



St. Tammany Parish, Louisiana Feasibility Study



Appendix G – Real Estate Plan

March 2024

TABLE OF CONTENTS

Section 1	5
Purpose of the Real Estate Plan	5
Section 2	6
Project Description	6
2.1 STUDY Authorization.....	6
2.2 STUDY AREA	6
2.3 Report Revision HisTORY	7
Section 3	9
Project LERRDs Required.....	9
3.1 West and South Slidell Levee and Floodwall System	9
3.2 Structure Elevations and Floodproofing (Nonstructural).....	18
3.3 Borrow and Compensatory Mitigation.....	21
Section 4	25
Non-Federal Sponsor.....	25
Section 5	26
Estates Required for the Project	26
5.1 Standard Estates for WEST AND SOUTH Slidell Levee AND Floodwall System.....	26
5.1.1 Fee Excluding Minerals (With Restriction on Use of the Surface)	26
5.1.2 Flood Protection Levee/Floodwall Easement.....	26
5.1.3 Road Easement.....	26
5.1.4 Temporary Work Area Easement.....	26
5.1.5 Borrow Easement.....	27
5.2 Standard Estates for Mitigation and Borrow	27
5.2.1 Fee Excluding Minerals (With Restriction on Use of the Surface)	27
5.2.2 Pipeline Easement	27
5.2.3 Road Easement.....	27
5.2.4 Temporary Work Area Easement.....	28
5.2.5 Borrow Easement.....	28
5.3 Non-standard Estate – Nonstructural Project Feature.....	28
Section 6	30
Existing Federal Projects and Ownerships.....	30
Section 7	32
Federally Owned Lands.....	32
Section 8	34
Navigation Servitude	34
Section 9	35

Induced Flooding	35
Section 10	36
Baseline Cost Estimates	36
Section 11	38
Uniform Relocation Assistance (PL 91-646, Title II as Amended).....	38
Section 12	40
Mineral Activities Impacted.....	40
12.1 Oil and Gas Activity.....	40
12.2 Timber/Minerals/Row Crop Activity	40
12.3 Oyster Leases.....	40
Section 13	41
Non-Federal Sponsor Authority to Participate.....	41
Section 14	43
Zoning Ordinances	43
Section 15	44
Real Estate Acquisitions Schedule	44
15.1 Structural Features Acquisitions Schedule.....	44
15.2 Nonstructural Project Features Acquisitions Schedule.....	44
Section 16	46
Facility/Utility Relocations	46
16.1 East/West Slidell Levee/Floodwall Facility and Utility Relocations.....	47
Section 17	54
Hazardous, Toxic, and Radioactive Waste.....	54
Section 18	55
Landowner Concerns	55
Section 19	56
Risk Letter.....	56
Section 20	57
Review and Approval.....	57

LIST OF TABLES

1. Table G:2-1. ROW Areas Required for West and South Slidell Levee and Floodwall	13
2. Table G:2-2. ROW Areas Required for Gates and Pumpstations	13
3. Table G:2-3. ROW Required for Vehicular Ramps.....	15
4. Table G:2-3. Perpetual Work and Staging Areas Required for West and South Slidell Levee and Floodwall System	17
5. Table G:2-4. Perpetual Access Roads Required for West and South Slidell Levee and Floodwall System	17
6. Table G:2-5. Additional Temporary Work/Staging Area Required for West and South Slidell Levee and Floodwall System	18
7. Table G:2-6. Total Areas and Estates required for West and South Slidell Levee and Floodwall System	18
8. Table G:10-1. Estimated Costs for the Recommended Plan.....	37
9. Table G:15-1. Facility and Utility Relocations Required for Slidell Levee/Floodwall	47

LIST OF FIGURES

10. Figure G:2-1. Recommended Plan Measures	7
11. Figure G:2-2. Recommended Plan Measures (Slidell Focus)	9
12. Figure G:2-4. East Focus of South and West Slidell Levee/Floodwall	16
13. Figure G:2-8. Potential Borrow Locations	23
14. Figure G:2-9. Additional Potential Borrow Locations	23
15. Figure G:2-10. M2 Marsh Mitigation Site	24
16. Figure G:2-11. PSR-1 Pine Savanna Mitigation Site	24
17. Figure G:5-1. Identified SELA projects in St. Tammany Parish.....	30
18. Figure G:6-1. Map Showing Western Portion of West and South Slidell Levee/Floodwall and BBMNWR	32

ANNEXES

ANNEX 1	ASSESSMENT OF NON-FEDERAL SPONSOR'S ACQUISITION CAPABILITIES
ANNEX 2	RISK LETTER TO NON-FEDERAL SPONSOR

Section 1

Purpose of the Real Estate Plan

The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division (MVD), New Orleans District (MVN) Real Estate Division has prepared this real estate plan (REP) in support of the Final Integrated Feasibility Report and Environmental Impact Statement (FIFR-EIS) for the St. Tammany Parish, Louisiana Feasibility Study (study). This REP describes the lands, easements, rights-of-way (ROW), relocations, and disposal sites (LERRDs) required for the recommended plan (RP) and the estimated LERRDs costs associated with the implementation and construction of the RP, as described in more detail in the RDIFR-EIS.

The information contained herein is tentative and preliminary in nature, intended for planning purposes only, and is subject to change. Further design optimization and feature prioritization will be performed after project authorization; therefore, this REP may be revised upon further analysis. Detailed maps for access, staging and other specifics relating to project features may not be developed until each of the FRM and CSRM measures undergo more detailed design analysis in the planning, engineering, and design (PED) phase if the project is authorized and funded. This REP supersedes all prior draft REPs associated with the study.

Section 2

Project Description

2.1 STUDY AUTHORIZATION

The study was authorized as a part of WRDA of 2016, Subtitle B, Section 1201(14) and funded by the BBA of 2018. The Bipartisan Budget Act of 2018 (Public Law 115-123) Division B, Subdivision 1, Title IV, appropriated supplemental funds for the study and subsequent guidance authorized the study to be conducted at full Federal expense. An exemption to Section 1001 of WRRDA 2014 requirements was approved by the Assistant Secretary of the Army for Civil Works ASA(CW) in April 2022 in order to complete the complex feasibility study. This study has been undertaken in accordance with Sections 1001 and 1002 of WRRDA 2014, applicable existing USACE civil works regulations, policies, and guidance, and has incorporated SMART planning principles. See MEMORANDUM FOR COMMANDING GENERAL, U.S. ARMY CORPS OF ENGINEERS, SUBJECT: Revised Implementation Guidance for Section 1001 of the Water Resources Reform and Development Act of 2014, Vertical Integration and Acceleration of Studies as amended by Section 1330(b) of the WRDA of 2018, dated 25 March 2019. More information regarding project authorization is provided in the FIFR-EIS, Section 1.2.

2.2 STUDY AREA

The study area encompasses all of St. Tammany Parish, which is approximately 1,124 square miles and located in southeastern Louisiana (see Figure G:2-1). St. Tammany Parish is located on the northeast shore of Lake Pontchartrain and is home to over 258,110 residents. The parish is uniquely located at the crossroads of three interstates (I-10, I-12, and I-59) and transportation waterways to the Gulf of Mexico. The State of Mississippi, with the Pearl River, creates the eastern boundary. Lake Pontchartrain serves as the southern boundary. Tangipahoa Parish is located along the western boundary and Washington Parish is located along the northern boundary.

The Southeastern Louisiana National Wildlife Refuge Complex Headquarters in Lacombe is also located near the southern boundary of the Parish. Tangipahoa Parish is located along the western boundary and Washington Parish is located along the northern boundary. Most of St. Tammany Parish's population resides near the edge of Lake Pontchartrain, and many commute into New Orleans. The larger communities in the study area include Slidell, Mandeville, Covington, Abita Springs, Pearl River, and Madisonville. St. Tammany Parish is the fastest-growing parish in Louisiana and one of the fastest-growing communities in the nation. Major industries in the study area are health care and social assistance, retail trade, professional services, scientific and technical services, construction, finance, and insurance.

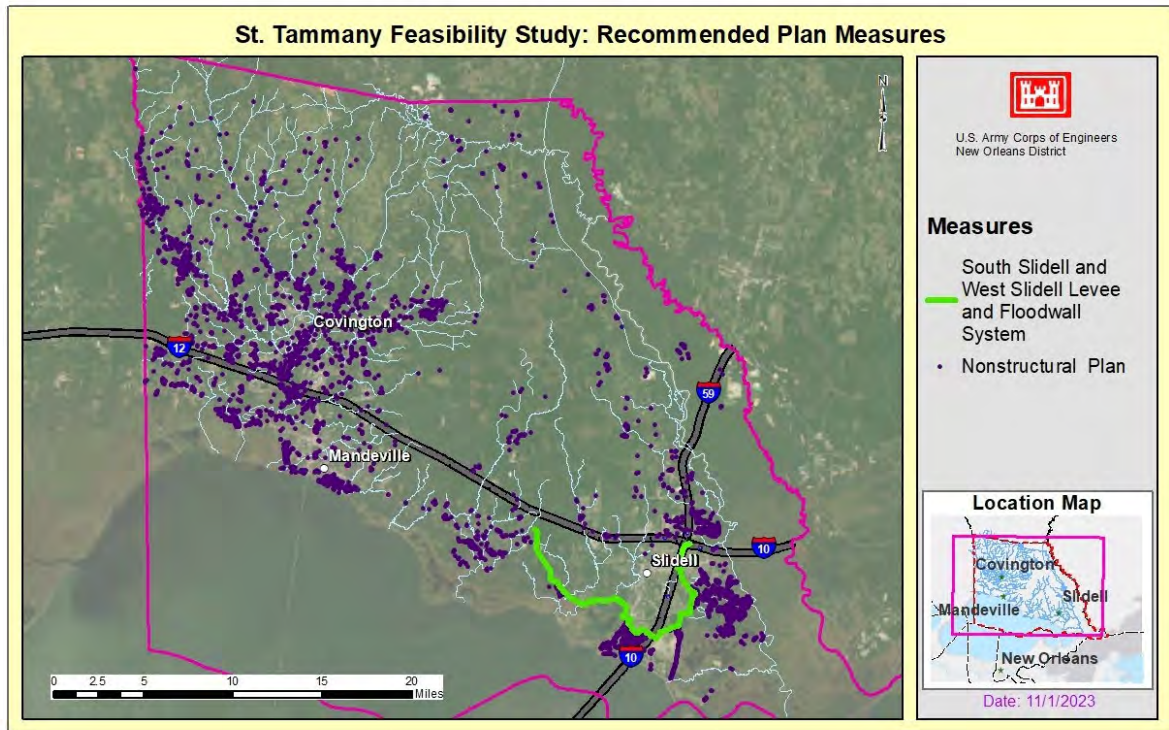


Figure G:2-1. Recommended Plan Measures

2.3 REPORT REVISION HISTORY

A DIFR-EIS containing a Draft TSP was released for 45-day concurrent public, Agency Technical Review (ATR), Independent External Peer Review (IEPR), and legal and policy review in June 2021. The Mile Branch Channel Improvements Measure was optimized after the release of the DIFR-EIS and therefore represents another difference between the Draft TSP and the Optimized TSP. Subsequent to the release of the DIFR-EIS in June 2021, the PDT conducted further analysis of the Mile Branch Channel Improvements Measure of the Draft TSP, including the refinement of the PDT's assumptions and analysis for the replacement of bridges required for this Measure. The DIFR-EIS contained an assumption that there is no existing bridge to connect both sides of the Mile Branch Channel on W. 18th Avenue in Covington and as such, the W. 18th Avenue bridge was eliminated as a required bridge replacement. Further, the DIFR-EIS stated that there was a pedestrian bridge (part of Tammany Trace Bike Trail) that crosses the Mile Branch Channel at W. 27th Avenue and included this as a potential bridge replacement.

In addition, the ROW assumptions for the Mile Branch Channel Improvements Measure were revised, including the identification of staging areas with the assumption that one of the staging areas would become a backwater area after project completion. CEMVN also received information regarding the utilities to be impacted by the Mile Branch Channel Improvements Measure which the PDT used to make assumptions regarding the disposition of utilities and compensability for such utility relocations in further project cost estimating.

The RDIFR-EIS, containing the Optimized TSP, was released for a 45-day public, ATR, and policy review on July 21, 2023. The RDIFR-EIS documented the refinements from the DIFR-EIS and recommended an optimized tentatively selected plan (Optimized TSP) that had been formulated by the PDT based on comments received from the public, USACE ATR review and legal and policy review.

As a result of ATR comments on the RDIFR-EIS related to the Mile Branch Channel Improvements Measure in the Optimized TSP, the PDT conducted an updated economic analysis which resulted in a revised cost estimate (higher implementation costs) that was higher than previously estimated in the RDIFR-EIS. An updated economic analysis was run based on the revised cost estimate, and it was determined that the cost to implement the Mile Branch Channel Improvements Measure exceeded the flood damages avoided and therefore the Mile Branch Channel Improvements Measure was no longer an economically justified measure with a BCR of 0.9. The cost increase for the Mile Branch Channel Improvements measure was due to two factors:

(1) Increase in Cost of Implementation of the Measure.

During the ATR review of the Optimized TSP, a reviewer commented that it is common cost engineering practice to model the third interval in the Cost Risk Analysis (CSRA) for triangular distributions at a lower percentage. The third interval in the risk register for all risk were reduced from 100% to 90%. This increased the contingency on the Mile Branch Channel Improvements measure implementation cost estimate by 11%.

(2) Increase in Cost for Mitigation for the Mile Branch Channel Improvements Measure.

The other increase to the cost for the Mile Branch Channel Improvements measure was due to the fact that the costs of habitat mitigation in the final Mitigation Plan were increased by roughly \$4 million for additional costs to mitigate for fish and wildlife impacts that would result from the implementation of the Mile Branch Channel Improvements Measure.

As a result of the increase in costs, the BCR for the Mile Branch Channel Improvements Measure dropped from a positive BCR to a BCR of 0.9 and was no longer economically justified. Consequently, the Mile Branch Channel Improvements measure was screened and was not carried forward into the RP.

Section 3

Project LERRDs Required

The RP measures with real estate requirements are: 1) the West and South Slidell Levee and Floodwall System; and 2) the nonstructural plan. Additionally, lands are required for borrow material to build the levee and to mitigate environmental impacts caused by the construction of the West and South Slidell Levee and Floodwall System. Below is a general overview of the features of the RP features. Refer to Appendix D – Engineering Appendix for a detailed description of the structural features and Appendix H – Nonstructural Implementation Plan for a detailed description of the nonstructural features.

3.1 WEST AND SOUTH SLIDELL LEVEE AND FLOODWALL SYSTEM

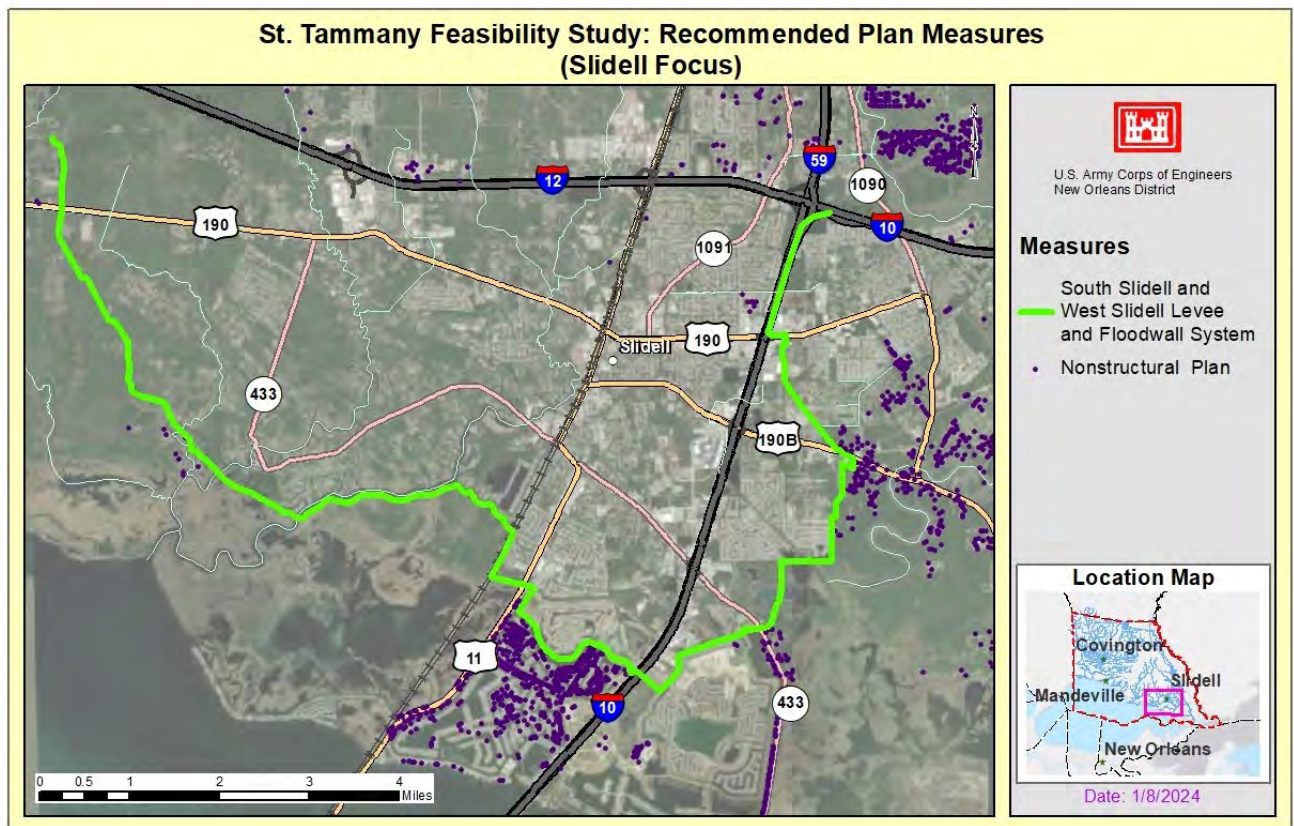


Figure G:2-2. Recommended Plan Measures (Slidell Focus)

The West and South Slidell Levee and Floodwall System (18.5 miles) consists of earthen levees (15 miles), floodwalls (3.5 miles of floodwalls), pump stations (8), sluice gates/lift gates (13), vehicular floodgates (18), pedestrian floodgate (1), railroad gate (1), and road ramps (6). Appendix D: Engineering provides levee, floodwall and structure dimension and typical segments. In addition to numerous temporary work/staging areas required for initial

construction of the system as outlined below, eight areas are required in perpetuity for initial construction, future levee lifts and operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). Although most areas will have access from nearby public roadways, four perpetual access roads are also required. This levee alignment would require 7,239,000 cubic yards of fill (borrow material) (includes 30 percent contingency).

The system would impact approximately 153 private landowners, and, additionally, four private properties to be acquired for a proposed land exchange with United States, Department of Interior, United States Fish and Wildlife Service (USFWS) for the lands required for the project located in the Big Branch Marsh National Wildlife Refuge, and an estimated 22 structures under private ownership are located within, or are directly affected by, the right of way (ROW) required for the system.

Required land types for the levee/floodwall system include rural wetlands, submerged water bottoms, rural residential acreage, residential lots, institutional use (school), highway commercial, and lands currently encumbered and utilized for roadways, railroads, waterways, utilities, and existing flood risk reduction levees. Affected private ownership structures include single-family residences, manufactured homes, boat storage structures, a small industrial building, carwash, restaurant, and gas station/convenience store.

From west to east, the West and South Slidell Levee and Floodwall System is briefly described as follows: Starting from the western end, the levee/floodwall system begins as a levee just south of Shannon Drive in Lacombe running southeastward to US Highway 190. A vehicular ramp is utilized for the US Highway 190 crossing and the levee proceeds southward to the Tammany Trace Bike Trail. A pedestrian gate and sluice gate are used for the Tammany Trace crossing and the levee proceeds southeastward crossing S. Tranquility Road via a vehicular gate continuing southeastward to and along CC Road converting to a floodwall near the western end of W. Doucette Road. Just southwest of W. Doucette Road the floodwall transitions back to earthen levee and proceeds in a southeastward direction to just northwest of Bayou Paquet Road where it transitions to a floodwall along the western side of 32365 Bayou Paquet Road.

Before crossing Bayou Paquet Road, the system transitions to an earthen levee using a vehicular floodgate to cross the roadway and continues as a levee to Bayou Paquet. A navigable floodgate with pumpstation is utilized for crossing the bayou connecting to a floodwall continuing southeastwardly until nearing its crossing of Mayer Drive where it transitions to an earthen levee. A vehicular gate is utilized to cross Mayer Drive and the levee continues westwardly to Bayou Liberty where a navigable floodgate with pumpstation is utilized for the crossing of the bayou.

After crossing the bayou, the system enters the Big Branch Marsh National Wildlife Refuge and continues as an earthen levee in a southeastward direction to Bayou Bonfouca just south of 1056 Peninsula Drive in Slidell. The system again utilizes a navigable gate with pumpstation to cross Bayou Bonfouca, then proceeds easterly along the south side of Bayou Bonfouca to the Norfolk Southern Railway across from Sun Valley Drive and the Delwood pumpstation.

A railroad floodgate is used for the railroad crossing, then the system transitions to a floodwall continuing southwestward and reverts back to an earthen levee integrating with an existing

levee along the railway at the rear of the First Baptist Christian Church and School facility located at 4141 Pontchartrain Drive (US Highway 11) in Slidell.

The levee follows the existing levee eastward to Pontchartrain Drive and crosses same utilizing a vehicular gate and continues as an earthen levee along the north side of the Schneider Canal. The existing Schneider Canal pumpstation is utilized as the crossing of the canal and the system crosses Oak Harbor Boulevard using a vehicular ramp and continues as integrated with the Oak Harbor subdivision levee crossing Islander Drive using a vehicular ramp, and Mariners Cove Boulevard, Oak Harbor Boulevard, and Country Club Drive using vehicular gates, then continues southeastward as integrated with the existing levee crossing Grand Champions Lane using a vehicular ramp.

The system continues to follow the existing Oak Harbor levee alignment and makes slight jog northeastward along the west side of Interstate 10 to align with the existing Lakeshore Estates levee on the opposite side of I-10. A vehicular ramp is utilized for the I-10 crossing and the system then integrates with the existing Lakeshore Village levee system which turns northeastward $\pm 1,400$ ft southeast of I-10. It crosses Lakeshore Village West Boulevard utilizing a roadway ramp and continues generally northeastward incorporated with the existing Lakeshore Village levee then leaves the existing levee system and briefly transitions to a floodwall then back to an earthen levee along the southern property line of 55481 LA Highway 433 (Old Spanish Trail).

The levee crosses LA Highway 433 utilizing a vehicular gate and briefly transitions to a floodwall for approximately 450 ft then transitions back to an earthen levee and continues northeastward along the west side of Nunez Road until the end of the roadway then continues northward until joining with the existing Kings Point Subdivision levee system behind 1410 and 1414 Denmark Street.

The levee briefly follows the Kings Point levee eastward then continues eastward crossing the W-14 canal using a navigable gate with pumpstation then again integrates with the Kings Point levee system and turns northward until just west of Hardin Road and the southern property lines of 57045 Hardin Road and 57042 Allen Road where a sluice gate is used where the levee turns northeastward following along the west side of Hardin Road.

Once the levee enters the property located at 57151 Hardin Road, it takes a more northward turn running along the rear of properties fronting Belair Drive to the southern property line of an electric substation along the south side of U.S. Highway 190 Business (Fremeaux Avenue). At this point, the system transitions into a floodwall and turns eastward then northward around the Cleco substation property running along the west side of Hardin Road, then northwestward along the south side of US Highway 190-Business. A vehicular gate is provided along the west side of Hardin Road for substation access. The floodwall continues northwestward along the south side of US Highway 190-Business until utilizing a vehicular gate to cross the highway near the east side of an established Entergy overhead electric utility corridor. The floodwall continues northwestwardly, first along the north side of the highway, then along the west side of the utility corridor until just south of S. Holiday Drive.

As the floodwall approaches S. Holiday Drive, it crosses to the eastern side of the utility corridor and continues northwestward crossing S. Holiday Drive and N. Holiday Drive using vehicular gates, then follows the eastern side of Carol Drive and Yaupon Drive northward

crossing Jaguar Drive, Natchez Drive, Kisatchie Drive, and Manzella Drive using vehicular gates.

After Manzella Drive, the floodwall turns eastward for a short distance along the north side of the roadway, then turns northward towards U.S. Highway 190 (Gause Boulevard) and crosses the highway utilizing vehicular gate. After crossing the highway, the floodwall turns westward along the north side of US Highway 190 crossing multiple business driveways and an Interstate 10 Service Road. Two vehicular gates will be used to cross a private road and the I-10 Service Road. Two private business access drives along the north side of Gause Boulevard will need to be eliminated.

After crossing the I-10 Service Road, the system continues as a small levee curved northward then turns west using a vehicular ramp to cross the I-10 eastbound on-ramp and connects with the east side of the earthen I-10/Highway 190 overpass at which point is the termination of the levee/floodwall system. Additionally, two sluice gates with pumpstations are needed north of this levee/floodwall termination point; one at I-10 and the Reine Canal, and another at I-10 and the French Branch waterway.

Levee sections have ROW widths of 300 ft or 160 ft depending on the needed height of the levee in the area. Floodwall sections have ROW widths of 80 ft, save for the section along the north side of Gause Boulevard which will have a ROW width of 50 ft. The total land area required in perpetuity for the levee/floodwall system is approximately 467.25 acres and the total land area for its needed temporary work and staging areas is approximately 58.25 acres.

Temporary and permanent work/staging areas will be needed in many places along the West and South Slidell Levee and Floodwall System alignment. Trees may be removed, and if necessary, crushed stone may be placed in the work/staging area prior to use. After use of temporary work/staging areas, the areas will be returned to their pre-project conditions.

Potential borrow sites for fill material have been identified, but a determination of exact locations has not been made. This information will be refined during PED.

Access to project areas is available using public roadways and the perpetual road easement areas to be acquired.

Within the western portion of the West and South Slidell Levee and Floodwall System, approximately 110 acres of required ROW for the West and South Slidell Levee and Floodwall System is located within the boundaries of the Big Branch Marsh National Wildlife Refuge. A fee, less minerals, interest land exchange between the non-Federal sponsor (NFS) and USFWS resulting in a net benefit to the Refuge is required to offset the lands required for the project within the refuge. Refer to Section 5, Existing Federal Projects and Ownerships, for more information. The NFS would acquire authorization for entry for construction of project features upon lands owned by state, parish, or city governments. The following tables show the approximate acreages and estates comprising the LERRDs required for the structural features of the West and South Slidell Levee and Floodwall System. The following tables outline the real property areas and interests required from private landowners for the West and South Slidell Levee and Floodwall System and their general locations.

Table G:2-1. ROW Areas Required for West and South Slidell Levee and Floodwall

Levee/Floodwall Easement Areas	Acres
West Slidell Levee	270
West Slidell Floodwall	4
South Slidell Levee	120
South Slidell Floodwall	23
TOTAL	417

Table G:2-2. ROW Areas Required for Gates and Pumpstations

Gate Structures Required Areas (Acres)	Permanent Structure (Fee Estate)	Perpetual Work/Staging Area (Fee Estate)	Temporary Work/Staging Area Easement
Shannon Dr Sluice Gate	---	1.25	0.75
Tammany Trace Pedestrian Gate	---	1.50	0.75
Tammany Trace Sluice Gate	---	1.25	0.75
Tranquility Rd Vehicular Gate	---	---	0.75
Sluice Gate #7	---	1.25	0.75
Sluice Gate #6	---	1.25	0.75
Bayou Paquet Rd Vehicular Gate	---	---	0.75
Bayou Paquet Navigation Gate & Pumpstation	1.25	---	0.75
Mayer Dr Vehicular Gate	---	---	0.75
Bayou Liberty Navigation Gate & Pumpstation	8	---	4
Bayou Bonfouca Navigation Gate & Pumpstation	8	---	4

Sluice Gate #2	---	1.25	0.75
Railroad Gate	---	---	0.75
Hwy 11 Vehicular Gate	---	---	0.75
Mariners Cove Blvd Vehicular Gate	---	---	0.75
Oak Harbor Dr Vehicular Gate	---	---	0.75
Oak Harbor CC Vehicular Gate	---	---	0.75
Old Spanish Trail Vehicular Gate	---	---	0.75
W-14 Canal Navigation Gate & Pumpstation	1.25	---	0.75
Sluice Gate #8 & Pumpstation	1.25	---	0.75
Hardin Rd Substation Vehicular Gate	---	---	0.75
Hwy 190-B Vehicular Gate	---	---	0.75
S. Holiday Dr Vehicular Gate	---	---	0.75
N. Holiday Dr. Vehicular Gate			0.75
Jaguar Dr Vehicular Gate	---	---	0.75
Sluice Gate #10	---	1.25	0.75
Natchez Dr Vehicular Gate	---	---	0.75
Kisatchie Dr Vehicular Gate	---	---	0.75
Manzella Dr Vehicular Gate	---	---	0.75
Gause Blvd Vehicular Gate	---	---	0.50
Private Rd Vehicular Gate	---	---	0.50

I-10 Service Rd Vehicular Gate	---	---	0.50
Reine Canal Sluice Gate & Pumpstation	1.25	---	0.75
French Branch Sluice Gate & Pumpstation	1.25	---	0.75
TOTALS	22.25	9.00	31.25

Table G:2-3. ROW Required for Vehicular Ramps

Temporary Work/Staging Area for Road Ramps	Temporary Work/Staging Area Easement Acres
Hwy 190 Ramp	0.50
Oak Harbor Blvd Ramp	0.50
Islander Dr Ramp	0.50
Grand Champions Ln Ramp	0.50
I-10 Ramp	24 ¹
Ramp for I-10 On-Ramp	0.50
TOTAL	26.50

¹ Within existing Interstate ROW.

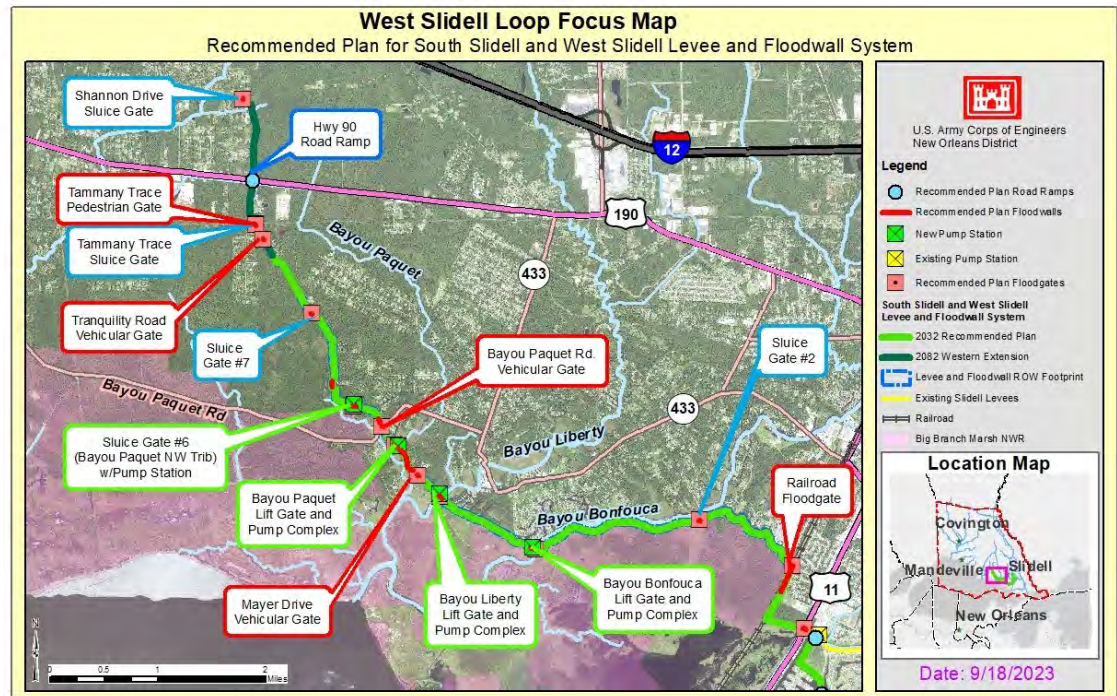


Figure G:2-3. West Focus of West and South Slidell Levee and Floodwall

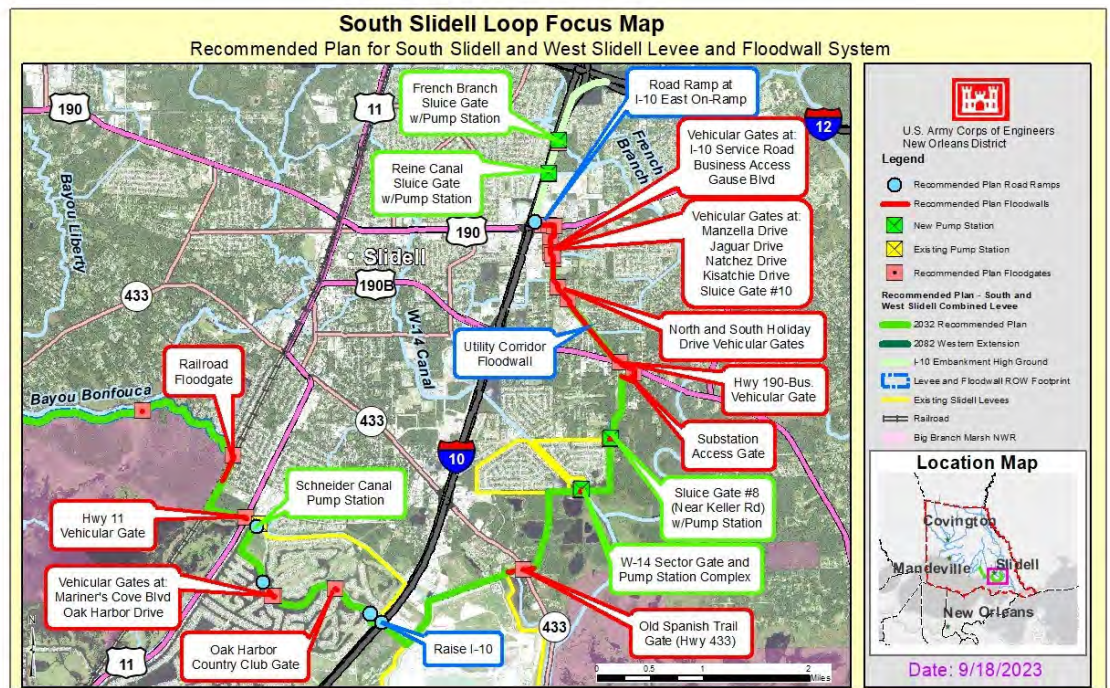


Figure G:2-4. East Focus of West and South Slidell Levee and Floodwall

Table G:2-3. Perpetual Work and Staging Areas Required for West and South Slidell Levee and Floodwall System

Perpetual Work/Staging Areas	Acres (Fee Interest)
Western Extension	2.00
West Slidell Work/Staging Area	2.12
Bayou Paquet/ Liberty Levee	2.05
Between Bayou Liberty and Bayou Bonfouca	2.14
Along Bayou Bonfouca/Southside levee	2.00
Oak Harbor	2.00
South Slidell Work/Staging Area #1	2.00
South Slidell Work/Staging Area #2	2.10
TOTAL	16.41

Table G:2-4. Perpetual Access Roads Required for West and South Slidell Levee and Floodwall System

Perpetual Access Roads	Perpetual Road Easement Acres
Sluice Gate #6	0.50
Bayou Paquet Navigation Gate & Pumpstation	0.24
Railroad Gate & Southshore of Bayou Bonfouca	0.10
W-14 Canal Navigation Gate & Pumpstation	1.75
TOTAL	2.59

Table G:2-5. Additional Temporary Work/Staging Area Required for West and South Slidell Levee and Floodwall System

Floodwall Temporary Work/Staging Area	Temporary Work/Staging Area Easement Acres
Utility Corridor	0.50

Table G:2-6. Total Areas and Estates required for West and South Slidell Levee and Floodwall System²

Levee/Floodwall System Features	Estate	Acres
Levee/Floodwall	Perpetual Flood Protection Levee/Floodwall Easement	417
Flood Gates & Pump Stations	Fee, Excluding Minerals	22.25
Permanent Work/Staging Areas	Fee, Excluding Minerals	25.41
Temporary Work/Staging Areas	Temporary Work Area Easement	58.25
Borrow Areas	Fee or Perpetual Borrow Easement	240
Permanent Access Roads	Perpetual Road Easement	2.59
Mitigation Areas (2)	Fee, Excluding Minerals	266
	TOTAL	1,031.50

There are existing improvements located within the preliminary ROW required for the West and South Slidell Levee and Floodwall System or construction and maintenance of same. Efforts will be made to avoid existing improvements in PED of the system. Residential and non-residential relocations are anticipated. Existing improvements preliminarily identified as being within the required ROW for the levee/floodwall system and potentially needing to be relocated include approximately eleven (11) single-family residences, three (3) manufactured homes, a warehouse building, restaurant, gas station/convenience store, a carwash facility, and various miscellaneous site improvements.

3.2 STRUCTURE ELEVATIONS AND FLOODPROOFING (NONSTRUCTURAL)

USACE, MVD, and MVN have prepared a NS implementation plan, which provides details regarding the method of implementation (Refer to Appendix H). An overview of the Nonstructural plan and implementation criteria, as discussed in Appendix H, is also included below in this REP.

² Compilation of Tables G:2-1 through G:2-5.

The NS measure of the RP consists of implementing floodproofing measures to reduce the risk of flood damages to residential and non-residential structures caused by riverine, rainfall, hurricane, and storm surge in St. Tammany Parish, Louisiana (both FRM and CSRM). Detailed plans and specifications for implementing NS measures are still in development as of this writing and will be finalized as part of the PED phase of the project. The PED phase occurs after Congress authorizes the RP. Private landowner participation for the NS plan is assumed at 100 percent and is voluntary.

Floodproofing means any combination of structural and nonstructural additions, changes, or modifications to structures which reduce or eliminate the risk of flood damage to an improved real property, its related mechanical systems, and contents. The primary goal of the NS plan is to reduce flood risk for structures that are outside of the influence area of the structural features proposed as part of the RP and have a first-floor elevation at or below the 50-year floodplain, based on hydrologic conditions predicted to occur in 2032 (the beginning of the 50-year period of analysis).

Using National Structure Inventory version 2.0 for the portions of the study area impacted by CSRM and FRM, an assessment of at-risk properties has identified a total of 6,410 total structures (5,583 residential, 827 non-residential) that appear to meet the preliminary eligibility criteria for participation in the project. Additional structure-specific analysis will be performed during PED to determine final eligibility and the most appropriate and cost-effective floodproofing measures to be employed including analysis of elevations and floodproofing alternatives. Property owners who have preliminarily eligible structures that wish to participate in the floodproofing measures will be required to apply for the program and provide a right-of-entry to their property.

The NS plan consists of the following flood damage risk reduction measures, which may be refined as additional data is developed or becomes available. Additional information regarding other NS measures may be added, as appropriate, as the NS plan is refined.

1. Elevation of eligible residential structures to the 100-year base flood elevation (BFE) based on year 2082 hydrology. Elevations will not exceed 13 feet. If after completion of the investigation of the property, USACE determines that the structure is eligible for elevation, the entire foundation of the structure will be lifted and placed on a new foundation (i.e., columns, piers, posted or raised foundation walls) so that the lowest habitable finished floor is at or above the 100-year BFE. All utilities and mechanical equipment, such as air conditioners and hot water heaters, will also be raised to or above this elevation. Property owners may choose to raise the structure, utilities, and/or mechanical equipment in excess of the predicted 2082 100-year BFE; however, costs attributable to elevations in excess of the minimum requirements set forth herein are not eligible and must be borne solely by the property owner. Tenants of structures that will be elevated, who are temporarily displaced by the project implementation, are eligible for certain benefits in accordance with Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Projects of 1970, Public Law 91-646 (P.L. 91-646). Property owner/occupants of eligible residential structures who willingly participate in the residential elevation program are not considered displaced persons, and therefore, may not be entitled to receive relocation assistance benefits.

2. Dry floodproofing of eligible non-residential structures to make the structure watertight below the BFE to prevent flood waters from entering, which may include one or more of the following methods: Sealing all areas of a structure up to a maximum of approximately 3 feet above ground level to reduce damage caused by flooding by making walls, doors, windows, and other openings resistant to penetration by water. Walls are coated with sealants, waterproofing compounds, or plastic sheeting. Back-flow from water and sewer lines is prevented by installing mechanisms such as drain plugs, standpipes, grinder pumps, and back-up valves. Openings, such as doors, windows, sewer lines, and vents, may also be closed temporarily with sandbags or removable closures, or permanently sealed. Dry floodproofing will be completed on eligible structures at or below 3 feet depth in based on hydrologic conditions predicted to occur in 2032 (the beginning of the 50-year period of analysis).

Figure G:2-7 below shows an overview of the locations of properties that may be preliminarily eligible for participation in the nonstructural program within the study area.

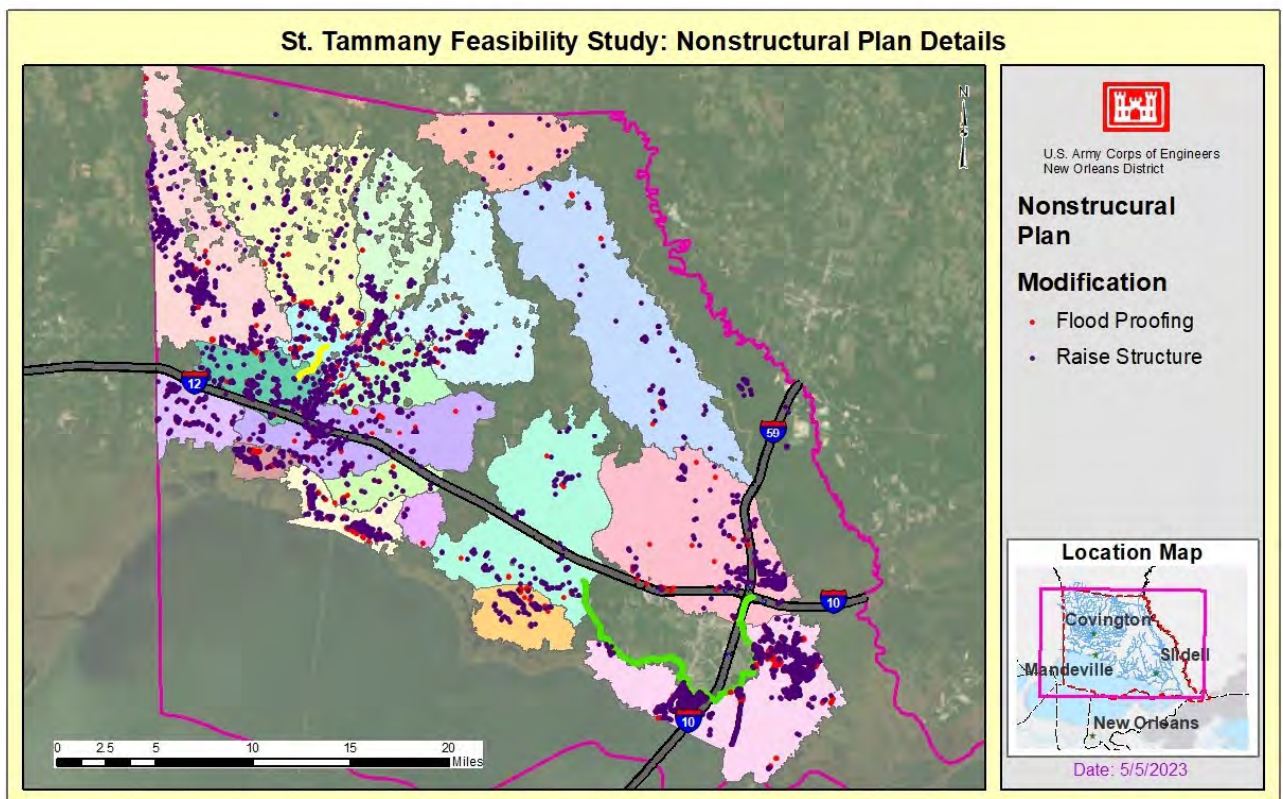


Figure G:2-7. Nonstructural Measure Locations

It is assumed that all eligible properties have legal access by way of public streets or existing public ROW. Further, it is assumed that residential and non-residential properties participating in the program will have adequate site area to accommodate the staging of required materials and equipment. For the purposes of this REP, the assumption is that no further real estate

rights need to be acquired for access to the properties or staging. Should additional ROW be necessary, standard temporary work area or access easements could be acquired.

It is anticipated that implementation of the NS plan will occur over an approximate 7-year period. However, the time frame is highly dependent upon the number of eligible structures, the number of landowners electing to receive NS measures, and the amount of funding allocated in any given year.

Further assessments will be performed on the NS component during the PED as the engineering modeling is refined, which will include further assessment of the relocation measures. The NS analysis was based on the portions of the study area impacted by CSRM and FRM associated with the future without project condition.

3.3 BORROW AND COMPENSATORY MITIGATION

Borrow material for the West and South Slidell Levee and Floodwall System would be obtained from five sites. Two sites in Mississippi (MS-1 and MS-2) are commercially-operating borrow pits. The remaining three sites are STP-5, STP-6, and STP-9. More information regarding the selection of borrow sources can be found in Appendix C: Environmental.

The compensatory Mitigation Plan to satisfy mitigation requirements resulting from the construction of the RP includes restoration of degraded wet Long-leaf Pine Savanna Forest within the Big Branch Marsh National Wildlife Refuge (PSR-001), marsh restoration on private ownerships within the Refuge boundary (M2), and the purchase of mitigation bank credits. The PSR-001 Pine Savanna Forest restoration is planned for an approximately 50-acre site within the Big Branch Marsh National Wildlife Refuge located near the south side of Bayou Bonfouca, approximately 1.25 miles west of the Norfolk Southern railway and Pontchartrain Drive (US Highway 11), and north of the Lake Pontchartrain shoreline in Slidell. The restoration includes eradication of invasive species, removal of undesirable hardwood species, and reintroduction of fire across the entire site. An access road would be established to the site either from Sun Valley Drive crossing the railway, or from US Highway 11 and the existing Slidell-Oak Harbor levee and across the railway. A 15-foot-wide perimeter access road around the site would also be constructed. Once across the railroad, access to the mitigation site will be via an existing dirt road generally traversing in a westerly direction approximately 1.8 miles. A staging area may be established within an existing gravel area just east of the railroad crossing, or in a location of lesser real estate or environmental impacts. An estimated one private ownership and two (2) public ownerships will be impacted. A special use permit from the USFWS would be needed for the work and access on the BBMNWR. A road easement and a work area temporary easement would be required of the other affected ownerships.

The M2 marsh restoration site is planned for an area within the acquisition boundary of the BBMNWR and consists of approximately 190 acres of mostly open water located west of Lake Road and north of Lake Pontchartrain in the Lacombe area of St. Tammany Parish. An estimated five (5) private ownerships and one public ownership will be impacted. This marsh creation work will require approximately 2,200,000 cubic yards of borrow material sourced from within Lake Pontchartrain approximately 2,000 feet off the northern shoreline southwest of the end of Lake Road. This is a State of Louisiana claimed water bottom which will be brought to the project without the benefit of credit. Therefore, there is no necessity to invoke the navigational servitude for this project feature.

A corridor containing approximately 6.75 acres (7,340-ft by 40-ft) located mostly within Lake Pontchartrain and the Lake Road borrow canal, will be used to pipe the needed borrow material to the marsh creation site area and for water access to the project areas. A temporary work area easement and/or pipeline easement will be required of the other affected ownerships for the corridor. The temporary work area/pipeline corridor will be accessible from the west side of Lake Road. The M2 site is to be acquired by the NFS, as the NFS is responsible for acquiring all LERRDs.

During PED, more precise wetland value assessments (WVAs) will be performed in coordination with the USFWS to refine mitigation requirements and specific mitigation project designs will be completed. The estimated real estate costs for mitigation herein include only the two restoration sites and not the costs of purchasing mitigation bank credits. Mitigation bank credits will be purchased for riparian habitat and private Pine Savanna habitat impacts. Preliminary estimates indicate the need for mitigation bank credits to offset 23 average annual habitat units (AAHUs) of riparian impacts and 67 AAHUs of Pine Savanna impacts.

The PDT has preliminarily identified multiple borrow sites which could be used as sources for the material required for the West and South Slidell Levee and Floodwall System. Specific borrow sites to be utilized will be selected after more investigations into the borrow sites can be completed during PED. Acreages and costs for borrow easement lands have been estimated based on the quantity of material needed for the project and an approximate average acreage value of the identified sites. See Appendix B – Plan Formulation for additional details on the potential borrow sites identified for the project.

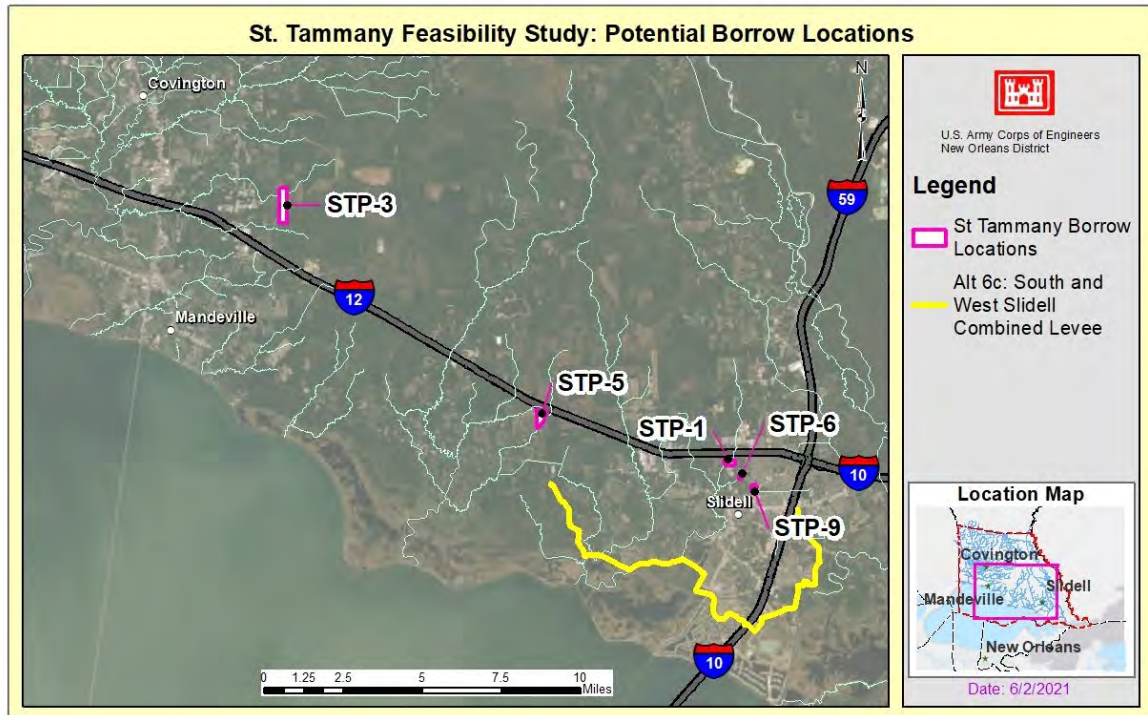


Figure G:2-8. Potential Borrow Locations

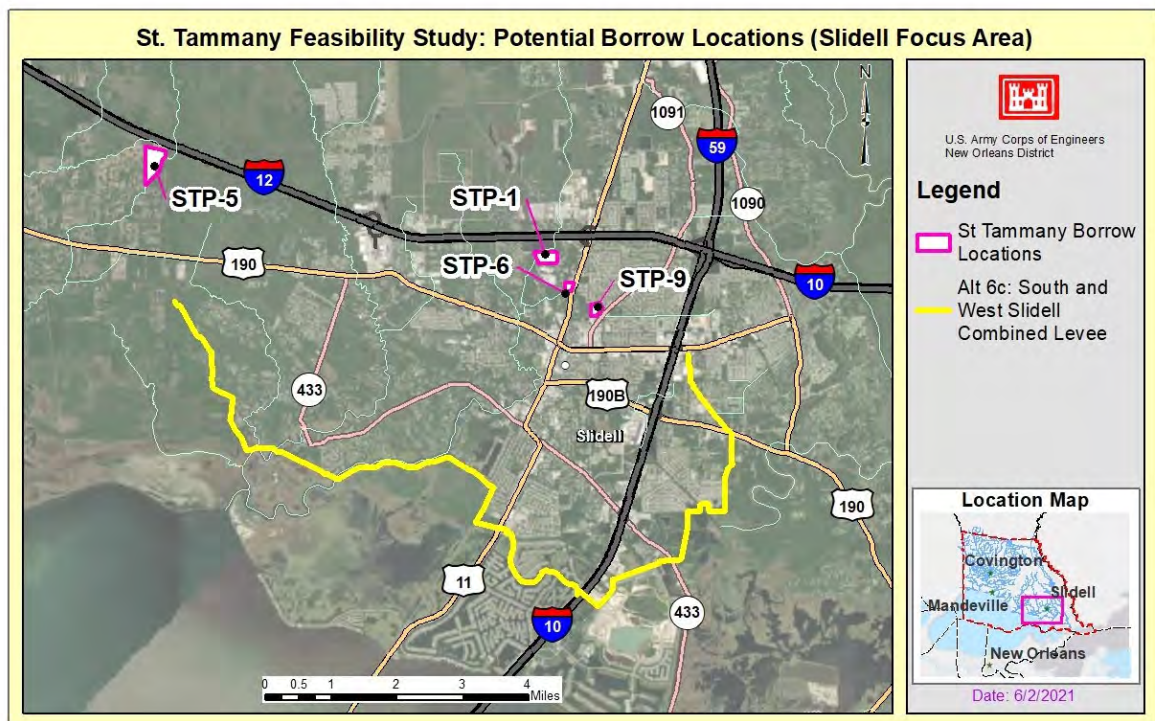


Figure G:2-9. Additional Potential Borrow Locations



Figure G:2-10. M2 Marsh Mitigation Site



Figure G:2-11. PSR-1 Pine Savanna Mitigation Site

Section 4

Non-Federal Sponsor

The NFS for the project is the Coastal Protection Restoration Authority Board of Louisiana (CPRAB). CPRAB will be the NFS for the design, construction; and OMRR&R of the project. CPRAB as the NFS, is charged, among other things, with responsibility for the provision of all LERRDs, including those requiring relocations under P.L. 91-646, the borrowing of material, and the disposal of dredged or excavated material; performing or ensuring the performance of all utility/facility relocations; and constructing all improvements required on LERRDs as determined by the Government to be required or to be necessary for the construction and OMRR&R of the project. Although CPRAB does not have the authority to acquire and hold lands, its implementation and enforcement arm, the Coastal Protection and Restoration Authority (CPRA) has authority to acquire and hold real property and other property rights.

As the NFS for previous and current USACE projects, CPRAB, acting through CPRA, has been found to be fully capable of acquiring LERRDs, based on its authority to perform acquisitions, as well as its authority to partner with local agencies (See: La R.S. 49.214.1, *et seq.*).

Section 5

Estates Required for the Project

5.1 STANDARD ESTATES FOR WEST AND SOUTH SLIDELL LEVEE AND FLOODWALL SYSTEM

The following standard estates would be required from public and private landowners. Temporary estates have been estimated as required for five (5) years.

5.1.1 Fee Excluding Minerals (With Restriction on Use of the Surface)

The NFS shall acquire fee simple title to the land, subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; excepting and excluding all oil and gas in and under said land and all appurtenant rights for the exploration, development, production and removal of said oil and gas, but without the right to enter upon or over the surface of said land for the purpose of exploration, development, production and removal therefrom said oil and gas.

5.1.2 Flood Protection Levee/Floodwall Easement

A perpetual and assignable right and easement in (the land described in Schedule A) (Tracts Nos. ____, ____, and ____) to construct, maintain, repair, operate, patrol and replace a flood protection levee, floodwall, or gate closure, including all appurtenances thereto; reserving, however, to the owners, their heirs and assigns, all such rights and privileges in the land as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.1.3 Road Easement³

A perpetual [exclusive] [non-exclusive] and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. ____, ____, and ____) for the location, construction, operation, maintenance, alteration replacement of (a) road(s) and appurtenances thereto; together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; (reserving; however, to the owners, their heirs and assigns, the right to cross over or under the right-of-way as access to their adjoining land at the locations indicated in Schedule B); subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.1.4 Temporary Work Area Easement

A temporary easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. ____, ____, and ____), for a period not to exceed five (5) years, beginning with date possession of the land is granted to the United States, for use by the

³ The easement estate may be limited as to time, depending upon project requirements.

United States, its representatives, agents, and contractors as a work area, including the right to move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.1.5 Borrow Easement³

A perpetual and assignable right and easement to clear, borrow, excavate and remove soil, dirt, and other materials from (the land described in Schedule A) (Tracts Nos. _____, _____ and _____); subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges in said land as may be used without interfering with or abridging the rights and easement hereby acquired.

5.2 STANDARD ESTATES FOR MITIGATION AND BORROW

The following standard estates would be required from public and private landowners. A special use permit from USFWS would be required for the work and access upon the BBMNWR. The NFS is not required to obtain an easement from the State of Louisiana to dredge material from the bottom of Lake Pontchartrain.

5.2.1 Fee Excluding Minerals (With Restriction on Use of the Surface)

The fee simple title to the land, subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; excepting and excluding all oil and gas in and under said land and all appurtenant rights for the exploration, development, production and removal of said oil and gas, but without the right to enter upon or over the surface of said land for the purpose of exploration, development, production and removal therefrom said oil and gas.

5.2.2 Pipeline Easement³

A perpetual and assignable easement and right of way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for the location, construction, operation, maintenance, alteration; repair and patrol of (overhead) (underground) (specifically name type of utility or pipeline); together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.2.3 Road Easement³

A perpetual [exclusive] [non-exclusive] and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____) for the

location, construction, operation, maintenance, alteration replacement of (a) road(s) and appurtenances thereto; together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; (reserving; however, to the owners, their heirs and assigns, the right to cross over or under the right-of-way as access to their adjoining land at the locations indicated in Schedule B); subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.2.4 Temporary Work Area Easement

A temporary easement and right of way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for a period not to exceed _____, beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as a work area, including the right to move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right of way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

5.2.5 Borrow Easement³

A perpetual and assignable right and easement to clear, borrow, excavate and remove soil, dirt, and other materials from (the land described in Schedule A) (Tracts Nos. _____, _____ and _____); subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges in said land as may be used without interfering with or abridging the rights and easement hereby acquired.

5.3 NON-STANDARD ESTATE – NONSTRUCTURAL PROJECT FEATURE

A Right of Entry for Surveys would be required for properties that are preliminarily eligible for elevation or floodproofing to make the determination that the property is eligible to be floodproofed (structural, HTRW, and cultural evaluations, etc.). Subsequently, a Temporary Work Area Easement (for the construction work), and a Permanent Easement (restrictions, and access for OMRR&R) would be required. A floodproofing agreement with the landowner will also be needed but that agreement is not a real estate instrument.

Any agreements/estates, as well as any required curative documents, subordination or release agreement(s), shall be recorded by the NFS in the public records of the parish in which the property is located prior to commencement of the nonstructural improvements on the property.

The Temporary Work Area Easement would authorize USACE, the NFS, or their contractors to enter the property for purposes of implementing the flood proofing action, for inspection and enforcement purposes, and an estate running with the land shall be executed by all owners of the property.

Elevation and floodproofing of eligible structures would require that the NFS acquire a Right of Entry for Survey and Exploratory Work, Right of Entry for Construction, and a permanent easement for OMRR&R. A standard Temporary Work Area Easement will be acquired for the duration of construction on any improvements. Additionally, CEMVN will propose a non-standard easement which runs with the land, and includes the perpetual rights and restrictions for construction, operation and maintenance of the project. For residential structures, the project requires an easement which prohibits conversion or occupancy of any part of the structure located below the lowest habitable finished floor for human habitation and prohibits the alteration of the structure in any way to impede the movement of flood waters under the structure. The easement language included would also prohibit the construction of any other structure in a manner that would impede the movement of floodwaters under the structure. For non-residential flood proofing of structures, a separate non-standard easement would be required, which provides the necessary rights and restrictions to protect the federal investment. In each case, the draft easement language would be submitted through CEMVD to USACE CEMP-CR as a request for approval of a Non-Standard Estate. The ability to require a hold harmless in the easement may need to be further researched and coordinated with MVD and HQ OC.

Additionally, the NFS would obtain subordination agreements for any outstanding encumbrances that would interfere with the rights obtained in the permanent easement or that would interfere with the project.

Section 6

Existing Federal Projects and Ownerships

Seven projects were authorized under USACE's Southeast Louisiana Urban Flood Control Project (SELA) program in St. Tammany Parish in 1996 pending a study (known as a 533d report) to confirm they are technically sound, environmentally acceptable and economically justifiable, and include: Schneider Canal Hurricane Protection; Mandeville Hurricane Protection; Lacombe Area Plan; Abita Area Plan; Mile Branch Plan; Bayou Chinchuba Plan; and Slidell Area Plan (W-13, W-14, and W-15 Canals).

Figure G:5-1 shows these seven projects within St. Tammany Parish.

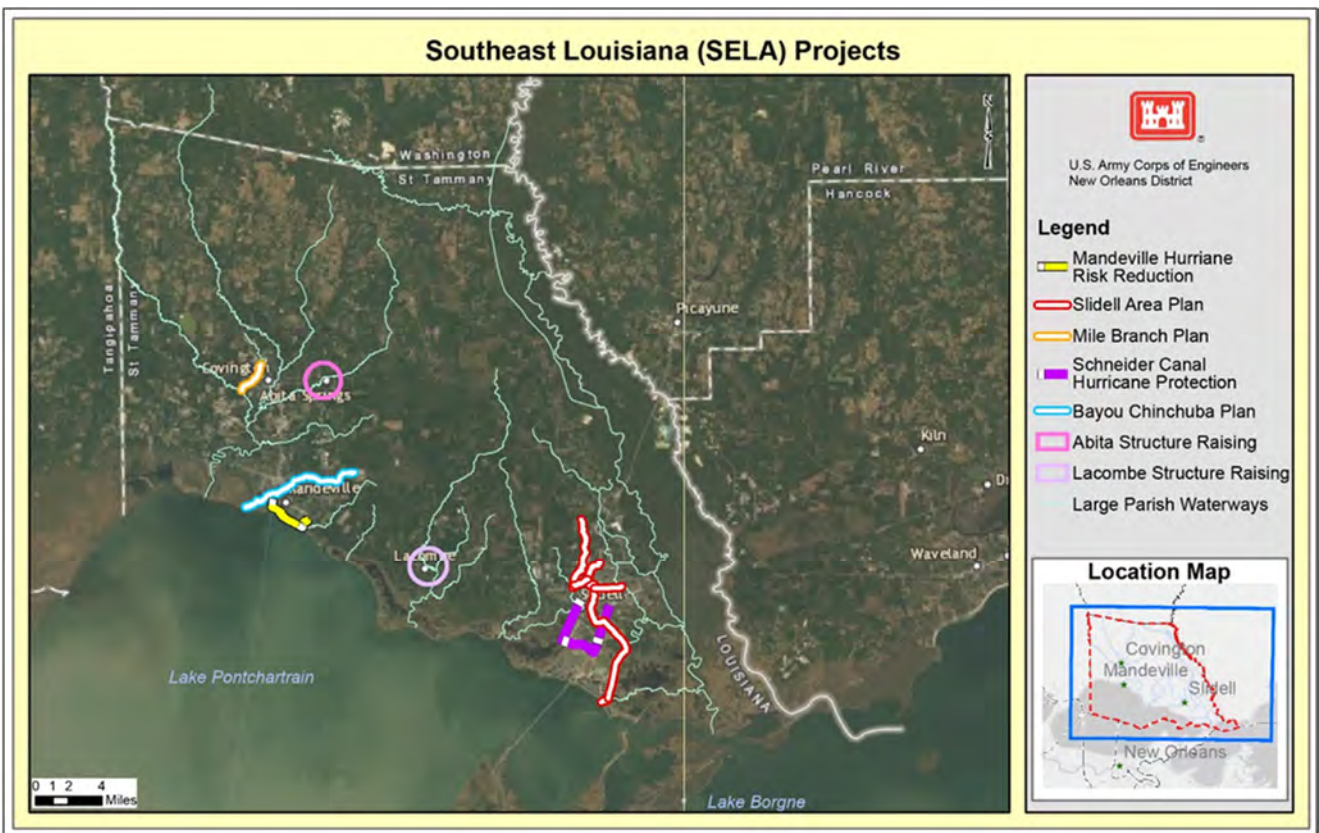


Figure G:5-1. Identified SELA projects in St. Tammany Parish

Only the W-14 canal project in Slidell has an approved report from March 2012 confirming it is technically sound, environmentally acceptable, and economically justifiable (533d report). Because the W-14 project had an approved 533d report it was excluded from plan formulation under this study. Analyses of the other six projects were included as part of plan formulation because the original SELA projects were over 30 years old and it was expected that conditions in the study area might have changed.

After this study was underway, efforts to develop a 533d report for the SELA Schneider Canal hurricane protection project were initiated but is currently without funding to proceed. There is significant overlap in the larger St. Tammany study area with the smaller SELA Schneider Canal study area. This study evaluated a comprehensive plan for the parish, whereas the SELA Schneider Canal 533d study is much more limited in scope and study area. If funding is received, the SELA Schneider Canal study PDT would evaluate the recommended alignment included in the Schneider Canal Hurricane Protection Reconnaissance Report dated May 1990. Coordination between the two study PDTs, Office of Counsel, and leadership would continue to determine the linkages between the two studies if the SELA Schneider Canal 533d study moves forward.

Section 7

Federally Owned Lands

The United States owns fee title to lands within the Big Branch Marsh National Wildlife Refuge, located on the western reach of the levee alignment for Measure 1. USFWS is the managing agency for the lands. The NFS would acquire from the USFWS the necessary real estate interests required for the project, and USFWS has indicated interest in doing a land exchange with the NFS to provide LERRDs needed for this project.

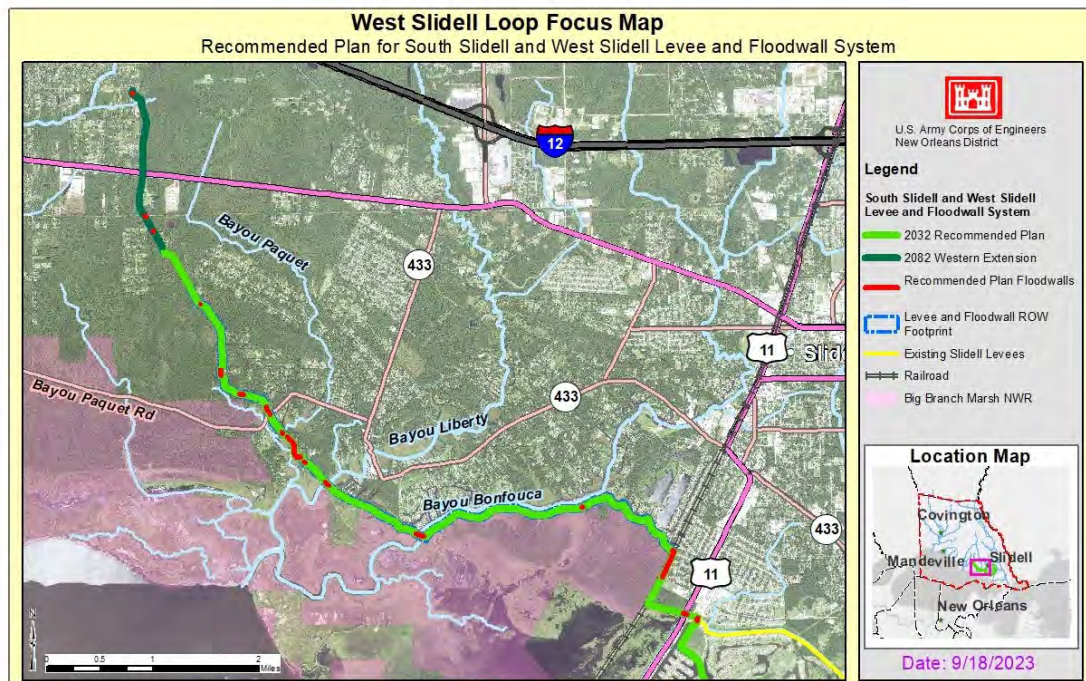


Figure G:6-1. Map Showing Western Portion of West and South Slidell Levee and Floodwall and BBMNWR

Approximately 110 acres of the Big Branch Marsh National Wildlife Refuge (BBMNWR), generally along the south side of Bayou Bonfouca westward of the railroad, is required from the USFWS for the West and South Slidell Levee and Floodwall System feature of the RP. The USFWS is authorized to exchange property with the NFS. Accordingly, property determined to be suitable and desirable by USFWS in a location where it is authorized to acquire property for the Big Branch Marsh National Wildlife Refuge would be identified by USFWS, then the identified property may be acquired by the NFS and exchanged with USFWS for the LERRDs required within the Refuge. The exchange of Refuge lands is authorized under the National Wildlife Refuge System Administration Act administered by the National Wildlife Refuge System. In the case of an exchange, an Exchange Agreement is to be executed between the

NFS and USFWS. The process by which the land required of the Refuge may be acquired by the NFS for the project and their estimated durations is generally as follows:

1. Preliminary assessments of the land to be divested by the USFWS for the project, and potential properties for acquisition by the NFS to exchange with the USFWS for said land, will be made, including land size, location, ownership, value, and environmental quality. Work to begin in PED (six months).
2. The NFS and the USFWS will coordinate to select a suitable exchange site(s). The selection of an alternate site is recommended should negotiations fail with the first selected site. The proposed land exchange needs to be a net conservation gain compared to the expected loss of the lands divested by the USFWS to the NFS; and of similar value, although equalization or differential payments at time of exchange may be required of the NFS or USFWS. 342 FW 5, Non-Purchase Acquisition, section 5.7 FWS, states “(1) that the exchange be of benefit to the United States (intent is for benefit of FWS), and (2) that the value of the lands or interests in lands be approximately equal or that values may be equalized by the payment of cash by the grantor or by the United States.” USFWS Regional Directors must approve in writing proposed land exchanges valued below \$500,000. The USFWS Director must approve in writing proposed land exchanges valued at \$500,000 or more. In addition, the House and Senate Committees on Appropriations must be given advance notice of exchanges valued between \$500,000 and \$2,000,000. For land exchanges where the estimated value of the Federal lands to be exchanged is greater than \$2,000,000, the House and Senate Committees on Appropriations must be afforded 30 days to examine the proposed exchange before it is consummated (six months).
3. The NFS/USACE will obtain plats or surveys, legal descriptions, title binders, environmental assessments, real estate appraisals and appraisal reviews of the lands proposed to be exchanged including an alternate site (if any). Reports to be reviewed by appropriate personnel of the parties to the land exchange (12 months).
4. Once there is agreement as to the acceptable terms for the exchange of the identified properties, the NFS shall negotiate and acquire fee interest in the property to be exchanged based on appraised value and subsequently exchange the property for the lands required of the USFWS along with any required differential or equalization payment which may be required by the NFS or the USFWS as dictated by the terms of the agreement (12 months).

All appraisals and appraisal reviews may be required to be performed and reviewed by the Department of Interior’s Appraisal and Valuation Services Office, which can reportedly be a lengthy process. However, based on past projects involving USACE and another Federal Agency, current USACE appraisers may be approved for some, or all, of these assignments, which could shorten the time needed for fulfill these requirements.

Section 8

Navigation Servitude

The Federal navigation servitude is the dominant right of the Federal Government under the Commerce Clause of the U.S. Constitution to use, control, and regulate the navigable waters of the United States and submerged lands thereunder for various commerce-related purposes including navigation and flood control. In tidal areas, the servitude extends to all lands below the mean high-water mark. In non-tidal areas, the servitude extends to all lands within the bed and banks of a navigable stream that lie below the ordinary high-water mark. It is not anticipated that the navigation servitude would be exercised for this Project, since this is a State of Louisiana claimed water bottom which will be brought to the project without the benefit of credit. Therefore, there is no necessity to invoke the navigational servitude for this project.

Legal analyses during PED will determine if the federal navigation servitude is available for use in the implementation of the RP and would have to establish a nexus to navigation in order to assert the servitude. This justification would be required to go to HQ Counsel for approval.

Section 9

Induced Flooding

ADCIRC modeling of the RP alignment for the 1 percent AEP water levels on the floodside of the alignment may indicate “negligible” water surface level increases for 2032 (up to 2” for 100-year and up to 4” for 500-year) and for 2082 (up to 3” for 100-year and up to 5” for 500-year). The larger water surface elevation indications are on the east side of the proposed alignments with the largest being on the east side of the Lakeshore Estates and Kingspoint levees up to 4 inches. The greater impact indications on the eastern side of the system are expected as these areas are closer to the Gulf of Mexico where storm surge would enter the Lake Pontchartrain basin via Rigolets. The potential for induced flooding will be further investigated during PED. If induced flooding rising to the level of an acquisition or the loss of real property rights is confirmed by a Takings Analysis, the RP would be refined to appropriately mitigate the issue(s) which could include things such as additional nonstructural actions, acquisition of flowage easements, or refinement of the RP measures. See Section 6.7.4 of the main report for additional details on induced flooding.

Section 10

Baseline Cost Estimates

The financial costs for the acquisition of the lands required for the construction, operation, and maintenance, for all three of the RP measures, including lands required for compensatory mitigation sites and borrow sites, although specific borrow sites have yet to be determined, have been estimated (shown in the 01 – Lands and Damages account). The Federal oversight and review costs for the acquisitions of the required LERRDs are reflected in the 30 – Planning, Engineering and Design account. The Facility/Utility Relocations costs have also been estimated. These estimates are preliminary and may be refined during PED. The financial costs estimates are distinct from the economic costs for National Economic Development Costs, referenced in ER 1105-2-100.

The estimated total cost for Real Estate Acquisitions is \$241,533,000, including Federal review and oversight, and incremental costs. This includes \$46,871,000 for the structural features, \$577,000 for compensatory mitigation, \$6,182,000 for borrow sites, and \$187,903,000 for residential and non-residential relocations and administrative costs associated with the residential and non-residential floodproofing measures. The costs associated with acquiring the required LERRDs for the structural features include land payments.

Costs for the NS floodproofing measures of the RP include administrative costs associated with implementation of the plan and residential and non-residential relocations during structure elevation or floodproofing measures construction. This could include such items as obtaining rights-of-entry, title work, preparation, execution, and recordation of the estates and any needed curative documents, any valuation work, residential and non-residential relocation costs for tenants and possibly owners, and subsequent inspections to ensure the work was performed in accordance with the Project Partnership Agreement (PPA). These costs are estimated to be approximately \$29,315 per structure. Costs of elevating and floodproofing the structures are construction costs and are not included as real estate costs.

Because NS floodproofing measures are optional, and there will likely be a net benefit to the raised or floodproofed structure after the work is complete, landowners will not be compensated for the real property instruments required to be eligible for the project.

Because the estimated costs of the LERRDs required for the project do not exceed 10% of the estimated total project costs, a gross appraisal was not prepared for this project. LERRDs costs are based on cost estimates prepared by the MVN Appraisal & Planning Branch in January 2023.

Facility and utility relocations costs are estimated to be \$32,162,000 including contingencies. Refer to Section 15 entitled “Facility/Utility Relocations” and the Engineering Appendix D for more information regarding the costs associated with these relocations. The Facility/Utility Relocations identifications and associated cost estimates are preliminary and will be refined in PED if the RP is authorized for construction and funded.

Table G:10-1. Estimated Costs for the Recommended Plan

FEATURE	FEDERAL COSTS ⁴	NFS COSTS ⁵	# OF LANDOWNERS
E & W SLIDELL LEVEE/FLOODWALL	\$1,417,000	\$45,454,000	157
MITIGATION	\$76,000	\$501,000	8
BORROW	\$38,000	\$6,144,000	5
NON-STRUCTURAL	\$52,830,000	\$135,073,000	6,410
SUB-TOTALS	\$54,361,000	\$187,172,000	6,580
TOTAL	\$241,533,000		
F & U RELOCATIONS	\$32,162,000 ⁶		
TOTAL REAL ESTATE PROJECT COSTS	\$273,695,000		

These cost estimates are preliminary and subject to revision during the PED. Property values were estimated based on available real estate sales data and listings at the time of this REP, as well as discussions with active market participants. These value estimates should not be misconstrued as appraisals. The costs for facility and utility relocations were estimated by the Engineering Division of USACE.

⁴ 30 Account

⁵ 01 Account

⁶ 02 Account

Section 11

Uniform Relocation Assistance (PL 91-646, Title II as Amended)

The availability of relocation assistance benefits for persons within the structural and NS features of the RP have been preliminary determined pursuant to P.L. 91-646 and its implementing regulations at 49 CFR Part 24, “Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs” (Uniform Act).

Approximately 16 residential and non-residential structures are located within or affected by the right-of-way footprint for the West and South Slidell Levee and Floodwall System. Additionally, approximately 5,583 residential and 827 non-residential structures are preliminarily determined eligible for the elevations and floodproofing within the NS feature of the RP. Uniform Act relocation assistance will be available to all affected structure ownerships within the West and South Slidell Levee and Floodwall System. A different situation exists for the NS plan because participation in the NS plan is voluntary, so the owner-occupants may not be eligible for relocation assistance benefits. However, if the owner of a leased residential property participates in the structure elevation, the tenant is considered displaced and is eligible for relocation assistance under the Uniform Act. Tenants would be eligible for reasonable out-of-pocket reimbursement for expenses incurred during the temporary relocation. Owners and tenants may only need to relocate at start of physical elevation for floodproofing, or when utilities are to be disconnected. Owners and tenants may occupy their structure immediately before and after this time when which preparations or finishing work is being performed. Per

Below are excerpts of the applicable portions of 49 CFR Part 24, as they relate to owner-occupants and tenants:

49 CFR Part 24:

(1) Subpart A, paragraph 24.2(a)(9)(ii)(E), Persons Not Displaced definition, states that an owner-occupant who moves as a result of an acquisition of real property that will not be acquired if an agreement cannot be reached, or as a result of rehabilitation of the real property, is not a displaced person. However, the displacement of a tenant as a direct result of any acquisition, rehabilitation or demolition for a Federal or Federally-assisted project is subject to the URA as a displaced person; and (H) states that an owner-occupant who conveys his or her property...after being informed in writing that if a mutually satisfactory agreement on terms of the conveyance cannot be reached, the Agency will not acquire the property. In such cases, however, any resulting displacement of a tenant is subject to the URA as a displaced person; and

(2) Subpart B, paragraphs 24.101(a)(2), (b)(1)(iii), & (b)(2)(i), Applicability of Acquisition Requirements, states that if the agency will not acquire a property because negotiations fail to result in an agreement, the owner of such property is not a displaced person and

as such, is not entitled to relocation assistance benefits. However, tenants on such properties may be eligible for relocation assistance benefits.

(Note the above paragraph is intended to stress that if an agency will not use condemnation as an acquisition tool, then an owner-occupant is not considered a displaced person; conversely, even if an agency does not utilize condemnation as an acquisition tool, tenants may be considered displaced persons. It is understood that if an owner does not participate in the program, then a tenant would not be displaced and would not qualify for relocation assistance.)

The replacement housing stock within the project areas of St. Tammany Parish appears adequate to absorb displaced residents and businesses. Payments for housing of last resort are likely, considering some of the affected improvements are manufactured homes and/or the individual circumstances of the displaced persons. The estimated costs for the relocation assistance benefits are \$42,663,000 including contingencies.

Section 12

Mineral Activities Impacted

12.1 OIL AND GAS ACTIVITY

The Louisiana Department of Natural Resources provides a Strategic Online Natural Resources Information System (SONRIS) which contains up-to-date information on oil and gas activity in Louisiana. Review of this information indicated that although there are oil and gas wells within the study area, there are no active wells located within the footprints of the RP alignments. However, the West and South Slidell Levee and Floodwall System alignment crosses a subsurface petroleum pipeline owned by ExxonMobil Corporation and operated by Collins Pipeline Company. The pipeline spans from Meraux, LA to Collins, MS. The levee crossing of the pipeline occurs near the south side of CC Road, approximately 2,100 feet south of Ned Avenue in Slidell. Additional information regarding the pipeline crossing is located in Section 15 of this appendix. A separate Relocations Report, containing relocations details and costs, will be submitted as a reference to the Engineering Appendix D.

With the exception of the acquisition of the standard Fee, Excluding Minerals Estate (With Restrictions on the Use of the Surface), which has the potential to impact mineral rights over certain lands, the other estates have no impact on mineral rights and USACE and/or the NFS will not acquire mineral rights to any of the LERRDs required for the Project. Over lands where the fee, excluding minerals estate, is being acquired, mineral rights will be subordinated. Mineral right owners can still explore for minerals through directional drilling.

12.2 TIMBER/MINERALS/ROW CROP ACTIVITY

No agricultural lands have been identified as being affected by the proposed alignments of the RP. Furthermore, the contributory value of any merchantable timber located within the structural feature alignments of the RP has been included in the estimated overall value of the LERRDs required for the project.

12.3 OYSTER LEASES

There are no oyster leases within the project study areas. As such, no oyster leases will be affected by the proposed structural features of the RP.

Section 13

Non-Federal Sponsor Authority to Participate

The required acquisitions will be performed by the NFS using USACE standard estates (permanent and temporary) for the land required for the structural, nonstructural, and compensatory mitigation components of the project, as well as non-standard estates needed for nonstructural features of the project.

An assessment of the legal and professional capability of the NFS, and its experience to acquire and provide the LERRDs for construction, operation, and maintenance of the RP has been included herein as **Annex A**. The NFS has worked with USACE on numerous other projects and has been capable of performing the responsibilities of LERRDs acquisition. CPRAB also has the authority to partner with another public agency to more expeditiously acquire the lands required for this project, including, but not limited to, the Louisiana Coastal Restoration and Protection Authority (CPRA), a local levee district, or a parish government. The NFS has been advised of P.L. 91-646 requirements and the requirements for documenting expenses for credit purposes, as well as risks associated with acquiring land before PCA. The fee lands required from USFWS are to be acquired by the NFS via an exchange of desirable substitute land authorized for the BBMNWR.

If the RP is authorized for construction, funded, and implemented, the NFS will be required to execute a combined structural and non-structural PPA with the Department of the Army. The PPA shall outline the items of local cooperation required of the NFS. The PPA requires, among other things, that the NFS provide all real property interests (LERRDs) required for construction, operation, and maintenance of the project. The NFS must also prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) that might reduce the level of flood risk reduction the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function. In addition, the NFS is responsible for undertaking any investigations to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. 9601-9675), that may exist in, on, or under the LERRDs required for construction, operation, and maintenance of the project. The NFS shall be considered the operator of the project for purposes of CERCLA liability.

Because the RP contains both structural and nonstructural measures, and the structural measures may require real property acquisitions from unwilling landowners, CPRAB may be required to utilize a partner's condemnation authority for any of the LERRDs required for structural measures of the RP. If condemnations become necessary for the acquisitions of the required LERRDs for the project, it is noted that CPRAB does not have "quick take" authority for acquisition of real property interests, except as provided under La. R.S. 49.214.61 relative to barrier island preservation, restoration, or creation for coastal wetlands purposes, which does not apply to the RP features. However, CPRAB does have the authority to partner with another public agency to more expeditiously acquire the lands required for this project,

including but not limited to, a local levee district or parish government, pursuant to La. R.S. 38:301, La. R.S. 38:301.1 and La. R.S. 49:214.5.2. At this point, CPRAB has not approached other public agencies to formalize the utilization of their quick-take authority on this project if required.

Generally, the Non-Federal Sponsor's policy is to not appropriate or expropriate property rights for the implementation of USACE flood/coastal storm risk management and ecosystem restoration projects. Appropriation or expropriation is only used by the Non-Federal Sponsor for USACE projects that mandate that the Non-Federal Sponsor use appropriation and/or expropriation to acquire the lands, easements, rights-of-way, relocations, and/or material disposal/placement areas ("property") required for the project. For USACE projects that include the construction of levees and related structures, appropriation and/or expropriation may be used Non-Federal Sponsor if necessary, and as a last resort, and only in the following limited situations: (a) the property has numerous undeterminable and/or absent owners; (b) the Non-Federal Sponsor is unable to negotiate reasonable conditions or payment for conventional acquisition of the property; (c) under "friendly" quick take circumstances (e.g., the Non-Federal Sponsor is unable to negotiate a reasonable price for the property, but the landowner(s) willing to give up property voluntarily); and/or (d) there is limited time available for the Non-Federal Sponsor to acquire the required property (i.e. emergency situations or other time constraints imposed by outside factors). Therefore, if necessary, appropriation and/or expropriation may be used by the Non-Federal Sponsor for the implementation of the structural components of the RP. On the other hand, appropriation and expropriation will not be used by the Non-Federal Sponsor in the implementation of the non-structural component of the RP since property buy-outs are not included in the plan and participation is 100% voluntary.

Section 14

Zoning Ordinances

There will be no application or enactment of zoning ordinances in lieu of, or to facilitate, acquisition of real estate interests in connection with structural features, or in implementation of the nonstructural features for this project. The nonstructural measures are voluntary in nature and would be available only to existing eligible structures as defined within the RP. During PED, planning and zoning regulations would be further reviewed, and discussions would be conducted with the NFS regarding the development and adoption of land use regulations for future activities within the project area to prevent future flood losses to life and real property. The NFS will be required to coordinate these matters with the local planning commissions.

Section R322.2.1; Elevation Requirements of the Louisiana Uniform Construction Code states that “Buildings and structures in flood hazard areas, including flood hazard areas designated as Coastal A Zones, shall have the lowest floors elevated to or above base flood elevation or the design flood elevation. Article V, Division 4 Sec 105-470 of the Home Rule Charter and Code of Ordinances of St. Tammany Parish requires “Minimum finished floor elevations for residential structures in flood zone "C" shall be no less than 12 inches above the centerline of street or top of curb fronting the home, whichever is greater. For residential structures located in flood zone “A,” the minimum finished floor elevation shall be at the base flood elevation or 12 inches above the centerline of street or top of curb fronting the home, whatever is greater. For residential lots less than 90 feet wide in all flood zones, structures shall be raised if more than 24 inches of fill is required to satisfy this section. Elevations shall be tied to NAVD88 vertical datum.”

Section 15

Real Estate Acquisitions Schedule

15.1 STRUCTURAL FEATURES ACQUISITIONS SCHEDULE

The required acquisitions will be performed by the NFS using USACE standard estates (permanent and temporary) for the lands required for the structural, compensatory mitigation, and borrow areas components of the project. The required acquisitions are estimated to take approximately four and one-half (4.5) years to complete once ROW plans are finalized and the acquisition process can begin.

The following acquisition schedule is based on the premise that the structural features of the project would impact approximately 290 private landowner(s). A phased approach may be utilized for the required acquisitions allowing acquisitions and construction work to be performed concurrently. A detailed acquisition schedule will be prepared once the 95 percent plans and specifications for the project are prepared. The schedule below provides the estimated total amount of time to complete the acquisition of real estate rights required for the construction of the project based on the information available to date and is preliminary and subject to change.

- | | |
|---|-----------|
| • TOD, Mapping | 9 months |
| • Obtain Title & Appraisal, and Appraisal Reviews | 12 months |
| • Negotiations | 12 months |
| • Closings | 9 months |
| • Eminent Domain Proceedings (if needed) | 12 months |

**Total: 54 months or
4.5 years**

15.2 NONSTRUCTURAL PROJECT FEATURES ACQUISITIONS SCHEDULE

The nonstructural project elevations and floodproofing features would require execution of a right of entry between the landowner and the USACE/NFS. In addition, the following administrative functions, along with their estimated durations, which can be concurrent, would be required for each structure:

- | | |
|---|----------|
| • Obtain Right-of-Entry for Investigations | 1 month |
| • Title research/review of title | 1 month |
| • Preliminary Investigations (i.e., HTRW, structural, surveys, etc.) | 2 months |
| • Execution of agreement between landowner/NFS & curative documents for elevations or non-residential floodproofing | 1 month |
| • Filing Agreement between landowner and NFS including NSE(s) | 1 months |
| • Relocation of Displaced Tenants | 2 months |
| • Residential elevation or non-residential floodproofing | 2 months |

Tasks shown above would likely vary by property. Considering the vast number of structures estimated to be eligible for the nonstructural plan, twelve (12) years is estimated as the overall anticipated implementation time required for the total number of structures. This estimate assumes an overlap of the required tasks and this time frame is dependent upon a finalized nonstructural implementation plan, the availability of contractors to perform the elevations and floodproofings and assumes that project funding would be available every year. This estimated schedule is expected to be refined as more information becomes available during PED and implementation of the RP. Refer to Appendix H of the RDIFR-EIS for a more detailed discussion of the non-structural implementation plan.

Section 16

Facility/Utility Relocations

The West and South Slidell Levee and Floodwall System alignment crosses a subsurface petroleum pipeline owned by ExxonMobil Corporation and operated by Collins Pipeline Company. The pipeline spans from Meraux, LA to Collins, MS. The levee crossing of the pipeline occurs near the south side of CC Road, approximately 2,100 feet south of Ned Avenue in Slidell. The pipeline is to be rerouted up and over the levee at this location.

The system also crosses the Norfolk Southern railway just west of the eastern end of Sun Valley Drive in Slidell. A floodgate will be utilized at the railroad crossing. Windows of time with no rail traffic at the crossing and floodgate location will be coordinated with the railroad operators to allow for railroad gate construction and railroad crossing for the construction of the levee along the south side of Bayou Bonfouca. It also crosses Interstate 10, which will be raised to the preliminary design elevation of 15 feet to ramp over the West and South Slidell Levee and Floodwall System. The existing elevation of I-10 at this location is approximately 12.8 feet per the LIDAR raster dataset. This proposed location is the highest elevation of the I-10 in the vicinity of the alignment. During construction to raise I-10 at this location, traffic will be rerouted within the existing I-10 ROW and required temporary work area easement area. For the additional roadway crossings, traffic will be rerouted within the existing ROW and/or temporary work area required for the crossing.

In addition to the above, the West and South Slidell Levee and Floodwall System affects roadways, bridges, underground water and sewerage lines, overhead and underground power and communication lines, power and light poles, drainage culverts, and drainage lines, as detailed in Appendix D.

The total estimated cost of facility/utility relocations is \$32,162,000 including contingencies. These costs are reflected as relocations (02-Relocations) within the Baseline Costs Estimate herein and would be 100% borne by the NFS. Although the relocations costs are a 100% NFS financial responsibility, the payment of compensable relocation costs by the NFS may be eligible for credit toward the NFS cost share under the terms of a future PPA. Refer to the Engineering Appendix for more information regarding costs associated with these facility/utility relocations. The Facility/Utility Relocations identifications and associated cost estimates are preliminary and will be refined in PED if the RP is authorized for construction and funded.

Real Estate Guidance issued for 3x3x3 studies indicates that if the costs of relocations of facilities and utilities is less than 30% of project costs, an Attorney's Preliminary Opinion of Compensable Interest report need not be prepared. Because the estimated cost of relocations does not exceed 30% of total project cost, an Attorney's Preliminary Opinion of Compensable Interest was not prepared for this REP. This information will be reviewed during PED, and a Final Attorney's Opinion of Compensability will be prepared prior to execution of the PPA. Until that opinion is prepared, the compensability of each of the facilities/utilities is unknown.

Any conclusion or categorization contained in this report that an item is a utility or facility relocation to be performed by the NFS as part of its LERRDs responsibilities is preliminary

only. The government will make a final determination of the relocations necessary for the construction, operation or maintenance of the project after further analysis and completion and approval of a Final Attorney's Opinion of Compensability for each of the impacted utilities and facilities.

A preliminary Real Estate Assessment addresses the following two questions under the corresponding letters in Tables G:15-1 and G:15-2 below (Y-Yes, N-No, X-Not Applicable).

- A. Is the identified facility/utility generally of the type eligible for compensation under the substitute facilities doctrine?
- B. Does the District have some valid data or evidence that demonstrates it has identified an owner with a compensable interest in the property?

16.1 EAST/WEST SLIDELL LEVEE/FLOODWALL FACILITY AND UTILITY RELOCATIONS⁷

Table G:15-1. Facility and Utility Relocations Required for Slidell Levee/Floodwall

DESCRIPTION	OWNER	DIAMETER	PRODUCT/ MATERIAL	DISPOSITION	A	B	Cost
Hwy 190 Rd Ramp	LaDOTD	Unknown	Hwy 190	Ramp	Y	N	\$1,634,337
OH ⁸ powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
BG ⁹ comm line (1)	Unknown	4"	Steel	Up and over	Y	N	
BG sewer line (1)	Parish	8"	GS	Up and over	Y	N	
BG water line (1)	Parish	10"	Cast iron	Up and over	Y	N	
Tammany Trace Bike Trail	Parish			Swing Gate	X	X	\$55,333
OH powerline (2)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
Power pole (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
Tranquility Rd	Parish			Vehicular Gate	X	X	\$0
No utilities							

⁷ Based on preliminary investigations.

⁸ Overhead.

⁹ Below ground.

Collins Liquid Gas Pipeline	Collins Pipeline Co.	16"	Steel	Up and over	Y	N	\$1,195,161
Bayou Paquet Rd	Parish			Vehicular Gate	X	X	\$32,081
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
Mayer Dr	Parish			Vehicular Gate	X	X	203,064
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
Railroad	Norfolk Southern			Railroad Gate	X	X	338,007
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeved thru sheet pile	Y	N	
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	Y	N	
OH powerline (1)	CLECO	Unknown	Unknown	Do not disturb	X	N	
Culvert (1)	Parish	62"	RCB	Do not disturb	X	N	
Railroad to Hwy 11					X	X	\$3,300,195
OH transmission poles (13)	CLECO	Unknown	Unknown	To be relocated (10)	Y	N	
Power pole (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
Hwy 11	State			Vehicular Gate	X	X	\$38,682
OH transmission line (2)	CLECO	Unknown	Unknown	Do not disturb	X	X	
OH powerline (2)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH Transmission pole (1)	CLECO	Unknown	Unknown		Y	N	
Hwy 11 to Oak Harbor Blvd					X	X	\$406,258
OH Transmission pole (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
OH transmission line (2)	CLECO	Unknown	Unknown	To be relocated	Y	N	

OH powerline (2)	CLECO	Unknown	Unknown	To be raised	Y	N	
Power poles (2)	CLECO	Unknown	Unknown	To be relocated	Y	N	
Oak Harbor Blvd	Parish			Vehicular Ramp	Y	N	538,578
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
BG powerline (1)	CLECO	4"	Steel	Up and over	Y	N	
Light pole (2)	Parish	Unknown	Unknown	To be relocated	Y	N	
Underground drainage (1)	Parish	30"	RCP	Unknown	Y	N	
Power poles (2)	CLECO	Unknown	Unknown	To be relocated	Y	N	
Island Dr	Parish			Vehicular Ramp	Y	N	1,566,945
Underground drainage (1)	Parish	30"	RCP	Sleeve thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
Light pole (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
Mariner's Cove Blvd	Parish			Vehicular Gate	X	X	\$847,499
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
BG drainage (1)	Parish	30"	RCP	Sleeve thru sheet pile	Y	N	
Oak Harbor Blvd	Parish			Vehicular Gate	X	X	\$844,667
BG drainage (1)	Parish	30"	RCP	Sleeve thru sheet pile	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	

Oak Harbor Country Club	Parish			Vehicular Gate	X	X	\$681,506
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
BG drainage (1)	Parish	30"	RCP	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
Grand Champions Ln	Parish			Vehicular Ramp	Y	N	2,073,087
BG comm line (1)	Unknown	4"	Steel	Up and over	Y	N	
BG powerline (1)	CLECO	4"	Steel	Up and over	Y	N	
BG drainage (1)	Parish	30"	RCP	Up and over	Y	N	
BG water line (1)	Parish	10"	Cast iron	Up and over	Y	N	
BG sewer line (1)	Parish	8"	GS	Up and over	Y	N	
Interstate 10	State			Vehicular Ramp	Y	N	\$90,283
BG drainage (1)	Parish	30"	RCP	Unknown	Y	N	
OH powerline (2)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
Power poles (2)	CLECO	Unknown	Unknown	To be relocated	Y	N	
Lakeshore Village	Parish			Vehicular Ramp	Y	N	\$2,073,087
BG powerline (1)	CLECO	4"	Steel	Up and over	Y	N	
BG water line (1)	Parish	10"	Cast iron	Up and over	Y	N	
BG sewer line (1)	Parish	8"	GS	Up and over	Y	N	
BG comm line (1)	Unknown	4"	Steel	Up and over	Y	N	
Old Spanish Trail	State			Vehicular Gate	X	X	\$43,900
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
Nunez Rd	Parish			Vehicular Ramp	X	X	\$37,898
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
Nunez Rd to W-14 canal					X	X	\$344,693
Power poles (10)	CLECO	Unknown	Unknown	To be relocated	Y	N	
W-14 canal	State			Floodgate	X	X	\$55,482

OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
Power poles (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
Hardin Rd side substation	Entergy			Vehicular Gate	X	X	\$88,433
OH powerline (3)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (3)	Unknown	Unknown	Unknown	To be raised	Y	N	
OH transmission line (2)	CLECO	Unknown	Unknown	Do not disturb	X	X	
Power poles (3)	CLECO	Unknown	Unknown	To be relocated	Y	N	
US Hwy 190 side substation	Entergy			Vehicular Gate	X	X	592,958
OH powerline (3)	CLECO	Unknown	Unknown	To be raised	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	
BG water line (1)	Parish	10"	Cast iron	Sleeved thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
Transmission line corridor					X	X	
OH transmission line (1)	Entergy/CLECO	Unknown	Unknown	Do not disturb	X	X	
OH Transmission pole (1)	Entergy/CLECO	Unknown	Unknown	Do not disturb	X	X	
South Holiday Dr	Parish			Vehicular Gate	X	X	\$43,900
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	
OH powerline (1)	CLECO	Unknown	Unknown	To be relocated	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be relocated	Y	N	
Holiday Dr to Yaupon Dr	Parish			Floodwall	X	X	\$33,962
Power poles (4)	CLECO	Unknown	Unknown	To be relocated	Y	N	
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	

North Holiday Dr	Parish			Vehicular Gate	X	X	\$493,395
OH transmission line (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	
BG comm line (1)	Unknown	4"	Steel	Sleeved thru sheet pile	Y	N	
BG water line (1)	Parish	4"	Cast iron	Sleeved thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
Carol Dr	Parish				X	X	\$0
OH powerline (1)	CLECO	Unknown	Unknown	Do not disturb	X	X	
BG drainage (1)	Parish	30"	RCP	Do not disturb	X	X	
BG comm line (1)	Unknown	4"	Steel	Do not disturb	X	X	
OH comm line (1)	Unknown	Unknown	Unknown	Do not disturb	X	X	
BG water line (1)	Parish	10"	Cast iron	Do not disturb	X	X	
Natchez Dr	Parish			Vehicular Gate	X	X	\$550,663
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeve thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
Kisatchie Dr	Parish			Vehicular Gate	X	X	\$556,573
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeve thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
Manzella Dr	Parish			Vehicular Gate	X	X	\$556,573
OH comm line (1)	Unknown	Unknown	Unknown	To be raised	Y	N	
OH powerline (1)	CLECO	Unknown	Unknown	To be raised	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
BG water line (1)	Parish	10"	Cast iron	Sleeve thru sheet pile	Y	N	

BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
Gause Blvd	State			Vehicular Gate	X	X	\$854,455
Water main (1)	Parish	10"	C900	Sleeve thru sheet pile	Y	N	
Water main (1)	Parish	12"	PVC	Sleeve thru sheet pile	Y	N	
BG sewer line (1)	Parish	8"	GS	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
N side of Gause	Parish			Vehicular Gate	X	X	\$512,673
BG water line (1)	Parish	6"	PVC	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
I-10 Service Rd	State			Vehicular Gate	X	X	\$512,673
BG water line (1)	Parish	6"	PVC	Sleeve thru sheet pile	Y	N	
BG powerline (1)	CLECO	4"	Steel	Sleeve thru sheet pile	Y	N	
BG comm line (1)	Unknown	4"	Steel	Sleeve thru sheet pile	Y	N	
I-10 On-ramp	State			Vehicular Ramp	X	X	
Reine Canal	State/Unknown			Sluice Gate	X	X	\$68,008
Guy poles (2)	CLECO	Unknown	Unknown	To be relocated	Y	N	
BG comm line (1)	Unknown	4"	Steel	To be relocated	Y	N	
French Branch	State/Unknown			Sluice Gate	X	X	\$34,318
BG comm line (1)	Unknown	4"	Steel	To be relocated	Y	N	
				Contingencies			\$10,863,000
				TOTAL (Rounded)			\$32,162,000

See Section 10.12 and Table D:10-23 of the Engineering Appendix for more detailed information on the facility/utility relocations required for the structural features of the RP (Appendix D).

Section 17

Hazardous, Toxic, and Radioactive Waste

A Phase I Environmental Site Assessment was conducted October 1-22, 2021, to assess the potential for Hazardous, Toxic, and Radioactive Waste (HTRW) materials within the RP footprints for each of the proposed structural measures. As a result of this investigation, it was determined that the probability of encountering HTRW during construction would be low. Due to limited availability of right of entry, additional surveys will be required prior to construction. However, it is not anticipated that there will be impacts to the real estate acquisition process and the LERRDs value estimate due to the presence of any HTRW within the LERRD required for project construction. Further discussion of these environmental investigations and findings can be found in Section 3.2.1.7 of the RDIFR-EIS.

Section 18

Landowner Concerns

Two landowner outreach meetings on the proposed project have been held to date. One was held on March 22, 2023 in Slidell, and another on March 22, 2023 in Covington. However, they were not well attended and the attitudes of most landowners who will be affected by construction of the structural features of the project are not known at this time. Some landowners have expressed concern and opposition to the specific locations of the proposed ROW on their property. Generally, however, local community support for flood risk mitigation projects is high. It is expected that once further analysis is conducted for the structural project features, additional landowner meetings will be held. At that time, specific landowner concerns and support for the structural features of the plan will be further assessed. Based on experience with other flood risk mitigation projects, it is expected that the majority of affected private landowners will be amenable to the proposed plan.

Because the required estate (if any) for the non-structural feature of the plan remains in question, this REP is unable to assess landowner concerns related to same. However, local parish and State officials have indicated that many of their residents have expressed interest in and are highly supportive of structure elevations.

Section 19

Risk Letter

The NFS has been sent a notification of the risks of acquiring real property interests prior to the PPA, as the preliminary information in the feasibility study may change once completed. Premature acquisition may result in insufficient or excessive real property acreage, as well as additional expense and delay schedule to complete acquisition. A copy of the letter discussion risk with early acquisition of real property interests is included in the REP as Annex 2.

Section 20

Review and Approval

Date: March 2024

Prepared by:

Reviewed by:

Zachary J. Derbes, MAI, R/W-AC
Real Estate Appraiser
USCAE MVN

Erin C. Rowan
Real Estate Appraiser
USACE MVN

Reviewed and approved by:

Todd M. Klock
Chief, Acquisitions Branch
USCAE MVN

ANNEX 1

ASSESSMENT OF NON-FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY ST TAMMANY PARISH FEASIBILITY STUDY

COASTAL PROTECTION AND RESTORATION AUTHORITY (CPRA), IMPLEMENTATION ARM OF THE COASTAL PROTECTION AND RESTORATION AUTHORITY BOARD (CPRAB)

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes?
YES
- b. Does the sponsor have the power of eminent domain for this project? **Yes, however, Act No. 199 (HB 144) signed by the Governor of the State of Louisiana on 6/14/2017, limits the power of eminent domain; it states that “no full ownership interest in property shall be acquired for integrated coastal protection through any method by the state of Louisiana, the Coastal Protection and Restoration Authority, a levee district, a levee authority, a sponsoring authority, a political subdivision, or any other state, local, or federal entity, or their agents or employees, including but not limited to compensatory mitigation and ecosystem restoration purposes, unless such interest is voluntarily offered and agreed to in writing by owners with at least seventy-five percent ownership in the property or such entity seeking to acquire the property proves by clear and convincing evidence in a court of competent jurisdiction that a full ownership interest is the minimum interest necessary to carry out the purposes of integrated coastal protection for the specific project for which it is acquired.” Furthermore, access rights, rights of use, servitudes, easements, or other property interests for coastal protection projects shall only be for fixed terms and shall not be acquired in perpetuity unless such acquisition is offered voluntarily by owners with at least seventy-five percent ownership in the property.**
- c. Does the sponsor have "quick-take" authority for this project? **NO** CPRAB does not directly have quick take authority. However, pursuant to La. R.S. 49:214.5.2 and 38:301.1, CPRAB may enter into an agreement to use the authority of a coastal area levee district or parish governing authority to use the quick take authority of those entities to acquire real property interests for project purposes.
- d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? **NO**
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? **See “b” above.**

II. Human Resource Requirements:

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? **NO**
- b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? **N/A**
- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? **YES**
- d. Is the sponsor's projected in-house staffing level sufficient considering its other workload, if any, and the project schedule? **YES**
- e. Can the sponsor obtain contractor support, if required in a timely fashion? **YES**
- f. Will the sponsor likely request USACE assistance in acquiring real estate? **NO**

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? **YES**
- b. Has the sponsor approved the project/real estate schedule/milestones? **YES**

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? **YES**
- b. With regard to this project, the sponsor is anticipated to be: (highly capable/fully capable/moderately capable/marginally capable/insufficiently capable). The NFS is anticipated to be highly capable of acquiring the real estate interests required for the project.

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? **YES**
- b. Does the sponsor concur with this assessment? **YES**

Prepared by:



Karen Vance-Orange
Realty Specialist
US Army Corps of Engineers

Approved by:



David A. Peterson
General Counsel
Coastal Protection and Restoration Authority

ANNEX 2



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LA 70118-3651

May 16, 2023

Real Estate Division
Appraisal & Planning Branch

Mr. Kyle "Chip" R. Kline, Jr., Chairman
Coastal Protection and Restoration Authority Board of Louisiana
P.O. Box 44027
Baton Rouge, LA 70804-4027

Dear Mr. Kline:

The St. Tammany Parish, Louisiana Feasibility Study (Study or Project) is authorized by subtitle B, Section 1201 (14) of the Water Resources Development Act of 2016, as included in the Water Infrastructure Improvements for the Nation Act (P.L. 114-322). The Study was authorized in accordance with the annual reports submitted to Congress in 2015 and 2016, pursuant to Section 7001 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014) (Public Law 113-121), (33 U.S.C. 2282d). The New Orleans District (CEMVN) of the U.S. Army Corps of Engineers (USACE) is nearing the completion of the revised integrated Draft Feasibility Report and Environmental Impact Statement (Draft Report and EIS) for this Study.

The revised Draft Report and EIS contains preliminary information, which may change once a greater level of design for the Project features are completed by USACE during later stages of the feasibility phase. Consequently, CEMVN is providing this notice of risk letter to advise CPRAB of the risks associated with the early acquisition of real estate interests and rights prior to the execution of a Project Partnership Agreement (PPA).

In the event that CPRAB elects to proceed with any acquisition of lands, easements, rights-of-way, relocations and disposal (LERRDs), that may be needed for the construction, operation, maintenance, repair, replacement and rehabilitation of this Project prior to the execution of a PPA, CPRAB will thereby assume full and sole responsibility for any and all costs, or liability arising out of all such acquisitions and attempts to acquire LERRDs for the Project. Generally, these risks include, but are not limited to, the following:

- a. Congress may not approve the Chief's Report for this Project;
- b. Congress may not appropriate funds to construct the proposed Project;
- c. The proposed Project may otherwise not be funded or approved for construction;
- d. A PPA mutually agreeable to CPRAB and the Government may not be executed and implemented;

-2-

- e. CPRAB may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended;
- f. CPRAB may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the Project;
- g. CPRAB may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under Public Law 91-646, The Uniform Relocation Assistance and Real Property Acquisition Policies Act (P.L. 91-646), as amended, as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until the PPA execution and the Government's notice to commence acquisition and performance of LERRDs, and
- h. CPRAB may incur costs or expenses in connection with its decision to acquire or perform LERRDs in advance of the executed PPA and/or the Government's notice to proceed, which may not be creditable under the provisions of P.L. 99-662 and/or the PPA.

Should CPRAB decide to proceed with acquisition of real estate interests, it is hereby notified that acquisition activities must conform to P.L. 91-646, which describes the rights of landowners impacted by a federally funded project and the responsibilities of government agencies performing acquisition of real estate interests for such projects. Furthermore, in order to ensure that you receive the maximum possible credit once the project alignment is finalized, we suggest that you send for your review the resume and proposed fees of your intended contractors, as well as the following real estate products once completed: ownership plat and legal descriptions, appraisal reports, title reports, proposed negotiated settlements, and relocations assistance payments, if applicable.

If you have questions regarding the acquisition and crediting process, please call Todd Klock, Acting District Chief of Real Estate, New Orleans District at (504) 862-1920.

Sincerely,



Todd Klock,
Acting District Chief of Real Estate

cc:
Mr. David Peterson

-3-

cc (Continued):
Deputy General Counsel
Coastal Protection and Restoration Authority
150 Terrace Ave.
Baton Rouge, LA 70802-8079

Mr. Ryan Vivian, Land Rights Attorney
Coastal Protection and Restoration Authority
150 Terrace Ave.
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Mr. James Altman
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Coastal Protection and Restoration Authority
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Mr. Ignacio Harrouch Operations Division Chief
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