

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

APR 2 7 2012

Operations Division Surveillance and Enforcement Section

REPLY TO

ATTENTION OF

# Exhibit II. Waterloo Site Jurisdictional Determination & Wetlands Delineation Report

Dear Mr. Patterson:

Reference is made to your request, on behalf of Barber Brothers Construction, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Section 10, Township 10 South, Range 2 East and Section 48, Township 9 South, Range 2 East, Ascension Parish, Louisiana (enclosed map). Specifically, this property is identified as the 177.14 acre site on and northeast of Louisiana Highway 75 and in the Mississippi River batture near Mississippi River Mile 186.

Based on review of recent maps, aerial photography, soils data, information provided with your request, and a brief site visit conducted on January 24, 2012, we have determined that part of the property is wetland and subject to Corps' jurisdiction. The approximate limits of the wetland are designated in red on the map. A Department of the Army (DA) permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into this wetland. A DA permit will also be required if you propose to deposit dredged or fill material into New River and its tributaries, designated in blue on the map. Additionally, the Mississippi River is a navigable waterway and subject to Corps' jurisdiction under Section 10 of the Rivers and Harbors Act. A DA Section 10 permit will be required prior to any work in the Mississippi River and areas below the ordinary high water of the Mississippi River, designated in blue crosshatch on the map.

You are advised that you must obtain a permit from a local assuring agency, usually a Levee Board or Parish Council, for any work within 1500 feet of a federal flood control structure such as a levee. You must apply by letter to the appropriate agency including full-size construction plans, cross sections, and details of the proposed work. Concurrently with your application to the assuring agency, you must also forward a copy of your letter and plans to Ms. Amy Powell, Operations Manager for Completed Works of the Corps and to the appropriate regional office of the Louisiana Department of Transportation and Development (LA DOTD) or the Office of Coastal Protection and Restoration (OCPR) for their review and comments concerning the proposed work. The assuring agency will not issue a permit for the work to proceed until they have obtained letters of no objection from both of these reviewing agencies. For additional information, please contact Ms. Amy Powell at (504) 862-2241.

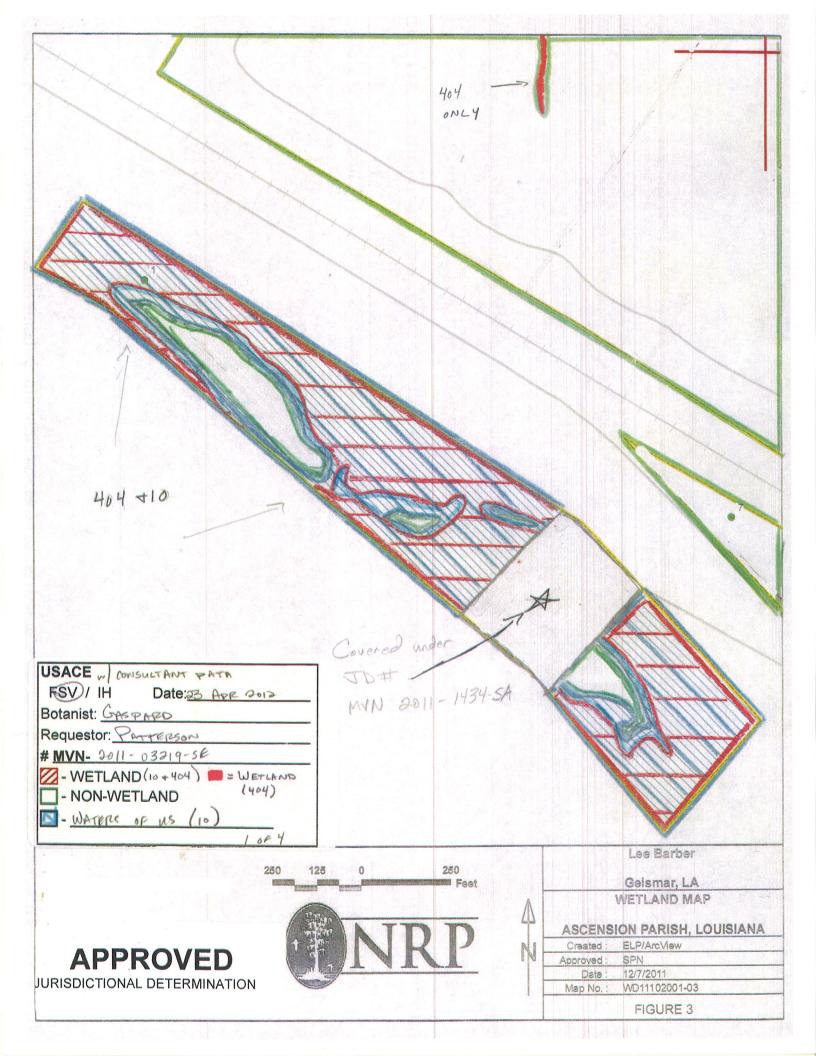
You and your client are advised that this approved jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific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

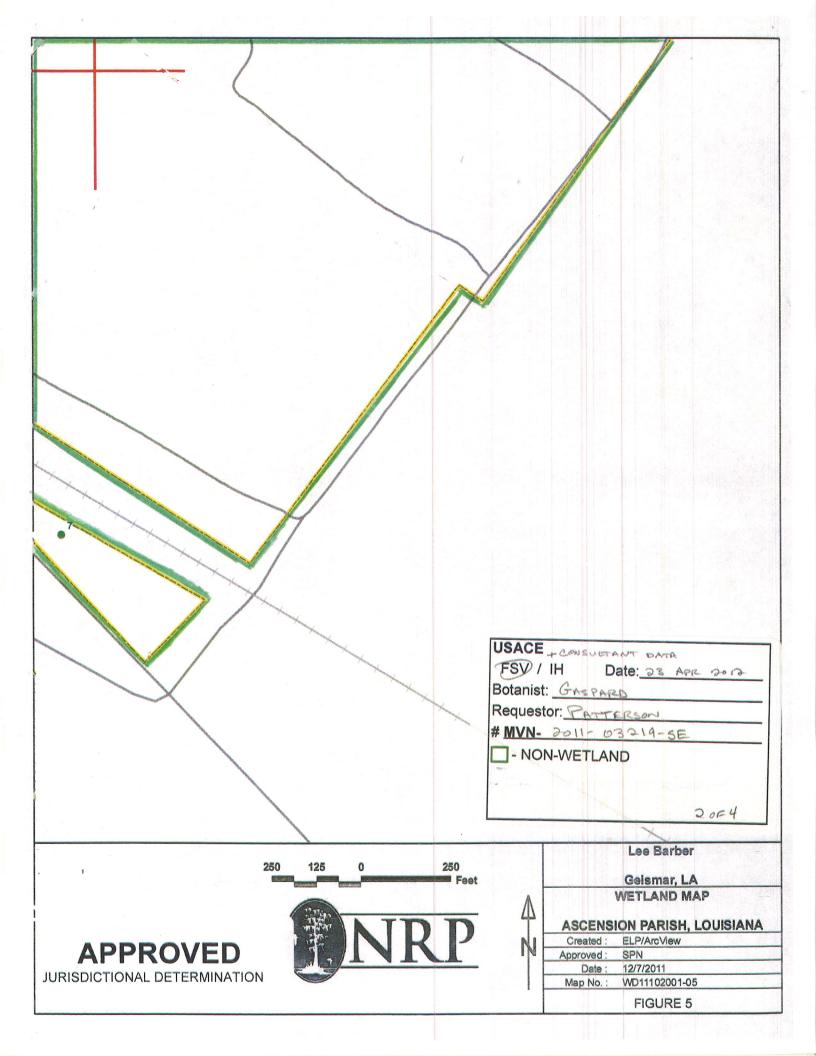
Should there be any questions concerning these matters, please contact Mr. Brandon Gaspard at (504) 862-1280 and reference our Account No. MVN 2011-03219-SE. If you have specific questions regarding the permit process or permit applications, please contact our Central Evaluation Section at (504) 862-2577. The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please complete the survey on our web site at http://per2.nwp.usace.army.mil/survey.html.

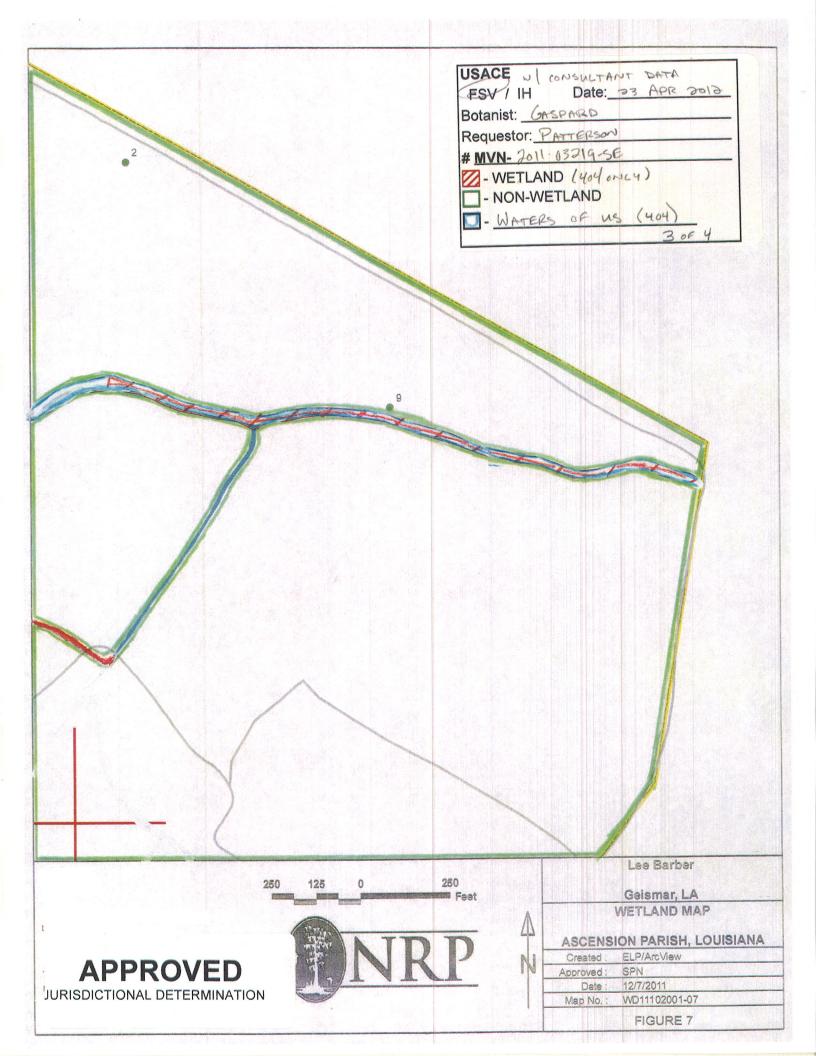
Sincerely,

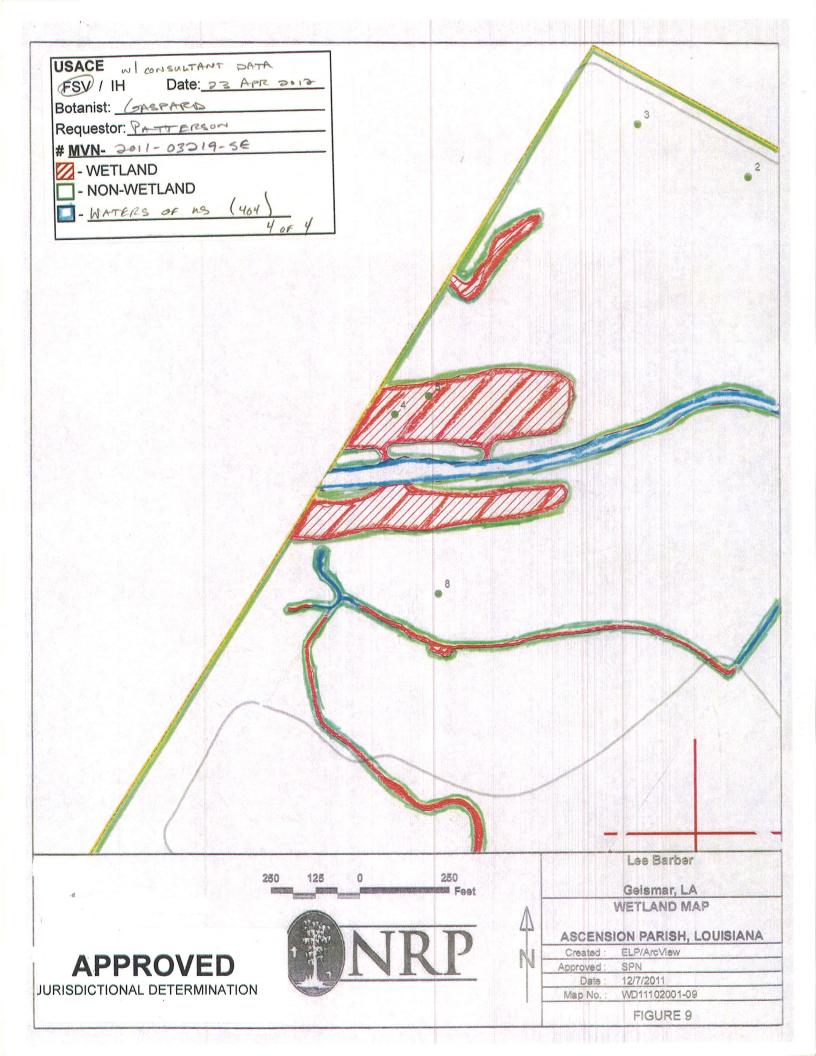
Pete J. Serio Chief, Regulatory Branch

Enclosures









#### APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

#### **SECTION I: BACKGROUND INFORMATION**

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 23 April 2012

#### B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New Orleans, Patterson, MVN 2011-03219-SE

#### C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: LA County/parish/borough: Ascension City: Center coordinates of site (lat/long in degree decimal format): Lat. 30.209865° N, Long. 91.027877° W. Universal Transverse Mercator:

#### Name of nearest waterbody: Mississippi River, New River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Mississippi River, New River Name of watershed or Hydrologic Unit Code (HUC): 08070204 - Lake Maurepas. LA

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

#### D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY);

- Office (Desk) Determination. Date: 23 April 2012
- $\boxtimes$ Field Determination. Date(s): 5 January 2012, 24 January 2012, 5 April 2012

#### SECTION II: SUMMARY OF FINDINGS

#### A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
- $\overline{X}$ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: The Mississippi River is currently used in the transportation of interstate and foreign commerce.

#### **B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

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- a. Indicate presence of waters of U.S. in review area (check all that apply): <sup>1</sup>
  - TNWs, including territorial seas
  - Wetlands adjacent to TNWs
  - X Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
  - Non-RPWs that flow directly or indirectly into TNWs
  - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
  - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
  - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
  - Impoundments of jurisdictional waters
  - Isolated (interstate or intrastate) waters, including isolated wetlands
- b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 2700 linear feet: 40 width (ft) and/or 13 acres. Wetlands: 20 acres.
- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

#### 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

Tributary stream order, if known:

.

<ul> <li>(b) <u>General Tributary Characteristics (check all that apply):</u></li> <li><b>Tributary</b> is:</li></ul>
Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
Primary tributary substrate composition (check all that apply):
Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: . Presence of run/riffle/pool complexes. Explain: . Tributary geometry: <b>Pick List</b> Tributary gradient (approximate average slope): %
<ul> <li>(c) <u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:</li> </ul>
Surface flow is: <b>Pick List.</b> Characteristics:
Subsurface flow: <b>Pick List</b> . Explain findings: . Dye (or other) test performed: .
Tributary has (check all that apply):
If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list):
(iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain:

Identify specific pollutants, if known:

.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

# Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, 13 acres.
   Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Flow was verified during all FSVs in un-named tributaries. New River is indicated as perennial on USGS Topos and NRCS Soil Survey and is tidal in its lower reaches (offsite).
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

Wetlands: acres.

#### NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): F.

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).



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Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:

Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

Non-wetland waters (i.e., rivers, streams): <u>\$9</u> linear feet width (ft).

Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource:

35 Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

Non-wetland	waters (i.e., rive	rs, streams):	linear feet,	width (ft)
Lakes/ponds:	acres.			
Other non-we	etland waters:	acres. List	type of aquatic re	source:
Wetlands:	acres.			

#### SECTION IV: DATA SOURCES.

- A. SUPPORTING DATA. Data reviewed for JD (check all that apply checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
  - Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland delineation report provided by applicant.
  - Data sheets prepared/submitted by or on behalf of the applicant/consultant.

    - Office concurs with data sheets/delineation report.
       Office does not concur with data sheets/delineation report.
    - Data sheets prepared by the Corps:
    - Corps navigable waters' study:
  - $\overline{\mathbf{X}}$ U.S. Geological Survey Hydrologic Atlas: 08070204.
    - USGS NHD data.
    - USGS 8 and 12 digit HUC maps.
    - U.S. Geological Survey map(s). Cite scale & quad name: 1:24000 Carville.
    - USDA Natural Resources Conservation Service Soil Survey. Citation: WSS [Sc, CV, Sa].
    - National wetlands inventory map(s). Cite name:

State/Local wetland inventory map(s):

- 20 FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
  - Photographs: Aerial (Name & Date): 1998, 2004, 2008, 2010.
    - or Other (Name & Date):
  - Previous determination(s). File no. and date of response letter:
  - Applicable/supporting case law:
  - Applicable/supporting scientific literature:
- 团 Other information (please specify): LIDAR, Mississippi River LIDAR, USGS river gauge data.

# NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND

	icant: Barber Brothers Construction	File Number:MVN-2011- 03219-SE	DatAPR 27 2012
Attac	See Section below		
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	INITIAL PROFFERED PERMIT (Standar PROFFERED PERMIT (Standard Permit of	* · · · · · · · · · · · · · · · ·	В
	PERMIT DENIAL	<b>.</b>	С
Χ	APPROVED JURISDICTIONAL DETER	MINATION	D
	PRELIMINARY JURISDICTIONAL DET	TERMINATION	E
A: IN A: A au sij to O th Y to m th	orps regulations at 33 CFR Part 331. NITIAL PROFFERED PERMIT: You may a CCEPT: If you received a Standard Permit, you may athorization. If you received a Letter of Permission (L gnature on the Standard Permit or acceptance of the L papeal the permit, including its terms and conditions, BJECT: If you object to the permit (Standard or LOP the permit be modified accordingly. You must complete your objections must be received by the district engines of appeal the permit in the future. Upon receipt of your modify the permit to address all of your concerns, (b) m the permit having determined that the permit should be istrict engineer will send you a proffered permit for your	sign the permit document and return it to the dis OP), you may accept the LOP and your work is OP means that you accept the permit in its entire and approved jurisdictional determinations asso ) because of certain terms and conditions therein e Section II of this form and return the form to the er within 60 days of the date of this notice, or yo letter, the district engineer will evaluate your ob nodify the permit to address some of your objection	authorized. Your ety, and waive all rights ociated with the permit. a, you may request that he district engineer. u will forfeit your right ojections and may: (a)
			our objections, the
B: P	ROFFERED PERMIT: You may accept or ap	ur reconsideration, as indicated in Section B bel	our objections, the
• A au si to	CCEPT: If you received a Standard Permit, you may uthorization. If you received a Letter of Permission (L gnature on the Standard Permit or acceptance of the L o appeal the permit, including its terms and conditions,	ur reconsideration, as indicated in Section B bel opeal the permit sign the permit document and return it to the dis OP), you may accept the LOP and your work is OP means that you accept the permit in its entire and approved jurisdictional determinations asso	our objections, the ow. strict engineer for final authorized. Your ety, and waive all rights beiated with the permit.
<ul> <li>A au si to</li> <li>A m fc da</li> <li>C: P</li> </ul>	CCEPT: If you received a Standard Permit, you may uthorization. If you received a Letter of Permission (L ignature on the Standard Permit or acceptance of the L o appeal the permit, including its terms and conditions, PPEAL: If you choose to decline the proffered permit may appeal the declined permit under the Corps of Eng- prim and sending the form to the division engineer. Th ate of this notice.	ur reconsideration, as indicated in Section B bel opeal the permit sign the permit document and return it to the dis OP, you may accept the LOP and your work is OP means that you accept the permit in its entire and approved jurisdictional determinations asso t (Standard or LOP) because of certain terms and ineers Administrative Appeal Process by complet is form must be received by the division engineers	our objections, the ow. strict engineer for final authorized. Your ety, and waive all rights beiated with the permit. d conditions therein, you eting Section II of this er within 60 days of the
<ul> <li>A au si to</li> <li>A m fc da</li> <li>C: P by corr engine</li> </ul>	CCEPT: If you received a Standard Permit, you may uthorization. If you received a Letter of Permission (L ignature on the Standard Permit or acceptance of the L o appeal the permit, including its terms and conditions, PPEAL: If you choose to decline the proffered permit may appeal the declined permit under the Corps of Eng- prim and sending the form to the division engineer. Th ate of this notice.	ur reconsideration, as indicated in Section B bel opeal the permit sign the permit document and return it to the dis OP, you may accept the LOP and your work is OP means that you accept the permit in its entire and approved jurisdictional determinations asso t (Standard or LOP) because of certain terms and ineers Administrative Appeal Process by complet is form must be received by the division engineer a permit under the Corps of Engineers Administration to the division engineer. This form must be received	our objections, the ow. etrict engineer for final authorized. Your ety, and waive all rights ociated with the permit. d conditions therein, yo eting Section II of this er within 60 days of the etrative Appeal Process sived by the division

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

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

# Lee Barber Barber Brothers Construction 177.14-ACRE PROJECT AREA

# WETLAND DATA REPORT ASCENSION PARISH, LOUSIANA

December, 2011

Prepared by:

Natural Resource Professionals, LLC 4664 Jamestown Avenue, Suite 420 Baton Rouge, Louisiana 70808 225.928.5333

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### WETLAND DATA REPORT BARBER BROTHERS CONSTRUCTION 177.14-ACRE PROJECT AREA ASCENSION PARISH, LOUISIANA

### **1.0 INTRODUCTION**

The following report summarizes a wetland delineation on a 177.14-acre project area in Livingston Parish, Louisiana. The purpose of the report is to identify areas that contain wetlands that may be subject to regulatory jurisdiction under Section 404 of the Clean Water Act (33 U.S.C 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Jurisdictional wetlands are regulated by the United States Army Corps of Engineers (USACE). The project area is located in Section 10, Township 10 South, and Range 2 East in Ascension Parish, Louisiana (Figure 1). The project area center coordinates of site are Lat: 30.2112° N & Long: 91.0274° W.

The wetland delineation was conducted in accordance with the U.S. Army Corps of Engineers, *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and *Interim Regional Supplemental to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Regional Supplemental 2008). Wetlands are defined as "areas that are inundated or saturated at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Three mandatory technical criteria for determining the presence of a wetland are, with exceptions, (1) hydric soils, (2) hydrophytic vegetation, and (3) wetland hydrology. A hydric soil is defined as one that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part [National Resource Conservation Service. 2006b(2006b NRCS)]. Hydrophytic vegetation is defined herein as the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. When hydrophytic vegetation comprises a community where indicators of hydric soils and wetland hydrology also occur, the area has wetland vegetation. The term "wetland hydrology" encompasses the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation (USACE 1987).

Deepwater aquatic habitats are "areas that are permanently inundated at mean annual water depths greater than 6.6 feet or permanently inundated areas, less than or equal to 6.6 feet in depth that do not support rooted-emergent or woody plant species" (USACE 1987) are referred to as "Other waters of the United States" in this report. Navigable waters are "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce" (33 CFR 329.4).

#### 2.0 SITE DESCRIPTION

The project area is located in Geismar, LA northwest of Highway 73. It is separated into three parts. The southernmost section is bordered on the south side by the Mississippi River and the north side by the levee. It is mostly wooded with the exception of a cargo loading area. The smallest of the three areas is located between River Road and the railroad tracks. The largest is bordered on both the north and south sides by pipeline right of ways. Much of the area is in commercial and agricultural use, but the area surrounding New River is forested. The general site elevation ranges from 7 to 32 feet North American Vertical Datum (NAVD).

### 3.0 METHODS

The wetland delineation followed *on-site routine* field procedures as outlined by the USACE (1987), subsequent Regulatory Guidance Letters (RGL) and the regional supplemental (2010). Natural Resource Professionals, LLC (NRP) conducted site visits on November 7, 9, 21 and 28, 2011 to determine the extent of potential wetlands and "waters of the United States" within the project area.

NRP personnel established data collection sites randomly throughout the project area according to plant community and topography. Observation of soils, vegetation, and hydrology were recorded at each data point (Appendix A). Soil samples were obtained by excavating an approximate 16-inch deep soil pit. Soil color was recorded by matching soil samples to color chips contained in a Munsell soil color chart. Hydric soil criteria were met when soil samples indicated a matrix chroma of 2 or less in mottled soils or a matrix chroma of 1 or less in unmottled soils.

Dominant vegetative species accounting for greater than 20% of vegetation present in each data plot were recorded for each of the following vertical strata: tree canopy or individual trees; sapling or shrub layer; herbaceous layer; and woody vine layer. Percent cover for each dominant species was determined by ocular estimation. Plant communities met hydrophytic vegetation criteria if greater than 50% of the dominant species from all strata were classified as obligatory, facultative-wet, or facultative species (U.S. Fish and Wildlife Service 1988; NRCS 2006).

Wetland hydrology criteria were assessed based on observation of primary and/or secondary field indicators. The hydrology criteria were met if one primary field indicator was observed (i.e., inundation, soil saturation within 12 inches of the soil surface, water marks, drift lines, and drainage patterns) or at least two secondary indicators were observed (e.g., drainage patterns and FAC-Neutral test).

Data points, other waters, roads and potential wetlands within the project areas were mapped with a Trimble Geo XT®, map grade Differential Global Positioning System (DGPS) with real-time correction. Acreage was obtained using the DGPS unit and ESRI software. Digital photographs were taken of project area, plants, and soils. (Appendix B).

### 4.0 **RESULTS**

### 4.1 Soils

The soils mapped within the project area are listed as Convent soils, frequently flooded and Sharkey Clay. Both Convent soils and Sharkey Clay are mapped as hydric (Web soil survey, 2011).

### 4.2 Vegetation

The project area consists of agricultural fields, forested areas in the batcher and surrounding New River, and several drainage features. Different vegetative communities preside over each of these locations. All scientific names are from the official NRCS Plants Data Base web site (2011).

The dominant tree species within the batcher include eastern cottonwood (*Populus deltoides*), sugarberry (*Celtis laevigata*), sweet pecan (*Carya illinoinensis*), and American sycamore (*Platanus occidentalis*). Virginia dayflower (*Commelina virginica*) is dominant within the herbaceous stratum in this area. There are also a number of woody vine species that are very abundant in this area: dewberry (*Rubus trivialis*), muscadine (*Vitis rotundifolia*), trumpet creeper (*Campsis radicans*), and American buckwheat vine (*Brunnichia ovata*).

The dominant tree species in the forested areas around New River include: sugarberry, water hickory (*Carya aquatica*), water oak (*Quercus nigra*), and American elm (*Ulmus americana*). Most of New River and the adjacent back swamp are almost completely covered in torpedo grass (*Panicum repens*). The slighty higher elevation areas around the swamp are very densely covered with ragweed (*Ambrosia trifida*).

### 4.2 Hydrology

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The project area is located in HUC 8070202. All the potential wetlands mapped within the project area were situated in or adjacent to drainage features or in elevation depressions. The batcher is elevated high enough above the river to facilitate relatively fast drainage. The remainder of the project is drained efficiently by a series of ditches that empty into New River. There are back swamp areas to the north and south of New River on the eastern side of the project area. These areas are connected to the river, but still hold a lot of water. The potential wetland contained at least one primary indicator, (inundation, saturation in upper 12 inches, a high water table). Non-wetland areas lacked primary hydrological indicators or contained only one secondary indicator.

#### 5.0 CONCLUSION

Based on the field investigation, with observations of the soil, hydrology and vegetation NRP personnel mapped 6.64 acres of potential wetlands and 19.89 acres of "Other Waters" (17.62 acres of which are located within the batcher) within the 177.14-acre project area (Figures 2-9).

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

#### 6.0 LITERATURE CITED

- Natural Resources Conservation Service (2010) *The PLANTS Database, Version* 3.5 [website]. U.S. Department of Agriculture, Natural Resources Conservation Service, National Plant Data Center. Accessed December 7, 2011. Available URL: http://plants.usda.gov/java/
- Natural Resources Conservation Service (2010) Web Soil Survey, Version 1.1 [website]. U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Accessed December 7, 2011. AvailableURL:http://websoilsurvey.nrcs.usda.gov/app/websoilsurvey.aspx
- Natural Resources Conservation Service (2002) Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 5.0. G.W. Hurt, Whited, P.M., and Pringle, R.F. (eds.). U.S. Department of Agriculture, Natural Resources Conservation Service, Ft.Worth, TX.
- Soil Conservation Service (1968) Soil Survey of Livingston Parish, Louisiana. U.S. Department of Agriculture Soil Conservation Service. January 1991.
- Soil Conservation Service (1995) Soil Mapping Units and Hydric Soils Designations, Louisiana. 3<sup>rd</sup> ed. May 1995.
- U.S. Army Corps of Engineers (1987) Corps of Engineers Wetland Delineation Manual. Wetland Research Program Technical Report Y-87-1, Waterways Experiment Station, Environmental Laboratory, Vicksburg, MS, January 1987.
- U.S. Army Corps of Engineers. (2010). Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region. Ed J.S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

# **FIGURES**

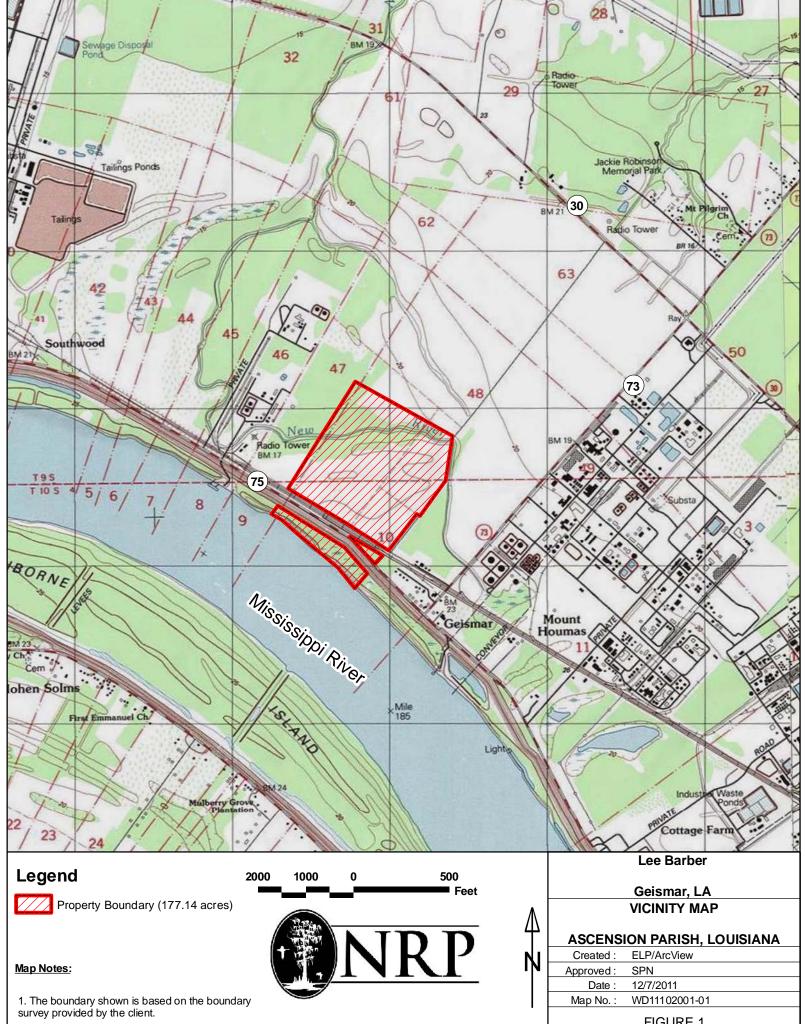


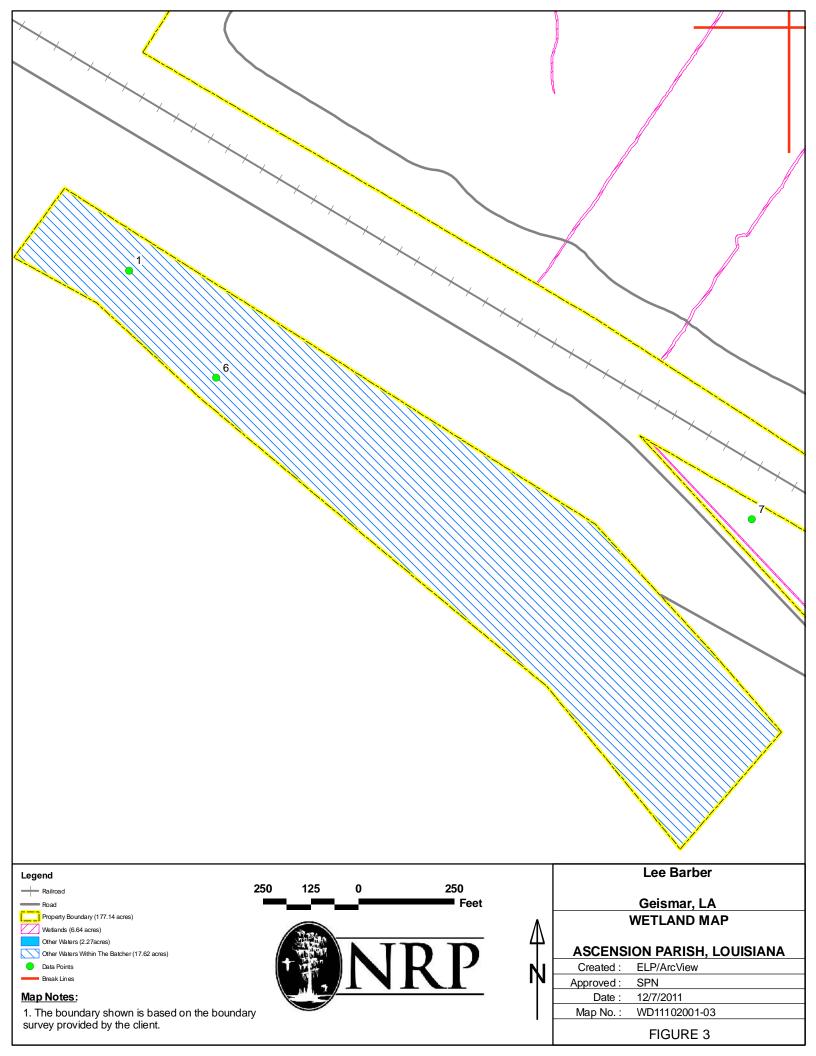
FIGURE 1



1. The boundary shown is based on the boundary
survey provided by the client.



Geisinai, LA						
WETLAND MAP						
ASCENS	ON PARISH, LOUISIANA					
Created :	ELP/ArcView					
Approved :	SPN					
Date :	12/7/2011					
Map No. :	WD11102001-02					
FIGURE 2						





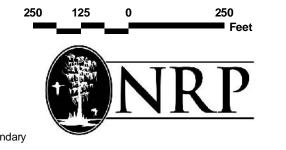
### Legend

Property Boundary (177.14 acres)
Wetlands (6.64 acres)
Other Waters (2.27acres)
Other Waters Within The Batcher (17.62 acres)

Data PointsBreak Lines

Map Notes:

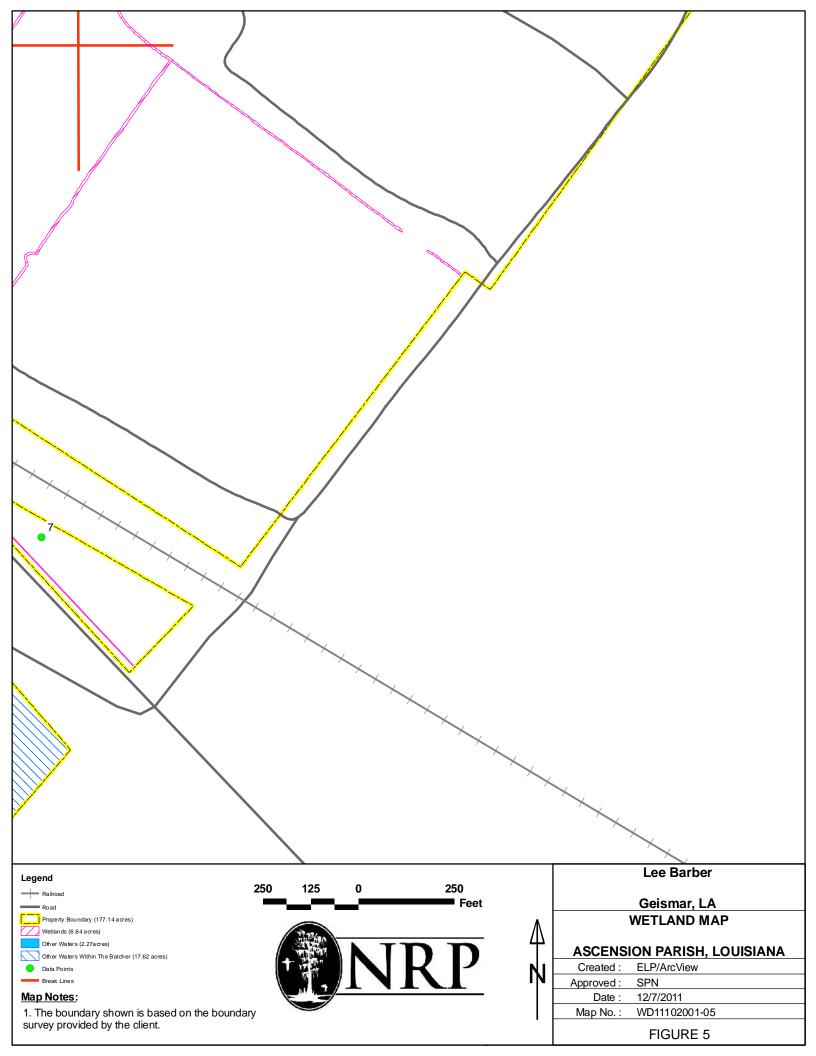
1. The boundary shown is based on the boundary survey provided by the client.



Lee Barber

Д

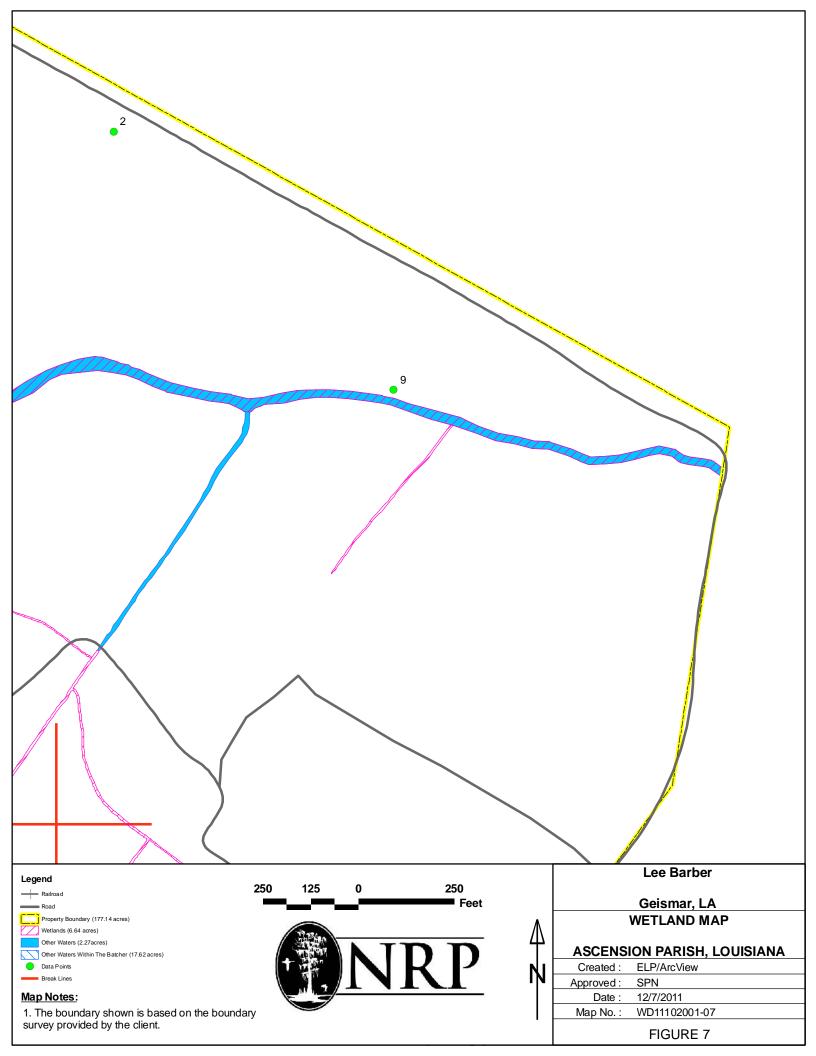
Geismar, LA WETLAND MAP						
ASCENSION PARISH, LOUISIANA						
Created :	ELP/ArcView					
Approved :	SPN					
Date :	12/7/2011					
Map No. :	WD11102001-04					
FIGURE 4						

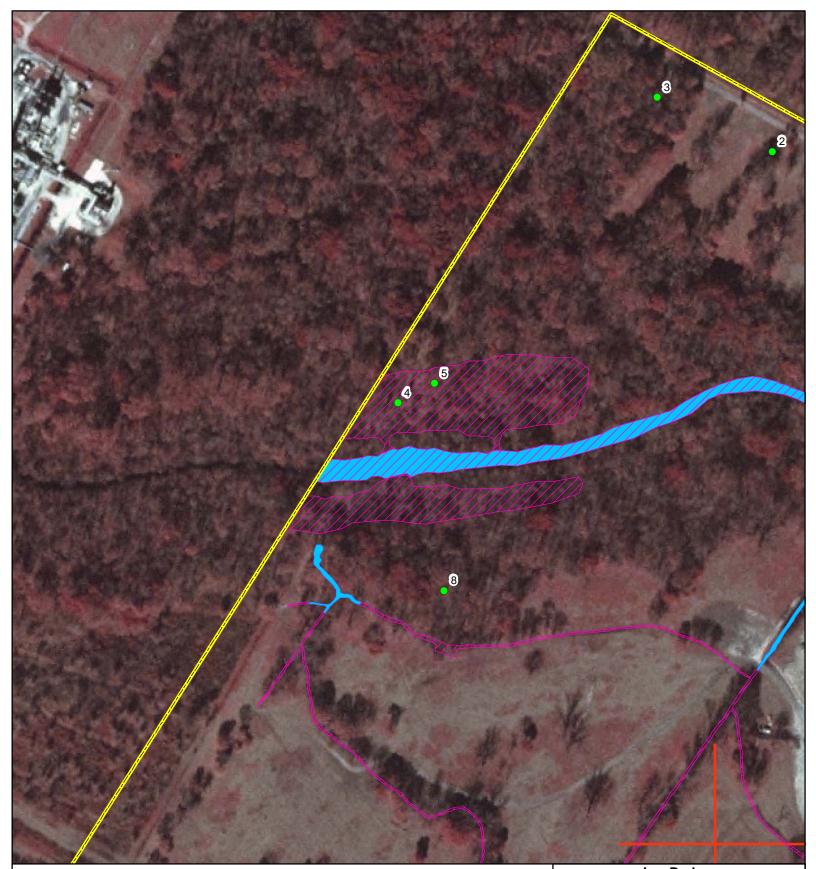




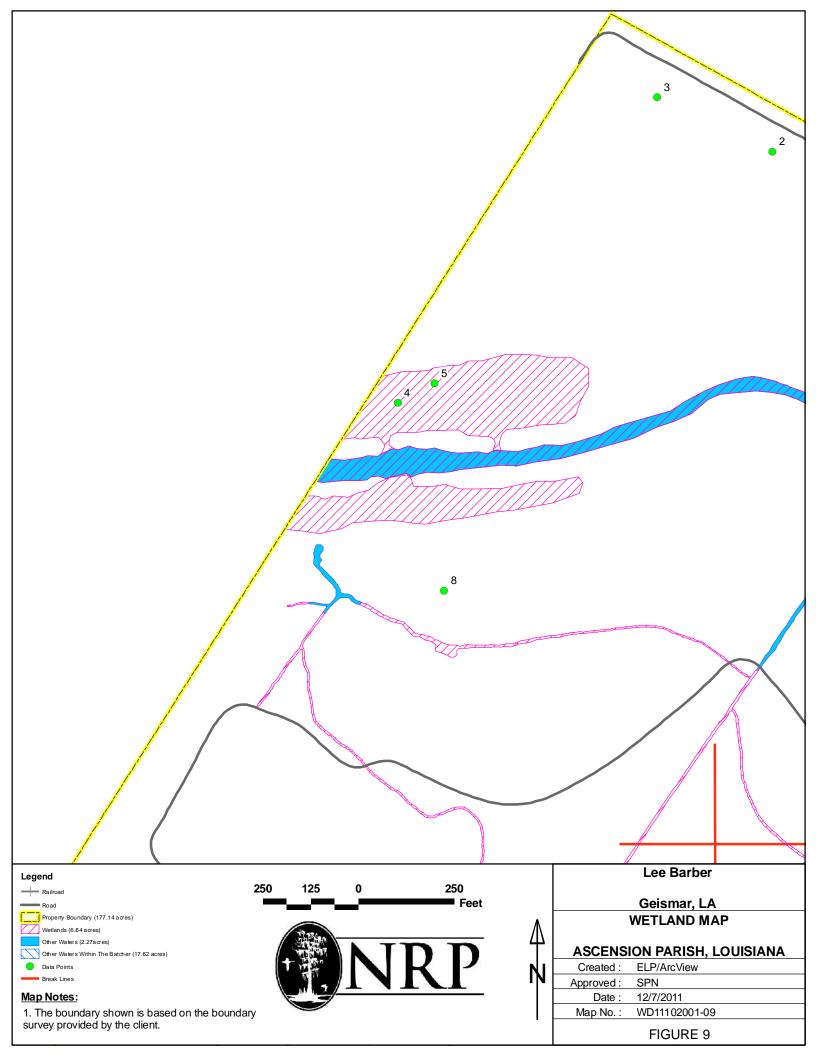
Legend							Lee Barber	
Property Boundary (177.14 acres)	250	125	0	250 Feet			Geismar, LA	
Wetlands (6.64 acres)					.		WETLAND MAP	
Other Waters (2.27acres)		TP WEA			ΛI			
Other Waters Within The Batcher (17.62 acres)					41	ASCENS	ION PARISH, LOUISIAN	٨٧
Data Points				RP	NI	Created :	ELP/ArcView	
Break Lines			LN		IN	Approved :	SPN	
Map Notes:	N N					Date :	12/7/2011	
1. The boundary shown is based on the bounda	ry					Map No. :	WD11102001-06	
survey provided by the client.								

FIGURE 6





Legend			-				Lee Barber	
Property Boundary (177.14 acres)	250	125	0	250 Feet			Geismar, LA	
Wetlands (6.64 acres)		-					WETLAND MAP	
Other Waters (2.27acres)		12.000			ΛI			
Other Waters Within The Batcher (17.62 acres)	(	ALL		nn	41	ASCENS	ION PARISH, LOUISIANA	
Data Points	6			K P	NI	Created :	ELP/ArcView	
Break Lines					ΙΝ[	Approved :	SPN	
Map Notes:						Date :	12/7/2011	
1. The boundary shown is based on the boundar	у					Map No. :	WD11102001-08	
survey provided by the client.							FIGURE 8	



# APPENDIX A: ROUTINE WETLAND DETERMINATION DATA SHEETS

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Barber	City/County: Gei	smar	Sampling Date: <u>11/7/2011</u>
Applicant/Owner: Lee Barber		State: LA	Sampling Point: <u>1</u>
	Section, Township	, Range: T10SR02E10	
Landform (hillslope, terrace, etc.): batcher			Slope (%): 5
Subregion (LRR or MLRA): 134-SMVL	4		
Soil Map Unit Name: <u>Convent soils, freque</u>			
Are climatic / hydrologic conditions on the site typ			
Are Vegetation, Soil, or Hydrology	-	Are "Normal Circumstances" p	
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach s			
Hydric Soil Present? Yes	✓         No         Is the Sam           No         ✓         within a W           No         ✓		No
Backside of levee within batcher			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil	
Surface Water (A1)	Water-Stained Leaves (B9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Pa	1
Saturation (A3)	Marl Deposits (B15) (LRR U)	Moss Trim L	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living		
Drift Deposits (B3)	Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Second		isible on Aerial Imagery (C9) Position (D2)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	FAC-Neutra	
Field Observations:			
Surface Water Present? Yes No	✓ Depth (inches):		
	✓ Depth (inches):		
Saturation Present? Yes No	✓ Depth (inches):	Wetland Hydrology Prese	nt? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monito	oring well aerial photos, pravious inspec	tions) if available:	······································
Describe Recorded Data (stream gauge, monit			
Remarks:			

### **VEGETATION** – Use scientific names of plants.

Sampling Point: 1

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot sizes: <u>32 ft</u> )		Species?		Number of Dominant Species
1. Celtis laevigata	60	ves	FACW	That Are OBL, FACW, or FAC: (A)
2. Carva illinoinensis	20	ves	FAC	
3. Acer negundo	15	no	FACW	Total Number of Dominant Species Across All Strata:(B)
		no	FAĆW	
	10	no		Percent of Dominant Species
5. Populus deltoides	10			That Are OBL, FACW, or FAC:(A/B)
6. <u>Salix nigra</u>	5	<u>no</u>	OBL	Prevalence Index worksheet:
7			·	Total % Cover of: Multiply by:
<b>a 1 a 1 2</b>	120	= Total Co	over	OBL species         x1 =
Sapling Stratum ( <u>32</u> )	•			
1. <u>Celtis laevigata</u>				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4			. <u> </u>	UPL species x 5 =
5				Column Totals: (A) (B)
6				
7.	<u></u>			Prevalence Index = B/A =
	3	= Total Co		Hydrophytic Vegetation Indicators:
Shrub Stratum(_32)				✓ Dominance Test is >50%
1. Acer negundo	20	ves	FACW	Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present.
5				
6				
7				Definitions of Vegetation Strata:
	20	= Total Co	over	
Herb Stratum(_32 ft)				Tree – Woody plants, excluding woody vines,
1. <u>Commelina virginica</u>	10	ves	<u>FACW</u>	approximately 20 ft (6 m) or more in height and
2	<u> </u>			3 in. (7.6 cm) or larger in diameter at breast
3				height (DBH).
4				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6				than 3 in. (7.6 cm) DBH.
7			<u></u>	Shrub – Woody plants, excluding woody vines,
8				approximately 3 to 20 ft (1 to 6 m) in height.
9				
10				Herb – All herbaceous (non-woody) plants, including
11				herbaceous vines, regardless of size. Includes
12		<u> </u>		woody plants, except woody vines, less than
	10	= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum()				
1. <u>Rubus trivialis</u>	70	yes	FAC	Woody vine – All woody vines, regardless of height.
2. Brunnichia ovata	40	yes	FACW	
3. <u>Toxicodendron radicans</u>		no	FAC	
4. Ampelopsis arborea	2	no	FAC	
5. <u>Campsis radicans</u>	2	no	FAC	Hydrophytic
	120	= Total C		Vegetation Present? Yes No
Remarks: (If observed, list morphological adaptations be	ow).			

#### SOIL

Sampling Point: 1

Profile Desc	ription: (Describe	to the dept				or confirn	n the absence of in	ndicators.)
Depth	Matrix	·	Redo	x Features	31			
(inches)	Color (moist)		Color (moist)	%	_Type <sup>1</sup> _	Loc <sup>2</sup>		Remarks
0-5	10YR4/2	99	7.5YR4/4		RM	M	SL	
5-16	10YR4/2			_			SICL	
						4		
								. vitter
	<b>1077-1</b>							
					<u> </u>	<u> </u>	<del></del>	
	Difference on centration, D=Dep		Reduced Matrix C		d or Coate	ad Sand G	rains <sup>2</sup> Locatio	on: PL=Pore Lining, M=Matrix.
Hydric Soil I			Reduced Matrix, O			d Ganu G		Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be	elow Surfa	ce (S8) (I	RRSTI		
	vipedon (A2)		Thin Dark S					(A10) <b>(LRR S)</b>
Black His			Loamy Muck					/ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			,		Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Ma		/			s Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	P, T, U)	Redox Dark	• •	<sup>-</sup> 6)		(MLRA 1	
5 cm Mu	cky Mineral (A7) (L	RR P, T, U)	Depleted Da	irk Surface	(F7)		Red Paren	t Material (TF2)
Muck Pr	esence (A8) <b>(LRR l</b>	J)	Redox Depr	essions (F	8)		Very Shallo	ow Dark Surface (TF12) (LRR T, U)
1 cm Mu	ck (A9) (LRR P, T)		Marl (F10) (I	•			Other (Exp	blain in Remarks)
<u> </u>	Below Dark Surfac	ce (A11)	Depleted Oc					
	ark Surface (A12)		Iron-Mangar				T) <sup>3</sup> Indicators	s of hydrophytic vegetation and
	airie Redox (A16) (					", U)	wetland	I hydrology must be present.
	lucky Mineral (S1) (	LRR O, S)	Delta Ochric					
	ileyed Matrix (S4)		Reduced Ve					
	edox (S5) Matrix (S6)		Piedmont Fl				49A) RA 149A, 153C, 153	3D)
	rface (S7) <b>(LRR P,</b> 5	S T 11)		Dright Loai	ny Solis (		(A 143A, 1550, 15	50)
	_ayer (if observed)			<u></u>		·		
Type:								
							Hydric Soil Pre	sent? Yes No
	ches):		·····				Hyunc Soli Fre	
Remarks:								
							· · · · · · · · · · · · · · · · · · ·	

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Barber	City/County: _Geisma	ar	Sampling Date: <u>11/9/2011</u>
Applicant/Owner: Lee Barber		State: LA	Sampling Point: 2
	Section, Township, Ra		
Landform (hillslope, terrace, etc.): <u>flat</u>			Slope (%)
Subregion (LRR or MLRA):SMVL	6		
Soil Map Unit Name: Sharkey clay		NWI classifi	
	,		
Are climatic / hydrologic conditions on the site typica	· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrology _		"Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If ne	eeded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	e map showing sampling point l	ocations, transect	s, important features, etc.
	No Is the Sampled No No within a Wetla		No
mowed area adjacent to sunflower field			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; cl	neck all that apply)	Surface Soi	l Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		egetated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		atterns (B10)
Saturation (A3)	Marl Deposits (B15) <b>(LRR U)</b>	Moss Trim I	1
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roo		
Drift Deposits (B3)	Presence of Reduced Iron (C4)		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (		c Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aq	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	FAC-Neutra	II Test (D5)
Field Observations:			
	Depth (inches):		
	Depth (inches):		
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): We	etland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitorin	ng well, aerial photos, previous inspections	s), if available:	
Remarks:	· · · · · · · · · · · · · · · · · · ·		

### **VEGETATION** – Use scientific names of plants.

Sampling Point: 2

20.4	Absolute		t Indicator	Dominance Test worksheet:
Tree Stratum (Plot sizes: <u>32 ft</u> )		Species		Number of Dominant Species
		ves	<u>FACW</u>	That Are OBL, FACW, or FAC: (A)
2. Quercus virginiana		_yes	<u>FACU</u>	Total Number of Dominant
3. Quercus nigra	_5	no	FAC	Species Across All Strata: 4 (B)
4			4	
5				Percent of Dominant Species That Are OBL_EACW, or EAC: $50$ (A/B)
				That Are OBL, FACW, or FAC: <u>50</u> (A/B)
6.				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
20		= Total C	over	
Sapling Stratum(_32)				OBL species x 1 =
1				FACW species <u>1</u> x 2 = <u>2</u>
2.	<u> </u>		<u> </u>	FAC species x 3 =
3				FACU species x 4 = _8
4				UPL species x 5 =
				Column Totals: _7 (A) _22 (B)
5				
6				Prevalence Index = B/A =3.14
7				Hydrophytic Vegetation Indicators:
		= Total C	over	
Shrub Stratum( <u>32</u> ))				Dominance Test is >50%
1			·	Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present.
5				
6				
7				Definitions of Vegetation Strata:
		= Total C	over	
Herb Stratum( <u>32 ft</u> ))				Tree – Woody plants, excluding woody vines,
1. Paspalum notatum	85	yes	<u>FACU</u>	approximately 20 ft (6 m) or more in height and
2. Ambrosia trifida	10	no	FAC	3 in. (7.6 cm) or larger in diameter at breast
3				height (DBH).
4				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6				than 3 in. (7.6 cm) DBH.
7				
8				Shrub – Woody plants, excluding woody vines,
9				approximately 3 to 20 ft (1 to 6 m) in height.
10				Herb – All herbaceous (non-woody) plants, including
11		<u> </u>		herbaceous vines, regardless of size. Includes
12				woody plants, except woody vines, less than
	95	_ = Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum()				
1. <u>Toxicodendron radicans</u>		yes	FAC	Woody vine – All woody vines, regardless of height.
2. <u>Smilax sp.</u>	5	no	FAC	
3.				
4				
		<u> </u>		Hydrophytic
5				Vegetation
	_20	= Total C	over	Present? Yes No V
Remarks: (If observed, list morphological adaptations below				

#### SOIL

# Sampling Point: 2

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	the absence o	f indicators.)
Depth	Matrix			x Feature		<u>_</u>		
(inches)	Color (moist)		Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-3	10YR3/1							
3-14	10YR5/1	65	10YR5/4	35				
						4		
	w				,			
		·						
					· <u>.</u>	<u></u>		
							. <u> </u>	
	400	·			·	,		
	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS	S=Covere	d or Coate	ed Sand Gra		ation: PL=Pore Lining, M=Matrix.
Hydric Soil I			Debuglue Dr	alour Curfa	aa (CQ) /I	ррети		-
Histosol Histic En	(AT) bipedon (A2)		Polyvalue Be					ick (A9) <b>(LRR O)</b> ick (A10) <b>(LRR S)</b>
Black His			Loamy Muck					d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye					nt Floodplain Soils (F19) <b>(LRR P, S, T)</b>
	I Layers (A5)		🖌 Depleted Ma					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		Redox Dark				-	A 153B)
	cky Mineral (A7) <b>(Lf</b> esence (A8) <b>(LRR U</b>		Depleted Da					ent Material (TF2) allow Dark Surface (TF12) (LRR T, U <b>)</b>
	ick (A9) (LRR P, T)	7	Mari (F10) (I	•	0)		-	Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangan				T) <sup>3</sup> Indicat	ors of hydrophytic vegetation and
-	airie Redox (A16) (I					, U)	wetla	nd hydrology must be present.
	lucky Mineral (S1) (I	_RR 0, S)	Delta Ochric Reduced Ve			0A 150B)		
	ileyed Matrix (S4) edox (S5)		Piedmont Flo				9A)	
	Matrix (S6)						A 149A, 153C,	153D)
Dark Su	rface (S7) (LRR P, S			-				
Restrictive L	_ayer (if observed)		·					
Type:								./
Depth (inc	ches):						Hydric Soil F	Present? Yes <u>v</u> No
Remarks:								
	·							

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Barber		City/County: (	Geismar		Sampling Date: <u>11/9/2011</u>	
Applicant/Owner: Lee Barber					Sampling Point: 3	
Investigator(s): NRP-LP		Section, Towr		-		
Landform (hillslope, terrace, etc.):					Slope (%): _0	
Subregion (LRR or MLRA): 134-						
Soil Map Unit Name: Sharkey of		, Lat.			cation:	
Are climatic / hydrologic conditions		this time of year? Yes				
Are Vegetation, Soil					present? Yes 🖌 No	
Are Vegetation, Soil	_, or Hydrology	_ naturally problematic?	(If needed, exp	lain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS	<ul> <li>Attach site ma</li> </ul>	p showing sampling	point location	s, transects	s, important features, etc	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	Sampled Area a Wetland?	Yes	No	
Remarks:	· · · · · · · · · · · · · · · · · · ·	1 · ···				
Forested area adjacent to	field and road					
HYDROLOGY						
Wetland Hydrology Indicators:			Se	econdary Indica	ators (minimum of two required)	
Primary Indicators (minimum of c	one is required; check a	all that apply)		_ Surface Soil		
Surface Water (A1)		/ater-Stained Leaves (B9)	_	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		quatic Fauna (B13)	—	_ Drainage Pa		
Saturation (A3)		arl Deposits (B15) (LRR U)	_	_ Moss Trim L		
Water Marks (B1)		ydrogen Sulfide Odor (C1)	ing Deets (C2)		Water Table (C2)	
Sediment Deposits (B2) Drift Deposits (B3)		xidized Rhizospheres on Liv resence of Reduced Iron (C		Crayfish Bur	ísible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		ecent Iron Reduction in Tille			Position (D2)	
I iron Deposits (B5)		hin Muck Surface (C7)	<u> </u>	_ Shallow Aqu		
Inundation Visible on Aerial		ther (Explain in Remarks)		FAC-Neutra		
Field Observations:		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
Surface Water Present? Y	′es No [	Depth (inches):				
Water Table Present? Y	′es No [	Depth (inches):				
Saturation Present? Y (includes capillary fringe)		Depth (inches):	Wetland Hyd	drology Prese	nt? Yes No	
Describe Recorded Data (stream	gauge, monitoring we	ll, aerial photos, previous in	pections), if availa	ble:	· · · · · · · · · · · · · · · · · · ·	
Remarks:	- gauge, mernoning we					

·	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot sizes: <u>32 ft</u> )		Species?		Number of Dominant Species
1. Liquidambar styraciflua	45	ves	FAC	That Are OBL, FACW, or FAC: (A)
2. Celtis laevigata		yes		Total Number of Dominant
3. <u>Gleditsia triacanthos</u>	15	no	<u>FAC</u>	Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:86 (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
Sapling Stratum( <u>32</u> ))				OBL species x 1 =
1. <u>Celtis laevigata</u>	15	ves	FACW	FACW species x 2 =
2. <u>Ulmus americana</u>	5	no	FACW	FAC species x 3 =
3			<b>.</b>	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				
7				Prevalence Index = B/A =
		= Total C	over	Hydrophytic Vegetation Indicators:
Shrub Stratum(_32)		_ = 10tai 0		✓ Dominance Test is >50%
1. Quercus nigra	25	ves	FAC	Prevalence Index is ≤3.0 <sup>1</sup>
2. Acer negundo			FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. <u>Ulmus americana</u>			FACW	
4. Ligustrum senense				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present.
5.				
6				Definitions of Vegetation Strata:
7				Deminions of Vegetation Strata.
Herb Stratum(32.ft)		_ = Total C	over	Tree – Woody plants, excluding woody vines,
1. Microstegium vimineum	50	ves		approximately 20 ft (6 m) or more in height and
2. Chasmanthium laxum			FACW	3 in. (7.6 cm) or larger in diameter at breast
				height (DBH).
3				
4				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6.				than 3 in. (7.6 cm) DBH.
7				Shrub – Woody plants, excluding woody vines,
8			<b>.</b>	approximately 3 to 20 ft (1 to 6 m) in height.
9.				
10				Herb – All herbaceous (non-woody) plants, including
11				herbaceous vines, regardless of size. Includes
12				woody plants, except woody vines, less than
	_65	= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum()				
1. <u>Toxicodendron radicans</u>		yes	<u>FAC</u>	Woody vine – All woody vines, regardless of height.
2. <u>Campsis radicans</u>		yes	FAC	
3. <u>Lyqodium japonicum</u>		no	FAC	
4. <u>Rubus trivialis</u>	3	no	FAC	Hudron hutin
5. <u>Smilax sp.</u>	3	no	FAC	Hydrophytic Vegetation
	_96	= Total C	over	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations bel	0W)			<u> </u>
internatives. In observed, list morphological adaptations be				

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirm	n the absence o	of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	%	<u>Type</u> <sup>1</sup>		<u>Texture</u>	Remarks
0-16	10YR4/2	95	7.5YR4/4	5	_RM_	M	Cl	
						4		
					,			
<u> </u>					<del></del>	<u> </u>		
<u> </u>							<u> </u>	
<sup>1</sup> Type: C=Co	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, CS	S=Covered	d or Coate	d Sand Gr	rains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	RR S, T, U	<b>J)</b> 1 cm Mi	uck (A9) (LRR O)
	ipedon (A2)		Thin Dark Su					uck (A10) <b>(LRR S)</b>
Black Hi			Loamy Muck			0)		d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		F2)			nt Floodplain Soils (F19) <b>(LRR P, S, T)</b>
	l Layers (A5) Bodies (A6) <b>(LRR F</b>	от IN	✓ Depleted Ma Redox Dark		6)			ous Bright Loamy Soils (F20) <b>A 153B)</b>
<b>—</b> •	cky Mineral (A7) (L		Depleted Da	•			•	rent Material (TF2)
	esence (A8) (LRR L		Redox Depre					hallow Dark Surface (TF12) (LRR T, U)
	ck (A9) (LRR P, T)		Marl (F10) <b>(L</b>					Explain in Remarks)
	I Below Dark Surfac	ce (A11)	Depleted Oc					
	rk Surface (A12)		Iron-Mangan				, T) <sup>3</sup> Indicat	tors of hydrophytic vegetation and
	airie Redox (A16) (					, U)	wetla	and hydrology must be present.
	lucky Mineral (S1) <b>(</b> leyed Matrix (S4)	LKR 0, 5)	Delta Ochric Reduced Ve			0A 150B)	h	
	edox (S5)		Piedmont Flo					
	Matrix (S6)						RA 149A, 153C,	153D)
Dark Su	face (S7) (LRR P, S	S, T, U)		-				
Restrictive l	_ayer (if observed)	:						
Туре:								1
Depth (ind	ches):						Hydric Soil F	Present? Yes <u>✓</u> No
Remarks:								

Project/Site: Barber				City/C	county: <u>Gei</u>	smar		_ Sampl	ing Date: 11	/9/2011
Applicant/Owner: Lee Barber										
Investigator(s): NRP-LP				State: <u>LA</u> Sampling Point: <u>4</u> _ Section, Township, Range: <u>T10SR02E10</u>						
Landform (hillslope, terrace, etc.): Slight depression									01 (	α(). <b>Ο</b>
Subregion (LRR or MLRA): _134-SMVL Lat: N 30					6					
		L	Lat: <u>N 30</u>	1.2133						
Soil Map Unit Name: Shark							NWI classi			
Are climatic / hydrologic condi	tions on th	e site ty	pical for this time of y	'ear? Y	'es 🗾	No	(If no, explain in	Remarks	s.)	
Are Vegetation, Soil	, or H	Hydrolog	y significantly	y distur	bed?	Are "Normal	Circumstances	present?	?Yes 🖌	No
Are Vegetation, Soil	, or H	Hydrolog	y naturally p	roblema	atic?	(If needed, e	explain any ansv	/ers in Re	emarks.)	
SUMMARY OF FINDIN	GS – At	tach s	ite map showing	g san	npling poi	int locatio	ons, transec	s, impo	ortant feat	ures, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present? Remarks:			✓         No           ✓         No           ✓         No	-	ls the Sam within a W		Yes	<u> </u>	lo	
HYDROLOGY										
Wetland Hydrology Indicat	arei						Saaandanu Indi	antara (m	inimum of hu	
				<b>`</b>			Secondary Indi			<u>s requirea)</u>
Primary Indicators (minimum	t or one is i	required						(D0)		
✓ Surface Water (A1) ✓ High Water Table (A2)				d Leaves (B9) Sparsely Vegetated Concave Surface (B					тасе (во)	
$\checkmark$ Align Water Table (A2)			Aquatic Fauna							
Water Marks (B1)				s (B15) (LRR U) Moss Trim Lines (B16)						
Sediment Deposits (B2)				fide Odor (C1) Dry-Season Water Table (C2)						
Drift Deposits (B3)				zospheres on Living Roots (C3)       Crayfish Burrows (C8)         Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)					on((CQ)	
Algal Mat or Crust (B4)				Reduction in Tilled Soils (C6) Geomorphic Position (D2)					5iy (05)	
Iron Deposits (B5)			Thin Muck Su							
Inundation Visible on Ae	erial Image	rv (87)		n in Remarks) FAC-Neutral Test (D5)						
Field Observations:					паткој					
Surface Water Present?	Vec .		Depth (inches	e)· 1						
Water Table Present?			Depth (inches							
Saturation Present?			Depth (inches			Wetland F	lydrology Pres	ent? Ye	-s ✓ -	No
(includes capillary fringe)										
Describe Recorded Data (str	ream gaug	e, monit	oring well, aerial phot	tos, pre	evious inspec	ctions), if ava	ilable:			
Remarks:										

Sampling P	oint:	4
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	Absolute	Dominant	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot sizes: <u>32 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1. <u>Celtis laevigata</u>	55	ves	FACW	That Are OBL, FACW, or FAC: (A)
2. <u>Ulmus americana</u>	_40	_yes	FACW	Total Number of Dominant
3. <u>Quercus nigra</u>	40	ves	FAC	Species Across All Strata:(B)
4. <u>Carva aquatica</u>	20	yes	<u>OBL</u>	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
6				
7				Prevalence Index worksheet:
		= Total Co		Total % Cover of:Multiply by:
Sapling Stratum(32))				OBL species x 1 =
1	<u> </u>			FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				
7				Prevalence Index = B/A =
		= Total C	over	Hydrophytic Vegetation Indicators:
Shrub Stratum(_32)		- 101010	000	✓ Dominance Test is >50%
1. Acer negundo	10	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>
2. Ligustrum senense			FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present.
6				
			••	Definitions of Vegetation Strata:
7	15	= Total C		
Herb Stratum(_32 ft)			over	<b>Tree</b> – Woody plants, excluding woody vines,
1. Panicum repens	85	ves	FACW	approximately 20 ft (6 m) or more in height and
2. <u>Ambrosia trifida</u>		no	FAC	3 in. (7.6 cm) or larger in diameter at breast
3. Quercus nigra	5	no	FAC	height (DBH).
4				
				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
6				
7				Shrub – Woody plants, excluding woody vines,
8				approximately 3 to 20 ft (1 to 6 m) in height.
9				
10				Herb – All herbaceous (non-woody) plants, including
11		······		herbaceous vines, regardless of size. Includes
12				woody plants, except woody vines, less than
	105	= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum ()	45		EAC	Woody vine – All woody vines, regardless of height.
1. <u>Rubus trivialis</u>	<u>15</u>	yes	FAC	
2. <u>Smilax sp.</u>		no	FAC	
3. <u>Toxicodendron radicans</u>			FAC	
4				Hydrophytic
5				Vegetation
	23	= Total C	over	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations bel	ow).			1

Depth	Matrix			ox Feature		<del></del>	<b>—</b> .	
(inches) 0-16	<u>Color (moist)</u> 10YR4/1	_ <u>%</u>	<u>Color (moist)</u> 10YR3/4	_ <u>%</u> 5		Loc <sup>2</sup>	<u>    Texture                                    </u>	Remarks
0-10	101 K4/1		10113/4		RM		<u> </u>	· ////////////////////////////////////
		.,, <u></u>					<u> </u>	·····
								<b></b>
					·		. <u></u>	
		<u> </u>					······	. <u> </u>
					<u> </u>			
							21 a a a ti	en. Dim Dere Lining M-Matrix
	oncentration, D=De Indicators:	pietion, Rivi-	-Reduced Matrix, C	S=Covere	u or Coale	u Sanu G		on: PL=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue B	elow Surfa	ice (S8) <b>(L</b>	RR S, T, I	J) 1 cm Muck	(A9) <b>(LRR O)</b>
	pipedon (A2)		Thin Dark S					< (A10) <b>(LRR S)</b>
	stic (A3)		Loamy Muc	-		0)		/ertic (F18) (outside MLRA 150A,B
	en Sulfide (A4)		Loamy Gley		(F2)			Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) <b>(LRR I</b>	рт ())	✓ Depleted Ma Redox Dark		-6)		(MLRA 1	s Bright Loamy Soils (F20) 153B)
	ucky Mineral (A7) (L	•		-				nt Material (TF2)
	esence (A8) (LRR		Redox Depr					ow Dark Surface (TF12) (LRR T, U)
1 cm Mu	uck (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(</b>				Other (Exp	olain in Remarks)
,	d Below Dark Surfa	ce (A11)	Depleted Oo				-	
	ark Surface (A12) rairie Redox (A16) (	MI DA 150	Iron-Mangai (A) Umbric Surf				indiodeore	s of hydrophytic vegetation and
	/ucky Mineral (S1)		Delta Ochrid			, 0,	wetland	d hydrology must be present.
	Gleyed Matrix (S4)	(, 0, 0)	Reduced Ve			0A, 150B)	)	
	Redox (S5)		Piedmont F					
	Matrix (S6)		Anomalous	Bright Loa	my Soils (	F20) <b>(MLF</b>	RA 149A, 153C, 15	3D)
	rface (S7) (LRR P,		<u> </u>					
	Layer (if observed							
Type: Depth (in	chee);						Hydric Soil Pre	esent? Yes No
Remarks:								
ternarite.								

Project/Site: _Barber		City/County: Gei	smar	Sampling Date: <u>11/9/2011</u>		
Applicant/Owner: Lee Barber			State: LA			
			o, Range: T10SR02E10			
Landform (hillslope, terrace, etc.):						
Subregion (LRR or MLRA): <u>134-SMVL</u>	Lat: <u>N 30</u>					
Soil Map Unit Name: Sharkey clay		1	NWI classifi	cation:		
Are climatic / hydrologic conditions on the si	e typical for this time of y	ear? Yes 🖌 🖊	No (If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydr	ology significantl	y disturbed?	Are "Normal Circumstances"	present? Yes 🗹 No		
Are Vegetation, Soil, or Hydi	ology naturally p	roblematic?	(If needed, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attac	h site map showin	g sampling poi	int locations, transects	s, important features, etc.		
Hydric Soil Present?	Yes _ ✔ No Yes _ ✔ No Yes _ ✔ No			No		
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is requ	ired: check all that apply	)	Surface Soil			
Surface Water (A1)	Water-Stained			getated Concave Surface (B8)		
→ High Water Table (A2)	Aquatic Fauna					
Saturation (A3)	Marl Deposits					
Water Marks (B1)	Hydrogen Sul			Water Table (C2)		
Sediment Deposits (B2)		ospheres on Living				
Drift Deposits (B3)	Presence of F			/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		eduction in Tilled Second		Position (D2)		
Iron Deposits (B5)	Thin Muck Su		Shallow Aqu			
Inundation Visible on Aerial Imagery (I	37) Other (Explain	n in Remarks)	FAC-Neutra	I Test (D5)		
Field Observations:						
Surface Water Present? Yes 🖌	No Depth (inche	s): _2				
Water Table Present? Yes 🖌	No Depth (inche	s):		,		
(includes capillary fringe)	No Depth (inche			nt? Yes 🖌 No		
Describe Recorded Data (stream gauge, n	nonitoring well, aerial pho	tos, previous inspec	ctions), if available:			
Remarks:						

Sam	pling	Point:	5

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot sizes: <u>32 ft</u> )	% Cover	Species	<u>Status</u>	Number of Dominant Species
1. <u>Celtis laevigata</u>	75	ves	FACW	That Are OBL, FACW, or FAC:8 (A)
2. <u>Carva aquatica</u>	25	yes	OBL	Total Number of Dominant
3. Quercus nigra	20	ves	FAC	Species Across All Strata:8 (B)
4				Demonst of Deminent Creation
5			<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
	120	= Total C	over	Total % Cover of: Multiply by:
Sapling Stratum(32)				OBL species x 1 =
1			- <u></u>	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				
7				Prevalence Index = B/A =
		= Total C	over	Hydrophytic Vegetation Indicators:
Shrub Stratum(_32)		- 101010	0,001	✓ Dominance Test is >50%
1. Ulmus americana	5	_yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>
2. Ligustrum senense			FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Crataegus opaca			OBL	
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present.
5.				
6				Definitions of Vegetation Strata:
7	- <u> </u>			Deminions of Vegetation Strata.
Herb Stratum(32 ft)	15	= Total C	over	Tree – Woody plants, excluding woody vines,
1. Panicum repens	95	ves	FACW	approximately 20 ft (6 m) or more in height and
2. <u>Ambrosia trifida</u>				3 in. (7.6 cm) or larger in diameter at breast
				height (DBH).
3				
4				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6			<u></u>	than 3 in. (7.6 cm) DBH.
7				Shrub – Woody plants, excluding woody vines,
8				approximately 3 to 20 ft (1 to 6 m) in height.
9.			<u> </u>	
10				Herb – All herbaceous (non-woody) plants, including
11			<u> </u>	herbaceous vines, regardless of size. Includes
12				woody plants, except woody vines, less than
		= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum ()				
1. <u>Smilax sp.</u>	3	yes	<u>FAC</u>	Woody vine – All woody vines, regardless of height.
2			<u> </u>	
3				
4				
5				Hydrophytic Vegetation
		= Total C	over	Present? Yes No
		-		
Remarks: (If observed, list morphological adaptations be	ow).			

3012								
Profile Descr	iption: (Describe	to the dept	h needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			K Features		_Loc <sup>2</sup>	Tautura	Remarks
(inches)	Color (moist)		Color (moist)	% 5	Type <sup>1</sup>		<u>    Texture                                    </u>	Remarks
0-16	10YR4/1	95	10YR3/4	<u> </u>	RM	M	<u> </u>	
						j		
					,			
							······	
·	tran the second	. <u> </u>					<b>.</b>	
						<u> </u>	<u> </u>	
		letion, RM=	Reduced Matrix, CS	=Covered	d or Coate	d Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils <sup>3</sup> :
Histosol (			Polyvalue Be					luck (A9) (LRR O)
Histic Ep	pedon (A2) tic (A3)		Thin Dark Su Loamy Muck					luck (A10) <b>(LRR S)</b> ed Vertic (F18) <b>(outside MLRA 150A,B)</b>
	n Sulfide (A4)		Loamy Gleye			0)		ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		✓ Depleted Mat		12)			lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark		6)			RA 153B)
	ky Mineral (A7) <b>(LF</b>		Depleted Dar	k Surface	(F7)		Red Pa	arent Material (TF2)
Muck Pre	sence (A8) <b>(LRR U</b>	)	Redox Depre	ssions (F	8)		Very SI	hallow Dark Surface (TF12) (LRR T, U $ig)$
—	ck (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(L</b>	-			Other (	Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Oct					
	k Surface (A12)	AL DA 450A	Iron-Mangan					ators of hydrophytic vegetation and
	airie Redox (A16) <b>(I</b> ucky Mineral (S1) <b>(I</b>		) Umbric Surfa Delta Ochric			, 0)	wet	and hydrology must be present.
	eyed Matrix (S4)		Reduced Ver	. , .		0A. 150B)		
	edox (S5)		Piedmont Flo					
	Matrix (S6)						A 149A, 153C,	153D)
Dark Sur	face (S7) <b>(LRR P, S</b>	i, T, U)						
Restrictive L	ayer (if observed):							
Туре:								1
Depth (inc	hes):						Hydric Soil	Present? Yes 🚩 No
Remarks:								

Project/Site: Barber	City/County: Geisn	nar	Sampling Date: <u>11/21/2011</u>				
Applicant/Owner: Lee Barber		State: LA	Sampling Point: 6				
Investigator(s): NRP-LP	Section, Township, Range: T10SR02E10						
	_ coaleri, remain, range _ Local relief (concave, convex, none): <u>CONVEX</u> Slope (%):						
Subregion (LRR or MLRA): <u>134-SMVL</u> Lat: <u>N 3</u>	6						
Soll Map Unit Name: Convent soils, frequently flooded							
			ation:				
Are climatic / hydrologic conditions on the site typical for this time of y							
Are Vegetation, Soil, or Hydrology significant		e "Normal Circumstances" p	resent? Yes 🖌 No				
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If	needed, explain any answe	rs in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showin	g sampling point	locations, transects	, important features, etc.				
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Demontorial       Yes No			No				
Remarks:							
Batcher adjacent to river							
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) Water-Staine	d Leaves (B9)	Sparsely Veg	etated Concave Surface (B8)				
High Water Table (A2) Aquatic Faun		Drainage Pat	terns (B10)				
	s (B15) <b>(LRR U)</b>	Moss Trim Li					
	fide Odor (C1)		Nater Table (C2)				
	cospheres on Living Ro						
	Reduced Iron (C4)		sible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Recent Iron F	Reduction in Tilled Soils	(Co) Geomorphic Shallow Aqui					
Inundation Visible on Aerial Imagery (B7) Other (Explai		FAC-Neutral					
Field Observations:			()				
Surface Water Present? Yes No 🖌 Depth (inche	es):						
Water Table Present? Yes No 🖌 Depth (inche							
Saturation Present? Yes No 🖌 Depth (inche (includes capillary fringe)	es): \	Vetland Hydrology Presen	t? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspectio	ns), if available:					
Demarker							
Remarks:							

00.1	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot sizes: <u>32 ft</u> )		Species? Status	Number of Dominant Species
1. <u>Populus deltoides</u>		ves FAC	That Are OBL, FACW, or FAC: (A)
2. Platanus occidentalis		<u>yes</u> <u>FACW</u>	Total Number of Dominant
3. <u>Carva illinoinensis</u>	10	no FAC	Species Across All Strata:5(B)
4		<i>i</i>	Percent of Dominant Species
5		<u>(</u>	That Are OBL, FACW, or FAC:80 (A/B)
6			······································
7			Prevalence Index worksheet:
		= Total Cover	Total % Cover of:Multiply by:
Sapling Stratum(32)			OBL species x 1 =
1			FACW species x 2 =
2			FAC species x 3 =
3.			FACU species x 4 =
4			UPL species x 5 =
			Column Totals: (A) (B)
5			
6			Prevalence Index = B/A =
7			Hydrophytic Vegetation Indicators:
a + a + ( <b>32</b> )		= Total Cover	✓ Dominance Test is >50%
Shrub Stratum ( <u>32</u> )	4 5		Prevalence Index is $\leq 3.0^{1}$
1. <u>Albizia julibrissin</u>			
2			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
4			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5			be present.
6			
7			Definitions of Vegetation Strata:
		= Total Cover	_
Herb Stratum( <u>32 ft</u> ))			Tree – Woody plants, excluding woody vines,
1			approximately 20 ft (6 m) or more in height and
2			3 in. (7.6 cm) or larger in diameter at breast
3			height (DBH).
4			Conting Western to the test
5			Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
			than 3 in. (7.6 cm) DBH.
6			
7			Shrub – Woody plants, excluding woody vines,
8			approximately 3 to 20 ft (1 to 6 m) in height.
9	- <u> </u>		
10			Herb – All herbaceous (non-woody) plants, including
11		<u></u>	herbaceous vines, regardless of size. Includes
12			woody plants, except woody vines, less than
		= Total Cover	approximately 3 ft (1 m) in height.
Woody Vine Stratum()			
1. <u>Vitis rotundifolia</u>	35	_ves	Woody vine – All woody vines, regardless of height.
2. <u>Campsis radicans</u>	20	yes	
3. <u>Ampelopsis arborea</u>	10	<u>no</u>	
4. Rubus trivialis	5	no	
5.			Hydrophytic Vegetation
	70	= Total Cover	Present? Yes <u>Ves</u> No
Remarks: (If observed, list morphological adaptations bel	ow).		

	ription: (Describe t	o the depth				or confirm	n the absence	of indicators.)
Depth (inches)	<u>Matrix</u> Color (moist)	%	Redo Color (moist)	<u>x Feature</u> %		Loc <sup>2</sup>	Texture	Remarks
0-16	10YR5/3			/0			S	
0-10	1011(0/0				·		<u> </u>	
					•		<u></u>	
		<u> </u>						
			<u> </u>					
	······································	<u> </u>		·		<u> </u>		
	<u></u>	<u> </u>		. <u> </u>	<u> </u>			
	oncentration, D=Depl	etion, RM=F	Reduced Matrix, CS	S=Covere	d or Coate	d Sand G		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:							for Problematic Hydric Soils <sup>3</sup> :
Histosol	• •		Polyvalue Be					Auck (A9) (LRR O)
	oipedon (A2)		Thin Dark Su					Auck (A10) (LRR S)
Black Hi	• •		Loamy Muck			: O)		ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		(F2)			ont Floodplain Soils (F19) (LRR P, S, T)
	l Layers (A5)		Depleted Ma					alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,		Redox Dark				•	RA 153B)
	icky Mineral (A7) (LF		Depleted Dat					arent Material (TF2)
	esence (A8) (LRR U	)	Redox Depre		8)			Shallow Dark Surface (TF12) (LRR T, U)
	ick (A9) <b>(LRR P, T)</b> d Below Dark Surface	. (A11)	Marl (F10) (L Depleted Oc		MIDA 1	54)	Other	(Explain in Remarks)
·	ark Surface (A12)	= (A H)	Iron-Mangan				<b>T</b> ) 3,	
	rairie Redox (A16) <b>(N</b>	II RA 150A)					· · · · · · · · · · · · · · · · · · ·	ators of hydrophytic vegetation and
	lucky Mineral (S1) <b>(L</b>		Delta Ochric			, c)	wet	tland hydrology must be present.
	eved Matrix (S4)		Reduced Ver			0A, 150B)	)	
	Redox (S5)		Piedmont Flo					
	Matrix (S6)						RA 149A, 153C	, 153D)
	rface (S7) (LRR P, S	, T, U)		5	, (	7.		. ,
	Layer (if observed):			· · · · ·				······
Type:								,
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:	,							

Project/Site: Barber	City/County: Geis	smar	_ Sampling Date: <u>11/21/2011</u>		
Applicant/Owner: Lee Barber			Sampling Point: 7		
	Section, Township	, Range: T10SR02E10			
Landform (hillslope, terrace, etc.):			Slope (%): _0		
Subregion (LRR or MLRA): <u>134-SMVL</u>					
Soil Map Unit Name: Sharkey Clay	ı	NWI classifi			
Are climatic / hydrologic conditions on the site typical for	r this time of vear? Yes 🗸 🚺				
Are Vegetation, Soil, or Hydrology			present? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe			
SUMMARY OF FINDINGS – Attach site m	ap snowing sampling pol	nt locations, transect	s, important reatures, etc.		
Hydrophytic Vegetation Present? Yes 🗸	No Is the Sam				
Hydric Soil Present?     Yes       Wetland Hydrology Present?     Yes	No vithin a W	etland? Yes	No		
Remarks:					
Wooded area between road and railroad tr	acks				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soi	I Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)		egetated Concave Surface (B8)		
	Aquatic Fauna (B13)		atterns (B10)		
	Marl Deposits (B15) (LRR U)	Moss Trim I			
	Hydrogen Sulfide Odor (C1)		Water Table (C2)		
	Oxidized Rhizospheres on Living Presence of Reduced Iron (C4)		/isible on Aerial Imagery (C9)		
	Recent Iron Reduction in Tilled Se		c Position (D2)		
	Thin Muck Surface (C7)	Shallow Aq			
	Other (Explain in Remarks)	FAC-Neutra			
Field Observations:					
Surface Water Present? Yes No	Depth (inches):				
Water Table Present? Yes No 🖌	Depth (inches):				
Saturation Present? Yes No	Depth (inches):	Wetland Hydrology Prese	ent? Yes No∕		
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspec	tions), if available:			
Remarks:					

Sam	pling	Point:	7

00 (	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot sizes: <u>32 ft</u> )		Species?		Number of Dominant Species
1. <u>Quercus nigra</u>		ves		That Are OBL, FACW, or FAC: (A)
2. <u>Carva illinoinensis</u>				Total Number of Dominant
3			<u> </u>	Species Across All Strata:6(B)
4				Percent of Dominant Species
5		ł_		That Are OBL, FACW, or FAC:(A/B)
6				
7				Prevalence Index worksheet:
	70	= Total Co	over	Total % Cover of:Multiply by:
Sapling Stratum(_32)				OBL species x 1 =
1			N=11-11-11-11-11-11-11-11-11-11-11-11-11-	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				
7				Prevalence Index = B/A =
		= Total Co	over	Hydrophytic Vegetation Indicators:
<u>Shrub Stratum</u> ( <u>32</u> )		, rotar o		✓ Dominance Test is >50%
1. Ligustrum senense	40	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>
2. Acer negundo	20	yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. <u>Carpinus caroliniana</u>	5	no	FAC	
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present.
6				Definitions of Vegetation Strata:
7	- <u></u>	- T-+-1 O		Deminions of Vegetation Ottata.
Herb Stratum( <u>32 ft</u> ))		. = Total C	over	Tree – Woody plants, excluding woody vines,
1. <u>Solidago sp.</u>	10	ves	FAC	approximately 20 ft (6 m) or more in height and
2				3 in. (7.6 cm) or larger in diameter at breast
				height (DBH).
3				
4				Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6				than 3 in. (7.6 cm) DBH.
7			·	Shruh - Woody plants excluding woody vines
8			·	Shrub – Woody plants, excluding woody vines,
				Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
8	<u></u>	·····		
89	<u></u>			approximately 3 to 20 ft (1 to 6 m) in height.
8 9 10	<u></u>			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than
8.         9.         10.         11.         12.	<u></u>			approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes
8 9 10 11 12 <u>Woody Vine Stratum</u> ()		= Total C	over	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
8	 		over	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than
8 9 10 11 12 <u>Woody Vine Stratum</u> ()		= Total C	over	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
8	    	= Total C ves no	over FAC FAC	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
8.	     	= Total C   	over FAC FAC	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
8.	 	= Total C   	over FAC FAC	<ul> <li>approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
8	   	= Total C   	over <u>FAC</u> <u>FAC</u>	approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
8	      	 = Total C   	over <u>FAC</u> <u>FAC</u>	<ul> <li>approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
8	      	 = Total C   	over <u>FAC</u> <u>FAC</u>	<ul> <li>approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
8	      	 = Total C   	over <u>FAC</u> <u>FAC</u>	<ul> <li>approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
8	      	 = Total C   	over <u>FAC</u> <u>FAC</u>	<ul> <li>approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>

Operative         Matrix         Record registive         Table Locy         Table Locy           Code/ model         5         Code (model)         5         Table Locy         C           4-14         10YR3/2         C         C         C	Profile Desc	ription: (Describe t	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence o	f indicators.)		
0-4       10YR3/2       C         4.14       10YR4/2       C         Image: C_C_Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils':         Histosi (A1)       Polyvalue Below Surface (S3) (LRR S, T, U)       2 cm Muck (A4) (LRR P, O)         Histosi (A1)       Polyvalue Below Surface (S3) (LRR S, T, U)       2 cm Muck (A1) (LRR P, S, T)         Histosi (A1)       Polyvalue Below Surface (S3) (LRR S, T, U)       2 cm Muck (A1) (LRR P, S, T)         Histosi (A1)       Loomy Mucky Mineral (F1) (LRR U)       Peledemot finction (F12) (LRR P, S, T)         Stratified Layers (A5)       Depleted Matrix (F3)       Anomabus Bright Loamy Suls (F20)         Graine Bodies (A6) (LRR P, T, U)       Robox Depresentions (F7)       Red Parent Matrial (TF12)         Muck Presence (A3) (LRR P, T, U)       Depleted Matrix (F3)       Other (Explain in Remarks)         Depleted Matrix (A1)       Loomy Glayer Masses (F12) (LRR P, T, U)       Other (Explain in Remarks)         Depleted Matrix (A1)       LoneAdved Varia (F12) (LRR T, U)       Weaten Mydrology must be present.         Samcy Glayer Matrix (S1)       Depleted Ontark Surface (F12) (MLR A 150, 150)       Samcy Glayer Matrix (S1) (LRR A, S1)         Samcy Glayer Matrix (S3)       Anomalous Bright Loam								<b>+</b>	_		
4-14       10YR4/2				Color (moist)		<u>Type</u>	Loc		<u>R</u>	Remarks	<u> </u>
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains, *Location: PL=Pore Lining, M=Matrix, Hydrids Soli Indicators:         Histosol (A1)       Polyvalue Bolow Surface (S3) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A2)       Thin Dark Surface (S3) (LRR S, T, U)       2 cm Muck (A10) (LRR P, S, T)         Black Histor (A2)       Thin Dark Surface (S3) (LRR S, T, U)       2 cm Muck (A10) (LRR P, S, T)         Stratified Layers (A5)       Learny Mucky Minarel (F1) (LRR P, S, T)       Pledmort Floodplain Solis (F19) (LRR P, S, T)         Stratified Layers (A5)       Depleted Matrix (F2)       Pledmort Floodplain Solis (F19) (LRR P, S, T)         Stratified Layers (A5)       Depleted Matrix (F3)       Anomalous Bright Learny Solis (F20)         Organic Bodies (A6) (LRR P, T, U)       Depleted Dark Surface (F1)       Wark Presence (A8) (LRR V)       Other (EVP)         Depleted Dark Surface (F1)       Mark (F10) (LRR A151)       Other (Explain Redox (A16) (MLRA 150A)       Depleted Dark Surface (F13) (MLRA 150A)       Vory Shaltow Dark Surface (F12) (LRR O, S)         Sandy Glocy Matrix (S1)       Depleted Certic (F13) (MLRA 150A, 130B)       Sandy Glocy Matrix (S1)       Deflexice Vertic (F19) (MLRA 150A, 130B)         Sandy Glocy Matrix (S1)       Pledmort Floodplain Solis (F19) (MLRA 149A)       Anomalous Bright Learny Solis (F20) (MLRA 149A)         Sandy Glocy Matrix (S3)       Pledmort Floodplain Solis (F19) (MLRA 149A)											<u> </u>
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,	4-14	10YR4/2						<u> </u>			
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,							<u> </u>				
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,											
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,											
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,											
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,											
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histo Epideón (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Hydrogen Suffae (A4)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F13) (Lotts16 MLRA 150A,B)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Loamy Soils (F20)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Oark's Urface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Haft (F10) (LRR V, T)       Red Parent Material (TF2)         Muck A9) (LRR P, T)       Mark (F10) (LRR P, T, U)       Depieted Ochric (F11) (MLRA 151)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Daglated Below Dark Surface (A12)       Iron-Manganese Masses (T12) (LRR P, T, U)       Indicators of hydrophytic vagetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       Indicators (S1) (LRR O, S)         Sandy Mucky (S6)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Sandy Kedx (S5)       Peledmont Floodpial Soils (F19) (MLRA 149A)       Stribped Matrix (S6)         Dark Surface (S7) (LRR P, S,	<sup>1</sup> Type: C=Co	oncentration, D=Depl	letion. RM=R	educed Matrix. CS	=Covered	or Coate	d Sand Gra	ains. <sup>2</sup> Loca	ation: PL=Pore	e Linina. M	=Matrix.
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic Epipedon (A2)       Loamy Mucky Mineral (F1) (LR R)       Reduced Vertic (F18) (outside MLRA 150A,B)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Pleidmont Floodplain Solis (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Depleted Matrix (F3)       Anomalous Bright Loamy Solis (F20)         Muck Presence (A6) (LRR P, T)       Redox Depressions (F8)       Very Shallow Dark Surface (T12) (LRR T, U)         1 cm Muck (A9) (LRR P, T)       Mar (F10) (LRR U)       Oppleted Dark Surface (F11) (MLRA 151)         1 thick Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Dopleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Think Dark Surface (A12)       Umbric Surface (F12) (LRR O, P, T)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)         Sandy Medox (S5)       Delta Ochric (F17) (MLRA 151)       Reduced Vertic (F18) (MLRA 150A)       Weitand hydrology must be present.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F19) (MLRA 154A), 153C, 153D)       Anomalous Bright Loamy Soils (F20) (MLRA 149A), 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):       Type:       No		· · · · · · · · · · · · · · · · · · ·					<u> </u>				
	Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	RR S, T, U	l) 1 cm Mu	ıck (A9) <b>(LRR (</b>	0)	
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Solis (F19) (LRR P, S, T)         Stratlified Layers (A5)       Depleted Matrix (F3)       Anomalous Bright Loamy Solis (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         Muck Presence (A8) (LRR P, T)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         1 cm Muck (A9) (LRR P, T)       Mark (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Coast Praifie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 151) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.         Sandy Redox (S5)       Pieldmont Floodplain Soils (F20) (MLRA 149A)       Stripped Matrix (S8)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Depleted Chric (F17) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)       Depleted Chric (F17) (MLRA 150A, 150B)         Betrictive Layer (if Observed):       Type:       Depleted Chric (F17) (MLRA 150A, 150B)       No <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>											
							. <b>O</b> )				
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         5 cm Mucky Mineral (A7) (LRR P, T, U)       Depieted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depieted Below Dark Surface (A11)       Depieted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Marganese Masses (F12) (LRR P, T, U)       wetland hydrology must be present.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A)       wetland hydrology must be present.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       sandy Redox (S5)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       TS0, 153D)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Remarks:       No         Remarks:       Remarks:       No       ✓						F2)					
			T. U)			6)			-	iny Solis (r	20)
										F2)	
				Redox Depre	ssions (F	8)		Very Sh	allow Dark Surl	face (TF12	:) (LRR T, U <b>)</b>
								Other (E	xplain in Rema	arks)	
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present.        Sandy Mucky Mineral (S1) (LRR O, S)Delta Ochric (F17) (MLRA 151)        Sandy Redox (S5)Piedmont Flootplain Soils (F19) (MLRA 149A)        Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)			ə (A11)	·	. ,	•		<b>T)</b> 2	_		
			AL RA 150A)					marcar			
							, - ,	wella	nu nyurology n	nusi be pre	56m.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) 	Sandy G	Bleyed Matrix (S4)									
Restrictive Layer (if observed):   Type:			- <b>T</b> 10	Anomalous E	right Loar	ny Solls (I	-20) (MLR	A 149A, 153C, 1	153D)		
Type:											
Depth (inches): No											
	Depth (ind	ches):						Hydric Soil P	resent? Yes	s	No
	Remarks:							- <b>-</b>			

Project/Site: Barber	City/Co	ounty: Geismar		Sampling Date: <u>11/28/2011</u>
Applicant/Owner: Lee Barber				
		n, Township, Range: _T		
Landform (hillslope, terrace, etc.):				
Subregion (LRR or MLRA): 134-SMVL	Lat: 30.2120			
Soil Map Unit Name: Sharkey Clay		4	NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for	or this time of year? Ye	es No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	significantly disturt	ed? Are "Norma	l Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problema	tic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sam	pling point location	ons, transects	, important features, etc.
	No No No	Is the Sampled Area within a Wetland?	Yes	No
Wooded area between road and railroad to	racks			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves	s (B9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	
	Marl Deposits (B15) (	LRR U)	Moss Trim Li	ines (B16)
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizosphere	es on Living Roots (C3)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks)	FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present? Yes No 🖌	/			
Water Table Present? Yes No _	Depth (inches):			
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland	Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, pre	vious inspections), if av	ailable:	
Remarks:				

·	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot sizes: <u>32 ft</u> )		Species?		
1. Celtis laevigata		ves	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Gleditsia triacanthos			FAC	
				Total Number of Dominant Species Across All Strata: 5 (B)
3. <u>Carva illinoinensis</u>			/	Species Across All Strata: (B)
4				Percent of Dominant Species
5		,		That Are OBL, FACW, or FAC: 100 (A/B)
6.				
7				Prevalence Index worksheet:
	85	= Total Co	over	Total % Cover of:Multiply by:
Sapling Stratum(32)		•		OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
				UPL species x 5 =
4				1
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
22		= Total Co	over	
<u>Shrub Stratum</u> ( <u>32</u> ))				✓ Dominance Test is >50%
1. <u>Cornus drummondii</u>	20	ves	FAC	Prevalence Index is ≤3.0 <sup>1</sup>
2. <u>Sabal minor</u>	5	no	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present.
5				
6				Definitions of Venetation Charter
7			·	Definitions of Vegetation Strata:
11 1 01 1 1 20 <del>1</del>	_25	_ = Total C	over	<b>T</b>
Herb Stratum ( <u>32 ft</u> )			=	Tree – Woody plants, excluding woody vines,
1. <u>Ambrosia trifida</u>		ves		approximately 20 ft (6 m) or more in height and
2. <u>Carex sp.</u>	_ <u>10</u>	no	OBL	3 in. (7.6 cm) or larger in diameter at breast height (DBH).
3. Sambucus canadensis	5	no	FACW	neight (DDH).
4. <u>Carva illinoinensis</u>	3	no	FAC	Sapling – Woody plants, excluding woody vines,
5				approximately 20 ft (6 m) or more in height and less
6				than 3 in. (7.6 cm) DBH.
			·	
7				Shrub – Woody plants, excluding woody vines,
8			·	approximately 3 to 20 ft (1 to 6 m) in height.
9				
10				Herb – All herbaceous (non-woody) plants, including
11				herbaceous vines, regardless of size. Includes
12	_			woody plants, except woody vines, less than
	88	= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum()		•		
1. <u>Smilax sp.</u>	25	yes	FAC	Woody vine – All woody vines, regardless of height.
2. Lonicera japonica	20	yes	FAC	
3. Toxicodendron radicans	_ <u></u> 15	no	FAC	· · · · · · · · · · · · · · · · · · ·
<ul> <li>Duleus trivielie</li> </ul>	10		FAC	
		no	170	Hydrophytic
5				Vegetation
	70	= Total C	over	Present? Yes Vo No
Remarks: (If observed, list morphological adaptations be	low).			1

#### 901

SOIL								Sampling Point: <u>o</u>				
Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	n the absence o	of indicators.)				
Depth	Matrix		Red	ox Feature	S							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-8	10YR4/2						С					
8-16	10YR5/1	90	10YR4/6	10	RM	Μ	С					
						1						
						<u> </u>						
	·····				- <u></u>							
		oletion, RM	=Reduced Matrix, C	S=Covere	d or Coate	d Sand G		cation: PL=Pore Lining, M=Matrix.				
Hydric Soil I								for Problematic Hydric Soils <sup>3</sup> :				
Histosol			Polyvalue B					luck (A9) (LRR O)				
· — ·	pipedon (A2)		Thin Dark S					luck (A10) (LRR S)				
Black Hi			Loamy Muc	•		0)		ed Vertic (F18) <b>(outside MLRA 150A,B)</b>				
	n Sulfide (A4) I Layers (A5)		Loamy Gley ✓ Depleted M		(FZ)			ont Floodplain Soils (F19) <b>(LRR P, S, T)</b> Ious Bright Loamy Soils (F20)				
	Bodies (A6) (LRR F	рт п)	Redox Dark		F6)			RA 153B)				
	cky Mineral (A7) (L	-		•	'			arent Material (TF2)				
	esence (A8) <b>(LRR I</b>		, Redox Depi		. ,			hallow Dark Surface (TF12) (LRR T, U)				
	ck (A9) (LRR P, T)	•	Marl (F10) (	•	,		·	Explain in Remarks)				
	Below Dark Surfac	ce (A11)	Depleted O		(MLRA 1	51)		,,				
Thick Da	ark Surface (A12)		Iron-Manga	nese Mass	ses (F12) <b>(</b>	LRR O, P	, T) <sup>3</sup> Indica	ators of hydrophytic vegetation and				
	airie Redox (A16) <b>(</b>				-	, U)		and hydrology must be present.				
	lucky Mineral (S1) (	LRR O, S)										
1	leyed Matrix (S4)		Reduced Ve									
	edox (S5)		Piedmont F					4520				
1	Matrix (S6)	е т II)	Anomaious	Bright Loa	imy Solis (	-20) (IVILI	RA 149A, 153C,	(1530)				
	rface (S7) (LRR P, _ayer (if observed)											
	Layer (II Observed)	•										
Type:												
Depth (ind	ches):						Hydric Soll	Present? Yes <u> </u>				
Remarks:												
3												
1												

Project/Site: Barber	City/C	<sub>ounty:</sub> Geismar		Sampling Date: <u>11/28/2011</u>
Applicant/Owner: Lee Barber			State: LA	
	Section			
Landform (hillslope, terrace, etc.):				Slope (%)· 0
Subregion (LRR or MLRA):				
Soil Map Unit Name: Sharkey Clay				cation:
Are climatic / hydrologic conditions on the site typical	for this time of year? Y			
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "No	rmal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (If neede	ed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site r	nap showing san	npling point loc	ations, transect	s, important features, etc.
	No No No	Is the Sampled Ar within a Wetland?		No
Wooded area north of New River				
HYDROLOGY			Cacandami India	ators (minimum of two required)
Wetland Hydrology Indicators:	air all that ann bu			ators (minimum of two required)
Primary Indicators (minimum of one is required; che		- (00)	Surface Soi	egetated Concave Surface (B8)
	_ Water-Stained Leave _ Aquatic Fauna (B13)			atterns (B10)
	_ Aquatic Paulia (B13) _ Marl Deposits (B15)		Moss Trim I	
1 <u> </u>	_ Hydrogen Sulfide Od			Water Table (C2)
	_ Oxidized Rhizospher			
	Presence of Reduce			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reductio			c Position (D2)
/right whit of ordet (D+/)	_ Thin Muck Surface (		Shallow Aq	
	_ Other (Explain in Rel		FAC-Neutra	
Field Observations:				
Surface Water Present? Yes No _	Depth (inches):			
Water Table Present? Yes No				
	Depth (inches):	Wetla	nd Hydrology Prese	nt? Yes No 🗸
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring				
Describe Recorded Data (stream gauge, monitoring	weil, aenai photos, pre	wous inspections), i	avallable.	
Remarks:				

00 %	Absolute		t Indicator	Dominance Test worksheet:
Tree Stratum (Plot sizes: <u>32 ft</u> )		Species		Number of Dominant Species
1. <u>Celtis laevigata</u>		ves	FACW	That Are OBL, FACW, or FAC: (A)
2. Ulmus americana		_yes	FACW	Total Number of Dominant
3. <u>Quercus nigra</u>	15	no	<u>FAC</u>	Species Across All Strata:9(B)
4. <u>Gleditsia triacanthos</u>	10	no	<u>FAC</u>	Percent of Dominant Species
5	<u> </u>	. <u></u> (		That Are OBL, FACW, or FAC:(A/B)
6				
7				Prevalence Index worksheet:
		= Total C	over	Total % Cover of: Multiply by:
Sapling Stratum(_32)				OBL species x 1 =
1. <u>Celtis laevigata</u>				FACW species x 2 =
2. <u>Acer negundo</u>		yes	FACW	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5	_		<u> </u>	Column Totals: (A) (B)
6				Desuelance Index - D(A -
7				Prevalence Index = B/A =
	10	= Total C	over	Hydrophytic Vegetation Indicators:
Shrub Stratum(32))				✓ Dominance Test is >50%
1. <u>Acer negundo</u>		yes		Prevalence Index is ≤3.0 <sup>1</sup>
2. <u>Sambucus canadensis</u>		no	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			•	
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
5				be present.
6	_			
7				Definitions of Vegetation Strata:
	_12	= Total C	over	
Herb Stratum( <u>32 ft</u> ))				Tree – Woody plants, excluding woody vines,
1. <u>Carex sp.</u>			OBL	approximately 20 ft (6 m) or more in height and
2. Eupatorium capillifolium			FAC	3 in. (7.6 cm) or larger in diameter at breast height (DBH).
3. Quercus texana			OBL	neight (DDH).
4. <u>Quercus nigra</u>		no	FAC	Sapling – Woody plants, excluding woody vines,
5. <u>Acer rubrum var. drummondii</u>	1	no	OBL	approximately 20 ft (6 m) or more in height and less
6				than 3 in. (7.6 cm) DBH.
7	_			
8				Shrub – Woody plants, excluding woody vines,
9				approximately 3 to 20 ft (1 to 6 m) in height.
10				Horb All between (non-weady) plants including
11				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes
12.				woody plants, except woody vines, less than
	27	= Total C	over	approximately 3 ft (1 m) in height.
Woody Vine Stratum()				
1. <u>Vitis rotundifolia</u>	15	yes	FAC	Woody vine - All woody vines, regardless of height.
2. Rubus trivialis	10	yes	FAC	
3. Toxicodendron radicans	10	yes	FAC	
4. Smilax sp.		no	FAC	
5.				Hydrophytic
	42	= Total C	over	Vegetation Present? Yes <u>Ves</u> No
Remarks: (If observed, list morphological adaptations be	IOW).			

Profile Desc	ription: (Describe	to the dept	n needed to docum	nent the i	indicator	or confirm	the absence of	of indicato	rs.)	
Depth	Matrix			x Feature						
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			Remarks	
0-16	10YR4/2	90	10YR4/3	10			<u>C</u>			
·						2				
			<u></u>							
	oncentration, D=Dep		Reduced Matrix CS	S=Covere	d or Coate		ains <sup>2</sup> Loc	ation: PI =	Pore Lining,	M=Matrix
Hydric Soil			teduced Matrix, oc						natic Hydric	
Histosol			Polyvalue Be	low Surfa	ice (S8) <b>(</b> 1	RR S. T. U			-	
	pipedon (A2)		Thin Dark Su					uck (A10) (		·
	stic (A3)		Loamy Muck			-				MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)					9) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					-	Loamy Soils	(F20)
- ·	Bodies (A6) (LRR F		Redox Dark		-			A 153B)		
	icky Mineral (A7) (L		Depleted Da		. ,			rent Materi		
	esence (A8) <b>(LRR l</b> ıck (A9) <b>(LRR P, T)</b>	<b>,</b>	Redox Depre		0)					12) (LRR T, U <b>)</b>
	d Below Dark Surfac	ce (A11)	Depleted Oc		(MLRA 1	51)	Other (i	Explain in F	temarks)	
	ark Surface (A12)		Iron-Mangan				T) <sup>3</sup> Indica	tors of bydi	rophytic vege	station and
	rairie Redox (A16) (	MLRA 150A						-	ogy must be	
	lucky Mineral (S1) <b>(</b>	LRR O, S)	Delta Ochric	(F17) <b>(M</b>	LRA 151)			,	0,	
	Bleyed Matrix (S4)		Reduced Ver							
	Redox (S5)		Piedmont Flo					4500		
	Matrix (S6)	от II)	Anomalous E	Bright Loa	my Solls (	F20) (MLR.	A 149A, 153C,	153D)		
	rface (S7) <b>(LRR P,</b> : Layer (if observed)						1			
		•								
							Hydric Soil I	Procont?	Vac	No
Depth (in							Hyune Soin	-Tesent :	165	
Remarks:										
Redox co	ncentrations fair	nt								
1										

APPENDIX B: PHOTOS



**Forested Area Within Batcher** 





# Mississippi River Bank





**Agricultural Fields** 





Drainage Feature in Agricultural Area





**Drainage Ditch** 





**New River** 

