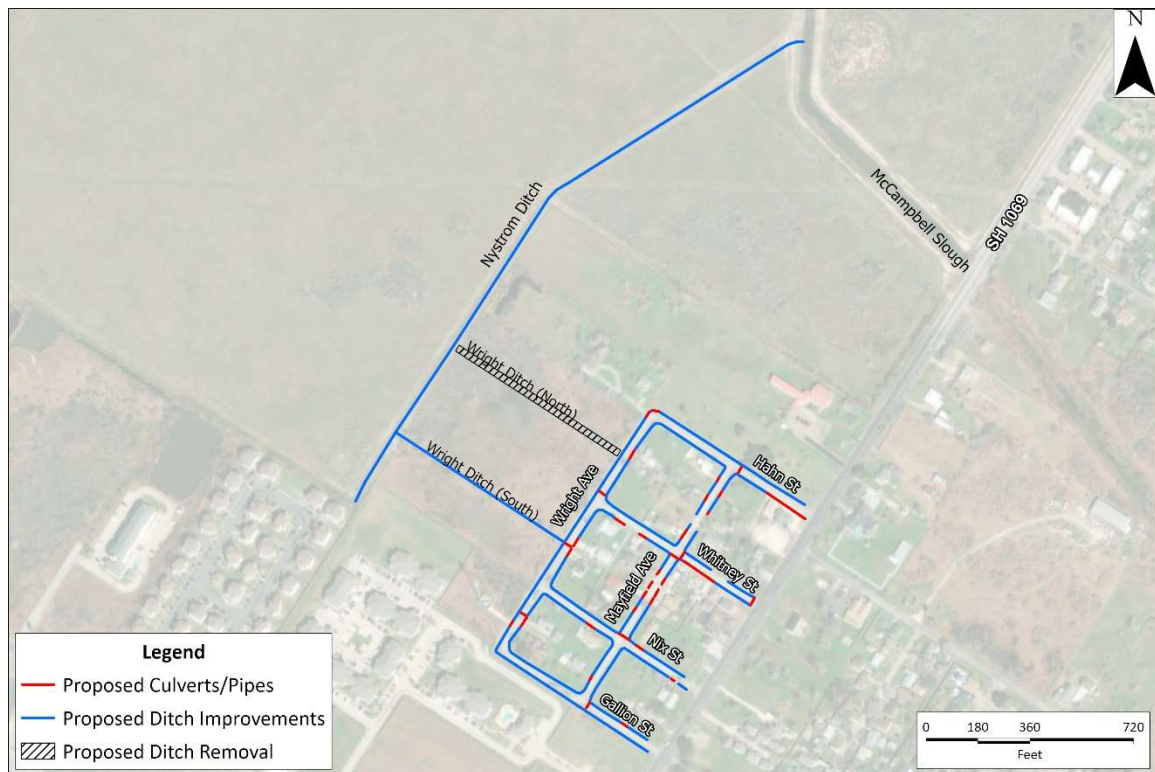


Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: The existing Nystrom Ditch will be improved, the two Wright Ditches will be combined into a single ditch, and the neighborhood roadside ditches will be improved by regrading and the addition of culverts. Proposed improvements are shown in **Figure 2-11** and in **Appendix B.5B**.

- Regrade approximately 5,595 linear feet of grass-lined roadside ditches (3-foot bottom width) and 1,460 linear feet of grass-lined roadside ditch (4-foot bottom width) throughout the neighborhood.
- Improve the outfall ditches to the west of the neighborhood by consolidating the two smaller ditches (Wright Ditch (North) and Wright Ditch (South)) into one larger ditch with sufficient capacity to drain the neighborhood.
 - The entire Wright Ditch (North) will be filled for a total of 670 linear feet.
 - Wright Ditch (South) will be lowered by approximately 2 feet and widened (10-foot bottom width) for 696 linear feet.
- Farther west, the ditch running northeast (Nystrom Ditch) will also require improvements; 2,288 linear feet of Nystrom Ditch will be lowered by approximately 2 feet and widened from a V-shaped ditch (no defined bottom width) to a bottom width of 20 feet.
- All proposed ditches will have 3H:1V side slopes.
- To move flow from the neighborhood ditches to the larger ditches, nine culverts ranging in size from 15-inches to 24-inches will be added to allow stormwater to cross the neighborhood streets into the improved ditches. Driveway culvert improvements will also be required to achieve positive drainage within the neighborhood.

Figure 2-11: Nystrom Addition Drainage Improvements - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood depth, a reduction in the inundated area, a reduction in the number of potentially inundated structures, a reduction in the length of unpassable road, and a reduction in the length of time inundation occurs. **Table 2-6** summarizes the modeling results for the Nystrom Addition neighborhood.

Table 2-6: Nystrom Addition Drainage Improvements - Summary of Results

Site 6: Nystrom Addition Drainage Improvements			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	38.1	27.9	72.2
Inundated Roadway (> 6" depth; LF)	356	297	956
Number of Potentially Inundated Structures (> 6" depth)	4	0	6
Maximum Flood Depth (ft)	0.83	0.62	1.05
Length of Time Inundated (hrs)	17.00	13.25	26.50
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	61.3	52.1	97.9
Inundated Roadway (> 6" depth; LF)	801	348	1,351
Number of Potentially Inundated Structures (> 6" depth)	6	2	8
Maximum Flood Depth (ft)	0.96	0.67	1.13
Length of Time Inundated (hrs)	22.75	21.25	31.00
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	99.2	95.1	129.7
Inundated Roadway (> 6" depth; LF)	1,520	437	1,847
Number of Potentially Inundated Structures (> 6" depth)	9	3	10
Maximum Flood Depth (ft)	1.06	0.76	1.17
Length of Time Inundated (hrs)	27.50	26.25	36.00
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	151.0	148.6	162.0
Inundated Roadway (> 6" depth; LF)	2,390	981	2,626
Number of Potentially Inundated Structures (> 6" depth)	20	6	23
Maximum Flood Depth (ft)	1.17	0.97	1.27
Length of Time Inundated (hrs)	33.00	31.75	41.25
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	177.7	175.6	184.2
Inundated Roadway (> 6" depth; LF)	3,295	2,438	3,926
Number of Potentially Inundated Structures (> 6" depth)	36	13	43
Maximum Flood Depth (ft)	1.65	1.63	1.86
Length of Time Inundated (hrs)	37.75	36.75	45.50

Project Considerations: To achieve the proposed improvements, a drainage easement for the Wright South Ditch will be required. City staff should also confirm that an appropriate drainage easement is in place for the Nystrom Ditch and that the proposed improvements can be constructed within the existing easement. Coordination with the SPCDD will be required for improvements being made at the connection of Nystrom Ditch into McCampbell Slough. Potential conflict of a natural gas line crossing the Nystrom Ditch may require further coordination between relevant parties. The locations of other utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. A USACE Nationwide Permit (NWP 7, 18, or 58) may be required for this project due to the project tie-in at McCampbell Slough and should be confirmed during final design. Phasing of this project should be considered starting with the most downstream portions of the project.

- Phase 1 – Nystrom Ditch improvements
- Phase 2 – Wright Ditch improvements
- Phase 3 – Nystrom Addition neighborhood improvements (roadside ditches and culverts)

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

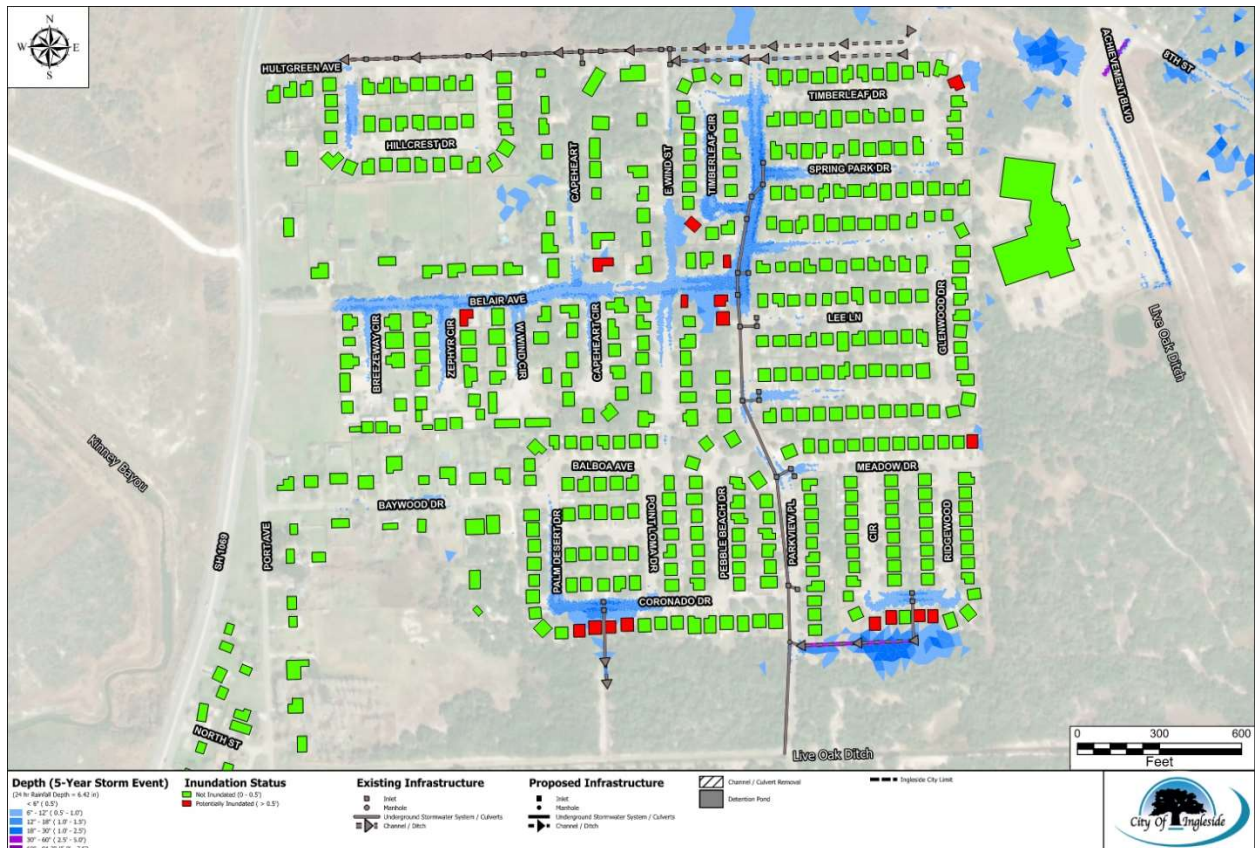
- 2016 Comprehensive Master Plan (CMP):
Although this site is not directly mentioned in the CMP, the proposed improvements do help to address the community concerns noted in the CMP about flooding in residential areas.
- 2018 San Patricio County Hazard Mitigation Plan (HMP):
There are no site-specific actions items in the HMP near the Nystrom Addition drainage improvements. However, by increasing the capacity of drainage infrastructure in the neighborhood, the improvements support proposed action #6 for the City of Ingleside to upgrade undersized storm water drains to improve drainage, reduce flooding, and reduce flood damages to structures and infrastructure.

- 2020 Transportation Master Plan (TMP):
The Thoroughfare Plan in the TMP identifies a proposed minor collector running generally parallel to the McCampbell Slough. It will be important to ensure that the future road does not impede any of the proposed drainage improvements. Additionally, as with other proposed drainage projects along roads, if any roadway work is needed in the areas of proposed drainage improvements, the TMP policies recommend combining it with the drainage project to the extent feasible to best use City resources.
- 2021 Parks, Recreation and Open Space Master Plan (PROSMP):
The proposed Nystrom Addition drainage improvements are not near any existing or proposed parks or recreation amenities or facilities, so there are no strong plan linkages to the PROSMP.

2.3.1.6 Site 7: Parkside Terrace Subdivision Drainage Improvements

Existing problem: Residential properties in the Parkside Terrace Subdivision are flooding during even minor storm events. Additionally, the neighborhood streets, namely Coronado Drive, Ridgewood Circle, Parkview Place, Belair Avenue, and Timberleaf Circle, experience overtopping during small storm events. The existing storm drain infrastructure does not have enough capacity to efficiently move flow south to Live Oak Ditch and more inlets are needed to capture flow. These instances of flooding can limit residents' ability to leave their homes during a flood event, pose a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. The existing inundation extents are shown in **Figure 2-12** and in **Appendix B.6A**.

Figure 2-12: Parkside Terrace Subdivision Drainage Improvements - Existing Conditions Flooding Extents



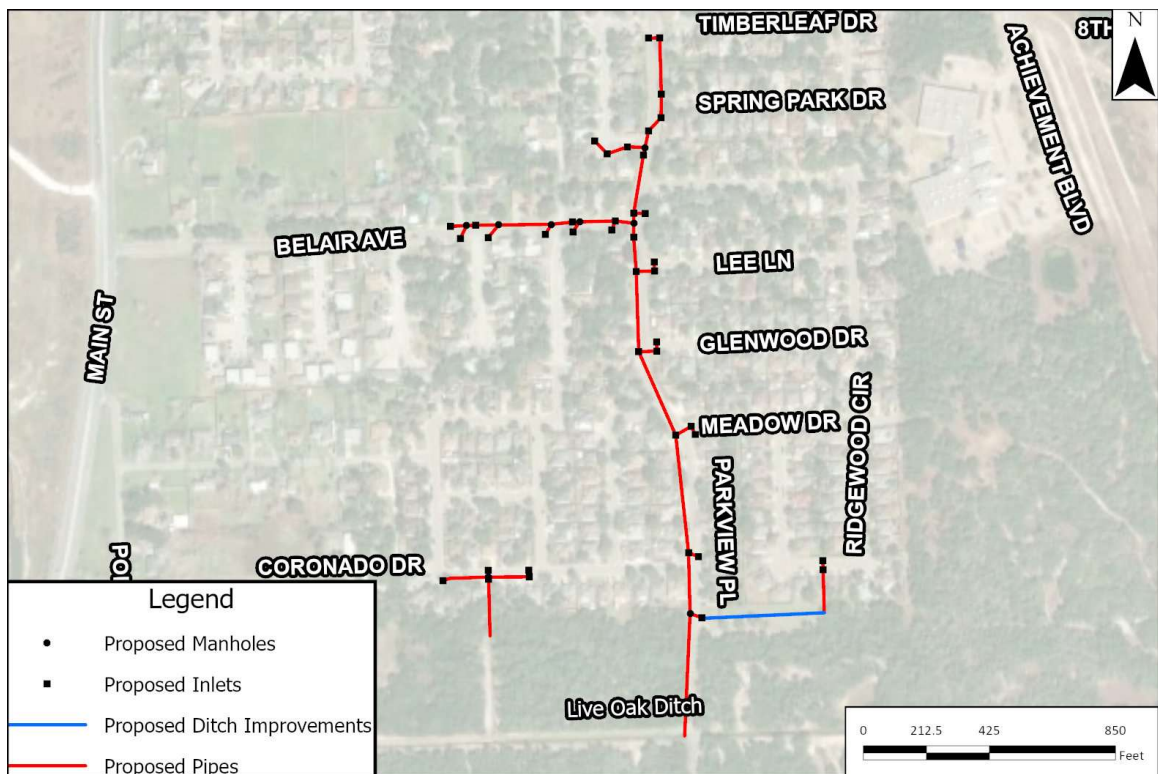
Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: Improvements in this area are already being constructed on Hultgreen Avenue and have been incorporated in the existing conditions model. Since a project has already been developed for the northern portion of the subdivision, the project developed for this DMP focused on improvements in the middle and southern portions of the subdivision. Proposed improvements include upsizing and extending the main trunk line on Parkview Place, extending lateral lines on Belair Avenue and Timberleaf Drive, and upsizing the systems on Coronado Street and Ridgewood Circle. Proposed improvements are shown in **Figure 2-13** and in **Appendix B.6B**.

- Extending the main trunk line north on Parkview Place by approximately 190 feet. The main trunk line would be upsized to 4' x 3' to 6' x 3' RCBs.
- Adding 620 feet of new 36-inch to 48-inch RCP lateral line to the west on Belair Avenue.
- Adding 190 feet of new 36-inch lateral line to the west on Timberleaf Avenue.

- New 10-ft curb inlets will be installed along each street where improvements are being made.
- Approximately 290 feet of 3.5' x 2' RCB would be added on Coronado Street along with upsizing the existing pipes to be 3.5 x 2' RCB.
- The existing pipes on Ridgewood Circle would also be upsized to 3.5' x 2' RCB.
- Ditch improvements would be made to the ditch south of Ridgewood Circle which flows west to the stormwater system on Parkview Place. The ditch would be deepened by approximately 1.5 feet to allow more capacity for water flowing to it and give the proposed system flowing south from Ridgewood Circle a steeper slope.

Figure 2-13: Parkside Terrace Subdivision Drainage Improvements - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood depth, a reduction in the inundated area, a reduction in the number of potentially inundated structures, a reduction in the length of unpassable road, and a reduction in the length of time inundation occurs. **Table 2-7** summarizes the modeling results for the Parkview Place neighborhood.

Table 2-7: Parkside Terrace Subdivision Drainage Improvements - Summary of Results

Site 7: Parkside Terrace Subdivision Drainage Improvements			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	9.8	6.5	10.5
Inundated Roadway (> 6" depth; LF)	5,655	4,253	5,797
Number of Potentially Inundated Structures (> 6" depth)	17	4	20
Maximum Flood Depth (ft)	1.70	1.30	1.70
Length of Time Inundated (hrs)	3.25	0.93	3.30
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	12.0	8.2	12.5
Inundated Roadway (> 6" depth; LF)	6,878	5,086	6,926
Number of Potentially Inundated Structures (> 6" depth)	25	7	22
Maximum Flood Depth (ft)	1.8	1.6	1.8
Length of Time Inundated (hrs)	5.35	1.20	5.42
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	15.0	11.6	15.3
Inundated Roadway (> 6" depth; LF)	8,247	6,731	8,256
Number of Potentially Inundated Structures (> 6" depth)	32	19	32
Maximum Flood Depth (ft)	2	1.8	2
Length of Time Inundated (hrs)	8.35	2.13	8.55
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	18.7	16.3	19.7
Inundated Roadway (> 6" depth; LF)	10,014	8,877	10,049
Number of Potentially Inundated Structures (> 6" depth)	39	28	44
Maximum Flood Depth (ft)	2.1	2	2.2
Length of Time Inundated (hrs)	13.67	3.77	14.27
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	24.3	21.7	24.6
Inundated Roadway (> 6" depth; LF)	11,469	10,723	11,521
Number of Potentially Inundated Structures (> 6" depth)	58	45	57
Maximum Flood Depth (ft)	2.3	2.2	2.4
Length of Time Inundated (hrs)	15.21	6.60	16.72

Project Considerations: The Site 10 (Live Oak Ditch) proposed improvements should be implemented prior to these Site 7 (Parkside Terrace) improvements for maximum benefit of the Site 7 project. If the Site 7 project is constructed prior to the Site 10 project, a lower level of benefit will be realized until the Site 10 improvements are implemented. No drainage easements are anticipated for this project, but existing easements should be confirmed during final design to verify no additional drainage easements or ROW will be required. Existing water and wastewater lines, including wastewater force mains, may cause potential conflicts during construction. Locations of other utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. No permitting requirements are anticipated. Phasing of this project could be considered since there are three distinct pipe networks that drain the Parkside Terrace Subdivision. These could be implemented in any order.

- Phase 1 – Coronado Drive Improvements
- Phase 2 – Parkview Place Improvements
- Phase 3 – Ridgewood Circle Improvements

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

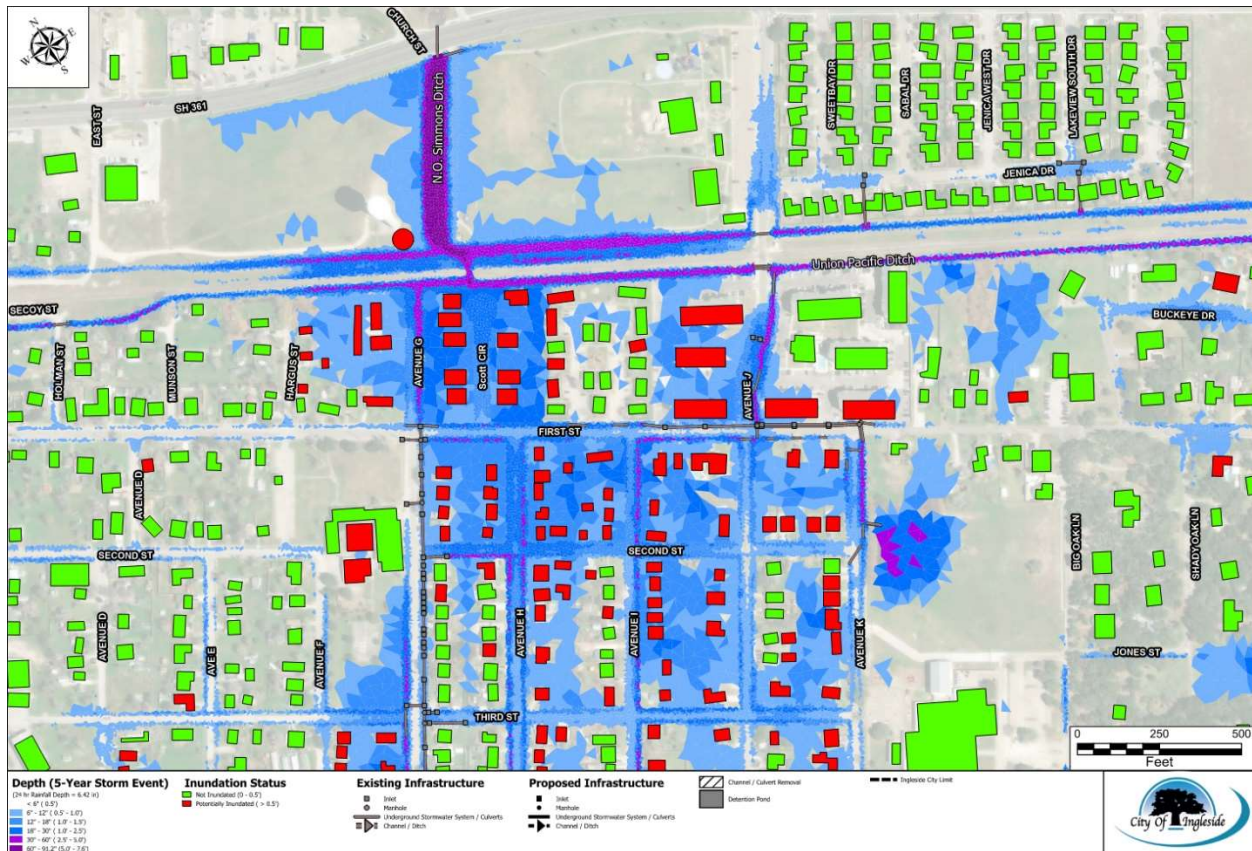
- 2016 Comprehensive Master Plan (CMP):
The CMP doesn't recommend any specific drainage improvements in the Parkside Terrace Subdivision but identifies drainage as a City-wide concern. The proposed Parkside Terrace Subdivision improvements will help to reduce current flooding issues within the subdivision, thus working to address the concerns identified in the CMP.
- 2018 San Patricio County Hazard Mitigation Plan (HMP):
Although there are no projects in the HMP that are specific to the Parkside Terrace Subdivision, there are multiple City-wide action items that address drainage and flooding for the entire City. The proposed improvements to the Parkside Terrace Subdivision support proposed City of Ingleside action #6 in the HMP for the City to upgrade undersized stormwater drains to improve drainage and reduce flooding.

- 2020 Transportation Master Plan (TMP):
The recommended maintenance program in the TMP calls for pairing transportation improvements with other utility improvements. Most proposed improvements in the Parkside Terrace Subdivision run along roads. These improvements will reduce the extent of unpassable roads during flood conditions as well as help to maintain the quality of pavement by reducing the inundation time during and after storm events. If other roadway work is needed in the areas of proposed drainage improvements, it should be completed with the drainage project to the extent feasible to best use City resources.
- 2021 Parks, Recreation and Open Space Master Plan (PROSMP):
The Parkside Terrace Subdivision is located north of Live Oak Park. The PROSMP identified the sidewalks along Parkview Place as part of the citywide trail/pedestrian corridor network to provide pedestrian access to and through Live Oak Park. If feasible and sufficient right-of-way is available, the City should consider improving and/or widening the sidewalks along Parkview Place at the time of construction of the Parkside Terrace Subdivision drainage improvements to best leverage City resources and implement DMP and PROSMP recommendations during the same project.

2.3.1.7 Site 8: Villanova Place Drainage Improvements

Existing problem: Houses within the Villanova Place neighborhood are flooding heavily during small storm events. Additionally, the neighborhood streets (First Street, Second Street, Third Street, Avenue H, Avenue I, Avenue J, and Avenue K) experience overtopping during even minor storm events. Existing stormwater infrastructure throughout the neighborhood does not have enough capacity to efficiently move flow to the outfalls, and there isn't enough capacity at current neighborhood outfalls to hold the amount of water that is ponding. The neighborhood is located in an area of low topography and is inundated by stormwater overflow from the Ave G stormwater system as well as from flow which overtops Ave J. These instances of flooding can limit residents' ability to leave their homes during a flood event, poses a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. The existing inundation extents are shown in **Figure 2-14** and in **Appendix B.7A**.

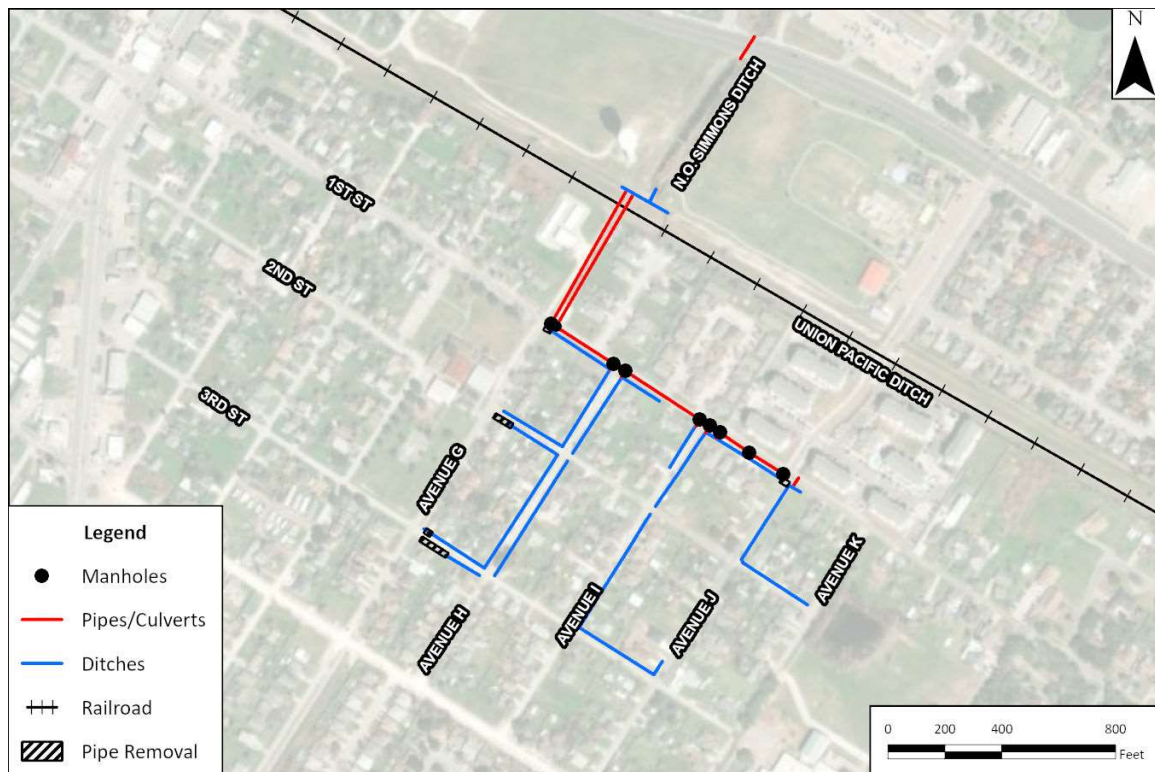
Figure 2-14: Villanova Place Drainage Improvements - Existing Conditions Flooding Extents



- Approximately 240 linear feet of roadside ditches will be added on the north side of 2nd street and 200 linear feet added on the south side of the street, flowing east to the ditches on Avenue H.
- Approximately 55 linear feet of roadside ditches on Avenue J will be regraded to flow south to connect to 310 linear feet of regraded ditch flowing west on 3rd Street, which will connect to the regraded roadside ditch on Avenue I.
- Approximately 280 linear feet of roadside ditch will be regraded to flow west on Second Street from Avenue K to Avenue J, and then flow north on Avenue J for 310 linear feet until it reaches First Street. A new 10' x 2' lateral will replace the existing 15" RCP and connect this newly regraded ditch to the existing trunkline on First Street, which outfalls into the Avenue J ditch near the Parc apartments and flows north to the Union Pacific Railroad Ditch.
- 24" RCPs will be added for street crossings and driveway culverts where necessary.
- A proposed new trunkline will be installed under First Street running west from Avenue J to avenue G, where it will turn north and run under the railroad to outfall into the north railroad ditch.
 - Seven 24" RCP laterals will connect the First Street south roadside ditches to the main trunkline between Avenue J and Avenue G.
 - The main trunkline will range in size from 7' x 2.5' RCB at the upstream end to two, 7' x 2' RCB at the downstream end.
- Roadside ditches on the south side of First Street will be regraded as follows:
 - 250 linear feet of roadside ditch will flow east from Avenue G to Avenue H to a new 24" lateral which connects to the new First Street trunkline.
 - 150 linear feet will flow west from mid-way between Avenue I and Avenue H to a new 24" lateral which connects to the new First Street trunkline.
 - 315 linear feet will flow west from Avenue J to Avenue I to new 24" laterals which connect to the new First Street trunkline.
 - 50 linear feet will flow west from the east side of Avenue J to the new 10' x 2' RCB lateral drains to the existing First Street trunkline.

- An additional proposed 6' x 2' RCB will be added to the existing system on Avenue G and will outfall north under the railroad into the north railroad ditch. The purpose of this proposed pipe is to provide a controlled outlet for the existing system on Avenue G to backflow when overwhelmed instead of overtopping and spilling into the neighborhood.
- Additional grading will be done at the north railroad ditch outfalls to provide lower elevations, more capacity, and a better connection to the N.O. Simmons Ditch.
- To provide some relief to the existing system on Avenue G, existing laterals will be removed to allow water to instead flow into the proposed ditches and new First Street system. Two, 24" RCPs will be removed on First Street; one, 24" RCP will be removed on Second Street; and one, 24" RCP and one, 15" RCP will be removed at Third Street.
- An existing 15" RCP will be removed from 1st Street where it connects flow from the west side of Avenue J to the east side of Avenue J. This will be removed to keep water from flowing to and overwhelming the existing system that runs north up Avenue J, and instead directs the flow into the proposed system.
- Finally, the outfall pipe that crosses under SH 361 will be upsized from four, 7' x 3' boxes to five, 10' x 5' boxes. This will allow more flow to cross under the highway instead of building up and overtopping the N.O. Simmons Ditch and the upstream systems.

Figure 2-15: Villanova Place Drainage Improvements - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include a reduction in the flood depth, a reduction in the inundated area, a reduction in the number of potentially inundated structures, a reduction in the length of unpassable road, and a reduction in the length of time inundation occurs. **Table 2-8** summarizes the modeling results for the Villanova Place neighborhood.

Table 2-8: Villanova Place Drainage Improvements - Summary of Results

Site 8: Villanova Place Drainage Improvements			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	73.3	55.6	87.1
Inundated Roadway (> 6" depth; LF)	15,150	13,458	17,611
Number of Potentially Inundated Structures (> 6" depth)	180	147	213
Maximum Flood Depth (ft)	2.40	1.70	2.60
Length of Time Inundated (hrs)	13.20	7.60	20.42
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	90.1	80.4	103.3
Inundated Roadway (> 6" depth; LF)	18,456	18,030	20,165
Number of Potentially Inundated Structures (> 6" depth)	220	207	250
Maximum Flood Depth (ft)	2.7	2.3	2.8
Length of Time Inundated (hrs)	18.72	11.37	25.57
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	115.0	103.2	120.4
Inundated Roadway (> 6" depth; LF)	22,138	22,124	22,933
Number of Potentially Inundated Structures (> 6" depth)	281	266	292
Maximum Flood Depth (ft)	3	2.9	3.1
Length of Time Inundated (hrs)	25.78	14.88	30.25
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	134.3	130.1	138.2
Inundated Roadway (> 6" depth; LF)	24,893	24,979	25,049
Number of Potentially Inundated Structures (> 6" depth)	320	326	334
Maximum Flood Depth (ft)	3.4	3.3	3.4
Length of Time Inundated (hrs)	45.75	22.78	74 .00
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	150.3	148.3	151.9
Inundated Roadway (> 6" depth; LF)	26,612	26,637	26,634
Number of Potentially Inundated Structures (> 6" depth)	351	355	361
Maximum Flood Depth (ft)	3.8	3.7	3.8
Length of Time Inundated (hrs)	46.12	29.15	76.9

Project Considerations: To achieve the proposed improvements, a drainage easement with the Union Pacific Railroad will be required. Coordination with and project approval by TxDOT for the proposed structures under SH 361 will be required to achieve the proposed project. The availability of existing ROW or drainage easements should be confirmed during final design. Existing water and wastewater lines, including a wastewater force main, may cause potential conflicts during construction. The locations of other utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. No permitting requirements are anticipated. The phasing of this project should be considered starting with the most downstream portions of the project.

- Phase 1 – Culvert Improvements Under SH 361
- Phase 2 – Avenue G and First Street Underground System Additions
- Phase 3 – Neighborhood Ditch Improvements and Culvert Removals

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

- 2016 Comprehensive Master Plan (CMP):
The CMP doesn't recommend any specific drainage improvements in the Villanova Place neighborhood but identifies drainage as a City-wide concern. The proposed Villanova Place drainage improvements will help to reduce current flooding issues within the neighborhood, thus working to address the concerns identified in the CMP.
- 2018 San Patricio County Hazard Mitigation Plan (HMP):
There are no site-specific actions items in the HMP near the Villanova Place neighborhood. However, by improving drainage and reducing flooding impacts in the neighborhood, the improvements support proposed City of Ingleside action #6 in the HMP for the City to upgrade undersized stormwater drains to improve drainage, reduce flooding, and reduce flood damages to structures and infrastructure.
- 2020 Transportation Master Plan (TMP):
Much of the drainage improvements proposed in the Villanova Place neighborhood run parallel to roads. Per policy in the TMP, any road improvement projects also needed in

the areas of proposed drainage improvements should be completed at the same time to best leverage City resources.

- 2021 Parks, Recreation and Open Space Master Plan (PROSMP):

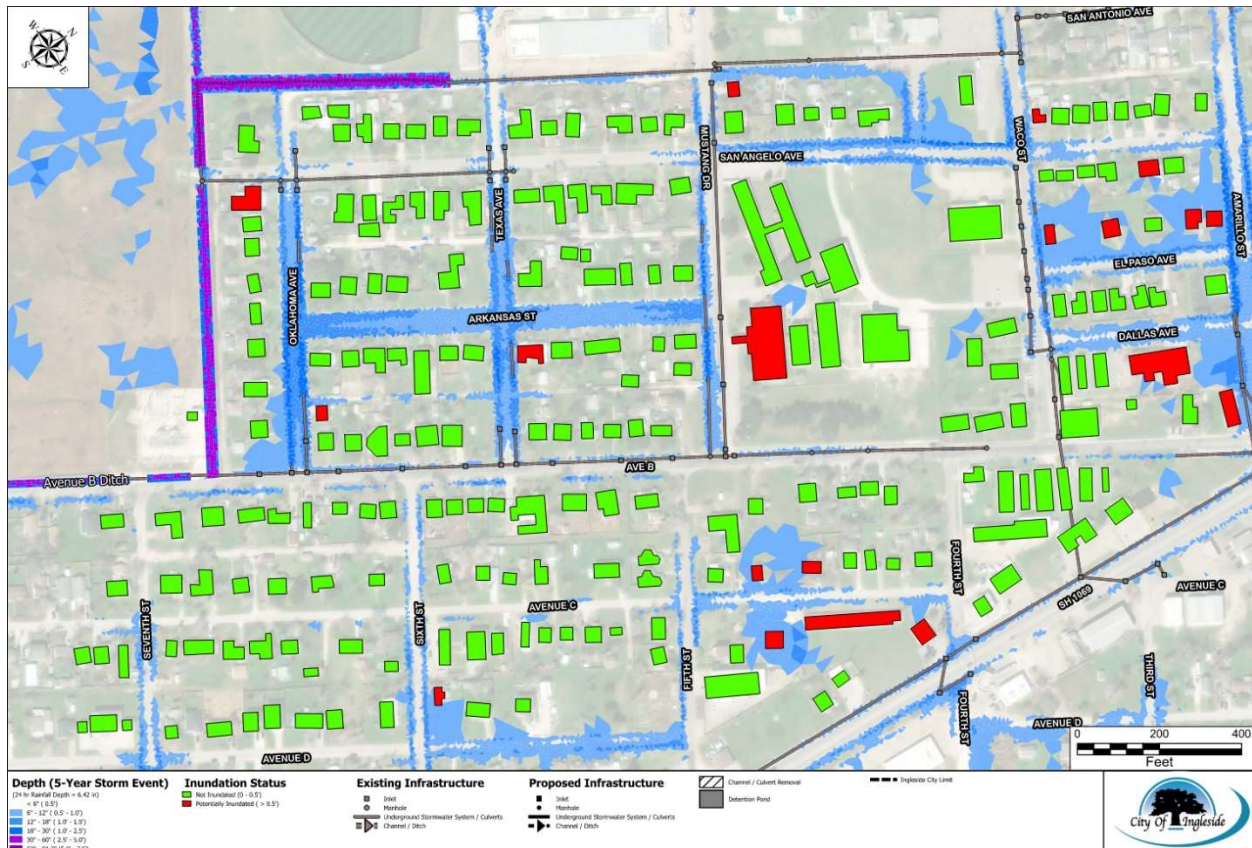
The proposed drainage infrastructure includes new outfalls on the north side of the Union Pacific Railroad near a drainage channel. This channel is at the northwest end of one of the City's most heavily programmed parks, N.O. Simmons Park. There is also a well-used trail around the perimeter of the park. As long as the trail remains usable, there shouldn't be any concerns about the proposed drainage improvements. There are no other strong linkages to the PROSMP.

- The PROSMP recommended updating the pedestrian bridge that crosses the N.O. Simmons Ditch. Bridge replacement should be considered as part of the drainage project.

2.3.1.8 Site 9: Humble Addition and Avenue B Drainage Improvements

Existing problem: Residential properties in the Humble Addition are experiencing inundation throughout the neighborhood and local streets. Additionally, the neighborhood streets (Oklahoma Avenue, Texas Avenue, Arkansas Street, and Waco Street) experience overtopping during even minor storm events. Existing roadside ditches throughout the neighborhood do not have enough capacity to efficiently move flow to stormwater pipes, resulting in ponding within the streets and flooding of homes. CCTV inspection of the existing pipes also showed several locations of damage or debris in the pipes which is limiting the capacity of the pipes. These instances of flooding can limit residents' ability to leave their homes during a flood event, poses a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. There are also three schools located within or adjacent to the Humble Addition neighborhood. Reducing flood extents will provide a safer route to the schools for children that live in the neighborhood, or who cross through the neighborhood to get to school. The existing inundation extents are shown in **Figure 2-16** and in **Appendix B.8A**.

Figure 2-16: Humble Addition and Avenue B Drainage Improvements - Existing Conditions Flooding Extents



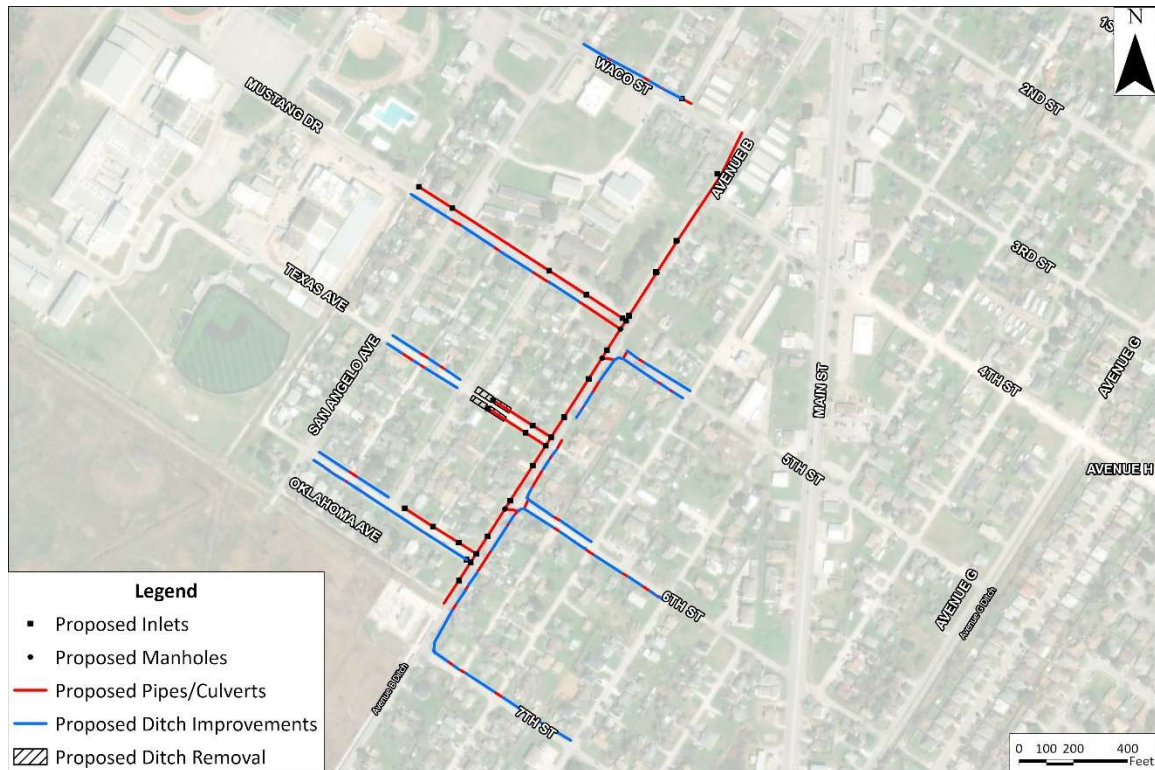
Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: The main trunkline on Avenue B will be upsized, lateral lines on the side streets will be upsized and/or extended, and roadside ditches will be regraded for better connection to the Avenue B trunkline. Proposed improvements are shown in **Figure 2-17** and in **Appendix B.8B**.

- The existing trunkline along Avenue B will be removed and new pipes will be installed ranging in size from 36-inch RCP at the most upstream end to a 6' x 3' RCB at the downstream end.
- Laterals on the north side of Oklahoma Drive will be extended by 125 feet, and upsized to RCPs ranging in size from 24-inch RCP to 36-inch RCP.
- Laterals on both sides of Texas Avenue will be extended by 75 feet, and upsized to 36-inch RCPs.

- Ditches on 5th Street, 6th Street, and 7th Street will be regraded to flow west into the Avenue B trunkline, and 18-inch RCP culverts will be added crossing Avenue B to connect the ditches to the main system. The roadside ditch along the east side of Avenue B will also be regraded to these new culverts.
- Ditches will also be regraded along both sides of Oklahoma Avenue, Texas Avenue, Mustang Drive, and the north side of Waco Street. Driveway culverts will be added or upsized where necessary to provide adequate capacity for water flowing through the ditches.
 - The ditches on Oklahoma Avenue will flow northwest into an existing system on San Angelo and southeast into the Avenue B system.
 - Texas Avenue will flow northwest into the existing system on San Angelo.
 - Mustang Drive will flow southeast into the Avenue B system.
 - The ditches on Waco Street will flow southeast to an existing underground stormwater system that runs east along Waco Street and connects to the Main Street system.
- A connection will be made from the existing Waco Street system to the new Avenue B system so water from Waco Street can flow into the Avenue B system or the Main Street system, which it is currently connected to, as system capacity is available.

Figure 2-17: Humble Addition and Avenue B Drainage Improvements - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood depth and inundated area, a reduction in the number of potentially inundated structures, a reduction in the length of unpassable road, and a small reduction in the length of time inundation occurs. **Table 2-9** summarizes the modeling results for the Humble Addition neighborhood.

Table 2-9: Humble Addition and Avenue B Drainage Improvements - Summary of Results

Site 9: Humble Addition and Avenue B Drainage Improvements			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	13.9	12.3	15.2
Inundated Roadway (> 6" depth; LF)	3,867	2,940	4,410
Number of Potentially Inundated Structures (> 6" depth)	19	16	26
Maximum Flood Depth (ft)	1.50	1.20	1.60
Length of Time Inundated (hrs)	4.95	4.32	6.65
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	18.8	17.5	20.1
Inundated Roadway (> 6" depth; LF)	5,600	5,159	6,088
Number of Potentially Inundated Structures (> 6" depth)	34	27	40
Maximum Flood Depth (ft)	1.8	1.7	1.9
Length of Time Inundated (hrs)	7.18	5.75	
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	25.5	24.7	26.3
Inundated Roadway (> 6" depth; LF)	7,458	7,248	7,759
Number of Potentially Inundated Structures (> 6" depth)	56	55	64
Maximum Flood Depth (ft)	2	1.9	2
Length of Time Inundated (hrs)	8.72	6.05	9.20
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	33.6	32.9	35.0
Inundated Roadway (> 6" depth; LF)	9,527	9,287	9,835
Number of Potentially Inundated Structures (> 6" depth)	80	80	89
Maximum Flood Depth (ft)	2.2	2.1	2.4
Length of Time Inundated (hrs)	10.15	8.38	12.78
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	44.0	43.5	46.0
Inundated Roadway (> 6" depth; LF)	11,212	11,204	11,811
Number of Potentially Inundated Structures (> 6" depth)	108	109	111
Maximum Flood Depth (ft)	2.3	2.2	2.3
Length of Time Inundated (hrs)	15.25	13.70	16.40

Project Considerations: For the proposed improvements to continue to be beneficial for the neighborhood, any future development that will outfall into the Avenue B Ditch should be required to detain stormwater on site and release it at a rate equal to or less than existing conditions. If development is allowed to occur to the future buildout conditions anticipated in the Future Land Use Plan without limiting stormwater runoff, the Avenue B Ditch becomes overburdened, and the proposed Humble Addition and Avenue B Drainage Improvements become ineffective. Existing water and wastewater lines may cause potential conflicts during construction. Locations of other utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. No permitting requirements are anticipated.

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

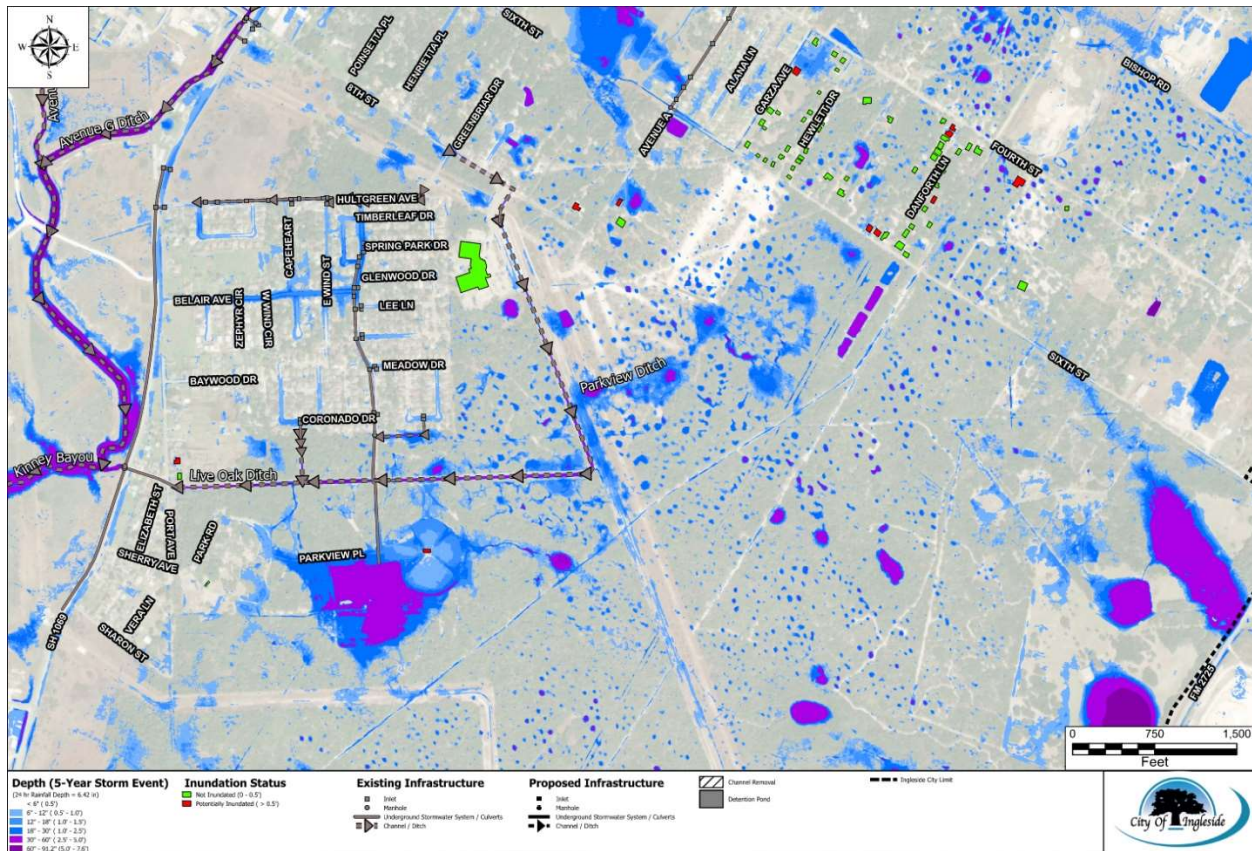
- **2016 Comprehensive Master Plan (CMP):**
The CMP highlights a need for improved flood control measures and includes infrastructure policies to implement varying methods for stormwater drainage management. While there are no specific projects recommended in the CMP, the proposed Humble Addition and Avenue B drainage improvements help to implement the CMP's high-level policies and address community concern about flooding in residential areas.
- **2018 San Patricio County Hazard Mitigation Plan (HMP):**
City of Ingleside action #12 in the HMP recommends implementation of Avenue B drainage project improvements to reduce the risk of flood damage to structures and infrastructure and improve emergency access to neighborhoods. The HMP notes that this project is a key component of down-stream drainage improvements for the older neighborhoods in the City and that residences in the area were blocked by high water during Hurricane Harvey. The proposed Humble Addition and Avenue B drainage improvements have strong plan linkages to the HMP.

- 2020 Transportation Master Plan (TMP):
The TMP recommends combining street and utility projects whenever possible. All of the proposed drainage improvements in this project run parallel to roads. If any road improvement projects are also needed in the areas of proposed drainage improvements, they should be completed at the same time to best leverage City resources.
- 2021 Parks, Recreation and Open Space Master Plan (PROSMP):
The proposed Humble Addition and Avenue B drainage improvements are located east of Faith Park. The PROSMP identified the sidewalks along Avenue B and Mustang Drive as part of the citywide trail/pedestrian corridor network to provide pedestrian access to Faith Park. If feasible and sufficient right-of-way is available, the City should consider improving and/or widening the sidewalks along Avenue B and Mustang Drive at the time of construction of the Humble Addition and Avenue B drainage improvements. This will best leverage City resources and implement DMP and PROSMP recommendations during the same project.

2.3.1.9 Site 10: Live Oak Ditch

Existing problem: Live Oak Ditch has low points along the channel banks that are overtopped during all modeled storm events. The overtopping is mostly occurring in the ditch section upstream of Parkview Place Road. This is likely due to restricted flow through the culverts under Parkview Place and the outfall culvert into Kinney Bayou under North Street and Main Street (FM 1069). Runoff from the east of the channel is not able to enter since the culverts are restricting flow and causing water surface elevations to increase in the upstream section of the channel. Additionally, residential development is anticipated east of Achievement Boulevard, and will drain into Live Oak Ditch. Future development pressure on the existing system will increase flooding depth and extents, and result in flooding problems to existing and future homes and residents. The existing inundation extents are shown in **Figure 2-18** and in **Appendix B.9A**.

Figure 2-18: Live Oak Ditch - Existing Conditions Flooding Extents



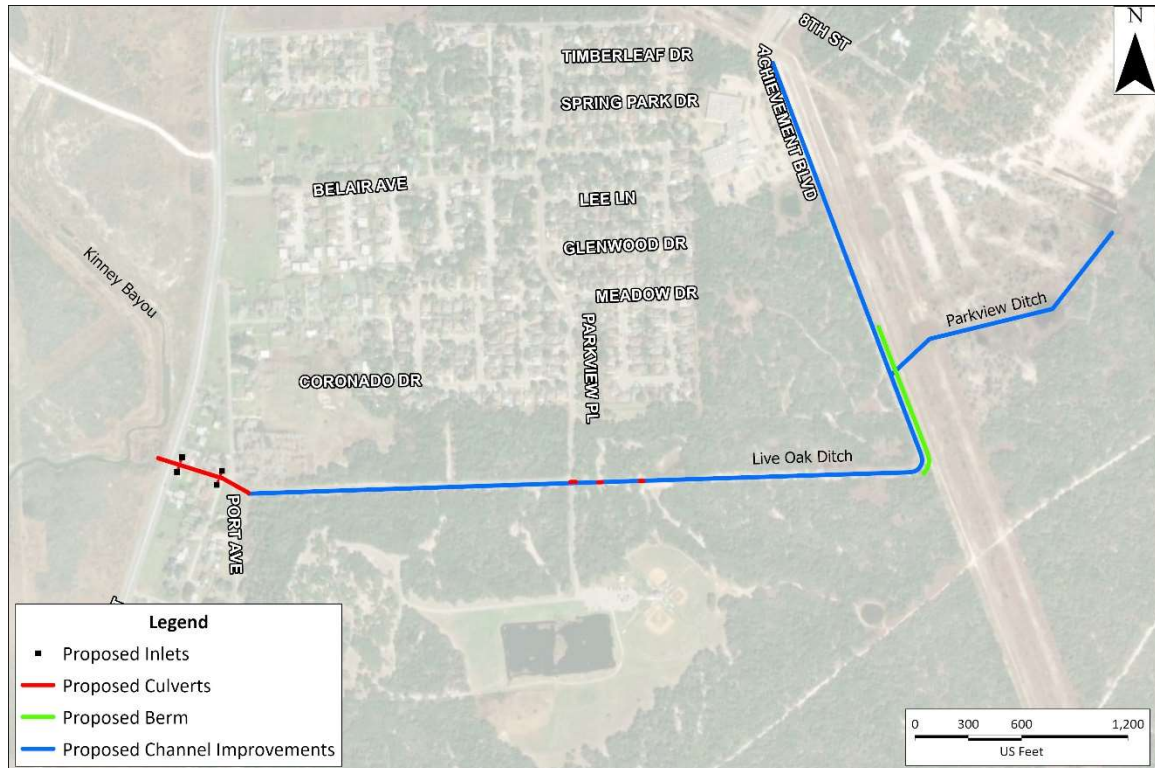
Note: Flooding extents based on existing land use conditions and the 5-year storm event.

Proposed Improvements: Regrade and widen Live Oak Ditch, install a larger outfall structure for the Live Oak Ditch, and add a new Parkview Ditch for future development. Proposed improvements are shown in **Figure 2-19** and in **Appendix B.9B**.

- Improve approximately 6,230 linear feet of the grass-lined Live Oak Ditch. The bottom width will be widened from approximately 15 feet to 18 feet, and the ditch will be deepened by approximately 3.5 feet in some locations. These improvements include regrading and widening the full length of the ditch and concrete lining the bend in the ditch to prevent erosion.
- Upsize all culverts within Live Oak Ditch to two 9' x 5' RCBs to allow the channel to flow with no impedance from the culverts.
- Install 1,106 linear feet of two new 9' x 5' RCB outfall structures to connect Live Oak Ditch to Kinney Bayou.

- An additional ditch, “Parkview Ditch”, is also proposed to discharge into Live Oak Ditch to support future development of nearby land. Parkview Ditch will consist of approximately 1,550 linear feet of grass-lined ditch with a 20-foot bottom width.

Figure 2-19: Live Oak Ditch - Proposed Drainage Improvements



Summary of Results: Benefits stemming from the proposed improvements include reductions in the flood depth, flood extents, and the amount of inundated time. **Table 2-10** summarizes the modeling results for the Southside Outfall area.

Table 2-10: Live Oak Ditch - Summary of Results

Site 10: Live Oak Ditch			
Criteria	Existing Conditions (No Improvements)	Existing Conditions (With Improvements)	Future Buildout (No Improvements)
5-yr Storm Event (6.42 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	156.2	109.1	191.3
Inundated Roadway (> 6" depth; LF)	2,803	2,378	3,579
Number of Potentially Inundated Structures (> 6" depth)	11	5	14
Maximum Flood Depth (ft)	1.56	0.90	1.81
Length of Time Inundated (hrs)	66.00	62.00	60.00
10-yr Storm Event (7.93 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	189.9	134.3	223.1
Inundated Roadway (> 6" depth; LF)	3,780	2,896	4,158
Number of Potentially Inundated Structures (> 6" depth)	13	5	16
Maximum Flood Depth (ft)	2.06	1.32	2.22
Length of Time Inundated (hrs)	72.25	68.75	66.25
25-yr Storm Event (10.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	235.9	169.8	268.1
Inundated Roadway (> 6" depth; LF)	4,673	3,833	4,880
Number of Potentially Inundated Structures (> 6" depth)	15	8	16
Maximum Flood Depth (ft)	2.52	1.88	2.64
Length of Time Inundated (hrs)	77.25	70.75	70.75
100-yr Storm Event (14.20 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	303.0	224.6	332.8
Inundated Roadway (> 6" depth; LF)	5,896	4,864	6,040
Number of Potentially Inundated Structures (> 6" depth)	19	11	21
Maximum Flood Depth (ft)	3.08	2.55	3.17
Length of Time Inundated (hrs)	82.25	71.25	77.25
500-yr Storm Event (19.80 inches/24-hrs)			
Inundated Area (> 6" depth; AC)	366.7	288.8	390.9
Inundated Roadway (> 6" depth; LF)	6,661	5,769	6,810
Number of Potentially Inundated Structures (> 6" depth)	22	13	21
Maximum Flood Depth (ft)	3.59	3.13	3.63
Length of Time Inundated (hrs)	86.25	75.25	80.25

Project Considerations: The proposed improvements to existing components (Live Oak Ditch and the culvert under North Street/Main Street) should be achieved within the existing City ROW or drainage easements. However, it should be confirmed during final design that the proposed improvements can be constructed within the existing easements. Coordination with and project approval by TxDOT will be required to achieve the proposed project. A new drainage easement will be required for construction of the Parkview Ditch. The easement can be dedicated prior to development or would need to be part of the plat requirements when development occurs. Oil, natural gas, highly volatile liquid, and wastewater pipelines may cause potential conflicts during construction. The most notable point of potential conflict is near the proposed Parkview Ditch. Locations of utilities in the area should be confirmed during the design process to ensure there are no conflicts with the proposed drainage improvements. A USACE Nationwide Permit (NWP 7, 18, or 58) may be required for this project due to the project tie-in at Kinney Bayou and should be confirmed during final design. Phasing of this project should be considered starting with the most downstream portions of the project.

- Phase 1 – North Street Culvert between Live Oak Ditch and Kinney Bayou
- Phase 2 – Live Oak Ditch Improvements
- Phase 3 – New Parkview Ditch

Planning Linkages: This section identifies potential areas of overlap and/or mutually beneficial projects recommended in this Plan and those described in the Previous Planning Efforts section at the beginning of this report.

- 2016 Comprehensive Master Plan (CMP):
The CMP documented multiple concerns about drainage throughout the City. While there is no specific project documented in the CMP that complements or conflicts with the Live Oak Ditch, the proposed ditch improvements will help to improve drainage in the existing residential area to the north as well as the planned future residential area to the east. This proposed project will help to address some of the drainage concerns identified in the CMP.
- 2018 San Patricio County Hazard Mitigation Plan (HMP):
The HMP recommended County-wide and Ingleside-specific mitigation actions to reduce the negative impacts of natural hazards. The proposed improvements to the Live Oak

Ditch support proposed action #7 for the City of Ingleside to undertake a comprehensive study of flood risk and implement feasible alternatives for flood reduction.

- 2020 Transportation Master Plan (TMP):

The Thoroughfare Plan included in the TMP identifies a proposed major collector road running north-south just east of Live Oak Park. This is one of the areas that will benefit from improved drainage once the Live Oak Ditch improvements are implemented. If any further detail is known about the exact routing of that future road, it should be considered when designing this project.

- 2021 Parks, Recreation and Open Space Master Plan (PROSMP):

The Live Oak Ditch runs through the northern part of the City's Live Oak Park, a large portion of which is in the existing inundation area during a 5-year storm event. The PROSMP included a conceptual master plan for the park with various improvements. The proposed park improvements are south of the ditch and do not conflict with the proposed ditch improvements. Instead, the Live Oak Ditch improvements will help to alleviate some park inundation during storm events and thus help to support the master plan vision. While much of the park and its proposed improvements will still be inundated during a 5-year storm event, it will be to a lesser extent.

2.3.2 Small Projects List

FNI was tasked to develop a list of "small" drainage projects that do not require hydrologic or hydraulic modeling but will improve the performance of the drainage system. These small projects are maintenance focused and can likely be completed by City staff or utilizing the City's operations and maintenance budget. The locations of potential small projects were noted during site visits, surveys, and CCTV inspections. A summary of each suggested small project is listed below, and the complete Small Projects Memorandum is included as **Appendix J**.

1. Clear Blocked Storm Pipe on Texas Avenue

- Concrete debris is blocking the storm drain. Clear the debris in the pipe to improve performance of drainage system.

2. Clear and Repair Storm Pipe on Avenue B

- Obstructions and collapsed/deformed pipes are blocking flow in the storm drains. Clear debris and repair failing pipe segments to improve performance of drainage system.

3. Clean Storm Pipes, Manholes, and Safety End Treatments on Main Street

- The storm drains and manholes are blocked with silt and trash making them inaccessible. Clear silt and debris to improve performance of drainage system.
- Coordinate with landscape workers and/or property owners not to leave excessive grass cuttings in ditches and pipe inlet areas to prevent buildup within drainage system.

4. Clean out Driveway Culverts on Church Street

- Driveway culverts are filled with dirt and one culvert end is broken. Clear dirt in culverts and fix broken culvert end to improve performance of drainage system.

5. Clean out Storm Drains on Avenue A

- Culverts are filled with leaves and dirt. Clean dirt and vegetation in culverts to improve performance of drainage system.

2.4 OPINION OF PROBABLE PROJECT COSTS

An opinion of probable project cost was developed for each CIP based on the conceptual project components. The project cost includes final design, permitting, and construction. It was assumed that each CIP would be completed as a standalone project.

All unit prices are in 2023 dollars and are based on recent bid tabulations and FNI's experience with projects with similar design, construction, permitting, and maintenance elements. The cost for maintenance is not included. A 30% construction contingency was included in each estimate due to the preliminary nature of the design as no survey, geotechnical, structural services, or locations of underground utilities and infrastructure were performed.

The requirement for land acquisition is noted for the projects where applicable. However, land acquisition costs were not accounted for during the development of CIP opinion of probable construction cost. The City is encouraged to confirm land acquisition requirements and costs prior to the final design process to ensure the required easements or rights-of-way can be obtained.

USACE permitting was incorporated into the cost estimate for each project. Based on past FNI experience and the nature of each project, it was determined whether each project might require a Nationwide

permit, an Individual permit, or no permit. Projects that were anticipated to require a Nationwide permit were assumed to require \$50,000 for permitting purposes, while those that were anticipated to require an individual permit were assumed to require \$100,000 for the permitting process.

Appendix D contains the preliminary opinion of probable project cost (OPPC) for each CIP, and total project costs are summarized in **Table 2-11**.

Table 2-11: OPPC Summary by Project Site

Project Name	Project Cost
Site 1: Humble Ditch Improvements	\$ 10,227,900
Site 3: Kenny Lane/Whitney Lake Infrastructure	\$ 2,876,083
Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane	\$ 15,869,600
Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street	\$ 1,019,800
Site 6: Nystrom Addition Drainage Improvements	\$ 2,823,800
Site 7: Parkside Terrace Subdivision Drainage Improvements	\$ 9,148,800
Site 8: Villanova Place Drainage Improvements	\$ 10,075,000
Site 9: Humble Addition and Avenue B Drainage Improvements	\$ 5,362,300
Site 10: Live Oak Ditch	\$ 16,188,700

3 PROJECT PRIORITIZATION

A ranking system was used to assess the relative severity of the identified drainage problems using weighted criteria that are used to assign a score to each project. The CIP ranking will assist the City in establishing annual funding priorities and needs. The ranking system is an integral component of a “living” master plan document with which existing projects can be modified and future projects can be added and prioritized. The overall ranking list shown in **Appendix G** provides the City with a method for determining which projects receive priority. This ranking process is not intended to provide a prioritized list in which the City must complete in order without exception. However, it is a tool that can be used to help the City staff in annual budgeting and project implementation for their stormwater infrastructure improvements.

3.1 IDENTIFICATION OF RANKING CRITERIA

The first step in the ranking process was to develop the criteria for scoring and ranking the projects. FNI coordinated with City staff to develop the different ranking criteria. The following ranking criteria were recommended (see **Section 3.3** for additional information on each ranking criteria).

- Life and Safety
- Property Damage
- Road Level of Service
- Project Cost
- Planning Linkages

3.2 CRITERIA WEIGHTING

The second step in the ranking process was to assign weighting factors to each criterion. This was accomplished through the “pairwise” process. Pairwise comparison provides a simple, customizable, and rational framework to structure the ranking process. A pairwise comparison table was created, which allowed each criterion to be weighed against the others by determining which criterion was more important than another based on a scale of 1 to 3. A score of 3 means that one criterion is considered more important than another, a score of 2 means that the criteria are of the same importance, and a score of 1 means that the criterion is considered less important than another.

The results of the pairwise exercise are shown in **Table 3-1**. For example, when comparing Life and Safety to Property Damage, a value of 3 would mean Life and Safety is considered more important, a value of 2 would mean the two criteria are equally important, and a value of 1 would mean Life and Safety is less important than Property Damage. Once this comparison is complete for each criterion, the total score for that criterion is determined and then the “weight” of that criterion is determined by dividing the individual score for that criterion by the sum of all scores. The formula used to calculate criterion weights, as well as an example calculation for the weight of the Life and Safety criterion is represented in **Equation 3-1** and **Equation 3-2**, respectively.

Equation 3-1: Calculation of Criterion Weight

$$Weight = \frac{Individual\ Score}{Sum\ of\ all\ Scores}$$

Equation 3-2: Example Calculation of Criterion Weight

$$Weight\ (Life\ \&\ Safety) = \frac{9}{24} = 0.38$$

Table 3-1: Pairwise Evaluation Criteria Ranking Results

Criteria	Life and Safety	Property Damage	Road Level of Service	Planning Linkages	Project Cost	Sum	Weight
Life and Safety		3	3	3	3	12	0.30
Property Damage	1		3	3	3	10	0.25
Road Level of Service	1	1		3	3	8	0.20
Planning Linkages	1	1	1		3	6	0.15
Project Cost	1	1	1	1		4	0.10

3.3 CRITERIA SCORING

After the criteria weighting was complete, FNI collaborated with the City to develop thorough descriptions and scoring systems for each category. The goal was to establish measures that provide consistent results and that would allow future projects to be added to the Master Plan if needed. It was determined that each criterion would have a 5-point scoring range, ranging from a minimum score of 0 and a maximum score of 5. Quantifiable measures and unique scoring guidelines were developed for each criterion. The following list provides descriptions of the ranking process and the scoring ranges developed for each criterion.

3.3.1 Life and Safety

Even though roadways are commonly used to convey stormwater, the depth of the water over the roadway can pose a risk to the public. This criterion can help high risk areas rank higher on the list.

Project scoring is based on depth of flooding within the project limits, where deeper flooding depths are assigned higher points. **Table 3-2** shows the scoring point system for this category.

Table 3-2: Life and Safety Scoring

Depth of Flooding (ft)	Points
> 2	5
1.5 - 2	4
1 – 1.5	3
0.5 - 1	2
0 – 0.5	1
0	0

3.3.2 Property Damage

Property damage due to flooding can have a lasting impact on communities due to the economic hardships it can impose on families and businesses during the rebuilding process and the reduction in property values that can accompany a home being flooded.

Project scoring is based on the number of potentially inundated structures within a project extent based on modeling. For the Ingleside projects, the number of potentially inundated structures was determined based on modeling the existing land use conditions (existing buildout) with existing infrastructure remaining (no stormwater improvements). Projects that serve an area with more potentially inundated structures will score higher. **Table 3-3** shows the scoring point system for this category.

Table 3-3: Property Damage Scoring

Potentially Inundated Structures (Existing Buildout; No Improvements)	Points
> 20	5
11 - 19	4
4 - 10	3
2 - 3	2
1	1
0	0

3.3.3 Road Level of Service

During significant rainfall events, stormwater may overtop roadways or pedestrian routes creating a hazard for pedestrians, bicyclists, and motor vehicle operators. Also, the flooding of a roadway effectively removes that segment from the surface transportation system. Based on the location of such flooding, and the traffic loading of the street, serious problems may result by interrupting a driver's ability to move through the area, particularly to critical facilities (e.g., hospitals, police stations, etc.).

Project scoring is based on road classification (e.g., arterial, local, etc.), with a project's score being higher for roadways that have higher volumes of traffic. Roadway functional classifications were determined using the City's Transportation Master Plan. **Table 3-4** shows the scoring point system for this category.

Table 3-4: Road Level of Service Scoring

Road Level of Service	Points
Arterial	5
Collector	3
Local	1
No Road	0

3.3.4 Planning Linkages

If a drainage project can be incorporated into another City planned project, that achieves multiple plan goals, is efficient use of City funds, and could potentially open additional funding source opportunities. For example, a grant typically dedicated to parks development could potentially be leveraged to fund a proposed drainage project as part of the overall park project.

Project scoring is based on if the drainage project can be incorporated as part of another project identified in one of the City's master plans (Parks, Recreation and Open Space Master Plan; Transportation Master Plan; Comprehensive Plan; or San Patricio County Hazard Mitigation Plan). If there is a linkage to projects in one of the other plans, then it gets a higher score. **Table 3-5** Table shows the scoring point system for this category.

Table 3-5: Planning Linkages Scoring

Linked to a Project in Another Master Plan?	Points
Yes	5
No	0

3.3.5 Project Cost

Each stormwater capital project will vary in size of improvement, the type of project, and the overall cost. It is important for the City to be able to provide funds for each identified project, and to develop a cost-effective implementation schedule for the funding provided. This criterion can help some smaller projects rank higher on the list because lower cost projects can be accomplished with less impact to the City budget.

Project scoring is based on the estimate of total project cost, with lower-cost projects receiving the highest points. **Table 3-6** shows the scoring point system for this category.

Table 3-6: Project Cost Scoring

Project Cost (\$)	Points
Project Cost < \$100,000	5
\$100,000 ≤ Project Cost ≤ \$500,000	4
\$500,000 ≤ Project Cost ≤ \$1,000,000	3
\$1,000,000 ≤ Project Cost ≤ \$5,000,000	2
Project Cost > \$5,000,000	1

3.4 PROJECT SCORING AND RANKING

Each project was scored in each of the four criteria and then multiplied by the corresponding criteria weights to develop a total score. The projects were ranked according to the total score, with 5 being the maximum possible score and 0 being the lowest possible score. In the event of a tied score between projects, the project with the higher criteria score for the highest weighted criteria was prioritized. Project scoring and ranking for all nine CIP projects are summarized in **Table 3-7** with additional details included in **Appendix G**.

Table 3-7: Project Ranking

Project Name	Project Score	Project Ranking
Site 1: Humble Ditch Improvements	2.70	6
Site 3: Kenny Lane/Whitney Lake Infrastructure	2.96	3
Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane	2.95	7
Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street	2.40	8
Site 6: Nystrom Addition Drainage Improvements	1.95	9
Site 7: Parkside Terrace Subdivision Drainage Improvements	2.71	5
Site 8: Villanova Place Drainage Improvements	2.75	4
Site 9: Humble Addition and Avenue B Drainage Improvements	3.10	2
Site 10: Live Oak Ditch	3.50	1

4 GIS DATABASE DEVELOPMENT

FNI GIS personnel developed an ESRI File Geodatabase schema for survey and field data collection of City owned assets. Assets include City stormwater-specific data to acquire detailed and accurate data of channels, roadway crossings, and hydraulic structures along the key outfalls for the studied watersheds. FNI coordinated with the City and survey field collection subconsultant to receive input on developing the GIS data schema model and define data collection attributes. Certain principles were utilized to guide the overall database design (e.g., elimination of redundant data to improve database performance). A good database design will divide data into specific subject tables, links data tables together via joins and/or relationships classes, ensures a high level of accuracy and integrity of data, and enhances data processing and project reporting.

A database should be considered a “living document” that can be altered as needed in the future as new projects arise or as the City’s needs change. It should be noted that some aspects of the database may need to be revisited by City personnel. Data can be updated within the provided schema using ESRI’s ArcGIS Field Maps app as well as ArcGIS PRO. The end user can download the ArcGIS Field Maps app to their preferred mobile device and link directly to an ArcGIS Online web map containing all GIS spatial data provided by the City and data collected via survey. FNI worked with City personnel to create an ArcGIS Online stormwater asset web map that can be used to collect data in real-time allowing the City to further develop their stormwater asset inventory. The use of ArcGIS Field Maps allows the end user to:

- Efficiently collect and update data in the field
- Work offline if Wi-Fi is not available
- Provide Real-Time data storage in the ESRI cloud environment
- Spatially link field photos and data to feature locations
- Support Android, iOS and Windows devices
- Easily share work with your internal and external clients, including videos and images

4.1 DATA COLLECTION

Due to the scale of the project and having subconsultants collect survey data, data management was essential. The City provided FNI with their GIS stormwater infrastructure inventory, which includes stormwater pipes and numerous stormwater features throughout the City. This dataset has been periodically updated over time to include new developments. FNI reviewed previous watershed studies,

reports, and record drawings from the City for the study area. FNI deployed surveyors into the field to collect attribute data for specific stormwater features. These attributes were, in turn, utilized by FNI engineers for hydraulic analysis and models. The City's stormwater infrastructure data was then used in the basin delineation to accurately portray the direction that runoff moves throughout the City.

Asset GIS attribute data collected by the CCTV inspector and surveyor included storm drain system features, channel cross sections, and culvert elevation data upstream and downstream. FNI obtained data for culverts, storm drain pipes, bridge type and shape, channel type and shape, stormwater pipes, inlets, curb opening, types of structures, elevations, asset shape, length and width, detailed notes, etc. FNI developed a Stormwater Structures Type Guide, which can be referenced by a data collector to ensure they are entering the correct information into the geodatabase. FNI also developed a Condition Rating Guide, which can be used by data collectors or surveyors in the field to rate the current conditions of the infrastructure. Having a guide should result in more consistent data entry between multiple input sources if all data collectors reference the guide when making their assessments. These systems can be applied to each asset inventoried within the ArcGIS database. **Appendix E** provides a summary of the Stormwater Structures Type Guide and Condition Rating Guide. The rating system was deployed with automated domains (pull-down menus) within the ESRI geodatabase so end users can easily select a rating on their mobile device in the field. Predefined pull-down domain menus reduce the risk of spelling errors within the database, as well as reduce post-office time/cost during the QC process. Once the data was collected in the field, it was published to the ESRI ArcGIS Online cloud and exported to a geodatabase that can be saved to the City local network.

5 MAINTENANCE PLAN

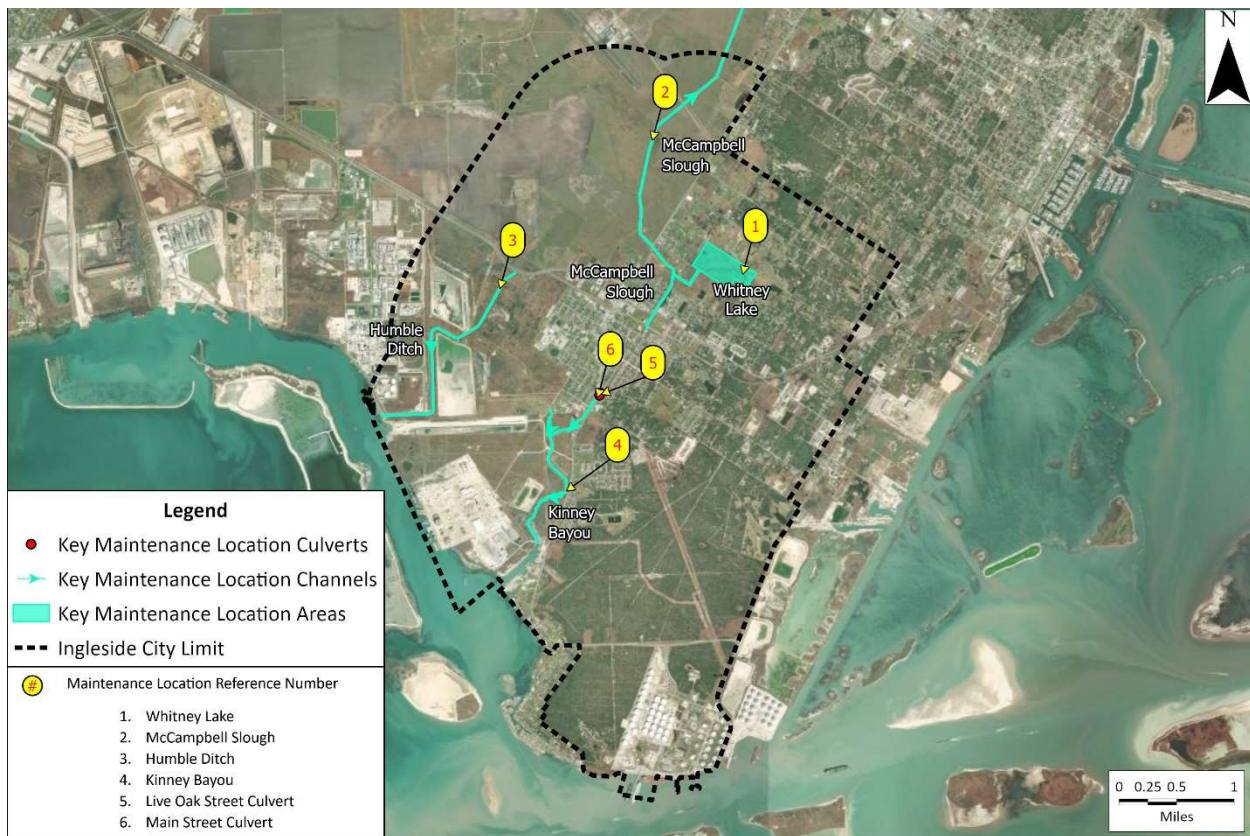
5.1 KEY MAINTENANCE LOCATIONS

Maintaining the City's drainage infrastructure improves the system's performance during a storm event and reduces costs by making repairs early before a system failure occurs. The following locations (see **Figure 5-1**) have been identified as priorities for maintenance to ensure proper system functionality.

- **Whitney Lake** – This regional detention pond and wetlands area is a key component of the drainage system for the northern area of Ingleside. Not only does it provide storage during various storm events, but it also provides important water quality features. It should be regularly maintained so it functions as intended.

- **McC Campbell Slough** – This ditch is a major component of the City’s drainage system, providing drainage for a significant portion of the City located north of SH 361 as well as some areas located south of SH 361 and the railroad. McC Campbell Slough should be regularly checked for erosion and the channel should be maintained so it is clear of brush and trees. Allowing vegetative growth or erosion/sedimentation in the channel reduces its capacity and reduces the efficiency of the systems draining to McC Campbell Slough.
- **Humble Ditch** – Although not a major outlet for much of the existing developed area in the City, if this ditch is not maintained properly stormwater in the system will backflow into the West Main Street area and result in ponding water that takes a significant amount of time to drain off. Keeping the channel clear of brush and trees allows for the areas of the City that drain to the ditch to drain off more quickly.
- **Kinney Bayou** – This ditch is a major component of the City’s drainage system, providing drainage for the majority of the City located south of SH 361. Kinney Bayou should be regularly checked for erosion and the channel should be maintained so it is clear of brush and trees. Allowing vegetative growth or erosion/sedimentation in the channel reduces its capacity and reduces the efficiency of the systems draining to Kinney Bayou.
- **Live Oak Street/Main Street Culverts** – The Avenue G Ditch crosses under Live Oak Street and then Main Street before outfalling into Kinney Bayou. These two culvert systems are a key component of the drainage system for a large portion of the City. These culverts should be regularly inspected for integrity and capacity. Any debris clogging the culverts should be removed, and any damage should be repaired to prevent further damage or degradation that would result in more costly repairs in the future.

Figure 5-1: Key Maintenance Locations



5.2 MAINTENANCE RECOMMENDATIONS

The City's plan for maintaining drainage capacity and longevity of the stormwater infrastructure should include the following components.

- Once a year provide a public informational flyer to residents either through utility billing or public broadcast that lists dos and don'ts for maintaining the City's drainage system. These include the following:
 - Remove trash and debris before major storm events.
 - Properly dispose of yard trimmings and pet waste.
 - Do not pour grease into the storm drain system.
 - Keep yard and pet waste out of the path of drainageways.
 - Report issues and damaged drainage infrastructure before it becomes a major repair.
 - Document issues for investigation or repair.

- City staff should enforce the following:
 - Proper disposal of yard trimmings by residents and businesses.
 - Proper erosion and sedimentation controls for all developments.
- Mowing/trimming vegetation twice a year to no less than 6 inches in height along all ditches/channels.
- Use aquatic herbicide to control cattails in all channels.
- Inspecting major channels/outfalls/culvert crossings after each significant storm event to assess damages, erosion, siltation/sediment, or excess drainage/ponding for blockages.
- Create a list of known areas that clog regularly to address those issues first after a rain event. Note the major issue for the persistent problem and determine a reasonable solution (e.g., grate inlet clogs with debris/grass clippings; install an alternate inlet to allow the debris to pass, such as, an area inlet).
- Establish a routine inspection schedule for drainage facilities throughout the community to ensure maintenance agreements are followed and facilities are functioning correctly. Routine inspection will encourage acceptable practices and make ordinances more effective.

6 STORMWATER CRITERIA REVIEW AND BEST MANAGEMENT PRACTICES

Stormwater criteria and regulations represent the first defense in creating an effective, high quality stormwater conveyance system. By ensuring proper design and construction, the City can be confident that stormwater challenges will not only cease to worsen, but potentially improve over time. Likewise, actions by property owners beyond the design and construction of stormwater infrastructure can drastically impact performance of Ingleside's conveyance system. Enacting and updating regulations serve to reduce the potential for negative impacts to adjacent properties and preserve the effectiveness of stormwater infrastructure. The following storm water criteria recommendations are provided for the City's consideration.

- Establish impervious cover or lot coverage standards, either within the subdivision ordinance or by district within the zoning ordinance, in order to provide firm parameters for coverage and runoff coefficients to support improved design. This would also reduce exacerbation of flooding concerns prompted by increased development intensity.

- Establish standards and practices to minimize impervious surface through efforts such as reduced street widths, incorporating sunken landscaped islands, clustering development, preservation of natural areas, reducing parking requirements, and requiring use of pervious surfaces for excess parking above minimum ratios.
- Establish regulations for illicit discharges into the municipal storm system. This regulatory approach seeks to specifically prohibit several activities, as well as erosion controls and mitigation, likely to result in increased non-point source pollutant loads in the stormwater system and that can also interfere with stormwater flow performance. Requirements for erosion and sedimentation controls reduce pollutant loads in runoff and maintain stormwater conveyance system flow capacity.
- Enforce, and adopt as needed, policies, regulations and practices to assure individual sites and development projects avoid negatively impacting adjacent property owners through poor storm drainage. Establish and update stormwater management and drainage regulations, creating a system of inspections, creation of necessary easements and establishment of maintenance entities to ensure private stormwater facilities function as designed years later as well as during construction. This should establish provisions for post-construction maintenance by the property owner in an effort to assure proper performance of stormwater conveyances. This can be coupled with third-party inspectors and reporting to the City.
- Promote regional stormwater detention as preferable to numerous, disconnected and poorly maintained on-site detention ponds and water quality facilities. Evaluate potential to establish a drainage impact fee approach for Ingleside.
- Update inspection and acceptance criteria for new stormwater infrastructure related to new development, as well as City-related projects. Require contractors to submit CCTV for storm drain projects as part of the substantial completion review in order to identify issues for contractor resolution before issuing acceptance or final payments.
- Update ordinances to require mitigation of impervious areas through green stormwater infrastructure controls and establish criteria and appropriate design technical standards. This serves to reduce pollutant loads in runoff, reduce maintenance costs to the City in maintaining and repairing the stormwater conveyance system, and preserves flow capacity and performance.

- Update regulations to limit cut and fill of a site without a development permit. This ordinance addresses the fundamental geography of Ingleside, where changes in grade of less than a foot can significantly alter runoff characteristics, direction and other attributes. By requiring all cut and fill activity to secure an appropriate permit, the City is better positioned to avoid issues of negative stormwater impacts to adjacent properties. This is commonly accomplished through zoning ordinances.
- Amend the zoning, subdivision and other relevant ordinances to require pre-construction and pre-development meetings. This provides a forum to ensure projects begin with the best of intentions with clarity of standards and expectations, resulting in a better experience for all parties.
- Update or replace the City's current flood damage prevention ordinance, enacting several provisions representing higher regulatory approaches for potential participation in the Community Rating System. The recommended changes, particularly increases to freeboard and raising finished floor elevations above the crown of the street, acknowledge the changing characteristics of flooding related to rising sea levels, higher tidal ranges and increasingly severe tropical systems. Specifically, the following enhancements are recommended:
 - Require that new construction and substantial improvement of any residential structure shall have the lowest floor (including basement) and exposed plumbing and electrical components, elevated to a minimum of 2 feet above the base flood elevation. In all cases, the lowest floor of a residential structure shall be elevated at least 2 feet above the natural grade or the crown of the road, whichever is higher.
 - Require that new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to a minimum of 2 feet above the base flood level or together with attendant utility and sanitary facilities, be designed so that the structure is watertight to a minimum of 2 feet above the base flood elevation with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
 - Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an

expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest horizontal structural member of the chassis of the manufactured home and exposed plumbing and electrical components are elevated to a minimum of 2 feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

- Require that the lowest floor of a manufactured home that is outside of the SFHA shall be elevated 2 feet above the natural grade or the crown of the road, whichever is higher.
- Require that fill material used to elevate any structure in Zones A, A1-30, AE, AO, AH, AR, or A99, be subject to the following:
 - Fill material must be compacted to at least 95 percent of Standard Laboratory Maximum Density (Standard Proctor) according to ASTM Standard D-698;
 - Fill soils must be fine grained soils of low permeability, such as those classified as CH, CL, SC, or ML according to ASTM Standard D-2487, "Classification of Soils for Engineering Purposes." See Table 1804.2 in the International Building Code (IBC) for descriptions of these soil types.
 - The fill material must be homogeneous and isotropic; that is, the soil must be all of one material, and the engineering properties must be the same in all directions.
- Require that for subdivisions, at least one primary entry road to a residential structure shall be elevated to or above the BFE to allow entry and exit of vehicles during a base flood event.
- Require that, in areas of shallow flooding (AO/AH zones), all new construction and substantial improvements of residential structures have the lowest floor (including basement) and exposed plumbing and electrical components elevated to a minimum of 2 feet above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 2 feet if no depth number is specified).

- Require that, for areas outside the SFHA, the lowest floor of a nonresidential or residential structure, or manufactured home that is outside of the SFHA shall be elevated 2 feet above the natural grade or the crown of the road, whichever is higher.
 - Require that, for areas outside the SFHA, if a new or substantially improved nonresidential or residential structure, or manufactured home is constructed outside the SFHA but is within 500 feet of the centerline of a known but unmapped water course (including an intermittent water course) on the community's FIRM, then it shall be elevated so that the lowest floor (including basement) is a minimum of 2 feet above the highest adjacent grade.
- Consider participating in the FEMA Community Rating System (CRS) to reduce potential for flood damage and support reduced flood insurance costs for residents and businesses. Ingleside should set an initial goal to achieve CRS Class 6.
- Consider updating stormwater design to the 5-, 10-, 25- and 100-year storm events, with no adverse impacts to existing or proposed structures from the proposed installation of any development, improvement or renovation.
- Transition to and adopt a drainage criteria manual, shifting technical elements such as the defined design storm event, and establishing appropriate design standards for stormwater facilities in Ingleside. It may be possible to adopt a regional manual by reference.
- Update stormwater regulations to require the use of best available data for drainage design.
- Add regulations limiting lot-to-lot drainage and establishing standards for such instances including requirements for swales and drainage easements.
- The FEMA Hazard Mitigation Plan Status from FEMA's Mitigation Planning Portal indicates the San Patricio County Hazard Mitigation Action Plan expired on 12/4/2023, which jeopardizes access to various useful funding mechanisms to support drainage improvements and may impair efficient access to funding in the event of a declared disaster.
- Protect natural conservation areas through deed restrictions and conservation easements, especially areas that serve as buffers that can catch pollutants before they enter the bay or key drainage infrastructure, or that serve as natural stormwater management facilities like marshes. Develop maintenance agreements with developers to ensure the areas are protected and

maintained without added workload to City staff. Develop criteria to identify natural areas to conserve and identify those areas.

In addition to providing stormwater management recommendations, standard stormwater construction details were developed as part of this Drainage Master Plan (**Appendix F**). The recommended standard details are based on standards that have been effectively used in the Coastal Bend for many years and are familiar to local contractors.

7 FUNDING ASSESSMENT

There are many funding options and opportunities the City could consider for funding stormwater projects. This section includes a funding evaluation for proposed drainage CIPs, including findings on each funding option, a project funding matrix, and an analysis of conservative and optimum scenarios for applying the various cost-sharing opportunities to the identified CIPs. The optimum scenario assumes cost-sharing from federal and state funding, while the conservative scenario assumes cost-sharing and federal and state grants will not be available as funding sources. The resulting general obligation bond repayment options required to pay back the project costs after each scenario are also included.

The following are funding mechanisms to pay for all or part of the identified drainage CIPs. An evaluation of the purpose, constraints, benefits, potential applications, and potential roadblocks is provided for each potential funding mechanism.

7.1 GENERAL OBLIGATION BONDS (GO BONDS)

7.1.1 Purpose

A general obligation bond (GO bond) is a common type of municipal bond that is secured by the local government's general operating revenues and taxing power. As a bond used to finance public projects, the issuer (i.e., the local government) owes the bond holders a debt and is obliged to pay them interest and/or to repay the principal at the maturity date. Most GO bond pledges at the local government level include a pledge to levy a property tax to meet debt service requirements. The City can issue GO bonds to finance CIPs, as they are considered long-term municipal financial solutions.

7.1.2 Constraints

Two conditions must be met before a city can issue GO bonds:

1. There must be a specific provision in the city charter that allows the issuance of bonds for the specified purpose of stormwater drainage improvements, and
2. The voters must approve the bond issuance at an election held on the issue.

Before a local government can receive a GO bond, the capital market evaluates the credit-worthiness of the government but does not specifically evaluate the technical and marketing risk of any project.

7.1.3 Benefits

Because the credit of a municipality stands behind GO bonds, they typically have high bond ratings. In other words, they have a high assessment of the likelihood the debt will be repaid, resulting in high-quality bonds that offer good protection for principal and interest payments. The reason for this high rating is the municipality's power of taxation: a city or town always has the option of raising tax rates or levying new taxes to meet its obligation to bondholders. Thus, it is rare for a municipality to default on its GO bonds. GO bonds are also paired with low interest rates because the investor risk is minimal resulting from guarantees by the city's tax-collecting capacity.

7.1.4 Potential Applications

Potential applications are wide-ranging, from landscaping to improvement of public buildings such as libraries, to drainage improvements, to street improvements. GO bonds are sold to raise funds for works that benefit the entire community and do not provide direct sources of revenue, such as roads, bridges, and parks.

7.1.5 Potential Roadblocks

There must be a specific provision in the city charter that allows the issuance of bonds for the specified purpose of drainage improvements and voters must approve the bond by election before it can be issued.

7.2 STATE AND FEDERAL GRANTS

7.2.1 Purpose

A grant is one of the ways federal and state governments fund ideas and projects to provide public services and stimulate the economy. Grants support critical recovery initiatives, innovative research, and many other programs listed in the Catalog of Federal Domestic Assistance (CFDA). Grants are provided by many state and federal agencies. Grant availability varies throughout the year and funds are awarded based on approval of an entity's application. Each grant has specific criteria that must be met. **Appendix H** offers additional information that can provide a better appreciation for the requirements and nuances of several grant funding opportunities.

A descriptive list of federal grants which can be applied to stormwater projects is provided below:

- **Building Resilient Infrastructure and Communities (BRIC); sponsored by the Federal Emergency Management Agency (FEMA)**

The Building Resilient Infrastructure and Communities (BRIC) grant program makes federal funds available for hazard mitigation activities. It does so with a recognition of the growing hazards associated with climate change, and of the need for natural hazard risk mitigation activities that promote climate adaptation and resilience with respect to those hazards. These include both acute extreme weather events and chronic stressors which have been observed and are expected to increase in intensity and frequency in the future. Eligible activities may include building codes; project scoping and planning; projects designed to increase resilience and public safety; reduce injuries and loss of life; and reduce damage and destruction to property, critical services, facilities, and infrastructure (including natural systems) from a multitude of natural hazards, including drought, wildfire, earthquakes, extreme heat, and the effects of climate change; and eligible and reasonable indirect costs, direct administrative costs, and other administrative expenses associated with a specific mitigation measure or project. The cost share for the BRIC program is typically 75% federal and 25% non-federal. FEMA made \$2.295 billion available for the Building Resilient Infrastructure and Communities (BRIC) grant program in fiscal year 2022. For the BRIC initial selections announced in May 2023, FEMA selected 325 subapplications totaling \$136 million across 55 states and territories, and 34 tribes.

- **Economic Development Assistance Programs (EDAP); sponsored by the U.S. Economic Development Administration (EDA)**

Under the EDAP Federal Funding Opportunity (FFO) announcement, EDA will make construction, non-construction, and revolving loan fund investments under the Public Works and Economic Adjustment Assistance (EAA) Programs. Grants made under these programs must support development in economically distressed areas of the United States by fostering job creation and attracting private investment. The cost-sharing amount varies.

- **Nonpoint Source Grant Program [Section 319 (h)]; sponsored by the U.S. Environmental Protection Agency (EPA)**

The 1987 amendments to the Clean Water Act (CWA) established the Section 319 Nonpoint Source (NPS) Management Program. Under Section 319, states, territories, and Tribes receive grant money that supports a wide variety of activities including technical assistance, education, training, technology transfer, demonstration projects and monitoring to assess the success of specific nonpoint source implementation projects. In 2022, \$21.2 million in grant money was awarded.

The Texas NPS Management Program is Texas' comprehensive strategy for addressing NPS pollution. The most recent program publication was submitted to the EPA by the Governor in 2022 Annual Report. The types of projects covered by this program are watershed protection plans in priority watershed, NPS portion of Total Maximum Daily Load (TMDL) implementation plans, surface water quality monitoring, data analysis and modeling, best management practices (BMPs), and public outreach/education. Over the past two years, the State's allocation of funding has been approximately \$43.2 million.

- **Emergency Watershed Protection (EWP) Program; sponsored by the Natural Resources Conservation Service (NRCS)**

The objective of the EWP Program is to assist sponsors, landowners, and operators in implementing emergency recovery measures for runoff retardation and erosion prevention to relieve imminent hazards to life and property created by a natural disaster that causes a sudden impairment of a watershed. Financial assistance for flood protection projects is made available following a Presidential Disaster Declaration. Applicants submit requests immediately following a disaster in anticipation of future funding through disaster declaration.

This grant applies to the construction of projects that: (1) provide protection from flooding or soil erosion, (2) remove debris that would affect runoff or erosion, and (3) restore hydraulic capacity following a disaster.

- **Flood Mitigation Assistance (FMA) Grant Program; sponsored by the Federal Emergency Management Agency (FEMA)**

The FMA program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FMA provides funding to states, territories, federally recognized Tribes and local communities for projects and planning that reduce or eliminate long-term risk of flood damage to structures insured under the NFIP. FMA funding is also available for management costs. Generally, local communities will sponsor applications on behalf of homeowners and then submit the applications to the state, which then submits the application to FEMA. For fiscal year 2022, FEMA announced selections of 230 subapplications totaling \$711 million in FMA grant funding.

- **Flood Infrastructure Fund (FIF); sponsored by the Texas Water Development Board (TWDB)**

The FIF program assists in the financing of drainage, flood mitigation, and flood control projects, including: planning and design activities, work to obtain necessary regulatory approvals, and construction and/or implementation of flood projects. The FIF program allows for a wide range of flood projects. Only Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) recommended in an amended regional flood plan approved by the TWDB are eligible for financial assistance.

Under the FME category, Under this category, eligible applicants conduct studies to identify, assess, and quantify flood risk or identify, evaluate, and recommend flood risk reduction solutions. These studies involve planning of entire watersheds, as required by the TWDB regional flood planning program, to better inform the development of strategies using structural and nonstructural measures before a flood event. This may include determining and describing problems from or related to flooding, identifying, and planning solutions to flooding problems, and estimating the benefits and costs of these solutions.

Under the FMP category, eligible applicants may undertake activities to construct or rehabilitate structural flood mitigation improvements or implement non-structural improvements.

FMS are flood risk reduction solution ideas and strategies that do not belong in FME or FMP categories. Examples may include regulatory enhancements, development of entity-wide buyout programs, and public outreach and education. This category may include projects that can be implemented quickly and are understood to be immediately effective in protecting life and property. Eligible FMS Category projects include warning systems, crossing barriers, gages, and public education and outreach.

The FIF program may also provide an eligible applicant's non-federal share for a federal grant program, such as the BRIC or FMA programs.

Both grants at various amounts and 0% interest rate loans are available, with the grant depending on the applicant's household income level.

In its first funding round, the TWDB committed over \$513 million to 138 projects.

- **Hazard Mitigation Grant Program (HMGP); sponsored by FEMA**

The purpose of HMGP is to help communities implement hazard mitigation measures following a Presidential Major Disaster Declaration in the areas of the state, Tribe, or territory requested by the Governor or Tribal Executive. The key purpose of this grant is to enact mitigation measures that reduce the risk of loss of life and property from future disasters. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

- **Watershed Protection and Flood Prevention Program; sponsored by NRCS**

The Watershed and Flood Prevention Operations (WFPO) Program provides technical and financial assistance in carrying out works of improvement to protect, develop, and utilize the land and water resources in watersheds. The program provides cost sharing funds to state agencies for flood mitigation projects including floodwater dams, floodplain easements and flood-proofing of residential and commercial structures.

- **Watershed Rehabilitation Program (Rehab); sponsored by NRCS**

Rehab helps project sponsors rehabilitate aging dams that are reaching the end of their 50-year design lives. This rehabilitation addresses critical public health and safety concerns. Since 1948, NRCS has assisted local sponsors in constructing more than 11,800 dams.

- **Water and Environmental Programs; sponsored by the United States Department of Agriculture - Rural Development (USDA-RD)**

Under the Water and Environmental Programs, the applicable grant program is the Water & Waste Disposal Loan & Grant Program. This program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas.

- **Continuing Authorities Program; sponsored by the United States Army Corps of Engineers (USACE)**

This program allows the USACE to plan, design, and construct smaller projects without specific authorization from Congress. The potential sponsor must request the USACE to investigate potential flood risk management issues that might fit the program. Once the USACE determines that the project fits the program, the District will request funds to initiate a reconnaissance effort to determine potential federal interest in proceeding to a feasibility study. There are three authorities available for this program:

- Section 14 – Emergency Streambank and Shoreline Protection
- Section 205 – Small Flood Risk Management Projects
- Section 208 – Clearing and Snagging of Waterways

7.2.2 Constraints

- **BRIC:** Typically, only 75% of a project's costs are provided as the federal grant, leaving the project sponsor seeking the remaining 25%. And while the per-project cap is \$50 million, the period of performance is only three years. This program is highly competitive and may result in only one or two projects funded in any given state. Lastly, all of the federal requirements apply such as Davis-Bacon Act wages, NEPA-level environmental, and requirements that almost all aspects of constructed projects have a Buy American preference (American Iron and Steel, manufactured products, and construction materials).
- **EDAP:** The maximum award amount from the EDA is \$3,000,000 with a minimum award amount of \$100,000. An area receiving this grant must be considered economically distressed and the

project must support the creation of new, permanent jobs. To be considered economically distressed, the applicable region must meet the following criteria:

- A 24-month unemployment rate that is at least 1 percentage point greater than the national average
 - Per capita income that is not more than 80% of the national average
 - “Special Need,” as determined by EDA and as discussed in Section C.3. of the application instructions
- **NPS Grant Program:** The NPS Grant Program is administered by the Texas Commission on Environmental Quality (TCEQ) and the Texas State Soil and Water Conservation Board (TSSWCB) for providing funding as grants to cooperating entities for activities that address the goals and objectives stated in the Texas NPS Management Program. The agencies request proposals during each grant cycle. They should stress interagency coordination, demonstrate new or innovative technologies, use comprehensive strategies that have statewide applicability, and stress public participation. They should also include a Quality Assurance Project Plan (QAPP).
 - This grant is more applicable to water quality projects, not stormwater drainage projects.
- **EWP Program:** All EWP work must reduce threats to life and property and must be economically, environmentally, and socially defensible and sound from a technical standpoint. EWP cannot solve problems that existed before the disaster or to improve the level of protection above that which existed before a disaster. It cannot fund operation and maintenance work or repair private or public transportation facilities or utilities. The work cannot adversely affect downstream water rights and fund cannot be used to install measures not essential to the reduction of hazards.
 - Sponsors must submit a formal request to the State Conservationist for assistance within 60 days of the natural disaster occurrence, or 60 days from the date when access to the sites becomes available.
- **FMA Program:** Requirements include community participation in the National Flood Insurance Program (NFIP), mitigated property insured by NFIP, a FEMA-approved hazard mitigation plan (HMAP), and that the CIP be cost-beneficial.
- **FIF Program:** The TWDB is only offering \$375 million for the 2024-2025 program cycle. Also, only projects in the current Texas regional flood plans are eligible with no opportunity to advance

studies funded by the 2020 funding cycle to actual projects. Lastly, only complete projects as listed in the regional plans are eligible and phasing or partial projects are not allowed.

- **HMGP:** Requirements include community participation in NFIP, a FEMA-approved HMAP, and a cost-beneficial project. The foundational requirement, however, is the grant is only applicable following a Presidential Disaster Declaration.
- **WFPO Program:** Sponsoring local organizations can request that watershed project plans be authorized for Federal Watershed Operations funding assistance. Watershed plans involving federal contributions of more than \$5,000,000 for contribution, or construction of any single structure having a capacity more than 2,500 ac-ft, require Congressional approval. Criteria for being an eligible authorized watershed project are:
 - Public sponsorship
 - Watershed projects up to 250,000 acres
 - Benefits that are directly related to agriculture, including rural communities, that are at least 20% of the total benefits of the project
- **Rehab Program:** The Rehab grant program is only applicable to the rehabilitation or decommissioning of NRCS aging dams.
- **Water & Waste Disposal Program:** Borrowers must have the legal authority to construct, operate and maintain the proposed services or facilities. Projects must also be financially sustainable. A preliminary engineering report, environmental report, and median household income are required in the application for this grant. Areas that may be served by this grant program include:
 - Rural areas and towns with fewer than 10,000 people
 - Tribal lands in rural areas
 - Colonias
- **Continuing Authorities Program**

Section 14: The Corps of Engineers is authorized to construct bank protection works to protect endangered highways, highway bridge approaches, and other essential, important public works, such as municipal water supply systems and sewage disposal plants, churches, hospitals, schools, and non-profit public services and known cultural sites that are endangered by flood-caused bank

or shoreline erosion. Privately owned property and facilities are not eligible for protection under this authority. Each project is limited to a total federal cost of \$1.5 million.

Section 205: Before the federal government can participate in implementing a flood risk management project, a planning study must be conducted to determine if the project is economically justified (benefits exceed the costs), technically feasible, and environmentally acceptable. Planning studies are typically conducted in two phases - reconnaissance and feasibility.

Section 208: In the interest of flood control, the Corps of Engineers can conduct clearing, snagging, or channel excavation. Limited embankment construction can be provided by utilizing the materials from the cleaning operation.

7.2.3 Benefits

- **BRIC:** Annual program with large project caps. Also, the BRIC program has been very well funded through 2026 by the Infrastructure Invest and Jobs Act. Lastly, a very broad range of projects that mitigate natural hazards are eligible.
- **EDAP:** There are no submission deadlines under this opportunity. Proposals and applications are accepted on an ongoing basis until the publication of a new EDAP FFO. Applicants may be from rural or urban areas. As previously mentioned, the cost-sharing varies, but generally, the amount of the EDA grant may not exceed 50% of the total cost of the project. Projects may receive up to an additional 30% based on the relative needs of the region in which the project will be located.
- **NPS Grant Program:** Cost sharing is 60% federal, 40% local governments.
- **EWP Program:** The NRCS may bear up to 75% (90% within limited resource areas as identified by the U.S. Census data) of the construction cost of emergency measures. Thus, the local government must cover the other 25% of the cost.
- **FMA Program:** Normally, funding is appropriated by Congress annually. For projects involving Severe Repetitive Loss Properties, the grant will cover 100% of the project. For projects involving Repetitive Loss Properties, the grant will cover 90% of the project. Finally, for projects involving NFIP insured properties, the grant will cover 75% of the project while the local government must

pay for 25% of the project. Also and like the BRIC program, the FMA program has been very well funded through 2026 by the Infrastructure Invest and Jobs Act.

- **FIF:** State program with state-level requirements, federal financial assistance requirements do not apply unless required by other cross-cutting federal laws. Also, projects that are currently listed in the regional flood plans have already been defined, scored, and ranked and therefore it is fairly certain which projects will be funded in the 2024-2025 program years. In addition, household income is considered on a project benefit area basis and therefore while Ingleside may not qualify for grant on a community-wide (city limit) basis, it may still have projects that do qualify to receive grant funding.
- **HMGP:** The benefits of HMGP include support for risk reduction activities, improvement of resiliency, elimination of the impact of future events, long-term solutions to problems, cost-effective solutions, and help to avoid repetitive damage from disasters. FEMA provides up to 75% of the funds for mitigation projects under HMGP. The remaining 25% can come from a variety of sources.
- **WFPO Program:** Cost sharing varies and availability of the grant is annually. This grant program is applicable to the Ingleside CIPs.
- **Rehab Program:** The NRCS has made \$4.8 million available to Ellis and Williamson counties to complete the design and construction of four watershed rehabilitation projects through Rehab. The cost sharing allocation is 65% federal and 35% local.
- **Water & Waste Disposal Program:** Long-term, low-interest loans are available, and grants may be combined with a loan if necessary to keep user costs reasonable. However, they are only available to rural areas with a population less than 10,000 people.
- **Continuing Authorities Program:** The first \$100,000 of the Planning Design Analysis phase is a federal expense. All PDA costs after the first \$100,000 are cost shared 50/50. All construction costs are cost shared 65% federal and 35% non-federal. Each project is limited to a total federal cost of \$1.5 million.

7.2.4 Potential Applications

- **BRIC:** Potential applications of this program include most hazard mitigation projects that are cost effective, meaning having benefits that at least equal the costs. Projects may directly relate to stormwater or protection for public facilities and roadways. Other risk reduction or resiliency activities are eligible that directly help to reduce impacts to the National Flood Insurance Program (NFIP).
- **EDAP:** Potential applications of this program are public works projects such as water and sewer system improvements, industrial parks, shipping and logistics facilities, etc.
- **NPS Grant Program:** Potential applications are limited for the CIPs in Ingleside, but may include watershed assessment, planning, implementation, demonstration and education projects with the boundaries of impaired watersheds.
- **EWP Program:** Potential applications are limited for the CIPs in Ingleside since the grant does not apply to pre-existing conditions and may only be applied immediately after a disaster has occurred.
- **FMA Program:** Potential applications include acquisition for demolition or relocation, structure elevation or reconstruction, dry flood-proofing, minor localized flood reduction projects, HMAP (flood hazard only) development or update.
- **FIF Program:** Potential applicants may include planning phase activities such as preliminary engineering, project design, feasibility assessments, coordination and development of regional projects, obtaining regulatory approvals, and hydraulic and hydrologic studies; construction/rehabilitation phase activities such as drainage infrastructure (e.g., channels, ditches, ponds, pipes, etc.), flood control infrastructure, flood mitigation infrastructure, retention basins, detention ponds, sustainable infrastructure, nonstructural flood mitigation, development of or amendments to flood related codes, permeable pavement, erosion control, levees, pump stations, rehabilitation of existing infrastructure taking into consideration methods of improving resiliency (not including costs associated with current or future operations and maintenance activities), property acquisitions determined to be the best solution for highest-risk properties, restoration of riparian corridors, floodplains, coastal areas, and wetlands, natural erosion and

runoff control; and other projects such as flood early warning systems, stream gauges, educational campaigns, and crossing barriers.

- **HMGP:** Potential applications are limited for the CIPs in Ingleside since the grant does not apply to pre-existing conditions and may only be applied immediately after a disaster has occurred.
- **WFPO Program:** Potential applications include flood damage mitigation through dams, easements, and flood-proofing, agricultural/rural water supply projects, water quality projects, water conservation projects, groundwater recharge projects, public fish and wildlife habitat conservation, and public water-based recreation projects.
- **Rehab Program:** The main application for this grant is to the rehabilitation or decommissioning of NRCS dams.
- **Water & Waste Disposal Program:** Applications of this grant are toward the design and construction of water, sanitary sewer, stormwater and solid waste facilities. However, the area's population must be fewer than 10,000 people.
- **Continuing Authorities Program:** Potential applications include flood risk management, ecosystem restoration, erosion control, streambank restoration, and multipurpose projects.

7.2.5 Potential Roadblocks

- **BRIC:** In the BRIC program, these could include projects that are not cost effective where the costs outweigh the benefits, projects that don't adequately reduce risk or do not provide resiliency, do not address climate change, do not provide benefits to communities, or areas of communities, that typically do not see investments in infrastructure, or have not garnered support of the affected community and have not leveraged community partnerships.
- **EDAP:** The City of Ingleside is unlikely to be considered an "economically distressed area," and is thus unlikely to receive this grant.
- **NPS Grant Program:** The grant cycle has defined open periods. It will be important to apply when the new cycle has started. The City of Ingleside may not be within the boundaries of an impaired watershed.
- **EWP Program:** Potential roadblocks exist due to the program requirements since the grant does

not apply to pre-existing conditions and may only be applied immediately after a disaster has occurred.

- **FMA Program:** The FMA program is a competitive grant program and FEMA chooses the applicants to be funded based on the applicant's ranking of the project and the eligibility and cost-effectiveness of the project. The application deadline is typically in October.
- **FIF Program:** Even if it is determined that the City has high-priority stormwater projects, if these same projects are not in a regional flood plan, they are not eligible for FIF funding. Also, Ingleside must gain the support of other communities if its project(s) extend outside of the City's limits. This can sometime be difficult, contentious, or even impossible. Lastly, many times communities struggle to provide the additional funding needed to complete a project when 100% grant is not offered or in the case of 0% interest rate loans, may not currently have the debt service capacity to repay even a 30-year loan.
- **HMGP:** Potential roadblocks exist due to the program requirements since the grant does not apply to pre-existing conditions and may only be applied immediately after a disaster has occurred.
- **WFPO Program:** The watershed area must not exceed 250,000 acres, the capacity of a single structure is limited to 25,000 acre-ft of total capacity, and 12,500 acre-ft of floodwater detention capacity. The watershed meets this criterion, but the CIPs must also meet the latter two requirements.
- **Rehab Program:** If none of the City of Ingleside's proposed CIPs include the decommissioning or rehabilitation of an aging dam, then this grant does not apply.
- **Water & Waste Disposal Program:** This program is primarily for water and wastewater infrastructure and may be limited for stormwater projects.
- **Continuing Authorities Program:** Formal assurance in the form of a Project Partnership Agreement must be executed with the project sponsor. The USACE would oversee project construction; however, once constructed, the operation and maintenance of the project would be the responsibility of the project sponsor.

7.3 4B SALES TAX FUND

7.3.1 Purpose

The use of the sales tax for economic development purposes has been one of the most popular and effective tools used by cities to promote economic development. Since the authorization for the local option tax took effect in 1989, more than 586 cities have levied an economic development sales tax. These cities have cumulatively raised more than \$573 million annually in additional sales tax revenue dedicated to the promotion of local economic development. Of these cities, 101 have adopted a Type A economic development sales tax, 367 cities have adopted a Type B economic development sales tax, and 118 cities have adopted both a Type A and a Type B sales tax.

7.3.2 Constraints

There are several important differences between Type A and Type B sales taxes for economic development. Type A and Type B taxes can be distinguished on the following grounds: 1) the authorized use of the tax proceeds; 2) the oversight procedure regarding project expenditures; and 3) the means for adopting and altering the tax by election.

The Type B tax also can be used to fund the provision of land, buildings, equipment, facilities, expenditures, targeted infrastructure and improvements that are for the creation or retention of primary jobs for projects such as manufacturing and industrial facilities, research and development facilities, military facilities, including closed or realigned military bases, transportation facilities, sewage or solid waste disposal facilities, recycling facilities, air or water pollution control facilities, distribution centers, small warehouse facilities, primary job training facilities for use by institutions of higher education, regional or national corporate headquarters facilities, eligible job training classes, certain career centers and certain infrastructural improvements that promote or develop new or expanded business enterprises. However, unlike the Type A tax, the Type B tax can additionally fund projects that are typically considered to be community development initiatives. For example, authorized categories under Type B include, among other items, land, buildings, equipment, facilities, expenditures, and improvements for professional and amateur sports facilities, park facilities and events, entertainment and tourist facilities, and affordable housing. Also, the Type B tax may be expended for the development of water supply facilities or water conservation programs.

If the city is eligible to adopt a Type B tax, it may propose a tax rate equal to one-eighth, one-fourth, three-eighths or one-half of one percent. The city may not adopt a sales tax rate that would result in a combined rate of all local sales taxes that would exceed two percent.

7.3.3 Benefits

Every Texas city is eligible to adopt a Type B sales tax if the combined local sales tax rate does not exceed two percent.

7.3.4 Potential Applications

Type B corporations may provide land, buildings, equipment, facilities and improvements found by the board of directors to promote or develop new or expanded business enterprises that create or retain primary jobs, including a project to provide:

- Transportation facilities (including but not limited to airports, hangars, airport maintenance and repair facilities, air cargo facilities, related infrastructure located on or adjacent to an airport facility, ports, mass commuting facilities and parking facilities)
- Sewage or solid waste disposal facilities
- Air or water pollution control facilities
- Facilities for furnishing water to the public
- Public safety facilities
- Streets and roads
- Drainage and related improvements
- Demolition of existing structures
- General municipally owned improvements
- Any improvements or facilities that are related to any of those projects and any other projects that the board in its discretion determines promoted or develops new or expanded business enterprises that create or retain primary jobs.

7.3.5 Potential Roadblocks

- Any drainage improvements would have to be approved by the Type B corporation board.

7.4 ESTABLISHMENT OF SPECIAL DISTRICTS

A special district is a political subdivision established to provide a single public service (such as water supply or sanitation) within a specific geographic area.

- **Public Improvement District (PID)**

A PID is a special assessment area created at the request of the property owners in the district. These owners pay a supplemental assessment with their taxes, which the PID uses for services above and beyond existing City services. A PID may be formed to perform any of the following improvements:

- Water, wastewater, health and sanitation, or drainage improvements
- Street and sidewalk improvements
- Mass transit improvements
- Parking improvements
- Library improvements

- **Water Control and Improvement District (WCID)**

A WCID is a political subdivision of the state of Texas, and is empowered to purchase, construct, operate, and maintain everything necessary to provide water, wastewater, and drainage services. Through “general law,” a district may be created by the TCEQ or the county commissioners court. WCIDs have broad authority to supply and store water for domestic, commercial, and industrial use; to operate sanitary wastewater systems; and to provide irrigation, drainage, and water quality services.

- **Municipal Utility District (MUD)**

A MUD is a special-purpose district that provides public utilities (such as electricity, natural gas, sewage treatment, waste collection/management, wholesale telecommunications, water) to district residents. MUDs engage in the supply of water, conservation, irrigation, drainage, firefighting, solid waste (garbage) collection and disposal (including recycling activities), wastewater (sewage) treatment, and recreational facilities. A MUD can require its customers to use its solid waste services as a condition for receiving other MUD services. A MUD may provide solid waste and recycling services through a private company. While they

can develop, maintain, or acquire parks or recreational facilities, MUDs are prohibited from issuing bonds to pay for these facilities. They can, however, set and charge user fees.

- **Drainage District (DD)**

Most DDs (or drainage improvement districts, DID) are administered by an internal drainage board (IDB), which are single purpose local drainage authorities, dealing with the drainage and water level management of clean water only. Each DD has a defined area, and the IDB only has powers to deal with matters affecting that area. An example of an established DD in Texas is the City of Garland. They established a DD to assist residential and commercial property owners who are experiencing property damage due to erosion from creeks or other bodies of water within the City.

- **Local Improvement District (LID)**

An LID is a method by which a group of property owners can share in the cost of transportation infrastructure improvements or other types of public improvements such as installing water and sanitary sewer lines. Most LIDs involve improving a street, building sidewalks, and installing a stormwater management system. An LID can also be used to install sidewalks on existing streets that previously have been accepted for maintenance by the City. When property owners decide they want to form a LID, they assume responsibility to pay for the project if the project is approved by City Council. The City works with property owners to determine the scope of the project and develops an assessment methodology. A variety of methods are used, including square footage, linear footage or equivalent dwelling unit. Sometimes a combination of these methods is used, but square footage is most commonly used for projects in residential areas.

- **Flood Control District (FCD)**

The role of the FCD is to reduce flood risk and conserve stormwater runoff while improving water quality, providing recreation opportunities, and enhancing open space where feasible. For example, the Harris County FCD roles include widening and deepening bayous to carry more stormwater and reduce the size of floodplains, excavating stormwater detention basins to safely store millions of gallons of stormwater, implementing voluntary home buyouts, and maintaining drainage infrastructure by addressing erosion, slope failure, and sediment build-

up. FCDs are generally capital improvement programs that address flooding from a regional perspective.

- **Tax Increment Reinvestment Zone (TIRZ)**

A TIRZ is a political subdivision of a municipality or county in Texas created to implement tax increment financing. They may be initiated by the city or county or by petition of owners whose total holdings in the zone consist of a majority of the appraised property value. To get funding for a TIRZ area, applicants should follow three steps.

- Property owners possessing 50% or more of the appraised value of a district submit a petition to the county, city, or town requesting a TIRZ be set up, or the local government may decide to create one. A specific lifetime for the TIRZ is determined. A TIRZ may only be city-initiated if less than 10% of its land area consists of residential area.
- For the purposes of existing tax-collecting entities (water districts, counties, etc.) the assessed values of properties within the new TIRZ are frozen. It is assumed that property values will increase over the lifetime of the TIRZ; the property taxes collected on this increase constitute the "increment".
- The municipality or county passes an ordinance establishing a governing board for the TIRZ and the zone as a legal entity itself. The board then meets to create a budget for the lifetime of the zone, establishing what projects it will undertake and how they will be financed. This plan is passed as another ordinance.

- **Municipal Development District (MDD)**

An MDD is created to generate economic development and growth opportunities within the boundaries of the district. To create an MDD, a city must call an election through an order that defines the proposed boundaries of the district. The ballot at this election must be printed to allow voting for or against the proposition. In the order calling the election, the city may provide that the district boundaries will automatically conform to future changes in the city's boundaries. If the voters turn down the creation of the district, a subsequent election to establish a district may not be held within a year of the first election. The MDD is funded through a local sales tax. State law permits a tax rate of one-eighth to one-half of one percent.

- **Sales Tax Reallocation Election (HB 157)**

Texas law allows cities to hold an election to reallocate sales tax revenue. Cities may hold elections to adopt sales taxes (general revenue or dedicated) in any increment of one-eighth of one percent, so long as the total city sales tax does not exceed the maximum two-percent local sales tax cap. In other words, cities now have increased flexibility to reallocate city sales taxes in a way that makes sense to the city and its residents. The election can be initiated at the discretion of the city council or by a petition signed by 20 percent of the number of voters who cast ballots in the most recent regular municipal elections.

7.5 STORMWATER UTILITY FEE

The state of Texas provides municipalities the opportunity to establish a stormwater utility, which is a legal mechanism used to generate revenue to finance the city's cost to provide and manage stormwater services in the city. The Texas Municipal Drainage Utility Systems Act [Local Government Code 552 Subchapter C] authorizes cities in Texas to establish a municipal stormwater utility system to "protect the public health and safety in municipalities from loss of life and property caused by surface water overflows, surface water stagnation, and pollution arising from non-point source runoff within the boundaries of the established service area..." [LGC 552.042(3)]. To provide these services, municipalities are authorized to assess fees to users of the stormwater utility system.

The stormwater utility fee is a service fee and must be based on the projected cost of providing stormwater service within the city's jurisdiction. Some stormwater-related costs that are allowed by state law [LGC 552.044(2)] to be included in the development of the projected revenue needs for stormwater service include the following:

- Property acquisition
- Service fees (architectural, engineering, legal, surveys, etc.)
- Capital (equipment, machinery, furniture, facilities, etc.)
- Funding and finance costs for construction projects
- Debt service
- Administration

When developing the fee rate for users, classification of affected properties must be nondiscriminatory, equitable, and reasonable. Specific requirements and allowances to exempt certain property owners and property types, respectively, are established in the law. The statute [LGC 552.053(c)] and recent amendments [LGC 580.003] specifically restrict the city from assessing the stormwater utility fee on certain types of property:

- Property with proper construction and maintenance of a wholly sufficient and privately-owned drainage system [LGC 552.053(c)(1)]
- Property held and maintained in its natural state, until such time that the property is developed and all the public infrastructure constructed has been accepted by the municipality in which the property is located for maintenance [LGC 552.053(c)(2)]
- A subdivided lot, until a structure has been built on the lot and a certificate of occupancy has been issued by the municipality in which the property is located [LGC 552.053(c)(3)]
- A State agency or public institution of higher education [LGC 580.003]

The city is also provided the opportunity to exempt certain properties from the stormwater utility fee without regard to the properties' impacts to the storm system. The following property is allowed by law [LGC 552.053(a), (b), and (d)] to be exempted from the stormwater utility fee:

- County property
- City property
- School district property
- Property owned by a tax-exempt religious institution
- Closed cemetery

7.6 GENERAL FUND

A general fund is a financial term referring to a nonprofit entity's financial pool of resources. This term traditionally refers to a fund used by a government or university, because for-profit businesses use a general ledger to monitor finances. From a general fund, all operating expenses, services and employee payrolls are provided. The money for this fund comes from several sources, depending on the institution. The bulk of a governmental fund is drawn from taxes. No matter if it is a state, local or national government, taxpayers are primarily the people helping fund services and operation. Beyond taxes, a

government makes other income from having a surplus from the previous fund, from interest on investments and from charging fees, such as entry fees into parks.

7.7 CERTIFICATES OF OBLIGATION (CO BONDS)

COs were initially authorized by Texas' Certificate of Obligation Act of 1971. Cities, counties and health or hospital districts can use them to fund the construction, demolition, or restoration of structures; purchase materials, supplies, equipment, machinery, buildings, land and rights-of-way; and pay for related professional services. COs are issued for terms of up to 40 years and usually are supported by property taxes or other local revenues.

COs often are associated with emergency spending, but their use isn't restricted to such purposes. They can be used to fund public works as part of standard local government operations.

Commissioners courts, city councils and health or hospital district boards opting to issue COs must post a description of the projects to be financed in local newspapers at least twice, first more than 30 days before the governing body's vote on the CO issuance and again a week after the initial posting. These postings must describe the general purpose and amount of the debt to be issued, name the method of repayment, and list the time and place of the governing body's vote.

COs do not require voter approval unless 5 percent of qualified voters within the jurisdiction petition for an election on the spending in question.

COs provide local governments with important flexibility when they need to finance projects quickly, as with reconstruction after a disaster or as a response to a court decision requiring capital spending. But the way COs circumvent voter approval has made them controversial in the past, leading to 2015 legislation restricting their use.

7.8 COMMUNITY DEVELOPMENT CORPORATION (CDC)

Community Development Corporations (CDCs) are nonprofit, community-based organizations focused on revitalizing the areas in which they are located, typically low-income, underserved neighborhoods that have experienced significant disinvestment. While they are most commonly celebrated for developing affordable housing, they are usually involved in a range of initiatives critical to community health such as economic development, sanitation, streetscaping, and neighborhood planning projects, and oftentimes even provide education and social services to neighborhood residents.

CDCs play a critical role in building community wealth for a few key reasons:

- They anchor capital in communities by developing residential and commercial property, ranging from affordable housing to shopping centers and even businesses.
- At least one-third of a CDC's board is typically composed of community residents, allowing for the possibility of direct, grass-roots participation in decision-making.
- CDCs' work to enhance community conditions oftentimes involves neighborhood organizing, a process critical for empowering residents and gaining political power.

A Community Development Corporation, often referred to as a 4B corporation for its enabling legislation, uses a half of a cent of the municipality's sales tax to fund a defined array of public improvements including buildings, equipment, programs and parks, as well as the promotion and development of business enterprises.

7.9 TEXAS CAPITAL FUND INFRASTRUCTURE PROGRAM (EDA/TEDC)

TEDC, or Texas Economic Development Council, is an Austin-based, statewide, non-profit professional association dedicated to the development of economic and employment opportunities in Texas. The Texas Capital Fund Infrastructure Program provides grants for infrastructure development to create or retain permanent jobs in primarily rural communities and counties. The money can be used for a variety of public infrastructure improvements. The program is only available to "non-entitlement" city or county governments. Non-entitlement cities/counties do not receive direct funding from HUD (U.S. Department of Housing and Urban Development) and typically include cities with a population of less than 50,000 and counties of less than 200,000. There are over 1,200 eligible cities and counties in the state. The award floor is \$50,000 and the award ceiling is \$1,500,000.

7.10 CLEAN WATER STATE REVOLVING LOAN FUND (EPA/TWDB)

The Clean Water State Revolving Fund (CWSRF) program is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects. Using a combination of federal and state funds, state CWSRF programs provide loans to eligible recipients to:

- Construct municipal wastewater facilities
- Control nonpoint sources of pollution

- Manage, reduce, or treat stormwater,
- Create green infrastructure projects
- Protect estuaries
- Fund other water quality projects

Under the CWSRF, EPA provides grants to all 50 states plus Puerto Rico to capitalize state CWSRF loan programs. The states contribute an additional 20 percent to match the federal grants. The 51 CWSRF programs function like environmental infrastructure banks by providing low interest loans to eligible recipients for water infrastructure projects. As money is paid back into the state's revolving loan fund, the state makes new loans to other recipients for high priority, water quality activities. Repayments of loan principal and interest earnings are recycled back into individual state CWSRF programs to finance new projects that allow the funds to "revolve" at the state level over time.

States are responsible for the operation of their CWSRF program. Under the CWSRF, states may provide various types of assistance, including loans, refinancing, purchasing, or guaranteeing local debt and environmental needs. As with the BRIC and FMA federal grant programs, the CWSRF has been well funded by the Infrastructure Investment and Jobs Act for the federal fiscal years 2022-2026.

7.11 PROJECT FUNDING MATRIX

Based on the researched funding mechanisms and known project scopes, FNI created the funding matrix shown in **Table 7-1**. The purpose of the funding matrix is to show the relevant funding options for each of the ranked projects identified by FNI. Although many funding options were researched only the relevant funding options are shown in **Table 7-1**. Using the associated cost for each CIP, the following two funding scenarios were analyzed:

- Conservative Projection; no external cost sharing
- Grant-Assisted Projection; maximum external cost sharing

For the conservative funding scenario, it is assumed that none of the projects will benefit from cost sharing. Under this scenario the full financial burden of addressing the CIPs falls on the City. The projects would have to be paid for through the General Fund, GO Bonds, a Stormwater Utility Fee, or the 4B sales tax corporation. As a result, the total cost to the City is \$73,591,983.

For the grant-assisted funding scenario, it is assumed that the projects will benefit from the highest amount of cost sharing with state and federal agencies. Certain federal and state grant programs place limits on the amount of funds that can be awarded to each applicant. For example, FMA and BRIC programs do not award more than \$50 million to a project. The Continuing Authorities Program (CAP) is limited to \$1.5 million in federal share per project. Keeping these limits in mind, the federal and state grants were used strategically for each project to reduce the total cost to the City. As a result, the total cost to the City is \$25,757,194, assuming the maximum City share is 35%.

Table 7-1: CIP Funding Matrix

Rank	Project ID	Project	Funding Options						Total Project Cost	Max Grant-Assisted Project Cost to City
			GO Bonds	Stormwater Utility Fee	4B Sales Tax	Federal/State Grants ¹				
						FMA ²	BRIC ³	CAP ⁴		
7	Site 1	Humble Ditch Improvements	Applies	Applies	Applies	75/25	75/25	65/35	\$10,227,900	\$3,579,765
3	Site 3	Kenny Lane/Whitney Lake Infrastructure	Applies	Applies	Applies	75/25	75/25	65/35	\$2,876,083	\$1,006,629
4	Site 4	SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane	Applies	Applies	Applies	75/25	75/25	65/35	\$15,869,600	\$5,554,360
8	Site 5	Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street	Applies	Applies	Applies	75/25	75/25	65/35	\$1,019,800	\$356,930
9	Site 6	Nystrom Addition Drainage Improvements	Applies	Applies	Applies	75/25	75/25	65/35	\$2,823,800	\$988,330
6	Site 7	Parkside Terrace Subdivision Drainage Improvements	Applies	Applies	Applies	75/25	75/25	65/35	\$9,148,800	\$3,202,080
5	Site 8	Villanova Place Drainage Improvements	Applies	Applies	Applies	75/25	75/25	65/35	\$10,075,000	\$3,526,250
2	Site 9	Humble Addition and Avenue B Drainage Improvements	Applies	Applies	Applies	75/25	75/25	65/35	\$5,362,300	\$1,876,805
1	Site 10	Live Oak Ditch	Applies	Applies	Applies	75/25	75/25	65/35	\$16,188,700	\$5,666,045
Total									\$73,591,983	\$25,757,194

¹ Only relevant grants for the listed projects are shown. The listed ratios are federal contribution/local contribution.

² Higher levels of grant are possible for projects that address RL & SRL properties. \$50 million per project cap. Period of performance is 36 months from date of award.

³ \$50 million per project cap. Period of performance is 36 months from date of award.

⁴ The first \$100,000 of the Planning Design Analysis phase is a federal expense. All PDA costs after the first \$100,000 are cost-shared 50/50. All construction costs are cost-shared 65/35. Each project is limited to a total Federal cost of \$10 million.

As is seen in **Table 7-1**, cost sharing with federal agencies can be very beneficial for the City and may result in up to 75% savings. However, even under the optimum scenario shown above, the City would still need to cover about \$25.8 million in costs for the 9 listed projects. These will likely need to be paid by the 4B sales tax, general fund, and/or a stormwater utility fee.

Regardless of the local funding mechanism used, general obligation bonds would need to be issued for the remaining project cost to the City. **Table 7-2** and **Table 7-3** show the resulting bond repayment options required to pay back the project costs.

Table 7-2: Conservative Scenario Debt Service

Bond Amount	\$73,591,983	\$73,591,983	\$73,591,983	\$73,591,983	\$73,591,983
Interest Rate¹	5.0%				
Repayment Period	10	15	20	25	30
Est. Annual Payment Required	\$9,530,498	\$7,090,020	\$5,905,211	\$5,221,532	\$4,787,264

¹Assumed interest rate by FNI

Table 7-3: Optimized Grant-Assisted Scenario Debt Service

Bond Amount	\$25,757,194	\$25,757,194	\$25,757,194	\$25,757,194	\$25,757,194
Interest Rate¹	5.0%				
Repayment Period	10	15	20	25	30
Est. Annual Payment Required	\$3,335,674	\$2,481,507	\$2,066,824	\$1,827,536	\$1,675,542

¹Assumed interest rate by FNI

7.12 CONCLUSION

FNI recommends that cost sharing with state and federal agencies be pursued strategically to maximize the amount of cost sharing across all the projects. The optimum scenario presented in **Table 7-1** can result in up to 75% cost savings to the City. Additional cost savings can be realized through the use of low-interest SRF loans through the TWDB. Any remaining costs will need to be paid for locally through issuing GO bonds. These GO bonds will then need to be paid back through the use of 4B sales tax, general fund, and/or a stormwater utility fee.

**APPENDIX A
CITY OF INGLESIDE DRAINAGE AREA MAP AND
EXISTING DRAINAGE CHANNELS MAP**





**FREASE
AND
NICHOLS**
800 N. Shoreline Blvd, Suite 1600N
Corpus Christi, Texas 78401
(P) 361-561-6500



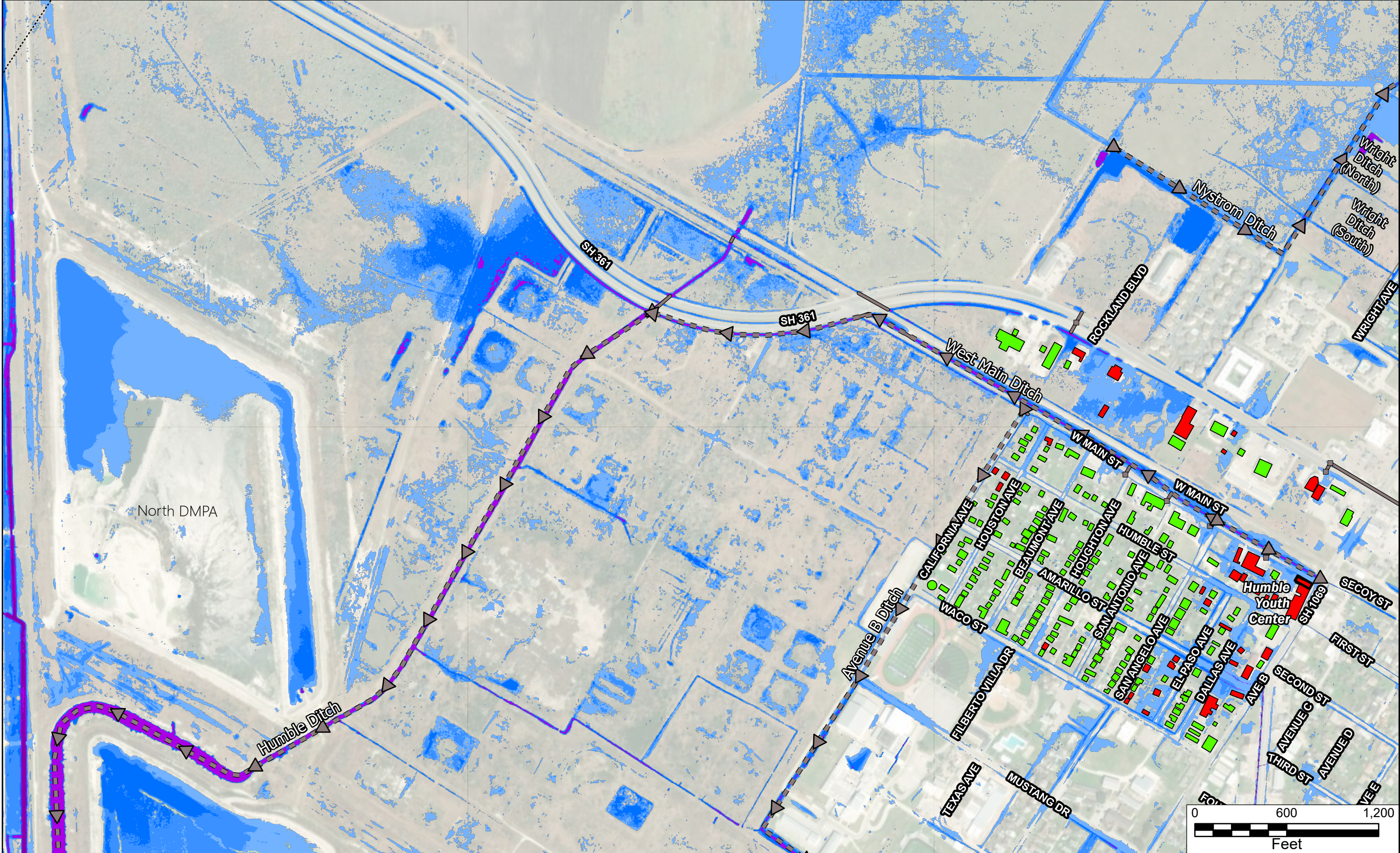
Existing Drainage Channels Map

Ingleside, Texas

FN JOB NO	ING21605
FILE	KB_Task4_ModelingStrategy
DATE	1/11/2024
SCALE	1:38,400
DRAFTED	08215

EXHIBIT
2

APPENDIX B INUNDATION MAPS



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)
< 6" (0.5')
6" - 12" (0.5' - 1.0')
12" - 18" (1.0' - 1.5')
18" - 30" (1.0' - 2.5')
30" - 60" (2.5' - 5.0')
60" - 91.2" (5.0' - 7.6')

Inundation Status
Not Inundated (0 - 0.5')
Potentially Inundated (> 0.5')

Existing Infrastructure
Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Proposed Infrastructure
Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Channel / Culvert Removal

Detention Pond

Ingleside City Limit

FIGURE
1A

ING21605

DATE CREATED

DATE: 2/28/2024

DTM & COORDINATE SYSTEM

NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

FILE NAME

PREPARED BY

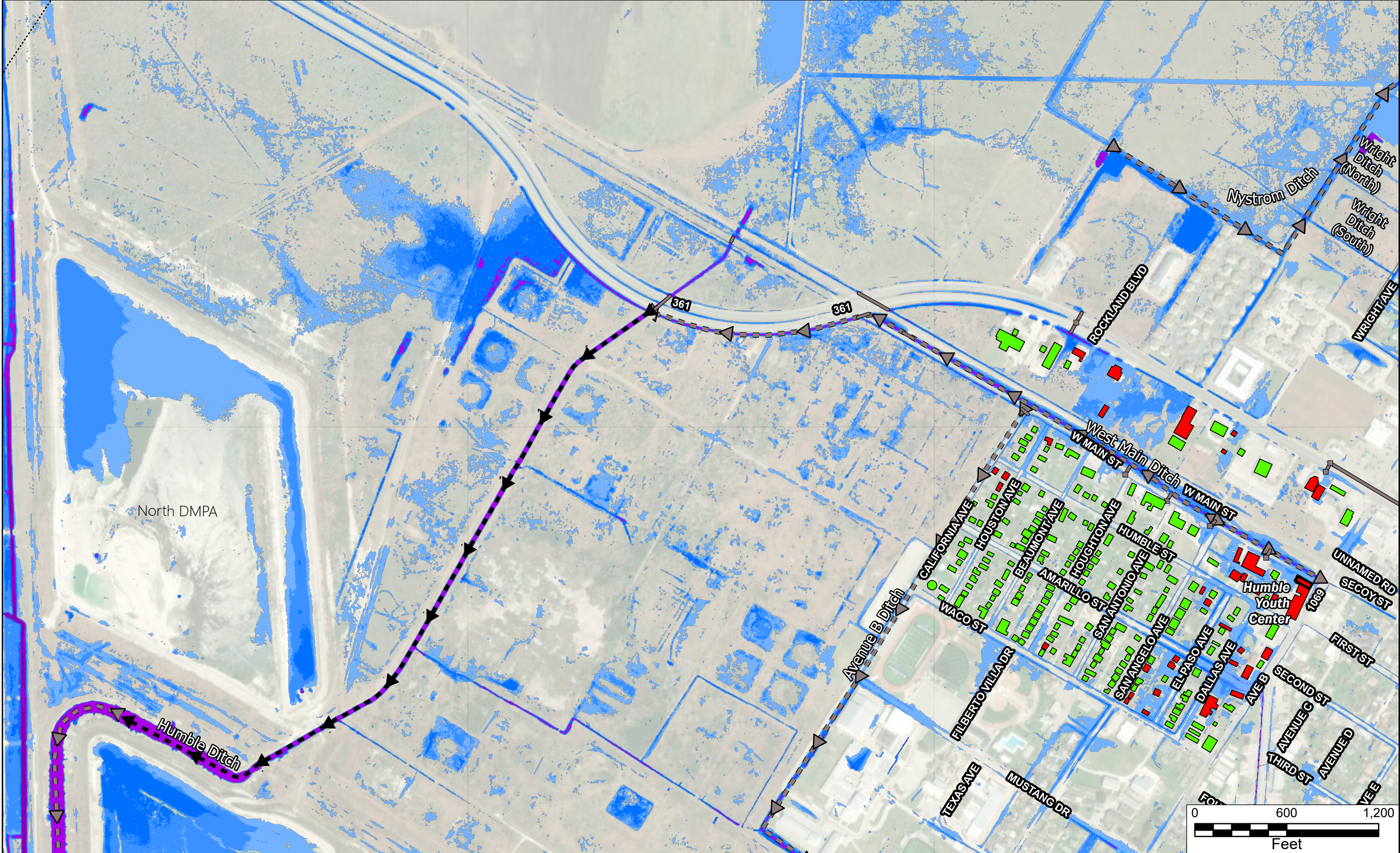
NAME: Ingleside2

EME

SITE 1: HUMBLE DITCH IMPROVEMENTS

EXISTING CONDITIONS INUNDATION MAP

FREES AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

< 6" (0.5')
6" - 12" (0.5' - 1.0')
12" - 18" (1.0' - 1.5')
18" - 30" (1.0' - 2.5')
30" - 60" (2.5' - 5.0')
60" - 91.2" (5.0' - 7.6')

Inundation Status

Not Inundated (0 - 0.5')
Potentially Inundated (> 0.5')

Existing Infrastructure

Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Proposed Infrastructure

Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Channel / Culvert Removal

Detention Pond

Ingleside City Limit

FIGURE
1B

ING21605

DATE CREATED: 2/28/2024

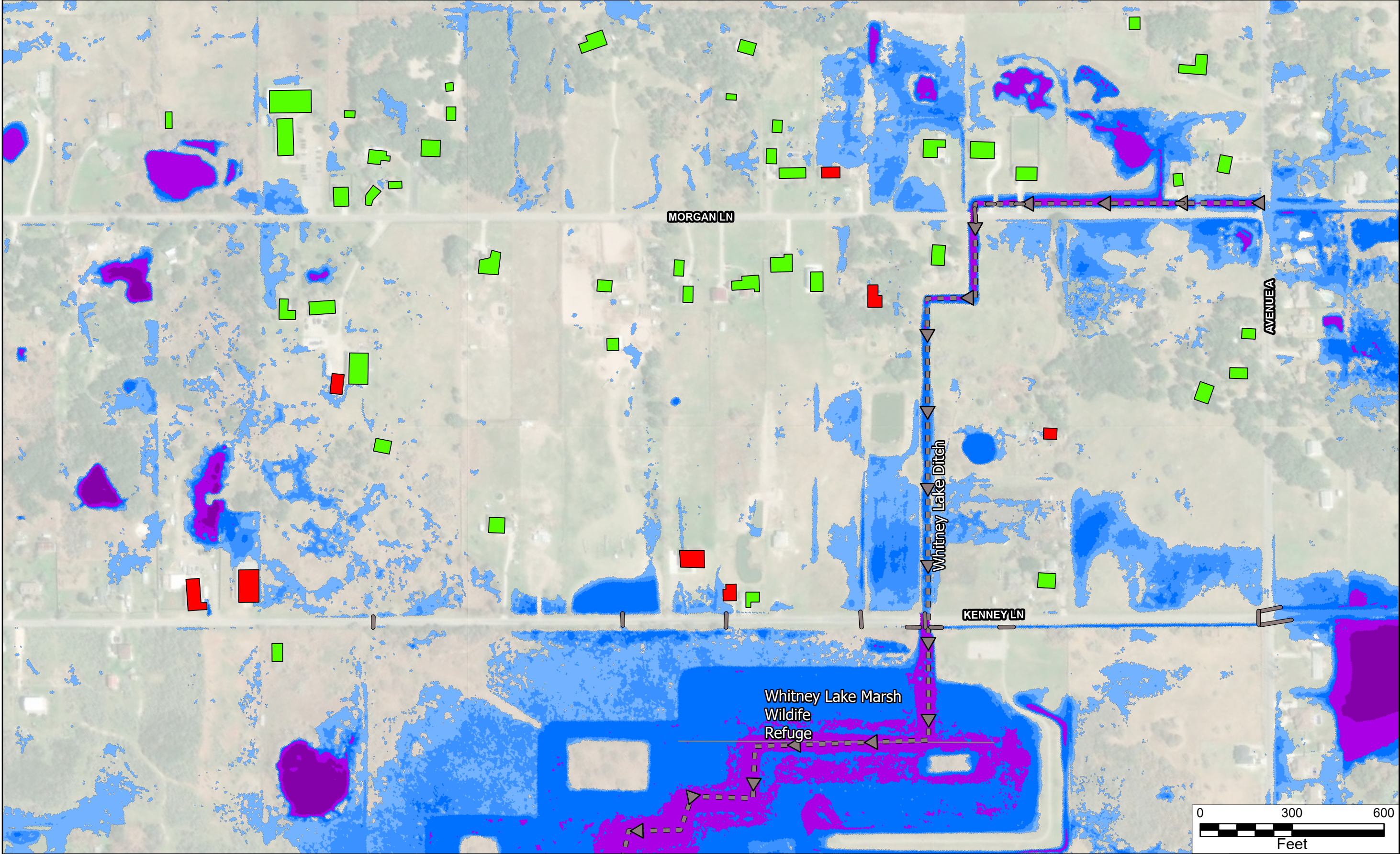
DYTIUM & COORDINATE SYSTEM: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

FILE NAME: PREPARED BY: EME

SITE 1: HUMBLE DITCH IMPROVEMENTS

PROPOSED IMPROVEMENTS INUNDATION MAP

FREESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Channel / Culvert Removal

Detention Pond

Ingleside City Limit

FIGURE
2A

PROJECT NO. INGS1605

DATE CREATED 2/28/2024

DATA & COORDINATE SYSTEM NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

FILE NAME

PREPARED BY Name: Ingleside2

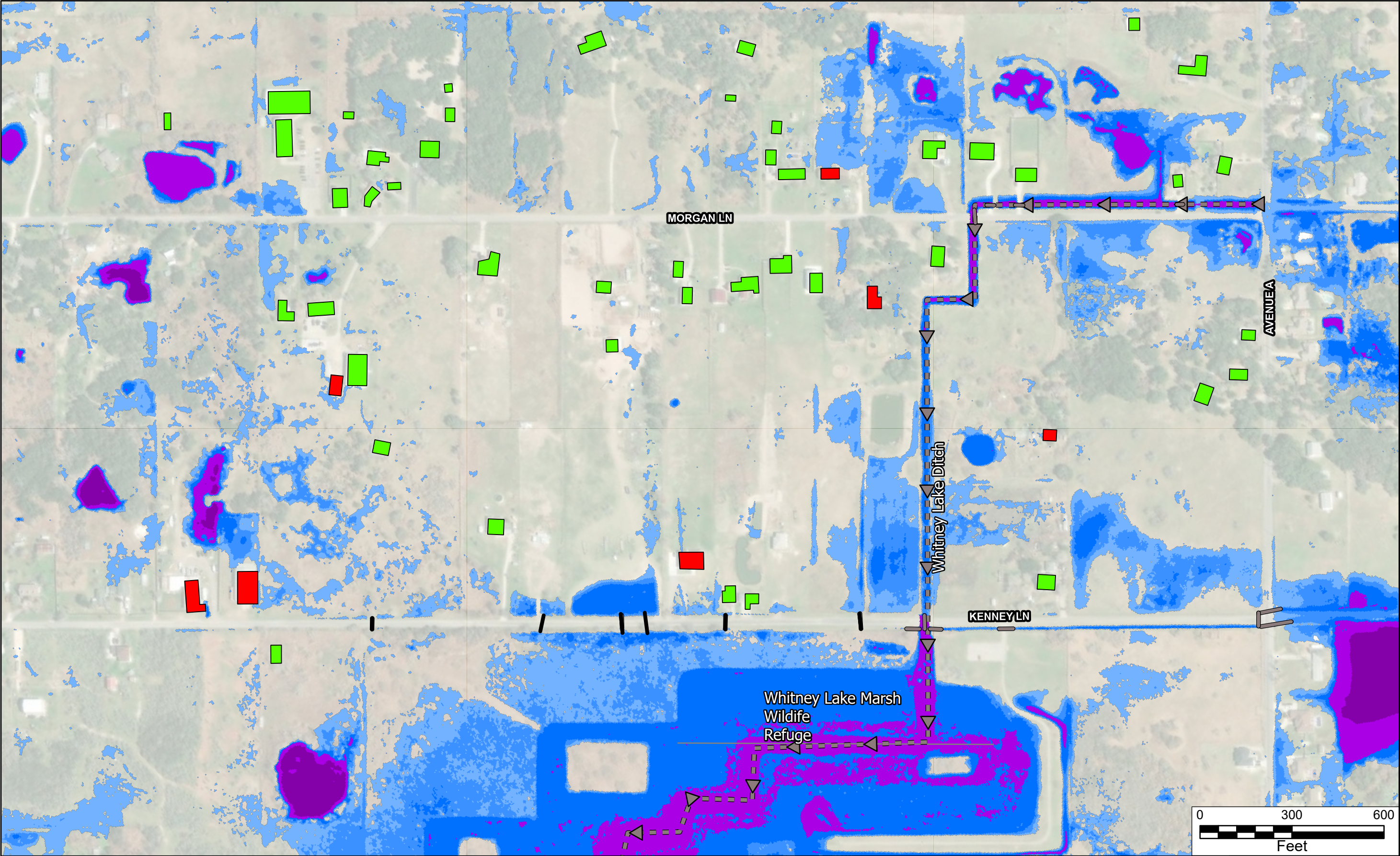
EME

SITE 3: KENNY LANE/WHITNEY LAKE

EXISTING CONDITIONS INUNDATION MAP

FRESE & NICHOLS

FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

- Channel / Culvert Removal
- Detention Pond

— Ingleside City Limit

FIGURE
2B

PROJECT NO. INGS21605

DATE CREATED Date: 2/28/2024

DATUM & COORDINATE SYSTEM NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

FILE NAME

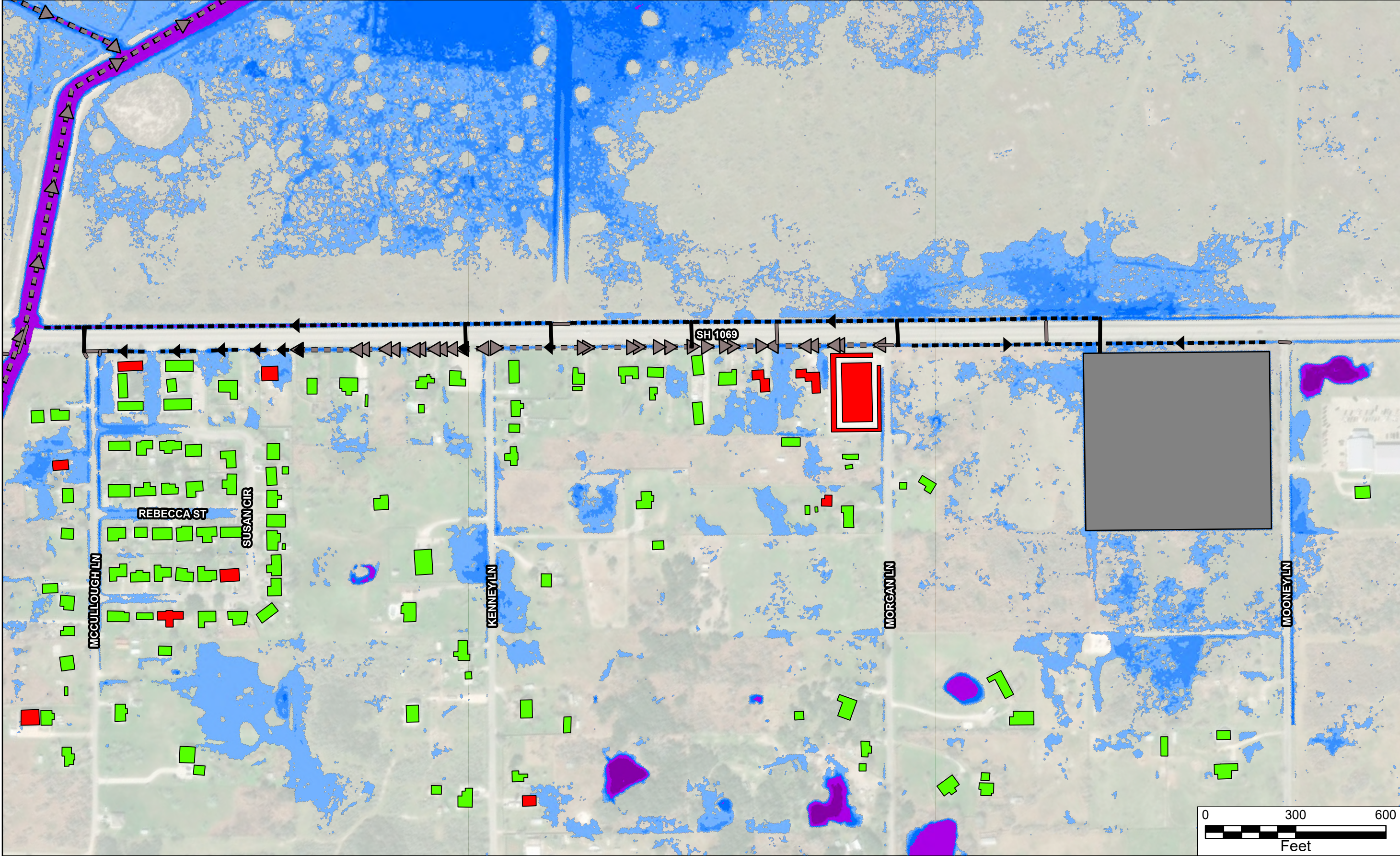
PREPARED BY Name: Ingleside2

ENR

SITE 3: KENNY LANE/WHITNEY LAKE

PROPOSED IMPROVEMENTS INUNDATION MAP

FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

- Channel Removal
- Detention Pond

Legend

- Ingliside City Limit



FIGURE
3B

FIGURE
3B

SITE 4: SH 1069 DRAINAGE IMPROVEMENT
MCCAMPBELL SLOUGH TO MOONEY LANE
PROPOSED IMPROVEMENTS INUNDATION MAP

PREPARED BY
INGLESIDE2

DATE CREATED
3/1/2024

DATE
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605

PREPARED BY
INGLESIDE2

DATE
3/1/2024

DATE CREATED
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605

PREPARED BY
INGLESIDE2

DATE
3/1/2024

DATE CREATED
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605

PREPARED BY
INGLESIDE2

DATE
3/1/2024

DATE CREATED
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605

PREPARED BY
INGLESIDE2

DATE
3/1/2024

DATE CREATED
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605

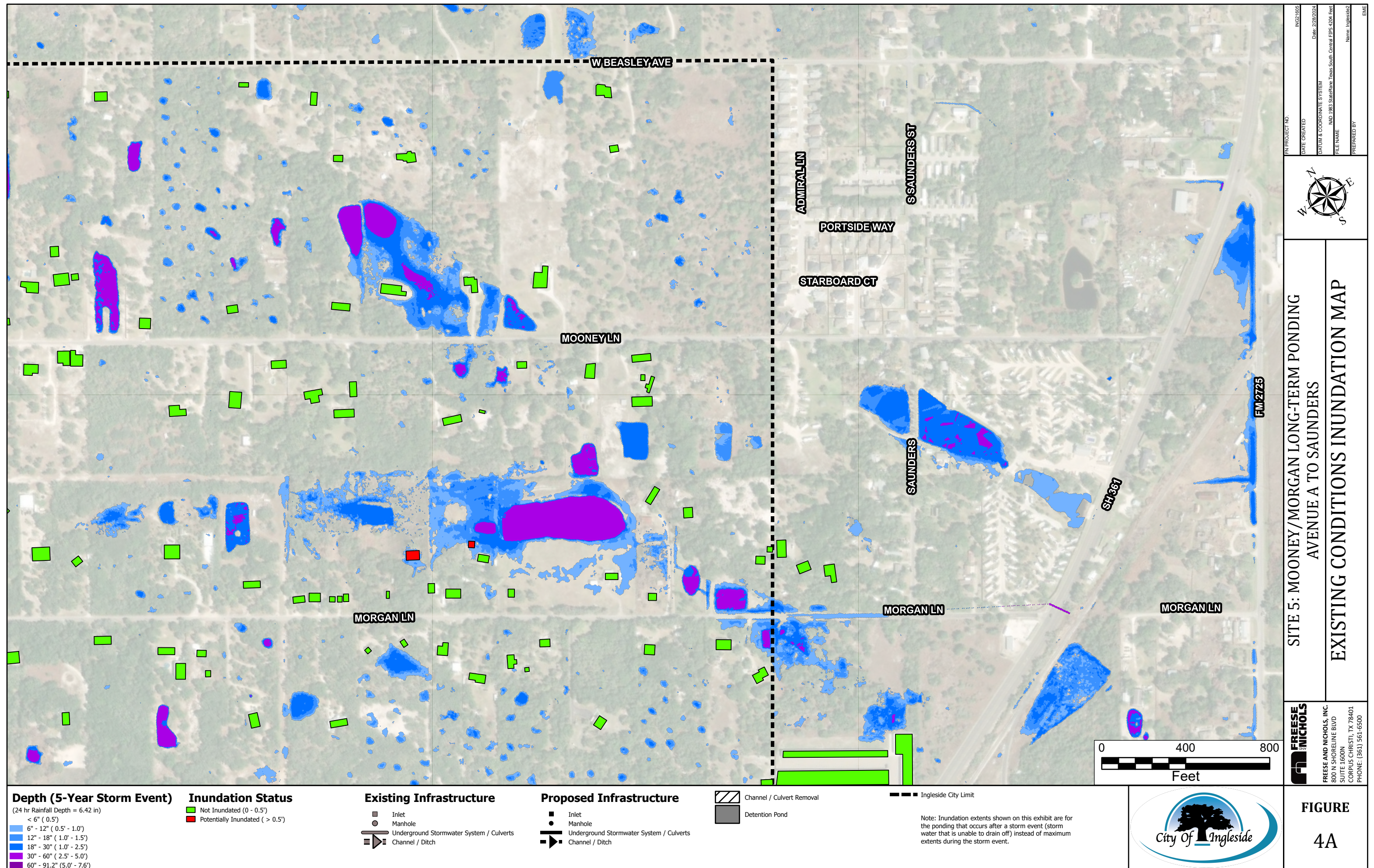
PREPARED BY
INGLESIDE2

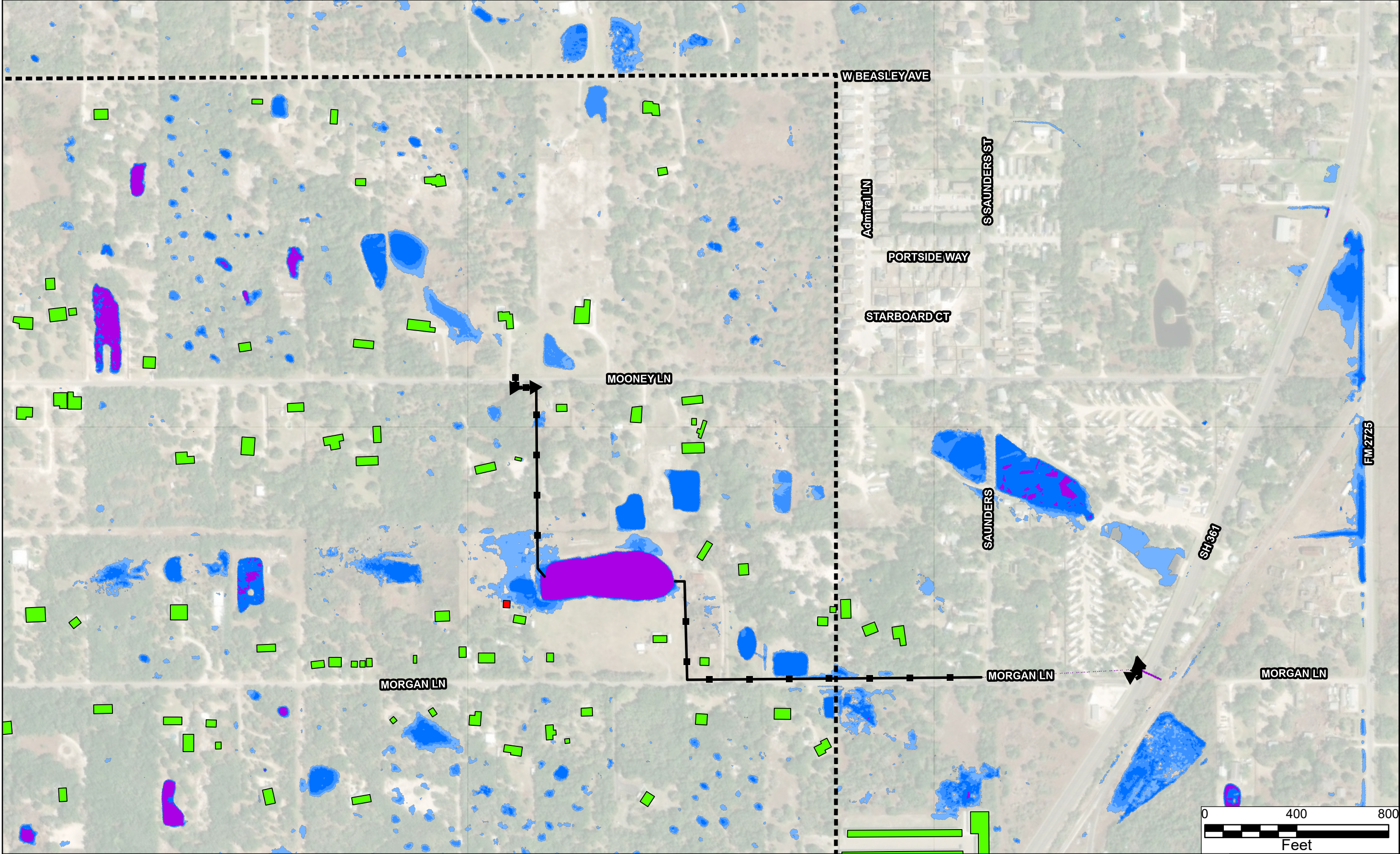
DATE
3/1/2024

DATE CREATED
3/1/2024

FILE NAME
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PROJECT NO.
ING21605





Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

- Channel / Culvert Removal
- Detention Pond

- Ingleside City Limit

Note: Inundation extents shown on this exhibit are for the ponding that occurs after a storm event (storm water that is unable to drain off) instead of maximum extents during the storm event.

FIGURE
4B

ING21605

DATE CREATED

DATE: 2/28/2024

DTM & COORDINATE SYSTEM

NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

FILE NAME

PREPARED BY

NAME: Ingleside2

EME

SITE 5: MOONEY/MORGAN LONG-TERM PONDING

AVENUE A TO SAUNDERS

PROPOSED IMPROVEMENTS INUNDATION MAP

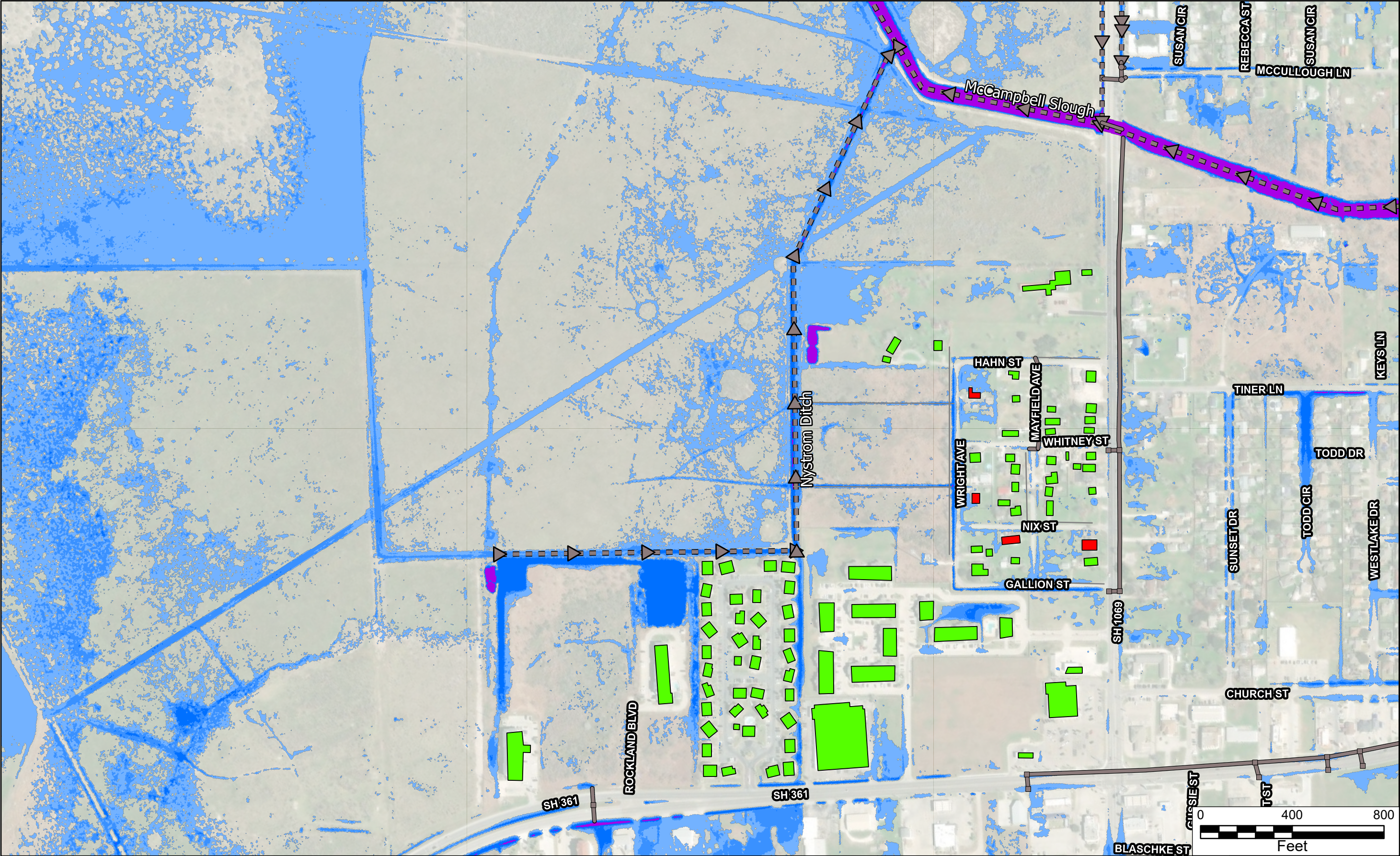
FRESE AND NICHOLS, INC.

800 N SHORELINE BLVD

SUITE 1600N

CORPUS CHRISTI, TX 78401

PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Channel / Culvert Removal

Detention Pond

Ingleside City Limit

FIGURE
5A

IR PROJECT NO. INGS1605

DATE CREATED Date: 2/28/2024

DATUM & COORDINATE SYSTEM NAD 1983 StatePlane Texas South Central FIPS 4304 Feet

FILE NAME

PREPARED BY Name: Ingleside2

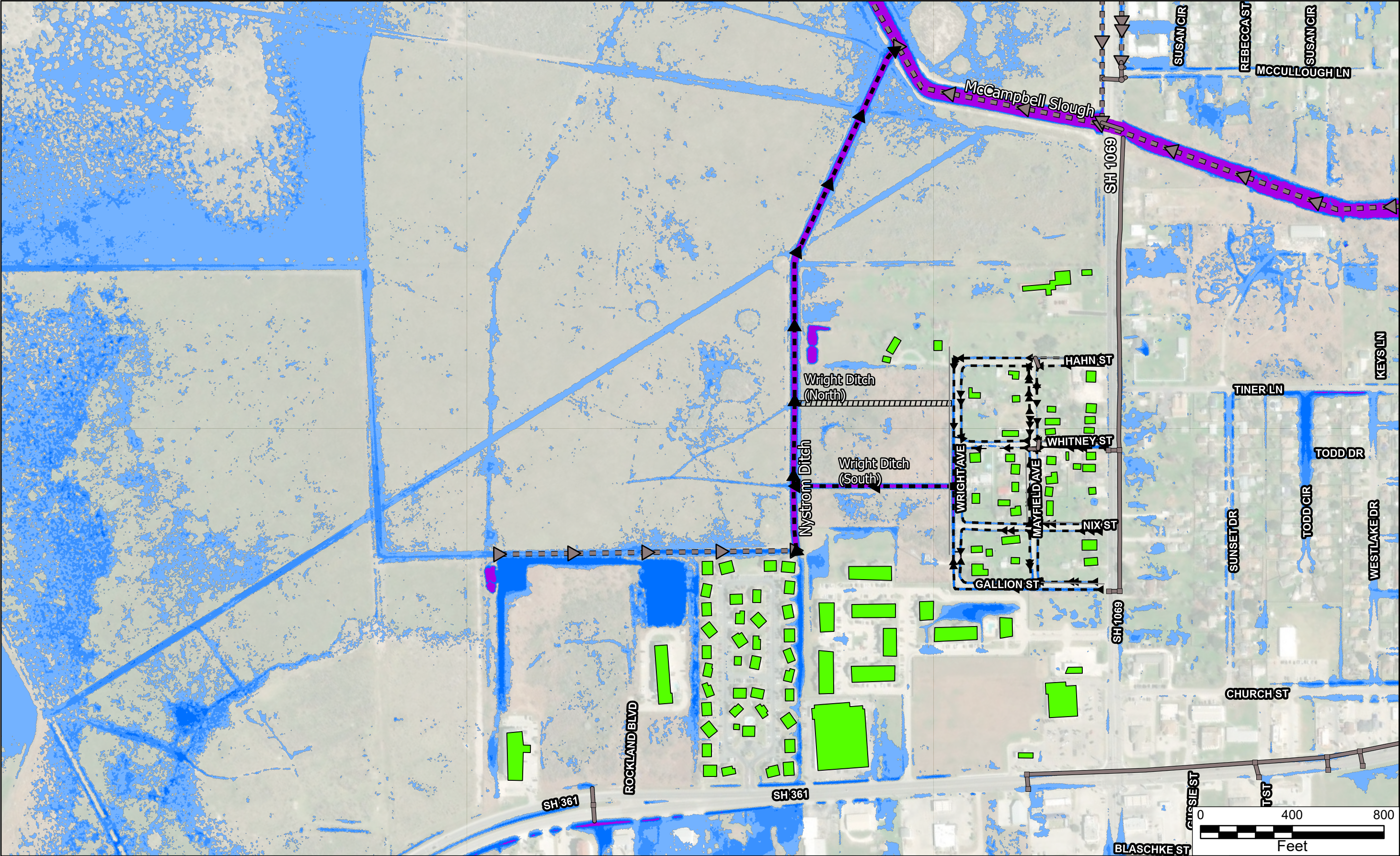
EME

SITE 6: NYSTROM ADDITION DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS INUNDATION MAP

FRESE AND NICHOLS

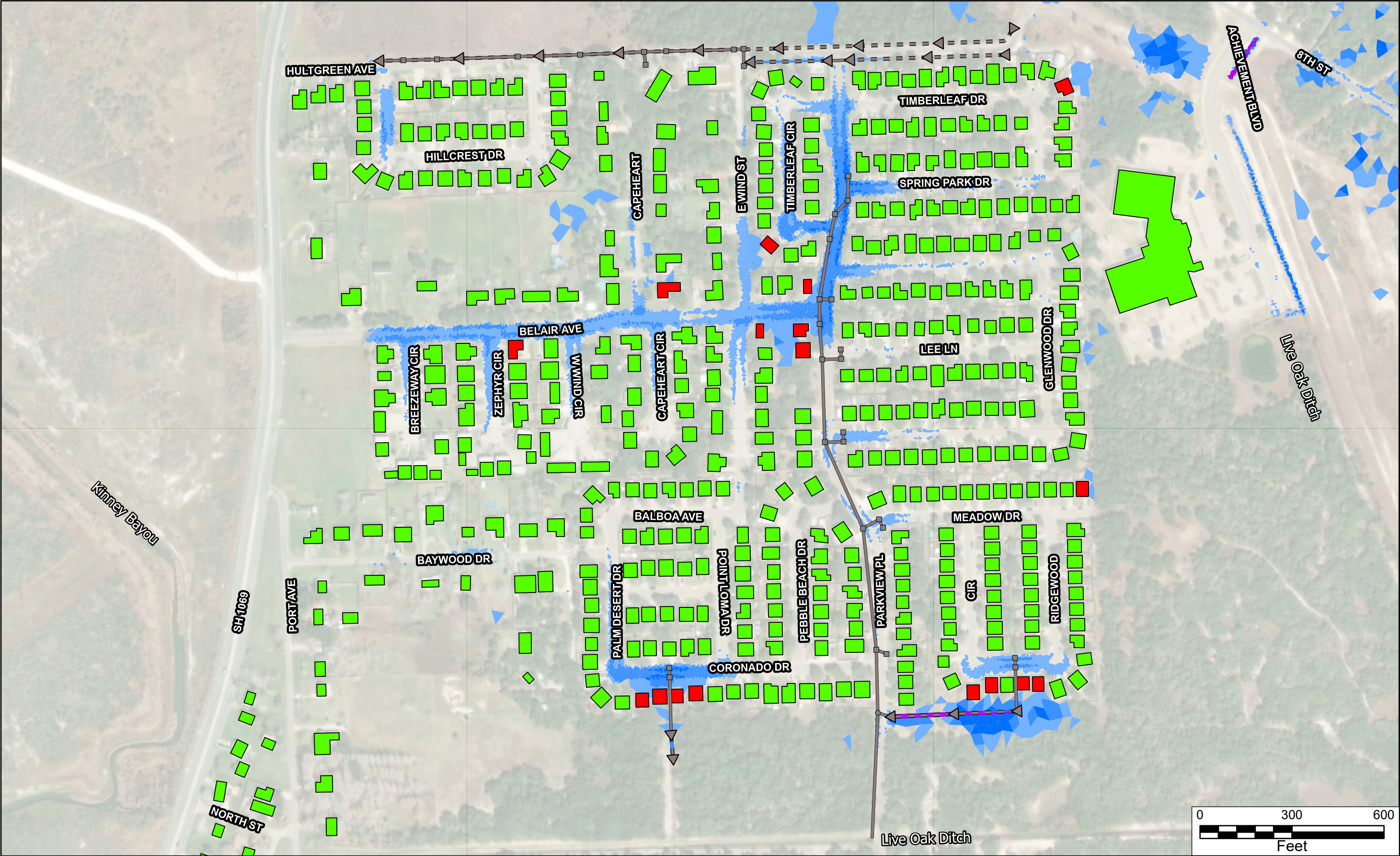
FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event) (24 hr Rainfall Depth = 6.42 in) 6" - 12" (0.5' - 1.0') 12" - 18" (1.0' - 1.5') 18" - 30" (1.0' - 2.5') 30" - 60" (2.5' - 5.0') 60" - 91.2" (5.0' - 7.6')	Inundation Status Not Inundated (0 - 0.5') Potentially Inundated (> 0.5')	Existing Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Proposed Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Channel / Culvert Removal Detention Pond	Ingeside City Limit
---	--	---	---	--	----------------------------

FIGURE 5B	
SITE 6: NYSTROM ADDITION DRAINAGE IMPROVEMENTS	
PROPOSED IMPROVEMENTS INUNDATION MAP	
IN PROJECT NO. INGS21605	
DATE CREATED Date: 2/28/2024	
DATUM & COORDINATE SYSTEM NAD 1983 StatePlane Texas South Central FIPS 4304 Feet	
FILE NAME	
PREPARED BY Name: Ingsides2	
EML	

FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



IN PROJECT NO.	ING21605
DATE CREATED	Date: 2/28/2024
DATUM & COORDINATE SYSTEM	NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
FILE NAME	Name: Ingleside2
PREPARED BY	EME



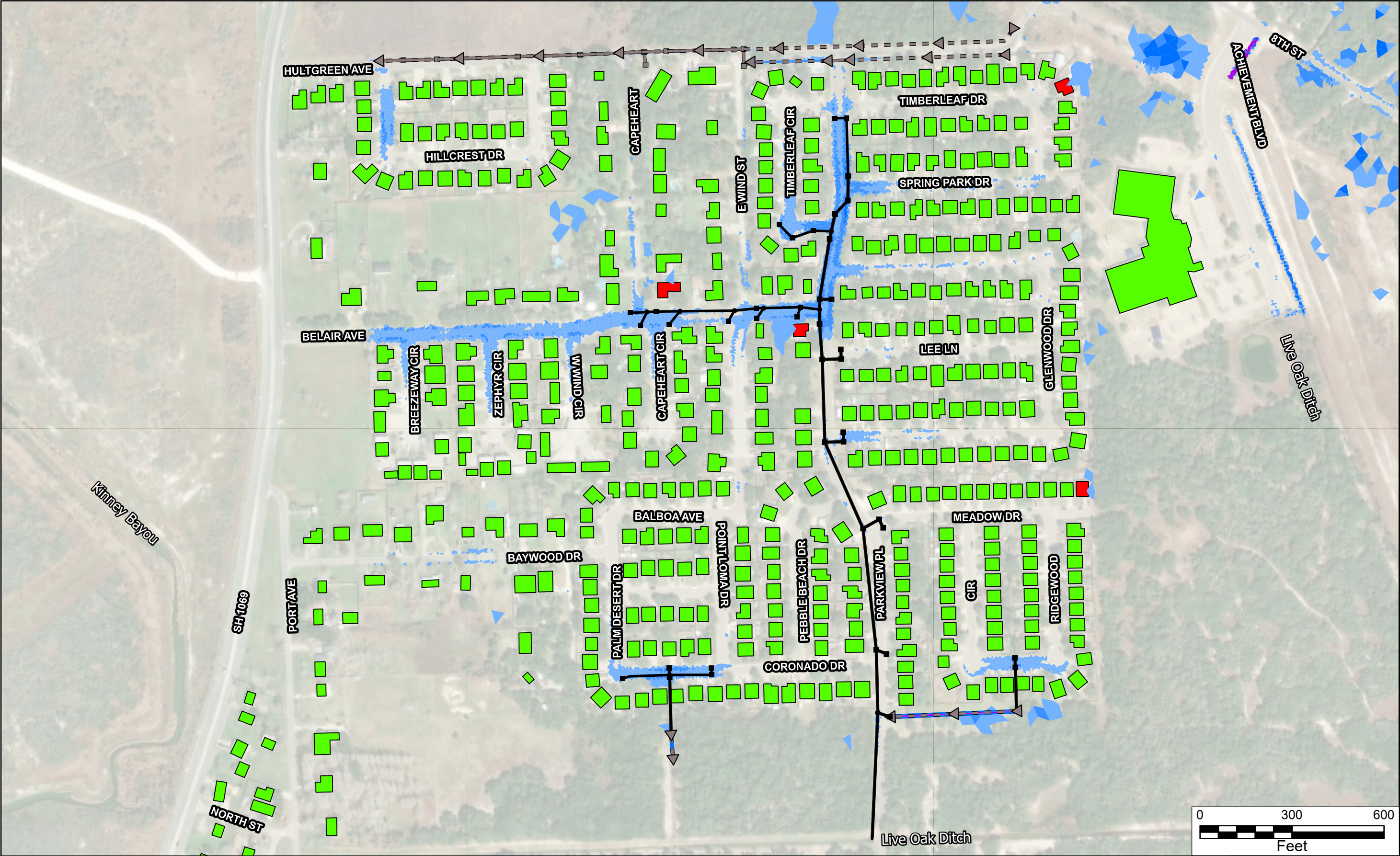
SITE 7: PARKSIDE TERRACE SUBDIVISION
DRAINAGE IMPROVEMENTS
EXISTING CONDITIONS INUNDATION MAP

FRESE & NICHOLS
FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500

Depth (5-Year Storm Event) (24 hr Rainfall Depth = 6.42 in) < 6" (0.5') 6" - 12" (0.5' - 1.0') 12" - 18" (1.0' - 1.5') 18" - 30" (1.0' - 2.5') 30" - 60" (2.5' - 5.0') 60" - 91.2" (5.0' - 7.6')	Inundation Status Not Inundated (0 - 0.5') Potentially Inundated (> 0.5')	Existing Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Proposed Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Channel / Culvert Removal Detention Pond	Ingleside City Limit
---	--	---	---	---	----------------------



FIGURE
6A

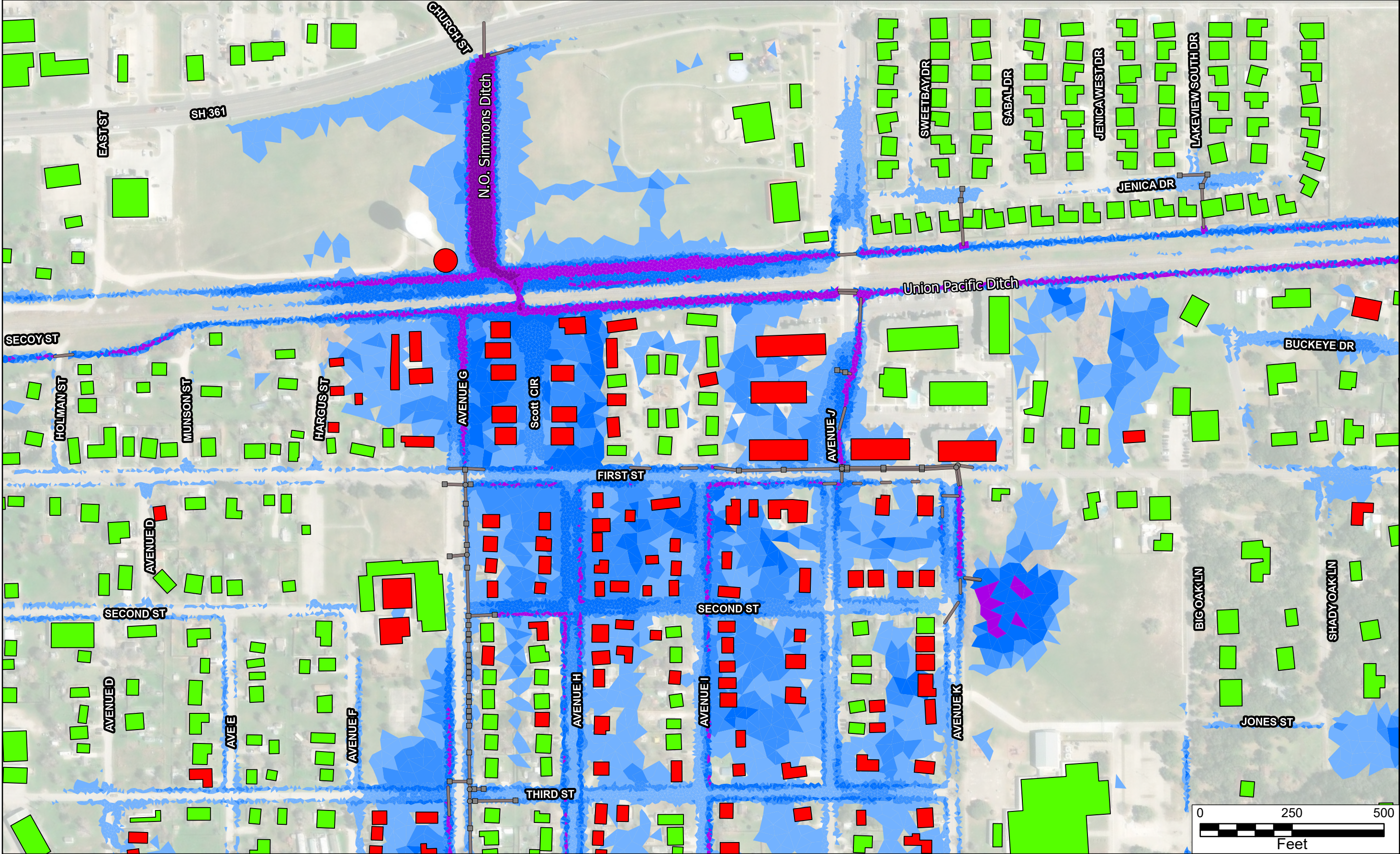


Depth (5-Year Storm Event) (24 hr Rainfall Depth = 6.42 in) < 6" (0.5') 6" - 12" (0.5' - 1.0') 12" - 18" (1.0' - 1.5') 18" - 30" (1.0' - 2.5') 30" - 60" (2.5' - 5.0') 60" - 91.2" (5.0' - 7.6')	Inundation Status Not Inundated (0 - 0.5') Potentially Inundated (> 0.5')	Existing Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Proposed Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Channel / Culvert Removal Detention Pond	Ingleside City Limit
---	--	---	---	---	----------------------

FIGURE 6B

FIGURE 6B	SITE 7: PARKSIDE TERRACE SUBDIVISION DRAINAGE IMPROVEMENTS PROPOSED IMPROVEMENTS INUNDATION MAP	 N W E S	ING21605 DATE CREATED: 2/28/2024 DATUM & COORDINATE SYSTEM: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet FILE NAME: Name: Ingleside2 PREPARED BY: EME
------------------	--	----------------	---

FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

- Channel / Culvert Removal
- Detention Pond

- Ingleside City Limit

FIGURE
7A

SITE 8: VILLANOVA PLACE DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS INUNDATION MAP

PREPARED BY
ING21605

DATE CREATED
2/28/2024

DATUM & COORDINATE SYSTEM
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

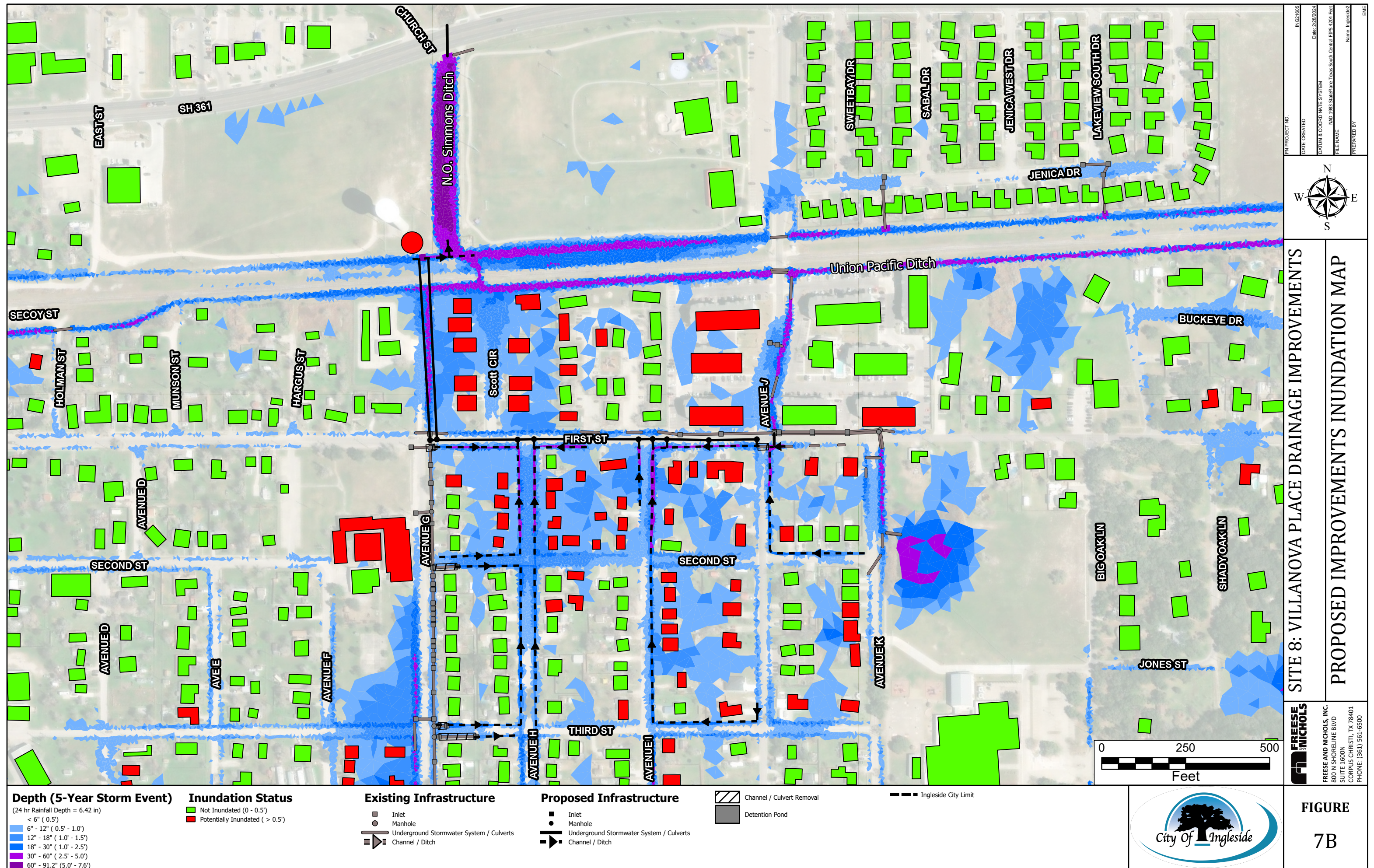
FILE NAME
ING21605

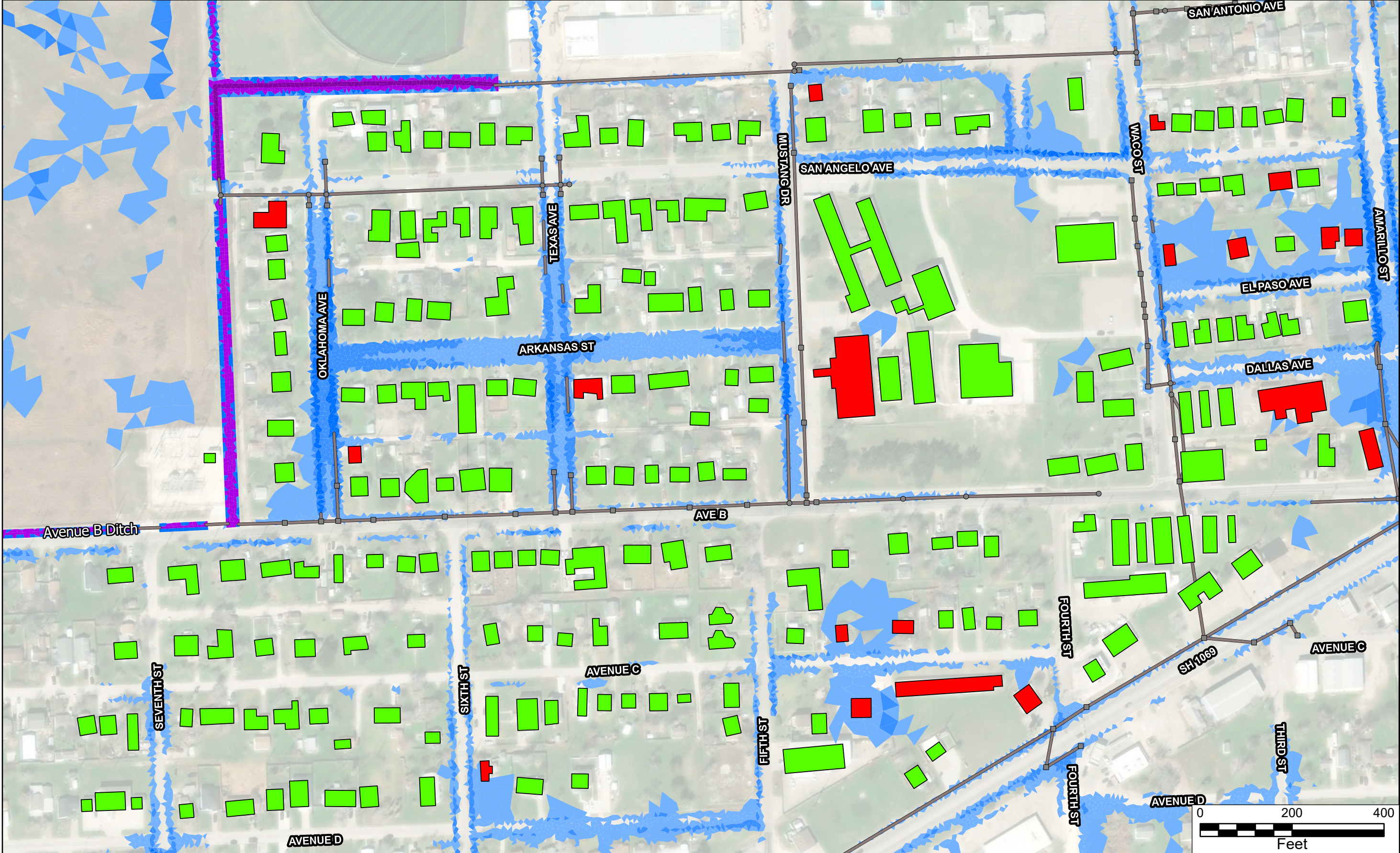
NAME
ING21605

PHONE
561-6500

FREESE & NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401

FIGURE
7A





Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

< 6" (0.5')
6" - 12" (0.5' - 1.0')
12" - 18" (1.0' - 1.5')
18" - 30" (1.0' - 2.5')
30" - 60" (2.5' - 5.0')
60" - 91.2" (5.0' - 7.6')

Inundation Status

Not Inundated (0 - 0.5')
Potentially Inundated (> 0.5')

Existing Infrastructure

Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Proposed Infrastructure

Inlet
Manhole
Underground Stormwater System / Culverts
Channel / Ditch

Channel / Culvert Removal

Channel / Culvert Removal
Detention Pond

Legend

Ingleside City Limit

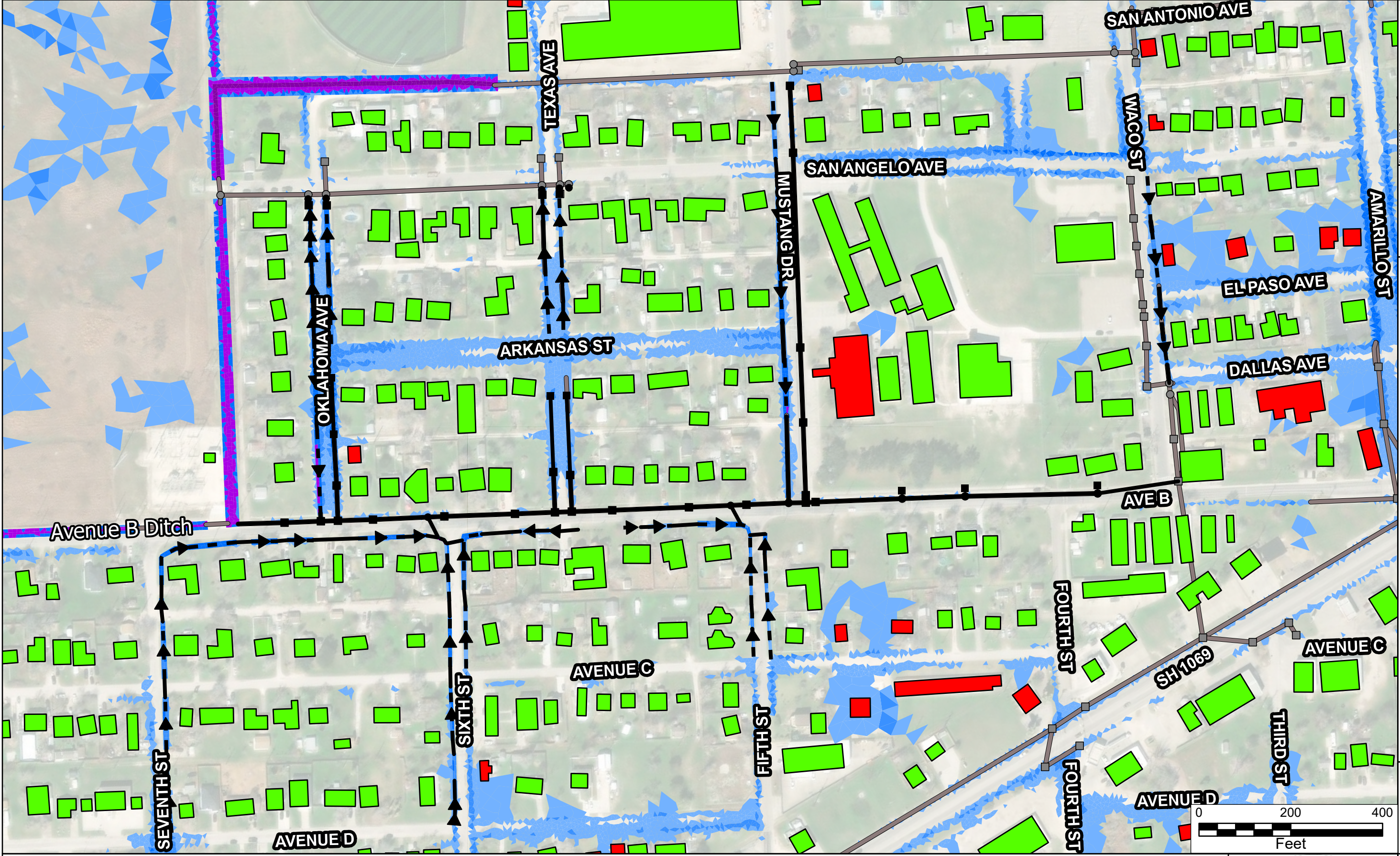
FIGURE 8A

SITE 9: HUMBLE ADDITION AND AVENUE B DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS INUNDATION MAP

DATE CREATED: 2/28/2024
DATE: 2/28/2024
DRAWN & COORDINATE SYSTEM: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
FILE NAME: INGS21605
PREPARED BY: NAME: Ings21605
ENGINEER: EME

FRESE & NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



Depth (5-Year Storm Event)
(24 hr Rainfall Depth = 6.42 in)

- < 6" (0.5')
- 6" - 12" (0.5' - 1.0')
- 12" - 18" (1.0' - 1.5')
- 18" - 30" (1.0' - 2.5')
- 30" - 60" (2.5' - 5.0')
- 60" - 91.2" (5.0' - 7.6')

Inundation Status

- Not Inundated (0 - 0.5')
- Potentially Inundated (> 0.5')

Existing Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Proposed Infrastructure

- Inlet
- Manhole
- Underground Stormwater System / Culverts
- Channel / Ditch

Channel / Culvert Removal

Detention Pond

--- Ingleside City Limit

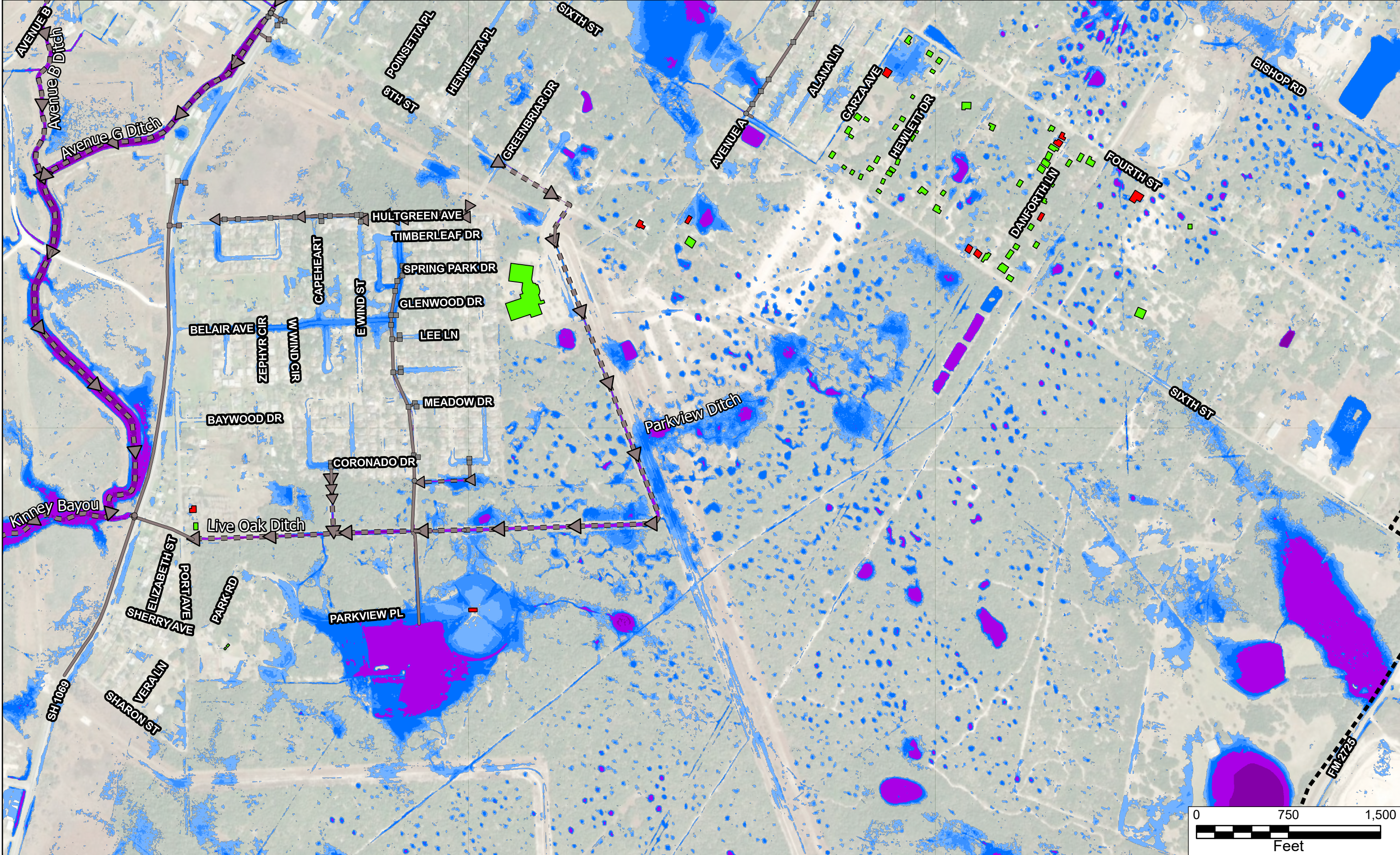
FIGURE 8B

SITE 9: HUMBLE ADDITION AND AVENUE B DRAINAGE IMPROVEMENTS

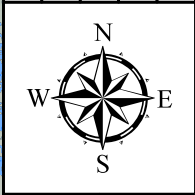
PROPOSED IMPROVEMENTS INUNDATION MAP

DATE CREATED: 2/28/2024
DRAWN & COORDINATE SYSTEM: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
FILE NAME: Ings21605
PREPARED BY: EME

FREESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500



IN PROJECT NO. INGS1605
DATE CREATED Date: 2/28/2024
DATUM & COORDINATE SYSTEM NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
FILE NAME
PREPARED BY Name: Ingleside2
EME



SITE 10: LIVE OAK DITCH
EXISTING CONDITIONS INUNDATION MAP

FRESE AND NICHOLS
FRESE AND NICHOLS, INC.
800 N SHORELINE BLVD
SUITE 1600N
CORPUS CHRISTI, TX 78401
PHONE: (361) 561-6500

Depth (5-Year Storm Event) (24 hr Rainfall Depth = 6.42 in) < 6" (0.5') 6" - 12" (0.5' - 1.0') 12" - 18" (1.0' - 1.5') 18" - 30" (1.0' - 2.5') 30" - 60" (2.5' - 5.0') 60" - 91.2" (5.0' - 7.6')	Inundation Status Not Inundated (0 - 0.5') Potentially Inundated (> 0.5')	Existing Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Proposed Infrastructure Inlet Manhole Underground Stormwater System / Culverts Channel / Ditch	Channel Removal Detention Pond	Ingleside City Limit
--	--	---	---	-----------------------------------	----------------------

FIGURE 9A

APPENDIX C ONE-PAGE CIP SUMMARY SHEETS



City of Ingleside

Capital Improvements Plan



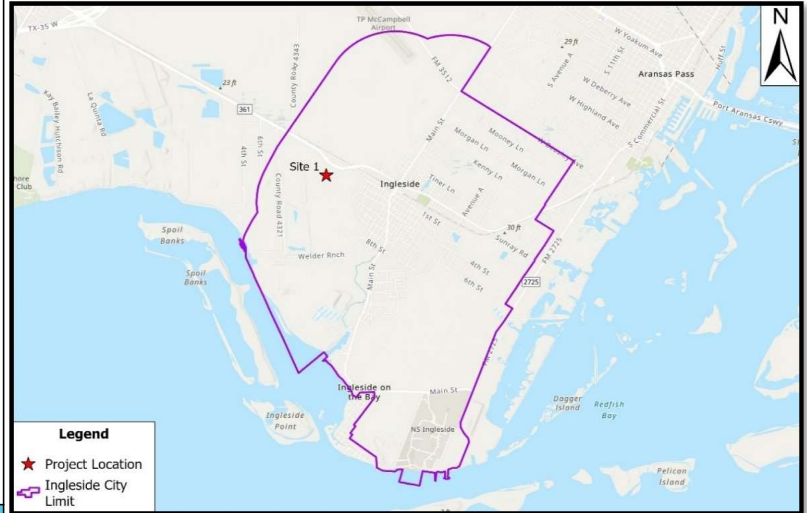
Project Summary Information:

Project ID:	1	Date:	3/5/2024
Project Name:	Site 1: Humble Ditch Improvements		
Project Type:	Channel	# Structures Impacted Pre-Project:	37
Easements Required?	No	# Structures Impacted Post-Project:	36

Existing Problem:

West Main Street experiences flooding that overtops the road and limits access to and from the adjacent business, including the Humble Youth Center, during even the smaller storm events. City staff has indicated that cars driving along West Main Street cause waves that send water into the Humble Youth Center building. Flooding issues in the West Main Street area are exacerbated due to backflow in the upstream section of the Humble Ditch. Water near the Humble Youth Center also seems to be relatively isolated from the drainage systems which causes lack of flow and ponding along West Main Street. These flooding issues can result in road and building damage.

Design Improvements Schematic:



Project Cost Information:

Design	\$1,334,073
Permitting	\$0
Construction	\$8,893,815
Total	\$10,227,900

Proposed Improvements:

Improve approximately 5000 linear feet of the Humble Ditch, including regrading the ditch from the south edge of SH 361 to approximately halfway between the Dredge Material Placement Area (DMPA) cells, and concrete lining the channel. These improvements will allow the Humble ditch to flow in the original intended direction and relieve some ponding in between SH 361 and West Main Street. The proposed improvements do not entirely prevent ponding along West Main Street, but improving the drainage downstream of the problem area does reduce the amount of time ponding occurs along West Main Street. Based on existing conditions, improving the Humble Ditch cannot entirely alleviate the flooding at the Humber Youth Center, so flood protection systems for the building itself should be considered to prevent water damage to the building.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 1
- Reduction in Flood Depth: 2.64 inches
- Impassible Road Length (>5" Depth) Reduction: 369 feet



Notes:

The San Patricio County Drainage District (SPCDD) is responsible for channel maintenance and improvements on the Humble Ditch; project coordination with SPCDD will be required. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. Several oil and gas pipelines and a major water transmission line cross the Humble Ditch at unknown depths. Coordination with the private and public pipeline owners will be required during project development and construction. No permitting requirements are anticipated.

Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	2
0.25	Property Damage	5
0.20	Road Level of Service	0
0.15	Planning Linkages	5
0.10	Project Cost	1
Total Weighted Point Score:		2.70
CIP Rank:		6



City of Ingleside

Capital Improvements Plan



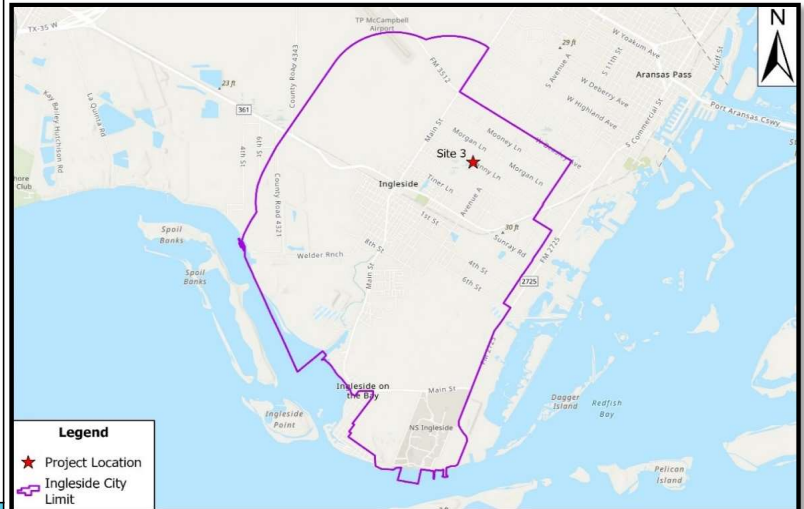
Project Summary Information:

Project ID: 2 Date: 3/5/2024
 Project Name: Site 3: Kenny Lane/Whitney Lake Infrastructure
 Project Type: Storm Sewer # Structures Impacted Pre-Project: 8
 Easements No # Structures Impacted Post-Project: 7
 Required?

Existing Problem:

Residential properties along Kenny Lane are flooding during even small storm events. Additionally, Kenny Lane experiences roadway overtopping during the 100-year or larger storm events. There are no existing roadside ditches and only one property on Kenny Lane has a driveway culvert. Existing cross culverts are limited and undersized due to lack of cover. Flooding events can limit residents' ability to leave their homes, pose a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation.

Design Improvements Schematic:



Project Cost Information:

Design	\$372,923
Permitting	\$0
Construction	\$2,486,150
Total	\$2,859,100

Proposed Improvements:

Proposed improvements in the Kenny Lane Construction Plans provided by the City were modeled. This includes approximately 440 linear feet of 15" reinforced concrete pipe (RCP) culverts along Kenny Lane to provide flow from the north side to the south side of Kenny Lane. Additional alternatives were analyzed to determine if further improvements were warranted, but none proved to be substantially more effective than the improvements already included in the Kenny Lane Construction Plans.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 1
- Reduction in Flood Depth: 2.64 inches
- Impassible Road Length (>5" Depth) Reduction: 0 feet



Notes:

The proposed improvements have already been incorporated into the Kinney Lane Construction Plans. No utility conflicts are anticipated, and no drainage easement acquisition or permitting is required.

Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	3
0.25	Property Damage	2
0.20	Road Level of Service	3
0.15	Planning Linkages	5
0.10	Project Cost	2
	Total Weighted Point Score:	2.96
	CIP Rank:	3



City of Ingleside

Capital Improvements Plan



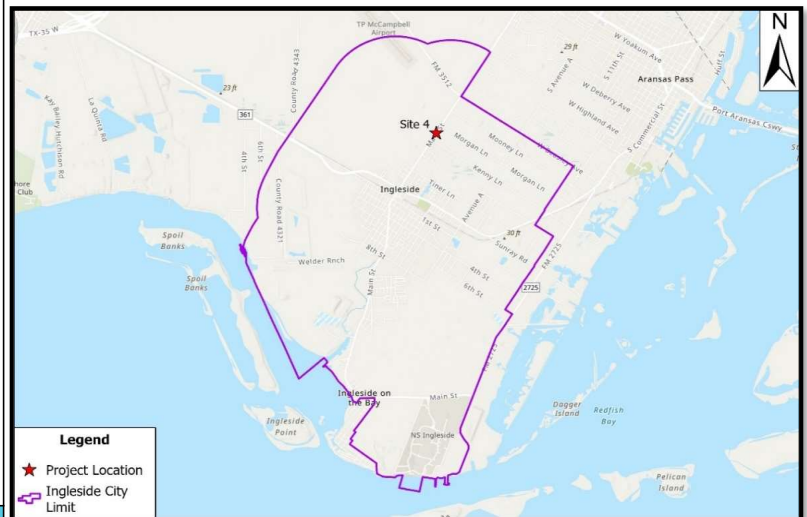
Project Summary Information:

Project ID: 3 Date: 3/5/2024
Project Name: Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane
Project Type: Storm Sewer, Channel, & Detention # Structures Impacted Pre-Project: 16
Easements
Required? Yes # Structures Impacted Post-Project: 12

Existing Problem:

State Highway 1069 (SH 1069) is acting as a barrier that causes water surface elevations to rise on the east side of the highway, resulting in inundation of properties east of SH 1069 between McCampbell Slough and Mooney Lane. The ponding caused by the road can lead to lack of accessibility to the properties in the area, pose a safety concern if emergency services are unable to safely access inundated properties, and could potentially result in damage to structures. Existing cross culverts and roadside ditches on either side of SH 1069 do not have enough capacity to efficiently move flow to McCampbell Slough.

Design Improvements Schematic:



Project Cost Information:

Design	\$2,063,421
Permitting	\$50,000
Construction	\$13,756,136
Total	\$15,869,600

Proposed Improvements:

Construct approximately 3452 linear feet of 4-ft bottom width, concrete-lined roadside ditch along the west side of SH 1069 and 1610 linear feet of 3-ft bottom width grass-lined ditch improvements along the east side. Culverts to move water from east to west of SH 1069 will be placed in strategic locations. Ditches on the east side of the road will be graded to send flow to the cross culverts. The west ditch will be graded to send flow from the cross culverts to McCampbell Slough. A detention pond is also recommended on the corner of SH 1069 and Mooney Lane due to the general lack of flow in the area. A gravity drained detention pond would not be deep enough to provide significant drainage benefits; therefore, a pumped detention pond is proposed for this site.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 4
- Reduction in Flood Depth: 4.56 inches
- Impassible Road Length (>5" Depth) Reduction: 22 feet



Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	2
0.25	Property Damage	3
0.20	Road Level of Service	5
0.15	Planning Linkages	0
0.10	Project Cost	1
	Total Weighted Point Score:	2.45
	CIP Rank:	7

Notes:

Coordination with and project approval by TxDOT will be required. Land acquisition for the proposed detention pond will be required. Need to confirm during design that proposed improvements along SH 1069 can be constructed within the TxDOT ROW, or if additional drainage easements will need to be obtained from adjacent property owners. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. A USACE Nationwide Permit (NWP 43) may be required for this project and should be confirmed during final design. Phasing of this project could be considered starting with the most downstream portions of the project.

- Phase 1 – Roadside ditch improvements and culverts crossing SH 1069
- Phase 2 – Detention pond



City of Ingleside

Capital Improvements Plan



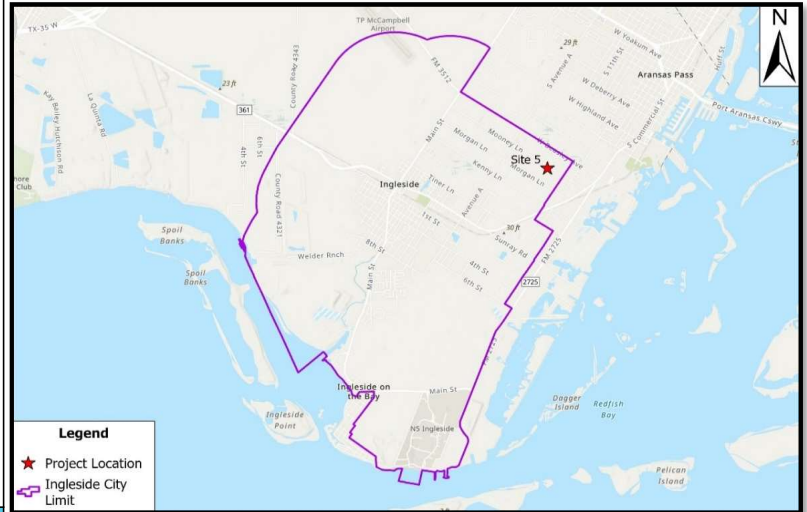
Project Summary Information:

Project ID: 4 Date: 3/5/2024
Project Name: Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street
Project Type: Storm Sewer and Channel # Structures Impacted Pre-Project: 3
Easements # Structures Impacted Post-Project: 3
Required? Yes

Existing Problem:

Stormwater is ponding on residential lots on both sides of Mooney Lane between Avenue A and South Saunders Street. Water stands on the lots for extended periods of time even after most areas have drained. This creates potential health concerns and inconveniences for nearby homeowners.

Design Improvements Schematic:



Project Cost Information:

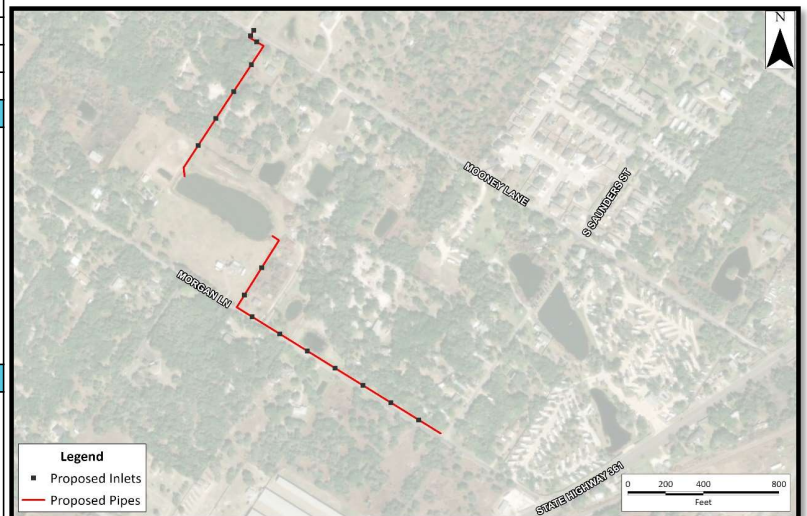
Design	\$133,006
Permitting	\$0
Construction	\$886,703
Total	\$1,019,800

Proposed Improvements:

Construct approximately 2585 linear feet of 15" PVC pipe to connect flow from the ponded areas north of Mooney Lane to the existing pond south of Mooney Lane. An outfall pipe will be added to the pond south of Mooney Lane, which will drain to an existing TxDOT or City of Aransas Pass inlet near the intersection of Morgan Lane and South Saunders Street, which appears to drain along Morgan Lane to a TxDOT culvert under SH 361. Grate or post inlets will be installed along the new pipes at an interval of 175 ft to help drain the area.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 0
 - Reduction in Flood Depth: 19.32 inches
 - Impassible Road Length (>5" Depth) Reduction: 113 feet
- NOTE: These values are based on model results for the ponding that occurs after a storm event (storm water that is unable to drain off) instead of maximum extents during the storm event.



Summary of Project Benefits:

Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	5
0.25	Property Damage	2
0.20	Road Level of Service	1
0.15	Planning Linkages	0
0.10	Project Cost	2
	Total Weighted Point Score:	2.40
	CIP Rank:	8

Notes:

To achieve the proposed improvements, drainage easements across private properties will be required. The proposed system ties into existing TxDOT or Aransas Pass infrastructure. Therefore, coordination with and project approval by TxDOT or Aransas Pass will be required. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. No permitting requirements are anticipated.



City of Ingleside

Capital Improvements Plan



Project Summary Information:

Project ID: 5 Date: 3/5/2024
Project Name: Site 6: Nystrom Addition Drainage Improvements
Project Type: Storm Sewer and Channel # Structures Impacted Pre-Project: 4
Easements # Structures Impacted Post-Project: 0
Required? Yes

Existing Problem:

Residential properties in the Nystrom Addition neighborhood are flooding during even small storm events. Additionally, the neighborhood streets (Gallion Street, Wright Avenue, Hahn Street, Whitney Street, Nix Street, and Mayfield Avenue) experience overtopping during storm events. Existing roadside ditches throughout the neighborhood do not have enough capacity to efficiently move flow to the outfall ditches to the west, and the outfall ditches are also undersized. These instances of flooding can limit residents' ability to leave their homes during a flood event, pose a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation.

Design Improvements Schematic:



Project Cost Information:

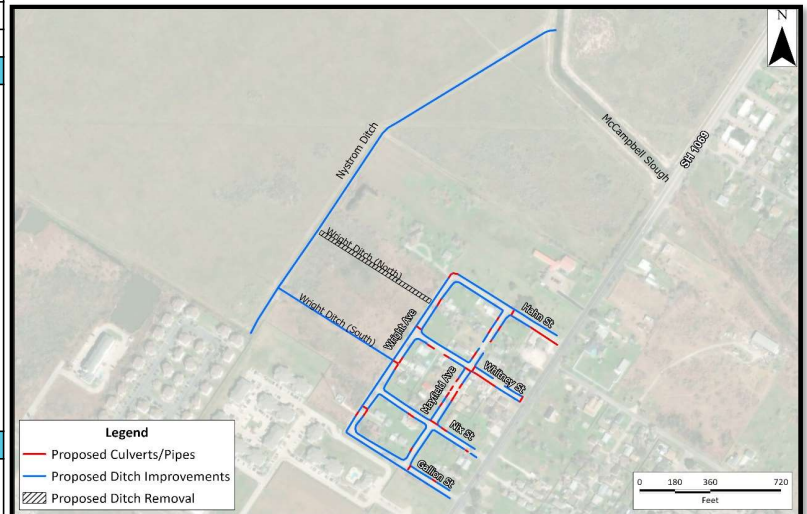
Design	\$361,799
Permitting	\$50,000
Construction	\$2,411,992
Total	\$2,823,800

Proposed Improvements:

Construct approximately 7055 linear feet of grass lined roadside ditches throughout the neighborhood. Improve the outfall ditches to the west of the neighborhood by consolidating the two smaller ditches (Wright Ditch (North) & Wright Ditch (South)) into one larger ditch with sufficient capacity to drain the neighborhood. Wright Ditch (South) will be lowered by approximately 2' and widened (10-ft bottom width). For the Nystrom Ditch, 2288 linear feet will be lowered by approximately 2' and widened from a V-shaped ditch (no defined bottom width) to a bottom width of 20-ft. To move flow from the neighborhood ditches to the larger ditches, nine culverts will be added to allow stormwater to cross the neighborhood streets into the improved ditches. Driveway culvert improvements will also be required to achieve positive drainage within the neighborhood.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 4
- Reduction in Flood Depth: 2.52 inches
- Impassible Road Length (>5" Depth) Reduction: 59 feet



Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	1
0.25	Property Damage	2
0.20	Road Level of Service	1
0.15	Planning Linkages	5
0.10	Project Cost	2
	Total Weighted Point Score:	1.95
	CIP Rank:	9

Notes:

A drainage easement for the Wright South Ditch will be required. Confirm during design that an appropriate drainage easement is in place for the Nystrom Ditch and that proposed improvements can be constructed within the existing easement. Coordination with SPCCD required for improvements at the connection of Nystrom Ditch into McCampbell Slough. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. A USACE Nationwide Permit (NWP 7, 18, or 58) may be required for this project and should be confirmed during final design. Phasing of this project should be considered.

- Phase 1 – Nystrom Ditch improvements
- Phase 2 – Wright Ditch improvements
- Phase 3 – Nystrom Addition neighborhood improvements (roadside ditches and culverts)



City of Ingleside

Capital Improvements Plan



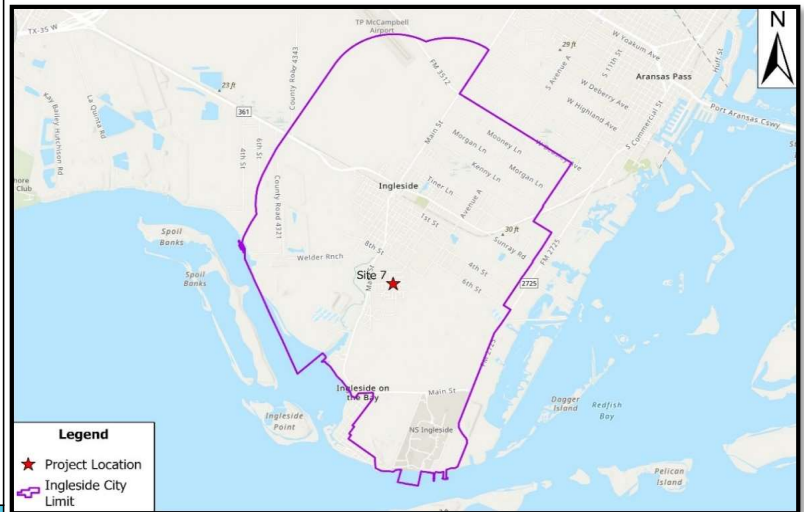
Project Summary Information:

Project ID:	6	Date:	3/5/2024
Project Name:	Site 7: Parkside Terrace Subdivision Drainage Improvements		
Project Type:	Storm Sewer	# Structures Impacted Pre-Project:	17
Easements Required?	No	# Structures Impacted Post-Project:	4

Existing Problem:

Residential properties in the Parkside Terrace Subdivision are flooding during even minor storm events. Additionally, the neighborhood streets, namely Coronado Drive, Ridgewood Circle, Parkview Place, Belair Avenue, and Timberleaf Circle, experience overtopping during storm events. The existing storm drain infrastructure does not have enough capacity to efficiently move flow south to Live Oak Ditch and more inlets are needed to capture flow. These instances of flooding can limit residents' ability to leave their homes during a flood event, poses a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation.

Design Improvements Schematic:

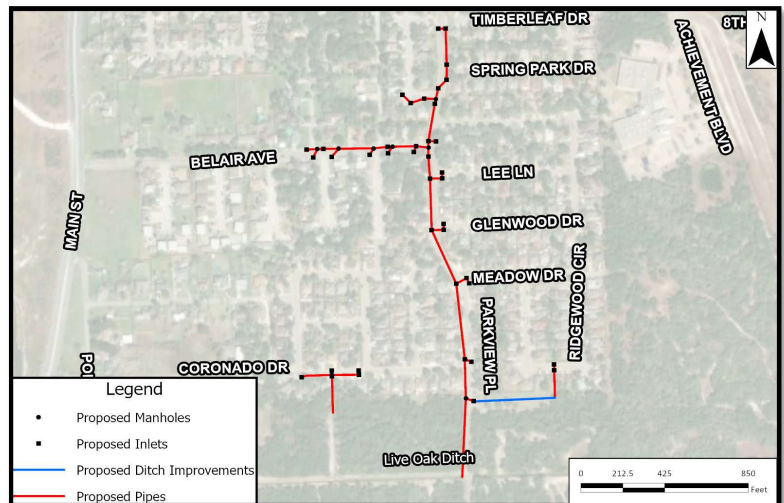


Project Cost Information:

Design	\$1,193,322
Permitting	\$0
Construction	\$7,955,477
Total	\$9,148,800

Proposed Improvements:

Proposed improvements include extending the main trunk line north on Parkview Place by approximately 190', west on Belair Ave by 620', and west on Timberleaf Ave by 190', along with adding additional inlets on each street. The main trunk line would be upsized to RCBs ranging in size from 4' x 3' to 6' x 3'. Approximately 290' of 3.5' x 2' RCB would be added on Coronado Street along with upsizing the existing pipes to be 3.5' x 2' RCB. The existing pipes on Ridgewood Circle would also be upsized to 3.5' x 2'. All inlets connected to the system would be 10' curb inlets.



Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 13
- Reduction in Flood Depth: 4.80 inches
- Impassible Road Length (>5" Depth) Reduction: 1,402 feet

Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	3
0.25	Property Damage	3
0.20	Road Level of Service	1
0.15	Planning Linkages	5
0.10	Project Cost	1
Total Weighted Point Score:		2.71
CIP Rank:		5

Notes:

The Site 10 proposed improvements should be implemented prior to these Site 7 improvements for maximum benefit of the Site 7 project. If the Site 7 project is constructed prior to the Site 10 project, a lower level of benefit will be realized until the Site 10 improvements are implemented. No drainage easements are anticipated for this project, but existing easements should be confirmed during final design to verify no additional drainage easements or ROW will be required. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. No permitting requirements are anticipated. Phasing of this project could be considered.

- Phase 1 – Coronado Drive Improvements
- Phase 2 – Parkview Place Improvements
- Phase 3 – Ridgewood Circle Improvements



City of Ingleside

Capital Improvements Plan



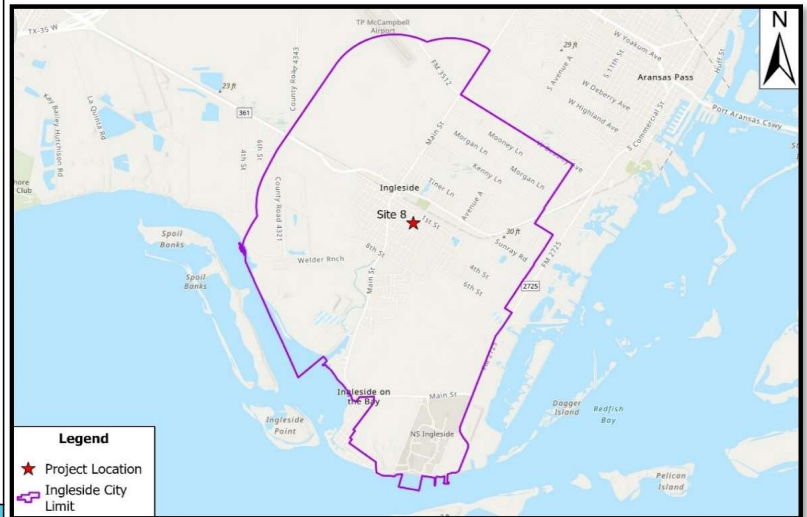
Project Summary Information:

Project ID: 7 Date: 3/5/2024
Project Name: Site 8: Villanova Place Drainage Improvements
Project Type: Storm Sewer # Structures Impacted Pre-Project: 180
Easements Required? Yes # Structures Impacted Post-Project: 147

Existing Problem:

Houses within the Villanova Place neighborhood are flooding heavily during small storm events. Additionally, the neighborhood streets (First Street, Second Street, Third Street, Avenue H, Avenue I, Avenue J, and Avenue K) experience overtopping during even minor storm events. Existing stormwater infrastructure throughout the neighborhood does not have enough capacity to efficiently move flow to the outfalls, and there isn't enough capacity at current neighborhood outfalls to hold the amount of water that is ponding. These instances of flooding can limit residents' ability to leave their homes during a flood event, poses a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation.

Design Improvements Schematic:



Project Cost Information:

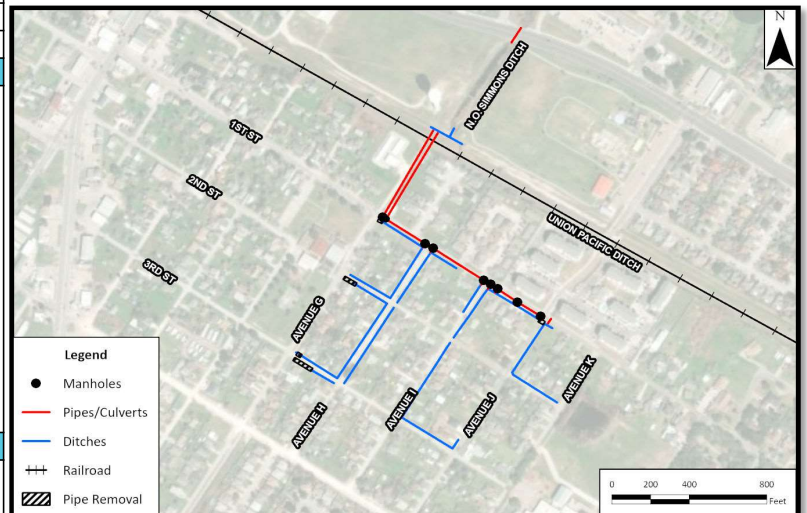
Design	\$1,314,131
Permitting	\$0
Construction	\$8,760,867
Total	\$10,075,000

Proposed Improvements:

Proposed improvements include regrading roadside ditches along Ave H, Ave I, Ave J, First Street, Second Street, and Third Street; installation of a new underground stormwater system under First Street and Ave G; and installation of a new outfall into the north Union Pacific Ditch. This project would also add another underground stormwater system connecting to the existing Ave G underground system, and provide an additional outfall into the north Union Pacific Ditch. The purpose of the connection to the Ave G system is to provide a way for the system on Ave G to backflow to the north when the southern downstream system is overwhelmed, instead of overtopping and inundating the neighborhood streets and property. Finally, the outfall pipe that crosses under SH 361 will be upsized to allow more flow under the highway, reducing overtopping of the N.O. Simmons Ditch and the upstream systems.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 33
- Reduction in Flood Depth: 8.40 inches
- Impassible Road Length (>5" Depth) Reduction: 1,692 feet



Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	4
0.25	Property Damage	5
0.20	Road Level of Service	1
0.15	Planning Linkages	0
0.10	Project Cost	1
	Total Weighted Point Score:	2.75
	CIP Rank:	4

Notes:

To achieve the proposed improvements, a drainage easement from the Union Pacific Railroad will be required. Coordination with and project approval by TxDOT for the proposed structures under SH 361 will be required. Availability of existing ROW or drainage easements should be confirmed during final design. Existing water and wastewater lines, including a wastewater force main, may cause potential conflicts during construction. Locations of all utilities should be confirmed during final design to ensure there are no conflicts with the proposed drainage improvements. No permitting requirements are anticipated. Phasing of this project should be considered starting with the most downstream portions of the project.

- Phase 1 – Culvert Improvements Under SH 361
- Phase 2 – Avenue G and First Street Underground System Additions
- Phase 3 - Neighborhood Ditch Improvements and Culvert Removals



City of Ingleside

Capital Improvements Plan



Project Summary Information:

Project ID: 8 Date: 3/5/2024
Project Name: Site 9: Humble Addition and Avenue B Drainage Improvements
Project Type: Storm Sewer and Channel # Structures Impacted Pre-Project: 19
Easements No # Structures Impacted Post-Project: 16
Required?

Existing Problem:

Residential properties in the Humble Addition are experiencing inundation throughout the neighborhoods and local streets. Additionally, the neighborhood streets (Oklahoma Avenue, Texas Avenue, Arkansas Street, and Waco St) experience overtopping during even minor storm events. Existing roadside ditches throughout the neighborhood do not have enough capacity to efficiently move flow to stormwater pipes, resulting in ponding within the streets and could lead to flooding of homes. The convergence of the Avenue B outfall and the existing ditch south of Oklahoma overpowers the existing culverts downstream, leading to water spilling out and moving back north through the neighborhood. These instances of flooding can limit residents' ability to leave their homes during a flood event, poses a safety concern if emergency services are unable to safely access these residences, and can cause damage to pavement over time due to repeated inundation. There are also three schools located within or adjacent to the Humble Addition neighborhood. Reducing flood extents will provide a safer route to the schools for children that live in the neighborhood, or who cross through the neighborhood to get to school.

Project Cost Information:

Design	\$699,422
Permitting	\$0
Construction	\$4,662,812
Total	\$5,362,300

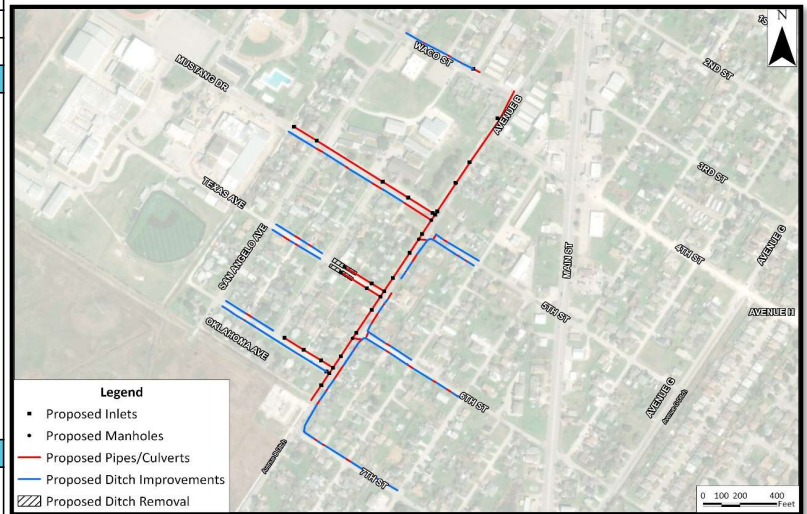
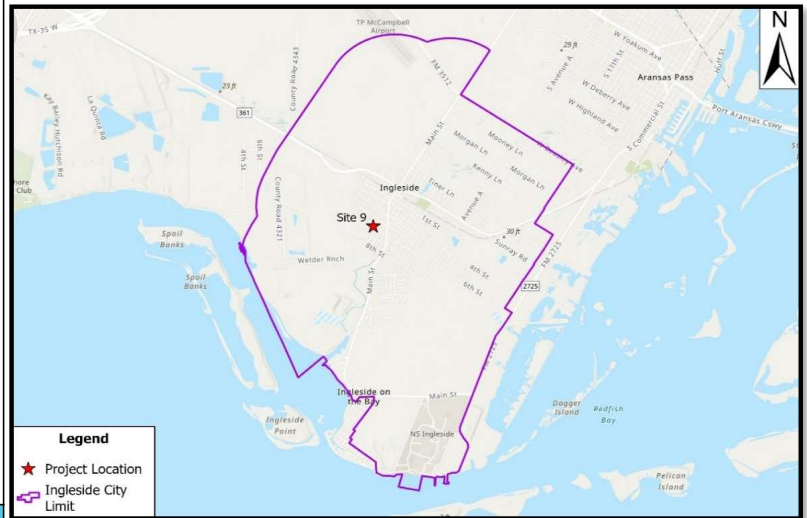
Proposed Improvements:

The main trunkline on Ave B will be upsized to pipes ranging from 36" RCP to 6' x 3' RCB. Laterals on Oklahoma Dr and Texas Ave will be extended and upsized to 24" to 36" RCPs. Ditches on 5th St, 6th St, and 7th St will be regraded to flow west into the Ave B trunkline, and 18" RCPs will be added crossing Ave B to connect the ditches to the main system. Ditches will also be regraded along Oklahoma Ave, Texas Ave, Mustang Dr, and Waco Street. Driveway culverts will be added or upsized where necessary to provide adequate capacity for water flowing through the ditches. A connection will be made from the existing Waco Street system to the new Ave B system so water from Waco Street can flow into the Ave B system or the Main Street system, which it is currently connected to, as system capacity is available.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 3
- Reduction in Flood Depth: 3.60 inches
- Impassible Road Length (>5" Depth) Reduction: 814 feet

Design Improvements Schematic:



Weight	CIP Ranking Criteria	Score	Notes:
0.30	Life and Safety	3	For the proposed improvements to continue to be beneficial for the neighborhood, any future development that will outfall into the Avenue B Ditch should be required to detain stormwater on site and release it at a rate equal to or less than existing conditions. If development is allowed to occur to the future buildout conditions anticipated in the Future Land Use plan without limiting stormwater runoff, the Avenue B Ditch becomes overburdened, and the proposed Humble Addition and Avenue B Drainage Improvements become ineffective. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. No permitting requirements are anticipated.
0.25	Property Damage	3	
0.20	Road Level of Service	3	
0.15	Planning Linkages	5	
0.10	Project Cost	1	
	Total Weighted Point Score:	3.10	
	CIP Rank:	2	



City of Ingleside

Capital Improvements Plan



Project Summary Information:

Project ID: 9 Date: 3/5/2024
Project Name: Site 10: Live Oak Ditch
Project Type: Storm Sewer and Channel # Structures Impacted Pre-Project: 11
Easements Yes # Structures Impacted Post-Project: 5
Required?

Existing Problem:

Live Oak Ditch has low points along the channel banks, mostly occurring in the ditch section upstream of Parkview Place road, that are overtopped during all modeled storm events. This is likely due to restricted flow through the culverts under Parkview Place and the outfall culvert into Kinney Bayou under North Street and Main Street (FM 1069). Runoff from the east of the channel is not able to enter since the culverts are restricting flow and causing water surface elevations to increase in the upstream section of the channel. Additionally, residential development is anticipated east of Achievement Boulevard, and will drain into Live Oak Ditch. Future development pressure on the existing system will increase flooding depth and extents, and result in flooding problems to existing and future homes and residents.

Design Improvements Schematic:



Project Cost Information:

Design	\$2,105,039
Permitting	\$50,000
Construction	\$14,033,592
Total	\$16,188,700

Proposed Improvements:

Improve approximately 6230 linear feet of the grass lined Live Oak Ditch. The bottom width will be widened from approximately 15 ft to 18 ft, and the ditch will be deepened by approximately 3.5 ft in some locations. These improvements include regrading and widening the full length of the ditch and concrete lining the bend in the ditch to prevent erosion. Other improvements include upsizing all culverts within the ditch to (2) 9' x 5' RCB's to allow the channel to flow with no impedence from the culverts, and installing 1106 linear feet of new (2) 9' x 5' RCB outfall structure to connect Live Oak Ditch to Kinney Bayou. An additional ditch, "Parkview Ditch", is also proposed to discharge into Live Oak Ditch to support future development of nearby land. Parkview Ditch will consist of approximately 1550 linear feet of grass lined ditch with a 20 ft bottom width.

Summary of Project Benefits:

- Number of Structures Removed from Potential Inundation Risk: 6
- Reduction in Flood Depth: 7.92 inches
- Impassible Road Length (>5" Depth) Reduction: 425 feet



Weight	CIP Ranking Criteria	Score
0.30	Life and Safety	3
0.25	Property Damage	3
0.20	Road Level of Service	5
0.15	Planning Linkages	5
0.10	Project Cost	1
	Total Weighted Point Score:	3.50
	CIP Rank:	1

Notes:

Proposed improvements to existing components (Live Oak Ditch and the culvert under North Street/Main Street) should be achieved within the existing City ROW or drainage easements, but easement widths should be confirmed during final design to verify no additional easements are required. A new drainage easement will be required for construction of the Parkview Ditch. The easement can be dedicated prior to development, or would need to be part of the plat requirements when development occurs. Locations of other utilities in the area should be confirmed to ensure no conflicts with the proposed drainage improvements. A USACE Nationwide Permit (NWP 7, 18, or 58) may be required for this project and should be confirmed during final design. Phasing of this project should be considered.

- Phase 1 – North Street Culvert between Live Oak Ditch and Kinney Bayou
- Phase 2 – Live Oak Ditch Improvements
- Phase 3 – New Parkview Ditch

APPENDIX D
OPINION OF PROBABLE PROJECT COSTS

Opinion of Probable Project Cost - Site 1: Humble Ditch Improvements					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 317,739	\$ 317,739
2	INSURANCE AND BONDS	2.5%	LS	\$ 158,870	\$ 158,870
3	TRAFFIC CONTROL	-	LS	\$ 10,000	\$ 10,000
CONSTRUCTION - GENERAL					\$ 486,610
BASE BID					
4	EXCAVATION (CHANNEL)	10,506	CY	\$ 58	\$ 604,082
5	EMBANKMENT (CHANNEL)	1,988	CY	\$ 20	\$ 39,756
6	EXCAVATION- HAUL OFF	11,149	CY	\$ 10	\$ 111,488
7	SWPPP FILTER FABRIC FENCE	4,940	LF	\$ 3	\$ 14,820
8	CLASS A CONCRETE (CHANNEL LINING)	8,588	CY	\$ 650	\$ 5,582,127
9	ROCK FILTER DAM INSTALLATION	22	LF	\$ 92	\$ 2,017
10	ROCK FILTER DAM REMOVAL	22	LF	\$ 23	\$ 497
CONSTRUCTION - BASE BID:					\$ 6,354,787
CONTINGENCY				30%	\$ 2,052,420
TOTAL:					\$ 8,893,817
DESIGN				15%	\$ 1,334,073
PERMITTING				-	\$ -
Estimated Project Total:					\$ 10,227,900

Opinion of Probable Project Cost - Site 3: Kenny Lane/Whitney Lake Infrastructure					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	1	LS	\$ 122,926	\$ 122,926
2	INSURANCE AND BONDS	1	LS	\$ 23,056	\$ 23,056
3	TRAFFIC CONTROL	1	LS	\$ 17,010	\$ 17,010
CONSTRUCTION - GENERAL					\$ 162,992
BASE BID					
4	All Items Including Streets, Drainage, Water and Wastewater	1	LS	\$ 2,323,159	\$ 2,323,159
Note: This project has already been bid and the construction contract has been awarded. This OPPC reflects the bid amount awarded for construction; the design costs are an estimate.					
CONSTRUCTION - BASE BID:					\$ 2,323,159
CONTINGENCY				0%	\$ -
TOTAL:					\$ 2,486,151
DESIGN				15%	\$ 372,923
PERMITTING				-	\$ -
Estimated Project Total:					\$ 2,859,100

Opinion of Probable Project Cost - Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 487,518	\$ 487,518
2	INSURANCE AND BONDS	2.5%	LS	\$ 243,759	\$ 243,759
3	TRAFFIC CONTROL	-	LS	\$ 100,000	\$ 100,000
CONSTRUCTION - GENERAL					\$ 831,277
BASE BID					
4	24" RCP INSTALLATION	1,329	LF	\$ 125	\$ 166,100
5	18" RCP REMOVAL	330	LF	\$ 34	\$ 11,219
6	EXCAVATION (ROADWAY)	2,422	CY	\$ 17	\$ 42,136
7	CEMENT STABILIZED SAND - BEDDING MATERIAL	801	CY	\$ 172	\$ 137,734
8	EMBANKMENT (ROADWAY)	1,201	CY	\$ 20	\$ 24,011
9	EXCAVATION (CHANNEL)	2,187	CY	\$ 58	\$ 125,726
10	EMBANKMENT (CHANNEL)	250	CY	\$ 20	\$ 4,991
11	EXCAVATION (DETENTION POND)	76,933	CY	\$ 58	\$ 4,423,641
12	EXCAVATION (MAINTANCE ROAD)	20	CY	\$ 58	\$ 1,126
13	EXCAVATION- HAUL OFF	111,394	CY	\$ 10	\$ 1,113,936
14	REMOVING CONCRETE (RIPRAP)	4,135	SY	\$ 26	\$ 108,586
15	CLASS A CONCRETE (CHANNEL LINING)	2,874	CY	\$ 650	\$ 1,868,278
16	ASPHALT PAVEMENT REPAIR	1,092	SY	\$ 120	\$ 131,043
17	6" TOPSOIL	49,251	SY	\$ 16	\$ 763,383
18	EROSION CONTROL MATTING	12,930	SY	\$ 17	\$ 213,350
19	HYDROMULCH	49,251	SY	\$ 9	\$ 443,255
20	LIMESTONE BASE (4")	6	CY	\$ 133	\$ 823
21	CONCRETE PAVEMENT (6")	10	CY	\$ 650	\$ 6,780
22	CONCRETE DRIVEWAY REPAIRS	4,158	SF	\$ 20	\$ 81,081
23	SWPPP FILTER FABRIC FENCE	7,068	LF	\$ 3	\$ 21,205
24	TRENCH SAFETY	1,329	LF	\$ 9	\$ 11,959
25	DETENTION POND PUMP	1	EA	\$ 50,000	\$ 50,000
CONSTRUCTION - BASE BID:					\$ 9,750,365
CONTINGENCY				30%	\$ 3,174,493
TOTAL:					\$ 13,756,136
DESIGN				15%	\$ 2,063,421
PERMITTING				-	\$ 50,000
Estimated Project Total:					\$ 15,869,600

Opinion of Probable Project Cost - Site 5: North Ingleside Long-Term Ponding					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 30,794	\$ 30,794
2	INSURANCE AND BONDS	2.5%	LS	\$ 15,397	\$ 15,397
3	TRAFFIC CONTROL	-	LS	\$ 20,000	\$ 20,000
CONSTRUCTION - GENERAL					\$ 66,192
BASE BID					
4	15" PVC Installation	2,585	LF	\$ 105	\$ 271,425
5	2.5' X 2.5' GRATE INLET INSTALLATION	16	EA	\$ 6,240	\$ 99,840
6	EXCAVATION (GROUND)	2,730	CY	\$ 17	\$ 47,497
7	EXCAVATION BACKFILL	2,016	CY	\$ 20	\$ 40,328
8	EXCAVATION- HAUL OFF	999	CY	\$ 10	\$ 9,987
9	CEMENT STABILIZED SAND - BEDDING MATERIAL	591	CY	\$ 172	\$ 101,668
10	CONCRETE DRIVEWAY REPAIRS	634	SF	\$ 20	\$ 12,363
11	TRENCH SAFETY	2,585	LF	\$ 9	\$ 23,265
12	SWPPP FILTER FABRIC FENCE	2,585	LF	\$ 3	\$ 7,755
13	INLET PROTECTION	160	LF	\$ 11	\$ 1,760
CONSTRUCTION - BASE BID:					\$ 615,887
CONTINGENCY				30%	\$ 204,624
TOTAL:					\$ 886,703
DESIGN				15%	\$ 133,006
PERMITTING				-	\$ -
Estimated Project Total:					\$ 1,019,800

Opinion of Probable Project Cost - Site 6: Nystrom Addition Drainage Improvements					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 84,901	\$ 84,901
2	INSURANCE AND BONDS	2.5%	LS	\$ 42,451	\$ 42,451
3	TRAFFIC CONTROL	-	LS	\$ 30,000	\$ 30,000
CONSTRUCTION - GENERAL					\$ 157,352
BASE BID					
4	15" RCP INSTALLATION	2,243	LF	\$ 105	\$ 235,481
5	24" RCP INSTALLATION	134	LF	\$ 125	\$ 16,697
6	15" RCP REMOVAL	1,093	LF	\$ 34	\$ 37,159
7	15" CORRUGATED METAL PIPE REMOVAL	41	LF	\$ 34	\$ 1,394
8	3' X 3' GRATE INLET REMOVAL	2	EA	\$ 1,385	\$ 2,771
9	EXCAVATION (ROADWAY)	1,094	CY	\$ 17	\$ 19,027
10	EMBANKMENT (ROADWAY)	373	CY	\$ 20	\$ 7,467
11	CEMENT STABILIZED SAND - BEDDING MATERIAL	545	CY	\$ 172	\$ 93,763
12	EXCAVATION (CHANNEL)	6,972	CY	\$ 58	\$ 400,907
13	EXISTING CHANNEL FILL	360	CY	\$ 20	\$ 7,200
14	EXCAVATION- HAUL OFF	7,621	CY	\$ 10	\$ 76,205
15	6" TOPSOIL	12,466	SY	\$ 16	\$ 193,217
16	EROSION CONTROL MATTING	12,466	SY	\$ 17	\$ 205,683
17	HYDROMULCH	12,466	SY	\$ 9	\$ 112,191
18	DITCH GRADING AND REGRADING	7,099	LF	\$ 14	\$ 95,834
19	ASPHALT PAVEMENT REPAIR	346	SY	\$ 120	\$ 41,482
20	CONCRETE DRIVEWAY REPAIRS	6,750	SF	\$ 20	\$ 131,625
21	SWPPP FILTER FABRIC FENCE	3,943	LF	\$ 3	\$ 11,830
22	TRENCH SAFETY	491	LF	\$ 9	\$ 4,423
23	ROCK FILTER DAM INSTALLATION	32	LF	\$ 92	\$ 2,945
24	ROCK FILTER DAM REMOVAL	32	LF	\$ 23	\$ 726
CONSTRUCTION - BASE BID:					\$ 1,698,026
CONTINGENCY				30%	\$ 556,614
TOTAL:					\$ 2,411,992
DESIGN				15%	\$ 361,799
PERMITTING				-	\$ 50,000
Estimated Project Total:					\$ 2,823,800

Opinion of Probable Project Cost - Site 7: Parkside Terrace Subdivision Drainage Improvements					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 282,307	\$ 282,307
2	INSURANCE AND BONDS	2.5%	LS	\$ 141,153	\$ 141,153
3	TRAFFIC CONTROL	-	LS	\$ 50,000	\$ 50,000
CONSTRUCTION - GENERAL					\$ 473,460
BASE BID					
4	4' X 3' RCB	1,362	LF	\$ 500	\$ 680,950
5	36" RCP INSTALLATION	363	LF	\$ 240	\$ 87,024
6	6' X 3' RCB	1,751	LF	\$ 775	\$ 1,357,258
7	24" RCP INSTALLATION	312	LF	\$ 125	\$ 38,938
8	3.5' X 2' RCB	709	LF	\$ 450	\$ 319,230
9	TYPE C INLET (10')	40	EA	\$ 9,421	\$ 376,848
10	48" DIAMETER MANHOLE	1	EA	\$ 10,850	\$ 10,850
11	6' X 6' JUNCTION BOX	5	EA	\$ 13,833	\$ 69,165
12	8' X 8' JUNCTION BOX	2	EA	\$ 18,181	\$ 36,362
13	TYPE C INLET (5') REMOVAL	18	EA	\$ 1,385	\$ 24,937
14	MANHOLE REMOVAL	5	EA	\$ 1,342	\$ 6,710
15	TRENCH SAFETY (STRUCTURE)	48	EA	\$ 380	\$ 18,240
16	15" RCP REMOVAL	131	LF	\$ 34	\$ 4,464
17	18" RCP REMOVAL	482	LF	\$ 34	\$ 16,402
18	24" RCP REMOVAL	596	LF	\$ 34	\$ 20,278
19	30" RCP REMOVAL	1,784	LF	\$ 34	\$ 60,642
20	EXCAVATION (ROADWAY)	14,043	CY	\$ 17	\$ 244,351
21	EMBANKMENT (ROADWAY)	5,215	CY	\$ 20	\$ 104,310
22	EXCAVATION- HAUL OFF	11,193	CY	\$ 10	\$ 111,927
23	TRENCH SAFETY	157	LF	\$ 9	\$ 1,410
24	SWPPP FILTER FABRIC FENCE	157	LF	\$ 3	\$ 470
25	CEMENT STABILIZED SAND - BEDDING MATERIAL	2,520	CY	\$ 172	\$ 433,473
26	INLET PROTECTION	413	LF	\$ 11	\$ 4,538
27	ASPHALT PAVEMENT REPAIR	1,166	SY	\$ 120	\$ 139,968
28	PRIME COAT	1,614	GAL	\$ 8	\$ 12,592
29	HOT MIX ASPHALT (TYPE D) (2")	8,072	SY	\$ 9	\$ 71,034
30	LIME SUBGRADE (8")	10,090	SY	\$ 7	\$ 70,327
31	LIMESTONE BASE (10")	6,727	CY	\$ 133	\$ 891,956
32	REMOVE-REPLACE CURB AND GUTTER	6,054	LF	\$ 55	\$ 335,089
33	DITCH GRADING AND REGRADING	1,955	LF	\$ 14	\$ 26,395
34	WATER OR WASTEWATER UTILITY ADJUSTMENT	10	EA	\$ 7,000	\$ 70,000
CONSTRUCTION - BASE BID:					\$ 5,646,137
CONTINGENCY				30%	\$ 1,835,880
TOTAL:					\$ 7,955,478
DESIGN				15%	\$ 1,193,322
PERMITTING				-	\$ -
Estimated Project Total:					\$ 9,148,800

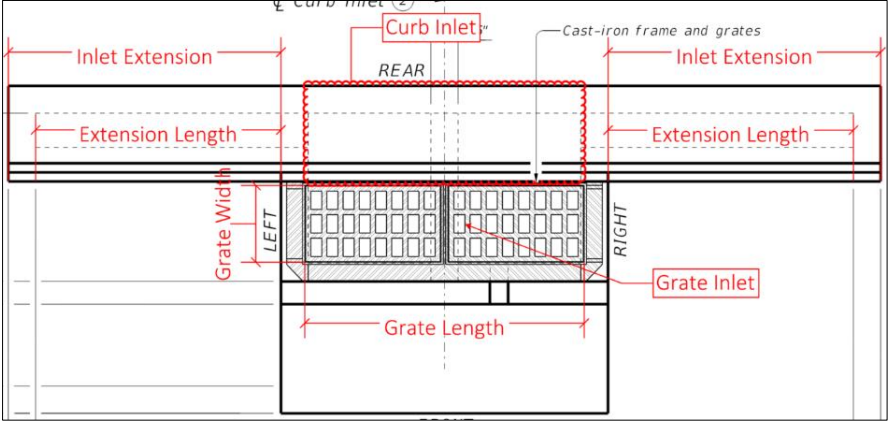
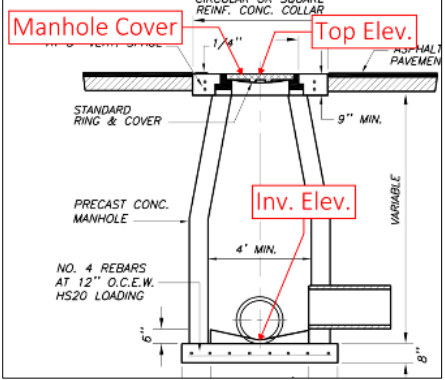
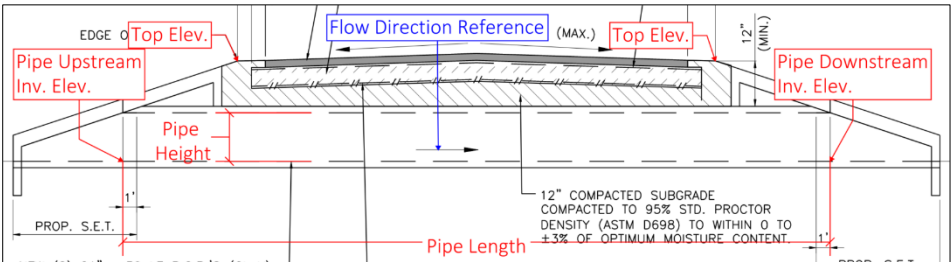
Opinion of Probable Project Cost - Site 8: Villanova Place Drainage Improvements					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 311,122	\$ 311,122
2	INSURANCE AND BONDS	2.5%	LS	\$ 155,561	\$ 155,561
3	TRAFFIC CONTROL	-	LS	\$ 50,000	\$ 50,000
CONSTRUCTION - GENERAL					\$ 516,683
BASE BID					
4	24" RCP INSTALLATION	1,060	LF	\$ 125	\$ 132,441
5	3' X 2' RCB	165	LF	\$ 395	\$ 65,294
6	6' X 2' RCB	567	LF	\$ 620	\$ 351,540
7	7' X 2.5' RCB	2,637	LF	\$ 850	\$ 2,241,365
8	5' X 2' RCB	67	LF	\$ 525	\$ 35,280
9	6' X 2.5' RCB	249	LF	\$ 700	\$ 174,580
10	10' X 5' RCB	460	LF	\$ 1,526	\$ 701,091
10	8' X 8' JUNCTION BOX	8	EA	\$ 18,181	\$ 145,448
11	TRENCH SAFETY (STRUCTURE)	8	EA	\$ 380	\$ 3,040
12	18" RCP REMOVAL	1,060	LF	\$ 34	\$ 36,024
13	7' X 3' RCB REMOVAL	368	LF	\$ 34	\$ 12,498
13	EXCAVATION (ROADWAY)	12,955	CY	\$ 17	\$ 225,413
14	EMBANKMENT (ROADWAY)	4,306	CY	\$ 20	\$ 86,120
15	EXCAVATION- HAUL OFF	11,978	CY	\$ 10	\$ 119,781
16	TRENCH SAFETY	3,432	LF	\$ 9	\$ 30,887
17	SWPPP FILTER FABRIC FENCE	3,716	LF	\$ 3	\$ 11,147
18	CEMENT STABILIZED SAND - BEDDING MATERIAL	2,867	CY	\$ 172	\$ 493,174
19	CONCRETE DRIVEWAY REPAIRS	9,804	SF	\$ 20	\$ 191,178
20	ASPHALT PAVEMENT REPAIR	4,698	SY	\$ 120	\$ 563,820
21	PRIME COAT	549	GAL	\$ 8	\$ 4,284
22	HOT MIX ASPHALT (TYPE D) (2")	2,746	SY	\$ 9	\$ 24,168
23	LIME SUBGRADE (8")	3,433	SY	\$ 7	\$ 23,928
24	LIMESTONE BASE (10")	2,289	CY	\$ 133	\$ 303,474
25	DITCH GRADING AND REGRADING	3,716	LF	\$ 14	\$ 50,160
26	EDGE CURB	2,546	LF	\$ 22	\$ 56,012
27	INLET PROTECTION	27	LF	\$ 11	\$ 297
28	WATER OR WASTEWATER UTILITY ADJUSTMENT	20	EA	\$ 7,000	\$ 140,000
CONSTRUCTION - BASE BID:					\$ 6,222,445
CONTINGENCY				30%	\$ 2,021,739
TOTAL:					\$ 8,760,868
DESIGN				15%	\$ 1,314,131
PERMITTING				-	\$ -
Estimated Project Total:					\$ 10,075,000

Opinion of Probable Project Cost - Site 9: Humble Addition and Avenue B Drainage Improvements					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 164,501	\$ 164,501
2	INSURANCE AND BONDS	2.5%	LS	\$ 82,251	\$ 82,251
3	TRAFFIC CONTROL	-	LS	\$ 50,000	\$ 50,000
CONSTRUCTION - GENERAL					\$ 296,752
BASE BID					
4	4' X 3' RCB	473	LF	\$ 500	\$ 236,300
5	36" RCP INSTALLATION	1,387	LF	\$ 240	\$ 332,904
6	6' X 3' RCB	217	LF	\$ 775	\$ 168,485
7	24" RCP INSTALLATION	1,156	LF	\$ 125	\$ 144,463
8	5' X 3' RCB	510	LF	\$ 530	\$ 270,300
9	12" RCP INSTALLATION	1,311	LF	\$ 97	\$ 126,594
10	18" RCP INSTALLATION	455	LF	\$ 123	\$ 55,904
11	3' X 3' RCB	59	LF	\$ 405	\$ 23,814
12	3' X 3' GRATE INLET INSTALLATION	18	EA	\$ 6,240	\$ 112,320
13	2' X 2' GRATE INLET INSTALLATION	7	EA	\$ 6,240	\$ 43,680
14	TYPE C INLET (5')	3	EA	\$ 6,855	\$ 20,564
15	TYPE C INLET (10')	1	EA	\$ 9,421	\$ 9,421
16	48" DIAMETER MANHOLE	3	EA	\$ 10,850	\$ 32,550
17	6' X 6' JUNCTION BOX	3	EA	\$ 13,833	\$ 41,499
18	8' X 8' JUNCTION BOX	5	EA	\$ 18,181	\$ 90,905
19	1' DIAMETER GRATE INLET REMOVAL	11	EA	\$ 1,385	\$ 15,239
20	2' X 2' GRATE INLET REMOVAL	10	EA	\$ 1,385	\$ 13,854
21	MANHOLE REMOVAL	11	EA	\$ 1,342	\$ 14,763
22	TRENCH SAFETY (STRUCTURE)	40	EA	\$ 380	\$ 15,200
23	6" RCP REMOVAL	134	LF	\$ 34	\$ 4,553
24	12" RCP REMOVAL	1,046	LF	\$ 34	\$ 35,571
25	18" RCP REMOVAL	773	LF	\$ 34	\$ 26,282
26	24" RCP REMOVAL	690	LF	\$ 34	\$ 23,453
27	32" RCP REMOVAL	1,222	LF	\$ 34	\$ 41,548
28	36" RCP REMOVAL	37	LF	\$ 34	\$ 1,251
29	EXCAVATION (ROADWAY)	6,211	CY	\$ 17	\$ 108,077
30	EMBANKMENT (ROADWAY)	1,955	CY	\$ 20	\$ 39,104
31	EXCAVATION- HAUL OFF	5,804	CY	\$ 10	\$ 58,039
32	TRENCH SAFETY	5,567	LF	\$ 9	\$ 50,099
33	SWPPP FILTER FABRIC FENCE	3,684	LF	\$ 3	\$ 11,051
34	CEMENT STABILIZED SAND - BEDDING MATERIAL	2,510	CY	\$ 172	\$ 431,696
35	INLET PROTECTION	297	LF	\$ 11	\$ 3,267
36	CONCRETE DRIVEWAY REPAIRS	11,075	SF	\$ 20	\$ 215,963
37	ASPHALT PAVEMENT REPAIR	1,455	SY	\$ 120	\$ 174,608
38	DITCH GRADING AND REGRADING	5,262	LF	\$ 14	\$ 71,036
39	REMOVING CONCRETE (SIDEWALKS)	6,132	SF	\$ 5	\$ 27,594
40	4" THICK CONCRETE SIDEWALK	7,665	SF	\$ 10	\$ 78,566
41	ADA RAMPS	8	EA	\$ 2,899	\$ 23,189
42	CURB AND GUTTER	1,260	LF	\$ 21	\$ 26,321
43	WATER OR WASTEWATER UTILITY ADJUSTMENT	10	EA	\$ 7,000	\$ 70,000
CONSTRUCTION - BASE BID:					\$ 3,290,026
CONTINGENCY				30%	\$ 1,076,034
TOTAL:					\$ 4,662,812
DESIGN				15%	\$ 699,422
PERMITTING				-	\$ -
Estimated Project Total:					\$ 5,362,300

Opinion of Probable Project Cost - Site 10: Live Oak Ditch					
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
GENERAL					
1	MOBILIZATION / DEMOBILIZATION	5%	LS	\$ 497,445	\$ 497,445
2	INSURANCE AND BONDS	2.5%	LS	\$ 248,723	\$ 248,723
3	TRAFFIC CONTROL	-	LS	\$ 100,000	\$ 100,000
CONSTRUCTION - GENERAL					\$ 846,168
BASE BID					
4	9' X 5' RCB	1,234	LF	\$ 1,600	\$ 1,974,624
5	18" RCP INSTALLATION	88	LF	\$ 123	\$ 10,824
6	48" RCP REMOVAL	60	LF	\$ 34	\$ 2,039
7	60" RCP REMOVAL	42	LF	\$ 34	\$ 1,434
8	66" RCP REMOVAL	543	LF	\$ 34	\$ 18,459
9	TYPE C INLET (5')	4	EA	\$ 6,855	\$ 27,419
10	TYPE C INLET (5') REMOVAL	2	EA	\$ 1,385	\$ 2,771
11	7' X12' CIP JUNCTION BOX	4	EA	\$ 23,000	\$ 92,000
12	EXCAVATION (ROADWAY)	5,802	CY	\$ 17	\$ 100,948
13	EMBANKMENT (ROADWAY)	2,857	CY	\$ 20	\$ 57,139
14	CEMENT STABILIZED SAND - BEDDING MATERIAL	878	CY	\$ 172	\$ 151,070
15	EXCAVATION (CHANNEL)	64,957	CY	\$ 58	\$ 3,735,034
16	EXCAVATION- HAUL OFF	95,062	CY	\$ 10	\$ 950,624
17	6" TOPSOIL	60,293	SY	\$ 16	\$ 934,541
18	EROSION CONTROL MATTING	60,293	SY	\$ 17	\$ 994,834
19	HYDROMULCH	60,293	SY	\$ 9	\$ 542,637
20	CLASS A CONCRETE (CHANNEL LINING)	106	CY	\$ 650	\$ 69,221
21	ASPHALT PAVEMENT REPAIR	2,115	SY	\$ 120	\$ 253,770
22	CURB AND GUTTER	660	LF	\$ 21	\$ 13,787
23	SWPPP FILTER FABRIC FENCE	705	LF	\$ 3	\$ 2,115
24	TRENCH SAFETY	705	LF	\$ 9	\$ 6,346
25	TRENCH SAFETY (STRUCTURE)	8	EA	\$ 380	\$ 3,040
26	ROCK FILTER DAM INSTALLATION	37	LF	\$ 92	\$ 3,391
27	ROCK FILTER DAM REMOVAL	37	LF	\$ 23	\$ 836
CONSTRUCTION - BASE BID:					\$ 9,948,903
CONTINGENCY				30%	\$ 3,238,522
TOTAL:					\$ 14,033,593
DESIGN				15%	\$ 2,105,039
PERMITTING				-	\$ 50,000
Estimated Project Total:					\$ 16,188,700

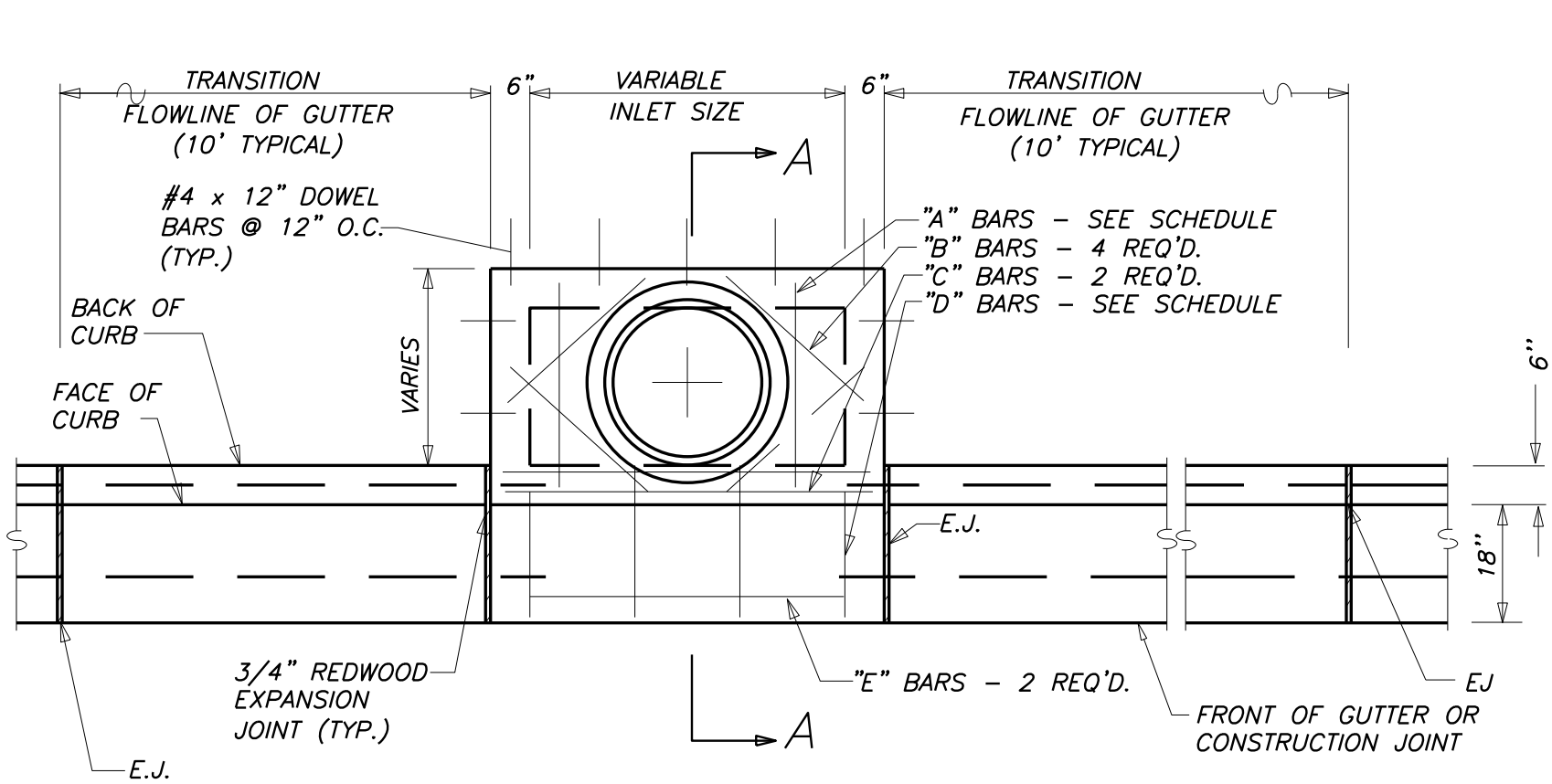
APPENDIX E
STORMWATER STRUCTURES TYPE GUIDE AND
CONDITION RATING GUIDE

Structure Type	Schematic	Pictures
Curb Inlet		
Post Inlet		
Grate Inlet		

Structure Type	Schematic	Pictures
Combination Inlet	 The schematic diagram for a Combination Inlet shows a top-down view of the structure. It features a central rectangular grate area labeled 'Grate Length' and 'Grate Width'. This grate is flanked by 'Inlet Extension' areas on both sides. The entire structure is enclosed in a 'Cast-iron frame and grates'. Labels include 'Curb Inlet', 'REAR', 'LEFT', 'RIGHT', 'Grate Inlet', 'Extension Length', and 'Inlet Extension'.	 Two photographs showing different types of combination inlets. The top photo shows a curb inlet with a metal grate. The bottom photo shows a grate inlet with a metal grate.
Manhole or Junction Box	 The schematic diagram for a Manhole or Junction Box shows a cross-section of the structure. It includes a 'Manhole Cover' on top, a 'Top Elev.' (top elevation) label, and an 'Inv. Elev.' (inverted elevation) label. The structure is made of 'PRECAST CONC. MANHOLE' and has a 'STANDARD RING & COVER'. Dimensions include '1/4\"	 A photograph of a circular manhole or junction box cover set into a concrete base, surrounded by grass.
Stormwater Pipe or Culvert	 The schematic diagram for a Stormwater Pipe or Culvert shows a cross-section of the pipe. It includes a 'Flow Direction Reference' arrow, 'Top Elev.' (top elevation) labels, and 'Pipe Upstream Inv. Elev.' (pipe upstream inverted elevation) and 'Pipe Downstream Inv. Elev.' (pipe downstream inverted elevation) labels. The pipe is shown with '12\"	 Two photographs showing different types of stormwater pipes or culverts. The left photo shows a pipe opening in a concrete structure. The right photo shows a culvert structure with a concrete pipe.

Rating	General Service Level		Specific Rating Description	Pictures		
	Culverts	Bridges				
Excellent	Culvert is structurally sound and flows freely with no accumulated debris or sedimentation. Channel slopes are stable and well protected. Water does not breach the embankment and cross the roadway. No noticeable or noteworthy structural deficiencies.	No problems of any consequence noted with the structural bridge components. No maintenance on structural items is required.	Excellent condition			
Good	Culvert is structurally sound and has only minor localized deficiencies. Silt and debris build-up is minimal. Banks may show some signs of instability. Water does not breach the embankment and cross the roadway.	There may be some deterioration or other minor defects in structural components. The capacity of the bridge is not impacted by deterioration or maintenance needs.	Good condition – some minor problems			
Fair	Culvert has moderate silt & debris build-up that requires occasional maintenance. Moderate to major deterioration occurring in localized areas & culvert may be misaligned. Erosion occurring in channel & banks may be unstable. Culvert can handle most heavy flows but may build up head water.	All primary structural elements are sound but may have minor defects.	Fair condition - minor deterioration of structural elements			
Poor	Culvert has significant silt & debris build-up impacting capacity. Bank protection has failed, and water may be piping around the culvert. The culvert has deteriorated to the point where settlement is likely occurring in the roadway. Partial culvert collapse is imminent if corrective action is not taken, or culvert has lost all structural capacity and has failed beyond the point of repair.	Bridge may be showing advanced deterioration in one or more structural components. Deterioration has seriously affected primary structural components & all parts of structure require some level of maintenance. Local failures are possible. Bridge should be closely monitored until repairs can be made. Bridge likely cannot carry legal loads.	Poor condition – deterioration significantly affects structural capacity & operation			

APPENDIX F
CITY OF INGLESIDE STANDARD STORMWATER CONSTRUCTION DETAILS

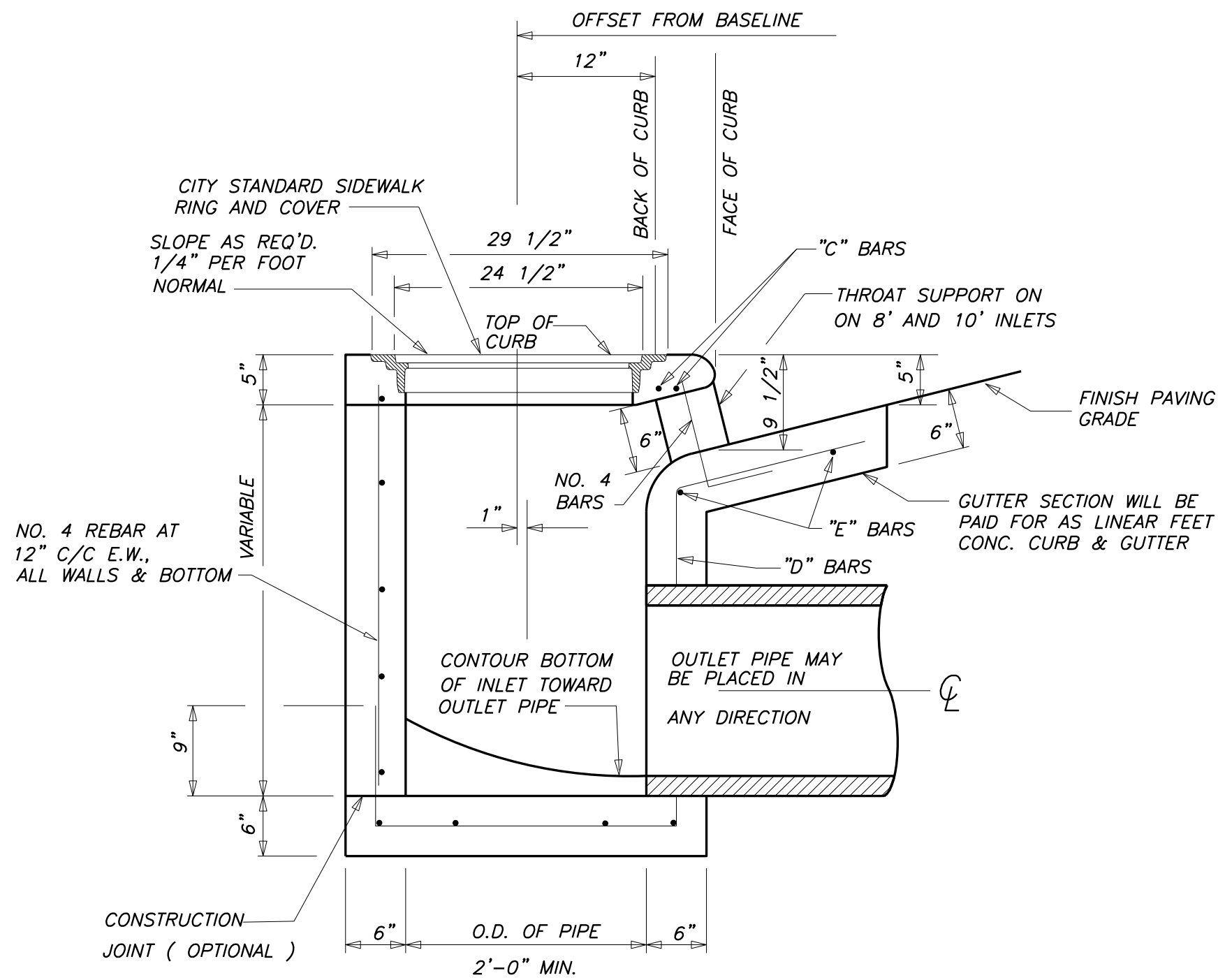


PLAN OF 5' STANDARD INLET

NOT TO SCALE

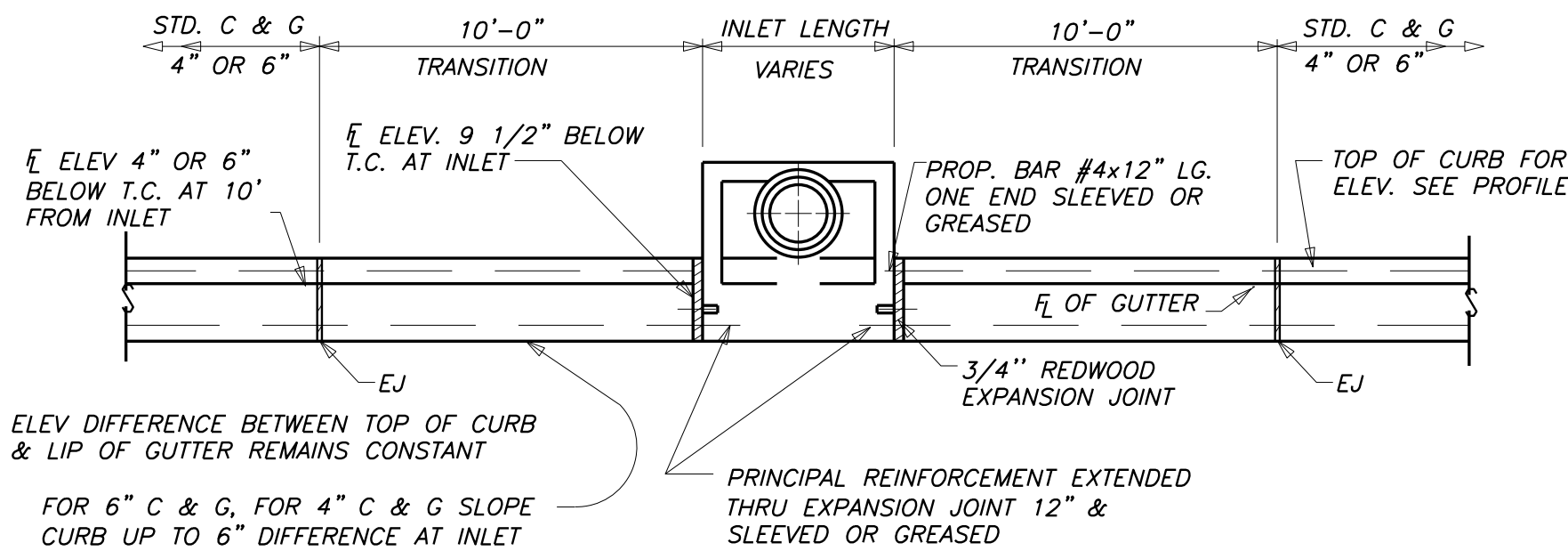
SPECIAL NOTE:

1. CONTRACTOR TO PROVIDE #4 x 12" DOWELS @ 12" O.C. WHERE PROP. SIDEWALK ABUTS INLET. (NO SEPARATE PAYMENT)
2. FOR CURB INLET THROAT EXTENSION DETAILS REFER TO STORM WATER STANDARD DETAIL SHEET 3 OF 3.



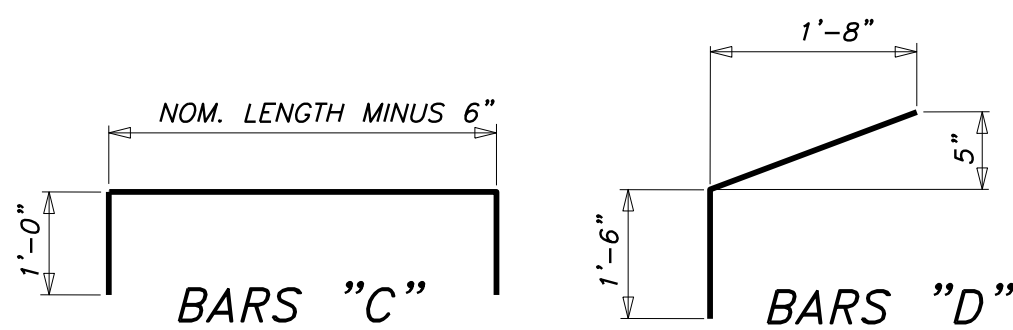
SECTION A-A

NOT TO SCALE



FLOWLINE TRANSITION AT INLET FOR 4" OR 6" STD. CURB AND GUTTER

NOT TO SCALE



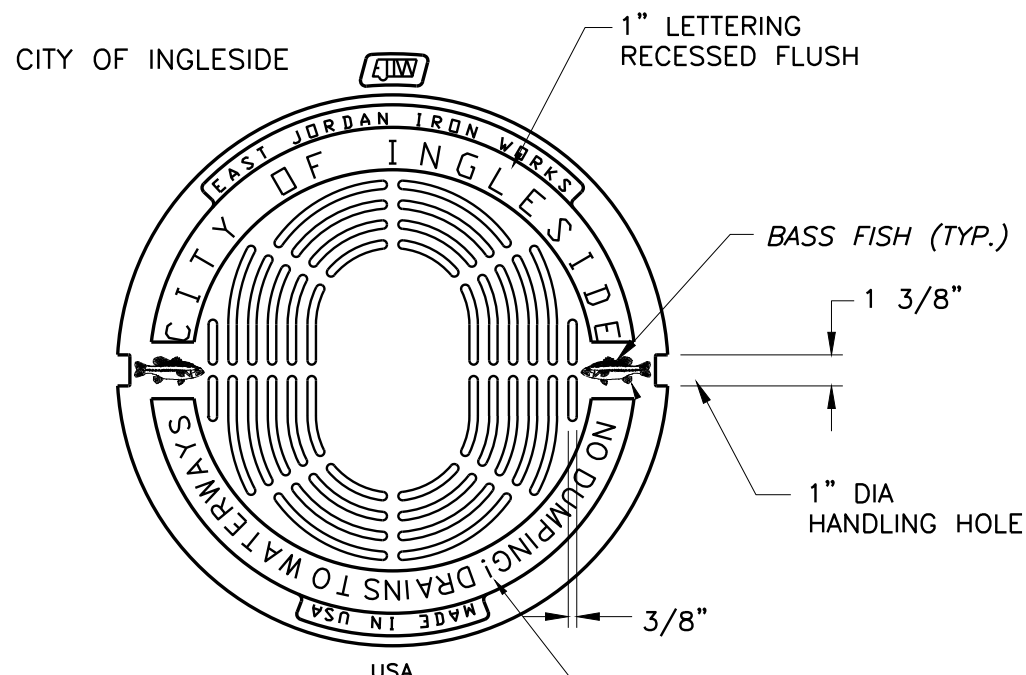
** THROAT OPENINGS SHALL HAVE A 6" X 6" CONCRETE SUPPORT PLACED AT MID-THROAT

* NOMINAL LENGTH OF INLET SHALL BE DESIGNATED AS THE CLEAR WIDTH OPENING.

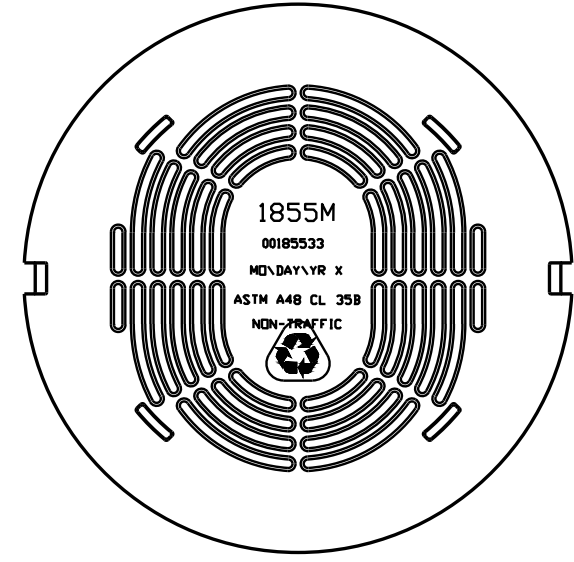
STANDARD CURB INLET STEEL SCHEDULE					
ALL BARS No. 4 PREFORMED					
INLET SIZE (Nom. Length)	NO. REQ'D./LENGTH				
	"A" BARS	"B" BARS	"C" BARS	"D" BARS	"E" BARS
4'	2/o	4/1'-10"	2/5'-6"	4/3'-2"	2/4'-6"
5'	2/o	4/3'-2"	2/6'-6"	4/3'-2"	2/5'-6"
6'	4/o	4/4'-0"	2/7'-6"	6/3'-2"	2/6'-6"
8'	4/o	4/4'-0"	2/9'-6"	6/3'-2"	2/8'-6"
10'	6/o	4/4'-0"	2/11'-6"	7/3'-2"	2/10'-6"
BENDING	STRAIGHT	STRAIGHT	SEE DET.	SEE DET.	STRAIGHT

o = O.D. + 8", 2'-8" MIN.

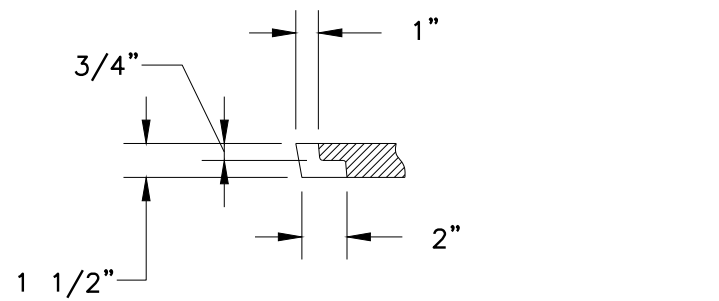
MAX. PIPE I.D. = 48 INCHES



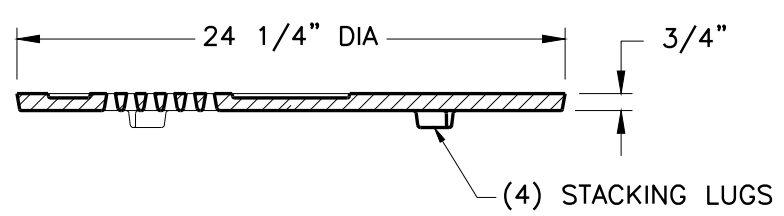
PLAN VIEW



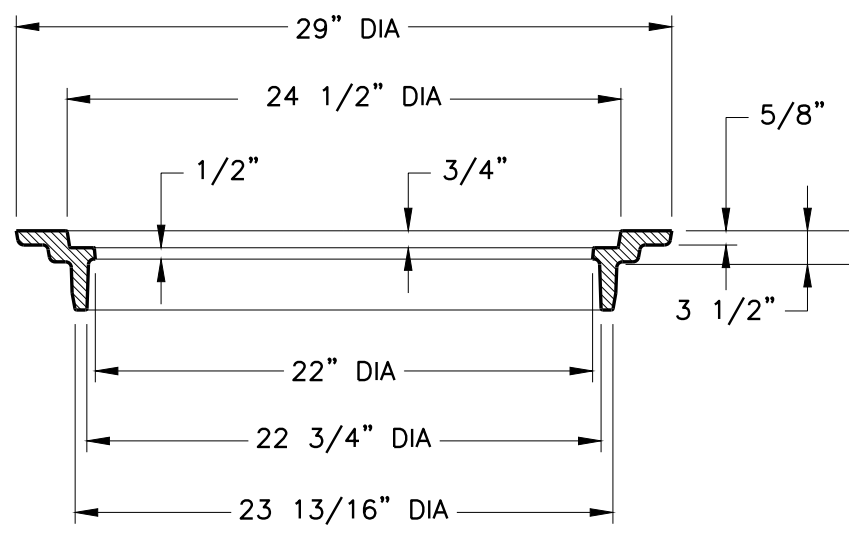
GRATE BLOCK



PICKSLOT DETAIL



GRATE SECTION



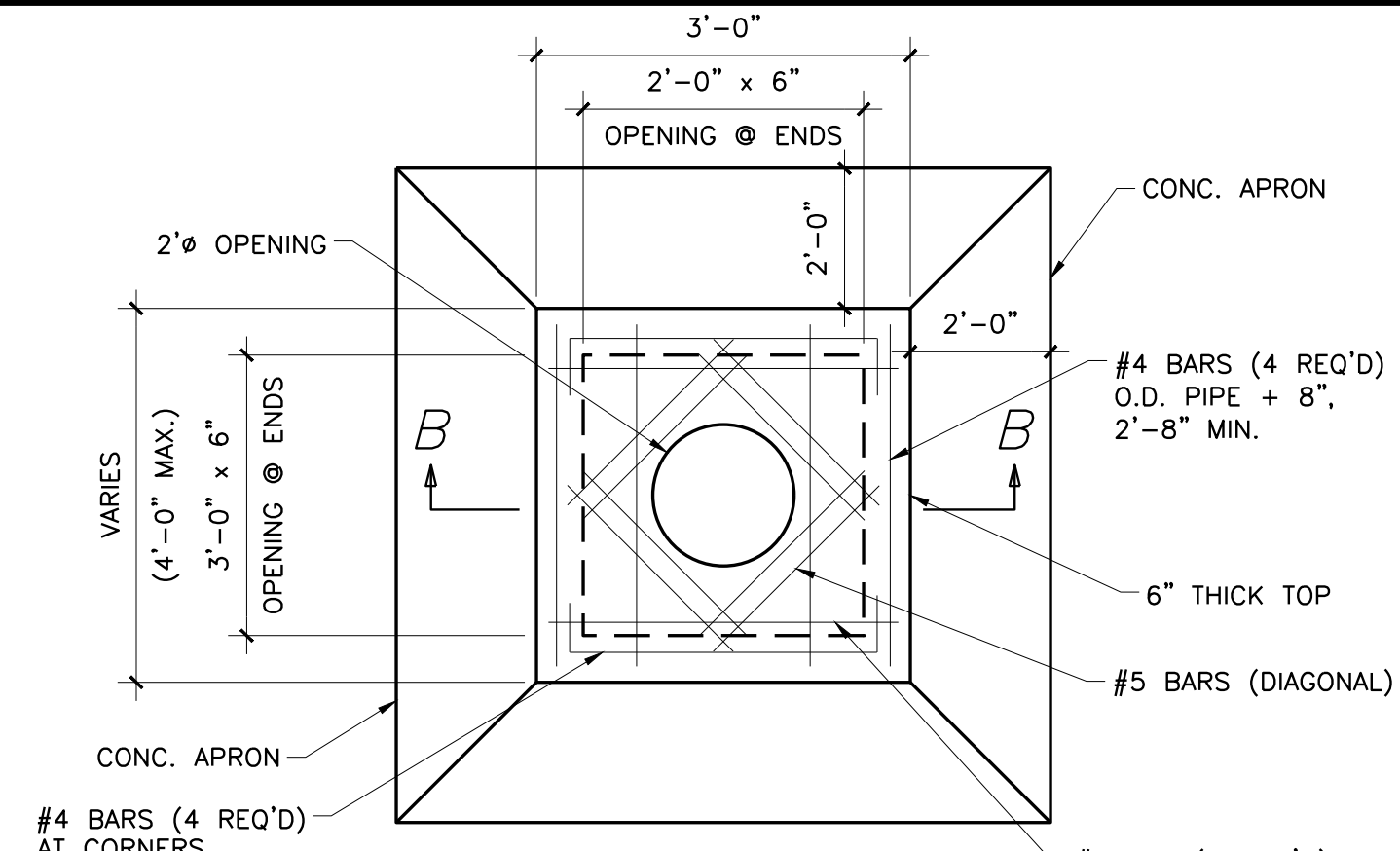
RING SECTION

CITY STANDARD INLET AND SIDEWALK MANHOLE RING & COVER CASTING DETAILS

NOT TO SCALE

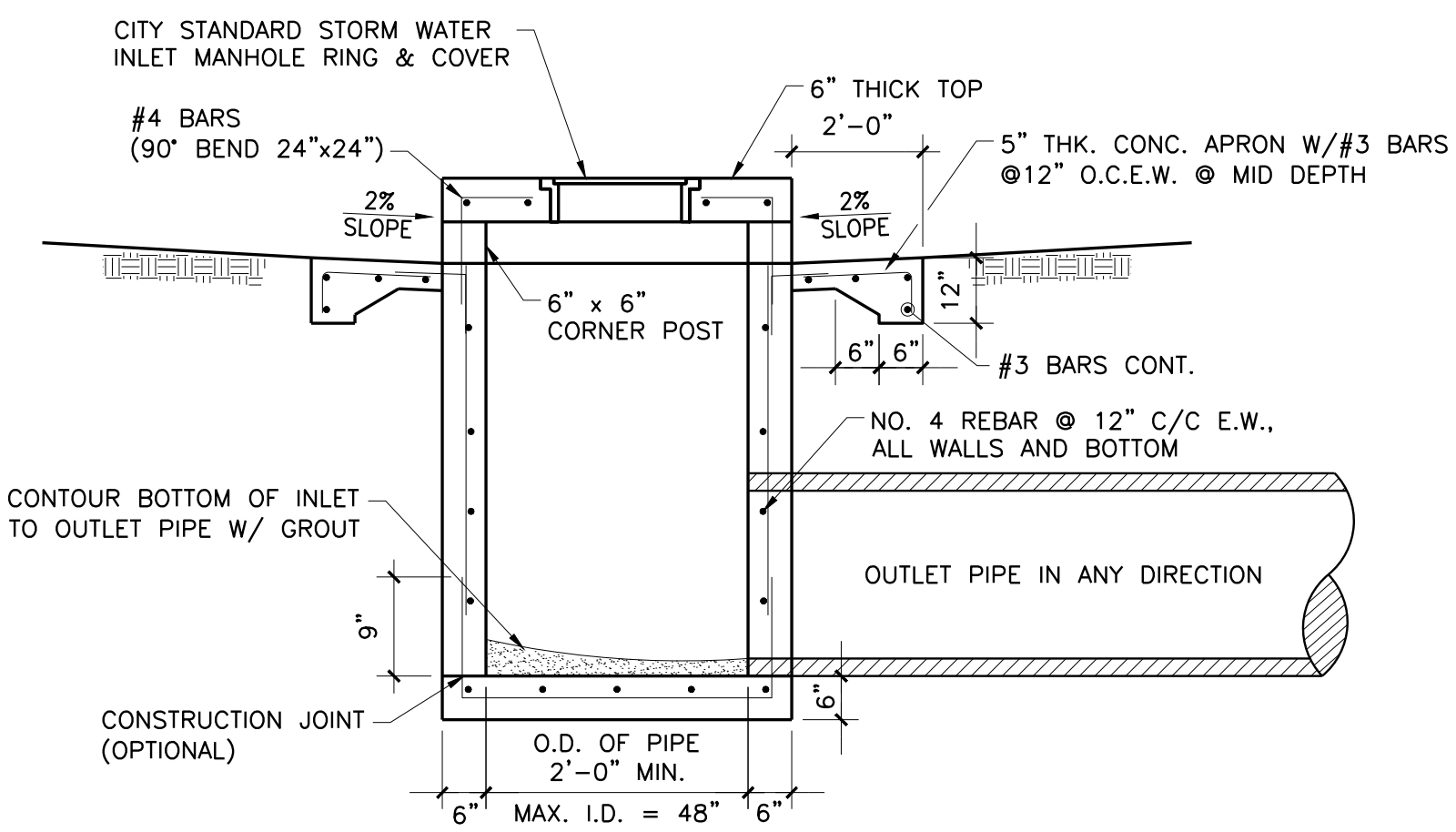
INLET AND SIDEWALK MANHOLE RING & COVER NOTES

1. MANHOLE RING & COVER SHALL BE EAST JORDAN MANHOLE ASSEMBLY FOR LOAD RATING NON-TRAFFIC.
2. THESE DETAILS SHOW GREY-IRON CASTINGS, FILLETED AT ANGLES WITH SHARP AND PERFECT ARISES.
3. CASTING SHALL BE TRUE TO PATTERN, FORM, AND DIMENSIONS, FREE FROM CRACKS, SPONGINESS AND BLOWHOLES.
4. MACHINE SURFACES TO YIELD FIT WHICH WILL NOT RATTLE WITH PASSING TRAFFIC LOAD.
5. TRAFFIC SHALL BE RESTRICTED FROM M.H. FOR 36 HOURS AFTER PLACEMENT OF RING.
6. RING AND COVER SHALL BE DIPPED IN COAL TAR OR ASPHALT.
7. OTHER CASTING PATTERNS FOR RING & COVERS MAY BE SUBMITTED FOR APPROVAL PROVIDED THE PLAN PATTERN OF COVER IS THE SAME AS SHOWN ON THIS SHEET AND PROVIDED OTHER CASTINGS SHALL BE COMPLETELY INTERCHANGEABLE, I.E., THE COVERS OF THIS SHEET SHALL FIT PROPERLY, THE RINGS OF OTHER CASTING DETAILS AND THE COVERS OF OTHER CASTINGS SHALL FIT THE RINGS OF THIS SHEET.
8. MINIMUM WEIGHTS OF FINISHED CASTINGS: THE COVER = 60 POUNDS, THE RING = 135 POUNDS.



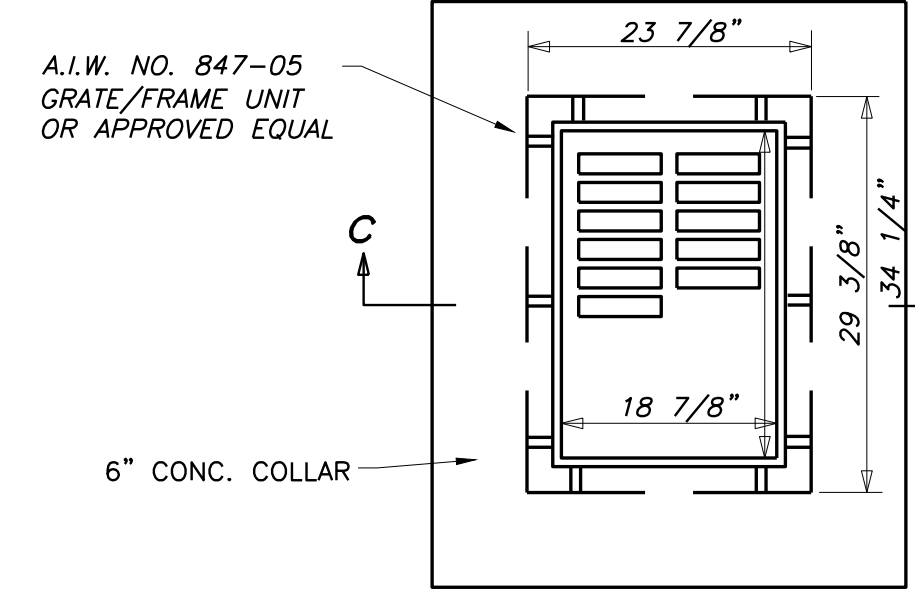
PLAN OF POST INLET

NOT TO SCALE



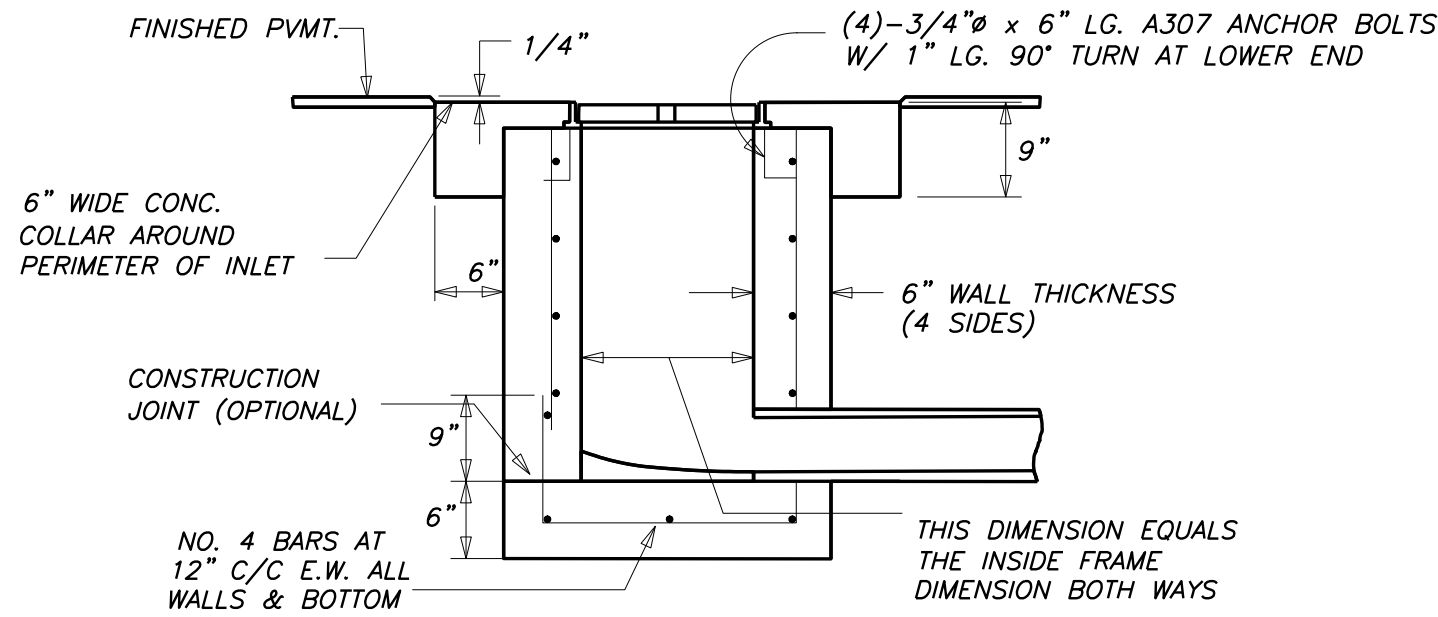
SECTION B-B

NOT TO SCALE



PLAN OF STANDARD GRATE INLET

NOT TO SCALE



SECTION C-C

NOT TO SCALE

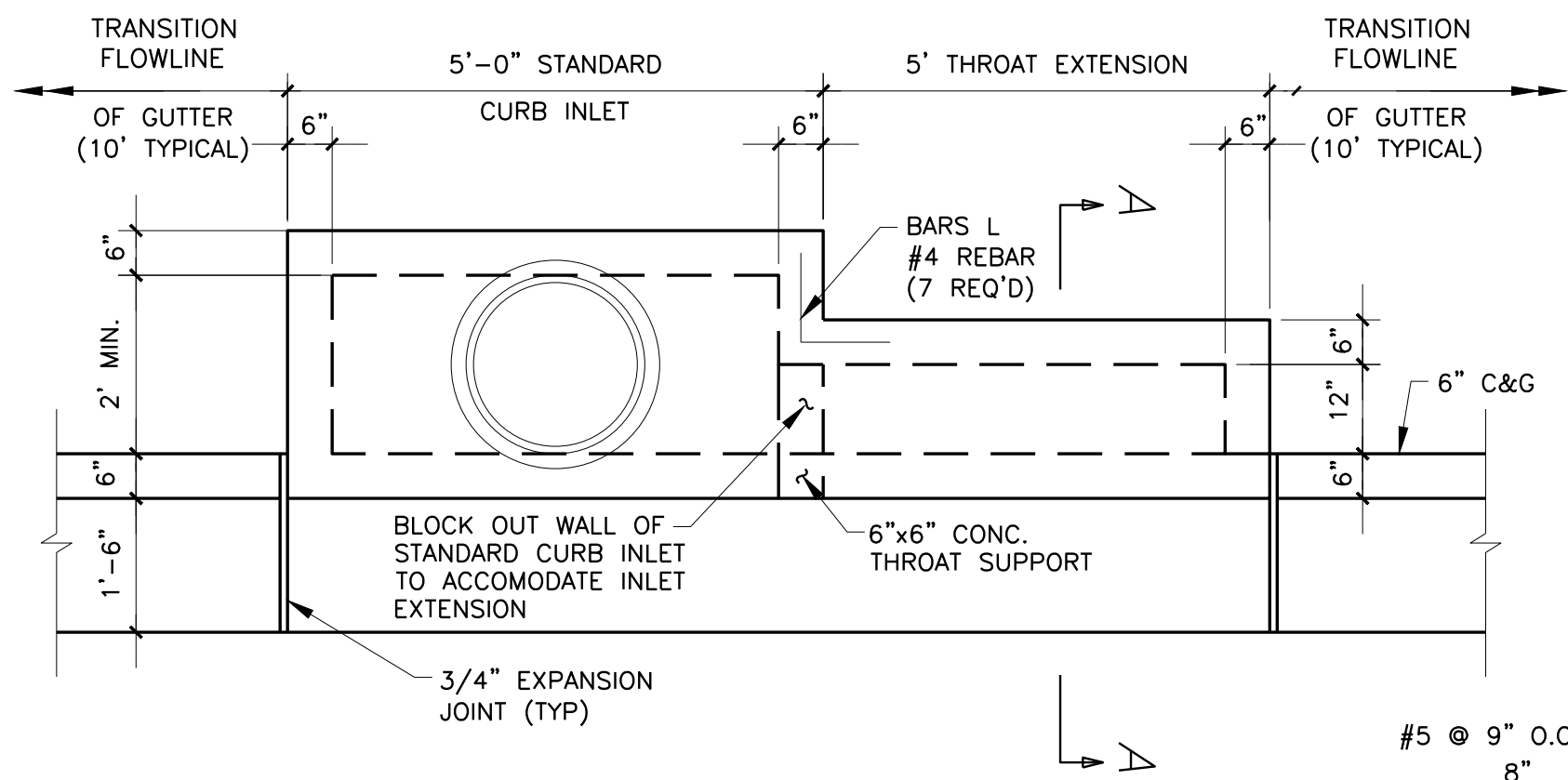


CITY OF INGLESIDE
STORM WATER STANDARD DETAILS
1 OF 3

SHEET ____ of ____
RECORD DRAWING NO.

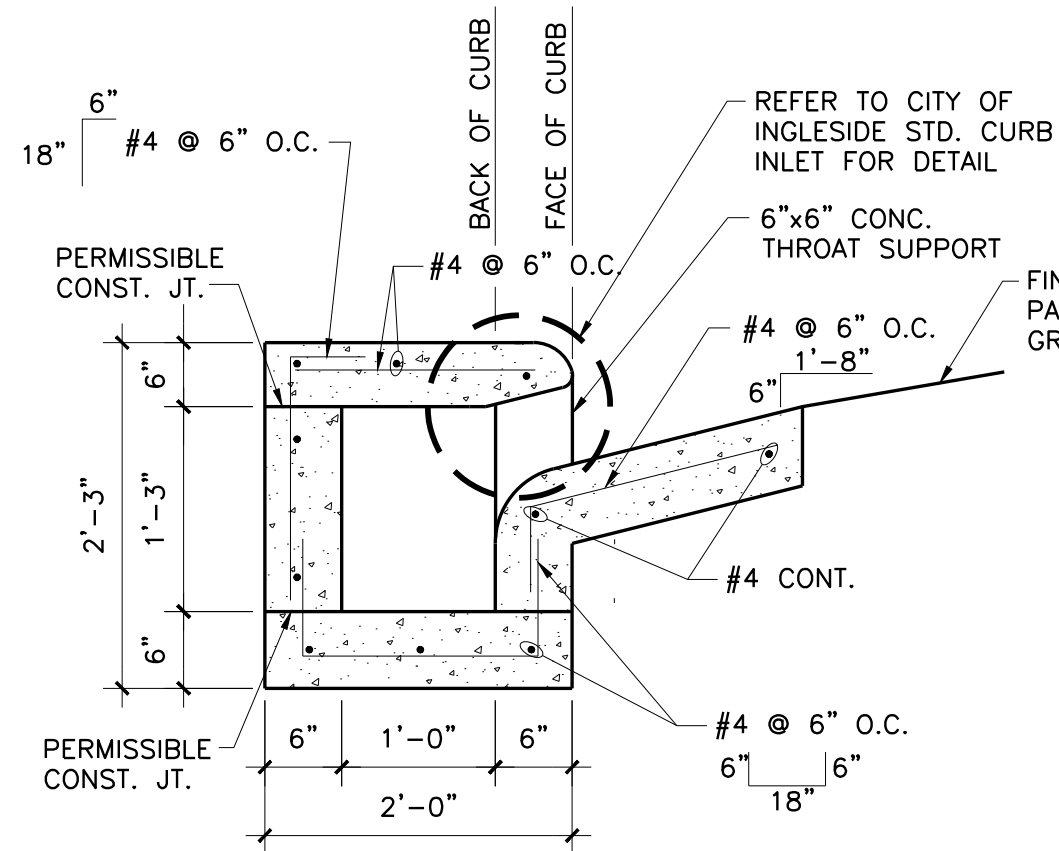
CITY PROJECT #

[illegible]



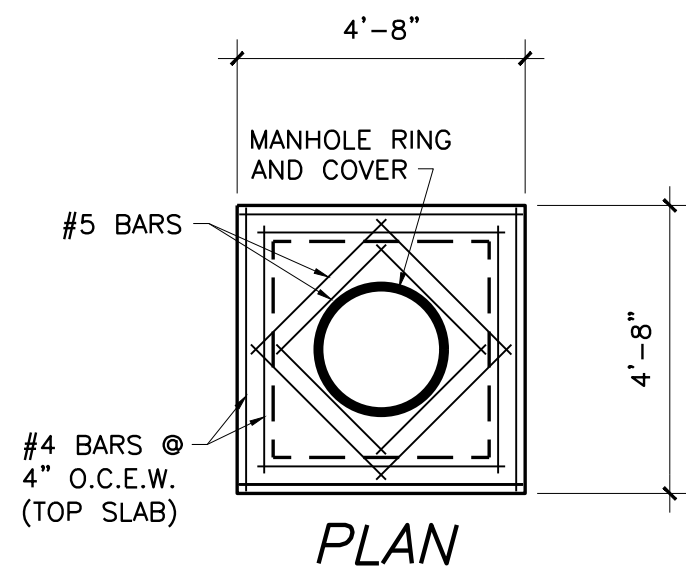
CURB INLET THROAT EXTENSION PLAN

NOT TO SCALE

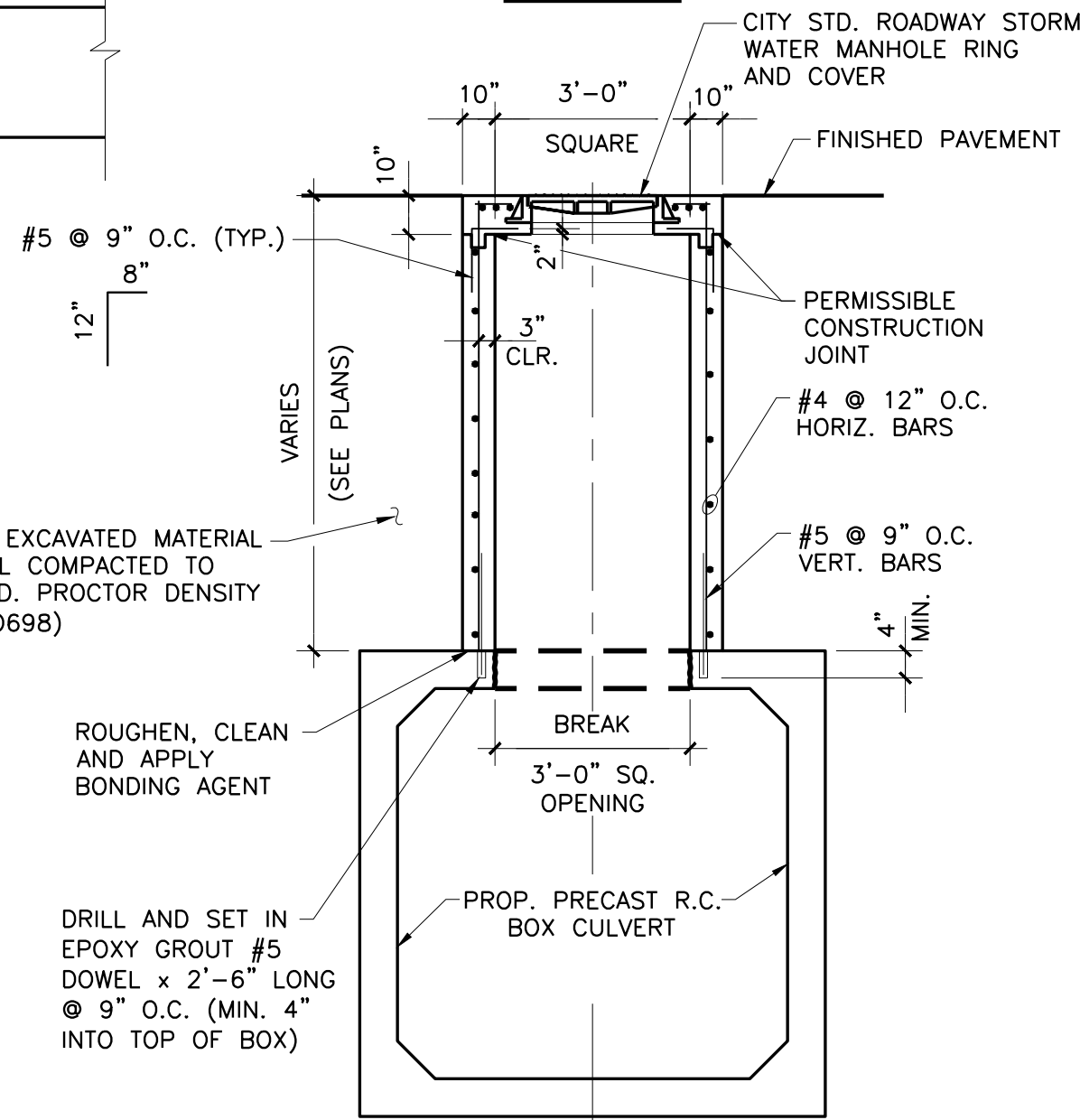


SECTION A-A

NOT TO SCALE



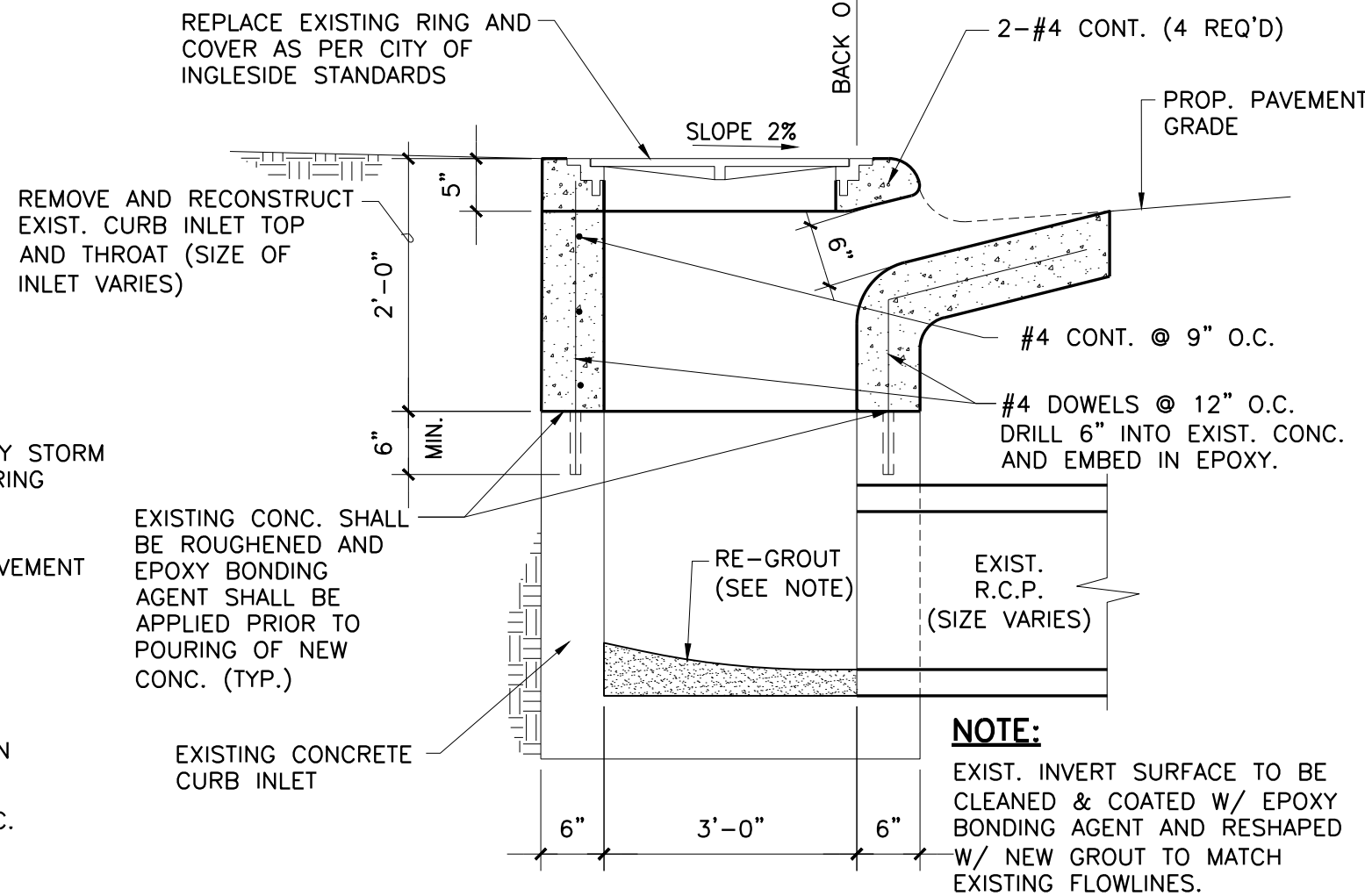
PLAN



SECTION

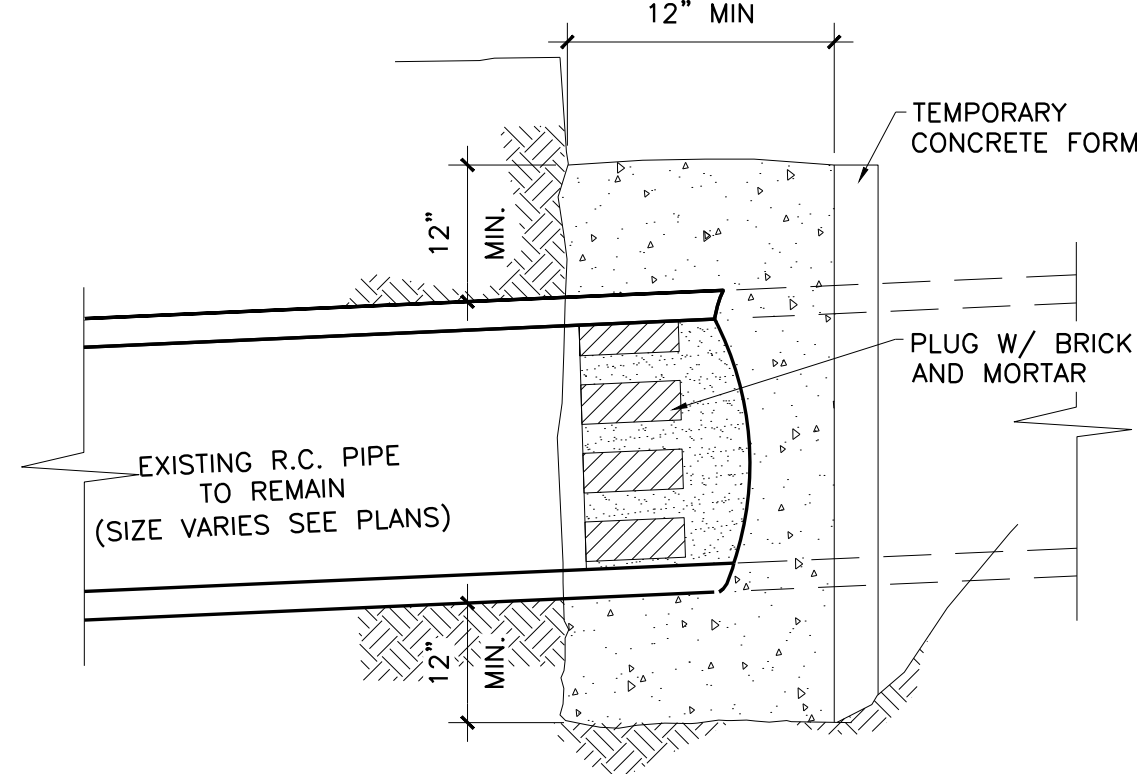
MANHOLE RISER DETAIL

NOT TO SCALE



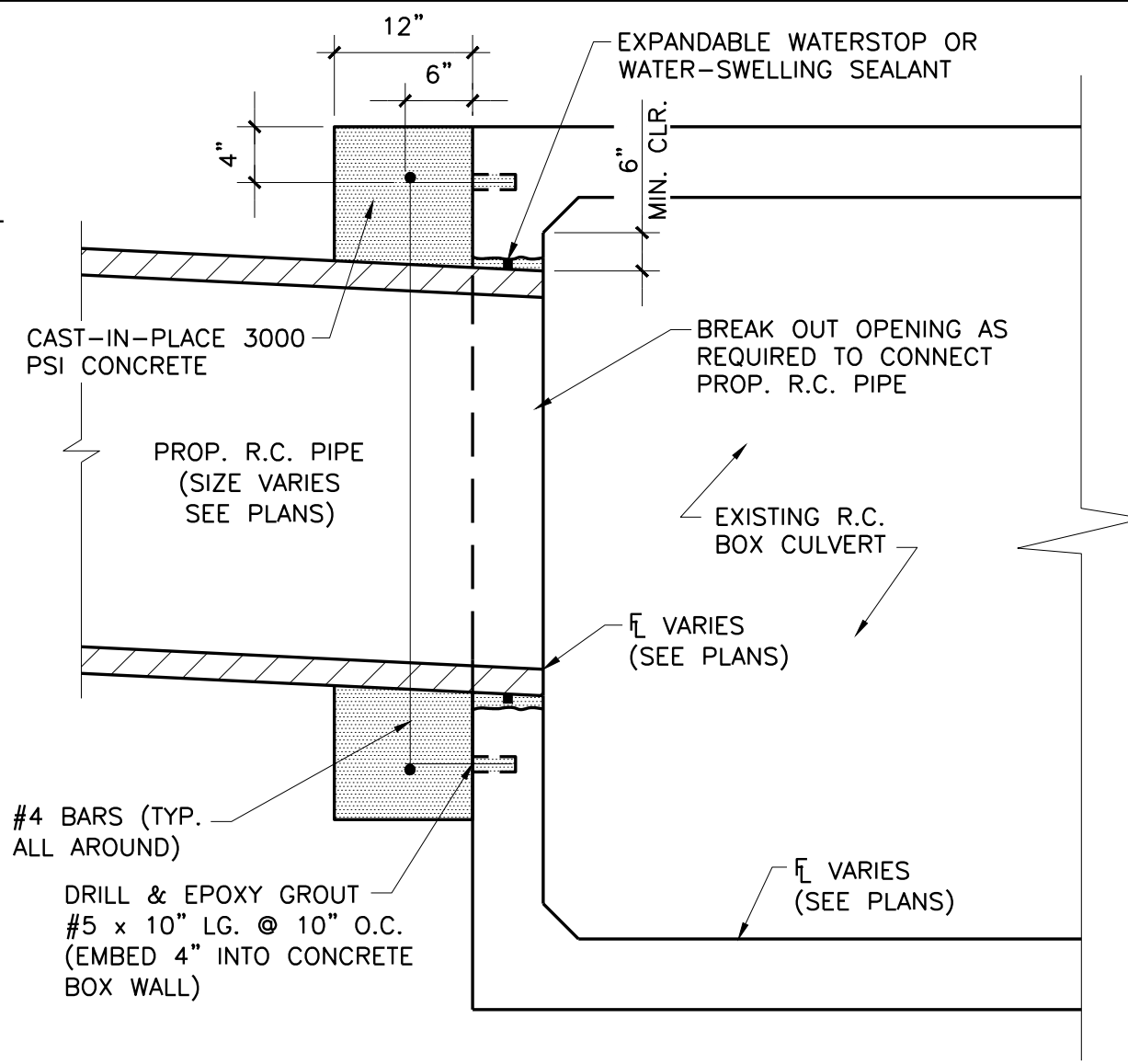
REMOVE AND REPLACE TOP OF EXISTING CURB INLET DETAIL

NOT TO SCALE



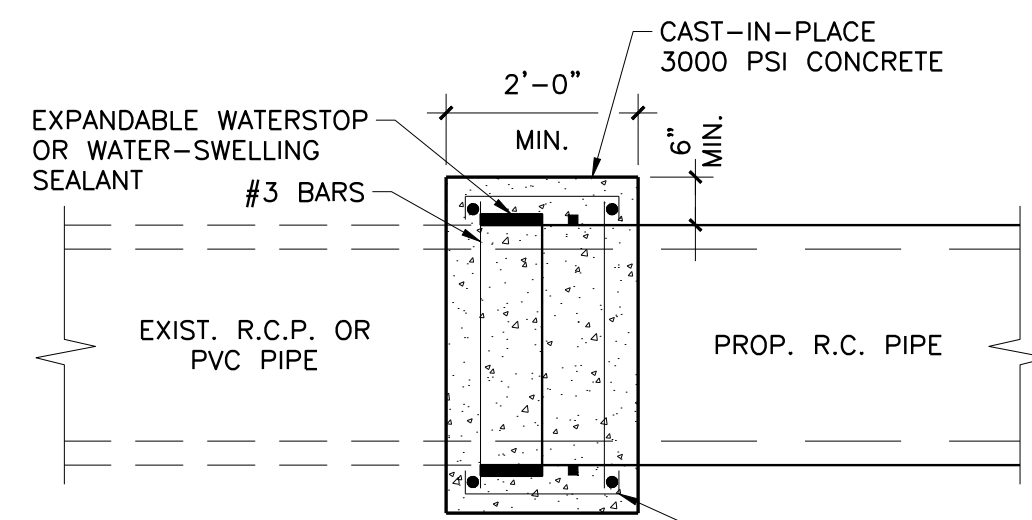
EXISTING R.C. PIPE PLUG

NOT TO SCALE



PROP. PIPE TO EXISTING R.C. BOX CONNECTION DETAIL

NOT TO SCALE



CONCRETE COLLAR DETAIL

NOT TO SCALE

GENERAL NOTES FOR BACKFILL

TABLE 1
BEDDING AND INITIAL BACKFILL
(BELOW PIPE TO 12" ABOVE PIPE)

ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF GRANULAR MATERIAL CONSISTING OF EITHER NATURAL SAND OR SANDY GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE OR GRAVEL. SEWER LINES:

1. EXCAVATIONS <20FT. DEEP AND ABOVE WATER TABLE, USE MATERIAL MEETING THE FOLLOWING CRITERIA.

MEETING REQUIREMENTS OF ASTM D2487 FOR:

SP GP
SP-GP GW
SP-SM GP-GM
SW-SM GW-GM

AND IN ADDITION:

PASSING 1/2" SIEVE - 100%
PASSING #4 SIEVE - 30% MINIMUM
PLASTICITY INDEX (PI) - NP TO 10 MAX.

2. IN DEEP EXCAVATIONS (>20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF:

A. CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4.

FOR ALL UTILITIES:

1. FOR PIPE DIAMETER EQUAL TO OR SMALLER THAN 16", USE 4" MINIMUM BEDDING UNDER PIPE.
2. FOR PIPE DIAMETER GREATER THAN 16", USE 6" MINIMUM BEDDING UNDER PIPE.

TABLE 2
FINAL BACKFILL
(GREATER THAN 12" ABOVE PIPE)

UNPAVED AREAS

PAVED AREAS

A. FOR 12" ABOVE PIPE TO BOTTOM OF TOPSOIL BACKFILL SHALL BE APPROVED SELECT MATERIAL FROM THE EXCAVATION; OR IMPORTED MATERIAL; ALL TO BE FREE OF ROCKS, DEBRIS, OR ANY CLUMPS GREATER THAN 2" IN DIAMETER; LOOSE LIFTS TO BE PLACED 10" MAX.

COMPACT MATERIAL TO 95% STD. PROCTOR (D698).
MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.

B. TOPSOIL TO BE PROVIDED EQUAL OR BETTER THAN EXISTING; AND MATCH EXISTING TOPSOIL DEPTH. (4" MIN.) COMPACT TO FIX CONFLICT TO EXISTING ADJACENT TOPSOIL (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD TOP SOIL SALVAGED TO BE PLACED ON TOP)

A. FOR 12" ABOVE PIPE TO 3' BELOW BOTTOM OF ROAD BASE; BACKFILL SHALL BE SELECT MATERIAL FROM EXCAVATION OR TO BE IMPORTED MATERIAL AND SHALL MEET THE FOLLOWING:

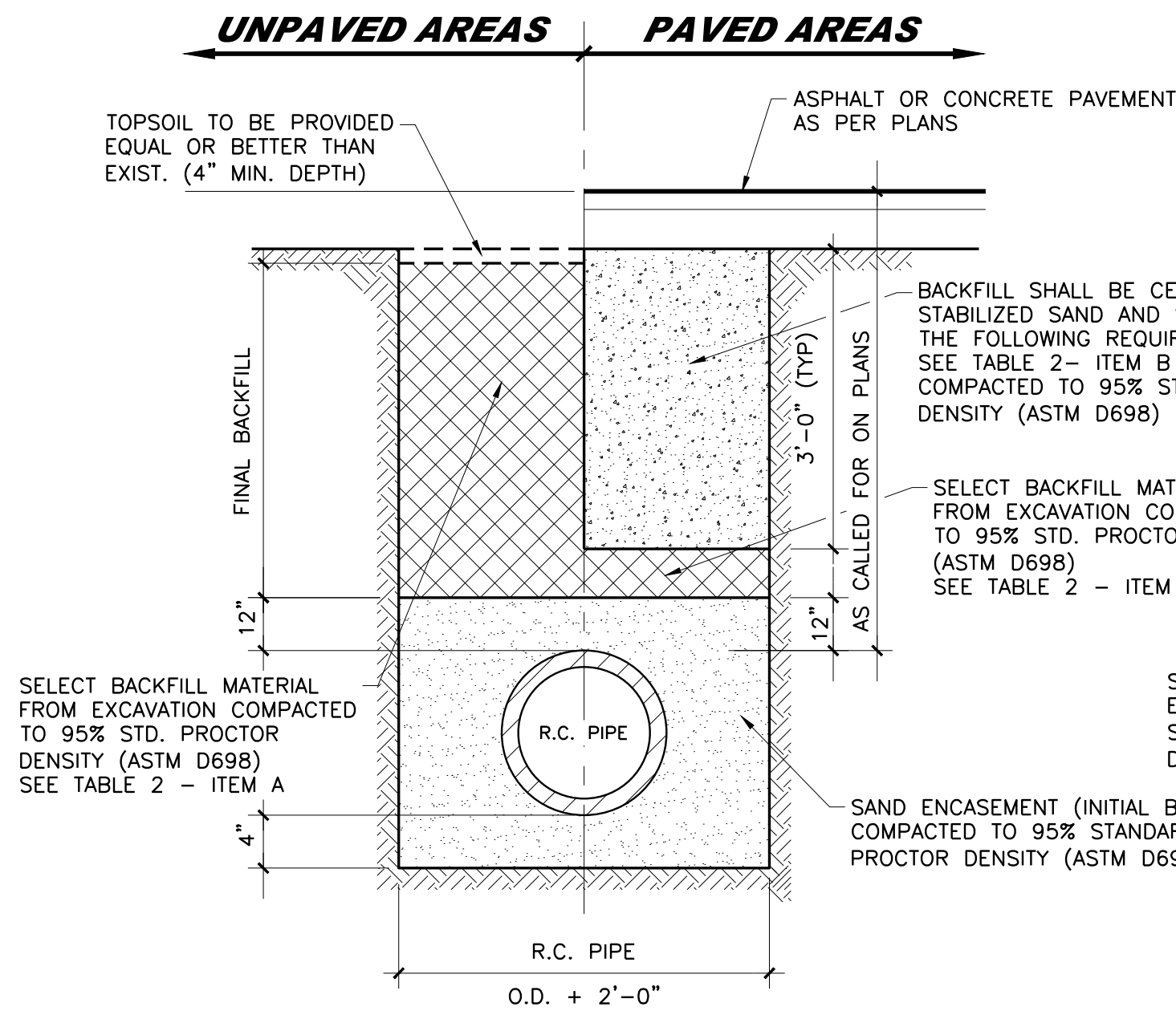
LL<35
PI 8-20
NO CLUMPS > 2" DIA.
MOISTURE 0 TO +3%
COMPACT 95% D698 STD PROCTOR

LOOSE LIFTS OF 10" MAX OR IF SELECT MATERIAL FROM EXCAVATION DOES NOT MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND SEE TABLE 2-ITEM B

B. FOR 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:

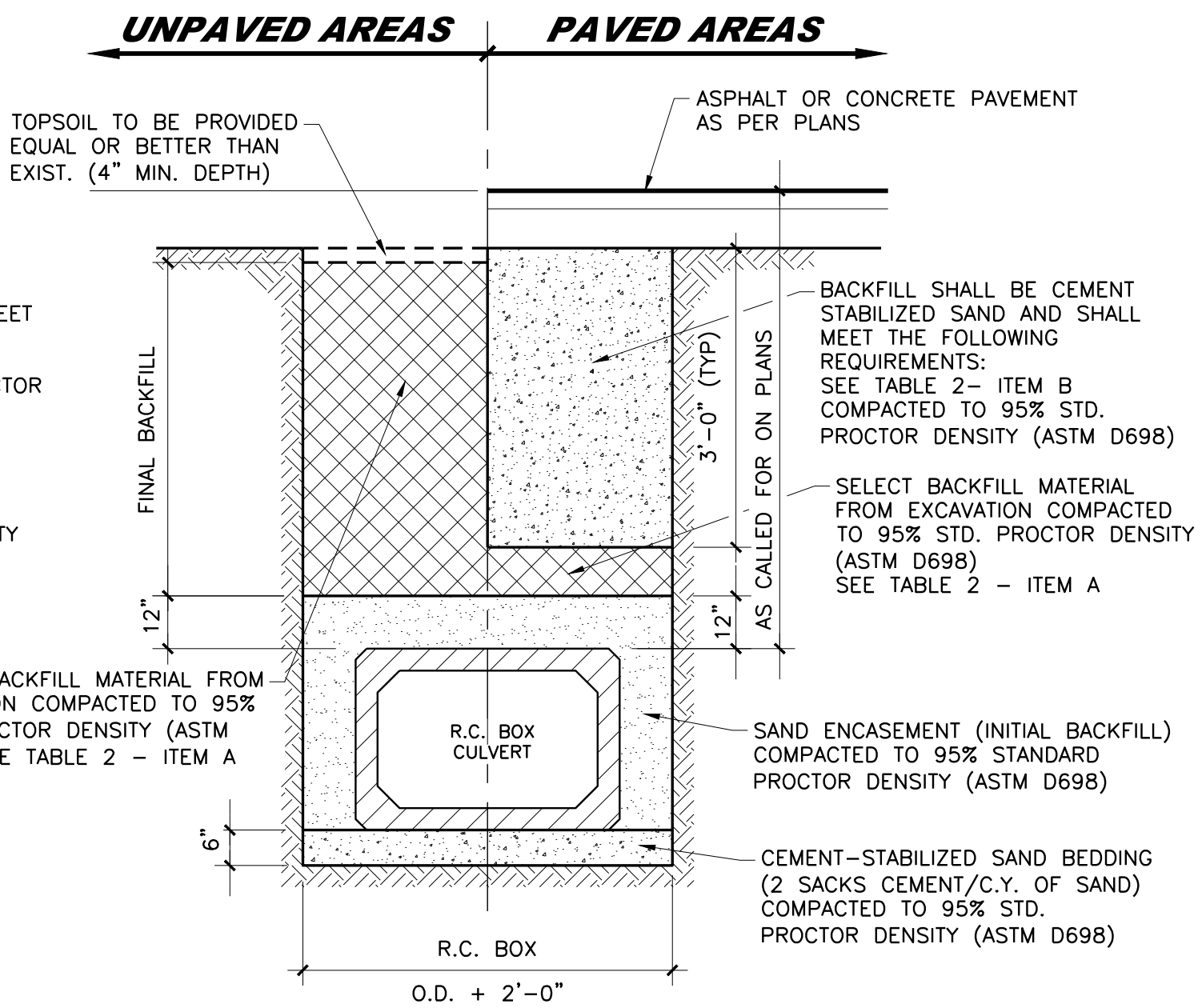
BACKFILL SHALL BE CEMENT STABILIZED SAND AND SHALL MEET THE FOLLOWING REQUIREMENTS:
SAND GRADATION:
% PASSING
1/2" 100%
#4 55-100
#10 40-100
#40 25-100
#200 10-20
PI NP-10

2 SACKS CEMENT/C.Y. OF SAND.
COMPACT TO 95% OF D698. MOISTURE TO BE ADJUSTED TO (+/-2%) OF OPTIMUM.



TRENCH BACKFILL FOR STORM WATER PIPES

NOT TO SCALE



TRENCH BACKFILL FOR STORM WATER R.C. BOX CULVERTS

NOT TO SCALE

NOTE: (CONCRETE PAVEMENT ONLY)

CONTRACTOR HAS OPTION TO USE CEMENT STABILIZED SAND OR BACKFILL WITH SELECT BACKFILL MATERIAL.



CITY OF INGLESIDE
STORM WATER STANDARD DETAILS

3 OF 3

SHEET ____ of ____
RECORD DRAWING NO.

CITY PROJECT #

[illegible]

Stormwater Pollution Prevention - Clean Water Act Section 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation.

☐ No Action Required

☐ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000

2. Comply with the SW3P and revise when necessary to control pollution or required by the Engineer.

3. Post Construction Site Notice, (CSN) with SW3P information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.

4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

Work in or near Streams, Waterbodies and Wetlands Clean Water Act Sections 401 & 404

No Permit Required
USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☐

☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)

☐ Individual 404 Permit Required

☐ Other Nationwide Permit Required: NWP* _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.

2.

3.

4.

Best Management Practices:

Erosion

☐ Temporary Vegetation

☐ Blankets/Matting

☐ Mulch

☐ Sodding

☐ Interceptor Swale

☐ Diversion Dike

☐ Erosion Control Compost

☐ Mulch Filter Berm and Socks

☐ Compost Filter Berm and Socks

Sedimentation

☐ Silt Fence

☐ Rock Berm

☐ Triangular Filter Dike

☐ Sand Bag Berm

☐ Straw Bale Dike

☐ Brush Berms

☐ Erosion Control Compost

☐ Mulch Filter Berm and Socks

☐ Compost Filter Berm and Socks

☐ Stone Outlet Sediment Traps

☐ Sediment Basins

Post-Construction TSS

☐ Vegetative Filter Strips

☐ Retention/Irrigation Systems

☐ Extended Detention Basin

☐ Constructed Wetlands

☐ Wet Basin

☐ Erosion Control Compost

☐ Mulch Filter Berm and Socks

☐ Compost Filter Berm and Socks

☐ Vegetation Lined Ditches

☐ Sand Filter Systems

III. Cultural Resources

In the event historical issues or archeological artifacts (bones, burnt rock, flint, pottery, etc.) are found during construction, cease work in the immediate area and contact the Engineer immediately.

☐ No Action Required

☐ Required Action

Action No.

1.

2.

3.

4.

5.

IV. Vegetation Resources

Preserve native vegetation to the extent practical.

☐ No Action Required

☐ Required Action

Action No.

1.

2.

3.

4.

V. Federal Listed, and Proposed Threatened and Endangered Species, Critical Habitat, State Listed Species, Candidate Species and Migratory Birds.

☐ No Action Required

☐ Required Action

Action No.

1.

2.

3.

4.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the Engineer immediately.

VI. Hazardous Materials or Contamination Issues

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets, (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

•

Dead or distressed vegetation (not identified as normal)

•

Trash piles, drums, canister, barrels, etc.

•

Undesirable smells or odors

•

Evidence of leaching or seepage of substances

Any other evidence indicating possible hazardous materials or contamination discovered on site.

Hazardous Materials or Contamination Issues Specific to this Project:

☐ No Action Required

☐ Required Action

Action No.

1.

2.

3.

4.

VII. Other Environmental Issues

(Include applicable regional or site specific enviromental issues.)

☐ No Action Required

☐ Required Action

Action No.

1.

2.

3.

4.

DESCRIPTION

BY

DATE

REVISION NO.

DESCRIPTION

BY

DATE

REVISION NO.

CITY OF INGLESIDE

STORM WATER ENVIRONMENTAL PERMITS

ISSUED AND COMMENTS (EPIC)

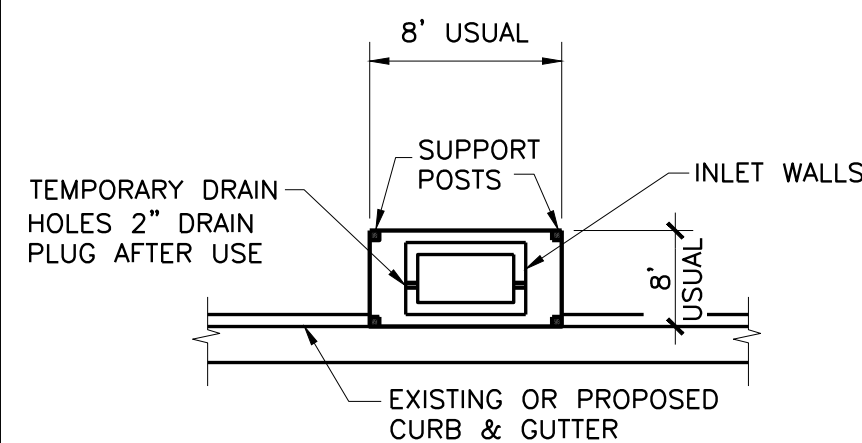
2 OF 3

SHEET _____ of _____

RECORD DRAWING NO.

CITY PROJECT # _____

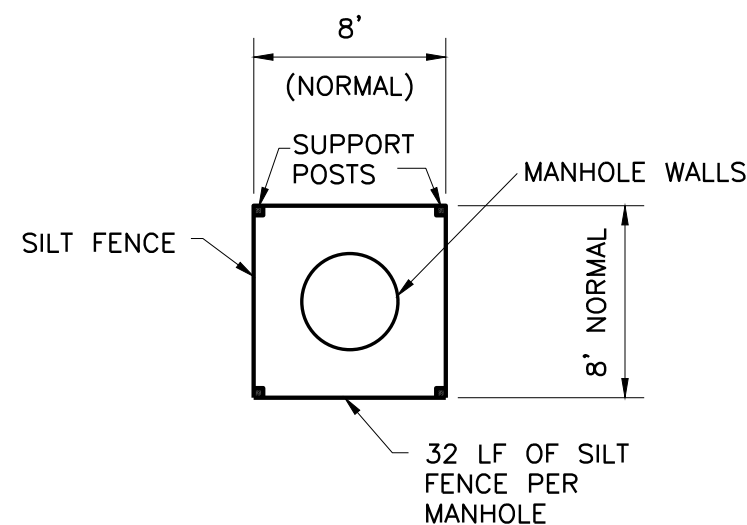
Packet Page 224 of 326



NOTE:
TYPICAL SILT FENCE INSTALLATION AT CURB INLET PRIOR TO PLACEMENT OF CURB AND INLET TOP.

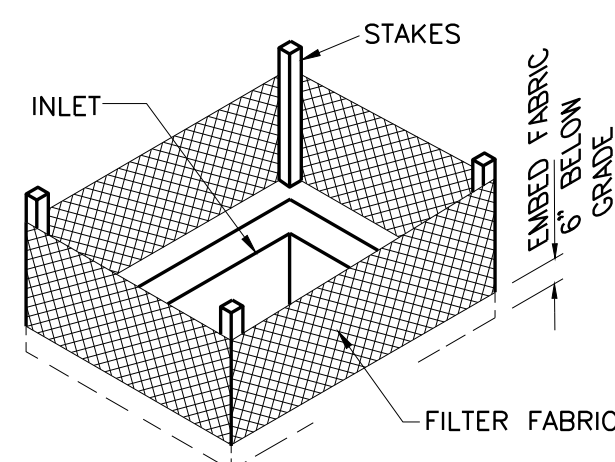
CURB INLET - PLAN

NOT TO SCALE



MANHOLE - PLAN

NOT TO SCALE

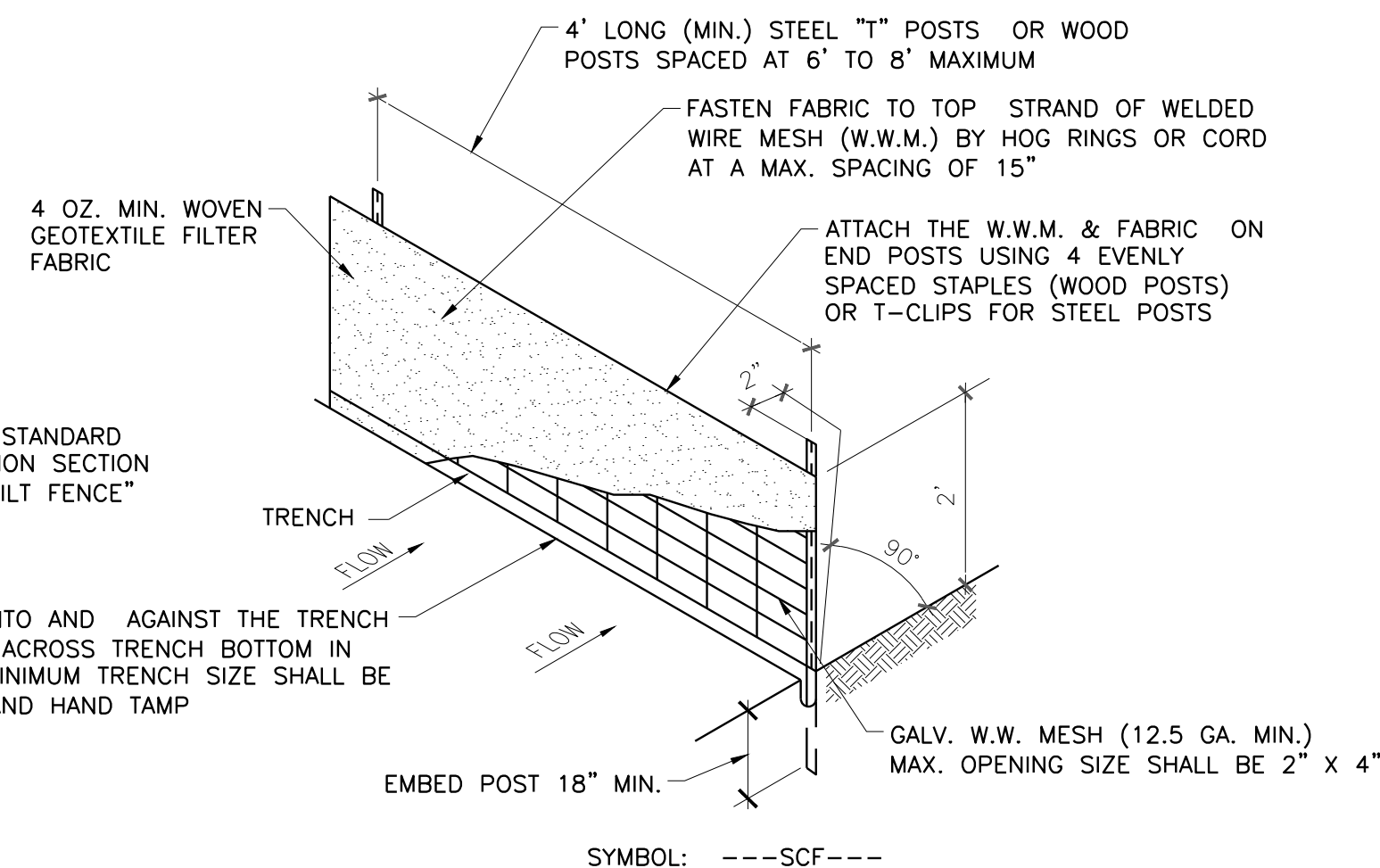


TEMPORARY FILTER FABRIC INLET PROTECTION DETAIL

NOT TO SCALE

- NOTES:**
1. FILTER FABRIC INLET PROTECTION SHALL BE USED DURING CONSTRUCTION TO CONTROL SEDIMENTATION.
 2. PERIMETER SILT FENCING AROUND INLET LOCATIONS SHALL BE INSTALLED AFTER PIPE IS PLACED.
 3. FABRIC MATERIAL SHALL BE A NET-REINFORCED FENCE, USING WOVEN GEOTEXTILE FABRIC.
 4. FENCE SHOULD BE REMOVED UPON COMPLETION OF CONSTRUCTION.

NOTE:
REFER TO STANDARD
SPECIFICATION SECTION
022420 "SILT FENCE"



TEMPORARY SEDIMENT CONTROL FENCE DETAIL

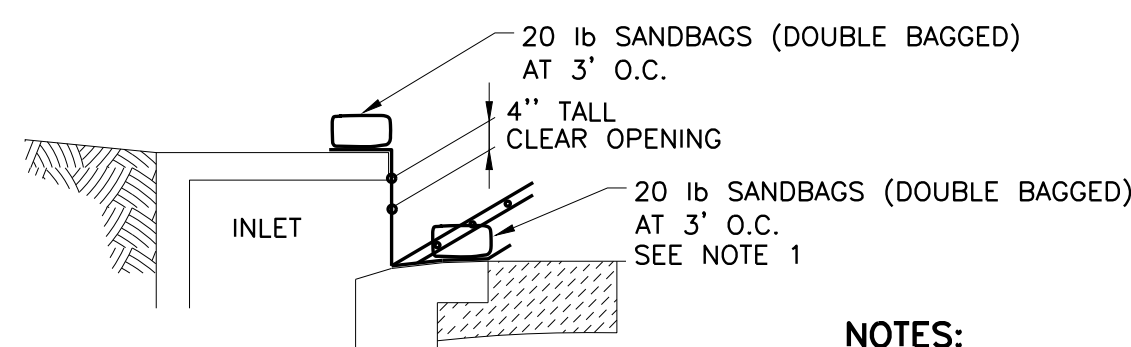
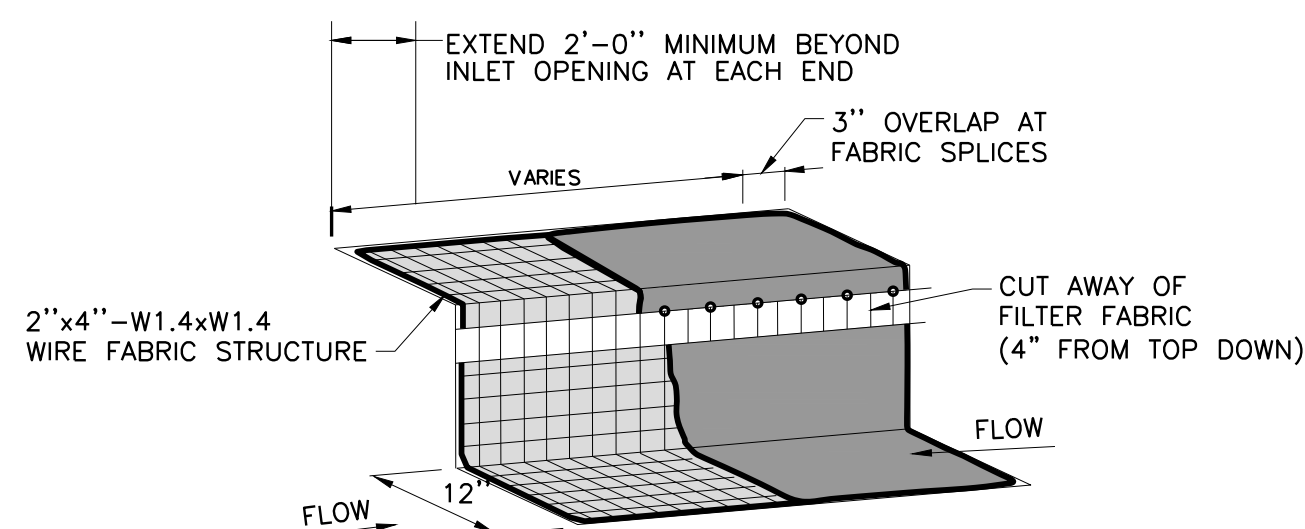
NOT TO SCALE

SEDIMENT CONTROL FENCE USAGE GUIDELINES:

SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX. FLOW THROUGH RATE OF 100 GPM/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE LARGER THEN 2 ACRES.

* THE GUIDELINES SHOWN HERE ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



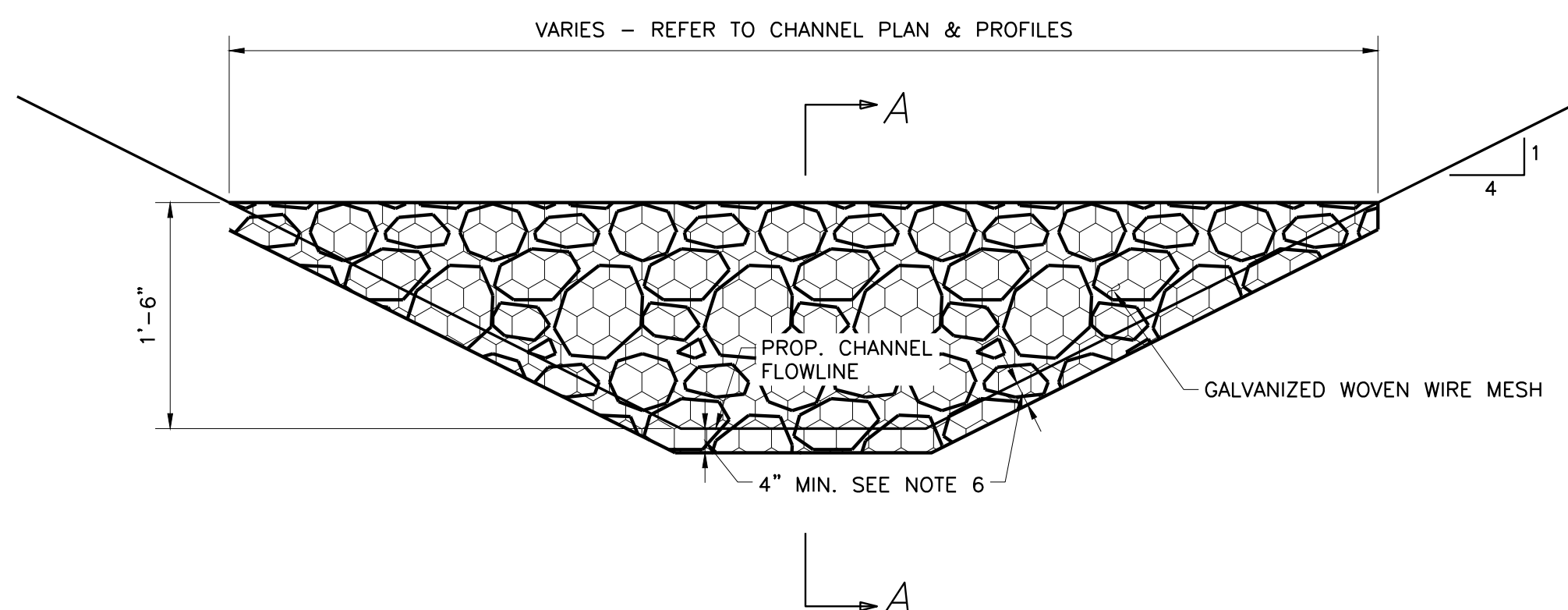
NOTES:
TYPICAL EROSION CONTROL INSTALLATION
AT CURB INLET AFTER PLACEMENT OF
CURB AND INLET TOP.

CURB INLET PROTECTION DETAIL

NOT TO SCALE

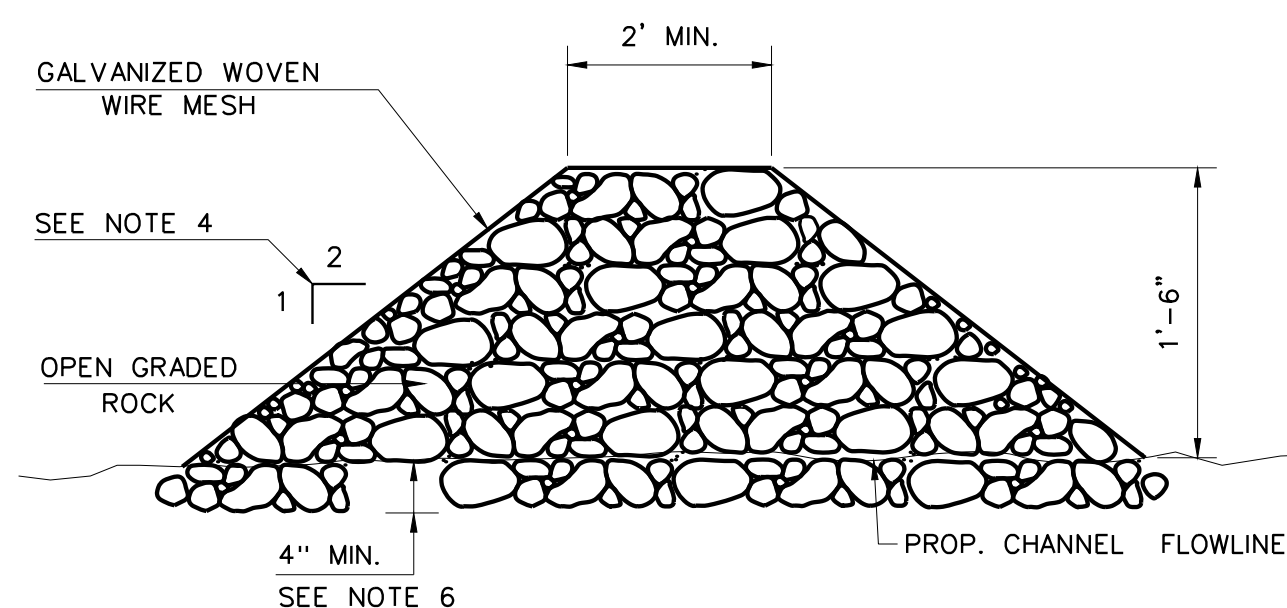
CURB INLET PROTECTION NOTES:

1. TO HOLD THE FILTER DIKE IN PLACE, 20 LB SANDBAGS SHALL BE USED AT 3' O.C. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1"x4" BOARD, SECURED WITH 1/4" OR 3/8" CONCRETE SCREWS. THE 1/4" OR 3/8" CONCRETE SCREWS SHALL BE ATTACHED TO THE GUTTER BY DRILLING AN APPROPRIATE PILOT HOLE WITH A CONCRETE BIT AND INSERT PLASTIC FASTENERS. THE TOP OF THE SCREW SHALL BE RECESSED BELOW THE TOP OF THE BOARD. THE SCREWS SHALL BE PLACED ON 3' O.C. THIS METHOD IS USED IN LIEU OF SANDBAGS; IN THE GUTTER ONLY, TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, EITHER BY THE PUBLIC OR CONTRACTOR, IN PLACE, OR REMOVE THE PLASTIC FASTENERS, CLEAN ANY DIRT/DEBRIS FROM THE SCREW LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH THE SURFACE OF THE GUTTER. THIS METHOD SHALL NOT BE USED ON THE INLET IN LIEU OF SANDBAGS.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2". INLET PROTECTION SHALL BE REPLACED AS NECESSARY DURING CONSTRUCTION DUE TO DAMAGE OR DETERIORATION (SUBSIDIARY TO INLET PROTECTION).
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND ONLY REMOVE INLET PROTECTION IF DIRECTED BY THE CITY OF INGLESDALE, OR IF CONTRACTOR OBSERVES AN IMMINENT THREAT OF FLOODING OF SURROUNDING PROPERTY.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.



ROCK FILTER DAM AT EARTHEN BOTTOM CHANNEL

NOT TO SCALE

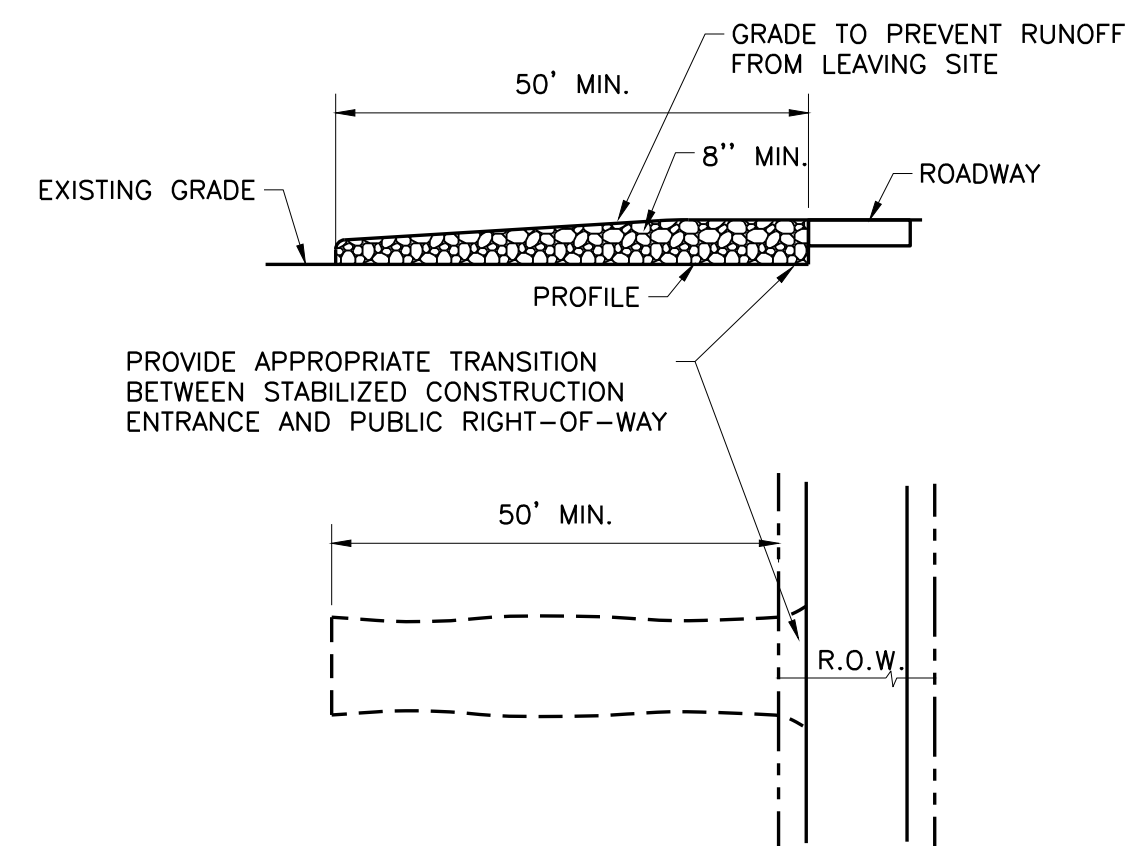


SECTION A-A

NOT TO SCALE

ROCK FILTER DAM NOTES:

1. IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, FILTER DAMS SHOULD BE PLACED NEAR THE TOE OF SLOPES WHERE EROSION IS ANTICIPATED, UPSTREAM AND/OR DOWNSTREAM AT DRAINAGE STRUCTURES, AND IN ROADWAY DITCHES AND CHANNELS TO COLLECT SEDIMENT.
2. MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATIONS FOR "ROCK FILTER DAMS FOR EROSION AND SEDIMENT CONTROL."
3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE PLANS.
4. SIDE SLOPES SHOULD BE 2:1 OR FLATTER.
5. ROCK FILTER DAM SHALL BE A MINIMUM OF TWO FEET IN THICKNESS AT TOP OF DAM.
6. FILTER DAMS SHOULD BE EMBEDDED A MINIMUM OF 4" INTO EXISTING GROUND.
7. THE SEDIMENT TRAP FOR PONDING OF SEDIMENT LADEN RUNOFF SHALL BE OF THE DIMENSIONS SHOWN ON THE PLANS.
8. ROCK FILTER DAM SHALL BE SECURED WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS, THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT & SLOPE SPECIFIED. THE MESH SHALL BE FOLDED AT THE UPSTREAM SIDE OVER THE AGGREGATE AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS. IN STREAM USE THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
9. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.)
10. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



PLAN

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: 3-5" OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 50'.
3. THICKNESS: NOT LESS THAN 8".
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

[illegible]

APPENDIX G PROJECT RANKING

Project Ranking													
CIP #	Project Name	Life and Safety [5 - Year Maximum Inundation Depth (ft)]	Life and Safety Score	Property Damage [No. of Potentially Inundated Structures in 5-Year Storm]	Property Damage Score	Road Level of Service	Road Level of Service Score	Planning Linkages	Planning Linkages Score	Project Cost	Project Cost Score	Project Total Score	Project Ranking
1	Site 1: Humble Ditch Improvements	1.2	2	37	5	No Road	0	Yes	5	\$10,227,900	1	2.70	6
2	Site 3: Kenny Lane/Whitney Lake Infrastructure	1.7	3	8	2	Collector	3	Yes	5	\$2,876,083	2	2.96	3
3	Site 4: SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane	1.4	2	16	3	Arterial	5	No	0	\$15,869,600	1	2.45	7
4	Site 5: Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street	2.9	5	3	2	Local	1	No	0	\$1,019,800	2	2.40	8
5	Site 6: Nystrom Addition Drainage Improvements	0.8	1	4	2	Local	1	Yes	5	\$2,823,800	2	1.95	9
6	Site 7: Parkside Terrace Subdivision Drainage Improvements	1.7	3	17	3	Local	1	Yes	5	\$9,148,800	1	2.71	5
7	Site 8: Villanova Place Drainage Improvements	2.4	4	180	5	Local	1	No	0	\$10,075,000	1	2.75	4
8	Site 9: Humble Addition and Avenue B Drainage Improvements	1.5	3	19	3	Collector	3	Yes	5	\$5,362,300	1	3.10	2
9	Site 10: Live Oak Ditch	1.6	3	11	3	Arterial	5	Yes	5	\$16,188,700	1	3.50	1

Project Scoring Rubric									
Life and Safety [5 - Year Maximum Inundation Depth (ft)]	Life and Safety Score	Property Damage [No. of Potentially Inundated Structures in 5-Year Storm]	Property Damage Score	Road Level of Service	Road Level of Service Score	Planning Linkages	Planning Linkages Score	Project Cost	Project Cost Score
2.5	5	30	5	Arterial	5	Yes	5	\$ 100,000	5
2.0	4	20	4	Collector	3	No	0	\$ 500,000	4
1.5	3	10	3	Local	1			\$ 1,000,000	3
1.0	2	3	2	No Road	0			\$ 5,000,000	2
0.5	1	1	1					\$ > \$5,000,000	1
0.0	0	0	0						

APPENDIX H FUNDING SOURCE MATRIX

	Flood Infrastructure Fund	Community Development Block Grant - Mitigation	Community Development Block Grant - Disaster Recovery	Texas CDBG - Community Development Fund (Grant)	Clean Water State Revolving Fund	Nonpoint Source Grant Program [Section 319 (h)]	Flood Mitigation Assistance Grant	Hazard Mitigation Grant Program - 404
Sponsor	TWDB	HUD/GLO	HUD/GLO	TDA	EPA/TWDB	EPA/TCEQ/TSWCB	FEMA/TWDB	FEMA/TDEM
Grant/Loan	Mixed Loan (0% interest) and Grant	Grant	Grant	Grant	Loan, Loan Forgiveness	Grant	Grant	Grant
Eligible Funding Activities	Drainage, flood mitigation and flood control such as: -Planning and design activities -Work to obtain regulatory approvals -Construction and implementation of flood projects	-Activities that increase resilience to disasters and reduce or eliminate the long- term risk of loss of life, injury, damage to and loss of property, and suffering and hardship, by lessening the impact of future disasters. -Per the Action Plan, funding will go toward 11 programs (local/regional mitigation, housing, planning), 3 of which are project competitions.	-Repairing, enhancing, and restoring infrastructure for local communities impacted by presidentially-declared disasters as part of a comprehensive long-term recovery program. Match for FEMA Public Assistance and Hazard Mitigation Grant Programs may be eligible. -Flood control and drainage repair and improvements -Restoration of infrastructure such as water and sewer facilities	Plan, design and construct public works projects in nonentitlement communities	-Planning, design and construction of wastewater infrastructure, including treatment and reuse facilities -Stormwater management and Nonpoint Source (NPS) pollution control	-Implementation of watershed protection plans -NPS portion of Total Maximum Daily Load (TMDL) Implementation Plans -Surface water quality monitoring, data analysis and modeling -Best management practices (BMPs) -Public outreach/education	-Project Scoping, Community Flood Projects, Technical Assistance, Flood HMP, and Individual Mitigation Projects, including: -Acquisition for demolition or relocation -Structure elevation or reconstruction -Dry flood-proofing (non-residential and historic) -Minor, localized flood reduction projects -Structural/non-structural retrofitting -Soil Stabilization -HMP (flood hazard only) development or update	-Acquisition for demolition or relocation -Structure elevation Dry flood-proofing -Minor, localized flood reduction projects (aquifer storage and recovery, floodplain and stream restoration, flood diversion and storage, or green infrastructure) -HMP development
Cost Share	Varies	None (100% Grant), additional scoring points for 1% local share	None (100% Grant)	Varies; typically 75% Grant / 25% Local	Long-term fixed rate loans at subsidized interest rates (up to 40% reduction from market rates) with a maximum repayment period of 30 years Additional subsidies (grants) available for disadvantaged communities, green projects, and emerging contaminants such as PFAS	60% Federal / 40% Local Match	0% Local/100% Federal, for projects involving Severe Repetitive Loss Properties 10% Local/90% Federal, for projects involving Repetitive Loss Properties 25% Local/75% Federal, for projects involving NFIP insured properties	25% Local/ 75% Federal
Recent Funding Levels	2024-2025: \$375 M	\$4.3 B total. Statewide competitive: 2015: \$46,096,950 2016: \$147,680,760 Harvey: \$2,144,776,720	Based on congressional appropriation	PY 2023: \$49.8 M	SFY 2024: \$460 M	Not listed	Under the CY 2024 NOFO, \$800 M Up to: \$60 M for Capability and Capacity Building, \$340 M for Localized Flood Risk Reduction Projects, and at least \$400 M for Individual Flood Mitigation Projects	Variable (disaster-dependent)
Project Funding Cap	Overall, just the program capacity; Grant, \$18.75 M	Varies for current Regional Mitigation Distribution thru COGS For Statewide competition 2015/2016: max \$10 M, min \$3 M Harvey: max \$100 M, min \$3 M (Projects >\$100 M are Covered Projects Requiring State Action Plan Amendment)	Depends on state action plan	\$500,000	Loans - None Principal forgiveness - \$10 M from all sources (disadvantaged community, green, small/rural)	Not listed	\$900,000 for project scoping, \$50 M for localized flood risk reduction projects (previously called community flood projects); \$50,000 per state for technical assistance; \$25,000 for local HMP update \$300,000 for other Capability and Capacity Building (C&CB) Activities	Based on project cost
Availability	\$375 M available 2024-2025	Currently, \$1.2B being distributed thru the Regional Mitigation Program by 9 regional COGS For Statewide Competition: One Time Occurrence (began 2020);	Following Presidential Disaster Declaration	Biennial	Annual	Annual	Annual	Following Presidential Disaster Declaration
Requirements	-Must show what the benefit/cost ratio is (at least 1:1) for construction related projects -Memorandum of understanding with neighboring political subdivisions relating to the management of watershed when same is partially located outside the applicant's jurisdiction -Must have floodplain ordinances or orders in place and enforced to NFIP standards	-Presidential Disaster Declaration. Eligible Counties varies by disaster (2015, 2016, Harvey) -Socially vulnerable Low market values -Low to moderate income >51% -Competition seeks projects with the highest benefitting population / project cost ratio	HUD's National Objectives: -Assist Low to Moderate Income (LMI) with housing, infrastructure, or economic development needs. -Alleviate Slum and Blight -Address Urgent Need	Eligible applicants are nonentitlement general purpose units of local government including cities (<50,000 pop) and counties (<200,000 pop) that are not participating or designated as eligible to participate in the entitlement portion of the federal Community Development Block Grant Program (CDBG)	-Water conservation and drought contingency plan for loans more than \$500,000 -NEPA review -Davis-Bacon Act wage rates -Disadvantaged Business Enterprise program compliance -Build America, Buy America Act provisions (American Iron & Steel, manufactured products, construction materials)	-Quality Assurance Project Plan (QAPP) -See Priority Waters list for areas that are "of particular interest"	-Community participation in the NFIP (and in good standing) -Mitigated property insured by NFIP -FEMA-approved and locally adopted HMP -Cost-beneficial project	-Presidentially declared disaster -Community participation in NFIP (for projects located in SFHA) -FEMA-approved HMP -Cost-beneficial project
Application Deadline	2024 abridged applications due March 15, 2024	For Regional Mitigation, varies. 2015, 2016, 1st Round of Harvey closed.	Unknown at this time - dependent on the disaster timeline	Application Deadline: May 3, 2023	Next, March 1, 2024	Established annually; next call for applications expected Summer 2024	NOFO/E-grants Access: Typically August; Application Call: Typically October; Deadline: Typically End of January *State deadlines can be prior to FEMA* Texas 2024 Deadline as January 8.	Established following Presidential Disaster Declaration. 30 days for letter of intent from state/local government, sup-applications usually due within 1 year
Website	https://www.twdb.texas.gov/financial/programs/fif/index.asp	https://recovery.texas.gov/mitigation/	https://recovery.texas.gov/disasters/index.html	https://www.texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/	https://www.twdb.texas.gov/financial/programs/CWSRF/index.asp?	https://www.tceq.texas.gov/waterquality/nonpoint-source/grants/grant-pgm.html#eligibleactivities	https://www.twdb.texas.gov/financial/programs/FMA/index.asp	https://www.fema.gov/grants/mitigation/hazard-mitigation
Legend	BRIC = Building Resilient Infrastructure and Communities • EPA = Environmental Protection Agency • FEMA = Federal Emergency Management Agency • GLO = Texas General Land Office • HMP = Hazard Mitigation Plan • HUD = Department of Housing and Urban Development • NFIP = National Flood Insurance Program • NRCS = Natural Resources Conservation Service • PY = Program Year • SFHA = Special Flood Hazard Area • SFY = State Fiscal Year • TCEQ = Texas Commission on Environmental Quality • TDA = Texas Department of Agriculture • TDEM = Texas Division of Emergency Management • TPWD = Texas Parks and Wildlife • TSWCB = Texas Soil and Water Conservation Board • TWDB = Texas Water Development Board • USACE = United States Army Corps of Engineers • USDA RD = United States Department of Agriculture - Rural Development • WEP = Water and Environment Program							

	BRIC Grant	Cooperating Technical Partners (CTP) Program	406 Mitigation Grant Program - Public Assistance	High Hazard Potential Dam Grant Program	Emergency Watershed Protection Program (Grant)	Watershed and Flood Prevention Operations Program	Watershed Rehabilitation	Water and Environmental Programs
Sponsor Grant/Loan	FEMA/TDEM Grant	FEMA Grant	FEMA/TDEM Grant	FEMA/TCEQ Grant	NRCS Grant	NRCS Grant	NRCS Grant	USDA RD Grants and Loans
Eligible Funding Activities	-Capability and Capacity Building (Including HMP development, project development, application development) -Mitigation Projects, with a focus on community-wide infrastructure projects	-Support communities to continue ongoing regulatory NFIP responsibilities and mitigate risk through flood risk mapping, risk communications, and more (as part of the Risk MAP process). -Fundable activities include: Program Management, Communication and Outreach Strategies, LOMR Review, Special Projects, Technical Hazard Identification, Risk Analysis and Mapping.	-406 funds mitigation (Public Assistance) measures in conjunction with the repair of the disaster-damaged facilities	-Technical, planning, design, and construction activities toward: repair, replacement, reconstruction or removal of dams (includes Planning and Risk Prioritization projects)	Recovery Measures for watershed impairments: -Purchase floodplain easements Site-specific measures (non-prescriptive) to protect and repair sites, such as: -Provide protection from flooding or soil erosion -Remove debris that would affect runoff or erosion -Restore hydraulic capacity -Repair levees and structures -Repair conservation practices	-Flood damage mitigation: dams, easements, flood- proofing -Agricultural/rural water supply -Water quality Water conservation -Groundwater recharge -Public fish and wildlife habitat -Public water-based recreation	Rehabilitation or decommission of NRCS dams: -Funds Assessment, Planning, Design, and Construction	Design and construction of water, sanitary sewer, stormwater and solid waste facilities
Cost Share	Standard - 25% Local/75% Federal Up to 90% Federal share for Economically Disadvantaged Rural Communities Management costs paid at 100%	Cost share or match is not required	25% Local/ 75% Federal	35% Local/ 65% Federal	25% Local/ 75% Federal (90% federal for limited resource areas)	Varies, depending on both federal and state contributions	35% Local/ 65% Federal	Loans and a limited number of grants
Recent Funding Levels	6% of all federal disaster spending 2023/2024 - \$1.0 B (\$224 M State Allocation, \$50 M Tribal, \$701 M National Competition for Mitigation Projects)	FY 2022 Funding: \$104 M	Variable (disaster-dependent)	FY 2024 Funding: \$185 M	Varies, requires Congressional Approval	Unknown at this time	Unknown at this time	unknown
Project Funding Cap	\$50 M for projects up to \$1 M per state may be used for planning activities	Not explicit. 140 awards expected (\$1.0 M avg)	Cost must be reasonable and justifiable	Based on State Allocation	Not listed	Not listed	Historically funded ~\$1 M - \$5 M per state, multiple projects per State	Varies
Availability	Annual	Annual	Following Presidential Disaster Declaration	Annually - dependent on the amount of funds available (TCEQ)	Following Natural Disaster (floods, windstorms, fire, drought, etc.)	Annual	Ongoing	Annually
Requirements	-States that have had a major disaster declaration in the last 7 years (COVID-19 resets 7 years to start at 2020 for all states) -Community participation in NFIP (for projects located in SFHA) -FEMA-approved HMP -Cost-beneficial project	-Participate in NFIP, comply with all statutes and regulations -Sign a partnership agreement with FEMA	-Declared County -Eligible damaged facility and applicant -Cost-beneficial project OR Cost for mitigation measure doesn't exceed 15% of the damaged facility's repair cost OR mitigation measure is listed -Cost Effective Hazard Mitigation Measures AND the cost doesn't exceed 100% of the damaged facility's repair cost	Dam: dam classified as "high hazard potential" per State Dam Safety Program, have an Emergency Action Plan, fail to meet state safety standards -Community participation in the NFIP -FEMA-approved State HMP with all-dam risk -Floodplain Management Plan -Risk Prioritization -State Dam Safety Agency approval of award -Mitigated property insured by NFIP	-Impaired watershed as a result of a natural disaster -Cannot solve pre-existing problems -Cannot fund improved protection level prior to the disaster (paid by applicant) -Complete within 220 days of funding -HMP <i>not</i> required	Area must be less than 250,000 acres	-NRCS dams -National Environmental Policy Act	-Population less than 10,000 -Preliminary engineering report -Environmental report -Median household income
Application Deadline	NOFO/E-grants Access: Typically August; Application Call: Typically October; Deadline: Typically End of January *State deadlines can be prior to FEMA* Texas 2022 Deadline as December 2.	Unknkown at this time	Established following Presidential Disaster Declaration	Annually - dependent on the amount of funds available (TCEQ)	Within 60 days following the date of the natural disaster	Established annually	Ongoing	Applications accepted year-round
Website	https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities	https://www.fema.gov/flood-maps/guidance-partners/cooperating-technical-partners	https://www.fema.gov/sites/default/files/2020-06/fema-pa406-mitigation-brochure.pdf	https://www.fema.gov/emergency-managers/risk-management/dam-safety/grants#hhpd	https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/landscape/ewpp/?cid=nrcseprd1381472	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wfpo/	https://www.nrcs.usda.gov/programs-initiatives/watershed-rehabilitation	https://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs
Legend	BRIC = Building Resilient Infrastructure and Communities • EPA = Environmental Protection Agency • FEMA = Federal Emergency Management Agency • GLO = Texas General Land Office • HMP = Hazard Mitigation Plan • HUD = Department of Housing and Urban Development • NFIP = National Flood Insurance Program • NRCS = Natural Resources Conservation Service • PY = Program Year • SFHA = Special Flood Hazard Area • SFY = State Fiscal Year • TCEQ = Texas Commission on Environmental Quality • TDA = Texas Department of Agriculture • TDEM = Texas Division of Emergency Management • TPWD = Texas Parks and Wildlife • TSWCB = Texas Soil and Water Conservation Board • TWDB = Texas Water Development Board • USACE = United States Army Corps of Engineers • USDA RD = United States Department of Agriculture - Rural Development • WEP = Water and Environment Program							

	Continuing Authorities Program	Deepwater Horizon (DWH) Natural Resource Damage Assessment (NRDA) Funds	Texas CDBG - Colonia Fund (Grant)	Flood Control Dam Infrastructure Projects- Supplemental Funding	Structural Dam Repair Grant Program
Sponsor	USACE	TGLO / TCEQ / TPWD	TDA	TSWCB	TSWCB
Grant/Loan	Grant	Grant	Grant	Grant	Grant
Eligible Funding Activities	-Flood risk management -Ecosystem restoration -Erosion control -Stream bank restoration -Multipurpose projects	Restoring wetlands and other coastal habitats, reducing nonpoint source pollution, replenish and protect living coastal and marine resources	- Water and wastewater improvements - Housing rehabilitation for low to modearate-income households - Payment of assessments levied against properties owned and occupied by persona of low and moderate income to recover the capital cost for a public improvement and other improvements including street paving and drainage	- Repair and rehabilitate flood control structures	
Cost Share	Feasibility Plan - \$100,000 Federal then 50%/50% Design and Implementation 65% Federal/ 35% Applicant minimum	100% Grant			95% of the cost of allowable repair activities
Recent Funding Levels	Congress appropriated \$53 M in FY 2022; IJA provided \$465 M; USACE FY 2023 IJA spend plan was \$380.3 M	Varies based on major restoration categories	unknown	Last update - \$150 M appropriations bill passed June 6, 2019	
Project Funding Cap	Varies by section - \$5-10 M typical	Not listed	Maximum of \$1,000,000		
Availability	Ongoing	multiple cycles of planning, release and implementation of restoration plans will occur until funding is expended	Biennial		
Requirements	Federal requirements apply	-Comprehensive, integrated ecosystem-restoration approach for implementation; -Projects must be sponsored and administered by a trustee agency;	- This fund is available to eligible county applicants for projects in severely distressed unincorporated areas which meet the definition as a “colonia” under this fund. Eligible areas are units of general local government limited to nonentitlement areas (with the exception of Hidalgo County) located within 150 miles of the Texas-Mexico border. - Except for fund categories where additional restrictions apply, a county can only submit applications on behalf of eligible colonia areas located within 150 miles of the Texas-Mexico border region, except that any county that is part of a standard metropolitan statistical area with a population exceeding 1,000,000 is not eligible under this fund.		- dams constructed by the USDA-NRCS - priority given to dams that have the highest hazard classification and the highest potential to fail as a result of a rainfall event
Application Deadline	Ongoing based on project sponsor notifying USACE District of problem and requesting assistance	Ongoing	Last, May 3, 2023		
Website	https://www.nae.usace.army.mil/Missions/Public-Services/Continuing-Authorities-Program/	https://www.glo.texas.gov/coast/coastal-management/nrda/index.html	https://texasagriculture.gov/GrantsServices/RuralEconomicDevelopment/RuralCommunityDevelopmentBlockGrant(CDBG)/CDBGResources/Applications/ColoniaConstructionFundApplicationandGuide.aspx	https://www.tsswcb.texas.gov/flood-control-repair-projects	https://www.tsswcb.texas.gov/programs/flood-control-program
Legend	BRIC = Building Resilient Infrastructure and Communities • EPA = Environmental Protection Agency • FEMA = Federal Emergency Management Agency • GLO = Texas General Land Office • HMP = Hazard Mitigation Plan • HUD = Department of Housing and Urban Development • NFIP = National Flood Insurance Program • NRCS = Natural Resources Conservation Service • PY = Program Year • SFHA = Special Flood Hazard Area • SFY = State Fiscal Year • TCEQ = Texas Commission on Environmental Quality • TDA = Texas Department of Agriculture • TDEM = Texas Division of Emergency Management • TPWD = Texas Parks and Wildlife • TSWCB = Texas Soil and Water Conservation Board • TWDB = Texas Water Development Board • USACE = United States Army Corps of Engineers • USDA RD = United States Department of Agriculture - Rural Development • WEP = Water and Environment Program				

APPENDIX I
SUMMARIES OF PUBLIC AND
STAKEHOLDER ENGAGEMENT ACTIVITIES

MEMORANDUM



Innovative approaches
Practical results
Outstanding service

800 N. Shoreline Blvd., Suite 1600N + Corpus Christi, Texas 78401 + 361-561-6500 + FAX 817-735-7491

www.freese.com

TO: Gary Paredes
CC: Dale McConnell, Donald Paty
FROM: Sarah West, PE, CFM
SUBJECT: Summary of Stakeholder Responses – SPCDD, TxDOT, & City of Aransas Pass
DATE: 2/10/2023
PROJECT: Ingleside Drainage Master Plan

The following questions were prepared and shared with the three (3) documented stakeholders (San Patricio County Drainage District (SPCDD), TxDOT, and the City of Aransas Pass) who potentially have jurisdiction over drainage infrastructure within the Ingleside City Limits, or over outfalls for the City of Ingleside. One in-person stakeholder meeting was held on 12/13/22 (City of Aransas Pass staff attended), and the questions were emailed to the stakeholders who were unable to attend the meeting (SPCDD and TxDOT). All responses to the questions are summarized below. Original questions are in **black text** and responses are included in **blue text**.

Stakeholder Questions – San Patricio County Drainage District:

Responder for SPCDD – Michael Vanecek and Roy Heistermann

1. What projects do they have going on that could impact the drainage in the future and timeline of those projects? - There are currently no planned drainage improvement projects within the City of Ingleside. The SPCDD relies on the City of Ingleside to prioritize future drainage projects and the City may use its currently available drainage funds.
 - a. Anything coming out of the San Patricio County Drainage Master Plan that is underway? - Currently, no projects from the Drainage Master Plan for the Ingleside area are underway by the SPCDD.
2. Any past storm events that caused flooding? - There have been several storms that caused flooding throughout the City.
 - a. Topical or local event? - The SPCDD does not keep records on flood events within the City unless they require subsequent drainage improvements.
 - i. If local event what do you believe caused it (e.g. lack of drainage infrastructure, clogged pipes/inlets, etc..) - The flat topography and lack of adequate drainage outfall capacity within the existing ditches.
 - b. Any documented high water marks? - No
3. What drainage components do you have jurisdiction over that impact the City of Ingleside's systems? - The attached map shows the existing ditches that are within the jurisdiction of the existing SPCDD drainage easements. [Map attached to these notes for ease of reference.]
 - a. Confirm jurisdictional limits of the channels (McC Campbell, Humble, Kinney); any SPCDD jurisdiction? - See attached map for the limits of drainage easements.
4. How are funds for drainage improvement projects allocated (specifically set aside for the City of Ingleside, or one large pot)? - The SPCDD allocates \$70,000 per year for drainage-related projects

in the City of Ingleside. The current accumulated balance of funds for the City of Ingleside is \$68,842.

- a. Does SPCDD allocate funds to specific projects? - No, the City decides how to allocate the drainage funds.
5. What is your inspection and maintenance schedule for stormwater system components (specifically those affecting the City of Ingleside)? - Maintenance is provided on an as-needed basis, as our schedule allows.
6. We are aware of an agreement between the City of Ingleside and SPCDD dated 9/26/1978. Is there a more current agreement we need to be aware of and/or a desire to update the 1978 agreement terms? - No
7. Is there a drainage easement through Buckeye property? If so, who has control of that easement and any future infrastructure (City of AP or SPCDD)? - Buckeye has not provided any drainage easement although one was requested in August 2019 (See attached pdf). [Exhibit attached to these notes for ease of reference.]
8. Would you consider joint participation in projects. Example: If City designs, would SPCDD construct/own/maintain? - The SPCDD does not do its own construction work anymore with the exception of setting culverts with a diameter of 36" or less. The SPCDD hires contractors from a pre-approved list for drainage projects within the existing SPDDD easements. The City of Ingleside may request the assistance of the SPCDD for ditch cleaning within the City.

Stakeholder Questions – TxDOT:

Responder for TxDOT – Robert Isassi

1. Do you have any planned projects that could impact the drainage in Ingleside, and can you provide the timeline of those projects?
 - a. Looking into the next 3 to 5 years, the only project that comes to mind that could impact drainage would be the proposed SH-200 project within the City Limits of Ingleside. Other proposed would likely be roadway overlays, sidewalk, and traffic signal work.
2. Any past storm events that caused flooding?
 - a. Topical or local event?
 - i. If local event what do you believe caused it (e.g. lack of drainage infrastructure, clogged pipes/inlets, etc..)
 - ii. Tropical Event: Hurricane Harvey. It was the events that caused flooding on our TxDOT facilities. What comes to mind as the closest we came to flooding is FM1069 (Main St) just north of 8th St (on the west side of the roadway). It is important that this outfall be maintained.
 - b. Any documented high water marks? – Not to my knowledge.
3. What drainage components do you have jurisdiction over that impact the City of Ingleside's systems?
 - a. State Roadway ditches such as the ditchline along FM1069. Culvert inlets and internal roadway drainage systems such as the system under SH-361 or FM1069 within the City.
4. What is your inspection and maintenance schedule for stormwater system components (specifically those affecting the City of Ingleside)?
 - a. TxDOT works closely with the San Patricio County Drainage District to discuss and troubleshoot any drainage issues noted. TxDOT inspects bridges and water crossings routinely at least every two years a comprehensive inspection is done on bridge class culverts and large bridges. TxDOT maintenance forces inspect curb and drop inlets routinely when it becomes evident that drainage is moving slower than in previous years.

5. Are there any current maintenance and stormwater improvement agreements we need to be aware of?
 - a. Not specifically to my knowledge but when new development is proposed and a developer wishes to gain access to the State Roadway system directly by way of a driveway permit, TxDOT also looks at how this new development will affect drainage.
6. Would you consider joint participation in projects. Example: If City designs, would SPCDD construct/own/maintain?
 - a. Yes, projects like this could happen through a Donation Agreement where the City would propose an improvement in TxDOT right-of-way that benefits the City and/or the State and TxDOT would allow the City or its contractor to construct in State ROW where, when complete, TxDOT would take it into its system and maintain it. There are many types of Donation Agreements that could be done and could be handled on a case-by-case basis. The City would just need to discuss it with me and, if agreeable, I would walk the City through the process on something like this.

Stakeholder Questions – City of Aransas Pass:

Responder for Aransas Pass – David Flores

1. Do you have any planned projects that could impact the drainage in Ingleside, and can you provide the timeline of those projects?
 - a. Aransas Pass is rebuilding 2 stormwater pump stations (Goodnight & Maddox) and replacing some existing infrastructure (new pipes, but not upsizing), but that should not affect Ingleside's drainage.
 - b. The Euclid pump station is not slated for any repairs/upgrades.
 - i. Sarah informed David that the Euclid pump station is on the list of projects in the Nueces Regional Flood Plan.
 - ii. David requested Sarah send the description of that project.
2. Any past storm events that caused flooding?
 - a. Topical or local event? – Had flooding with Hurricane Harvey in Aug 2017.
 - i. If local event what do you believe caused it (e.g. lack of drainage infrastructure, clogged pipes/inlets, etc..)
 - b. Any documented high water marks?
 - i. City does not have any documented high-water marks that David is aware of.
3. What drainage components do you have jurisdiction over that impact the City of Ingleside's systems?
 - a. Confirm jurisdictional limits of the channels (McC Campbell, Humble, Kinney); any City of Aransas Pass jurisdiction?
 - i. Aransas Pass doesn't have jurisdiction on any of these 3 channels.
 - b. Aransas Pass does have jurisdiction over the drainage ditches on Beasley and is looking at improvements here (improvements for area between Beasley & Rhodes; close to Saunders).
 - i. Dale requested David keep Ingleside public works staff informed about specific plans as they're developed.
4. Are there any current development, maintenance, and stormwater improvement agreements we need to be aware of?
 - a. No official agreements in place between the two municipalities, but they have always had good working relationships between the public works departments.

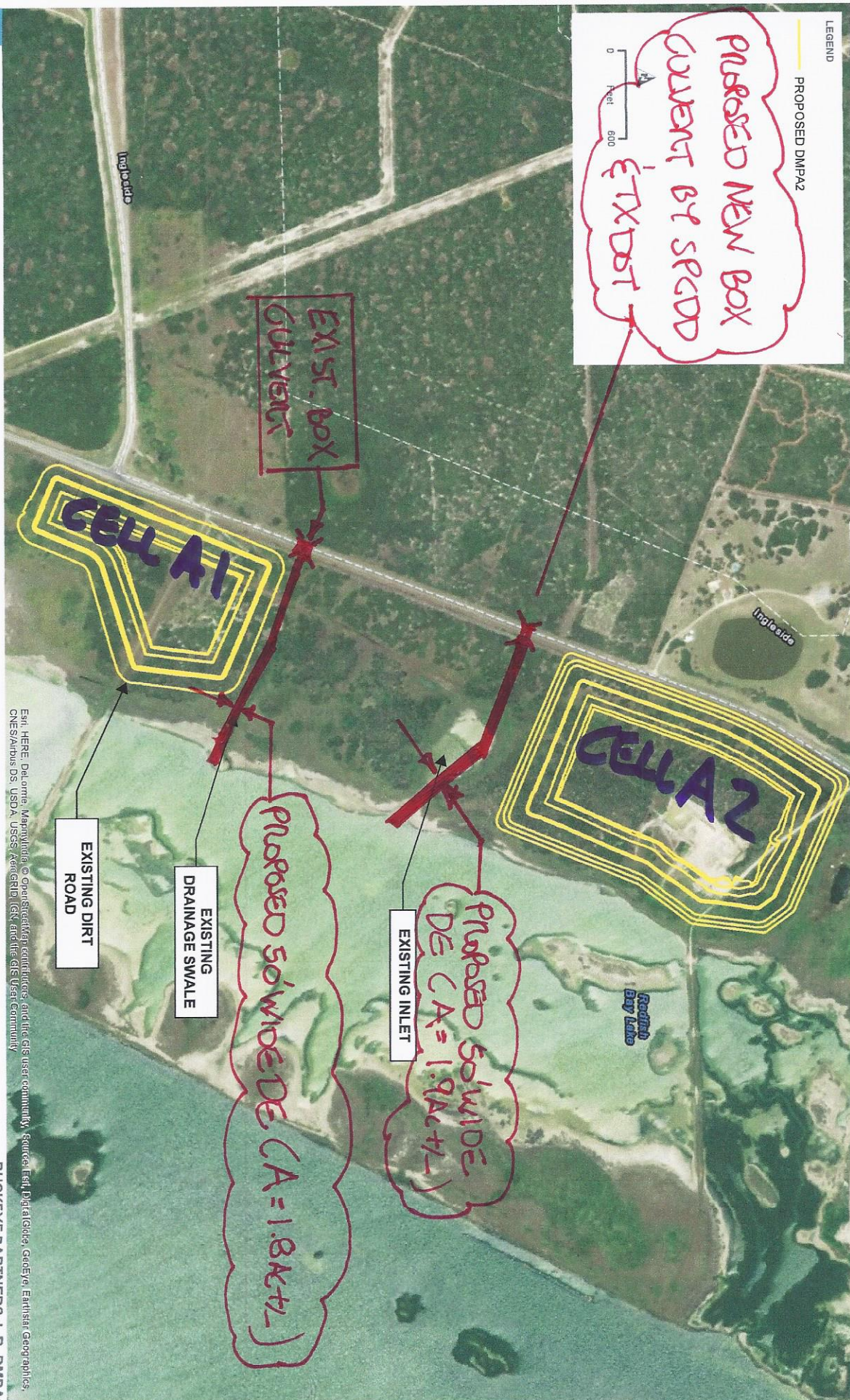
5. Is there a drainage easement through Buckeye property? If so, who has control of that easement and any future infrastructure (City of AP or SPCDD)?
 - a. David will confirm jurisdiction across this property
 - b. Dale noted that there are possibly sluffed spoils that are blocking the existing ditch across that property.
6. Would you consider joint participation in projects. Example: Would Aransas Pass contribute design/construction funds for a mutually beneficial project?
 - a. Aransas Pass public works staff would support joint projects, but Aransas Pass and Ingleside City Managers and Councils will have the ultimate decision.
7. General Discussion
 - a. Flooding is tidally influenced in Ingleside
 - b. Ingleside staff noted that when the soils are already saturated a 1"/hr rainfall will cause flooding.
 - c. Ingleside staff noted that they have had some flooding issues since the TxDOT roadway (FM 1069) was repaved. Aransas Pass staff was not aware of similar issues in their jurisdiction along that roadway.



SAN PATRICIO COUNTY DRAINAGE DISTRICT

SCALE	1"=1000'	REVISIONS	BY	DATE
DATE	12-1-2022			
DRAWN	L.R.M.	CHECKED		
APPROVED				

TITLE EASEMENTS-INGLESIDE, TX NO.



Virtual Open House #1 Summary

The first Virtual Open House included opportunities for participants to learn about the Drainage Master Plan process and provide input about their experiences with flooding in Ingleside. The Virtual Open House was hosted on a project website (www.inglesideDMP.com) and activities included an introductory video, a public survey and an interactive map. The Virtual Open House was live from December 19, 2022 to January 18, 2023.

There were eight survey responses and 31 comments added to the interactive map. Responses are summarized on the following pages.

Virtual Open House #1

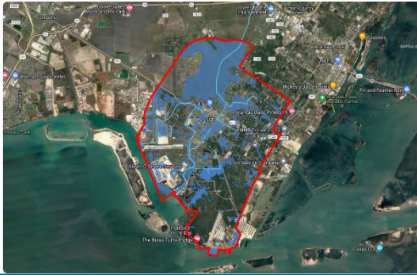
The City needs your input!

This virtual open house includes opportunities to learn about the Drainage Master Plan process and provide input about your experiences with flooding in Ingleside. Your input helps the project team understand the chronic issues affecting your neighborhood.

[Click here](#) to watch an introductory video on the plan development process and this activity.

Next, click on the button below to tell us about your experiences with flooding in Ingleside.

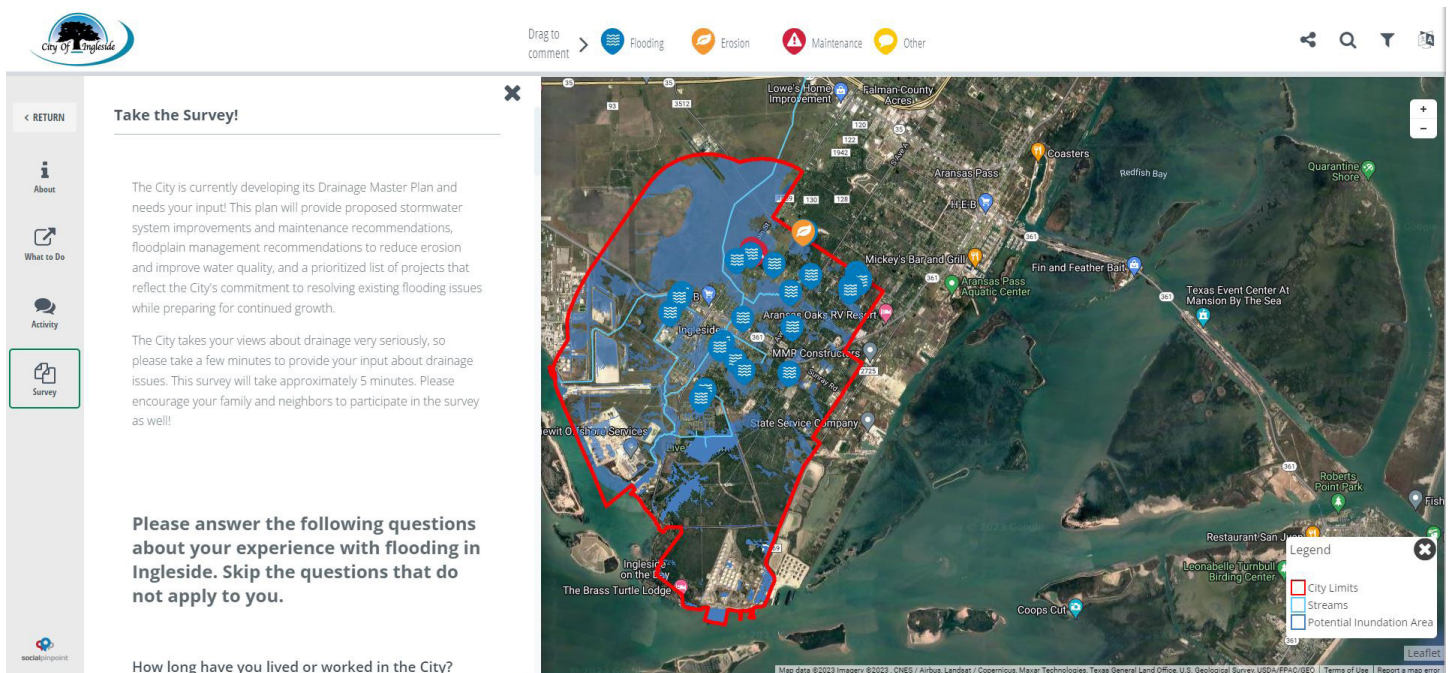
We appreciate your valuable input by January 18, 2023.



Tell Us About Your Experiences with Flooding in Ingleside

[See Project Map](#)

Project website

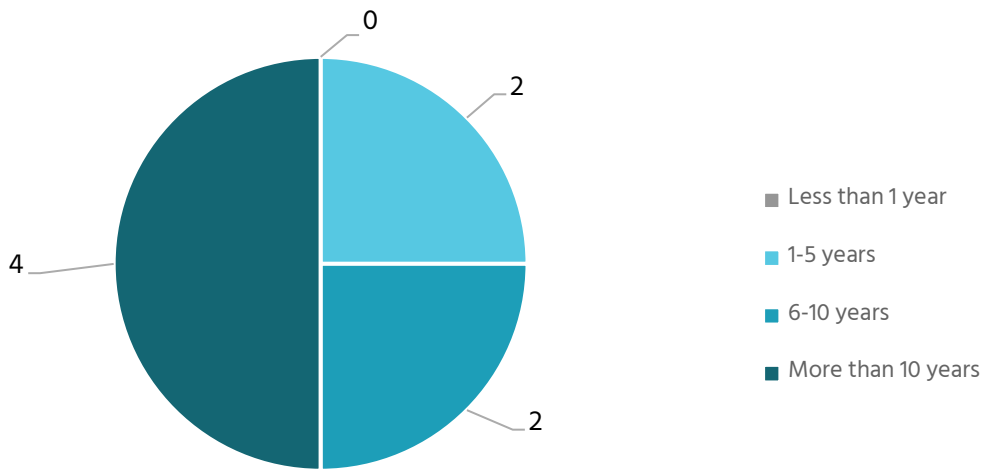


The screenshot displays the City of Ingleside's project website. On the left, a sidebar contains navigation links: 'About', 'What to Do', 'Activity', and 'Survey'. The main content area is titled 'Take the Survey!' and includes a message from the City: 'The City is currently developing its Drainage Master Plan and needs your input! This plan will provide proposed stormwater system improvements and maintenance recommendations, floodplain management recommendations to reduce erosion and improve water quality, and a prioritized list of projects that reflect the City's commitment to resolving existing flooding issues while preparing for continued growth. The City takes your views about drainage very seriously, so please take a few minutes to provide your input about drainage issues. This survey will take approximately 5 minutes. Please encourage your family and neighbors to participate in the survey as well! Please answer the following questions about your experience with flooding in Ingleside. Skip the questions that do not apply to you.' Below this, a question is visible: 'How long have you lived or worked in the City?'. On the right, an interactive map shows the city limits of Ingleside, Texas, with a red outline. The map includes various landmarks and features, such as 'Lowe's Home Improvement', 'Aransas Pass Aquatic Center', 'Mickey's Bar and Grill', 'Fin and Feather Bar', 'Texas Event Center At Mansion By The Sea', 'Roberts Point Park', 'Restaurant San Juan', 'Leonabeing Turnbull Building Center', 'Coops Cut', 'The Brass Turtle Lodge', 'Ingleside on the Bay', 'MMP Construction', 'State Service Company', 'Aransas Oaks RV Resort', 'Aransas Pass', 'Coasters', 'Redfish Bay', 'Quarantine Shore', and 'The Brass Turtle Lodge'. A legend in the bottom right corner identifies 'City Limits' (red outline), 'Streams' (blue lines), and 'Potential Inundation Area' (blue shading). The map also shows a 'Drag to comment' feature and a 'Report a map error' link.

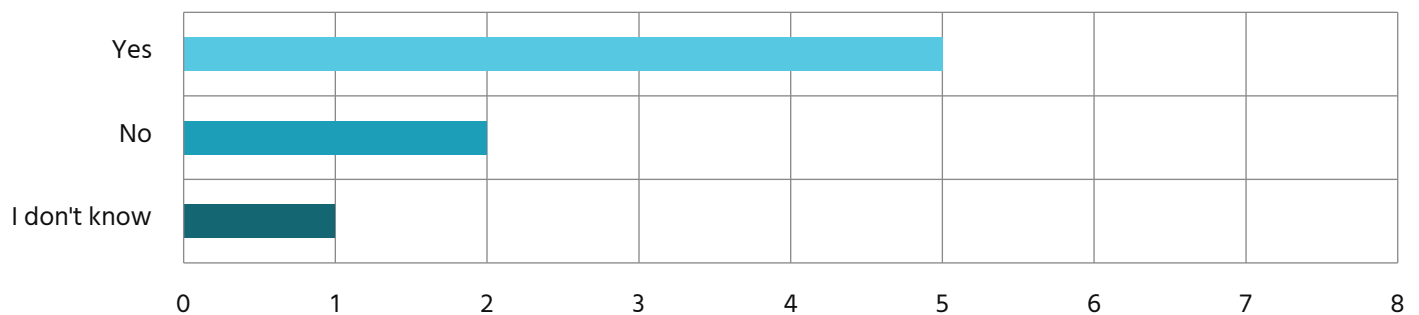
Interactive map and survey

Public Survey Responses

How long have you lived or worked in the City? (whichever is longest)



Do you live a potentially inundated area? (see map above or the interactive map)



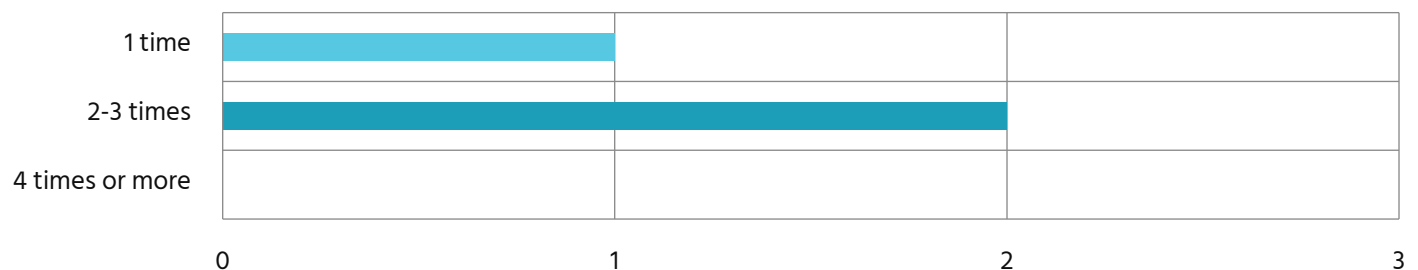
Have you experienced flooding in the City?

	Yes	No
Tropical event (e.g., hurricane)	8	0
Local event (e.g., typical rainstorm)	8	0
Structural flooding (i.e., building flooding regardless of the type of rain event)	3	5

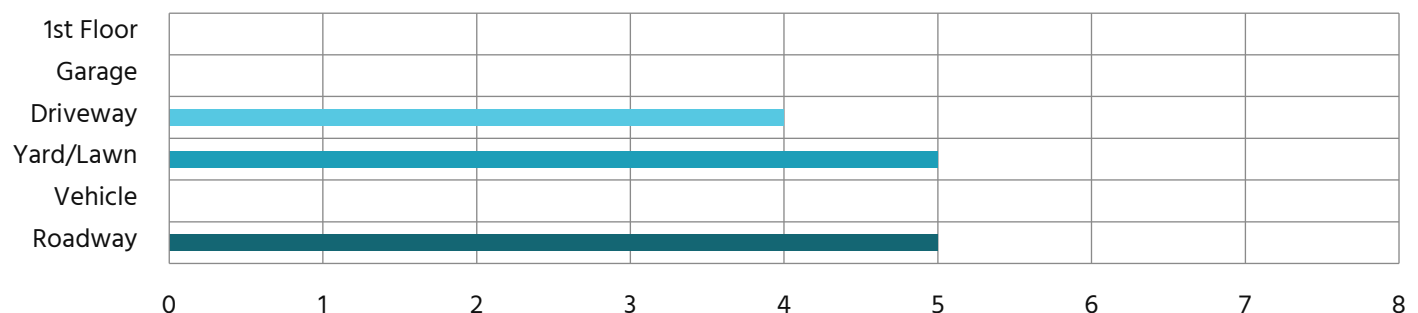
If a local event, what do you believe caused the flooding (e.g., lack of drainage infrastructure, clogged pipes/inlets, etc.)?

Response
Lack of drainage
Lack of drainage
Lack of Drainage infrastructure
lack of drainage infrastructure
Lack of drainage infrastructure, ditches not able to hold water
lack of drainage infrastructure, more houses being allowed to be built in a known flooding area. When the property is raised for building purposes this pushes the water to other locations around the property.
lack of drainage, broken pipes, clogged ditches
lack of maintenance on existing drainage

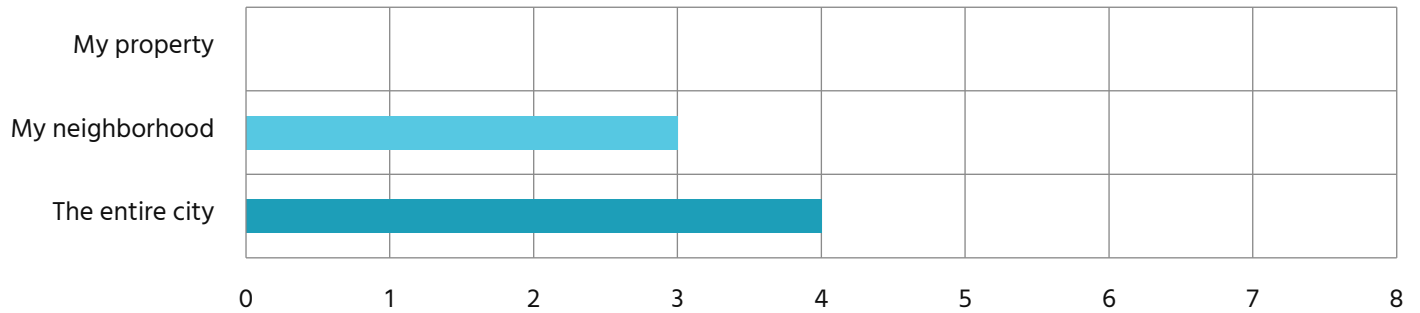
If you've experienced structural flooding, how many times has it happened?



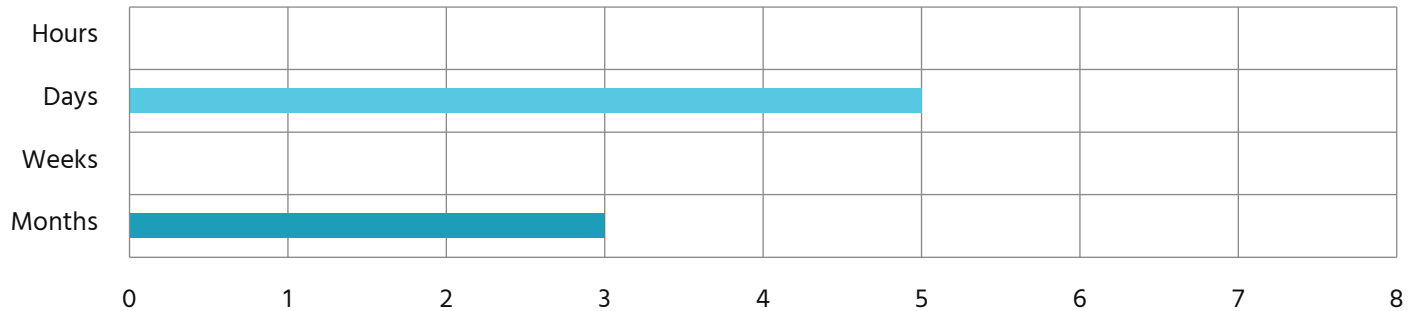
If your property has flooded, where was the water during the worst flooding event? (choose all that apply)



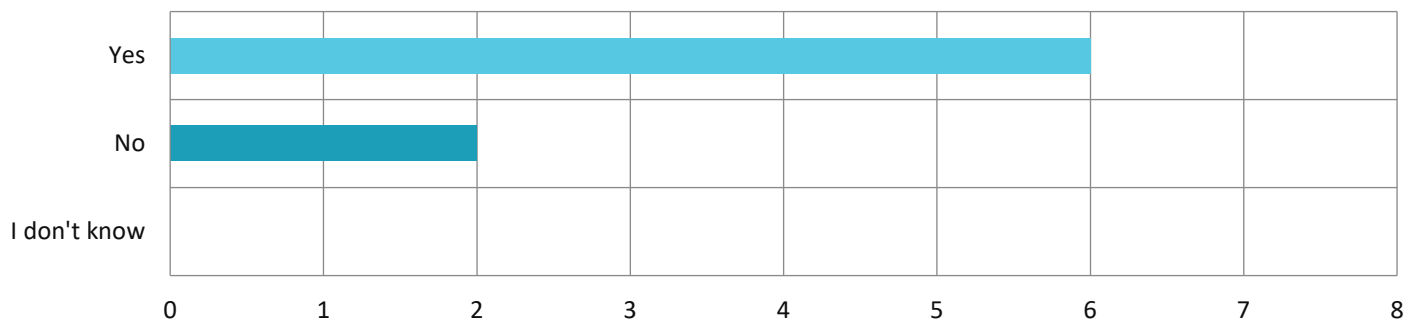
How widespread was the flooding during the worst flooding event?



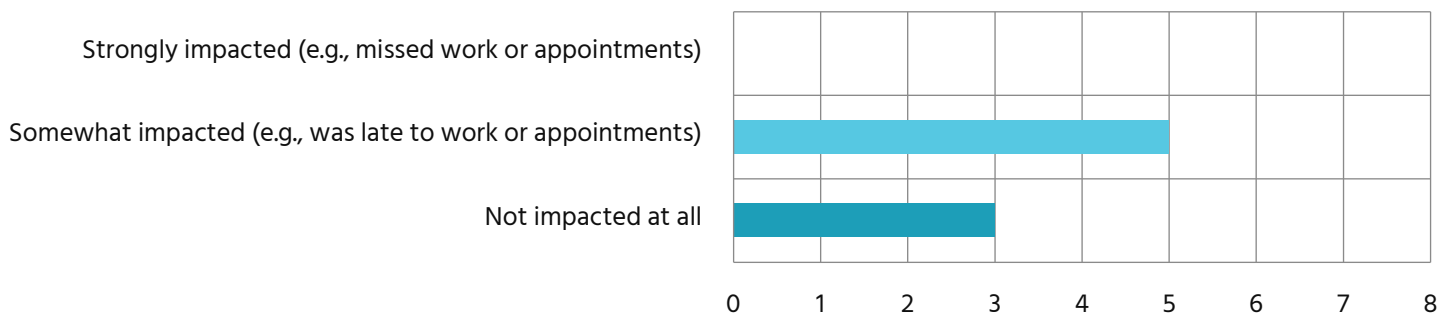
How long did it take for the water to recede?



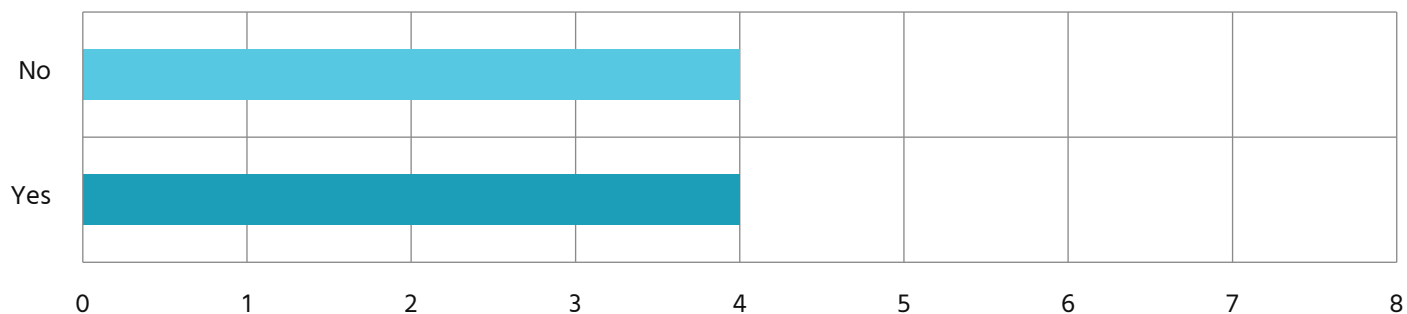
Do you have flood insurance?



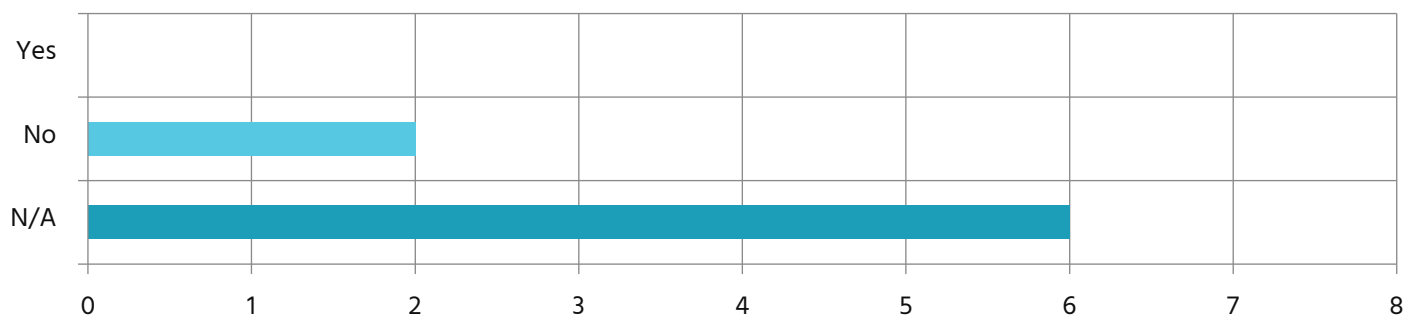
How strongly would you say flooding impacts your daily life?



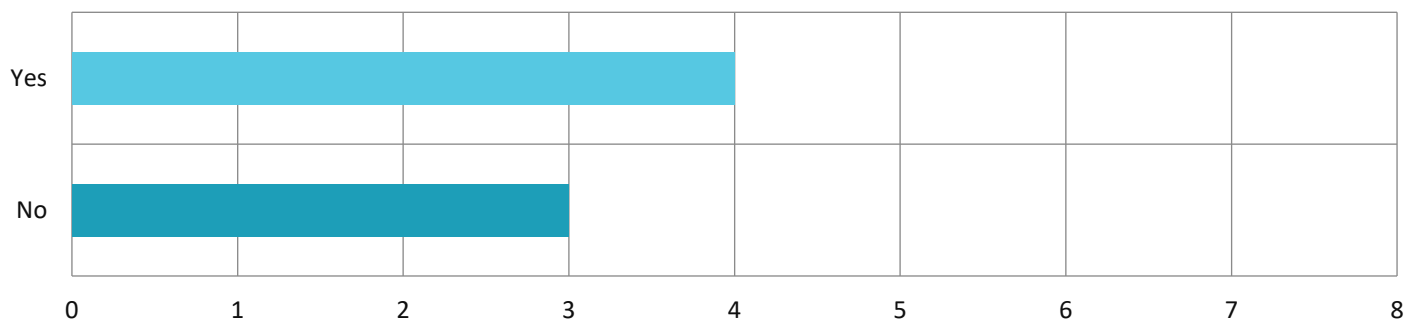
Have you reported flooding issues to the City in the past?



Did you receive a follow-up call or resolution to the flooding issue?



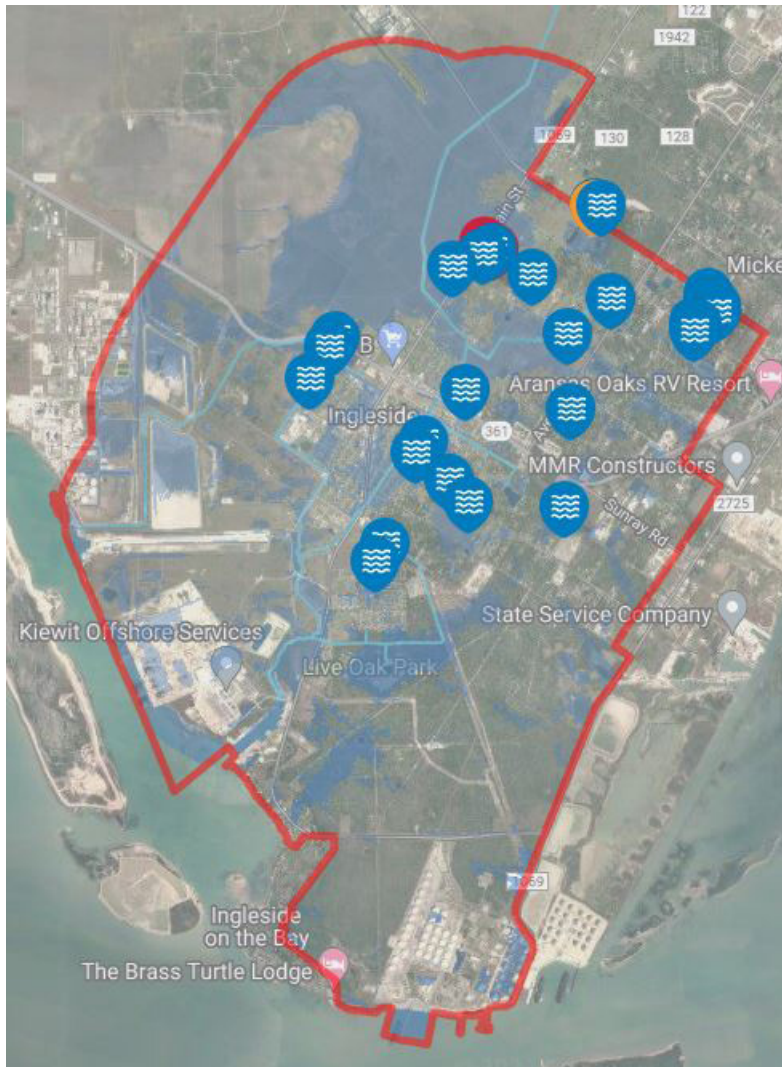
Are you aware that the County has a drainage district that maintains some ditches/ waterways?



We may have questions about your responses. Please provide your email address below if we can contact you if needed.

Responses withheld for privacy.

Interactive Map Comments



Respondents were asked to drag a comment topic (i.e., flooding, erosion, maintenance or other) onto the map to drop a pin. They added comments and optional images describing their experience with flooding in the City. For each pin, they were asked to answer the following questions:

- When the site flooded, was the water ponding or flowing?
- When did the flooding occur?
- How deep was the flooding?
- What part of the property was damaged?

Once pins were added, participants were encouraged to review comments from others.

The comments on the following pages were submitted by respondents and have not been edited.



	Pin Type	Comment	Latitude	Longitude	Photo
1	Flooding	any time there is a decent rain this area floods	27.865832	-97.201498	
2	Flooding	This floods like not other	27.861862	-97.2104	
3	Flooding	Every time we get a little rain it floods and there is no where for water to go, and it takes months for water to dry up.	27.881677	-97.190864	
4	Flooding	This area floods and stays flooded for months making it difficult to clear and keep cleared because of it. Water stays on top of road causing more and more damage to it. Kenney Ln lacks, drainage, water and sewerage lines, fire hydrants and deal with horribly damaged road. Many of us were told the city had a plan to start construction for water and sewage as well as fire hydrants in June 2022 but then told it was put on hold.	27.887402	-97.194725	
5	Flooding	There is no adequate drainage on this road, most yards on the east side of the road flood. Can take weeks to over a month to dry up. Digging out the ditches would help tremendously.	27.874559	-97.190477	
6	Flooding	This area is a huge problem during rain storms, it floods really bad and it causes problems for students trying to attend school, it disrupts learning because students shoes and pants are soaked due to the flooding in this area taking on the name " Lake IHS"	27.877473	-97.218565	

	Pin Type	Comment	Latitude	Longitude	Photo
7	Flooding	With every rainfall our driveway fills up with water. When it's hard rain it starts coming in our garage. Currently the project has hit our street. Today it was flooded with dirty water. Supposedly the workers hit a brittle pipe and drinking water exploded. This water was filthy though. I was told it mixed with garbage and dirt from our street but when it floods with rain the water is never that gross. Also when land was first marked a pipe burst and was marked so they already knew pipe was weak	27.871565	-97.206386	
8	Flooding	Every time it rains real bad my back and front yards flood. We don't have any drainage down our block. I feel like this will help tremendously with our flood issue.	27.885116	-97.18619	
9	Flooding	This area floods due to overflow from the pond across the street. Overflow from the pond runs thru a concrete culvert under the street directly to the property and floods this property	27.883813	-97.174881	
10	Flooding	The eastern end of Mooney does not have drainage and causes flooding during mid to heavy rains. Flooding in some areas is 3 feet deep. The water ponds and does not flow. Water has remained for 6 to 7 months	27.884612	-97.175295	
11	Flooding	The site floods every time it rains, the ditches overflow with water and backs up all the way from the Corner of McCullough Ln, to the third house down on Susan Cir.	27.888058	-97.203268	

	Pin Type	Comment	Latitude	Longitude	Photo
12	Flooding	We have no drainage in this area, Everytime we get a good rain this whole are will flood and will take months to dry out. I have talked with city many times and have always been given same excuses, The city always wants to call it a " 30 Year flood" I have lived here for 15 Years and it happens at least one time a year. We need the city to find an exit for all this water. This Problem has gotten worse every year! we get most of Mooneys water when it rains,	27.882749	-97.177355	
13	Flooding	This area floods with the slightest of rains. Most of the water from the surrounding properties make their way to a very large pond and surrounding properties. Due to the large surface area that drains to this pond it doesn't take much to become overwhelmed at which point all of the properties around suffer. This water can take up to 9 months to dry out. I've had 1.5 acres under 12-18" of water for that length of time. From previous discussions there seem to be some viable options. Please help!	27.882035	-97.17728	
14	Flooding	Photo didn't attach, trying again.	27.882644	-97.177074	
15	Flooding	I have severe flooding from Kenney Ln to about 100 ft inside my property. At my electric gate ope key pad there is approx. 1 foot of water. The ditch is non existent. And the water just sits until it evaporates. The ditch across the street has trees growing in it. It is a real problem !!	27.889328	-97.199969	

	Pin Type	Comment	Latitude	Longitude	Photo
16	Flooding	We have rain that flows from across the street into our yard, down the right side of house, and to our pond in the back of our 2 1/2 acres. It has lasted for as long as around 8 months. It will cover at least an acre and quarter of the land. Because our neighbors yard floods completely and flows to ours the berm between us is level with our yard. The large hill behind both of our yards which stops the water from flowing any further. These two homes are across from the land cleared last year.	27.884258	-97.174996	
17	Flooding	this 1638 Mooney when it rains we catch everyone's water we have no flow so it takes up to ten months for water to evaporate. Water is two to three feet deep. City has know of this issue for four years and has not address issue. Count commissioner Howard G. put this issue has one of his platforms for re-election bid and has done nothing to address issue	27.885558	-97.175716	
18	Flooding	Our property floods with every heavy rain. The water ponds and stands on our property sometimes for months. During several of the floods our property had 2-1/2 ' to 3' of standing water in the back. Flooding has caused our property to sink in many areas.	27.893994	-97.187977	
19	Flooding	Water is still standing on the property behind 3584 Vickery Ln. The City is well aware of the flooding issues in our area.	27.893837	-97.187279	
20	Erosion	The severe flooding in our area has caused the back of our property to sink considerably. City is aware of the flooding and standing water in our area and has been for years. We have had standing water for as much as 10 months in our backyard due to the water having no place to go. I was told the drainage ditch would be regraded but that has not happened yet. With each rain more of the soil from our yard erodes.	27.893842	-97.187896	

	Pin Type	Comment	Latitude	Longitude	Photo
21	Flooding	I can personally confirm this flood model. We've had water in the heaviest rain events cover the roadways completely and our yard more than 1/2 way up to the house. Luckily the water level has historically subsided quickly in almost 95% of this area. There is about a 5-10% area of pooling that last for several weeks and builds mosquito swarms.	27.876409	-97.201899	
22	Flooding	The front quarter of my property floods when there is a decent amount of rain and the last time it took over 5-6 months to dry up. The depth of water is only about 1 foot but across the street the depth is several feet but it all contributes to the mosquito population. The water flows to our area and stops as there is no outlet.	27.884611	-97.175775	
23	Flooding	Covert has been there for 50+ years and not maintained and clogged and will not drain.	27.88983	-97.198888	
24	Maintenance	Area has drain but requires cleaning.	27.889769	-97.198754	
25	Maintenance	Drain requires cleaning and dug out.	27.890324	-97.199762	
26	Flooding	Is there a key for the colors used on the map? Does the color blue mean accumulation of water after a 1 inch rain, 2 inch rain , 6 inch rain?	27.860172	-97.211417	
27	Flooding	Can the flood plain map be added?	27.867961	-97.203598	
28	Flooding	There were extensive aerial photos taken by C. Meyer and Jane Ward during the 2009 flood event. A complete set of those photos was provided to the then Parks/Drainage dept. head. O. Adame. Additional copies of the set was provided to Naismith Engineering and also retained within the Finance department.	27.865375	-97.191204	
29	Flooding	This street has a big dip that fills with water and takes days to go down	27.881489	-97.215785	
30	Flooding	Curb line is full of water after rain and takes days to drain.	27.880479	-97.216471	
31	Flooding	Standing water after rain. If it's heavy rain it gets close to our front door.	27.870504	-97.207142	

Virtual Open House #2 Summary

The second Virtual Open House introduced participants to the nine proposed drainage improvement projects. Information about each project included a location map, description of the existing problem and proposed improvements, and a proposed improvement schematic diagram (see example on page 2). Public feedback was requested (but not required) on each project. The Virtual Open House was hosted on the project website (www.InglesideDMP.com) and was live from January 24, 2024 to February 7, 2024.

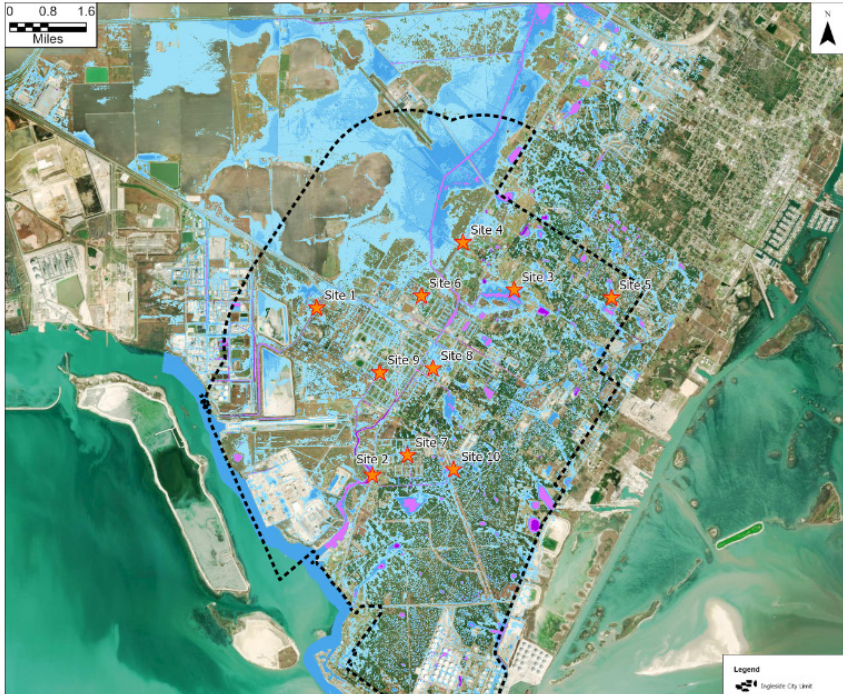
Seven individuals provided comments on the proposed projects. Responses are summarized on the following pages.

Virtual Open House #2

Provide feedback on the proposed projects by February 7, 2024.

The existing drainage channels within the City limits were assessed for existing and future land use conditions. Existing flooding, erosion, safety, and conveyance problem areas were identified based on the analyses of existing data and discussions with City staff. Flood-prone areas or channel sections that may need improvements were identified and preliminary improvements were proposed to mitigate these drainage problems and to develop the Capital Improvement Projects (CIPs).

Click on the links below to review the proposed projects and provide feedback.



Ten potential project sites were considered, resulting in nine proposed projects to improve drainage throughout the City of Ingleside. Click on the links below to review details about each.

- [Site 1 – Humble Ditch Improvements](#)
- Site 2 – SH 1069 Overtopping near Kinney Bayou *[This site did not progress, so no flood reduction project has been developed for this location.]*
- [Site 3 – Kenny Lane/Whitney Lake Infrastructure](#)
- [Site 4 – SH 1069 Drainage Improvements - McCampbell Slough to Mooney Lane](#)
- [Site 5 – Mooney/Morgan Long-Term Ponding – Avenue A to Saunders Street](#)
- [Site 6 – Nystrom Addition Drainage Improvements](#)
- [Site 7 – Parkside Terrace Subdivision Drainage Improvements](#)
- [Site 8 – Villanova Place Drainage Improvements](#)
- [Site 9 – Humble Addition and Avenue B Drainage Improvements](#)
- [Site 10 – Live Oak Ditch](#)

Project website

Survey Responses

City of Ingleside Drainage Master Plan

Proposed Site #1 - Humble Ditch Improvements

Existing Problem:

West Main Street experiences flooding that overtops the road and limits access to and from the adjacent business, including the Humble Youth Center, during even the smaller storm events. City staff has indicated that cars driving along West Main Street cause waves that send water into the Humble Youth Center building. Flooding issues in the West Main Street area are exacerbated due to backflow in the upstream section of the Humble Ditch. Water near the Humble Youth Center also seems relatively isolated from the drainage systems, which causes a lack of flow and ponding along West Main Street. These flooding issues can result in road and building damage.

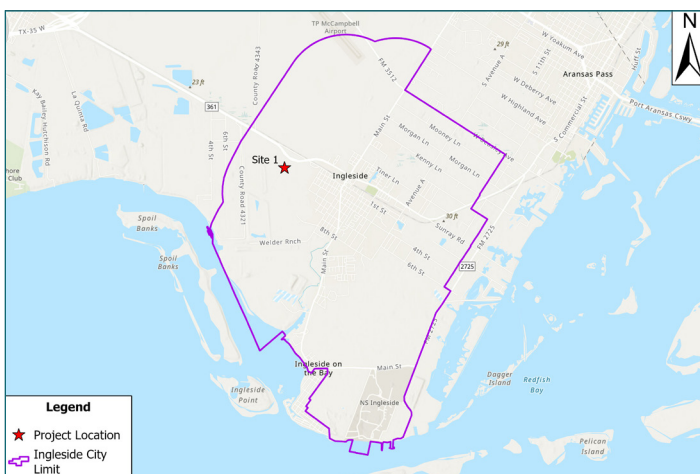
The site location is shown in the figures below.

Proposed Improvements:

Improve approximately 5,000 linear feet of the Humble Ditch, including regrading the ditch from the south edge of SH 361 to approximately halfway between the Dredge Material Placement Area (DMPA) cells, and concrete lining the channel. These improvements will allow the Humble Ditch to flow in the original intended direction and relieve some ponding between SH 361 and West Main Street. The proposed improvements do not entirely prevent ponding along West Main Street, but improving the drainage downstream of the problem area does reduce the amount of time ponding occurs along West Main Street. Based on existing conditions, improving the Humble Ditch cannot entirely alleviate the flooding at the Humble Youth Center, so flood protection systems for the building itself should be considered to prevent water damage to the building.

Proposed improvements are shown in the figures below.

Proposed Site #1 Project Description



Site #1 Location Map



Site #1 Proposed Schematic

Do you have any comments on the proposed improvements? If so, let us know below.

Survey	Comment
Site #1	This slough needs to be cleaned out and the area on the east side of 361 needs to drain downstream of the Ingleside outfall.
Site #1	As a small business manager, the flooding directly affects our business and the lively hoods of our employees. Not only does the roads become impassible, but the parking becomes non existent. The plumbing starts backing up and toilets over flow leaving us with no choice but to close.
Site #1	An additional drainage route would be ideal for this location to truly alleviate flooding.
Site #1	My area is not on the list. Pace and Indian Trial. The ditch going across my property, would love for you to decide if it needs to be that large, would love it to be maintained, get the trees out of it, the culvert I paid for is buried, the neighbor has no culvert therefore we have a trough. You do not have easement rights, but dug a ditch across my land so deep and wide years ago that it is impossible for anyone to maintain and yall claim you can not maintain it because you don't have easement. Please add my ditch to the list. Fill it, clean it, fix the pipes that are blocked and non existent. So lucky to be in the oldest part of Ingleside and have no sewer, no water, and a ditch that looks like Jurassic Park.
Site #3	No comment
Site #3	I believe the elevation of Kenny and Morgan is lower than surrounding areas. Will improvements really alleviate flooding in this area?
Site #4	This will require re setting TxDot drain lines
Site #4	I believe the elevation of Kenny, Morgan, and Mooney is lower than surrounding areas. Will improvements really alleviate flooding in this area? A pumped detention pond seems to be an expensive option for only a few houses.
Site #4	I have lived on the 1069 end of Morgan Ln. since 1953. I believe the holding pond is unnecessary as that area is already very low. It held water year-round until the present culvert, between Morgan & Moony, under 1069 was installed in the mid 1980s to allow water to drain into McCampbell Slough via the ditch on the West side of 1069. One additional culvert under 1069 should be installed between the existing culvert closer to Moony & the 1,610 linear feet of 3-ft bottom width grass-lined ditch improvements along the east side of 1069 should be extended to Collins Ln. Thank you Michael A. Morgan. I can be reached at morganm2378@gmail.com
Site #5	No comment
Site #5	Could somebody please consider coming out and speaking to me about the flooding issue we are having a miles south of this proposed site between Wayne Circle off Morgan Lane and Ave. A. I have done everything short of begging the city to address this issue for years.
Site #5	What is the proposed elevation of the inlet of this drain located on the north side of Mooney? Ground elevation appears to be 17' while surrounding area is as low at 15 ft. What is the plan for existing under the Mooney road culverts that run N to S? Will there be any drainage ditches along Mooney north and/or south toward the new drainage pipe? Will residents on Mooney need to fill/grade properties to utilize proposed drainage? Proposed drainage plan is presented with as conditional or qualified solution. Please explain

Survey	Comment
Site #6	This should help drain the area behind HEB with some regrading
Site #7	No Comment
Site #7	No comment. Improvement plan is good.
Site #9	No comment. Improvements seem reasonable.
Site #10	Is this the ditch the traverses the disc golf course? If so, will disc golfers still be able to obtain discs?

APPENDIX J
SMALL PROJECTS MEMORANDUM

MEMORANDUM



Innovative approaches
Practical results
Outstanding service

800 N. Shoreline Blvd., Suite 1600N + Corpus Christi, Texas 78401 + 361-561-6500 + FAX 817-735-7491

www.freese.com

TO:	Gary Paredez, Ingleside Director of Infrastructure Services
FROM:	Sarah West, PE, CFM
SUBJECT:	Small Projects List
PROJECT:	ING21605 – Ingleside Drainage Master Plan
DATE:	June 23, 2023
CC:	Brenton Lewis, Ingleside City Manager Donald Paty, Ingleside Director of Public Works



Sarah West

FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144

As part of the Drainage Master Plan (DMP) for the City of Ingleside (City), Freese and Nichols (FNI) was scoped to develop a list of “small” drainage projects that do not require hydrologic or hydraulic modeling but will improve the performance of the drainage system. These projects were identified using CCTV inspection reports and videos provided by Video Pipeline Inspections, Inc., and survey data field notes and photographs provided by CivilCorp, LLC. For each project, the extents and summary of problems and improvements are included. Photographs of each noted issue are included in Appendix A, and an exhibit is provided for each proposed project in Appendix B.

As some general guidance, FNI recommends not allowing corrugated metal pipe (CMP) in the right-of-way (ROW) for future developments or when replacing existing systems. If not already developed and implemented, FNI also recommends the City develop a routine operations and maintenance plan. Scheduling routine maintenance would be beneficial to prevent buildup within storm pipes.

1. CLEAR BLOCKED STORM PIPE ON TEXAS AVENUE

Location: South-east side of Texas Avenue between Arkansas Street and Avenue B

Problem: There is concrete debris blocking the 18” storm drain, approximately 77.8 feet east of grate inlet GI-19 (see photo attachments for GI-19 to GI-17 in Appendix A, CCTV report and video for GI-19 to GI-17, and Exhibit SP-1 in Appendix B)

Solution: Clear the debris in the pipe to improve performance of drainage system.

2. CLEAR AND REPAIR STORM PIPE ON AVENUE B

Location: Along Avenue B, south of Mustang Dr to Waco St

Problem 1: There is an obstruction completely blocking the 15" by 24" storm drain. This is approximately 156.9 feet north of grate inlet GI-11, located between 4th St and Waco St (see photo attachments for GI-11 to MH11A in Appendix A, CCTV report and video for GI-11 to MH11A, and Exhibit SP-2A in Appendix B).

Problem 2: The 15" by 24" storm drain has collapsed approximately 104.9 ft south of GI 11. There is a significant buildup of sediment throughout the pipe segment as well. Located between Mustang Dr and 4th St (see photo attachments for GI-11 to GI-12 in Appendix A, CCTV report and video for GI-11 to GI-12, and Exhibit SP-2A in Appendix B).

Problem 3: The 15" by 24" storm drain has a deformed section approximately 190.3 ft south of GI 12 along with buildup throughout the pipe. This is located between Mustang Dr and 4th St (see photo attachments for GI-12 to GI-6 in Appendix A, CCTV report and video for GI-12 to GI-6, and Exhibit SP-2B in Appendix B).

Problem 4: There is lots of debris throughout the 15" storm drain from GI-6 travelling south to STMH 1. This is located on Avenue B crossing over Mustang Dr (see photo attachments for GI-6 to STMH 1 in Appendix A, CCTV data report and video for GI-6 to STMH 1, and Exhibit SP-2B in Appendix B).

Solution: Clear debris in pipe and repair failing pipe segments to improve performance of drainage system.

3. CLEAN STORM PIPES, MANHOLES, AND SAFETY END TREATMENTS ON MAIN STREET

Location: East side of Main St, from south of State Highway 361 to Morgan Ln

Problem: The storm drain is blocked with silt and trash and some manholes are inaccessible. The blockage is located approximately 70 feet south of State Highway 361 to Morgan Ln on Main St (see Survey field notes file 11003-23022ED and photo attachments for SW Asset Inventory Points 50015, 50016, 50035, 50038, 50044, 50048, 50190, 50200, 51454, 51461, 51468, 51475, 51482, 51488, 51496, 51507, 51514, 51521, 51525, 51535, 51542, 51549, 51556, 51563, 51570, 51715, 51726, 51733, 51740, 51755, 51764, 51771, 51778, 51784, 51793, 51794, 51795, 60023, 60024, 60041, 60042, 60055, and 60056 in Appendix A, and Exhibits SP-3A and SP-3B in Appendix B).

Solution: Clear silt and debris in pipes and manholes to improve performance of drainage system. It appears that grass clippings are accumulating in the culvert headwalls/safety end treatments. To prevent buildup within the drainage system, coordinate with landscape workers and/or property owners to not leave excessive grass cuttings in the ditches and pipe inlet areas.

4. CLEAN OUT DRIVEWAY CULVERTS ON CHURCH STREET

Location: Church St, between East St and State Highway 361

Problem: Driveway culverts are filled with dirt, which is obstructing water flow. This is located on the north side of Church St approximately 50 feet east of East St through 190 ft northwest of Westlake Dr and the south side of Church St, 30 ft west of Westlake Dr to 190 ft east of Westlake Dr. One of the culvert ends is broken approximately 260 ft east of East St (see photo attachments

for SW Asset Inventory Points 50064, 50065, 50066, 50067, 50068, 50073, 50074, 50077, 50078, 50084, and 50094 in Appendix A, and Exhibit SP-4 in Appendix B).

Solution: Clear dirt in culverts and fix broken culvert end to improve performance of drainage system.

5. CLEAN OUT STORM DRAINS ON AVENUE A

Location: Avenue A, south of Buckeye Dr to south of Union Pacific railroad

Problem: Culverts are filled with leaves and dirt, which is obstructing water flow. This is located 20 ft south of Buckeye Dr to a driveway culvert 117 ft south of Union Pacific railroad (see photo attachments for SW Asset Inventory Points 50800, 50804, 50805, 50899, and 50901 in Appendix A, and Exhibit SP-5 in Appendix B).

Solution: Clear dirt and vegetation in culverts to improve performance of drainage system.

End of Memorandum

Appendix A

Problem Area Photographs

(Please refer to maps in Appendix B for location of the photographs.)

Texas Avenue

GI-19 to GI-17:



Avenue B

GI-11 to MH11A:



GI-11 to GI-12:



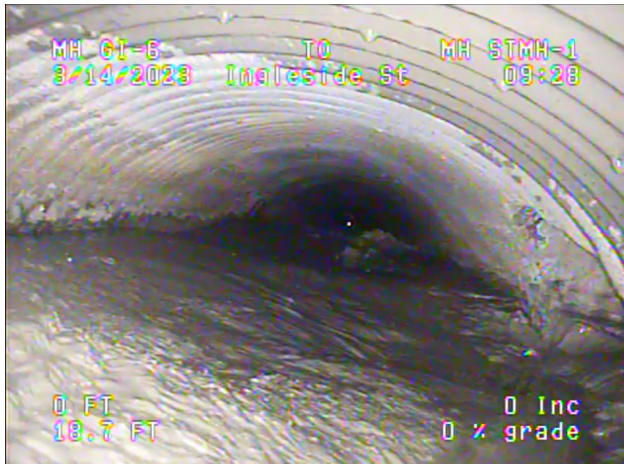
GI-11 to GI-12:



GI-12 to GI-6:



GI-6 to STMH-1:



Main Street

50015:



50016:



50035:



50038:



50044:



50048:



50190:



50200:



51454:



51461:



51468:



51475:



51482:



51488:



51496:



51507:



51514:



51521:



51525:



51535



51542:



51549:



51556:



51563:



51570:



51715:



51726:



51733:



51740:



51755:



51764:



51771:



51778:



51784:



51793:



51794:



51795:



60023:



60024:



60041:



60042:



60055:



60056:



Church Street

50064:



50065:



50066:



50067:



50068:



50073:



50074:



50077:



50078:



50084:



50094:



Avenue A

50800:



50804:



50805:



50899:

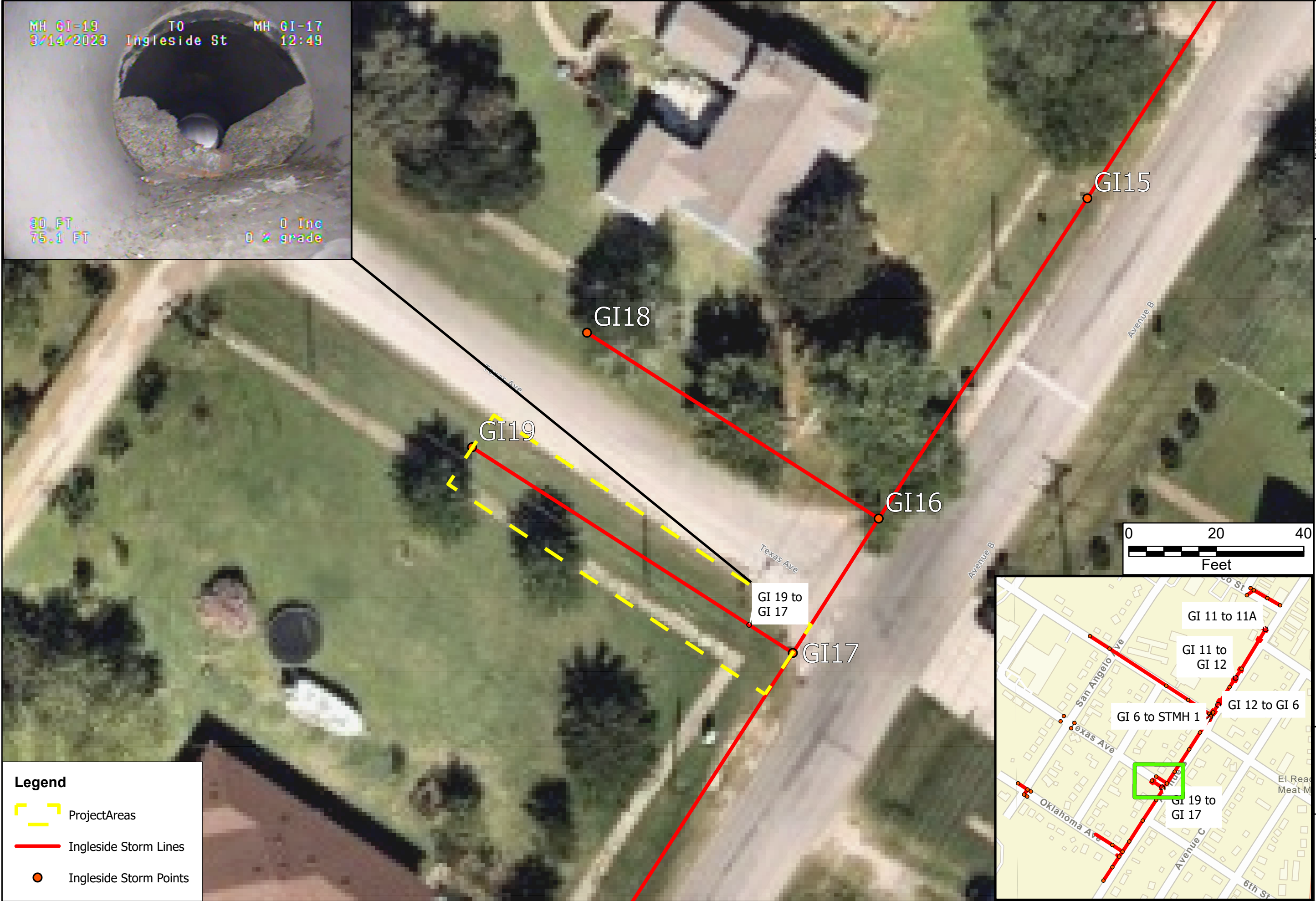


50901:



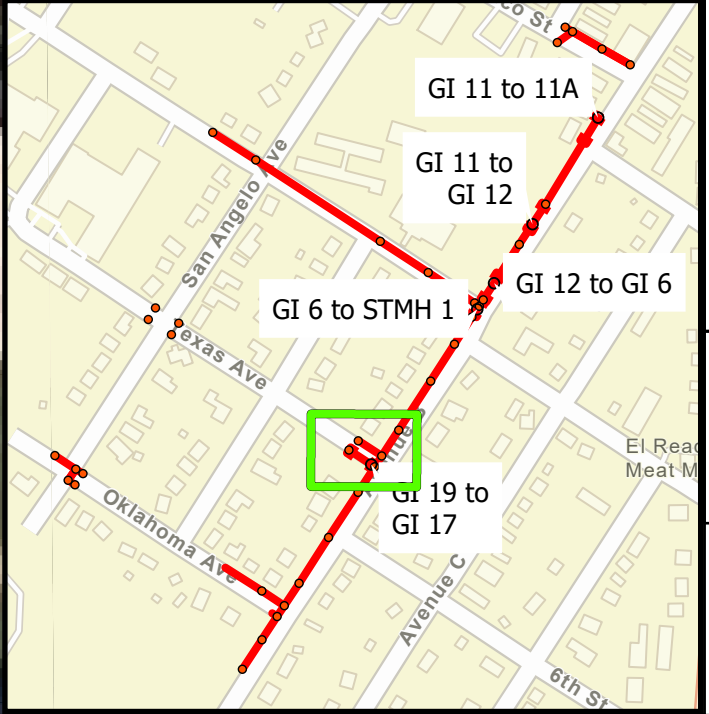
Appendix B

Small Project Exhibits



Legend

- ProjectAreas
- Ingleside Storm Lines
- Ingleside Storm Points

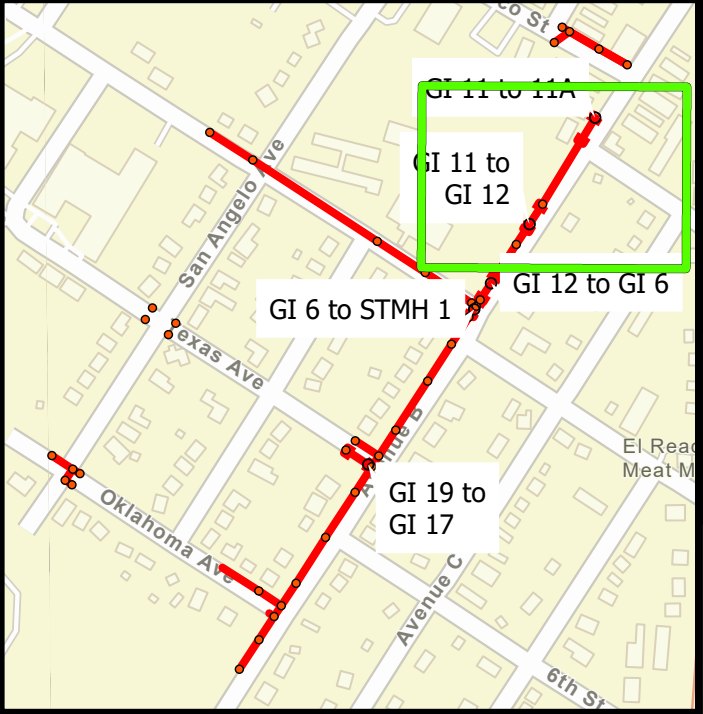


INGLESIDE, TEXAS		DATE CREATED: 4/20/2023	
Small Project List		DATUM & COORDINATE SYSTEM: NAD 1983 2011 StatePlane Texas Central FIPS 4204 FIPS	
Clear Blocked Storm Pipe on Texas Avenue		FILE NAME: KB_Task5_Workmap	
FRESE AND NICHOLS, INC.		PREPARED BY: EME	
10431 MORADO CIRCLE BUILDING 5, SUITE 300 AUSTIN, TEXAS 78759 P: 512-617-3100			
FIGURE			
SP-1			

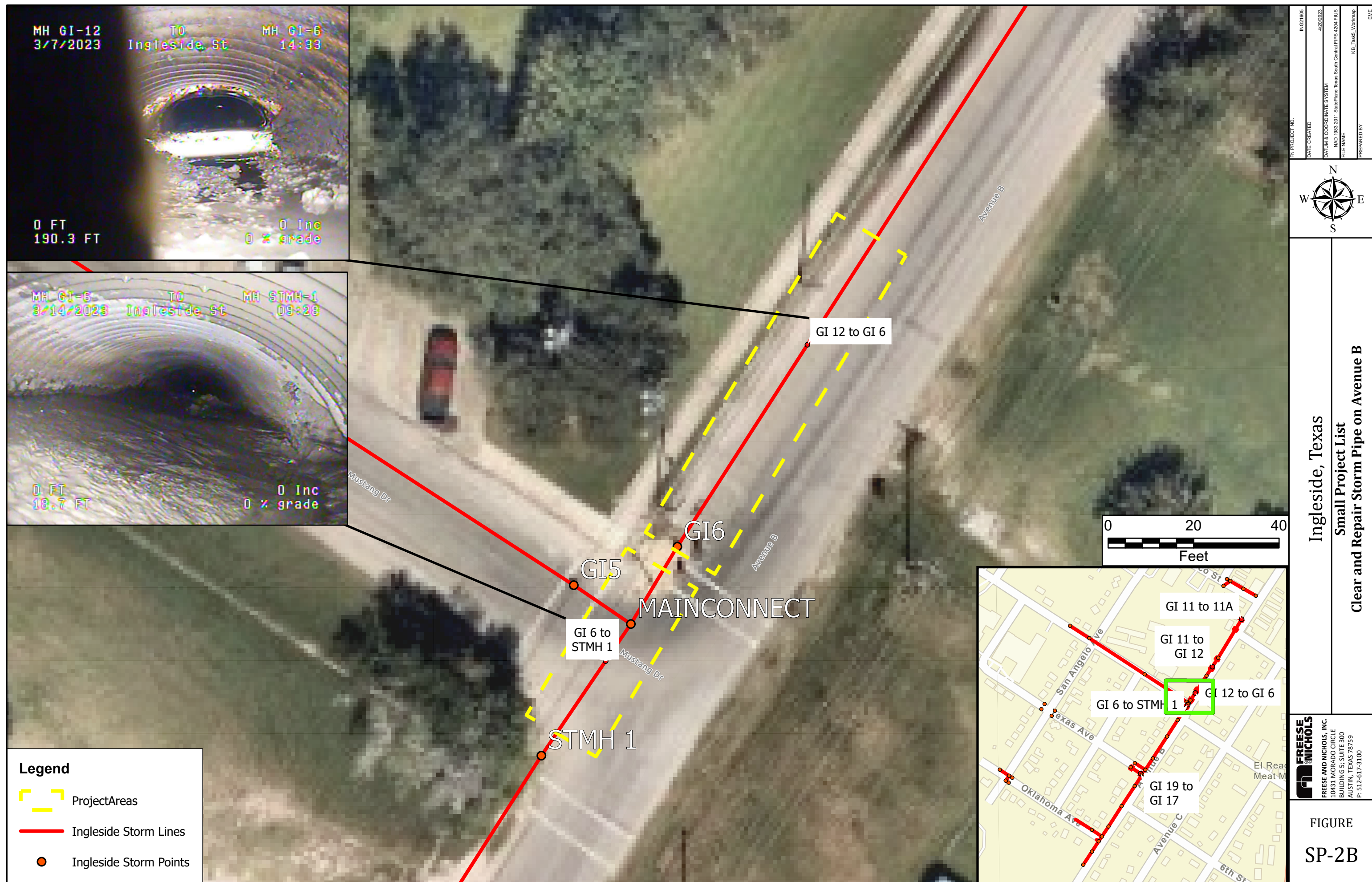


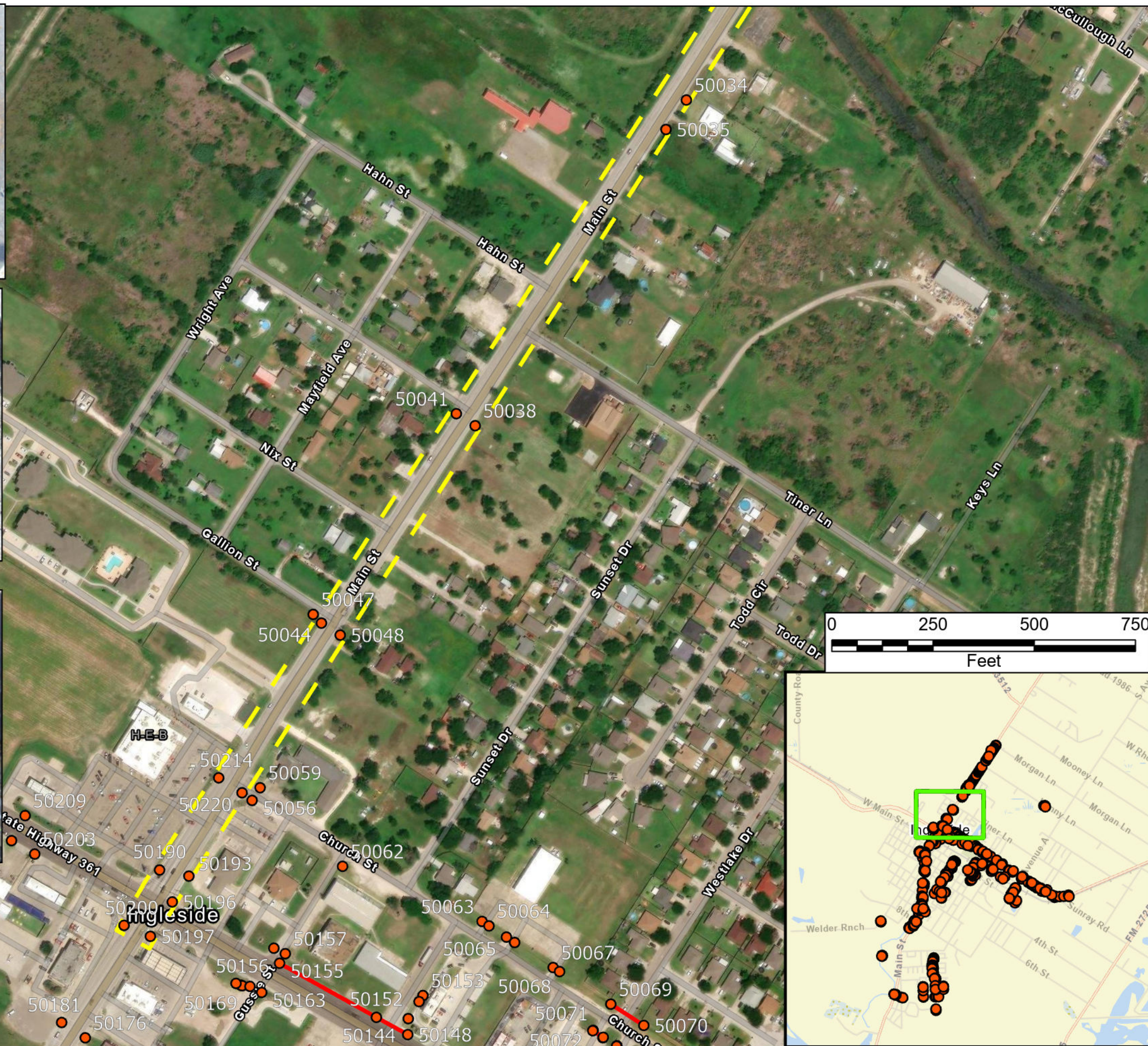
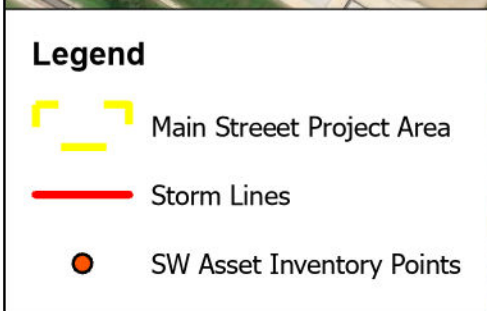
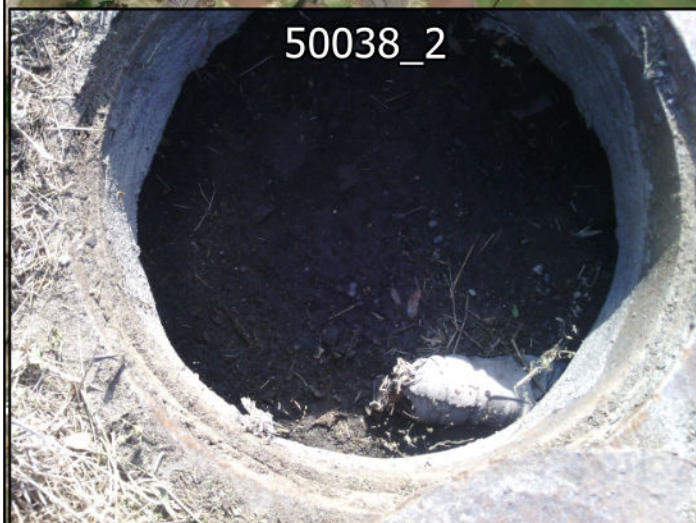
Legend

- ProjectAreas
- Ingleside Storm Lines
- Ingleside Storm Points

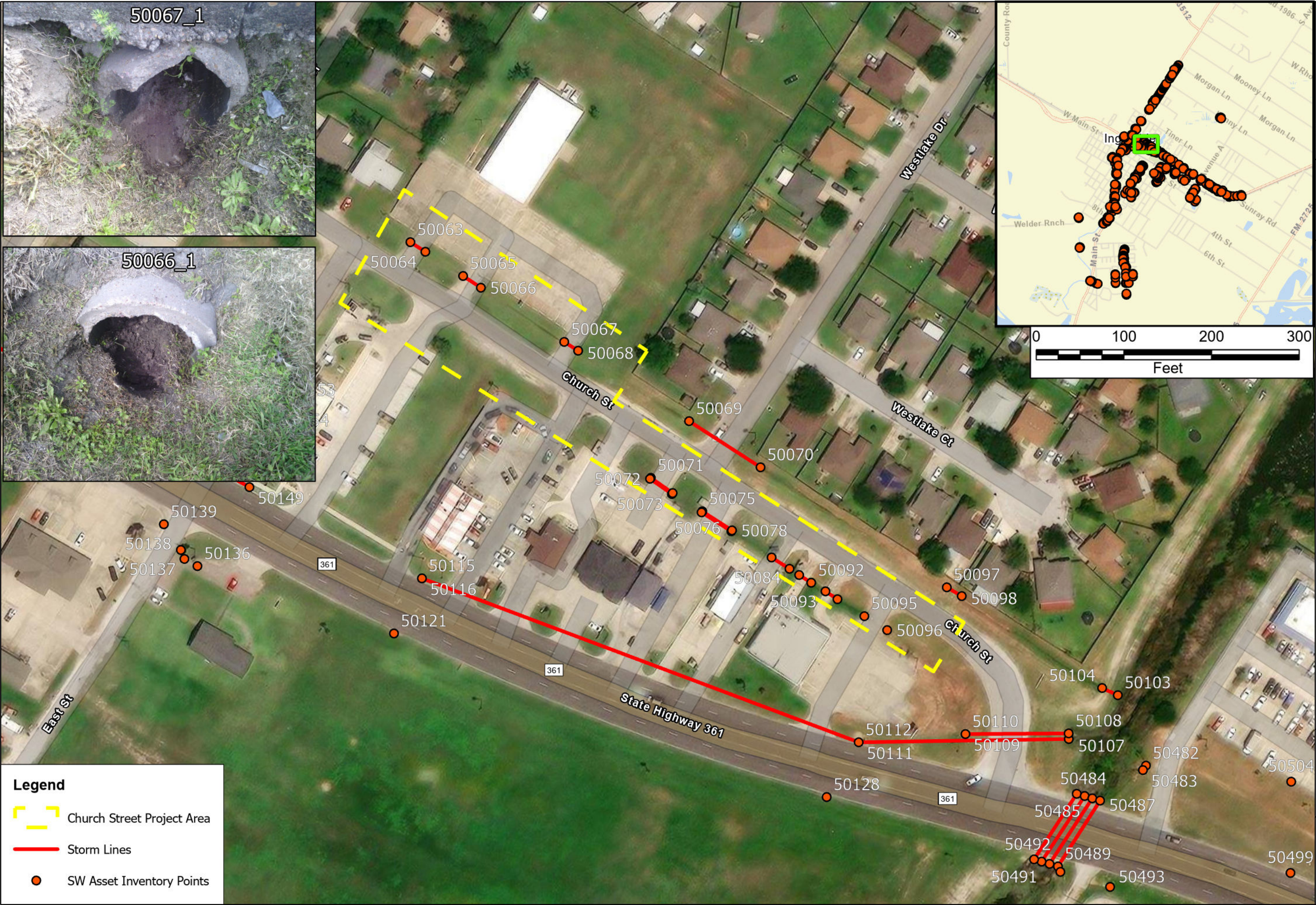


INGLESIDE, TEXAS	
Small Project List	
Clear and Repair Storm Pipe on Avenue B	
FIGURE SP-2A	
FRESE AND NICHOLS, INC. 10431 MORADO CIRCLE BUILDING 5, SUITE 300 AUSTIN, TEXAS 78759 P: 512-617-3100	
DATE CREATED: 4/20/2023 DRAWN & COORDINATE SYSTEM: NAD 1983 2011 StatePlane Texas South Central FIPS 4204 PLUS FILE NAME: KB_Task5_Workmap PREPARED BY: EME	





FN PROJECT NO.	ING21605
DATE CREATED	6/14/2023
DATUM & COORDINATE SYSTEM	NAD 1983 2011 StatePlane Texas South Central FIPS 4204 PLUS
FILE NAME	K5_Tasks_Working2
PREPARED BY	RUE



Legend

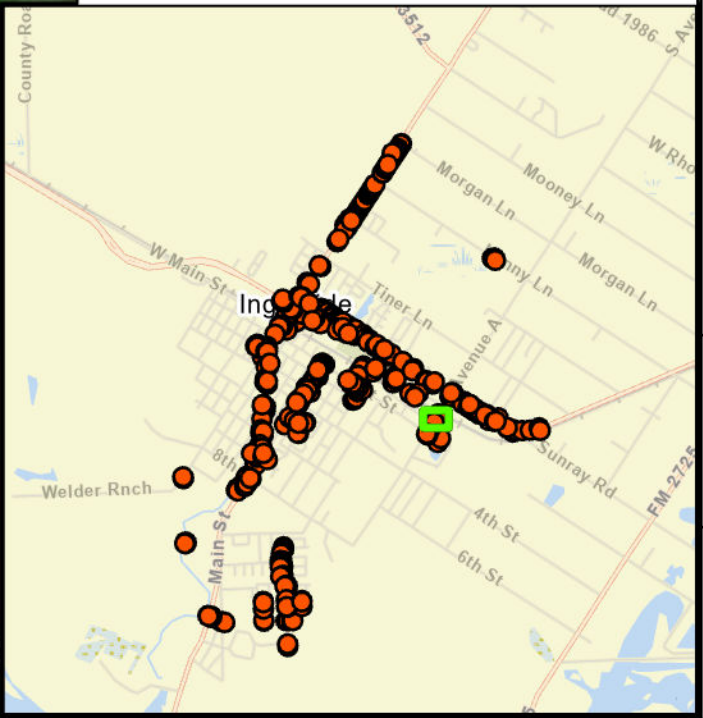
- Church Street Project Area
- Storm Lines
- SW Asset Inventory Points

INGLESIDE, TEXAS Small Project List Clean out Driveway Culverts on Church Street		FIGURE SP-4
FREESE AND NICHOLS, INC. 800 N. SHORELINE BLVD. SUITE 1600N CORPUS CHRISTI, TEXAS 78401 P: 361-561-6500		
PROJECT NO: IN21605 DATE CREATED: 6/14/2023 DATUM & COORDINATE SYSTEM: NAD 1983 2011 StatePlane Texas South Central FIPS 4204 PLUS FILE NAME: KB_Task5_Workmap2 PREPARED BY: EME	North Arrow	



Legend

- Avenue A Project Areas
- Storm Lines
- SW Asset Inventory Points



INGLESIDE, TEXAS	
Small Project List	
Clean Out Storm Drains on Avenue A	
FIGURE SP-5	
FREESE AND NICHOLS, INC. 800 N. SHORELINE BLVD. SUITE 1600 CORPUS CHRISTI, TEXAS 78401 P: 361-561-6500	
PROJECT NO. ING21605	DATE CREATED 6/14/2023
DATUM & COORDINATE SYSTEM NAD 1983 2011 StatePlane Texas South Central FIPS 4204 PLUS	
FILE NAME KB_Task5_Workmap2	
PREPARED BY BME	

APPENDIX K
HYDROLOGIC AND HYDRAULIC METHODOLOGIES MEMORANDUM

TO:	Gary Paredez, City of Ingleside
FROM:	Sarah West, PE, CFM
SUBJECT:	Hydrologic and Hydraulic Methodologies
PROJECT:	Ingleside Drainage Master Plan
DATE:	February 16, 2023
CC:	Donald Paty, City of Ingleside Dale McConnell, City of Ingleside

1.0 PROJECT UNDERSTANDING

Freese and Nichols, Inc. (FNI) will develop a Drainage Master Plan (DMP) for the City of Ingleside (City). The DMP will support goals presented in the Comprehensive Master Plan (CMP) by providing recommendations for stormwater system improvements and maintenance. The DMP will also provide recommendations for floodplain management strategies for reducing flood risk and erosion potential as well as improving water quality. The DMP recommendations will guide the prioritization process for City stormwater projects such that each project reflects the City's commitment to resolving existing flooding issues while preparing for continued growth.

The purpose of this technical memorandum is to summarize the hydrologic and hydraulic methodologies that will be used in the Model Development and Runs (Task 5) for the Drainage Master Plan. The City of Ingleside includes two FEMA Zone AE creeks (effective November 8, 2016). These FEMA effective Flood Insurance Study (FIS) models were reviewed, and it was confirmed that they are not viable for this study. Since the Base Level Engineering (BLE) HEC-RAS two-dimensional (2D) models are now available, it is recommended that the methodology shift from one-dimensional (1D) open channel (HEC-RAS) and storm drain models (StormCAD) that were originally scoped. The HEC-RAS 2D BLE models will be leveraged and supplemented with InfoWorks ICM for the study areas identified on Exhibit 1 where there is underground stormwater infrastructure present. InfoWorks ICM has the capability of combining the analysis of two-dimensional overland hydraulics with one-dimensional sub-surface stormwater system hydraulics. This gives the ability to assess the performance of surface and sub-surface stormwater infrastructure through a dynamic exchange of water with calculations for depth and velocity at incremental time steps during an entire flood event, not only during the peak flow condition. Separate inundation maps from each model will be developed and merged in GIS to the extent possible for the existing and fully-developed conditions floodplains for the 100-year event within the study limits. The following memorandum describes the methodology to be used and next steps resulting from Task 4 Modeling Strategy Development.

2.0 BASE MAP DATA SOURCES

2.01 Previous Studies:

- *Aransas Bay HUC-8 Watershed, Texas Base Level Engineering (BLE) Results* (July 2022), Halff Associates, Prepared for Federal Emergency Management Agency (FEMA)
- *North Corpus Christi HUC-8 Watershed, Texas Base Level Engineering (BLE) Results* (July 2022), Halff Associates, Prepared for FEMA

2.02 Topography:

- 2018 USGS South TX LiDAR, Nueces, San Patricio – terrains acquired from the BLE models

2.03 Coordinate System:

- NAD 1983 State Plane Texas South FIPS 4205 (US Feet) – DMP and North Corpus Christi BLE model
- NAD 1983 State Plane Texas S Central FIPS 4204 (US Feet) – Aransas Bay BLE model

2.04 Aerial:

- ArcGIS Pro – World Imagery Map Service, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

2.05 Soils:

- USGS, Web Soil Survey, Soil Survey Area (SSURGO)
 - Nueces County, Texas, Area Symbol TX355, Version: Survey Area Version 21 (Aug 24, 2022), Tabular Version 20 (Aug 24, 2022), Spatial Version 3 (Sep 12, 2019)
 - San Patricio and Aransas Counties, Texas Area Symbol TX620, Version: Survey Area Version 19 (Aug 24, 2022), Tabular Version 19 (Aug 24, 2022), Spatial Version 3 (Sep 12, 2019)

2.06 Land Use:

- Existing Land Use:
 - BLE Models: 2019 National Land Cover Dataset (NLCD)
 - ICM Model: Polygon feature class attributed with 2019 NLCD Land Cover classifications based on County tax parcels and aerial imagery. Within the ICM model, a polygon feature class will be used to incorporate more detail into the ICM model and to maintain consistency between the existing and future landuse data formats, so that existing and future conditions results are not affected by the use of different data formats (polygons versus raster).
- Future Land Use:
 - BLE Models: Existing BLE model curve numbers will be modified based on relative difference between existing and future landuse polygon feature classes used for the ICM model.
 - ICM Model: Existing land use feature class modified based on 2016 City of Ingleside GIS data.

2.07 Storm Drain Infrastructure:

- Survey and CCTV (per Task 3 of the scope)
- As-Built Plans to be provided by the City
- City of Ingleside GIS Data

- 2.08 Development Plans:
- As-Built Plans from the City

3.0 METHOD OF COMPUTING RUNOFF

- 3.01 Criteria Used to Select Method:
- City of Ingleside Code of Ordinances (dated October 20, 2022), one of the objectives of the DMP is to provide guidance to the City
- 3.02 Selected Method:
- The SCS Method will be used within HEC-HMS for the calculation of rainfall abstraction and infiltration losses and development of excess precipitation hyetographs. These hyetographs will be applied through a Rain-on-Mesh (ROM) approach to the InfoWorks ICM 2D mesh. Runoff hydrographs provided in the HEC-RAS BLE models will not be revised as part of this study. These hydrographs were generated using SCS Method and excess precipitation as well. More detail can be found in the BLE reports.

4.0 HYDROLOGIC PARAMETERS

- 4.01 Drainage Areas:
- Information used to delineate Drainage Areas (topography, as-builts, proposed design studies and plans):
 - Ingleside Drainage Basins exhibit by Naismith Engineering, Inc.
 - Topography (See “Base Map Data Source” Section)
 - City’s stormwater infrastructure GIS data
 - Drainage Area Size Limitations: N/A
 - Drainage Area Map showing delineations to primary City stormwater drainage systems is included as Exhibit 2
 - Further sub-division of the drainage areas provided in Exhibit 2 will not be provided as part of this effort since it is not required for ROM
- 4.02 Time of Concentration:
- Methodology/Criteria: Since lag time does not impact the excess rainfall hyetograph, it is not necessary to calculate an accurate basin travel time, but the model still requires a value to run. The time of concentration will be approximated using the same methodology as the BLE models: “as the square root of the drainage area, then multiplied by 0.6 to compute the lag time.”
- 4.03 Loss Calculations: SCS Method
- Percent impervious: To be estimated from aerial imagery and National Land Cover classifications
 - Source of Soil CN values: To be developed based on NLCD land cover data with reference to Tables 2-2a through d of the NRCS Technical Release 55 (TR-55) Manual
 - Soil Moisture Conditions to be used: Antecedent Runoff Condition (ARC II)
- 4.04 Precipitation:
- Frequency/Events: 2-, 10-, 25-, 100-, and 500-year (24-hr rainfall depth: 4.72, 7.87, 10.10, 14.10, and 20.20 inches, respectively)

- Distribution: Frequency Storm
- Source of Depth: NOAA Atlas 14 Precipitation Frequency Data Server (PFDS) at the centroid of the City limits.

5.0 HEC-HMS MODEL

The sole purpose of the HEC-HMS model is to develop excess precipitation hyetographs to be applied to the ground model mesh in the 2D hydraulic models (HEC-RAS and InfoWorks ICM). Detailed watershed hydrologic modeling is not included as part of this study.

5.01 Available Models:

- The FEMA effective FIS models are outdated and not viable for this study. The BLE models will be used as reference since they provide the most up-to-date flood risk assessment for the study area. The BLE model parameters are:
 - Name/Watershed: Aransas Bay and North Corpus Christi
 - Version: 4.3
 - Area Reduction: NOAA Technical Paper Number 40 (TP40) Method based on an assigned storm area equivalent to approximately one half of the total study area was used for the BLE models, but will not be used for the drainage master plan
 - Routing Methodology: none
 - Model updates: The 2-year storm will be added using the Ingleside precipitation depths (not enough data was provided to reasonably obtain the 2-year depths that correspond to the BLE study).

5.02 Selected Model:

- Since different rainfall data and areal reductions are used for the two BLE models that cover the City of Ingleside, a separate HEC-HMS will be developed using rainfall data at the centroid of the city limits and no aerial reduction.

6.0 HEC-RAS MODEL (OPEN CHANNELS)

6.01 Available Models:

- FEMA effective FIS models are outdated and not viable for this study, the BLE models will be used as the basis of the open channel assessment since they provide the most up-to-date flood risk assessment for the study area (*Guidance for Flood Risk Analysis and Mapping: Base Level Engineering Analysis and Mapping* (Nov 2021), FEMA, pg 1).

6.02 Purpose:

- The HEC-RAS 2D BLE models will be used to assess the following creeks and streams:
 - Kinney Bayou and 3 tributaries, approx. 4.8 miles
 - McCampbell Slough and 3 tributaries, approx. 3.8 miles
 - Humble Ditch and 2 tributaries, approx. 3.9 miles
- Study Area 5 will also be modeled in HEC-RAS.

6.03 Stormwater Open Channels:

- Survey will be evaluated and incorporated into the model terrain only if it will improve the accuracy on the model results

- City GIS data will be supplemented with as-builts and survey to add Bridge/culvert crossings inside of the 2D Flow Area along the identified creeks and streams
 - If no data is available, crossings will be modelled by modifying the terrain to let flow through the embankment (referred to as “burning” the crossings into the terrain)
- Stormwater infrastructure outside of the study areas will only be modeled to the extent necessary to accurately represent the conditions at the study areas

6.04 Boundary Condition/Tailwater:

- Stage hydrographs representing a known water surface elevation of **1.5-feet** along Aransas Bay, Nueces Bay and Corpus Christi Bay were used for the boundary conditions in the BLE models. This was established using NOAA tidal datums for the Texas coast and applying the mean higher high water elevations.

7.0 INFOWORKS ICM MODEL (LOCAL SYSTEMS)

7.01 Purpose:

- The purpose of the InfoWorks ICM model is to supplement the HEC-RAS 2D BLE models for the study areas identified on Exhibit 1 where there is underground stormwater infrastructure present. Study Areas 1, 2, 3 and 4 all contain storm sewer and will be modeled in ICM.

7.02 Surface:

- Topography (See “Base Map Data Source” Section)
- Mesh size: Mean maximum mesh triangle size of 100 square feet, optimized to accurately model the systems and maintain reasonable run times
- Breaklines: roadway and stream centerlines will be used as necessary

7.03 Roughness Zones

- Land Use data (See “Base Map Data Source” Section)
- Manning’s roughness values will be set using the best available data (*Open Channel Hydraulics, Chow, 1959*, and the *HEC-RAS User Manual*)
- Building footprints: roughness value of 10 (Two-Dimensional Modeling Guidelines, Harris County Flood Control District, July 2018)

7.04 Storm Drain Data:

- City GIS data will be supplemented with as-builts and survey
- Stormwater Inlets:
 - Inlet types and dimensions are not included in City GIS data. Available as-built and survey data will be used to incorporate inlet details in the model where possible.
 - When as-built or survey data is not available, Google Street View will be used for estimating inlet types and dimensions where possible. City standard 5-ft curb inlets will be assumed when no other methodology is available to make a size determination.

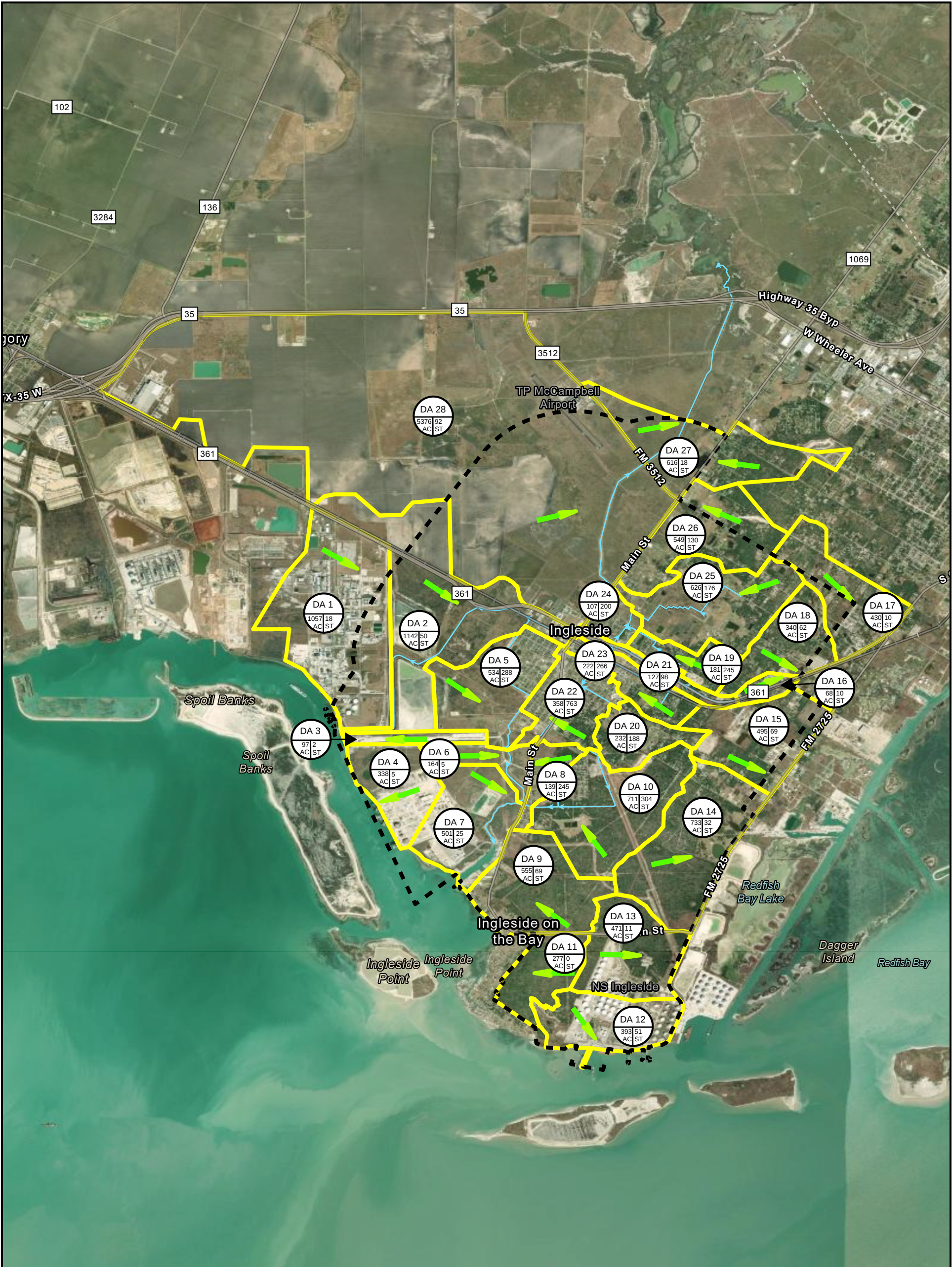
- Inlets will be set to Flood Type “2D” such that discharge between the 2D mesh and the inlets and manholes will be calculated using standard weir equations or inlet capacity curves.
 - Stormwater Conduits:
 - Pipe material, dimensions and inverts will be modeled based on City GIS data. Missing information will be supplemented with available as-built and survey data. If none of these resources provide enough information to define the pipe geometries and vertical locations, interpolations will be made based on bounding pipes along the same system.
 - Head loss conditions at the upstream end of each link will be determined using ICM “NORMAL” headloss curves.
 - Stormwater infrastructure outside of the study areas will only be modeled to the extent necessary to accurately represent the conditions at the study areas
 - Bridge/culvert crossings may be modelled by burning channels through the embankment when it is evident that there is ponding that should continue downstream
- 7.05 Boundary Condition/Tailwater:
- Stage hydrographs from the BLE models will be used as necessary to accurately model the systems tailwater.



Study Areas

Ingleside, Texas

FN JOB NO	ING21605
FILE	KB_Task4_ModelingStrategy
DATE	12/20/2022
SCALE	1:36,000
DRAFTED	08215



Legend

Ingleside City Limits

Drainage Area Direction of Flow

Drainage Area Boundary

Existing Drainage Infrastructure

DA

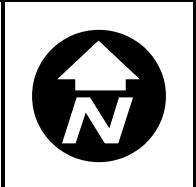
AC

ST

DA: Drainage Area Number
AC: Acreage in Drainage Area
ST: Number of Structures in Drainage Area

**FRESE
NICHOLS**

800 N. Shoreline Blvd, Suite 1600N
Corpus Christi, Texas 78401
(P) 361-561-6500



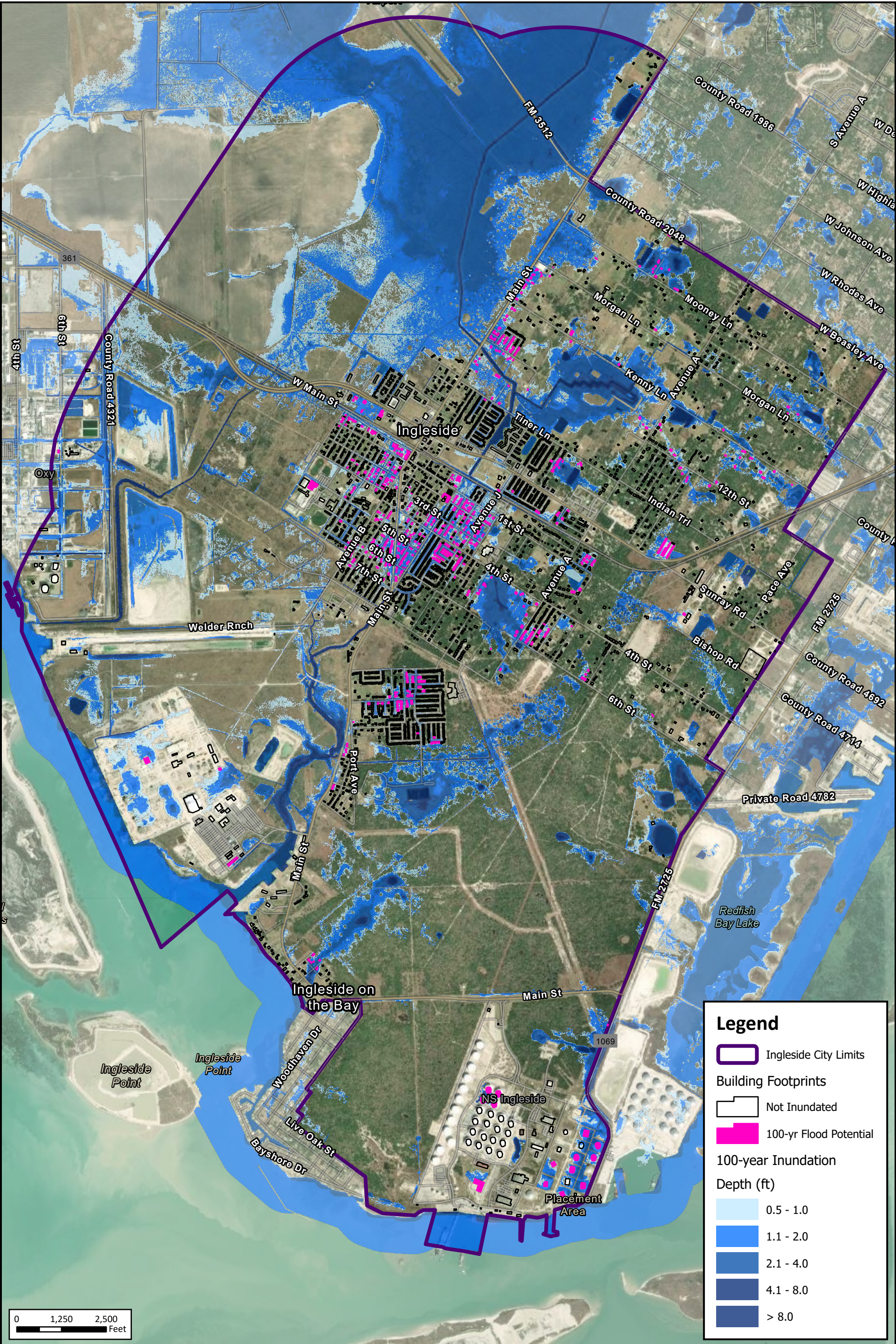
Drainage Area Map

Ingleside, Texas

FN JOB NO	ING21605
FILE	KB_Task4_ModelingStrategy
DATE	2/17/2023
SCALE	1:60,000
DRAFTED	08215

EXHIBIT

2



FREES AND NICHOLS
800 N. Shoreline Blvd, Suite 1600N
Corpus Christi, Texas 78401
(P) 361-561-6500

100-Year Flood Indication Hotspots

Ingleside, Texas

FN JOB NO	ING21605
FILE	FloodRiskHotspotExhibits
DATE	11/8/2022
SCALE	1:30,000
DRAFTED	08196

EXHIBIT

3

CITY COUNCIL AGENDA
Regular Meeting: April 9, 2024

AGENDA ITEM: 17

Deliberate and take appropriate action regarding the purchase of a digital sign for tourism/information at a location near the Humble Station Community Center using HOT Funds.

SUBMITTED BY: Jodi Carr, Director of Economic Development

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

Staff has been researching different avenues to provide information to the citizens and visitors. The availability of a City-owned digital sign would enhance the tourism in Ingleside. The information on the sign would be readily available to tourists 24 hours/day. A TIPS Bid for \$38,514.00 has been received. However, because of the time frame for approvals, staff is recommending a not to exceed budget of \$42,000. A budget amendment for Fund 21 would be required.

FISCAL ANALYSIS:

A TIPS Bid for \$38,514.00 has been received. However, because of the time frame for approvals, staff is recommending a not to exceed budget of \$42,000.

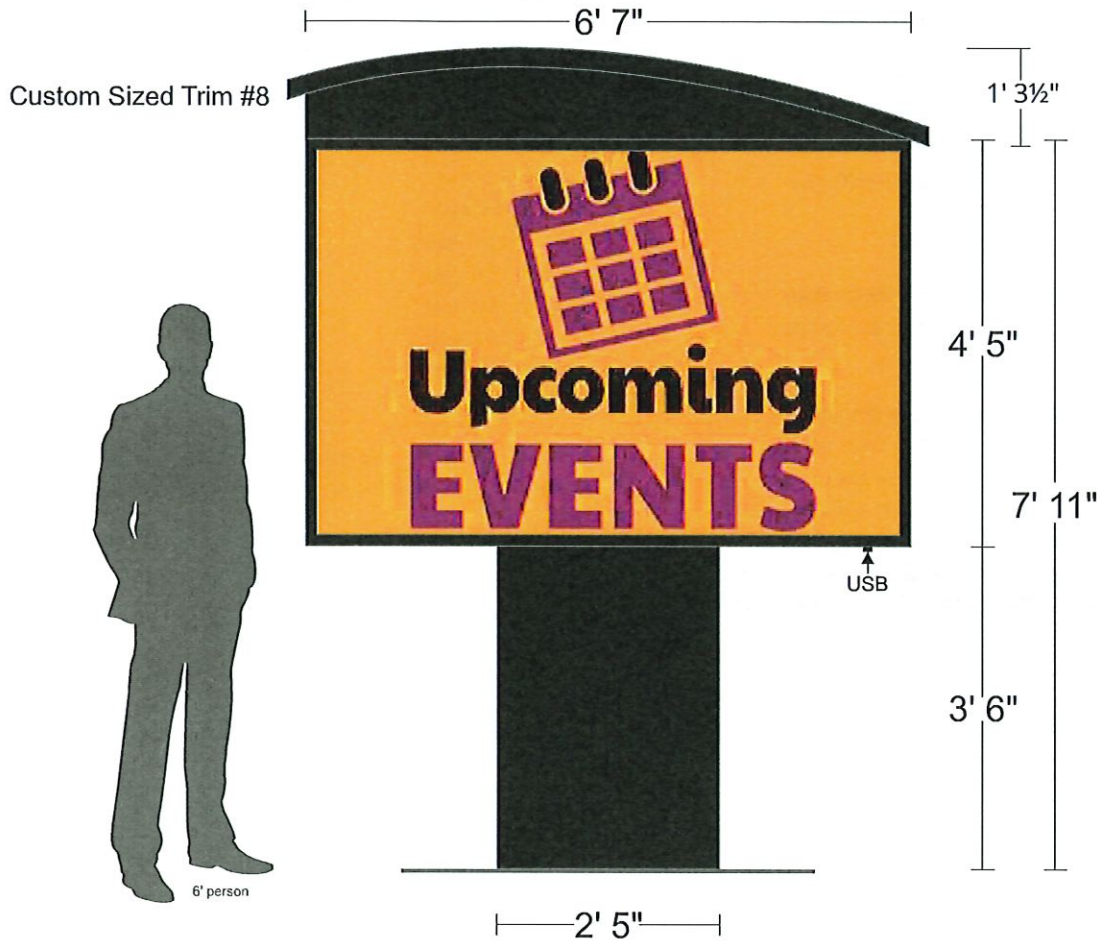
RECOMMENDATION:

Staff recommends City Council approve the request to fund the purchase of a digital sign for tourism to be located near the Humble Community Center.

ATTACHMENTS:

1. hot fund sign bid

Hotel/motel



Stewart Signs
ONE SIGN, ONE COMPANY
1-800-237-3928 stewartsigns.com

POLARIS COLOR 10.66mm 120x180
LED CABINET: 4' 5" x 6' 7"
Sk: 1030488-1a Cust: 3186309
1/11/2024 CgO/aVasquez PROPOSAL
Scale: 1/2"=1' Paint Color: Black

Signature _____
Date _____

Please confirm that all lettering, colors and graphics are correct before signing. Changes to artwork after signature is received will incur a \$200 art change fee.



This custom artwork is not intended to provide an exact match for ink, vinyl, paint, or LED color. Signs are designed for an illuminated graphic and art is based off of this premise. Non-illumination during daylight hours may result in graphics of varying appearance. Brickwork and masonry are not included in the proposal with the exception of Cornerstone products. Measurements shown are approximations; final product dimensions may vary. LED images shown are simulated to replicate optimum viewing distance. **Original design, do not duplicate.**

LED Display Specifications

Model:	Polaris
Color:	Full Color
Pixel Pitch:	10.66mm (0.42")
Matrix - pixel height:	120
Matrix - pixel width:	180
Sides:	Double Sided*
* Two single sided cabinets in a master/master relationship.	
Cabinet Type:	Hinged
Modular Design:	No
Communication Method:	Cellular Data Modem with Lifetime Verizon Unlimited Data Plan**

** Wireless Data Modem with no restrictions on distance. Wireless data plan provided for 10 years. By signing the customer affirms and agrees to the terms and conditions listed at <https://www.signcommand.com/data-plan>.

Controller:	Industrial PC
Total pixels:	43,200
Total LEDs:	129,600
Brightness:	Up to 10,000 nits
Horizontal/vertical viewing angle:	140/70
Software:	SignCommand.com
Frames per second:	60
Auto or manual dimming:	Included

Electrical Requirements (Estimated)

Circuit:	1 circuit at 20 amps
Voltage:	240 volts

LED Display Electrical Use (Estimated)

Typical use (daytime):	571 watts per side
Typical use (nighttime):	114 watts per side
Maximum use:	1,141 watts per side
Max draw:	5 amps per side

Operating cost is approximately \$30 per month per side, assuming the average of daytime and nighttime use and a price of \$0.12 per kWh.

LED Display Dimensions

Nominal dimensions - final dimensions are provided on mechanical drawings.

Active display height:	4'-2.25" (50.25")
Active display width:	6'-3.5" (75.5")
Active display sq.ft.:	26.3 sq.ft. per side
Cabinet height:	4'-5.25" (53.25")
Cabinet width:	6'-6.5" (78.5")
Individual cabinet depth:	6.5"
Cabinet sq.ft.:	29 sq.ft. per side
Cabinet weight (approximate):	392 lbs. per side

Cabinet Options

Cabinet color:	Black (Glossy)
Ventilation:	Rear
Mounting and finishing package	Not included

Text Capabilities

15 rows of 2.9" text
12 rows of 3.8" text
10 rows of 4.2" text
7 rows of 5.5" text
6 rows of 8.4" text *
5 rows of 10.1" text *
4 rows of 12.6" text *
3 rows of 16.8" text *
2 rows of 25.2" text *
1 row of 50.4" text *
* Using regular text.

Supported Formats

AVI, BMP, GIF, JPG, MOV, MP4, MPG, PNG, TIF, WMV

Capabilities for a 10.66mm 120x180 Full Color LED Display

Want More?

We make LED displays to fit every budget and need.
Upgrade to a higher resolution display for even more amazing clarity and increased capabilities!

This Display

[8.88mm 144x216](#)

43,200
total pixels
\$33,534 investment
\$0.78 per pixel
15 rows of text

62,208
total pixels
\$35,298 investment
\$0.57 per pixel
18 rows of text
*44% increase in resolution
(19,008 more pixels) for 5%
more investment than 10.66mm
120x180*
[View this sign](#)

Prepared for

City of Ingleside
2671 San Angelo Ave
Ingleside, TX 78362

Prepared by

Alejandro Vasquez
avasquez@stewartsigns.com
1.888.237.3928 x2440

DESCRIPTION

POLARIS+ 10.66mm CLR 120x180 DS OTDR LED

For larger and higher resolution displays, a separate weather-resistant LED cabinet is top-hinged for easy front access to internal components. Our flagship LED sign.

LED display

- 10.66mm full color at 120 pixels high by 180 pixels wide (21,600 total pixels per side)
- Active display area 4'2" x 6'4" (26.4 square feet per side)
- Double sided LED cabinet, size 4'5" x 6'7"
- 1 to 15 rows of text and use your own images and video clips
- 10-year parts availability guarantee (see warranty for info)
- Entire sign UL Listed and FCC Part 15 compliant

[See full display capabilities](#)

Communication method

Communication provided by cellular modem and LIFETIME Cell Connect data plan.

[See full specifications](#)

Sign structure

- TCI® industrial powder coat finish, color: Bristol Blue
- Dual leg mount with cowling (creates pedestal appearance)
- Leg height: 3'6", Leg width: 2'5", Overall sign height: 7'11"
- Minimum wind load rating: 120mph, exposure B
- Lifetime warranty on structure, including vandalism (see warranty for info)

Electrical specifications

- One 20 amp circuit at 240 volts, Max draw: 8.8 amps

Custom options

- Top Trim 8
- Install
- One Set of Three (3) Engineer Drawings & Calcs, Sealed

Software

SignCommand.com Cloud-based LED Sign Software FREE for the lifetime of the product.

Control your sign from anywhere using any device. No monthly fees. [Learn more.](#)

PRICE

~~\$37,519.00~~

Special Price: \$36,847.00

Freight: \$1,667.00

Total: \$38,514.00

BuyBoard Contract #690-23

Contract Expires 03/31/2024



Included

Total: \$38,514.00

+ any applicable sales tax and freight

Payment terms: Net 30 with Purchase Order Issued to
Stewart Signs



Prepared for: City of Ingleside • Ingleside, TX

Prepared by: Alejandro Vasquez • avasquez@stewartsigns.com • 1.888.237.3928 x2440

SHIPPING INFORMATION*All items not specified here will be shipped to:*City of Ingleside
2671 San Angelo Ave
Ingleside, TX 78362*Shipping terms: FOB Origin. Storage and other freight services may be added to your invoice should they be required. Unless managed installation services are included, customer is responsible for unloading of sign upon delivery. Signs greater than 6 feet wide are not eligible for lift gate services.***TERMS & CONDITIONS** (*unless noted elsewhere in this quote)**TAX:** Any applicable sales tax will be added to your invoice. Organizations exempt from sales tax must include exemption certificate with order.**PERMITS:** Permits and zoning are the responsibilities of the buyer. Check with your city or county zoning office for proper permitting procedures in your area. Sealed engineer drawings available at additional cost.**INSTALLATION:** Installation of footers, erection, electrical service to sign site, electrical hook-up, removal and/or disposal of any existing signage, and any decorative masonry are the responsibilities of the buyer. Managed installation services are available at additional cost.**CANCELLATION:** Any cancellation may be subject to cancellation, return, and/or restocking fees. A late fee of 1.5% per month will be charged on any overdue balances. In the event of a payment default, customer will be responsible for all of Stewart Signs' costs of collection, including but not limited to court costs, filing fees and attorney fees.**SUPPORT:** US-based phone and internet support are provided FREE for the lifetime of the product. A premier service warranty is available at additional cost.**SOFTWARE:** By purchasing the SignCommand.com software product, you are agreeing with the Website Terms of Use (<https://www.signcommand.com/terms>) and Software End User License Agreement (<https://www.signcommand.com/eula>).**COMMUNICATION:** Connectivity requires cell service at sign site. Must be within the United States (including Puerto Rico) with 4G LTE coverage shown on the Verizon Coverage Map (<https://www.stewartsigns.com/verizon-map>).**DATA PLAN:** By purchasing the Cell Connect Data Plan, you are agreeing with the Data Plan Terms and Conditions (<https://www.signcommand.com/data-plan>).

I have read and understand the Terms & Conditions above.

INITIALS **ORDERING INSTRUCTIONS**

1. Review this quote for accuracy. Initial the Terms & Conditions box. Sign and date the quote here.
2. Review any corresponding artwork provided with this quote. Check all spelling and colors. Sign and date the artwork.
3. Submit both documents along with your deposit payment to your sign consultant. Speak with your consultant about payment method options.

Customer's authorized signature for quote #1030488-1

SIGNATURE 

PRINT NAME

DATE

Alejandro Vasquez**1/11/2024**

Alejandro Vasquez, Sign Consultant

Limited Product Warranty ("Limited Warranty")

Prepared for: City of Ingleside • Ingleside, TX

Prepared by: Alejandro Vasquez • avasquez@stewartsigns.com • 1.888.237.3928 x2440

Definition of Warranty Coverage:

- 1) Stewart Signs (the "Company") expressly warrants to the original purchaser ("You" or "Buyer" or "Owner" or "Customer") that, for a period of five (5) years from the date of shipment (the "Warranty Period"), the electronic displays and the associated Company products (the "Product") will be reasonably free of material defects in materials and workmanship impacting Product fit, form and/or function. During the Warranty Period, the Company will, at its discretion, repair or replace any defective covered Product. The Owner will be responsible for removing and reinstalling any and all repaired or replacement parts. This Limited Warranty only applies to the Company's Product if installed, used, and maintained in the manner recommended by Company, and this Limited Warranty is conditioned upon compliance with all such instructions. Lifetime telephone support for the Product is provided, as needed.
- 2) In the event the Product is damaged during shipping, it is the responsibility of the Buyer to refuse delivery, causing the Product to be returned to the manufacturer for repair. Title to the Product passes to the Buyer upon the Company's delivery to the freight carrier. The Company assumes no liability for damage caused by careless handling or poor installation, except for work completed by employees of the Company.
- 3) Any information or suggestion by the Company with respect to the Product concerning applications, specifications or compliance with zoning, codes and standards is provided solely for your convenience and without any representation as to accuracy or suitability. You must verify and test the suitability of any information with respect to the Product for your specific application.
- 4) Sign Structure and Sign Face: In the event the sign structure or identification/changeable copy portion of the sign malfunctions under normal use and service thereof DURING THE LIFE OF THE SIGN due to material defects in workmanship or materials, the Company will, at its option, repair or replace any defective materials.
- 5) Vandalism to Sign Faces: This Limited Warranty covers polycarbonate faces against breakage due to vandalism DURING THE LIFE OF THE SIGN. Warranty protection does not extend to these surfaces if damaged by gunshots, or when damaged coincident with damage to the sign cabinet in which the faces are installed. LED panels are also covered from vandalism for the duration of the electronics portion of the Limited Warranty (5 years). Excludes Cornerstone monument signs and other Cornerstone components.
- 6) Failed electronic parts or assemblies will be repaired or replaced, at the sole discretion of the Company. Replacement or repaired parts are warranted to be free from material defects in material or workmanship for ninety (90) days, or for the remainder of the Warranty Period of the Product they are replacing or in which they are installed, whichever is longer.
- 7) The Company will repair failed LED pixels if greater than one quarter of one percent (0.25%) of the total number of pixels in the sign have failed in one (1) calendar year, provided the sign is installed with the recommended ventilation system for its location. The definition of pixel failure is when all LEDs in the pixel will no longer emit light. Pixel repair is performed at the Company Repair Center. It is common knowledge within the sign industry that all LEDs degrade and produce less light as they age. Eventually the LEDs will require replacement even though the LEDs will still emit light. This Limited Warranty does not cover normal LED degradation.
- 8) Customer Obligations:
Failure by the Customer to properly maintain the Product will void coverage for affected components. The Customer shall notify the Company immediately of equipment failure and allow the Company full and free access to the Product when required. Waiver of liability or other restriction shall not be imposed as a site access requirement. The Customer is responsible for all costs and management oversight associated with providing the Company access to the Product, providing the necessary machines, communication facilities and other equipment, inclusive of but not limited to lifting equipment. Should on-site repair be required, Customer is required to have a responsible individual on-site to provide access to the Product as well as sign off on a completed work order.
- 9) Exclusions and Restrictions:
The Company reserves the right to restrict service, limit replacement parts, or invalidate this Limited Warranty to Customers whose account balance is past due.
This Limited Warranty specifically excludes any on-site labor required to service the covered Product, including diagnosis, removal, and installation of parts and/or products. Any on-site service required by the Customer of Company technicians or a local Company-authorized service provider is billable to the Customer based on an agreed-upon written quote.
This Limited Warranty does not apply to software. Software is covered by a separate agreement, which appears in the Company's software license agreement.
ID cabinet LED illumination and power supply are covered for two (2) years, when purchased as a system.
- 10) This Limited Warranty specifically does not cover the following:
 - a) Third-party communication devices such as wireless devices and modems, which are covered by a separate electronic communication warranty. This includes the Ubiquiti wireless radios provided by Stewart Signs, which carry a one (1) year warranty from ship date when purchased with a new sign.
 - b) Damage to Product that has been moved from its original installation location or is mounted in a mobile structure.
 - c) Cosmetic damage to the Product (including but not limited to scratches and dents that do not otherwise affect the fit, form or functionality of the Product or materially impair its use).
 - d) Recovery or transfer of any data or software stored on the Product not originally installed on the Product by the Company.
- 11) This Limited Warranty specifically does not cover conditions, defects or damage caused by or resulting from the following:
 - a) Defects caused by: unreasonable or unintended use of Product; improper or unauthorized handling; accident; omission; neglect; vandalism (unless otherwise noted in this Limited Warranty); misuse; physical abuse; installation, use and/or fabrication, and maintenance of the Product by



2201 Cantu Court #215 Sarasota, FL 34232 • 1.800.237.3928 • Fax: 1.800.485.4280

Customer Installation Agreement and Specification

Prepared for Customer # 3186309 - City of Ingleside-Humble Park

1. Zoning / Building Permits

Permits: TO BE PAID BY THE CUSTOMER

- Sealed Engineer Drawings, if required by the local zoning department, and the permit with all acquisition fees will be invoiced separately. If the permit is denied, the customer is no longer obligated to this agreement and only responsible for any Engineer drawing and applicable permit acquisition cost(s).

Site Plan, Permit Documents Required by Local Jurisdiction is Customer Provided.

- A site plan is required prior to initiating any permitting or installation work. See attached Sample Site Plan.
- A site plan (plot plan) is a detailed map of the customer's property that typically includes location, with dimensions, of the property lines, buildings, sidewalks, streets, existing signs, and the desired location for the new sign(s). Measurements for the placement of the new sign should be from fixed locations with tolerance for up to +/- 6".
- On site installer survey is fee based and invoiced separately.

Permit Variance:

- Stewart Signs does not become involved in Variance applications and it is not part of this agreement. The customer is responsible for cost associated with variance proceedings.

2. Project Completion Time Line

- Installation will occur within 2-5 weeks from the sign delivery date.

3. Installation Site Conditions

Site Conditions:

- The site will be free and clear of obstructions with adequate access for installation crews and equipment.

Underground Obstructions:

- The customer is responsible to specify sign location on the site plan
- The installer is responsible for A "Utility Dig" service to mark all underground utilities for sign site.
- Stewart Signs is not responsible for any damages or losses that are caused by unmarked underground obstructions.

Digging Conditions:

Unless noted in an addendum, installation costs are based on:

- Normal, undisturbed soil with no rock, fill, concrete, coral, asphalt, frozen conditions, etc.
- A water table below the depth of the required footer.
- Ground water intrusion into the foundation will incur additional costs.
- Winter install is not part of this agreement and will require additional costs.

4. Standard Working Hours

- Standard working hours are 8:00am to 5:00pm, Monday through Friday, excluding legal holidays.
- If additional trips are required due to some action or decision by the customer or an Act of God, the customer will be responsible for additional travel costs.

5. Materials

- If installation requires new footer, all necessary materials including concrete and rebar will be supplied by installer.

6. Disposal of installation materials and minor damages

- The installer will dispose of the excavated soil, crating material, and any installation debris.
- Good working practices are observed to leave each site in good condition.
- Minor cosmetic damages to the property such as tire ruts, spilled concrete, displaced soil, landscaping, etc. are to be considered normal.

7. Electrical: Customer provided

- Electrical circuit wiring to within 3 feet of the sign is the responsibility of the customer.
- All electrical work must be completed by a licensed electrician and meet all state and local electrical codes.
- The recommended voltage and amperage for each dedicated circuit is printed on the Sign Quote Form.
- If electric/data is not at the sign at the scheduled installation, the customer assumes responsibility for connectivity.

8. If Your Sign is Wi-Fi Wireless, Customer Provided Cabling Requirements and Building Penetration

- Wireless communication between the building's network and the LED sign requires mounting a wireless device on the outside of the building in line-of-sight between the antenna on the sign and the wireless device on the building. The installer will connect the building antenna if it is 10' or less from the ground level and there at the time of the scheduled installation, provided that the Cat5 cable has been penetrated through building wall, otherwise the customer assumes responsibility for connectivity. The customer is responsible for internal wiring and connections to their network device.
- Wall penetration is governed by local building and fire codes. Building membranes and other wall construction designs may require special consideration and inspecting for wiring, plumbing, ductwork, etc. before penetrating any wall.
- Stewart Signs does not perform building penetrations as part of the sign installation process. The wireless device weighs approximately 3 ounces and is attached to the building using mounting brackets and the hole sealed with silicone.
- Contact Stewart Signs at 855-841-4624 for any programming concerns or questions.

9. Post Agreement Changes: Circumstances may change during the installation process.

- Stewart Signs will inform the customer of any additional costs when unforeseen conditions occur. The install will stop until the additional cost receives written approval.

10. Installation onto existing structures: IF APPLICABLE TO THE EXTENT PERMITTED BY STATE LAW:

- Customer shall agree to defend, indemnify, and hold harmless Stewart Signs and the installer from liability and claim as new sign is being installed onto existing structure and footer. Stewart Signs and installer are NOT responsible for the integrity of the existing structure or footer.

Scope of work to include:

Acquire any necessary permits. Dig, form and pour new footer. Connect to customer supplied electric which will be within 3' of sign. Power up and test sign. Remove all shipping and installation debris. Take final pics of working sign and send to SS.

ADDENDUMS

- Electric provided by customer must be within 3 feet of the install location at the time of installation for final connection to be made by installer. If electric is **NOT** available at the time of installation final connection becomes the customer responsibility.
- Permit and acquisition fees are **NOT** included. Permit and Sealed engineered drawings, if required by local jurisdiction will be billed to the customer. All costs will be itemized and invoiced to the customer at project completion.

***** Any change to this agreement requires signed approval by both the customer and Stewart Signs.***

Installation price: Included in quote

Price valid until: 04-11-2024

Sign type and size: POLARIS+ 10.66mm CLR 120x180

OAH: 7'11"

Quote #: 1030488-1

Communication Method: Cellular Modem

INTERNAL USE ONLY

Installation Coordinator: JER

Approval Date: 01-11-2024

The foregoing agreement is exclusive and in lieu of all other agreements whether written, oral, or implied.

I understand and agree to the above standards and conditions.

Responsible person's signature: _____

Title: _____

Date: ____/____/____

Print name: _____

Organization name: _____

Phone: (____) ____-____

WE BUILT YOUR SIGN LET US INSTALL IT TOO



COST EFFECTIVE

We have delivered over 50,000 signs across the country and have established relationships with vetted installers.



EFFICIENT AND COMPREHENSIVE PROCESS

From order processing, until your installation is complete and your sign is fully operational we cover everything in between.



PEACE OF MIND

A dedicated project manager will work with you throughout the entire project.



EXPERTISE

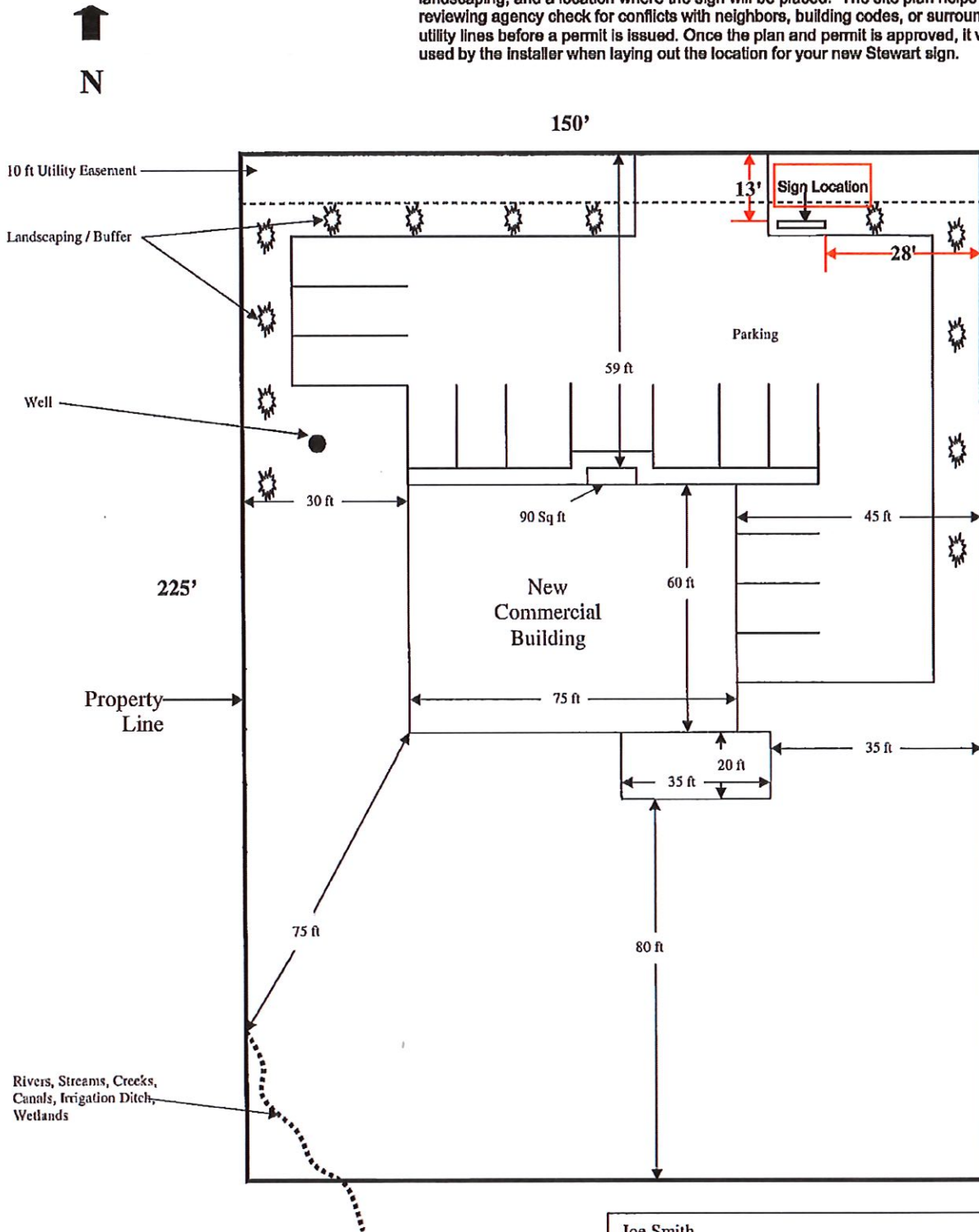
We have over 50 years experience in manufacturing signs. We know the product better than anyone else.

- ✓ Comprehensive project management
- ✓ Trusted network of local installers
- ✓ Zoning / Code Check
- ✓ Permits
- ✓ Sign Shipment Coordination
- ✓ Pre-install Inspection of Sign
- ✓ Removal of Existing Footer / Sign
- ✓ Quality Check
- ✓ Site Clean-up

stewartsigns.com ■ 800-237-3928

What is a Site Plan?

A key component in getting a sign project approved is a property site plan. Many jurisdictions will require one before moving forward in the permitting and installation process. A site plan usually shows measurements along with a building footprint, roadways, parking, drainage facilities, sewer lines, water lines, trails, lighting, landscaping, and a location where the sign will be placed. The site plan helps the reviewing agency check for conflicts with neighbors, building codes, or surrounding utility lines before a permit is issued. Once the plan and permit is approved, it will be used by the installer when laying out the location for your new Stewart sign.



SAMPLE SITE PLAN

NOTE: All easements must be shown and identified.

Joe Smith
100 W. Anywhere Street
Parcel # 55-55-55-55-5555
Ph. 555-555-5555
Scale: 1" = 30'
Put Drawing Scale Here

Prepared for: City of Ingleside • Ingleside, TX

Prepared by: Alejandro Vasquez • avasquez@stewartsigns.com • 1.888.237.3928 x2440

any party other than the Company.

- b) Damage (not resulting from manufacturing defects) that occurs while the Product is in the Owner's control and/or possession, unless otherwise noted in this Limited Warranty.
 - c) Extreme physical or electrical stress or interference; environmental conditions beyond the Company's control, such as man-made or naturally occurring salt air/fog, electrochemical oxidation or corrosion and/or metallic pollutants. Also not covered is normal wear and tear; inadequate, improper, or surges of electrical power; lightning, floods, fire, acts of God, war, terrorism, or other external causes, including Force Majeure.
 - d) Unauthorized modification, including installation of third-party software on the Product.
 - e) Product modification or service by anyone other than: (a) the Company, (b) a Company-authorized service provider, or (c) Customer's own installation of Company approved parts with instruction from the Company. Service to damaged or malfunctioning Product which has not been ordered or authorized by the Company's Customer Satisfaction Department is not covered under this Limited Warranty and will automatically invalidate this Limited Warranty.
 - f) Computer viruses, Trojan horses, worms, self-replicating code or like destructive code which was not included in the Product by the Company.
 - g) Products installed with known or visible manufacturing defects at the time of installation.
- 12) The Company will provide and be responsible for the cost of shipping parts from the Company to the Customer, with the exception of sign faces replaced due to vandalism. Standard shipping via the United States Postal Service or other commercial parcel delivery company is the default method of delivery. Expedited delivery is available to the Customer at his or her expense.
- 13) Warranty claims must be registered with the Company within thirty (30) days of damage or malfunction. To register a claim, the Customer must contact the Company at the location specified below and provide (a) his or her name and any other required contact information, (b) Product and purchase descriptions, and (c) the nature of the defect. The Company reserves the right (at its sole discretion) to require proof of original purchase (e.g. paid invoice, receipt) and to visit the site of the installation or to require documentation of the claim before assuming any responsibility under the provisions of this Limited Warranty.
- 14) THE LIMITED WARRANTIES SET FORTH HEREIN ARE THE ONLY WARRANTIES MADE BY THE COMPANY IN CONNECTION WITH THE PRODUCT. THE COMPANY CANNOT AND DOES NOT MAKE ANY IMPLIED OR EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, AND DISCLAIMS ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE COMPANY'S SOLE OBLIGATION UNDER THIS LIMITED WARRANTY SHALL BE TO REPAIR OR REPLACE MALFUNCTIONING OR DEFECTIVE PARTS OF THE PRODUCT. BUYER ASSUMES ALL RISK WHATSOEVER AS TO THE RESULT OF THE USE OF THE PRODUCT PURCHASED, WHETHER USED SINGULARLY OR IN COMBINATION WITH ANY OTHER PRODUCTS OR SUBSTANCES.
- 15) NO CLAIM BY BUYER OF ANY KIND, INCLUDING CLAIMS FOR INDEMNIFICATION, SHALL BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL COMPANY BE LIABLE TO BUYER IN TORT, CONTRACT OR OTHERWISE, FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, RELIANCE, PUNITIVE OR EXEMPLARY DAMAGES, OR FOR LOSS OF PROFIT, REVENUE OR USE, IN CONNECTION WITH, ARISING OUT OF, OR AS A RESULT OF, THE SALE, DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCT SOLD HEREUNDER, OR FOR ANY LIABILITY THAT BUYER HAS TO ANY THIRD PARTY WITH RESPECT THERETO.

10-Year Parts Guarantee - Stewart Signs provides a 10-year parts guarantee for our LED signage. While hardware can change year over year, we will have available suitable hardware to allow the continued use of your signage for 10-years from the ship date of the sign. Changes in hardware include but are not limited to: visual hardware changes, software changes, or control system upgrades.

Contact Information:

Stewart Signs Customer Satisfaction
2201 Cantu Court, Suite 215
Sarasota, FL 34232
Phone: 855-841-4624
Web: www.stewartsigns.com/support/

Copyright © 2024 Stewart Signs Lim Prod Warr rev.01.01.2024

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 18

Deliberate and take appropriate action on an Interlocal Cooperation Agreement between the Ingleside Independent School District and the City of Ingleside for two School Resource Officers.

SUBMITTED BY:

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The City of Ingleside and the Ingleside Independent School District (IISD) have been working on an Interlocal Agreement to provide an additional School Resource Officer with the IISD at a seventy-five percent (75%) cost to the IISD. The percentage was based on the school year is approximately nine months of the year, and the officer would be available to the City the other three months of the year. The negotiations between the parties began because the State of Texas House and Senate passed House Bill 3 that requires each campus to have a school district police officer, school resource officer, or a commissioned peace officer that is employed as security personnel on campus during regular school hours. The IISD School Superintendent has been provided the proposed agreement and has planned to present the agreement to the board at their Monday meeting.

FISCAL ANALYSIS:

The actual employee cost to be covered by the IISD at 75%.

RECOMMENDATION:

Approval of the agreement with the IISD and authorize the Mayor and City Manager to execute on behalf of the City.

ATTACHMENTS:

1. MARK-UP of draft SRO Agreement

**INTERLOCAL COOPERATION AGREEMENT
BETWEEN INGLESIDE INDEPENDENT SCHOOL DISTRICT AND THE CITY OF
INGLESIDE**

This Interlocal Cooperation Agreement (Agreement) is made and entered into by and between Ingleside Independent School District (Ingleside ISD), a political subdivision acting through its Board of Trustees, and the City of Ingleside (City), a political subdivision acting through its City Council. Collectively Ingleside ISD and the City may be referred to as the “Parties.”

PREMISES

WHEREAS, Chapter 791 of the Texas Government Code, as amended, entitled Interlocal Cooperation Contracts, authorizes contracts between political subdivisions for the performance of governmental functions and services;

WHEREAS, Ingleside ISD is a public school district with campuses located within the jurisdictional boundaries of the City of Ingleside where the City presently operates a Police Department; and

WHEREAS, Ingleside ISD and the City have each found that contracting for and with respect to the governmental services described herein will result in increased efficiency, economy, and enhanced public safety for the constituents of both Ingleside ISD and the City;

NOW THEREFORE, in consideration of the mutual covenants and agreements of the Parties, it is agreed as follows:

ARTICLE 1: SERVICES TO BE PROVIDED

- 1.1 The City hereby authorizes the Chief of Police (Chief) to appoint and assign ~~one~~ two (2) appropriately licensed and commissioned law enforcement officers~~s~~ to be employed full-time by the City and called to duty by the Chief to provide enhanced law enforcement services as ~~a~~-School Resource Officers~~s~~ (SRO~~s~~) for Ingleside ISD during the active school year, which generally encompasses 187 days during each calendar year. Officers may also be requested to work at school events after hours and on off-days, as contract employees of the District, using the extra-curricular salary scale.
- 1.2 While school is in session, ~~an~~ two (2) SRO~~s~~ will be assigned to Ingleside ISD on a full-time basis, forty (40) hours each work week, according to the daily schedule agreed upon by the Chief and the Ingleside ISD Superintendent, minus any scheduled vacation time, sick time, training time, court time, or any other police-related activity, including any emergencies such as civil disasters.
- 1.3 The Parties agree that every effort should be made to schedule and/or designate vacation days, compensatory time, and other days off at times when school is not in session or at other times when the SRO’s absence will not otherwise create an unnecessary risk or

hamper school operations. The SROs will also coordinate vacation hours with Ingleside ISD's Superintendent.

- 1.4 Should any officer assigned as an SRO during the active school year be absent for more than five consecutive school days, the Chief will assign a suitable replacement whose training is acceptable to both Parties.
- 1.5 The SROs will report to the Ingleside ISD Superintendent and other Ingleside ISD administrative staff in carrying out his/her day-to-day duties as an SRO. The Chief retains final authority over the SRO's law enforcement responsibilities.
- 1.6 The duties, schedule, and responsibilities of the SROs on days when school is not in session shall be determined solely at the discretion of the Chief.
- 1.7 The duties to be performed by the SROs include, but are not limited to, the following:
 - a. Patrolling areas within or in the vicinity of the geographical boundaries of Ingleside ISD to protect all students, personnel, and visitors. Patrol and other law enforcement duties of the SROs shall be performed with the use of City-owned police vehicles.
 - b. Being a visible presence during the school day in order to assist the Ingleside ISD administration with general public safety services during school hours.
 - c. Maintaining the peace and/or address any breaches of the peace as needed.
 - d. Engaging in all law enforcement activities arising from the enforcement of criminal laws, issuing citations, transporting arrested persons, completing follow-up activities, filing of affidavits and complaints, and participating in legal proceedings resulting from the law enforcement services provided in accordance with this Agreement.
 - e. Responding to Police calls for service during the course of the regular school day on campuses.
 - f. Assisting in providing security as needed for after-hour activities and events taking place at Ingleside ISD facilities as a contract employee of the District, utilizing the extra-curricular salary scale.
 - g. Mediating disputes on campus, including working with students to help solve disputes in a non-violent manner.
 - h. Preventing property loss due to theft or vandalism.
 - i. Providing traffic control as needed.
 - j. Assisting Ingleside ISD with its Emergency Operation Plan.

- k. Assisting with school safety projects, participating in emergency drills, emergency response, and after-action reviews within Ingleside ISD.
 - l. Providing training for staff as agreed upon by the Ingleside ISD Superintendent and the City's Police Chief.
 - m. Serving as a resource for law enforcement education at the request of school staff, such as speaking to classes on the law, search and seizure, drugs, or motor vehicle laws.
 - n. Maintaining the confidentiality of student records as required by the Family Educational Rights and Privacy Act.
 - o. Preparing any reports and documentation required by the Ingleside Police Department within the geographic boundaries of Ingleside ISD.
- 1.8 No assignment, task, or function shall be imposed on the SRO by Ingleside ISD that would violate or jeopardize the officer's sworn oath, conditions of licensure, or departmental regulations; however, each officer is responsible for disclosing to appropriate Ingleside ISD personnel his/her opinion that such assignment, task, or function would have such an effect.
- 1.9 Circumstances constituting an immediate threat to public safety may be dealt with by the SRO consistent with his/her training and responsibility as a peace officer.
- 1.10 The final disciplinary action or other dispensation of any matter or issue involving only a violation of a rule or regulation of Ingleside ISD or a "school offense" under Texas Education Code §37.143 shall be at the discretion of Ingleside ISD, provided that in the event the SRO observes any event, matter or action that appears to constitute a violation of any local, State or Federal penal or criminal law other than a school offense, then, in such event, the investigation of and decision to file charges on any such event shall be made by the SRO.
- 1.11 When the SRO takes a person into custody in the course of performing his/her duties on behalf of Ingleside ISD under this Agreement, Ingleside ISD shall receive notification of the incident from the City within the timeframe required by law and of the disposition of the individual to the extent allowed by law.
- 1.12 To the extent permitted by applicable law, the SRO shall report to Ingleside ISD all information obtained during the investigation of any reported incident involving a Ingleside ISD student or employee for the purposes of determining appropriate disciplinary actions and modifications of education programs as a result of the incident.
- 1.13 Changes in the total number of officers to be assigned hereunder or the total cumulative number of hours to be worked shall be determined by mutual consent of the Parties as part of the annual review of this Agreement or at any other time as mutually agreed between the City and Ingleside ISD.

ARTICLE 2: DUTIES & RESPONSIBILITIES OF THE PARTIES

- 2.1 The City agrees to perform any obligations required to maintain the SROs as a commissioned police officer with the City of Ingleside Police Department with full Texas peace officer status; including but not limited to, providing the SRO with any and all continuing training necessary to maintain his/her TCOLE certification. Ingleside ISD will pay for any additional training it may require unrelated to TCOLE basic peace officer training requirements (including TCOLE active shooter response training) as agreed upon by both parties. Required additional training paid for by ISD shall include training and proficiency certification for school resource officers required under Occupations Code §1701.263, and TEA-approved training on the use of a bleeding control station in event of traumatic injury.
- 2.2 The Parties agree to jointly interview and select personnel to fill the positions of SRO in accordance with the City policies and procedures. The SROs assigned to Ingleside ISD shall be subject to the approval of the Ingleside ISD Superintendent. Ingleside ISD understands that the Chief may rotate or change any officer assigned to serve as an SRO; provided, however, that Ingleside ISD may refuse any particular officer assigned as SRO and request assignment of a different officer.
- 2.3 Any properly licensed officer providing SRO services under this Agreement shall be vested with all powers, privileges, and immunities of a peace officer within all territory contained in the boundaries of the Ingleside ISD and while on property under the control and jurisdiction of Ingleside ISD or otherwise in the performance of his/her duties under the guidelines of Ingleside ISD policies and regulations.
- 2.4 The City will authorize the SRO to carry a weapon and act as a peace officer at all times, so long as the employee is acting under his/her official capacity. Likewise, Ingleside ISD specifically authorizes the SRO to carry a weapon in performing services at Ingleside ISD. When not on duty as an SRO, the officer's right to carry a firearm will fall back under provisions and rules set forth by TCOLE and the City of Ingleside
- 2.5 As an employee of the City, any disciplinary action taken against the SRO shall be taken by the City and shall follow the policy and procedure set forth in the employee handbook of the City.
- 2.6 At its own cost, the City shall furnish the SROs with all equipment routinely assigned to law enforcement personnel who serve the City. The City will maintain and service all equipment used by the SROs in providing services to Ingleside ISD. City Equipment includes, but is not limited to, uniforms, computers and computer equipment, firearms, radios, and all other devices used by City law enforcement personnel in the performance of their duties.
- 2.7 The City will provide the SROs with a patrol unit appropriately marked designating law enforcement services being performed under authority of the City for use in his/her SRO duties, but not for personal use.

- 2.8 Ingleside ISD will provide the SROs with office space on school property and other office equipment to perform duties under this Agreement and as mutually agreed by the Parties. The City will provide the SROs with access to Ingleside Police Department facilities as needed to conduct police business regarding the securing of evidence in crimes and interviewing individuals in connection with a criminal investigation.
- 2.9 Subject to its obligations under the Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. §1232g, Ingleside ISD agrees to provide the SROs with (a) unrestricted access to student and personnel records as necessary for the investigation of criminal offenses, to collect certain incident-based data, or to ensure the safety and security of school campuses or events, and (b) unrestricted access to technology installed at Ingleside ISD, including surveillance cameras, to provide for safety and security. SROs shall be designated as “school officials” under Ingleside ISD Policy FL (local) for purposes of access to student records.
- 2.10 Ingleside ISD will include the Chief of Police or his/her designee as a member of the Ingleside ISD School Safety and Security Committee.
- 2.11 Except for Ingleside ISD payment for the cost of additional training of SROs required under Section 2.1, and for SRO overtime hours approved by the Ingleside ISD Superintendent, the City shall bear 100% of all costs for the first SRO assigned under this Agreement, including but not limited to the equipment, salary, benefits, and personnel services of the first SRO assigned under this Agreement. For the purpose of subsidizing a proportion of the costs and expenses incurred by the City in the employment and retention of two SROs, Ingleside ISD agrees to pay the City for each month on a quarterly basis during the active school year for 75% of all costs for the second SRO assigned under this Agreement, including but not limited to the uniforms, duty weapon, taser, body armor, radio, salary, benefits, overtime, and personnel services of the second SRO assigned under this Agreement.
- a. The City shall provide the SROs with all wages, salaries, or other compensation, and benefits of similarly-situated and classified employees of the City. The City shall also be directly responsible for the payment of all payroll taxes, bond costs, retirement contributions, overtime, social security taxes, if any, and all other payroll expenses.
 - b. The City shall keep and maintain accurate records of dates of service and the hours served by the SROs. The City shall be responsible for calculating and documenting the charge for services rendered pursuant to this Agreement.
 - c. Overtime hours that relate to SRO duties must be authorized and approved by the Ingleside ISD Superintendent prior to the performance of the overtime work and will be paid in accordance with procedures established by the City’s personnel policy manual, and paid reimbursed to City quarterly by Ingleside ISD.
 - d. During the active school year, the City will provide Ingleside ISD with a monthly quarterly invoice for the salary, benefits, overtime, and personnel services of the two SROs due at least ten (10) business days prior to each payment date.

- e. Ingleside ISD will pay all invoices within thirty days out of current revenue funds.
 - f. With 48-hour notice, the city is allowed two business days after notice, the City shall promptly provide Ingleside ISD with access to all time calculation records maintained by the City for any SRO services provided pursuant to this Agreement.
 - g. Ingleside ISD also agrees to pay to the City, as part of the consideration for the services provided under this Agreement, a reasonable annual fee to compensate the City for actual costs associated with the City's purchase of any additional insurance or risk pool coverage required under the Agreement to meet the City's obligation for coverage of the SROs which is not already included by the City's current self-insurance liability coverage plan.
- 2.12 The Parties shall each monitor, review and provide oversight and supervision of the services as they are provided and each agree to notify the other as soon as reasonably possible in the event the level or quality of any scheduling, operating, service or performance issue becomes unsatisfactory.
- 2.13 The Parties recognize that the services to be provided by the City may be limited to the extent that said services conflict with or compromise the Chief's ability to provide effective law enforcement services to the City generally; and, should a conflict arise between the policies of Ingleside ISD and the City, City policy shall prevail.
- 2.14 The Parties agree that they will use their best reasonable efforts to coordinate media relations pertaining to law enforcement incidents and investigations occurring pursuant to this Agreement prior to the release of information whenever possible. It is understood that, depending on the nature of an incident, law enforcement personnel may be required to conduct on-scene interviews and/or briefings for the media without prior coordination among all Parties. Information will only be released by a Party in accordance with established law and its existing policies and procedures.
- 2.15 Nothing in this Agreement prevents Ingleside ISD from continuing its practice of hiring off-duty police officers to provide security at sporting events, after-hour activities, or other events. This Agreement shall not govern off-duty peace officers hired for these purposes.

ARTICLE 3: RELATIONSHIP BETWEEN THE PARTIES

- 3.1 Notwithstanding any provision to the contrary herein, this Agreement is a contract for and with respect to the performance of governmental functions by governmental entities. The relationship of Ingleside ISD and the City shall, with respect to that part of any service or function undertaken as a result of or pursuant to this Agreement, be that of independent contractors.
- 3.2 Nothing contained herein shall be deemed or construed by the Parties, or by any third party, as creating the relationship of principal and agent, partners, joint venturers, or any other similar such relationship.

- 3.3 Officers employed by the City and assigned by the Chief to serve as an SRO at Ingleside ISD are and will remain employed by the City.
- 3.4 The City shall have no liability whatsoever for or with respect to Ingleside ISD's use of any Ingleside ISD property or facility, or the actions of, or failure to act by, any employees, subcontractors, agents or assigns of Ingleside ISD. Ingleside ISD covenants and agrees that:
- a. Ingleside ISD shall be solely responsible, as between Ingleside ISD and the City and the agents, officers and employees of the City, for and with respect to any claim or cause of action arising out of or with respect to any act, omission, or failure to act by Ingleside ISD or its agents, officers, employees, and subcontractors, while on Ingleside ISD property or while using any Ingleside ISD facility or performing any function or providing or delivering any service undertaken by Ingleside ISD pursuant to this Agreement.
 - b. For and with respect to Ingleside ISD property or Ingleside ISD's use of any Ingleside ISD facility, Ingleside ISD hereby contracts, covenants, and agrees to obtain and maintain in full force and effect, during the term of this Agreement, a policy or policies of insurance, or risk pool coverage, in amounts sufficient to insure Ingleside ISD and its agents, officers, and employees from any and against any claim, cause of action or liability arising out of or from the action, omission, or failure to act by Ingleside ISD, its agents, officers, employees, and subcontractors in the course of their duties.
- 3.5 Ingleside ISD shall have no liability whatsoever for or with respect to the City's use of any City property or facility, or the actions of, or failure to act by, any employees, subcontractors, agents, or assigns of the City. The City covenants and agrees that:
- a. The City shall be solely responsible, as between the City and Ingleside ISD and the agents, officers, and employees of the Ingleside ISD, for and with respect to any claim or cause of action arising out of or with respect to any act, omission, or failure to act by the City or its agents, officers, employees, and subcontractors, while on City property or while using any City facility or performing any function or providing or delivering any service undertaken by the City pursuant to this Agreement.
 - b. For and with respect to the services to be provided by the City to Ingleside ISD pursuant to this Agreement, the City hereby contracts, covenants, and agrees to obtain and maintain in full force and effect, during the term of this Agreement, a policy or policies of insurance, or risk pool coverage, in the amounts sufficient to insure the City and its agents, officers, and employees from and against any claim, cause of action, or liability arising out of or from the action, omission, or failure to act by the City, its agents, officers, employees, and subcontractors in the course of their duties.
- 3.6 It is specifically agreed that, as between the Parties, each party to this Agreement shall be individually and respectively responsible for responding to, dealing with, insuring against,

defending, and otherwise handling and managing liability and potential liability pursuant to this Agreement.

- 3.7 Each party hereto reserves and does not waive any immunity or defense available to it at law or in equity as to any claim or cause of action whatsoever that may arise or result from the services provided and/or any circumstance arising under the Agreement. Neither Ingleside ISD nor the City waives, modifies, or alters to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas on behalf of itself, its trustees, council members, officers, employees, and agents.
- 3.8 No term or provision of this Agreement shall benefit or obligate any person or entity not a party to it. This Agreement shall not be interpreted nor construed to give to any third party the right to any claim or cause of action, and neither the City nor Ingleside ISD shall be held legally liable for any claim or cause of action arising pursuant to, or out of the services provided under, this Agreement except as specifically provided herein or by law. The Parties hereto shall cooperate fully in opposing any attempt by any third person or entity to claim any benefit, protection, release, or other consideration under this Agreement.
- 3.9 Nothing in this Agreement shall be deemed to extend, increase or limit the jurisdiction or authority of either the City or Ingleside ISD except as necessary to implement, perform and obtain the services and duties provided for in this Agreement. Save and except only as specifically provided in this Agreement, all governmental functions and services traditionally provided by Ingleside ISD, and all governmental and proprietary functions and services traditionally provided by the City, shall be and remain the sole responsibility of each such respective party.

ARTICLE 4: TERM

- 4.1 The initial term of this Agreement shall commence on ~~August 7th, 2018~~ August 1, 2024, and continue through ~~May 24, 2019~~ July 31, 2025, and shall automatically renew for an annual term commencing on August 1st thereafter, unless terminated earlier in writing by either party.
- 4.2 This Agreement may be terminated at any time by either party, with or without cause, by giving the other party a minimum of thirty (30) days written notice of its intention to terminate, such notice to be delivered by hand or U.S. Certified Mail to the other party.

ARTICLE 5: NOTIFICATIONS

- 5.1 All correspondence and communications regarding this Agreement shall be directed to:

CITY: City of Ingleside
Attn: City Manager
2671 San Angelo Avenue
Ingleside, Texas 78362

INGLESIDE ISD: Ingleside Independent School District
Attn: Superintendent of Schools
2664 San Angelo
Ingleside, Texas 78362

- 5.2 Notices provided pursuant to this Agreement must be in writing and hand-delivered or sent by certified mail, return receipt requested.

ARTICLE 6: MISCELLANEOUS PROVISIONS

- 6.1 If any portion of this Agreement shall be deemed void or invalid, the remaining portions of the Agreement shall continue in full force and effect.
- 6.2 This Agreement represents the entire Agreement between the Parties, and it supersedes any prior understanding or written or oral agreement relating to the subject matter herein. This Agreement may not be modified, altered, changed, or amended, except by written agreement of the Parties.
- 6.3 This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, and venue shall live in Ingleside County, Texas unless otherwise mandated by law.
- 6.4 No party shall assign or otherwise transfer its interest in this Agreement without the express written permission of the other Party.
- 6.5 This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall be considered fully executed when all parties have executed an identical counterpart, notwithstanding that all signatures may not appear on the same counterpart.
- 6.6 By the execution and delivery of this Agreement, the undersigned individuals warrant that they have been duly authorized by their governing body in order to enter into and perform the terms of this Agreement.

The Parties have executed and attested to this Agreement by their duly authorized officers effective as of ~~April~~ _____, ~~2018~~ 2024.

INGLESIDE ISD:

CITY OF INGLESIDE:

_____, Board President
Ingleside ISD

_____, Mayor
City of Ingleside

_____, Superintendent

_____, City Manager

Ingleside ISD

City of Ingleside

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 19

Deliberate and take appropriate action on first reading of an Ordinance altering the prima facie speed limits established for vehicles under the provisions of SEC. 545-356, Texas Transportation Code, upon the basis of an engineering and traffic investigation, upon certain streets and highways, or parts thereof, within the corporate limits of the City of Ingleside, as set out in the Ordinance; and Providing a penalty of a fine in an amount of not less than twenty five dollars (\$25.00) or more than five hundred dollars (\$500.00) for violation of this Ordinance; and providing for effective date, reading severance, and publication.

SUBMITTED BY: Ruby Beaven, City Secretary

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

TxDot recently performed a speed study along FM 1069 from approximately 1470FT North of SH 35 to 111FT South of FM 3512 to investigate whether or not the speed limit might be decreased within these limits. Based on the data that was received and the constraints of the roadway, TX was able to reduce the speed limits that were within our study limits. Within the memo attached you will find the limits of these proposed speed zones to be passed by the City of Ingleside. TxDot requires City action to approve and pass an Ordinance. Once approved, TxDot can schedule sign installations.

FISCAL ANALYSIS:

N/A

RECOMMENDATION:

Staff recommends passage of first reading of an Ordinance altering the prima facie speed limit, as presented.

ATTACHMENTS:

1. FM1069_City_Ingleside_Proposed_City_Ordinance
2. Ordinance Speed Limit-DRAFT



125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

February 22, 2024

The Honorable Oscar Adame
Mayor of Ingleside, TX
2671 San Angelo St.
Ingleside, TX 78362

Dear Mayor Adame,

My name is Bianca Mijares and I work in the Corpus Christi District Traffic Engineering Office of the Texas Department of Transportation. We recently conducted a speed study along FM 1069 from 1,470FT North of SH35 to 111FT South of FM3512 and would like to propose to set the speed limits as shown below. We are proposing the following:

Figure 1.

- That a 50-mph zone be established by the City of Ingleside from the northern city limits (or 90FT South of Highland Ave) to 111FT South of FM3512.

If our proposal is satisfactory, please secure city action and return a copy of the city ordinance to our office. Once we have this information, we will schedule sign installations.

I have attached a map for your reference which includes the proposed speed zones in the area described above. If you have any questions or need additional information, please contact me at (361) 808-2276.

Sincerely,

DocuSigned by:

Bianca B. Mijares

F568EE981A13480...

Bianca B. Mijares, P.E.
Corpus Christi District Traffic Operations
361-808-2276



125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

Figure 1.



An Equal Opportunity Employer

ORDINANCE 2024-XX

An Ordinance altering the prima facie speed limits established for vehicles under the provisions of SEC. 545-356, Texas Transportation Code, upon the basis of an engineering and traffic investigation, upon certain streets and highways, or parts thereof, within the corporate limits of the City of Ingleside, as set out in the Ordinance; and Providing a penalty of a fine in an amount of not less than twenty five dollars (\$25.00) or more than five hundred dollars (\$500.00) for violation of this Ordinance; and providing for effective date, reading severance, and publication.

WHEREAS, Section 545.356, Texas Transportation Code, provides that whenever the governing body of the City shall determine upon the basis of an engineering and traffic investigation that the prima facie speed therein set forth is greater or less than is reasonable or safe under the conditions found to exist at any intersection or other place or upon any part of a street or highway within the city, taking into consideration the width and condition of the pavement and other circumstances on such portion of said street or highway, as well as the usual traffic thereon, said governing body may determine and declare a reasonable and safe prima facie speed limit thereon by the passage of an Ordinance, which shall be effective when appropriate signs giving notice thereof are erected at such intersection or other place or part of the street or highway;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF INGLESIDE, COUNTY OF SAN PATRICIO, STATE OF TEXAS:

SECTION 1. ESTABLISHED

Upon the basis of an engineering and traffic investigation heretofore made as authorized by the provisions of Section 545.356 Texas Transportation Code, the following prima facie speed limits hereafter indicated for vehicles are hereby determined and declared to be reasonable and safe; and such speed limits are hereby fixed at the rate of speed indicated for vehicles traveling upon the named streets and highways, or parts thereof, described as follows:

- 1) Beginning at the northern city limit of Ingleside on State Highway 1069 or 90 FT South of Highland Ave to 111 FT South of FM 3512, **50 MPH**.

SECTION 2. PENALTY OF A FINE

Any person violating any part of the provisions of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount of not less than twenty five dollars (\$25.00) and not more than five hundred dollars (\$500.00).

SECTION 3. EFFECTIVE DATE

As provided by Article III, Section 3.11C of the Charter of the City of Ingleside, this ordinance shall be effective upon adoption and, in addition, if any penalty, fine or forfeiture is imposed by

the ordinance, then this ordinance shall be effective only after publication of this ordinance in its entirety or in summary form once in the official newspaper of the City of Ingleside.

SECTION 4. READING

As provided by Article III, Section 3.11B of the Charter of the City of Ingleside, this ordinance or the caption of it shall be read at two city council meetings with at least two weeks elapsing between each reading.

SECTION 5. SEVERANCE

If any part of this ordinance is invalid or void or is declared to be so, then said part shall be severed from the balance of this ordinance and said invalidity shall not affect the balance of this ordinance, the balance of the ordinance to be read as if said invalid or void portion thereof were not included.

SECTION 6. PUBLICATION

If and as required by Article III, Section 3.11C of the Charter of the City of Ingleside, the caption of this ordinance shall be published one time in the official newspaper of the City of Ingleside, San Patricio County, Texas.

Passed, Ordained, Approved and Adopted this XX day of April 2024.

CITY OF INGLESIDE

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City Secretary

First Reading: 04/09/2024

Second Reading:

CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 20

Deliberate and take appropriate action on authorizing Staff to use City Council Discretionary Funds to purchase retention binders to maintain historical documents.

SUBMITTED BY: Ruby Beaven, City Secretary

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

Last year while searching missing Ordinances and Resolutions that were not scanned in the archival system, it was discovered that our current Ordinance and Resolution retention binders are starting to age. The metal brackets system is not holding on some of the folders and when you retrieve the file from the cabinet the folder springs open. In addition, the front and back portion of the binders are starting to separate or disintegrate.

Earlier this year, we discovered the current binders that we have been using are discontinued. With that being said, vendors who are carrying an alternate brand, of the same type of binder, have them at double cost. In addition, we are using our last binder in inventory that is shared by both Ordinance and Resolution documents.

As Records Manager, it is the requirement of the City Secretary to indefinitely maintain the Minutes, Resolutions, and Ordinances as they are permanent historical documents.

The Minutes are currently maintained in extra heavy binders with metal hinges and posts. Currently, the Ordinances and Resolution binders are starting to deteriorate beyond repair. We have chosen the Indestructo style binder in which the material is durable and will withstand aging. In addition, the swing-away hinge flap and metal post will securely hold and lock documents in place.

These binders will be custom ordered to indicate Ordinance or Resolution on the spine with a binder number to keep them in order. We are looking to obtain 25 Ordinance books and 25 Resolution books in addition to a few more minute books. Once an order is placed the product will take approximately eight weeks for delivery.

We are requesting to use City Council Discretionary Funds for the purchase. Originally, Staff was planning to use funds allocated for the election; however, those funds are obligated now for a May 2024 election.

FISCAL ANALYSIS:

The estimated cost of this project is not expected to exceed \$15,000.

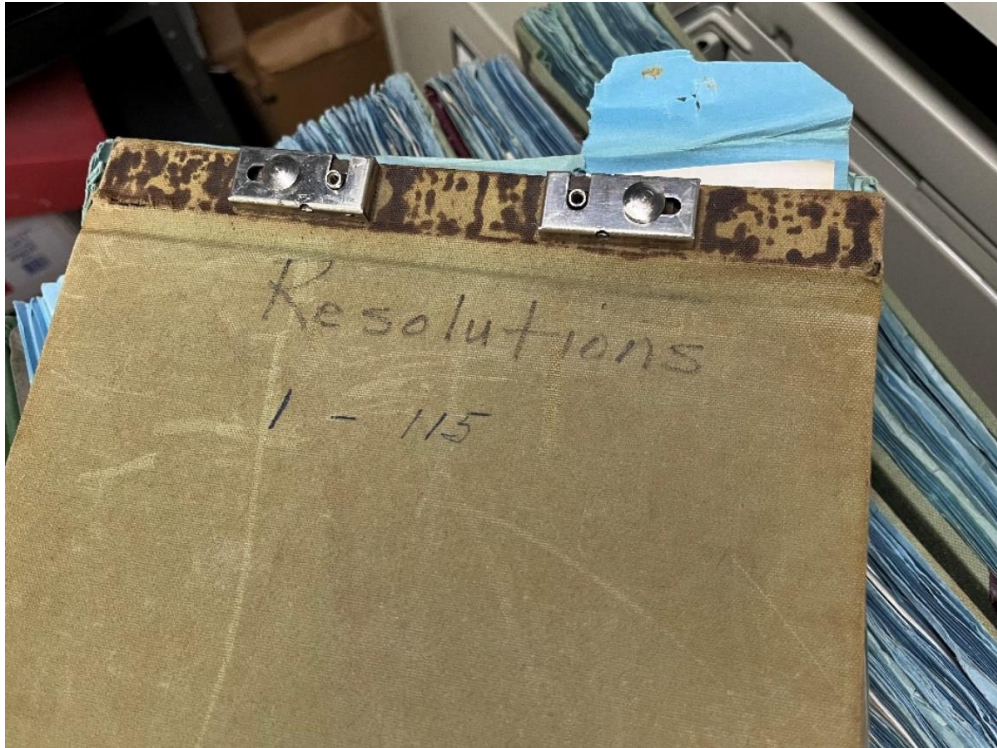
RECOMMENDATION:

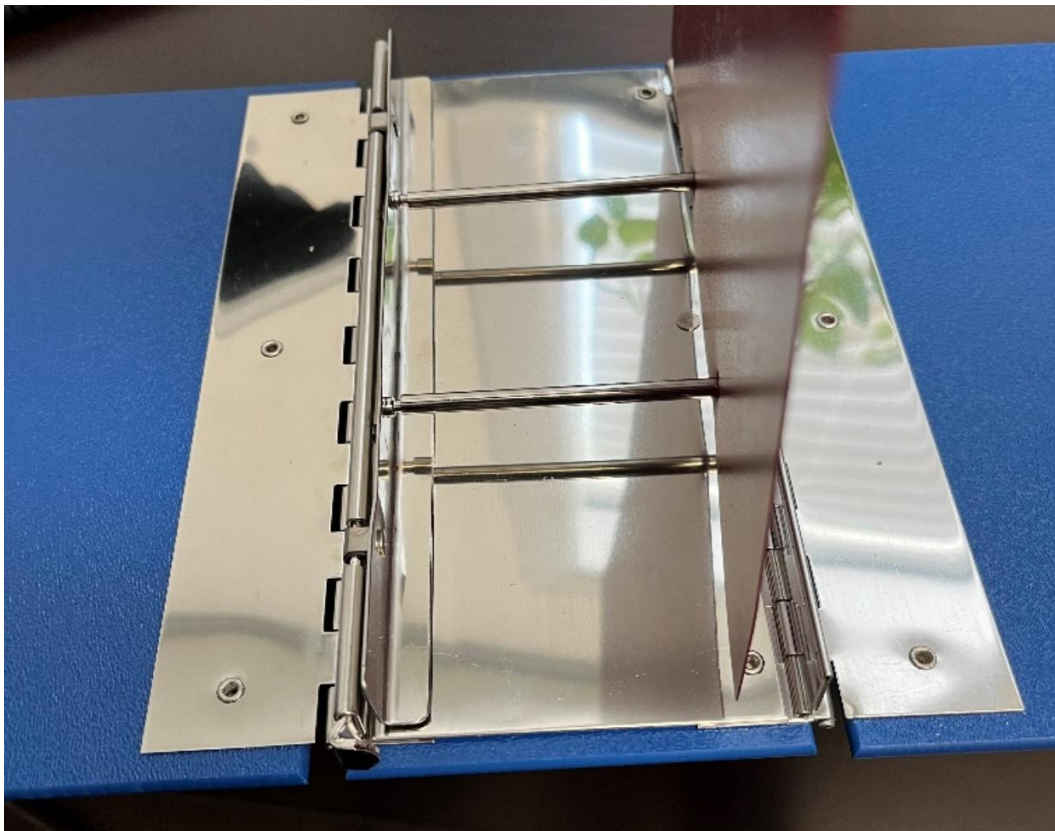
Staff recommends Council authorize the use of Council Discretionary Funds for the purchase of retention binders to maintain the historical documents.

ATTACHMENTS:

1. Binder Photos







CITY COUNCIL AGENDA

Regular Meeting: April 9, 2024

AGENDA ITEM: 21

Deliberate and take appropriate action on a first and only reading of an Ordinance amending the Fiscal Year 2023-2024 Budget for the City of Ingleside, Texas, for the use of Council Discretionary funds for the purchase of retention binders to maintain historical documents.

SUBMITTED BY: Ruby Beaven, City Secretary

APPROVED FOR AGENDA: Brenton Lewis, City Manager

BACKGROUND:

The Administrative Services-City Secretary Department requested to purchase retention binders to maintain historical documents. The City Council decided to authorize the use of their discretionary funds to purchase the requested items and the funds to be transferred to the Administrative Services-City Secretary Department in the amount of \$15,000.00.

The City Charter states, "One reading shall be required for emergency and budget/tax ordinances". The City Attorney concurs that only one reading shall be required to pass this budget amendment ordinance.

FISCAL ANALYSIS:

Account Name:	Fund-Dept-Acct Number:	Budget Increase	Budget Decrease
Fund 10 General Fund Expenses			
Council Discretionary Funds	501-581		<u>15,000</u>
Office Supplies-City Sec.	503-201	<u>15,000</u>	

To amend the FY2024 budget as shown above to transfer City Council Discretionary Funds to the General Fund Administrative Services-City Secretary Office Supplies and to appropriate said funds for retention binders.

RECOMMENDATION:

Request Council approval of the Ordinance to amend Fund 10 General Fund as it relates to the Mayor and City Council Department and Administrative Services-City Secretary Department respectively.

ATTACHMENTS:

1. ORDINANCE NO FY2023-XX BUDGET AMENDMENT-COUNCIL
DISCRETIONARY FUNDS

ORDINANCE NO. 2024-XX

AN ORDINANCE AMENDING THE FISCAL YEAR 2023-2024 BUDGET FOR THE CITY OF INGLESIDE, TEXAS, FOR THE USE OF COUNCIL DISCRETIONARY FUNDS FOR THE PURCHASE OF RETENTION BINDERS TO MAINTAIN HISTORICAL DOCUMENTS.

BE IT ORDAINED BY THE CITY COUNCIL OF INGLESIDE, TEXAS:

WHEREAS, it was unforeseen when the budget was adopted that there would be a need for funding for these expenditures this fiscal year.

BE IT ORDAINED by the City Council of the City of Ingleside that the Fiscal Year 2023-2024 budget be amended as shown as follows:

CITY OF INGLESIDE DEPARTMENT REVENUES AND EXPENSES BUDGET AMENDMENT			
Account Name:	Fund-Dept-Acct Number:	Budget Increase	Budget Decrease
Fund 10	General Fund		
Expenses			
Council Discretionary Funds	501-581		<u>15,000</u>
Office Supplies-City Sec.	503-201	<u>15,000</u>	

[To amend the FY2024 budget as shown above to transfer City Council Discretionary Funds to the General Fund Administrative Services-City Secretary Office Supplies and to appropriate said funds for retention binders.]

THAT all Ordinance or parts of Ordinances in conflict with this Ordinance are repealed to the extent of such conflict only.

THAT if for any reason any section, paragraph, subdivision, clause, phrase, word or provision of this ordinance shall be held invalid or unconstitutional by final judgement of a court of competent jurisdiction, it shall not affect any other section, paragraph, subdivision, clause, phrase, word or provision of this ordinance, for it is the definite intent of this City Council that every section, paragraph, subdivision, clause, phrase, word or provision hereof be given full force and effect for its purpose.

THAT this Ordinance shall not be codified, but shall become effective on and after adoption and publication as required by law.

PASSED, APPROVED AND ADOPTED this 9th day of April 2024.

CITY OF INGLESIDE, TEXAS

Pedro Oscar Adame, Mayor

ATTEST:

Ruby Beaven, City Secretary

DRAFT