Exhibit FF. West Feliciana Industrial Park Site Wetlands Delineation Report

Baton Rouge Area Chamber®

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West Feliciana Industrial Park Site Wetlands Delineation Report

Table of Contents

- *Wetland Data Report, West Feliciana Industrial Park, West Feliciana Parish, Louisiana* by CK & Associates dated February 2017.
- Preliminary Jurisdictional Determination of TEMBEC Tracts totaling 7 acres dated August 5, 2016.
- *Preliminary Waters of the U.S. Assessment,107 Acres of Land, TEMBEC Tracts, Highway 964, St. Francisville, West Feliciana Parish, Louisiana* by Terracon Consultants, Inc. dated October 2015.

West Feliciana Industrial Park Site Wetlands Delineation Report

Wetland Data Report

West Feliciana Industrial Park Site

West Feliciana Parish, Louisiana

Baton Rouge Area Chamber

564 Laurel Street

Baton Rouge, Louisiana 70801

February 2017

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CK Project Number: 14281

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

The following report summarizes a wetland delineation conducted by CK Associates (CK) on a 410.3-acre survey area (site) near St. Francisville, Louisiana. The purpose of this report is to identify areas that contain potential wetlands and other potential "Waters of the United States" (US) as defined in 33 C.F.R. § 328.3. The site is located on Highway 964 in West Feliciana Parish at latitude 30°43'08.50"N and longitude 91°19'11.65"W within Sections 43, 46, and 48 of Township 4 South and Range 2 West.

Waters of the US are aquatic areas that are either navigable or have a significant nexus to a navigable water. These areas are regulated by the US Army Corps of Engineers (USACE). Navigable waters are defined as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce" (33 C.F.R. § 329.4 [1986]). Any area below the ordinary high water mark, as defined in 33 C.F.R. § 328.3 (1993), may fall under Federal jurisdiction as a navigable water (33 C.F.R. § 329.11 [1986]).

Waters of the US, regardless of navigability, can generally be categorized as either: 1) deepwater aquatic habitats, 2) special aquatic sites, or 3) other waters of the US. Deepwater aquatic habitats are "areas that are permanently inundated at mean annual water depths greater than 6.6 feet or permanently inundated areas, less than or equal to 6.6 feet in depth that do not support rooted-emergent or woody plant species". Special aquatic sites include 1) sanctuaries and refuges, 2) wetlands, 3) mudflats, 4) vegetated shallows, 5) coral reefs, and 6) riffle and pool complexes. Other waters of the US include, but are not limited to 1) isolated wetlands and lakes, 2) intermittent streams, 3) prairie potholes, and 4) other waters that are not part of a tributary system to interstate waters or navigable waters of the US (USACE 1987).

Wetlands are classified as a special aquatic site and are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987). These areas are referred to as "wetlands" throughout this report whereas deepwater aquatic habitats, special aquatic sites, streams, and other waters of the US are referred to as "other waters" in this report.

Three mandatory technical criteria for determining the presence of a wetland are, with exceptions, 1) prevalence of hydrophytic vegetation, 2) wetland hydrology, and 3) hydric soils (USACE 1987). Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The term wetland hydrology encompasses "the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation" (USACE 1987). A hydric soil is defined as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA 2010).

2.0 PHYSIOGRAPHY, CLIMATE, AND SITE DESCRIPTION

The survey area is located within Land Resource Region (LRR) O – Mississippi Delta Cotton and Feed Grains Region, in Major Land Resource Area (MLRA) 131A – Southern Mississippi River Alluvium. The topography of MLRA 131A is characterized by level or depressional to very undulating alluvial plains, backswamps, oxbows, natural levees, and terraces. Average elevations start at sea level in the southern part of the area and gradually rise to about 330 feet in the northwestern part. The lower Mississippi River and its tributaries drain nearly all of MLRA 131A, but the Atchafalaya River drains the extreme southwest part (USDA 2006).

The dominant soils in the survey area are typically found in humid subtropical climates. Annual rainfall in these areas averages 156 cm, and mean annual temperature is 18.7 degrees Celsius. Soils at the site are well-drained; runoff is medium to rapid and permeability is moderate. Much of the acreage is used for silviculture and woodlands of mixed hardwood and pines. Cleared areas are often used for soybeans, small grains, hay, and pasture (USDA 2016).

Active silviculture, bottomland hardwoods, utility right-of-ways, and hunting food plots for hunting activities comprise a majority of the site. There are existing non-habitable structures in the east-central portion of the site associated with hunting activities.

3.0 METHODS

CK visited the survey area October 12, November 18, November 21, November 22, 2016 and February 17 and February 20, 2017 to determine the extent of potential wetlands and other waters of the US. The wetland delineation followed routine onsite field procedures as outlined by the USACE (1987 and 2010). Soil references include the NRCS (2015 and 2017) and USDA (2010). Plant nomenclature and wetland indicator status is taken from The National Wetland Plant List (Lichvar et al. 2016). Plant nomenclature not listed in The National Wetland Plant List is taken from the NRCS PLANTS Database (2017).

Prior to conducting the field investigation, CK reviewed available aerial photography, soil survey data, elevation data (Light Detection and Ranging [LiDAR] contours and Digital Elevation Models [DEM]), topographic maps, and National Wetland Inventory (NWI) data. Data points were established within the dominant plant communities of the survey area. Observations of soils, vegetation, and hydrology were documented at each data point location (Attachment A). Potential wetlands, potential waters of the US, and data point locations were mapped utilizing Trimble® GeoXT® Differential Global Positioning System (DGPS) with real-time corrections. Acreage was obtained by exporting the data from the DGPS unit into ESRI® ArcMap Version 10.4. Digital photographs were taken of the soil profile and surrounding vegetation at each data point (Attachment A).

Wetland hydrology was based on the observation of wetland hydrology indicators, as described by USACE (2010). Wetland hydrology criteria were met if one primary indicator was observed or a minimum of two secondary indicators were observed.

All vegetative species present within each data point plot were documented for all vegetation strata, including the tree stratum, sapling/shrub stratum, herbaceous stratum, and woody vines stratum. Percent absolute cover for each species was determined by ocular estimation. Plant communities met hydrophytic vegetation criteria if all dominant species across all strata are classified as obligatory and/or facultative-wet, or if greater than 50% of all dominant species from all strata were classified as obligatory, facultative-wet, and/or facultative species, or if the prevalence index is 3.0 or less (USACE 2010). Dominant species were selected using the "50/20 rule" described by the USACE (2010).

Soil profiles were obtained by excavating an approximate 12- to 16-inch soil pit. Soil color was recorded by matching soil samples throughout the profile to color chips contained in a Munsell soil color chart. The presence or absence of hydric soils was determined utilizing the methods and procedures outlined by the USACE (2010), including, but not limited to, the observation of the hydric soil indicators described by the USACE (2010).

4.0 RESULTS

Eight (8) data points (DP) were collected during the field investigation. DP2, DP3, DP4, and DP5 were all located within non-wetlands. DP1, DP6, DP7, and DP8 were all located within wetlands.

4.1 Hydrology

No primary hydrology indicators and only one secondary hydrology indicator (drainage patterns) were observed at DP2, DP3, DP4, and DP5.

Primary and secondary hydrology indicators were observed at DP1, DP6, DP7, and DP8. These include surface water, saturation, sediment deposits, drift deposits, water-stained leaves, oxidized rhizospheres on living root channels, sparsely vegetated concave surface, crayfish burrows, and drainage patterns.

4.2 Vegetation

The non-wetland, bottomland hardwood habitat is dominated by water oak (*Quercus nigra)*, sweetgum (*Liquidambar styraciflua)*, and Chinese tallow (*Triadica sebifera)* in the tree stratum. Chinese privet (*Ligustrum sinense*) and yaupon (*Ilex vomitoria)* dominate the sapling-shrub stratum. Wild onion (*Allium canadense*) and Violet *(Viola spp.)* are dominates in the herbaceous stratum.

Bottomland hardwood wetland habitat is dominated by water oak, American sycamore (*Platanus occidentalis)*, and Nutall Oak (*Quercus texana*) in the tree stratum. The sapling-shrub layer is dominated by Chinese privet. The herbaceous layer is dominated by soft rush *(Juncus effusus)* and Chinese privet.

The herbaceous food plot / utility right-of-way habitat consists of clover (*Trifolium spp.)* and alfalfa (*Medicago spp.*). The non-wet pine plantation consists of *Pinus taeda.*

4.3 Soils

The survey area is underlain by the following soils (Figure 4):

a. FH: Feliciana and Natchez silt loam, 8 to 60 percent slopes
b. Lo: Loring silt loam, 1 to 3 percent slopes
c. Lr: Loring silt loam, 3 to 8 percent slopes
d. Ob: Olivier silt loam, 1 to 3 percent slopes
e. We: Weyanoke silt, 1 to 3 percent slopes

The Lo and Ob soil mapping units are listed in the National Hydric Soils List (NRCS 2015). The depleted matrix hydric soil indicator was observed at DP1, DP4, and DP6-DP8.

4.4 Questions Pertaining to Regulatory Authority

CK has also addressed the items below as directed in the request for proposal:

1. Identify any bodies of water on or abutting the site and identify the authority with jurisdiction over them.
    - The Mississippi River is located adjacent to the western property boundary. This feature is under the jurisdiction of the USACE by authority of Section 10 of the Rivers and Harbors Act.
2. Do wetlands and/or other waterways exist on or near the site?
    - By our investigation, there are 9.5 acres of Section 404 Wetlands present on the site. Wetland features are under the jurisdiction of the USACE under the authority of Section 404 of the Clean Water Act.
    - There are 7.8 acres of Section 404 Other Waters of the US present on the site. These features are under the jurisdiction of the USACE by authority of Section 404 of the Clean Water Act.
3. If wetlands are present has a Section 404 permit application been submitted to USACE? If yes, provide a copy.
    - To the best of CK's knowledge, no permit application has been submitted to the USACE.
4. If wetlands are present, has the Section 404 permit been received from the USACE?
    - See above.
5. If wetlands are present, have all wetlands on site been mitigated?
    - See above.

5.0 CONCLUSIONS

Based on field observations, the 410.3-acre survey area contains (Figure 2 and Figure 3):

- 7.8 acres of Section 404 Other Waters of the US
- 9.5 acres of Section 404 Wetlands

This acreage is influenced by the accuracy of the DGPS unit utilizing real-time corrections and ESRI® ArcMap Version 10.4 drafting software.

The USACE, under the authority of the Clean Water Act - Section 404 and the Rivers and Harbor Act - Section 10, has the responsibility to make the final determination of the location and extent of jurisdictional wetlands, other waters of the US, and navigable waters on this property. This report represents the opinion of the investigators and should be considered preliminary until final concurrence is obtained from the New Orleans District Army Corps of Engineers office.

6.0 LITERATURE CITED

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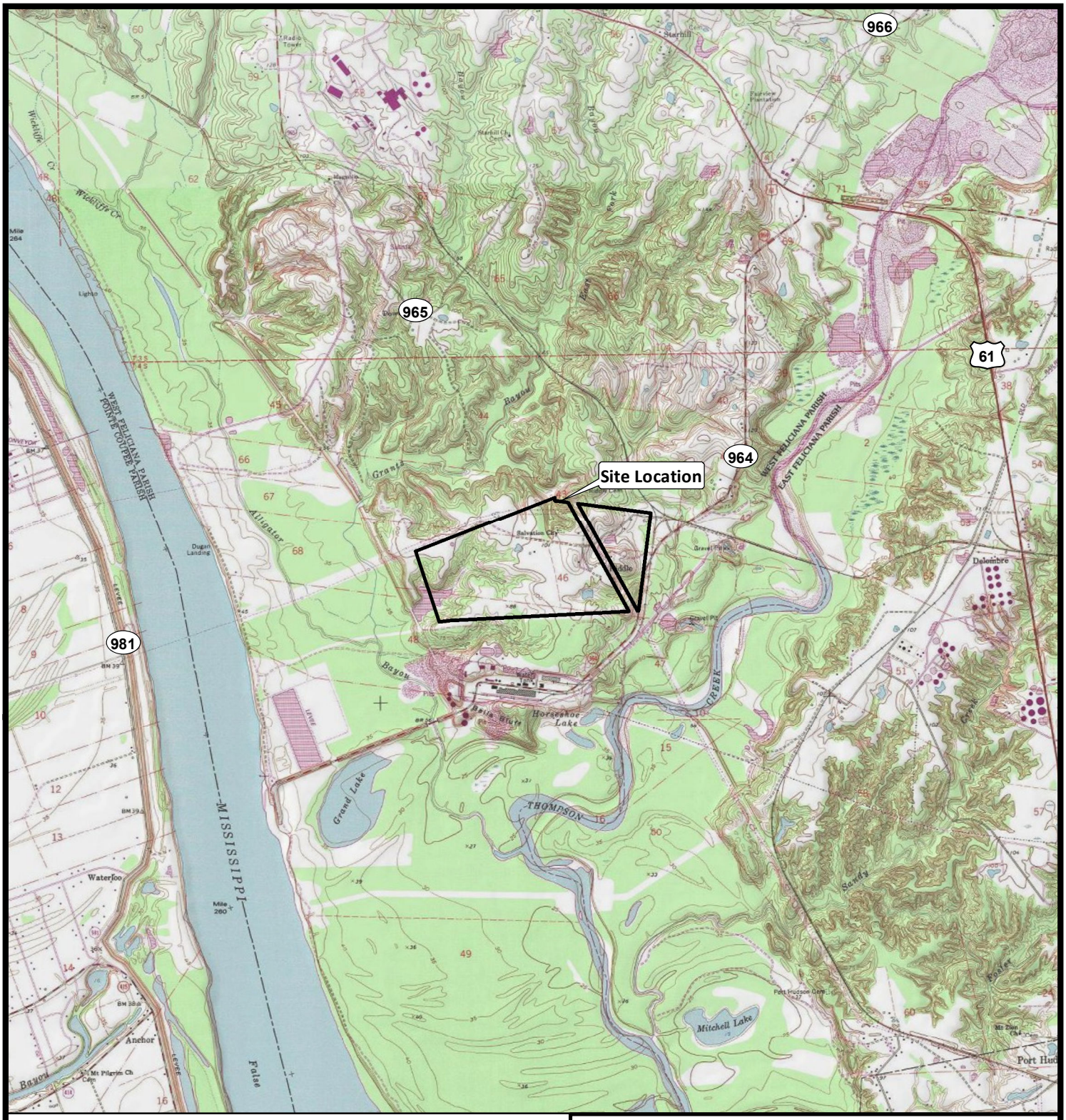
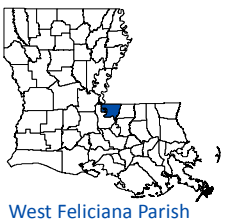
FIGURES





West Feliciana Parish

Legend

Survey Area
(410.3 acres)

N

S

0 4,000 8,000

Feet

esri Partner Network Silver

U.S.G.S. 24K Series Quad Map, Port Hudson, LA.

Baton Rouge Area Chamber
Baton Rouge, Louisiana

West Feliciana Industrial Park

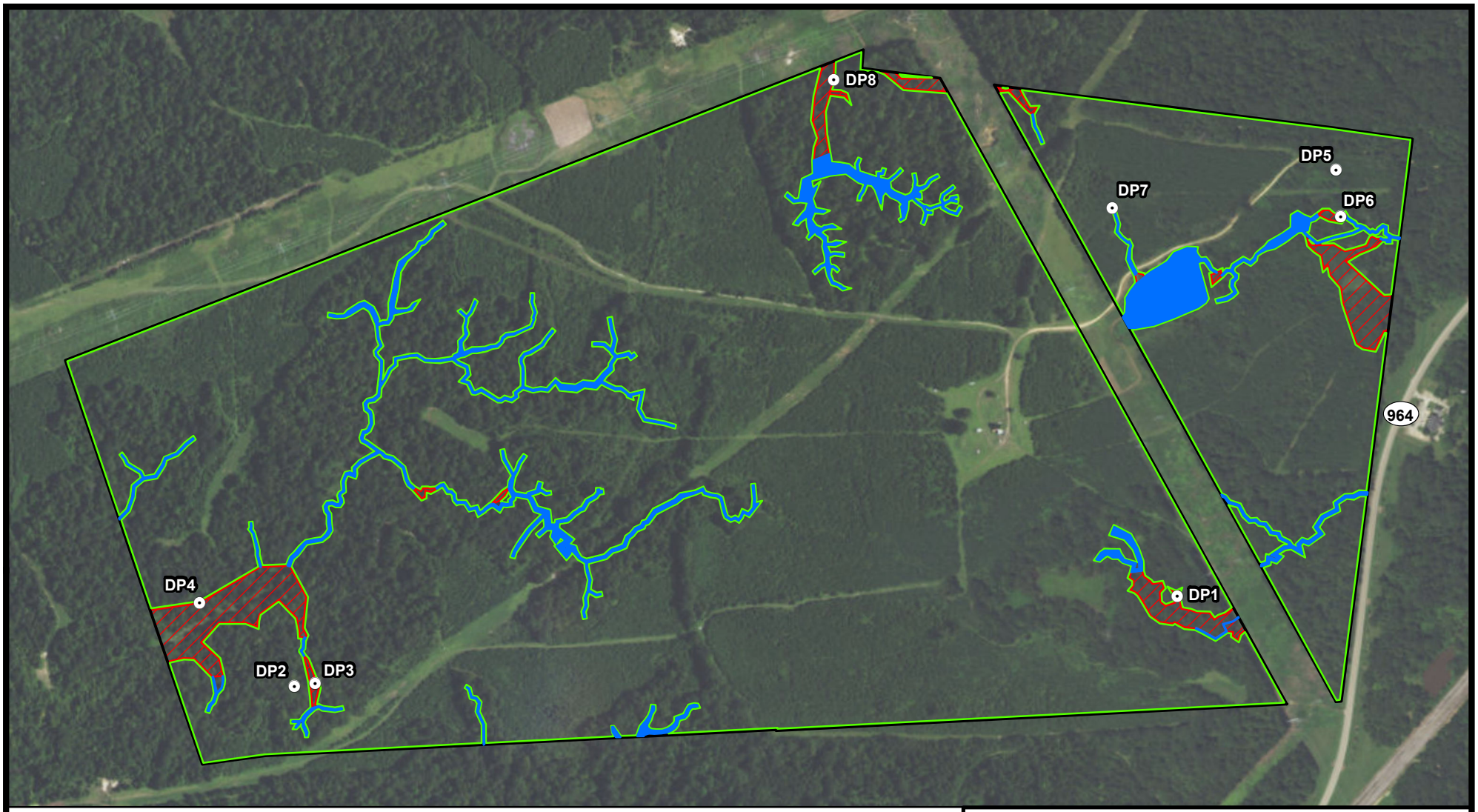
Site Location Map

West Feliciana Parish

CK Associates Environmental Consultants

Drawn:	CPL/AM10.4
Checked:	CMP
Approved:	TEW
Date:	02/23/2017
Dwg. No.:	A14281-05

Figure 1



West Feliciana Parish

Legend

- Data Point
- Wetlands (9.5 acres)
- Non-Wet (378.6 acres)
- Other Waters of the U.S. (7.8 acres)
- Survey Area (410.3 acres)

N

S

0 725 1,450

Feet

esri Partner Network Silver

Background is 2015 NAIP imagery; West Feliciana Parish, LA.

Baton Rouge Area Chamber

Baton Rouge, Louisiana

West Feliciana Industrial Park

Wetland Map

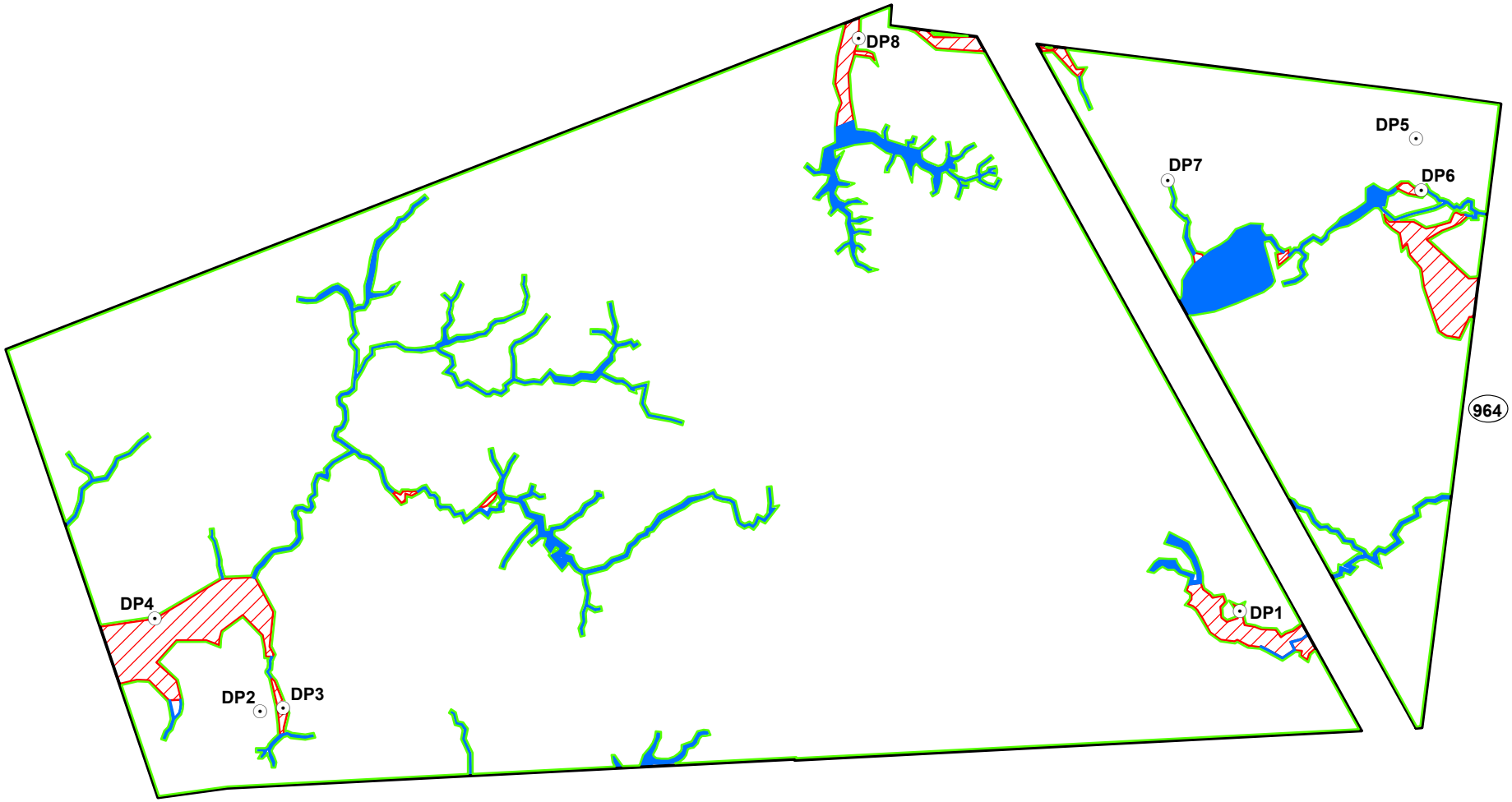
(Aerial Imagery Background)

West Feliciana Parish

CK Associates Environmental Consultants

Drawn:	CPL/AM10.4
Checked:	CMP
Approved:	TEW
Date:	02/27/2017
Dwg. No.:	A14281-06

Figure 2



West Feliciana Parish

Legend

- Data Point
- Wetlands (9.5 acres)
- Non-Wet (378.6 acres)
- Other Waters of the U.S. (7.8 acres)
- Survey Area (410.3 acres)

N

S

0 725 1,450

Feet

esri Partner Network Silver

Baton Rouge Area Chamber

Baton Rouge, Louisiana

West Feliciana Industrial Park

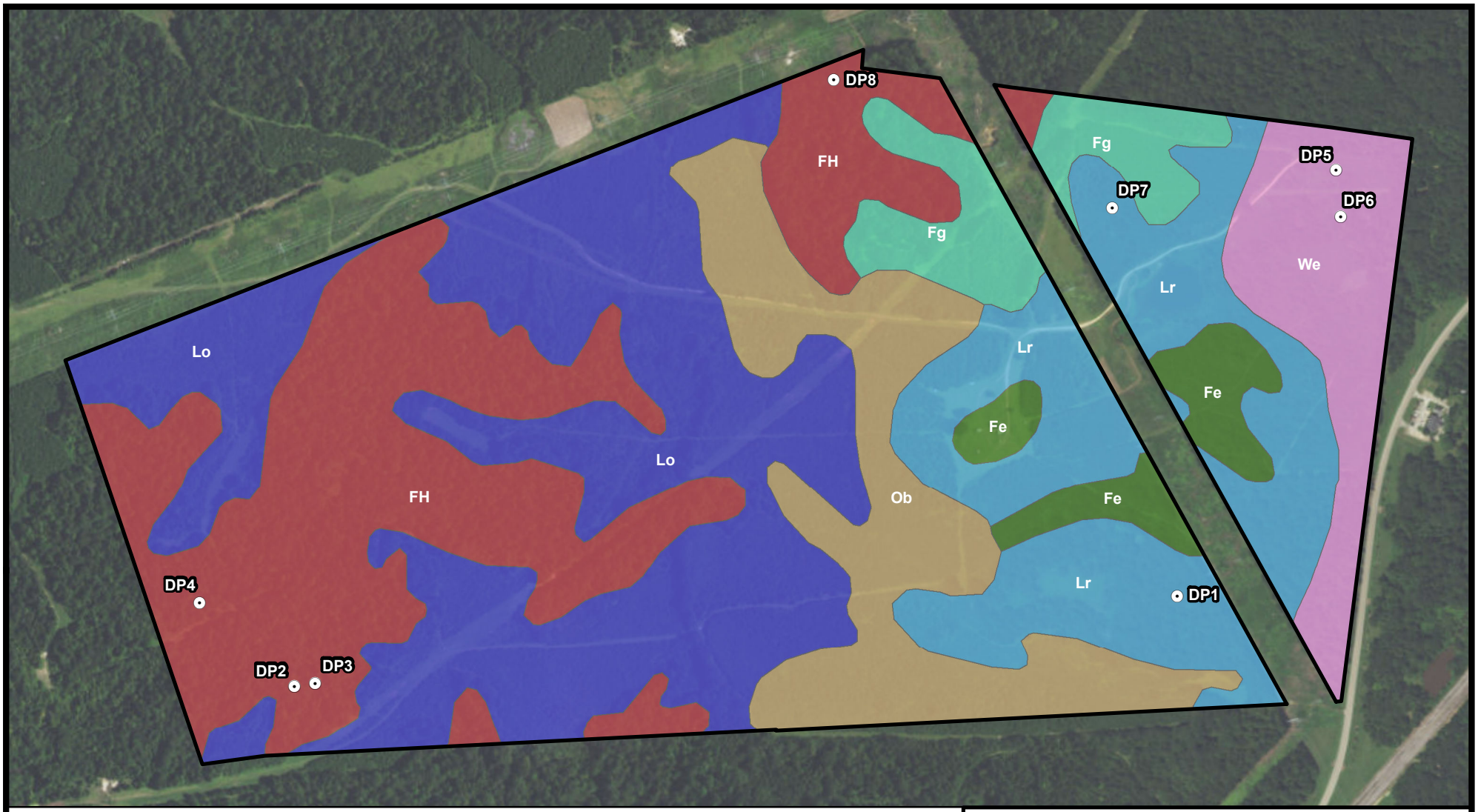
Wetland Map

West Feliciana Parish

CK Associates Environmental Consultants

Drawn:	CPL/AM10.4
Checked:	CMP
Approved:	TEW
Date:	02/27/2017
Dwg. No.:	A14281-07

Figure 3



West Feliciana Parish

0 725

Feet

Legend

Data Point

Survey Area (410.3 acres)

Published Soils

- FH - Feliciana and Natchez silt loams, 8 to 60 percent slopes
- Fe - Feliciana silt loam, 1 to 3 percent slopes
- Fg - Feliciana silt loam, 3 to 8 percent slopes
- Lo - Loring silt loam, 1 to 3 percent slopes
- Lr - Loring silt loam, 3 to 8 percent slopes
- Ob - Olivier silt loam, 1 to 3 percent slopes
- We - Weyanoke silt, 1 to 3 percent slopes

N

S

1) Background is 2015 NAIP imagery; West Feliciana Parish, LA.
2) Soil data from USDA NRCS Soil Survey Geographic (SSURGO) database for West Feliciana Parish, LA.

esri Partner Network Silver

Baton Rouge Area Chamber
Baton Rouge, Louisiana

West Feliciana Industrial Park

Published Soils Map

West Feliciana Parish

CK Associates Environmental Consultants

Drawn:	CPL/AM10.4
Checked:	CMP
Approved:	TEW
Date:	02/27/2017
Dwg. No.:	A14281-08

Figure 4

APPENDIX A
Wetland Determination Data Forms
&
Site Photographs

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 11/18/2016

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP1

Investigator(s): Kale Wetekamm | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'1.567"N | Long: 91°18'43.227"W | Datum: NAD83

Soil Map Unit Name: Loring Silt Loam - 3-8% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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	**Is the Sampled Area within a Wetland?** **Yes**
Hydric soil present? Yes	
Indicators of wetland hydrology present? Yes	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- [X] Surface Water (A1)
- [ ] High Water Table (A2)
- [X] Saturation (A3)
- [ ] Water Marks (B1)
- [X] Sediment Deposits (B2)
- [X] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [X] 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)
- [X] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Moss Trim Lines (B16)
- [X] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [X] 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**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: Yes (2>0)

VEGETATION -- Use scientific names of plants. Sampling Point: DP

Tree Stratum (Plot size: 30 feet)		Absolute % Cover	Dominant Species	Indicator Staus
1	*Carya aquatica*	50	Y	OBL
2	*Platanus occidentalis*	30	Y	FACW
3	*Liquidambar styraciflua*	25	Y	FAC
4	*Quercus nigra*	20	N	FAC
5				
6				
7				
8				
		125	= Total Cover	
	50% of total cover: 62.5	20% of total cover:	25	

Sapling/Shrub Stratum (Plot size: 30 feet)				
1	*Ligustrum sinense*	25	Y	FAC
2				
3				
4				
5				
6				
7				
8				
		25	= Total Cover	
	50% of total cover: 12.5	20% of total cover:	5	

Herb stratum (Plot size: 30 feet)				
1	*Ligustrum sinense*	2	N	FAC
2	*Fraxinus pennsylvanica*	1	N	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		3	= Total Cover	
	50% of total cover: 1.5	20% of total cover:	0.6	

Woody vine stratum (Plot size: 30 feet)				
1				
2				
3				
4				
5				
		0	= Total Cover	
	50% of total cover: 0	20% of total cover:	0	

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: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-3	10YR 7/1	100					Sand	
3-6	GLEY1 5/5GY	75	GLEY1 5/10GY	25	RM	M	Clay	
6-16	10YR 5/1	100					Clay Loam	

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- X 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)**
- ___ Loamy Mucky Mineral (F1)
- X 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP1 facing north taken 11/18/2016

Vegetation at DP1 facing east taken 11/18/2016

Vegetation at DP1 facing south taken 11/18/2016

Vegetation at DP1 facing west taken 11/18/2016

Soil profile at DP1 taken 11/18/2016

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 11/22/2016

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP2

Investigator(s): Christina Perez | Section, Township, Range: T4S, R2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°42'57.638"N | Long: 91°19'35.125"W | Datum: NAD83

Soil Map Unit Name: Feliciana & Natchez Silt Loam - 8-60% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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	**Is the Sampled Area within a Wetland?** **No**
Hydric soil present?	No	
Indicators of wetland hydrology present?	No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ 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? **No**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: No (0<3)

VEGETATION -- Use scientific names of plants. Sampling Point: DP2

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Carya glabra*	50	Y	FACU
2 *Liquidambar styraciflua*	20	Y	FAC
3			
4			
5			
6			
7			
8			
	70	= Total Cover	
50% of total cover: 35	20% of total cover: 14		

Sapling/Shrub Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Asimina triloba*	25	Y	FAC
2 *Prunus caroliniana*	25	Y	FACU
3			
4			
5			
6			
7			
8			
	50	= Total Cover	
50% of total cover: 25	20% of total cover: 10		

Herb stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Lonicera japonica*	15	Y	FAC
2 *Prunus caroliniana*	5	Y	FACU
3 *Ligustrum sinense*	2	N	FAC
4			
5			
6			
7			
8			
9			
10			
11			
12			
	22	= Total Cover	
50% of total cover: 11	20% of total cover: 4.4		

Woody vine stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Vitis rotundifolia*	35	Y	FAC
2 *Lygodium japonicum*	5	N	FAC
3			
4			
5			
	40	= Total Cover	
50% of total cover: 20	20% of total cover: 8		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 57.14% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 4/4	100					Fine Silt-Sand	

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **No**

Remarks:

Vegetation at DP2 facing north taken 11/21/2017

Vegetation at DP2 facing east taken 11/21/2017

Vegetation at DP2 facing south taken 11/21/2017

Vegetation at DP2 facing west taken 11/21/2017

Soil profile at DP2 taken 11/21/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 11/22/2016

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP3

Investigator(s): Christina Perez | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'15.275"N | Long: 91°19'29.733"W | Datum: NAD83

Soil Map Unit Name: Feliciana & Natchez Silt Loam - 8-60% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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 Hydric soil present? Yes Indicators of wetland hydrology present? Yes	**Is the Sampled Area within a Wetland?** **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X 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**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: Yes (2>1)

VEGETATION -- Use scientific names of plants. Sampling Point: DP3

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Platanus occidentalis*	20	Y	FACW
2 *Liquidambar styraciflua*	20	Y	FAC
3 *Acer rubrum*	10	N	FAC
4 *Carya glabra*	5	N	FACU
5			
6			
7			
8			
	55	= Total Cover	
50% of total cover: 27.5	20% of total cover:	11	

Sapling/Shrub Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Ligustrum sinense*	15	Y	FAC
2 *Quercus nigra*	10	Y	FAC
3 *Sambucus racemosa*	5	N	FACU
4			
5			
6			
7			
8			
	30	= Total Cover	
50% of total cover: 15	20% of total cover:	6	

Herb stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Panicum hemitomon*	30	Y	OBL
2 *Pteridium aquilinum*	10	Y	FACU
3 *Sambucus racemosa*	5	N	FACU
4 *Lonicera japonica*	5	N	FAC
5			
6			
7			
8			
9			
10			
11			
12			
	50	= Total Cover	
50% of total cover: 25	20% of total cover:	10	

Woody vine stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Lygodium japonicum*	15	Y	FAC
2			
3			
4			
5			
	15	= Total Cover	
50% of total cover: 7.5	20% of total cover:	3	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 85.71% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals	(A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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 (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 5/2	85	10YR5/6	15	C	M	Fine Silt-Sand	

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP3 facing north taken 11/21/2017

Vegetation at DP3 facing east taken 11/21/2017

Vegetation at DP3 facing south taken 11/21/2017

Vegetation at DP3 facing west taken 11/21/2017

Soil profile at DP3 taken 11/21/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 11/22/2016

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP4

Investigator(s): Christina Perez | Section, Township, Range: T4S, R2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'1.854"N | Long: 91°19'40.331"W | Datum: NAD83

Soil Map Unit Name: Feliciana & Natchez Silt Loam - 8-60% slope | NWI Classification: L1UBH

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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	**Is the Sampled Area within a Wetland?** **Yes**
Hydric soil present? Yes	
Indicators of wetland hydrology present? Yes	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X 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**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: Yes (3>1)

VEGETATION -- Use scientific names of plants. Sampling Point: DP4

Tree Stratum (Plot size: 30 feet)		Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer negundo*	40	Y	FAC
2	*Triadica sebifera*	20	Y	FAC
3	*Platanus occidentalis*	10	N	FACW
4				
5				
6				
7				
8				
		70	= Total Cover	
	50% of total cover: 35	20% of total cover:	14	

Sapling/Shrub Stratum (Plot size: 30 feet)				
1	*Ligustrum sinense*	5	Y	FAC
2	*Triadica sebifera*	5	Y	FAC
3	*Sambucus nigra*	5	Y	FACW
4	*Acer negundo*	5	Y	FAC
5				
6				
7				
8				
		20	= Total Cover	
	50% of total cover: 10	20% of total cover:	4	

Herb stratum (Plot size: 30 feet)				
1	*Potentilla indica*	35	Y	FACU
2	*Phyllanthus urinaria*	35	Y	FAC
3	*Persicaria hydropiperoides*	20	Y	OBL
4				
5				
6				
7				
8				
9				
10				
11				
12				
		90	= Total Cover	
	50% of total cover: 45	20% of total cover:	18	

Woody vine stratum (Plot size: 30 feet)				
1				
2				
3				
4				
5				
		0	= Total Cover	
	50% of total cover: 0	20% of total cover:	0	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across all Strata: 9 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 88.89% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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 (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 6/2	75	10YR 5/8	25	C	PL	Fine silt-sand	

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP4 facing north taken 11/22/2017

Vegetation at DP4 facing east taken 11/22/2017

Vegetation at DP4 facing south taken 11/22/2017

Vegetation at DP4 facing west taken 11/22/2017

Soil profile at DP4 taken 11/22/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 2/17/2017

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP5

Investigator(s): Christina Perez, Autry Akins | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'23.134"N | Long: 91°18'33.626"W | Datum: NAD83

Soil Map Unit Name: Weyanoke Silt - 1-3% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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 Hydric soil present? No Indicators of wetland hydrology present? Yes	**Is the Sampled Area within a Wetland?** **No**

Remarks:

Drainage patterns attributed to sheet flow

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X 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**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: Yes (1>0)

VEGETATION -- Use scientific names of plants. Sampling Point: DP5

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Liquidambar styraciflua*	15	Y	FAC
2 *Platanus occidentalis*	5	Y	FACW
3 *Pinus taeda*	5	Y	FAC
4			
5			
6			
7			
8			
	25	= Total Cover	
50% of total cover: 12.5	20% of total cover: 5		

Sapling/Shrub Stratum (Plot size: 30 feet)			
1 *Liquidambar styraciflua*	30	Y	FAC
2			
3			
4			
5			
6			
7			
8			
	30	= Total Cover	
50% of total cover: 15	20% of total cover: 6		

Herb stratum (Plot size: 30 feet)			
1 *Viola sororia*	30	Y	FAC
2 *Allium canadense*	5	N	FACU
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
	35	= Total Cover	
50% of total cover: 17.5	20% of total cover: 7		

Woody vine stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
	0	= Total Cover	
50% of total cover: 0	20% of total cover: 0		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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 (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10YR 5/4	100					Clay Loam	
10-16	10YR 5/4	90	10YR 3/2	4	C		Clay Loam	
			10YR3/6	6	C			

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **No**

Remarks:

Vegetation at DP5 facing north taken 2/17/2017

Vegetation at DP5 facing east taken 2/17/2017

Vegetation at DP5 facing south taken 2/17/2017

Vegetation at DP5 facing west taken 2/17/2017

Soil profile at DP5 taken 2/17/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 2/17/2017

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP6

Investigator(s): Christina Perez, Autry Akins | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'20.504"N | Long: 91°18'33.577"W | Datum: NAD83

Soil Map Unit Name: Weyanoke Silt - 1-3% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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 Hydric soil present? Yes Indicators of wetland hydrology present? Yes	**Is the Sampled Area within a Wetland?** **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- X 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	X	No	___	Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: No (0<1)

VEGETATION -- Use scientific names of plants. Sampling Point: DP6

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Liquidambar styraciflua*	20	Y	FAC
2			
3			
4			
5			
6			
7			
8			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 4		

Sapling/Shrub Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Liquidambar styraciflua*	15	Y	FAC
2 *Quercus nigra*	5	Y	FAC
3 *Ligustrum sinense*	5	Y	FAC
4			
5			
6			
7			
8			
	25 = Total Cover		
50% of total cover: 12.5	20% of total cover: 5		

Herb stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Rubus argutus*	15	Y	FAC
2 *Potentilla indica*	15	Y	FACU
3 *Mikania scandens*	5	N	FACW
4 *Campsis radicans*	5	N	FAC
5 *Persicaria punctata*	5	N	OBL
6 *Packera glabella*	2	N	OBL
7 *Juncus effusus*	2	N	OBL
8 *Viola sororia*	2	N	FAC
9			
10			
11			
12			
	51 = Total Cover		
50% of total cover: 25.5	20% of total cover: 10.2		

Woody vine stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 83.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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

SOIL Sampling Point: DP6

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 5/2	70	10YR 3/6	30	C	M	Clay Loam	

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP6 facing north taken 2/17/2017

Vegetation at DP6 facing east taken 2/17/2017

Vegetation at DP6 facing south taken 2/17/2017

Vegetation at DP6 facing west taken 2/17/2017

Soil profile at DP6 taken 2/17/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 2/20/2017

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP7

Investigator(s): Christina Perez, Autry Akins | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'21.293"N | Long: 91°18'46.878"W | Datum: NAD83

Soil Map Unit Name: Loring Silt Loam - 3-8% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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 Hydric soil present? Yes Indicators of wetland hydrology present? Yes	**Is the Sampled Area within a Wetland?** **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X 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)
- X 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X 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	X	No	___	Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: Yes (1>0)

VEGETATION -- Use scientific names of plants. Sampling Point: DP7

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Quercus texana*	30	Y	FACW
2 *Ulmus americana*	10	Y	FAC
3 *Quercus nigra*	5	N	FAC
4			
5			
6			
7			
8			
	45	= Total Cover	
50% of total cover: 22.5	20% of total cover: 9		

Sapling/Shrub Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Ligustrum sinense*	20	Y	FAC
2			
3			
4			
5			
6			
7			
8			
	20	= Total Cover	
50% of total cover: 10	20% of total cover: 4		

Herb stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Ligustrum sinense*	15	Y	FAC
2 *Rubus argutus*	2	N	FAC
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
	17	= Total Cover	
50% of total cover: 8.5	20% of total cover: 3.4		

Woody vine stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Campsis radicans*	10	Y	FAC
2			
3			
4			
5			
	10	= Total Cover	
50% of total cover: 5	20% of total cover: 2		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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

SOIL Sampling Point: DP7

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10YR 5/2	60	10YR 3/6	20	C	PL		
			10YR 3/4	20	C	M		
10-16	10YR 5/2	70	10YR 3/6	30	C	M		

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

Hydric Soil Indicators:

- ___ Histisol (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)**
- ___ Loamy Mucky Mineral (F1)
- ___ 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)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP7 facing north taken 2/20/2017

Vegetation at DP7 facing east taken 2/20/2017

Vegetation at DP7 facing south taken 2/20/2017

Vegetation at DP7 facing west taken 2/20/2017

Soil profile at DP7 taken 2/20/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: West Feliciana Industrial Park Site | City/County: St.Francisville/W. Feliciana | Sampling Date: 2/20/2017

Applicant/Owner: Baton Rouge Area Chamber | State: Louisiana | Sampling Point: DP8

Investigator(s): Christina Perez, Autry Akins | Section, Township, Range: Section 43, Township 4S, Range 2W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):

Subregion (LRR or MLRA): 131A | Lat: 30°43'27.787"N | Long: 91°19'2.886"W | Datum: NAD83

Soil Map Unit Name: Feliciana & Natchez Silt Loam - 8-60% slope | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

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 Hydric soil present? Yes Indicators of wetland hydrology present? Yes	**Is the Sampled Area within a Wetland? Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- X 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)
- X 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- X 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	X	No	___	Depth (inches): 9

Wetland Hydrology Present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FAC-Neutral Test: No (0<1)

VEGETATION -- Use scientific names of plants. Sampling Point: DP8

Tree Stratum (Plot size: 30 feet)		Absolute % Cover	Dominant Species	Indicator Staus
1	*Carpinus caroliniana*	20	Y	FAC
2	*Ulmus americana*	15	Y	FAC
3				
4				
5				
6				
7				
8				
		35	= Total Cover	
	50% of total cover: 17.5	20% of total cover:	7	

Sapling/Shrub Stratum (Plot size: 30 feet)				
1	*Ligustrum sinense*	15	Y	FAC
2	*Ostrya virginiana*	5	Y	FACU
3	*Carpinus caroliniana*	5	Y	FAC
4				
5				
6				
7				
8				
		25	= Total Cover	
	50% of total cover: 12.5	20% of total cover:	5	

Herb stratum (Plot size: 30 feet)				
1	*Ligustrum sinense*	10	Y	FAC
2	*Persicaria virginiana*	5	Y	FAC
3	*Viola sororia*	5	Y	FAC
4				
5				
6				
7				
8				
9				
10				
11				
12				
		20	= Total Cover	
	50% of total cover: 10	20% of total cover:	4	

Woody vine stratum (Plot size: 30 feet)				
1				
2				
3				
4				
5				
		0	= Total Cover	
	50% of total cover: 0	20% of total cover:	0	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across all Strata: 8 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 87.50% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals		(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] Rapid test for hydrophytic vegetation
- [X] Dominance test is >50%
- [ ] Prevalence index is ≤3.0*
- [ ] Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

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Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

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

SOIL Sampling Point: DP8

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 5/2	60	10YR4/4	40	C	M	Silt Clay	

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

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- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

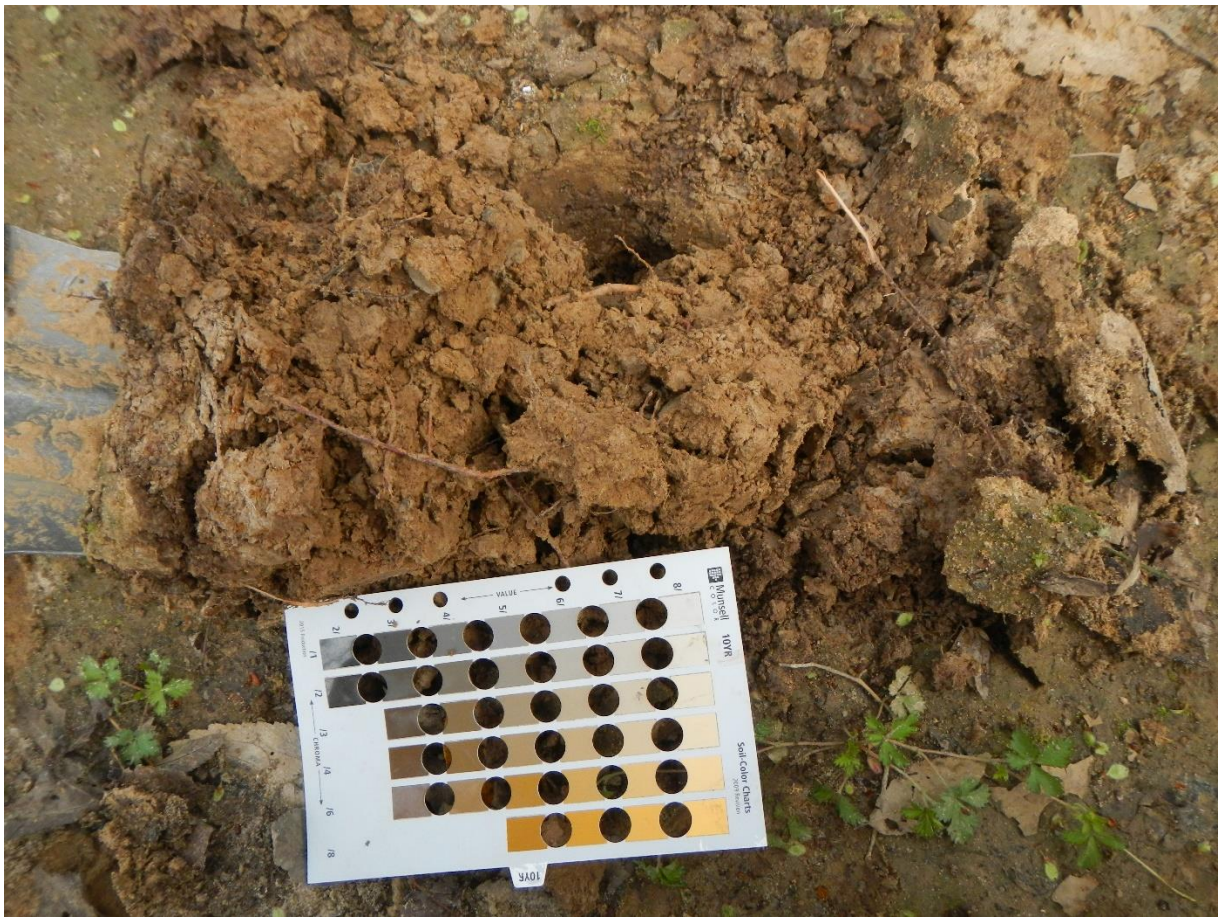
Remarks:

Vegetation at DP8 facing north taken 2/20/2017

Vegetation at DP8 facing east taken 2/20/2017

Vegetation at DP8 facing south taken 2/20/2017

Vegetation at DP8 facing west taken 2/20/2017



Soil profile at DP8 taken 2/20/2017

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118-3651

August 5, 2016

REPLY TO
ATTENTION OF
Operations Division
Surveillance and Enforcement Section

Ms. Jessica Keasler
Terracon Consultants
2822-B O'Neal Lane
Baton Rouge, Louisiana 70816

West Feliciana Industrial Park Site Wetlands Delineation Report

Dear Ms. Keasler:

Reference is made to your request, on behalf of the West Feliciana Department of Public Works, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Section 43, Township 4 South, Range 2 West, West Feliciana Parish, Louisiana (enclosed map). Specifically, this property is identified as TEMBEC Tracts off of LA-964 consisting of two tracts totaling approximately 107 acres along the Mississippi River.

A field inspection of the property was conducted on July 12, 2016. Based on the results of this investigation, we have determined that part of the property is wetland and may be subject to Corps' jurisdiction. The approximate limits of the wetland are designated in red on the map. A Department of the Army (DA) permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the United States. Additionally, a DA permit will be required if you propose to deposit dredged or fill material into other waters subject to Corps' jurisdiction. Other waters that may be subject to Corps' jurisdiction are indicated in blue on the map.

You and your client are advised that this preliminary jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Should there be any questions concerning these matters, please contact at (504) 862-2275 and reference our Account No. MVN-2015-02447-SY. If you have specific questions regarding the permit process or permit applications, please contact our Central Evaluation Section at (504) 862-1581.

Sincerely,

for Martin S. Mayer
Chief, Regulatory Branch

Enclosures

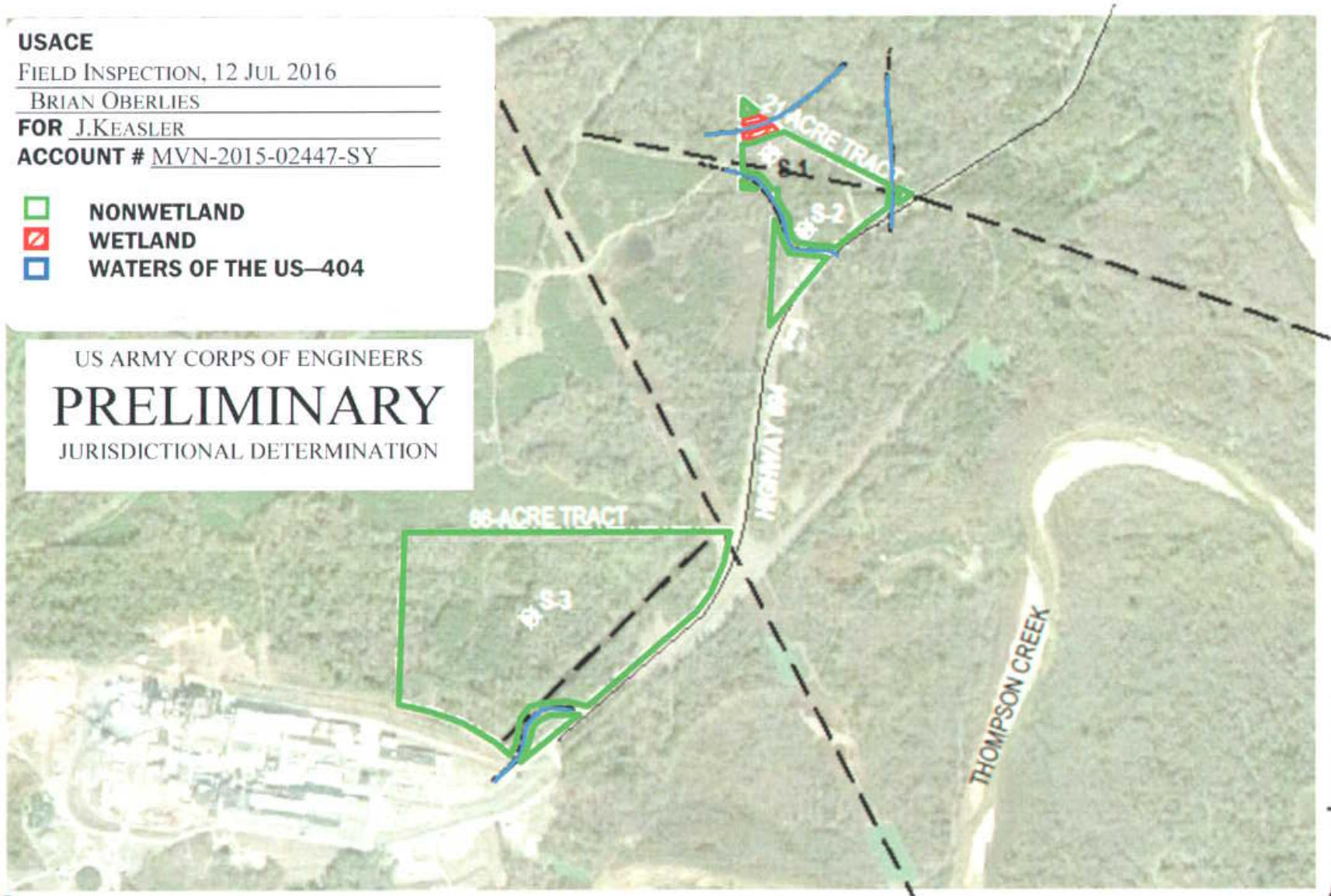
USACE
FIELD INSPECTION, 12 JUL 2016
BRIAN OBERLIES
FOR J.KEASLER
ACCOUNT # MVN-2015-02447-SY

- **NONWETLAND**
- **WETLAND**
- **WATERS OF THE US—404**

US ARMY CORPS OF ENGINEERS

PRELIMINARY

JURISDICTIONAL DETERMINATION



NOT TO SCALE

LEGEND

- SITE
- TRANSMISSION (RIGHT OF WAY)
- DITCH/WOUS
- SAMPLE POINT LOCATION

JRK	EH157123
TLY	AS SHOWN
JRK/MRF	
JRK	AUGUST 2016

Terracon
Consulting Engineers and Scientists

SITE DIAGRAM
WETLAND DELINEATION
TEMBEC TRACTS
LA HIGHWAY 954
ST. FRANCISVILLE, WEST FELICIANA PARRISH, LA

EXHIBIT
2

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office: New Orleans District | File/ORM #: MVN-2015-02447-SY | PJD Date: Aug 4, 2016

State: LA | City/County: West Feliciana Parish

Nearest Waterbody: Thompson Creek

Location: TRS, LatLong or UTM: Sec. 43, T4S, R2W
30.724 N -91.309 W

Name/ Address of Person Requesting PJD:
Ms. Jessica Keasler
Terracon Consultants
2822-B O'Neal Lane
Baton Rouge, Louisiana 70816

Identify (Estimate) Amount of Waters in the Review Area:

Non-Wetland Waters: 500 linear ft | width | acres | Stream Flow: Intermittent

Wetlands: ~0.2 acre(s) | Cowardin Class: Palustrine, forested

Name of Any Water Bodies on the Site Identified as Section 10 Waters: Tidal: | Non-Tidal:

☐ Office (Desk) Determination
☑ Field Determination | Date of Field Trip: Jul 12, 2016

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below)

- ☑ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- ☑ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☐ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps
- ☐ Corps navigable waters' study:
- ☑ U.S. Geological Survey Hydrologic Atlas:
  - ☐ USGS NHD data.
  - ☑ USGS 8 and 12 digit HUC maps.
- ☑ U.S. Geological Survey map(s). Cite quad name: 1 24k Port Hudson
- ☑ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS web soil survey
- ☐ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is:
- ☑ Photographs: ☑ Aerial (Name & Date): 98, 04, 05, 08, 10
  - ☐ Other (Name & Date):
- ☑ Previous determination(s). File no. and date of response letter: 2012-00211-SG 2/24/2012
- ☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

OBERLIES.BRIAN.MC INNIS.1230779739

Digitally signed by OBERLIES.BRIAN.MC.INNIS.1230779739
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=OBERLIES.BRIAN.MC.INNIS.1230779739
Date: 2016.08.04 08:28:57 -05'00'

Signature and Date of Regulatory Project Manager (REQUIRED)

Requested by agent 13 NOV 2015

Signature and Date of Person Requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: West Feliciana Dept. of Public Works	File Number: MVN-2015-02447-SY	Date: AUG 05 2016
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
✓	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Rob Heffner (504-862-1288)
Chief, Surveillance & Enforcement Section
U.S. Army Corps of Engineers
P.O. Box 60627
New Orleans, LA 70160

If you only have questions regarding the appeal process you may also contact:

Administrative Appeals Review Officer
Mississippi Valley Division
P.O. Box 80 (1400 Walnut Street)
Vicksburg, MS 39181-0080
601-634-5820 FAX: 601-634-5816

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

October 27, 2015

Mr. Jim Ferguson, P.E.
West Feliciana Department of Public Works
5935 Commerce Street
Saint Francisville, Louisiana 707755

Telephone: (225) 635-3864
Email: JFerguson@wfparish.org

West Feliciana Industrial Park Site Wetlands Delineation Report

RE: Preliminary Waters of the U.S. Assessment Report
Approximately 107 Acres of Land
TEMBEC Tracts
Highway 964
Saint Francisville, West Feliciana Parish, Louisiana
Terracon Project No. EH157123

Dear Mr. Ferguson:

Terracon is pleased to submit this Preliminary Waters of the U.S. (WOUS) Delineation report addressing federal Clean Water Act (CWA) compliance requirements as they may affect the above referenced project, in accordance with our proposal (Terracon Proposal Number PEH150392) dated August 14, 2014. The preliminary WOUS delineation was performed on approximately 107 acres of land.

The project site consist of two undeveloped tracts of land. The northern tract is identified as 21 acres, and the southern tract is identified as 86 acres. Based on the results of the delineation, Terracon did not observe wetland habitat or jurisdictional waters on either tract.

The Environmental Protection Agency (EPA) has the ultimate authority for official jurisdictional determinations; however, authority has been delegated to the USACE to give an approved jurisdictional determination (AJD) on potential WOUS. If an AJD is desired, a WOUS delineation would need to be submitted to the USACE New Orleans District. The USACE can be reached at the following address:

United States Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160

Terracon would be pleased to assist you in performing a wetland delineation, requesting an AJD independent of a permit application, and/or the preparation of a CWA Permit Application, and wetland or WOUS mitigation plans that may be required if jurisdictional wetland or WOUS impacts are anticipated and a permit or mitigation plan are deemed necessary by the USACE.

Terracon appreciated the opportunity to have worked for you on this project. Please feel free to contact either of the undersigned if you have any questions or require additional information.

Sincerely,
Terracon Consultants, Inc.

Jessica Keasler
Environmental Scientist

Ginger Horn
Natural Resources Manager

Enclosure

Preliminary Waters of the U.S. Assessment

107 Acres of Land
TEMBEC Tracts
Highway 964
Saint Francisville, West Feliciana Parish, Louisiana

October 2015

Terracon Project No. EH157123

Prepared for:
West Feliciana Department of Public Works
Saint Francisville, Louisiana

Prepared by:
Terracon Consultants, Inc.
Baton Rouge, Louisiana

TABLE OF CONTENTS

Page

APPENDICES

Preliminary Waters of the U.S. Delineation
TEMBEC Tracts
107 Acres – Highway 964
Saint Francisville, West Feliciana Parish, Louisiana
Terracon Project No. EH157123
October 2015

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) was retained by West Feliciana Department of Public Works (client) to perform a preliminary Waters of the U.S. (WOUS) delineation, in accordance with our proposal (Terracon Proposal Number PEH150392) dated August 14, 2015, on approximately 107 acres of wooded land located west of Highway 964 in Saint Francisville, West Feliciana Parish, Louisiana hereafter referred to as the project site. The project site can be seen on *Exhibits 1 and 2* in *Appendix A*.

The project site consists predominately of mixed pine and hardwood forest with sparse understory. The site, is two separate tracts, a northern tract consisting of 21 acres, and a southern tract consisting of 86 acres. Both tracts were located along Highway 964. The surrounding properties included undeveloped wooded land, KPAQ paper mill adjacent to the southwest of the 86-acre tract, and a bank across Highway 964 from the 21-acre tract.

The purpose of performing the preliminary WOUS assessment was to characterize the existing site conditions, observe the site for the presence of suspect WOUS, including wetlands, and provide an opinion regarding whether or not suspect WOUS (if observed) would be considered jurisdictional by the U.S. Army Corps of Engineers (USACE).

2.0 SCOPE OF SERVICES

Terracon performed the following scope of work:

- Reviewed topographical, National Wetlands Inventory and aerial photograph resources to assist with identifying suspect WOUS and wetland areas at the project site.
- Mobilized to the site to conduct the preliminary site visit.
- Prepared a map showing different vegetative communities and locations of suspect WOUS, including wetlands, if any.
- Completed a Preliminary WOUS Delineation Report that included site characterization information, a discussion of applicable data, and recommendations for the site.

3.0 PRELIMINARY DATA GATHERING AND ANALYSIS

Prior to performing the site visit, several map and aerial photograph resources were reviewed to assist with identifying suspect WOUS, including wetlands, at the project site. Each source of data is described in detail below.

3.1 Topographic Map

The United States Department of the Interior Geologic Survey (USGS) 7.5-Minute Topographic Map dated 1954, 1963, and 2014 (Port Hudson, LA Quadrangle) of the project site was reviewed to identify drainages or suspect WOUS within the project site. The topographic maps depict the site elevation to range from 75-100 feet above mean sea level. A structure is depicted on the 21-acre along with roadways in the 1954 and 1963 maps. The remainder of the tracts, including the 86-acre tract were depicted as undeveloped with roads throughout in all maps. The adjacent industrial facility to the south was depicted in 1963 and 2014. The USGS map does not show other apparent drainages or suspect WOUS occurring on the project site.

3.2 National Wetlands Inventory Map

The National Wetlands Inventory (NWI) Map of the project site was reviewed to identify suspect wetland areas. The map for the project site was published by the U.S. Department of the Interior's Fish and Wildlife Service (USFWS) and depicts suspect wetland areas based on stereoscopic analysis of high altitude aerial photographs. A NWI map is included as *Exhibit 3.0* in *Appendix A*.

The review of the NWI map indicates no wetlands or waters on-site. The nearest wetland habitat is located east of the site along Thompson Creek, approximately 1,500 feet from the site. This wetland habitat is classified primarily as forested broad-leaved deciduous, temporarily flooded. A small pond was depicted approximately 900 feet west of the 21-acre tract, and indicated to be unconsolidated bottom, permanently flooded.

3.3 Soil Survey

Data from the soil survey of West Feliciana Parish, Louisiana the U.S. Department of Agriculture (USDA) soil data mart, and the Natural Resources Conservation Service (NRCS) web soil survey was reviewed to identify soil types, including hydric soils. Hydric soil is one of the three essential characteristics of a wetland according to the USACE. Data for the soil survey was compiled by the USDA Soil Conservation Service, now known as the NRCS, in 1997. A soil survey map is included as *Exhibit 4.0* in *Appendix A*.

The following soil types were identified within the project area on the soil survey map:

- Morganfield - This series consists of deep, well drained, moderately permeable, nearly level soils that formed in thick silty alluvium. These soils are on flood plains and upland drainageways in the Southern Mississippi Valley Silty Uplands Major Land Resource Area. Slopes range from 0 to 2 percent.
- Bigbee – This series consists of very deep, excessively drained, rapidly permeable soils are on natural levees and higher positions in flood plains along stream flood plains in the Southern Coastal Plain (MLRA 133A) and the Eastern Gulf Coast Flatwoods (MLRA 152A).
- Weyanoke – This series consists of well drained soils that formed in silty alluvium of Holocene age. These soils are on slightly convex ridges on local stream terraces along floodplains in the Southern Mississippi Valley Silty Uplands. Slopes range from 0 to 3 percent.
- Feliciana – This series consists of very deep, well drained, moderately permeable soil in the Southern Mississippi Valley Loess Major Land Resource Area (MLRA 134). They formed in Peoria loess deposits more than 48 inches in thickness that overly terraces and uplands of the Southern Coastal Plain. Slopes range from 0 to 40 percent.
- Natchez – This series consists of deep, well drained soils that formed in thick deposits of loess. Permeability is moderate, and runoff is rapid to very rapid. These strongly sloping to very steep soils are on hillsides in the highly dissected bluff hills section of the Southern Mississippi Silty Uplands that border the alluvial plains of the Mississippi River and its tributaries. Slope ranges from 12 to 60 percent.
- Loring – This series consists of moderately well drained soils with a fragipan. These soils formed in loess on level to strongly sloping uplands and stream terraces. Slopes range from 0 to 20 percent.
- Olivier – This series consists of somewhat poorly drained, slowly permeable soils that formed in loess. These soils have a brittle fragipan in the lower part of the subsoil. They are on terraces of Pleistocene age. Slopes range from 0 to 5 percent.

Morganfield and Bigbee, Feliciana, Loring, and Olivier series were listed on the 2014 Hydric Soils list for West Feliciana Parish. Weyanoke and Natchez series were not listed as hydric.

3.4 Aerial Photographs

Terracon reviewed aerial photographs to review suspect wetland areas and waters that may be present on the project site. Aerial photographs were available for 1998, 2004, and 2014. The project site appears to consist of undeveloped wooded land and remained relatively unchanged. The adjacent roadway, transmission line right-of-way, and commercial/industrial facilities were present in all photographs.

4.0 FIELD TECHNIQUES

Terracon personnel conducted a site visit on August 31, 2015 to characterize the existing site conditions and identify the presence of potential jurisdictional wetlands and waters, if any. Characteristics of potential jurisdictional wetlands and waters were assessed (when applicable) utilizing the criteria detailed in Sections 4.1 and 4.2 of this report. The evaluation methods generally followed the routine on-site determination method referenced in the 1987 USACE Manual and the 2010 Atlantic and Gulf Coast Plain Regional Supplement.

4.1 Wetland Observations

The USACE defines "wetlands" as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33CFR 328.3b). Wetlands generally have three essential characteristics: hydrophytic (wetland vegetation), hydric soils, and wetland hydrology. During the site delineation, Terracon personnel traversed the project site and did not observe any wetland areas. Vegetation and hydrology observations were performed throughout the site, and where access permitted, soils were also evaluated to determine if wetland characteristics were present. Data regarding the three essential characteristics was gathered within observed suspect wetland areas. Prior to the site visit, suspect wetland areas were identified within the project site boundaries on the NWI map.

4.1.1 Plant Community Assessment

Suspect areas were visually observed to determine the species, when possible, and absolute percentage of ground cover for four stata of plant community types. Herbs were generally observed within a 5-foot radius, shrubs/samplings within a 15-foot radius, and trees and woody vines within a 30-foot radius of the sampling point.

For each species of vegetation observed, wetland indicator status was evaluated. The indicator status was determined using the USACE National Wetlands Plant List (NWPL) version 3.2. The NWPL can be found at http://wetland_plants.usace.army.mil. Indicator categories for vegetation are listed below:

- Obligate Wetland (OBL) – occur almost always (estimated probability greater than 99%) under natural conditions in wetlands.
- Facultative Wetland (FACW) – usually occur in wetlands (estimated probability 67-99%) but occasionally found in non-wetlands.
- Facultative (FAC) – equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%).
- Obligate Upland (UPL) – rarely occur in wetlands, but occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

The percent cover of each stratum was determined and dominance was evaluated. Dominant species were the most abundant species that accounted for more than 20 percent of the absolute percent coverage of the stratum. The number of dominant species with an indicator status of OBL, FACW, and/or FAC was compared to the total number of dominant species across all strata. Typically, when more than 50 percent of the dominant species had an indicator status of OBL, FACW, and/or FAC, hydrophytic vegetation was present.

If the percentage of dominant species with an indicator status of OBL, FACW, and/or FAC was less than 50 percent, prevalence index and morphological adaptations may have been evaluated to confirm if hydrophytic vegetation was present or absent.

4.1.2 Hydric Soils

After Terracon evaluated wetland vegetation, subsurface soil samples were collected. The samples were collected to a depth of approximately 16 inches below ground surface (or until rock was encountered) and were visually compared to Munsell Soil Color Charts which aided in the evaluation of hydric soil characteristics. The soil samples were further examined for hydric soil indicators including, but not limited to, histosol, thick dark surface, sandy gleyed matrix, sandy redox, loamy gleyed matrix, redox dark surface, and/or redox depressions. If these or other hydric soil indicators were observed in the subsurface soil sample, the observation location was considered to have hydric soil.

4.1.3 Wetland Hydrology

Visual indicators of wetland hydrology were evaluated. Examples of primary wetland hydrology indicators include, but are not limited to surface water, high water table, soil saturation, water marks, sediment deposits, drift deposits, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, and water-stained leaves. If at least one primary or two secondary indicators were observed, the observation location was considered to have wetland hydrology.

4.1.4 Classification of Wetlands

Upon completion of the review of the three wetland criteria at each sampling point, a wetland determination was made. Under normal circumstances, if one or more of the wetland criteria were not identified, the area was not considered to be a wetland. Additional observations were made throughout the wetland area to define the wetland/non-wetland boundary, which was mapped with global positioning systems (GPS) technology. Vegetation, soil and hydrology assessment data from at least one sampling point location within each suspect wetland areas were recorded on a USACE Wetland Determination Data Form. The recorded data forms for each sampling point can be found in Appendix B.

4.2 WOUS Observations

Terracon also made observations of site features that may be considered a jurisdictional waterbody or WOUS. Potentially jurisdictional non-wetland WOUS were generally evaluated based on the following characteristics:

- Flow regime
  - Perennial – flowing water year-round during a typical year
  - Intermittent – flowing water during certain times of the year (groundwater supports streamflow)
  - Ephemeral – flowing water for a short duration during and after a precipitation event (groundwater is not a source for streamflow)
- OHWM – The limit line established by fluctuation of a water surface
- Bank shape
  - Undercut – banks overhang the channel
  - Steep – bank slope greater than 30 degrees
  - Gradual – bank slope equal to or less than 30 degrees
- Aquatic Habitat
  - Pool – deep portion of stream where water flows slower
  - Riffle – shallow portion of stream with swift flow over rock or coarse substrate producing turbulence on the surface
  - Run -- section of stream with little or no turbulence on the surface

5.0 FIELD OBSERVATIONS AND RESULTS

On August 21, 2015, Terracon performed field observations on the project site and did not identify WOUS on-site. The sample point locations are illustrated on Exhibit 2 in Appendix A, and site photographs are included in Appendix C. Descriptions of the observed features are provided in the following sections.

The site was primarily wooded, varying from a mixed pine & hardwood to hardwood dominant species. Along Highway 964 and within the transmission right-of-way, the vegetation was maintained by periodic cutting and consisted of herbaceous species. Dominant vegetation species included longleaf pine (*Pinus palustris*), Chinese privet (*Ligustrum sinense*), sweetgum (*Liquidambar styraciflua*), ash-leafed maple (*Acer negundo*), American elm (*Ulmus Americana)*, Japanese climbing fern (*Lygodium japonica*) and cinnamon fern (*Osmundastrum connamorneum*). No hydrology features were observed on-site. Soils consisted of pale brown to brown with some light gray to yellowish brown to terminal depths of 18-20 inches below ground surface. The soil profiles were not characteristic of hydric soils.

During the site visit, Terracon personnel traversed the project site and observed areas that are typically indicative of being classified as upland areas. Terracon sampled and assessed all areas

that represented different vegetative communities throughout the project site to thororughly review if these areas may exhibit the three wetland criteria (hydrophytic vegetation, hydric soils and hydrology). All of the sample locations were found to be classified as upland based on the three wetland criteria not being met.

6.0 CONCLUSIONS AND RECOMMENDATIONS

A preliminary WOUS delineation of approximately 107 acres of land located on two TEMBEC tracts off of Highway 964 in St. Francisville, West Feliciana Parish, Lousiana was conducted. A review of the site utilizing readily available information including, but not limited to, topographic, aerial, and suspect wetland data. In addition, a preliminary site visit was performed to characterize the existing site conditions and observe the site for suspect WOUS, included wetlands (if any). Based on this information, Terracon did not identify any WOUS. It should be noted that the EPA has the ultimate authority for official jurisdictional determinations; however, authority has been delegated to the USACE to give an AJD on potential WOUS.

To confirm the conclusions reached in this assessment and thereby eliminate any concern regarding inadvertent impacts to jurisdictional waters, an official AJD can be requested from the USACE; however, this is not mandated by law. AJDs are made by the USACE, in conjunction with the EPA, on a case-by-case basis in accordance with internal policies and procedures in place at the time and using information at its disposal that may not be readily available to the public.

Further action options for obtaining USACE regulatory concurrence or approvals for West Feliciana (client) include:

1. Submit a copy of the preliminary WOUS delineation report to the USACE and request official review and an AJD or a preliminary jurisdictional determination (PJD). This could include coordination with the EPA. It is Terracon's experience that the current USACE timeframe for internal processing of AJD requests is an estimated 6-9 months for the New Orleans District and 4-6 months for a PJD.

Terracon would be pleased to assist you in request of verification of the determination of a AJD or PJD.

7.0 GENERAL COMMENTS

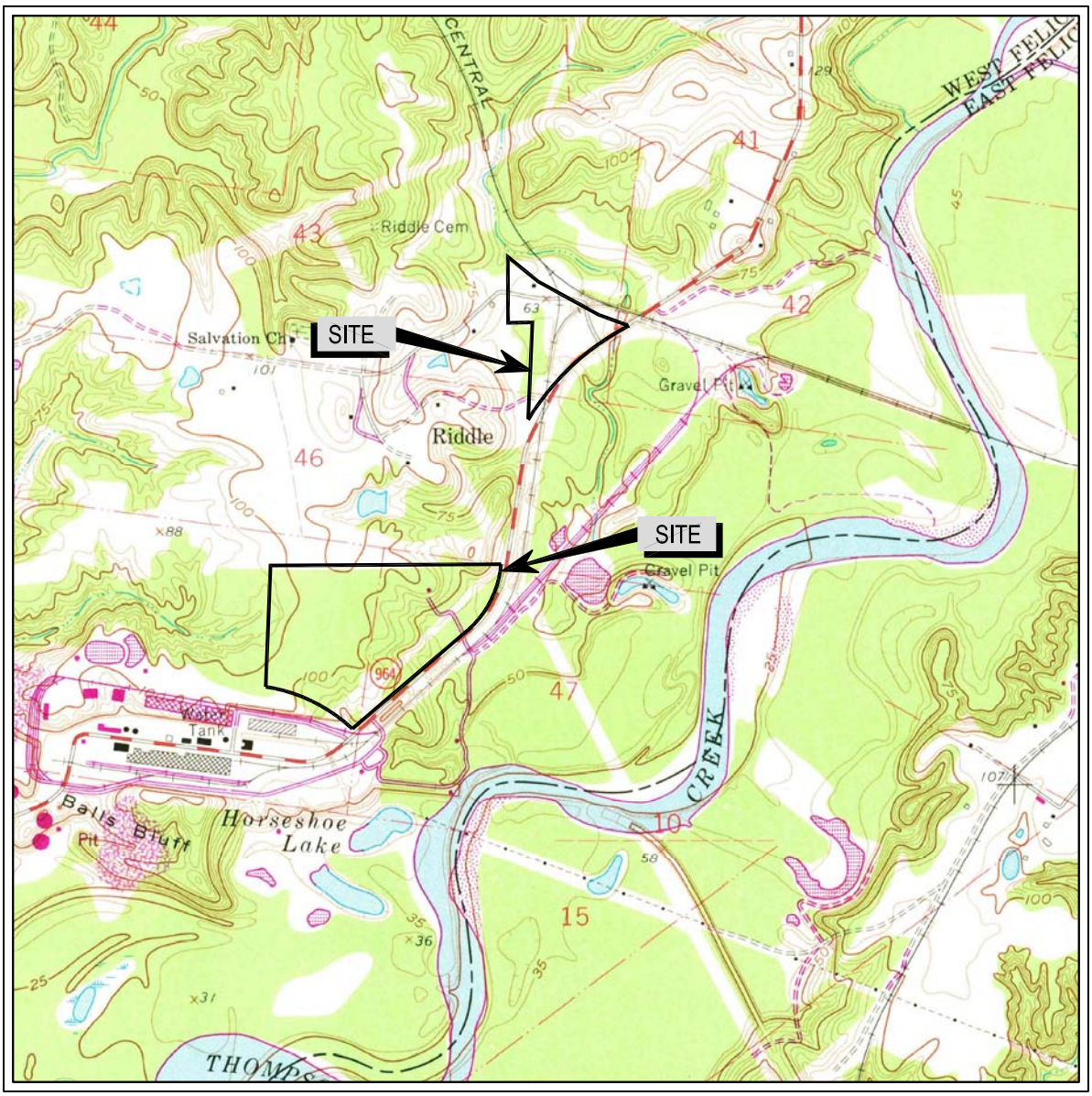
The limited WOUS assessment was performed in accordance with generally accepted practices of this profession undertaken in similar studies at the same time and in the same geographical area. A limited WOUS assessment, such as the one performed at this site, is of limited scope, is noninvasive, and cannot eliminate the potential that wetlands or WOUS are present at the site

beyond what is identified by the limited scope of this limited assessment. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. No biological assessment can wholly eliminate uncertainty regarding the potential for concerns in connection with a project. The limitations of this limited assessment should be recognized.

This report has been prepared in accordance with generally accepted scientific and engineering evaluation practices. This report has been prepared for the exclusive use of West Feliciana Parish (client) for the project being discussed. No warranties, either expressed or implied, are intended or made.

APPENDIX A
Exhibits

UNITED STATES – DEPARTMENT OF THE INTERIOR – GEOLOGICAL SURVEY



SCALE 1:24 000

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

1 .5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

FEET

CONTOUR INTERVAL 5 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

PORT HUDSON, LA
1963
PR1980
7.5 MINUTE SERIES (TOPOGRAPHIC)

*INDICATES WHICH MAP SITE IS LOCATED ON

Project Mngr: JRK	Project No. EH157123	Terracon Consulting Engineers and Scientists	TOPOGRAPHIC VICINITY MAP
Drawn By: TLY	Scale: AS SHOWN	2822-B O'Neal Lane, Building B Baton Rouge, LA 70816	WETLAND DELINEATION
Checked By: JRK/MRF	File No. WDEH157123-1	(225) 344-6052 (225) 344-6346	TEMBEC TRACTS
Approved By: JRK	Date: OCTOBER 2015		LA HIGHWAY 964
			ST. FRANCISVILLE, WEST FELICIANA COUNTY, LA

EXHIBIT 1

NOT TO SCALE

LEGEND

- SITE
- TRANSMISSION (RIGHT OF WAY)
- SAMPLE POINT LOCATION

Project Mngr:	JRK
Drawn By:	TLY
Checked By:	JRK/MRF
Approved By:	JRK

Project No.	EH157123
Scale:	AS SHOWN
File No.	WDEH157123-2
Date:	OCTOBER 2015

Terracon
Consulting Engineers and Scientists
2822-B O'Neal Lane, Building B Baton Rouge, LA 70816
(225) 344-6052 (225) 344-6346

SITE DIAGRAM

WETLAND DELINEATION
TEMBEC TRACTS
LA HIGHWAY 964
ST. FRANCISVILLE, WEST FELICIANA PARRISH, LA

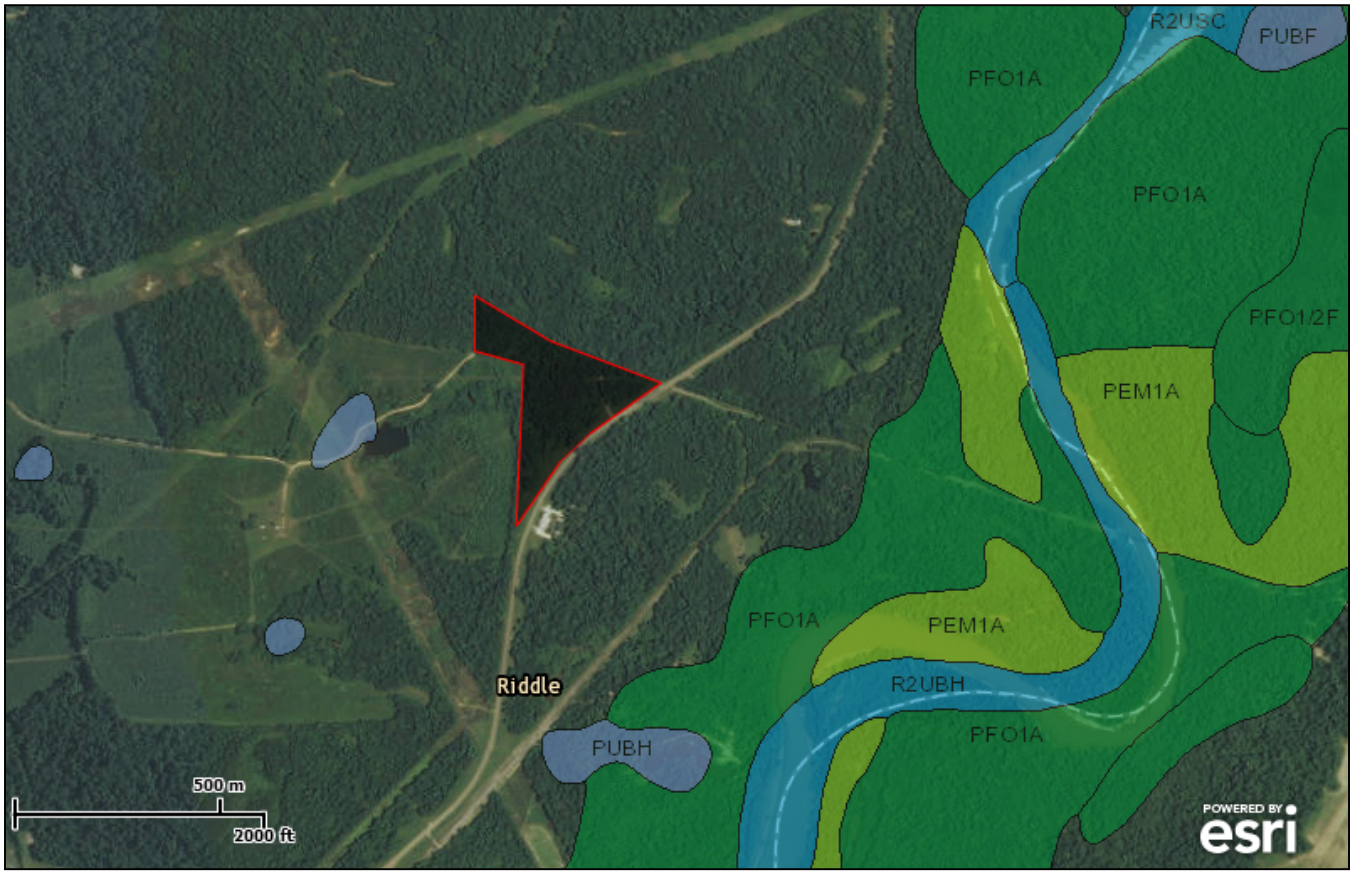
EXHIBIT 2

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

U.S. Fish and Wildlife Service
National Wetlands Inventory

Exhibit 3

Oct 21, 2015



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks:

21-Acre Tract

U.S. Fish and Wildlife Service

National Wetlands Inventory

21-Acre Tract

Oct 19, 2015

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks:

Tembec Tracts

Soil Map—West Feliciana Parish, Louisiana
(86-Acre Tract)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: West Feliciana Parish, Louisiana
Survey Area Data: Version 7, Mar 17, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

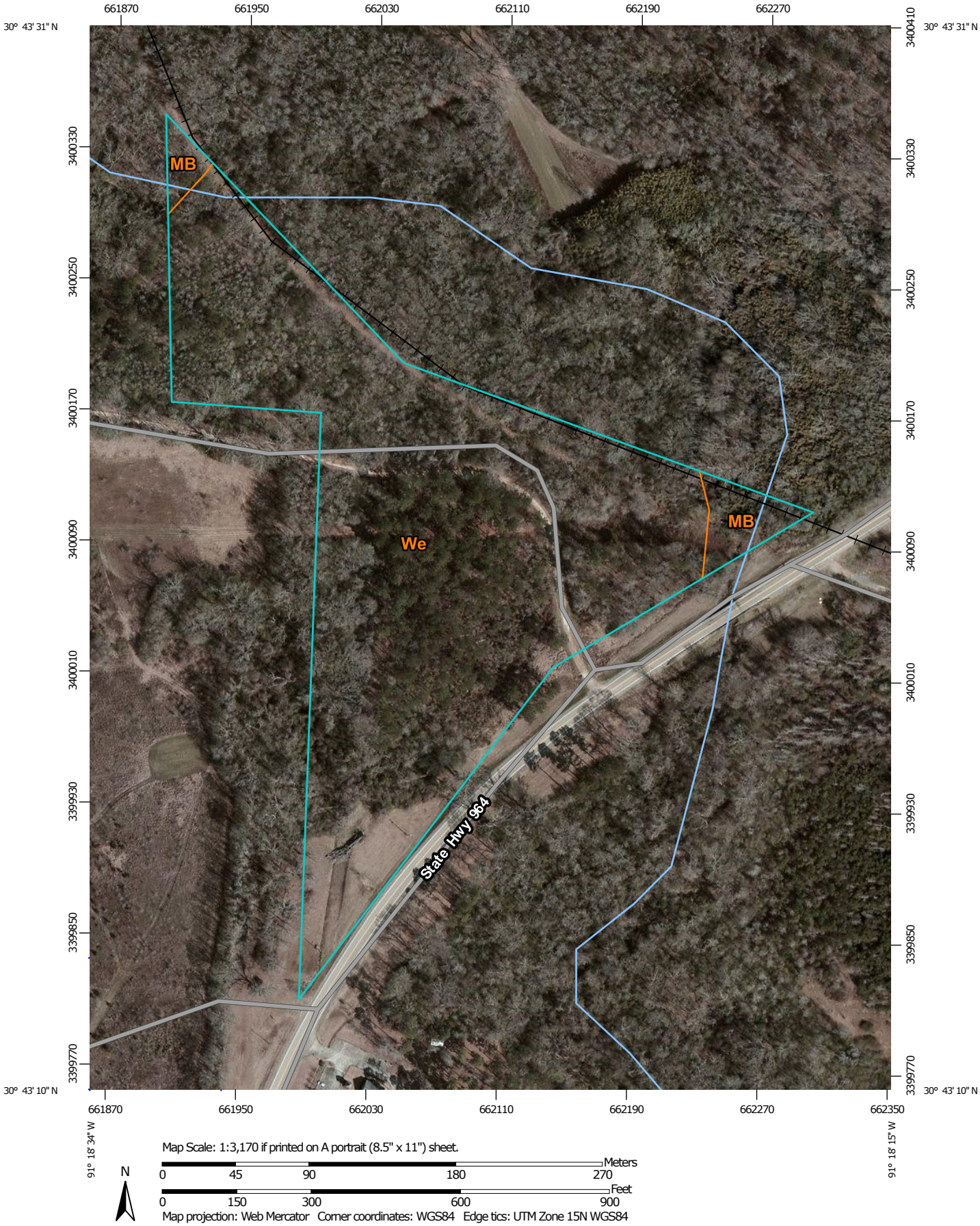
Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

West Feliciana Parish, Louisiana (LA125)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
FH	Feliciana and Natchez silt loams, 8 to 60 percent slopes	9.6	12.9%
Lo	Loring silt loam, 1 to 3 percent slopes	0.9	1.2%
Lr	Loring silt loam, 3 to 8 percent slopes	48.6	65.4%
Ob	Olivier silt loam, 1 to 3 percent slopes	12.3	16.6%
UB	Urban land	0.1	0.1%
We	Weyanoke silt, 1 to 3 percent slopes	2.9	3.9%
Totals for Area of Interest		**74.3**	**100.0%**

Soil Map—West Feliciana Parish, Louisiana
(21-Acre Tract)



Map Scale: 1:3,170 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

West Feliciana Parish, Louisiana (LA125)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
MB	Morganfield and Bigbee soils, frequently flooded	0.7	4.5%
We	Weyanoke silt, 1 to 3 percent slopes	15.6	95.5%
Totals for Area of Interest		**16.4**	**100.0%**

APPENDIX B
Data Forms

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Tembec Tracts - 21&86 Acre City/County: West Feliciana Sampling Date: 8-31-15

Applicant/Owner: West Feliciana Dept. Public Works State: LA Sampling Point: 1

Investigator(s): J. Keasler Section, Township, Range: 43 T04S R02W

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): none

Subregion (LRR or MLRA): LRR P 134 Lat: 30.724153 Long: 91.3093059 Datum: 84

Soil Map Unit Name: Weyanoke silt NWI classification: None

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 along 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: 1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. longleaf pine (Pinus palustris)	25	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size:)			
1. Chinese privet (Ligustrum sinense)	30	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size:)			
1. Japanese climbing fern (Lygodium japonicum)	15	Y	FAC
2. witch hazel (Hamamelis virginiana)	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20 = Total Cover		

50% of total cover: 10 20% of total cover: 4

Woody Vine Stratum (Plot size:)			
1. laurel-leaf greenbrier (Smilax laurifolia)	5	Y	FACW
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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

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 X No _____

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

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 6/3	100					loam	
3-10	10YR 6/1	80	10YR 6/4	20			sicl	
10-16	10YR 7/1	85	10YR 5/3	15			sicl	
16-18	10YR 7/1	65	10YR 3/6	30			sicl	
			10YR 5/6	5				

[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)**
- ☐ 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 Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Tembec Tracts - 21&86 Acre City/County: West Feliciana Sampling Date: 8-31-15

Applicant/Owner: West Feliciana Dept. Public Works State: LA Sampling Point: 2

Investigator(s): J. Keasler Section, Township, Range: 43 T04S R02W

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): none

Subregion (LRR or MLRA): LRR P 134 Lat: 30.722191 Long: 91.307417 Datum: 84

Soil Map Unit Name: Weyanoke silt NWI classification: None

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 along 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: 2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. longleaf pine (Pinus palustris)	20	Y	FAC
2. sweet gum (Liquidambar styraciflua)	10	Y	FAC
3. sycamore (Platanus occidentalis)	5	N	FACW
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size:)			
1. Chinese privet (Ligustrum sinense)	30	Y	FAC
2. sweetgum (Liquidambar styraciflua)	15	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size:)			
1. Japanese climbing fern (Lygodium japonicum)	15	N	FAC
2. cinnamon fern (Osmundastrum cinnamorneum)	50	Y	FACW
3. Virginia creeper (Parthenoccisus quinquefolia)	5	N	FACU
4. poison oak (Toxicodendron pubescens)	5	N	FACU
5. beauty berry (Callicarpa americana)	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		

50% of total cover: 40 20% of total cover: 16

Woody Vine Stratum (Plot size:)			
1. muscadine (Vitis rotundifolia)	2	Y	FAC
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: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

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 X No _____

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

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/2	100					loam	
2-18	7.5YR 4/4	100					sicl	

[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)**
- ☐ 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 Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Tembec Tracts - 21&86 Acre City/County: West Feliciana Sampling Date: 8-31-15

Applicant/Owner: West Feliciana Dept. Public Works State: LA Sampling Point: 3

Investigator(s): J. Keasler Section, Township, Range: 48 T04S R02W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): none

Subregion (LRR or MLRA): LRR P 134 Lat: 30.713819 Long: 91.31421 Datum: 84

Soil Map Unit Name: Loring, silt loam NWI classification: None

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 along 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: 3

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. elm (Ulmus americana)	15	Y	FAC
2. ash-leaf maple (Acer negundo)	15	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size:)			
1. Chinese privet (Ligustrum sinense)	30	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size:)			
1. poison oak (Toxicodendron pubescens)	5	Y	FACU
2. peppervine (Ampelopsis arborea)	3	Y	FAC
3. beauty berry (Callicarpa americana)	5	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	13 = Total Cover		

50% of total cover: 6.5 20% of total cover: 2.6

Woody Vine Stratum (Plot size:)			
1. muscadine (Vitis rotundifolia)	5	Y	FAC
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: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

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 X No _____

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

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5 7/3	95	10YR 6/8	5			loam	
6-20	2.5Y 8/1	20	10YR 6/8	5			sicl	
	2.5Y 7/3	70	Mn nodes					

[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)**
- ☐ 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 Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

APPENDIX C
Site Photographs

Photo 1 Typical view of mixed pine-hardwood forest.

Photo 2 Soil profile from Sampling Point 1.

Photo 3 Typical view of understory in wooded area.

Photo 4 Soil profile from Sampling Point 2.

Photo 5 Typical view of hardwood dominant area.

Photo 6 View of landscaped area along Highway 964.

Photo 7 Typical view of forested area.

Photo 8 Soil profile from Sampling Point 3.

Photo 9 View of maintained transmission right-of-way.

APPENDIX D
Credentials

JESSICA KEASLER, M.S.
ENVIRONMENTAL SCIENTIST

PROFESSIONAL EXPERIENCE

Ms. Keasler is an experienced environmental services professional having obtained an Environmental Science degrees from Louisiana State University and the University of Alabama. While with Terracon, Ms. Keasler has performed various environmental consulting services including Environmental Site Assessments (ESA), National Environmental Policy Act (NEPA) assessments, permitting, risk-based assessments and remediation. Ms. Keasler has been responsible for project management, project setup, field investigations, development of sampling plans, analytical data review and summary, regulatory interaction, report preparation and Geographical Information System (GIS) map production.

Ms. Keasler meets the qualifications of an Environmental Professional as defined by EPA's AAI. She has performed all aspects of Phase I ESA's including site reconnaissance and report preparation for sites throughout the Southeast. The ESAs have ranged from parcels of land less than an acre to 100 or more acres. Clients for these projects have consisted on lending institutions, site owners, potential buyers and land developers. Typical sites included vacant land in metropolitan areas for future development, and developed sites planned for property transfer or redevelopment. Activities of Phase II ESAs have included identification of potential contaminants, preparation and execution of work plans and sampling and analytical plans. Phase II activities also included review of data in comparison to the regulatory standards.

Ms. Keasler has experience in subsurface investigations for soil and groundwater. She has assisted in all phases of soil and groundwater sample collection, preservation and shipping. She has assisted in environmental drilling, piezometer installation, and monitor well installation and sampling. Ms. Keasler has conducted RECAP evaluations involving identifying Areas of Concern (AOC) and Areas of Investigation (AOI), comparing results to the Screening Standards and various Management Options. These evaluations have included determination of groundwater usage, and application to the Domenico Model. Ms. Keasler has also been involved with preparing corrective action plans and overseeing remedial action for various sites.

Ms. Keasler's experience with the National Environmental Policy Act (NEPA) has ranged from assessing specific components such as Threatened and Endangered Species or wetlands, to NEPA compliance Checklists, to Environmental Assessments. These assessments have been conducted in accordance with various scopes for the lead agency, including USACE, FEMA, GSA, HUD and FCC; in addition to the NEPA regulations by the CEQ. The identification of the potential impact related to the following compliance factors: endangered species, floodplains, cultural resources, Native American tribal land, noise, air, natural resources, prime and unique farmland, wetlands, and socioeconomic condition.

Ms. Keasler has become proficient in not only identifying the potential impact to/from these compliance factors relating to the proposed projects,

Education

Master of Science
Environmental Studies with Planning and Management and Wetland Science and Management, Louisiana State University
2006

Bachelor of Science
Environmental Science
University of Alabama
2004

Certifications

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response - 40 Hour & 8-hour refresher

Transportation Worker Identification Credential (TWIC)

Affiliations

Louisiana Brownfields Association

American Planning Association
LA Capitol Section Director 2014-2015; Treasurer, 2012-2013

Louisiana Water Environment Association
Secretary, 2013-2015

Air and Waste Management Association

Society of Wetland Scientists

Work History

Terracon Consultants, Inc.
2009 – Present

Aquaterra Engineering, LLC
2006 - 2009

but in many instances has excelled in quantifying the impacts. Noise and Air Quality have become two areas in which Ms. Keasler has amassed a great deal of experience in Louisiana. In addition to quantifying the potential impacts to/from these resources, she has assisted in finding solutions to reduce or mitigate impacts. In many cases, modeling and regulatory agency communication has been essential to Ms. Keasler's successful completion of these NEPA studies. Beyond regulatory consultation, Ms. Keasler has been involved with the Public Outreach components, which have included soliciting views, issuing public notice documents, and most importantly, satisfactorily responding to public and regulatory comments.

Ms. Keasler has been formally trained to conduct all aspects of wetland determinations, delineations, permitting and mitigation. Ms. Keasler is familiar with the USACE regulatory divisions, and remains current with the Gulf Coast Regional Supplements and regulatory changes. Ms. Keasler has been involved with wetland projects for a range of project types including pipeline relocations, new developments, permit renewals, communications towers, roadway alignments, and waterway crossings. These projects have been located throughout Louisiana and the Mississippi-Alabama gulf coast. Ms. Keasler's experience with wetland habitats has ranged from coastal marshes, to bottomland hardwoods, to riverine fringe wetlands. USACE consultation and permitting have been an integral part of many of the wetland delineation projects Ms. Keasler has completed, and has included obtaining nationwide and individual permits. Through the permitting process, Ms. Keasler has prepared avoidance and minimization plans, mitigation plans, and has assisted her clients through Mitigation Banking. Ms. Keasler is familiar with the WRAP, Charleston and HGM methods for assessing wetland functions. Ms. Keasler has also conducted numerous Informal Biological Assessments for communications towers which included identifying habitat types, wildlife communities present, and potential for listed species.

PROJECT EXPERIENCE

Commercial

Ruffino's Restaurant | Baton Rouge, Louisiana

Ms. Keasler conducted a Phase I ESA under a short timeframe for a restaurant manager and chef interested in taking ownership of Ruffino's Restaurant and the property it is located on. The site reconnaissance was conducted while the restaurant was not open for business, in order to minimize disruption to customers and alleviate limitations. In addition to the site reconnaissance and interviews with knowledgeable people, historical records and regulatory data were reviewed. Terracon identified no Recognized Environmental Conditions (REC) and indicated no further investigation was warranted.

Mid-City Redevelopment │ New Orleans, Louisiana

Ms. Keasler served as the project manager for the Phase I ESA and subsequent subsurface investigations for the four city-block property located in Mid-City New Orleans. Three of the four block had been vacant since Hurricane Katrina, and included a car dealership, retail shopping strip center and a daiquiri shop. The initial Phase I ESA identified a drycleaner facility and former gas station on-site, and historical industrial uses of the entire property. An initial limited site investigation consisted of 17 borings/temporary monitor wells, and identified two areas of concern requiring further assessment and remediation. A contaminant plume in the soils was identified from the drycleaning facility, and a Risk Evaluation/Corrective Action Program (RECAP) investigation and report was completed. The future use of the area played an important role in this facility receiving a No Further Action Designation from LDEQ. The underground storage tanks (USTs) were suspected at the former gas station, and recommended for removal. During the removal activities, a total of 11 USTs were discovered under the former building. Subsequently, a RECAP investigation was conducted which recommended no further action.

Colonial and Hospital Apartments │ Baton Rouge, Louisiana

Ms. Keasler served as the project manager for the environmental assessments for these apartment complexes. Terracon was retained to assist in obtaining environmental clearance for the redevelopment of two public housing apartment complexes located in Baton Rouge. The redevelopment projects would be receiving funding from the Department of Housing and Urban Development (HUD), and therefore were subject to HUD's environmental review procedures. The HUD Environmental Assessment was required. A

Phase I Environmental Site Assessment (ESA) for the site in accordance with ASTM 1527-05 and the EPA's All Appropriate Inquiry was also performed. The Phase I ESA identified historic drycleaners and gas station in the vicinity of the site, and recommended a subsurface investigation. The Limited Site Investigation (LSI) included installation of soil borings and temporary monitor wells and collection of soil and groundwater samples. The results of the LSI indicated no evidence of impact from these sources.

Sazerac Facility│ Jefferson, Louisiana

Ms. Keasler conducted a Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation / Corrective Action Program (RECAP) Evaluation for the Sazerac Distribution facility. Aquaterra Engineering (A Terracon Co.) previously conducted a Phase I ESA and Limited Site Investigation (LSI), which identified petroleum hydrocarbons in the subsurface above the regulatory limits. Due to the pending property transaction, Terracon's client was interested in obtaining a letter of No Further Action (NFA). Terracon installed four additional soil borings and temporary monitoring wells to further delineate the contaminants and provide usable data under RECAP. The additional field investigation and RECAP Evaluation Report were completed within four weeks and submitted to LDEQ. LDEQ provided a NFA letter within the client's timeframe for the pending transaction.

Parcel 3 │East Baton Rouge Parish, Louisiana

Ms. Keasler conducted a wetland delineation on a 37.5-acre tract of land located in the vicinity of Manchac Bayou. A portion of the site was previously developed with a residential structure and utilized for agriculture. During the site reconnaissance, Terracon identified and documented dominant vegetation species and types, as well as all hydrologic evidence, and examined the soil profile to an approximate depth of 16 inches below ground surface. As a deliverable, Ms. Keasler provided a delineation report which identified the different wetland habitats and upland areas, and was suitable for submission to the US Army Corps of Engineers with a Jurisdictional Determination request.

Industrial

Asphalt Facility Permitting │ Amite and Mermentau, Louisiana

Ms. Keasler assisted the client with air permitting services for two Asphalt Production Facilities in Louisiana. Both facilities are considered portable, and had proposed changes. In each case, Ms. Keasler reviewed the existing active permits with the Louisiana Department of Environmental Quality (LDEQ) for compliance. Based on the proposed actions, relocation, changes in equipment, and change in fuel source; Ms. Keasler compiled the required permit modification application. Modeling of anticipated emissions was required for the change in fuel source from diesel to natural gas.

Elder Wood Preserving│ Mansura, Louisiana

As the project manager for the Phase I ESA and subsequent Limited Site Investigation (LSI), Ms. Keasler conducted the site visit for the 19-acre tract of land developed with the Elder Wood Preserving, Co. The historical review identified this facility has operated at this site since 1976, and had expanded to the current 19-acre size in 2002. Based on the historical use of hazardous wastes, chemicals and petroleum products during the operation of this facility, a subsurface investigation was recommended. The scope of the LSI included installation of 13 soil borings and 2 temporary monitor wells. One soil sample was collected from each boring in addition to 5 surface soil background samples and 1 surface soil sample from the retention pond. Based on the analytical results, Terracon concluded that the on-site operations did not adversely impact the subsurface soils on-site.

Peters Road Site │ Harvey, Louisiana

Ms. Keasler served as the project manager for the Phase I & II ESA of an industrial facility. The site encompassed 14 acres separated onto three parcels by the adjacent streets, and included 19 buildings. The Phase I ESA identified numerous Recognized Environmental Conditions (RECs) with each parcel relating to the previous uses of site. The Phase II ESA consisted of the installation of 36 soil borings and temporary monitor wells in addition to sampling existing monitoring wells and a ground-penetrating radar survey. Based on a review of the data, seven areas of concern were identified to require further assessment. Ms. Keasler

assisted the client in developing a preliminary corrective action plan for the areas to estimate the overall cost for environmental clean-up.

Municipal / Federal Funded

2,367-Acre Tract | Livingston Parish, Louisiana

Ms. Keasler conducted a Phase I ESA for Livingston Parish prior to the acquisition of a 2,367-tract of undeveloped bottomland hardwood swamp under the Coastal Impact Assistance Program (CIAP). The property was located northwest of the Blind River outlet into Lake Maurepas. Ms. Keasler traversed the majority of the site via boat and airboat and identified some inaccessible areas as limitations.

New Orleans Neighborhood Development Collaborative (NONDC) │ New Orleans, Louisiana

Ms. Keasler managed the contract with NONDC to provide Tier II Housing and Urban Development (HUD) Environmental Review Record (ERR) checklists under the Neighborhood Stabilization Program 2 (NSP2). To date, Terracon has completed Tier II ERR's for 17 properties, which included a mixture of Acquisition, Demolition, Rehabilitation and New Development checklists. Floodplain management, toxics and hazardous, noise, cultural resources, and airport clear zones are some of the compliance factors investigation for the completion of the ERRs. Under this contract Terracon anticipates being released on up to 20 additional sites before the end of funding in February 2013.

Sorrento Community Center │Ascension Parish, Louisiana

Ms. Keasler served as the project manager for the Environmental Assessment for the proposed Community Center to be built in Sorrento under the Ascension Parish's Disaster-Community Development Block Grant funds. The proposed community center was to be located on a site of which portions were located within the 100-year floodplain and contained wetland habitat. As a result, HUD's 8-step process was also completed, which included additional public notices requesting community and agency comment as well as a more in-depth analysis of impacts to/from the floodplain and wetland. Ms. Keasler assisted Ascension Parish in locating the facility outside of wetland habitat, based on preliminary wetland delineation.

Oakwood Terrace Subdivision │ Baton Rouge, Louisiana

Ms. Keasler served as the project manager for the environmental consulting services for the proposed Oakwood Terrace Subdivision to be located in Baton Rouge, Louisiana. Environmental Clearance activities in accordance with the Housing and Urban Development (HUD) environmental review procedures were required in order to obtain tax credit incentives from the Louisiana Housing Authority. It was determined that an Environmental Assessment would be required as the HUD level of Environmental Review, due to the new development proposed. Terracon performed an Environmental Assessment in accordance with 24 CFR Part 58. Terracon performed a Phase I Environmental Site Assessment (ESA) for the site in accordance with ASTM 1527-05 and the EPA's All Appropriate Inquiry. A wetland delineation was performed by others, and Terracon reviewed the Jurisdictional Determination issued by the United States Army Corps of Engineers, to determine the impact from the proposed development. In addition to the review of the wetland documents and Phase I ESA, published resources including maps, lists and other documents were reviewed to determine the impact to the other compliance factors. Where applicable, Terracon consulted with governing agencies such as the State Historic Preservation Officer, Fish and Wildlife, and the EPA, to determine impact.

New Fire Station │ Grosse Tete, Louisiana

Ms. Keasler served as the project manager for the Phase I ESA and FEMA Environmental Assessment for the new fire station development project. As a grant recipient for the construction of a new fire station, an Environmental Assessment was required by FEMA for the project. Terracon was retained by the architect to complete the Environmental Assessment, which included such compliance factors as historic buildings, floodplain, natural resources, streams, threatened and endangered species, socioeconomic factors and air quality. Due to the fire station development occurring in Iberville Parish, a non-attainment parish for air quality, emissions modeling from the construction and post-construction phases were required to show a negligible impact on air quality. The Environmental Assessment was finalized for public review after being reviewed by

FEMA. The Phase I ESA was conducted in accordance with ASTM 1527-05 and the AAI, on the proposed property prior to acquisition by the Town of Grosse Tete, as the chosen location of the new Fire Station.

Transportation and Utilities

TV Tower Road Bridge over Bayou Serpent │ Jefferson Davis Parish, Louisiana

Ms. Keasler served as the project manager for wetland delineation for the bridge replacement project. The replacement included a construction area extending approximately 100 feet from the existing bridge on all four sides of the bridge. The delineation identified the wetland habitat within the construction area, and also delineated the Bayou and it's tributaries within the Right-of-Way. Based on the delineation, a Nationwide Permit for Linear Transportation Projects was requested from the United States Army Corps of Engineers.

I-20 Frontage Road │ Rayville, Louisiana

Ms. Keasler served as the project manager for this wetland delineation for the proposed I-10 Frontage Road. A wetland delineation was completed utilizing the approved USACE Manual and the Atlantic and Gulf Coastal Plain Region Supplement. During the preparation of the delineation report, Terracon completed a desktop review which included obtaining background information of the site and area by gathering published sources relating to wetlands.

Central Consolidation Force Main │ Baton Rouge, Louisiana

Ms. Keasler served as the Project Manager for the environmental work for this project, which included a Phase I ESA, wetland delineation and consulting, and Limited Site Investigation (LSI). The force main alignment consisted of approximately 33,120 linear feet of continuous new pipeline construction. The Phase I ESA was conducted on a wider alignment than was necessary for the line in order to aid the design engineers in determining the exact placement of the force main, which in many cases was within an existing road right-of-way. As a result of the Phase I ESA, numerous Recognized Environmental Conditions (REC) were identified, most notable of which was the intersection with a former closed unregulated municipal landfill. A LSI was conducted along the force main alignment in the vicinity of the landfill. Findings of the LSI included identification of trash layers within the alignment and presence of various contaminants. Ms. Keasler assisted the client with consultation with the Department of Environmental Quality (DEQ) regarding the portion of the alignment within the former landfill. The Phase I ESA also identified numerous area of potential wetland habitat which included multiple bayou crossings. Ms. Keasler conducted wetland delineations in the vicinity of these suspect areas. The wetland report was submitted to the US Army Corps of Engineers with the alignment drawings and plans in order to obtain Section 404 permits.

Pump Station Improvements │ Baton Rouge, Louisiana

Ms. Keasler completed a Phase I ESA for each of the 5 new pump stations included in this project. The ESAs consisted of conducting a site reconnaissance, reviewing title information, interviewing past and current landowners, and preparation of draft and final reports.

Sewer Line Improvements │ Baton Rouge, Louisiana

Terracon was a part of a team that was awarded a contract to design a proposed new force main to be constructed in Baton Rouge, Louisiana. The sewer line upgrades will be completed along Brightside Drive and from Perkins Road to Jefferson Highway. The force main will consist of approximately 58,121 linear feet of sewer line construction, divided into multiple smaller alignments. Ms. Keasler conducted Phase I Environmental Site Assessments, limited NEPA surveys, and wetland delineations on each of the alignments.

Grand Goudine Waterline Extension │ Gonzales, Louisiana

Ms. Keasler served as the project manager for this waterline extension. Terracon was contracted to perform wetland related services for a proposed 11,000-foot waterline installation in Gonzales, Ascension Parish, Louisiana. The waterline was proposed to be installed from Griffith Road to the intersection of Bourdeaux and Bayou View Roads; located within the acquired servitude for the roadways and the servitude for Grand Goudine Bayou; and directionally drilled underneath Grand Goudine Bayou.

Baker Gas Line Replacement │ Baker, Louisiana
Ms. Keasler served as the project manager for this project. Terracon was retained by the City of Baker to perform environmental services for the proposed gas line replacement along twenty-two residential streets in Baker, Louisiana. Environmental Clearance activities in accordance with the Housing and Urban Development (HUD) environmental review procedures were required in order to receive funds from the Disaster-Community Development Block Grant Program. It was determined that the proposed gas line replacement qualified as a Categorical Exclusion Subject to §58.5, as the HUD level of Environmental Review. A site reconnaissance and review of published resources including maps, lists and other documents were reviewed to determine the impact to the compliance factors. Where applicable, Terracon consulted with governing agencies such as the State Historic Preservation Officer, Fish and Wildlife, and the EPA, to determine impact. The impact determination and resource documentation was compiled into the appropriate HUD and Louisiana Recovery Authority forms for Disaster-Community Development Block Grant Projects.

Presentations

"Natural Resources and NEPA" presented to Louisiana Engineering Society Conference, January 2014

"Introduction to Wetlands" presented to Urban Land Institute, June 2012

"Benefits from Supplemental Due Diligence in Historically Developed Areas" presented at the Louisiana ASCE Conference, January 2012

"Ecological Constraints on Property Development" presented to Mississippi Commercial Association of Realtors, May 2009

Published Articles

"Benefits from Supplemental Due Diligence in Historically Developed Areas" published in the Louisiana Civil Engineer Journal August 2012.

Additional Training

NHI Course No. 142005 NEPA and Transportation Decision Making, FHWA, 2012

Louisiana Brownfields Forum, Regional Planning Commission, 2011

Quality Project & Program Management Training, EPA, 2011

Wetland Plant Identification, Biotic Consultants, 2010

Advanced Wetland Delineation & Management Training; Richard Chinn Environmental Training, 2009

NEPA: What Do I Wish I Had Known Sooner?, ASCE, 2009

Environmental Compliance Training, HUD Region IV, 2009

Writing the Perfect EA/FONSI or EIS, Northwest Environmental Training Center, 2009

Wetlands and 404 Permitting, ASCE, 2007

APPENDIX E
Common Acronyms

COMMON ACRONMYS

AJD	Approved Jurisdictional Determination
CWA	Clean Water Act
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GPS	Global Positioning Systems
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate Wetland
OHWM	Ordinary High Water Mark
PJD	Preliminary Jurisdictional Determination
UPL	Obligate Upland
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
WOUS	Waters of the U.S.