Exhibit EE. Shreveport Airport Warehouse District Site Wetlands Delineation Report & Transmittal Letter







March 22, 2017

Vicksburg District USACE Regulatory Branch 4155 Clay Street Vicksburg, Mississippi 39183-3435

Shreveport Airport Warehouse District Site Wetlands Delineation Report & Transmittal Letter

Re: Preliminary Jurisdictional Determination Request

MVK-2015-677

Shreveport Airport Tracts

Shreveport, Caddo Parish, Louisiana Terracon Project No. EH157076.1

To Whom it may Concern:

As requested by the Shreveport Airport Authority, Terracon Consultants, Inc. (Terracon) has conducted a wetland delineation on additional acreage added to the previously identified Airport Tracts owned by Shreveport Airport. The revised tracts may be part of future development projects. As such, an updated preliminary jurisdictional determination, including the additional acreage, is requested.

On November 17, 2015, a Preliminary Jurisdictional Determination (MVK-2015-677) was issued for two tracts identified as a 55-acre and 93-acre; located within the boundaries of the Shreveport Airport Facility. As depicted on the attached maps, approximately 15.69 acres was added south and west to the 55-acre tract; and 9.3 acres was added south of the 93-acre tract. The Shreveport Airport Authority wishes to have an updated Preliminary Jurisdictional Determination to include the entire site, including the new additional acreage.

As indicated in the attached updated wetland delineation report, no wetland habitat and two drainage features were identified in the additional acreage, which was consistent with the initial findings and PJD issued on November 17, 2015 (MVK-2015-677). These features appear to extend onto adjacent properties to the south. Based on topographic maps, the features appear to eventually drain into Brush Bayou.

Terracon appreciates your assistance in this matter. If there or any questions or if additional information is needed, please feel free to contact the undersigned at 225-239-2628 or by E-mail at Jessica.keasler@terracon.com.

Sincerely,

Terracon Consultants, Inc.

Environmental Scientist

Attachments: Preliminary WOUS Delineation Report dated March 16, 2017; Exhibits showing increased acreage

Terracon Consultants, Inc. 2822-B O'Neal Lane Baton Rouge, Louisiana 70816 P [225] 344 6052 F [225] 344 6346 terracon.com

Shreveport Airport Tracts

Hollywood Avenue

Shreveport, Caddo Parish, Louisiana

April 20, 2017

Terracon Project No. EH157076



Prepared for:

Shreveport Airport Authority Shreveport, LA

Prepared by:

Terracon Consultants, Inc. Baton Rouge, Louisiana

terracon.com

lerracon

Environmental Facilities Geotechnical Materials



Mr. Stephen Price Shreveport Airport Authority 5103 Hollywood Avenue, Suite 300 Shreveport, LA 71109

Re: Preliminary WOUS Delineation

Shreveport Airport Tracts

Hollywood Drive

Shreveport, Caddo Parish, Louisiana

Terracon Project No. EH157076

Dear Mr. Price:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Preliminary Waters of the United States (WOUS) Delineation report for the above-referenced site. On July 20, 2015 and February 22, 2017, Terracon sent qualified wetland scientists to perform a delineation of the site to determine the presence/absence of jurisdictional WOUS.

Based on site conditions at the time of reconnaissance, it is Terracon's opinion that 1,398 linear feet of jurisdictional WOUS are present within the Warehouse District site (70-acre); however, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. Should work be proposed within the jurisdictional area, coordination with the USACE to obtain coverage under a Section 10 or 404 permit may be required.

We appreciate the opportunity to be of service to you on this project. Our professionals provide a variety of environmental, geotechnical, construction materials, and facilities services locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact Jessica Keasler at 225-239-2628 or by e-mail at Jessica.keasler@terracon.com.

Sincerely,

Terracon Consultants, Inc.

Jessica R. Keasler, MS

Environmental Scientist

Ginger C. Horn, PWS

Approved Project Reviewer

Attachments



Terracon Consultants, Inc. 2822-B O'Neal Lane Baton Rouge, LA 70816
P [225] 344-6052 F [225] 344-6346 terracon.com

TABLE OF CONTENTS

			Page No.
EXEC		MMARY	
	Opinion		i
1.0		JCTION	
2.0	PRELIMI	NARY DATA GATHERING AND ANALYSIS	2
	2.1 T	opographic Map	2
	2.2 N	lational Wetlands Inventory Map	2
	2.3 S	oil Survey	2
	2.4 F	EMA Flood Insurance Rate Map	3
	2.5 A	erial Photographs	3
3.0	FIELD MI	ETHODS	3
	3.1 V	Vetland Field Methods	4
	3	.1.1 Vegetative Community	4
	3	.1.2 Hydric Soils	5
	3	.1.3 Wetland Hydrology	5
	3.2 N	lon-Wetland WOUS Field Methods	5
4.0	FIELD OF	BSERVATIONS	6
5.0	PRINCIP	AL FINDINGS OF THE INVESTIGATION	6
		APPENDICES	
APPE	ENDIX A	EXHIBITS	
	Exhibit 1	: Topographic Vicinity Map	
	Exhibit 2	: Site Diagram	
		: Detail Site Diagram – 55-Acre Tract	
		: Detail Site Diagram – 93-Acre Tract	
		: National Wetland Inventory Map	
		· ·	
		: Soils Map	
	Exhibit 7	: Flood Insurance Rate Map	
APPE	ENDIX B	PHOTO LOG	
APPE	ENDIX C	DATA FORMS	
APPE	ENDIX D	COMMON ACRONYMS	

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



EXECUTIVE SUMMARY

Terracon Consultants, Inc. (Terracon) conducted a delineation of waters of the United States (WOUS) for two tracts within the Shreveport Airport property, Warehouse District Site (70-acre tract) and a Aeropark Site (102-acre tract) (the site).

Terracon's qualified wetland scientists, conducted a site visit on July 20, 2015 and on February 22, 2017 in order to determine the presence of potentially jurisdictional WOUS within the site. The initial site visit in 2015 was conducted on a portion of the site, and the 2017 site visit was conducted on additional acreage.

The site was reviewed for potential WOUS using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic and Gulf Coastal Plain Regional Supplement manual. The site was also reviewed for potential WOUS, including wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook.

Opinion

Terracon's opinion is that there is a total of 1,398 linear feet of jurisdictional WOUS within the Warehouse District (70-acre) site, of which, all was classified as ephemeral stream and none as wetland habitat. Additionally, no non-jurisdictional WOUS were identified. No jurisdictional WOUS was identified within the Aeropark (102-acre) site. However, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. According to the guidelines, non-wetland jurisdictional WOUS are identified according to their flow regime as Traditional Navigable Waters (TNW), Relatively Permanent Waters (RPW), and Non Relatively Permanent Waters (NRPW).

Terracon's opinion of jurisdictional and non-jurisdictional waters is summarized as follows:

- A total of 1,398 linear feet jurisdictional non-wetland WOUS were identified on the Warehouse District (70-acre) site for a total of 0.016 acre (Table 1).
- No jurisdictional wetlands were identified on site.
- No non-jurisdictional waters were identified on site.

This opinion is part of an executive summary and incomplete without the remainder of the Preliminary WOUS Delineation report.

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted a preliminary delineation of waters of the United States (WOUS) for two tracts within the Shreveport Airport property, Warehouse District (70-acre) tract and Aeropark (102-acre) tract (the site), as shown on Exhibits 1 & 2 in Appendix A. Terracon conducted the preliminary WOUS delineation in order to determine the jurisdiction of WOUS on the site. The following Exhibits are included in Appendix A:

- USGS Topographic Vicinity Map (Exhibit 1)
- Site Diagram (Exhibit 2)
- Detail Site Diagram Aeropark (102-Acre) Tract (Exhibit 3)
- Detail Site Diagram Warehouse District (70-Acre) Tract (Exhibit 4)
- National Wetland Inventory Map (Exhibit 5)
- Soils Map (Exhibit 6)
- Flood Insurance Rate Map (Exhibit 7)

Terracon's qualified wetland scientists, conducted a site visit on July 20, 2015 and on February 22, 2017 in order to determine the presence of potentially jurisdictional WOUS within the site. The initial site visit in 2015 was conducted on a portion of the site, and the 2017 site visit was conducted on additional acreage.

The site was reviewed for potential WOUS using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic Gulf Coast Regional Supplement manual. The site was also reviewed for potential WOUS, including wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook.

The observations and opinions contained in this report are based on guidance, regulations, and data available at the time of preparation as well as site conditions encountered at the time of the site reconnaissance. Guidance, regulations, data furnished by others, and site conditions are dynamic and subject to changes beyond the control of Terracon. A future evaluation may yield differing results.

This Preliminary WOUS Delineation report is prepared for the exclusive use and reliance of **Shreveport Airport Authority**. Use or reliance by any other party except a governmental entity having jurisdiction over the site is prohibited without the written authorization of **Shreveport Airport Authority** and Terracon.

Reliance on the Preliminary WOUS Delineation by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, Preliminary WOUS

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



Delineation report, and Terracon's Agreement for Services. The limitation of liability defined in the Agreement for Services is the aggregate limit of Terracon's liability to the client and all relying parties.

2.0 PRELIMINARY DATA GATHERING AND ANALYSIS

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

2.1 Topographic Map

The United States Department of the Interior Geologic Survey (USGS) 7.5-Minute Topographic Map of the project site was reviewed to identify drainages or suspect WOUS within the project site. A portion of the Shreveport West, LA quadrangle can be seen on Exhibit 1 in Appendix A. The USGS map shows both tracts to be undeveloped. The USGS map shows a roadway extending through the 55-acre tract, which is not currently present; additionally for this tract the map shows two areas of vegetation/woods. The USGS map does not show other apparent drainages or suspect WOUS occurring on the project site.

2.2 National Wetlands Inventory Map

The National Wetlands Inventory (NWI) Map of the project site was reviewed to identify suspect wetland areas. The map for the project site was published by the U.S. Department of the Interior's Fish and Wildlife Service (USFWS) and depicts suspect wetland areas based on stereoscopic analysis of high altitude aerial photographs. A NWI map is included as Exhibit 5 in Appendix A. The review of the NWI map does not indicate the presence of suspect wetland areas occurring on the project site.

2.3 Soil Survey

Data from the soil survey of Caddo Parish, Louisiana, the U.S. Department of Agriculture (USDA) soil data mart, and the Natural Resources Conservation Service (NRCS) web soil survey was reviewed to identify soil types, including hydric soils. Hydric soil is one of the three essential characteristics of a wetland according to the USACE. Data for the soil survey was compiled by the USDA Soil Conservation Service, now known as the NRCS, in 2014. A soil survey map is included as *Exhibit 6* in *Appendix A*.

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

Keithville very fine sandy loam The Keithville series consists of deep, moderately well
drained, very slowly permeable soils that formed in loamy over clayey sediment of Tertiary

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



age. These soils are on broad nearly level or gently sloping uplands of the coastal plains. Keithville soils are saturated above the clayey layers to a depth of 2 to 3 feet below the surface for intermittent periods totaling 2 to 6 weeks during the winter and early spring.

- Metcalf-Timpson complex The Metcalf series consists of deep, somewhat poorly drained, very slowly permeable soils that formed in Pliestocene age loamy marine or alluvial sediments over Tertiary age clayey deposits. These soils are on broad level, nearly level marine or stream terraces on the Coastal Plain. The Timpson series consists of very deep, moderately drained soils. These nearly level soils formed in loamy and clayey alluvial sediments on Pleistocene age marine or fluvatile terraces overlying the Wilcox Formation.
- Meth fine sandy loam The Meth series consists of very deep, well drained, moderately slowly permeable soils that formed in thick loamy and clayey sediments on Tertiary age uplands. These soils are on broad sloping coastal plains. Water runs off the surface at a medium rate.

The 2014 Hyrdric Soils list for Caddo Parish did not include any of the listed soil series.

2.4 FEMA Flood Insurance Rate Map

Terracon downloaded and reviewed Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel Numbers 22017X0454H and 22017C0458H. According to the FIRM panels, the site is located outside of the 100-year and 500-year floodplains. A FEMA Map is included as Exhibit 7 in Appendix A.

2.5 Aerial Photographs

Terracon reviewed aerial photographs to review suspect WOUS, including wetland areas that may be present on the project site. Aerial photographs were available for 1998, 2004, 2007, 2012 and 2013 from the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS). In all of the photographs reviewed, the site and surrounding area had characteristics similar to the current conditions. No evidence of suspect wetlands was observed in the aerial photographs.

3.0 FIELD METHODS

Terracon wetland scientists conducted a reconnaissance of the site to characterize existing conditions and identify the presence/absence of potentially jurisdictional WOUS. Geographic Information System (GIS) software was used to analyze collected features, calculate areas, and generate figures provided in Appendix A.

The site was reviewed for potentially jurisdictional WOUS (including wetlands) using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic and Gulf Coastal

Shreveport Airport Tracts ■ Shreveport, Louisiana April 20, 2017 ■ Terracon Project No. EH157076



Plain Regional Supplement manual. The site was also reviewed for potential WOUS, including wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook. Following the June 5, 2007 guidance, if present, the boundaries of potential wetlands would have been placed at the point where one or more of the field indicators of wetlands were no longer observed. If present, the boundaries of streams and other open water bodies were determined using the OHWM as described in the June 5, 2007 guidance.

3.1 Wetland Field Methods

Wetlands generally have three essential characteristics: hydrophytic (water-loving) vegetation, hydric soils, and wetland hydrology. During the site reconnaissance, Terracon personnel traversed the site and recorded observations with attention paid to suspect areas if they were identified on NWI maps and aerial photographs prior to the site visit. Vegetation and hydrology observations were performed randomly throughout the site where access was permitted and soils were evaluated to determine if wetland characteristics were present. Data regarding the three essential characteristics was gathered within observed suspect wetland areas to further delineate boundaries.

3.1.1 Vegetative Community

Suspect areas were visually observed to determine the species, when possible, and absolute percentage of ground cover for five strata of plant community types. Herbs were generally observed within a five-foot radius, shrubs/saplings within a fifteen-foot radius, and trees and vines within a thirty-foot radius of the observation location. Areas representing different vegetative communities were identified throughout the project site and a plant community assessment was performed in each vegetative community.

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

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

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



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

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

3.1.2 Hydric Soils

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

3.1.3 Wetland Hydrology

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

3.2 Non-Wetland WOUS Field Methods

Terracon recorded observations of non-wetland site features that may be considered a jurisdictional WOUS. If a potential jurisdictional WOUS was identified, observations regarding its characteristics were recorded. Potentially jurisdictional non-wetland WOUS were generally evaluated based on the following characteristics:

Flow regime

- Perennial flowing water year-round during a typical year
- Intermittent flowing water during certain times of the year (groundwater supports streamflow)
- Ephemeral flowing water for a short duration during and after a precipitation event (groundwater is not a source for streamflow)





- OHWM The limit line established by fluctuation of a water surface
- Bank shape
 - Undercut banks overhang the channel
 - Steep bank slope greater than 30 degrees
 - Gradual bank slope equal to or less than 30 degrees
- Aquatic Habitat
 - Pool deep portion of stream where water flows slower
 - Riffle shallow portion of stream with swift flow over rock or coarse substrate producing turbulence on the surface
 - Run -- section of stream with little or no turbulence on the surface

4.0 FIELD OBSERVATIONS

A total of 9 sampling points documenting existing soil and vegetation conditions were established during the field investigation in 2015 and an additional 6 sampling points were established in 2017 (Exhibits 3 and 4, Appendix A). Each sampling point reflects representative vegetative communities occurring on the site at the time of the investigation. A shovel/auger test was used as the primary tool to sample the soils to a minimum depth of 16 inches. A Munsell color chart was utilized to evaluate the soil at each station, and the results are documented in Appendix C.

The majority of the site for both tracts was of an herbaceous community that is periodically mowed. Neither tract appeared to have been mowed recently. Within the Warehouse District (70-acre) tract, a wooded area was observed in the vicinity of a stream, and a few trees were observed within the tract outside of this area.

5.0 PRINCIPAL FINDINGS OF THE INVESTIGATION

Terracon's opinion is that there is a total of 1,398 linear feet of jurisdictional WOUS within the Warehouse District (70-acre) site, of which, all was classified as ephemeral stream and none as wetland habitat. Additionally, no non-jurisdictional WOUS were identified. No jurisdictional WOUS were identified within the Aeropark (102-acre) site, however, a jurisdictional stream was identified immediately adjacent to it. However, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. According to the guidelines, non-wetland jurisdictional WOUS are identified according to their flow regime as Traditional Navigable Waters (TNW), Relatively Permanent Waters (RPW), and Non Relatively Permanent Waters (NRPW).

Shreveport Airport Tracts Shreveport, Louisiana April 20, 2017 Terracon Project No. EH157076



Terracon's opinion of jurisdictional and non-jurisdictional waters is summarized as follows:

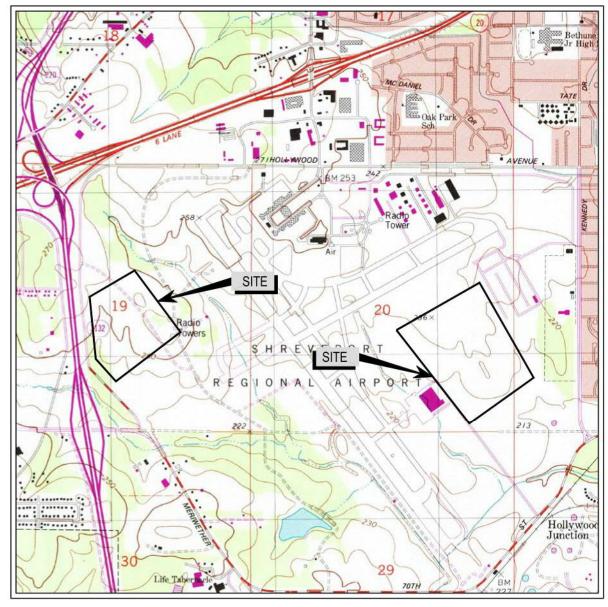
- A total of 1,398 linear feet jurisdictional non-wetland WOUS were identified on the Warehouse District (70-acre) site for a total of 0.016 acre (Table 1).
- No jurisdictional wetlands were identified on site.
- No non-jurisdictional waters were identified on site.

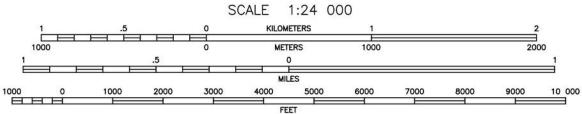
Table 1. Opinion of Jurisdictional Wetlands on the Site

Name	USACE Classification	Flow Regime	Length (feet)	Average Width (feet)	Area (acres)
Warehouse District (70- Acre) Ephemeral Stream	Jurisdictional	Ephemeral	1,398	0.5	0.016

APPENDIX A EXHIBITS

UNITED STATES - DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY





CONTOUR INTERVAL 10 FEET NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE SHREVEPORT WEST, LA 1980 PR1982

7.5 MINUTE SERIES (TOPOGRAPHIC)

*INDICATES WHICH MAP SITE IS LOCATED ON

Project Mngr:	JRK	ľ
Drawn By:	RLW	İ
Checked By:	JRK/MRF	Ì
Approved By:	IDK	Ī

Project No.	EH157076
Scale:	AS SHOWN
File No.	ESAEH157076-1
Date:	MARCH 2017

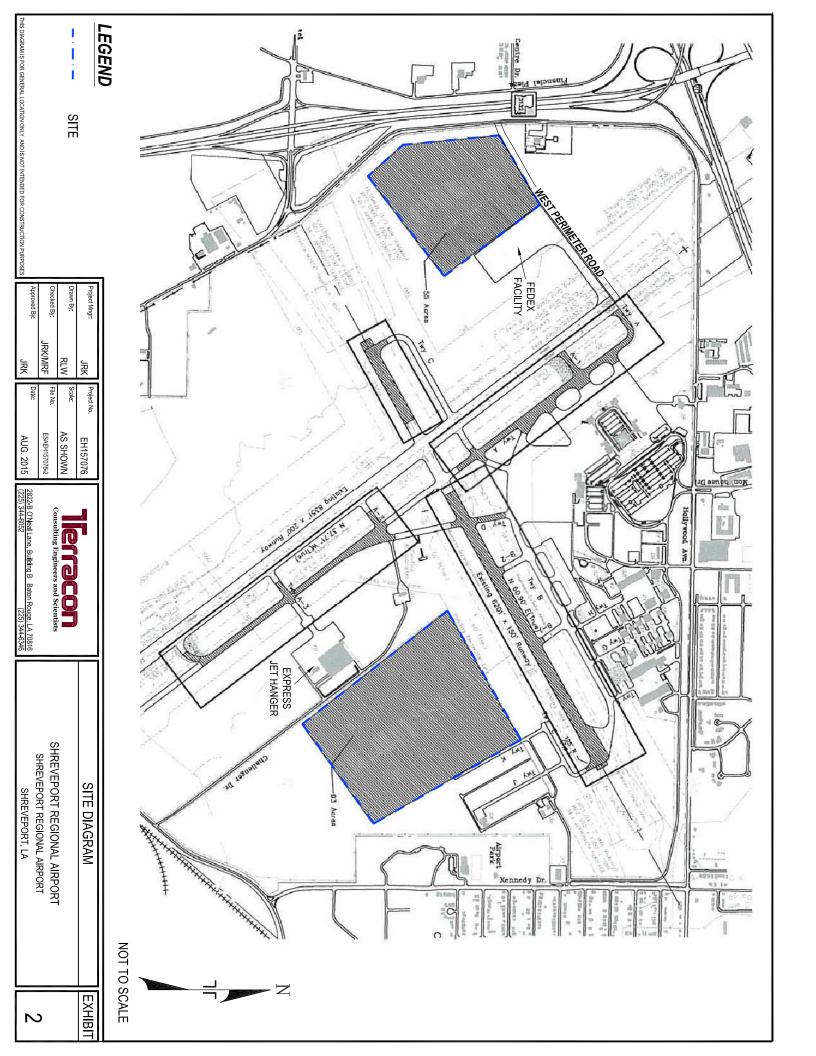
	I	
ILEFFACON Consulting Engineers and Scientists		
322-B O'Neal Lane, Building B Baton Rouge, LA 70816		
25) 344-6052 (225) 344-6346	П	

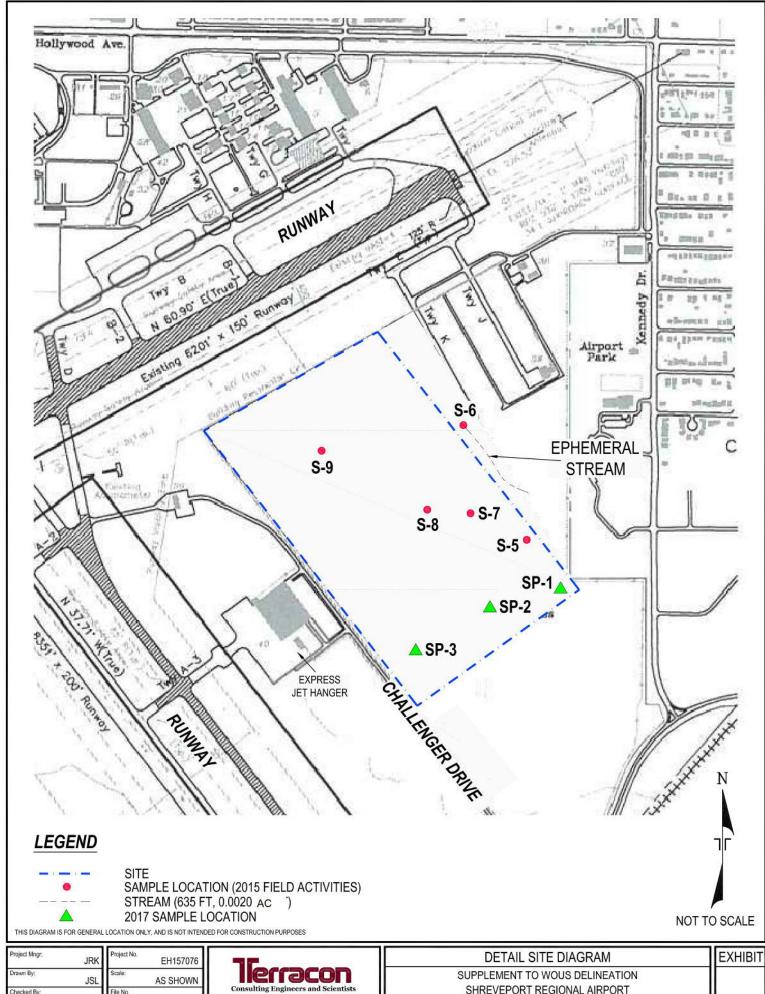
TOPOGRAPHIC VICINITY MAP
SUPPLEMENT TO WOUS DELINEATION
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT, LA

1

EXHIBIT

Ν

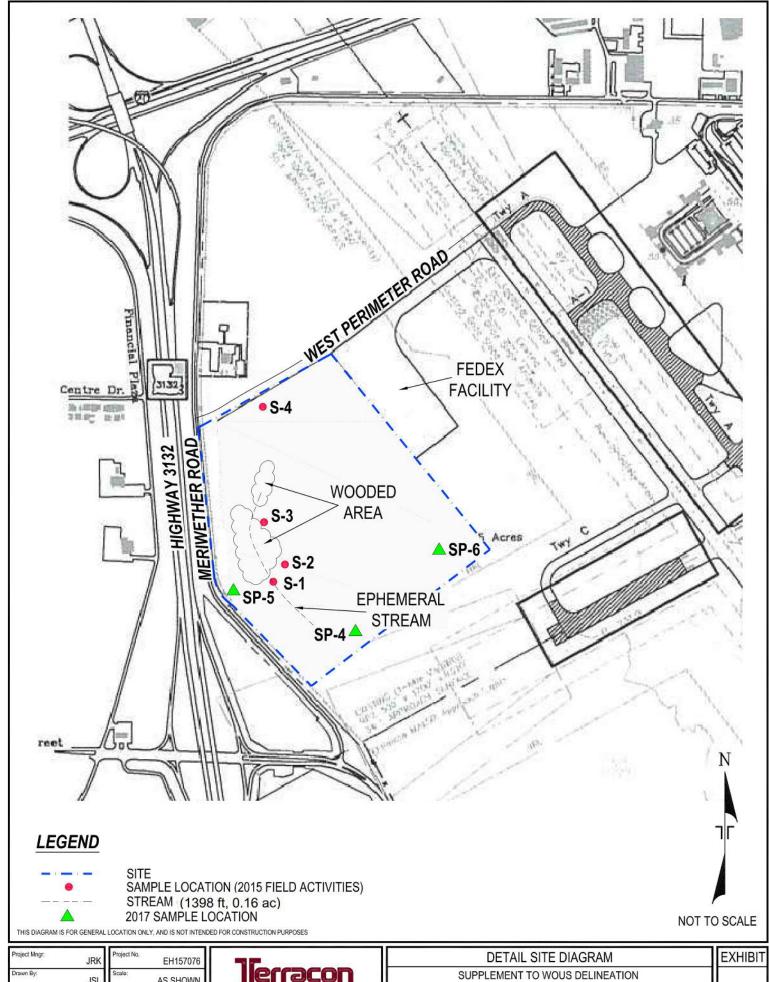




Checked By: JRK/MRF Approved By: JRK

ESAEH157076-4 MARCH 2017

SHREVEPORT REGIONAL AIRPORT SHREVEPORT REGIONAL AIRPORT SHREVEPORT, LA



Project Mngr: JRK

Drawn By: JSL

Checked By: JRK/MRF

Approved By: JRK

Project No. EH157076

Scale: AS SHOWN

File No. ESAEH157076-3

Date: MARCH 2017

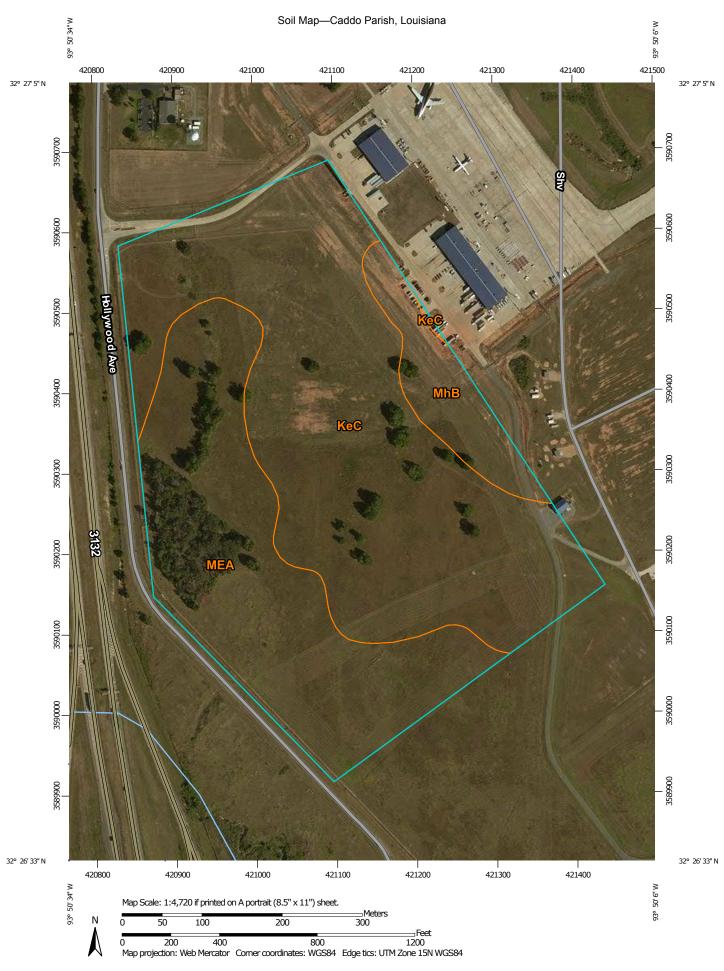
Terracon
Consulting Engineers and Scientists

22 O'Neal Lane, Building B Baton Rouge, LA 70

SUPPLEMENT TO WOUS DELINEATION
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT, LA

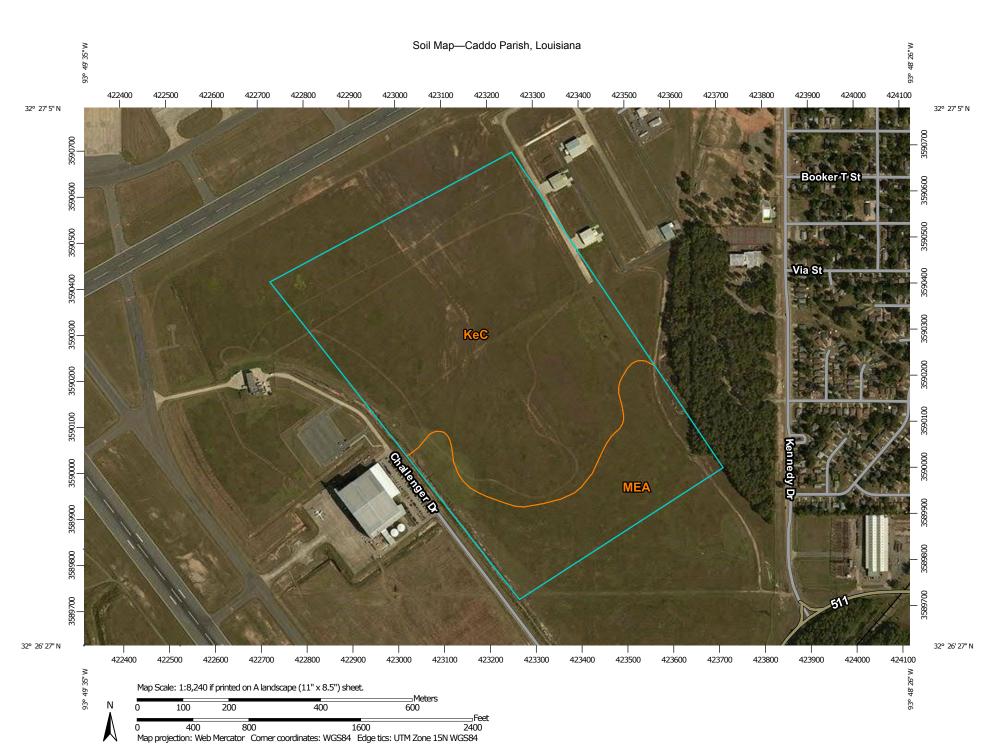
4





Map Unit Legend

Caddo Parish, Louisiana (LA017)								
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI					
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	38.9	56.5%					
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	24.7	35.9%					
MhB	Meth fine sandy loam, 1 to 3 percent slopes	5.2	7.6%					
Totals for Area of Interest		68.8	100.0%					



Map Unit Legend

Caddo Parish, Louisiana (LA017)								
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI					
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	88.7	75.0%					
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	29.5	25.0%					
Totals for Area of Interest		118.3	100.0%					

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

☑ Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

A Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

J_...

Spoil Area

Stony Spot

M Very Stony Spot

Wet Spot

△ Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

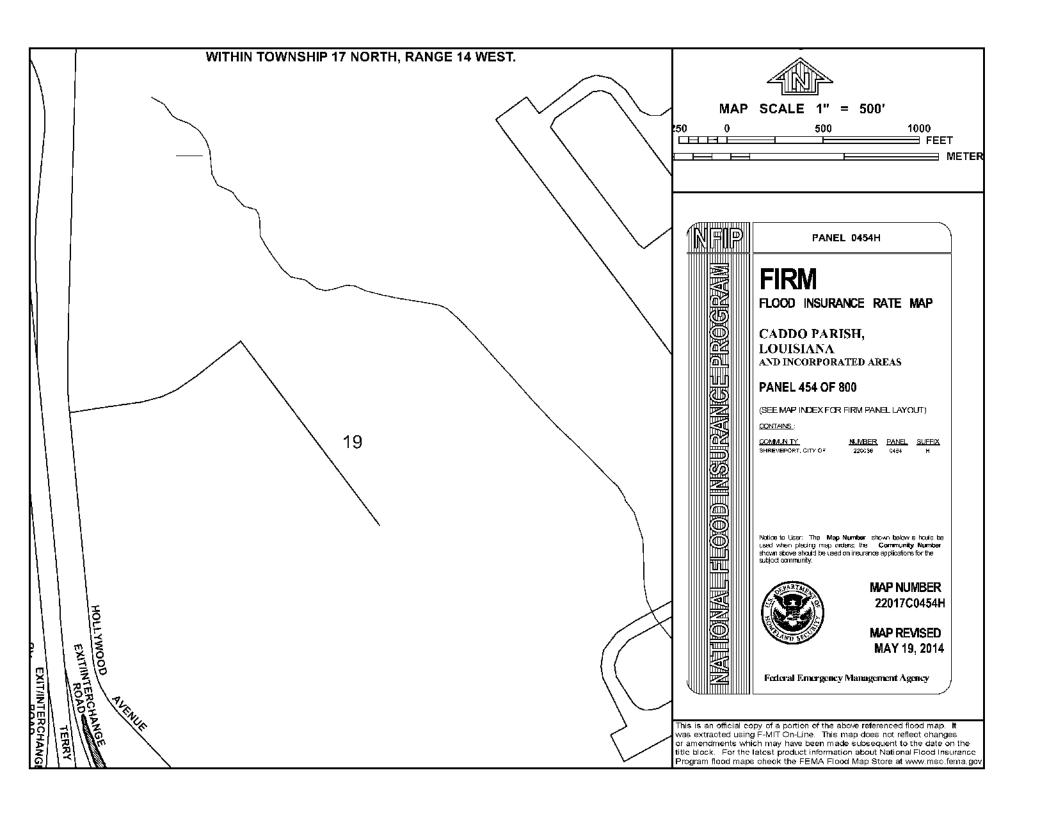
Soil Survey Area: Caddo Parish, Louisiana Survey Area Data: Version 7, Sep 26, 2014

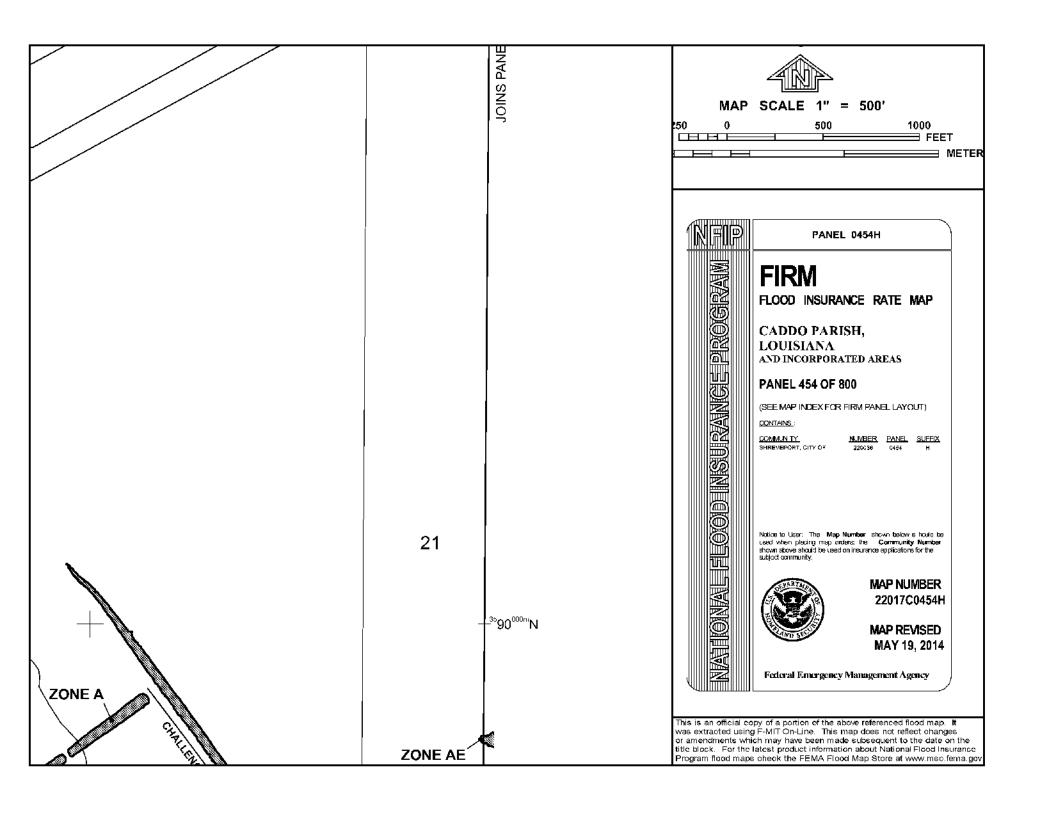
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

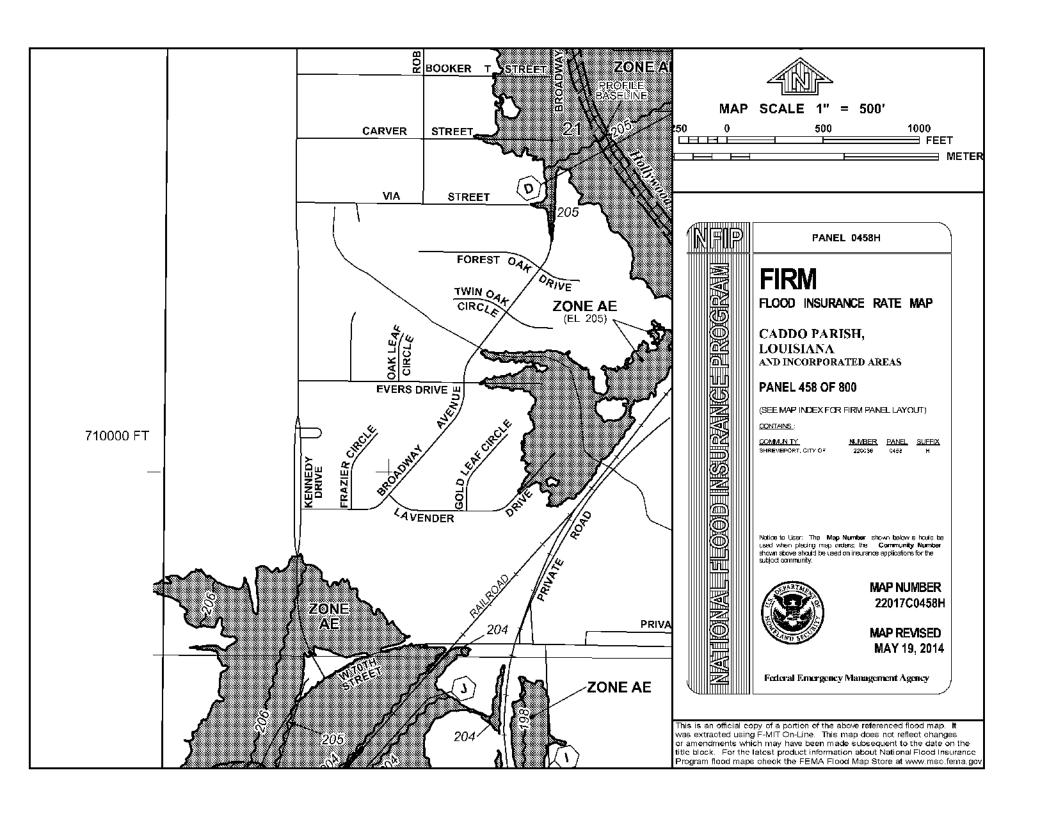
Date(s) aerial images were photographed: Sep 25, 2013—Nov 1, 2013

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









APPENDIX B PHOTO LOG





Photo 1 View east across 55-acre site.



Photo 2 View of soil profile at S-1.



Photo 3 View of southern end of wooded area on 55-acre site.



Photo 4 View of soil profile at S-2.



Photo 5 View of stream channel within wooded area in 55-acre site.



Photo 6 View of soil profile at S-3.





Photo 7 View of soil profile at S-4.



Photo 9 View of soil profile at S-5.



Photo 11 View of soil profile at S-6.



Photo 8 Typical view of 93-acre site facing north.



Photo 10 View of willow trees at head of ephemeral stream on 93-acre site.



Photo 12 View of soil profile at S-7.





Photo 13 View of soil profile at S-8.



Photo 14 View of soil profile at S-9.

APPENDIX C DATA FORMS

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH	157076	Citv/C	ounty: Shre	eveport / Ca	ddo Parish	Sampling Date:	7/20/15
Applicant/Owner: Shrevepo					77	Sampling Point:	
Investigator(s): Jessica Kea		Section	n Townshin	, Range: 19 T	17N R14W	/ /	
Landform (hillslope, terrace, etc		Section	ni, rownsiip,	, italige.	Concave	e Slop	- (9/): <1
Subregion (LRR or MLRA): LR	RP 133B					Slop Dat	
		_ Lat: _02.44040					tum: OT
Soil Map Unit Name: Metcalf					NWI classifica	200-00-00-00-00-00-00-00-00-00-00-00-00-	
Are climatic / hydrologic condition		-					
Are Vegetation, Soil	, or Hydrology	_ significantly distur	bed?	Are "Normal Cir	cumstances" p	resent? Yes X	No
Are Vegetation, Soil	, or Hydrology	_ naturally problema	atic? (If needed, expla	ain any answer	s in Remarks.)	
SUMMARY OF FINDING	S – Attach site ma	p showing sam	pling poir	nt locations	, transects,	, important fe	atures, etc.
Hydrophytic Vegetation Prese	nt? Yes	No. X					:
Hydric Soil Present?	Yes	No X	Is the Samp		02000777	Y	
Wetland Hydrology Present?	Yes Yes _X	No	within a We	etland?	Yes	No_X	-
Remarks:	174 32						
1045 A 454 3003 \$440005 A 450							
HYDROLOGY							
Wetland Hydrology Indicato	rs:			Sec	condary Indicat	tors (minimum of	two required)
Primary Indicators (minimum o	of one is required; check a	all that apply)		□	Surface Soil (Cracks (B6)	
Surface Water (A1)	Aqua	tic Fauna (B13)			Sparsely Veg	etated Concave	Surface (B8)
High Water Table (A2)	☐ Marl f	Deposits (B15) (LRF	R U)	V	Drainage Pat	terns (B10)	
Saturation (A3)	☐ Hydro	ogen Sulfide Odor (C	C1)		Moss Trim Lir	nes (B16)	
Water Marks (B1)	U Oxidi:	zed Rhizospheres a	long Living R	oots (C3)	Dry-Season V	Nater Table (C2)	
Sediment Deposits (B2)	Prese	ence of Reduced Iro	n (C4)	<u>~</u>	Crayfish Burn	ows (C8)	
Drift Deposits (B3)	☐ Rece	nt Iron Reduction in	Tilled Soils (C6) <u></u>	Saturation Vis	sible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)		Ш	Geomorphic I	Position (D2)	
Iron Deposits (B5)		r (Explain in Remark	(s)	Ц	Shallow Aquit		
Inundation Visible on Aeri				Ц	FAC-Neutral		
☐ Water-Stained Leaves (B	9)			ш	Sphagnum m	oss (D8) (LRR T	, U)
Field Observations:	v	_n _u					
Surface Water Present?	Yes No X						
Water Table Present?	Yes No X [v X	MARKS
Saturation Present? (includes capillary fringe)	Yes No _X [Depth (inches):		wetland Hydi	rology Present	t? Yes X	No
Describe Recorded Data (stre	am gauge, monitoring we	II, aerial photos, pre	vious inspect	ions), if availab	le:		
Remarks:							
1							

VEGETATION (Four Strata) - Use scientific names of plants

Tree Stratum (Plot size:)	Absolute			
		Dominant Species?	Indicator	Dominance Test worksheet:
Loblolly Pine (Pinus taeda)	10	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
southern red oak (Quercus falcata)	15	Υ	FACU	
				Total Number of Dominant Species Across All Strata: 4 (B)
				Percent of Deminant Species
5	· · · · · · · · · · · · · · · · · · ·			Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B
5				Bravelance Index workshoots
Ç				Prevalence Index worksheet:
3				
		= Total Cov		OBL species
50% of total cover: 12.5	20% of	total cover:	:	FAC species 40 x 3 = 120
Sapling/Shrub Stratum (Plot size:)				FACU species 55 x 4 = 220
·				UPL species 0 x 5 =
2.				Column Totals: 100 (A) 350 (B)
3.				
l				Prevalence Index = B/A = 3.5
5				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
<u></u>				2 - Dominance Test is >50%
3		= Total Cov		3 - Prevalence Index is ≤3.0¹
50% of total cover:	(d)			Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:)	20 % 01	total cover.		
1. globe flatsedge (Cyperus echinatus)	5	N	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
ricefield flat sedge (Cyperus iria)	5	N	FACW	Definitions of Four Vegetation Strata:
liverseed grass (Urochloa ramosa)	35	Υ	FACU	2472 #5077 96 30 45 77 NOV 63 525403 002550 P20
·				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
broom sedge (Andropogon virginicus)	25	Y	FAC	more in diameter at breast height (DRH), regardless of
	25 5	N	FACU	more in diameter at breast height (DBH), regardless of height.
goose grass (Eleusine indica)	5	N	FACU	height.
goose grass (Eleusine indica)	5	N	FACU	
goose grass (Eleusine indica) 3.	5	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
goose grass (Eleusine indica)	5	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
goose grass (Eleusine indica)	5	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
goose grass (Eleusine indica) 3. 3. 3. 3. 4. 5. 6. 6. 6. 7. 7. 8. 9. 10.	5	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
goose grass (Eleusine indica) 3. 3. 3. 4. 5. 6. 10.	5	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
goose grass (Eleusine indica)	5 	N	FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
goose grass (Eleusine indica) 3. 3. 3. 4. 5. 6. 10.	5 	N	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
goose grass (Eleusine indica)	5 	N = Total Cov	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5. goose grass (Eleusine indica) 6	75 	N = Total Coversitotal covers	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5. goose grass (Eleusine indica) 6	75 20% of	N = Total Cov	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1	75 20% of	N = Total Cov	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5. goose grass (Eleusine indica) 6	75 20% of	Total Covers	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50 goose grass (Eleusine indica) 75 20% of	Total Coversitotal covers	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.	
5. goose grass (Eleusine indica) 6	75 20% of	Total Covers	FACU	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

Sampling Point: S-1

SOIL

Profile Desc	cription: (Describe	to the dep	th needed to docun	nent the i	ndicator	or confirm	the absence of inc	dicators.)
Depth	Matrix			x Features		. 2		5
(inches) 0-14	Color (moist) 10YR 5/3	80	Color (moist) 10YR 3/2	15	Type ¹	_Loc ² _	Sand	Remarks
0-14	101103/3		5YR 3/4	2				
: 	~		Some to control that the same and the same a	3			Sand	
44.40	40VD C/4	70	10YR 6/8	-			Sand	
14-19	10YR 6/1	70	2.5YR 4/8	30			Clay	
Hydric Soil Histosol Histic Ep Black Hi Hydroge Stratified Organic 5 cm Mu Muck Pr 1 cm Mu Depleted Thick Da Coast P Sandy M Sandy M Stripped Dark Su Restrictive	Indicators: (Applic	able to all , T, U) RR P, T, U) e (A11) MLRA 1500 LRR O, S)	Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	wise note low Surface (S9) y Mineral (d Matrix (F3) Surface (F6 k Surface (F11) ese Masse ce (F13) ((F17) (ML tic (F18) (odplain Se	ed.) ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 15 es (F12) (I LRR P, T, RA 151) MLRA 15 oils (F19)	RR S, T, L T, U) O) S1) LRR O, P, U) OA, 150B) (MLRA 14	Indicators for P J) 1 cm Muck (2 cm Muck (Reduced Ve Piedmont Fi Anomalous (MLRA 15 Red Parent Very Shallov Other (Explain T) 3Indicators wetland h unless di	Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, isturbed or problematic.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076	City/County: Shre	eveport / Caddo Parish	Sampling Date: 7/20/15			
Applicant/Owner: Shreveport Airport	State: LA Sampling Point: 2					
Investigator(s): Jessica Keasler & Lem Dial	Section, Township	, Range: 19 T17N R14W	oumpling Forms			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): None Slope (
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44555	Long: -93.841067	Datum: 84			
Soil Map Unit Name: Metcalf-timpson complex		NWI classifica				
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes X	No (If no, explain in Re	marks.)			
Are Vegetation, Soil, or Hydrologys	significantly disturbed?	Are "Normal Circumstances" pr	esent? Yes X No			
Are Vegetation, Soil, or Hydrology r	naturally problematic?	(If needed, explain any answers	s in Remarks.)			
SUMMARY OF FINDINGS – Attach site map	showing sampling poi	nt locations, transects,	important features, etc.			
Hydrophytic Vegetation Present? Yes N	lo X					
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N	No X Is the Sam		Y			
Wetland Hydrology Present? Yes X N	within a W	etland? Yes	No_X			
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum of one is required; check all	that apply)	Surface Soil C	Cracks (B6)			
Surface Water (A1)	Fauna (B13)	Sparsely Vege	etated Concave Surface (B8)			
	eposits (B15) (LRR U)	Drainage Patt	A STATE OF THE STA			
1	en Sulfide Odor (C1)	Moss Trim Lin	[2] 기계속에서 위했다			
	d Rhizospheres along Living R		Vater Table (C2)			
	ce of Reduced Iron (C4)	Crayfish Burro				
	Iron Reduction in Tilled Soils (uck Surface (C7)	Geomorphic F	ible on Aerial Imagery (C9)			
	Explain in Remarks)	Shallow Aquita				
Inundation Visible on Aerial Imagery (B7)	_xpiairi ir remarks)	FAC-Neutral 1				
Water-Stained Leaves (B9)			oss (D8) (LRR T, U)			
Field Observations:		to the transfer of the transfe	STATE OF THE STATE			
Surface Water Present? Yes No X De	epth (inches):					
Water Table Present? Yes No X De	epth (inches):					
Saturation Present? Yes No X De	epth (inches):	Wetland Hydrology Present	? Yes X No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspec	tions), if available:				
, , , , , , , , , , , , , , , , , , , ,						
Remarks:						

EGETATION (Four Strata) – Use scientific na	mes of pi	ants.			Sampling Point: 2	
Trac Stratum (Plat size:		Dominant		Dominance Test workshe	et:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Speci That Are OBL, FACW, or FA		(A)
					N 4038,2000	_ , ,
				Total Number of Dominant Species Across All Strata:	2	_ (B)
k				Percent of Dominant Specie	00	
5				That Are OBL, FACW, or F		_ (A/B
)				Prevalence Index worksh	eet:	
Ŷ 				Total % Cover of:	Multiply by:	
J				OBL species		
	A CONTRACTOR OF THE	= Total Cov		FACW species		
50% of total cover:	20% of	total cover		FAC species		
Sapling/Shrub Stratum (Plot size:)				FACU species		
				UPL species		
<u> </u>				Column Totals:		
·						
· <u></u>				Prevalence Index = E		
				Hydrophytic Vegetation In	ndicators:	
				1 - Rapid Test for Hydr	ophytic Vegetation	
•				2 - Dominance Test is	>50%	
				3 - Prevalence Index is	s ≤3.0 ¹	
EASS (ASSOCIATE	-	= Total Cov		Problematic Hydrophyt	ic Vegetation ¹ (Exp	olain)
50% of total cover:	20% of	total cover				
lerb Stratum (Plot size:) yellow partridge pea (Chamaecrista fasciculata)	10		FACU	¹ Indicators of hydric soil and be present, unless disturbe		y must
sticky-willy (Gallum aparine)	35	170 141 - 141	FACU	Definitions of Four Vegeta	ation Strata:	
sunflower (Helianthus strumosus)	3		UPL	Tree Weeds plants evels	dinguina 2 in (7	C\ -
snakeroot (Ageratina altissima)	15		FACU	Tree – Woody plants, exclumore in diameter at breast		
globe flatsedge (Cypercus echinatus)	3		FAC	height.	3 (), 3	
S				Sapling/Shrub – Woody pl		
k				than 3 in. DBH and greater	than 3.28 ft (1 m) t	all.
				Herb - All herbaceous (nor		
0.				of size, and woody plants le	ess than 3.28 ft tall.	
0				Woody vine – All woody vi	nes greater than 3.	28 ft in
1				height.		
2						
22		= Total Cov	STREET, SALES STREET,			
50% of total cover: 33	20% of	total cover	13.2			

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

____ = Total Cover 50% of total cover: ____ 20% of total cover: ___

Yes ____ No _X

Hydrophytic Vegetation Present? SOIL Sampling Point: 2

	perhat to make	to the dep	oth needed to docu		or or confirm	n the absence o	f indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Features%Type	e ¹ Loc ²	Texture	Remark	s
0-3	10YR 6/4					Silty Sand		
	10YR 6/6	80	10YR 6/3	5		Silty Sand		
% 			10YR 7/1	15		Silty Sand		-
0	3		1011(1/1			-		
-	-							
								-
	2		2 1					
	:							
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Masked Sand	Grains.		PL=Pore Lining, M=M	
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless othe	NO MET CONTROL OF THE COST OF THE COST OF THE			or Problematic Hydr	ic Soils ³ :
Histosol	20 50			elow Surface (S8	50.455		ıck (A9) (LRR O)	
	oipedon (A2)		=	urface (S9) (LRR	1,070.0		ick (A10) (LRR S)	- MI DA 450A D\
Black Hi	stic (A3) n Sulfide (A4)		_	ky Mineral (F1) (L ed Matrix (F2)	.RR O)		d Vertic (F18) (outsic nt Floodplain Soils (F	
	Layers (A5)		Depleted Ma				ous Bright Loamy Soi	
J. 100 S. C. 100	Bodies (A6) (LRR P	, T, U)		Surface (F6)			A 153B)	- ()
5 cm Mu	cky Mineral (A7) (LI	RR P, T, U	Depleted Da	ark Surface (F7)			ent Material (TF2)	
	esence (A8) (LRR U	J)		essions (F8)			allow Dark Surface (T	F12)
	ck (A9) (LRR P, T)	(8.4.6)	Marl (F10) (I			Other (E	xplain in Remarks)	
· ·	l Below Dark Surfac ork Surface (A12)	e (A11)		chric (F11) (MLR Anese Masses (F1	100	T) ³ Indicat	tors of hydrophytic ve	getation and
_	rairie Redox (A16) (I	MLRA 150		ace (F13) (LRR F		V 7	nd hydrology must be	55
_	lucky Mineral (S1) (I		_	(F17) (MLRA 15	20 USB 12		s disturbed or proble	- 80 - 20
	leyed Matrix (S4)			ertic (F18) (MLRA)		
	edox (S5)			oodplain Soils (F				
	Matrix (S6)	S T 11)	☐ Anomalous I	Bright Loamy Soi	ls (F20) (MLF	RA 149A, 153C, 1	153D)	
	face (S7) (LRR P, S ayer (if observed)					1		
Type:	, (
Depth (inc	ches):					Hydric Soil P	resent? Yes	No_X
Remarks:						,		

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157	076	City/C	county: Shreve	eport / Caddo Parish	Sampling Date: 7/20/15
Applicant/Owner: Shreveport A				State: LA	
Investigator(s): Jessica Keasle		Section		tange: 19 T17N R14W	
Landform (hillslope, terrace, etc.): 2	adjacent to strea	am bed Local	relief (concave,	, convex, none): None	Slope (%): <1
Subregion (LRR or MLRA): LRRF	133B	Lat: 32.44688		Long: -93.84138	Datum: 84
Soil Map Unit Name: Metcalf-tim	npson complex	- Hind digner		NWI classifica	
Are climatic / hydrologic conditions of	on the site typical for	this time of year? Y	es X No	(If no, explain in Re	emarks.)
Are Vegetation, Soil	, or Hydrology	_ significantly distur	bed? Are	e "Normal Circumstances" p	resent? Yes X No
Are Vegetation, Soil	, or Hydrology	_ naturally problema	atic? (If r	needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS -	Attach site ma	ap showing san	npling point	locations, transects,	, important features, etc.
Hudrophytic Vegetation Brecent?	Voc X	No			
Hydrophytic Vegetation Present? Hydric Soil Present?	Ves	No	Is the Sample		V
Wetland Hydrology Present?	Yes	No X	within a Wetla	and? Yes	No_X
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of on	e is required; check	all that apply)		Surface Soil (Cracks (B6)
Surface Water (A1)	H Aqua	atic Fauna (B13)		Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRI		Drainage Pati	AND THE PROPERTY OF THE PROPER
Saturation (A3)		rogen Sulfide Odor (The second of the second	☐ Moss Trim Lir	맛있 ^다 가르워 보니다.
Water Marks (B1)		ized Rhizospheres a		1000	Water Table (C2)
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Burro	
Drift Deposits (B3) Algal Mat or Crust (B4)		ent Iron Reduction in Muck Surface (C7)	Tilled Solls (Co	Geomorphic F	sible on Aerial Imagery (C9)
Iron Deposits (B5)		er (Explain in Remark	(e)	Shallow Aquit	
Inundation Visible on Aerial Im		i (Explain in Neman	(3)	FAC-Neutral	
☐ Water-Stained Leaves (B9)				The state of the s	ioss (D8) (LRR T, U)
Field Observations:			T T	- top topological and the control of	principal incide apraiding in final file
Surface Water Present? Ye	s No _X	Depth (inches):			
Water Table Present? Ye	s No _X	Depth (inches):	63		
	s No _X	Depth (inches):	v	Vetland Hydrology Present	t? Yes No X
(includes capillary fringe) Describe Recorded Data (stream g	gauge, monitoring we	ell, aerial photos, pre	vious inspection	ns), if available:	
<i>y</i> :					
Remarks:					

VEGETATION (Four Strata) - Use scientific names of plants.

Tree Stratum (Plot size:) % Cov 15 1. winged elm (Ulmus alata) 15 2. oak (Quercus nigra) 10 3	er Specie Y Y		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet:
2. oak (Quercus nigra) 10 3	= Total (FAC	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
3	= Total (Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)
4	= Total (Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)
5	= Total (That Are OBL, FACW, or FAC: 75 (A/B)
6	= Total (That Ale OBE, I AGW, SI I AG (AB)
7	= Total (Dravalance Index worksheet:
8	= Total (-10.0	Flevalence muex worksneet.
25 20%			Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:) 1. privet (Ligustrum sinense)20		Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:) 1. privet (Ligustrum sinense)20			FACW species x 2 =
1. privet (Ligustrum sinense) 20			FAC species x 3 =
2	Y	FAC	FACU species x 4 =
2.			UPL species x 5 =
3.			Column Totals: (A) (B)
4.	18.00		Prevalence Index = B/A = 3.5
5.			Hydrophytic Vegetation Indicators:
6.			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
8.	127		3 - Prevalence Index is ≤3.0¹
	= Total (Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 20%			Froblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size:)		2000 0 	¹ Indicators of hydric soil and wetland hydrology must
1. saw greenbrier (Smilax bona-nox) 15	Y	FAC	be present, unless disturbed or problematic.
2. beauty berry (Callicarpa americana) 5	N	FACU	Definitions of Four Vegetation Strata:
3. wood oats (chasmanthium sessiliflorum) 5	N	FAC	2019 MINTER NO NO NO TO NOT 10 SERVICE PSD
4. poison ivy (Toxicodendron radicans) 5	N	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5			height.
6			Sapling/Shrub – Woody plants, excluding vines, less
7			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8	1 (0)2 		Herb – All herbaceous (non-woody) plants, regardless
9.	200	-8/8	of size, and woody plants less than 3.28 ft tall.
10			Woody vine All woody vines greater than 2.29 ft in
11			Woody vine – All woody vines greater than 3.28 ft in height.
12			
30	= Total (Cover	
50% of total cover: 15 20%	of total co	ver: 6	
Woody Vine Stratum (Plot size:)		-	
1		39 3	
2.			
3			
4			
5		18.4 20 18.9 20	Hydrophytic
<u></u>	= Total (Cover	Vegetation
50% of total cover: 20%	of total co	/er:	Present? Yes X No
Remarks: (If observed, list morphological adaptations below).	100g eola 17.00 = 20, 81 a 1, 10 = 10		I.

Sampling Point: S-3

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	ndicator	or confirm	the absence of in	dicators.)	
Depth	Matrix			x Feature					63
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remark	<u>(S</u>
0-4	10YR 6/3	100	9				Silty Sand		
4-18	10YR 5/4	92	5YR 4/6	8			Silty Sand		
7			A CONTRACTOR OF THE CONTRACTOR		·				
9	19:		-		·——				
s 			1						
			2 						
£ 	B			-					
	·					-			
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.		Pore Lining, M=M	
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless othe	rwise not	ed.)		Indicators for P	roblematic Hydi	ric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U	J) 📙 1 cm Muck ((A9) (LRR O)	
_	pipedon (A2)		Thin Dark Su	ırface (S9	(LRR S,	T, U)		(A10) (LRR S)	
Black His			Loamy Muck	-		0)			de MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye	and the second	F2)		and the second s	man and a second	19) (LRR P, S, T)
And the second s	Layers (A5)	2,600,000.0	Depleted Ma	All the same of th				Bright Loamy Soi	ils (F20)
	Bodies (A6) (LRR P	The state of the s	Redox Dark	A CONTRACTOR OF THE PARTY OF TH	The State of the S		(MLRA 15		
	cky Mineral (A7) (LF	COLOR RECORDS IN PROPERTY OF						Material (TF2)	TE40)
	esence (A8) (LRR U))	Redox Depre		8)			w Dark Surface (IF12)
	ck (A9) (LRR P, T) Below Dark Surfac	o (A11)	Marl (F10) (L		/MI DA 44	:4\	Uther (Expla	ain in Remarks)	
	rk Surface (A12)	e (ATT)	☐ Depleted Oc Iron-Mangan		177		T) ³ Indicators	of hydrophytic ve	agetation and
	rairie Redox (A16) (I	MI PA 150						hydrology must be	
=	lucky Mineral (S1) (I		Delta Ochric			, 0,		isturbed or proble	3. (1)
	leyed Matrix (S4)	- tut 0, 0,	Reduced Ve			0A. 150B)		otarboa or proble	mano.
	edox (S5)		Piedmont Flo						
	Matrix (S6)					-	A 149A, 153C, 153	D)	
	face (S7) (LRR P, S	S, T, U)							
Restrictive L	ayer (if observed):								
Type:									
Depth (inc	ches):						Hydric Soil Pres	ent? Yes	No X
Remarks:									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076	City/Count	y: Shreveport / Caddo Parish	Sampling Date: 7/20/15
Applicant/Owner: Shreveport Airport		State: LA	
Investigator(s): Jessica Keasler & Lem Dial	Section, T	ownship, Range: 19 T17N R14W	
Landform (hillslope, terrace, etc.): Flat	Local relie	f (concave, convex, none): None	Slope (%): none
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44943	Long: -93.8412	Datum: 84
Soil Map Unit Name: Keithville very fine		1.00	ation: none
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes _	X No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	Are "Normal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampli	ng point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X	No		
Hydrophytic Vegetation Present? Hydric Soil Present? Yes X Yes	No X Is t	he Sampled Area	×
Wetland Hydrology Present? Yes	No X wit	hin a Wetland? Yes	No_X
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil	Cracks (B6)
	itic Fauna (B13)		getated Concave Surface (B8)
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Deposits (B15) (LRR U)	☐ Drainage Pat	
1 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ogen Sulfide Odor (C1)	☐ Moss Trim Li	11:16 T. 프랑스 11:16
	ized Rhizospheres along		Water Table (C2)
	ence of Reduced Iron (Ca		
	ent Iron Reduction in Tille Muck Surface (C7)	Geomorphic	sible on Aerial Imagery (C9)
	r (Explain in Remarks)	Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)	(Explain in Nomano)	FAC-Neutral	
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			and the state of t
Surface Water Present? Yes No _X	Depth (inches):		
Water Table Present? Yes No _X	Depth (inches):		
Saturation Present? Yes No _X (includes capillary fringe)	Depth (inches):	Wetland Hydrology Presen	t? Yes No X
Describe Recorded Data (stream gauge, monitoring we	II, aerial photos, previous	s inspections), if available:	
Remarks:			

VEGETATION (Four Strata) - Use scientific names of plants.

/EGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point: S-4
		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	(i)	Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2.				Section 455 pour 1, 29 Marie est 16 Marie
3.				Total Number of Dominant Species Across All Strata: 3 (B)
4.			7	A A COURT NO STAND PERSON
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)
6.			-	That Are OBL, FACW, or FAC: 66 (A/B)
7				Prevalence Index worksheet:
8.		· ·	ş . , ;	Total % Cover of: Multiply by:
o		= Total Cov		OBL species x 1 =
50% of total cover:	A management			FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20 /6 01	total cover		FAC species x 3 =
				FACU species x 4 =
1				UPL species x 5 =
2		-		Column Totals: (A) (B)
3			% 	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	·		·	3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	:	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. sawtooth blackberry (Rubus argutus)	20	Υ	FAC	be present, unless disturbed or problematic.
2. black elder (Sambucus nigra)	50	Υ	FAC	Definitions of Four Vegetation Strata:
3. sunflower (Helianthus strumosus)	5	N	UPL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. blackeyed susan (Rudbeckia hirta)	20	Υ	FACU	more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.	83 8	s 	10 55	of size, and woody plants less than 3.28 ft tall.
10				PREPRINT MANUAL SIA MICHIED THEM AS THE STATE ASSESSMENT OF THE STATE
11			-	Woody vine – All woody vines greater than 3.28 ft in height.
12.				Holght.
12.	95	= Total Cov		
50% of total cover: 47.5	$\overline{}$			
Woody Vine Stratum (Plot size:)	20 /6 01	total cover		
1				
2				
3		<u> </u>	() <u> </u>	
4			4	
5				Hydrophytic
2000 10071 0	A CONTRACTOR OF THE	= Total Cov		Vegetation Present? Yes X No
40 APC 19 (AAA 90 APC) APC 10	b commence	total cover	:	
50% of total cover:Remarks: (If observed, list morphological adaptations below	b commence	total cover	:	

Sampling Point: S-4

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the indic	cator or conf	irm the absence	of indicators	i.)	
Depth	Matrix			x Features					
(inches)	Color (moist)		Color (moist)	%T	ype ¹ Loc ²		9	Remarks	
0-6	10YR 5/4	100				Sandy loam			
6-19	10YR 6/6	100				Sandy loam			
									
· 	*						·		
	-								
	Se								
-	///				30.		3 7		
1 _{Type:} C=Ce	oncentration, D=Dep	lotion DM=C	laduand Matrix MG		nd Croins	21 agation:	PL=Pore Lini	ing M=Matrix	
A PARTY OF THE PAR	ndicators: (Applic		7.55 E. T.	7.71			for Problema		
☐ Histosol	SOME STATE SECTION STATE SECTION	abic to all E	and the side of the same of th	low Surface (luck (A9) (LR	NAME OF TAXABLE PARTY OF THE PARTY OF TAXABLE PARTY.	
	ipedon (A2)			rface (S9) (LF		50 St 50	fuck (A3) (LK) fuck (A10) (LK)	7.0	
Black His			=	y Mineral (F1)	0.075.0				ILRA 150A,B)
	n Sulfide (A4)			d Matrix (F2)					(LRR P, S, T)
☐ Stratified	Layers (A5)		Depleted Ma	trix (F3)		Anoma	alous Bright Lo	oamy Soils (F	-20)
Organic	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F6)			RA 153B)		
	cky Mineral (A7) (LF		A STATE OF THE PERSON OF THE P	k Surface (F7	")		arent Material		
	esence (A8) (LRR U)	Redox Depre				hallow Dark S		2)
	ck (A9) (LRR P, T)	- (844)	Marl (F10) (L		DA 454)	Other	Explain in Re	marks)	
17 <u></u>	Below Dark Surfac rk Surface (A12)	e (A11)	= '	nric (F11) (ML ese Masses (I	500	D T) 3India	ators of hydro	nhytic yeart	ation and
_	airie Redox (A16) (I	MLRA 150A)		ce (F13) (LRF			land hydrolog		
	ucky Mineral (S1) (I	7		(F17) (MLRA			ess disturbed	B 88	
_	leyed Matrix (S4)	-, -,		tic (F18) (MLI					
=	edox (S5)			odplain Soils					
Stripped	Matrix (S6)		Anomalous B	right Loamy S	Soils (F20) (M	LRA 149A, 153C	, 153D)		
	face (S7) (LRR P, S								
	.ayer (if observed):								
Туре:			_						V
Depth (inc	:hes):					Hydric Soil	Present?	Yes	No X
Remarks:									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076	City/County: Shr	eveport / Caddo Parish	Sampling Date: 7/20/15
Applicant/Owner: Shreveport Airport		State: LA	
Investigator(s): Jessica Keasler & Lem Dial	Section Township	o, Range: 21 T17N R14W	
Landform (hillslope, terrace, etc.): Flat	Cocion, rownship	wa sanyay nana). None	Slope (%): None
Subregion (LRR or MLRA): LRRP 133B	32 4447	Long: -93.8132	
Soil Map Unit Name: Metcalf-timpson comple.	2020	NWI classifica	
Are climatic / hydrologic conditions on the site typical f			
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" pr	resent? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing sampling po	int locations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes	No. X		
Hydric Soil Present? Yes	No X Is the Sam		Y
Wetland Hydrology Present? Yes	No X within a W	etland? Yes	No_X
Remarks:			**************************************
Another Book (Automotive)			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; chec	k all that apply)	Surface Soil C	Cracks (B6)
	uatic Fauna (B13)	Sparsely Vege	etated Concave Surface (B8)
1	rl Deposits (B15) (LRR U)	☐ Drainage Patt	And the same of th
	drogen Sulfide Odor (C1)	☐ Moss Trim Lin	13 T - 14
	idized Rhizospheres along Living F		Vater Table (C2)
	esence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils	Crayfish Burro	
	in Muck Surface (C7)	Geomorphic F	sible on Aerial Imagery (C9)
	ner (Explain in Remarks)	Shallow Aquit	
Inundation Visible on Aerial Imagery (B7)	(=-4	FAC-Neutral	
Water-Stained Leaves (B9)			oss (D8) (LRR T, U)
Field Observations:			
	Depth (inches):		
	Depth (inches):		v
	Depth (inches):	Wetland Hydrology Present	? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring)	well, aerial photos, previous insper	tions), if available:	
9 10 010			
Remarks:			

VEGETATION (Four Strata) - Use scientific names of plants.

			nt Indicator	Dominance Test worksheet:
ee Stratum (Plot size:)			? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
				Total Number of Dominant
				Species Across All Strata: 4 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 50 (A/B
4		# <u></u>	277	
_	_	**		Prevalence Index worksheet:
· -		08/2		Total % Cover of: Multiply by:
		= Total C	over	OBL species $0 \times 1 = 0$
50% of total cover:	20% o	f total cove	er:	FACW species 20 x 2 = 40
pling/Shrub Stratum (Plot size:)				FAC species $\frac{27}{35}$ $x = \frac{81}{140}$
50 SP N N N N N N N N N N N N N N N N N N				FACU species $\frac{35}{9}$ $x = \frac{140}{9}$
				UPL species $\frac{0}{82}$ $x = \frac{0}{264}$
				Column Totals: <u>82</u> (A) <u>261</u> (B)
-		58 <u>6</u>		Prevalence Index = B/A = 3.18
				Hydrophytic Vegetation Indicators:
-				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
			Water 20	3 - Prevalence Index is ≤3.0¹
			over	Problematic Hydrophytic Vegetation¹ (Explain)
				Froblematic Hydrophytic Vegetation (Explain)
50% of total cover:	20% o	f total cove	er:	
50% of total cover:	20% o	f total cove	er:	Indicators of hydric call and wattend hydrology must
erb Stratum (Plot size:)	20% o	f total cove	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
meadow beauty (Rhexia mariana)	524500 (400 A40 A40 A40 A40 A40 A40 A40 A40 A40			be present, unless disturbed or problematic.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus)	20	Υ	FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium)	20 15	Y	FACW FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta)	20 15 15	Y Y Y	FACW FAC FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius)	20 15 15 20	Y Y Y	FACW FAC FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10	Y Y Y Y N	FACW FAC FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N	FACW FAC FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N	FACW FAC FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N N	FACW FAC FACU FACU FAC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N N	FACW FACU FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N N	FACW FACU FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y Y N N	FACW FACU FACU FAC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y N N	FACW FACU FACU FACC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y N N	FACW FACU FACU FACC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
reb Stratum (Plot size:) meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2 	Y Y Y N N = Total Co	FACW FACU FACU FACC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
erb Stratum (Plot size:) meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2	Y Y Y N N = Total Co	FACW FACU FACU FACC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea) 50% of total cover: 41	20 15 15 20 10 2 	Y Y Y N N = Total Co	FACW FACU FACU FACC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea) 50% of total cover: 41	20 15 15 20 10 2	Y Y Y N N = Total Cove	FACW FACU FACU FAC FAC FAC FAC FAC FAC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea) 50% of total cover: 41	20 15 15 20 10 2 	Y Y Y N N = Total Cove	FACW FACU FACU FAC FAC FAC FAC FAC FAC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2 	Y Y Y N N = Total Co	FACW FAC FACU FACU FAC FAC FAC FAC FAC FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
erb Stratum (Plot size:) meadow beauty (Rhexia mariana) globe flatsedge (Cyperus echinatus) yarrow (Achillea millefolium) blackeyed susan (Rudbeckia hirta) poverty rush (Juncus tenius) peppervine (Ampelopsis arborea)	20 15 15 20 10 2 	Y Y Y N N = Total Co	FACW FACU FACU FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

Sampling Point: S-5

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	the absence of in	dicators.)
Depth	Matrix			x Feature		. 2	7-1 V	
(inches) 0-4	Color (moist) 10YR 6/3	100	Color (moist)	%	Type ¹	Loc ²	Texture Sandy loam	Remarks
0	The same and the s		40VD 0/0	_			500	
4-12	10YR 6/3	93	10YR 3/6	7			Sand	
12-20	10YR 5/6	85	10YR 3/6	15			Sand	
-	y a	-	OT			-	a 'a l a	
¹Type: C=Co	ncentration D=Der	letion RM:	-Reduced Matrix, MS	S=Maske	d Sand Gr	ains	² Location: PL=F	Pore Lining, M=Matrix.
			LRRs, unless other					roblematic Hydric Soils ³ :
☐ Histosol	(A1)		☐ Polyvalue Be	low Surfa	ace (S8) (L	RR S, T, L	J) 🔲 1 cm Muck (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Su			1.07.0		A10) (LRR S)
Black Hi			Loamy Muck			(0)		rtic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		(F2)		and the second s	oodplain Soils (F19) (LRR P, S, T)
	l Layers (A5) Bodies (A6) (LRR P	T 11)	Depleted Mar	A STATE OF THE PARTY OF THE PAR	F6)		(MLRA 15	Bright Loamy Soils (F20)
	cky Mineral (A7) (LI	Control of the second		A CONTRACTOR OF THE PARTY OF TH				Material (TF2)
	esence (A8) (LRR L	in the representation of the	Redox Depre					v Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (L				Other (Expla	nin in Remarks)
	Below Dark Surfac	e (A11)	Depleted Oct		1/072		- 3	
	rk Surface (A12) rairie Redox (A16) (I	MI DA 150.	☐ Iron-Mangan A) ☐ Umbric Surfa					of hydrophytic vegetation and hydrology must be present,
_	lucky Mineral (S1) (Delta Ochric			, 0)		sturbed or problematic.
11.000	leyed Matrix (S4)		Reduced Ver			0A, 150B)		
	edox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	19A)	
	Matrix (S6)		Anomalous E	right Loa	my Soils (F20) (MLR	A 149A, 153C, 153I	0)
	face (S7) (LRR P, S ayer (if observed)						T	
Type:	.u.yo. (o.oo. rou)							
	ches):		<u> </u>				Hydric Soil Pres	ent? Yes No X
Remarks:								

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076	City/C	county: Shreveport	/ Caddo Parish	Sampling Date: 7/20/15
Applicant/Owner: Shreveport Airport				Sampling Point: S-6
	Section	on, Township, Range:	21 T17N R14W	/
Landform (hillslope, terrace, etc.): adjacent to stream	am bed Local	relief (concave, convex	, none): None	Slope (%): None
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.4478	Long:	-93.8145	Datum: 84
Soil Map Unit Name: Keithville		2000		ation: none
Are climatic / hydrologic conditions on the site typical for	this time of year? Y	es X No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	_ significantly distur	bed? Are "Norm	al Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology	_ naturally problema	atic? (If needed,	, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing san	npling point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No. X			
Hydric Soil Present? Yes	No X	Is the Sampled Area		Y
Wetland Hydrology Present? Yes		within a Wetland?	Yes	No_X
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)		Surface Soil	
Surface Water (A1)	tic Fauna (B13)		☐ Sparsely Veç	getated Concave Surface (B8)
High Water Table (A2)	Deposits (B15) (LRF	R U)	Drainage Pat	tterns (B10)
Saturation (A3)	ogen Sulfide Odor (0	C1)	Moss Trim Li	nes (B16)
Water Marks (B1)	zed Rhizospheres a	long Living Roots (C3)	Dry-Season \	Water Table (C2)
	ence of Reduced Iro		Crayfish Burr	
	nt Iron Reduction in	Tilled Soils (C6)		sible on Aerial Imagery (C9)
	Muck Surface (C7)		Geomorphic	
	r (Explain in Remark	(S)	Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	noss (D8) (LRR T, U)
		72	Spriagrium ii	1055 (D6) (LRR 1, U)
Surface Water Present? Yes No _X _ [Denth (inches):			
Water Table Present? Yes No [
Saturation Present? Yes No X			Hydrology Presen	t? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we				it: TesNo
Describe Necorded Data (stream gauge, monitoring we	ii, acriai priotos, pre	vious inspections), ii av	rallable.	
Remarks:				
romano.				

VEGETATION (Four Strata) – Use scientific names of plants.

/EGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point: S-6
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover	2.9		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				Service of State of the State o
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4.				21 A A A A A A A A A A A A A A A A A A A
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.				That Are OBE, I AGW, SI I AG. (A/B)
7				Prevalence Index worksheet:
8.		AT 10.	3 7	Total % Cover of: Multiply by:
		= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	- 4 50 15-282 7340-0			FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 =
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of	total cover	:	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. goose grass (Eleusine indica)	10	N	FACU	be present, unless disturbed or problematic.
2. little barley (Hordeum pusillum)	20	<u>Y</u>	FACU	Definitions of Four Vegetation Strata:
3. yarrow (Achillea millefolium)	8	N	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. gama grass (Tripsacum dactyloides)	5	N	FAC	more in diameter at breast height (DBH), regardless of
5. horseweed (Erigeron canadensis)	15	<u>Y</u>	FACU	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Co		
50% of total cover: 29	20% of	total cover	11.6	
Woody Vine Stratum (Plot size:)				
1				
2	. ——			
3	77 <u></u>	<u> </u>	T	
4				
5		<u> </u>		Hydrophytic
		= Total Co	ver	Vegetation
50% of total cover:	20% of	total cover	:	Present? Yes No _X
Remarks: (If observed, list morphological adaptations below	ow).			

Sampling Point: S-6

Profile Desc	ription: (Describe	to the de	pth needed to docu	ment the in	dicator	or confirm	the absence	of indicators.)		
Depth	Matrix			ox Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²	Texture	Re	marks	
·	5YR 4/6	75	7.5YR 5/1	25			clay			
10-			0 d				3			
· 	9		1 8 8				-			
			-							
	3 <u>0</u>		- 12 -				-			
4 1 	: -		6 2 5), .	-			20
1Tuno: C=C	naantration D=Da	nlation DM	I=Dodused Metrix N		Cand Cr	——	² l costion:	DI =Doro Lining	M=Matrix	
	7 6 6 6 75 75 75 75 75 75 75 75 75 75 75 75 75		I=Reduced Matrix, N I LRRs, unless oth		75.614	allis.		PL=Pore Lining, for Problematic		3.
☐ Histosol	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T	cable to al	are negatified the ship of the property of the post of the	selow Surface	00000	DD C T I		luck (A9) (LRR C	and the second second	
	oipedon (A2)			Surface (S9)				luck (A9) (LRR C	T()	
Black Hi			=	ky Mineral (F		0.550		ed Vertic (F18) (c		4 150A.B)
	n Sulfide (A4)			ed Matrix (F		,		ont Floodplain So		
	Layers (A5)		Depleted M	Control of the contro				lous Bright Loam		
	Bodies (A6) (LRR I	P, T, U)	Redox Dark	Surface (F6	6)			A 153B)		
	cky Mineral (A7) (L			ark Surface (rent Material (TF		
	esence (A8) (LRR I			ressions (F8)			hallow Dark Surfa		
	ck (A9) (LRR P, T)		☐ Marl (F10)		Maria maria na mana ana mana ana mana ana mana ana	24000000	U Other (Explain in Remai	ks)	
The second second	Below Dark Surface	ce (A11)		chric (F11) (I			3			0.0000000000000000000000000000000000000
_	ark Surface (A12)	MI DA 450		nese Masse				ators of hydrophy		
	airie Redox (A16) (lucky Mineral (S1) (face (F13) (L c (F17) (MLF		, 0)		and hydrology m	- 30	ιι,
_	ileyed Matrix (S4)	LKK 0, 3)		ertic (F18) (N		0A 150R)		ss disturbed or p	iobiemano.	
	edox (S5)			loodplain So		75				
=	Matrix (S6)					-	A 149A, 153C,	153D)		
	rface (S7) (LRR P,	S, T, U)		3	,		,	•		
Restrictive I	ayer (if observed)):								
Type:										
Depth (inc	ches):						Hydric Soil	Present? Yes	No	, <u>X</u>
Remarks:										
rtomanto.										

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076	City/County	Shreveport / Caddo Parish	Sampling Date: 7/20/15
Applicant/Owner: Shreveport Airport		State: LA	
Investigator(s): Jessica Keasler & Lem Dial	Section, To	ownship, Range: 21 T17N R14W	/
Landform (hillslope, terrace, etc.): Flat	Local relief	(concave, convex, none): None	Slope (%): None
Subregion (LRR or MLRA): LRRP 133B		Long: -93.81522	
Soil Map Unit Name: Keithville		1.0	ation: none
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes _x	No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	Are "Normal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	p showing samplin	g point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No. X		
Hydric Soil Present? Yes	No X	ne Sampled Area	Υ Υ
Wetland Hydrology Present? Yes		nin a Wetland? Yes	No_X
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil	Cracks (B6)
	itic Fauna (B13)		getated Concave Surface (B8)
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Deposits (B15) (LRR U)	<u>✓</u> Drainage Pa	and the same of th
1 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ogen Sulfide Odor (C1)	☐ Moss Trim Li	MAN TO POST STATE OF THE STATE
	ized Rhizospheres along L		Water Table (C2)
	ence of Reduced Iron (C4) ent Iron Reduction in Tilled	= oraymon ban	
	Muck Surface (C7)		sible on Aerial Imagery (C9) Position (D2)
	r (Explain in Remarks)	☐ Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)	(Explain in Homaine)	☐ FAC-Neutral	
Water-Stained Leaves (B9)		The state of the s	noss (D8) (LRR T, U)
Field Observations:			and the second of the second o
Surface Water Present? Yes No _X	Depth (inches):		
Water Table Present? Yes No _X	Depth (inches):		
Saturation Present? Yes No _X (includes capillary fringe)	Depth (inches):	Wetland Hydrology Presen	t? Yes No X
Describe Recorded Data (stream gauge, monitoring we	II, aerial photos, previous	inspections), if available:	
Remarks:			
Remarks.			

VEGETATION (Four Strata) – Use scientific names of plants.

/EGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point: S-7
10 (14)		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3			-	Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6			77	Prevalence Index worksheet:
7		i 	§ 	Total % Cover of: Multiply by:
8				OBL species x 1 =
222 (20) (de company d	= Total Co		FACW species x 2 =
50% of total cover:	20% of	total cover	·	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)				FACU species x 4 =
1,				UPL species x 5 =
2				Column Totals: (A) (B)
3			75 .	
4				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			-	2 - Dominance Test is >50%
8			3 	3 - Prevalence Index is ≤3.0 ¹
published all poorly to	-			Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size:)	60	Υ	FACU	¹ Indicators of hydric soil and wetland hydrology must
dropseed (Sporobolus indicus) orange milkwort (Polygala lutea)	5	N	FACW	be present, unless disturbed or problematic.
2. blackeyed susan (Rudbeckia hirta)	10	N	FACU	Definitions of Four Vegetation Strata:
V.			(Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		- 1		than 5 m. DBT and greater than 5.20 m (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9		-		of size, and woody plants less than 3.28 ft tall.
10			·	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	75			
50% of total cover: 37.5		= Total Co		
TO A TABLE OF THE PARTY OF THE	20% of	total cover	: 10	
Woody Vine Stratum (Plot size:)				
1				
2				
3		V <u> </u>	1	
4				2003 App. 2000 2004
5				Hydrophytic Vegetation
FOO/ of total account	and the second	= Total Co		Present? Yes No _X
50% of total cover:	E Consideration	total cover	•——	
Remarks: (If observed, list morphological adaptations belo	vw j.			

Sampling Point: S-7

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	n the absence of ind	icators.)	
Depth	Matrix			x Feature					10
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remark	<u>(S</u>
0-6	10YR 3/6	100					sa loam		
6-10	7.5YR 4/6	100	-				cl sa		
10-18	2.5YR 4/8	80	7.5YR 7/1	20			sa cl		
5	***************************************		The state of the s				3		
-			9-				· · · · · ·		X
(*		9						
	2		0 5						
					·				
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=P	ore Lining, M=M	latrix.
	7 10 to 10 10 10 10 10 10 10 10 10 10 10 10 10		LRRs, unless othe		1 11 11 11	100000000000000000000000000000000000000	Indicators for Pr		
. Histosol	(A1)		☐ Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, L	J) 🔲 1 cm Muck (A	(9) (LRR O)	
Histic Ep	oipedon (A2)		Thin Dark S	urface (S9)	(LRR S,	T, U)	2 cm Muck (A		
	stic (A3)		Loamy Muck			0)			de MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley		F2)			Carlotte Commence Services	19) (LRR P, S, T)
and the second second second second	d Layers (A5)		Depleted Ma	Mary Company of the Parket of	-0\			right Loamy So	ils (F20)
	Bodies (A6) (LRR Ficky Mineral (A7) (L		Redox Dark Depleted Da				(MLRA 153		
	esence (A8) (LRR L	SOLD STREET, STREET, STREET, SOLD	Redox Depr					Dark Surface (TF12)
	ick (A9) (LRR P, T)	-,	Marl (F10) (I		0)			n in Remarks)	11 12)
	Below Dark Surface	ce (A11)	Depleted Oc		(MLRA 1	51)			
Thick Da	ark Surface (A12)		☐ Iron-Mangar	nese Mass	es (F12) (LRR O, P,	T) ³ Indicators of	of hydrophytic ve	egetation and
Coast P	rairie Redox (A16) (MLRA 150				, U)	wetland h	drology must b	e present,
1000	lucky Mineral (S1) (LRR O, S)	Delta Ochric					turbed or proble	matic.
	Bleyed Matrix (S4)		Reduced Ve						
	Redox (S5)		Piedmont Fl			-		v.	
	Matrix (S6) rface (S7) (LRR P, \$	S T III	Anomalous	Bright Loar	my Solls (I	-20) (WILK	A 149A, 153C, 153D).	
	Layer (if observed)								
Type:	,								
Depth (inc	ches):						Hydric Soil Prese	nt? Yes	No X
Remarks:							,		
rtomanto.									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076	City/Co	unty: Shreveport / C	addo Parish	Sampling Date: 7/20/15	
Applicant/Owner: Shreveport Airport		St.		Sampling Point: S-8	
Investigator(s): Jessica Keasler & Lem Dial	Section	, Township, Range: 21	T17N R14W	Sumpling Forms	
Landform (hillslope, terrace, etc.): toe of hill	Local re	elief (concave, convex, no	one): None	Slope (%): None	
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.4455			Datum: 84	
Soil Map Unit Name: Keithville	- William Milliam		NWI classifica		
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	s_X No (If	no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrology	_ significantly disturbe	ed? Are "Normal C	ircumstances" pre	esent? Yes X No	
Are Vegetation, Soil, or Hydrology	_ naturally problemati	c? (If needed, exp	plain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	p showing samp	oling point location	s, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes	No. X				
Hydric Soil Present? Yes	No X	ls the Sampled Area	~		
Wetland Hydrology Present? Yes		within a Wetland?	Yes	No	
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		S	econdary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one is required; check a	all that apply)	Γ	Surface Soil C	v 1 mariana	
	atic Fauna (B13)			etated Concave Surface (B8)	
	Deposits (B15) (LRR	υ) 🗍	Drainage Patte		
	ogen Sulfide Odor (C1	1150	Moss Trim Lin		
☐ Water Marks (B1) ☐ Oxidi	ized Rhizospheres alo	ng Living Roots (C3)	Dry-Season W	/ater Table (C2)	
Sediment Deposits (B2)	ence of Reduced Iron	(C4)	Crayfish Burro	ws (C8)	
Drift Deposits (B3)	ent Iron Reduction in T	illed Soils (C6)	Saturation Vis	ible on Aerial Imagery (C9)	
	Muck Surface (C7)	_	Geomorphic P	Position (D2)	
	r (Explain in Remarks)) <u>L</u>	Shallow Aquita		
Inundation Visible on Aerial Imagery (B7)		Ī	FAC-Neutral T		
☐ Water-Stained Leaves (B9)		<u>L</u>	Sphagnum mo	oss (D8) (LRR T, U)	
Field Observations:	2200 EN 9040 FE 100				
Surface Water Present? Yes No _X I					
Water Table Present? Yes No _X I				Y	
Saturation Present? Yes No _X I (includes capillary fringe)			drology Present	? Yes No X	
Describe Recorded Data (stream gauge, monitoring we	ili, aeriai photos, previ	ous inspections), if availa	ible:		
Remarks:					

VEGETATION (Four Strata) - Use scientific names of plants.

AND THE STATE OF A SECURITY OF		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
l				Develop of Deminent Species
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B
3				
7.a				Prevalence Index worksheet:
3		oli 10. 02 140	a 7.	Total % Cover of: Multiply by:
		= Total Cov	/er	OBL species 0 x 1 = 0
50% of total cover:	20% of	total cover	:	FACW species 10 x 2 = 20
Sapling/Shrub Stratum (Plot size:)			N	FAC species 20 x 3 = 60
·				FACU species 40 x 4 = 160
·				UPL species 0 x 5 = 0
				Column Totals: <u>70</u> (A) <u>240</u> (B)
3				
l				Prevalence Index = B/A = 3.4
5				Hydrophytic Vegetation Indicators:
S				1 - Rapid Test for Hydrophytic Vegetation
·			·	2 - Dominance Test is >50%
3	. ——		·	3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	:	
				¹ Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size:)				indicators of rigario son and wettaria rigarology must
dropseed (Sporobolus indicus)	40	<u>Y</u>	FACU	be present, unless disturbed or problematic.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria)	10	Y N	FACU FAC	
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus)	· · · · · · · · · · · · · · · · · · ·		N. P. A. S.	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus)	10	N	FAC	be present, unless disturbed or problematic.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens)	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5.	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5.	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7.	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8.	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9.	10 10 10	N N N	FAC FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10.	10 10 10	N N N	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11.	10 10 10	N N N	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11.	10 10 10	N N N	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11.	10 10 10 	N N N	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11. 12. 150% of total cover: 35	10 10 10 	N N N	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: 35	10 10 10 70 20% of	N N N N Total Cover total cover	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11. 12. 150% of total cover: 35 Noody Vine Stratum (Plot size:) 1.	10 10 10 	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW FA	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: 35 Moody Vine Stratum (Plot size:) 1. 2.	10 10 10 10 	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW FA	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens)	10 10 10 	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW FA	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens)	10 10 10 	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW FA	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens)	10 10 10 	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW FA	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
dropseed (Sporobolus indicus) yaupon (Ilex vomitoria) curly dock (Rumex crispus) bladdersedge (Carex inturnescens) 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: 35 Woody Vine Stratum (Plot size:) 1. 2.	10 10 10 10 70 20% of	N N N STATE OF TOTAL COVERNMENT OF TOTAL COVER	FAC FACW	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

Sampling Point: S-8

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the in	dicator o	or confirm	the absence of ind	licators.)	
Depth	Matrix			x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remark	(S
0-4	5YR 4/6	100	<u> </u>				sa loam		
4-14	5YR 5/6	80	5YR 6/1	20		· ·	sa silt		
14-18	10YR 66	10					sa silt		
	*		2 						
	-		9						
	-		9				· · · · · ·		
	-		·						
	-								
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=P	ore Lining, M=M	atrix.
	7 0.01 0.0 0.01 0.01 0.01		LRRs, unless othe		75.616	10000000	Indicators for Pr		
☐ Histosol	(A1)		☐ Polyvalue Be	elow Surfac	e (S8) (L	RR S, T, U	J) 1 cm Muck (/	A9) (LRR O)	
Histic Ep	pipedon (A2)		Thin Dark Su				11 S 11	A10) (LRR S)	
Black Hi	stic (A3)		Loamy Muck	y Mineral (I	F1) (LRR	0)	Reduced Ver	rtic (F18) (outsic	de MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		2)		and the second s	Section of the sectio	19) (LRR P, S, T)
A STATE OF THE PROPERTY OF THE	Layers (A5)	1.075592	Depleted Ma	A COUNTY OF THE PARTY OF THE PA				Bright Loamy Soi	ls (F20)
	Bodies (A6) (LRR P		Redox Dark	A CONTRACTOR OF THE PARTY OF TH	1 Bearing		(MLRA 153		
	cky Mineral (A7) (LF				7			Material (TF2)	TE40\
	esence (A8) (LRR U ck (A9) (LRR P, T))	Redox Depre)			Dark Surface (1 in in Remarks)	(F12)
	Below Dark Surfac	ρ (Δ11)	Depleted Oc		MI RA 15	(1)	Culer (Expla	iii iii ixemarks)	
	ark Surface (A12)	C (ATT)	Iron-Mangan			100	T) ³ Indicators of	of hydrophytic ve	egetation and
	rairie Redox (A16) (I	MLRA 150						ydrology must be	-
=	lucky Mineral (S1) (I		Delta Ochric	(f) (f)		ti iš		sturbed or proble	- 50
Sandy G	leyed Matrix (S4)	10 15	Reduced Ve			0A, 150B)		11.50	
☐ Sandy R	edox (S5)		Piedmont Flo	oodplain So	ils (F19)	(MLRA 14	19A)		
	Matrix (S6)		Anomalous I	Bright Loam	ny Soils (F	20) (MLR	A 149A, 153C, 153D))	
	rface (S7) (LRR P, S						1		
	_ayer (if observed):								
Type:									Y
Depth (inc	ches):						Hydric Soil Prese	ent? Yes	No X
Remarks:									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076	City/C	ounty: Shrevepor	t / Caddo Parish	Sampling Date: 7/20/15			
Applicant/Owner: Shreveport Airport			7	Sampling Point: S-9			
Investigator(s): Jessica Keasler & Lem Dial	Section	on, Township, Range:	21 T17N R14W	/			
Landform (hillslope, terrace, etc.): flat	relief (concave, conv	ncave, convex, none): None Slope (%): None					
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.4484	Long	-93.8185	Datum: _84			
Soil Map Unit Name: Keithville	- Million Millergion	200000		ation: none			
Are climatic / hydrologic conditions on the site typical for	this time of year? Ye	es_X No	_ (If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrology	_ significantly disturt	bed? Are "Nor	mal Circumstances" p	oresent? Yes X No			
Are Vegetation, Soil, or Hydrology	_ naturally problema	atic? (If neede	d, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site ma	p showing sam	pling point loca	tions, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X						
Hydric Soil Present? Yes	No X	Is the Sampled Are	~				
Wetland Hydrology Present? Yes		within a Wetland?	Yes	No			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check a	all that apply)		Surface Soil	Cracks (B6)			
	itic Fauna (B13)			getated Concave Surface (B8)			
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Deposits (B15) (LRF	1000	Drainage Pat	and the second s			
1 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ogen Sulfide Odor (C	The second and present the decrees	Moss Trim Li	HIS TOPICAL SECTION			
	A CONTRACTOR OF THE PARTY OF TH	long Living Roots (C3		Water Table (C2)			
	ence of Reduced Iron ent Iron Reduction in		Crayfish Burn	sible on Aerial Imagery (C9)			
	Muck Surface (C7)	Tilled Solls (Co)		Position (D2)			
	r (Explain in Remark	(s)	Shallow Aqui				
Inundation Visible on Aerial Imagery (B7)	(—	/	FAC-Neutral				
Water-Stained Leaves (B9)			A CONTRACTOR OF THE PROPERTY O	noss (D8) (LRR T, U)			
Field Observations:							
Surface Water Present? Yes No _X	Depth (inches):						
Water Table Present? Yes No _X				.,			
Saturation Present? Yes No _X (includes capillary fringe)		***	d Hydrology Presen	t? Yes No X			
Describe Recorded Data (stream gauge, monitoring we	II, aerial photos, pre	vious inspections), if	available:				
Remarks:							
Remarks.							

VEGETATION (Four Strata) – Use scientific names of plants.

Tree Stratum (Plot size:) % 1		Dominant		
1	Cover		Indicator	Dominance Test worksheet:
2		Species?		Number of Dominant Species
3				That Are OBL, FACW, or FAC: 1 (A)
4				Total Number of Dominant
				Species Across All Strata: 2 (B)
5		-		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				Prevalence Index worksheet:
7		- 100		Total % Cover of: Multiply by:
8				OBL species 0 x 1 = 0
	energen en en en en en en	Total Cov		FACW species 0 x 2 = 0
50% of total cover:	20% of	total cover:		FAC species 20 x 3 = 60
Sapling/Shrub Stratum (Plot size:)				FACU species 65 x 4 = 260
1				UPL species 0 x 5 = 0
2				Column Totals: 85 (A) 320 (B)
3				
4				Prevalence Index = B/A = 3.05
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		Total Cov		☐ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				☐ Problematic Hydrophytic Vegetation¹ (Explain)
9574 COMMON 25 A COMMON	20 /0 01	lotal cover.		
Herb Stratum (Plot size:) 1. dropseed (Sporobolus indicus) 60)	Υ	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. bagpod (Sesbania vesicaria)	 0	Y	FAC	Definitions of Four Vegetation Strata:
3. goose grass (Eleusine indica) 5		N	FACU	Definitions of Pour Vegetation Strata.
3,				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		-	-	The Control of the Co
8 9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10		-		TARREST MAN TO MAND THE SECOND TO SECOND STATE OF THE SECOND SECOND STATE OF THE SECOND SECON
11				Woody vine – All woody vines greater than 3.28 ft in height.
12				neight.
85		Total Cov		
50% of total cover: 42.5		total cover:	1000	
Woody Vine Stratum (Plot size:)	20 /0 01	total cover.		
1				
2.				
2.05	0.50			
3				
4		Total Cov		Hydrophytic Vegetation
		Total Cov	OI .	
4	enarense ble	total cover		Present? Yes No X

Sampling Point: S-9

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the i	ndicator	or confirm	n the absence of	indicators.)	
Depth	Matrix			x Features	3				8
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remark	(S
0-18	2.5YR 4/6	90	5YR 7/1	10			clay		
-	-		-						
5	3 4		()						
									×
			16.			-			· ·
S-			Of the second se				- 3 5		
	(-). [
			=Reduced Matrix, M		1500	ains.		_=Pore Lining, M=N	
Hydric Soil I	ndicators: (Applic	cable to all	LRRs, unless othe		A			r Problematic Hyd	ric Soils*:
Histosol	2		Polyvalue Be					k (A9) (LRR O)	
	ipedon (A2)		Thin Dark Su	97	3.7	10700		k (A10) (LRR S)	
Black His			Loamy Muck			(0)		Vertic (F18) (outside	
	n Sulfide (A4)		Loamy Gleye		F2)			Floodplain Soils (F	
And the second s	Layers (A5)	. T III	Depleted Ma	Sald rest Separate Se	6)			us Bright Loamy So	ils (F20)
	Bodies (A6) (LRR F cky Mineral (A7) (L		Redox Dark Depleted Da				□ (MLRA	nt Material (TF2)	
	esence (A8) (LRR I		Redox Depre					llow Dark Surface (TE12\
	ck (A9) (LRR P, T)	•,	Marl (F10) (I		,			plain in Remarks)	11 12)
	Below Dark Surface	ce (A11)	Depleted Oc		(MLRA 1	51)	outlot (Ex	piani in i tomanto)	
177 -111 0-1111	rk Surface (A12)	()	Iron-Mangan				T) ³ Indicato	ors of hydrophytic ve	egetation and
	airie Redox (A16) (MLRA 150	- 17 C					d hydrology must b	-
Sandy M	lucky Mineral (S1) (LRR O, S)	☐ Delta Ochric	(F17) (ML	RA 151)		unless	disturbed or proble	ematic.
☐ Sandy G	leyed Matrix (S4)		Reduced Ve	rtic (F18) (I	MLRA 15	0A, 150B)			
	edox (S5)		Piedmont Flo			-			
	Matrix (S6)		Anomalous I	Bright Loan	ny Soils (F20) (MLR	A 149A, 153C, 15	53D)	
	face (S7) (LRR P,								
	_ayer (if observed)	:							
Type:									v
Depth (inc	ches):						Hydric Soil Pro	esent? Yes	No X
Remarks:									

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 9.30 Acres	City/County: Shr	eveport / Caddo Parish	Sampling Date: 2-22-17
Applicant/Owner: Shreveport Airport		State: LA	0 100 March 100
Investigator(s): Daniel Lafleur & Jordan Earls		o, Range: 21 T17N R14V	
		100	Slope (%): none
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44482	Long: -93.81269	Datum: 84
Soil Map Unit Name: Metcalf-Timpson Complex		NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for thi			
Are Vegetation, Soil, or Hydrology			resent? Yes X No
Are Vegetation, Soil, or Hydrology		(If needed, explain any answer	
SUMMARY OF FINDINGS – Attach site map		NOT THE RESERVE OF THE PARTY OF	\$100 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Hydrophytic Vegetation Present? Yes N	No X	The STEE	
Hydric Soil Present? Yes N	No X Is the Sam		X
Hydrophytic Vegetation Present? Yes	No within a W	etland? Yes	No X
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all	that apply)	Surface Soil	Cracks (B6)
Surface Water (A1)	c Fauna (B13)		getated Concave Surface (B8)
	eposits (B15) (LRR U)	☐ Drainage Pat	
	gen Sulfide Odor (C1)	Moss Trim Li	
	ed Rhizospheres along Living F ace of Reduced Iron (C4)	Crayfish Burr	Water Table (C2)
	Iron Reduction in Tilled Soils		sible on Aerial Imagery (C9)
	uck Surface (C7)		Position (D2)
	Explain in Remarks)	Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	8 8
☐ Water-Stained Leaves (B9) Field Observations:		Sphagnum m	noss (D8) (LRR T, U)
	epth (inches):		
Water Table Present? Yes No X De	epth (inches):		
Saturation Present? Yes X No De	epth (inches): 12	Wetland Hydrology Presen	t? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,		tions) if available:	-
Boothibo (Goodada Bata (ottodini gadgo, monitorinig won,	derial priotoe, proviode mopee	nono), n avanabie.	
Remarks:			
Late of reduced in decisions of the			

/EGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point: SP-1
		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1		-		That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				1/200 AS \$16000 BY \$25000 WILLIAM
5.				Percent of Dominant Species That Are OBL FACW or FAC: 50 (A/B)
				That Are OBL, FACW, or FAC: 50 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species $0 x 1 = 0$
	Dr. Commercial Dr.	= Total Cov		FACW species $0 \times 2 = 0$
50% of total cover:	20% of	total cover:	·	FAC species 20 x 3 = 60
Sapling/Shrub Stratum (Plot size:)				
1	-10			
2				OFL species x 3
3.				Column Totals: 60 (A) 220 (B)
4.				Prevalence Index = B/A = 3.6
				ACTIVITY STATES AND CONTROL OF THE C
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	· · · · · · · · · · · · · · · · · · ·			3 - Prevalence Index is ≤3.0 ¹
	13 <u></u> 3	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	:	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
globe flatsedge (Cyperus echinatus)	20	<u>Y</u>	FAC	be present, unless disturbed or problematic.
2. blackeyed susan (Rudbeckia hirta)	5	N	FACU	Definitions of Four Vegetation Strata:
3. yarrow (Achillea millefolium)	10	N	FACU	
4. horseweed (Erigeron canadensis)	15	Y	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. little barley (Hordeum pusillum)	10	N	FACU	height.
(7) (4) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4				500 SEE SEE SEE SEE SEE SEE SEE SEE SEE S
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8			- 0	Herb - All herbaceous (non-woody) plants, regardless
9		i 		of size, and woody plants less than 3.28 ft tall.
10		N <u> </u>		Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				00000 SERBERTOS
ASS-10: -	00	= Total Cov	/er	
50% of total cover: 30	20% of			
Woody Vine Stratum (Plot size:)		total covol.	())	
1				
2				
3				
4				
5.				Hydrophytic
		= Total Cov	/er	Vegetation
50% of total cover:	20% of	total cover		Present? Yes No _X
Remarks: (If observed, list morphological adaptations belo	ow).		N 3	I.

Sampling Point: SP-1

Profile Desc	ription. (Describe	to the del	oth needed to docu	ment the n	idicator or co	Onnirin	the absence of	maicator	,	
Depth	Matrix	%		x Features		oc ²	T		Damada	
(inches) 0-2	Color (moist) 10YR 3/3	100	Color (moist)	%	Type ¹ Lo	OC	SI CL		Remarks	
2-10	10YR 5/4	80	10YR 6/1	20			SI CL			
10-14	10YR 6/4	70	7.5YR 5/6	30			SI CL _			
14-18	101R 6/4	100	7.51K 3/0	30			SI CL _			
14-10	10 1 K 6/4	100	-				SI CL			37.
89		-	-							
¥. 	2 	5.0 c .								= = ₹
33 	9		-							
			=Reduced Matrix, M				² Location: PL			
in particular in the state of the		able to all	LRRs, unless othe		20080	O T 111	Indicators fo			Soils*:
Histosol	(A1) pipedon (A2)				e (S8) (LRR : (LRR S, T, U		1 cm Muc			
Black Hi			Loamy Muck			'1			-	MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye	A STATE OF THE PARTY OF THE PAR						(LRR P, S, T)
The state of the s	l Layers (A5)		Depleted Ma						oamy Soils	(F20)
100,000,000,000,000	Bodies (A6) (LRR P		Redox Dark	Charles and the second of the second of the	The second second		(MLRA	153B) nt Materia	L/TEO)	
	icky Mineral (A7) (L l esence (A8) (LRR L		Depleted Da Redox Depre		2011/02/01				Surface (TF	12)
=	ck (A9) (LRR P, T)		Marl (F10) (L		,			plain in R		
	Below Dark Surfac	e (A11)	Depleted Oc	2.000	V 1990		3			
_	ark Surface (A12)	MI DA 450			s (F12) (LRR		(2)	11733	ophytic vege	
	rairie Redox (A16) (I lucky Mineral (S1) (Delta Ochric		LRR P, T, U)			0.500	gy must be p I or problema	
	leyed Matrix (S4)			151 (51) (54)	MLRA 150A,	150B)	dillood	Glotarboo	or probleme	
	edox (S5)				oils (F19) (ML		The State of the second			
100	Matrix (S6)		Anomalous I	Bright Loam	ny Soils (F20)	(MLRA	A 149A, 153C, 1	53D)		
1.7.1	rface (S7) (LRR P, S									
Restrictive I	ayer (if observed)									
Restrictive I							Hydric Soil Pr	esent?	Yes	No X
Restrictive I	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)		_				Hydric Soil Pr	esent?	Yes	X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No <u>X</u>
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	No X
Restrictive I Type: Depth (inc	_ayer (if observed)						Hydric Soil Pr	esent?	Yes	X

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 9.30 Acres	City/County	Shreveport / Ca	ddo Parish Sa	ampling Date: 2-22-17
Applicant/Owner: Shreveport Airport	00 50 50	Stat		
Investigator(s): Daniel Lafleur & Jordan Earls	Section, To	ownship, Range: 21 T		
				Slope (%): none
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44452	Long: <u>-93</u>	.81371	Datum: 84
Soil Map Unit Name: Metcalf-Timpson Complex	x			
Are climatic / hydrologic conditions on the site typical for t		(No (If n	o. explain in Rem	narks.)
Are Vegetation, Soil, or Hydrology				sent? Yes X No
Are Vegetation, Soil, or Hydrology			ain any answers i	
SUMMARY OF FINDINGS – Attach site ma		MANAGAGINANANA PERINANANAN	SEPTEMBER OF CHEAT CROSS SANDERS	10 COL NO 200 A COLO COLO COLO COLO COLO COLO COLO CO
Hydrophytic Vegetation Present? Yes	No X	8 06.0 1702 CCC.02		
Hydric Soil Present? Yes	No X Is th	ne Sampled Area	194-200	Y
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes	No with	nin a Wetland?	Yes	_ No X
HYDROLOGY				
Wetland Hydrology Indicators:		Se	condary Indicator	rs (minimum of two required)
Primary Indicators (minimum of one is required; check a	ill that apply)		Surface Soil Cra	
Surface Water (A1)	tic Fauna (B13)		Sparsely Vegeta	ated Concave Surface (B8)
	Deposits (B15) (LRR U)		Drainage Patter	
	ogen Sulfide Odor (C1)		Moss Trim Lines	
	zed Rhizospheres along l ence of Reduced Iron (C4		Dry-Season Wa Crayfish Burrow	T. 20
	nt Iron Reduction in Tilled	· · · · · · · · · · · · · · · · · · ·	Construction of the contract o	ole on Aerial Imagery (C9)
	Muck Surface (C7)		Geomorphic Po	
The state of the s	(Explain in Remarks)		Shallow Aquitar	27.2842.2842.084.0424.2
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral Te	
☐ Water-Stained Leaves (B9)		<u>L</u>	Sphagnum mos	ss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No X	Depth (inches):			
Water Table Present? Yes No X	Depth (inches):			
Saturation Present? Yes X No [Depth (inches): 10		rology Present?	Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we				20.21
Describe Recorded Data (stream gauge, monitoring we	i, aeriai priotos, previous	inspections), ii avallab	iic.	
Remarks:				1
Site of relation of Analysis (14)				

Trop Stratum (Plot size:	MACE CONTRACTOR			
		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33 (A/B)
6		3 <u>4 44</u>		
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)): ***********)	FAC species x 3 =
1				FACU species x 4 =
				UPL species x 5 =
2				Column Totals: (A) (B)
3				57 S S S S S S S S S S S S S S S S S S S
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. little barley (Hordeum pusillum)	15	<u>Y</u>	FACU	be present, unless disturbed or problematic.
2. blackeyed susan (Rudbeckia hirta)	5	N	FACU	Definitions of Four Vegetation Strata:
horseweed (Erigeron canadensis)	20	Y	FACU	
	45	· ·	E40	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
 globe flatsedge (Cyperus echinatus) 	15	Y	FAC	
4. globe flatsedge (Cyperus echinatus)		10 TO	31 N. 2017-201	more in diameter at breast height (DBH), regardless of height.
5.			- 1000000	more in diameter at breast height (DBH), regardless of height.
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	55	= Total Cov	er	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	55		er	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	55	= Total Cov	er	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5		= Total Cover	eer 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5		= Total Cover	er 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5		= Total Cov	er 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5		= Total Cover	er 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	55 20% of	= Total Cover	er 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	55 20% of	= Total Cover	er . 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	55 20% of	= Total Cover	der 11	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

Sampling Point: SP-2

Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	n the absence of in	dicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	Type ¹	Loc ²	Texture	Remarks	
0-2	10YR 3/2	100	Color (moist)	/0	Туре	LUC	SICL	Kelliaiks	
2-4	10YR 4/2	100	î .			()	CL		*
4-8	10YR 6/3	90	7.5YR 6/6	10			CL		
8-18			10YR 5/2	10			CL —		***
0-10	10YR 7/8	90	1018 5/2	. 10			<u>CL</u>		
8		-	3 5				· ·		
S	A			-	. —				
	De com con los		en e				()	PLA MALE BY WINE 1994 1994 19	
			=Reduced Matrix, MS			ains.		Pore Lining, M=Matr	
A SECTION OF THE PROPERTY OF THE PERSON OF T		cable to all	LRRs, unless other		A CONTRACTOR OF THE PARTY OF TH	DD C T I	AND THE PROPERTY OF THE PROPERTY OF	Problematic Hydric	Solls":
Histosol	pipedon (A2)		☐ Polyvalue Be ☐ Thin Dark Su		- 1			(A9) (LRR O) (A10) (LRR S)	
	istic (A3)		Loamy Muck					ertic (F18) (outside	MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)	•	Piedmont F	loodplain Soils (F19	(LRR P, S, T)
	d Layers (A5)	3 722953439	Depleted Ma		LV25			Bright Loamy Soils	(F20)
	Bodies (A6) (LRR Fucky Mineral (A7) (L		Redox Dark				(MLRA 1	53B) Material (TF2)	
	resence (A8) (LRR I		Redox Depre		CONTRACTOR OF THE PARTY OF THE			w Dark Surface (TF	12)
	uck (A9) (LRR P, T)	•	Marl (F10) (L		3.63			ain in Remarks)	557. 6 6
	d Below Dark Surfac	ce (A11)	Depleted Ocl				- 3		
_	ark Surface (A12) rairie Redox (A16) (MI DA 150	Iron-Mangan		200	75 35		of hydrophytic vege hydrology must be p	
_	// fairle Redox (A16) (// fucky Mineral (S1)		A) Umbric Surfa Delta Ochric	- W - SW		, 0)		isturbed or problema	
	Gleyed Matrix (S4)		Reduced Ver	151 ST/174	1.5	0A, 150B)		January Production	
	Redox (S5)		Piedmont Flo						
100000	Matrix (S6)	C T II)	Anomalous E	Bright Loa	my Soils (I	F20) (MLF	RA 149A, 153C, 153	D)	
and the same of th	rface (S7) (LRR P, Layer (if observed)								
Type:		8							
Depth (in	ches):						Hydric Soil Pres	ent? Yes	No X
Remarks:	5/0-19/		2-7				100		

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 9.30 Acres	City/County:	Shreveport / Caddo Parish	Sampling Date: 2-22-17
Applicant/Owner: Shreveport Airport		State: LA	Sampling Point: SP-3
Investigator(s): Daniel Lafleur & Jordan Earls	Section, Town	ship, Range: 21 T17N R14\	ν -
Landform (hillslope, terrace, etc.): Flat	Local relief (co	oncave convex none). none	Slope (%): none
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44391	Long: -93.81654	Datum: 84
Soil Map Unit Name: Metcalf-Timpson Comple	ex	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology			present? Yes X No
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site ma		18X0562441104-03/15. 0/18/12 N. A. P. 37 M. POSSES-CARD P. G. CARD. (2000) 30	SECURIO DE COMO DECOMO DECOMO DE COMO DECOMO DE COMO D
U. J. J. V. J. V. B. 10	X		
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	$\frac{NO}{X}$ Is the S	Sampled Area	v
Wetland Hydrology Present? Yes	No $\frac{X}{X}$ within	a Wetland? Yes	No X
Remarks:			
HYDROLOGY			70
Wetland Hydrology Indicators:	2650kg 1/201 6/7/6/2		ators (minimum of two required)
Primary Indicators (minimum of one is required; check	TO THE PARTY OF THE PROPERTY OF THE PARTY OF		THE PROPERTY OF THE PROPERTY O
	atic Fauna (B13)	- 1112 v 314 m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	getated Concave Surface (B8)
	Deposits (B15) (LRR U)	Drainage Pa	THE STANDARD CONTRACTOR OF THE STANDARD CONTRACT
	rogen Sulfide Odor (C1) lized Rhizospheres along Livi	Moss Trim L	
	ence of Reduced Iron (C4)	Crayfish Bur	Water Table (C2)
	ent Iron Reduction in Tilled So		isible on Aerial Imagery (C9)
A	Muck Surface (C7)	and to the source of the sourc	Position (D2)
The state of the s	er (Explain in Remarks)	Shallow Aqu	AND CONTRACTOR CONTRACTOR OF CONTRACTOR CONT
Inundation Visible on Aerial Imagery (B7)	, (p	FAC-Neutral	
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			20 200000 2000
	Depth (inches):		
	Depth (inches):		v
Saturation Present? Yes No X (includes capillary fringe)	Depth (inches):	Wetland Hydrology Preser	nt? Yes No X
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous ins	spections), if available:	
Remarks:			
incinario.			

		Dominant		Dominance Test worksheet:
1.		Species?		Number of Dominant Species
				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
·		= Total Cov	er	FACW species x 2 =
50% of total cover:	_ 20% of	total cover:		ACCORDANCE AND ACCORD
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Cov		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of	total cover:		Troblemate Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. goose grass (Eleusine indica)	10	N	FACU	be present, unless disturbed or problematic.
2. gama grass (Tripsacum dactyloides)	10	N	FAC	Definitions of Four Vegetation Strata:
3. little barley (Hordeum pusillum)	25	Υ	FACU	Tree Weeds plants evaluding since 2 in /7 6 am) as
4. yarrow (Achillea millefolium)	10	N	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		25 151	71	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10.				Was designed and the second se
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.		· · · · · · · · · · · · · · · · · · ·		
· -	55 ;	= Total Cov	er	
50% of total cover: 27.5		total cover:	52 . 27	
Woody Vine Stratum (Plot size:)		1014. 0010.		
1				
2				
3				
3				
4				3 # 100 # (000 000 000 000 000 000 000 000 00
				Hydrophytic Vegetation
4		= Total Cov	er	Hydrophytic Vegetation Present? Yes No X

Sampling Point: SP-3

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence	of indicate	ors.)	
Depth	Matrix			x Feature:		. 2	N-72 V			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	2.	Remarks	
0-4	10YR 5/8	100				· ·	SI CL	·		
4-18	10YR 6/6	100				·	CL			
		2000				-		100		
12		-				·		: 3		
D				-01				105		*
8								N 		
S 							-	¥ -		
a 	(-	0.0					0	×		
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.	² Location:	PL=Pore L	ining, M=Matri	x.
Hydric Soil	ndicators: (Applic	able to all Li	RRs, unless othe	rwise not	ed.)				matic Hydric	
☐ Histosol	(A1)		☐ Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U	J) 🔲 1 cm N	/luck (A9) (I	LRR O)	
Histic Ep	pipedon (A2)		Thin Dark St	urface (S9)	(LRR S,	T, U)	2 cm N	/luck (A10)	(LRR S)	
Black Hi			Loamy Muck	y Mineral	(F1) (LRR	(0)		The state of the s	A second second second second	/ILRA 150A,B)
1000 miles 17 mg	n Sulfide (A4)		Loamy Gley	71960 - Joseph Bly	F2)				ain Soils (F19)	
	Layers (A5)	2200020	Depleted Ma	AND THE RESERVE TO SERVE THE PARTY OF THE PA	(2)		And the second s		t Loamy Soils (F20)
- 25	Bodies (A6) (LRR P		Redox Dark					RA 153B)	-1 (TEO)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	cky Mineral (A7) (LI	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P	Depleted Da		Contract of the Contract of th			arent Mater	rial (TF2) k Surface (TF1	2)
	esence (A8) (LRR L ick (A9) (LRR P, T)	,,	Redox Depre		5)			(Explain in	10km makinghili 111 an makin 1110 - H	²⁾
_	Below Dark Surfac	e (A11)	Depleted Oc	150	(MI RA 1	51)	Other	(Explain iii	ixemarks)	
_	ark Surface (A12)	(/(///	Iron-Mangar				T) ³ Indic	ators of hy	drophytic vege	tation and
· =	rairie Redox (A16) (I	MLRA 150A)						1.5	logy must be pr	
Sandy M	lucky Mineral (S1) (I	LRR O, S)	☐ Delta Ochric	(F17) (ML	RA 151)	Ki 18	unle	ess disturbe	ed or problema	tic.
Sandy G	leyed Matrix (S4)		Reduced Ve							
	edox (S5)		Piedmont Flo							
1000	Matrix (S6)		Anomalous I	Bright Loar	ny Soils (F20) (MLR	A 149A, 153C	, 153D)		
The state of the s	rface (S7) (LRR P, S _ayer (if observed)						Ti			
623	_ayer (ii observed)									
Type: Depth (inc	ches):						Hydric Soil	Present?	Yes	No X
Remarks:							,			
Remarks.										

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 15.69 Acres	City/County: Shre	eveport / Caddo Parish	Sampling Date: 2-22-17
Applicant/Owner: Shreveport Airport		State: LA	
Investigator(s): Daniel Lafleur & Jordan Earls		, Range: 19 T17N R14V	
Landform (hillslope, terrace, etc.): Flat		ve, convex, none): Concav	50 W.
Subregion (LRR or MLRA): LRRP 133B	Lat: 32.44518	Long: -93.83881	
Soil Map Unit Name: Keithville very fine sandy lo		NWI classification	
Are climatic / hydrologic conditions on the site typical for thi			
Are Vegetation, Soil, or Hydrologys		Are "Normal Circumstances" p	
Are Vegetation, Soil, or Hydrology I		(If needed, explain any answer	
SUMMARY OF FINDINGS – Attach site map		* CONTROL OF THE CONT	Balance and Carlot Company of the Carlot Car
Hydrophytic Vegetation Present? Yes N	No. X	112 CD2	
Hydric Soil Present? Yes N	No X Is the Sam		Y
Hydrophytic Vegetation Present? Yes	No within a W	etland? Yes	No X
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all	CHARLES TO SERVICE TO SERVICE TO AN	Surface Soil (A AND THE PROPERTY OF THE PROP
[1]	Fauna (B13)		etated Concave Surface (B8)
	eposits (B15) (LRR U) en Sulfide Odor (C1)	Drainage Pat	
	ed Rhizospheres along Living R	Roots (C3) Dry-Season V	Nater Table (C2)
	ce of Reduced Iron (C4)	Crayfish Burr	T. 20
	Iron Reduction in Tilled Soils (sible on Aerial Imagery (C9)
The state of the s	uck Surface (C7)	Geomorphic	A CONTRACTOR OF CONTRACTOR
_	Explain in Remarks)	☐ Shallow Aqui	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		FAC-Neutral	loss (D8) (LRR T, U)
Field Observations:		opnagnam m	isso (Bo) (Errit 1, G)
Surface Water Present? Yes No X De	epth (inches):		
Water Table Present? Yes No X De	epth (inches):		v
Saturation Present? Yes X No De (includes capillary fringe)	epth (inches): 16	Wetland Hydrology Presen	t? Yes No X
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspec	tions), if available:	
Remarks:			
SALE OF INSIDERAL AMERICAN OF A			

'EGETATION (Four Strata) – Use scientific naı	nes or pr	arito.		Sampling Point: SP-4
Tree Stratum (Plot size:)		Dominant Species?		Dominance Test worksheet: Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				NOS OF WANTED BY SEPARATE WILLIAM
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B
6				N N D D N
7				Prevalence Index worksheet:
3				Total % Cover of: Multiply by:
		= Total Cov		OBL species $\frac{0}{40}$ $x = \frac{0}{20}$
50% of total cover:	20% of	total cover:		FACW species $\frac{10}{50}$ $\times 2 = \frac{20}{450}$
Sapling/Shrub Stratum (Plot size:)				FAC species 50 x 3 = 150
1				FACU species 15 x 4 = 60
2.				UPL species 0 x 5 = 0
3.				Column Totals: <u>75</u> (A) <u>230</u> (B)
4.				Prevalence Index = B/A = 3.06
5				Hydrophytic Vegetation Indicators:
3				
7				2 - Dominance Test is >50%
3.				3 - Prevalence Index is ≤3.0¹
·		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:				Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size:)			(¹ Indicators of hydric soil and wetland hydrology must
ricefield flat sedge (Cyperus iria)	10	N	FACW	be present, unless disturbed or problematic.
broom sedge (Andropogon virginicus)	50	Y	FAC	Definitions of Four Vegetation Strata:
liverseed grass (Urochloa ramosa)	15	Y	FACU	
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3.				II. A. All best energy (conservation of the first energy)
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
		-		
10				8 828
A Marco Control of the Control of th				Woody vine – All woody vines greater than 3.28 ft in
11				8 828
11		2 22		Woody vine – All woody vines greater than 3.28 ft in
11	75	Total Cov		Woody vine – All woody vines greater than 3.28 ft in
11	75	2 22		Woody vine – All woody vines greater than 3.28 ft in
11	75 20% of	= Total Cov total cover	15	Woody vine – All woody vines greater than 3.28 ft in
11	75 20% of	= Total Cov total cover		Woody vine – All woody vines greater than 3.28 ft in
11	75 20% of	= Total Cov total cover	15	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:) 1	75 20% of	= Total Cov total cover	15	Woody vine – All woody vines greater than 3.28 ft in
11	75 20% of	= Total Cov total cover	15	Woody vine – All woody vines greater than 3.28 ft in height.
11	75 20% of	= Total Cov total cover		Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
11	75 20% of	= Total Covers		Woody vine – All woody vines greater than 3.28 ft in height.

Sampling Point: SP-4

	inpulon. (Describe	to the dep	th needed to docu	ment the	ndicator or co	nfirm the abse	ice of indicat	015.)	
Depth	Matrix			x Feature	S1 .	2		D	
(inches) 0-2	Color (moist) 10YR 3/4	100	Color (moist)	%	_Type ¹ _Loc	SI CL	<u> </u>	Remarks	c
10	A THE OTHER DESIGNATION AND ADDRESS OF THE OTHER DESIGNATION OF THE OTH		.	-01	ra 		_ :		
2-10	10YR 4/6	100	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		·	SICL			
10-18	10YR 6/3	70	10YR 5/6	30	· · · · · · · · · · · · · · · · · · ·	SI CL			
100	~				500	~ ~			
35			9	-53.64					*
8	-		3 5	-					*
1.	2-	1.0 t	3	100					₩.
1 _{Tupo: C-Ce}		lotion DM	=Reduced Matrix, M	C=Maaka	L Sand Crains		on: DI -Doro I	_ining, M=Matri	
			LRRs, unless othe					matic Hydric	
☐ Histosol			and the life with the second of the second continues.		ce (S8) (LRR S	100	m Muck (A9) (
_	pipedon (A2)				(LRR S, T, U)		m Muck (A10)		
Black His					(F1) (LRR O)			18) (outside N	/ILRA 150A,B)
	n Sulfide (A4)		Loamy Gley		F2)			ain Soils (F19)	
A CONTRACTOR	Layers (A5)		Depleted Ma	And the second second	-0)	A CONTRACTOR OF THE PARTY OF TH		t Loamy Soils (F20)
- 17	Bodies (A6) (LRR Ficky Mineral (A7) (L		Redox Dark Depleted Da				MLRA 153B) d Parent Mate	rial (TE2)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	esence (A8) (LRR L	Charles Control of the Control of th	Redox Depr		Control of the Control			k Surface (TF1	2)
	ick (A9) (LRR P, T)	2	Marl (F10) (I		0)		ner (Explain in	() 집에 대접하여 없다면 있다면 다 하나라 하십시오 - 네.	
	Below Dark Surfac	e (A11)			(MLRA 151)		1888 SAM	*	
=	ark Surface (A12)				es (F12) (LRR (drophytic veget	
	rairie Redox (A16) (2.00	- W - W	(LRR P, T, U)			logy must be pr	
	lucky Mineral (S1) (Bleyed Matrix (S4)	LRR O, S)	Delta Ochrid	151 (57)(74)	.KA 151) (MLRA 150A, 1		uniess disturb	ed or problema	tic.
	ledox (S5)				oils (F19) (MLR				
	Matrix (S6)				my Soils (F20) (3C, 153D)		
Dark Sur	rface (S7) (LRR P,	S. T. U)							
	100 200 00	200 DE 1989 T							The state of the s
Restrictive I	_ayer (if observed)	200 DE 1989 T							
Type:									
Type: Depth (inc	Layer (if observed)					Hydric \$	Soil Present?	Yes	No <u>X</u>
Type:						Hydric \$	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric \$	Goil Present?	Yes	No <u>X</u>
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X
Type: Depth (inc						Hydric S	Soil Present?	Yes	No X

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 15.69 Acres	Sity/County: Shreveport / Caddo Parish Sampling Date: 2-22-17
Applicant/Owner: Shreveport Airport	State: LA Sampling Point: SP-5
	Section, Township, Range: 19 T17N R14W
Landform (hillslope, terrace, etc.): Flat L	ocal relief (concave, convex, none): None Slope (%): None
Subregion (LRR or MLRA): LRRP 133B Lat: 32.44	
Soil Map Unit Name: Metcalf-Timpson complex	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly d	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally prob	olematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	8-100 cm 10-100 cm
Hydric Soil Present? Yes No X	Is the Sampled Area
Wetland Hydrology Present? Yes No X	within a Wetland? Yes No X
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Water Present? Yes No Depth (inches):	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) res along Living Roots (C3) or In Tilled Soils (C6) C7) Geomorphic Position (D2) marks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No _X
Remarks:	

	Absolute	Dominant		Dominance Test worksheet:				
Tree Stratum (Plot size:)	200	Species?	100	Number of Dominant Species				
1. Loblolly Pine (Pinus taeda)	10	<u>Y</u>	FAC	That Are OBL, FACW, or FAC: 2	(A)			
2. southern red oak (Quercus falcata)	5	<u>Y</u>	FACU	Total Number of Dominant				
3. winged elm (Ulmus alata)	5	<u>Y</u>	FACU	Species Across All Strata: 6	(B)			
4				Percent of Dominant Species				
5				That Are OBL, FACW, or FAC: 33	(A/B)			
6		3			# #			
7				Prevalence Index worksheet:				
8				Total % Cover of: Multiply by:	-			
	20	= Total Cov	er	OBL species x 1 =				
50% of total cover: 10	20% of	total cover	4	FACW species x 2 =				
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =				
1				FACU species x 4 =				
2.				UPL species x 5 =				
3.				Column Totals: (A)	(B)			
4.								
				Prevalence Index = B/A =	+)			
5				Hydrophytic Vegetation Indicators:				
6				1 - Rapid Test for Hydrophytic Vegetation				
7				2 - Dominance Test is >50%				
8				3 - Prevalence Index is ≤3.0 ¹				
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain	1)			
	20% of	total cover						
50% of total cover:								
Herb Stratum (Plot size:)		NI	EACW	¹ Indicators of hydric soil and wetland hydrology m	ust			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria)	5	N	FACW	be present, unless disturbed or problematic.	ust			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus)	5 20	Υ	FAC	¹ Indicators of hydric soil and wetland hydrology me be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:	ust			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima)	5 20 15	<u>Y</u> <u>Y</u>	FACU	be present, unless disturbed or problematic.				
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine)	5 20 15 25	Y Y Y	FAC	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle	m) or			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine)	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 c	m) or			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 c more in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines,	m) or ss of			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6	5 20 15 25	<u>Y</u>	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 c more in diameter at breast height (DBH), regardle height.	m) or ss of			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 c more in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall.	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 c more in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines,	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11	5 20 15 25	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12	5 20 15 25 	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5	5 20 15 25 	Y Y Y	FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5	5 20 15 25 65 65	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1	5 20 15 25 	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 So% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1 2	5 20 15 25 65 065	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1 2 3	5 20 15 25 65 65	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1 2 3 4	5 20 15 25 —————————————————————————————————	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 height.	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 So% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1 2	5 20 15 25 65 65	Y Y Y	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 height.	m) or ss of less			
Herb Stratum (Plot size:) 1. ricefield flat sedge (Cyperus iria) 2. broom sedge (Andropogon virginicus) 3. snakeroot (Ageratina altissima) 4. sticky-willy (Galium aparine) 5 6 7 8 9 10 11 12 50% of total cover: 32.5 Woody Vine Stratum (Plot size:) 1 2 3 4	5 20 15 25 65 65	Y Y Y Total Covers	FACU FACU FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle height. Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 height.	m) or ss of less			

Sampling Point: SP-5

Profile Desc	cription: (Describe	to the dep	th needed to docum	ent the ir	ndicator	or confirn	n the absence of	indicator	rs.)	**
Depth	Matrix			Features					100	
(inches)	Color (moist)	<u>%</u>	Color (moist)	% 1E	Type ¹	_Loc ²	Texture _		Remarks	
1-2	7.5R 3/3	75	7.5R 5/1	15			SI CL			
			7.5R 6/8	5		·	SICL			
	-		7.5R 4/2	5			SICL			
2-10	7.5YR 4/1	80	7.5 YR 7/8 / 2.5 YR 5/8	10/5			SICL			
8	-		2.5 YR 3/6	5			SICL			
10-18	7.5YR 6/4	60	7.5YR 6/6	20			SICL			
			7.5YR 7/1	20			SICL			
¹ Type: C=Ce	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: P	L=Pore Li	ning, M=Matrix.	2
Hydric Soil	Indicators: (Application	able to all	LRRs, unless otherv	vise note	ed.)		Indicators fo	r Problen	natic Hydric So	oils³:
Histosol	S. S.		Polyvalue Beld					1000	100	
_	pipedon (A2)		Thin Dark Sur		•	-		ck (A10) (I		
	stic (A3)		Loamy Mucky		(CC) (N	S (O)		2.77.23	18) (outside M l	
	n Sulfide (A4)		Loamy Gleyed	30 - 20 6 302	-2)			and the second of the second	in Soils (F19) (I	TO CONTRACT TO STATE OF THE PARTY OF THE PAR
The state of the s	d Layers (A5)		Depleted Matr		0)			THE RESERVE OF THE PARTY OF THE	Loamy Soils (F2	20)
- 27	Bodies (A6) (LRR P,		Redox Dark S		100			153B)	. (*****)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	icky Mineral (A7) (LR				Carried March 2011			ent Materia	Surface (TF12)	
	esence (A8) (LRR U)	Redox Depres		5)				이 이 살아왔다면서 가장 없는 바람이 없었다. 그런 이렇	
	ick (A9) (LRR P, T) d Below Dark Surface	0 (111)	Marl (F10) (LF Depleted Och	150	MI DA 1	E4)	Uther (E	xplain in R	emarks)	
_	ark Surface (A12)	e (ATT)	Iron-Mangane				T) ³ Indicate	ors of hydi	rophytic vegeta	tion and
=	rairie Redox (A16) (N	/LRA 150	=			9 35 35	77 P	11773	gy must be pre	
_	lucky Mineral (S1) (L		Delta Ochric (I	20 20 2				30750	d or problemation	
	Gleyed Matrix (S4)		Reduced Verti		150	50A, 150B)			The state of the s	
☐ Sandy F	Redox (S5)		Piedmont Floo	dplain So	oils (F19)	(MLRA 14	49A)			
☐ Stripped	Matrix (S6)		Anomalous Br	ight Loan	ny Soils (F20) (MLF	RA 149A, 153C, 1	53D)		
A Control of the Cont	rface (S7) (LRR P, S	2 00 2257	0/440				500.000			
623	Layer (if observed):									
Type:	ah aa V						Hydric Soil P		Yes X	N-
	ches):		10				Hydric Soil Pi	resent?	res /	No
Remarks:										

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: EH157076.1 / 15.69 Acres	City/County: Shre	eveport / Caddo Parish	Sampling Date: 2-22-17
Applicant/Owner: Shreveport Airport		State: LA	
Investigator(s): Daniel Lafleur & Jordan Earls		, Range: 19 T17N R14V	
Landform (hillslope, terrace, etc.): Flat	Local relief (conca	ve. convex. none); None	Slope (%): None
Subregion (LRR or MLRA): LRRP 133B La	32.44610	Long: -93.83748	Datum: 84
Soil Map Unit Name: Keithville very fine sandy loa	am	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology sig			resent? Yes X No
Are Vegetation, Soil, or Hydrology na		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map s		NORTH TRANSPORT OF WINE N. A. FORTH PORTSON FOR CONTRACTOR OF SECTION STATES	\$100 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Hydrophytic Vegetation Present? Yes No	X	Ter sher	
Hydrophytic Vegetation Present? Yes	X Is the Sam		No X
Wetland Hydrology Present? Yes X No	within a W	etiand? Yes	No <u>/\</u>
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all the	STATE CONTRACTOR CONTRACTOR OF THE CONTRACTOR OF	Surface Soil	NAMES OF THE PROPERTY OF THE PARTY OF THE PA
[1]	Fauna (B13)		getated Concave Surface (B8)
	osits (B15) (LRR U) n Sulfide Odor (C1)	Drainage Pat	
	Rhizospheres along Living F	☐ Moss Trim Li	Water Table (C2)
	e of Reduced Iron (C4)	Crayfish Burn	7.1 (A)
	on Reduction in Tilled Soils (sible on Aerial Imagery (C9)
The state of the s	k Surface (C7)	Geomorphic	Position (D2)
	xplain in Remarks)	☐ Shallow Aqui	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		FAC-Neutral	Test (D5) noss (D8) (LRR T, U)
Field Observations:		Spriagridin ii	1055 (D0) (LKK 1, 0)
Surface Water Present? Yes No X Dept	th (inches):		
Water Table Present? Yes No X Dept	th (inches):		916.2n
Saturation Present? Yes X No Dept	th (inches): 5	Wetland Hydrology Presen	t? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac	erial photos, previous inspec	tions), if available:	
Remarks:			1

VEGETATION (Four Strata) - Use scientific names of plants.

er	Dominance Test worksheet: Number of Dominant Species 1 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B) Prevalence Index worksheet:
er FACW	That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B) Prevalence Index worksheet:
FACW FAC	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Multiply by: OBL species FACW species FAC species FAC species FACU species Y 4 = UPL species Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
er FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:
FACW FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:
FACW FAC	That Are OBL, FACW, or FAC: 33 (A/B) Prevalence Index worksheet:
FACW FAC	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
er FACW	Total % Cover of: Multiply by: OBL species
FACW FAC	OBL species
FACW FAC	FACW species
FACW	FAC species
FACW	FACU species x 4 =
FACW	UPL species x 5 =
FACW FAC	Prevalence Index = B/A =
FACW FAC	Prevalence Index = B/A =
FACW FAC	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
FACW FAC	be present, unless disturbed or problematic.
FAC	be present, unless disturbed or problematic.
A 100010007	AND THE STATE OF T
	1700
FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	height.
	Carling/Church Washingharts avaluding vines less
	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	Woody vine – All woody vines greater than 3.28 ft in height.
	neight.
er _	
10.00	
3	
	Hydrophytic Vegetation
800	Present? Yes No X
	er 13

Sampling Point: SP-6

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	n the absence of in	dicators.)	**
Depth	Matrix			x Features		. 2			
(inches) 0-2	Color (moist) 10YR 4/6	100	Color (moist)	%	Type ¹	_Loc ²	SA SL	Remarks	<u> </u>
		-0.	5) (D. 7) (O.						
10-18	5YR 5/8	90	5YR 7/2	5			SA CL		
·	72		10YR 7/6	5			SA CL		
P	1.5		·	· (1)			1 1		201
83	(2	- CO	()	-			9 9		
9) 	//	1 27 		-			97		
	F 10 10 10 10 10 10 10 10 10 10 10 10 10	-	eta e especial o recei				-	420 - 2001 AV - 2002 1232	
			Reduced Matrix, MS			ins.		Pore Lining, M=Ma	
night grows a toward-toward		able to all	LRRs, unless other		Section 1988		AND THE PROPERTY OF THE PARTY OF THE PARTY OF	Problematic Hydri	c Soils":
Histosol	(A1) pipedon (A2)		Polyvalue Be					(A9) (LRR O) (A10) (LRR S)	
_	stic (A3)		Loamy Muck			-		ertic (F18) (outsid	e MI RA 150A B)
	en Sulfide (A4)		Loamy Gleye		10000	0,		loodplain Soils (F1	
	d Layers (A5)		Depleted Ma	Apple and the party of the part				Bright Loamy Soils	
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark	Surface (F	6)		(MLRA 1		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	icky Mineral (A7) (L				Carlo Harrison			Material (TF2)	
	esence (A8) (LRR L	J)	Redox Depre		3)			w Dark Surface (T	F12)
=	ick (A9) (LRR P, T)	- (844)	Marl (F10) (L	(5)			U Other (Expl	ain in Remarks)	
_	d Below Dark Surface	e (A11)	Depleted Oc				T) ³ Indicators	of hydrophytic veg	notation and
_	ark Surface (A12) rairie Redox (A16) (MI RA 150				- The Control of the	77 - 7 7	hydrology must be	
	lucky Mineral (S1) (Delta Ochric	20 20 2		٥,		isturbed or probler	
	Gleyed Matrix (S4)		Reduced Ver	151 ST 154.	100	0A, 150B)			
	Redox (S5)		Piedmont Flo						
☐ Stripped	Matrix (S6)		Anomalous E	Bright Loan	my Soils (F	20) (MLR	RA 149A, 153C, 153	D)	
The state of the s	rface (S7) (LRR P,								
623	Layer (if observed)	:							
Type:	phos):						Hudrio Soil Bros	ent? Yes	No X
	ches):						Hydric Soil Pres	sent? Yes	_ No <u>^</u>
Remarks:									
									1

APPENDIX D COMMON ACRONYMS

COMMON ACRONYMS

CLOMR Conditional Letter of Map Revision

CWA Clean Water Act

DFIRM Digital Flood Insurance Rate Map

FEMA Federal Emergency Management Administration

FIRM Flood Insurance Rate Map

GIS Geographic Information System

GPS Global Positioning System

IH Interstate Highway

NRCS Natural Resources Conservation Service

NRPW Non-Relatively Permanent Water

OHWM Ordinary High Water Mark

PJD Preliminary Jurisdictional Determination

RHA Rivers and Harbors Act

RPW Relatively Permanent Water

TNRIS Texas Natural Resource Information System

TNW Traditionally Navigable Water

U.S. United States

USACE
U.S. Army Corps of Engineers
USDA
U.S. Department of Agriculture
USFWS
U.S. Fish and Wildlife Service

USGS U.S. Geologic Survey

WOUS Waters of the U.S.