

## Bayou Teche Wetlands Mitigation Area Phase IV Restoration Plan

### A. Introduction:

This Mitigation Plan, dated and effective upon execution by the U.S. Army Corps of Engineers New Orleans District (CEMVN) and consistent with state and federal authorities (Appendix A), is an agreement made and entered into by Louisiana Wetlands, LLC (referred to hereinafter as Sponsor) and the Interagency Review Team (IRT) composed of CEMVN, the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), and the Louisiana Department of Wildlife and Fisheries (LDWF).

The purpose of this Mitigation Plan is to establish guidelines and responsibilities for the establishment, use, operation, protection, monitoring and maintenance of the Bayou Teche Wetlands Mitigation Area, Phase IV (Phase IV). This document is submitted as an addendum to the Mitigation Banking Instrument (MBI) for Phase III of the Bayou Teche Wetlands Mitigation Area (hereinafter, MBI) which was signed by CEMVN on May 7, 2010.

Phase IV includes approximately 211.35 acres located in Sections 35, 52 & 66, T14S-R10E and Sections 2 & 42, T15S-R10E, St. Mary Parish, Louisiana (**Exhibit 1**) north of highway 87 and approximately 2.0 miles northwesterly from Centerville, LA. Adjacent to Phase IV is Bayou Teche National Wildlife Refuge and Phase II of the Bayou Teche Mitigation Bank. General topography is flat to gently sloping (4' to 8' elevations). Approximately 211.35 acres of Phase IV are active agricultural lands and un-encumbered. An existing un-improved farm road exists through Phase IV and will remain un-improved for access to the adjacent Bayou Teche National Wildlife Refuge. **Exhibit 6** shows the existing farm road relative to Phase IV. Unless specified in this document, the provisions of the MBI apply to this Phase IV Site.

### B. Baseline Conditions:

**1. Current land use:** Phase IV lands have historically been and are presently used for agricultural purposes (sugarcane). The US Department of Agriculture - Natural Resources Conservation Service has designated the property prior-converted cropland (**Exhibit 3**). A copy of the approved jurisdictional determination is attached (**Exhibit 4**).

**2. Existing Soils:** Three soil types are mapped (**Exhibit 2**) on Phase IV and include Baldwin silty clay loam (**BdA**), Galvez silt loam, 0-1 percent slopes (**GaA**), and Schriever clay (**ShA**). The predominant soils at Phase IV are the Baldwin silty clay loam, and Schriever clay comprising of approximately 85% of the soil type. Galvez silt loam comprises of approximately 15%. The Baldwin and Schriever soil types are classified as hydric. The Galvez silt loam soil is classified as non-hydric (NRCS, 2008).

A wetland delineation was conducted August 10 – 11<sup>th</sup>, 2011. Based on sampling data there are approximately 211.35-acres of hydric soils. The findings were not consistent with the NRCS soils surveys as variations in slope from mapped soil units were minimal or non-significant. Hydric soils were found in the areas mapped Galvez silt loam, 0-1 percent slopes.

**3. Existing Hydrology:** Phase IV is located within the Bayou Teche watershed (HUC 08080102) (**Exhibit 5**). Phase IV is positioned north of Bayou Teche and slopes generally north. A man-made ditch exits on Phase IV across the hydrologic regime, separating the tract into northern and southern portions. The ditch was dredged for hydrology improvements under normal agricultural activities, filled was placed adjacent to the ditch and incorporated into the headlands. Surface water from the southern portion was collected in this ditch and diverted east and west, which is indirectly connected to Yellow Bayou. Surface water from the northern portion was directed into an existing ditch along the boundary of Bayou Teche National Wildlife Refuge and Phase IV. The surface water from the northern portion also is indirectly connected to Yellow Bayou and its adjacent wetlands.

### **C. Area Restoration Plan:**

**1. Vegetative Restoration:** A mixture of hard and soft-mast tree species will be planted at a ratio of 60/40, on maximum 9 foot centers for an initial density of 538 trees per acre. Depending on the planting method, by hand or machine, standing weeds in fallow fields may or may not be removed. One to two-year old bare root seedlings properly stored and handled to ensure viability, will be planted during the period of December 15<sup>th</sup> through March 15<sup>th</sup>. For a given tract planting, a minimum of 50 percent, or 269 seedlings per acre, consonant with the planted ratio of hard mast to soft mast-producing species, must survive through the end of the first growing season following the planting (i.e., Year 1). Should 50 percent survival not be achieved, the area will be re-planted to achieve the target density. The survival criteria apply to initial plantings as well as subsequent replanting that may be needed. For a given tract planting, a minimum of 300 seedlings, including volunteers, per acre must be established by the end of the fourth year (i.e., Year 5) following successful attainment of the one-year survivorship criteria

**a. Planting Schedule:** One- to two-year old bare-root seedlings of a Louisiana eco-type obtained from a registered and licensed nursery, that have been properly stored and handled to ensure viability, will be planted in the prepared tract during the period of December 15 through March 15. Events such as flooding may warrant cold storage of seedlings with planting in late spring.

**b. Density:** Seedlings will be planted on nine-foot (9') centers for an initial stand density of, at minimum, five hundred thirty-eight (538) seedlings per acre.

**c. Tree Species Composition:** The following is a list of hard and soft mast dominants and co-dominants acceptable for Phase IV:

Hard Mast Species ( $\pm$  60%)

*Quercus nuttallii* (nuttall oak)

*Q. lyrata* (overcup oak)

*Q. nigra* (water oak)

*Q. phellos* (willow oak)

*Q. michauxii* (swamp chestnut oak)

Soft Mast Species ( $\pm$  30%)

*Fraxinus pennsylvanica* (green ash)

*Acer rubrum* var. *drummondii* (Drummond red maple)

*Liquidambar styraciflua* (sweetgum)  
*Ulmus americana* (American elm)  
*Magnolia virginiana* (sweetbay)  
*Morus rubra* (red mulberry)

Mid-story Species (< 10% of total)  
*Diospyros virginiana* (persimmon)  
*Crataegus aestivalis* (mayhaw)  
*C. viridis* (green hawthorne)  
*I. decidua* (deciduous holly)  
*I. vomitoria* (yaupon)

**2. Topographic restoration:** Current agricultural practices entail tilling and rowing of surface soils prior to sugarcane planting. Tracts will be disked approximately 2 months prior to planting to level existing crop rows and furrows to the maximum extent practicable.

**3. Hydrologic Restoration:** Current agricultural practices entail the creation and maintenance of drainage ditches to remove excess surface water. Internal ditches will be backfilled with earthen material from within the project site and made non-functional. The main agricultural ditch separating Phase IV north and south will remain in its existing condition. Future filling or plugging of the ditch will be implemented if necessary to achieve hydrologic restoration.

A Hydrologic Restoration Plan map and cross section are included as **Exhibit 6** respectively.

**4. Maintenance:** Phase IV will be maintained, as necessary, to promote seedling survival by mechanical or chemical controls or some combination thereof.

- a. Exotic/Invasive Vegetation:** Phase IV and its immediate perimeter shall be virtually free (approximately 5% or less on an acre-by-acre basis) of exotic/invasive vegetation. Exotic/invasive species control will be accomplished by mechanical or chemical controls or some combination, thereof. Noxious plants such as tallow-tree (*Triadica sebiferum*) may be spot treated with herbicide.
- b. Timber:** Timber harvesting/thinning will only be approved if the IRT determines it is needed to maintain or enhance the ecological value of the Bank. Timber harvesting/thinning would be performed under the supervision of the Sponsor/Long-term Steward and shall implement appropriate recommended best management practices as published by the Louisiana Department of Agriculture and Forestry. Measures to control the encroachment of exotic/invasive vegetation during and after harvesting/thinning shall be implemented.

**5. Monitoring:** Monitoring and reporting will comply with the terms and schedule outlined in the Umbrella Mitigation Banking Instrument. In brief, survey transects shall be established at the time of planting and the Sponsor shall conduct a survey of living and dead seedlings in each planted tract at or near the end of the first growing season following

planting of that tract. The report also shall describe drainage feature conditions, general seedling condition and discuss likely causes for observed mortality within those tracts that did not exhibit a seedling survival rate of at least 50 percent. A written report will be submitted to the CEMVN indicating the number and species of surviving seedlings.

- 6. Performance Standards:** Performance standards will comply with the criteria and schedule outlined in the Umbrella Mitigation Banking Instrument for the Bayou Teche Mitigation Area.

#### **D. Service Area:**

The primary service areas of Phase IV will be HUC 08080102. The secondary service areas of Phase IV will be HUCs 08080101 and 08080103.

#### **E. Available Credits:**

Approximately 211.35 acres of wetlands are unencumbered and available for credit restoration. Approximately 1.76 acres was excluded from the tract and will remain in its condition, an unimproved road, for access to the Bayou Teche National Wildlife Refuge. The 211.35 acres available for restoration is illustrated in **Exhibit 6**. Wetland Value Assessment and Modified Charleston Method spreadsheets are attached to this site restoration plan for Phase IV (**Exhibit 7**).

#### **F. Financial Protection:**

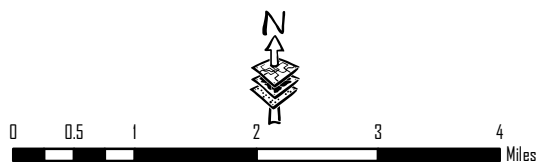
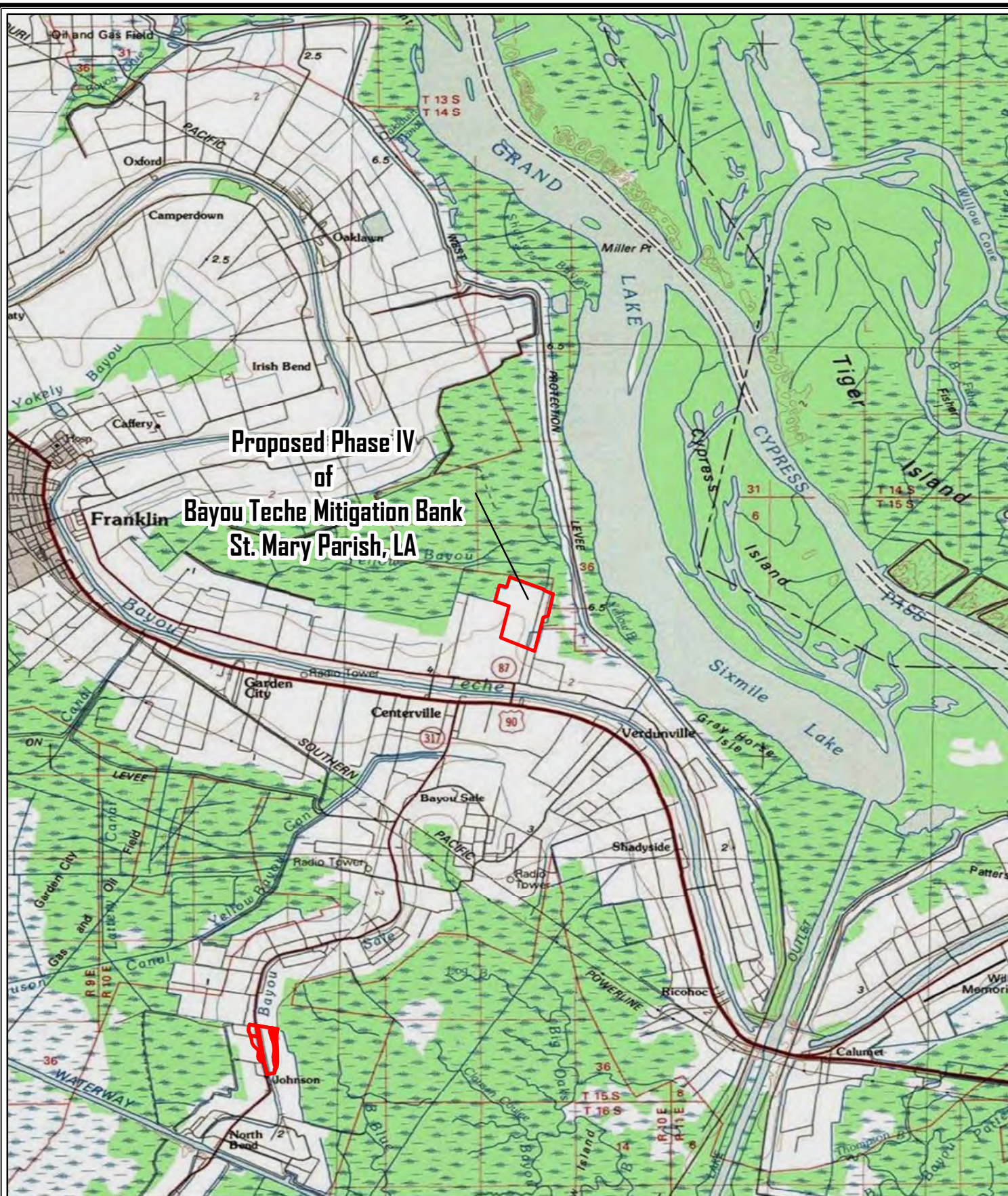
1. The Sponsor agrees to provide Financial Assurances sufficient to ensure satisfactory completion for the work described in this mitigation work plan. The Sponsor is establishing the Construction and Establishment (C&E) financial assurance to assure sufficient funds are available to perform work required to construct and maintain the Bank through successful attainment of long-term success criteria. An assessment of initial and capital costs and ongoing management funds required to manage and monitor the Bank is included in Exhibit 8, as well as work tasks and associated costs for construction and establishment of the Bank through achievement of long-term success criteria. To fund this account, the Sponsor proposes to establish a letter of credit at a value of Ninety one thousand five hundred and fifty dollars (\$91,550). The financial assurance shall be reduced in accordance with Section X of the MBI.

The Sponsor shall provide copies of annual status of the financial assurances to CEMVN upon request and/or in their monitoring reports. The financial assurance shall guarantee payment to a third party, as determined appropriate by the CEMVN in consultation with the IRT, in the event that the Sponsor does not fulfill its obligations to perform, as specified in the MBI. Payment to Sponsor, or if necessary, to the third party as identified by CEMVN, of a specified amount of the financial assurances shall be made upon written notification by CEMVN to the financial institution.

2. To ensure that sufficient funds are available to provide for the perpetual maintenance and protection of the Bank, the Sponsor is establishing the "Long-Term Maintenance and Protection" escrow account. This account will be administered by a federally-insured depository that is "well-capitalized" or "adequately-capitalized" as defined in Section 38 of the Federal Deposit Insurance Act. The Long-Term Maintenance and Protection Account will be established as an integral part of the Long-Term Management Plan. The Long-Term Management needs are defined in the MBI as follows: trespass prevention and enforcement, boundary maintenance, herbivory control and invasive species control. It is projected that the annual costs associated with these activities will be two thousand six hundred sixty five dollars (\$2,665.00). The account will be incrementally funded by depositing a minimum of \$283 into the account per credit/acre sold at the time of credit sale. Once the account is fully funded (\$45,010), no incremental fund per credit sale is required. If Long-term Success Criteria are met prior to fully funding the escrow account, the Sponsor must deposit into the escrow account the difference between the amount determined to be full funding and the account balance. Accrued interest in excess of the value of the fully funded account may only be used for the administration, operation, maintenance and/or other purposes that directly benefit the Bank. The principal shall not be used and shall remain as part of the Bank's assets to ensure that sufficient funds are available should perpetual maintenance responsibilities be assumed by a third party. The Sponsor or long-term steward may withdraw the accumulated interest only with written approval from CEMVN and only to be used to maintain the Bank. The Sponsor shall provide copies of depository account statements to CEMVN upon request and in their monitoring reports.

## **Exhibit 1: Vicinity Map**



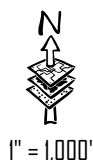
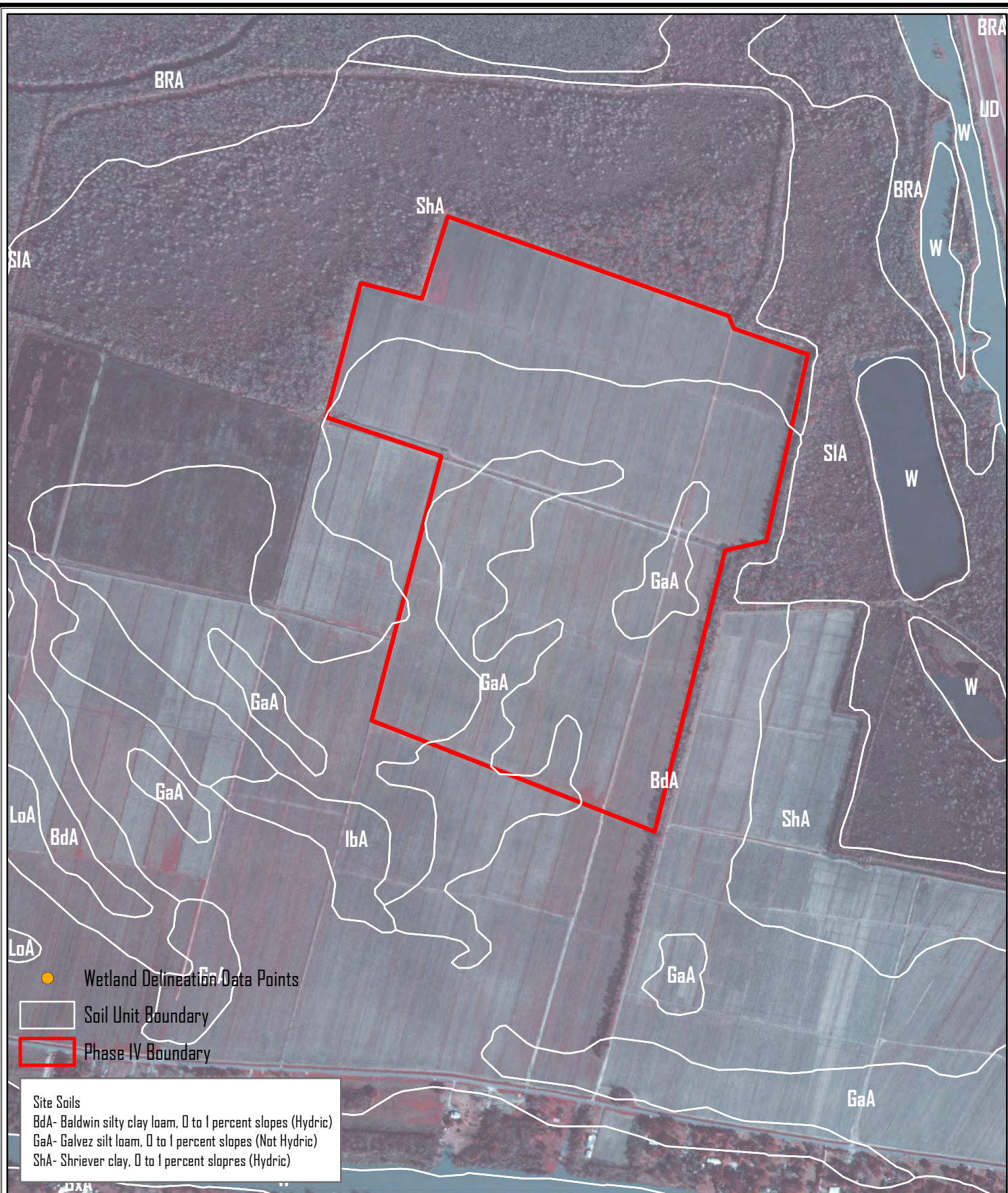


**Vicinity Map**  
Bayou Teche Mitigation Bank Phase IV  
Louisiana Wetlands, LLC  
Sections 42, 66, & 78 T14S-R10E  
St. Mary Parish, LA



## **Exhibit 2: Soils Map**





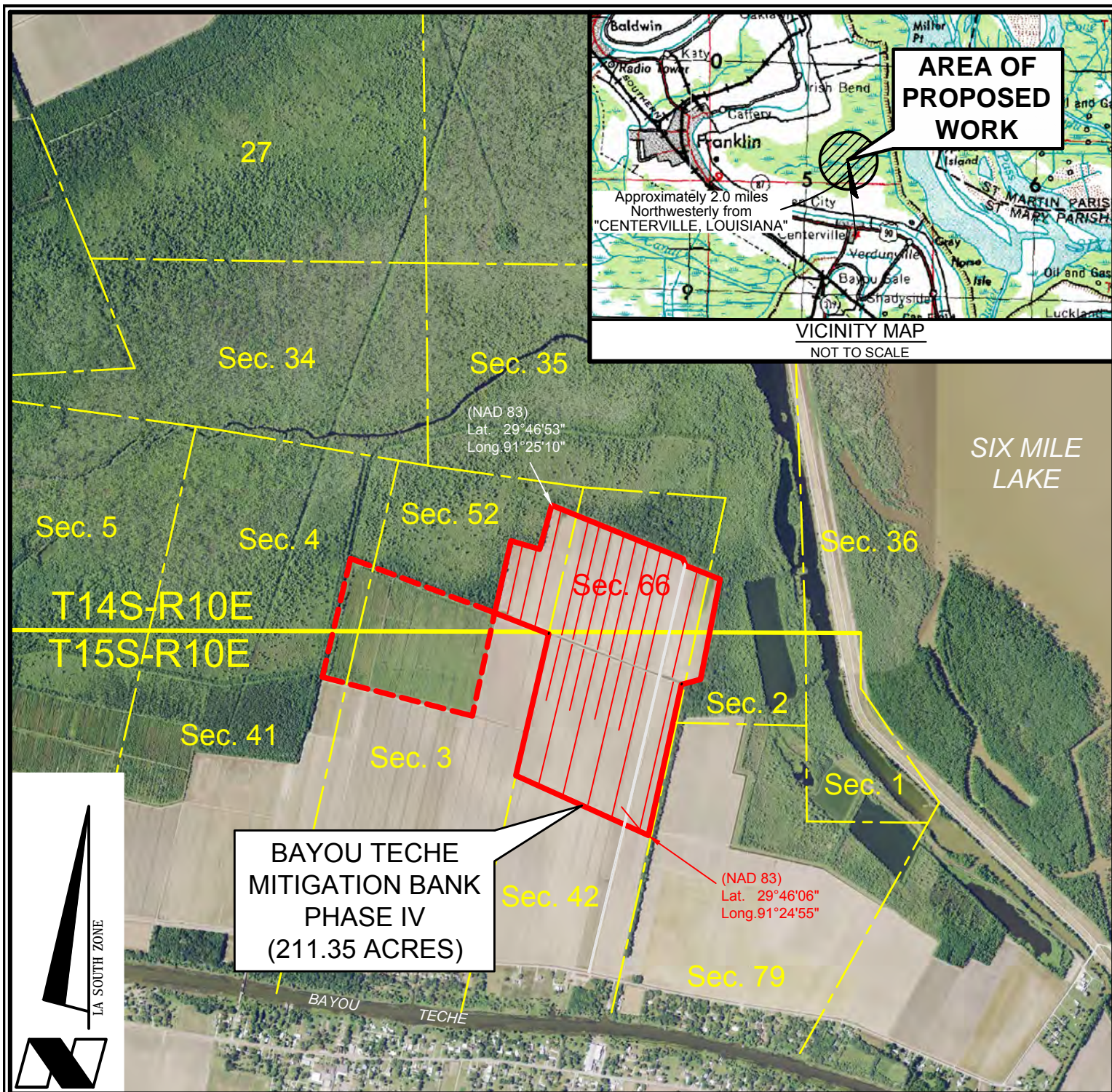
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## Soils Map

Bayou Teche Mitigation Bank Phase IV  
 Louisiana Wetlands, LLC  
 Sections 42, 66, & 78 T14S-R10E  
 St. Mary Parish, LA

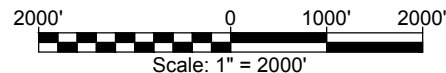
## **Exhibit 3: Location Map & PC Determination**





NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED  
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
ENVIRONMENTAL COMPLIANCE PERMITS

**VICINITY MAP**



## LOUISIANA WETLANDS, LLC

BAYOU TECHE MITIGATION BANK PHASE IV

(211.35 ACRES)

Sections 35, 52 & 66, T14S-R10E & Sections 2 & 42, T15S-R10E

St. Mary Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: KJD

PROJ. MGR.: RLL

REVISED: 01/05/2012

DATE: 12/01/11

SHEET 1 OF 3 SHEETS

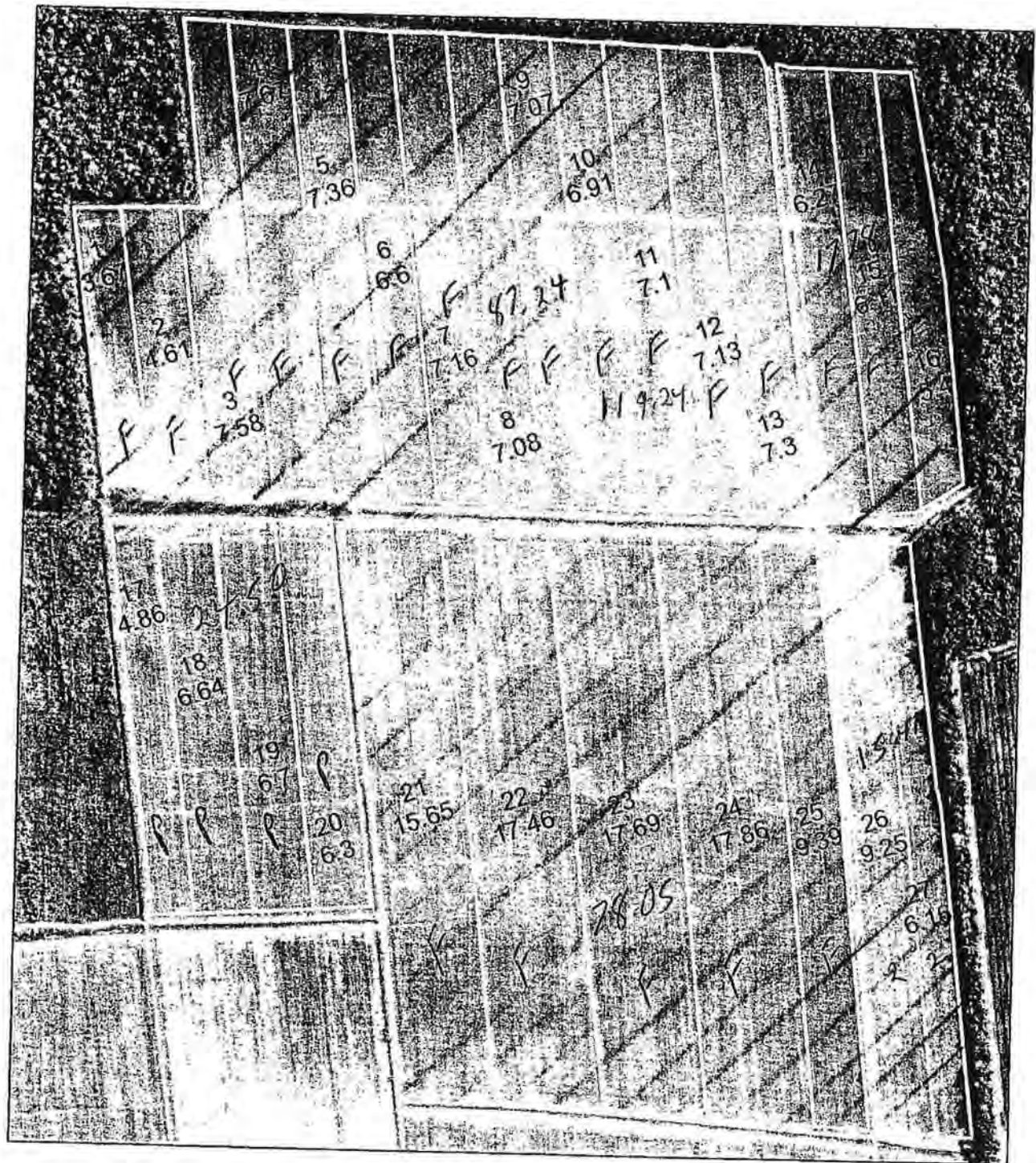
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233.76 Ac

FSN 385 T-728 07 1 of 2  
James J. Bailey, III agt./Mother



Prepared by FSA Date: 1-11-11

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



United States Department  
of Agriculture

Natural Resources  
Conservation Service

NRCS-CPA-026E  
9/2000

**HIGHLY ERODIBLE LAND AND WETLAND CONSERVATION DETERMINATION**

Name Address:	Pontiff Farms, Inc. 2300 Chatsworth Road Franklin, LA 705385106	Request Date:	10/29/01	County:	St. Mary
Agency or Person Requesting Determination:	Farm Service Agency	Tract No:	728	FSA Farm No.:	385

**Section I - Highly Erodible Land**

Is a soil survey now available for making a highly erodible land determination?	Yes
Are there highly erodible soil map units on this farm?	No

Fields in this section have undergone a determination of whether they are highly erodible land (HEL) or not; fields for which an HEL Determination has not been completed are not listed. In order to be eligible for USDA benefits, a person must be using an approved conservation system on all HEL.

Field(s)	HEL(Y/N)	Sodbust(Y/N)	Acres	Determination Date
179-258	N	N	419.2	10/29/01
-	-	-		
-	-	-		
-	-	-		
-	-	-		

The Highly Erodible Land determination was completed in the-Office

**Section II - Wetlands**

Are there hydric soils on this farm?	Yes
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Fields in this section have had wetland determinations completed. See the Definition of Wetland Label Codes for additional information regarding allowable activities under the wetland conservation provisions of the Food Security Act and/or when wetland determinations are necessary to determine USDA program eligibility.

Field(s)	Wetland Label*	Occurrence Year (CW)**	Acres	Determination Date	Certification Date
179-192	PC	N/A	32.9	10/29/01	
193-258	PC/NW	N/A	354.7	10/29/01	
UN-1	NI	N/A	31.6	10/29/01	
-	-				
-	-				

The wetland determination was completed in the -Office It was -mailed to the person on 10/29/01.

Remarks: FSA has no cropping records prior to 1985 on this tract. After viewing areal photography prior to 1985 this tract appears to be cropped.

I certify that the above determinations are correct and were conducted in accordance with policies and procedures contained in the National Food Security Act Manual.

Signature Designated Conservationist	Date
	10/29/01

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).



## **Exhibit 4: Approved Jurisdictional Determination**



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

REPLY TO  
ATTENTION OF

NOV 21 2011

Operations Division  
Surveillance and Enforcement Section

Mr. Brandon Melville  
C.H. Fenstermaker & Associates, Inc.  
135 Regency Square  
Lafayette, LA 70508

Dear Mr. Melville:

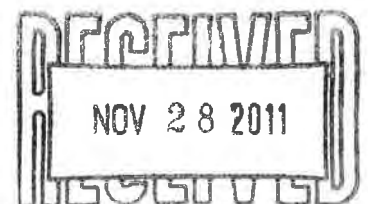
Reference is made to your request, on behalf of Louisiana Wetlands, LLC, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in St. Mary Parish, Louisiana (enclosed map). Specifically, this property is identified as a 233-acre tract proposed as the Bayou Teche Mitigation Bank, Phase IV.

Based on review of recent maps, aerial photography, soils data, and information provided with your request, we have determined that this property is not in a wetland subject to Corps' jurisdiction. A Department of the Army permit under Section 404 of the Clean Water Act will not be required for the deposition or redistribution of dredged or fill material on this site.

You and your client 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. Powell at (504) 862-2241.

This delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in your request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If the property owner or tenant is a USDA farm participant, or anticipates participation in USDA programs, a certified wetland determination should be requested from the local office of the Natural Resources Conservation Service prior to starting work.

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. Pierre Castaing at (504) 862-1726 and reference our Account No. MVN-2011-02672-SG. 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 and return the enclosed Customer Service Survey.

Sincerely,

A handwritten signature in black ink, appearing to read "Pete J. Serio".

 Pete J. Serio  
Chief, Regulatory Branch

Enclosures



U.S. ARMY CORPS OF ENGINEERS

**APPROVED**

JURISDICTIONAL DETERMINATION

**USACE**

I.H. 7NOV11

BY: P. CASTAENG

FOR: MELVILLE

(#MUN-2011-02672-SG)

 = NON-WETLAND / P.C.

Wetland Delineation Data Points

Phase IV Boundary



1" = 1,000'

ESRI Imagery World 20

**Wetland Delineation Map**

Bayou Teche Mitigation Bank Phase IV  
Louisiana Wetlands, LLC  
Sections 42, 66, & 78 T14S-R10E  
St. Mary Parish, LA



## APPROVED JURISDICTIONAL DETERMINATION FORM

### U.S. Army Corps of Engineers

To view the unedited version of the form go to: <http://www.mvn.usace.army.mil/regulatory/finalform.htm>.

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): 11/09/2011**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: MVN-2011-02672-SG**

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

State: LA County/parish/borough: St. Mary City:  
Center coordinates of site (lat/long in degree decimal format): Lat. 29.77500° N, Long. 91.41720° W.  
Universal Transverse Mercator:

Name of nearest waterbody: Unnamed tributary

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A

Name of watershed or Hydrologic Unit Code (HUC): 08080102

☒ 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: 11/07/2011

☐ Field Determination. Date(s):

#### **SECTION II: SUMMARY OF FINDINGS**

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

There **are no** "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]

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

There **are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**SECTION III THRU V.** Not Applicable

#### **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:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☒ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24000 / Centerville.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: WSS.

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): 1995, 1998, 2004, 2005, 2008, 2010.

or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): NRCS / USDA Wetland determination (PC).

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**



## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Brandon Melville	File Number: MVN-2011-02672-SG	Date: <b>NOV 21 2011</b>
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

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

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

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

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

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

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

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

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

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


## **Exhibit 5: Hydrologic Unit Map**

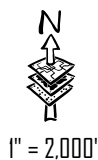




8080101

8080102

 HUC Boundary



2004\_0000

## HUC Map

Bayou Teche Mitigation Bank Phase IV  
Louisiana Wetlands, LLC  
Sections 42, 66, & 78 T14S-R10E  
St. Mary Parish, LA



## **Exhibit 6: Phase IV Restoration Plan**

(NAD 83)  
Lat. 29°46'53"  
Long. 91°25'10"

Internal  
Ditches to be  
Filled

Woods

PROPOSED  
HARDWOOD  
PLANTINGS  
(211.35 Acres)

Sec. 52

Sec. 36

Sec. 66

T14S-R10E

T15S-R10E

Sec. 2

Sec. 1

Existing Mitigation  
Area

Existing Field Road (1.76 Ac.)

Sec. 3

Sugar Cane  
Fields

Sec. 42

(NAD 83)  
Lat. 29°46'06"  
Long. 91°24'55"

Sec. 79

Sugar Cane  
Fields

NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED  
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
ENVIRONMENTAL COMPLIANCE PERMITS

VICINITY MAP

1000' 0 500' 1000'  
Scale: 1" = 1000'

LOUISIANA WETLANDS, LLC

BAYOU TECHE MITIGATION BANK PHASE IV

(211.35 ACRES)

Sections 35, 52 & 66, T14S-R10E & Sections 2 & 42, T15S-R10E

St. Mary Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: KJD

REVISED: 01/05/2012

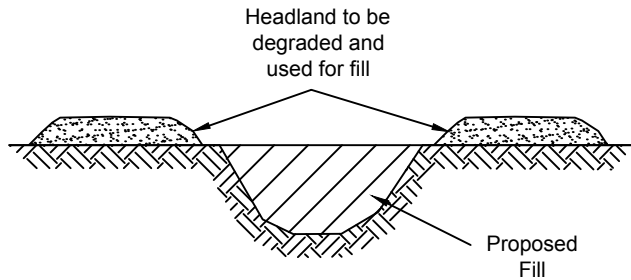
DATE: 12/01/11

PROJ. MGR.: RLL

SHEET 2 OF 3 SHEETS

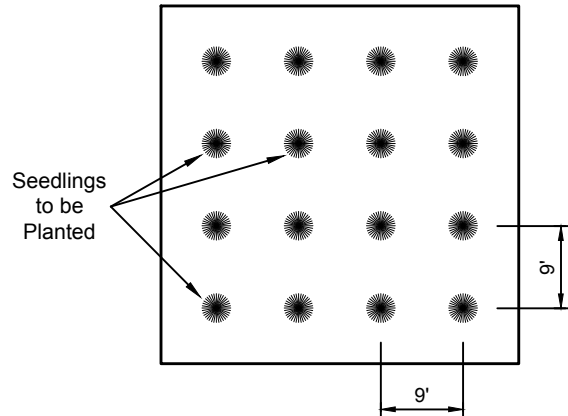
FILENAME: T:\2011\2111273\DWG\Bayou Teche Mitigation Bank Phase IV COE.dwg





### TYPICAL INTERIOR FILLING OF DITCH

No Scale



### TYPICAL PLANTINGS

No Scale

#### NOTES

- 1) A mixture of hard mast and soft mast-producing species will be planted in accordance with the species selection list and target range of percentages for these species.
- 2) Existing land uses will cease on the property. The entire 211.35 acres shall be planted in the non-growing season.
- 3) Areas to be planted during a given year will be prepared by mechanical or chemical means, controlled burning, or combination thereof. Prior to planting, existing crop rows and furrows will be leveled to return the land surface to natural contours. To the extent drainage on adjacent properties is not affected, site hydrology shall be restored through internal ditch closure. Drainage features may be used consistent with maintaining optimum hydrologic conditions for restoration. All scrub/shrub areas will be cut and cleared prior to planting.
- 4) As a general rule, one- to two-year old bare-root seedlings, properly stored and handled to ensure viability, will be planted in the prepared tract during the period of December 15 through March 15 (non-growing season).
- 5) After planting, the site will be maintained as necessary to promote seedling survival, by use of mechanical or chemical controls or some combination, thereof.
- 6) Fill material to be provided by cut/fill operations onsite utilizing crop row/swales and headlands. No offsite fill will be required.

DISCLAIMER: At this time, Fenstermaker & Associates, Inc. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED  
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
ENVIRONMENTAL COMPLIANCE PERMITS

## LOUISIANA WETLANDS, LLC

### BAYOU TECHE MITIGATION BANK PHASE IV

(211.35 ACRES)

Sections 35, 52 & 66, T14S-R10E & Sections 2 & 42, T15S-R10E

St. Mary Parish, Louisiana



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DRAWN BY: KJD

PROJ. MGR.: RLL

REVISED: 01/05/2012

DATE: 12/01/11

SHEET 3 OF 3 SHEETS

FILENAME: T:\2011\2111273\DWG\Bayou Teche Mitigation Bank Phase IV COE.dwg

## **Exhibit 7: Modified Charleston Spreadsheets**

MOD # MCM 2010

**Table 2B: Proposed Restoration/Enhancement Mitigation Worksheet**

Mitigation Project Name:

Bayou Teche Mitigation Bank - Phase IV

**Mitigation Project Size (Acres) Include Wetlands:**

7-Jan-00

**Non-wetlands and Buffer Areas:** 211.4

**Mitigation Project HUC:** 08080102

**Mitigation Project Basin:** Vermilion

**Impacted HUC:** 08080103

**Mitigation Project in the same basin as the impact:** Yes

**Proximity Factor:** 1.0

Comments:

	Factors	Area 1	Area 2	Area 3	Area 4	Area 5
Net Improvement	Mitigation Type	Re-establishment I	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Maintenance/ Management Requirement	Self-Sustaining	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Control	Conservation Servitude	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Temporal Lag	Over 20	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Credit Schedule	Schedule I	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Kind	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Location Relative to Impact	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
Negative Influences on the mitigation site	Commercial/Residential Development	No Impact	No Impact	No Impact	No Impact	No Impact
	Oil & gas activities	No Impact	No Impact	No Impact	No Impact	No Impact
	Size	>500 acres	>500 acres	>500 acres	>500 acres	>500 acres
	Utility Corridors	No Impact	No Impact	No Impact	No Impact	No Impact
	Transportation Corridors	No Impact	No Impact	No Impact	No Impact	No Impact

	Factors	Area 1	Area 2	Area 3	Area 4	Area 5
Net Improvement	Mitigation Type * Maintenance/ Management Requirement	4.0	0.0	0.0	0.0	0.0
	Control	0.4	0.0	0.0	0.0	0.0
	Temporal Lag	-0.3	0.0	0.0	0.0	0.0
	Credit Schedule	0.4	0.0	0.0	0.0	0.0
	Kind	0.0	0.0	0.0	0.0	0.0
	Location Relative to Impact	0.0	0.0	0.0	0.0	0.0
	<b>Subtotal</b>	<b>4.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Negative Influences on the mitigation site	Commercial/Residential Development	0.0	0.0	0.0	0.0	0.0
	Oil & gas activities	0.0	0.0	0.0	0.0	0.0
	Size	0.0	0.0	0.0	0.0	0.0
	Utility Corridors	0.0	0.0	0.0	0.0	0.0
	Transportation Corridors	0.0	0.0	0.0	0.0	0.0
	<b>Sum of negative impacts</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
	Sum of m Factors	4.5	0.0	0.0	0.0	0.0
	Size of Area (Acres)	211.4	0.0	0.0	0.0	0.0
	M × A=	951.1	0.0	0.0	0.0	0.0
Acreage required for Permittee-responsible Mitigation project using required credits calculated in Adverse impact Worksheet.		16.8	0.0	0.0	0.0	0.0

Total Restoration/Enhancement Credits =  $\sum (M \times A) =$

951.1

Total Available including buffers

951.1

Average Credit Per Acre =

4.5

	Buffers	Non-hydric inclusions	Hydric Inclusions
Credits per acre (M)	0.2	0.4	0.6
Size in Acres (A)	0.0	0.0	0.0
M × A =	0.0	0.0	0.0
Credits added to bank =			0.0

## **Exhibit 8: Financial Documents**

Task List	Specification	Number of Units	Unit	Cost	Total Cost
<b>Habitat Restoration</b>	<i>Site preparation</i>				
	Land Preparation - tilling/leveling <i>equipment &amp; labor</i>	212	/acre	25.00	\$5,300.00
	Culvert removal <i>equipment &amp; labor</i>	20	/unit	100.00	\$2,000.00
	<i>Construction</i>				
	Planting <i>equipment, labor &amp; materials</i>	212	/acre	150.00	\$31,800.00
<b>Monitoring/Reporting</b>	<i>Permanent plot establishment</i>				
	Plot establishment <i>labor &amp; equipment</i>	11	/20 acres	250.00	\$2,750.00
	<i>Ground water monitor</i>				
	Piezometer Installation <i>equipment, labor &amp; materials</i>	1	/unit	2,500.00	\$2,500.00
	<i>Field data acquisition (yrs. 1,3,5,10,&amp;15)</i>				
	Quantitative/Qualitative vegetation survey (yrs 1, 3, 5, 10 & 15) Hydrology (yrs. (5,10, & 15) Soil morphology (3, 5,10,&15) <i>equipment &amp; labor</i>	5	/event	1,200.00	\$6,000.00
	<i>Report preparation</i>				
	<i>labor &amp; materials</i>	5	/event	500.00	\$2,500.00
	Aerial photographs (either yr. 3 or 5)	1	/event	2,500.00	\$2,500.00
<b>Maintenance</b>	<i>Survival Survey - (1 yr after planting)</i>				
	Field data acquisition Report Preparation & submission	1	/event	1,200.00	\$1,200.00
	<i>Replanting</i>				
	Planting <i>equipment, labor &amp; materials</i>	70 *	/acre	50.00	\$3,500.00
	<i>Invasive Species Control (Yr. 1,2,5,10, &amp; 15)</i>				
	Invasive Species Control <i>equipment, labor &amp; materials</i>	5	/unit	6,000.00	\$30,000.00
	<i>Fencing &amp; Signage</i>				
	Construction/maintenance <i>equipment, labor &amp; materials</i>				
<b>Miscellaneous</b>					
<i>Labor (credit tracking &amp; reporting)</i>	<i>equipment, labor &amp; materials</i>	15	/unit	100.00	\$1,500.00
* Assume +/- 33% failure rate				Total	\$91,550.00



**BAYOU TECHE MITIGATION BANK**  
**PHASE IV**  
**LONG TERM PROTECTION AND MAINTENANCE**  
**ANALYSIS OF ESCROW ACCOUNT**

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**GENERAL ASSUMPTIONS:**

ANNUAL COSTS TO IMPLEMENT LONG TERM MANAGEMENT PLAN: \$ 2,665.00  
 PLAN PROJECTED TO BE FUNDED BY YEAR 5, WITHDRAWS AFTER YEAR 15  
 EARNING RATE FOR ACCOUNT: 4% ANNUALLY , THE RATE TO BE HELD  
 CONSTANT THROUGHOUT ALLOWING A MARGIN OF DEFENSE AGAINST INFLATION  
 HISTORICALLY INTEREST RATES RISE WITH INFLATION AND THEREFORE  
 THIS IS AN EXTREMELY CONSERVATIVE APPROACH.

<u>YEAR</u>	<u>ANNUAL COSTS</u>	<u>EARNINGS ESCROW ACCOUNT</u>	<u>ESCROW BALANCE A AFTER COSTS AND EARNINGS</u>
<b>5 BEGINNING BALANCE</b>			<b>45,010.00</b>
6		1,800.40	46,810.40
7		1,872.42	48,682.82
8		1,947.31	50,630.13
9		2,025.21	52,655.33
10		2,106.21	54,761.55
11		2,190.46	56,952.01
12		2,278.08	59,230.09
13		2,369.20	61,599.29
14		2,463.97	64,063.26
15		2,562.53	66,625.80
16	(2,665.00)	2,665.03	66,625.83
17	(2,665.00)	2,665.03	66,625.86
18	(2,665.00)	2,665.03	66,625.89
19	(2,665.00)	2,665.04	66,625.93
20	(2,665.00)	2,665.04	66,625.97
21	(2,665.00)	2,665.04	66,626.01
22	(2,665.00)	2,665.04	66,626.05
23	(2,665.00)	2,665.04	66,626.09
24	(2,665.00)	2,665.04	66,626.13
25	(2,665.00)	2,665.05	66,626.18
26	(2,665.00)	2,665.05	66,626.22
27	(2,665.00)	2,665.05	66,626.27
28	(2,665.00)	2,665.05	66,626.32
29	(2,665.00)	2,665.05	66,626.38
30	(2,665.00)	2,665.06	66,626.43
31	(2,665.00)	2,665.06	66,626.49
32	(2,665.00)	2,665.06	66,626.55
33	(2,665.00)	2,665.06	66,626.61
34	(2,665.00)	2,665.06	66,626.68
35	(2,665.00)	2,665.07	66,626.74
36	(2,665.00)	2,665.07	66,626.81
37	(2,665.00)	2,665.07	66,626.88
38	(2,665.00)	2,665.08	66,626.96
39	(2,665.00)	2,665.08	66,627.04
40	(2,665.00)	2,665.08	66,627.12
41	(2,665.00)	2,665.08	66,627.20
42	(2,665.00)	2,665.09	66,627.29
43	(2,665.00)	2,665.09	66,627.38
44	(2,665.00)	2,665.10	66,627.48
45	(2,665.00)	2,665.10	66,627.58
46	(2,665.00)	2,665.10	66,627.68
47	(2,665.00)	2,665.11	66,627.79
48	(2,665.00)	2,665.11	66,627.90
49	(2,665.00)	2,665.12	66,628.02
50	(2,665.00)	2,665.12	66,628.14