CSRS | BUILDING STRONGER, SMARTER COMMUNITIES TOGETHER.

Exhibit EE.
Maxie & Vida Girouard Site
Wetlands Delineation Report

June 27, 2023

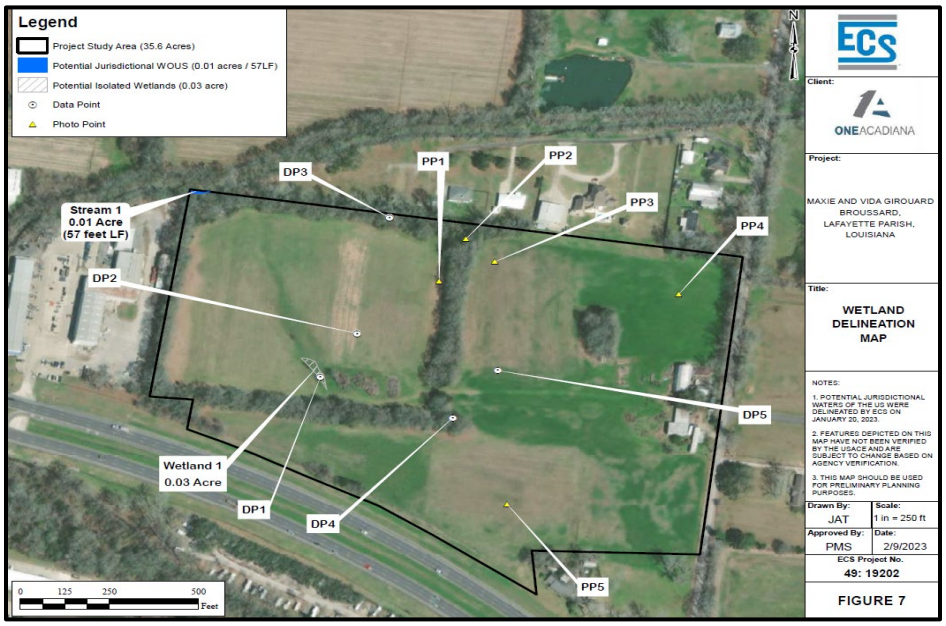
Mr. Emile Lege
One Acadiana
804 East St. Mary Street
Lafayette, LA 70503

Maxie & Vida Girouard Site Wetlands Delineation Report

RE: Maxie & Vida Girouard Site - Wetland Delineation Executive Summary
CSRS Project No 214002

Dear Mr. Lege,

In part of the Louisiana Economic Development (LED) Certified Sites Program a wetlands delineation was completed for the Maxie & Vida Girouard Site in Lafayette Parish. On 24 January 2023, a wetland delineation was completed in accordance with the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and Regional Supplements and identified approximately 0.03 acre of potentially non-jurisdictional isolated wetlands and 0.01 acre of potential non-wetland waters of the US within the site boundary. The findings of this report are considered preliminary and have not been reviewed or approved by the USACE. A Jurisdictional Determination (JD) through the USACE will be required to determine if the identified wetlands and waters are subject to Section 404 and/or 10 of the Clean Water Act.

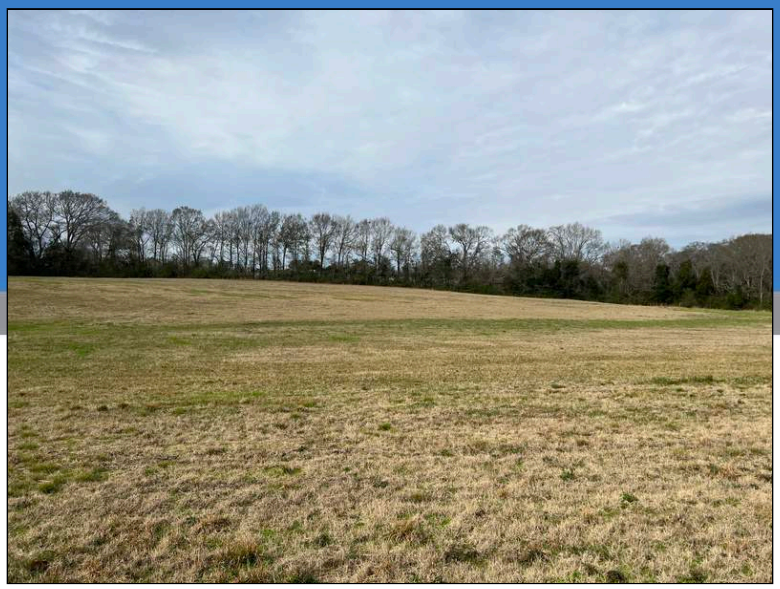


Thank you for the opportunity to assist you in this project. Should you have any questions or require additional information, feel free to contact me.

Respectfully,

Elliott Boudreaux
Project Manager

WETLAND DELINEATION



MAXIE AND VIDA GIROUARD SITE

LA HWY 90 & NORTH GIROUARD ROAD
BROUSSARD, LOUISIANA 70518

ECS PROJECT NO. 49:19360

FOR: ONEACADIANA

JANUARY 24, 2023

January 24, 2023

Mr. Emile Lege
OneAcadiana
804 E St. Mary Blvd.
Lafayette, Louisiana, 70503

ECS Project No. 49:19360

Reference: Waters of the U.S. Wetland Delineation Report, Maxie and Vida Girouard Site, LA Hwy 90 & North Girouard Road, Broussard, Lafayette Parish Louisiana

Dear Mr. Lege:

ECS Southeast, LLP (ECS) is pleased to submit this wetland delineation report regarding potential Waters of the U.S. (WOUS), including wetlands services for the above-referenced site. ECS services were provided in general accordance with ECS Proposal No. 49:49: 34090P authorized on January 13, 2023 and generally meets the requirements of the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0 dated November 2010. ***Based on our field reconnaissance potentially jurisdictional non-wetland WOUS, as well as, potentially non-jurisdictional isolated wetlands WOUS are present onsite.***

If there are questions regarding this report, or a need for further information, please contact the undersigned.

ECS Southeast, LLP

Jayun Thibodeaux
Environmental Project Manager
jthibodeaux@ecslimited.com
225-975-8215

Paul M. Stephens IV, P.E., PWS
Associate Principal
PStephens@ecslimited.com
843-654-4448

1.0 INTRODUCTION

This report presents the findings of a wetland delineation study conducted by ECS Southeast, LLP (ECS) for OneAcadiana at the Maxie and Vida Girouard Site Project Study Area (PSA) located at LA Hwy 90 & North Girouard Road, Broussard, Lafayette Parish, Louisiana (30.152108, -91.951349). According to the Lafayette Parish Geographic Information System (GIS) website, the Parcel Identification Number (PIN) is: 6034838. The site, referred to as the Project Study Area (PSA) for the purpose of this report, includes approximately 35.6 acres, as shown on the Site Location Map (Appendix I, Figure 1). The PSA currently consists predominately of agricultural land with some wooded areas traversing the north and west boundaries. The PSA is bordered by LA Hwy 90 to the south, North Girouard Road to the east, residential development to the north and commercial businesses to the west. The purpose of this study was to identify and delineate jurisdictional Waters of the U.S. (WOUS) within the PSA.

Wetlands are defined by the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions." In order for an area to be classified as wetland, hydrophytic vegetation, hydric soils, and wetland hydrology indicators must be present described in the 1987 "Corps of Engineers Wetlands Delineation Manual" and the Appropriate Regional Supplement.

2.0 METHODOLOGY

The findings of the WOUS delineation is based on ECS' professional judgment and application of the technical criteria presented in the 1987 USACE Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0 dated November 2010.

ECS completed the following tasks to identify and delineate potentially jurisdictional WOUS boundaries onsite:

2.1 Literature Review

ECS reviewed supporting information from publicly-available databases to identify possible ecological effects the project may have on potential state- and/or federally-jurisdictional water resources. During the desktop review, ECS documented relevant, site-specific details (e.g., topographic characteristics, soil composition, recent precipitation, level of disturbance, plant community structure, etc.) and integrated the obtained information with the onsite delineation effort.

2.2 Methodology for Field Investigation

Wetland boundaries were delineated using the routine onsite determination method described in the 1987 USACE Manual and the Atlantic and Gulf Coastal Plain Regional Supplement, in conjunction with the USACE National Wetland Plant List and the USDA NRCS Soil Survey.

ECS performed the onsite wetland delineation utilizing methodologies described by the USACE. Site hydrology, if observed, was documented according to the guidelines set forth by USACE wetland delineation methodology. The plant community within the radius of the wetland data point was characterized according to species and ranked by cover values to ascertain the dominance of hydrophytic (wetland) plants within the plant community. The USFWS has defined five wetland plant indicator categories including:

- Obligate wetland (OBL) – has >99% probability of occurring in wetlands
- Facultative wetland (FACW) – has 66% to 99% chance of occurring in wetlands
- Facultative (FAC) – has 33% to 66% chance of occurring in wetlands
- Facultative upland (FACU) – has 1 to 33% chance of occurring in wetlands
- Upland (UPL) – has <1% chance of occurring in wetlands
- No Indicator (NI) – no wetland indicator for the specified species, considered UPL

Plants identified as OBL, FACW, or FAC are considered hydrophytes and proliferate in wetland conditions.

In areas determined to be dominated by hydrophytic vegetation and potential wetland hydrology is observed, an approximately 16-inch soil pedon was excavated with a shovel to determine if hydric soils were present. The soil pit was also inspected to determine if indicators of wetland hydrology (inundation, soil saturation, oxidized rhizospheres on living roots, etc.) were present.

Once an area is determined to be a wetland, further testing was performed to locate the wetland/ non-wetland boundary. A second data point was established in an adjacent non-wet area to document non-wetland conditions. Wetland boundaries were documented with a handheld global positioning unit (Trimble Geo 7X™).

Data forms specified in the Regional Supplement were completed for each wetland and non-wetland data point location. Information recorded on the USACE-approved wetland data sheets included vegetation data (species and percent cover in each stratum), soil matrix and redox conditions to a depth of 16 inches, and hydrological indicator observations utilized in making wetland determinations.

2.3 Methodology for Delineating Streams

During the wetland delineation field investigation, ECS identified streams onsite that could be considered potentially jurisdictional by the USACE. ECS used field indicators such as flow, substrate composition, presence/absence of defined bed and banks, origin of hydrologic source, presence/ absence of vegetation in the stream channel, and composition and relative abundance of resident benthic macroinvertebrates to classify onsite streams into three stream types: ephemeral, intermittent, and perennial.

Regional Guidance Letter (RGL) No. 05-05 provides guidance on identifying physical indicators of Ordinary High Water Mark (OHWM) as defined in 33 CFR Sections 328.3(e) and 329.11(a)(1), and discusses implementation of other appropriate means which consider the characteristics of the surrounding areas to establish the lateral limits of jurisdiction over non-tidal waters. Per RGL No.

05-05, the lateral limits of jurisdiction over non-tidal water bodies extend to the location of the OHWM in the absence of adjacent wetlands. When adjacent wetlands are present, Clean Water Act (CWA) jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands.

3.0 FINDINGS

3.1 Literature Review

ECS professionals reviewed the U.S. Geological Survey (USGS) Topographic Map, the U.S. Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey, the USDA-NRCS Hydric Soils List, the Federal Emergency Management Agency (FEMA) Floodplain Mapping Service, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Wetlands Mapper, and available aerial photographs to identify potentially jurisdictional Waters of the U.S. (i.e., streams, wetlands, natural ponds, lakes, etc.) and available watershed information.

3.1.1 Literature Review Summary

The following is a summary of the available desktop information that was reviewed as part of this study:

- According to the Broussard (Louisiana) USGS Topographic Map Quadrangle dated 1983 (Appendix I, Figure 2), a surface water is depicted on the northwest corner of the PSA. The PSA ranges from approximately 19 to 45 feet above mean sea level (MSL).

- According to the USDA-NRCS Web Soil Survey of Lafayette Parish (Appendix I, Figure 3), the PSA is comprised of the following soil map unit(s): Frost silt loam, 0 to 1 percent slopes, occasionally flooded (FrA), Memphis silt loam, 0 to 1 percent slopes (MbA), and Memphis silt loam, 1 to 5 percent slopes (MbC). The FrA and MbA soils are both listed on the USDA-NRCS Hydric Soils List for Lafayette Parish, Louisiana.

- The US Fish and Wildlife NWI map (Appendix I, Figure 4) does depict a Riverine in the northwest corner of the PSA. The site is located within the La Salle Coulee-Bayou Tortue watershed and is identified as Hydrologic Unit Code (HUC) 080801030203.

- The FEMA Flood Insurance Rate Maps (FIRMs), Panel(s) 22055C0200J and 22099C0225H, dated December 21, 2018 and November 5, 2010 respectively (Appendix I, Figure 5) indicates that the majority of the PSA is located in un-shaded Zone X, while a small portion of the northwest corner of the PSA is located within Flood Zone AE (areas with a 1% Annual Chance Flood Hazard).

- ECS reviewed the National Atmospheric and Oceanic Administration (NOAA) Light Detection and Ranging (LiDAR) Digital Elevation Model (DEM) of the PSA (Appendix I, Figure 6). The onsite elevations range from approximately 15 feet above MSL to approximately 45 feet above MSL.

3.2 Field Investigation Findings

ECS personnel conducted the field investigation on January 20, 2023. During the field reconnaissance of the PSA, a potentially isolated and non-jurisdictional emergent wetland area, consisting of herbaceous vegetation, was observed in the western central portion of the property. Also, ECS did identify a potentially jurisdictional non-wetland WOUS within the PSA. Data was collected utilizing a Trimble Geo7X™ hand-held GPS unit capable of sub-meter accuracy, and the data downloaded to produce a wetland delineation map (Appendix I, Figure 7). The potentially jurisdictional WOUS feature is summarized in the table below:

Table 1: Potential WOUS Summary Table

Feature ID	GPS Coordinates (decimal degrees)	Approximate Acreage	Approximate Square Footage	Approximate Linear Feet (if applicable)
Wetland 1 (Potentially Non-Jurisdictional Isolated Wetland)	30.152107°, -91.951974°	0.03	1307	N/A
Stream 1	30.153765°, -91.953106°	>0.01	435	7

3.2.1 Wetland Summary

The potentially non-jurisdictional isolated wetland observed within the PSA exhibited wetland indicators of hydrophytic vegetation, wetland hydrology, and hydric soils during the site reconnaissance. The wetland area and data point location is depicted on the Waters of the U.S. Delineation Map (Appendix I, Figure 7). Photographs of the wetland is presented in Appendix II.

The emergent wetland observed within the PSA (DP1) is approximately 0.03 acre. The wetland observed was dominated by herbaceous species including blunt spike-rush (*Eleocharis obtusa*), white clover (*Trifolium repens*), and spotted crane's-bill (*Geranium maculatum*). Indicators of wetland hydrology observed included surface water (A1) and saturation (A3), and geomorphic position (D2). The hydric soil indicator for depleted matrix (F3) was met at the sampling point.

3.2.2 Stream Summary

A potentially jurisdictional stream (non-wetland WOUS) feature was observed within the northwest corner of the PSA. The potential stream feature consisted of approximately 0.01 acre and 57 linear feet (LF) within the PSA boundary. All WOUS features had well-defined bed and bank features and exhibited an Ordinary High Water Mark (OHWM). The feature was also observed to contain flowing water (potentially perennial), standing water/very low flow-rates (potentially intermittent), or

exhibited evidence of periodic conveyance of surface flows through a defined channel followed by prolonged periods of drying (ephemeral). The streams are depicted on the Waters of the U.S. Delineation Map (Appendix I, Figure 7). Photographs of the stream is presented in Appendix II.

4.0 REGULATORY DISCUSSION

After review of the findings in the report and at the client's request, ECS can coordinate with the USACE to acquire a jurisdictional determination and conduct a field visit, if necessary. The timeline of this process is dependent on the availability of the regulatory agency. ECS recommends receipt of the formal jurisdictional determination letter from the necessary agencies prior to conducting any land-disturbance activities.

The WOUS are regulated by Sections 401 and 404 of the Clean Water Act. State and Federal law dictates that any disturbance to WOUS must be permitted through the appropriate agencies. If any potential impacts are proposed, we can assist you with permitting options and support to complete the process. As part of the permitting process, we will conduct a preliminary review of state and federal agency records pertaining to Section 7 (Federal Endangered Species Act) and Section 106 (National Historic Preservation Act). If deemed necessary, we can assist you with targeted species surveys or cultural investigations to satisfy the requirements of the Nationwide Permit (NWP), Individual Permit (IP), or General Permit conditions.

Section 404 of the Clean Water Act regulates the discharge of dredge and fill materials into waters of the United States (lakes, rivers, ponds, streams, etc.), including wetlands. Waters of the United States include territorial seas, navigable coastal and inland lakes, rivers, perennial streams, intermittent streams, and wetlands. The EPA and the U.S. Army Corps of Engineers jointly administer the Section 404 program. Section 401 of the Clean Water Act grants each state the authority to approve, condition, or deny any Federal permits that could result in a discharge to State waters.

Streams, ponds, and wetlands are regulated by the USACE. Permits are required prior to impacting wetlands or open waters, including ponds, lakes, and perennial or intermittent streams. Mitigation and storm-water management plans may be a condition of permits issued for the PSA. Buffers may be required adjacent to streams and water bodies.

For impacts to 0.5 acre or more of wetlands/waters an individual permit (IP) may be required.

An IP requires a habitat analysis, alternative site analysis, project justification, plans to avoid and minimize impacts, and a proposed mitigation plan. Depending on the habitat analysis and the extent of impacts, an Environmental Impact Statement may be required by the USACE. An IP allows for a public comment period and may require six to 18 months to obtain depending on conditions arising during the USACE review and public comment period.

5.0 WATERSHED CLASSIFICATION/BUFFER REQUIREMENTS

5.1 State Riparian Buffer Requirements

According to the Louisiana Department of Environmental Quality (LDEQ), the PSA occurs in the La Salle Coulee-Bayou Tortue Watershed. To ECS' knowledge, there are no known state-mandated riparian buffer requirements to warrant the protection of adjacent wetlands and riparian areas

beyond the limits of construction. However, it is recommended by LDEQ that best management practices outlined in LDEQ's Storm-water Construction General Permit guidelines be employed during construction activities to limit downstream translocation of sediment into adjacent wetlands and riparian areas.

5.2 Local Buffer Requirements

According to the Lafayette Parish Planning Department, there are no additional riparian buffer requirements from streams, wetlands, and/or other surface waters in addition to the state recommended practices for general construction and storm-water management.

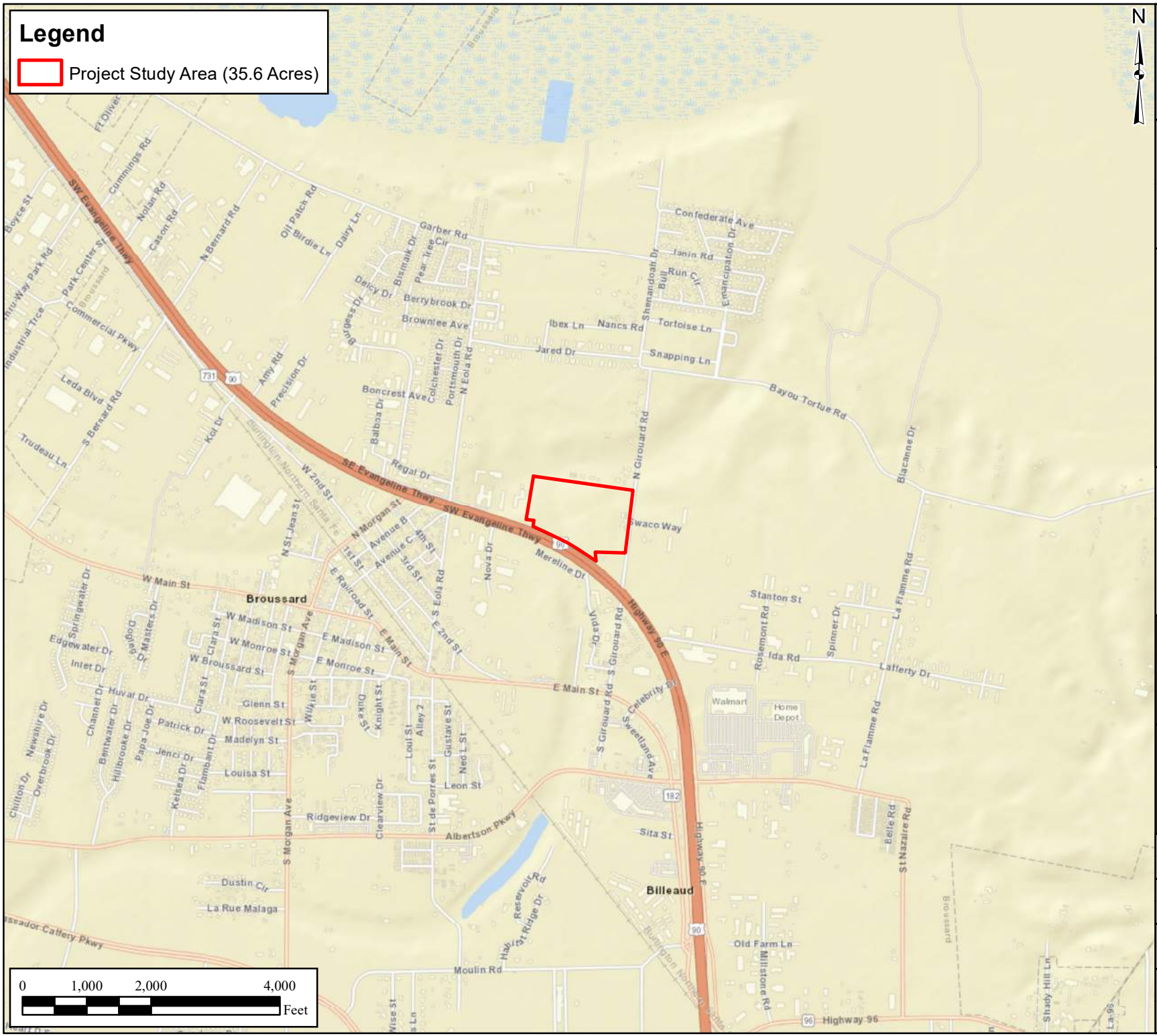
ECS recommends consultation with a civil engineer to determine if mandatory vegetative buffers and/or regulated development (impervious surfaces) setbacks are required for the site in addition to those mentioned above.

6.0 CONCLUSIONS

One potentially non-jurisdictional isolated wetland feature totaling approximately 0.03 acre and one potential non-wetland WOUS feature totaling approximately 57 LF (>0.01 acre) were identified and delineated within the PSA. The location and boundaries of both the isolated wetland and non-wetland features are illustrated on the attached Wetland Delineation Map (Appendix I, Figure 7).

The boundaries of the wetland is subject to change during the jurisdictional determination meeting with the USACE. ECS cannot guarantee that field conditions and/or WOUS boundaries will not change over time.

Appendix I: Figures



ECS

Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD
BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

Title:

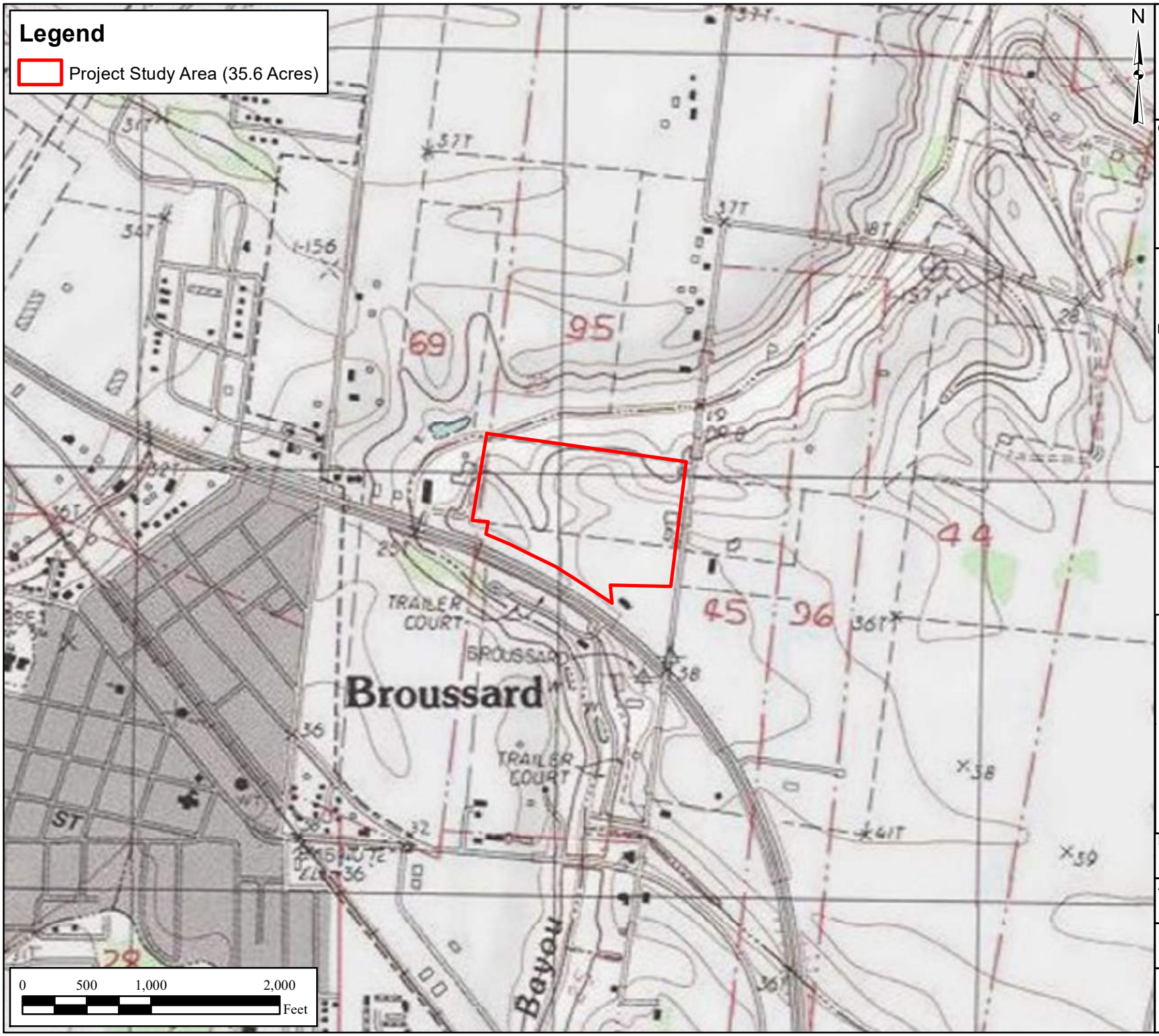
SITE LOCATION MAP

LAFAYETTE PARISH

Drawn By:	Scale:
JAT	1 in = 2,000 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.
49: 19360

FIGURE 1



Client:
ONEACADIANA

Project:
MAXIE AND VIDA GIROUARD
BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

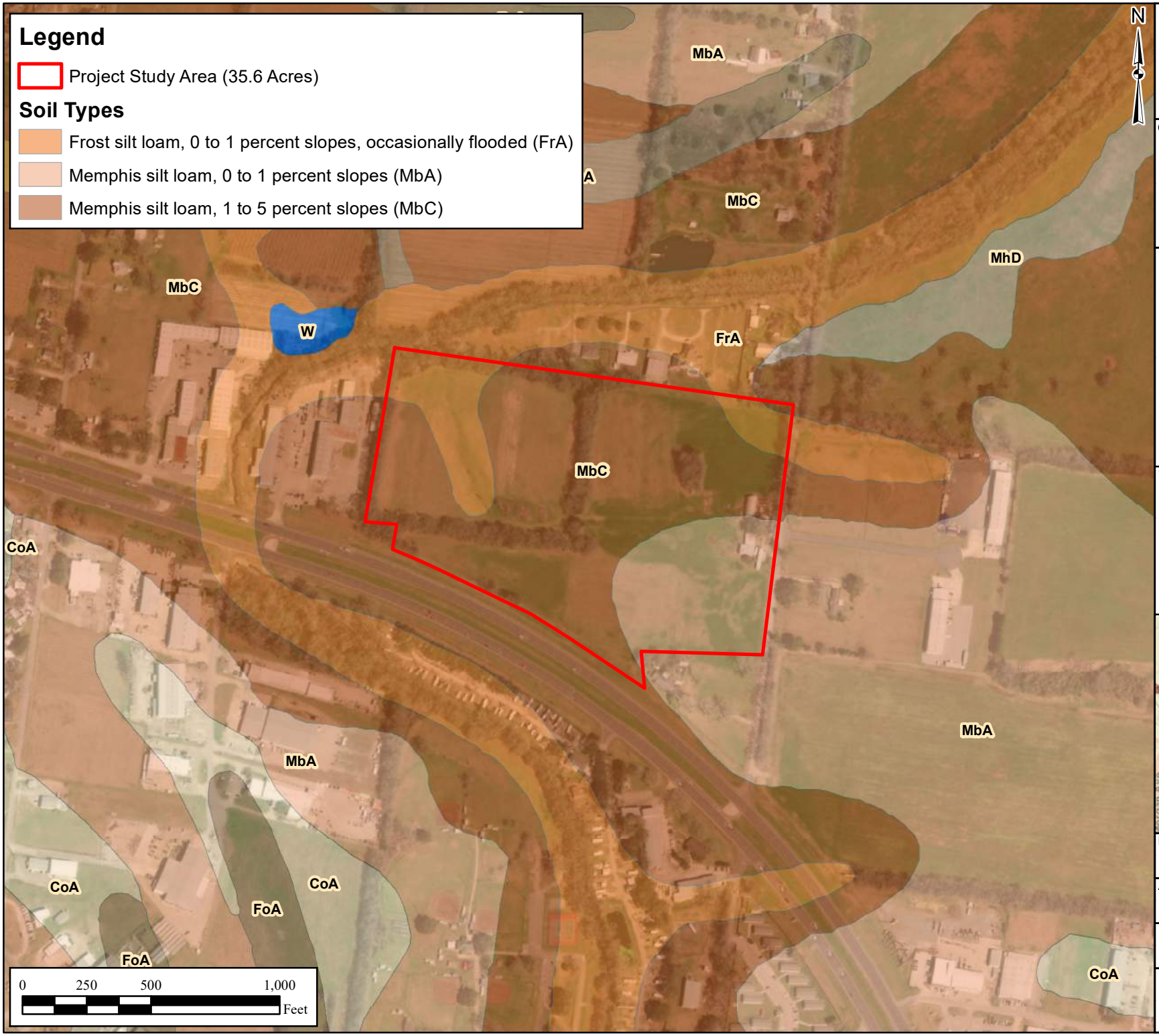
Title:
USGS TOPOGRAPHIC MAP BROUSSARD LOUISIANA DATED: 1983

EAST BATON ROUGE PARISH

Drawn By:	Scale:
JAT	1 in = 1,000 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.
49: 19360

FIGURE 2



Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD BROUSSARD, LAFAYETTE PARISH, LOUISIANA

Title:

USDA NRCS SOILS MAP

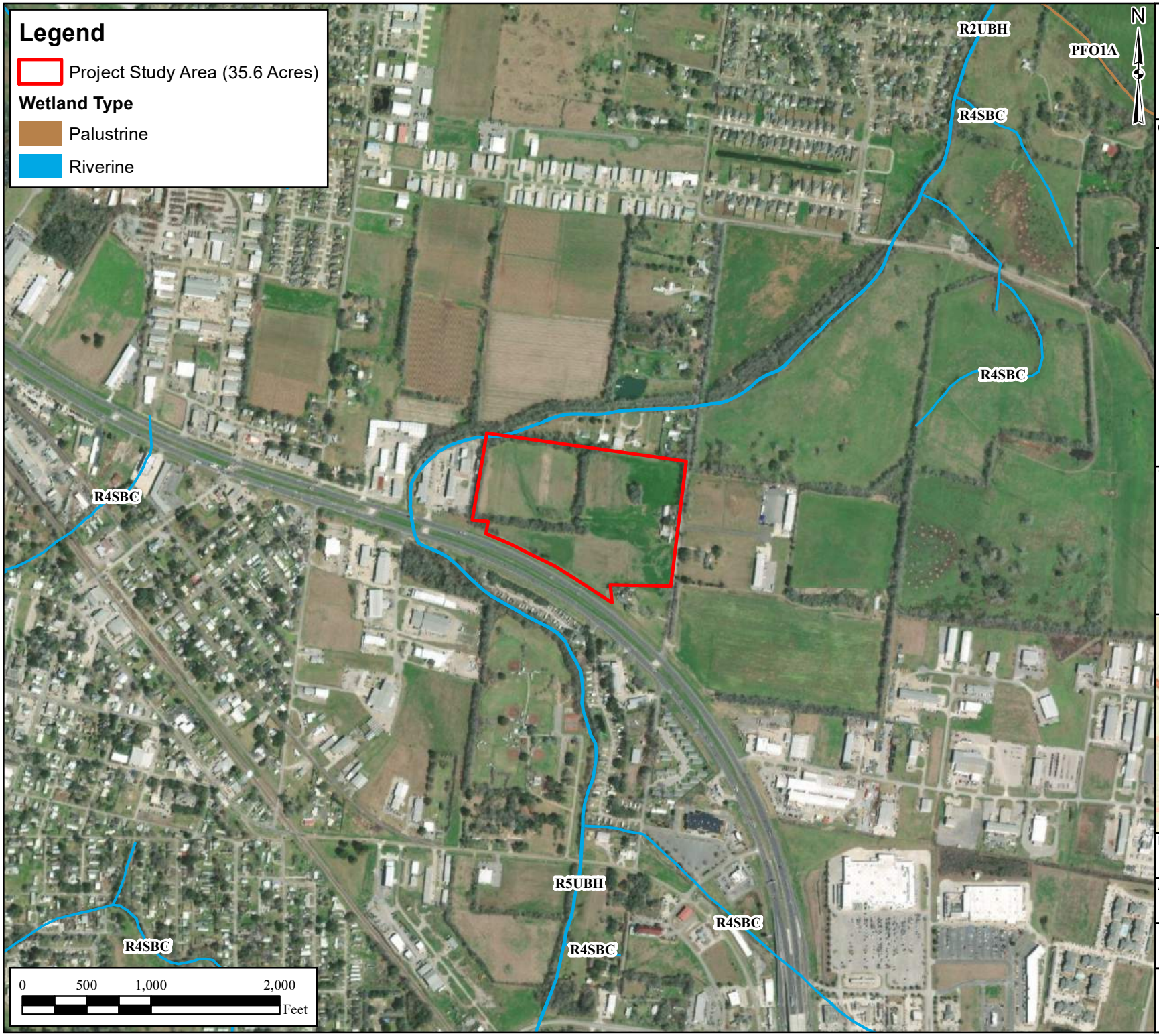
PUBLICATION DATE: 9-6-2022

Drawn By:	Scale:
JAT	1 in = 500 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.

49: 19360

FIGURE 3



Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD
BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

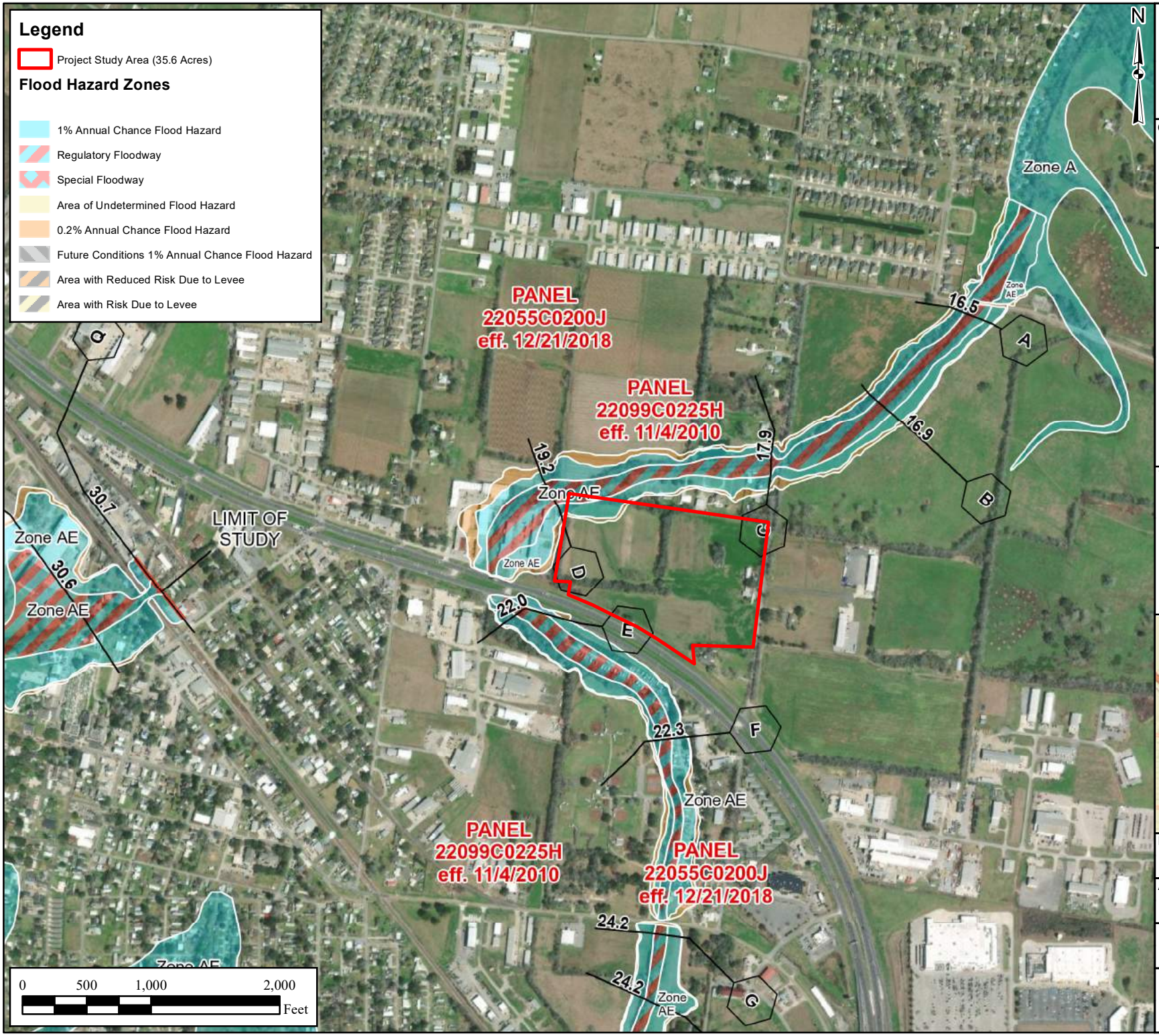
Title:

NATIONAL WETLANDS INVENTORY MAP

Drawn By:	Scale:
JAT	1 in = 1,000 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.
49: 19360

FIGURE 4



ECS

Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

Title:

FEMA - NFHL FLOOD ZONE MAP

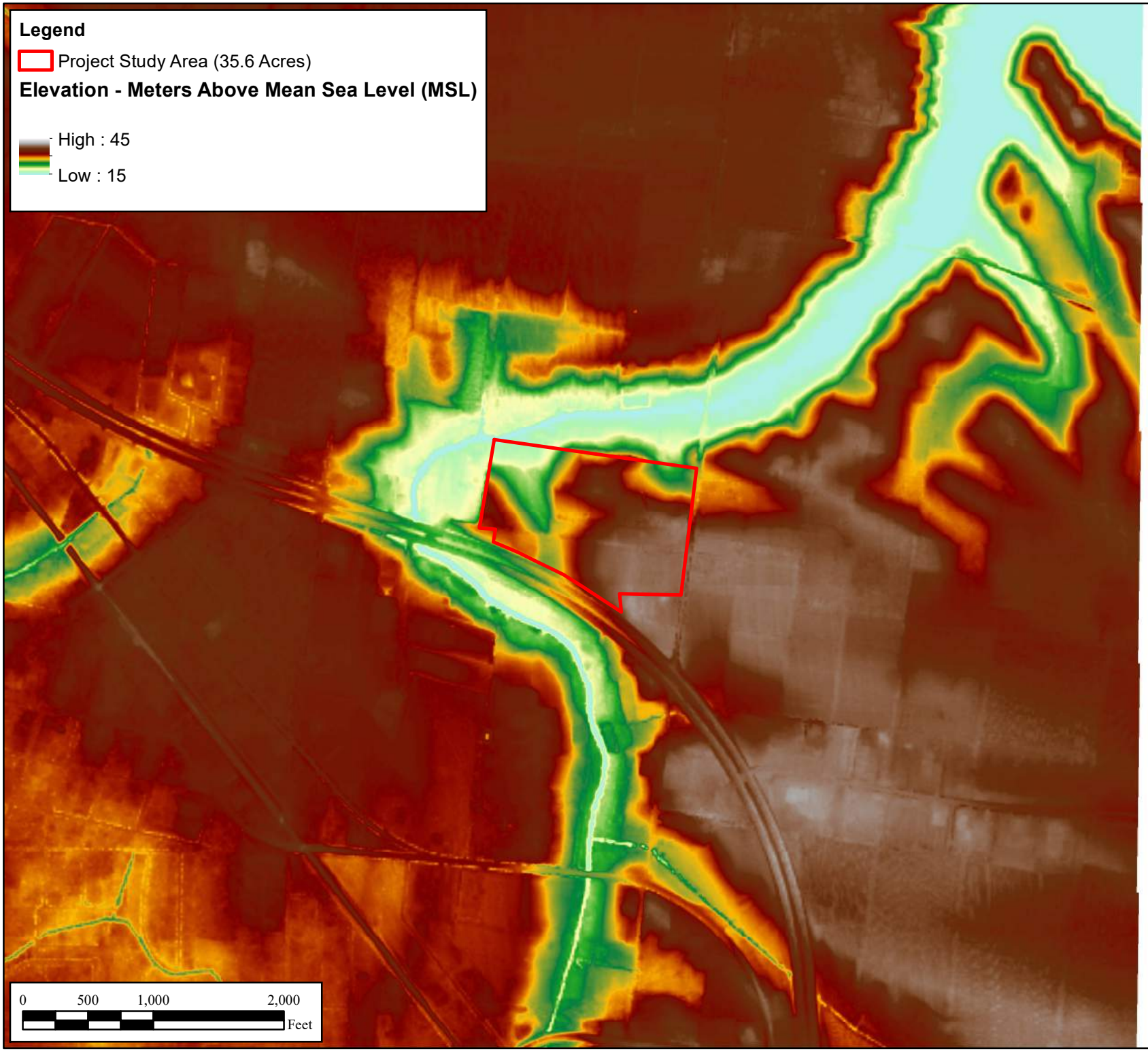
PROJECT STUDY AREA

Drawn By:	Scale:
JAT	1 in = 1,000 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.

49: 19360

FIGURE 5



ECS

Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD
BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

Title:

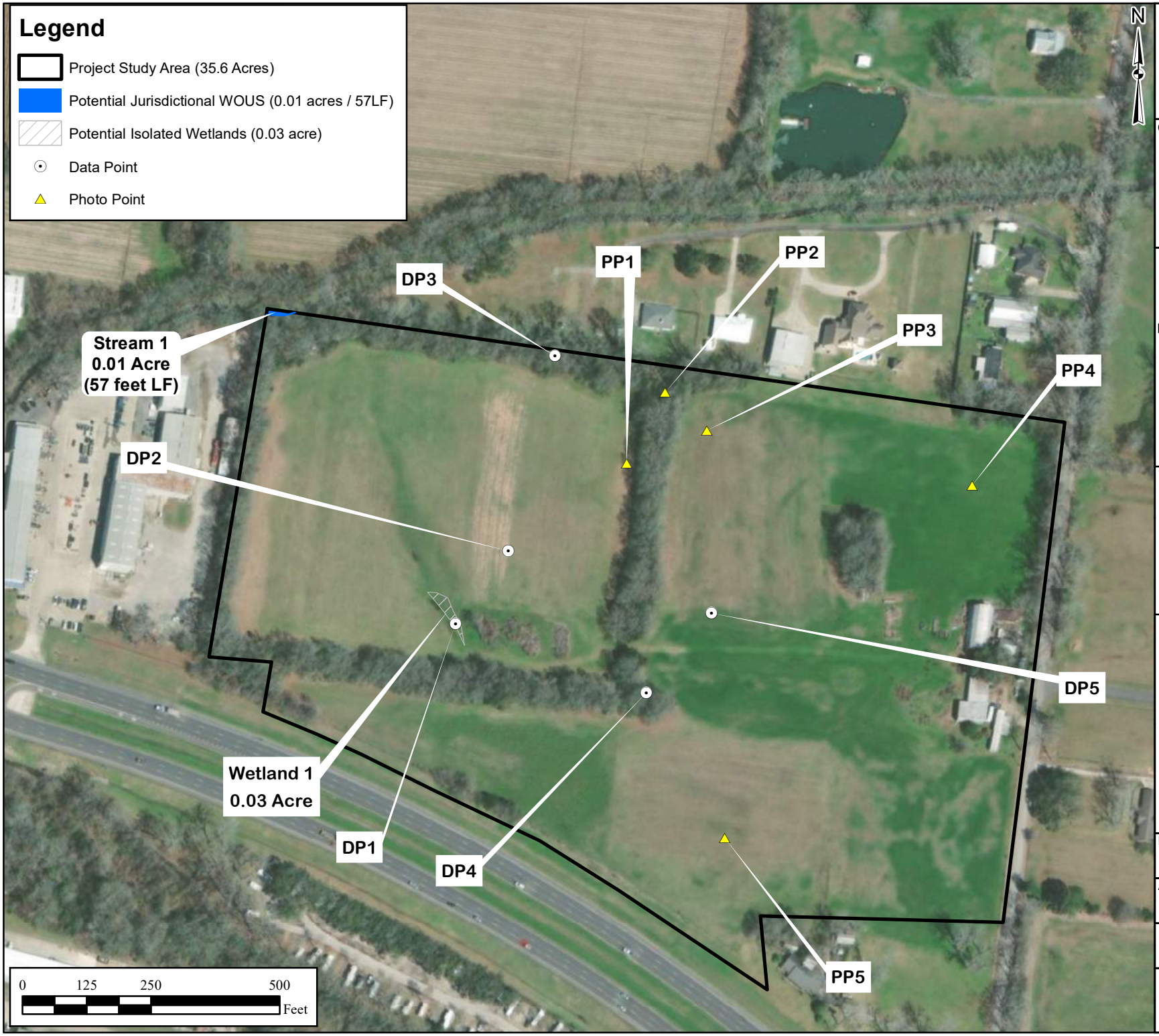
NOAA - LiDAR ELEVATION MAP

PROJECT STUDY AREA

Drawn By:	Scale:
JAT	1 in = 1,000 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.
49: 19360

FIGURE 6



ECS

Client:

ONEACADIANA

Project:

MAXIE AND VIDA GIROUARD BROUSSARD,
LAFAYETTE PARISH,
LOUISIANA

Title:

WETLAND DELINEATION MAP

NOTES:

1. POTENTIAL JURISDICTIONAL WATERS OF THE US WERE DELINEATED BY ECS ON JANUARY 20, 2023.

2. FEATURES DEPICTED ON THIS MAP HAVE NOT BEEN VERIFIED BY THE USACE AND ARE SUBJECT TO CHANGE BASED ON AGENCY VERIFICATION.

3. THIS MAP SHOULD BE USED FOR PRELIMINARY PLANNING PURPOSES.

Drawn By:	Scale:
JAT	1 in = 250 ft
Approved By:	**Date:**
PMS	2/9/2023

ECS Project No.

49: 19202

FIGURE 7

Appendix II: Photographic Log

1 - Photo 1: Soil profile at DP1.

2 - Photo 2: Overview at DP1 facing north.

3 - Photo 3: Overview at DP1 facing east.

4 - Photo 4: Overview at DP1 facing south.

5 - Photo 5: Overview at DP1 facing west.

6 - Photo 6: Soil profile at DP2.

7 - Photo 7: Overview at DP2 facing north.

8 - Photo 8: Overview at DP2 facing east.

9 - Photo 9: Overview at DP2 facing south.

10 - Photo 10: Overview at DP2 facing west.

11 - Photo 11: Soil profile at DP3.

12 - Photo 12: Overview at DP3 facing north.

13 - Photo 13: Overview at DP3 facing east.

14 - Photo 14: Overview at DP3 facing south.

15 - Photo 15: Overview at DP3 facing west.

16 - Photo 16: Soil profile at DP4.

17 - Photo 17: Overview at DP4 facing north.

18 - Photo 18: Overview at DP4 facing east.

19 - Photo 19: Overview at DP4 facing south.

20 - Photo 20: Overview at DP4 facing west.

21 - Photo 21 : Overview at PP1 facing north.

22 - Photo 22 : Overview at PP1 facing east.

23 - Photo 23 : Overview at PP1 facing south.

24 - Photo 24 : Overview at PP1 facing east.

25 - Photo 25 : Overview at PP2 facing north.

26 - Photo 26 : Overview at PP2 facing east.

27 - Photo 27 : Overview at PP2 facing south.

28 - Photo 28 : Overview at PP2 facing west.

29 - Photo 29 : Overview at PP3 facing north.

30 - Photo 30 : Overview at PP3 facing east.

31 - Photo 31 : Overview at PP3 facing south.

32 - Photo 32 : Overview at PP3 facing west.

33 - Photo 33 : Overview at PP4 facing north.

34 - Photo 34 : Overview at PP4 facing east.

35 - Photo 35 : Overview at PP4 facing south.

36 - Photo 36 : Overview at PP4 facing west.

37 - Photo 37 : Overview at PP5 facing north.

38 - Photo 38 : Overview at PP5 facing east.

39 - Photo 39 : Overview at PP5 facing south.

40 - Photo 40 : Overview at PP5 facing west.

41 - Photo 41: Stream 1, northwest section of PSA facing north.

42 - Photo 42: Stream 1, northwest section of PSA facing northeast.

43 - Photo 31: Stream 1, northwest section of PSA facing northwest.

Appendix III: USACE Wetland Data Forms and Stream Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Maxie and Vida Girouard Site City/County: Broussard, Lafayette Parish Sampling Date: 1/20/2023

Applicant/Owner: CSRS, Inc State: LA Sampling Point: DP1

Investigator(s): Jay Thibodeaux (PWS) Section, Township, Range: S36, T9S, R5E

Landform (hillside, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 0-1

Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 30.152107 Long: -91.951974 Datum: NAD83

Soil Map Unit Name: Frost silt loam, 0 to 1 percent slopes, occasionally flooded (FrA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ____ High Water Table (A2)
- X Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15) **(LRR U)**
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ FAC-Neutral Test (D5)
- ____ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 1
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP1

Tree Stratum (Plot size: 30-ft Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 30-ft Radius)			
1. *Eleocharis obtusa*	20	Yes	OBL
2. *Trifolium repens*	15	Yes	FACU
3. *Geranium maculatum*	15	Yes	FACU
4. *Rumex crispus*	10	No	FAC
5. *Persicaria lapathifolia*	10	No	FACW
6. *Sagittaria platyphylla*	10	No	OBL
7. *Andropogon glomeratus*	5	No	FACW
8.			
9.			
10.			
11.			
12.			
	85 =Total Cover		
50% of total cover: 43	20% of total cover: 17		
Woody Vine Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	85 (A)		210 (B)
Prevalence Index = B/A =			2.47

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR 4/2	95	10YR 5/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations
8-18	10YR 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Maxie and Vida Girouard Site City/County: Broussard, Lafayette Parish Sampling Date: 1/20/2023

Applicant/Owner: CSRS, Inc State: LA Sampling Point: DP2

Investigator(s): Jay Thibodeaux (PWS) Section, Township, Range: S36, T9S, R5E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1-5

Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 30.152497 Long: --91.951654 Datum: NAD83

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slopes (MbC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP2

Tree Stratum (Plot size: 30-ft Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 30-ft Radius)			
1. *Paspalum notatum*	40	Yes	FACU
2. *Geranium maculatum*	20	Yes	FACU
3. *Plantago rugelii*	15	No	FACU
4. *Rumex crispus*	15	No	FAC
5. *Rubus argutus*	10	No	FAC
6. *Solidago altissima*	5	No	FACU
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
50% of total cover: 53	20% of total cover: 21		
Woody Vine Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	105 (A)		395 (B)
Prevalence Index = B/A =			3.76

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Maxie and Vida Girouard Site City/County: Broussard, Lafayette Parish Sampling Date: 1/20/2023

Applicant/Owner: CSRS, Inc State: LA Sampling Point: DP3

Investigator(s): Jay Thibodeaux (PWS) Section, Township, Range: S36, T9S, R5E

Landform (hillside, terrace, etc.): N/A Local relief (concave, convex, none): N/A Slope (%): 1-5

Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 30.153542 Long: -91.951372 Datum: NAD83

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slopes (MbC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP3

Tree Stratum (Plot size: 30-ft Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus nigra*	25	Yes	FAC
2. *Ulmus americana*	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	30 =Total Cover		
50% of total cover: 15	20% of total cover: 6		
Sapling/Shrub Stratum (Plot size: 30-ft Radius)			
1. *Ligustrum sinense*	45	Yes	FAC
2. *Ligustrum japonicum*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	65 =Total Cover		
50% of total cover: 33	20% of total cover: 13		
Herb Stratum (Plot size: 30-ft Radius)			
1. *Rubus argutus*	20	Yes	FAC
2. *Sabal minor*	5	No	FACW
3. *Carex frankii*	5	No	OBL
4. *Rumex crispus*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35 =Total Cover		
50% of total cover: 18	20% of total cover: 7		
Woody Vine Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	5	x 2 =	10
FAC species	120	x 3 =	360
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		375 (B)

Prevalence Index = B/A = 2.88

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 3/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Maxie and Vida Girouard Site City/County: Broussard, Lafayette Parish Sampling Date: 1/20/2023

Applicant/Owner: CSRS, Inc State: LA Sampling Point: DP4

Investigator(s): Jay Thibodeaux (PWS) Section, Township, Range: S36, T9S, R5E

Landform (hillside, terrace, etc.): N/A Local relief (concave, convex, none): N/A Slope (%): 1-5

Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 30.151743 Long: -91.950799 Datum: NAD83

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slopes (MbC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP4

Tree Stratum (Plot size: 30-ft Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus nigra*	25	Yes	FAC
2. *Ulmus americana*	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	30	=Total Cover	
50% of total cover: 15		20% of total cover: 6	

Sapling/Shrub Stratum (Plot size: 30-ft Radius)			
1. *Ligustrum sinense*	45	Yes	FAC
2. *Ligustrum japonicum*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	65	=Total Cover	
50% of total cover: 33		20% of total cover: 13	

Herb Stratum (Plot size: 30-ft Radius)			
1. *Rubus argutus*	20	Yes	FAC
2. *Sabal minor*	5	No	FACW
3. *Carex frankii*	5	No	OBL
4. *Rumex crispus*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	

Woody Vine Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	5	x 2 =	10
FAC species	120	x 3 =	360
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	130 (A)		375 (B)

Prevalence Index = B/A = 2.88

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 3/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Maxie and Vida Girouard Site City/County: Broussard, Lafayette Parish Sampling Date: 1/20/2023

Applicant/Owner: CSRS, Inc State: LA Sampling Point: DP5

Investigator(s): Jay Thibodeaux (PWS) Section, Township, Range: S36, T9S, R5E

Landform (hillside, terrace, etc.): N/A Local relief (concave, convex, none): N/A Slope (%): 1-5

Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 30.152172 Long: -91.950401 Datum: NAD83

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slopes (MbC) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP5

Tree Stratum (Plot size: 30-ft Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 30-ft Radius)			
1. *Lolium perenne*	50	Yes	FACU
2. *Geranium maculatum*	30	Yes	FACU
3. *Trifolium repens*	25	Yes	FACU
4. *Rumex crispus*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 =Total Cover		
50% of total cover: 58	20% of total cover: 23		
Woody Vine Stratum (Plot size: 30-ft Radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	115 (A)		450 (B)
Prevalence Index = B/A =			3.91

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks: