

*Jefferson County*  
**Drainage District No. 6**  
*6550 Walden Rd. • Beaumont, Texas 77707*  
*Telephone (409) 842-1818*  
*Fax (409) 842-2729*  
*Established in 1920*

**Board of Directors:**

Joshua W. Allen, Sr.  
Charles "Chuck" Guillory  
Bernie Daleo  
Anthony Malley, III  
Charles "Chuck" Kiker, III

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*District Engineer*  
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*Chief Financial Officer*  
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*Chief Business Officer*

May 28, 2021

Commissioner Everett "Bo" Alfred  
Jefferson County Precinct 4  
1149 Pearl Street  
Beaumont, Texas 77701

Re: Rainfall/Flooding Week of May 17, 2021 Discussion Summary

Dear Commissioner,

The following is a summary of the discussions that took place at your office on Wednesday, May 26, 2021. Illustrations for each item discussed have been included with this summary.

1. Mack Road / Boyt Road / West Clubb Road

The main backup point are the culverts under IH-10 that serve Bayou Din. TxDOT will be replacing the single 8-ft x 5-ft box culvert with two 10-ft x 6-ft box culverts as part of their IH-10 widening project. This will triple the flow capacity for Bayou Din across IH-10, and it will be a great relief for the area. A copy of the Plan Sheet from the IH-10 project, which illustrates the box culvert replacement, is included with this summary.

2. Sandy Lane in the Hwy-365 Area

This flooding was caused from runoff that resulted from the intense rainfall that fell between the east Green Pond detention levee and West Clubb Road. There are three proposed solutions for this flooding and the illustrations have been included.

- A. Purchasing approximately 600 acres or a flood easement and enlarging the Green Pond detention facility by constructing a levee that will capture much of the water from this watershed and divert it to the Green Pond detention facility.

*Drainage, Storm Water Management, Flood Control, Reclamation and Conservation.*

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- B. A drain ditch, currently owned by TxDOT, that drains this section of Hwy-365 near Lulu Lane will be transferred to Drainage District No. 6. Drainage District No. 6 will clean the ditch as soon as the new easements are acquired.
- C. TxDOT, along with their IH-10 widening project will be constructing a diversion channel from the Sandy Lane outfall ditch (Ditch 505-A1) along IH-10 directly towards Taylor's Bayou.
- D. As part of the IH-10 widening project, TxDOT will also construct a longer bridge and will be widening Taylor's Bayou across IH-10

3. Cheek North Subdivision

The primary drainage outfall for Cheek North is Ditch 602. Ditch 602 is currently being cleaned from Green Pond Gully up to the Cheek North Subdivision.

The upper end of Ditch 602 will be prevented from flowing south into the area by the addition of a levee that will contain the water and force it to flow north into Ditch 607.

The culverts that drain from the subdivision outfalls at Lawhon Road and the ditch to the north will be enhanced with new metal flap gates, and the area will be cleaned out to make sure it flows efficiently.

4. Old Gilbert Road Area

Ditch 505 is the outfall that runs from IH-10 to Hwy-124 and crosses Hwy-365. Drainage District No. 6 is currently working to obtain easements along this channel so the cleanout work can be performed.

Additionally, a 260-acre detention basin is proposed for this channel on the north side of IH-10. This detention basin will hold back a great deal of the runoff that flows through this area of Fannett. The grant was applied for about four months ago and we should hear something back from FEMA in the coming months. If Drainage District No. 6 does not receive these grant funds, we will just have to find the money.

5. Winzer Road / Green Acres / Bayou Din Drive / Kidd Road

The solution being pursued by Drainage District No. 6 is part of a \$60 million CDBG-MIT funding opportunity. This grant project will include a 640-acre detention basin on Bayou Din, improvements to Ditch 407 (the primary outfall for Green Acres) and Kidd Gully (primary outfall for Kidd Road), along with associated crossing improvements. The project is illustrated on an exhibit included with this summary.

Additionally, Drainage District No. 6 recently purchased two acres located behind the new Dollar General located on Hwy-124 for the purposes of enlarging the existing detention basin behind the Fannett grocery store. The District will begin excavating this 2-acre basin next month. This basin will add additional storage to aid in the prevention of flooding.



6. Master Plan for Taylor's and Hillebrandt Bayous

We also discussed the Master Plan for the Taylor's Bayou and Hillebrandt Bayou Watersheds. Drainage District No. 6 was awarded an \$8.5 million grant; 25% local match, to produce a comprehensive plan for the Hillebrandt Bayou, Taylor's Bayou, and Pine Island Bayou Watershed. The study will start this summer and will take two years to complete. Included for your information is a map which illustrates the study area.

7. We also discussed the fact that the May 17, 2021 rain event was indeed an intense rainfall event, especially for the Fannett area. The Fannett rain gauges measured from 18.68 inches down to 12.96 inches. Most of this rain occurred in a single day. Included are three maps that illustrate the 1) event rainfall, 2) maximum 24-hr rainfall, and 3) maximum 12-hr. rainfall.

8. Sunchase Addition

TxDOT is currently looking at the possibility of enlarging culverts under IH-10.

Please feel free to call me with any questions or comments.

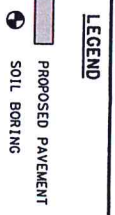
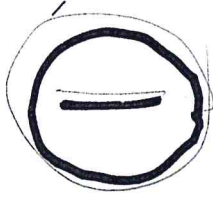
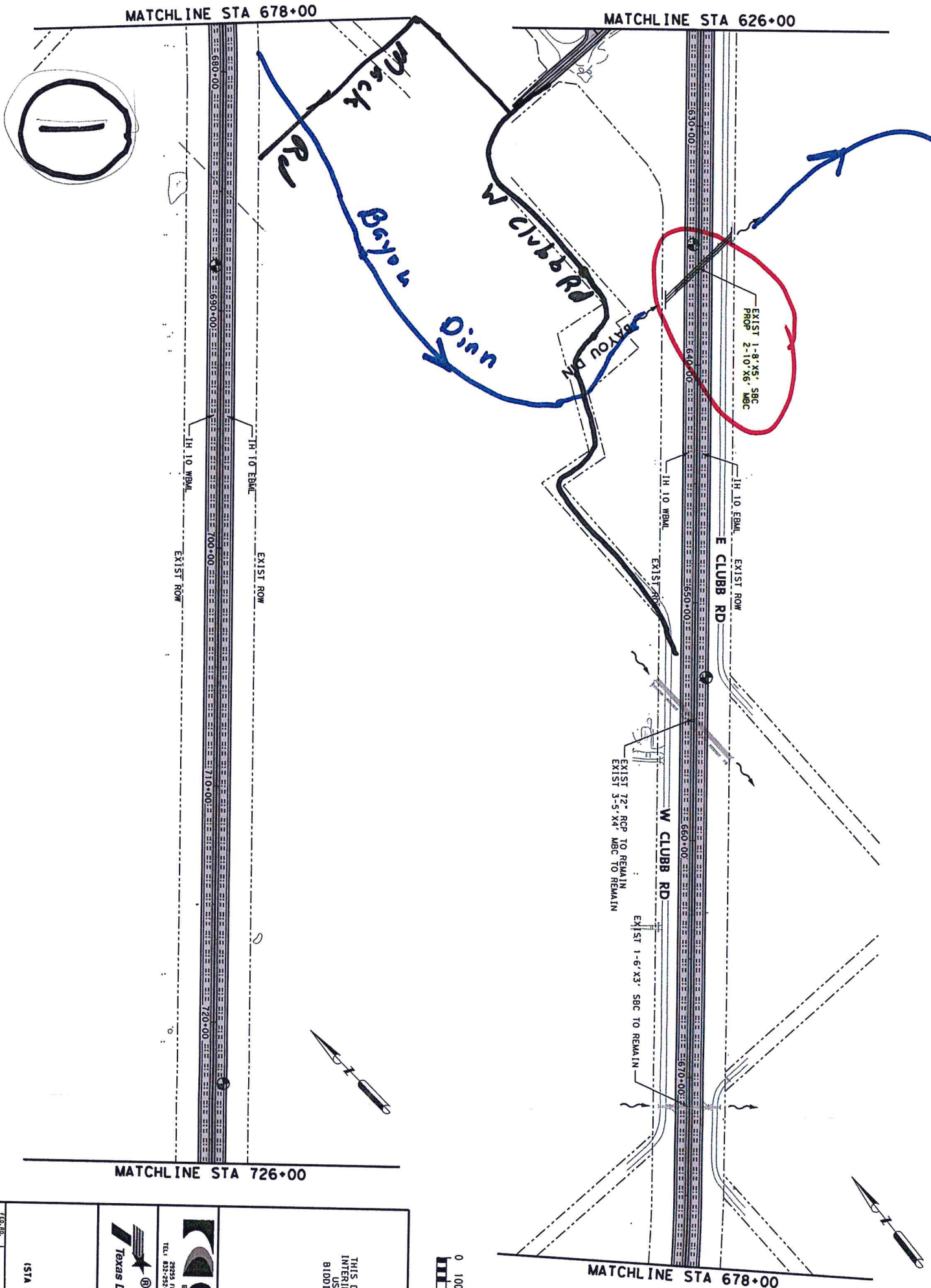
Sincerely,



Doug S. Canant, Jr., PE, RPLS, CFM  
District Engineer  
Jefferson Co. Drainage District No. 6

cc: Dr. Joseph G. Majdalani, PE, CFM – DD6 General Manager  
John Murff – DD6 Senior Project Manager  
DD6 Website Library @ dd6.org

Enclosures: 1 - IH-10 Project Layout  
2 - 600 Green Pond East 600-acre Addition  
3 - Ditch 602 Watershed North Cheek  
4 - Proposed Basin Footprint Aerial Map (West Clubb Rd.)  
Benefit Area Exhibit  
5 - JCDD6 CDBG-MIT Application Bayou Din Detention Enlargement Project  
JCDD6 Green Acres Project Benefit Area  
6 - TWDB Flood Intended Use Plan  
Description of areas identified for flood risk evaluation.  
7 - Rain Increment Map – 7 day  
Rain Increment Map – 24-hr  
Rain Increment Map – 12-hr



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 JASON C. KASPAR  
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 12/21/2017

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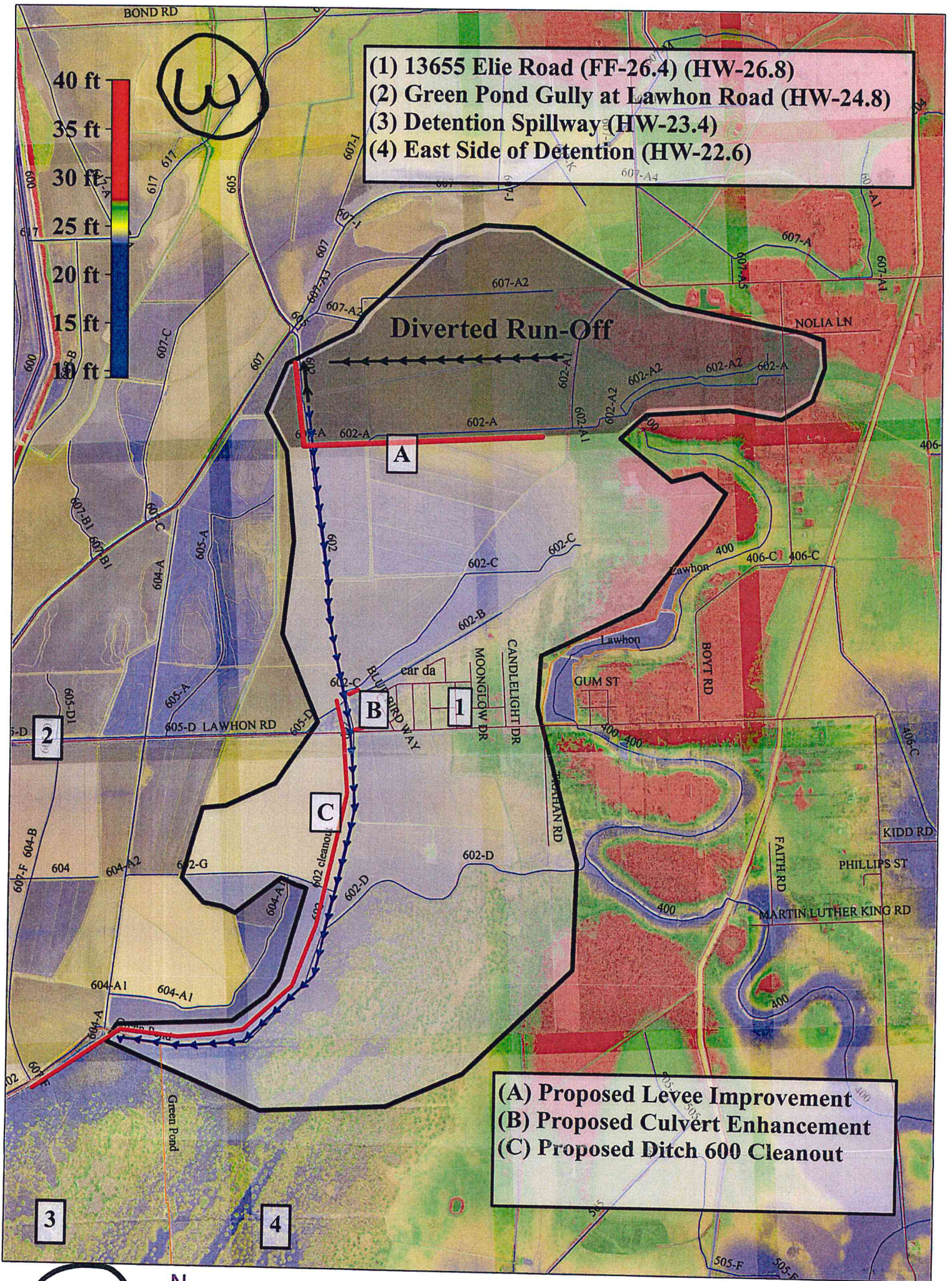
**Texas Department of Transportation**

IH 10		PROJECT LAYOUT		STA 626-00 TO STA 726-001	
LOG NO.	STATE	PROJECT NO.	SHEET NO.	SHEET 5 OF 6	
6	TEXAS		IH 10		
DISTRICT	COUNTY	CONTRACT / SECTION	DATE		
BMT	JEFFERSON	0739 02	162		



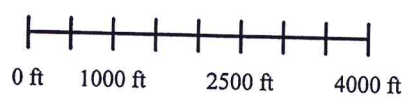






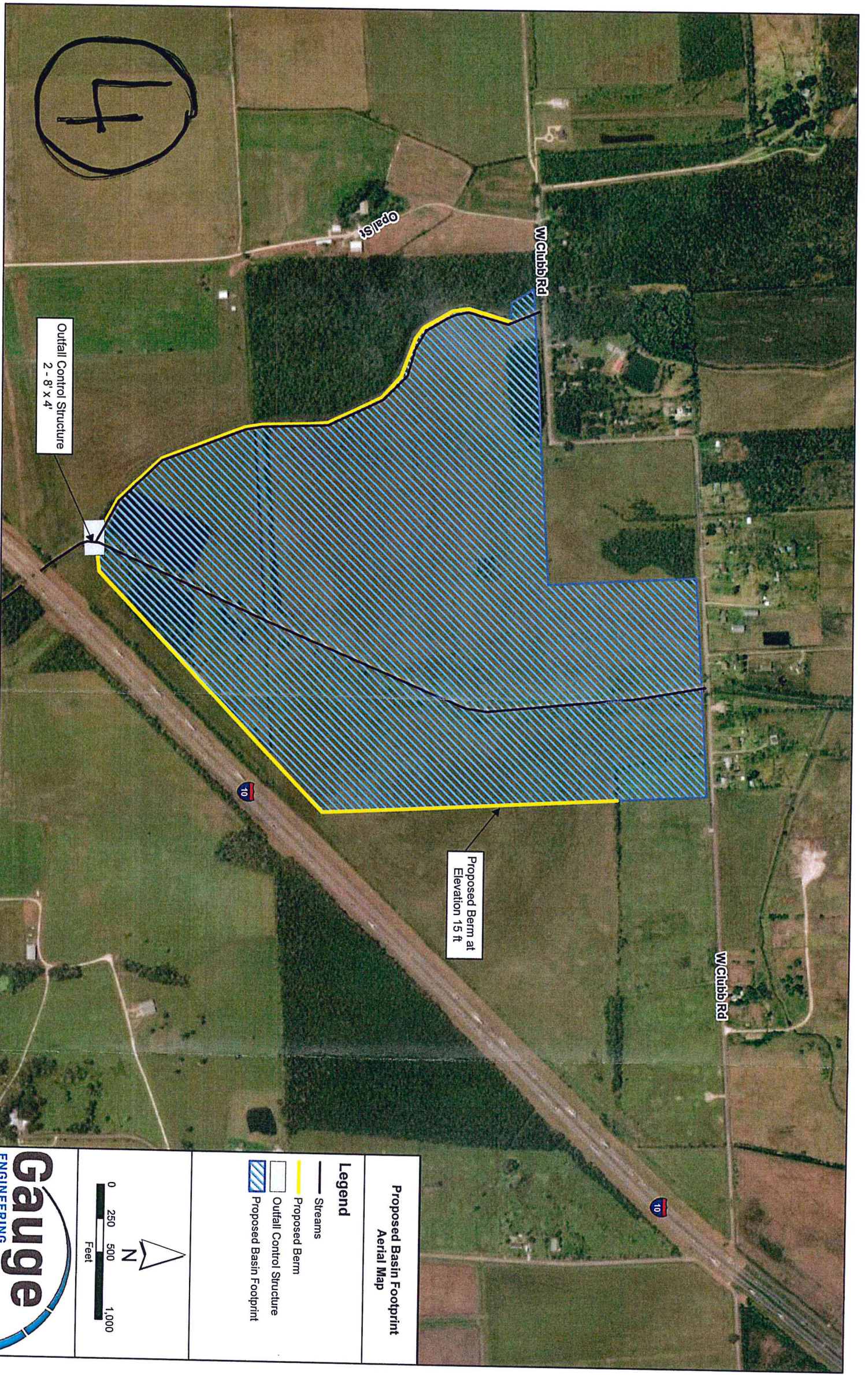
- (1) 13655 Elie Road (FF-26.4) (HW-26.8)
- (2) Green Pond Gully at Lawhon Road (HW-24.8)
- (3) Detention Spillway (HW-23.4)
- (4) East Side of Detention (HW-22.6)

- (A) Proposed Levee Improvement
- (B) Proposed Culvert Enhancement
- (C) Proposed Ditch 600 Cleanout



**Ditch 602  
Watershed  
North Cheek**





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Opal St

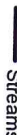

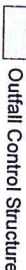
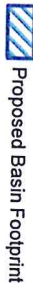
W Clubb Rd

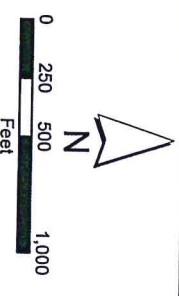
W Clubb Rd

Proposed Berm at  
Elevation 15 ft

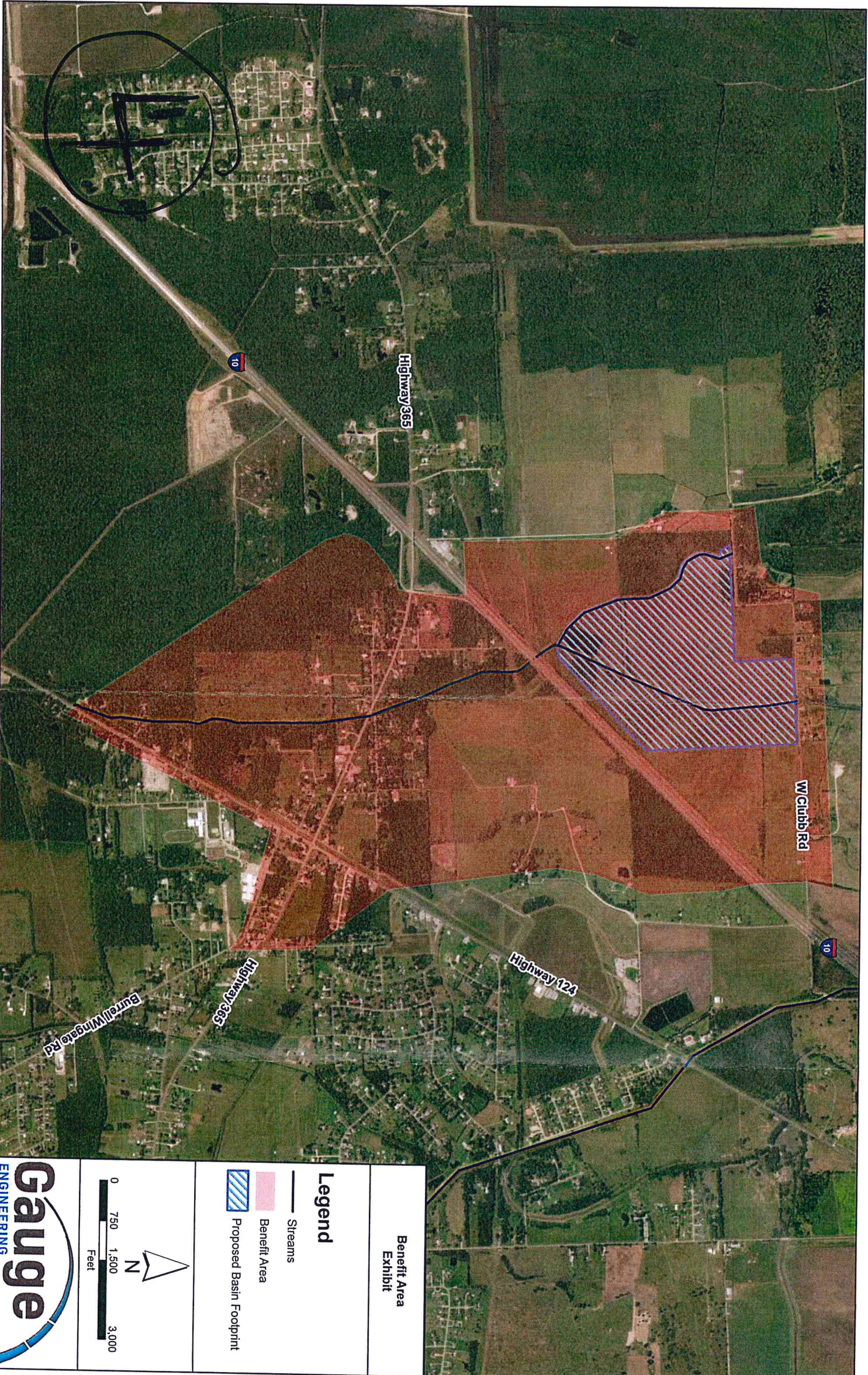
Outfall Control Structure  
2 - 8' x 4'

**Proposed Basin Footprint  
Aerial Map**

- Legend**
-  Streams
  -  Proposed Berm
  -  Outfall Control Structure
  -  Proposed Basin Footprint



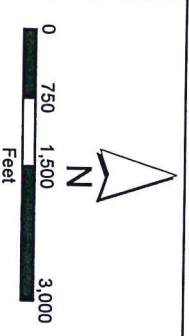




**Benefit Area Exhibit**

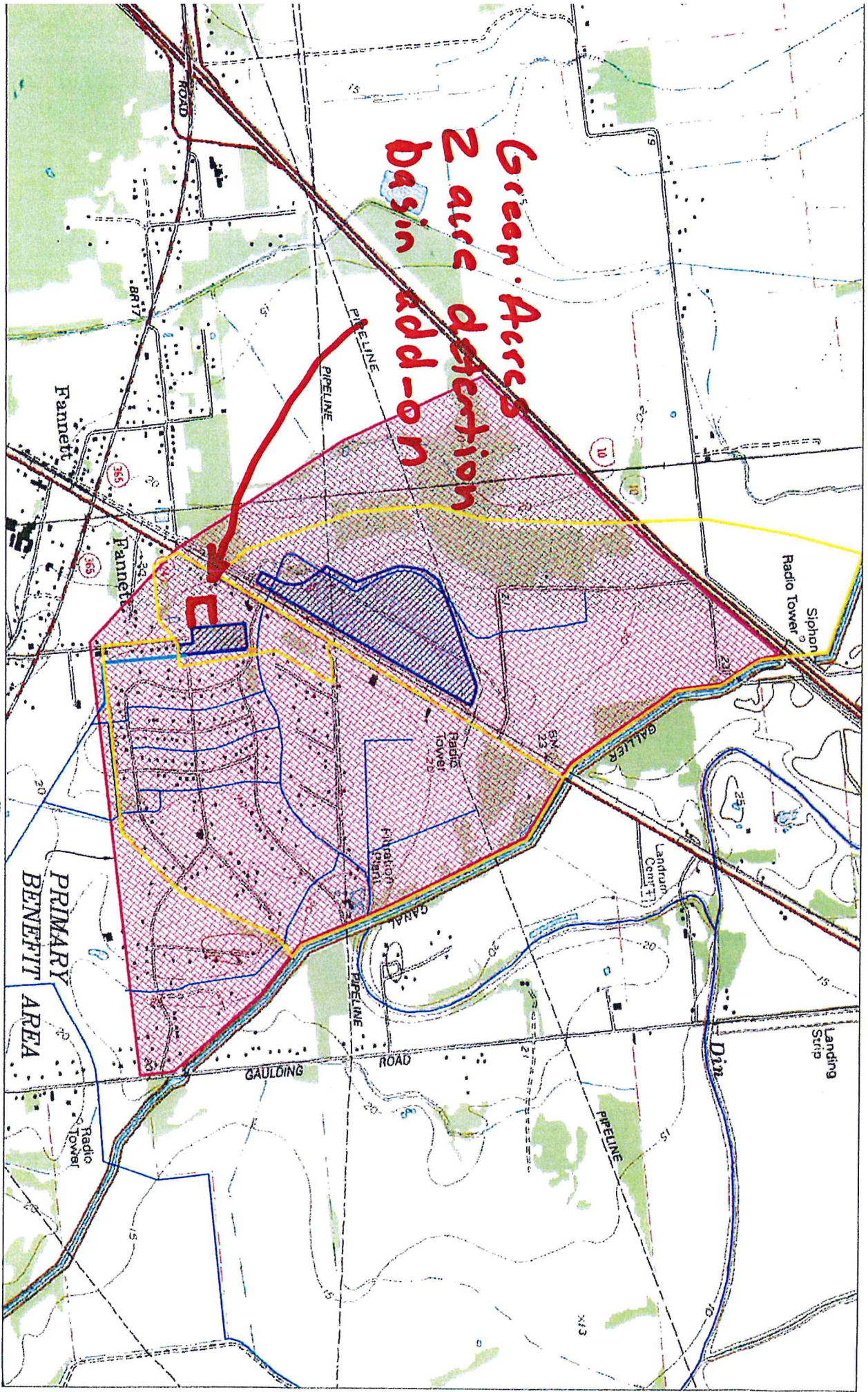
**Legend**

- Streams
- Benefit Area
- Proposed Basin Footprint





Green Acres  
2 acre detention  
basin add-on



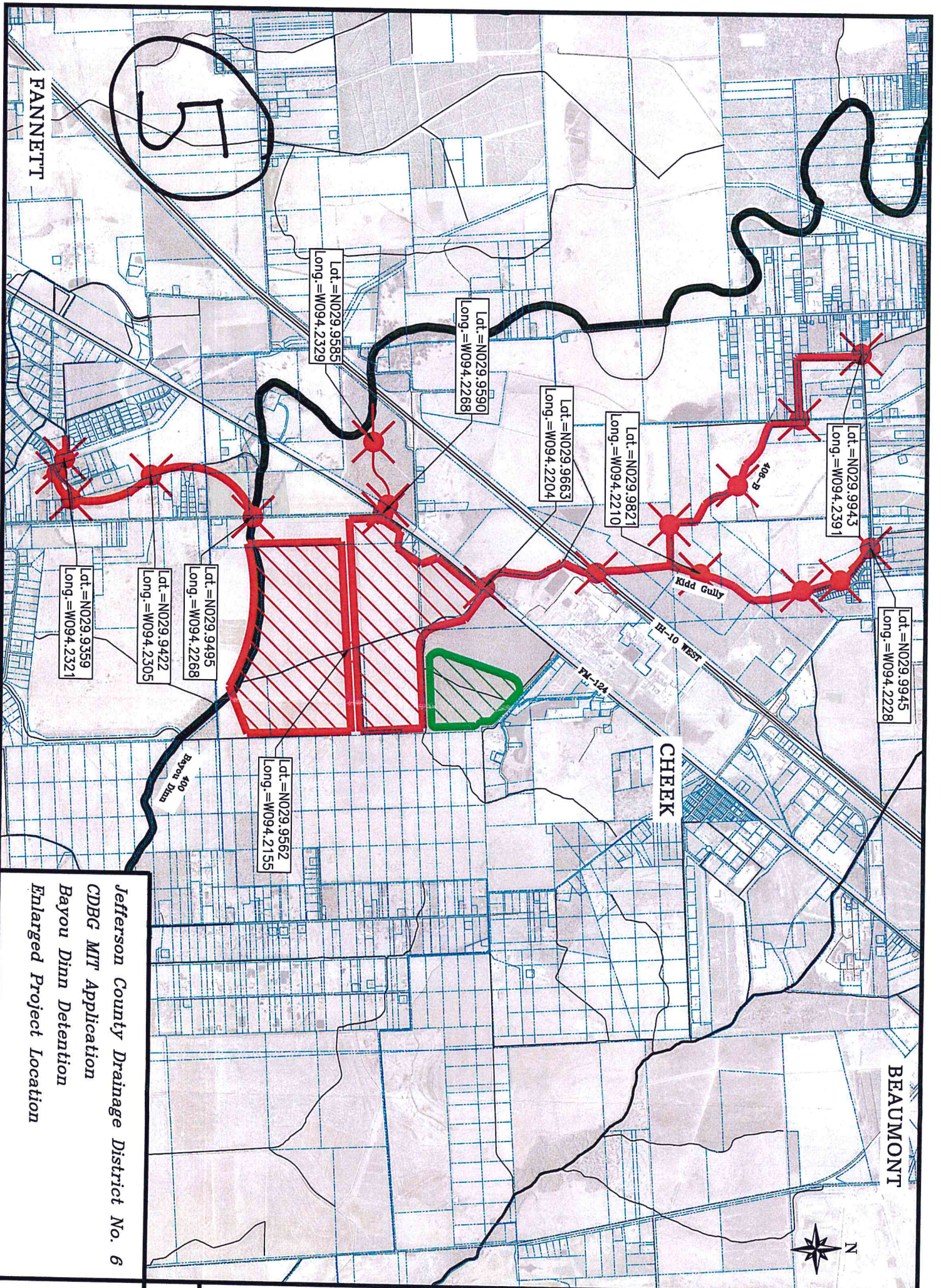
JEFFERSON COUNTY  
DRAINAGE DISTRICT #6  
GREEN ACRES PROJECT & BENEFIT AREA  
ON USGS QUADRANGLES  
FANNETT WEST & FANNETT EAST

5

LEGEND:

- EXISTING OPEN DITCHES
- PROPOSED CROSSING IMP.
- PROPOSED DRAIN DITCH IMP.
- ▨ PROPOSED DETENTION










Jefferson County Drainage District No. 6  
 CDBG MTI Application  
 Bayou Dinn Detention  
 Enlarged Project Location



Drawn by: HEC  
 Date: 10/06/2020

- Legend:**
-  Proposed Crossing Improvements
  -  Proposed Channel Improvements
  -  Proposed Detention Basin Improvements
  -  Spoil Area
  -  Benefit Area



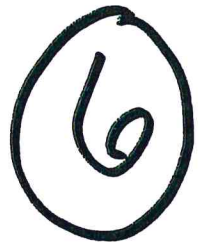
Description of areas identified for flood risk evaluation  
including hydrologic and hydraulic modeling, mapping,  
and proposed method of evaluation.

The proposed study will update previous study efforts for Taylor Bayou and Hillebrandt Bayou and will develop a new study for the Pine Island watershed. The Cities of Beaumont, Bevil Oaks, Lumberton, Sour Lake, China, and others along with outlying communities including Pinewood, Countrywood and others are partially included in the study limits.

The Pine Island has been the source of major flooding from Polk county to Jefferson County encompassing more than 700 square miles. There has never been a comprehensive flood study of the Pine Island watershed to show its impacts to its regional surroundings.

Taylor Bayou and Hillebrandt Bayou were originally studied by FEMA with an effective FEMA flood insurance study (FIS) dated of 2002. Jefferson County Drainage District #6 developed a master plan of improvements for Taylor Bayou and Hillebrandt Bayou in 2001. The master plan included detailed modeling using the US Army Corps of Engineers HEC-HMS and HEC-RAS software. Several improvements from the master plan have been constructed and the plan has reached the end of its useful life.

A complete restudy of the 2 watersheds and a new study for the Pine Island Watershed would be tremendously beneficial to local government officials to fully understand their flood risk. The study will also guide public officials by developing a series of master planned improvements designed to reduce flood risk and increase resiliency.



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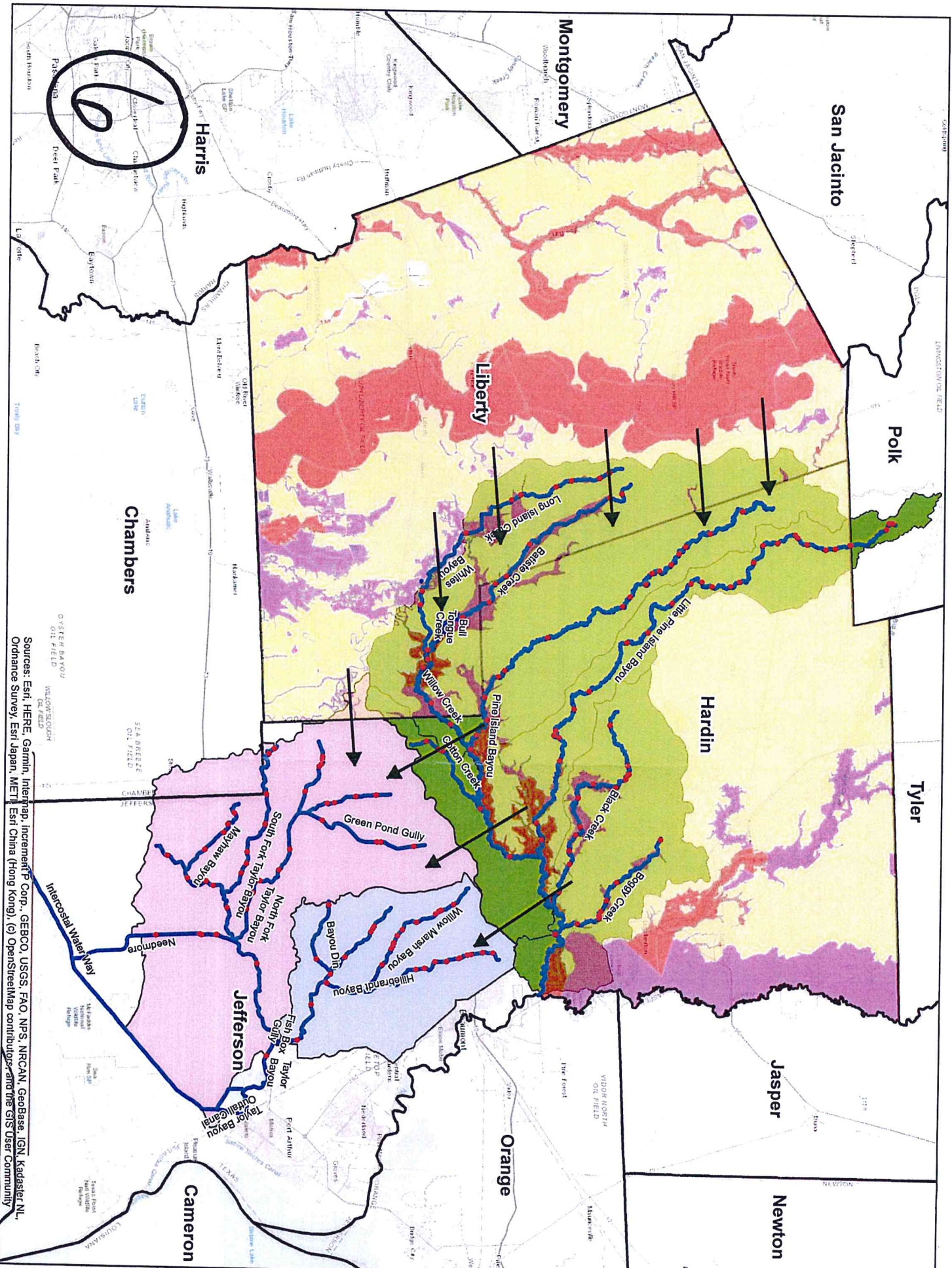
**TWDB**  
**FLOOD INTENDED USE PLAN**  
**DRAINAGE DISTRICT NO. 6**

**Legend**

- Channel
- Crossings
- Inter-Basin Flow Direction
- Study Channel Centerline
- FEMA Flood Zone
- A
- AE
- X
- US COUNTY
- Hillbrandt Bayou DA
- Taylor Bayou DA
- Pine Island Bayou DA

0 5 10  
 Miles

N



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community











