

**APPENDIX D - REAL ESTATE PLAN
Upper Barataria Basin, LA
Draft Integrated Feasibility Study
with
Environmental Impact Statement**

November 2019

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1. STUDY NAME AND PURPOSE

This Real Estate Plan (REP) sets forth the real estate requirements and costs for the implementation and construction of the Tentatively Selected Plan (TSP) as described in more detail in the Draft Feasibility Study with Integrated Environmental Impact Statement (EIS) for Upper Barataria Basin, LA study. The lands, easements, rights-of-way, relocations and disposal sites (LERRD) required for the TSP are outlined in this REP. The information contained herein is tentative, preliminary in nature, and intended for planning purposes only.

The purpose of the study is to provide a general summary of structural measures to address flood risk from tidal surges, coastal storm surges, and heavy rainfall in the area between Bayou Lafourche and the Mississippi River System, from Donaldsonville to just past U.S. Highway 90 in the basin.

The study is a Coastal Storm Risk Management (CSRМ) Project covering parts of Lafourche and St. Charles Parishes in southeast Louisiana. The study area is bounded on the north by the Mississippi River, on the east by Lakes Cataouatche and Salvador, on the west by Highway 90 and Bayou Lafourche and on the south by Highway 1. This area is part of the larger Barataria Basin watershed, made up of mostly wetland and agricultural lands with numerous communities located adjacent to major highways and the Mississippi River and Bayou Lafourche. (See Figure 3 under Paragraph 8. Study Maps)

The TSP, Alternative 1, Highway 90, Segment 1 Extension, consists of a structural alternative that extends from the existing St. Charles Parish levee, building to a 7.5' design elevation and totaling 96,726' in length, into high ground across the basin near Raceland. The levees were designed to 1V:4H with a 10' crown. Engineering designed to 7.5' elevation across the basin and will construction to 8.5' to allow for settlement.

The TSP consists of the following features within St. Charles and Lafourche Parishes:

- Levee and floodwall (T-wall) construction
- Pump station protection,
- Gates (roller, barge and stop log),
- Hydraulic structures and sluice gates
- Temporary, permanent, and existing roads

Reaches D, E and F are located east of the cities Paradis and Des Allemands. Reaches G and H travel across Bayou Des Allemands and extend southwesterly past Dufrene

Ponds along Godchaux Canal and Amarada Hess Road until it reaches Bayou Lafourche near Raceland. (See Figure One below and under Paragraph 8. Study Maps).



Figure One - Map Showing Alternative1 Reaches

2. TSP DESCRIPTION

Below is the description of the TSP features for each reach and the LERRD required for the implementation of the TSP:

Reach D

- Floodwall and Levee east of Paradis and Des Allemands
- Paradis Hydraulic Control Structure
- Temporary Access Road (1,527 foot) located between Highway 632 and Paradis Canal for construction

Reach E

- Floodwall and Levee east of Des Allemands
- 45' Roller Gate Structure at Bayou Gauche Road
- Crawford Canal Pump Station fronting projection
- Existing access road utilized during construction, Highway 306 (Bayou Gauche Road)

Reach F

- Floodwall and Levee Reaches east of Des Allemands
- Temporary Access Road (8,293 foot) access route from U.S. Highway 90 to eastern side of Bayou Des Allemands via Down the Bayou Road near the proposed barge gate placement site for construction
- Existing Access road utilized during construction, Down the Bayou Road

Reach G

- Levee
- 270' Barge Gate at Bayou Des Allemends
- Stop Log Gate at Godchaux Canal
- Existing access roads utilized during construction, Amarada Hess Road
- Permanent Access Road (7,925 foot) for construction and operation and maintenance from U. S. Highway 90 to alignment just southwest of Dufrene Ponds

Reach H

- Levee
- Structures with sluice gates
- Existing access roads utilized during construction, Amarada Hess Road

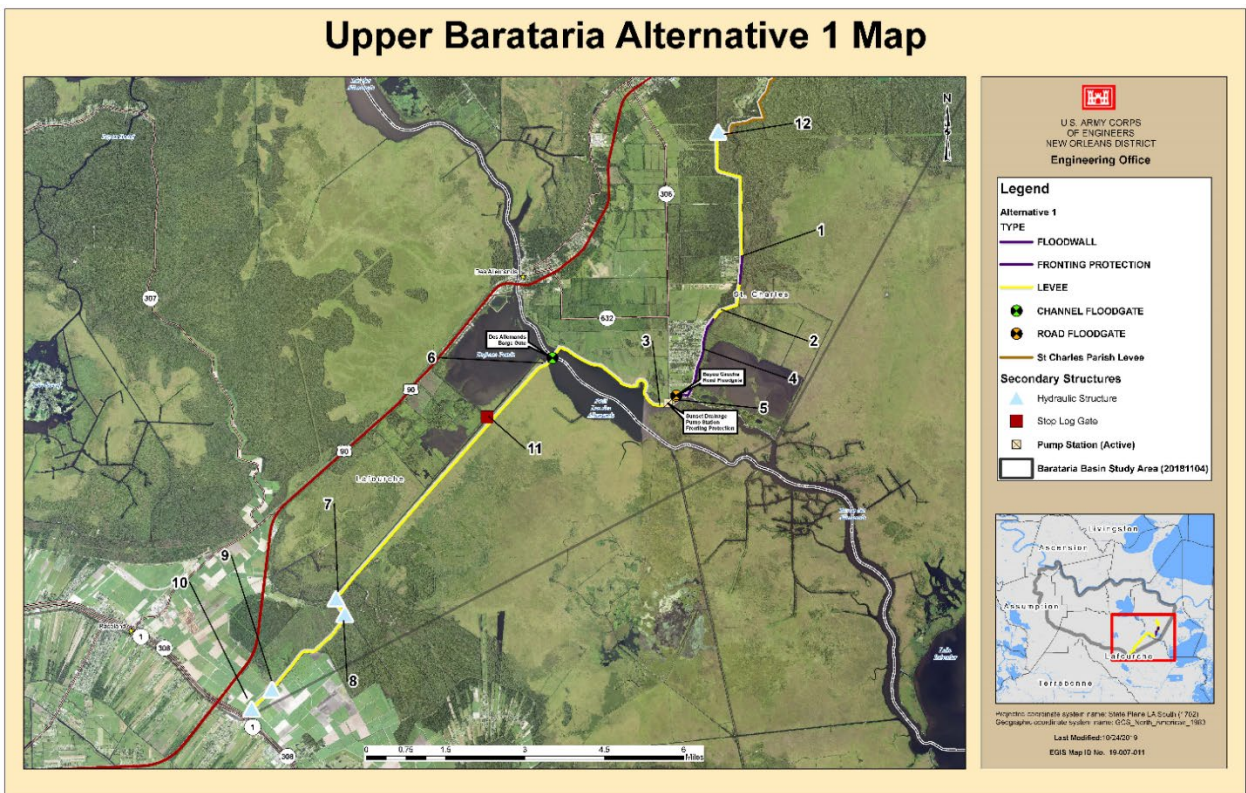


Figure Two - Map Showing Alternative1 Features

- Borrow sites are estimated to be within 15 miles of the vicinity of where U S Highway 90 crosses Bayou Des Allemands near Raceland, Louisiana. An estimated 1,086,096 cubic yards would be needed for the TSP. This comes to approximately 54 acres of agriculture lands that are included in the real estate cost below under Lands and Damages column within Paragraph 10. Baseline Cost Estimate
- Staging areas are assumed to be within LERRD being acquired for other features. These areas will be further investigated during design and reported in the Final REP.

- In total, there is approximately 84,158 linear foot levee, 12,253 linear foot of floodwall (T-wall) east of Des Allemands along the Paradis Canal, one 45 linear foot roller gate structure at Bayou Gauche, and one 270 linear foot barge gate structure across Bayou Des Allemands.

LANDS, EASEMENTS, RIGHTS-OF-WAY, RELOCATIONS AND DISPOSAL (LERRD) REQUIRED FOR THE TSP

Estate	Acres	Project Feature /Description
Flood Protection Levee Easement (perpetual)	592.10	Levees, floodwalls, gates, pump station protection, and hydraulic structures.
Temporary Work Area Easement (borrow)	54	Borrow
Road Easement (perpetual)	TBD	Pasture lands located from Hwy 90 to alignment just southwest of Dufrene Ponds (7,925 LF) (Reach G)
Road Easement (temporary)	TBD	Pasture lands - Bayou road near barge gate (8,293 LF) (Reach F); and Between Hwy 632 and Paradis Canal (1,527 LF) (Reach D)
Temporary Work Area Easement (Staging)	TBD	Staging

The LERRD in above table would be acquired from approximately 75 landowners.

3. LERRD OWNED BY NON-FEDERAL SPONSOR

The non-federal sponsor for this study is the Coastal Protection and Restoration Authority Board of Louisiana (CPRAB). The Non-Federal Sponsor does not own any lands within the study area. However, portions of the study area are located within areas of the following agencies of the State of Louisiana (table below). The Final Real Estate Plan will include reaches and acreages of the alignment, which are located within lands owned or controlled by these agencies.

From Parish/Levee District	NFS to Request	Parish
St. Charles Parish Government	Authorization for Entry	St. Charles Parish
Sunset Drainage District Levee	Authorization for Entry	St. Charles Parish
Lafourche Basin Levee District	Authorization for Entry	Lafourche Parish

4. ESTATES

The following standard estates would be acquired from private landowners:

Road Easement (temporary and perpetual)

A (perpetual [exclusive] [non-exclusive] and assignable) (temporary) 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.

Flood Protection Levee 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, 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.

Temporary Work Area Easement (borrow)

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 borrow area, including the right to borrow and/or deposit fill, spoil and waste material thereon 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.

Temporary Work Area Easement (staging)

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. EXISTING FEDERAL PROJECTS

There are no active federal projects fully or partially within the footprint of the TSP. All nearby projects within St. Charles and Lafourche Parishes are outside of the immediate vicinity of the TSP reaches.

6. FEDERALLY OWNED LANDS

Federally owned land within the study area consist of disposal easements encompassing 21,871.30 acres for the Bayou Lafourche Spoil Disposal Area within Lafourche Parish whose eastern border is along the Reach H levee area on the southwestern end near Raceland and Bayou Lafourche. It will be determined if the right-of-way needed for the levees intersects with this easement during the design phase. The easement held for the Bayou Lafourche Project does not provide the necessary rights for the TSP. Therefore, easements appropriate for the TSP will be acquired by the non-Federal Sponsor.

7. NAVIGATION SERVITUDE

The navigation servitude is the “dominant right of the Government under the Commerce Clause of the U.S. Constitution to use, control and regulate the navigable waters of the United States and the 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.” The federal navigation servitude will not be asserted by USACE in the implementation of the TSP.

8. STUDY MAPS

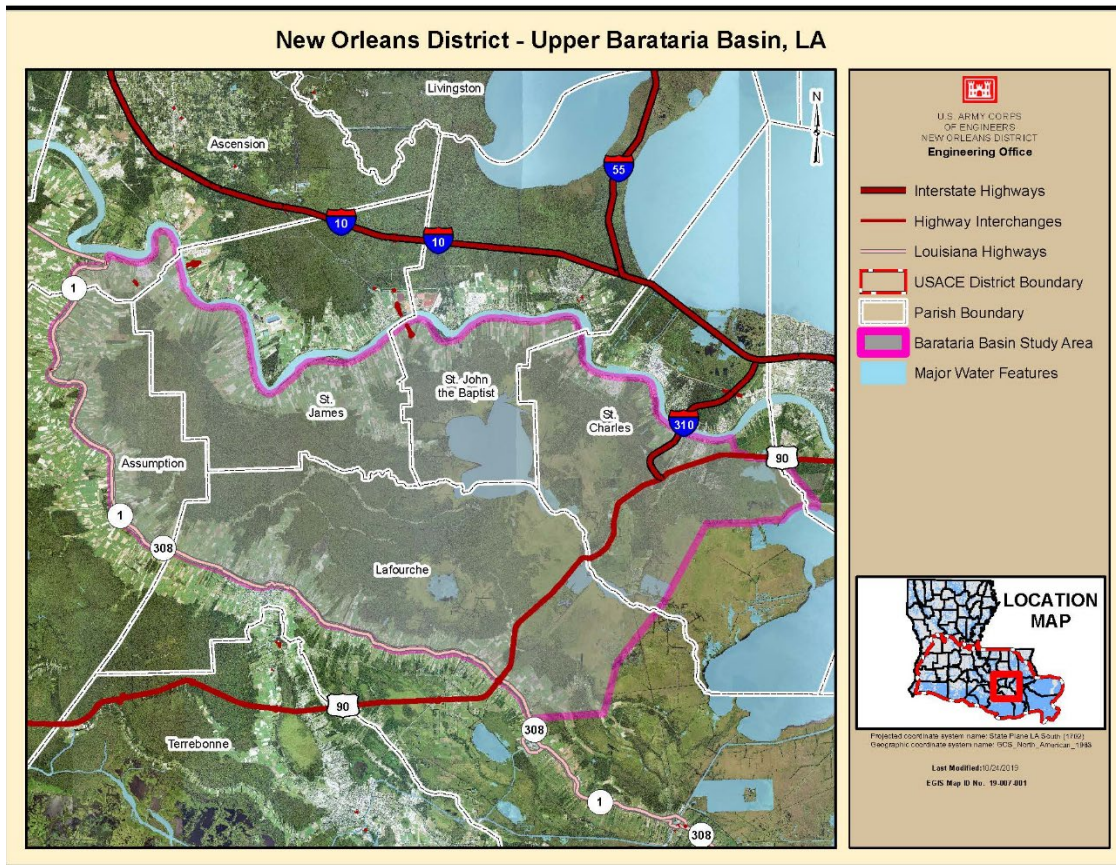


Figure Three – Map of Study Area

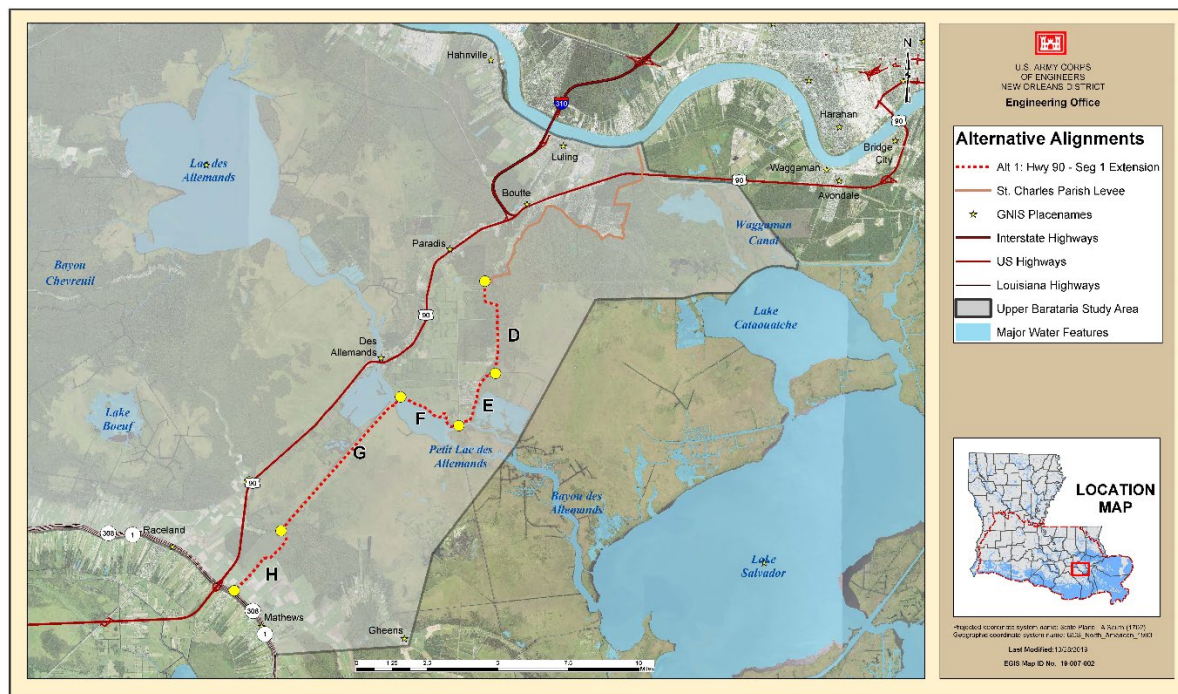


Figure Four – Map of Tentatively Selected Plan Reaches

Upper Barataria Alternative 1 Map

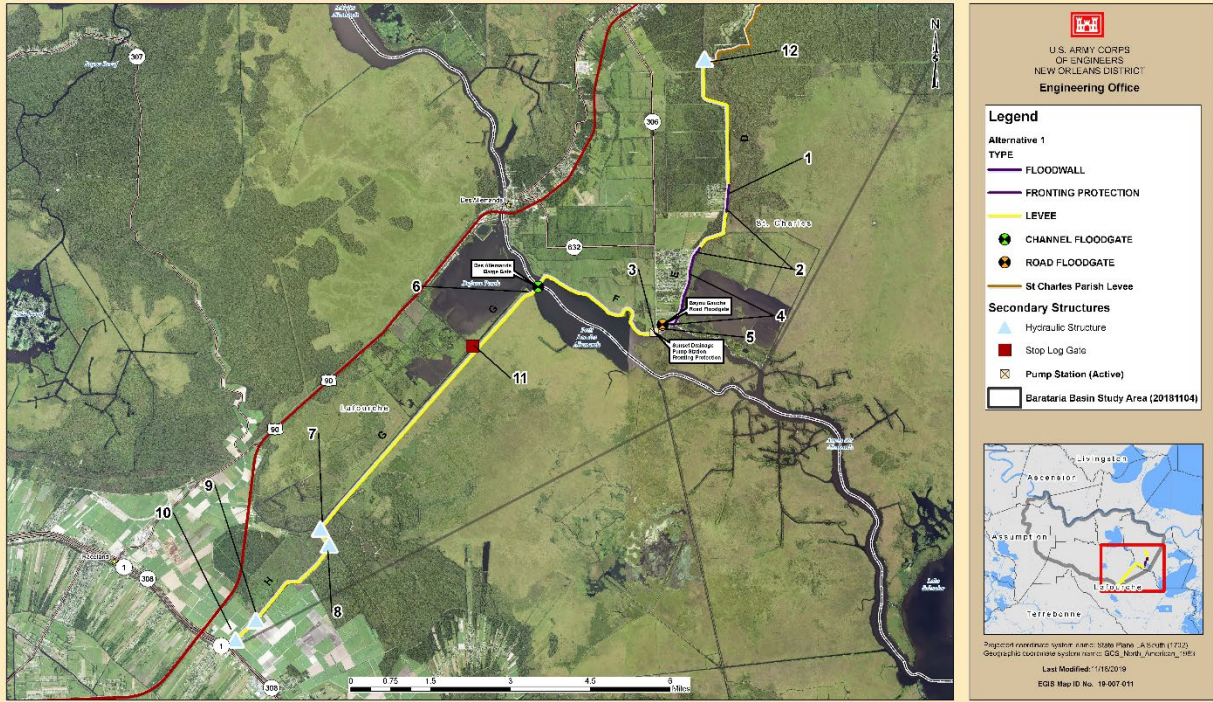


Figure Five – Map of Tentatively Selected Plan Features



Figure Six – Map of Reach G proposed permanent access route (in red)



Figure Seven – Map of Reach F proposed temporary access route (in red)

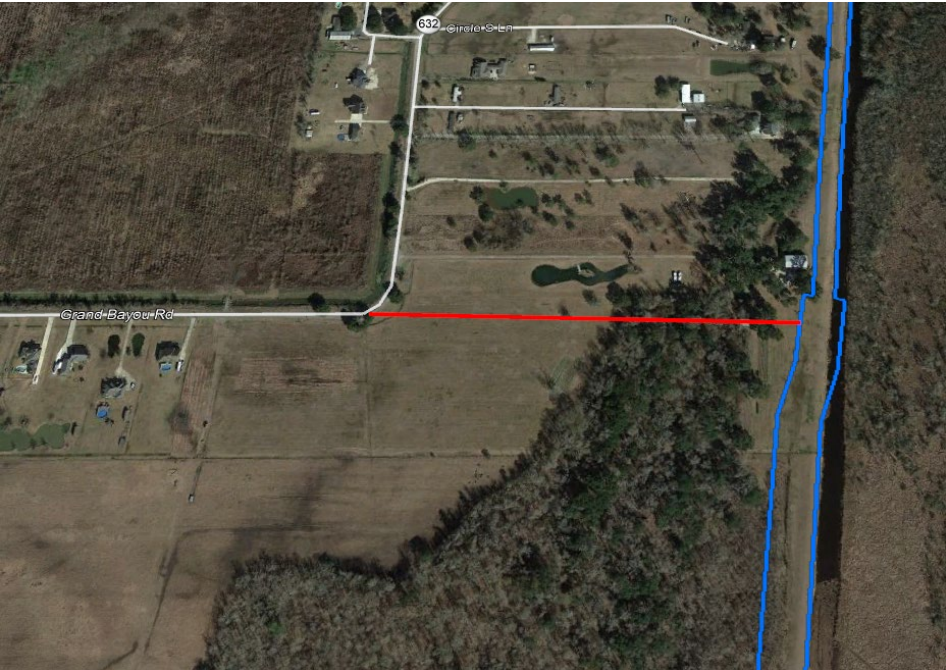


Figure Eight – Map of Reach D proposed temporary access route (in red)

9. INDUCED FLOODING

Construction of the TSP will not induce flooding. This will be further addressed when “Future with Project Conditions” is developed.

10. BASELINE COST ESTIMATE

Lands and Damages	\$2,107,000
Improvements & Crops	N/A
Contingencies	\$527,000
TOTAL LERRD	<u>\$2,330,000</u>
P. L. 91-646 Relocations	N/A
Acquisition Costs (landowners & gov)	\$2,250,000
TOTAL REAL ESTATE COST	\$4,884,000

The proposed mitigation costs for Real Estate are \$75,192,000 as stated in the Economics Appendix, which represents the estimated cost of approximately 719.47 acres if mitigation would be needed.

11. P.L. 91-646 RELOCATION ASSISTANCE BENEFITS

The implementation of the TSP will not displace residential, commercial, industrial or habitable structures within the Project boundaries; therefore, the provisions under Title II of Public Law 91-646, as amended, are not applicable.

12. MINERAL ACTIVITY/CROPS

Mineral activity within the right of way of the TSP has been plugged and abandoned as researched online through Department of Natural Resources site Strategic Online natural Resources Information System. There is no merchantable timber or row crop activity affected by this TSP.

13. NON-FEDERAL SPONSOR CAPABILITY ASSESSMENT

An assessment of the non-Federal sponsor's legal and professional capability and experience to acquire and provide the LERRD for the construction, operation and maintenance of the Project, including its condemnation authority and quick-take capability will be included in the Final Real Estate Plan. However, the NFS has been the non-Federal sponsor on numerous other projects and has been capable of performing the responsibilities of LERRD acquisition and management.

14. ZONING ORDINANCES

No application or enactment of zoning ordinances has been proposed in lieu of, or to facilitate, acquisition in connection with the TSP.

15. ACQUISITION SCHEDULE

The following schedule shows the tasks and duration for acquisition of the LERRD by the NFS. The implementation of the TSP will affect approximately 75 private landowners.

1) Mapping	3 months
2) Title	6 months
3) Appraisals (begin concurrent with title)	9 months
4) Negotiations	24 months
5) Closing	6 months
6) Condemnation (if necessary)	12 months
7) Issuance of Authorization for Entry by NFS	2 months
8) Certification of Right-of-Way/Right of Entry	1 month

16. FACILITY / UTILITY RELOCATIONS

Below is listed public facilities and utilities within the TSP footprint that are expected to be impacted. These were researched from databases including the National Pipeline Database, State Online Natural Resources Information System (SONRIS), Louisiana Department of Natural Resources (LADNR), HTST-HIS, Penwell and the National Pipeline Mapping System (NPMS) data.

There are multiple pipelines within the Project Area of the TSP, each crossing project access corridors or running parallel to the proposed flood protection alignments. Based on the preliminary findings of CEMVN Engineering Division's Design Services Branch, it was determined that the existing pipelines within the Project Area of the TSP WILL be impacted, either requiring relocation of the utility or providing pipeline protection over the utility during construction. The estimated cost for utility relocations for TSP is \$32,201,000.00. This cost is estimated to be below 30% of the total project cost.

UTILITIES WITHIN THE TSP

	Owner	Diameter	Material	Product
Segment 2.1				
	Bridgeline	22"	steel	natural gas
Segment 2.5				
	Boardwalk	18"	steel	natural gas
	Bellsouth	12"	steel	conduit
	St. Charles Parish	4"	steel	water
Segment 2.6				
	Chevron	6"	steel	natural gas

	Chevron	6"	steel	natural gas liquid
	William Energy	10"	steel	natural gas liquid
	Chevron	14"	steel	natural gas
	Chevron	20"	steel	liquified petroleum gas
	Bridgeline	30"	steel	natural gas
Segment 3				
	Boardwalk	12"	steel	natural gas
	Boardwalk	16"	steel	natural gas
	Boardwalk	30"	steel	natural gas
	Shell	9"	steel	crude oil
	Boardwalk	2-10"	steel	natural gas
	Entergy	N/A		electric transmission
Segment 4				
	Boardwalk	12"	steel	natural gas
	Boardwalk	16"	steel	natural gas
	Boardwalk	30"	steel	natural gas
	Shell	9"	steel	crude oil
	Boardwalk	2-10"	steel	natural gas
	Castex	6"	steel	???
	Entergy	N/A		electric transmission
Segment 5				
	Boardwalk	12"	steel	natural gas
	Boardwalk	16"	steel	natural gas
	Boardwalk	30"	steel	natural gas
	Shell	9"	steel	crude oil
	Boardwalk	12"	steel	natural gas
	Castex	6"	steel	???
	Phillip 66	8"	steel	ethane/propylene
	Entergy			overhead electric transmission
	Transcontinental	10"	steel	gas
	Boardwalk	12"	steel	natural gas
	Boardwalk	10"	steel	natural gas
	abandoned	6.5"	steel	
	Entergy			overhead transmission
	Entergy			overhead transmission
	Spectra	36"	steel	natural gas
	LOOP	48"	steel	crude oil
	Exxon	12"	steel	crude oil
	Exxon	16"	steel	crude oil
	Entergy			overhead distribution



Figure Nine – Map of Utility/Facilities within TSP footprint

A full description of the facility or utility relocations that must be performed to implement the TSP will be discussed in the Final REP. MVN EDD Relocations Team will incorporate the relocations process towards compensability and coordinate with utility owners throughout the design and development of the Plans & Specification process once the recommended plan has been chosen.

ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REPORT THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION 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 FINAL ATTORNEY’S OPINIONS OF COMPENSABILITY FOR EACH OF THE IMPACTED UTILITIES AND FACILITIES.

17. HAZARDOUS, TOXIC, RADIOACTIVE WASTE (HTRW) AND OTHER ENVIRONMENTAL CONSIDERATIONS

Phase I of the Draft EIS is scheduled to be completed in December 2019. Any lands, contaminated with HTRW, will be avoided. Any impacts on the real estate acquisition process due to known or suspected presence of contaminants that are located in, on, under, or adjacent to the LERRD required for the construction, operation or maintenance of the Project will be included in the Final REP.

18. LANDOWNER ATTITUDE

USACE held general scoping meetings within 90 days of the start of the study. Landowners in these low-lying areas seem generally agreeable to more protection.

19. RISK NOTIFICATION

A copy of the risk notification letter that will be sent to the NFS will be included in the Final REP.

20. OTHER REAL ESTATE ISSUES

Nonstructural measures could be used to reduce residual risk associated with the TSP.

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