

APPENDIX F

**WETLANDS PRELIMINARY JURISDICTIONAL
DETERMINATION**



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

AUG 11 2014

Operations Division
Surveillance and Enforcement Section

Mr. Lee Womack
Providence Engineering & Environmental
1201 Main St.
Baton Rouge, Louisiana 70802

Dear Mr. Womack:

Reference is made to your request, on behalf of LA DOTD, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Sections 40 and 41, Township 12 South, Range 13 East, Assumption Parish, Louisiana (enclosed map). Specifically, this property is identified as the LA Hwy 70 Detour Route (SPN H.010571.2).

Based on review of recent maps, aerial photography, and soils data, 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. Furthermore, Grand Bayou is a navigable waterway and subject to Corps' jurisdiction under Section 10 of the Rivers and Harbors Act. A DA Section 10 permit will be required prior to any work in this waterway.

Please be advised that this property is in the Louisiana Coastal Zone and a Coastal Use Permit may be required prior to initiation of any activities on this site. For additional information, contact Ms. Christine Charrier, Office of Coastal Management, Louisiana Department of Natural Resources at (225) 342-7953.

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 Mr. Brian Oberlies at (504) 862-2275 and reference our Account No. MVN-2014-00584-SY. If you

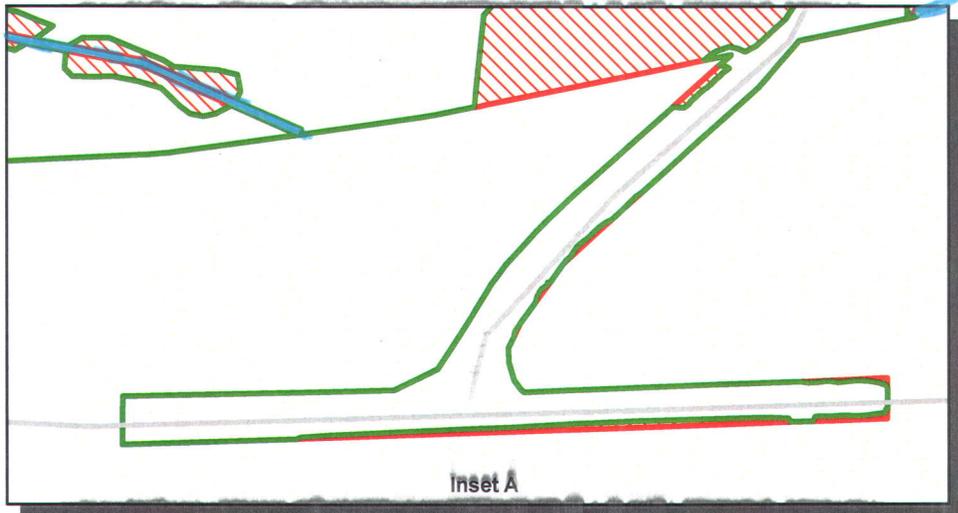
have specific questions regarding the permit process or permit applications, please contact our Central Evaluation Section at (504) 862-2577.

Sincerely,

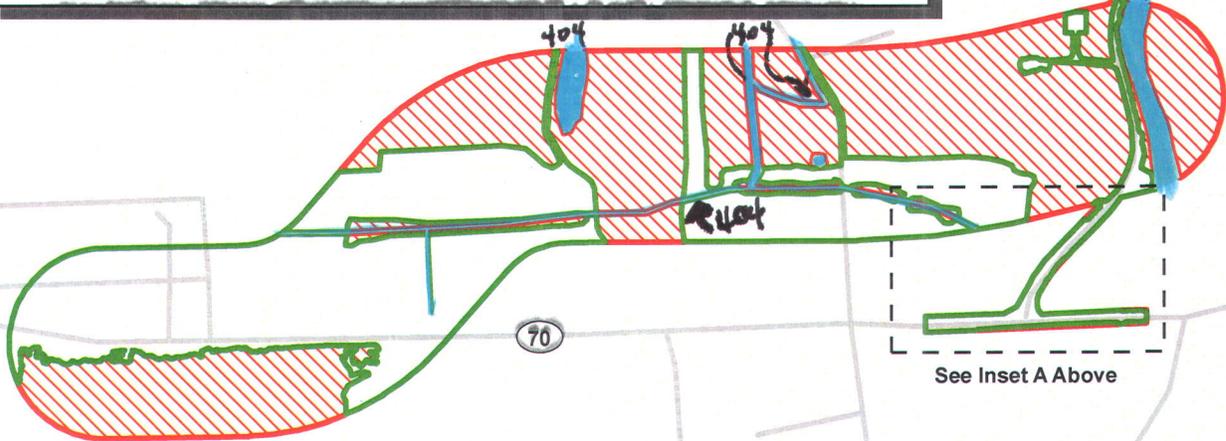


Martin S. Mayer
Chief, Regulatory Branch

Enclosures



SECTION 10 of 404



US ARMY CORPS OF ENGINEERS
PRELIMINARY
 JURISDICTIONAL DETERMINATION



Legend

USACE

FSV / (H) Date: 8/4/14

Botanist: *Charles*

Requestor: *WOMACK*

MVN-2014-00584-SY

□ - NON-WETLAND

▨ - WETLAND

□ - WATERS OF THE US *SEC 404 on 10/4/14*

Site Plan

Wetland Analysis/Request for
 Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

Louisiana
 Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/20/2014
		Checked By	LAW	6/20/2014
		Approved By		
		Project Number	040-014	6 Figure
		Drawing Number	040-014-A063	





June 16, 2014

Mr. Brian Oberlies
Surveillance and Enforcement Section
U.S. Army Corps of Engineers
New Orleans District
7400 Leake Avenue
New Orleans, Louisiana 70118-3651

Re: **MVN-2014-00584**
Wetland Analysis/Request for Preliminary Jurisdictional Determination (Rev 1)
Louisiana Department of Transportation and Development (LDOTD)
LA 70 Detour Route
SPN H.010571.2/FAP H010571
Assumption Parish, Louisiana
Providence Project No. 040-014

Dear Mr. Oberlies:

On behalf of Louisiana Department of Transportation and Development (LDOTD), Providence is submitting this wetland analysis report and request for preliminary jurisdictional determination (JD) for the above-referenced project (referred to as Site) in Assumption Parish, Louisiana.

On February 18, 2014, Providence, on behalf of the Louisiana Department of Transportation and Development (LDOTD), submitted a wetland data report and request for preliminary jurisdictional determination for the above referenced project (MVK-2014-00584). Providence now submits this revision due to additional project components extending along LA 69 and LA 70 that were not previously assessed.

BACKGROUND

The purpose of this report is to present field data, habitat descriptions, and other pertinent information on the three diagnostic characteristics of wetlands. This report was prepared in accordance with the *Corps of Engineers Wetlands Delineation Manual* (U.S. Army Corps of Engineers, Waterways Experiment Station 1987) and subsequent guidance provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (U.S. Army Corps of Engineers, Wetland Regulatory Assistance Program 2010). On February 3, 2014 and June 10, 2014,

Providence biologists visited the Site and collected field data on the three diagnostic wetland parameters – soils, vegetation, and hydrology.

This request for a preliminary JD is in accordance with Regulatory Guidance Letter 08-02 enacted June 26, 2008. Please be advised that LDOTD is aware that preliminary JDs are non-binding, advisory in nature, and cannot be appealed. Furthermore, when the U.S. Army Corps of Engineers (USACE) provides a preliminary JD, or authorizes an activity based on a preliminary JD, the USACE is making a non-legally binding determination as to whether jurisdiction exists over a particular water body or wetland governed by the Clean Water Act of 1977 or the Rivers and Harbors Act of 1899. LDOTD also understands that a recipient of a preliminary JD can later request and obtain an approved JD should it become necessary during the permitting process.

Prior to conducting the wetland analysis, Providence reviewed the Natural Resources Conservation Service (NRCS) Web Soil Survey, the *Soil Survey of Assumption Parish* (United States Department of Agriculture, Soil Conservation Service 1978 and NRCS 2014), United States Geological Survey (USGS) 7.5-minute topographic maps, U.S. Fish and Wildlife Service, National Wetland Inventory maps and 1998, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, and 2013 aerial photography. Included for your review are: **Figure 1** – Vicinity Map, **Figure 2** – Site Location Map, **Figure 3** – Site Plan, **Figure 4** – Aerial Photograph, **Figure 5** – Soil Map, **Exhibit 1** – Copies of Site Photographs, and **Exhibit 2** – Wetland Determination Data Forms - Atlantic and Gulf Coastal Plain Region.

PROJECT LOCATION AND DESCRIPTION

The approximate 153.22-acre Site is approximately 4.69 miles northeast of Pierre Part, Louisiana (**Figure 1**). The Site is centered at approximate Latitude 30.017893°; Longitude -91.140321° in Sections 40 and 41, Township 12 South, Range 13 East in Assumption Parish, Louisiana (**Figure 2**). The northern section of the Site is dominated by palustrine forested and cypress/tupelo wetland habitat. The southern section of the Site consists of palustrine emergent wetland habitat, upland forest, mowed and maintained grassland, and commercial and residential developments.

SOILS

The NRCS's Web Soil Survey was used to determine mapped soil series. The revised official series descriptions were used to confirm profile matrix, redoxomorphic features, and texture of soils underlying the Site. The Web Soil Survey shows that the Site may be underlain by Cancienne silt loam, Cancienne silty clay loam, Fausse association, and Schriever silty clay loam. Providence collected soil samples between the surface and approximately 16 inches. The depth of each sample was sufficient to determine changes in upper horizons and to observe field indicators of hydric soils.

Field data indicate that the Site may be underlain by Cancienne silt loam, Cancienne silty clay loam, Gramercy silty clay loam, and Schriever silty clay loam. Schriever silty clay loam and Gramercy silty clay loam are listed as predominantly hydric soils on the local list (NRCS Web Soil Survey 2014) and hydric soils on the national list (NRCS 2013 National Hydric Soils List by State), while Cancienne silt loam and Cancienne silty clay loam are non-hydric. The wetland criterion for hydric soils was met at 11 of the 14 sample locations established by Providence to characterize the Site.

VEGETATION¹

Indicator statuses for dominant vegetation on the Site consist of facultative upland (FACU), facultative (FAC), facultative-wetland (FACW), and obligate (OBL) plant species. Dominant species identified on the Site include: southern bald-cypress (*Taxodium distichum*, OBL), black tupelo (*Nyssa sylvatica*, OBL), American elm (*Ulmus americana*, FAC), sweet-gum (*Liquidambar styraciflua*, FAC), laurel oak (*Quercus laurifolia*, FACW), water oak (*Quercus nigra*, FAC), sugar-berry (*Celtis laevigata*, FACW), live oak (*Quercus virginiana*, FACU), black willow (*Salix nigra*, OBL), red maple (*Acer rubrum*, FAC), dwarf palmetto (*Sabal minor*, FACW), saw-tooth blackberry (*Rubus argutus*, FAC), narrow-leaf cat-tail (*Typha angustifolia*, OBL), lamp rush (*Juncus effusus*, OBL), cress-leaf groundsel (*Packera glabella*, OBL), yellow thistle (*Cirsium horridulum*, FAC), white-edge sedge (*Carex debilis*, FACW), Drummond's sedge (*Cyperus drummondii*, OBL), floating marsh-pennywort (*Hydrocotyle ranunculoides*, OBL), chalky bluestem (*Andropogon capillipes*, FAC), St. Augustine grass (*Stenotaphrum secundatum*, FAC), brown-seed crown grass (*Paspalum plicatulum*, FAC), Bermuda grass (*Cynodon dactylon*, FACU), Gulf cock's-spur grass (*Echinochloa crus-gavonis*, OBL), golden crown grass (*Paspalum dilatatum*, FAC), Bahia grass (*Paspalum notatum*, FACU), lizard's tail (*Saururus cernuus*, OBL), alligator-weed (*Alternanthera philoxeroides*, OBL), Japanese honeysuckle (*Lonicera japonica*, FAC), peppervine (*Ampelopsis arborea*, FAC), and fringed greenbrier (*Smilax bona-nox*, FAC). The wetland criterion for a prevalence of hydrophytic vegetation was met at 11 of the 14 sample locations established by Providence to characterize the Site.

HYDROLOGY

The Site is in the Central Louisiana Coastal watershed; within USGS Hydrologic Cataloging Unit 08090302. Hydrology on the Site is primarily restricted to rainfall and over the bank flooding from creeks, canals, and tributaries of Bayou Corne and Grand Bayou. Primary and secondary indicators of wetland hydrology observed on the Site include: surface water, high water tables, water marks and moss trim lines on tree boles, saturation and oxidized root channels within the upper twelve inches of soil profiles, inundation on aerial imagery, saturation on aerial imagery, geomorphic position, and positive FAC-Neutral tests. The wetland criterion for hydrology was met at 12 of the 14 sample locations established by Providence to characterize the Site.

¹ All species and common names were acquired from Lichvar, R.W. 2013. *The National Wetland Plant List: 2013: wetland ratings. Phytoneuron 2013-49: 1-241.*

Mr. Brian Oberlies
June 16, 2014
Page 4 of 4

CONCLUSIONS

Positive evidence of all three diagnostic characteristics for jurisdictional wetlands was found at 11 of the 14 sample locations established on the Site. Evidence of poor drainage found in association with potentially hydric soils and predominantly hydrophytic vegetation was considered sufficient to confirm the presence of potential jurisdictional wetlands. It appears that approximately 5.57 acres of potential other waters of the U.S. and 80.25 acres of potentially jurisdictional wetlands (8.65 acres palustrine emergent, 48.18 acres palustrine forested, and 23.42 acres cypress/tupelo) are present on the Site.

On behalf of the LDOTD, Providence respectfully requests that you review this wetland analysis report and render a preliminary jurisdictional determination on the Site at your earliest convenience. Should you have any questions, or require additional information, please contact me at (225) 766-7400 or via email at leewomack@providenceeng.com.

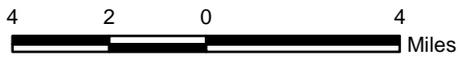
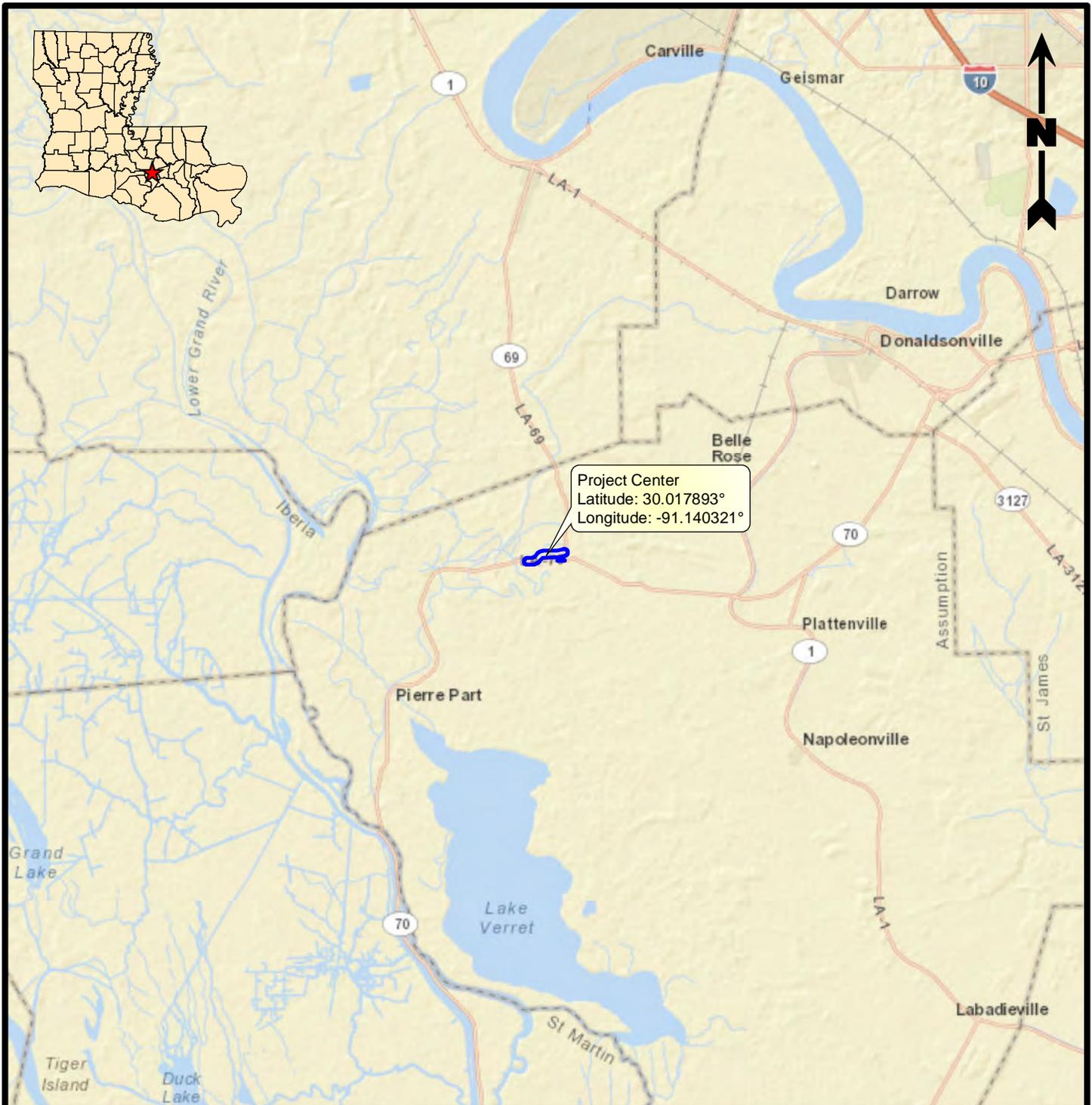
Sincerely,



Lee Womack
Senior Environmental Scientist
Providence Engineering and Environmental Group LLC
1201 Main Street
Baton Rouge, LA 70802

Encl: As stated

FIGURES



Legend

 Limits of Delineation (153.22 acres)

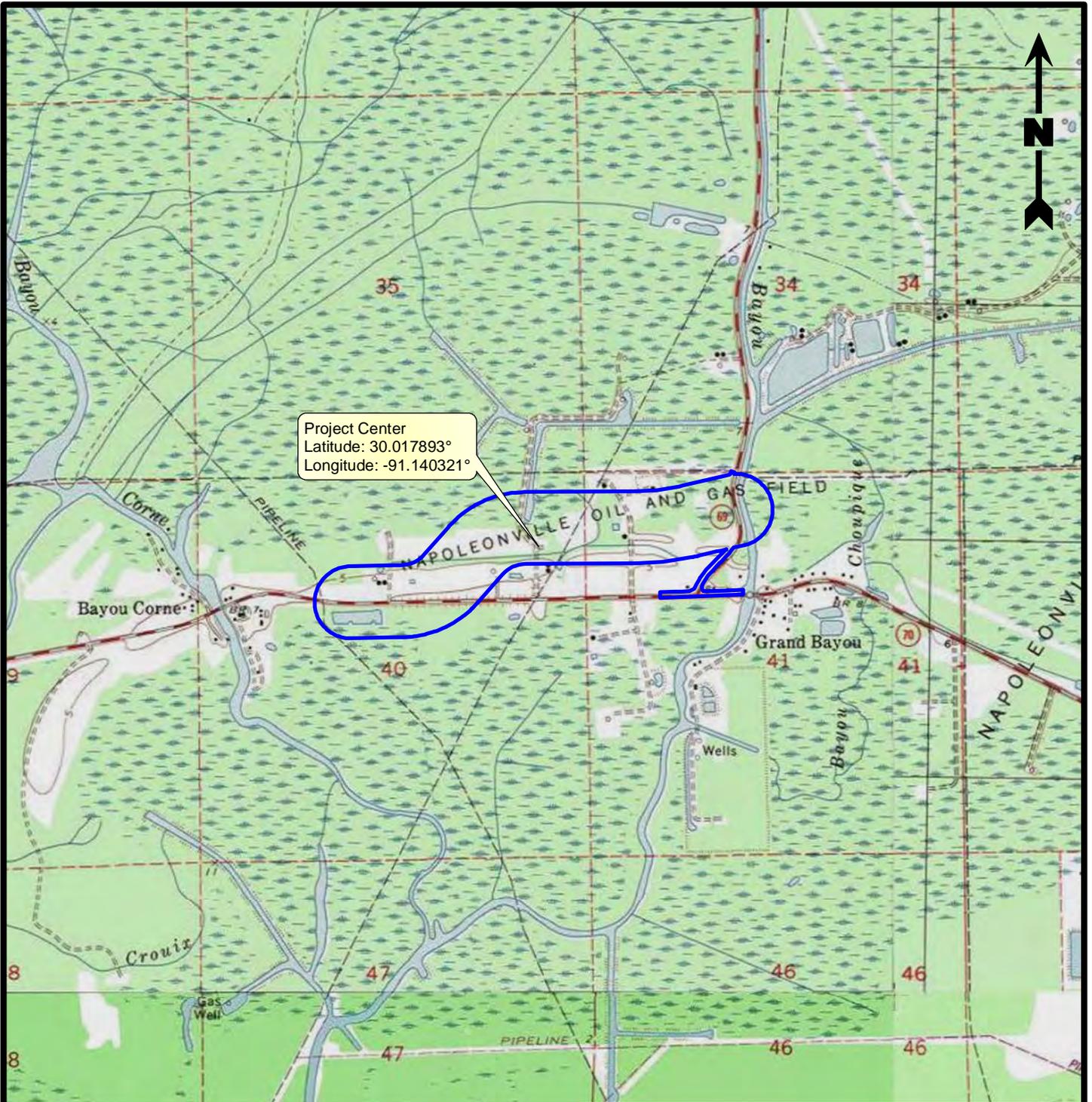
Reference

Base map comprised of ESRI StreetMap USA data.

Vicinity Map
 Wetland Analysis/Request for
 Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

Louisiana
 Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/11/2014
		Checked By	LAW	6/11/2014
		Approved By		
Project Number			1	
040-014			Figure	
Drawing Number				
040-014-A036				



Project Center
 Latitude: 30.017893°
 Longitude: -91.140321°



Legend

Limits of Delineation (153.22 acres)

Reference

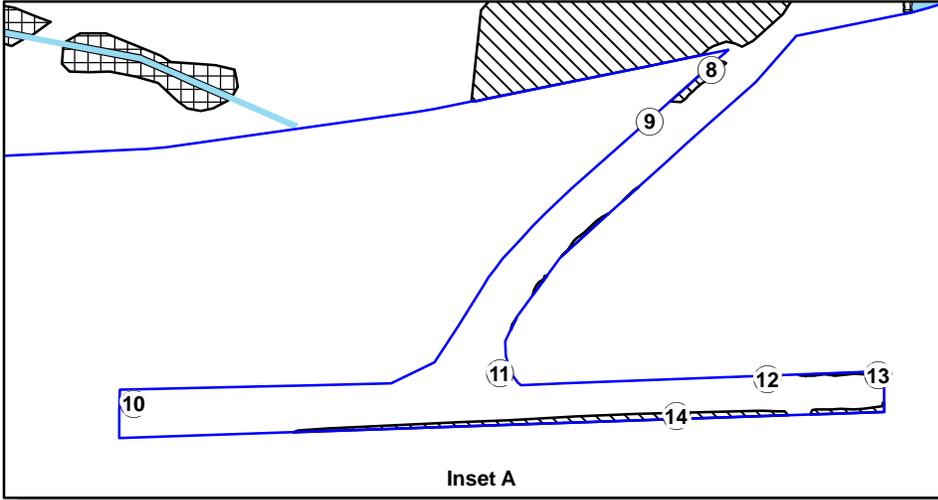
Base map comprised of U.S.G.S. 7.5 minute topographic map, Lone Star, LA" dated 1983.

Site Location Map
 Wetland Analysis/Request for
 Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

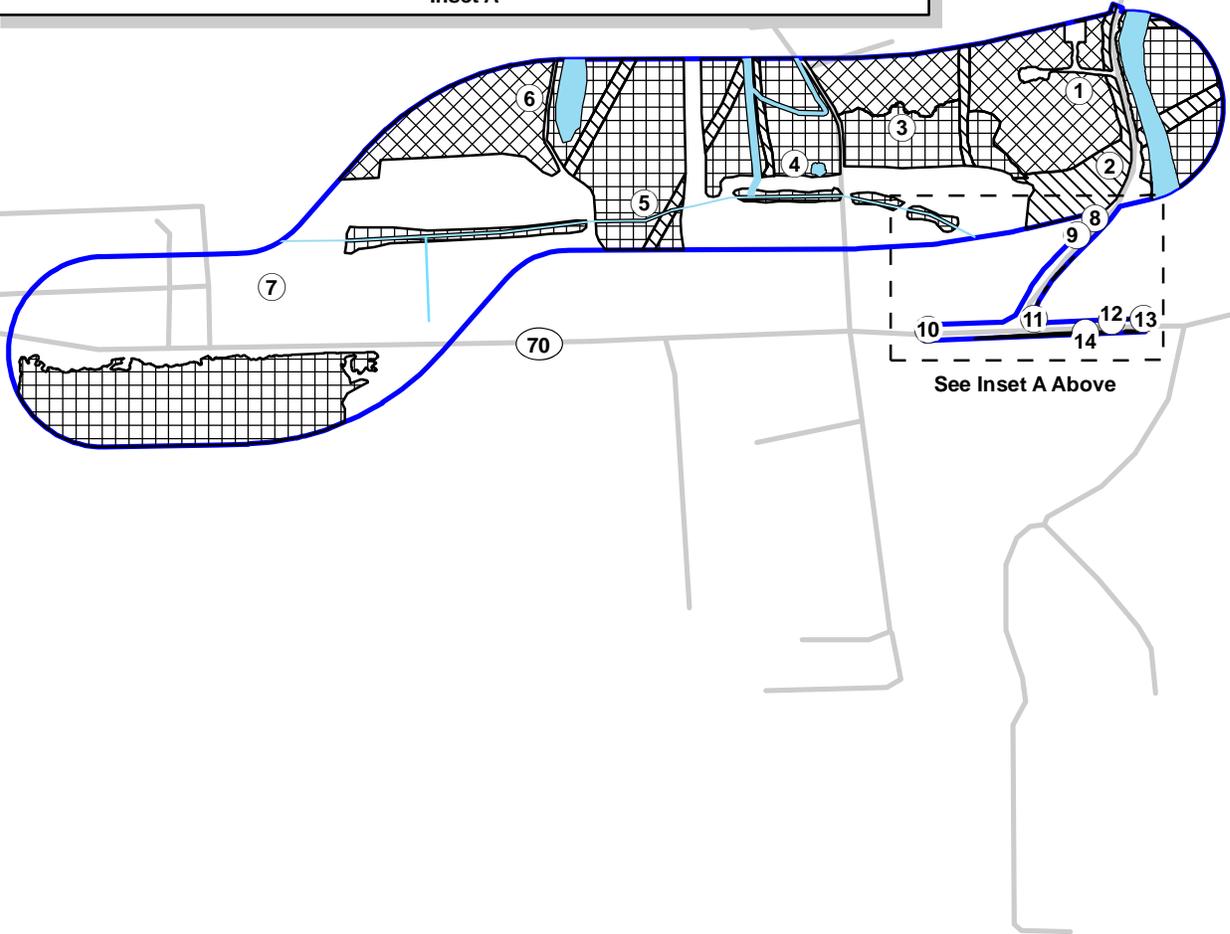
Louisiana
 Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/11/2014
		Checked By	LAW	6/11/2014
Approved By:		Project Number		2 Figure
		040-014		
		Drawing Number		
		040-014-A037		





Inset A



See Inset A Above



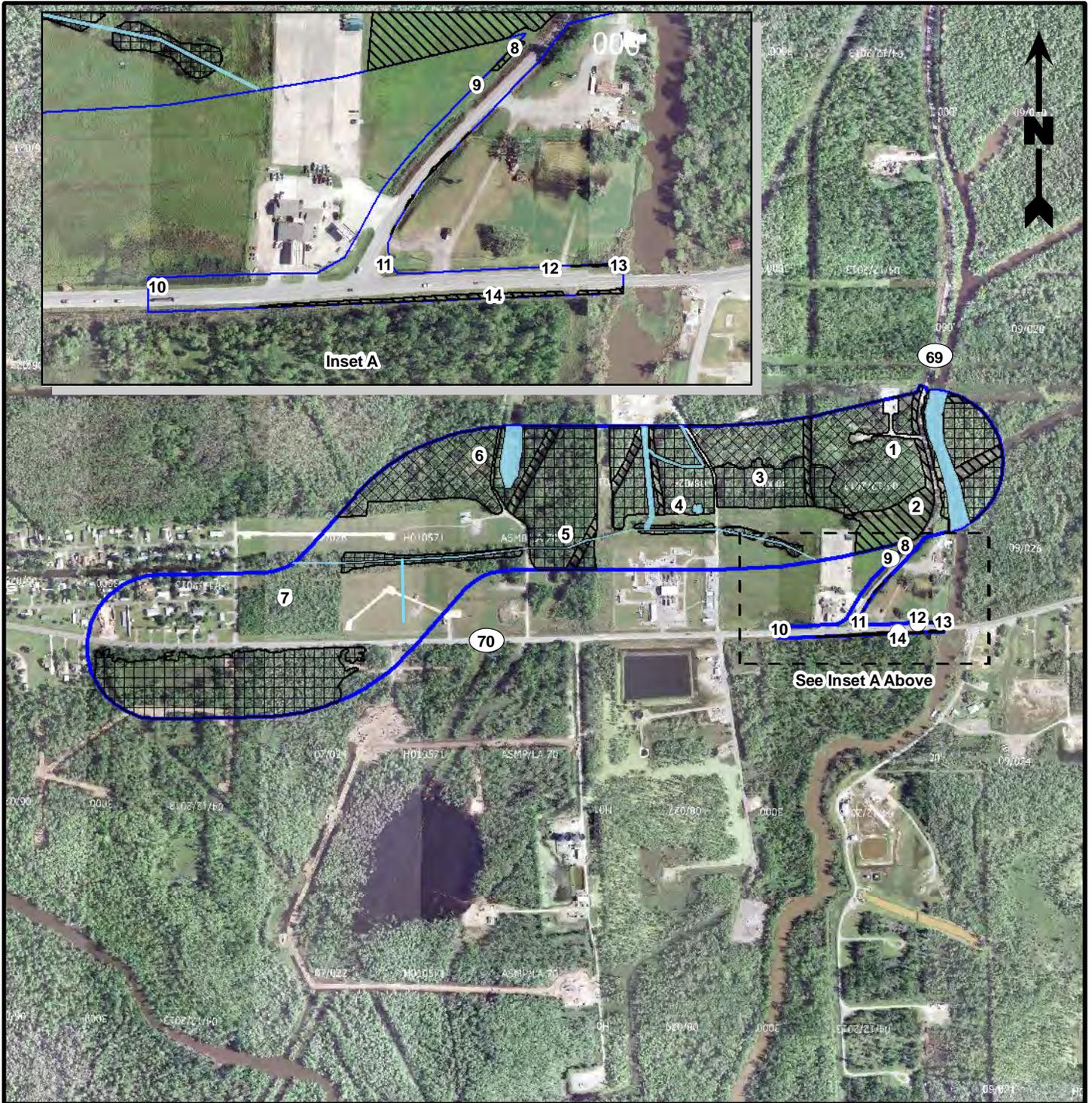
Legend

- Limits of Delineation (153.22 acres)
- Sample Location
- Potential Jurisdictional Wetlands (80.25 acres)**
 - Palustrine Emergent (8.65 acres)
 - Palustrine Forested (48.18 acres)
 - Cypress/Tupelo (23.42 acres)
 - Potential Other Waters of the U.S. (5.57 acres)
 - Local Roads

Site Plan
 Wetland Analysis/Request for
 Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

Louisiana
Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/11/2014
		Checked By	LAW	6/11/2014
		Approved By		
		Project Number		3 Figure
		040-014		
		Drawing Number		
		040-014-A038		



Legend

- Limits of Delineation (153.22 acres)
- Sample Location
- Potential Jurisdictional Wetlands (80.25 acres)**
- Palustrine Emergent (8.65 acres)
- Palustrine Forested (48.18 acres)
- Cypress/Tupelo (23.42 acres)
- Potential Other Waters of the U.S. (5.57 acres)

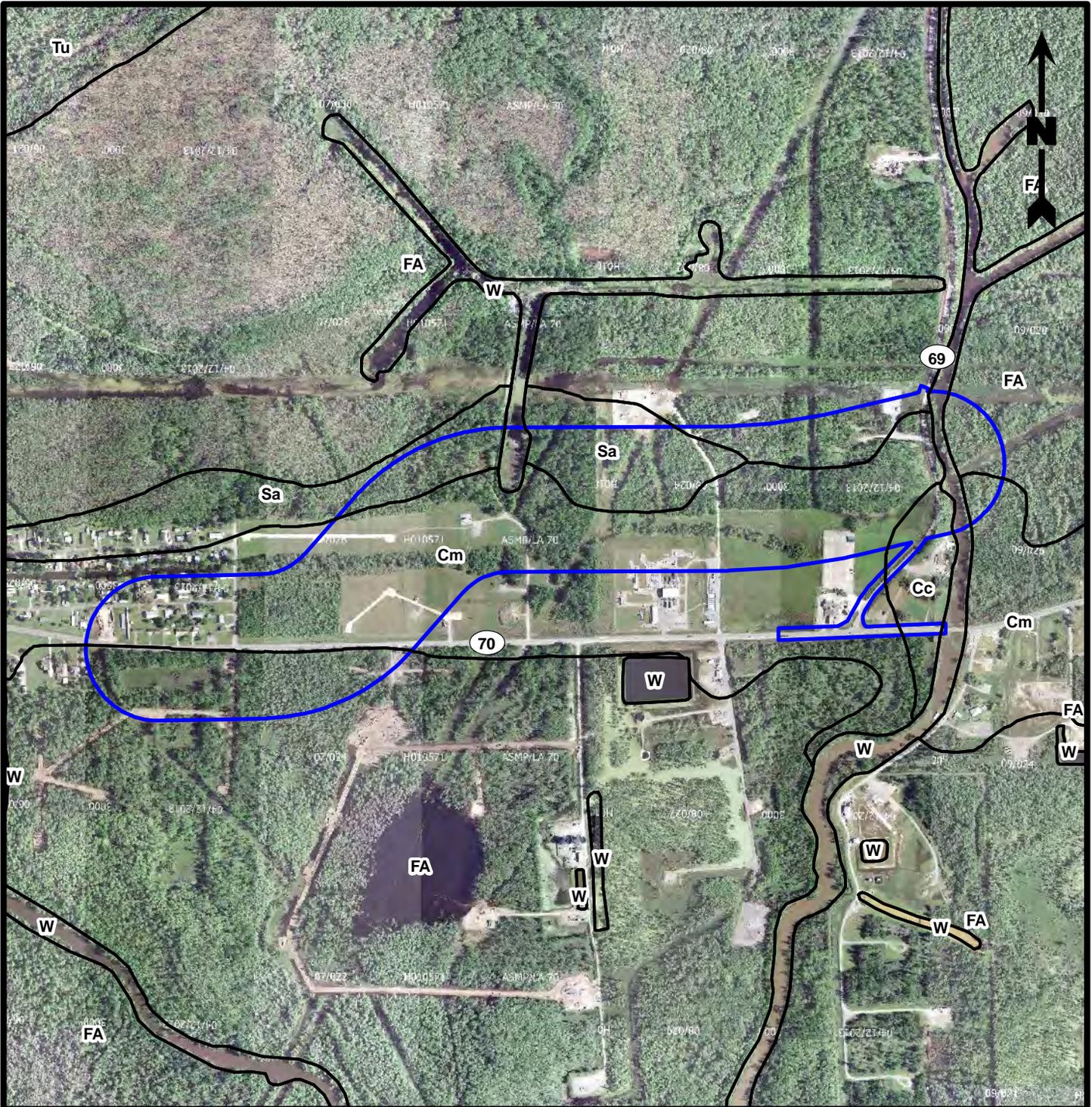
Reference

Base map comprised of Aerial Photography collected by SURDEX Corp, collected 4/12/2013.

Aerial Photograph
 Wetland Analysis/Request for
 Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

Louisiana
 Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/11/2014
		Checked By	LAW	6/11/2014
		Approved By		
		Project Number		4 Figure
		040-014		
		Drawing Number		
		040-014-A039		



Legend

- Limits of Delineation (153.22 acres)
- Soils
 - Cc - Cancienne silt loam
 - Cm - Cancienne silty clay loam
 - FA - Fausse association
 - Sa - Schriever silty clay loam
 - W - Water

Reference

Base map comprised of Bing Maps aerial imagery from (c) 2013 Microsoft Corporation and its data suppliers. Soils data obtained from Natural Resources Conservation Service (NRCS) data-server.

Soil Map

Wetland Analysis/Request for Preliminary Jurisdictional Determination
 State Project No. H.010571.2
 F.A.P. No. H010571
 Pierre Part, Assumption, Louisiana

Louisiana Department of Transportation and Development

Prepared By:	Prepared For:	Drawn By	JCR	6/11/2014
		Checked By	LAW	6/11/2014
		Approved By		
		Project Number		5 Figure
		040-014		
		Drawing Number		
		040-014-A040		



EXHIBIT 1
COPIES OF SITE PHOTOGRAPHS

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #1A

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 1.



Photograph #1B

Direction:

Northwest

Comments:

View of habitat and typical landscape features at Sample Location 1.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #2A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 2.



Photograph #2B

Direction:

Northwest

Comments:

View of habitat and typical landscape features at Sample Location 2.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #3A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 3.



Photograph #3B

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 3.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #4A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 4.



Photograph #4B

Direction:

North

Comments:

View of habitat and typical landscape features at Sample Location 4.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #5A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 5.



Photograph #5B

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 5.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #6A

Direction:

Northwest

Comments:

View of habitat and typical landscape features at Sample Location 6.



Photograph #6B

Direction:

East

Comments:

View of habitat and typical landscape features adjacent to Sample Location 6.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: February 3, 2014

Photograph #7A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 7.



Photograph #7B

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 7.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #8A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 8.



Photograph #8B

Direction:

Northeast

Comments:

View of habitat and typical landscape features at Sample Location 8.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #9A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 9.



Photograph #9B

Direction:

Southwest

Comments:

View of habitat and typical landscape features at Sample Location 9.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #10A

Direction:

North

Comments:

View of habitat and typical landscape features at Sample Location 10.



Photograph #10B

Direction:

Northeast

Comments:

View of habitat and typical landscape features at Sample Location 10.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #11A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 11.



Photograph #11B

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 11.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #12A

Direction:

N/A

Comments:

Typical soil profile at Sample Location 12.



Photograph #12B

Direction:

West

Comments:

View of habitat and typical landscape features at Sample Location 12.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #13A

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 13.



Photograph #6B

Direction:

Southeast

Comments:

View of habitat and typical landscape features at Sample Location 13.



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Site Name: LA 70 Detour Route

Site Location: Pierre Part, Assumption Parish, Louisiana

Date: June 10, 2014

Photograph #14A

Direction:

Southwest

Comments:

View of habitat and typical landscape features at Sample Location 14.



Photograph #14B

Direction:

South

Comments:

View of habitat and typical landscape features at Sample Location 14.



EXHIBIT 2

**WETLAND DETERMINATION DATA FORMS - ATLANTIC AND
GULF COASTAL PLAIN REGION**

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	1
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.018805°	Long: -91.132676°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification: PFO1C		

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

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

Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
Yes Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
Yes High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
Yes Saturation (A3)	No Marl Deposits (B15) (LRR U)	Yes Moss Trim Lines (B16)	
Yes Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	No Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	N/A FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	Yes	Depth (inches):	12-36	Wetland Hydrology Present?
Water table Present?	Yes	Depth (inches):	N/A	
Saturation Present?	Yes	Depth (inches):	N/A	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Texture
	Color	%	Color	%	Type	
N/A						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	No Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

No soil sample taken. Soils assumed hydric due to extent/duration of inundation.

VEGETATION

SAMPLING POINT

1

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	
<i>Taxodium distichum</i>		40	Yes	OBL	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC (A): <u>6</u> Total Number of Dominant Species Across All Strata <u>6</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>100.00%</u>
<i>Nyssa aquatica</i>		30	Yes	OBL	
<u>70</u> = Total Cover 50/20 Threshold 50% of Total Cover = 35 20% of Total Cover = 14					Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply OBL x1= <u> </u> FACW x2= <u> </u> FAC x3= <u> </u> FACU x4= <u> </u> UPL x5= <u> </u> A Totals B
Sapling Stratum Plot Size: 30' Absolute % Cover Dominant Species Indicator Status					
<i>Taxodium distichum</i>		20	Yes	OBL	Prevalence Index (B/A)= <u> </u> Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg: <u> </u> No Dominance Test > 50%: <u> </u> Yes Prevalence Index is ≤3.0: <u> </u> N/A Problematic Hydrophytic Veg: <u> </u> No
<i>Nyssa aquatica</i>		15	Yes	OBL	
<u>35</u> = Total Cover 50/20 Threshold 50% of Total Cover = 17.5 20% of Total Cover = 7					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.
Shrub Stratum Plot Size: 30' Absolute % Cover Dominant Species Indicator Status					
<i>Nyssa aquatica</i>		15	Yes	OBL	
<u>15</u> = Total Cover 50/20 Threshold 50% of Total Cover = 7.5 20% of Total Cover = 3					
Herb Stratum Plot Size: 30' Absolute % Cover Dominant Species Indicator Status					Remarks:
<i>Typha angustifolia</i>		5	Yes	OBL	
<u>5</u> = Total Cover 50/20 Threshold 50% of Total Cover = 2.5 20% of Total Cover = 1					
Woody Vine Stratum Plot Size: 30' Absolute % Cover Dominant Species Indicator Status					
None					
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Hydrophytic Vegetation Present? <u> </u> Yes

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	2
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.017716°	Long: -91.132168°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silt loam	NWI Classification: PFO2/1F		

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

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

Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
Yes Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	Yes Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	Yes FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	None	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	None	Depth (inches):	N/A	
Saturation Present?	Yes	Depth (inches):	0-16	
Remarks:				

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-16	10YR 4/2	65	10YR 4/6	20	C	M	silty clay loam
			10YR 4/6	15	C	PL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Soils:
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)
No Stratified Layers (A5)	Yes Depleted Matrix (F3)
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
No Dark Surface (S7) (LRR P, S, T, U)	

Restrictive Layer (if observed):	Hydric Soil Present?
Type: None	Yes
Depth inches: None	

Remarks:

Soil profile appears to be consistent with Gramercy silty clay loam.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet:
None					Number of Dominant Species That are OBL, FACW, or FAC (A): <u>1</u>
					Total Number of Dominant Species Across All Strata <u>1</u>
					Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>100.00%</u>
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Prevalence Index Worksheet: Total % Cover of: _____ Multiply _____ OBL x1= _____ FACW x2= _____ FAC x3= _____ FACU x4= _____ UPL x5= _____ A Totals B _____ Prevalence Index (B/A)= _____
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
None					Rapid Test for Hydrophytic Veg: <u>No</u>
					Dominance Test > 50%: <u>Yes</u>
					Prevalence Index is ≤3.0: <u>N/A</u>
					Problematic Hydrophytic Veg: <u>No</u>
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
None					
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
<i>Juncus effusus</i>		30	Yes	OBL	
<i>Panicum virgatum</i>		15	No	FAC	
<i>Cynodon dactylon</i>		15	No	FACU	
<i>Eleocharis palustris</i>		10	No	OBL	
<i>Carex debilis</i>		10	No	FACW	
<i>Solidago sempervirens</i>		5	No	FACW	
<i>Rubus argutus</i>		5	No	FAC	
<i>Ambrosia trifida</i>		2	No	FAC	
<i>Geranium maculatum</i>		2	No	FACU	
<i>Rumex crispus</i>		2	No	FAC	
<u>96</u> = Total Cover 50/20 Threshold 50% of Total Cover = 48 20% of Total Cover = 19.2					
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Present?
None					<u>Yes</u>
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	3
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.018277°	Long: -91.135600°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification: PFO1C		

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
Yes Saturation (A3)	No Marl Deposits (B15) (LRR U)	Yes Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	Yes Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	Yes Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	N/A FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	None	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	None	Depth (inches):	N/A	
Saturation Present?	Yes	Depth (inches):	0-16	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-3	10YR 3/1	100					silty clay loam
3-6	10YR 4/2	90	10YR 4/6	10	C	M	silty clay loam
6-16	10YR 4/1	58	10YR 5/6	20	C	M	silty clay loam
			10YR 5/6	5	C	PL	
			10YR 6/1	5	D	M	
			5YR 4/6	2	C	M	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

Soil profile appears to be consistent with Gramercy silty clay loam.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC (A):	
<i>Ulmus americana</i>		15	Yes	FAC		12
<i>Liquidambar styraciflua</i>		10	Yes	FAC	Total Number of Dominant Species Across All Strata	
<i>Quercus laurifolia</i>		10	Yes	FACW		12
<i>Acer rubrum</i>		5	No	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC (A/B):	
<i>Quercus nigra</i>		5	No	FAC		100.00%
<i>Quercus phellos</i>		2	No	FACW		
<p>_____ 47 = Total Cover 50/20 Threshold 50% of Total Cover = 23.5 20% of Total Cover = 9.4</p>					Prevalence Index Worksheet: Total % Cover of: Multiply	
<p>OBL x1= _____ FACW x2= _____ FAC x3= _____ FACU x4= _____ UPL x5= _____ A Totals B _____</p>						
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index (B/A)=	
<i>Quercus nigra</i>		20	Yes	FAC		Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg: _____ No Dominance Test > 50%: _____ Yes Prevalence Index is ≤3.0: _____ N/A Problematic Hydrophytic Veg: _____ No
<i>Liquidambar styraciflua</i>		15	Yes	FAC	Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.	
<i>Ulmus americana</i>		10	Yes	FAC		
<p>_____ 45 = Total Cover 50/20 Threshold 50% of Total Cover = 22.5 20% of Total Cover = 9</p>						
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:	
<i>Sabal minor</i>		25	Yes	FACW		<p>_____ 7 = Total Cover 50/20 Threshold 50% of Total Cover = 3.5 20% of Total Cover = 1.4</p>
<i>Quercus nigra</i>		15	Yes	FAC		
<i>Ulmus americana</i>		5	No	FAC	<p>_____ 15 = Total Cover 50/20 Threshold 50% of Total Cover = 7.5 20% of Total Cover = 3</p>	
<i>Liquidambar styraciflua</i>		5	No	FAC		
<i>Cephalanthus occidentalis</i>		2	No	OBL		
<p>_____ 52 = Total Cover 50/20 Threshold 50% of Total Cover = 26 20% of Total Cover = 10.4</p>					Hydrophytic Vegetation Present? _____ Yes	
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
<i>Packera glabella</i>		5	Yes	OBL		
<i>Cirsium horridulum</i>		2	Yes	FAC		
<p>_____ 7 = Total Cover 50/20 Threshold 50% of Total Cover = 3.5 20% of Total Cover = 1.4</p>						
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
<i>Lonicera japonica</i>		10	Yes	FAC		
<i>Smlax bona-nox</i>		5	Yes	FAC		
<p>_____ 15 = Total Cover 50/20 Threshold 50% of Total Cover = 7.5 20% of Total Cover = 3</p>						

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	4
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.017754°	Long: -91.137385°	Datum: NAD 83
Soil Map Unit Name:	Schriever silty clay loam	NWI Classification: PFO1C		

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

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

Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
No Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	Yes Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	N/A FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	None	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	None	Depth (inches):	N/A	
Saturation Present?	None	Depth (inches):	N/A	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-2	10YR 3/1	100					clay loam
2-16	10YR 4/2	80	7.5YR 5/6	20	C	M	clay loam
			7.5YR 5/6	5	C	PL	
			10YR 5/1	5	D	M	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet:
<i>Quercus nigra</i>		20	Yes	FAC	Number of Dominant Species That are OBL, FACW, or FAC (A): <u>7</u> Total Number of Dominant Species Across All Strata <u>7</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>100.00%</u>
<i>Quercus laurifolia</i>		15	Yes	FACW	
<i>Ulmus americana</i>		5	No	FAC	
<i>Quercus phellos</i>		5	No	FACW	
<u>45</u> = Total Cover 50/20 Threshold 50% of Total Cover = 22.5 20% of Total Cover = 9					Prevalence Index Worksheet: Total % Cover of: _____ Multiply _____ OBL x1= _____ FACW x2= _____ FAC x3= _____ FACU x4= _____ UPL x5= _____ A Totals B _____ Prevalence Index (B/A)= _____
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
None					Rapid Test for Hydrophytic Veg: <u>No</u> Dominance Test > 50%: <u>Yes</u> Prevalence Index is ≤3.0: <u>N/A</u> Problematic Hydrophytic Veg: <u>No</u>
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	
<i>Sabal minor</i>		25	Yes	FACW	
<i>Quercus nigra</i>		15	Yes	FAC	
<i>Ulmus americana</i>		5	No	FAC	
<i>Rubus argutus</i>		5	No	FAC	
<u>50</u> = Total Cover 50/20 Threshold 50% of Total Cover = 25 20% of Total Cover = 10					Remarks:
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	
<i>Packera glabella</i>		2	Yes	FACW	
<u>2</u> = Total Cover 50/20 Threshold 50% of Total Cover = 1 20% of Total Cover = 0.4					
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Present?
<i>Lonicera japonica</i>		5	Yes	FAC	<u>Yes</u>
<i>Smlax bona-nox</i>		5	Yes	FAC	
<u>10</u> = Total Cover 50/20 Threshold 50% of Total Cover = 5 20% of Total Cover = 2					

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	5
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 40, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	
Subregion (LRR or MLRA):	LRR O	Lat: 30.017186°	Long: -91.139874°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification: PFO1C		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks)				
Are Vegetation, Soil, or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes				
Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)				

SUMMARY OF FINDINGS	
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Remarks:	
Is the Sampled Area within a Wetland? Yes	

HYDROLOGY	
Wetland Hydrology Indicators	Secondary Indicators (Need 2):
Primary Indicators (Need 1):	No Surface Soil Cracked (B6)
No Surface Water (A1)	No Sparsely Veg. Concave Surface (B8)
No High Water Table (A2)	No Drainage Patterns (B10)
Yes Saturation (A3)	No Moss Trim Lines (B16)
No Water Marks (B1)	No Dry-Season Water Table (C2)
No Sediment Deposits (B2)	No Crayfish Burrows (C8)
No Drift Deposits (B3)	No Saturation on Aerial Imagery (C9)
No Algal Mat or Crust (B4)	No Geomorphic Position (D2)
No Iron Deposits (B5)	No Shallow Aquitard (D3)
No Inundation on Aerial Imagery (B7)	No FAC-Neutral Test (D5)
	No Sphagnum Moss (D8) (LRR T, U)
	No Other (Explain in Remarks)

Field Observations:		Wetland Hydrology Present?
Surface Water Present?	None	Yes
Water table Present?	None	
Saturation Present?	Yes	
Depth (inches):	N/A	
Depth (inches):	N/A	
Depth (inches):	0-16	
Remarks:		

SOIL							
Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-2	10YR 3/1	100					silt clay loam
2-6	10YR 4/2	90	10YR 4/6	10	C	M	silt clay loam
6-16	10YR 4/1	75	10YR 5/1	10	D	M	silt clay loam
			10YR 4/6	10	C	M	
			10YR 4/6	5	C	PL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Soils:
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)
No Stratified Layers (A5)	No Depleted Matrix (F3)
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
No Dark Surface (S7) (LRR P, S, T, U)	

Restrictive Layer (if observed):	Hydric Soil Present?
Type: None	Yes
Depth inches: None	

Remarks:

Soil profile appears to be consistent with Gramercy silty clay loam.

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	6
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 40, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.018707°	Long: -91.141769°	Datum: NAD 83
Soil Map Unit Name:	Schriever clay	NWI Classification: PF01/2C		

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

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

Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):			
Yes	Surface Water (A1)	No	Water Stained Leaves (B9)
Yes	High Water Table (A2)	No	Aquatic Fauna (B13)
Yes	Saturation (A3)	No	Marl Deposits (B15) (LRR U)
Yes	Water Marks (B1)	No	Hydrogen Sulfide Odor (C1)
No	Sediment Deposits (B2)	No	Oxidized Root Channels (C3)
No	Drift Deposits (B3)	No	Presence of Reduced Iron (C4)
No	Algal Mat or Crust (B4)	No	Recent Reduct. in Tilled Soils (C6)
No	Iron Deposits (B5)	No	Thin Muck Surface (C7)
No	Inundation on Aerial Imagery (B7)	No	Other (Explain in Remarks)
		No	Surface Soil Cracked (B6)
		No	Sparsely Veg. Concave Surface (B8)
		No	Drainage Patterns (B10)
		Yes	Moss Trim Lines (B16)
		No	Dry-Season Water Table (C2)
		No	Crayfish Burrows (C8)
		No	Saturation on Aerial Imagery (C9)
		No	Geomorphic Position (D2)
		No	Shallow Aquitard (D3)
		N/A	FAC-Neutral Test (D5)
		No	Sphagnum Moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes	Depth (inches):	12-48	Wetland Hydrology Present?
Water table Present?	Yes	Depth (inches):	N/A	
Saturation Present?	Yes	Depth (inches):	N/A	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Texture
	Color	%	Color	%	Type	
N/A						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No	Histol (A1)	No	Polyvalue Below Surface (S8) (LRR S,T,U)
No	Histic Epipedon (A2)	No	Thin Dark Surface (S9) (LRR S,T,U)
No	Black Histic (A3)	No	Loamy Mucky Mineral (F1) (LRR O)
No	Hydrogen Sulfide (A4)	No	Loamy Gleyed Matrix (F2)
No	Stratified Layers (A5)	No	Depleted Matrix (F3)
No	Organic Bodies (A6) (LRR P,T,U)	No	Redox Dark Surface (F6)
No	5cm Mucky Mineral (A7) (LRR P,T,U)	No	Depleted Dark Surface (F7)
No	Muck Presence (A8) (LRR U)	No	Redox Depressions (F8)
No	1cm Muck (A9) (LRR P,T)	No	Marl (F10) (LRR U)
No	Depleted Below Dark Surface (A11)	No	Depleted Ochric (F11) (MLRA 151)
No	Thick Dark Surface (A12)	No	Iron-Manganese Masses (F12) (LRR O,P,T)
No	Coast Prairie Redox (A16) (MLRA 150A)	No	Umbric Surface (F13) (LRR P, T, U)
No	Sandy Mucky Mineral (S1) (LRR O,S)	No	Delta Ochric (F17) (MLRA 151)
No	Sandy Gleyed Matrix (S4)	No	Reduced Vertic (F18) (MLRA 150A, 150B)
No	Sandy Redox (S5)	No	Piedmont Floodplain Soils (F19) (MLRA 149A)
No	Stripped Matrix S6)	No	Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
No	Dark Surface (S7) (LRR P, S, T, U)		
No		No	1cm Muck (A9) (LRR O)
No		No	2cm Muck (A10) (LRR S)
No		No	Reduced Vertic (F18) (outside MLRA 150A,B)
No		No	Piedmont Floodplain Soils (F19) (LRR P,S,T)
No		No	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
No		No	Red Parent Material (TF2)
No		No	Very Shallow Dark Surface (TF12)
No		No	Other (Explain)

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

No soil sample taken. Soils assumed hydric due to extent/duration of inundation.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet:
<i>Taxodium distichum</i>		30	Yes	OBL	Number of Dominant Species That are OBL, FACW, or FAC (A): <u>7</u>
<i>Nyssa aquatica</i>		15	Yes	OBL	
					Total Number of Dominant Species Across All Strata <u>7</u>
					Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>100.00%</u>
<p style="text-align: center;"><u>45</u> = Total Cover 50/20 Threshold 50% of Total Cover = 22.5 20% of Total Cover = 9</p>					Prevalence Index Worksheet: Total % Cover of: _____ Multiply _____ OBL x1= _____ FACW x2= _____ FAC x3= _____ FACU x4= _____ UPL x5= _____ A Totals B _____ Prevalence Index (B/A)= _____
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
<i>Taxodium distichum</i>		15	Yes	OBL	Rapid Test for Hydrophytic Veg: <u>No</u>
<i>Nyssa aquatica</i>		5	Yes	OBL	Dominance Test > 50%: <u>Yes</u>
					Prevalence Index is ≤3.0: <u>N/A</u>
					Problematic Hydrophytic Veg: <u>No</u>
<p style="text-align: center;"><u>20</u> = Total Cover 50/20 Threshold 50% of Total Cover = 10 20% of Total Cover = 4</p>					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
<i>Nyssa aquatica</i>		5	Yes	OBL	
<p style="text-align: center;"><u>5</u> = Total Cover 50/20 Threshold 50% of Total Cover = 2.5 20% of Total Cover = 1</p>					
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
<i>Cyperus drummondii</i>		30	Yes	OBL	
<i>Hydrocotyle ranunculoides</i>		20	Yes	OBL	
<i>Lemna minor</i>		10	No	OBL	
<p style="text-align: center;"><u>60</u> = Total Cover 50/20 Threshold 50% of Total Cover = 30 20% of Total Cover = 12</p>					
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
None					
<p style="text-align: center;"><u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					Hydrophytic Vegetation Present? <u>Yes</u>

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	2/3/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	7
Investigator(s):	Tim Kimmel and Angela Singletary	Section, Township, Range:	Section 40, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	
Subregion (LRR or MLRA):	LRR O	Lat: 30.015992°	Long: -91.146034°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification: None		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks)				
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes				
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)				

SUMMARY OF FINDINGS	
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	No
Wetland Hydrology Present?	No
Remarks:	
Is the Sampled Area within a Wetland? No	

HYDROLOGY	
Wetland Hydrology Indicators	Secondary Indicators (Need 2):
Primary Indicators (Need 1):	No Surface Soil Cracked (B6)
No Surface Water (A1)	No Sparsely Veg. Concave Surface (B8)
No High Water Table (A2)	No Drainage Patterns (B10)
No Saturation (A3)	No Moss Trim Lines (B16)
No Water Marks (B1)	No Dry-Season Water Table (C2)
No Sediment Deposits (B2)	No Crayfish Burrows (C8)
No Drift Deposits (B3)	No Saturation on Aerial Imagery (C9)
No Algal Mat or Crust (B4)	No Geomorphic Position (D2)
No Iron Deposits (B5)	No Shallow Aquitard (D3)
No Inundation on Aerial Imagery (B7)	No FAC-Neutral Test (D5)
No Water Stained Leaves (B9)	No Sphagnum Moss (D8) (LRR T, U)
No Aquatic Fauna (B13)	
No Marl Deposits (B15) (LRR U)	
No Hydrogen Sulfide Odor (C1)	
No Oxidized Root Channels (C3)	
No Presence of Reduced Iron (C4)	
No Recent Reduct. in Tilled Soils (C6)	
No Thin Muck Surface (C7)	
No Other (Explain in Remarks)	

Field Observations:		Wetland Hydrology Present?
Surface Water Present?	None	No
Water table Present?	None	
Saturation Present?	None	
Depth (inches):	N/A	
Depth (inches):	N/A	
Depth (inches):	N/A	
Remarks:		

SOIL							
Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-16	10YR 4/2	95	10YR 5/6	5	C	M	silt clay loam

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Soils:
No Histol (A1)	No 1cm Muck (A9) (LRR O)
No Histic Epipedon (A2)	No 2cm Muck (A10) (LRR S)
No Black Histic (A3)	No Reduced Vertic (F18) (outside MLRA 150A,B)
No Hydrogen Sulfide (A4)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)
No Stratified Layers (A5)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)
No Organic Bodies (A6) (LRR P,T,U)	No Red Parent Material (TF2)
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Very Shallow Dark Surface (TF12)
No Muck Presence (A8) (LRR U)	No Other (Explain)
No 1cm Muck (A9) (LRR P,T)	
No Depleted Below Dark Surface (A11)	
No Thick Dark Surface (A12)	
No Coast Prairie Redox (A16) (MLRA 150A)	
No Sandy Mucky Mineral (S1) (LRR O,S)	
No Sandy Gleyed Matrix (S4)	
No Sandy Redox (S5)	
No Stripped Matrix S6)	
No Dark Surface (S7) (LRR P, S, T, U)	
No Polyvalue Below Surface (S8) (LRR S,T,U)	
No Thin Dark Surface (S9) (LRR S,T,U)	
No Loamy Mucky Mineral (F1) (LRR O)	
No Loamy Gleyed Matrix (F2)	
No Depleted Matrix (F3)	
No Redox Dark Surface (F6)	
No Depleted Dark Surface (F7)	
No Redox Depressions (F8)	
No Marl (F10) (LRR U)	
No Depleted Ochric (F11) (MLRA 151)	
No Iron-Manganese Masses (F12) (LRR O,P,T)	
No Umbric Surface (F13) (LRR P, T, U)	
No Delta Ochric (F17) (MLRA 151)	
No Reduced Vertic (F18) (MLRA 150A, 150B)	
No Piedmont Floodplain Soils (F19) (MLRA 149A)	
No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	

Restrictive Layer (if observed):		Hydric Soil Present?
Type:	None	No
Depth inches:	None	

Remarks:	
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WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	8
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.016968°	Long: -91.132411°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silt loam	NWI Classification: None		

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
No Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	Yes Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	Yes FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	No	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	No	Depth (inches):	N/A	
Saturation Present?	No	Depth (inches):	N/A	
Remarks:				

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-3	10YR 3/1	80	10YR 5/8	10	C	M	silty clay loam
			10YR 5/1	10	D	M	
3-16	10YR 5/1	83	10YR 4/6	15	C	M	silty clay loam
			5YR 5/8	2	C	PL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	
Yes		

Remarks:

Soil profile appears to be consistent with Gramercy silt clay loam.

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	9
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.016718°	Long: -91.132705°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam		NWI Classification: None	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks)				
Are Vegetation, Soil, or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes				
Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)				

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	No	Is the Sampled Area within a Wetland?	No
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	No		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
No Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	No Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	No FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present?	
Surface Water Present?	No	Depth (inches):	N/A
Water table Present?	No	Depth (inches):	N/A
Saturation Present?	No	Depth (inches):	N/A
Remarks:		<u> No </u>	

SOIL

Depth Inches	Matrix		Redox Features				Location	Texture
	Color	%	Color	%	Type			
0-4	10YR 4/3	98	10YR 5/8	2	C	M	silt loam	
4-16	10YR 5/1	95	10YR 5/6	5	C	M	silt loam	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):		Hydric Soil Present?
Type:	None	<u> Yes </u>
Depth inches:	None	

Remarks:

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	10
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.015366°	Long: -91.135174°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification:	None	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks)				
Are Vegetation, Soil, or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes				
Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)				

SUMMARY OF FINDINGS	
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Remarks:	
Is the Sampled Area within a Wetland? Yes	

HYDROLOGY	
Wetland Hydrology Indicators	Secondary Indicators (Need 2):
Primary Indicators (Need 1):	No Surface Soil Cracked (B6)
Yes Surface Water (A1)	No Sparsely Veg. Concave Surface (B8)
Yes High Water Table (A2)	No Drainage Patterns (B10)
Yes Saturation (A3)	No Moss Trim Lines (B16)
No Water Marks (B1)	No Dry-Season Water Table (C2)
No Sediment Deposits (B2)	No Crayfish Burrows (C8)
No Drift Deposits (B3)	Yes Saturation on Aerial Imagery (C9)
No Algal Mat or Crust (B4)	No Geomorphic Position (D2)
No Iron Deposits (B5)	No Shallow Aquitard (D3)
No Inundation on Aerial Imagery (B7)	No FAC-Neutral Test (D5)
	No Sphagnum Moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes	Depth (inches): 4+
Water table Present? Yes	Depth (inches): N/A
Saturation Present? Yes	Depth (inches): N/A
Remarks:	
Wetland Hydrology Present? Yes	

SOIL			
Depth	Matrix	Redox Features	Texture
Inches	Color %	Color % Type Location	
N/A			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains		Location: PL=Pore Lining, M=Matrix	
Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	No Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (if observed):		Hydric Soil Present? Yes	
Type:	None		
Depth inches:	None		
Remarks:			
No soil sample taken. Soils assumed hydric due to extent/duration of inundation.			

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator	Status	Dominance Test Worksheet:	
None						Number of Dominant Species That are OBL, FACW, or FAC	(A): 1
						Total Number of Dominant Species Across All Strata	1
						Percent of Dominant Species That Are OBL, FACW, or FAC	(A/B): 100.00%
_____ 0 _____ = Total Cover						50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0	
						Prevalence Index Worksheet: Total % Cover of: _____ Multiply _____	
						OBL	x1= _____
						FACW	x2= _____
						FAC	x3= _____
						FACU	x4= _____
						UPL	x5= _____
						A Totals	B
						Prevalence Index (B/A)= _____	
						Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg: _____ No Dominance Test > 50%: _____ Yes Prevalence Index is ≤3.0: _____ N/A Problematic Hydrophytic Veg: _____ No	
_____ 0 _____ = Total Cover						50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0	
						Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.	
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator	Status	Remarks:	
None							
_____ 0 _____ = Total Cover							
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator	Status	Remarks:	
<i>Typha angustifolia</i>		60	Yes		OBL		
<i>Alternanthera philoxeroides</i>		10	No		OBL		
_____ 70 _____ = Total Cover							
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator	Status	Remarks:	
None							
_____ 0 _____ = Total Cover						50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0	
						Hydrophytic Vegetation Present? _____ Yes _____	

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	11
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.015513°	Long: -91.133422°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silty clay loam	NWI Classification: None		

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

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

Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
No Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	Yes Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	Yes Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	Yes FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	No	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	No	Depth (inches):	N/A	
Saturation Present?	No	Depth (inches):	N/A	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-3	10YR 2/1	100					clay
3-16	N 4/	80	10YR 4/6	10	C	M	clay
			5YR 4/6	10	C	PL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

Soil profile appears to be consistent with Schriever clay.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
None					Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC (A): <u>2</u> Total Number of Dominant Species Across All Strata <u>2</u> Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>100.00%</u>	
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply OBL x1= <u> </u> FACW x2= <u> </u> FAC x3= <u> </u> FACU x4= <u> </u> UPL x5= <u> </u> A Totals B <u> </u> Prevalence Index (B/A)= <u> </u>	
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
None						Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg: <u> </u> No Dominance Test > 50%: <u> </u> Yes Prevalence Index is ≤3.0: <u> </u> N/A Problematic Hydrophytic Veg: <u> </u> No
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.	
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
None						Remarks:
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Remarks:	
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
<i>Stenotaphrum secundatum</i>		30	Yes	FAC		Remarks:
<i>Paspalum dilatatum</i>		20	Yes	FAC		
<i>Eleocharis palustris</i>		15	No	OBL		
<i>Alternanthera philoxeroides</i>		15	No	OBL		
<i>Hydrocotyle bonariensis</i>		5	No	FACW		
<i>Diodia virginiana</i>		5	No	FAC		
<i>Cynodon dactylon</i>		5	No	FACU		
<i>Plantago major</i>		2	No	FAC		
<u>97</u> = Total Cover 50/20 Threshold 50% of Total Cover = 48.5 20% of Total Cover = 19.4					Remarks:	
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status		
None						Remarks:
<u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0					Hydrophytic Vegetation Present? <u> </u> Yes	

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	12
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.015484°	Long: -91.132141°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silt loam	NWI Classification: None		

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
No Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
No High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
No Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	No Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
No Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	N/A FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	No	Depth (inches):	N/A	Wetland Hydrology Present?
Water table Present?	No	Depth (inches):	N/A	
Saturation Present?	No	Depth (inches):	N/A	

Remarks:

SOIL

Depth Inches	Matrix		Redox Features			Location	Texture
	Color	%	Color	%	Type		
0-5	10YR 3/1	100					silty clay loam
5-16	10YR 5/2	65	10YR 2/1	20	C	M	silty clay loam
			7.5YR 5/8	15	C	M	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	Yes Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	

Remarks:

Gravel found in soil profile.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet:
None					Number of Dominant Species That are OBL, FACW, or FAC (A): <u>1</u>
					Total Number of Dominant Species Across All Strata <u>2</u>
					Percent of Dominant Species That Are OBL, FACW, or FAC (A/B): <u>50.00%</u>
<p style="text-align: center;"><u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					Prevalence Index Worksheet: Total % Cover of: _____ Multiply _____ OBL x1= _____ FACW x2= _____ FAC x3= _____ FACU x4= _____ UPL x5= _____ A Totals B _____ Prevalence Index (B/A)= _____
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
None					Rapid Test for Hydrophytic Veg: <u>No</u>
					Dominance Test > 50%: <u>No</u>
					Prevalence Index is ≤3.0: <u>N/A</u>
					Problematic Hydrophytic Veg: <u>No</u>
<p style="text-align: center;"><u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
None					
<p style="text-align: center;"><u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
<i>Paspalum notatum</i>		50	Yes	FACU	
<i>Stenotaphrum secundatum</i>		25	Yes	FAC	
<i>Trifolium repens</i>		10	No	FACU	
<i>Paspalum dilatatum</i>		5	No	FAC	
<i>Rumex crispus</i>		2	No	FAC	
<p style="text-align: center;"><u>92</u> = Total Cover 50/20 Threshold 50% of Total Cover = 46 20% of Total Cover = 18.4</p>					
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Present?
None					<u>No</u>
<p style="text-align: center;"><u>0</u> = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	13
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	Slope: 0-1%
Subregion (LRR or MLRA):	LRR O	Lat: 30.015505°	*Long: -91.131610	Datum: NAD 83
Soil Map Unit Name:	Cancienne silt loam	NWI Classification: None		

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Is the Sampled Area within a Wetland?	Yes
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators		Secondary Indicators (Need 2):	
Primary Indicators (Need 1):		No Surface Soil Cracked (B6)	
Yes Surface Water (A1)	No Water Stained Leaves (B9)	No Sparsely Veg. Concave Surface (B8)	
Yes High Water Table (A2)	No Aquatic Fauna (B13)	No Drainage Patterns (B10)	
Yes Saturation (A3)	No Marl Deposits (B15) (LRR U)	No Moss Trim Lines (B16)	
No Water Marks (B1)	No Hydrogen Sulfide Odor (C1)	No Dry-Season Water Table (C2)	
No Sediment Deposits (B2)	No Oxidized Root Channels (C3)	No Crayfish Burrows (C8)	
No Drift Deposits (B3)	No Presence of Reduced Iron (C4)	No Saturation on Aerial Imagery (C9)	
No Algal Mat or Crust (B4)	No Recent Reduct. in Tilled Soils (C6)	No Geomorphic Position (D2)	
No Iron Deposits (B5)	No Thin Muck Surface (C7)	No Shallow Aquitard (D3)	
Yes Inundation on Aerial Imagery (B7)	No Other (Explain in Remarks)	N/A FAC-Neutral Test (D5)	
		No Sphagnum Moss (D8) (LRR T, U)	

Field Observations:

Surface Water Present?	Yes	Depth (inches):	2+	Wetland Hydrology Present?
Water table Present?	Yes	Depth (inches):	N/A	
Saturation Present?	Yes	Depth (inches):	N/A	
Remarks:				

SOIL

Depth Inches	Matrix		Redox Features			Texture
	Color	%	Color	%	Type	
N/A						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Soils:	
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)	No 1cm Muck (A9) (LRR O)	
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)	No 2cm Muck (A10) (LRR S)	
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)	No Reduced Vertic (F18) (outside MLRA 150A,B)	
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)	No Piedmont Floodplain Soils (F19) (LRR P,S,T)	
No Stratified Layers (A5)	No Depleted Matrix (F3)	No Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)	No Red Parent Material (TF2)	
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)	No Very Shallow Dark Surface (TF12)	
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)	No Other (Explain)	
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)		
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)		
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)		
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)		
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)		
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)		
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)		
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
No Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type:	None	Hydric Soil Present?
Depth inches:	None	
Yes		

Remarks:

No soil sample taken. Soils assumed hydric due to extent/duration of inundation.

WETLAND DETERMINATION DATA FORM - ATLANTIC AND GULF COASTAL PLAIN REGION

Project/Site:	LA 70 Detour Route	Parish: Assumption	Sampling Date:	6/10/2014
Applicant/Owner:	Louisiana Department of Transportation and Development	State: Louisiana	Sampling Point:	14
Investigator(s):	Angela Singletary and John Gross	Section, Township, Range:	Section 41, Township 12 South, Range 13 East	
Landform (hillslope, terrace, etc.):	Flat	Local Relief (concave, convex, none):	None	
Subregion (LRR or MLRA):	LRR O	Lat: 30.015305°	Long: -91.132578°	Datum: NAD 83
Soil Map Unit Name:	Cancienne silt loam	NWI Classification: PEM1C		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks)				
Are Vegetation, Soil, or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes				
Are Vegetation, Soil, or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)				

SUMMARY OF FINDINGS	
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	Yes
Wetland Hydrology Present?	Yes
Remarks:	

HYDROLOGY	
Wetland Hydrology Indicators	Secondary Indicators (Need 2):
Primary Indicators (Need 1):	No Surface Soil Cracked (B6)
Yes Surface Water (A1)	No Sparsely Veg. Concave Surface (B8)
Yes High Water Table (A2)	No Drainage Patterns (B10)
Yes Saturation (A3)	No Moss Trim Lines (B16)
No Water Marks (B1)	No Dry-Season Water Table (C2)
No Sediment Deposits (B2)	No Crayfish Burrows (C8)
No Drift Deposits (B3)	No Saturation on Aerial Imagery (C9)
No Algal Mat or Crust (B4)	No Geomorphic Position (D2)
No Iron Deposits (B5)	No Shallow Aquitard (D3)
Yes Inundation on Aerial Imagery (B7)	No FAC-Neutral Test (D5)
	No Sphagnum Moss (D8) (LRR T, U)

Field Observations:					
Surface Water Present?	Yes	Depth (inches):	4+	Wetland Hydrology Present?	<u>Yes</u>
Water table Present?	Yes	Depth (inches):	N/A		
Saturation Present?	Yes	Depth (inches):	N/A		
Remarks:					

SOIL						
Depth Inches	Matrix		Redox Features			Texture
	Color	%	Color	%	Type	
N/A						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Soils:
No Histol (A1)	No Polyvalue Below Surface (S8) (LRR S,T,U)
No Histic Epipedon (A2)	No Thin Dark Surface (S9) (LRR S,T,U)
No Black Histic (A3)	No Loamy Mucky Mineral (F1) (LRR O)
No Hydrogen Sulfide (A4)	No Loamy Gleyed Matrix (F2)
No Stratified Layers (A5)	No Depleted Matrix (F3)
No Organic Bodies (A6) (LRR P,T,U)	No Redox Dark Surface (F6)
No 5cm Mucky Mineral (A7) (LRR P,T,U)	No Depleted Dark Surface (F7)
No Muck Presence (A8) (LRR U)	No Redox Depressions (F8)
No 1cm Muck (A9) (LRR P,T)	No Marl (F10) (LRR U)
No Depleted Below Dark Surface (A11)	No Depleted Ochric (F11) (MLRA 151)
No Thick Dark Surface (A12)	No Iron-Manganese Masses (F12) (LRR O,P,T)
No Coast Prairie Redox (A16) (MLRA 150A)	No Umbric Surface (F13) (LRR P, T, U)
No Sandy Mucky Mineral (S1) (LRR O,S)	No Delta Ochric (F17) (MLRA 151)
No Sandy Gleyed Matrix (S4)	No Reduced Vertic (F18) (MLRA 150A, 150B)
No Sandy Redox (S5)	No Piedmont Floodplain Soils (F19) (MLRA 149A)
No Stripped Matrix S6)	No Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
No Dark Surface (S7) (LRR P, S, T, U)	

Restrictive Layer (if observed):	Hydric Soil Present?
Type: None	<u>Yes</u>
Depth inches: None	

Remarks:

No soil sample taken. Soils assumed hydric due to extent/duration of inundation.

VEGETATION

SAMPLING POINT

Tree Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC (A):
None					
					Total Number of Dominant Species Across All Strata
					5
					Percent of Dominant Species That Are OBL, FACW, or FAC (A/B):
					100.00%
<p>0 = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					<p>Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply</p> <p>OBL x1= <u> </u></p> <p>FACW x2= <u> </u></p> <p>FAC x3= <u> </u></p> <p>FACU x4= <u> </u></p> <p>UPL x5= <u> </u></p> <p>A Totals B</p> <p>Prevalence Index (B/A)= <u> </u></p>
Sapling Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg: No Dominance Test > 50%: Yes Prevalence Index is ≤3.0: N/A Problematic Hydrophytic Veg: No
None					
<p>0 = Total Cover 50/20 Threshold 50% of Total Cover = 0 20% of Total Cover = 0</p>					<p>Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20' or more in height and 3" or larger in DBH. Sapling - Woody plants, excluding woody vines, approximately 20' or more in height and less than 3" in DBH. Shrub - Woody plants, excluding woody vines, approximately 3-20' in height. Herb - All herbaceous plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3' in height. Woody vine - All woody vines, regardless of height.</p>
Shrub Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	Remarks:
<i>Acer rubrum</i>		10	Yes	FAC	
<i>Salix nigra</i>		5	Yes	FAC	
<p>15 = Total Cover 50/20 Threshold 50% of Total Cover = 7.5 20% of Total Cover = 3</p>					
Herb Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	
<i>Saururus cernuus</i>		60	Yes	OBL	
<i>Alternanthera philoxeroides</i>		25	Yes	OBL	
<i>Juncus effusus</i>		5	No	OBL	
<i>Solidago sempervirens</i>		5	No	FACW	
<p>95 = Total Cover 50/20 Threshold 50% of Total Cover = 47.5 20% of Total Cover = 19</p>					
Woody Vine Stratum	Plot Size: 30'	Absolute % Cover	Dominant Species	Indicator Status	
<i>Ampelopsis arborea</i>		5	Yes	FAC	
<p>5 = Total Cover 50/20 Threshold 50% of Total Cover = 2.5 20% of Total Cover = 1</p>					<p>Hydrophytic Vegetation Present? <u> </u> Yes</p>