Draft Environmental Assessment

Plaquemines Parish

Lake Hermitage Road Elevation

Plaquemines Parish

Hazard Mitigation Grant Program

Project Number 1603-0419

Plaquemines Parish, Louisiana

May 2015

U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
Baton Rouge, Louisiana

FEMA

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LIST OF ACRONYMS

AADT	Average Annual Daily Traffic
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BMP	Best Management Practices
CAA	Clean Air Act
CAM	Coastal Area Management
CDBG	Community Development Block Grant
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CUP	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DFIRM	Digital Flood Insurance Rate Map
EA	Environmental Assessment
EFH	Essential Fish Habitat
EHP	Environmental and Historic Preservation (EHP)
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ERR	Environmental Review Report
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness
H&H	Hydraulic and Hydrological
HMGP	Hazard Mitigation Grant Program
HP	Historic Preservation
HUD	U.S. Department of Housing and Urban Development
LCP	Local Coastal Program
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDOTD	Louisiana Department of Transportation and Development
LDWF	Louisiana Department of Wildlife and Fisheries
LPDES	Louisiana Pollutant Discharge Elimination System
MBTA	Migratory Bird Treaty Act
MRC	Mississippi River Commission
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NR	National Register

NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OCM	Office of Coastal Management
RCRA	Resources Conservation and Recovery Act
RFD	Request for Determination
ROW	Right of Way
SHPO	State Historic Preservation Officer
SOW	Scope of Work
SOV	Solicitation of Views
SPCCP	Spill Prevention, Control, Countermeasure Plan
SWPPP	Storm Water Pollution Prevention Plan
TSCA	Toxic Substances Control Act
US	United States
USACE	United States Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service

1.1 INTRODUCTION

1.2 Project Authority

Hurricane Katrina, a Category 4 hurricane with a storm surge above normal high tide levels, moved across the Louisiana, Mississippi and Alabama gulf coasts on August 29, 2005. Maximum sustained winds at landfall were estimated at 140 miles per hour. President Bush declared a major disaster for the State of Louisiana due to damages from Hurricane Katrina and signed a disaster declaration (FEMA- 1603-DR-LA) on August 29, 2005, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. FEMA is administering this disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA' s Hazard Mitigation Grant Program (HMGP) to provide funds to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration.

A United States (U.S.) Department of Housing and Urban Development (HUD) Environmental Record Review (ERR) was previously completed on March 13, 2013 and a FONS[signed on October 25, 2013 to satisfy HUD regulations 24 Code of Federal Regulations (CFR) 58.5 and 58.6, for the initial HUD proposed action that consisted of improvements to the same five (5) miles of Lake Hermitage Road but with approximately 1.7 miles elevated and asphalted (HUD, 2013) (HUD, 2013). A HUD Re- evaluation of Environmental Assessment (24 CFR 58.47) was completed in June 2014 in which it was determined that the impacts analyzed under the HUD ERR would be similar to the new proposed action which is presented in this Environmental Assessment (EA). The HUD ERR and FONSI as well as the HUD Re-evaluation of Environmental Assessment are incorporated by reference in this document and is herein referred to as the HUD ERR (HUD, 2013 and HUD, 2014).

Plaquemines Parish, through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) has requested funding under FEMA HMGP to reduce flooding on Lake Hermitage Road during high tide events. FEMA's HMGP provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (N EPA); the President's Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508); and FEMA's regulations implementing NEPA (44 CFR 10.9). The purpose of this EA is to analyze the potential environmental impacts of the proposed Lake Hermitage Road Improvements. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.3 Project Location

Lake Hermitage Road is located in Plaquemines Parish on the west bank of the Mississippi River near Myrtle Grove and extends away from Louisiana Highway 23 for approximately five (5) miles (Figures 1 and 2).

It is the primary access road for three (3) main bayou communities and is the primary evacuation route for residents and several offshore commercial activities. Lake Hermitage Road lies outside the flood protection levee system and is subject to flooding during high tidal conditions. Recent evaluations indicate that the road is regularly flooded during normal high tide events (Plaquemines Parish Government, 2014).

Figure 1 Lake Hermitage Road Location Map

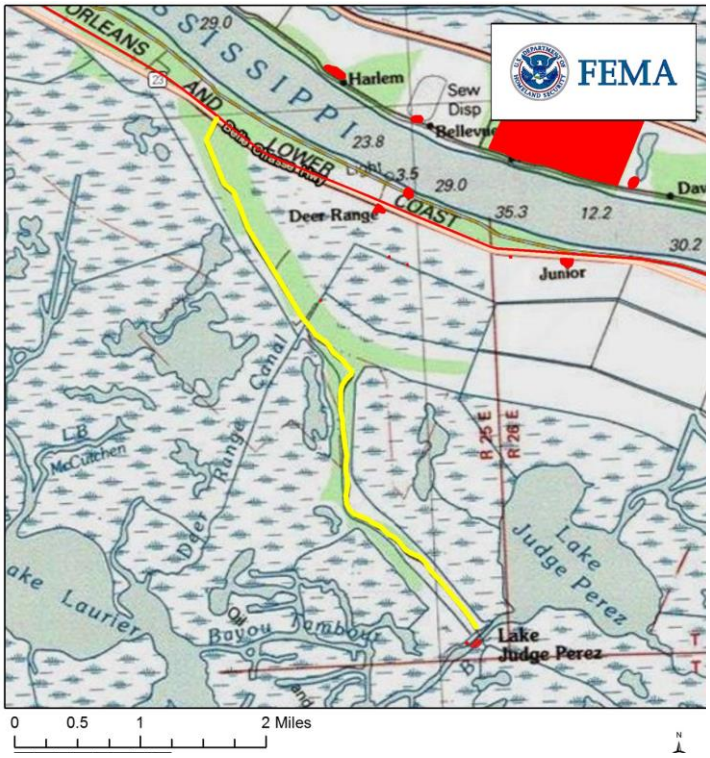


Figure 2 Lake Hermitage Road Site Map

2.0 PURPOSE AND NEED

2.1 Purpose

Through the HMGP, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. Plaquemines Parish identified "flooding" and "hurricanes/tropical storms" as two (2) of the most prevalent hazards being faced by the nearby residents and businesses from flooding of Lake Hermitage Road.

In addition, review of the HMGP resulted in the identification of several goals including, but not limited to the following (Plaquemines Parish Government, 2013):

- Reduce loss to existing and future property due to hazards;
- Protect the health and well-being of the people of Plaquemines Parish from the negative effects of hazard;
- Ensure the ability of emergency services providers and facilities to continue operating during hazard events; and
- Protect existing public and private infrastructure from damage.

2.2 Need

Lake Hermitage Road lies outside the federal flood protection levee system and is subject to flooding during high tidal conditions. Lake Hermitage Road is the primary access road for three (3) bayou communities and is the primary evacuation route for these communities and for several offshore commercial businesses. According to information provided by the Parish (Plaquemines Parish Government, 2013) Lake Hermitage Road provides access and passage to five (5) business, 154 residential structures, and approximately 500 residences of the area.

At its current elevation and condition, the roadway floods regularly during normal high tide events which reduces its ability to act as a primary evacuation route for the nearby communities and impedes it use as main access route for emergency providers. The improvements to Lake Hermitage Road are needed to improve public safety in emergency or natural disaster events.

3.0 ALTERNATIVES

3.1 No Action Alternative

Under the No Action Alternative, Lake Hermitage Road would not be raised or improved. The No Action Alternative would result in continued inundation of Lake Hermitage Road and adjacent flooding in the area. This alternative would result in hazardous conditions for Plaquemines Parish's residents, businesses and emergency responders who utilize the roadway. The No Action Alternative does not meet the purpose and need; however, it will continue to be evaluated throughout this EA.

3.2 Proposed Action

The Proposed Action would consist of approximately five (5) mile of roadway improvements to Lake Hermitage Road from the junction of Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). Road improvements would include: raising the roadway approximately ten (10) inches, to a minimum elevation of +2.5 feet (NGVD 29) through the installation of a limestone base followed by an asphalt pavement; and the installation of three (3) new drainage culverts. The improvements would stay within the existing right-of-way and would provide two (2) 12-foot wide driving lanes with two (2) foot wide shoulders.

The following drainage culvert improvements are proposed:

1. Culvert #1: Replace existing two (2) 24" culverts with three (3) new 24" culverts
2. Culvert #2: Replace existing 24" culvert with one (1) new 24" culverts
3. Culvert #3: Replace existing 24" culvert with two (2) new 24" culverts

Figure 2 depicts the limits of the Proposed Action. Photos of Lake Hermitage Road are also included in Appendix A.

3.3 Alternatives Considered and Dismissed

3.3.1 Complete Buyout Alternative

Plaquemines Parish also considered a complete buyout of the structures along the roadway. The cost to complete a buyout was considered to not be economically feasible and would result in the extended displacement of residents and businesses which rely on their close proximity to the water and coastline of Plaquemines Parish for their commercial operations and economic/financial sustenance. Therefore, the Complete Buyout Alternative was considered by Plaquemines Parish but was ultimately dismissed due to the high economic impacts it would cause to residents and businesses.

4.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The following subsections discuss the existing conditions and relevant regulatory setting in Plaquemines Parish for those resources/areas of concern that the Proposed Action and/or alternatives have the potential to affect.

The following resources/areas of concern were not discussed in this EA due to the limited impacts to the resources from the proposed action and alternatives. Resources not addressed are as follows:

- Climate Change – the proposed improvements to Lake Hermitage Road would not significantly adversely affect climate.
- Noise – the proposed improvements to Lake Hermitage Road would neither affect nor be affected by noise.

4.1 Physical Resources

4.1.1. Geology, Soils, and Seismicity

The project area is located within Plaquemines Parish which is within the Mississippi River Delta and consists mainly of two (2) thick partially overlapping delta complexes, the St. Bernard and the Plaquemines-Modern complexes. These delta complexes are underlain by Pleistocene deposits at depth between 100 to 700 feet. The depth to the Pleistocene surface increases towards the modern Mississippi delta. The St. Bernard delta complex was initially deposited in shallow water approximately 4,500 years ago and several deltaic lobes were successively deposited, grew into lobes and then were abandoned (Seed, et al, 2006).

For the last 1,200 years sediment has been deposited primarily at the mouth of the Mississippi River's current Plaquemines-Balize Delta and in recent decades, the delta front has been building laterally into the Gulf of Mexico at a rate of approximately 300 to 400 feet per year. Currently, the delta front is located at the edge of the Gulf of Mexico's continental shelf and the Balize Delta lobe is the only deepwater delta lobe of the Mississippi River and exhibits its current bird's-foot deltaic form. Due to the location of the lobe large volumes of sediment are now being lost to the continental slope or ocean floor, where water depths are up to 1,000 feet and do not allow land to be built. (Louisiana Coastal Wetlands Planning Protection and Restoration Act [CWPPRA], 2014)

According to documentation by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey, the soils in and around the proposed project right-of-way predominately include Gentilly Muck and Schriever clay, 0 to 1 percent slopes with limited inclusion of Cancienne silty clay loam, 0 to 1 percent slopes.

The project area is located within the Louisiana Gulf Coast faults which consist of a belt of mostly seaward-facing normal faults bordering the northern Gulf of Mexico in Louisiana. Because the Gulf Coast faults number in the hundreds they are divided in four (4) large groups based on regional characteristics. Those faults in Louisiana and Arkansas are evaluated together in a single group. The gulf-margin normal faults in Louisiana and Arkansas are assigned as Class B structures due to their low seismicity and the lack of clarity on if these faults can cause damaging ground motion (Wheeler and Heinrich, 1998).

Class B structures indicate that the geologic evidence demonstrates the existence of Quaternary deformation, but either the fault might not extend deeply enough to be a potential source of significant earthquakes, or the currently available geologic evidence is too strong to confidently assign the feature to Class C but not strong enough to assign it to Class A (USGS, 2014a). Based on the national hazard maps maintained by the United States Geological Survey (USGS), the Louisiana Gulf Coast is within the lowest hazard probability area for seismicity (USGS 2014b).

No Action Alternative: No impacts to geology, soils, or seismicity are anticipated under the No Action Alternative.

Proposed Action: No impacts to geology or seismicity are anticipated under the Proposed Action. On June 30, 2014, correspondence was submitted to the NRCS. The NRCS responded on July 8, 2014 stating that based on the project's location within the existing right-of-way, that the project was exempt for the rules and regulations of the Farmland Protection Policy Act (FPPA). Correspondence with the NRCS including their response is included in Appendix C.

In addition, the Project Engineer was provided a questionnaire with regard to potential impacts associated with the Proposed Action. In a response dated July 15, 2014, the Project Engineer of record stated that minor impacts to the slope of the immediate project area would be expected as result of raising Lake Hermitage Road. Topography outside of the immediate project area would remain unchanged. No other impacts were reported.

Any soil loss would be directly from ground disturbing activities or indirectly from wind or water erosion. The improvements to Lake Hermitage Road would be within the existing right-of-way. No significant impacts to soils would occur under the Proposed Action with the implementation of construction Best Management Practices (BMP).

BMPs such as the development and implementation of an erosion and sedimentation control plan, the use of silt fences or hay bales would be used to prevent soils from eroding and dispersing off-site. In addition, the construction contractor would be required to obtain a Louisiana Pollutant Discharge Elimination System (LPDES) permit and implement a Storm Water Pollution Prevention Plan (SWPPP), if applicable.

4.1.2 Air Quality

The Clean Air Act (CAA) requires that states adopt ambient air quality standards and authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare and regulate emissions of hazardous air pollutants. NAAQS standards are classified as primary or secondary and in general primary air quality standards protect public health and secondary air quality standards protect public welfare. The criteria pollutants are carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone, particulate matter less than 2.5 microns and lead.

According to the EPA Greenbook (EPA 2013) and information provided by the Louisiana Department of Environmental Quality (LDEQ) Air Division, Plaquemines Parish is in attainment for all NAAQS.

No Action Alternative: No impacts to air quality are anticipated under the No Action Alternative and no localized effects to air quality would occur.

Proposed Action: No significant impacts to air quality are anticipated under the Proposed Action. However, during construction there is the potential for localized short-term impacts due to an increase in heavy equipment and construction vehicle use and the disturbance of soils which could generate fugitive dust.

Area soils would be wetted to minimize fugitive dust generation. All vehicles would be properly maintained to ensure emissions are within vehicle design standards. On June 30, 2014, correspondence was submitted to the EPA and the LDEQ. In a response dated July 29, 2014, the LDEQ stated that based on the Parish's attainment status, no general conformity determination obligations were required.

FEMA Environmental and Historic Preservation (EHP) submitted a follow up Solicitation of Views (SOV) to LDEQ and EPA on May 5, 2015 as of the date of this report. Although a response from the EPA and LDEQ has not been received, FEMA-EHP anticipates a no impact concurrence. Please refer to Appendix C for EPA and LDEQ correspondence.

4.2 WATER RESOURCES

4.2.1 Water Quality

The Clean Water Act (CWA) established the basic federal structure for regulating pollutant discharges to navigable waters of the U.S. The law set forth procedures for effluent limitations and water quality standards, national performance standards and point and non-point source programs. The CWA also established the National Pollutant Discharge Elimination System (NPDES) under Section 402 and permits for dredge or fill material under Section 404 (EPA 2014). The EPA enforces the CWA and regulates discharges to waters of the United States through permits issued under the NPDES permitting program. On August 27, 1996, Louisiana assumed the NPDES from EPA Region VI, thus becoming a state delegated to administer the NPDES Program (EPA 2013, LDEQ 2011). Having assumed NPDES responsibilities, Louisiana may directly issue NPDES permits and has primary enforcement responsibility for facilities in this state, with certain exceptions such as Indian Country Lands (EPA 2013, LDEQ 2011). Louisiana administers the NPDES Program and surface water discharge permitting system under the Louisiana Pollutant Discharge Elimination System (LPDES) program (LDEQ 2011). LPDES requires permits for the discharge of pollutants/wastewater from any point source into waters of the state (LAC 33:IX). The term "point source" is defined as "any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, … vessel, or other floating craft from which pollutants are or may be discharged" (40 C.F.R. § 122.2; LAC 33:IX, Chapter 23, §2313). Prior to assumption of the program, permittees were required to hold both a valid state and federal permit. Today, all point source discharges of pollutants to waters of the state of Louisiana are required to hold an LPDES permit issued by the Louisiana Department of Environmental Quality (LDEQ, 2011).

The U.S. Corps of Engineers (USACE) regulates the disposal of dredged and fill materials under Section 404 of the CWA. A Section 404 permit must be obtained for any dredge or fill activities within jurisdictional waters of the U.S. Through the permit review process, USACE determines if a general or individual permit is appropriate for the proposed action.

Section 401 of the CWA specifies that states must certify that any activity subject to a permit issued by a federal agency must meet all state water quality standards. A Louisiana Water Quality Certification would be required, and all conditions of the certification must be adhered to and followed.

E.O. 11990, Protection of Wetlands, directs Federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the values of wetlands for federally funded projects (42 F.R. 26961, May 25, 1977). Wetlands are identified as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (E.O. 11990, § 7[c]). FEMA regulations for complying with E.O. 11990 are found at 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

4.2.1.2 Floodplains

E.O. 11988 (Floodplain Management) requires federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. A floodplain is defined as the lowland and relatively flat areas adjoining inland and coastal waters, including food-prone areas of off-shore islands, and including at a minimum that area subject to a 1 percent or greater chance of flooding in any given year. FEMA complies with EO 11988 through 44 CFR Part 9, Floodplain Management and Protection of Wetlands. FEMA uses Flood Insurance Rate Maps (FIRM) created by the National Flood Insurance program (NFIP). Digital versions of these maps are called DFIRMS. Per the FEMA Community Status Book Report, Plaquemines Parish enrolled in the NFIP in May 1, 1985. Per E.O. 11988, federal agencies proposing activities in a 100-year floodplain must consider alternatives to avoid adverse effects and incompatible development in the floodplain. If no practicable alternative exist to siting an action in the floodplain, the action must be designed to minimize potential harm to or within the floodplain. A notice must be publically circulated explaining the action and the reasons for siting in a floodplain. When evaluating actions in the floodplain, FEMA utilizes the decision process described in 44 CFR Part 9, referred to as the 8 Step Process. The 8 Step Process ensures that the action is consistent with E.O. 11988.

According to the Preliminary Digital Flood Insurance Rate Map (DFIRM) panel 22075C0450E, dated 11/9/12, the project is located partly within a VE (EL14), (EL 13), and (EL 12) zone and partly within an AE (EL 12) and (EL11) zone. An 8-step process has been completed and can be found in Appendix B

No Action Alternative: No impacts to water quality, wetlands (or waters of the U.S.) or floodplains are anticipated under the No Action Alternative and no localized effects to air quality would occur.

Proposed Action: No significant direct impact would occur to water quality under the Proposed Action; however, indirect short-term impacts to the surrounding area could occur during construction. Construction BMPs would be included into the daily construction activities. Per Hydrologic and Hydraulics (H&H) study dated June 2014, prepared by Linfield, Hunter, & Junis, Inc. the proposed action would not have any upstream or downstream impacts. FEMA -EHP submitted a follow up SOV to LDEQ, EPA, and USACE, on May 5, 2015 as of the date of this report. Although a response from the agencies has not been received, FEMA-EHP anticipates a no impact concurrence.

In addition, the construction contractor must contact the LDEQ to determine if a LPDES permit is required; however, it is anticipated that a LPDES would be required and the construction contractor would therefore be required to follow all stipulations in the LPDES permit and all applicable BMPs noted in the permit. As the site is larger than one (1) acre, a Storm Water Pollution Prevention Plan (SWPPP) would be required as part of the LDDES permit. Nonpoint source pollution must be controlled during all construction activities. A site specific Spill Prevention, Control, and Countermeasures Plan (SPCCP) would also be required to be in place prior to the start of construction. BMPs outlined in these plans would reduce the potential of soils, oil and grease, and construction debris to enter into local watersheds.

The improvements to the Lake Hermitage Road would remain within the right of way (ROW); therefore direct impacts to wetlands would be insignificant. However, indirect minor impacts to wetlands are anticipated from construction of the Proposed Action particularly in connection with the replacement of the existing culverts along the right-of-way.

On June 30, 2014 a letter requesting project review was sent to the USACE. In a letter dated July 17, 2014, the USACE responded stating that information reviewed by the USACE indicated conditions existed in the project area that were indicative of the occurrence of water of the U.S., including wetlands. The letter also noted that a permit would be required prior to deposition and/or redistribution of soils into jurisdictional waters and wetland. As such, a Section 404 permit would be obtained prior to construction in the event that soils would be discharged in to surrounding wetlands during construction activities. Correspondence with the USACE has been included in Appendix C.

In accordance with 9.11(d)(2), there shall be no construction of a new or substantially improved structure in a coastal high hazard area unless it is functionally dependent on water or facilitates open space use. A review of the proposed scope of work indicates the action meets FEMA's allowance for improvement of facilities in the coastal high hazard area. Per 44 CFR 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the NFIP. The Applicant is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. All documentation pet1aining to these activities and Applicant compliance with any conditions should be forwarded to the LA GOHSEP and FEMA for inclusion in the permanent project files.

In accordance with E.O. 11988 (Floodplain Management) and E.O. 11990 (Wetland Protection), an 8 Step Process assessment to evaluate the impacts related to the construction of the Proposed Action within the 100-year floodplain and in an area surrounded by wetlands. An early and initial public notice was published in The Plaquemines Gazette on August 5, 2014 to alert the public of the intent to implement the Proposed Action that may impact a floodplain and wetlands. The initial public comment period of 15 days allowed interested citizens to review the Proposed Action and provide comment. The 8-Step Process reviewed practicable alternatives, identified direct and indirect impacts, minimization and mitigation of impacts, and provided a re-evaluation of the Proposed Action's location within the floodplain and surrounding wetlands. Based on the 8-Step Process evaluation, the Plaquemines Parish Government decided that no other practicable alternative to the Proposed Action would meet the purpose and need of the project. Therefore, a final public notice detailing the 8-Step Process decision was published in The Plaquemines Gazette on September 16, 2014. The public was notified that a copy of the 8-Step Process document was available for a 7-day comment period ending September 24, 2014. No comments were received. The original Public Notice, 8-Step and FONSI is in Appendix E.

4.3 COASTAL RESOURCES

The Coastal Zone Management Act (CZMA) of 1972 authorizes the Coastal Zone Management Program and provides states with the authority to comprehensively determine whether activities of federal or state agencies are consistent with the federally-approved State Coastal Zone Management Plans.

The law encourages states to preserve, protect, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coastal reefs, as well as the fish and wildlife using those habitats. In 1978, the Louisiana State and Local Coastal Resources Management Act authorizes the development of management authority at the local parish level under a Local Costal Program (LCP). Upon receipt of federal and state approval, the parish LCP becomes the permitting authority for coastal uses of local concern (LDNR, 2014). Plaquemines Parish lies entirely within the Louisiana Coastal Zone and has an approved active LCP (Figure 3).

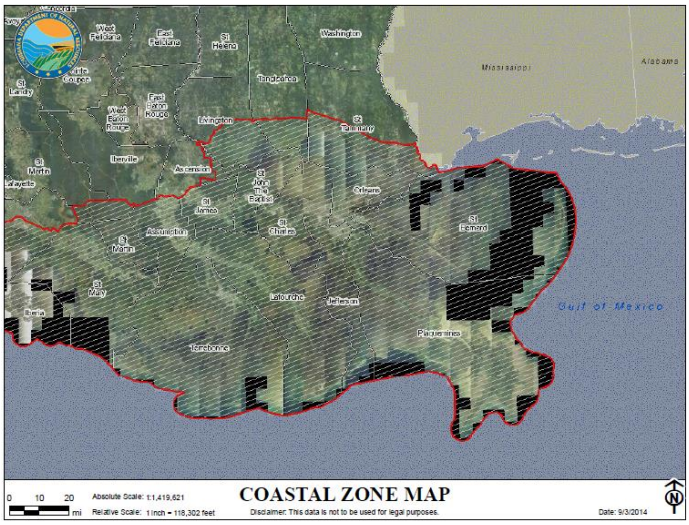


Figure 3 Louisiana Coastal Zone Map

No Action Alternative: No impacts to the Louisiana Coastal Zone are anticipated under the No Action Alternative and no Coastal User Permit (CUP) would be required.

Proposed Action: No direct or significant impact on coastal waters would occur with the implementation of the Proposed Action. A coastal zone and CUP determination was provided for the HUD ERR in 2012 and similar determinations would be anticipated.

On June 30, 2014 a SOV letter requesting project review was sent to the LDNR Office of Coastal Management (LDNR-OCM). Subsequent coordination with the LDNR-OCM resulted in the submittal of a Request for Determination (RFD) regarding the need for a CUP. Submittal of the RFD was competed via their CUP Online Application system. A response from the LDNR-OCM dated August 19, 2014 determined that the Proposed Action did not require a CUP. Copies of the initial SOV letter, RFD application, and the response from LDNR-OCM are included in Appendix C.

The Parish CZM Coordinator with the Plaquemines LCP was provided a questionnaire regarding impacts to the LCP in connection with the Proposed Action. No impacts to the Coastal Area Management (CAM) or resources under the authority if the LCP were reported to be expected. Please refer to Appendix C for a copy of this correspondence

4.4 Biological Resources

4.4.1 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 establishes a federal program to conserve, protect and restore threatened and endangered plant and animals and their habitats. Section 7 of the ESA mandates that all federal agencies ensure any action authorized, funded or implemented is not likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction of their critical habitat. As defined by U.U. Fish and Wildlife Service (USFWS), an endangered species is one that is in danger of extinction throughout all or a significant portion of it range. A threatened species is one that is likely to become endangered in the foreseeable future.

An area listed as Critical habitat is defined as a specific geographic area(s) that contain features essential to the conservation of a threatened or endangered species and may require special management and protection. Table 1 outlines threatened or endangered species found in Plaquemines Parish.

Table 1: Threatened and Endangered Species and Critical Habitat for Plaquemines Parish (USFWS 2014).

Common Name	Scientific Name	Status
Birds		
Piping Plover	*Charadrius melodus*	T, CH
Sprague's Pipit	*Anthus spragueii*	C
Red Knot	*Calidris canutus rufa*	P
Fish		
Gulf Sturgeon	*Acipenser oxyrinchus desotoi*	T
Pallid Sturgeon	*Scaphirhynchus albus*	E
Mammals		
West Indian Manatee	*Trichechus manatus*	E
Reptiles		
Green Sea Turtle	*Chelonia mydas*	T
Hawksbill Sea Turtle	*Eretmochelys imbricata*	E
Kemp's Ridley Sea Turtle	*Lepidochelys kempii*	E
Leatherback Sea Turtle	*Dermochelys coriacea*	E
Loggerhead Turtle	*Caretta caretta*	T

Notes: E=Endangered, T=Threatened, P=Proposed, C=Candidate & CH=Critical Habitat

4.4.2 Vegetation and Wildlife

The Migratory Bird Treaty Act (MBTA) makes it unlawful to take, possess, buy, sell, purchase or barter any migratory bird species listed in 50 CFR 10. If an action is determined to cause a potential take of migratory birds, consultation with the USFWS would be required.

The Magnuson-Stevens Fishery Conservation and Management Act requires all federal agencies to consult with National Oceanic and Atmospheric Administration (NOAA) Fisheries on proposed activities authorized, funded or undertaken by that agency that would affect Essential Fish Habitat (EFH).

The project area is currently disturbed and functions as a roadway and the Proposed Action would remain within the existing Lake Hermitage Road ROW. Per the Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana Natural Heritage Program, a Coastal Live Oak Forest is located adjacent to the project area.

No Action Alternative: No impacts to listed threatened, endangered or their critical habitat are anticipated under the No Action Alternative.

Proposed Action: No impacts to listed threatened, endangered or their critical habitat are anticipated under the Proposed Action. A similar determination was provided for the HUD ERR previous proposed action and a similar determination would be anticipated.

Per the HUD ERR previous proposed action, the USFWS through the USFWS self-assessment tool on November 16, 2012 provided a *no impact* statement determination. The self-assessment tool was updated on July 14, 2014 with the same *no impact* determination resulting.

In addition, a letter was sent to USFWS and to the LDWF based upon the FEMA Proposed Action on June 30, 2014. In a letter dated July 31, 2014, the LDWF noted the presence of the protected Coastal Live Oak forest community in the vicinity of the Proposed Action right-of-way and recommended that all actions be taken to avoid impacts to this protected vegetative community. The LDWF also stated that no other rare, threatened or endangered species or critical habitat would be impacted. FEMA -EHP submitted a follow up SOV to USFWS and LDWF, on May 5, 2015 as of the date of this report. Although a response from the agencies has not been received, FEMA-EHP anticipates a no impact concurrence. All USFWS and the LDWF correspondence is included in Appendix C.

4.5 CULTURAL RESOURCES

4.5.1 Regulatory Setting

The consideration of impacts to historic and cultural resources is mandated under Section 101(b)4 of the NEPA as implemented by 40 CFR, Parts 1501-1508. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account their effects on historic properties (*i.e.*, historic and cultural resources) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. FEMA has chosen to address potential impacts to historic properties through the "Section 106 consultation process" of the NHPA as implemented through 36 CFR, Part 800.

In order to fulfill its Section 106 responsibilities, FEMA has initiated consultation on this project in accordance with Louisiana State-Specific Programmatic Agreement among FEMA, the GOHSEP, the Louisiana State Historic Preservation Officer of the Department of Culture Recreation and Tourism (SHPO), the Alabama-Coushatta Tribe of Texas (ACTT), the Chitimacha Tribe of Louisiana (CTL), the Choctaw Nation of Oklahoma (CNO), the Jena Band of Choctaw Indians (JBCI), the Mississippi Band of Choctaw Indians (MBCI), the Seminole Tribe of Florida (STF), and the Advisory Council on Historic Preservation (ACHP) regarding FEMA's Hazard Mitigation Grant Program (2011 LA HMGP PA) dated January 31st, 2011. (http://www.fema.gov/pdf/hazard/hurricane/2005katrina/LA_HMGP%20PA.pdf). The (2011 LA HMGP PA was created to streamline the Section 106 review process.

The "Section 106 process" outlined in the LA HMGP PA requires the identification of historic properties that may be affected by the proposed action or alternatives within the project's area of potential effects (APE). Historic properties, defined in Section 101(a)(1)(A) of NHPA, include districts, sites (archaeological and religious/cultural), buildings, structures, and objects that are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). Historic properties are identified by qualified agency representatives in consultation with interested parties. Below is a consideration of various alternatives and their effects on historic properties.

4.5.2 Existing Conditions

On June 30, 2014 Plaquemines Parish Government (Applicant) submitted a Solicitation of Views (SOV) to SHPO for this undertaking but did not engage Tribes at this time. Though the scope of work (SOW) solicited by the Applicant was similar to the SOW indicated in the design plans dated October 31, 2014 supplied by the Applicant to FEMA, in the June 30, 2014 SOV the Applicant stated that the Lake Hermitage Road Improvements would extend to "the bridge crossing at Hermitage Bayou (near Bayou Lane)." However, the design plans dated October 31, 2014 instead specify that the southern terminus of the proposed road improvements is the junction of Lake Hermitage Road and Bayou Lane (-89.884847; 29.559471), at which point the road will be tapered to match the existing road elevation.

In the June 30, 2014 SOV to SHPO the Applicant stated that the "proposed Lake Hermitage Road Improvements project would be funded through Plaquemines Parish HMGP and the HUD Community Development Block Grant (CDBG) grant funds. A HUD ERR was previously completed and a FONSI signed on October 25, 2013 to satisfy HUD regulations 24 CFR 58.5 and 58.6, for the HUD proposed action that consisted of improvements to the same five (5) miles of Lake Hermitage Road surfaced with asphalt. Per the HUD ERR and in response to the SOV it was determined that "no historic properties will be impacted by this project" and that your office had no further concerns for this project (correspondence from Breaux to Shuman, dated February 11, 2013 RE: Draft Report La Division of Archaeology Report No. 22-4176). Plaquemines Parish's HMGP requests a similar determination for the new but similar HMGP proposed action, as detailed above." SHPO concurrence was received on August 11, 2014.

FEMA has determined that the SOW, as currently defined in the design plans dated October 31, 2014 supplied by the Applicant to FEMA and the HMGP grant application is not the same as the one previously consulted upon in the June 30, 2014 SOV. Additionally, there is no documentation relating to Tribal consultation. For these reasons, FEMA re-consulted with SHPO and engaged Tribes in consultation on 05/08/2015.

Historic Properties within the project area were identified based on FEMA's review of the NRHP database, the Louisiana Cultural Resources Map provided by SHPO, historic map research, and a visual inspection of the project location conducted on May 1, 2015 by FEMA Historic Preservation (HP) staff. This data was evaluated by FEMA using the National Register (NR) Criteria. FEMA verified that the Standing Structures view-shed is not located within a listed historic district nor is it located within the view-shed of a property individually listed in the NRHP. Furthermore, the view-shed from the location of the Lake Hermitage Road Improvements does not include any structures aged fifty years or older.

FEMA reviewed available information pertaining to soils in the project location and the related Mississippi River Delta development. Soils within the project ROW (http://websoilsurvey.nrcs.usda.gov) consist primarily of Schriever Clay (47.2%), a soil-type typically indicative of backswamp environments, followed by Gentilly muck (33.0%), a soil-type indicative of marsh environments,

The next most prevalent soil type is Cancienne silty clay loam (13.5%), a soil-type indicative of natural levees (only found in the extreme northern portion of the APE bordering the junction of Louisiana Highway 23 and Lake Hermitage Road), water (4.5%), and Harahan clay (1.8%), a soil-type indicative of backswamp environments. In general, the majority of these soil-types are typically considered to be unfavorable to Prehistoric occupation.

However, based on the presence of archaeological deposits associated with 16PL18 and a large multi-mound site 16PL159 (the Bayou Grand Chenier Site), this soil appears to have been favorable for early-Prehistoric occupation in this area. This soil-type is often found both on the lower parts of natural levees and in backswamp positions on the lower Mississippi River alluvial plain. Presently, these soils manifest within the vicinity of the project area as comparatively dry landmasses in an otherwise semi-inundated landscape and as such were likely favorable to Prehistoric use, especially during periods of drier climatic conditions.

The Delta Plain Region was formed by the various courses, or distributaries, of the Mississippi River as the river changed course over time. There are six (6) widely accepted delta complexes, or deltaic lobes, that contributed to the formation of the Delta Plain Region, some of which being deposited coevally at times. The present APE is contained within the Plaquemines Complex which formed 1100 B.P. -present (Saucier 1994) and Goodwin et al. (1991) further hypothesize that surface exposures within the Plaquemines coastal region date to after A.D. 1000; therefore Prehistoric use of the present project area is not anticipated to pre-date the Tcula or the Baytown/Coles Creek period.

FEMA also conducted a review of historic maps and documentation pertinent to the APE. The current review of historic maps revealed that the 1848 La Tourrette's reference map of the state of Louisiana indicated that by this date the present APE had been divided into four separate properties but does not indicate any significant detail beyond the names of the owners/plantations (mostly illegible). The 1883-1994 Mississippi River Commission (MRC) Survey of the Mississippi River maps do not provide coverage of the southern extent of the APE. The 1883 Survey of the Mississippi River (Chart 79) does however provide coverage of the northern portion of the APE. This map designates that approximately the first two miles of the present-day location of Lake Hermitage Road were actively cultivated sugar cane fields at this time, and from north to south, the APE would have passed through properties owned by "A. De La Rose, Theo Laumade, Ed Purearle, A.P. Foster, Wade Walker," and finally Deer Range plantation before continuing through undeveloped land vegetated with "live oak and palmetto," at which point coverage of the APE is discontinued.

No structures are depicted within or surrounding the entire covered portion of the APE and no indication of the presence of Lake Hermitage Road is recorded. The 1913 Survey of the Mississippi River (Chart 79) does not provide any detail below the location where the junction of Louisiana Highway 23 and Lake Hermitage Road was later to be established. The 1935 Survey of the Mississippi River (Chart 106) is the first map identified that depicts the location of Lake Hermitage Road, but otherwise does not indicate any development within the northern portion of the present APE. The 1939 and 1944 U.S. Geological Survey, Point La Hache, LA Quadrangle Maps, provide coverage of the entire APE. These maps also display the location of Lake Hermitage Road and are the first in this series that indicate the location of Deer Range Cemetery in the central portion of the APE and the town of Hermitage near the southern terminus of the APE, but otherwise show no additional development within the vicinity of the APE. The 1949, 1961, and 1973 Survey of the Mississippi River (Charts 52; 59; 59) maps do not provide any additional details beyond what is presented in the 1935 MRC map. The 1964 U.S. Geological Survey, Point La Hache, LA Quadrangle Map first depicts light residential development fronting Suzie Road and East Shirley Road, located approximately 1.3 miles (2.0 km) from the junction of Louisiana Highway 23 and Lake Hermitage Road.

This map also indicates that by this time the number of houses within the town of Hermitage had significantly increased. Based on the aforementioned map data, historic occupation of the area surrounding the present APE appears to be primarily confined to two (2) locales (Deer Range and Hermitage) that were developed during the late Industrialization and Modernization 1890-1940 LA SHPO thematic period (Smith et al. 1983) and up until the present time. Even up until the present-time, development within the vicinity of the APE remains confined to these two (2) small population centers.

However, the possibility exists for the presence of earlier plantation/agricultural related deposits in the northern portion of the APE and undocumented historic occupation sites in the central and southern portions of the APE, potentially dating to the War and Aftermath 1800-1890 LA SHPO thematic period or earlier. FEMA has additionally determined that that no previously recorded archaeological sites fell within the APE. However, there are seven (7) previously recorded sites located within 1-mile (1.6 km) of the present APE. Site 16PL266 (NO and Lower Coast RR) is located 27.0 meters (88.5 ft) to the north Lake Hermitage Road (-89.917377; 29.619022) on the opposite side of Louisiana Highway 23. Site 16PL190 (Locus 24), a historic ruin, is located 0.17 miles (0.2 km) to the east-northeast of the central portion of the APE. Site 16PL185 (Locus 6), a historic artifact scatter, is located 0.9 miles (1.4 km) to the northeast of the central portion of the APE. Site 16PL189 (Locus 23), recorded as a historic unknown site, is located 0.8 miles (1.2 km) to the northeast of the central portion of the APE. Sites 16PL190, 16PL185, and 16PL189 all have components attributed to the War and Aftermath 1800-1890 and Industrialization and Modernization 1890-1940 LA SHPO thematic periods (Smith et al. 1983).

Site 16PL191 (Locus 25), a historic transportation site associated with the Industrialization and Modernization 1890-1940 LA SHPO thematic period, is located 0.8 miles (1.2 km) to the northeast of the central portion of the APE. Site 16PL18 (Hermitage Site), an altered Prehistoric mound and Rangia Cuneata shell midden, is located 160.0 meters (525.57 ft) to the south of the southern terminus of the APE, across the intersection of Bayou Grand Chenier and Bayou Hermitage, and Site 16PL156 (Bieber Cemetery Site), a historic cemetery associated with the War and Aftermath 1800-1890 and Industrialization and Modernization 1890-1940 LA SHPO thematic periods, is located 218.0 meters (715.2 ft) to the southwest of the southern terminus of the APE.

On May 1, 2015, a FEMA archaeologist conducted a site visit to the project APE and visually inspected the area, with a particular emphasis near the southern terminus. No artifacts were observed within the Lake Hermitage Road APE. Additionally, FEMA reviewed a previous consultation for the Lake Hermitage Volunteer Fire Department (FEMA letter dated December 3, 2007, SHPO concurrence December 13, 2007). This letter documents that two FEMA archaeologists conducted a visual inspection of the exposed surface area surrounding the fire station (near the southern terminus of the project APE) and found no evidence of pre-historic deposits. Additionally, on May 6, 2015, during a Monthly Tribal Conference Call, FEMA solicited Tribal opinions regarding the above referenced project and received no objections at that time.

While no artifacts were observed within the APE and no archaeological sites are currently recorded in the project APE, FEMA conducted a review of the background material and archival records associated with archaeological site 16PL18 due to confusion relating to is location. This review included a review of all previous site forms (Kinffen 1952, Wurtzburg 1991, Tavaszi 2014), archaeological reports (Wurtzburg 1992, Tavaszi et al. (forthcoming), and Shuman 2013), and historic map data. In summary, FEMA has determined that there is potential for the presence of deposits associated with archaeological site 16PL18 in its circa-1951 recorded location, on the north bank of Bayou Hermitage, but outside of the current project APE.

In conclusion, FEMA has made a reasonable and good faith effort to identify historic properties within the APE, including potential historic properties not yet identified. Soils research does indicate that portions of the APE were moderately favorable to pre-historic and/or historic occupation. Historic map research indicates that other than the circa 1930s establishment of Lake Hermitage Road, development occurring within the vicinity of the project area occurred primarily during the mid- to late-twentieth-century, though no historic buildings are in the APE. Furthermore, the archaeological APE is confined to existing previously-disturbed ROWs in which no artifacts were observed.

Based on all the available evidence, FEMA has determined that it is unlikely that the APE possess any NRHP-eligible historic properties or archaeological deposits.

No Action Alternative: This alternative does not include any FEMA undertaking; therefore FEMA has no further responsibilities under Section 106 of the NHPA.

Proposed Alternative: A review of this alternative was conducted in accordance with FEMA's 2011 LA HMGP PA dated January 31st, 2011. FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. However, there is concern related to potential affects to archaeological site 16PL18. Therefore, FEMA has determined a finding of **No Historic Properties Affected, with conditions** for this Undertaking and submitted this Undertaking on 05/08/2015 to SHPO and Tribes for review and comment. Consultation with affected Tribes (Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Chitimacha Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Muscogee Creek Nation, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, and , the Tunica-Biloxi Tribe of Louisiana) was conducted per 36 CFR §800.2(c)(2)(i)(B). FEMA requested comments within 30 days of the transmittal of this consultation and in accordance with Stipulation III.F(3) & IX.F of Louisiana HMGP Secondary Programmatic Agreement and 36 CFR part 800.5(c)1, FEMA may proceed with funding the undertaking assuming concurrence if SHPO and Tribes do not object within the regulatory timeframes.

If the proposed Action is implemented, the Applicant must comply with the NHPA conditions described in this document. (Staging Area Restrictions, Louisiana Unmarked Human Burial Sites Preservation Act, and the Inadvertent Discovery Clause).

4.6 Socioeconomic Resources

4.6.1 Environmental Justice

E.O. 12898 (Federal Actions to Address Environmental Justice in Minority and Low-Income Populations) requires federal agencies to ensure the rights established under Title VI of the Civil Rights Act of 1964 when analyzing environmental effects. Agencies are required to identify and correct programs, policies, and activities that have a disproportionately high and adverse human health or environmental effects on minority or low-income populations. The project area is located within U.S. Census Bureau (Census) Tract 504, Plaquemines Parish, Louisiana. Census data with regard to demographics and economic character are as follows:

Table 2:U.S. Census data 2008-2012 for the state of Louisiana, Plaquemines Parish, and project site

Category	Louisiana	Plaquemines Parish	Census Tract 504
Population	4,529,605	23,220	3,773
White	63.1%	71.0%	48.4%
Black or African American	32.0%	21.1%	40.7%
American Indian and Alaskan Native	0.6%	1.9%	6.5%
Asian	1.6%	3.5%	4.4%
Native Hawaiian/Other Pacific Islander	0.0%	0.0%	0.0%
Some other race	1.1%	1.0%	0.0%
Persons of Hispanic or Latino origin	4.3%	4.8%	0.6%
Two or more races	1.5%	1.5%	0.0%
Economic Characteristic			
Median household income	$44,673	$57,386	$55,278
Median family income	$56,047	$71,126	$78,214
% of Families and People Whose Income in the Past 12 Months is Below the Poverty Line			
All families	14.3%	7.6%	10.9%
Married couple families	5.3%	2.5%	1.8%
Families with female householder, no husband present	37.5%	22.0%	14.8%
Under 18	26.6%	13.5%	13.0%
18 years and older	16.0%	10.0%	6.5%
65 years and over	12.5%	12.1%	5.1%

No Action Alternative: No disproportionate impacts to minority or low-income populations would occur under the No Action Alternative.

Proposed Action: No disproportionate impacts to minority or low-income populations would occur under the Proposed Action. However, improved access to Lake Hermitage Road through a reduction in flooding could provide beneficial impacts to all populations with existing health concerns as emergency vehicle access would be improved. In addition, evacuation during emergencies (such as hurricanes) often disproportionately affects some residents; therefore the ability to potentially have the Lake Hermitage Road open longer during evacuations due to a reduction in tidal flooding conditions would also potentially provide a beneficial impact to these communities.

The Parish Grant Administrator, Ms. Hilda Lott, was provided a questionnaire regarding potential impacts to Environmental Justice issues as a result of the Proposed Project. Based on her response dated July 30, 2014, no displacements, no changes to the demographic character, and no changes to employment patterns would be expected as a result of the Proposed Action.

4.6.2 Hazardous Materials

Hazardous wastes and materials are regulated in the U.S. under many different federal and state laws. Federal laws include the Resource Conservation and Recovery Act (RCRA), the RCRA Hazardous and Solid waste Amendments, the Solid Waste Act, the Toxic Substances Control Act (TSCA), the Comprehensive Environmental Response, Compensation and liability Act (CERCLA) and the CAA. Based on the HUD ERR, HUD regulations provide stringent guidelines on various hazardous waste and materials concerns in a project area in which HUD funding would be utilized such as:

- The siting of HUD-assistance project near hazardous facilities;
- The nearby siting of explosive, flammable, toxic and radioactive materials to a HUD-assistance project area;
- Airport clear zones and accident potential zones; and,
- Solid waste disposal.

These various hazardous and hazardous waste materials were examined and investigated and a site reconnaissance was completed and no nearby concerns were noted within the project area (HUD, 2013 and HUD, 2014).

No Action Alternative: No impacts from hazardous waste or hazardous materials would occur under the No Action Alternative.

Proposed Action: No long term significant impacts are expected from the Proposed Action; however, there is the potential for short–term impacts to occur during construction activities. Any hazardous material used or generated during construction activities would be handled and disposed of in accordance with federal state and local regulations.

Letters were sent to EPA and LDEQ based upon the FEMA Proposed Action on June 30, 2014. The LDEQ response dated July 29, 2014 cited required actions in the event hazardous materials are to be used, generated, or disposed of that would impact surrounding soils or surface or groundwater. FEMA - EHP submitted a follow up SOV to LDEQ and EPA on May 5, 2015 as of the date of this report. Although a response from the agencies has not been received, FEMA-EHP anticipates a no impact concurrence. All correspondence sent and received from the EPA and LDEQ is included in Appendix C.

In response to a questionnaire provided to the Project Engineer dated July 2, 2014, no impacts to explosive or flammable operations or impacts from toxic chemicals or radioactive materials were reported to be expected as a result of the Proposed Project. Correspondence from the Project Engineer has been included in Appendix C.

4.6.3 Traffic and Transportation

The Louisiana Department of Transportation and Development (LDOTD) is responsible for the design, construction, and maintenance of the state highway system, as well as portions of the federal interstate highway within Louisiana's boundaries. The state provides traffic counts along various highways within certain parishes. Traffic counts are provided in units of Average Annual Daily Traffic (AADT). Traffic counts along Louisiana State Highway 23 at Myrtle Grove, north of the beginning of the Lake Hermitage Road right-of-way was reported to be 9,217 AADT in 2012 while traffic counts at West Pointe a la Hache were reported to be 7,074 AADT in the same year.

Lake Hermitage Road provides the primary access for three (3) main bayou communities and is the primary evacuation route for residents and several offshore commercial activities. Lake Hermitage Road lies outside the flood protection levee system and is subject to flooding during high tidal conditions and recent evaluations indicate that the road is regularly flooded during normal high tide events (Plaquemines Parish Government, 2014).

The LDOTD did not provide traffic counts or other similar data for Lake Hermitage Road. However, the Parish reports that approximately 698 utilize Lake Hermitage Road on a daily basis (Plaquemines Parish Government, 2013).

No Action Alternative: No additional impacts on traffic and transportation would occur under the No Action Alternative; however, the reduced roadway access due to frequent tidal flooding would continue to occur and overtime may substantially increase due to rising sea levels causing additional indirect impacts.

Proposed Action: No long-term adverse impacts on traffic and transportation would occur under the Proposed Action; however, short-term construction impacts from construction-related activities would occur but these would be short-term and minor. Proper signage, lighting, barriers, and appropriate traffic control measures would be utilized during construction. Improved transportation access to Lake Hermitage Road through a reduction in roadway flooding would provide beneficial impacts on traffic and transportation. Many of these beneficial impacts would be from greater use of the road by emergency vehicles and an increase in disaster evacuation usage of the roadway by nearby residents.

Letters were sent to LDOTD based upon the FEMA Proposed Action on June 30, 2014. As of the date of this report, no response from the LDOTD has been received. Correspondence sent to the LDOTD has been included in Appendix C.

4.6.4 Public Service and Utilities

Utilities in the general project area are provided as follows:

- Water and Sewage Disposal – Plaquemines Parish Water Department
- Natural Gas – Atmos Energy
- Electricity – Entergy
- Debris/Garbage Collection and Disposal – Plaquemines Parish Solid Waste Department
- Police Services - Plaquemines Sherriff's Office

No Action Alternative: No additional short-term impacts on public service and utilities would occur under the No Action Alternative; however, reduced roadway access due to frequent tidal flooding would continue to occur and overtime may substantially increase due to rising sea levels thereby causing additional long-term indirect impacts.

Proposed Action: No long-term adverse impacts on public service and utilities would occur under the Proposed Action; however, short-term construction impacts from construction-related activities which might reduce public service and utility vehicle access vehicles would occur but these would be short-term and minor. Improved transportation access to Lake Hermitage Road through a reduction in roadway flooding would provide beneficial impacts on public service and utilities.

Correspondence provided by the Parish Engineer and the Parish Sheriff dated July 2, 2014 reported no impacts to utilities or community services, including services provided by the Sheriff's department were expected as a result of the Proposed Action. Copies of this correspondence have been included in Appendix C.

4.6.5 Public Health and Safety

Threats to public health and safety resulting from regular and frequent flooding and inundation is well documented for the areas that Lake Hermitage Road provides access. Flooding is common during storm and hurricane events and when the Mississippi River stage at Venice exceeds +4 feet. Serving as the only ingress and egress and providing the only evacuation route for upwards of 500 residences of the area, Lake Hermitage Road's tendency to flood and obstruct residents' movements as well as access to emergency vehicles under disaster conditions poses a threat to not only private citizens and property but to Parish resources and infrastructure as well.

Review of the HMGP identified several goals including, but not limited to, the following:

- Reduce loss to existing and future property due to hazards;
- Protect the health and well-being of the people of Plaquemines Parish from the negative effects of hazard;
- Ensure the ability of emergency services providers and facilities to continue operating during hazard events; and
- Protect existing public and private infrastructure from damage.

No Action Alternative: No additional short-term impacts on public health and safety would occur under the No Action Alternative; however, reduced roadway access due to frequent tidal flooding would continue to occur and overtime may substantially increase due to rising sea levels causing additional long-term indirect impacts.

Proposed Action: No long-term adverse impacts on public health and safety would occur under the Proposed Action; however, short-term construction impacts from construction-related activities reducing access to emergency vehicles would occur but these would be short-term and minor. Improved transportation access to Lake Hermitage Road through a reduction in roadway flooding would provide beneficial impacts on public health and safety and meet goals set forth by the Parish. Many of these beneficial impacts would be from greater use of the road by emergency vehicles and an increase in disaster evacuation usage of the roadway by nearby residents. In addition, evacuation during emergencies (such as hurricanes) would provide long-term beneficial impacts from a reduction in tidal flooding conditions which could potentially increase the length of time that Lake Hermitage Road could remain open during evacuations.

5.1 CUMULATIVE IMPACTS

According to the CEQ regulations, cumulative impacts represent the *impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions*. Per 40 CFR 1508.7, cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The entire Louisiana Gulf Coast and specifically Plaquemines Parish is still undergoing recovery after a series of devastating hurricanes. Many of these activities include demolition and reconstruction of infrastructure, structures, and resources impacted by past storm events. Rebuilding of the Parish also includes new construction activities, both within the private as well as the public sector.

These projects can be expected to have cumulative impacts to the built and natural environment throughout Plaquemines Parish. However, the improvements recommended under the Proposed Action do not represent new construction of infrastructure and are taking place within an existing right-of-way. Therefore, implementation of the Proposed Action would not be anticipated to contribute any significant adverse impacts and therefore, would not contribute to overall cumulative impacts in the Parish.

5.2 Mitigation Conditions

- The applicant must complete a jurisdictional wetland determination and submit it to USACE and complete the permitting process. All correspondence must be submitted to FEMA and GOHSEP for inclusion into the project files.

- The project is within and directly adjacent to jurisdictional wetlands as per documentation provided by the USACE. Extreme care must be taken during the construction process through the appropriate use and maintenance of Best Management Practices (BMPs). Applicant must adhere to all conditions outlined in Clean Water Act Section 401 permits associated with the project.

- Erosion Control Devices (ECD's) such as silt fencing, hay bales, sediment traps, etc. must be used and maintained extensively to prevent any potential direct or indirect adverse impacts to nearby wetland areas per the Clean Water Act and EO 11990. Any adverse impacts to adjacent wetlands resulting from the construction of this project will jeopardize receipt of federal funding.

- Precautions must be observed to control nonpoint source pollution from construction activities. LDEQ requires stormwater general permits for construction areas equal to or greater than one (1) acre. The applicant must contact the LDEQ Water Permits Division at (225) 219-3181 to determine if the proposed project requires a permit.

- Proper signage must clearly identify the adjacent wetland boundaries to help prevent any potential adverse impacts from construction vehicles, equipment, or supplies accidentally leaving the boundaries of the approved Right Of Way.

- If the project results in a discharge to waters of the State, a Louisiana Pollution Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act (CWA) and the Louisiana Clean Water Code. If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater. In order to minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the nearby waters of the United States and well defined drainage areas, the contractor should ensure compliance with all local, state, and federal requirements related to sediment control, disposal of solid waste, control and containment of spills, and discharge of surface runoff and stormwater from the site. All documentation pertaining to these activities and Applicant compliance with any conditions should be forwarded to the State and FEMA for inclusion in the permanent project files.

- Implement construction BMPs; install silt fences/straw bales to reduce sedimentation. Area soils must be covered and/or kept wet during construction. If fill is stored on site as part of unit installation or removal, the contractor is required to appropriately cover it.

- Appropriate signage and barriers must be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes, and to minimize potential adverse public safety concerns.

- Per 44 CFR 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the National Flood Insurance Program. Applicant is required to coordinate

- The Parish will control all filling, grading, and other construction development so as to not increase the potential for future flood damage.

- The project will be designed to avoid any altering of the natural floodplains and/or the formation of flood barriers which increase flood hazards to adjacent lands

- Applicant must ensure compliance with all parish and city ordinances. All correspondence must be submitted to FEMA and FEMA-EHP for inclusion in the project files. Should the site plans (including drainage design) change the applicant must submit changes to FEMA-EHP for review and approval prior to the start of construction.

- Applicant is required to coordinate with the local floodplain administrator regarding building permits, clearances, drainage studies, etc. Documentation of all coordination activities with the local floodplain administrator pertaining to this project shall be submitted to the LA GOHSEP and FEMA for inclusion in the permanent project files.

- The contractor will be responsible for keeping all excavated areas periodically sprayed with water, all equipment maintained in good working order, and all construction vehicles limited to 15 mph to minimize pollution/fugitive dust.

- Any water system improvements shall be coordinated through the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.

- All precautions must be observed to protect the groundwater of the region. All debris must be disposed of in an approved landfill.

- The contractor is required to take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction area. The contractor must implement traffic control measures, as necessary.

- If any solid or hazardous waste materials, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, the LDEQ Single-Point-of-Contact (SPOC) must be contacted at (225) 219-3640 to initiate appropriate measures for the proper assessment, remediation, management and disposal of the contaminated material. Additionally, precautions should be taken to protect workers from these hazardous constituents.

- If a bald eagle or its nest is spotted within 1,500 feet of the project site during the months of October through mid-May, the applicant must cease construction activities and contact LDWF and USFWS immediately. Documentation of all coordination activities with LDWF and the USFWS must be submitted to the LA GOHSEP and FEMA for inclusion in the permanent project files.

- To minimize worker and public health and safety risks from project construction and closure, all construction and closure work shall be done using qualified personnel trained in the proper use of construction equipment, including all appropriate safety precautions. Additionally, all activities must be conducted in a safe manner in accordance with the standards specified in OSHA regulations and the USACE safety manual.

- If human bone or unmarked grave(s) are present with the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.

- If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform its Public Assistance contacts at FEMA, who will in turn contact FEMA Historic Preservation staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO.

- Any fill or borrow material used must be sourced from areas that do not contain any buried cultural materials (e.g. brick foundations, prehistoric Indian artifacts, human burials, and the like).

- FEMA is requiring, as a condition of this grant, that no construction staging occur in areas that are not currently covered in gravel, asphalt, or concrete (i.e., previously disturbed ROWs or "protected" surfaces) surrounding the southern terminus of the APE near the intersection of Lake Hermitage Road and Bayou Lane.

6.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

6.1 Agency Coordination

As part of the development of this EA, federal, state and local agencies were contacted in letters dated 6/30/20104. FEMA sent follow up SOV letters on May 5, 2015 and is awaiting responses. All initial Solicitation of Views letters and the respective responses from these agencies are included in Appendix C.

The following agencies were contacted and asked to review the proposed project and include federal, state and local agencies as listed below:

Federal

- U.S. Environmental Protection Agency (EPA)
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife (USFWS)

State

- State Historic Preservation Officer (SHPO)
- Louisiana Department of Wildlife and Fisheries (LDWF)
- Louisiana Department of Environmental Quality (LDEQ)
- Louisiana Department of Natural Resources (LDNR)
- Louisiana Department of Transportation and Development (DOTD)

Local

- Plaquemines Parish Sheriff's Office, Office of the Sheriff
- Plaquemines Parish Project Engineer
- Plaquemines Parish, Parish Engineer
- Plaquemines Parish Department of Coastal Zone Management
- Plaquemines Parish Grant Administrator
- Plaquemines Parish, Permits, Planning and Zoning

6.2 Public Involvement

An early and initial public notice was published by Plaquemines Parish in The Plaquemines Gazette on August 5, 2014 to alert the public of the intent to implement the Proposed Action that may impact a floodplain and wetlands. The initial public comment period of 15 days allowed interested citizens to review the Proposed Action and provide comment. The 8-Step Process reviewed practicable alternatives, identified direct and indirect impacts, minimization and mitigation of impacts, and provided a re-evaluation of the Proposed Action's location within the floodplain and surrounding wetlands. Based on the early 8-Step Process evaluation, the Plaquemines Parish Government decided that no other practicable alternative to the Proposed Action would meet the purpose and need of the project. Therefore, a final public notice detailing the 8-Step Process decision was published in The Plaquemines Gazette on September 16, 2014. The public was notified that a copy of the 8-Step Process document was available for a 7-day comment period ending September 24, 2014. No comments were received. A United States (U.S.) Department of Housing and Urban Development (HUD) Environmental Record Review (ERR) was previously completed on March 13, 2013 and a FONSI signed on October 25, 2013

A public notice published by FEMA ran in the local newspaper, The Times-Picayune, on Wednesday, May 20, Friday, May 22, 2015, and Sunday, May 24, 2015. The public notice also ran in the local newspaper, The Plaquemines Gazette, on Tuesday, May 19 and May 26, 2015 .The draft EA and draft FONSI were available for review at the following locations: 1) Port Sulphur Branch Library at 139 Delta St., Port Sulphur, LA 70083 Monday-Fridays 8:30 a.m. - 5:00 p.m.; and 2) the Belle Chase Library at 8442 Hwy 23 Belle Chasse, LA 70037 on Monday, Wednesday, and Friday 830 a.m. - 5p.m., Tuesday and Thursday 8:30 a.m. - 7:00 p.m. The documents can also be downloaded from FEMA's website at http://www.fema.gov/resource-document-library. There was a fifteen (15) day comment period, beginning on May 19, 2015 and concluding on June 3, 2015 at 4 p.m. If no substantive comments are received, the draft EA and associated FONSI will become final. See Appendix E for a copy of the Public Notices, 8-Steps, and FONSIs.

7.0 REFERENCES

Federal Emergency Management Agency (FEMA), 2014. Community Status Book Report, Louisiana Communities Participating in the National Flood Program, 2014. Last Accessed: June 2014. Available online at URL:http://www.fema.gov/cis/LA.html

FEMA Website, 2014. Last accessed: June 2014. Available online at URL: http://www.fema.gov/hazard-mitigation-grant-program.

Goodwin, R. Christopher, Paul Heinrich, William P. Athens, and Stephen Hinks. 1991. Overview, Inventory, and Assessment of Cultural Resources in the Louisiana Coastal Zone. Report submitted to the Coastal Management Division, Department of Natural Resources, Baton Rouge.

La Tourrette, John. 1848. La Tourrette's reference map of the state of Louisiana: from the original surveys of the United States, which show the townships, sections, or mile squares, Spanish grants, settlement rights & c., also the plantations with the owners names engraved thereon. New Orleans, John La Tourrette, 1848.

Louisiana Coastal Wetlands Planning Protection and Restoration Act (CWPPRA), 2014. Coastal Louisiana Basins, The Mississippi River Delta Basin. Available online at URL: http://lacoast.gov/new/About/Basin_data/mr/. Last Accessed: June 2014.

Louisiana Department of Natural Resources (LDNR), 2014. Local Coastal Programs. Available online at URL: http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=111&pnid=192&nid=194. Last Accessed: June 2014.

LDNR, SONRIS Application. Available online at URL: http://sonris.com/

Louisiana Department of Transportation & Development (LDOTD) Estimated Annual Average Daily Traffic Counts. Available online at URL: http://wwwapps.dotd.la.gov/engineering/tatv/

Louisiana Department of Wildlife and Fisheries (LDWF) Natural Heritage Program – Species by Parish List. Available online at URL: http://www.wlf.louisiana.gov/wildlife/species-parish-list

Mississippi River Commission:

1883 Historic Mississippi Hydrographic Survey Books (Chart 79). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1895 Survey of the Mississippi River (Sheet 29). Electronic document, http://alabamamaps.ua.edu/historicalmaps/MississippiRiver/index2.html, accessed on 4/27/2015.

1913 Historic Mississippi Hydrographic Survey Books (Chart 79). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1935 Historic Mississippi Hydrographic Survey Books (Chart 106). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1949 Historic Mississippi Hydrographic Survey Books (Chart 52). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1961 Historic Mississippi Hydrographic Survey Books (Chart 59). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1973 Historic Mississippi Hydrographic Survey Books (Chart 59). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

1991 Historic Mississippi Hydrographic Survey Books (Chart 59). Electronic document, http://www2.mvn.usace.army.mil/eng2/hydsrv/msHYD.asp, accessed on 4/27/2015.

Plaquemines Parish Government, 2014. Plaquemines Parish, LA. Elevation of Parish Roads, Lake Hermitage Road, Hydrologic and Hydraulic Study Report, HMGP #1603X-075-0010, Parish Project No. 13-03-06. Prepared for Plaquemines Parish Government. Prepared by Linfield, Hunter & Junius, Inc. March 2014.

Plaquemines Parish Government, 2013. State of Louisiana Plaquemines Parish Government, Hurricane Katrina Hazard Mitigation Grant program (HMGP), Elevation of Plaquemines Parish Roads, 1603X-075-0010. Prepared by Hunt, Guillot & Associates, LLC. March 21, 2013.

Saucier, R. T. 1994. Geomorphology and Quaternary Geologic History of the Lower Mississippi Valley. Mississippi River Commission. U.S. Army Corps of Engineers, Vicksburg, Mississippi.

Seed, R. B., et al, 2006. Investigation of the Performance of the New Orleans Flood Protection Systems in Hurricane Katrina on August 29, 2005 Independent Levee Investigation Team. New Orleans Levee Systems, Hurricane Katrina. Report No. UCB/CCRM – 06/01. Available online at URL: http://www.ce.berkeley.edu/projects/neworleans/report/Draft/CH_3.pdf. June 30, 2006.

Shuman, Malcolm. 2013.Review and Assessment of Cultural Resources Issues Related to the Proposed Elevation of Lake hermitage Road, Plaquemines Parish, LA (Report No. 22-4176). Report on file at the Division of Archaeology, Louisiana Department of Culture, Recreation and Tourism, Baton Rouge.

Steven D., Phillip G. Rivet, Kathleen M. Byrd, and Nancy W. Hawkins. 1983. Louisiana's Comprehensive Archaeological Plan. State of Louisiana Department of Culture, Recreation and Tourism, Office of Cultural Development, Division of Archaeology, Baton Rouge.

Tavaszi, Maria M., Jason A. Emery, and Jeremiah A. Kaplan. 2015 [forthcoming]. Archaeological Monitoring of Demolition and Debris Removal Operations in Plaquemines, St. Bernard, St. Charles, St. Mary and St. Tammany Parishes, Louisiana. Report in production. Will be placed on file at the Division of Archaeology, Louisiana Department of Culture, Recreation and Tourism, Baton Rouge.

U.S. Census Bureau, 2008 – 2012 American Community Survey 5Year Estimates. Available online at URL. http://www.census.gov/

U.S. Department of Housing and Urban Development (HUD), 2013. HUD Re-evaluation of Environmental Assessment (24 CFR 58.47). Prepared for Plaquemines Parish Government. Prepared by Professional Service industries, Inc. June 2014

U.S. HUD, 2013. Environmental Record Review for the Lake Hermitage Road Improvements Port Sulfur, Plaquemines Parish, Louisiana. Prepared for Plaquemines Parish Government. Prepared by Professional Service industries, Inc. March 13, 2013. Finding of No Significant Impact (FONSI) signed on October 25, 2013.

U.S. Environmental Protection Agency (EPA), 2013. Green Book. Available online at URL: http://www.epa.gov/airquality/greenbook/rindex.html. Updated: December 05, 2013. Last Accessed: June 2014.

U.S. EPA, 2012. EPA Region 6, Sole Source Aquifers. Last Accessed: June 2014. Available online at URL: http://www.epa.gov/region6/water/swp/ssa/maps.htm. Last Update: August 2012.

U.S. Fish and Wildlife Service (USFWS), 2014. Endangered, Threatened, and Candidate Species of Louisiana. Available online at URL: http://www.fws.gov/lafayette/pdf/LA_T&E_Species_List.pdf. Updated: March 14, 2014. Last Acessed July 2014.

U.S. Geological Survey (USGS) including:

1939 Point La Hache, LA [Contours]. 1:62,500. 15 Minute Series (Topographic). Reston, VA: USGS. Copy on file, FEMA Historic Preservation, 1500 Main Street, Baton Rouge, LA 70802.

1944 Point La Hache, LA [Contours]. 1:62,500. 15 Minute Series (Topographic). Reston, VA: USGS. Copy on file, FEMA Historic Preservation, 1500 Main Street, Baton Rouge, LA 70802.

1964 Point La Hache, LA [Contours]. 1:62,500. 15 Minute Series (Topographic). Reston, VA: USGS. Copy on file, FEMA Historic Preservation, 1500 Main Street, Baton Rouge, LA 70802.

2014a. Earthquakes Hazard Program, Glossary. Last Accessed: June 2014. Available online at URL: http://earthquake.usgs.gov/hazards/qfaults/glossary.php#physiographic province. June 2014.

2014b. Earthquakes Hazard Program. Last Accessed: June 2014. Available online at URL: http://earthquake.usgs.gov/hazards/qfaults/. June 2014.

USGS and Louisiana Department of Transportation and Development (DOTD), 2013. Water Resources of Plaquemines Parish, Louisiana, Fact Sheet 2013–3031. Available online at URL: http://pubs.usgs.gov/fs/2013/3031/pdf/FS2013-3031_Plaquemines.pdf. June 2013

Wheeler, R.L., and Heinrich, P.V., compilers, 1998, Fault number 1022, Gulf-margin normal faults, Louisiana and Arkansas, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, Available online at URL: http://earthquakes.usgs.gov/hazards/qfaults, accessed 07/01/2014 08:17 PM.

Wurtzburg, Susan J. 1992. *Archaeological Investigations in the Southeastern Region of Louisiana: The 1991-1992 Annual Report* (Report No. 22-1707). Regional Archaeology Program at Louisiana State University. Report on file at the Division of Archaeology, Louisiana Department of Culture, Recreation and Tourism, Baton Rouge.

8.0 LIST OF PREPARERS

Denise Rousseau Ford, *Environmental Project Co-Manager*, Professional Service Industries, Inc.

Rachel A. Keane, *Environmental Project Co-Manager*, Professional Service Industries, Inc.

Robert E. Nockton, P.E., *Project Engineer* - Linfield, Hunter & Junius, Inc.

Leesa Foreman, *HMGP Coordinator* - Plaquemines Parish Government

Merina Christoffersen-*Environmental Protection Specialist*-Federal Emergency Management Agency

Tiffany Spann-Winfield- *Deputy Environmental Liaison Officer*, Federal Emergency Management Agency

Melanie Pitts- *Lead Environmental Historic Preservation Specialist*, Federal Emergency Management Agency

APPENDIX A

SITE PHOTOGRAPHS

Photo 1. Lake Hermitage Road Beginning of Project Proposal, at Latitude 29.619022, Longitude -89.917377, Just off Hwy 23. Notice road elevation appears to be 'at grade'.

Photo 2. Lake Hermitage Road, Showing Waterway Running Alongside Road Within ROW of Project Proposal, On Left Side of Road Headed South.

Photo 3. Lake Hermitage Road, Showing Waterway Running Alongside Road Within ROW of Project Proposal,
On Right Side of Road Headed South.

Photo 4. Lake Hermitage Road, Showing Location of Submerged Culvert Crossing 1 of 3 In Waterway Within ROW of Project Proposal, On Right Side of Road Headed South. This Culvert is Proposed to Be Replaced As Part of Project Proposal.

Photo 5. Lake Hermitage Road, Showing Location of Submerged Culvert Crossing 1 of 3 In Waterway Within ROW of Project Proposal, On Left Side of Road Headed South. This Culvert is Proposed to Be Replaced As Part of Project Proposal.

Photo 6. Lake Hermitage Road, Showing Location of Submerged Culvert Crossing 2 of 3 In Waterway Within ROW of Project Proposal, On Left Side of Road Headed South. This Culvert is Proposed to Be Replaced As Part of Project Proposal.

Photo 7. Lake Hermitage Road, Showing Storm Damaged Old Coastal Live Oak Tree, Within ROW of Project Proposal, On Left Side of Road Headed South.

Photo 8. Lake Hermitage Road, Showing Massive Old Coastal Live Oak Tree, Almost in Road, Within ROW of Project Proposal, On Left Side of Road Headed South. (Please See Louisiana Department of Wildlife and Fisheries (LDWF) Note Below)

LDWF Louisiana Natural Heritage Program Notes

The Louisiana Natural Heritage Program database indicates that a Coastal Live Oak Forest is located adjacent to the proposed project area. This community is considered critically imperiled to imperiled in the state of Louisiana with an S1S2 ranking. This community provides habitat for many unique species of plants, and acts as a migratory staging/stopover site for Neo-tropical migratory birds. We advise you to take the necessary measures to avoid any impacts to this ecological community. If you have any questions or need additional information, please contact Amity Bass at 225-765-2975.

Photo 9. Lake Hermitage Road, Showing Bridge Crossing at West Shirley Road. No Widening of Bridges Is Associated With This Project Proposal.

Photo 10. Lake Hermitage Road, Showing Bridge Crossing at West Shirley Road. No Widening of Bridges Is Associated With This Project Proposal.

Photo 11. Lake Hermitage Road, Showing Bridge Crossing at Dove Road. No Widening of Bridges Is Associated With This Project Proposal.

Photo 12. Lake Hermitage Road, Showing Bridge Crossing at Dove Road. No Widening of Bridges Is Associated With This Project Proposal.

Photo 13. Lake Hermitage Road, Showing Location of Submerged Culvert Crossing 3 of 3 In Waterway Within ROW of Project Proposal, On Right Side of Road. Photo Taken Standing on Bayou Lane Looking North. This Culvert is Proposed to Be Replaced As Part of Project Proposal.

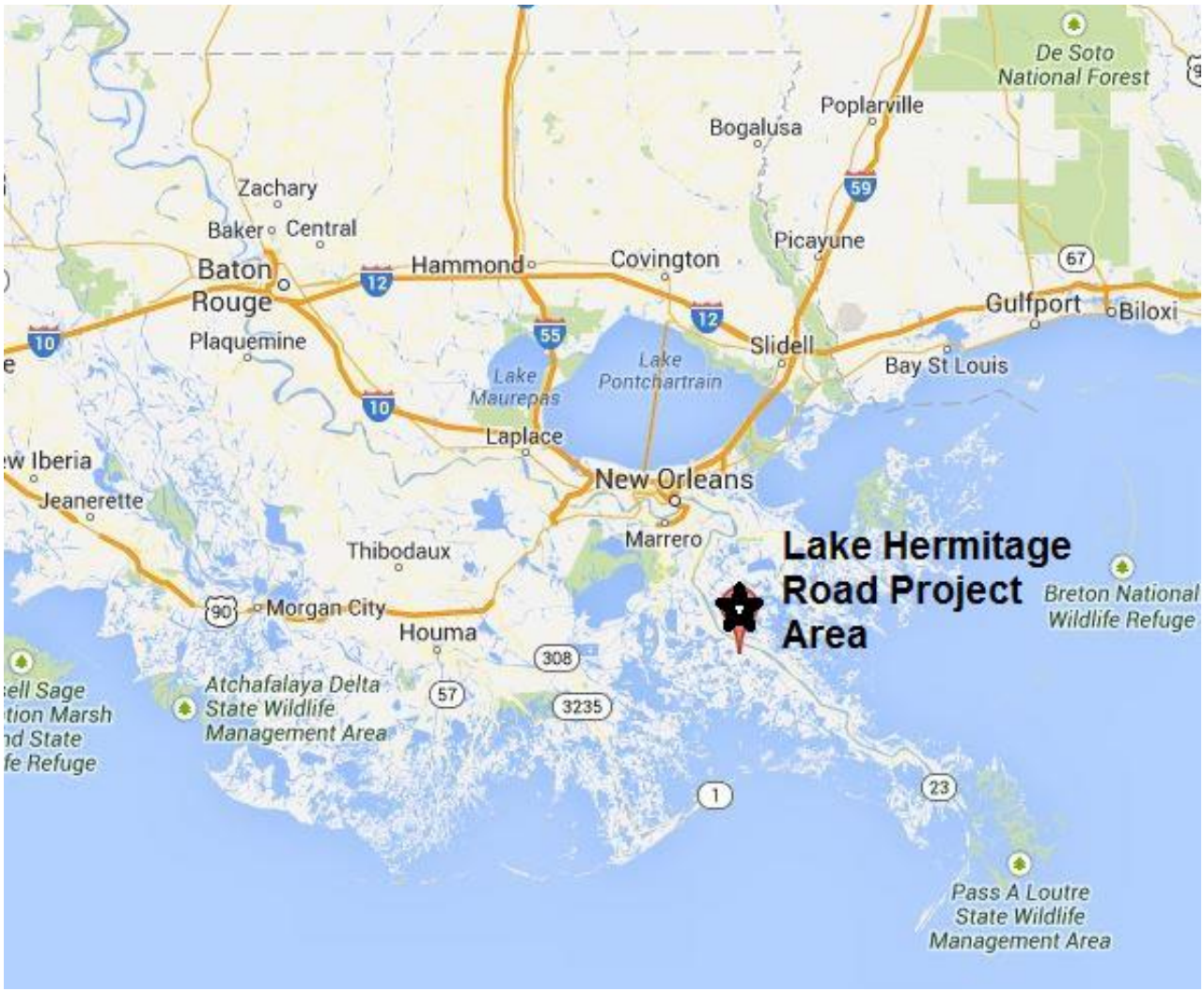
Photo 14. Lake Hermitage Road, Showing Location of Submerged Culvert Crossing 3 of 3 In Waterway Within ROW of Project Proposal, On Left Side of Road Headed South. This Culvert is Proposed to Be Replaced As Part of Project Proposal.

Photo 15. Lake Hermitage Road, Location of the End of the Project Proposal, at Latitude 29.5586, Longitude -89.884261, at Fire Station and Bridge Near Bayou Lane.

Photo 16. Google Aerial Image Photo, Lake Hermitage Road Bridge End of the Project Proposal, at Latitude 29.5586, Longitude -89.884261, Showing Fire Station and Bayou Lane.

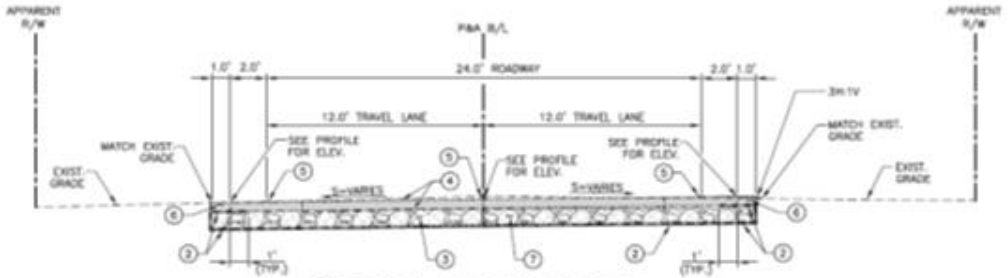
APPENDIX B
SITE PLAN DRAWINGS
FOR PREFERRED ALTERNATIVE

Lake Hermitage Road Location USGS Map



Lake Hermitage Road Site Map Aerial Photo

Lake Hermitage Road Elevation and Paving Typical Cross Section

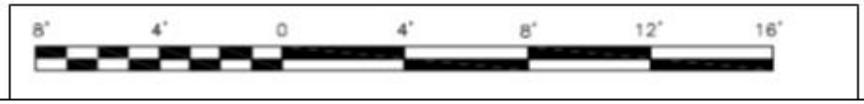


④ TYPICAL ROADWAY SECTION
(BRIDGE TRANSITION)
STA. 172+32.00 TO STA. 173+32.00,
STA. 174+07.00 TO STA. 175+07.00,
STA. 196+35.00 TO STA. 197+35.00,
STA. 198+13.00 TO STA. 199+13.00
(CUT AT STA. 198+13.00)

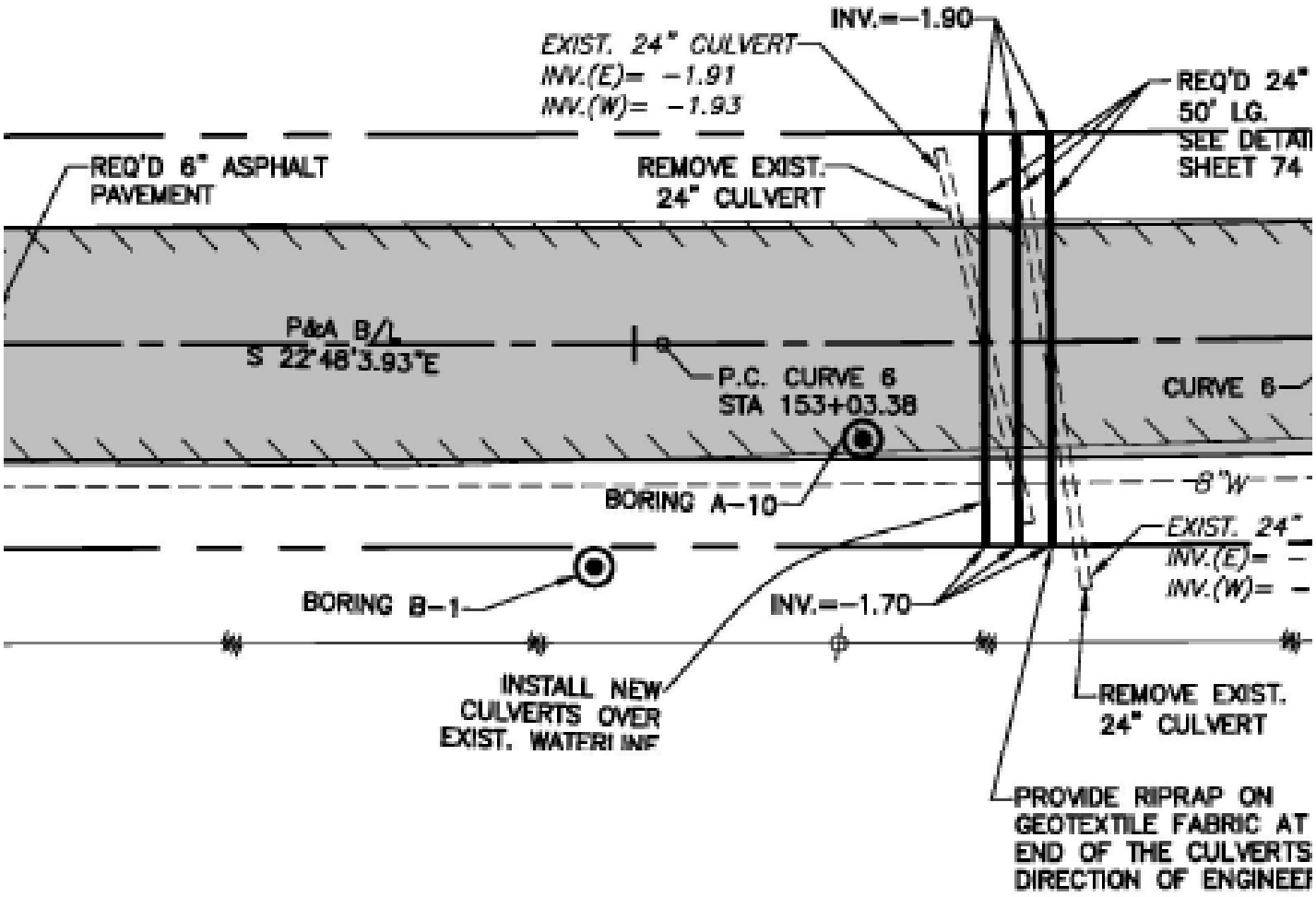
SCALE: 1" = 4'

CONSTRUCTION LEGEND

1. EXISTING AGGREGATE ROADWAY TO REMAIN
2. GEOTEXTILE FABRIC (EXTEND 1' MIN. UNDER REQ'D PAVEMENT)
3. CRUSHED STONE PAVEMENT BASE (1' THICK)
4. 6" THICK ASPHALTIC CONCRETE PAVEMENT (2" THICK WEARING COURSE, 2" THICK BINDER COURSE, 2" ASPHALTIC BASE COURSE)
5. PERMANENT PAVEMENT MARKINGS (SEE PERMANENT PAVEMENT MARKINGS AND SIGNAGE SHEETS)
6. EMBANKMENT
7. EXCAVATION



Lake Hermitage Road Elevation Typical Plan View Culvert Removal and Replacement



APPENDIX C
EXTERNAL
AGENCY CORRESPONDENCE

USDA

United States Department of Agriculture

July 8, 2014

Plaquemines Parish Government
Attn: Hilda Lott
Grant Administrator
8056 Hwy. 23, Suite 200
Belle Chasse, Louisiana 70037

RE: Plaquemines Parish Hazard Mitigation Grant Program
Solicitation of Views
Lake Hermitage Road Improvements, HMGP Project 4: 1603x-075-0010

Dear Ms. Lott:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resources Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project maps and description submitted with your request indicates that the proposed construction areas are within existing right of ways, and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549.

For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location:

http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown above.

Respectfully,

Kevin D. Norton
State Conservationist

ACTING FOR

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (318) 473-7626
An Equal Opportunity Provider and Employer

PLAQUEMINES PARISH GOVERNMENT
HAZARD MITIGATION GRANT PROGRAM
(HMGP)

LAKE HERMITAGE ROAD IMPROVEMENTS
HMGP PROJECT #: 1603x-075-0010

The following questions require input from your agency for completion of the environmental review for the construction of improvements to five miles of Lake Hermitage Road. The improvements would elevate the roadway and improve drainage on approximately five miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). The proposed action consists of raising the elevation of five miles of Lake Hermitage Road to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt and the replacement of three existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing right-of way (ROW). (Please see signature requirements at bottom of this form)

Department: Plaquemines Parish Project Engineer for the LAKE HERMITAGE ROAD IMPROVEMENTS

The following questions must be answered to complete the required environmental review process. Please answer the following questions and sign the applicable section at the end of the checklist. Once signed please return to Ms. Hilda Lott, Plaquemines Parish Government, either via fax (504) 297-5042) or email to hlott@plaquemines parish.com or Ms. Rachel Keane, PSI via fax (504) 733-9415 or email to rachel.keane@psiusa.com for inclusion in the Environmental Record Review information packet.

1. Will the project have any impact on the slope of the local topography, i.e. significantly increasing/decreasing the slope of the land surrounding the project site?
   ____ No Impact X Minor Impact ____ Major Impact

   a. If so, describe the nature of the impact and any measures taken to mitigate effects on the slope of the area. The roadway is being raised, and accordingly the road bed and side slopes will be somewhat higher than currently. Impacts should be minor as the roadway alignment is unchanged, as the roadway will generally be raised only 10", and as all work will be within the existing 50' right-of-way. Topography beyond the right-of-way will remain unchanged.

2. Will the project have any impact on the existing erosion conditions, i.e. contributing to increased erosion of the land surrounding the project site?
   X No Impact ____ Minor Impact ____ Major Impact

   a. If so, describe the nature of the impact along with any measures taken to mitigate erosion in the project area.

3. Are the local soil conditions suitable for the project without risking the geotechnical stability of the building's foundation?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

4. Does the project produce any additional hazards or nuisances which could present dangerous situations for the community?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If so, describe the nature of the posed dangers along with any measures being taken to mitigate such hazards.

5. Does the project's energy consumption present a significant increase over the current energy use of the community?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If so, to what extent would current utility use increase and would additional utility equipment need to be installed to handle the increase?

   b. Describe any specific measures being taken to maximize the building's operating efficiency.

Environmental Design, Historic Values, and Urban Impact

1. To what extent will the project location or its generated activities negatively affect the aesthetics of its natural and manmade surroundings? (Visual Quality Concrence)
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. Is the project's design such that it is visually compatible with the area and its architectural scale?

Noise

1. What are the effects of local ambient noise on the project?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. To what extent would the project contribute to existing community noise levels? Describe impacts including any mitigation measures.

Explosive or Flammable Operations.

1. Does the project involve any use of any above-ground explosive or flammable fuels or chemical containers? Describe.
   X No Impact ____ Minor Impact ____ Major Impact

2. Is the project located near, or are mitigation measures in place so as to neither expose people or buildings to such hazards? Describe. N/A

Note: Blast overpressure or thermal radiation can be mitigated with the construction of a barrier of adequate size and strength to protect the project.

Toxic Chemicals and Radioactive Materials

1. Will the project include or be near hazardous materials, contamination, toxic chemicals, gasses or radioactive substance which could affect the health or safety of occupants or conflict with the intended use of the subject property?
   X No Impact ____ Minor Impact ____ Major Impact

2. If so, such adverse environmental conditions can be mitigated by removing, stabilizing or encapsulating the toxic substances in accordance with the requirements of the appropriate Federal, State or local oversight agency; describe any measures.
   X No Impact ____ Minor Impact ____ Major Impact

For any of the above impacts, provide any mitigation efforts.

In completing the above questionnaire, please provide the information below:

Printed Name: Robert E. Mockton

Signature: [signature]

Title: Civil Engineer

Organization: Linfield, Hunter & Junius, Inc.

Rachel Keane

From: Linda (Brown) Hardy <Linda.Hardy@la.gov>
Sent: Tuesday, July 29, 2014 2:47 PM
To: Rachel Keane
Cc: Yasoob Zia
Subject: DEQ SOV 140717/0920 Plaquemines Parish Lake Hermitage Road Improvements

July 29, 2014

Rachel Keane, Environmental Consultant
Plaquemines Parish Government
8056 Hwy 23, Suite 200
Belle Chasse, LA 70037
rachel.keane@psiusa.com

RE: 140717/0920 Plaquemines Parish Lake Hermitage Road Improvements
HMGP & HUD CDBG Funding
Plaquemines Parish

Dear Ms. Keane:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than January 1, 2014. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 9371.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.

- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, Plaquemines Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3954 or by email at linda.hardy@la.gov.

Sincerely,

Cwt 'A ltÜwe

Technical Assistant to the Deputy Secretary
Louisiana Department of Environmental Quality
Office of the Secretary
P.O. Box 4301
Baton Rouge, LA 70821-
4301 Ph: (225) 219-3954
Fax: (225) 219-3971
Email: linda.hardy@la.gov

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.0. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

JUL 17 2014

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

Ms. Hilda Lott
Plaquemines Parish Government
8056 Hwy. 23
Suite 200
Belle Chasse, Louisiana 70037

Dear Ms. Lott:

This is in response to your Solicitation of Views request dated June 30, 2014, concerning the Lake Hermitage Road improvements in Plaquemines Parish, Louisiana.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Information and signatures obtained from recent maps, aerial photography, and local soil surveys concerning the proposed project are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition and/or redistribution of dredged or fill material into jurisdictional waters and wetlands.

This preliminary determination is advisory in nature. If an approved delineation is needed, please furnish us with the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional wetlands or waters occurring on this property.

Please be advised that this property is in the Louisiana Coastal Zone and a Coastal Use Permit may be required prior to initiation of any activities on this site. For additional information, contact Ms. Christine Charrier, Office of Coastal Management, Louisiana Department of Natural Resources at (225) 342-7953.

You are advised that you must obtain a permit from the Plaquemines Parish West Bank Levee District for any work within 1500 feet of a federal flood control structure such as a levee. Performance of all subsurface work within this area is usually restricted when the stage of the Mississippi River is above elevation +11.0 feet on the Carrollton gage, at New Orleans, Louisiana. As a consequence, subsurface work should be scheduled for performance during the low-water period (typically June through November) to avoid delays in performance of the proposed work. You must apply by letter to the Plaquemines Parish West Bank Levee District including full-size construction plans, cross sections, and details of the proposed work. Concurrently with your application to the Plaquemines Parish West Bank Levee District, you must also forward a copy of your letter and plans to Operations Division, Operations Manager for Completed Works of the Corps of Engineers and to the Coastal Protection and Restoration Authority of Louisiana (CPRA) in Baton Rouge for their review and comments concerning the proposed work. The Plaquemines Parish West Bank Levee District will not issue a permit for the work to proceed until they have obtained letters of no objection from both of these reviewing agencies. For further information regarding permit requests affecting federal flood control levees and structures, please contact Ms. Amy Powell, Operations Manager for Completed Works at (504) 862-2241.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Michael Farabee by telephone at (504) 862-2292 or by email at Michael.V.Farabee@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2014-01771-SB. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

Copy Furnished:

Ms. Christine Charrier
Coastal Zone Management
Department of Natural Resources
Post Office Box 44487
Baton Rouge, Louisiana 70804-4487

PLAQUEMINES PARISH GOVERNMENT
HAZARD MITIGATION GRANT PROGRAM
(HMGP)

LAKE HERMITAGE ROAD IMPROVEMENTS
HMGP PROJECT #: 1603X-075-0010

The following questions require input from your agency for completion of the environmental review for the construction of improvements to five miles of Lake Hermitage Road. The improvements would elevate the roadway and improve drainage on approximately five miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). The proposed action consists of raising the elevation of five miles of Lake Hermitage Road to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt and the replacement of three existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing right-of way (ROW). (Please see signature requirements at bottom of this form)

Department: **Plaquemines Parish Permits, Planning and Zoning Department**

The following questions must be answered to complete the required environmental review process. Please answer the following questions and sign the applicable section at the end of the checklist. Once signed please return to Ms. Hilda Lott, Plaquemines Parish Government, either via fax (504-297-5642) or email to hlott@plaqueminesparish.com or Ms. Rachel Keane, PSI via fax 505-733-9415 or email to rachel.keane@psiusa.com for inclusion in the Environmental Record Review information packet.

State/Local Statutes

1. Does the project conform to local comprehensive Plans and Zoning?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If not, describe the nature of the impact upon these items and any measures in place to facilitate conformance to community planning and zoning regulations.

2. Are the project and its use compatible with the local community and overall society of the urban environment?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If not, describe the nature of the impact along with any mitigation measures being taken to best "fit" the building to the area.

3. Does the project conform to all state and local statutes under the purview of your department?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

Floodplain Management

1. Does the property sit within a 100 year flood plain (Zones A or V) as identified by FEMA maps?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

2. Are there any practicable alternatives to the proposal or measures taken to mitigate the effects of the project in the floodplain?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

3. Will the project pose an impact to the floodplains of the community?
   X **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If so, describe the nature of the impact along with any mitigation measures taken to minimize the impact.

For any of the above impacts, provide any mitigation efforts.

In completing the above questionnaire, please provide the information below:

Printed Name: D. M. METCALF

Signature: [signature]

Title: BUILDING OFFICIAL

Organization: **Plaquemines Parish Government**
Permits, Planning and Zoning Department

Date: 7-2-14

Comments:

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

August 19, 2014

PSI, Inc.
Attn: Rachel Keane
11950 Industriplex Blvd.
Baton Rouge, LA 70809

RE: P20140981, Request for Determination
Plaquemines Parish Government
Description: Elevation through the placement of a limestone base and then asphalt overlay of the existing Lake Hermitage Road, approx. 5 miles in length, from LA Highway 23 to Lake Hermitage. Also, replacement of three existing culverts. All work will be performed within the existing right-of-way.
Location: Lat. 29° 37' 08.48"N, Long. 89° 55' 02.87"W; Lake Hermitage Road, Port Sulphur, LA
Plaquemines Parish, LA

Dear Ms. Keane:

We have received a Request for Determination for the above referenced project, which has been found to be inside the Louisiana Coastal Zone. After careful consideration, it has been determined that the proposed activity will have no direct and significant impact on coastal waters. Therefore, in accordance with the Louisiana Administrative Code, Title 43, Chapter 7, Part 1, §723.B.8.b, a Coastal Use Permit will not be required.

This determination is valid for two (2) years from the date of this letter. If the proposed activity is not initiated within this 2-year period, this determination will expire and the applicant will be required to submit a new application. The applicant will notify the Office of Coastal Management of the date on which initiation of the proposed activity began by mailing the enclosed green initiation card on the date of initiation of the proposed activity. This determination does not eliminate the need to obtain a permit from the United States Army, Corps of Engineers (USACE) or any other Federal, state, or local approval, that may be required by law.

Permittee shall, prior to commencement of the herein permitted activities, contact Rhonda Braud (phone: 225-342-4553, email: rhonda.braud@la.gov) to determine if a construction permit will be required from the local levee district.

This determination has been made on the basis of information provided by your application. If it is later established that you furnished erroneous data, you may be directed to alter or modify your plans, to remove structures you have installed, and/or to restore the work area to pre-project conditions at your own expense. If it is established that you knowingly furnished erroneous data, you could also be subject to legal action. Note that your application shows that either no dredging or limited dredging would be necessary to access the work site. Dredging beyond that described in your application, including prop washing, wheel washing, or otherwise displacing water bottom material is not authorized by this determination. If site conditions are such that dredging beyond that authorized is necessary, a revised determination including agency or public notice, if applicable, will be required. The drawings submitted with the referenced application are attached hereto and made a part of the record.

Sincerely,

Karl L. Morgan
Administrator

KLM/vsa

Attachments (green card, plats)

cc: Martin Mayer, COE w/plats
Dave Butler, LDWF w/plats
Jessica Diez, OCM/IAFSD/SS w/plats
Frank Cole, OCM/IAFSD/FB w/plats
Albertine Kimble, Plaquemines Parish w/plats
Hilda Lott, Plaquemines Parish w/plats

FINAL PLATS
P20140981
vsa 8/19/14

PSI Information To Build On
Engineering • Consulting • Testing

PSI, Inc.
11950 Industriplex Blvd.
Baton Rouge, Louisiana 70809
(225) 293-8378
Fax (225) 292-8132

PROJECT NAME:

Proposed Lake Hermitage Road Improvements

HMGP Project #: 1603x-075-0010
Plaquemines Parish, Louisiana

PROJECT NO.: 0259553

SITE VICINITY

SCALE: None

Figure 1

PLEASE REFER TO ATTACHED NDSI AND LDWF NATURAL HERITAGE PROGRAI
NOTES***

PSI Information To Build On
Engineering • Consulting • Testing

PSI, Inc.
11950 Industriplex Blvd.
Baton Rouge, Louisiana 70809
(225) 293-6378
Fax (225) 292-8132

PROJECT NAME:

Proposed Lake Hermitage Road Improvements

HMGP Project #: 1603x-075-0010
Plaquemines Parish, Louisiana

PROJECT NO.: 0259553

FINAL PLATS
P20140981
vsa 8/19/14

SITE PROJECT AREA

SCALE: None

N

Figure 2

FINAL PLATS
P20140981
vsa 8/19/14

NDSI Notes

1. All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.

2. Structures must be marked/lighted in accordance with U. S. Coast Guard regulations.

3. In order to ensure the safety of all parties, the permittee shall contact the Louisiana One Call System (1-800-272-3020) a minimum of 48 hours prior to the commencement of any excavation (digging, dredging, jetting, etc.) or demolition activity.

LDWF Louisiana Natural Heritage Program Notes

The Louisiana Natural Heritage Program database indicates that a Coastal Live Oak Forest is located adjacent to the proposed project area. This community is considered critically imperiled to imperiled in the state of Louisiana with an S1S2 ranking. This community provides habitat for many unique species of plants, and acts as a migratory staging/stopover site for Neo-tropical migratory birds. We advise you to take the necessary measures to avoid any impacts to this ecological community. If you have any questions or need additional information, please contact Amity Bass at 225-765-2975.

No other impacts to rare, threatened or endangered species or critical habitats are anticipated from the proposed project. No state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known at the specified site or within ¼ mile of the proposed project.

The Louisiana Natural Heritage Program (LNHP) reports summarize the existing information known at the time of the request regarding the location in question. LNHP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. If at any time LNHP tracked species are encountered within the project area, please contact our biologist at 225-765-2643.

PLAQUEMINES PARISH GOVERNMENT
HAZARD MITIGATION GRANT PROGRAM
(HMGP)

LAKE HERMITAGE ROAD IMPROVEMENTS
HMGP PROJECT #: 1603x-075-0010

The following questions require input from your agency for completion of the environmental review for the construction of improvements to five miles of Lake Hermitage Road. The improvements would elevate the roadway and improve drainage on approximately five miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). The proposed action consists of raising the elevation of five miles of Lake Hermitage Road to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt and the replacement of three existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing right-of way (ROW). (Please see signature requirements at bottom of this form)

Department: **Plaquemines Parish Department of Coastal Zone Management**

The following questions must be answered to complete the required environmental review process. Please answer the following questions and sign the applicable section at the end of the checklist. Once signed please return to Ms. Hilda Lott, Plaquemines Parish Government, either via fax (504-297-5642) or email to hlott@plaqueminesparish.com or Ms. Rachel Keane, PSI via fax (504) 733-9415 or email to rachel.keane@psiusa.com for inclusion in the Environmental Record Review information packet.

Coastal Zone Management

1. Will the project have an impact on endangered species, vegetation, and the protection of fish and wildlife?
   ✓ **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If so, address details of what impacts will occur and describe any mitigation measures taken to minimize such impacts.

2. Will the project result in an increase in intensity of use in the Coastal Zone?
   ✓ **No Impact** ____ **Minor Impact** ____ **Major Impact**

   a. If so, address details of the impact and describe any mitigation measures taken to minimize such impact.

For any of the above impacts, provide any mitigation efforts.

In completing the above questionnaire, please provide the information below:

Printed Name: P. J. Hahn

Signature:

Title: Plaquemines Parish Director of Coastal Zone Management

Organization: Plaquemines Parish Government
Department of Coastal Zone Management

Date: 7/30/14

Comments:

PSI Information To Build On
Engineering • Consulting • Testing

PSI, Inc.
11950 Industriplex Blvd.
Baton Rouge, Louisiana 70809
(225) 293-8378
Fax (225) 292-8132

PROJECT NAME:

Proposed Lake Hermitage Road Improvements

HMGP Project #: 1603x-075-0010
Plaquemines Parish, Louisiana

PROJECT NO.: 0259553

SITE PROJECT AREA

SCALE: None

N

Figure 1

Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: Plaquemines Parish Government

Point of Contact: William Nunguesser

Address: 8056 Hwy 23 Suite 200

City: Belle Chasse **State:** Louisiana **Zip Code:** 70037

Phone Number 1: 504 297 5637 **Phone Number 2:** _____

Email Address: hlott@ppgov.net

Proposed Project Information

Project Reference ID: 3132

Project Latitude: 29° 37' 8.596" North **Project Longitude:** 89° 55' 2.574" West

Project Parish(es): Plaquemines

Project Description: Lake Hermitage Road Improvements, HMGP Project #: 1603x-076-0010. Plaquemines Parish, under the Hazard Mitigation Grant Program (HMGP), is preparing an Environmental Assessment (EA) and is submitting this request for information and concurrence related to improvements proposed for Lake Hermitage Road. The improvements would elevate the roadway and improve drainage on approximately five (5) miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23, (Coordinates listed above) and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane, Latitude: 29deg 38' 31.232" N, Longitude: 89deg 53' 5.261" W). In this proposed action five (5) miles of Lake Hermitage Road would be elevated to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt for the entire five (5) miles and replacement of three (3) existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing road right-of way (ROW).

Based on the information provided, the proposed project is not an activity that would affect a federally listed threatened or endangered species nor is there proposed or designated critical habitat present within this Parish.

Therefore, a "no effect" conclusion is appropriate. No further ESA coordination with the Service is necessary for the proposed action, unless there are changes in the scope or location of the proposed project or the project has not been initiated one year from the date of this letter.

If the proposed project has not been initiated within one year, follow-up coordination via this website should be accomplished prior to making expenditures because our threatened and endangered species information is

Louisiana Ecological Services Office

ESA Technical Assistance Form

updated annually. If the scope or location of the proposed project is changed, coordination via this website should occur as soon as such changes are made.

This finding completes project review by the Service for effects to Federal trust resources under our jurisdiction and currently protected by the ESA.

Please keep a copy of this pre-development coordination for your records. Do not send it to the Lafayette ES Office.

If you have additional questions, please contact Louisiana ES Office Biological Science Technician at 337/291-3100 for further assistance.

7/14/2014

Louisiana Ecological Services Office

ESA Technical Assistance Form

Project Type: HUD Funded and/or Urban Development

Does the project propose to construct new buildings, streets, sidewalks or other urban/suburban infrastructure in an area that has been previously undisturbed? **No**

Does the project propose to obtain, remodel, refurbish, or rehabilitate existing structures in such a way that does not significantly alter the present capacity or use, and does not alter surrounding land areas that were previously undisturbed? **No**

Does the project propose to reconstruct, resurface, or enhance infrastructure and/or cityscape (e.g. streets, sewers, sidewalks, etc.) within the current footprint of the infrastructure and in a manner that does not disturb previously undisturbed ground? **Yes**

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date	July 31, 2014
Name	Hilda Lott
Company	Plaquemines Parish Government
Street Address	8056 Hwy. 23, Suite 200
City, State, Zip	Belle Chasse, LA 70037
Project	PlHazard Mitigation Grant Program Lake Hermitage Rd Improvements HMGP Project #: 1603x-075-0010
Project ID	
Invoice Number	14073117

Personnel of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project.

The Louisiana Natural Heritage Program database indicates that a Coastal Live Oak Forest is located adjacent to the proposed project area. This community is considered critically imperiled to imperiled in the state of Louisiana with an S1S2 ranking. This community provides habitat for many unique species of plants, and acts as a migratory staging/stopover site for Neo-tropical migratory birds. We advise you to take the necessary measures to avoid any impacts to this ecological community. If you have any questions or need additional information, please contact Amity Bass at 225-765-2975.

After careful review of our database, no other impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Amity Bass, Coordinator
Natural Heritage Program

Plaquemines Parish Government

BILLY NUNGESSER
Parish President

8056 Hwy. 23, Suite 200
Belle Chasse, LA 70037

(504) 392-6690
(504) 274-2462
1-888-784-5387
Fax: (504) 274-2463

June 30, 2014

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux 8-11-14
Pam Breaux — Date
State Historic Preservation Officer

Pam Breaux
State Historic Preservation Officer, Office of Cultural Development
Department of Cultural, Recreation and Tourism
PO Box 44247
Baton Rouge, Louisiana 70804-4247

RE: Plaquemines Parish Hazard Mitigation Grant Program
Solicitation of Views
Lake Hermitage Road Improvements, HMGP Project #: 1603x-075-0010

Dear Ms. Breaux,

Plaquemines Parish, under the Hazard Mitigation Grant Program (HMGP), is preparing an Environmental Assessment (EA) and is submitting this request for information and concurrence related to improvements proposed for Lake Hermitage Road. The improvements would elevate the roadway and improve drainage on approximately five (5) miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). In this proposed action five (5) miles of Lake Hermitage Road would be elevated to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt for the entire five (5) miles and replacement of three (3) existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing road right-of way (ROW).

The proposed Lake Hermitage Road improvements project would be funded through Plaquemines Parish HMGP and the United States (U.S.) Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) grant funds. A HUD Environmental Record Review (ERR) was previously completed and a Finding of No Significant Impact (FONSI) signed on October 25, 2013 to satisfy HUD regulations 24 Code of Federal Regulations (CFR) 58.5 and 58.6, for the HUD proposed action that consisted of improvements to the same five miles of Lake Hermitage Road but with approximately 1.7 miles of road elevated and asphalted. A HUD *Re-evaluation of Environmental Assessment* (24 CFR 58.47) was completed June 2014 in which it was determined that the impacts analyzed under the HUD ERR would be similar under the new proposed action for all five (5) miles of Lake Hermitage Road surfaced with asphalt. Per the HUD ERR and in response to the solicitation of views request your organization determined that "no historic properties will be impacted by this project" and that your office had no further concerns for this project (correspondence from Breaux to Shuman, dated February 11, 2013 RE: Draft Report La Division of Archaeology Report No. 22-4176). Plaquemines Parish's HMGP requests a similar determination for the new but similar HMGP proposed action, as detailed above. Two figures are attached for your review that depicts the proposed project vicinity area and the five-mile proposed project extent.

APPENDIX D
HYDROLOGIC AND HYDRAULICS STUDY
and
HUD ENVIRONMENTAL RECORD REVIEW (ERR)

PLAQUEMINES PARISH, LA

ELEVATION OF PARISH ROADS

LAKE HERMITAGE ROAD

Hydrologic and Hydraulic Study Report

HMGP #1603X-075-0010

Parish Project No. 13-03-06

FOR

PLAQUEMINES PARISH GOVERNMENT

POINTE A LA HACHE, LOUISIANA

JUNE 2014

LINFIELD, HUNTER & JUNIUS, INC.

3608 18TH ST

METAIRIE, LA 70002

ELEVATION OF PARISH ROADS: LAKE HERMITAGE ROAD H&H STUDY

SECTION/SUBSECTION NAME **PAGE NUMBER**

SECTION 3 – MODELING AND ANALYSIS

SECTION 4 – SUMMARY OF RESULTS

FIGURES

TABLES

APPENDICES

SECTION 1 – INTRODUCTION

1.1 BACKGROUND

Plaquemines Parish is located at the southeastern tip of Louisiana, straddling the lower reaches of the Mississippi River as it runs to the Gulf of Mexico just south of New Orleans. Situated in the Mississippi River Delta, a significant portion of the Parish is made up of marsh and open water, with the higher land adjacent to the Mississippi River.

The area of study, Lake Hermitage Road, is located on the West Bank of Plaquemines Parish near Myrtle Grove. Lake Hermitage Road is the primary access road serving communities along three bayous that cross Lake Hermitage Road. In addition, Lake Hermitage Road provides access to several offshore commercial activities. Lake Hermitage Road extends away from Louisiana Highway 23 approximately five (5) miles. Lake Hermitage Road lies outside the flood protection levee system, and as such is subject to flooding during high tidal conditions.

Recent evaluations performed by the Parish indicate that the roadway is regularly flooded during normal high tide events. This flooding limits access to the communities along Lake Hermitage Road and severely impacts the commercial activities that use Lake Hermitage Road for offshore access. As Lake Hermitage Road is the primary evacuation route for these communities, the Parish has placed a high priority upon improving this roadway by raising it so that roadway flooding is minimized. To assist with funding of these improvements, the Parish submitted applications for funding under the Community Development Block Grant (CDBG) program and under the Hazard Mitigation Grant Program (HMGP). These applications for funding were approved in 2013.

1.2 PURPOSE OF PROJECT

The purpose of this project is to reduce the incidences of roadway flooding on Lake Hermitage Road during tide events. In addition, the existing drainage culvert system that crosses Lake Hermitage Road will be upgraded to increase the carrying capacity for drainage of areas that drain across the roadway. Specifically, the project is intended to address the following goals and actions identified in the Plaquemines Parish Hazard Mitigation Plan (PPHMP) and stated in the Parish's HGMP application for the project:

- Goal 1: Reduce Losses to Existing and Future Property Due to Hazards by Objective 1.2 – Improve Existing Drainage Infrastructure
- Goal 2: Protect the Health and Well-Being of the People of Plaquemines Parish from Negative Effects of Hazards by Objective 2.1 – Ensure Proper Evacuation Procedures are Followed Prior to a Hazard Event, and Action 2.1.1 – Elevate Roadways that Currently Flood to Allow Proper Evacuation Routes

The project will also provide the following benefits:

- Improve access of emergency service providers
- Reduce disruption of offshore commercial activities that use Lake Hermitage Road for offshore access

This report focuses on the results of a hydrologic and hydraulic (H&H) study identifying the level of protection provided by raising the roadway, and evaluating the drainage impacts of the roadway improvements. Following approval of this report, detailed final design of the proposed

improvements will be performed. This detailed final design will include preparation of plans and specifications for public bid and construction.

1.3 SCOPE OF WORK

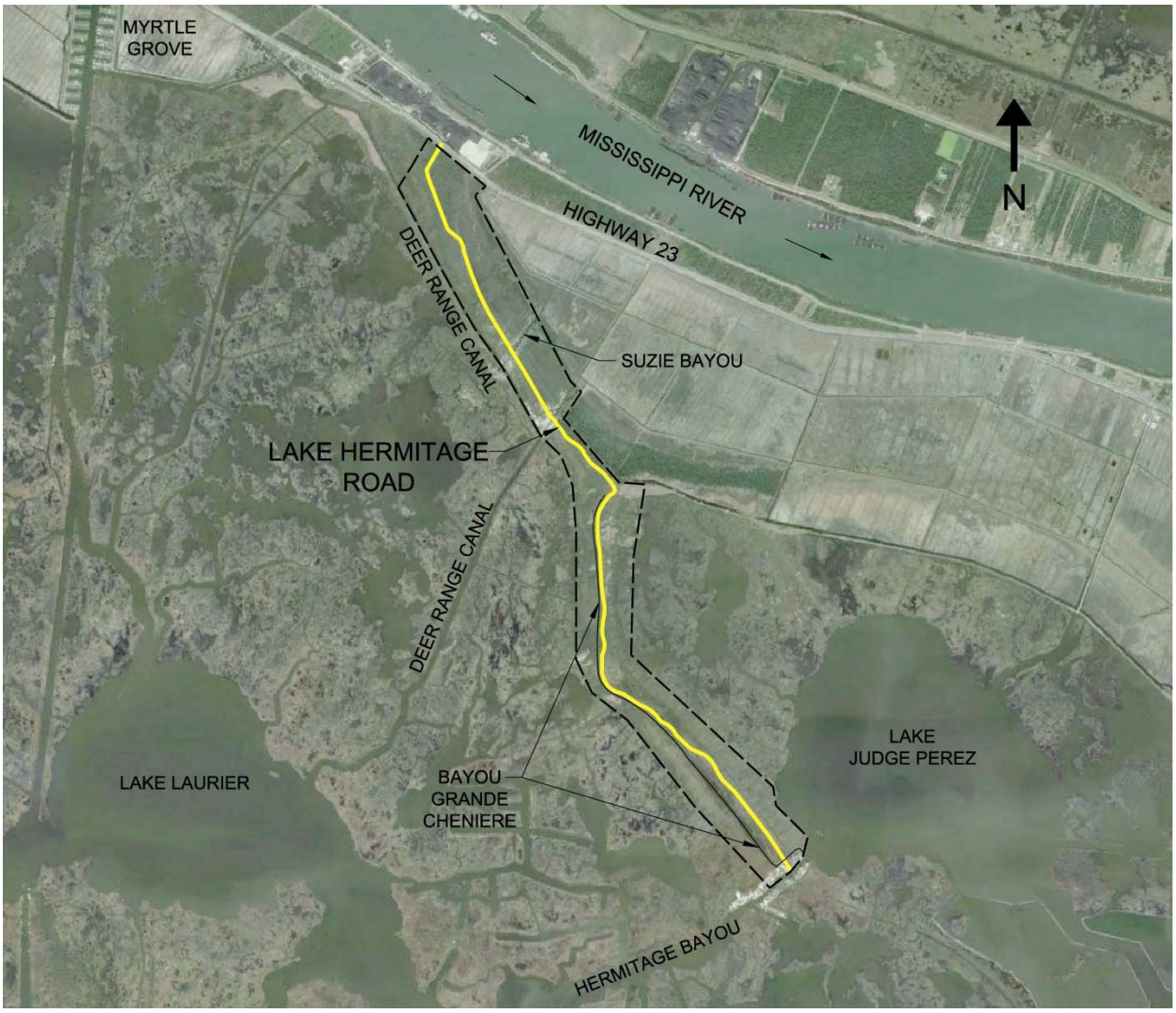
This project includes the raising the roadway elevation to a minimum elevation of +2.5' (N.G.V.D. 29) and the installation of new drainage culverts across Lake Hermitage Road to improve local drainage. The existing aggregate roadway will be raised to grade using a limestone base and surfaced with asphalt pavement to provide two 12-foot wide driving lanes and two-foot wide shoulders.

1.4 DESCRIPTION OF PROJECT AREA

The project is located in Plaquemines Parish on the West Bank of the Mississippi River near Myrtle Grove. The portion of the roadway undergoing improvement is approximately five (5) miles long, beginning at the junction of Highway 23 and Lake Hermitage Road and ending at a bridge crossing Hermitage Bayou (near Bayou Lane). Figure 1-1 below illustrates the location of the roadway relative to Highway 23, the Mississippi River and Myrtle Grove.

The total study area, as shown in Figure 1-1, is approximately 625 acres in size. This area represents the approximated drainage impact area that is further evaluated in this report. This study area has been broken down into sub-basins which have different drainage characteristics, as well as differing tidal exposures. Modeling approaches were tailored to the unique characteristics of each sub-basin to predict the drainage impacts of the project. For example, some areas are bounded by adjacent levees and primarily drain across the roadway, both through culverts and over the top of the roadway. These areas could be significantly impacted by the elevation of the roadway. Other areas are open and tend to drain away from the roadway into the surrounding marshes, which thus may not be significantly impacted by the elevation of the roadway.

Figure 1-1: Location and Project Area



SECTION 2 – DATA COLLECTION AND FIELD WORK

2.1 PARISH INFORMATION AND DATA

The following information was provided by the Parish and was utilized in this study:

- Right-of-Way survey titled "Map of Survey Lake Hermitage Road and Rights of Way", dated August 1, 2005.
- Hurricane Katrina Hazard Mitigation Grand Program (HMGP) Application titled "Elevation of Plaquemines Parish Roads", dated March 21, 2013, hereinafter referred to as the "HGMP Application".

2.2 HMGP APPLICATION

As stated in Section 1, Lake Hermitage Road is regularly flooded during normal high tide events. To assist with the costs associated with improving the roadway to minimize this flooding, Plaquemines Parish submitted an application for Federal assistance under the Hazard Mitigation Grant Program (HMGP). The application for this project was approved in 2013.

The HMGP application outlined conceptual improvements to the roadway and served as the basis for the scope of work evaluated by this study. It is not projected that any significant revisions or amendments are required of the HMGP application to align scope of work outlined in the application with the improvements recommended in this study.

2.3 FLOOD INSURANCE DATA

The latest version of the FEMA Flood Insurance Rate Maps (FIRMs) covering the project area are shown in Figures 2-1 and 2-2 at the end of this section. The FIRMs are indicated as Panel 410 of 1400, Community Panel Number 2201390410B and Panel 425 of 1400, Community Panel Number 2201390425B, both dated May 1, 1985.

The project area is located within the 100-year flood zone, Zone A, with an approximate Base Flood Elevation (BFE) between 8.0 to 9.0, depending upon the location along the roadway.

2.4 PHOTOGRAPHIC, TOPOGRAPHIC, AND SOILS DATA

The following data was obtained and used in this study:

- 2004 Digital Ortho Quarter Quadrangle Photographs of the Bertrandville USGS quadrangle
- 2005 Digital Ortho Quarto Quadrangle Photographs
- 2012 Google Earth Aerial Photographs
- Digital Photographs Taken during Field Visits
- Spot Elevations from Topographic Surveys
- 2009 NRCS Soil Surveys for the Study Area
- NOAA Tide Predictions for Manilla, LA, Station ID: 8761732

Figure 2-1: Flood Insurance Rate Map (1 of 2) for Project Area

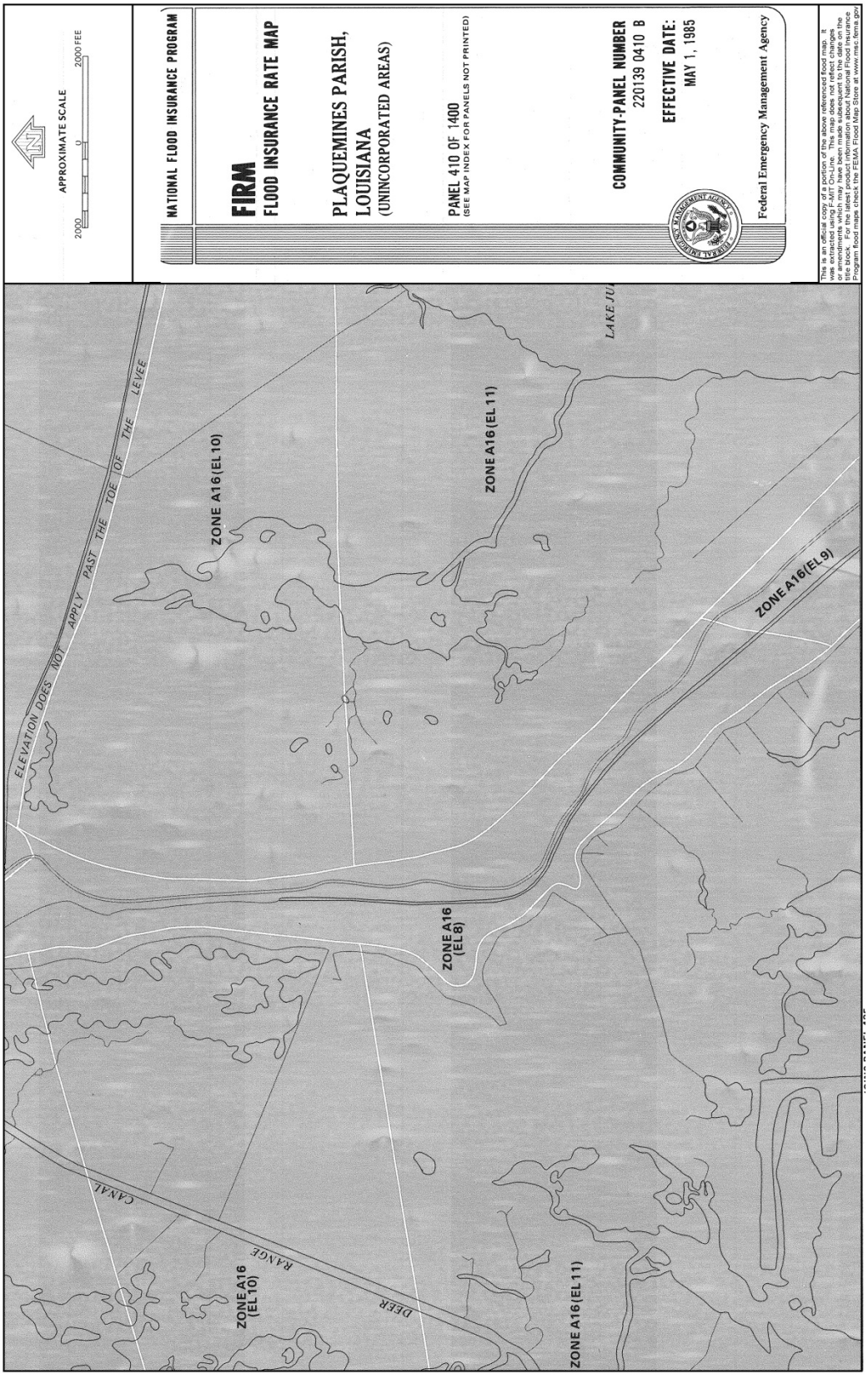
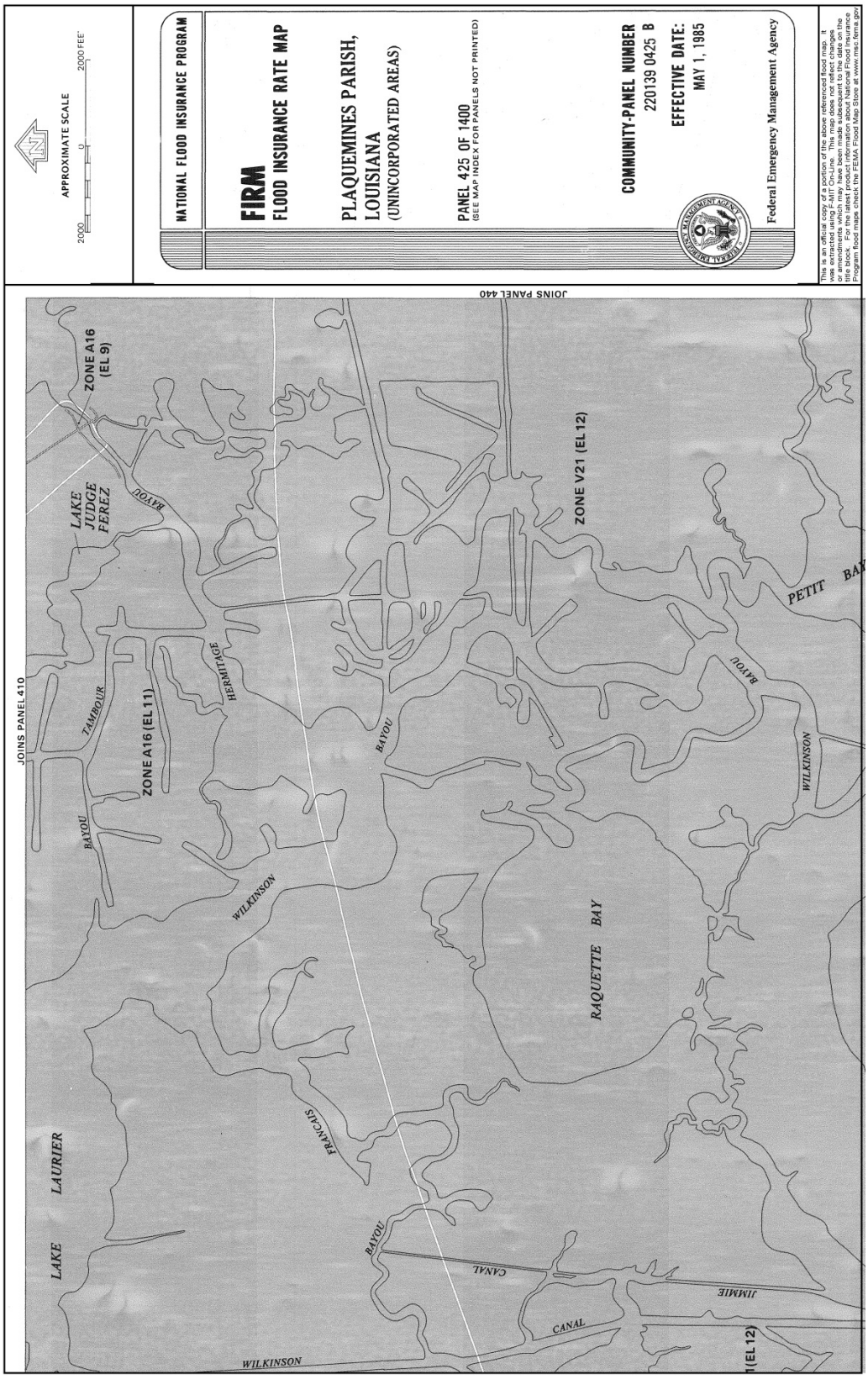


Figure 2-2: Flood Insurance Rate Map (2 of 2) for Project Area



2.5 SITE VISITS AND OBSERVATIONS

Site visits were made to the study area to collect data, observe tidal impacts on the roadway, interview residents and verify the findings of the study.

2.5.1 CONTRIBUTING AREA

Aerial imagery was used in conjunction with site visits to identify drainage basins and drainage patterns of the areas adjacent to Lake Hermitage Road. Aerial imagery aided in identifying land patterns that create physical obstructions, such as nearby levees, which trap rainwater and force drainage to occur across the roadway. Areas which drain away from the roadway and into the surrounding marsh were also identified.

2.5.2 SYSTEM CONNECTIVITY AND SIZES

An important aspect of the site visits was to identify the drainage system connectivity in the marshes surrounding Lake Hermitage Road. Combining field observations with aerial imagery, it was found that much of the surrounding marsh contains a network of interconnected canals and bayous that drain the areas along Lake Hermitage Road. There are also two major waterways – Suzie Bayou and Deer Range Canal – that cross Lake Hermitage Road and provide drainage to the marshes.

2.5.3 OUTFALL CHARACTERISTICS

The areas along Lake Hermitage Road generally drain into the surrounding marsh and thence through the interconnected canals and bayous into Lake Laurier and Lake Judge Perez. Between Highway 23 and Deer Range Canal, the area on the Highway 23 side of Lake Hermitage Road is bounded by levees and by Lake Hermitage Road. This area drains primarily through culverts that cross Lake Hermitage Road and via Suzie Bayou and Deer Range Canal, as the levees and roadway form physical barriers that restrict direct overland flow into the surrounding marsh.

Lake Laurier and Lake Judge Perez are connected by a series of interconnected canals and bayous to the Gulf of Mexico. A detailed description of the drainage patterns in each sub-basin can be found in Section 3.1.1.

2.5.4 INTERVIEWS OF RESIDENTS AND BUSINESSES

Several residents and business owners along Lake Hermitage Road were interviewed and asked a number of questions to help develop a further understanding of the drainage patterns and flooding mechanics of the area. Based upon these interviews, the following conclusions were drawn:

- The roadway is inundated during high tide events numerous times per year. Roadway flooding can last from a few hours to a few days depending upon the cycles of the tides and the overall tide levels.
- Strong directional winds can push water across the roadway when the tides are up. Roadway flooding abates when the winds die down.
- The roadway does not generally flood during normal rainfall events.

2.6 TOPOGRAPHIC SURVEYING

A topographic survey of the existing roadway was performed to identify the existing project site conditions. The topographic survey included over 1,700 topographic shots and cross sections of the existing roadway obtained at 100-foot intervals. The topographic survey data was used to define the existing roadway geometrics and to develop an existing roadway centerline profile. Locations, sizes and invert elevations of existing culverts that cross the roadway were also obtained.

Location data was obtained and reported in State Plane Coordinate System, and all elevations were obtained in North American Vertical Datum of 1988 (N.A.V.D. 88), Epoch 2009.55, referenced to NGS Reference Benchmark PID# BJ1342 (ALCO). The elevation values obtained were then converted to N.G.V.D. 29 datum to conform to the HMGP Application. The NGS Reference Benchmark Data Sheet and conversion from N.A.V.D. 88 to N.G.V.D. 29 can be found in Appendix C.

The surveying work indicates that, between Highway 23 and Deer Range Canal, the roadway crown generally ranges from El. 2.5 to El. 3.0 (N.G.V.D. 29). From Deer Range Canal to Hermitage Bayou, the roadway crown elevation generally ranges from El. 1.8 to 2.0 (N.G.V.D. 29). The reach of roadway between Deer Range Canal and Hermitage Bayou is the reach that residents report is most frequently inundated.

2.7 TIDAL DATA

2.7.1 GAGES AND GAGE DATA

The Manilla NOAA tidal station was used for this study, as it is the nearest active NOAA tidal station to the project site. The NOAA Station ID for the Manilla tidal station is 8761732. Tide data for this station is referenced to the East Point, Grand Isle Station (Station ID #8761724). A vicinity map showing the location of this station, as well as historical daily tide predictions are included in Appendix A. Additional NOAA tide data and predictions for this station can be found at the following link:

http://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=8761732

2.7.2 COMPARISON OF GAGE DATA WITH OBSERVED WATER LEVELS

Tide prediction data for the Manilla tidal station is reported in reference to Mean Low Low Water Level (MLLW), which is an internal reference datum. To provide a conversion between the project datum (N.G.V.D. 29) and this internal reference datum, tidal station data was compared to observed water surface elevations at multiple points along Lake Hermitage Road. These water surface elevations were obtained twice per day for several weeks at Suzie Bayou, Deer Range Canal and Hermitage Bayou.

These observed water surface elevations were then compared to the tidal data reported for the Manilla tidal station so that water levels along Lake Hermitage Road could be estimated based upon tidal data reported for the Manilla tidal station. Based upon these observations, it was found that 0.3 feet must be added to the reported Manilla tidal station stage readings to convert the stages reported for the Manilla tidal station to the local N.G.V.D. 29 datum. These observations were taken on generally calm days. Winds from the south or west would likely require the addition of more than 0.3 feet to levels recorded at the Manilla tidal station to convert these stages to the local N.G.V.D. 29 datum.

2.7.3 USE OF MANILLA TIDAL STATION DATA TO ASSESS ROADWAY INUNDATION

The following tide data was available: (1) NOAA Tide Predictions for the Manilla tidal station from 2004 through 2011 as included in the HGMP Application; and (2) NOAA Tide Predictions for the Manilla tidal station from 2012 through 2014. This data is included in Appendix A. These NOAA Tide Predictions do not include the effects of tropical events. We were unable to obtain any additional tide information in the project area.

Based upon the roadway elevations obtained during topographic surveying and the tide gage comparisons outlined in Section 2.7.2 above, roadway overtopping occurs when tide stages exceed El. 1.8 (N.G.V.D. 29), the elevation of low reaches of the existing roadway. Upon review of the NOAA Tide Prediction data included in Appendix A, high tides exceed El. 1.8 numerous times per year for several days at a time. This finding corresponds to findings based upon interviews with residents.

The highest tide in the historical and projected NOAA Tide Predictions for the Manilla tidal station as included in Appendix A is El. 2.0 (N.G.V.D. 29) which is below the minimum improved roadway elevation of El. 2.5 (N.G.V.D. 29). This finding generally confirms the level of protection specified in the HMGP Application for the improved roadway. Accordingly, flooding should be decreased significantly by raising the roadway to a minimum elevation of 2.5 (N.G.V.D 29).

SECTION 3 – MODELING AND ANALYSIS

The Hydrologic Modeling System, or HEC-HMS, was utilized to perform hydrologic and hydraulic modeling of the project study area. HEC-HMS was developed by the United States Army Corps of Engineers, Institute for Water Resources, Hydrologic Engineering Center (HEC) to simulate precipitation-runoff processes of watershed systems. HEC-HMS modeling is appropriate for analyzing the hydrologic response for a wide range of watersheds, from small and simple sub-basins to large complex watersheds. HEC-HMS can be used to predict sub-basin discharges and event-based water levels in those sub-basins. Hydrographs computed by HEC-HMS can also be used with other software or in hydraulic calculations for rural drainage applications, making the use of HEC-HMS appropriate for this H&H study.

HEC-HMS models were developed to simulate the existing and proposed conditions for the study area. The models were used to answer the following questions:

1. What impact will the raising of the roadway have on existing drainage patterns?

2. What culvert crossing improvements are required to maintain drainage across the roadway?

3.1 HEC-HMS Model

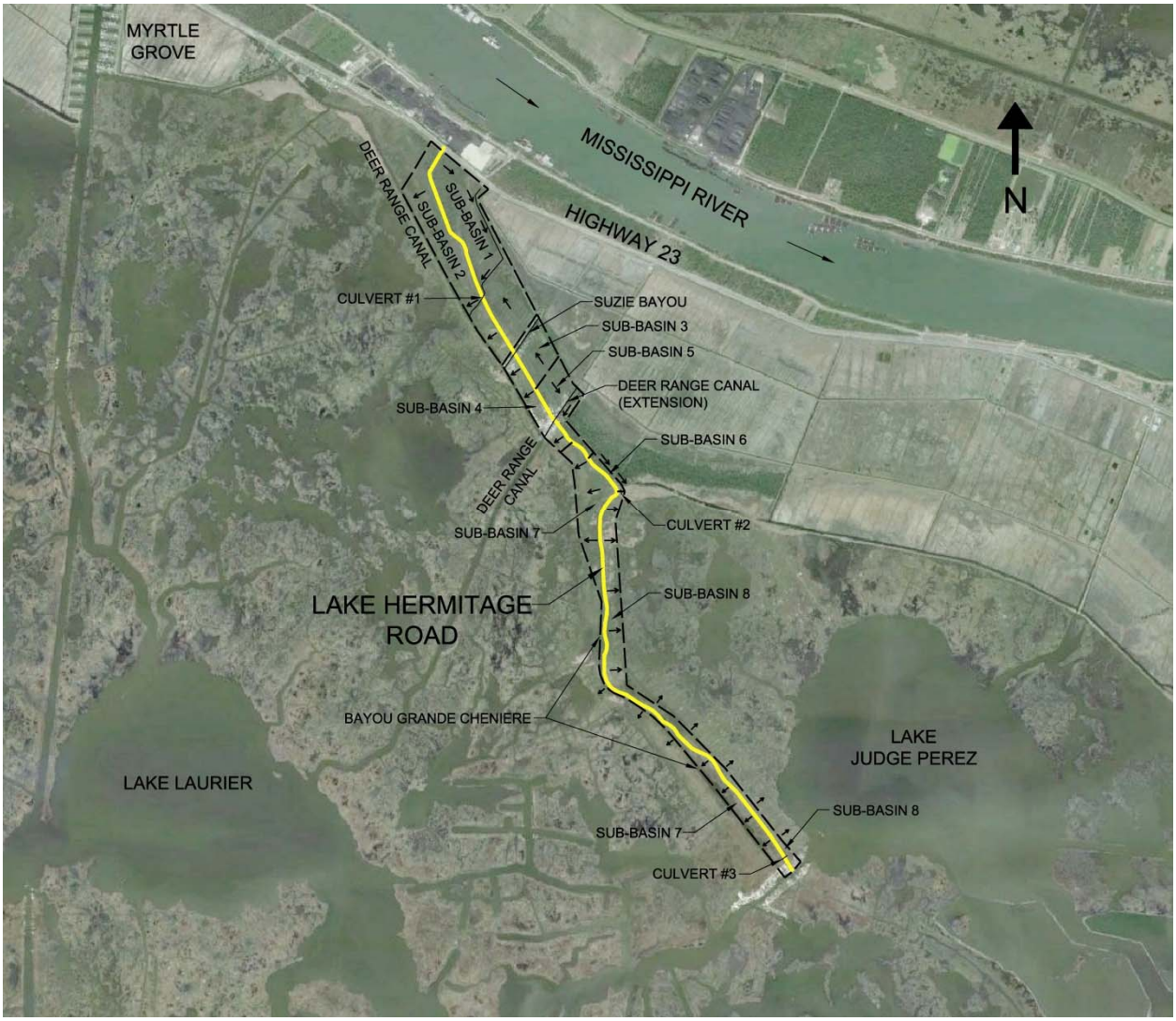
HEC-HMS models were developed for both the existing and proposed improved conditions to analyze the systems for the 10-year, 25-year, 50-year, and 100-year, 24-hour storm events. Specific historical drainage data for the area is not available to calibrate these models; however, field observations in conjunction with the reports of residents indicate that the computed results are reasonable.

The HEC-HMS system schematic is shown below in Figure 3-1. Sub-basins were identified based upon physical geographic boundaries such as berms, levees and waterways. Arrows indicate assumed general directions of drainage flows based upon aerial imagery, topographic survey data and resident interviews.

HEC-HMS models are comprised of a basin model and a meterologic model. The basin model describes the physical characteristics of the watershed such as sub-basin areas and runoff characteristics. The meteorological model describes the rainfall characteristics of the design storms used in the HEC-HMS model. HEC-HMS routes the output of the meteorological model through the basin model to compute runoff hydrographs for each sub-basin and stage-storage-discharge relationships for the sub-basins.

Input for the basin model and meteorological model are described in the following sections.

Figure 3-1: HEC-HMS Model Schematic



3.1.1 BASIN MODEL

The basin model for the study includes eight sub-basins as shown in Figure 3-1. The HEC-HMS basin model for the project study area simulates a flat rural marsh with saturated soils, which results in a very high rate of runoff. Below are brief descriptions of each of the sub-basins simulated in the HEC-HMS models:

1. Sub-basin 1 is bounded by Lake Hermitage Road, the Plaquemines Parish back levee and Suzie Road (which is adjacent to Suzie Bayou). These roads and levee form raised physical barriers that bound the sub-basin. This sub-basin drains beneath Lake Hermitage Road and into the marsh through culverts that cross beneath the roadway (shown as "Culvert #1" on Figure 3-1). "Culvert #1" currently consists of two 24-inch diameter culverts. Sub-basin 1 is approximately 154 acres in size.

2. Sub-basin 2 is bounded by Lake Hermitage Road, Deer Range Canal and Suzie Bayou. Runoff from this sub-basin flows overland away from Lake Hermitage Road and into Deer Range Canal and thence to Lake Laurier. Sub-basin 2 is approximately 113 acres in size.

3. Sub-basin 3 is bounded by Lake Hermitage Road, the Plaquemines Parish back levee, Suzie Bayou and a ridge located midway between Suzie Bayou and the Deer Range Canal Extension. Sub-basin 3 drains overland into Suzie Bayou, thence to Deer Range Canal and Lake Laurier. Sub-basin 3 is approximately 36 acres in size.

4. Sub-basin 4 is bounded by Lake Hermitage Road, Deer Range Canal, Suzie Bayou and the Deer Range Canal Extension. Runoff from this sub-basin flows overland away from Lake Hermitage Road and into Deer Range Canal and thence to Lake Laurier. Sub-basin 4 is approximately 32 acres in size.

5. Sub-basin 5 is bounded by Lake Hermitage Road, the Plaquemines Parish back levee, the Deer Range Canal Extension and a ridge located midway between Suzie Bayou and the Deer Range Canal Extension. Sub-basin 5 drains overland into the Deer Range Canal Extension, thence to Deer Range Canal and Lake Laurier. Sub-basin 5 is approximately 42 acres in size.

6. Sub-basin 6 is bounded by Lake Hermitage Road, the Deer Range Canal Extension and a levee system running roughly parallel to Lake Hermitage Road. These road and levee system form raised physical barriers that bound the sub-basin. This sub-basin drains beneath Lake Hermitage Road and into the marsh through a culvert that crosses beneath the roadway (shown as “Culvert #2” on Figure 3-1). “Culvert #2” currently consists of a single 24-inch diameter culvert. Sub-basin 6 is approximately 7 acres in size.

7. Sub-basin 7 is bounded by Lake Hermitage Road, Bayou Grand Cheniere, Deer Range Canal and Hermitage Bayou. Runoff from this sub-basin drains overland away from Lake Hermitage Road into Bayou Grande Cheniere, thence through interconnected bayous and canals to Lake Laurier and Hermitage Bayou. There is a single 24-inch diameter culvert (shown as “Culvert #3” on Figure 3-1) near Hermitage Bayou that connects marsh on each side of Lake Hermitage Road. Sub-basin 7 is approximately 133 acres in size.

8. Sub-basin 8 is bounded by Lake Hermitage Road, a canal that runs roughly parallel to Lake Hermitage Road, Hermitage Bayou and Lake Judge Perez. Runoff from this sub-basin drains overland away from Lake Hermitage Road through an interconnected system of canals and bayous to Lake Judge Perez. Sub-basin 8 is approximately 107 acres in size.

To describe the physical runoff characteristics of each of the sub-basins, HEC-HMS requires additional input for each sub-basin to describe precipitation losses, hydrograph transformation and the baseflow conditions of the sub-basins. These inputs are described in the following four subsections.

3.1.1.1 Loss Method

The Soil Conservation Service (SCS) Curve Number (TR-55) was selected as the loss method for the HEC-HMS models. This method required values for the Curve Number (CN), Initial Abstraction (Ia) in inches, and the percent of imperviousness of each sub-basin.

The factors that determine the curve number are the hydrologic soil group, cover type, treatment, hydrologic condition and antecedent runoff condition. Table 2.2 from the TR-55 manual, Urban Hydrology for Small Watersheds (USDA, 1986), provides Curve Numbers assuming average antecedent runoff conditions. This table was used to choose the Curve Number for each sub-basin.

The Curve Numbers were chosen based on ground cover as noted from aerial photographs, field observations and Google Earth images. The hydrologic soil group and hydrologic condition were determined by reviewing the 2009 NRCS Soil Surveys for Plaquemines Parish, available at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. The portions of the NRCS surveys used for identifying soil types used in the modeling effort are presented in Figures 3-2 through 3-7 on the following pages.

Figure 3-2: NRCS Soils Map (1 of 2) of Study Area

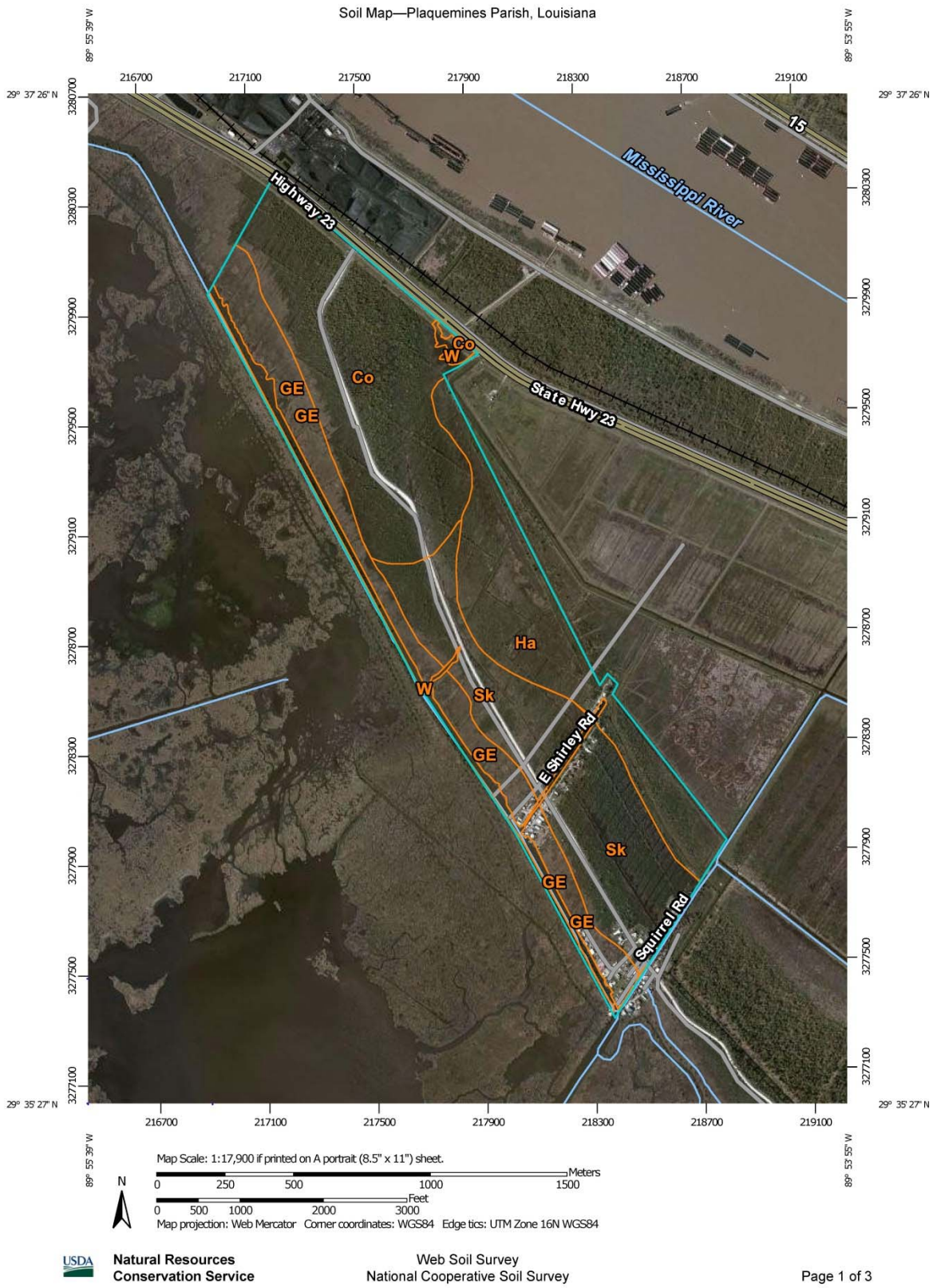


Figure 3-3: NRCS Soils Map (1 of 2) Legend

Figure 3-4: NRCS Soils Map (1 of 2) Unit Legend

Soil Map—Plaquemines Parish, Louisiana

Map Unit Legend

Plaquemines Parish, Louisiana (LA075)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Co	Cancienne silty clay loam, 0 to 1 percent slopes	146.2	32.4%
GE	Gentilly muck	74.3	16.4%
Ha	Harahan clay	89.7	19.9%
Sk	Schriever clay, 0 to 1 percent slopes	118.0	26.1%
W	Water	23.5	5.2%
Totals for Area of Interest		**451.6**	**100.0%**

Figure 3-5: NRCS Soils Map (2 of 2) of Study Area

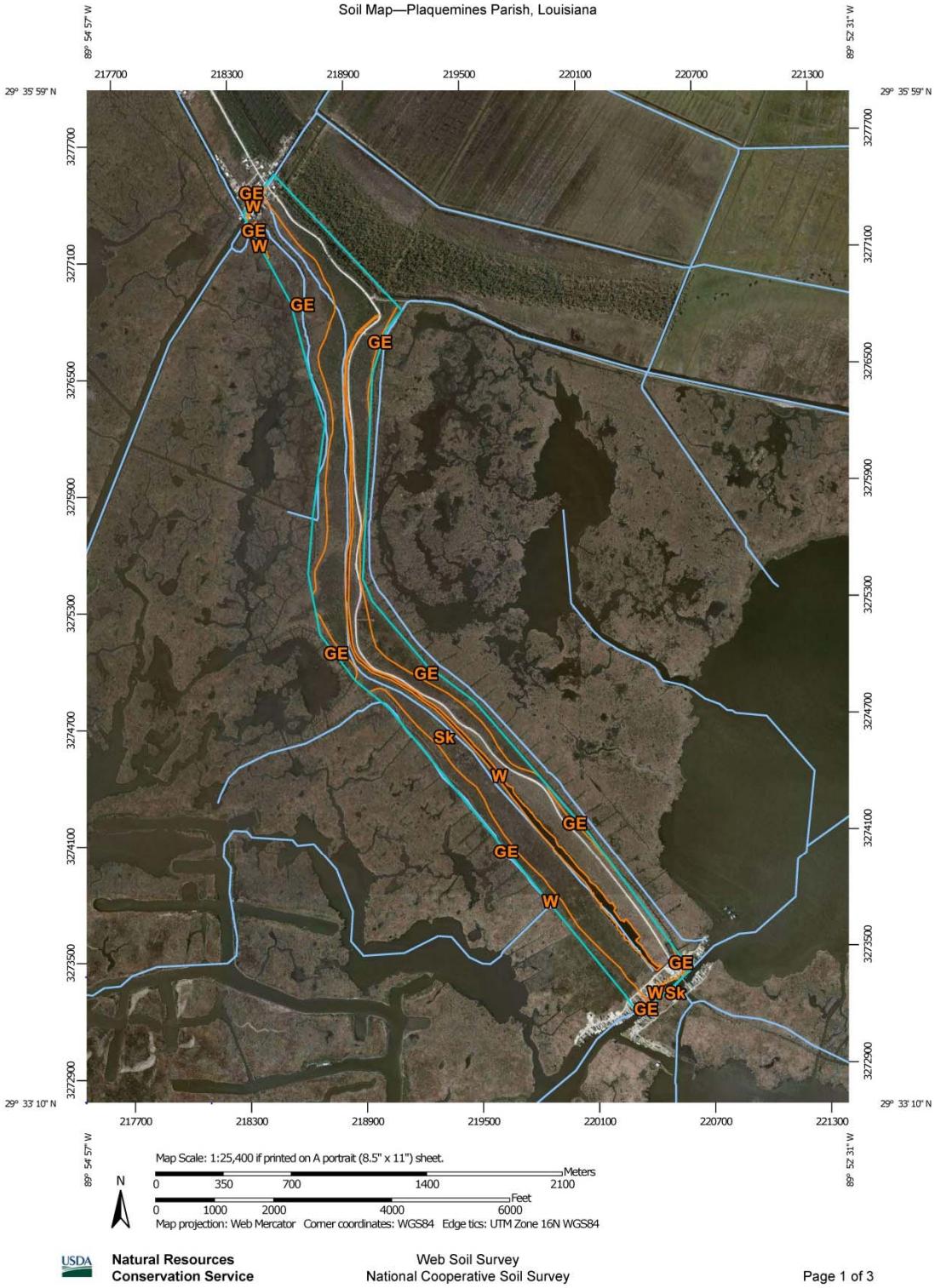


Figure 3-6: NRCS Soils Map (2 of 2) Legend

Soil Map—Plaquemines Parish, Louisiana

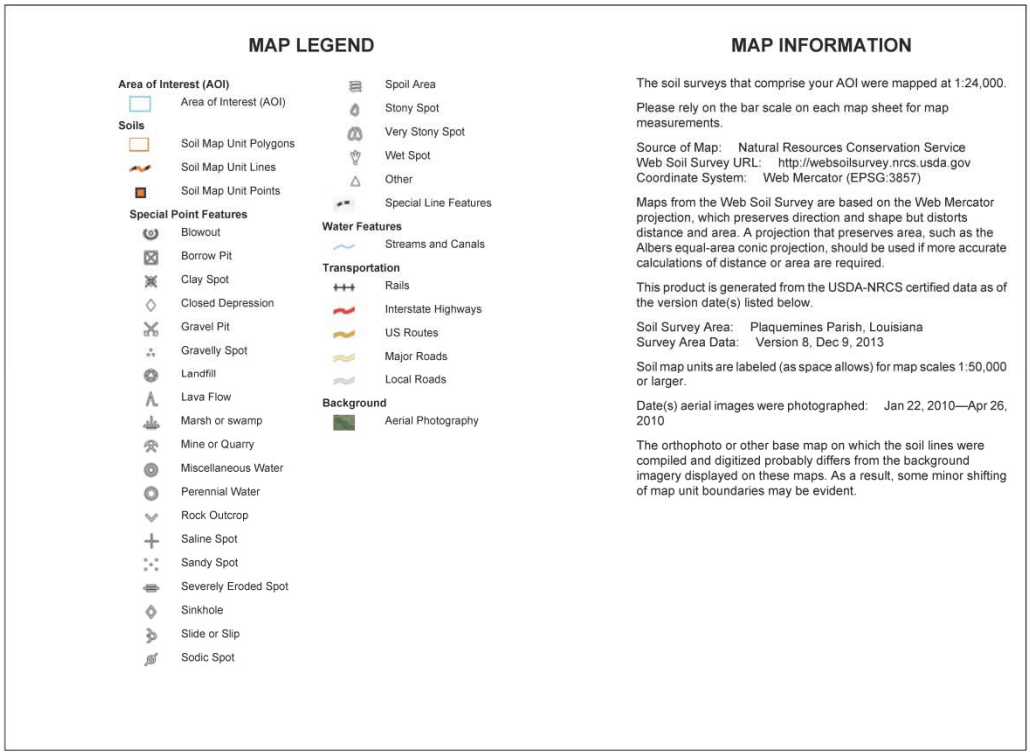


Figure 3-7: NRCS Soils Map (2 of 2) Unit Legend

Soil Map—Plaquemines Parish, Louisiana

Map Unit Legend

Plaquemines Parish, Louisiana (LA075)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
GE	Gentilly muck	116.0	28.4%
Sk	Schriever clay, 0 to 1 percent slopes	268.8	65.9%
W	Water	23.1	5.7%
Totals for Area of Interest		**407.9**	**100.0%**

USDA Natural Resources Conservation Service | Web Soil Survey National Cooperative Soil Survey | Page 3 of 3

Based on the information shown in the NRCS Soil Surveys, the hydrologic soil group for the study area is "D", which is described as soils having a very slow infiltration rate. Using Table 2.2 from the TR-55 manual, the runoff curve numbers with hydrologic soil group "D" were chosen for the study areas. Due to the undeveloped condition of a majority of the study area, a single curve number was utilized for the undeveloped portions of each sub-basin (CN 73), and a single curve number was utilized for the developed portions of each sub-basin (CN 87) using the values for a ¼ acre developed lot with an average of 38% impervious area. These values were then used to calculate a weighted average composite curve number for each sub-basin using Figure 2-4 from the TR-55 manual.

Using Table 4.1 of the TR-55 manual, Initial Abstraction values were calculated using the equations below for S and I_a. The Initial Abstraction values for each sub-basin were calculated using the following equations:

$$Initial\ Abstraction = I_a = 0.2S, \quad where\ S = \frac{1000}{CN} - 10$$

The 2013 Google Earth aerial photographs and field observations were reviewed to determine the percent of the study area that is impervious.

Table 3-1 below shows the Curve Numbers, Initial Abstractions and percent impervious used for each of the sub-basins for both the existing and proposed improved conditions.

Table 3-1: Curve Numbers and Initial Abstraction Values for Each Sub-basin

Sub-basin ID	% Impervious (Existing)	Curve Number (Existing)	Initial Abstraction (Ia, in) (Existing)	% Impervious (Improved)	Curve Number (Improved)	Initial Abstraction (Ia, in) (Improved)
Sub-basin-1	0	73	0.740	1.4	74	0.703
Sub-basin-2	0	73	0.740	2.0	74	0.703
Sub-basin-3	4	74	0.703	5.2	76	0.632
Sub-basin-4	7	76	0.632	9.0	77	0.597
Sub-basin-5	13	78	0.564	15.5	80	0.500
Sub-basin-6	0	73	0.740	6.5	75	0.667
Sub-basin-7	0	73	0.740	4.0	75	0.667
Sub-basin-8	0	73	0.740	4.3	75	0.667

3.1.1.2 Transform Method

The SCS Unit Hydrograph was selected as the transform method for the HEC-HMS models. This method requires a value for the lag time based in minutes. According to the HEC-HMS Users Manual (USACE, 2006), the lag time for the SCS Unit Hydrograph can be approximated as 60% of the time of concentration computed for the basin. The time of concentration is defined as the sum of the travel times for sheet flow, shallow concentrated flow, and open channel flow.

Travel times for sheet flow is defined as:

$$T_{t=} \frac{0.007(nL)^{0.8}}{\sqrt{P_x}S^{0.4}}$$

Where: Tt is the travel time in hours

n is the Manning's roughness coefficient

L is the flow length in feet (maximum 300 ft)

P is the 24-hour rainfall in inches for the specified storm event

X is the storm event year (e.g., 10-year, 25-year, 50-year, 100-year)

S is the slope along the total flow length

A Manning's roughness coefficient of 0.20 was chosen in the above equation to compute the travel times for sheet flow.

Travel time for shallow concentrated flow is defined as:

$$T_t = \frac{L}{3600 * V}$$

Where: Tt is the travel time in hours

L is the flow length in feet

V is the average velocity in ft/sec

Elevations and slope information for the existing system were estimated using LIDAR data from LSU's Atlas website and topographic survey data.

The TR-55 manual (USDA, 1986) recommends using the following equations when determining the average velocity for shallow concentrated flow:

$$v_{unpaved,ft/sec=}16.1545\sqrt{S_{decimal}}$$

$$v_{paved,ft/s} = 20.3282\sqrt{S_{decimal}}$$

These equations are based on the solution of the Manning's equation with n=0.05, r=0.4, and S=0.5%. Sheet flow travel times were calculated using the rainfall amount for a 100 year return interval (14.1 inches). Due to the very short distance of paved areas within the study reach, the equation for shallow concentrated flow on paved areas was not utilized in the calculations.

Lag times computed for each sub-basin are shown in Table 3-2 below.

Table 3-2: Lag Calculation for each Sub-basin

Sub-basin ID	Sheet Flow Length (ft)	Sheet Flow Travel Time (hr)	Shallow Concentrated Flow Length (ft)	v (ft/s)	Shallow Concentrated Flow Time (hr)	Total Lag Time (min)
Sub-basin-1	300	0.135	4599	1.14	1.121	75.4
Sub-basin-2	300	0.135	1548	1.14	0.377	30.8
Sub-basin-3	300	0.135	1733	1.14	0.422	33.5
Sub-basin-4	300	0.135	180	1.14	0.044	10.8
Sub-basin-5	300	0.135	1620	1.14	0.395	31.8
Sub-basin-6	300	0.135	1116	1.14	0.271	24.4
Sub-basin-7	300	0.135	907	1.14	0.221	21.4
Sub-basin-8	300	0.135	326	1.14	0.079	12.9

3.1.1.3 Baseflow Method

Based upon the topography of the study area, there is no predicted water inflow into the sub-basins other than via tidal events and rainfall. Therefore, no baseflow method was utilized in the models.

3.1.1.4 Loss/Gain Method

The Loss/Gain Method is used to model losses due to percolation in channels and gains due to ground water infiltration. Due to the poor infiltration capacity of the existing soil types, percolation and ground water infiltration are not predicted to be significant. Accordingly, no loss/gain method was utilized in the models.

3.1.2 METEOROLOGIC MODEL

The Meteorologic Model is comprised of three elements – precipitation, evapotranspiration, and snowmelt – that are used to establish the boundary conditions that act on the watershed during a simulation. For this modeling effort, four (4) meteorologic models were applied to all sub-basins in the Basin Model.

3.1.2.1 Precipitation Method

The precipitation method used for this model was the SCS Storm. Rainfall values for the four (4) storm events previously described were obtained from the TP-40 charts on NOAA's website, http://www.erh.noaa.gov/er/hq/Tp40s.htm, for the 10-, 25-, 50- and 100-year, 24-hour storm events. Total 24-hour rainfall for these storms are, respectively, 9.5 inches, 11.3 inches, 12.5 inches, and 14.1 inches.

3.1.2.2 Evapotranspiration Method

The Evapotranspiration method used for this model was the monthly average method. Monthly average pan evaporation data is available from the Louisiana Office of State Climatology. Pan evaporation data does not take into account water losses due to transpiration; however, using this data provides a more accurate representation of the project site conditions compared with using no evapotranspiration method in the meteorological model.

The most recently released *Louisiana Monthly Climate Review* which included the entire calendar year was for 2002. (http://www.losc.lsu.edu/cgi-bin/newsmonthly.py). Although monthly summary data tables current to March 2011 are also available for this location, they do not contain pan evaporation data. The 2002 monthly reports list pan evaporation data form five (5) locations throughout the state. The USDA Houma Station was selected for this modeling effort because of its proximity and similarity to the study area. The mean value in inches was used for the evapotranspiration method. Those values are listed in Table 3-3 below. A pan coefficient of 1.0 was used since the published mean value was previously processed by the state climate office from the total monthly pan evaporation value also published in the *Louisiana Monthly Climate Review* (2002).

Table 3-3: 2002 Monthly Mean Pan Evaporation Values, USDA Houma Station (Louisiana Monthly Climate Review, 2002)

Month	Mean Pan Evaporation, Inches
January	2.4
February	3.0
March	4.6
April	5.7

May	6.6
June	6.6
July	6.5
August	5.9
September	5.4
October	4.4
November	2.9
December	2.4

3.1.2.3 Snowmelt Method

Based on the typically mild winter weather conditions in the area, snowmelt is generally not a factor in the hydrology of this area. Accordingly, snowmelt was not considered in this modeling effort.

3.2 EXISTING SYSTEM MODEL

3.2.1 EXISTING SYSTEM MODEL PARAMETERS

The existing system model was assembled using the sub-basins and input parameters detailed above in Section 3.1. Sub-basins 1 and 6 were modeled as reservoirs with stage-storage-discharge relationships to compute water surface elevations for each storm event since these sub-basins are bounded on all sides by physical barriers. Water surface elevations were not computed for other sub-basins since they drain freely into the surrounding marshes.

3.2.2 SUZIE BAYOU AND DEER RANGE CANAL EXTENSION

As discussed above, Suzie Bayou and the Deer Range Canal Extension drain sub-basins 3 and 5. The capacity of these canals for drainage of these sub-basins was computed using the Manning's equation. The Manning's equation is defined as:

$$Q = \frac{1.49}{n} A R^{\frac{2}{3}} \sqrt{S}$$

Where: Q is the flow rate in ft^3/s

n is the Manning's Roughness Coefficient

A is the Flow Area in ft^2

R is the Hydraulic Radius in ft

S is the Channel Slope in ft/ft

A conservative "n" value of 0.045 and a maximum hydraulic slope of 0.1% were used in the Manning's equation to compute the drainage capacities of the canals. The computed canal capacities are shown in Table 3-4 below.

Table 3-4: Calculation of Canal Capacities using Manning's Equation

Canal	Approximate Width (ft)	Approximate Average Depth (ft)	Manning's "n"	Canal Capacity at 0.1% Slope (CFS)
Suzie Bayou	42	5	0.045	557
Deer Range Canal (Ext.)	24	5	0.045	291

3.2.3 EXISTING SYSTEM MODEL RESULTS

Tables 3-5, 3-6 and 3-7 below show the peak runoff, peak water surface elevations, and peak culvert discharges computed for each of the sub-basins for the 10-, 25-, 50- and 100-year, 24 hour storm events.

Table 3-5: HEC-HMS Model Results, Existing Conditions – Peak Basin Inflow

Existing Condition (Unimproved)		Storm Event			
		10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Drainage Area (mi^2)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)
Sub-basin-1	0.24033	198.8	254.6	292.2	342.5
Sub-basin-2	0.17701	251.8	322.0	369.2	432.3
Sub-basin-3	0.0566447	78.5	100.0	114.4	133.6
Sub-basin-4	0.0499591	130.2	164.0	186.6	216.7
Sub-basin-5	0.0661366	102.7	128.7	146.1	169.3
Sub-basin-6	.0104531	17.0	21.7	24.9	29.1
Sub-basin-7	0.20706	362.2	463.0	530.6	621.0
Sub-basin-8	0.16759	379.4	484.0	554.2	648.0

Table 3-6: HEC-HMS Model Results, Existing Conditions – Peak Water Surface Elevation

Existing Condition (Unimproved)	Storm Event			
	10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Peak WSEL (ft.)	Peak WSEL (ft.)	Peak WSEL (ft.)	Peak WSEL (ft.)
Sub-basin-1	1.2	1.4	1.5	1.6
Sub-basin-6	0.9	1.0	1.0	1.1

*Sub-basins 2,4,5,7, and 8 drain freely into the surrounding marsh; no peak WSEL was computed

Table 3-7: HEC-HMS Model Results, Existing Conditions – Peak Culvert Discharge

Existing Condition (Unimproved)	Storm Event			
	10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)
Sub-basin-1	32.5	35.1	36.4	37.5
Sub-basin-6	28.2	29.7	29.7	31.1

*Sub-basins 2,4,5,7, and 8 drain freely into the surrounding marsh; no peak culvert discharge was computed

3.3 PROPOSED SYSTEM MODEL

3.3.1 PROPOSED SYSTEM MODEL PARAMETERS

The proposed system model is based upon the existing system model with the following modifications:

(1) Additional impervious area was included within the sub-basins to account for projected future development. This additional impervious area changes curve numbers for the sub-basins (see Table 3-1 above for input values).

(2) New culverts are modeled at “Culvert #1”, “Culvert #2” and “Culvert #3” locations. At “Culvert #1” the existing two 24-inch diameter culverts are replaced with three 24-inch diameter culverts. At “Culvert #2” the existing 24-inch diameter culvert is replaced with a new 24-inch diameter culvert. At “Culvert #3” the existing 24-inch diameter culvert is replaced with two 24-inch diameter culverts.

No modifications to Suzie Bayou or to the Deer Range Canal were made in the proposed system model.

3.3.2 PROPOSED SYSTEM MODEL RESULTS

Tables 3-7 and 3-8 below show the peak discharges and peak water surface elevations computed for each of the sub-basins for the 10-, 25-, 50- and 100-year, 24 hour storm events.

Table 3-8: HEC-HMS Model Results, Proposed Conditions – Peak Basin Inflow

Proposed Condition (Improved)		Storm Event			
		10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Drainage Area (mi^2)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)	Peak Basin Inflow (cfs)
Sub-basin-1	0.24033	203.7	259.8	297.5	348.0
Sub-basin-2	0.17701	258.5	329.0	376.3	439.6
Sub-basin-3	0.0566447	82.8	104.4	118.9	138.2
Sub-basin-4	0.0499591	135.7	169.5	192.0	221.9
Sub-basin-5	0.0661366	109.9	135.8	153.1	176.1
Sub-basin-6	.0104531	18.0	22.8	26.0	30.2
Sub-basin-7	0.20706	381.2	482.7	550.6	641.2
Sub-basin-8	0.16759	399.1	504.5	574.9	668.8

Table 3-9: HEC-HMS Model Results, Proposed Conditions – Peak Water Surface Elevation

Proposed Condition (Improved)	Storm Event			
	10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Peak WSEL (ft.)	Peak WSEL (ft.)	Peak WSEL (ft.)	Peak WSEL (ft.)
Sub-basin-1	1.2	1.3	1.4	1.5
Sub-basin-6	0.9	1.0	1.0	1.1

Table 3-10: HEC-HMS Model Results, Proposed Conditions – Peak Culvert Discharge

Existing Condition (Unimproved)	Storm Event			
	10-yr	25-yr	50-yr	100-yr
Hydrologic Element	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)	Peak Culvert Discharge (cfs)
Sub-basin-1	48.8	50.8	52.7	54.5
Sub-basin-6	42.2	44.5	44.5	46.7

SECTION 4 – SUMMARY OF RESULTS

4.1 PHYSICAL IMPROVEMENTS

The proposed improvements in this project consist of raising Lake Hermitage Road to a minimum elevation of 2.5 (N.G.V.D 29), surfacing the raised roadway with asphalt and replacing existing culverts beneath Lake Hermitage Road to improve drainage.

4.1.1 IMPACT OF RAISING ROADWAY ELEVATION

Due to the low-lying elevation and direct exposure to tides, raising the roadway elevation is projected to protect the roadway against overtopping from normal non-tropical high tide events that can result in frequent roadway closures and limited accessibility. These road closures and limited accessibility have a significant health and safety impact on the residents that depend on the Lake Hermitage Road for emergency access and a significant economic impact on the businesses that depend upon Lake Hermitage Road for commercial access. Accordingly, the raising of Lake Hermitage Road will have a positive health, safety and economic impact.

Lake Hermitage Road is generally higher than the surrounding marsh and accordingly forms a significant ridge in the area. During high tide events the roadway overtops, maintaining an equalization of water levels in the marsh on both sides of the roadway. By raising the roadway as proposed, this overtopping is projected to be significantly reduced and could impact the natural equalization of water levels on each side of the roadway. However, due to the highly interconnected nature of all of the water bodies surrounding Lake Hermitage Road, it appears that the raising of the roadway will have a minimal impact on the surrounding water levels.

4.1.2 IMPACT OF DRAINAGE CULVERT IMPROVEMENTS

The following drainage culvert improvements are proposed:

- Culvert #1: Replace existing (2) 24” culverts with three (3) new 24” culverts
- Culvert #2: Replace existing 24” culvert with one (1) new 24” culvert
- Culvert #3: Replace existing 24” culvert with two (2) new 24” culverts

These proposed drainage improvements will improve drainage and protect the roadway for a Technical Paper No. 40 100-year rainfall event. Based upon the results of the HEC-HMS modeling, it is predicted that these culvert improvements will increase the drainage capacity of Sub-Basins 1 and 6 while maintaining, if not slightly lowering, peak water levels in these sub-basins induced by rainfall events. Accordingly, these culvert improvements are projected to have a positive impact on drainage.

Other sub-basins generally drain away from Lake Hermitage Road and directly into the surrounding marsh. Accordingly, the proposed culvert improvements are not projected to have any impact on these sub-basins or on the surrounding marsh.

4.1.3 IMPACT OF INCREASED IMPERVIOUS AREA AND RUNOFF

The placement of asphalt on Lake Hermitage Road will slightly increase the impervious area which drains into the surrounding drainage basins. The existing roadway consists of an aggregate roadway surfacing with a moderate rate of runoff. The proposed asphalt surface is highly

impervious and will increase the rate of runoff. This increased rate of runoff will increase flows into the adjacent drainage sub-basins. Drainage culvert improvements discussed above are projected to offset the increased rate of runoff such that this increased rate of runoff will not have a significant impact on these sub-basins. Due to the size of the drainage basins in comparison to the area of asphalt that will be placed, the impacts of any additional runoff in other basins are projected to be negligible.

4.2 CONSTRUCTABILITY ASSESSMENT

Constructability of the roadway and drainage improvements identified in this report was considered to assess potential impacts on the feasibility and cost of implementation. Generally speaking, there are no major constructability issues identified that would prevent any of the improvements from being implemented, although a number of factors related to constructability were considered in preliminary design to ensure timely and economical completion of the project.

Due to the location of the roadway within a Coastal Zone, it is anticipated that a Coastal Use Permit will be required from the Louisiana Department of Natural Resources and the US Army Corps of Engineers. To prevent encroachment into existing wetlands immediately adjacent to the roadway, the geometric design of the roadway improvements closely follows the existing aggregate roadway. This will minimize the environmental impact of the construction work being performed, and will improve the likelihood of obtaining a Coastal Use Permit in a timely manner. In addition, staying within the existing roadway footprint as proposed will not require the purchase of additional right-of-way.

The finished roadway section recommended by the geotechnical engineer consists of six inches (6”) of asphalt pavement placed on top of four inches (4”) of stone base placed upon the top of the existing aggregate roadway surface. The depth of this stone base can be increased in areas where necessary to achieve the minimum finished roadway elevation of 2.5 (N.G.V.D. 29). The geotechnical engineer further recommended that the existing aggregate roadway surface be left undisturbed (i.e. not excavated or cut) prior to placement of the new stone base. This will result in a finished roadway elevation that will generally exceed the minimum design elevation of 2.5 (N.G.V.D. 29) throughout the project, with a considerable length of the improved roadway exceeding a finished elevation of 3.0 (N.G.V.D. 29).

4.3 PRELIMINARY CONSTRUCTION COST ESTIMATE

The preliminary estimated construction cost for this project is $4,732,482.50. A breakdown on this estimate is shown in Table 4.1 below.

Quantities shown are based upon the proposed improvements specified in previous sections and upon a preliminary design of these improvements. Unit costs used in this Preliminary Construction Cost Estimate are based upon bid pricing from similar projects in the area and upon bid pricing as published by the Louisiana Department of Transportation and Development (LADOTD) for comparable work. This cost estimate is preliminary in nature and may increase or decrease as project design progresses.

Table 4-1 Preliminary Construction Cost Estimate

Item No.	Description	Quantity	Unit	Unit Cost	Extension
203-03	Embankment	6,100	CY	$40.00	$244,000.00
203-08	Geotextile Fabric	99,500	SY	$1.50	$149,250.00
302-01	Class II Base Course	9,800	CY	$65.00	$637,000.00
502-03	Asphaltic Concrete (6" Thick)	82,600	SY	$39.00	$3,221,400.00
701-01	Cross Drain Pipe (24" Steel)	300	LF	$350.00	$105,000.00
713-01	Temporary Signs and Barricades	1.00	LS	$5,500.00	$5,500.00
727-01	Mobilization	1.00	LS	$235,000.00	$235,000.00
731-02	Reflectorized Pavement Markers	705	EA	$6.50	$4,582.50
732-01	Plastic Pavement Striping (4" Width)	106,000	LF	$0.75	$79,500.00
740-01	Construction Layout	1.00	LS	$47,500.00	$47,500.00
S-001	Rumble Strips	5.0	Mi	$750.00	$3,750.00
TOTAL ESTIMATED CONSTRUCTION COST					**$4,732,482.50**

4.4 SUMMARY AND RECOMMENDATION

It is projected that the raising of Lake Hermitage Road and improving the culverts crossing the roadway as proposed will protect the roadway against overtopping from normal non-tropical high tide events and will improve roadway drainage for a Technical Paper No. 40 100-year rainfall event. It is projected that the proposed improvements will have a positive impact on the health and safety of the public and a positive economic impact on the area. It is projected that the improvements will have a minimal impact on the drainage of the area. Accordingly, it is recommended that the improvements proposed in this study be implemented.

Preliminary plans showing the proposed improvements are included in Appendix B.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

ENVIRONMENTAL REVIEW RECORD

For

LAKE HERMITAGE ROAD IMPROVEMENTS PORT SULPHUR, PLAQUEMINES PARISH, LOUISIANA

Prepared for

PLAQUEMINES PARISH GOVERNMENT
8056 HIGHWAY 23
SUITE 200
BELLE CHASSE, LA 70037

Prepared by

Professional Service Industries, Inc.
22171 MCH Road
Mandeville, Louisiana 70471
(985) 809-233

PSI Project No.: 0255662

March 13, 2013

Compliance Documentation Checklist
24 CFR 58.6

PROJECT NAME / DESCRIPTION: Plaquemines Parish Government, Lake Hermitage Road Improvements, Port Sulphur, Plaquemines Parish, Louisiana..

Refer to APPENDIX A for Project Location Map

Level of Environmental Review Determination: (4) Environmental Assessment per §58.36 Select One: (1) Exempt per 24 CFR 58.34, or (2) Categorically Excluded not subject to statutes per § 58.35(b), or (3) Categorically Excluded subject to statutes per § 58.35(a), or (4) Environmental Assessment per § 58.36, or (5) EIS per 40 CFR 1500

STATUTES and REGULATIONS listed at 24 CFR 58.6

FLOOD DISASTER PROTECTION ACT

1. Does the project involve acquisition, construction or rehabilitation of structures located in a FEMA-identified Special Flood Hazard?

☐ No; Cite Source Documentation**:**

☒ Yes; Source Documentation: FEMA FIRM 2201390410B – May 1, 1985 – **Appendix B**

2. Is the community participating in the National Insurance Program (or has less than one year passed since FEMA notification of Special Flood Hazards)? **Appendix B**

☒ Yes (Flood Insurance under the National Flood Insurance Program must be obtained and maintained for the economic life of the project, in the amount of the total project cost. A copy of the flood insurance policy declaration must be kept on file).

☐ No **(Federal assistance may not be used in the Special Flood Hazards Area).**

COASTAL BARRIERS RESOURCES ACT

1. Is the project located in a coastal barrier resource area?

☒ No; Cite Source Documentation: http://www.fws.gov/CBRA/index.html
(This element is completed).

☐ Yes – **Federal assistance may not be used in such an area.**

AIRPORT RUNWAY CLEAR ZONES AND CLEAR ZONES DISCLOSURES

1. Does the project involve the sale or acquisition of existing property within a Civil Airport's Runway Clear Zone or a Military Installation's Clear Zone?

☒ No; Source Documentation: Per 24 CFR 51-D: Project not within 2,500 feet of end of civil airport runway or 15,000 feet of end of military airfield runway (**Map in Appendix B**)
Project complies with 24 CFR 51.303(a)(3).

☐ Yes; **Disclosure statement must be provided** to buyer and a copy of the signed disclosure must be maintained in this Environmental Review Record

Prepared by (name and title, please print): Rachel A. Keane - PSI,Inc. - Project Scientist
On behalf of the Plaauemines Parish Government

Signature: Rachel A Keane

Date: March 13, 2013

STATUTORY CHECKLIST

24 CFR §58.5 STATUTES, EXECUTIVE ORDERS & REGULATIONS

Project Name: Plaquemines Parish Government – Lake Hermitage Road Improvements

Project Description (Include all actions which are either geographically or functionally related):
Elevation and partial pavement of Lake Hermitage Road, Port Sulphur, Plaquemines Parish, Louisiana.

Location: Lake Hermitage Road, Port Sulphur,LA - Refer to **Appendix A** for Project Location Map

This project is determined to be categorically excluded according to: [Cite section(s)] N/A – EA required per §58.36

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5	N/A	Consultation, Review, Permits Required	Consistency Determination	Condition, Mitigation	**Compliance Documentation**
Historic Preservation [36 CFR Part 800]	X				Per SHPO letter 02/11/13 no adverse effects expected.
Floodplain Management [24 CFR 55, Executive Order 11988]	X				In 100-year floodplain. 8-Step Process per 24 CFR Part 55.2 completed.
Wetland Protection [Executive Order 11990]		X			Per NWI map, wetlands surround project. Per USACE letter dated 8/8/11, permitting required.
Coastal Zone Management Coastal Zone Management Act [Sections 307(c), (d)]	X				Project determined to be consistent by LDNR in letter dated 9/28/12. Per LDNR letter dated 12/7/12, no CUP permit required.
Water Quality Safe Drinking Water Act (42 USC 201, 300(f) & 21 U.S.C. 349)		X			Per EPA map and EPA letter 11/21/12, not in area designated as sole source aquifer. Impacts to potable water not expected. LPDES permit required. Surface water impacts minor with BMPs.
Sole Source Aquifers [40 CFR 149]	X				Per EPA map, not in area designated as sole sources aquifer. USEPA letter of determination dated 11/21/12, project not in designated sole source aquifer zone.
Fish and Wildlife Endangered Species Act [50 CFR 402]	X				"No impact" to T&E determination from USFWS online assessment tool (11/16/2012).
Wild and Scenic Rivers Wild and Scenic Rivers Act [Sections 7(b), and (c)]	X				http://www.rivers.gov/ No wild and scenic river will be impacted.
Clean Air Clean Air Act [Sections 176(c), (d), and 40 CFR 6, 51, 93]	X				http://www.deq.louisiana.gov/portal/tabid/68/Default.aspx Plaquemines Parish in "attainment" for NAAQS parameters per email from LDEQ dated 12/10/12.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5	N/A	Consultation, Review, Permits Required	Consistency Determination	Condition, Mitigation	**Compliance Documentation**
Farmland Protection Farmland Protection Policy Act [7 CFR 658]	X				Prime farmland surrounding area. No impacts expected; construction to remain in ROW.
Environmental Justice [Executive Order 12898]	X				www.census.gov No adverse impacts to low income/minority populations expected.
HUD ENVIRONMENTAL STANDARDS					
Noise Abatement and Control [24 CFR 51B]	X				Proposed use not a sensitive noise receptor. Noise assessment not applicable.
Explosive and Flammable Operations [24 CFR 51C]	X				Based on site reconnaissance and nature of the project, no impacts are expected.
Toxic Chemicals and Radioactive Materials [24 CFR 58.5(i)]	X				Based on site reconnaissance and the nature of the project, no impacts are expected.
Airport Clear Zones and Accident Potential Zones [24 CFR 51D]	X				Per 24 CFR Part 51-D: Project 2,500 and 15,000 feet from civil and military airfields respectively.
Solid Waste Disposal	X				Waste generated by construction will be disposed of according to regulatory guidelines. Regular solid waste disposal not required.
State/Local Statutes		X			Permit from the Parish West Bank Levee District needed.

PREPARER SIGNATURE: Rachel A Keane

DATE: March 13, 2013

PREPARER NAME: Rachel A. Keane

On Behalf of the Plaquemines Parish Government

RESPONSIBLE ENTITY AGENCY

OFFICIAL SIGNATURE: _____

DATE: _____

NAME, TITLE: _____

Environmental Assessment Checklist

Project Name: Plaquemines Parish Government, Lake Hermitage Road Improvements, Port Sulphur, LA.
Refer to **Appendix A** for Project Location Map

Impact Categories	IMPACT ANTICIPATED			REQUIRES MITIGATION OR MODIFICATION	NOTE CONDITIONS AND/OR SOURCE DOCUMENTATION THAT SUPPORTS FINDING REFERENCE NOTES
	NONE	MINOR	MAJOR		
Land Development					
Conformance with Comprehensive Plans and Zoning	X				Zoning consistent with use. In compliance with Parish Evacuation Plan.
Compatibility and Urban Impact	X				No change in land use.
Slope	X				http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Slopes for the area are less than 1 percent.
Erosion	X				http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx No evidence of erosion observed on site.
Soil Suitability	X				http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx No impacts expected.
Hazards and Nuisances Including Site Safety	X				Based on site reconnaissance and the nature of the project, no impacts are expected.
Energy Consumption	X				Given the nature of the project, impacts to energy consumption not applicable.
Noise					
Effects of Ambient Noise on Project and Contribution to Community Noise Levels	X				Proposed use not a sensitive noise receptor. Noise assessment not applicable.
Air Quality					
Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	X				http://www.deq.louisiana.gov/portal/tabid/95/Default.aspx Plaquemines Parish in "attainment" for NAAQS parameters per email from LDEQ dated 12/10/12.
Environmental Design, Historic Values and Urban Impact					
Visual Quality Coherence, Diversity, Compatible Use and Scale	X				No change of use. Overall surrounding areas will not be impacted.
Historic, Cultural and Archaeological Resources	X				Per SHPO letter 02/11/13 no adverse effects expected.

Environmental Assessment Checklist

Impact Categories		IMPACT ANTICIPATED			REQUIRES MITIGATION OR MODIFICATION	NOTE CONDITIONS AND/OR SOURCE DOCUMENTATION THAT SUPPORTS FINDING REFERENCE NOTES
		NONE	MINOR	MAJOR		
Socioeconomic						
Demographic Character Changes		X				www.census.gov No adverse impacts expected.
Displacement		X				www.census.gov No displacement required.
Employment and Income Patterns		X				www.census.gov No adverse impacts expected.
Community Facilities and Services.						
Educational Facilities		X				Given proposed use, not applicable
Commercial Facilities		X				Given proposed use, not applicable.
Health Care		X				Given proposed use, not applicable.
Social Services		X				Given proposed use, not applicable.
Solid Waste		X				Waste generated by construction will be disposed of according to regulatory guidelines. Regular solid waste disposal not required
Waste Water		X				No impacts expected.
Storm Water			X			Minor impacts expected. LPDES permit required. Minimized with use of BMPs.
Water Supply		X				Impacts to surrounding water supply not expected.
Public Safety	Police	X				Services provided by Plaquemines Sheriff Dept. Access to police vehicles expected to be improved.
	Fire	X				Services provided by Lake Hermitage Vol. Dept. Access to fire vehicles expected to be improved.
	Emergency Medical	X				Emergency medical transport provided by Parish. Access to police vehicles expected to be improved.
Open Space and Recreation	Open Space	X				Given proposed use, not applicable.
	Recreation	X				Given proposed us, not applicable.
	Cultural Facilities	X				Given proposed use, not applicable.
Transportation		X				Temporary adverse impacts expected during construction. Overall positive impacts expected upon completion.

Environmental Assessment Checklist

Impact Categories		IMPACT ANTICIPATED			REQUIRES MITIGATION OR MODIFICATION	NOTE CONDITIONS AND/OR SOURCE DOCUMENTATION THAT SUPPORTS FINDING REFERENCE NOTES
		NONE	MINOR	MAJOR		
Socioeconomic						
Demographic Character Changes		X				www.census.gov No adverse impacts expected.
Displacement		X				www.census.gov No displacement required.
Employment and Income Patterns		X				www.census.gov No adverse impacts expected.
Community Facilities and Services.						
Educational Facilities		X				Given proposed use, not applicable
Commercial Facilities		X				Given proposed use, not applicable.
Health Care		X				Given proposed use, not applicable.
Social Services		X				Given proposed use, not applicable.
Solid Waste		X				Waste generated by construction will be disposed of according to regulatory guidelines. Regular solid waste disposal not required.
Waste Water		X				No impacts expected.
Storm Water			X			Minor impacts expected. LPDES permit required. Minimized with use of BMPs.
Water Supply		X				Impacts to surrounding water supply not expected.
Public Safety	Police	X				Services provided by Plaquemines Sheriff Dept. Access to police vehicles expected to be improved.
	Fire	X				Services provided by Lake Hermitage Vol. Dept. Access to fire vehicles expected to be improved.
	Emergency Medical	X				Emergency medical transport provided by Parish. Access to police vehicles expected to be improved.
Open Space and Recreation	Open Space	X				Given proposed use, not applicable.
	Recreation	X				Given proposed us, not applicable.
	Cultural Facilities	X				Given proposed use, not applicable.
Transportation		X				Temporary adverse impacts expected during construction. Overall positive impacts expected upon completion.

Environmental Assessment Checklist

Impact Categories	IMPACT ANTICIPATED			REQUIRES MITIGATION OR MODIFICATION	NOTE CONDITIONS AND/OR SOURCE DOCUMENTATION THAT SUPPORTS FINDING REFERENCE NOTES
	NONE	MINOR	MAJOR		
Natural Features					
Water Resources	X				Per letter from EPA dated 11/21/12, no sole source aquifers in project area. No Wild Scenic Rivers located in or around project (www.rivers.gov).
Surface Water		X			Project surrounded by wetlands and other surface waters. LPDES permit required. Use of BMPs will result in minor impacts.
Floodplains	X				Project in 100-year floodplain. 8-step process complete.
Wetlands		X			Per NWI map, wetlands surround project. Per USACE letter dated 8/8/11, permitting required.
Coastal Zone	X				Project determined to be consistent by LDNR in letter dated 9/28/12. Per LDNR letter dated 12/7/12, no CUP permit required.
Unique Natural Features and Agricultural Lands	X				Prime farmland around project; no impacts due to construction located in existing ROW.
Vegetation and Wildlife	X				No unique or rare vegetative or wildlife habitat will be impacted. "No impact" to T&E determination from USFWS online assessment tool (11/16/2012).

Summary of Findings and Conclusions

Overall negative impacts resulting from the proposed project are minor in nature and do not represent significant impacts. The following permits will likely be required:

- USACE Section 404 Wetland Permit
- LPDES Construction Permit
- West Bank Levee District Permit

Mitigation required to acquire the above listed permits, would sufficiently minimize any resulting impacts. The project demonstrates consistency with the environmental standards and regulations pursuant to the National Environmental Policy Act (NEPA) and HUD guidelines. Therefore, the proposed project would qualify for a Finding of No Significant Impact (FONSI).

Summary of Environmental Conditions

Overall impacts resulting from the proposed project area minor in nature and do not represent significant impacts.

Environmental Assessment Checklist

ALTERNATIVES

Determine and describe possible alternatives to the proposed project, including the alternative of not implementing the project. The feasibility of each alternative and the reasons why each should be adopted or rejected should be discussed sufficiently to indicate that an adequate consideration of each alternative has occurred.

Alternative 1 – Proposed Action – The Plaquemines Parish Government proposes to elevate and improve the length of Lake Hermitage Road, approximately 5 miles, from Highway 23 to Lake Hermitage. Approximately 1.7 miles of Lake Hermitage Road, beginning at Highway 23, will be elevated and paved. The remaining length of Lake Hermitage Road will be elevated and paved with limestone. Specific elevation of the road will be determined during the design phase of the project and will meet local base flood elevation requirements. Lake Hermitage Road has been previously damaged by storm surge and winds associated with Hurricane's Gustav and Ike. Lake Hermitage Road is the only evacuation route that services the communities of Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage. Elevating and improving this road would allow for the quick and safe evacuation of these Parish communities.

Alternative 2 – No-Action – Lake Heritage Road would not be elevated and partially paved. Impacts from future storm activity would continue to degrade and further impede evacuation for the communities this road is intended to serve. Without the proposed improvements, more effective evacuation would not be realized and the overall purpose of the project would not be served.

COMPARATIVE ANALYSIS: Local and area-wide plans that demonstrate environmental considerations can serve as the context within which a comparison of alternative sites is made (i.e. by a project's consistency with the environmental criteria for site selection as may be established with such plans).

The purpose of the project is to provide more efficient and improved access to four classically underserved communities. Elevation and the partial pavement of Lake Hermitage Road would take place within the existing right-of-way. Though the areas surrounding the proposed project may contain wetland and other surface waters, mitigation through the permitting process would render these impacts minor. Not completing Alternative 1 – Proposed Action Alternative, would fail to meet the purpose of the project.

The proposed project has demonstrated an overall consistency with the environmental standards and regulations as required under NEPA and HUD guidelines. Further, selection of the No-Action alternative would fail to meet the purpose of the proposed action.

Additional Studies Performed (Attach Study or Summary)

None

Mitigation Measures Needed:

The following mitigation measures would be exactly defined upon completion of each respective permitting process"

- USACE Section 404 Wetland Permit – If wetlands are found to be impacted along the periphery of the project area, a Section 404 permit will be required. Mitigation, typically in the form of purchasing mitigation credits from an approved USACE mitigation bank, would minimize any impacts.
- LPDES Construction Permit – Typical mitigation required under this permit is the use of Best Management Practices (BMPs) such as silt fence, hay bales, and other control devices, to reduce and minimize sedimentation and discharges into surrounding waters.
- West Bank Levee District Permit – Mitigation requirements, if any, are unknown at this time.

Environmental Assessment

Environmental Assessment Checklist

1. **Is project in compliance with applicable laws and regulations?** ☒**Yes** ☐**No**

2. **Is an EIS required?** ☐**Yes** ☒**No**

3. **Finding of No Significant Impact (FONSI) can be made. Project will not significantly affect the quality of the human environment.** ☒**Yes** ☐**No**

Rachel A Keane

Prepared By: Rachel A. Keane
On Behalf of Plaquemines Parish Government

Title: PSI, Inc. Project Scientist

Date: March 13, 2013

Reviewed By: _____

Title: _____

Date: _____

CHECKLIST NARRATIVES

STATUTORY CHECKLIST

Historic Preservation

A cultural resources review and assessment report dated January 21, 2013 was submitted to the State Historic Preservation Officer (SHPO) requesting potential impacts to cultural resources in connection with the proposed project. The report concluded that no impacts to cultural resources would result from the proposed project and no additional archeological work would be required. Upon review, the SHPO issued a letter dated February 11, 2013 concurring with the report's findings and that the SHPO had no further interest in the project. A copy of agency correspondence has been included in **Appendix C**.

Floodplain Management

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel Number 2201390410B (May 1, 1985), the project area lies within the 100-year floodplain. As such, the 8-Step Process as directed under *24 CFR 55.20 – Procedures for Making Determinations on Floodplain Management* must be completed. An initial notice was published in the Times-Picayune on December 2, 2012 and the Plaquemines Gazette on December 4, 2012 to notify the public that the project was to be constructed in a floodplain. The 15-day public comment period for the Times-Picayune ended on December 18, 2012. The 15-day public comment period for the Plaquemines Gazette ended on December 20, 2012. No comments or objections were received. Subsequent analysis required under the 8-Step Process determined that the project's placement in a floodplain was still practicable because the structures are already located within the floodplain resulting in negligible impacts, the majority of the area surrounding the proposed project location is also located within the 100-year floodplain, and a fully elevated road was too costly. A second notice alerting the public to the decision to construct the project in a floodplain was published in the Times-Picayune on December 30, 2012 beginning an additional 7-day comment period ending on January 8, 2013. A second notice alerting the public to the decision to construct the project in a floodplain was published in the Plaquemines Gazette on January 1, 2013 beginning an additional 7-day comment period ending on January 9, 2013. No comments were received. Pursuant to 24 CFR 552.0, the 8-step process is complete. Please refer to **Appendix D Floodplain Management 8-Step Process**.

Wetland Protection

Review of the National Wetland Inventory Map (NWI), maintained by the U.S. Fish and Wildlife (USFWS), indicated that the project area is surrounded by wetland habitat. A copy of the NWI map has been included in **Appendix B**. In addition, a letter dated November 15, 2012 was submitted to the U.S. Army Corps of Engineers (USACE) regarding potential impacts to wetlands resulting from the proposed project. In a letter dated December 18, 2012, the USACE submitted a previously issued letter of determination dated August 8, 2011 that stated the project area shows indications that wetlands are present and that a permit from the USACE will be required prior to construction. At this time, the USACE has not been engaged for a permit to be issued. Prior to construction, a permit from the USACE will be acquired and mitigation, if required, will be assessed at that time. A copy of agency correspondence has been included in **Appendix C**.

Coastal Management Zone Act

Review of the Coastal Zone Map provided by the Louisiana Department of Natural Resources (LDNR) Office of Coastal Restoration and Management indicated that the project area is located within the Coastal Management Zone (CZM). In a letter dated September 28, 2012, the LDNR

Office of Coastal Management issued a letter of general consistency concurrence that as of October 1, 2012, the granting of financial assistance, is fully consistent with the Louisiana Coastal Resources Program. A copy of this letter has been included in **Appendix C**.

A completed application was submitted to the LDNR via their online application system dated November 29, 2012 requesting a determination with regard to Coastal Use Permit (CUP) requirements. In a letter dated December 7, 2012, the LDNR – Office of Coastal Restoration and Management stated that the project will have no direct and significant impact on coastal waters. Therefore, a CUP will not be required. Copies of all correspondence regarding coastal management have been included in **Appendix C**.

Water Quality

Proposed renovation activities will likely require a Louisiana Pollutant Discharge Elimination System (LPDES) permit to account for stormwater discharges from the construction site. LPDES permits require the use of best management practices (BMPs) to minimize and reduce sedimentation and discharges to be released into surrounding waters. Therefore, no significant storm water discharges impacting surface water would be expected. Potable water supplied to the surrounding areas will not be disrupted.

Sole Source Aquifers

Consultation with the U.S. Environmental Protection Agency (USEPA) – Region 6 was made regarding potential impacts to sole source aquifers resulting from the proposed project. A letter was submitted to the USEPA – Office of Groundwater dated November 15, 2012 regarding impacts to sole source aquifers resulting from the proposed project. In a letter dated November 21, 2012, the USEPA stated that through review of the project, the USEPA had concluded that the project does not lie within the boundaries of a designated sole source aquifer and therefore, no impacts would be expected. A copy of the sole source aquifers designated in USEPA – Region 6 and a copy of this correspondence have been included in **Appendix B** and **Appendix C** respectively.

Threatened and Endangered Species

In a letter dated August 13, 2012, the U.S. Fish and Wildlife Service (USFWS) introducing an online assessment feature allowing project proponents the ability to self-assess projects for potential impacts. This tool was utilized and a "no impact" determination was issued dated November 16, 2012 based on the known parameters of the proposed activity. A copy of the agency determination letter has been included in **Appendix C**.

During review of the CUP application for the proposed project the Louisiana Department of Wildlife and Fisheries (LDWF) offered the following comments:

- Ecological Studies – The LDWF recognized that minimal or no long-term impacts to wetlands would be expected. Best practices to control storm-water runoff would also be expected.
- Louisiana Natural Heritage Program – A Coastal Love Oak Forest was found to be located adjacent to the project area. The LDWF advised to take measures to avoid any impacts to this ecological community.

The LDWF noted that no other impacts to rare, threatened, or endangered species or critical habitats would be anticipated and that no state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known in connection with the project area or within ¼ mile of the project location. Please refer to LDNR's letter in **Appendix C**.

Wild and Scenic Rivers

Based on a review of the National Wild and Scenic Rivers website (http://www.rivers.gov/) the closest wild and scenic river in Louisiana is Saline Bayou in the northern portion of the state, well outside the proposed project area. Therefore, no impacts to wild and scenic rivers are expected as a result of this project. A copy of the designated Wild and Scenic rivers in Louisiana as posted by the National Wild and Scenic Rivers System has been included in **Appendix B**.

Clean Air Act

Through review of National Ambient Air Quality Standards (NAAQS) data and information provided on the Louisiana Department of Environmental Quality (LDEQ) website (http://www.deq.louisiana.gov/portal/default.aspx?tabid=1759), Plaquemines Parish is in attainment with air quality standards. In addition, the Louisiana Department of Environmental Quality (LDEQ) stated in an electronic mail letter dated December 10, 2012 that Plaquemines Parish was in attainment of the NAAQS for all criteria air pollutants. A copy of this correspondence has been included in **Appendix C**.

Construction activities may result in localized air quality impacts as a result of fugitive dust, elevation activities, and paving. These impacts will be temporary in nature and will not result in long-term adverse impacts.

Farmland Protection

Through review of information provided by the Natural Resources Conservation Service (NRCS) Web Soil Survey, the majority of the areas surrounding the project area are classified as prime farmland. However, given that the project involves a currently existing roadway and that construction is proposed to remain within the existing right-of-way (ROW), impacts to prime farmland are not expected. A copy of the Web Soil Survey classification map has been included in **Appendix B**.

Environmental Justice

Executive Order (EO) 112898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" provides that "each Federal agency shall make achieving environmental justice part of its mission be identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations." The U.S. Census Bureau collects general statistical information from individuals and establishments in order to compile statistics relevant to the population of the United States. Every ten years, the U.S. Census Bureau coordinates an effort to gather information and data of the population of the U.S. In addition to this effort, the U.S. Census Bureau collects economic data of the U.S. population as well as state and local governments every five years. The following summarizes the most recent and accessible population and income estimates relevant to the proposed project area.

Category	Louisiana	Plaquemines Parish	Port Sulphur CDP*
Population			
White	63.8%	71.3%	21.3%
Black/African American	32.4%	21.3%	64.2%
American Indian/Alaskan Native	0.7%	1.7%	13.4%
Asian persons	1.5%	3.4%	1.2%

Native Hawaiian/Other Pacific Islander	0.1%	0.2%	0.0%
Persons of Hispanic or Latino origin	4.4%	5.3%	3.6%
Economic Characteristic			
Median household income, 2007-2011	$44,086	$55,301	$41,833
Persons below poverty level, 2006-2010	18.1%	24.4%	15.6%

Source: http://www.census.gov/ - American Fact Finder, * Data from the American Community Survey 5-Year Estimates 2007-2011, CDP – Census Designated Place.

In comparison with population characteristics of the state, the proposed general project area supports a significantly larger percentage of minority individuals which have been classically identified as lower-income or disadvantaged populations. With regard to income, the median household income is lower in comparison to the Parish estimate but on par with estimates for the State. However, the percent of persons below the poverty level is lower in the general project area versus the Parish estimate.

In addition to data gather directly from the Census Bureau, the Plaquemines Parish Government also provided community specific data that indicates the population within the project area is generally equally represented. However, low and extremely low income persons represent the majority of the specific project area.

Overall positive impacts to minority and lower income populations are expected as a result of this project. Improved ingress and egress of these underserved communities would increase the potential impacts from storm activity. Families and individuals would be able to remove themselves and valuables at an easier and more effective rate.

Noise Abatement and Control

The current noise regulation was published in the Federal Register on July 12, 1979, as 24 CFR Part 51 B, "Environmental Criteria and Standards: Noise Abatement and Control". A streamlined rule was published on March 26, 1996. Sources of noise and distances from the project site are as follows:

- Civil airport (within 5 miles);
- Military airfields (within 15 miles);
- Major highways or busy roads (within 1000 feet); or
- Railroads (within 3000 feet).

HUD provides a Site Day/Night Noise Level Assessment calculator on their website (http://www.hud.gov/offices/cpd/environment/dnlcalculatortool.cfm) to calculate the expected Day/Night Noise Level (DNL). Noise criteria for HUD assisted developments are as follows:

Standard	DNL	Requirements
Acceptable	Not over 65 decibels (dB)	None
Normally Unacceptable	Above 65 dB but not over 75 dB	Special Approvals
Unacceptable	Above 75 dB	Attenuation, special approvals, environmental review.

Given the proposed activity, the proposed project does not represent a sensitive noise receptor. Therefore, a noise assessment would not be applicable to this project. Noise impacts on the

surrounding residential communities from construction activities will be minor and temporary as renovation activities would be conducted during daylight hours.

Explosive and Flammable Operation

Per guidance outlined in the "Siting of Hud-Assitance Project near Hazardous Facilities", when determining Acceptable Separation Distance (ASD) from any above-ground flammable or explosive hazards, a one-mile radius is to be investigated. Based on site reconnaissance and the nature of the proposed project, no impacts from explosive and flammable operations would be expected.

Toxic Chemicals and Radioactive Materials

Based on site reconnaissance and the nature of the proposed project, no impacts from explosive and flammable operations would be expected.

Airport Clear Zones and Accident Potential Zones

Louis Armstrong International Airport, Lakefront Civil Airport, and the Naval Air Station - Belle Chasse are within the following approximate distances of the project site:

- Naval Air Station – Belle Chasse: 14.36 miles
- Lakefront Civil Airport : 29.3 miles
- Louis Armstrong International Airport: 32.2 miles

Per HUD guidance and HUD policy as described in 24 CFR Part 51 Subpart D, the project area is not located within 2,500 feet of a civil airport runway or 15,000 feet of a military airfield runway. Therefore, impacts to the proposed project resulting from the proximity of airport clear zones or accident potential zones are not expected.

Solid Waste Disposal

Solid waste disposal of materials produced during construction will be managed as appropriate to federal, state, and local mandates and regulations. No impacts to surrounding solid waste disposal activities are expected.

State/Local Statutes

As discussed on the previously issued letter from the USACE dated August 8, 2011, any construction or work taking place within 1,500 feet of a federal flood control structure, such as a levee, will require a permit from the Plaquemines Parish Government – West Bank Lee District. This permit must be obtained prior to the commencement of construction activities.

ENVIRONMENTAL ASSESSMENT CHECKLIST

Land Development

Conformance with Comprehensive Plans and Zoning
Based on the proposed activities, the project is consistent with its current zoning status.

The Plaquemines Parish Government Guidelines for Evacuation outlines the circumstances under which emergency evacuation will be applied. According to this information, based on contraflow implementation, all evacuations must be completed by 30 hours prior to landfall. Given the condition of the road and its remote location, elevation and improvement of Lake Hermitage Road would serve to implement this plan.

Compatibility and Urban Impact
The general project area is largely rural and residential in nature. The proposed improvements to Lake Hermitage Road will be constructed with in the existing right-of-way. No additional land will be required. While the proposed improvements do include paving a portion of the existing limestone road, the overall impact to the surrounding area will be minor.

Slope
According to the NRCS Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx), the dominant soil present on the project site is Schriever clay with remaining portions containing Cancenne silty clay loam and Gentilly muck. According to the NRCS soil description function of their website (http://soils.usda.gov/technical/classification/osd/index.html), the slopes for these soils are less than 1 percent to 0 to 1 percent. Percentage of slope is the vertical distance divided by horizontal distance then multiplied by 100. The slope percentages designated for the soils on the project site represent a decline of less than 1 foot per 100 feet of horizontal distance. Please refer to **Appendix B** for a copy of the soil description. Site reconnaissance confirms that the project area is flat with little topographic interest. Due to the flat nature of the project area, the proposed project will not be impacted by slope nor will the topographic nature of the area be impacted.

Erosion
According to the NRCS Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) soil present on the project site is Schriever clay with remaining portions containing Cancenne silty clay loam and Gentilly muck. Erosion K factor represents the susceptibility of a soil to erosion by water. Values for K factor range from 0.02 to 0.69 (low to high susceptibility respectively). The K factors for these soils range from 0.32 to 0.37. These K factors represent a moderate susceptibility to erosion. Please refer to **Appendix B** for a copy of erosion factors for the project soils. Overall, little to no impacts to the proposed project resulting from erosion are expected. Appropriate fill materials will be used as needed. Therefore, no impacts to the proposed project resulting from erosion would be expected.

Soil Suitability
Minor impacts relating to soil suitability are expected. According to the NRCS Web Soil Survey, (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) the soils mapped for the project areas are classified as “somewhat limited” to “very limited” for local roads and streets. This designation is based on flooding, depth to saturated soil, and shrink-swell conditions. Please refer to **Appendix B** for a copy of the soil suitability ratings for the soils present at the project

site. Appropriate fill materials will be used as needed. Therefore, no impacts to the proposed project associated with regard to soil suitability would be expected.

Hazards and Nuisances Including Site Safety
Based on site reconnaissance and the nature of the proposed project, no impacts from hazards and nuisances would be expected.

Energy Consumption
Due to the nature of the proposed project, impacts to energy consumption would not be expected.

Noise
The current noise regulation was published in the Federal Register on July 12, 1979, as 24 CFR Part 51 B, "Environmental Criteria and Standards: Noise Abatement and Control". A streamlined rule was published on March 26, 1996. Sources of noise and distances from the project site are as follows:

- Civil airport (within 5 miles);
- Military airfields (within 15 miles);
- Major highways or busy roads (within 1000 feet); or
- Railroads (within 3000 feet).

HUD provides a Site Day/Night Noise Level Assessment calculator on their website (http://www.hud.gov/offices/cpd/environment/dnlcalculatortool.cfm) to calculate the expected Day/Night Noise Level (DNL). Noise criteria for HUD assisted developments are as follows:

	DNL	Requirements
Acceptable	Not over 65 decibels (dB)	None
Normally Unacceptable	Above 65 dB but not over 75 dB	Special Approvals
Unacceptable	Above 75 dB	Attenuation, special approvals, environmental review.

Given the proposed activity, the proposed project does not represent a sensitive noise receptor. Therefore, a noise assessment would not be applicable to this project. Noise impacts on the surrounding residential communities from construction activities will be minor and temporary as renovation activities would be conducted during daylight hours.

Air Quality
Through review of National Ambient Air Quality Standards (NAAQS) data and information provided on the Louisiana Department of Environmental Quality (LDEQ) website (http://www.deq.louisiana.gov/portal/default.aspx?tabid=1759), Orleans Parish is in attainment with air quality standards. In addition, the Louisiana Department of Environmental Quality (LDEQ) stated in an electronic mail letter dated December 10, 2012 that Plaquemines Parish was in attainment of the NAAQS for all criteria air pollutants. A copy of this correspondence has been included in **Appendix C**.

Construction activities may result in localized air quality impacts as a result of fugitive dust, elevation activities, and paving. These impacts will be temporary in nature and will not result in long-term adverse impacts.

Environmental Design, Historic Values, and Urban Impact

Visual Quality, Coherence, Diversity, Compatible Use and Scale
Given the nature of the proposed project and the location of the proposed improvements within the existing right-of-way, impacts to the surrounding landscape would not be expected.

Historic, Cultural, and Archaeological Resources
A cultural resources review and assessment report dated January 21, 2013 was submitted to the State Historic Preservation Officer (SHPO) requesting potential impacts to cultural resources in connection with the proposed project. The report concluded that no impacts to cultural resources would result from the proposed project and no additional archeological work would be required. Upon review, the SHPO issued a letter dated February 11, 2013 concurring with the report's findings and that the SHPO had no further interest in the project. A copy of agency correspondence has been included in **Appendix C**.

Socioeconomic

Demographic Character Changes
The U.S. Census Bureau collects general statistical information from individuals and establishments in order to compile statistics relevant to the population of the United States. Every ten years, the U.S. Census Bureau coordinates an effort to gather information and data of the population of the U.S. The following summarizes the most recent and accessible population estimates relevant to the proposed project area:

Population	Louisiana	Plaquemines Parish	Port Sulphur CDP*
White	63.8%	71.3%	21.3%
Black/African American	32.4%	21.3%	64.2%
American Indian/Alaskan Native	0.7%	1.7%	13.4%
Asian persons	1.5%	3.4%	1.2%
Native Hawaiian/Other Pacific Islander	0.1%	0.2%	0.0%
Persons of Hispanic or Latino origin	4.4%	5.3%	3.6%

Source: http://www.census.gov/ - American Fact Finder, * Data from the American Community Survey 5-Year Estimates 2007-2011, CDP – Census Designated Place.

In comparison with population characteristics of the state, the proposed general project area supports a significantly larger percentage of minority individuals which have been classically identified as lower-income or disadvantaged populations. Due to the nature of the proposed project, no impacts to the demographic nature of the area are expected.

Displacement
Based on the commercial use of the project site and that no additional property would be acquired to construct the project, no displacements are expected.

Employment and Income Patterns
In addition to population information, the U.S. Census Bureau also collects data regarding the employment and income status of the population. The following summarizes the most recent and accessible employment and income estimates relevant to the proposed project area:

Economic Characteristic	Louisiana	Plaquemines Parish	Port Sulphur CDP*

Median household income, 2007-2011	$44,086	$55,301	$41,833
Persons below poverty level, 2006-2010	18.1%	24.4%	15.6%

Source: http://www.census.gov/ - American Fact Finder, * Data from the American Community Survey 5-Year Estimates 2007-2011, CDP – Census Designated Place.

With regard to income, the median household income is lower in comparison to the Parish estimate but on par with estimates for the State. However, the percent of persons below the poverty level is lower in the general project area versus the Parish estimate. Overall impacts to the economic nature of the project area would not be expected.

Community Facilities and Services

Educational Facilities: Based on the nature of the proposed project, impacts to educational facilities in the area are not expected.

Commercial Facilities: Based on the nature of the proposed project, impacts to commercial facilities in the area are not expected.

Health Care: Based on the nature of the proposed project, impacts to health care facilities are not applicable.

Social Services: Based on the nature of the proposed project, impacts to social services are not applicable.

Solid Waste: Solid waste disposal of materials produced during construction will be managed as appropriate to federal, state, and local mandates and regulations. No impacts to surrounding solid waste disposal activities are expected.

Waste Water: Given the nature of the project, waste water service would likely not be required. Therefore, impacts would not be expected.

Storm Water: Proposed renovation activities will likely require a Louisiana Pollutant Discharge Elimination System (LPDES) permit to account for storm water discharges from the construction site. LPDES permits require the use of best management practices (BMPs) to minimize and reduce sedimentation and discharges to be released into surrounding waters. Therefore, no significant storm water discharges impacting surface water would be expected.

Water Supply: Due to the nature of the proposed project, access to potable water would likely not be required. No impacts to the surrounding water supply would be unlikely.

Public Safety

Police: Police services are provided by Plaquemines Parish Sheriff's Department. The nearest office is located approximately 17 miles south of the proposed project area. Based on the nature of the proposed project, adverse impacts to police services would not be expected. Elevation and partial pavement of Lake Hermitage Road would allow for faster, safer, and more effective access for emergency and fire vehicles and equipment.

Fire: The Lake Hermitage Volunteer Fire Department is located directly on Lake Hermitage Road. Overall positive impacts to fire services would be expected. Elevation and partial pavement of Lake Hermitage Road would allow for faster, safer, and more effective access for emergency and fire vehicles and equipment.

Emergency Medical: Ambulance services are provided by the Plaquemines Parish Emergency Medical Services (EMS) Department. The EMS Department services the Parish from 6 locations including Port Sulphur. Given the nature of the proposed project, no adverse impacts to emergency medical services would be expected. Elevation and partial pavement of Lake Hermitage Road would allow for faster, safer, and more effective access for emergency and fire vehicles and equipment.

Open Space and Recreation

Open Space: Based on the nature of the proposed project, impacts to open space are not applicable.

Recreation: Based on the nature of the proposed project, impacts to recreation are not applicable.

Cultural Facilities: Based on the nature of the proposed project, impacts to cultural facilities are not applicable.

Transportation: Improvements to Lake Hermitage Road would likely have a positive impact on transportation in the area. Traffic may be impeded during construction. However, easier and improved access to local residents, Parish vehicles, and emergency vehicles would be provided through the project.

Natural Features

Water Resources

Proposed renovation activities will likely require a Louisiana Pollutant Discharge Elimination System (LPDES) permit to account for storm water discharges from the construction site. LPDES permits require the use of best management practices (BMPs) to minimize and reduce sedimentation and discharges to be released into surrounding waters. Therefore, no significant storm water discharges impacting surface water would be expected. Potable water supplied to the surrounding areas will not be disrupted.

Consultation with the U.S. Environmental Protection Agency (USEPA) – Region 6 was made regarding potential impacts to sole source aquifers resulting from the proposed project. A letter was submitted to the USEPA – Office of Groundwater dated November 15, 2012 regarding impacts to sole source aquifers resulting from the proposed project. In a letter dated November 21, 2012, the USEPA stated that through review of the project, the USEPA had concluded that the project does not lie within the boundaries of a designated sole source aquifer and therefore, no impacts would be expected. A copy of the sole source aquifers designated in USEPA – Region 6 and a copy of this correspondence have been included in **Appendix B** and **Appendix C** respectively.

Based on a review of the National Wild and Scenic Rivers website (http://www.rivers.gov/) the closest wild and scenic river in Louisiana is Saline Bayou in the northern portion of the state, well outside the proposed project area. Therefore, no impacts to wild and scenic rivers are expected as a result of this project. A copy of the designated Wild and Scenic rivers in Louisiana as posted by the National Wild and Scenic Rivers System has been included in **Appendix B**.

Surface Water

The proposed project area is located in an area surrounded by wetlands and other surface waters. Proposed renovation activities will likely require a Louisiana Pollutant Discharge Elimination System (LPDES) permit to account for storm water discharges from the construction site. LPDES permits require the use of best management practices (BMPs) to minimize and reduce sedimentation and discharges to be released into surrounding waters. Therefore, no significant storm water discharges impacting surface water would be expected. Potable water supplied to the surrounding areas will not be disrupted.

Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel Number 2201390410B (May 1, 1985), the project area lies within the 100-year floodplain. As such, the 8-Step Process as directed under *24 CFR 55.20 – Procedures for Making Determinations on Floodplain Management* must be completed. An initial notice was published in the Times-Picayune on December 2, 2012 and the Plaquemines Gazette on December 4, 2012 to notify the public that the project was to be constructed in a floodplain. The 15-day public comment period for the Times-Picayune ended on December 18, 2012. The 15-day public comment period for the Plaquemines Gazette ended on December 20, 2012. No comments or objections were received. Subsequent analysis required under the 8-Step Process determined that the project's placement in a floodplain was still practicable because the structures are already located within the floodplain resulting in negligible impacts, the majority of the area surrounding the proposed project location is also located within the 100-year floodplain, and a fully elevated road was too costly. A second notice alerting the public to the decision to construct the project in a floodplain was published in the Times-Picayune on December 30, 2012 beginning an additional 7-day comment period ending on January 8, 2013. A second notice alerting the public to the decision to construct the project in a floodplain was published in the Plaquemines Gazette on January 1, 2013 beginning an additional 7-day comment period ending on January 9, 2013. No comments were received. Pursuant to 24 CFR 552.0, the 8-step process is complete. Please refer to **Appendix D Floodplain Management 8-Step Process**.

Wetlands

Review of the National Wetland Inventory Map (NWI), maintained by the U.S. Fish and Wildlife (USFWS), indicated that the project area is surrounded by wetland habitat. A copy of the NWI map has been included in **Appendix B**. In addition, a letter dated November 15, 2012 was submitted to the U.S. Army Corps of Engineers (USACE) regarding potential impacts to wetlands resulting from the proposed project. In a letter dated December 18, 2012, the USACE submitted a previously issued letter of determination dated August 8, 2011 that stated the project area shows indications that wetlands are present and that a permit from the USACE will be required prior to construction. At this time, the USACE has not been engaged for a permit to be issued. Prior to construction, a permit from the USACE will be acquired and mitigation, if required, will be assessed at that time. A copy of agency correspondence has been included in **Appendix C**.

Coastal Zone

Review of the Coastal Zone Map provided by the Louisiana Department of Natural Resources (LDNR) Office of Coastal Restoration and Management indicated that the project area is located within the Coastal Management Zone (CZM). In a letter dated September 28, 2012, the LDNR Office of Coastal Management issued a letter of general consistency concurrence that as of October 1, 2012, the granting of financial assistance, is fully consistent with the Louisiana Coastal Resources Program. A copy of this letter has been included in **Appendix C**.

A completed application was submitted to the LDNR via their online application system dated November 29, 2012 requesting a determination with regard to Coastal Use Permit (CUP) requirements. In a letter dated December 7, 2012, the LDNR – Office of Coastal Restoration and Management stated that the project will have no direct and significant impact on coastal waters. Therefore, a CUP will not be required. Copies of all correspondence regarding coastal management have been included in **Appendix C**.

Unique Natural Features and Agricultural Lands

No unique, rare, or critical habitat or natural features were identified on the project site. Through review of information provided by the Natural Resources Conservation Service (NRCS) Web Soil Survey, the majority of the areas surrounding the project area are classified as prime farmland. However, given that the project involves a currently existing roadway and that construction is proposed to remain within the existing right-of-way (ROW), impacts to prime farmland are not expected. A copy of the Web Soil Survey classification map has been included in **Appendix B**.

Vegetation and Wildlife

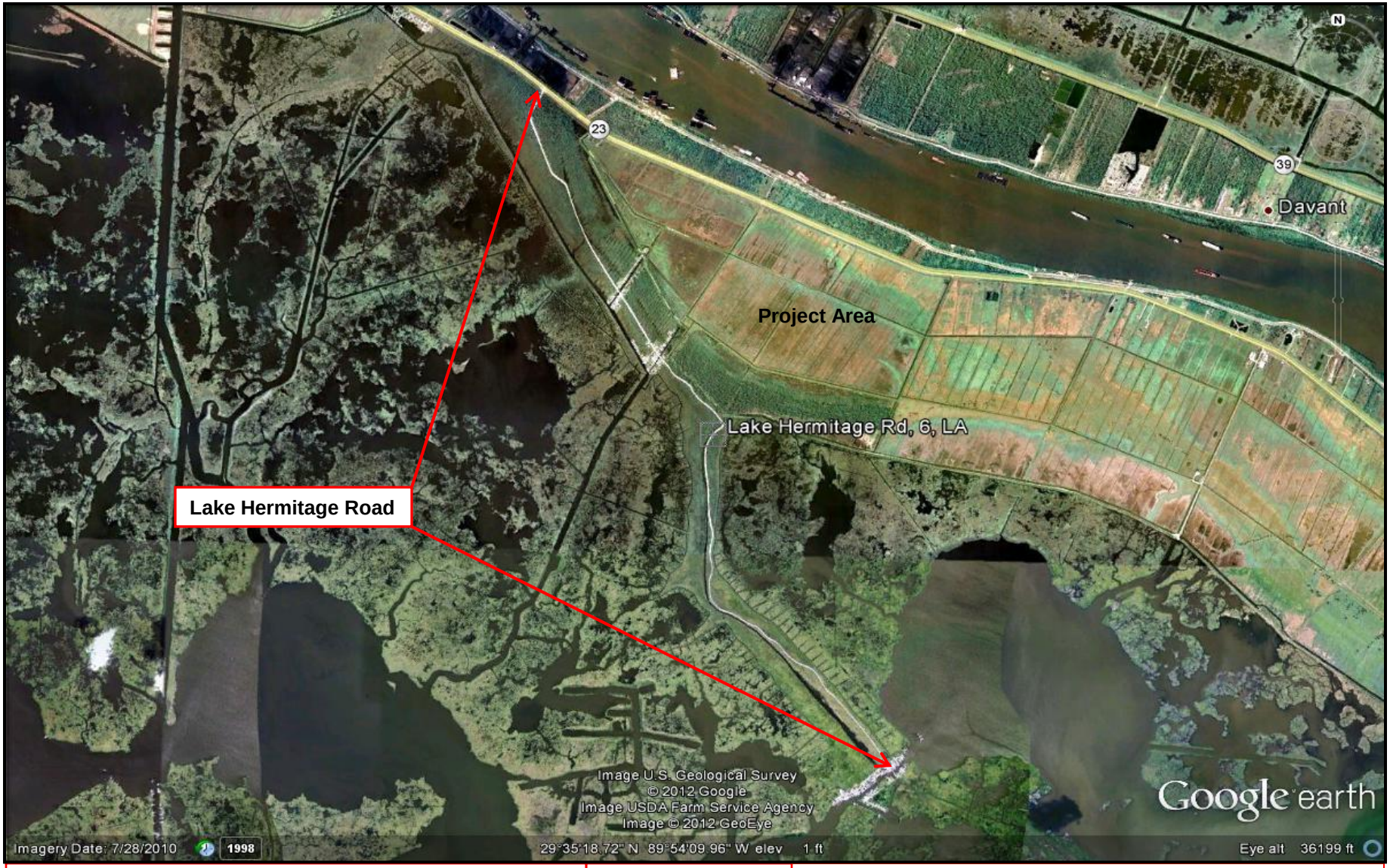
Proposed elevation and improvements to Lake Hermitage Road would take place within the existing right-of-way. No additional land would be acquired to complete the project. Per information provided using the self-assessment tool provided by the USFWS dated November 16, 2012 no threatened and endangered species or critical habitats will be impacted by the proposed project. Copies of agency coordination and response letters have been included in **Appendix C**.

During review of the CUP application for the proposed project the Louisiana Department of Wildlife and Fisheries (LDWF) offered the following comments:

- Ecological Studies – The LDWF recognized that minimal or no long-term impacts to wetlands would be expected. Best practices to control storm-water runoff would also be expected.
- Louisiana Natural Heritage Program – A Coastal Love Oak Forest was found to be located adjacent to the project area. The LDWF advised to take measures to avoid any impacts to this ecological community.

The LDWF noted that no other impacts to rare, threatened, or endangered species or critical habitats would be anticipated and that no state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known in connection with the project area or within ¼ mile of the project location. Please refer to LDNR's letter in **Appendix C**.

Appendix A
Figures



Project Area Map
Lake Hermitage Road
Port Sulphur, LA

DATE: November 2012

DRAWN: RAK

CHKD: SEW

FIGURE: Project Map

PSI PROJECT NO.: 0255663

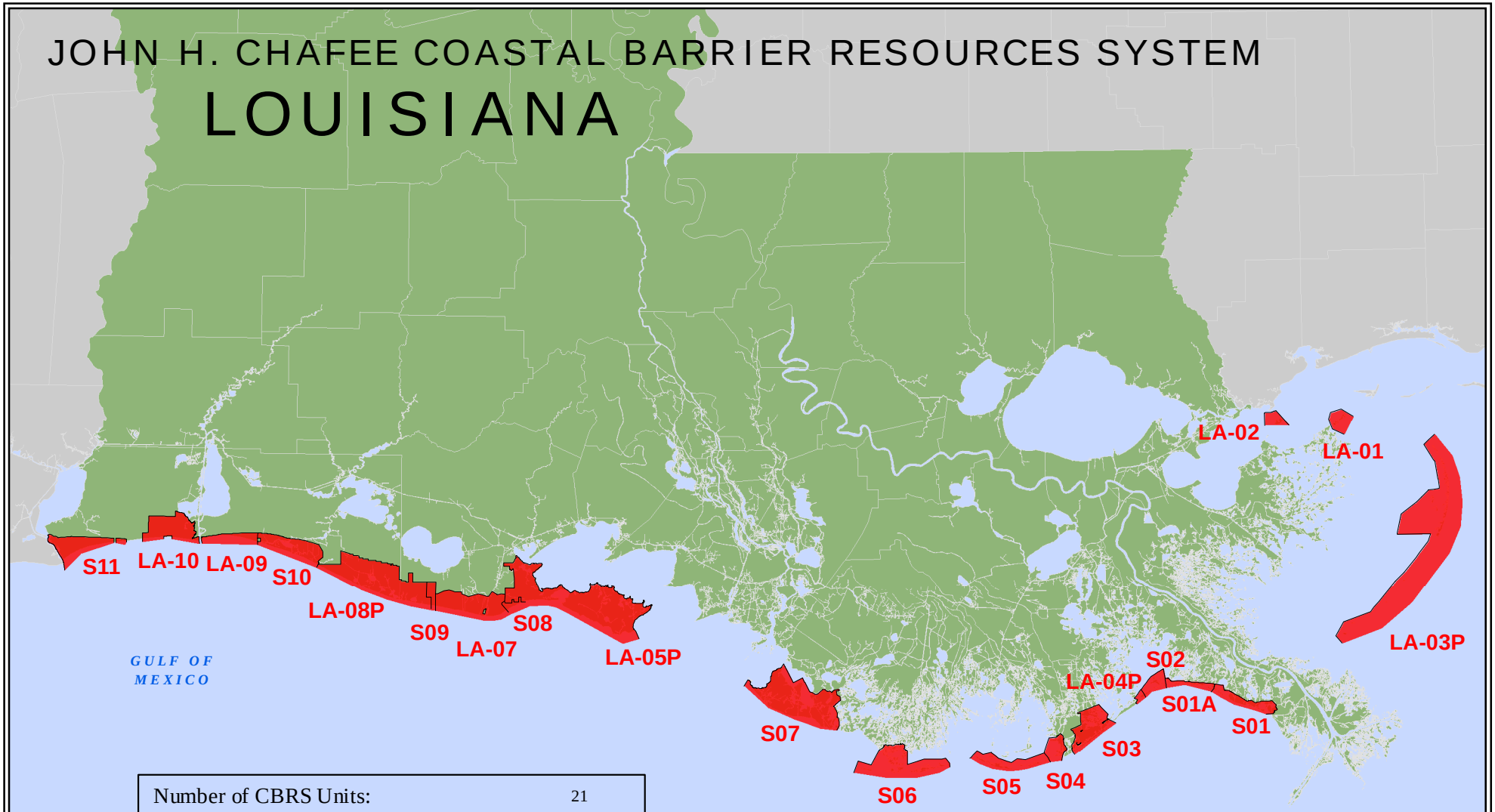
psi Information To Build On
Engineering • Consulting • Testing

Appendix B
Support Documentation


AIRPORT MAP
Lakefront Airport
Louis Armstrong Airport
NAS-Belle Chasse
Project Area
Kenner
New Orleans
St Charles
Lake Borgne
Lafourche
Jefferson
Port Sulphur, LA
610
10
310
3127
90
47
© 2012 Google
Image © 2012 TerraMetrics
29°44'39.79" N 90°03'14.72" W elev 0 ft
Eye alt 63.77 mi
Google earth

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

LOUISIANA

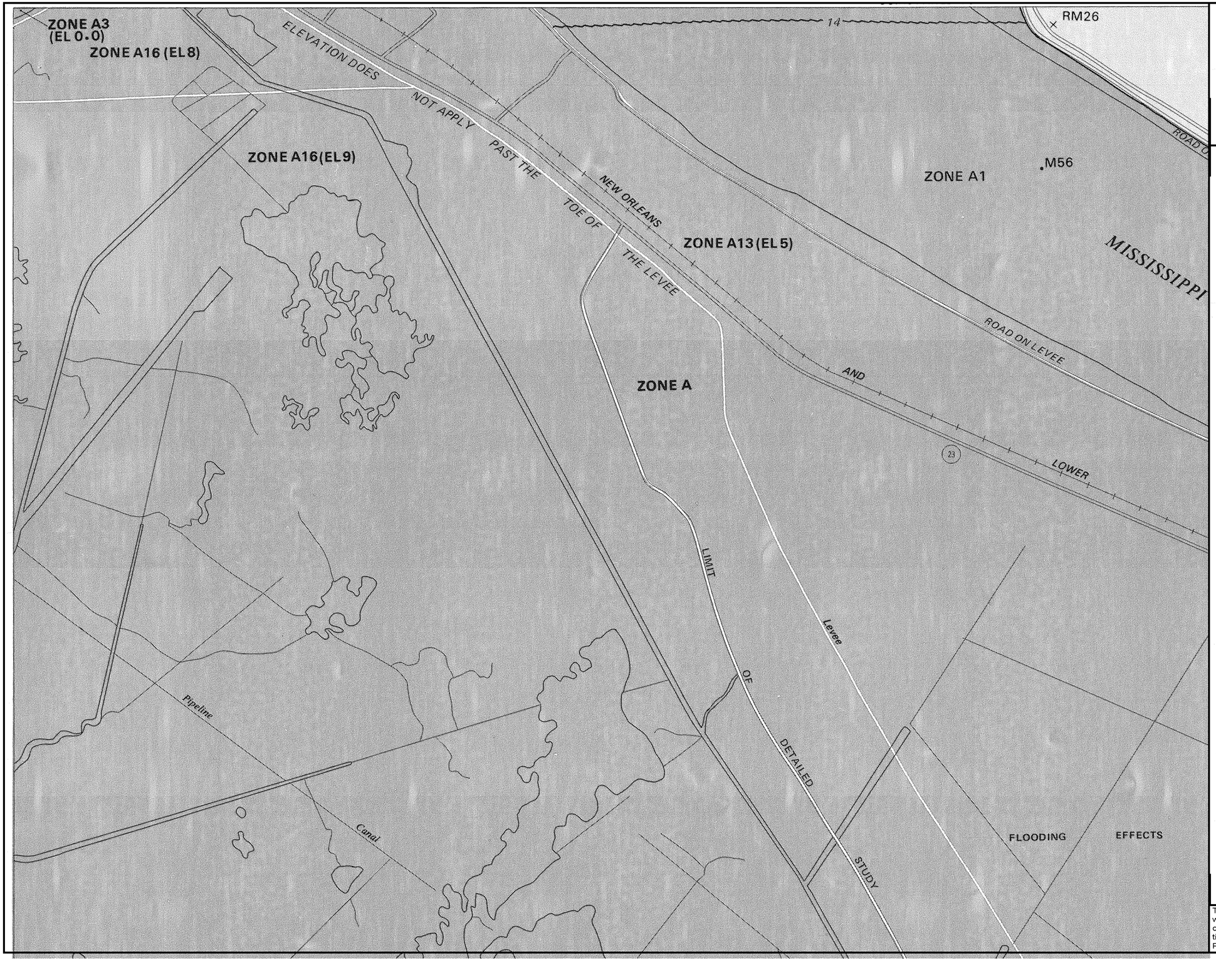


Number of CBRS Units:	21
Number of System Units:	*17*
Number of Otherwise Protected Areas:	*4*
Total Acres:	536,976
Upland Acres:	*8,592*
Associated Aquatic Habitat Acres:	*528,384*
Shoreline Miles:	241

Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at http://www.fws.gov/habitatconservation/coastal_barrier.html.

Federal Emergency Management Agency
Community Status Book Report
LOUISIANA
Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
225203#	NEW ORLEANS/ORLEANS PARISH*	ORLEANS PARISH	03/13/70	10/19/71	03/01/84	08/03/70	No
	CITY OF NEW ORLEANS & ORLEANS PARISH						
220144#	NEW ROADS, TOWN OF	POINTE COUPEE PARISH	02/01/74	04/15/80	11/16/95	04/15/80	No
220216#	NEWELLTON, TOWN OF	TENSAS PARISH	06/14/74	03/16/82	03/16/82(M)	03/16/82	No
220342	OAK GROVE, TOWN OF	WEST CARROLL PARISH	05/21/76		(NSFHA)	08/18/97	No
220303	OAK RIDGE, VILLAGE OF	MOREHOUSE PARISH	08/15/75		(NSFHA)	03/27/97	No
220011	OAKDALE, CITY OF	ALLEN PARISH	11/28/73	08/05/85	08/05/85(M)	08/05/85	No
220012	OBERLIN, TOWN OF	ALLEN PARISH	06/21/74	10/12/82	10/12/82(M)	10/12/82	No
220343	OLLA, TOWN OF	LA SALLE PARISH	11/12/76	11/01/85	11/01/85(M)	08/08/79	No
220173#	OPELOUSAS, CITY OF	ST. LANDRY PARISH	06/14/74	08/03/81	08/03/81	08/03/81	No
220135#	OUACHITA PARISH*	OUACHITA PARISH	09/13/74	07/02/80	03/15/94	07/02/80	No
220174	PALMETTO, VILLAGE OF	ST. LANDRY PARISH	09/13/74	04/15/86	04/15/86(M)	04/15/86	No
220190#	PARKS, VILLAGE OF	ST. MARTIN PARISH	01/18/74	07/16/80	07/16/80	07/16/80	No
220197#	PATTERSON, CITY OF	ST. MARY PARISH	06/14/74	01/18/89	05/02/95	07/03/78	No
220203#	PEARL RIVER, TOWN OF	ST. TAMMANY PARISH	05/24/74	05/04/88	05/04/88	05/04/88	No
220068	PINE PRAIRIE, VILLAGE OF	EVANGELINE PARISH	08/30/74	06/25/76	06/25/76(M)	06/25/76	No
220151#	PINEVILLE, CITY OF	RAPIDES PARISH	12/21/73	09/05/84	09/05/84	09/05/84	No
220244	PIONEER, VILLAGE OF	WEST CARROLL PARISH	06/04/76		01/01/50	07/11/97	No
220035#	PLAIN DEALING, TOWN OF	BOSSIER PARISH	06/14/74	04/15/81	09/26/08	04/15/81	No
220086	PLAQUEMINE, CITY OF	IBERVILLE PARISH	04/12/74		(NSFHA)	08/26/77	No
220139#	PLAQUEMINES PARISH*	PLAQUEMINES PARISH	01/17/85	05/01/85	09/30/93	05/01/85	No
220024#	PLAUCHEVILLE, VILLAGE OF	AVOYELLES PARISH	08/30/74	09/11/79	09/11/79(M)	09/11/79	No
220140#	POINTE COUPEE PARISH*	POINTE COUPEE PARISH	11/29/77	07/16/81	11/16/95	07/16/81	No
220305#	POLLOCK, TOWN OF	GRANT PARISH	08/15/75	05/25/82	05/25/82(M)	05/25/82	No
220211#	PONCHATOULA, TOWN OF	TANGIPAHOA PARISH	04/12/74	04/17/79	07/21/99	04/17/79	No
220242#	PORT ALLEN, CITY OF	WEST BATON ROUGE PARISH	06/28/74	01/24/78	09/07/00	01/24/78	No
220175#	PORT BARRE, TOWN OF	ST. LANDRY PARISH	05/31/74	04/15/81	04/15/81	04/15/81	No
220119#	PORT VINCENT, VILLAGE OF	LIVINGSTON PARISH	08/13/76	08/16/88	08/23/01	08/16/88	No
220132	PROVENCAL, VILLAGE OF	NATCHITOCHES PARISH	05/24/74	11/01/92	11/01/92(L)	11/01/92	No
220145#	RAPIDES PARISH*	RAPIDES PARISH	01/10/75	09/05/84	06/02/99	09/05/84	No
220008#	RAYNE, CITY OF	ACADIA PARISH	03/29/74	03/02/81	12/14/82	03/02/81	No
220157#	RAYVILLE, TOWN OF	RICHLAND PARISH	05/10/74	09/03/80	09/03/80	09/03/80	No
220152	RED RIVER PARISH*	RED RIVER PARISH	09/06/74	05/15/85	05/15/85(M)	05/15/85	No
220307	REEVES, VILLAGE OF	ALLEN PARISH	08/15/75		08/15/75	06/24/08(E)	No
220154	RICHLAND PARISH*	RICHLAND PARISH	06/28/77	08/01/87	12/08/98	08/01/87	No
220125#	RICHMOND, VILLAGE OF	MADISON PARISH	10/01/76	07/16/80	07/16/80	07/16/80	No
220378#	RICHWOOD, TOWN OF	OUACHITA PARISH		09/30/87	03/15/94	09/30/87	No
220056#	RIDGECREST, TOWN OF	CONCORDIA PARISH	05/24/74	04/03/78	04/03/78	04/03/78	No
220030#	RINGGOLD, TOWN OF	BIENVILLE PARISH	05/03/74	10/15/85	07/03/06	10/15/85	No
220133#	ROBELINE, VILLAGE OF	NATCHITOCHES PARISH	04/12/74	08/05/85	10/06/98	08/05/85	No
220308#	RODESSA, VILLAGE OF	CADDO PARISH	07/18/75	04/06/00	(NSFHA)	08/26/77	No
220087#	ROSEDALE, VILLAGE OF	IBERVILLE PARISH	12/07/73	02/15/78	02/26/80	02/15/78	No
220212	ROSELAND, TOWN OF	TANGIPAHOA PARISH	04/09/76	09/01/87	09/01/87(L)	09/01/87	No
220346	ROSEPINE, VILLAGE OF	VERNON PARISH	08/15/75	10/19/82	10/19/82(M)	10/19/82	No
220347#	RUSTON, CITY OF	LINCOLN PARISH	12/24/76	06/15/81	04/02/09	06/15/81	No
220368#	SABINE PARISH*	SABINE PARISH	01/24/78	08/05/91	08/05/91	08/05/91	No
220106#	SCOTT, CITY OF	LAFAYETTE PARISH	06/14/74	04/04/83	01/20/99	04/04/83	No
220036#	SHREVEPORT, CITY OF	CADDO PARISH	01/03/75	01/18/84	05/17/04	01/18/84	No
220258A	SIBLEY, VILLAGE OF	WEBSTER PARISH	02/07/75	07/18/85	03/02/10(>)	07/18/85	No
220025#	SIMMESPORT, TOWN OF	AVOYELLES PARISH	04/30/76	07/16/80	07/16/80	07/16/80	No
220312#	SIMSBORO, VILLAGE OF	LINCOLN PARISH	02/07/75	04/02/09	04/02/09	04/02/09	No



APPROXIMATE SCALE

2000 0 2000 FEE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

PLAQUEMINES PARISH, LOUISIANA

(UNINCORPORATED AREAS)

PANEL 410 OF 1400

(SEE MAP INDEX FOR PANELS NOT PRINTED)

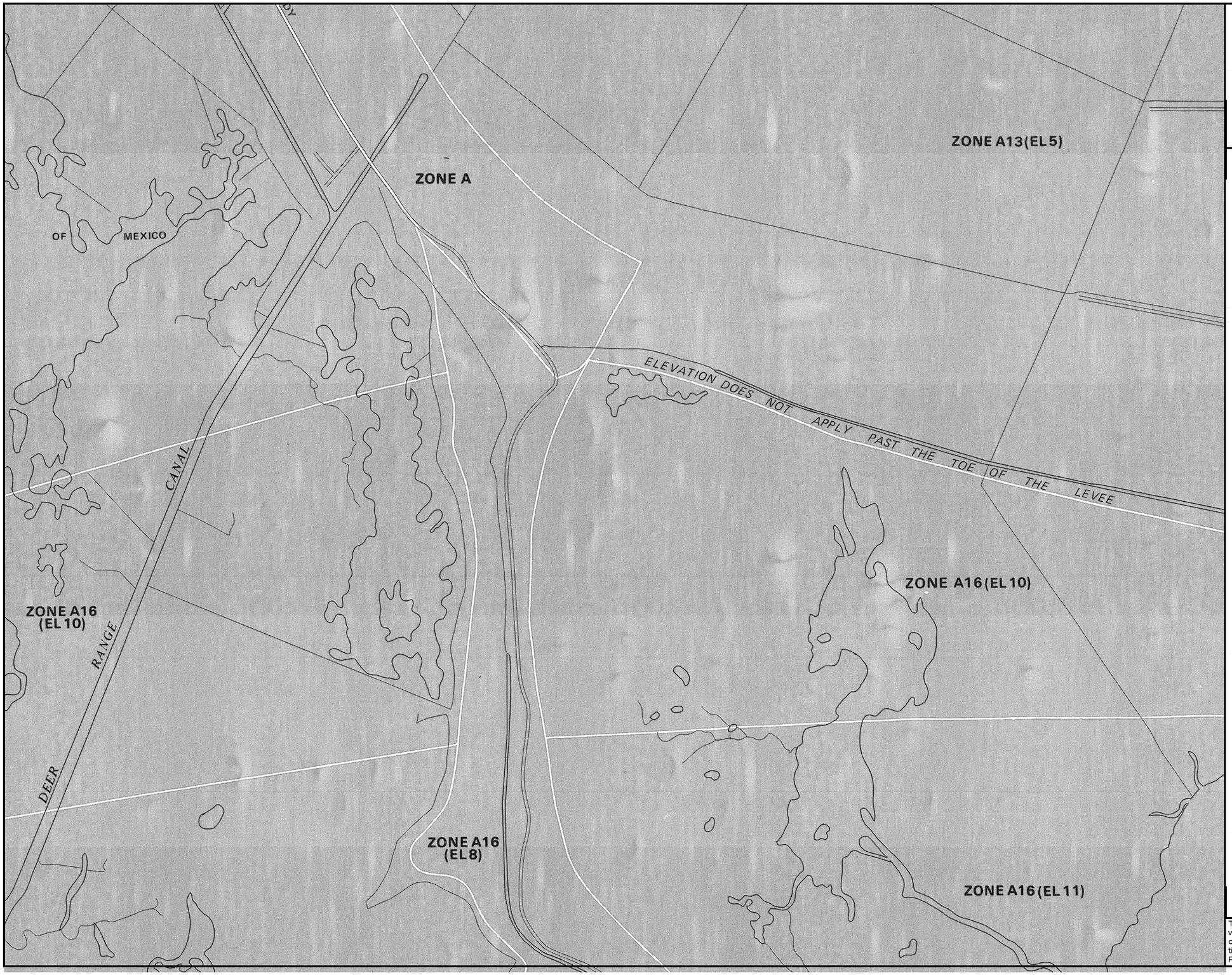
COMMUNITY-PANEL NUMBER

220139 0410 B

EFFECTIVE DATE:

MAY 1, 1985

Federal Emergency Management Agency



APPROXIMATE SCALE

2000 0 2000 FEE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

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PLAQUEMINES PARISH, LOUISIANA

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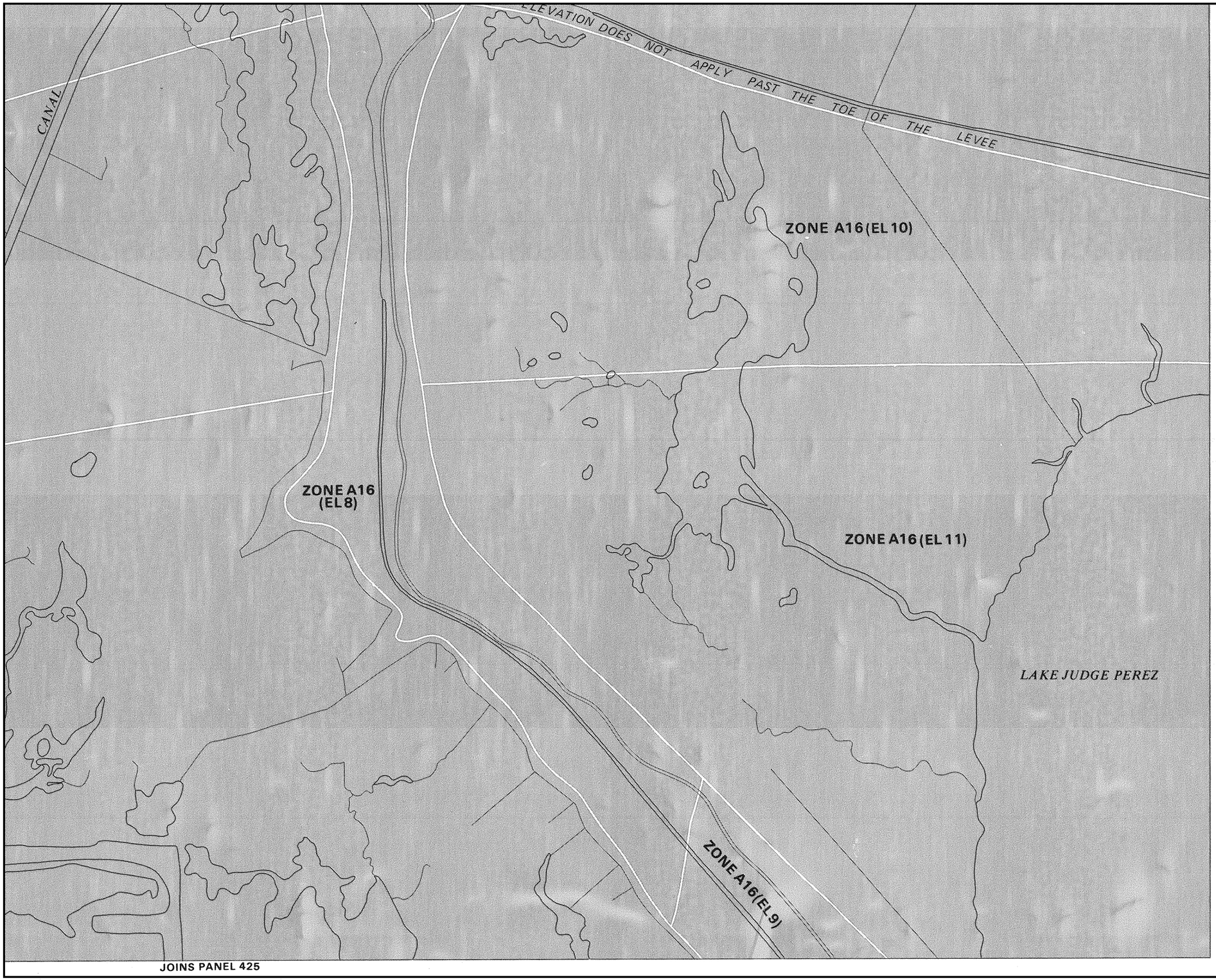


N

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

PLAQUEMINES PARISH, LOUISIANA

(UNINCORPORATED AREAS)

PANEL 410 OF 1400

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER

220139 0410 B

EFFECTIVE DATE:

MAY 1, 1985

Federal Emergency Management Agency

National Wild & Scenic Rivers

Contact Us

Saline Bayou

Louisiana

Kisatchie National Forest
2500 Shreveport Highway
Post Office Box 5500
Pineville, Louisiana 71361

Designated Reach: October 30, 1986. From Saline Lake upstream to the Kisatchie National Forest.

Classification/Mileage: Scenic — 19.0 miles; Total — 19.0 miles.

Vegetation, animal and bird life, and calm black water characterize the bayou. It is ideal for quiet canoeing, floating and fishing.

Kid's Page

GIS & Maps

WSR Display

Rivers | Site Index | WSR Council
RTCA | Contact Us | Publications

Saline Bayou Wild and Scenic River, Louisiana

Created on: 1/1/2007
Last updated: 04/27/2010 11:25:23
Site has changed since last visit!

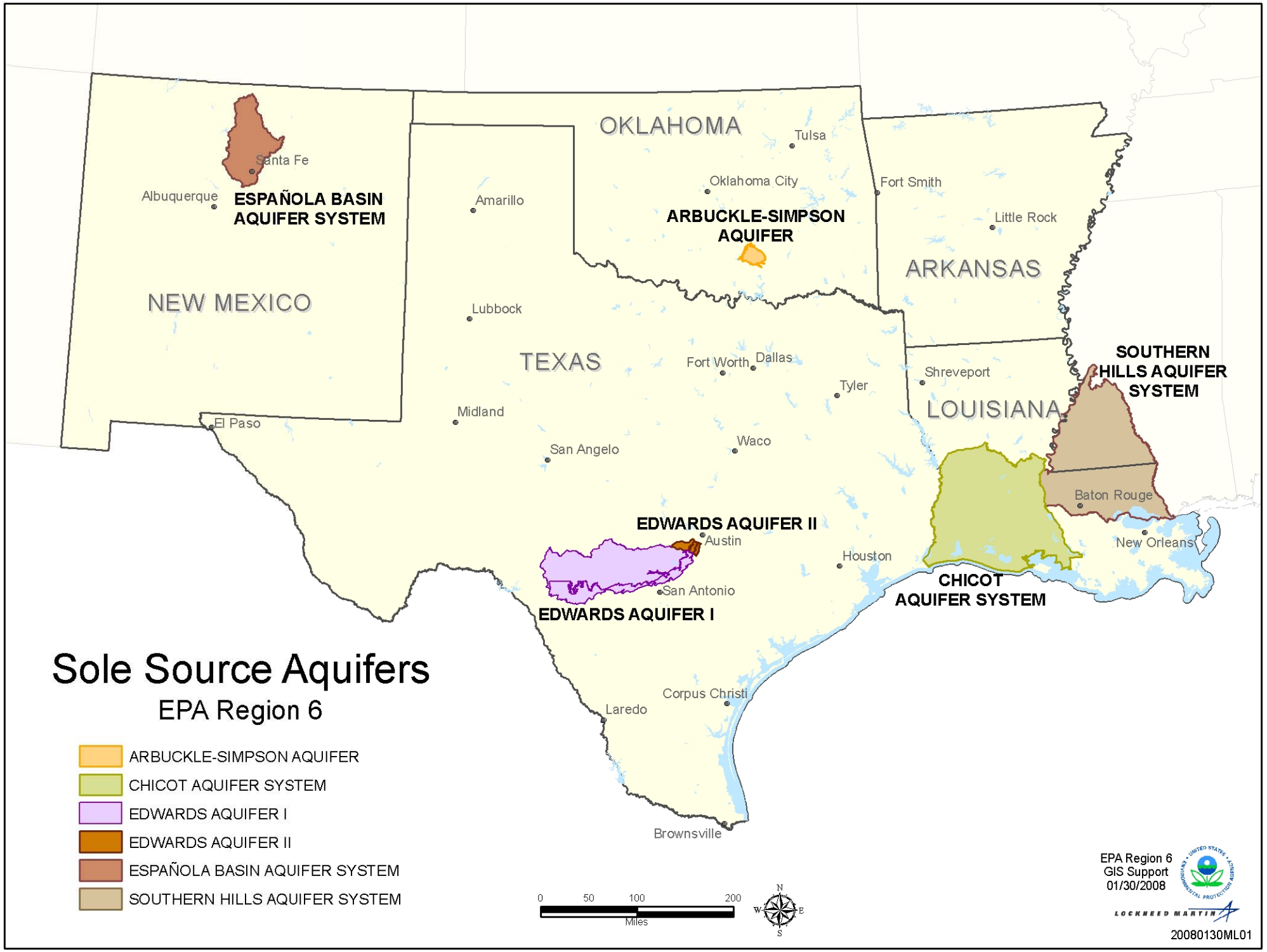
U.S. Fish and Wildlife Service
National Wetlands Inventory

Nov 27, 2012

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks:


OKLAHOMA
Tulsa
Oklahoma City
Fort Smith
Little Rock
ARKANSAS
Santa Fe
Albuquerque
ESPAÑOLA BASIN
AQUIFER SYSTEM
Amarillo
ARBUCKLE-SIMPSON
AQUIFER
NEW MEXICO
Lubbock
TEXAS
Fort Worth
Dallas
Shreveport
Tyler
SOUTHERN
HILLS AQUIFER
SYSTEM
LOUISIANA
Midland
El Paso
San Angelo
Waco
Baton Rouge
EDWARDS AQUIFER II
Austin
New Orleans
Houston
CHICOT
AQUIFER SYSTEM
San Antonio
EDWARDS AQUIFER I
Corpus Christi
Laredo
Brownsville
Sole Source Aquifers
EPA Region 6
ARBUCKLE-SIMPSON AQUIFER
CHICOT AQUIFER SYSTEM
EDWARDS AQUIFER I
EDWARDS AQUIFER II
ESPAÑOLA BASIN AQUIFER SYSTEM
SOUTHERN HILLS AQUIFER SYSTEM
0
50
100
200
Miles
N
W
E
S
EPA Region 6
GIS Support
01/30/2008
LOCKHEED MARTIN
20080130ML01

Search

Suitabilities and Limitations Ratings

Open All | Close All

- Building Site Development
- Construction Materials
- Disaster Recovery Planning
- **Land Classifications**
  - Conservation Tree and Shrub Group
  - Ecological Site ID
  - Ecological Site Name
  - **Farmland Classification**
- Land Management
- Military Operations
- Recreational Development
- Sanitary Facilities
- Vegetative Productivity
- Waste Management
- Water Management

View Description | View Rating

View Options

Map

Table

Description of Rating

Rating Options

Detailed Description

Advanced Options

View Description | View Rating

- Forage Suitability Group ID (Component Table)
- Hydric Rating by Map Unit
- Irrigated Capability Class
- Irrigated Capability Subclass
- NH Forest Soil Group
- Nonirrigated Capability Class
- Nonirrigated Capability Subclass
- Soil Taxonomy Classification

Legend

Map -- Farmland Classification

Scale (not to scale)

Tables -- Farmland Classification -- Summary By Map Unit

Summary by Map Unit -- Plaquemines Parish, Louisiana (LA075)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Co	Cancienne silty clay loam	All areas are prime farmland	68.9	20.7%
GE	Gentilly muck	Not prime farmland	30.7	9.2%
Ha	Harahan clay	Not prime farmland	0.2	0.1%
Sk	Schriever clay	All areas are prime farmland	217.3	65.1%
W	Water	Not prime farmland	16.6	5.0%

				(1.00)		
				Flooding (1.00)		
				Low strength (1.00)		
Ha	Harahan clay	Very limited	Harahan (90%)	Shrink-swell (1.00)	10.3	1.6%
				Flooding (0.40)		
				Depth to saturated zone (0.19)		
Sk	Schriever clay	Very limited	Schriever (90%)	Shrink-swell (1.00)	360.6	54.6%
				Depth to saturated zone (1.00)		
				Flooding (0.40)		
W	Water	Not rated	Water, large (100%)		23.9	3.6%
Totals for Area of Interest					**660.5**	**100.0%**

Table — Local Roads and Streets — Summary by Rating Value

Summary by Rating Value

Rating	Acres in AOI	Percent of AOI
Very limited	543.0	82.2%
Somewhat limited	93.6	14.2%
Null or Not Rated	23.9	3.6%
Totals for Area of Interest	**660.5**	**100.0%**

Description — Local Roads and Streets

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options — Local Roads and Streets

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Soil Qualities and Features

Water Features

Description — K Factor, Whole Soil

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Rating Options — K Factor, Whole Soil

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Layer Options: Surface Layer

Appendix C
Agency Coordination

Information To Build On
Engineering • Consulting • Testing

November 15, 2012

U.S. Fish and Wildlife Service
Lafayette Ecological Services
644 Cajundome Blvd
Lafayette, LA 70506

Attention: Debbie Fuller
Endangered Species Coordinator

RE: Request for Information
Department of Housing and Urban Development - Environmental Review
Plaquemines Parish Government
Lake Hermitage Road Elevation and Improvements
Port Sulphur, Plaquemines Parish, Louisiana
PSI Project No.: 0255662

Dear Ms. Fuller:

On behalf of the Plaquemines Parish Government, the responsible entity under 24 CFR 58.4, Professional Services Industries Inc., (PSI) is submitting this request for information and concurrence related to the proposed elevation and improvement of Lake Hermitage Road in Port Sulphur, Louisiana.. This project will be constructed with financial assistance from the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. The proposed development requires an environmental review in accordance with HUD regulations 24 CFR 58.5 and 58.6. To meet the requirements set forth in these regulations, an assessment of potential impacts to the following resources must be conducted:

- Officially designated wilderness areas
- Officially designated wildlife preserves
- Listed and proposed threatened and endangered species
- Officially designated or proposed critical habitats
- Other elements applicable to the National Environmental Policy Act (NEPA)

The Plaquemines Parish Government proposes to elevate and improve the length of Lake Hermitage Road, approximately 5 miles, from Highway 23 to Lake Hermitage. Approximately 1.7 miles of Lake Hermitage Road, beginning at Highway 23, will be elevated and paved. The remaining length of Lake Hermitage Road will be elevated and paved with limestone. Specific elevation of the road will be determined during the design phase of the project and will meet local base flood elevation requirements. Lake Hermitage Road has been previously damaged by storm surge and winds associated with Hurricane's Gustav and Ike. Lake Hermitage Road is the only evacuation route that services the communities of Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage. Elevating and improving this road would allow for the quick and safe evacuation of these Parish communities. An aerial photograph of the proposed project area has been attached for your review.

Your assistance in this matter would be greatly appreciated. Please feel free to contact me anytime if you have any questions or require additional information.

Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Rachel A. Keane
Project Scientist

Information To Build On
Engineering • Consulting • Testing

November 15, 2012

U.S. Army Corps of Engineers
New Orleans District
Operations Division
P.O. Box 60267
New Orleans, LA 70160

Attention: Ms. Karen Oberlies
Solicitation of Views Manager

RE: Request for Information
Department of Housing and Urban Development - Environmental Review
Plaquemines Parish Government
Lake Hermitage Road Elevation and Improvements
Port Sulphur, Plaquemines Parish, Louisiana
PSI Project No.: 0255662

Dear Ms. Oberlies:

On behalf of the Plaquemines Parish Government, the responsible entity under 24 CFR 58.4, Professional Services Industries Inc., (PSI) is submitting this request for information and concurrence related to the proposed elevation and improvement of Lake Hermitage Road in Port Sulphur, Louisiana.. This project will be constructed with financial assistance from the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. The proposed development requires an environmental review in accordance with HUD regulations 24 CFR 58.5 and 58.6. To meet the requirements set forth in these regulations, an assessment of potential impacts to the following resources must be conducted:

- Wetlands and Section 404 Permitting Requirements
- Significant changes to surface features (i.e. wetland fill, deforestation, water diversion, etc.)
- Other elements applicable to the National Environmental Policy Act (NEPA)

The Plaquemines Parish Government proposes to elevate and improve the length of Lake Hermitage Road, approximately 5 miles, from Highway 23 to Lake Hermitage. Approximately 1.7 miles of Lake Hermitage Road, beginning at Highway 23, will be elevated and paved. The remaining length of Lake Hermitage Road will be elevated and paved with limestone. Specific elevation of the road will be determined during the design phase of the project and will meet local base flood elevation requirements. Lake Hermitage Road has been previously damaged by storm surge and winds associated with Hurricane's Gustav and Ike. Lake Hermitage Road is the only evacuation route that services the communities of Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage. Elevating and improving this road would allow for the quick and safe evacuation of these Parish communities. An aerial photograph of the proposed project area has been attached for your review.

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Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Rachel A. Keane
Project Scientist

Information To Build On
Engineering • Consulting • Testing

November 15, 2012

U.S. Environmental Protection Agency
Office of Groundwater
1445 Ross Ave
Dallas, TX 75202-2733

Attention: Mr. Michael Bechdol

RE: Request for Information
Department of Housing and Urban Development - Environmental Review
Plaquemines Parish Government
Lake Hermitage Road Elevation and Improvements
Port Sulphur, Plaquemines Parish, Louisiana
PSI Project No.: 0255662

Mr. Bechdol:

On behalf of the Plaquemines Parish Government, the responsible entity under 24 CFR 58.4, Professional Services Industries Inc., (PSI) is submitting this request for information and concurrence related to the proposed elevation and improvement of Lake Hermitage Road in Port Sulphur, Louisiana.. This project will be constructed with financial assistance from the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. The proposed development requires an environmental review in accordance with HUD regulations 24 CFR 58.5 and 58.6. To meet the requirements set forth in these regulations, an assessment of potential impacts to the following resources must be conducted:

- Significant changes to surface features (i.e. wetland fill, deforestation, water diversion, etc.)
- Groundwater and Sole Source Aquifers
- Other elements applicable to the National Environmental Policy Act (NEPA)

The Plaquemines Parish Government proposes to elevate and improve the length of Lake Hermitage Road, approximately 5 miles, from Highway 23 to Lake Hermitage. Approximately 1.7 miles of Lake Hermitage Road, beginning at Highway 23, will be elevated and paved. The remaining length of Lake Hermitage Road will be elevated and paved with limestone. Specific elevation of the road will be determined during the design phase of the project and will meet local base flood elevation requirements. Lake Hermitage Road has been previously damaged by storm surge and winds associated with Hurricane's Gustav and Ike. Lake Hermitage Road is the only evacuation route that services the communities of Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage. Elevating and improving this road would allow for the quick and safe evacuation of these Parish communities. An aerial photograph of the proposed project area has been attached for your review.

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Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Rachel A Keane

Rachel A. Keane
Project Scientist

Rachel Keane

From:	Rachel Keane
Sent:	Friday, November 16, 2012 1:39 PM
To:	Beth Altazan-Dixon (Beth.Dixon@LA.GOV)
Subject:	0255662 Hermitage Road
Attachments:	Nov15 ldeq_letter-Hermitage.pdf; Vicinty Map.pdf

Please review and comment with regard to the attached letter and map.
Thanks!

Rachel A. Keane
Project Scientist
PSI, Inc.
11950 Industriplex Blvd
Baton Rouge, LA 70809
225-293-8378 ext. 203 (o)
225-292-8132 (f)

Information To Build On
Engineering • Consulting • Testing

November 15, 2012

Louisiana Department of Environmental Quality
Business & Community Outreach Division
Office of the Secretary
PO Box 301
Baton Rouge, LA 70821-4301
SENT VIA EMAIL – Beth.Dixon@LA.GOV

Attention: Beth Altazan-Dixon

RE: Request for Information
Department of Housing and Urban Development - Environmental Review
Plaquemines Parish Government
Lake Hermitage Road Elevation and Improvements
Port Sulphur, Plaquemines Parish, Louisiana
PSI Project No.: 0255662

Dear Ms. Altazan-Dixon:

On behalf of the Plaquemines Parish Government, the responsible entity under 24 CFR 58.4, Professional Services Industries Inc., (PSI) is submitting this request for information and concurrence related to the proposed elevation and improvement of Lake Hermitage Road in Port Sulphur, Louisiana.. This project will be constructed with financial assistance from the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. The proposed development requires an environmental review in accordance with HUD regulations 24 CFR 58.5 and 58.6. To meet the requirements set forth in these regulations, an assessment of potential impacts to the following resources must be conducted:

- Drinking Water Resources
- Surface Water Resources
- Air Quality
- Other elements applicable to the National Environmental Policy Act (NEPA)

The Plaquemines Parish Government proposes to elevate and improve the length of Lake Hermitage Road, approximately 5 miles, from Highway 23 to Lake Hermitage. Approximately 1.7 miles of Lake Hermitage Road, beginning at Highway 23, will be elevated and paved. The remaining length of Lake Hermitage Road will be elevated and paved with limestone. Specific elevation of the road will be determined during the design phase of the project and will meet local base flood elevation requirements. Lake Hermitage Road has been previously damaged by storm surge and winds associated with Hurricane's Gustav and Ike. Lake Hermitage Road is the only evacuation route that services the communities of Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage. Elevating and improving this road would allow for the quick and safe evacuation of these Parish communities. An aerial photograph of the proposed project area has been attached for your review.

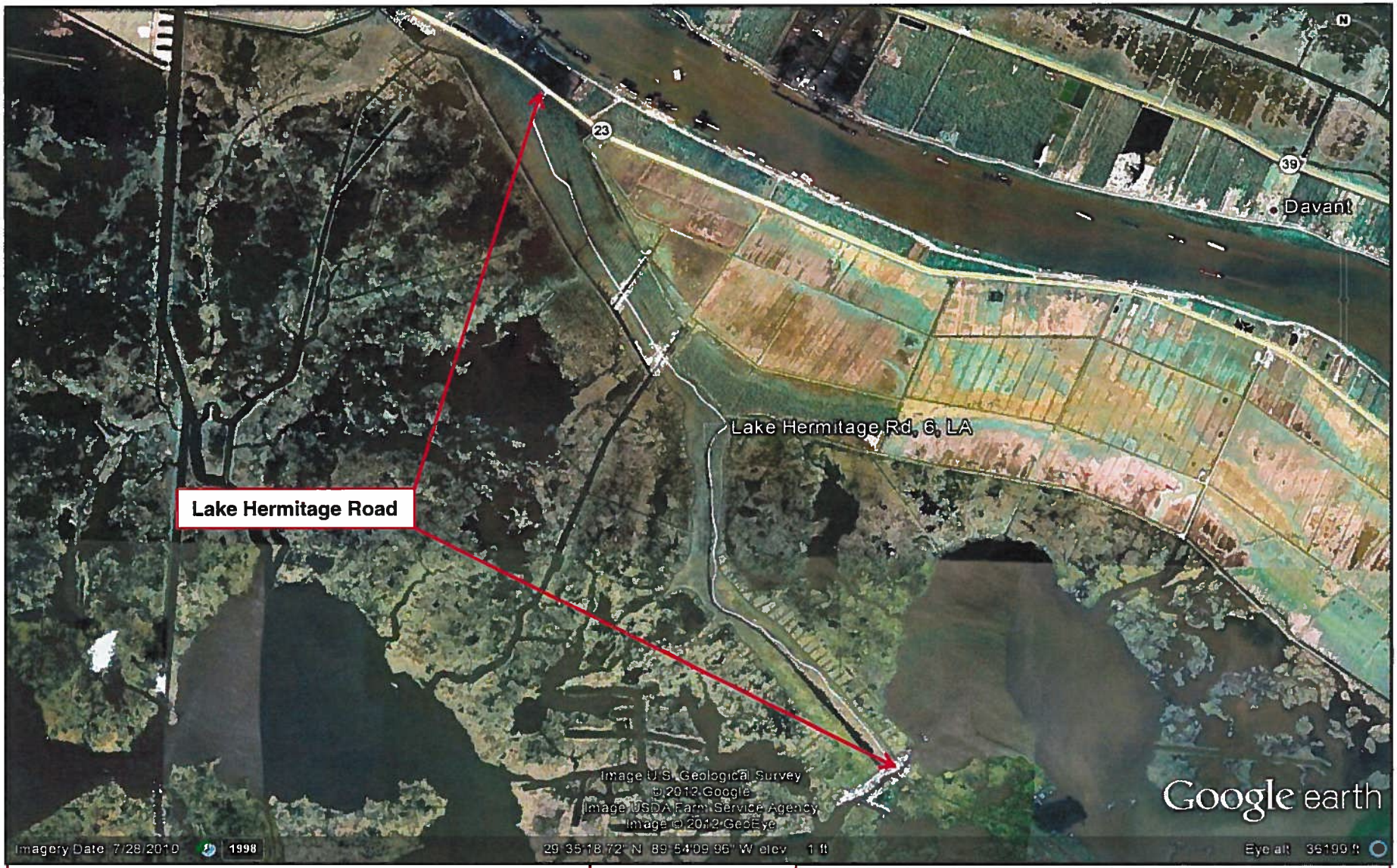
Your assistance in this matter would be greatly appreciated. Please feel free to contact me anytime if you have any questions or require additional information.

Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Rachel A Keane

Rachel A. Keane
Project Scientist



Project Area Map Lake Hermitage Road Port Sulphur, LA		DATE: November 2012 DRAWN: RAK	psi Information To Build On Engineering • Consulting • Testing
FIGURE: Project Map	PSI PROJECT NO.: 0255663	CHKD: SEW	

RF
2-11-2013

JAY DARDENNE
LIEUTENANT GOVERNOR

State of Louisiana

OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

CHARLES R. DAVIS
DEPUTY SECRETARY

PAM BREAUX
ASSISTANT SECRETARY

11 February 2013

Dr. Malcolm Shuman
Surveys Unlimited Research Assoc.
PO Box 14414
Baton Rouge, LA 70898-4414

Re: Draft Report
La Division of Archaeology Report No. 22-4176
Review and Assessment of Cultural Resource Issues Related to the Proposed Elevation of Lake Hermitage Road, Plaquemines Parish, Louisiana

Dear Dr. Shuman:

We acknowledge receipt of your letter dated 21 January 2013 and two copies of the above referenced report. We have completed our review of this report and have no comments to offer. We are accepting the report as final and have received the pdf of the report.

We concur that no historic properties will be impacted by this project. Our office has no further concerns for this project.

If you have any questions, please contact Chip McGimsey in the Division of Archaeology by email at cmcgimsey@crt.la.gov or by phone at 225-219-4598.

Sincerely,

Pam Breaux

Pam Breaux
State Historic Preservation Officer

PB:crm

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

DEC 18 2012

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

Ms. Rachel A. Keane
Professional Service Industries, Inc.
11950 Industriplex Boulevard
Baton Rouge, Louisiana 70809

Dear Ms. Keane:

This is in response to your Solicitation of Views request dated November 15, 2012, on behalf of Plaquemines Parish Government, concerning the Lake Hermitage Road Elevation and Improvements at Port Sulphur, Louisiana, in Plaquemines Parish.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Please note that a Solicitation of Views response letter was issued for this project on August 8, 2011, account number MVN-2011-01946-SK, copy enclosed.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Michael Farabee by telephone at (504) 862-2292 or by e-mail at Michael.V.Farabee@usace.army.mil.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

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

August 8, 2011

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

Ms. Hilda Lott
Plaquemines Parish Government
8056 Highway 23
Suite 200
Belle Chasse, Louisiana 70037

Dear Ms. Lott:

This is in response to your Solicitation of Views request dated July 29, 2011, concerning the Lake Hermitage Road Hurricane Evacuation Route Elevation at Myrtle Grove, Louisiana, in Plaquemines Parish.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Information and signatures obtained from recent maps, aerial photography, and local soil surveys concerning this site are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional waters.

This preliminary determination is advisory in nature. If an approved delineation is needed, please furnish us with the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional waters occurring on this property.

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

You are advised that you must obtain a permit from the Plaquemines Parish Government – West Bank Levee District for any work within 1500 feet of a federal flood control structure such as a levee. Performance of all subsurface work within this area is usually restricted when the stage of the Mississippi River is above elevation +11.0 feet on the Carrollton gage, at New Orleans, Louisiana. As a consequence, subsurface work should be scheduled for performance during the low-water period (typically June through November) to avoid delays in performance of the proposed work. You must apply by letter to the Plaquemines Parish Government – West Bank Levee District including full-size construction plans, cross sections, and details of the proposed work. Concurrently with your application to the Plaquemines Parish Government – West Bank Levee District, you must also forward a copy of your letter and plans to Operations Division, Operations Manager for Completed Works of the Corps of Engineers and to the Office of Coastal Protection and Restoration of Louisiana (OCPR) in Baton Rouge for their review and comments concerning the proposed work. The Plaquemines Parish Government – West Bank Levee District will not issue a permit for the work to proceed until they have obtained letters of no objection from both of these reviewing agencies. For further information regarding permit requests affecting federal flood control levees and structures, please contact Ms. Amy Powell, Operations Manager for Completed Works at (504) 862-2241.

Please be advised that this property is in the Louisiana Coastal Zone. For additional information regarding coastal use permit requirements, contact Ms. Christine Charrier, Coastal Management Division, Louisiana Department of Natural Resources at (225) 342-7953.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Michael Farabee by telephone at (504) 862-2292 or by e-mail at Michael.V.Farabee@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2011-01946-SK. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

Karen L. Oberlies
Solicitation of Views Manager

Copy Furnished:

Ms. Christine Charrier
Coastal Zone Management
Department of Natural Resources
Post Office Box 44487
Baton Rouge, Louisiana 70804-4487

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
INTERIM SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT

September 28, 2012

To whom it may concern:

The Louisiana Department of Natural Resources, Office of Coastal Management (LDNR OCM) administers the state's federally-approved Coastal Zone Management (CZM) program.

A number of federal and state agencies are involved in providing financial assistance to state and local governments, non-governmental organizations, businesses, and individuals in Louisiana. As part of their award process, many of these agencies require the applicant to coordinate with the Louisiana CZM program. This coordination is generally intended to address one of two questions: concerns about awarding the financial assistance, or concerns about implementing the proposed project.

As a result of an internal review of program functions, OCM is streamlining its financial assistance review procedure to ensure response to all requests in a timely and appropriate manner. The OCM is confident that this procedure change will greatly improve office productivity, and provide for better accountability to the public we serve. Consequently, as of May 1, 2012, the coordination with OCM concerning applications for federal financial assistance should follow the procedures below, depending on the nature of the inquiry:

Consistency review for Federal Assistance

Federal regulations at 15 CFR §930.90 *et seq.* require state and local government bodies applying for federal financial assistance (grants, loans, guarantees, insurance, contractual arrangements, or other form of financial aid) to submit a request for Consistency review of that assistance to OCM. Since the inception of the Louisiana Coastal Resources Program in 1980, OCM has never found that financial assistance for a proposed project would be inconsistent with the state Coastal Zone Management program. The Office of Coastal Management therefore is issuing this letter of general consistency concurrence, which shall serve as formal notification that, as of October 1, 2012, the granting of any financial assistance as defined at 15 CFR §930.91, is fully consistent with the Louisiana Coastal Resources Program. Federal agencies should not require applicants for financial assistance to seek OCM's approval for that assistance.

Request for Determination for project implementation

If the applicant is seeking comments on the need to obtain a Coastal Use Permit or other authorization from OCM, for projects in or near to the Louisiana Coastal Zone, a Request for Determination or Solicitation of Views should be submitted to OCM's Permits and Mitigation

Division. Instructions and downloadable and online applications are located online at http://dnr.louisiana.gov/crm/coastmgt/coastmgt.asp. In Step 3 of the application, the box for Request for Determination or Solicitation of Views should be checked. Questions regarding this process may be directed to the OCM Permits Section staff at (225) 342-7591 or 1-800-267-4019, or by mail at P.O. Box 44487, Baton Rouge, LA 70804.

Outside of the Coastal Zone

Projects which are clearly located outside of the Coastal Zone and are not likely to have an impact on coastal waters generally will not require coordination with the OCM. However, projects near the Coastal Zone boundary where there may be some doubt, or those which may involve discharges into waters that flow into the Coastal Zone, should be submitted to OCM for review. A map of the Coastal Zone may be found at http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=89&pnid=0&nid=39.

Finally, OCM may find it necessary to change or rescind the provisions of this letter. Should this become necessary, OCM will publish a public notice in the Official State Journal (The Baton Rouge Advocate) and on the DNR web page, and attempt to contact all affected federal agencies directly.

Questions concerning these procedures should be addressed to Mr. Jeff Harris of the Consistency Section, at (225) 342-7949 or via e-mail to Jeff.Harris@LA.gov.

Sincerely,

Keith Lovell

Keith Lovell
Acting Administrator
Interagency Affairs/Field Services Division

cc: Karl Morgan, P/M Division
Consistency file C20120326

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
INTERIM SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

December 7, 2012

PSI, Inc.
Attn: Rachel Keane
6022 Crestmount Drive
Baton Rouge, LA 70809

RE: P20121591, Request for Determination
Plaquemines Parish Government
Description: Elevation and improvements to the existing Lake Hermitage Road, approx. 5 miles in length, from LA Highway 23 to Lake Hermitage. Approx. 1.7 miles, beginning at LA Highway 23, will be elevated and paved with asphalt. The remaining length will be elevated and paved with limestone. All work will be performed within the existing right-of-way.
Location: Lat. 29° 37' 08.28"N, Long. 89° 55' 2.87"W; Lake Hermitage Road, Port Sulphur, LA
Plaquemines Parish, LA

Dear Ms. Keane:

We have received a Request for Determination for the above referenced project, which has been found to be inside the Louisiana Coastal Zone. After careful consideration, it has been determined that the proposed activity will have no direct and significant impact on coastal waters. Therefore, in accordance with the Louisiana Administrative Code, Title 43, Chapter 7, Part 1, §723.B.8.b, a Coastal Use Permit will not be required.

This determination is valid for two (2) years from the date of this letter. If the proposed activity is not initiated within this two year period, this determination will expire and the applicant will be required to submit a new application. The applicant will notify the Office of Coastal Management of the date on which initiation of the proposed activity began by entering a commencement date through the online system, or by mailing said information to OCM. This determination does not eliminate the need to obtain a permit from the United States Army, Corps of Engineers (USACE) or any other Federal, state, or local approval, that may be required by law.

Permittee shall, prior to commencement of the herein permitted activities, contact Rhonda Braud (phone: 225-342-4553, email: rhonda.braud@la.gov) to determine if a construction permit will be required from the local levee district.

This determination has been made on the basis of information provided by your application. If it is later established that you furnished erroneous data, you may be directed to alter or modify your plans, to remove structures you have installed, and/or to restore the work area to pre-project conditions at your own expense. If it is established that you knowingly furnished erroneous data, you could also be subject to legal action. Note that your application shows that either no dredging or limited dredging would be necessary to access the work site. Dredging beyond that described in your application, including prop washing, wheel washing, or otherwise displacing water bottom material is not authorized by this determination. If site conditions are such that dredging beyond that authorized is necessary, a revised determination including agency or public notice, if applicable, will be required. The drawings submitted with the referenced application are attached hereto and made a part of the record.

Sincerely,

Karl L. Morgan
Administrator

KLM/vsa

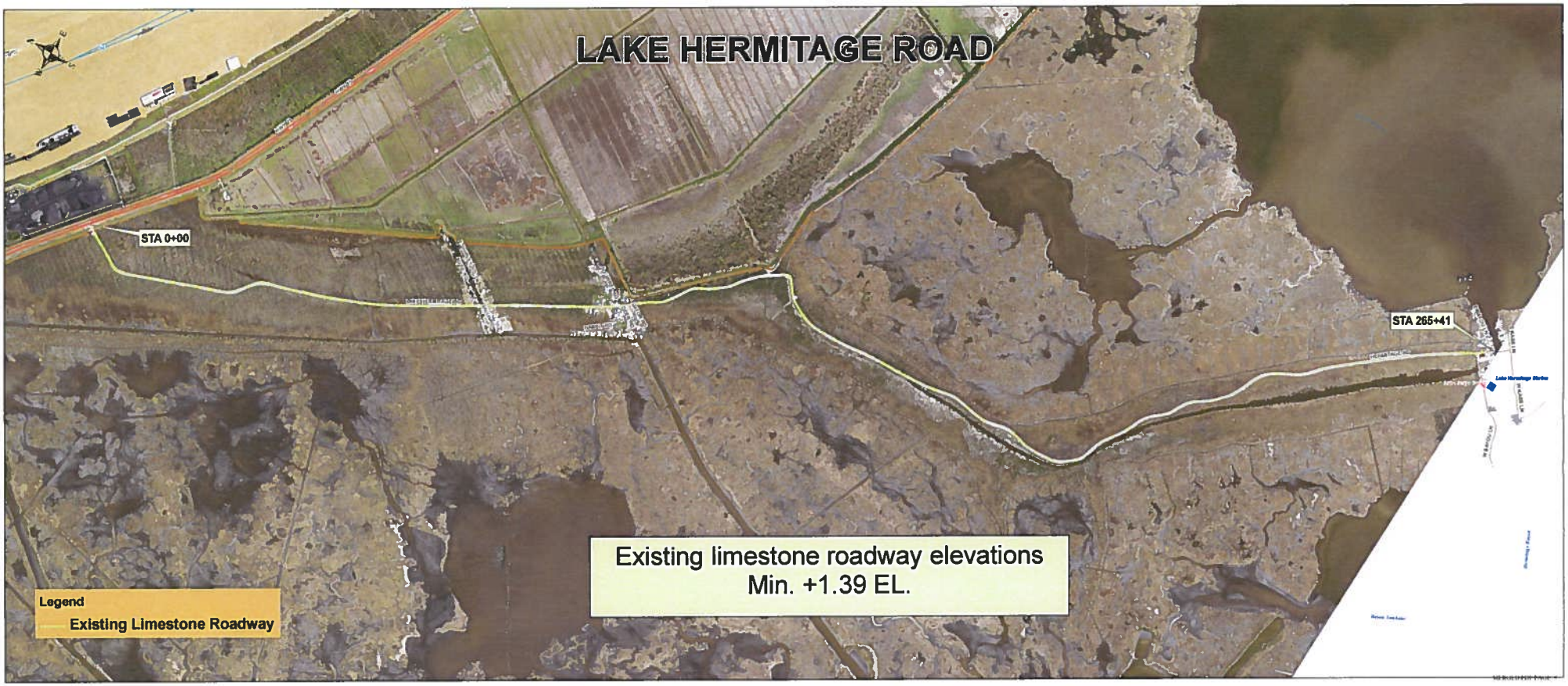
Attachment

cc: Pete Serio, COE w/plats
Dave Butler, LDWF w/plats
Frank Cole, OCM w/plats
Plaquemines Parish w/plats

Project Area Map Lake Hermitage Road Port Sulphur, LA		DATE: November 2012
		DRAWN: RAK
FIGURE: Project Map	PSI PROJECT NO.: 0255663	CHKD: SEW

psi Information To Build On
Engineering • Consulting • Testing

P2012 1591
Final Plats
12-7-12



P20121591
Final Plats
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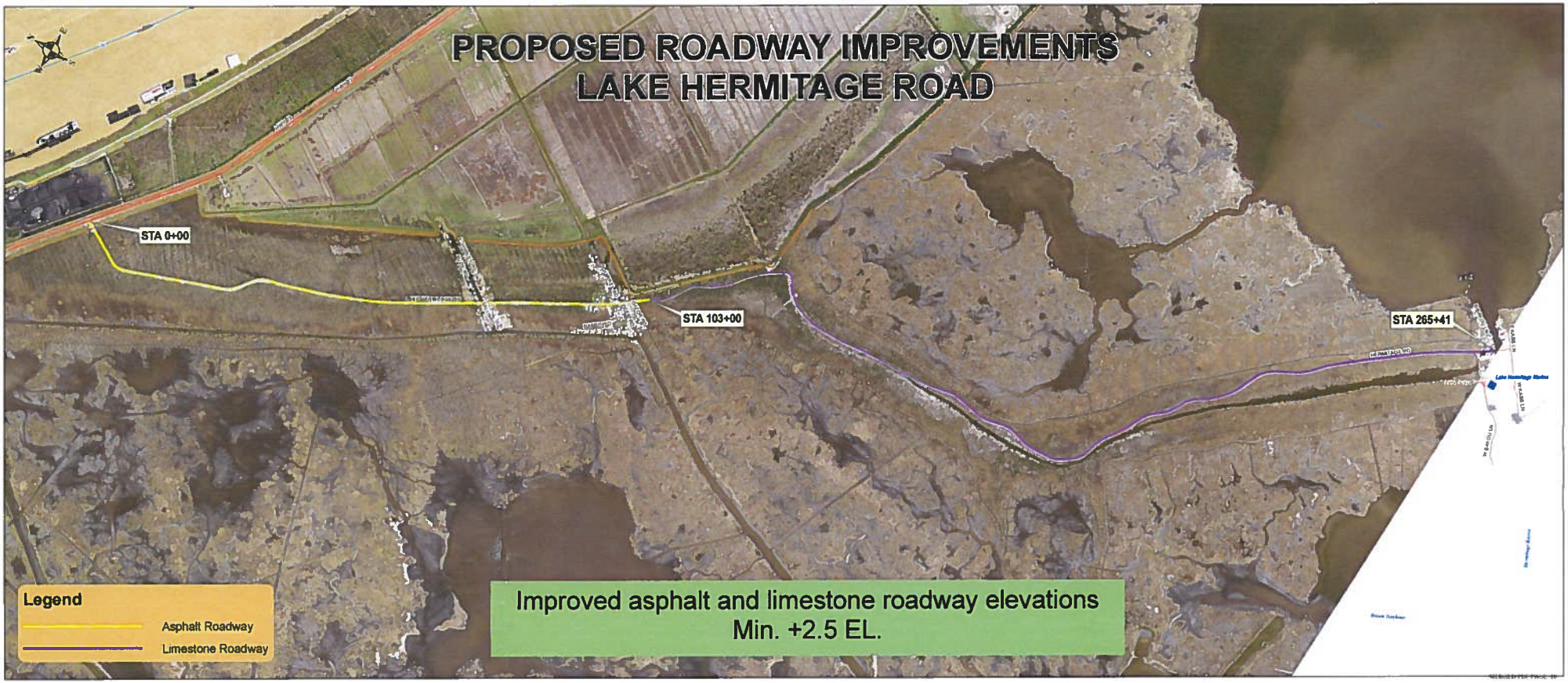

P2012591
Final Plats
12-7-12

P20121591 – Lake Hermitage Road – Project Design/Construction Notes

Notes:

All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.

Structures must also be marked/lighted in accordance with U.S. Coast Guard Regulations.

In order to ensure the safety of all parties, the permittee shall contact the Louisiana One Call System (1-800-272-3020) a minimum of 48 hours prior to the commencement of any excavation (digging, dredging, jetting, etc.) or demolition activity.

Per the Louisiana Department of Wildlife and Fisheries (LDWF) comment letter dated 12/2/2012, the following notes are included:

Ecological Studies - It is anticipated that the proposed activity will have minimal or no long-term adverse impacts to wetland functions and therefore, we have no objection provided that adequate erosion/sediment control measures are implemented to insure that no sediments or other activity related debris are allowed to enter adjacent wetlands. Accepted measures include the proper use of vegetated buffers, silt fences, or other Environmental Protection Agency construction site storm-water runoff control best management practices.

Louisiana Natural Heritage Program – The Louisiana Natural Heritage Program database indicates that a Coastal Live Oak Forest is located adjacent to the proposed project area. This community is considered critically imperiled to imperiled in the state of Louisiana with an S1S2 ranking. This community provides habitat for many unique species of plants, and acts as a migratory staging/stopover site for Neo-tropical migratory birds. We advise you to take the necessary measures to avoid any impacts to this ecological community. If you have any questions or need additional information, please contact Amity Bass at 225-765-2975.

No other impacts to rare, threatened, or endangered species or critical habitats are anticipated from the proposed project. No state or federal parks wildlife refuges, wildlife management areas or scenic rivers are known at the specified site or within ¼ mile of the proposed project.

The Louisiana Natural Heritage Program (LNHP) reports summarize the existing information known at the time of the request regarding the location in question. LNHP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. If any time LNHP tracked species are encountered within the project area, please contact our biologist at 225-765-2643.

P20121591
Final Plats
12-7-12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

November 21, 2012

Ms. Rachel A. Keane
Project Scientist
Professional Service Industries, Inc.
11950 Industriplex Boulevard
Baton Rouge, LA 70809

Dear Ms. Keane:

We have received your November 13, 2012. letter requesting our evaluation of the potential environmental impacts which might result from the following project:

Lake Hermitage Road
Elevation & Improvements
PSI Proj. No. 0255662
Plaquemines Parish
Port Sulphur, Louisiana

In administering the sole source aquifer (SSA) program under Section 1424 of the Safe Drinking Water Act our Office performs evaluations of projects with federal financial assistance which are located over a designated sole source aquifer.

Based on the information provided, we have concluded that the project does not lie within the boundaries of a designated sole source aquifer and is thus not eligible for review under the SSA program.

If you did not include the Parish/County; a legal description; project location and the latitude and longitude if available, please do so in future Sole Source Aquifer correspondence. To view a map of the Sole Source Aquifer delineation(s) for your state go to the following website. http://www.epa.gov/region6/water/swp/ssa/maps.htm

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-7133.

Sincerely yours,

Michael Bechdol, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Jesse Means, LDEQ

11/16/2012

Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: Plaqueminea Parish Government

Point of Contact: Ken Dugas

Address: 102 Avenue G

City: Belle Chasse **State:** Louisiana **Zip Code:** 70037

Phone Number 1: 504-297-5343 **Phone Number 2:** _____

Email Address: ken_dugas@plaqueminesparish.com

Proposed Project Information

Project Reference ID: 503

Project Latitude: 29.618967 **Project Longitude:** 89.917464

Project Parish(es): Plaquemines

Project Description: Elevate and paritally paved Lake Hermitage Road in Plaquemines Parish from Highway 23 to Lake Hermitage. The entire length (5 miles) will be elevated. Approximately 2 miles will be paved with the rest of the road remaining limestone. This road is the only evacuation route serving three communities.

Based on the information provided, the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within this Parish.

Therefore, a "no effect" conclusion is appropriate. No further ESA coordination with the Service is necessary for the proposed action, unless there are changes in the scope or location of the proposed project or the project has not been initiated one year from the date of this letter.

If the proposed project has not been initiated within one year, follow-up coordination should be accomplished with the Service prior to making expenditures because our threatened and endangered species information is updated annually. If the scope or location of the proposed project is changed, coordination should occur as soon as such changes are made.

This finding completes project review by the Service for effects to Federal trust resources under our jurisdiction and currently protected by the ESA.

Please keep a copy of this pre-development coordination for your records. Additionally, if you would like a copy of this activity kept on file by the Service, please submit a copy to the Louisiana Ecological Services office.

Mailing Address: 646 Cajundome Blvd., Suite 400, Lafayette, LA 70506 Attn: Biological Science Technician
Email: Lafayette@fws.gov
Fax: 337/291-3139

If you have additional questions, please contact Louisiana ES Office Biological Science Technician at 337/291-3100 for further assistance.

Louisiana Ecological Services Office

ESA Technical Assistance Form

Project Type: HUD Funded and/or Urban Development

Does the project propose to construct new buildings, streets, sidewalks or other urban/suburban infrastructure in an area that has been previously undisturbed? **No**

Does the project propose to obtain, remodel, refurbish, or rehabilitate existing structures in such a way that does not significantly alter the present capacity or use, and does not alter surrounding land areas that were previously undisturbed? **Yes**

Rachel Keane

From: Beth Altazan-Dixon <Beth.Dixon@LA.GOV>

Sent: Monday, December 10, 2012 11:11 AM
To: Rachel Keane
Subject: DEQ SOV 121119/2110 Buras Oyster Facility

December 10, 2012

Rachel A. Keane, Project Specialist
Professional Service Industries, Inc.
11950 Industriplex Blvd.
Baton Rouge, LA 70809
rachel.keane@psiusa.com

RE: 121119/2110 Buras Oyster Facility
LCDBG Funding
Plaquemines Parish

Dear Ms. Keane:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than January 1, 2013. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 9371.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.

- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, Plaquemines Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3958 or by email at beth.dixon@la.gov.

Sincerely,

Beth

Beth Altazan-Dixon, EPS III
Performance Management
LDEQ/Office of the Secretary
Business and Community Outreach and Incentives Division
P.O. Box 4301 (602 N. 5th Street)
Baton Rouge, LA 70821-4301
Phone: 225-219-3958
Fax: 225-325-8148
Email: *beth.dixon@la.gov*

Appendix D
8-Step Floodplain Process

8-STEP DECISION MAKING PROCESS
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
24 CF 55.20 – PROCEDURES FOR MAKING DETERMINATIONS ON FLOODPLAIN MANAGMENT

As required under 24 CFR 55.20 "Procedures for Making Determinations on Floodplain Management", the Plaquemines Parish Government has completed the 8-step process regarding floodplain management in relation to the proposed elevation and partial paving of Hermitage Road in Port Sulphur, Plaquemines Parish, Louisiana. Hermitage Road is approximately 5 miles in length and is currently the only access and evacuation route to several communities. The proposed project falls within an area designated as "Areas of the 100-year flood". Under environmental review guidelines set forth by the Department of Housing and Urban Development (HUD), the proposed improvement to Lake Hermitage Road would be subject to the procedures outlined under 24 CFR 55.20. Following addresses each step of the decision making process as it pertains to the proposed development:

Step 1 – Determine whether the proposed action is located in a 100-year floodplain (or 500-year floodplain for a Critical Action): The proposed project includes the elevation and partial paving of Lake Hermitage Road, approximately 5 miles in length, from Highway 23 to Lake Hermitage.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 02201390410B, May 1, 1985, the project area is located within the 100-year floodplain.

Step 2 – Notify the public at the earliest possible time of a proposal to consider an action in a floodplain (or 500-year floodplain for a Critical Action, and involve the affected and interested public in the decision making process: A public notice was prepared and submitted to the Times-Picayune and the Plaquemines Gazette Legal Notices sections for publication on December 2, 2012 and December 4, 2014 respectively. The public was notified that comments would be accepted for 15 calendar days after the publication date of the notice. No comments were received during the 15-day comment period.

Step 3 – Identify and evaluate practicable alternatives to locating the proposed action in a floodplain (or 500-year floodplain for Critical Actions): Practicable alternatives to the proposed action are not available at this time. Relocation of the communities that would be served by the proposed action (Deer Range Bayou, Susie Bayou, Bayou Wilson, and Lake Hermitage) would be cost prohibitive and unrealistic. Similarly, construction of an elevated roadway would be not be cost effective.

The No-Build or No Action Alternative is also an alternative to the proposed action. However, not proceeding with the elevation and partial paving of Lake Hermitage Road would not serve the purpose of the project. Therefore, the No-Build option is not a practicable alternative.

Step 4 – Identify the potential direct and indirect impacts associated with the occupancy or modification of the floodplain (or 500-year floodplain for a Critical Action): Lake Hermitage Road is a pre-existing route and would not require new construction. The proposed action would

take place in the existing right-of-way. Therefore, the proposed alternative would result in negligible impacts to floodplain conditions.

Step 5 – Where practicable, design or modify the proposed action to minimize the potential adverse impacts within the floodplain (including the 500-year floodplain for a Critical Action) and to restore and preserve its natural and beneficial values: The proposed elevation and partial paving of Lake Hermitage Road would be constructed within the existing right-of-way. No additional right-of-way or new property would be acquired to accommodate the proposed project construction activities. Therefore, impacts to the surrounding floodplain would avoided.

Step 6 – Reevaluate the proposed action to determine (1) whether it is still practicable in light of its exposure to flood hazards in the floodplain, the extent to which it will aggravate the current hazards to other floodplains, and its potential to disrupt floodplain values and (2) Whether alternatives preliminarily rejected in Step 3 are practicable in light of the information gained in Steps 4 and 5: (1) Lake Hermitage Road currently exists within the floodplain. Therefore, impacts to the value of the floodplain will be negligible. The proposed elevation and partial paving activities will take place within the existing right-of-way. No new property will be required to complete the project. (2) No other practicable alternatives to the presently proposed location were offered. Lake Hermitage Road is the only access and evacuation route that serves the communities in the area. Relocation of those populations or the construction of an eleveated road would be financial burdensome. Therefore, no other alternative construction or location has been considered.

Step 7 – If reevaluation of results in a determination that there is no practicable alternative to locating the proposal in the floodplain (or the 500-year floodplain for a Critical Action), publish a final notice: A final public notice was prepared and submitted to the Times-Picayune and the Plaquemines Gazette Legal Notices sections for publication on December 30, 2012 and January 1, 2013 respectively. The public was notified that comments would be accepted for 7 calendar days after the publication date of the notice. No comments were received during the 7-day comment period.

Step 8 – Upon completion of the decision making process in Steps 1 through 7, implement the proposed action: Based on the results of Steps 1 through 7, the proposed project will be implemented.

nola.com | The Times-Picayune
NOLA MEDIA GROUP

3800 HOWARD AVENUE, NEW ORLEANS, LOUISIANA 70125-1429 TELEPHONE (504) 826-3201

Exhibit A
Attached

State of Louisiana

Parish of Orleans

City of New Orleans

Personally appeared before me, a Notary in and for the parish of Orleans, Randy A. Trahan who deposes and says that he is Administrative Operations Manager of NOLA Media Group, a division of The Times-Picayune, L.L.C., a Louisiana limited liability company, and Publishers of The Times-Picayune, Daily and Sunday, of general circulation; doing business in the City of New Orleans and the State of Louisiana, and that the attached

LEGAL NOTICE

Re: Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain

Advertisement of Professional Services Industries, Inc

(PSI).
11950 Industriplex Blvd
Baton Rouge, LA 70809

Was published in The Times Picayune

3800 Howard Ave
New Orleans, LA 70125

On the following dates December 2, 2012

I attest that the copy attached hereto as "Exhibit A" is a true and correct copy of the advertisement published in The Times-Picayune on these dates.

Sworn to and subscribed before me this
4th Day of December, 2012

Notary Public

My commission expires at my death.
Charles A. Ferguson, Jr.

Notary identification number 23492

Early Notice and Public Review
of a Proposed
Activity in a 100-Year Floodplain

To: All interested Agencies, Groups and Individuals

This is to give notice that the Plaquemines Parish Government will conduct an evaluation as required by Executive Order 11988, in accordance with the Department of Housing and Urban Development (HUD) regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the floodplain will have on the human environment for the elevation and partial paving of Hermitage Road in Port Sulphur, Louisiana. The proposed project will provide improved emergency evacuation for several communities in Port Sulphur. Funding for the project will be achieved through Community Development Block Grant Funding.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

Written comments must be received by the Plaquemines Parish Government at the following address on or before December 17, 2012: Plaquemines Parish Government - Engineering Office, 102 Avenue G, Belle Chasse, LA 70037 (504) 297-5343 - Attention: Ken Dugas, office hours - 8:00 AM to 4:30 PM. Comments may also be submitted via email at ken_dugas@plaqueminesparish.com.

Date: December 2, 2012

PLAQUEMINES NEWSPAPER PUBLISHING, INC.

The Plaquemines GAZETTE

STATE OF LOUISIANA
PARISH OF PLAQUEMINES

Before me, the undersigned authority, duly commissioned and qualified in and for the above Parish and State, personally came and appeared:

Norris J. Babin, Jr., Legals Clerk

That as Legals Clerk of ***The Plaquemines Gazette***, the official journal of the Parish of Plaquemines, attests that the attached copy of **LEGAL NOTICE**

PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN - HERMITAGE ROAD

Was published in the newspaper in the issues of:

December 4, 2012

Sworn to and subscribed before me

This 4th day of December, 2012

NOTARY PUBLIC

P.O. BOX 700 • 7962 HIGHWAY 23 · BELLE CHA

NEWS • COMMUNITY EV

PUBLIC NOTICE

Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain

To: All Interested Agencies, Groups and Individuals

This is to give notice that the Plaquemines Parish Government will conduct an evaluation as required by Executive Order 11988, in accordance with the Department of Housing and Urban Development (HUD) regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the floodplain will have on the human environment for the elevation and partial paving of Hermitage Road in Port Sulphur, Louisiana. The proposed project will provide improved emergency evacuation for several communities in Port Sulphur. Funding for the project will be achieved through Community Development Block Grant Funding.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

Written comments must be received by the Plaquemines Parish Government at the following address on or before December 19, 2012: Plaquemines Parish Government – Engineering Office, 102 Avenue G, Belle Chasse, LA 70037 (504) 297-5343 - Attention: Ken Dugas, office hours - 8:00 AM to 4:30 PM. Comments may also be submitted via email at ken_dugas@plaqueminesparish.com.

December 4, 2012

nola.com | The Times-Picayune
NOLA MEDIA GROUP

3800 HOWARD AVENUE, NEW ORLEANS, LOUISIANA 70125-1429 TELEPHONE (504) 826-3201

Exhibit A
Attached

I attest that the copy attached hereto as "Exhibit A" is a true and correct copy of the advertisement published in The Times-Picayune on these dates.

State of Louisiana

Parish of Orleans

City of New Orleans

Personally appeared before me, a Notary in and for the parish of Orleans, Randy A. Trahan who deposes and says that he is Administrative Operations Manager of NOLA Media Group, a division of The Times-Picayune, L.L.C., a Louisiana limited liability company, and Publishers of The Times-Picayune, Daily and Sunday, of general circulation: doing business in the City of New Orleans and the State of Louisiana, and that the attached

LEGAL NOTICES

Re: Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain

Advertisement of Professional Services Industries, Inc.

(PSI)
11950 Industriplex Blvd.
Baton Rouge, LA 70809

Was published in The Times Picayune

3800 Howard Ave.
New Orleans, LA 70125

On the following dates December 30, 2012

Sworn to and subscribed before me this
10th Day of March, 2014

Notary Public
My commission expires at my death.

Charles A. Ferguson, Jr.

Notary identification number 23492

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sher shall be un- bility for its fail- y cause to insert rtisement. The will not be re- for errors after sertion. Material the fault of the will be adjusted re than one gra- tion. Advertiser obtain clippings sheets when the s are in effect agrees to pro- tect and indemnify the Times-Picayune Publishing Corporation, its agents and employees against any and all liability loss and expenses arising from the publication of the Advertiser's advertising because of claims for (1) alleged misrepresentation or misstatement, (2) alleged infringement of trademark, trade names, patents or copyrights, (3) alleged violations of fair trade laws, (4) libel and invasion of privacy and (5) other violation of the rights of 3rd party, or of government rules.

The Publisher reserves the right to censor, reclassify, revise, edit or reject any classified advertisement not meeting the standards of acceptance of The Times-Picayune. All ads accepted are subject to credit approval unless paid for prior to publication.

On-line Information

All advertising materials published in The Times-Picayune may also be used on-line and in any and all media by The Times-Picayune and those authorized by The Times-Picayune. All advertising is subject to the terms of newspaper's rate card.

Bids & Proposals	9905
Dividend Notices	9910
Special Notices	9915
Auctions	9920
Bankruptcy Proceedings	9925
Legal Notices	9930
Oil/Mineral	9935
Sale By U.S. Marshall	9940
Successions	9945

Notices

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Important Information

The Publisher shall be under no liability for its failure for any cause to insert an advertisement. The Publisher will not be responsible for errors after the first insertion. Material errors not the fault of the advertiser will be adjusted by not more than one gratis insertion. Advertiser agrees to obtain clippings and tear sheets when the local rates are in effect. Advertiser agrees to protect and indemnify the Times-Picayune Publishing Corporation, its agents and employees against any and all liability loss and expenses arising from the publication of the Advertiser's advertising because of claims for (1) alleged misrepresentation or misstatement, (2) alleged infringement of trademark, trade names, patents or copyrights, (3) alleged violations of fair trade laws, (4) libel and invasion of privacy and (5) other violation of the rights of 3rd party, or of government rules.

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Oil/Mineral	9935
Sale By U.S. Marshall	9940
Successions	9945

9905 Bids & Proposals

DBE Subcontractors sought for multi-unit residential renovation Call (504) 402-9041.

9920 Auctions

A HUGE ESTATE AUCTION
JANUARY 1, 11am! 225-791-2448 #2007 www.southernlens.com

9930 Legal Notices

Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain

To: All Interested Agencies Groups and Individuals

This is to give notice that the Plaquemines Parish Government has conducted an evaluation as required by Executive Order 11988, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the floodplain will have on the human environment resulting from the preparation and operation of an oyster remote setting facility on a portion of the Buras Marina located in Buras, Louisiana. Funding for the project will be achieved through Community Development Block Grant funding.

The Plaquemines Parish Government has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values. Locating the proposed project to an area outside the floodplain was eliminated due to the lack of available property outside of the floodplain. Construction of a new dock facility versus locating the operation on the existing marina was not cost-effective and would result in additional impacts to the natural environment. The No-Build Alternative was eliminated because the purpose of the project would not be met. The proposed project will be in compliance with all state and local floodplain protection and regulations.

The Plaquemines Parish Government has reevaluated the alternatives to reconstruction in the floodplain and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 8 of Executive Order 11988, are available for public inspection, review and copying upon request at the times and location delineated in the last paragraph of this notice for receipt of comments. It is activity will have no significant impact on the environment for the following reasons.

Proposed project activities will take place at an existing location and result in only minor alterations to the existing marina. Only minor and temporary impacts to water resources and habitat in the immediate project area would be expected.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

Written comments must be received by the Plaquemines Parish Government at the following address on or before January 7, 2013. Plaquemines Parish Government - Engineering Office, 102 Avenue G, Belle Chasse, LA 70037 (504) 297-5343 - Attention: Ken Dugas, office hours - 8:00 AM to 4:30 PM. Comments may also be submitted via email at ken_dugas@plaqueminesparish.com.

Date: December 30, 2012

Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain

To: All Interested Agencies Groups and Individuals

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The Plaquemines Parish Government has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values. Locating the proposed project to an area outside the floodplain was eliminated due to nature of the proposed project and the lack of areas sur-

Notices

9930 Legal Notices

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Date: December 30, 2012

"Boulevard H" has wrapped. Any creditor claims in relation to this project should be reported to Boulevard H Movie, LLC, 609 Metairie Rd #779, Met LA 70005

Office of Disciplinary Counsel 4000 S Sherwood Fst #607 BR LA

Office of Disciplinary Counsel 4000 S Sherwood Fst #607 BR LA

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9930 Legal Notices

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PLAQUEMINES NEWSPAPER PUBLISHING, INC.

The Plaquemines GAZETTE

STATE OF LOUISIANA
PARISH OF PLAQUEMINES

Before me, the undersigned authority, duly commissioned and qualified in and for the above Parish and State, personally came and appeared:

Norris J. Babin, Jr., Legals Clerk

That as Legals Clerk of ***The Plaquemines Gazette,*** the official journal of the Parish of Plaquemines, attests that the attached copy of **LEGAL NOTICE**

PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN
HERMITAGE ROAD

Was published in the newspaper in the issues of: January 1, 2013

Sworn to and subscribed before me

This 1st day of January, 2013

NOTARY PUBLIC

BELINDA B. HAZEL
NOTARY PUBLIC I.D. #43775
Parish of Plaquemines, State of Louisiana
My Commission is issued for Life

P.O. BOX 700 • 7962 HIGHWAY 23 • BELLE CHASSE, LA 70037-0700

NEWS • COMMUNITY EVENTS

PUBLIC NOTICE

Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain

To: All Interested Agencies, Groups and Individuals

This is to give notice that the Plaquemines Parish Government has conducted an evaluation as required by Executive Order 11988, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, ,to determine the potential affect that its activity in the floodplain will have on the human environment resulting from the elevation and partial paving of Hermitage Road in Port Sulphur, Louisiana. The proposed project will provide improved emergency evacuation for several communities in Port Sulphur. Funding for the project will be achieved through Community Development Block Grant Funding.

The Plaquemines Parish Government has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values: Locating the proposed project to an area outside the floodplain was eliminated due to nature of the proposed project and the lack of areas surrounding the project outside of the floodplain. Construction of an elevated road was eliminated based on cost-effectiveness. The No-Build Alternative was eliminated because the purpose of the project would not be met. The proposed project will be in compliance with all state and local floodplain protection and regulations.

The Plaquemines Parish Government has reevaluated the alternatives to reconstruction in the floodplain and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 8 of Executive Order 11988, are available for public inspection, review and copying upon request at the times and location delineated in the last paragraph of this notice for receipt of comments. This activity will have no significant impact on the environment for the following reasons:

Renovation activities proposed for the project will take place within the existing right-of-way. Therefore, no significant natural resources or habitats are expected to be impacted.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

Written comments must be received by the Plaquemines Parish Government at the following address on or before January 8, 2013: Plaquemines Parish Government – Engineering Office, 102 Avenue G, Belle Chasse, LA 70037 (504) 297-5343 - Attention: Ken Dugas, office hours - 8:00 AM to 4:30 PM. Comments may also be submitted via email at ken_dugas@plaqueminesparish.com.

January 1, 2013

Notice of Finding of No Significant Impact
and
Notice of Intent to Request Release of Funds

PLAQUEMINES PARISH GOVERNMENT
HURRICANES GUSTAV/IKE CDBG PARISH IMPLEMENTED RECOVERY PROGRAM
LAKE HERMITAGE ROAD IMPROVEMENTS

COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT AND NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS

September 23, 2013

Plaquemines Parish Government
8056 Highway 23
Belle Chasse, LA 70037
(504) 274-2460

This notice shall satisfy two separate but related procedural requirements for activities to be undertaken by the Plaquemines Parish Government.

REQUEST FOR RELEASE OF FUNDS

On or about October 14, 2013, the Plaquemines Parish Government will submit a request to the Louisiana Office of Community Development – Disaster Recovery Unit for the release of Community Development Block Grant (CDBG) funds under Title I, Section 104(g) of the Housing and Community Development Act of 1974, as amended, to undertake a project known as the Lake Hermitage Road Improvements, for the purpose of elevating and partial paving of the Lake Hermitage Road estimated at $1,929,632.00 in Port Sulphur, Plaquemines Parish, Louisiana.

FINDING OF NO SIGNIFICANT IMPACT

The Plaquemines Parish Government has determined that the project will have no significant impact on the human environment. Therefore, an Environmental Impact Statement under the National Environmental Policy Act of 1969 (NEPA) is not required. Additional project information is contained in the Environmental Review Record (ERR) on file at the Plaquemines Parish Government located at 8056 Highway 23 in Belle Chasse, LA where it may be examined or copied Monday through Friday from 8:30 A.M. to 4:00 P.M.

PUBLIC COMMENTS

Any individual, group, or agency disagreeing with this determination or wishing to comment on the project may submit written comments to the Plaquemines Parish Government. All comments received by Friday, October 11, 2013 will be considered by the Plaquemines Parish Government prior to authorizing submission of a request for release of funds. Comments should specify which part of this Notice they are addressing.

RELEASE OF FUNDS

The Plaquemine Parish Government certifies to the Louisiana Office of Community Development – Disaster Recovery Unit, that Billy Nungesser in his capacity as Parish President to accept the jurisdiction of the Federal Courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. The Louisiana Office of Community Development – Disaster Recovery Unit's approval of the certification satisfies its responsibilities under NEPA and related laws and authorities, and allows the Plaquemines Parish Government to use Program funds.

OBJECTIONS TO RELEASE OF FUNDS

The Louisiana Office of Community Development—Disaster Recovery Unit will consider objections to its release of funds and the Plaquemines Parish Government certification received by November 1, 2013, or for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later) only if they are on one of the following bases: (a) the certification was not executed by the Certifying Officer of the Plaquemines Parish Government; (b) the Plaquemines Parish Government has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the grant recipient has committed funds or incurred costs not authorized by 24 CFR Part 58 before approval of a release of funds by HUD/State; or (d) another Federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and shall be addressed to:

Louisiana Office of Community Development-Disaster Recovery Unit
P.O. Box 94095
Baton Rouge, Louisiana 70804-9095

Potential objectors should contact the LA Office of Community Development—Disaster Recovery Unit (225) 219-9600 to verify the actual last day of the objection period.

/s/ Billy Nungesser
Billy Nungesser
Parish President
Environmental Certify Officer

Combined Notice of Finding of No Significant Impact and Notice of Intent to Request Release of Funds

Distribution List

The "Combined Notice of Finding of No Significant Impact and Notice of Intent to Request Release of Funds" was sent to the following organizations, as well as being published on Plaquemines Parish Government's website and posted on the bulletin board located at the Plaquemines Parish Government's office.

US Army Corp of Engineers
New Orleans District – Operations Division
PO Box 60267
New Orleans, LA 70160

US Environmental Protection Agency
Office of Groundwater
1445 Ross Avenue
Dallas, TX 75202

US Fish and Wildlife Service
Lafayette Ecological Services
644 Cajundome Boulevard
Lafayette, LA 70506

State Historic Preservation Officer
Louisiana Department of Culture, Recreation, and Tourism
Louisiana Division of Archeology
1051 3rd Street, Room 405
Baton Rouge, Louisiana 70802

National Resources Conservation Service
Acting State Conservationist
3737 Government Street
Alexandria, Louisiana 71302

Louisiana Department of Environmental Quality
Business & Community Outreach Division
Office of the Secretary
PO Box 301
Baton Rouge, LA 70821-4301

Request for Release of Funds and Certification

U.S. Department of Housing and Urban Development
Office of Community Planning and Development

OMB No. 2506-0087
(exp. 10/31/2014)

This form is to be used by Responsible Entities and Recipients (as defined in 24 CFR 58.2) when requesting the release of funds, and requesting the authority to use such funds, for HUD programs identified by statutes that provide for the assumption of the environmental review responsibility by units of general local government and States. Public reporting burden for this collection of information is estimated to average 36 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless that collection displays a valid OMB control number.

Part 1. Program Description and Request for Release of Funds (to be completed by Responsible Entity)

1. Program Title(s) **Hurricanes Gustav/Ike CDBG Parish-Implemented Recovery Program**	2. HUD/State Identification Number **B-08-DI-22-0001**	3. Recipient Identification Number (optional)
4. OMB Catalog Number(s) **14.228**	5. Name and address of responsible entity **Plaquemines Parish Government** **8056 Highway 23** **Suite 200** **Belle Chasse, Louisiana 70037**	
6. For information about this request, contact (name & phone number) **Benny Puckett, Grants Administrator** **Plaquemines Parish Government** **(504) 297-5642** **Peter Cole, PSI** **(985) 809-2333**		
8. HUD or State Agency and office unit to receive request **LA Office of Community Development** **Disaster Recovery Unit**	7. Name and address of recipient (if different than responsible entity) **Same as Item #5**	

The recipient(s) of assistance under the program(s) listed above requests the release of funds and removal of environmental grant conditions governing the use of the assistance for the following

9. Program Activity(ies)/Project Name(s) **Lake Hermitage Road Improvements** **Grant Award # 38PARA-2101**	10. Location (Street address, city, county, State) **Lake Hermitage Road, Port Sulphur, LA**

11. Program Activity/Project Description

Plaquemines Parish Government plans to elevate and partially pave Lake Hermitage Road in Port Sulphur, LA. Plaquemines Parish Government requests $1,929,632.00 to complete the project.

Part 2. Environmental Certification (to be completed by responsible entity)

With reference to the above Program Activity(ies)/Project(s), I, the undersigned officer of the responsible entity, certify that:

1. The responsible entity has fully carried out its responsibilities for environmental review, decision-making and action pertaining to the project(s) named above.
2. The responsible entity has assumed responsibility for and complied with and will continue to comply with, the National Environmental Policy Act of 1969, as amended, and the environmental procedures, permit requirements and statutory obligations of the laws cited in 24 CFR 58.5; and also agrees to comply with the authorities in 24 CFR 58.6 and applicable State and local laws.
3. The responsible entity has assumed responsibility for and complied with and will continue to comply with Section 106 of the National Historic Preservation Act, and its implementing regulations 36 CFR 800, including consultation with the State Historic Preservation Officer, Indian tribes and Native Hawaiian organizations, and the public.
4. After considering the type and degree of environmental effects identified by the environmental review completed for the proposed project described in Part 1 of this request, I have found that the proposal did ☐ did not ☒ require the preparation and dissemination of an environmental impact statement.
5. The responsible entity has disseminated and/or published in the manner prescribed by 24 CFR 58.43 and 58.55 a notice to the public in accordance with 24 CFR 58.70 and as evidenced by the attached copy (copies) or evidence of posting and mailing procedure.
6. The dates for all statutory and regulatory time periods for review, comment or other action are in compliance with procedures and requirements of 24 CFR Part 58.
7. In accordance with 24 CFR 58.71(b), the responsible entity will advise the recipient (if different from the responsible entity) of any special environmental conditions that must be adhered to in carrying out the project.

As the duly designated certifying official of the responsible entity, I also certify that:

8. I am authorized to and do consent to assume the status of Federal official under the National Environmental Policy Act of 1969 and each provision of law designated in the 24 CFR 58.5 list of NEPA-related authorities insofar as the provisions of these laws apply to the HUD responsibilities for environmental review, decision-making and action that have been assumed by the responsible entity.
9. I am authorized to and do accept, on behalf of the recipient personally, the jurisdiction of the Federal courts for the enforcement of all these responsibilities, in my capacity as certifying officer of the responsible entity.

Signature of Certifying Officer of the Responsible Entity	Title of Certifying Officer **Wm. "Billy" Nungesser, Parish President** **Plaquemines Parish Government**
X	Date signed

Address of Certifying Officer
Plaquemine Parish Government
8056 Highway 23
Suite 200
Belle Chasse, Louisiana 70037

Part 3. To be completed when the Recipient is not the Responsible Entity

The recipient requests the release of funds for the programs and activities identified in Part 1 and agrees to abide by the special conditions, procedures and requirements of the environmental review and to advise the responsible entity of any proposed change in the scope of the project or any change in environmental conditions in accordance with 24 CFR 58.71(b).

Signature of Authorized Officer of the Recipient	Title of Authorized Officer
X	Date signed

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

APPENDIX E
OTHER INFORMATION
(PUBLIC NOTICE, 8-STEP, FONSI)

PUBLIC NOTICE
FEMA NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT
DRAFT FINDING OF NO SIGNIFICANT IMPACT
PLAQUEMINES PARISH LAKE HERMITAGE ROAD
ELEVATION OF FIVE (5) MILES OF ROADWAY
MYRTLE GROVE, LOUISIANA

Interested parties are hereby notified that the Federal Emergency Management Agency (FEMA) has prepared a draft Environmental Assessment (EA) and draft Finding of No Significant Impact (FONSI) in compliance with the National Environmental Policy Act (NEPA). The purpose of the EA is to assess the effects on the human and natural environment for elevation and improvements to approximately five miles of Lake Hermitage Road from the junction of Highway 23 extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). Road improvements would include raising the roadway approximately 10 inches, to a minimum elevation of +2.5 feet above National Geodetic Vertical Datum (NGVD 29). To accomplish this, Plaquemines Parish would install a limestone base topped with an asphalt pavement. The work would include replacement of three (3) existing degraded drainage culverts. The improvements would stay within the existing right-of-way and would provide two (2) 12-foot wide driving lanes with two (2) foot wide shoulders. This roadway improvement is a proposed action for which FEMA is considering providing funding assistance.

Lake Hermitage Road is located in Plaquemine Parish on the west bank of the Mississippi River near the community of Myrtle Grove. It is the primary access road for three main bayou communities and is the primary evacuation route for residents and several offshore commercial activities. Lake Hermitage Road lies outside the flood protection levee system and is subject to flooding during high tidal conditions. Recent evaluations indicate that the road is regularly flooded during normal high tide events. The purpose of the draft EA is to analyze the potential environmental impacts associated with the preferred action and alternatives. The draft EA evaluates a No Action Alternative and a Preferred Action Alternative, which is to elevate the five (5) mile stretch of road with limestone and asphalt topping. Another Alternative Action Plaquemines Parish considered was a complete buyout of the structures along the roadway, and removal of the roadway and restoration to open space. The cost to complete a buyout was not considered not economically feasible and would result in the extended displacement of residents and businesses which rely on their close proximity to the water and coastline of Plaquemines Parish for their commercial operations and economic/financial sustenance. The draft FONSI is FEMA's finding that the preferred action of the elevation of the existing roadway will not have a significant effect on the human and natural environment.

The draft EA and draft FONSI are available for review at the following locations: 1) Port Sulphur Branch Library at 139 Delta St Port Sulphur, LA 70083 Monday-Fridays 8:30 a.m. – 5:00 p.m.; and 2) the Belle Chase Library at 8442 Hwy 23 Belle Chase, LA 70037 Monday, Wednesday, and Friday 830 a.m. – 5p.m., Tuesday and Thursday 8:30 a.m. – 7:00 p.m. This public notice will run in the local newspaper, The Times-Picayune, on Wednesday, May 20, Friday, May 22, 2015 and Sunday May 24, 2015. This public notice will also run in the local newspaper, The Plaquemines Gazette, on Tuesdays, May 19 and May 26, 2015. The documents can also be downloaded from FEMA's website at http://www.fema.gov/resource-document-library . There will be a 15 day comment period, beginning on June 4, 2015 and concluding on June 19, 2015 at 4 p.m. Comments may be mailed to: DEPARTMENT OF HOMELAND SECURITY-FEMA EHP-SUNO, 1500 MAIN STREET, BATON ROUGE, LOUISIANA 70802. Comments may be emailed to: FEMA-NOMA@dhs.gov or faxed to 225-346-5848. Verbal comments will be accepted or recorded at 504-427-8000. If no substantive comments are received, the draft EA and associated FONSI will become final.

PLAQUEMINESGAZETTE.COM

PUBLIC NOTICE

EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND/OR WETLANDS

To: All Interested Agencies, Stakeholders and Individuals

Plaquemines Parish provides this notice as the Early Public Notice for a Proposed Activity in the 100-Year Floodplain and Wetlands. This notice is provided pursuant to Federal Emergency Management Agency's (FEMA) implementing regulations at 44 Code of Federal Regulations Part 9, which includes an eight step decision making process for compliance and FEMA's implementing regulation for Executive Order (EO) 11988, Floodplain Management and Executive Order 11990, Wetland Protection, concerning FEMA's funding assistance for activities within and/or affecting a floodplain and/or wetland. As required by EO 11988 and EO 11990, Plaquemines Parish Government will conduct an evaluation to "avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and/or wetlands and to avoid direct or indirect support of floodplain and/or wetland development wherever there is a practicable alternative". The proposed project would raise and improve drainage on approximately five (5) miles of Lake Hermitage Road, starting from the junction of Louisiana Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). In this proposed action five (5) miles of Lake Hermitage Road would be elevated to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt for the entire five (5) miles and replacement of three (3) existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing road right-of way (ROW). Funding for the project will be achieved through the Plaquemines Parish Hazard Mitigation Grant Program.

Plaquemines Parish has determined that the project is located within Zone A, an area of 100-year flood; base flood elevations and flood hazards factors determined, as depicted on FIRM Community Panel 2201390410B, dated May 1, 1985. The proposed project is also located within an area indicative of wetland habitat. While the proposed project will not directly impact wetlands, indirect impacts to wetland may occur during construction activities.

The comment period will end 15 days from the initial notice publication date of August 5, 2014. Written comments must be received by the Plaquemines Parish Government at the following address on or before August 20, 2014: Plaquemines Parish Government – 8056 Hwy. 23, Suite 200, Belle Chasse, LA 70037 504-297-5642 - Attention: Hilda Loft, office hours – 8:00 AM to 4:30 PM. Comments may also be submitted via email at hloft@plaqueminesparish.com.

August 5, 2014

PLAQUEMINES PARISH HAZARD MITIGATION GRANT PROGRAM
AND THE UNITED STATES (US) DEPARTMENT
OF HOUSING AND URBAN DEVELOPMENT (HUD) COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) LAKE HERMITAGE ROAD IMPROVEMENTS
HMGP PROJECT #: 1603X-075-00108- 8-STEP PROCESS

STEP 1: DETERMINE WHETHER THE ACTION IS LOCATED IN A 100-YEAR FLOODPLAIN.

The project footprint is located in a 100-year floodplain in Zone A with a base flood elevation (BFE) of between 9 and 9 feet per DFIRM Community Panel No. 2201390410B dated May 1, 1985, therefore, Executive Order (E.O.) 19988 (43 Code of Federal Regulations [CFR] 6030) applies. The project would include 1.) five (5) miles of Lake Hermitage Road that would be elevated to a minimum elevation of +2.5 feet National Geodetic Vertical Datum of 1929 (NGVD 29) through the placement of a limestone base overlain by asphalt; and 2.) the replacement of three (3) existing culverts with new culverts. The improvements to Lake Hermitage Road would stay within the existing right-of way (ROW). The proposed Lake Hermitage Road improvements project would be funded through Plaquemines Parish Hazard Mitigation Grant Program and the United States (US) Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) grant funds. To satisfy NEPA compliance a HUD Environmental Record Review (ERR) was completed and a Finding of No Significant Impact (FONSI) signed on October 25, 2013 to satisfy HUD regulations 24 CFR 58.5 and 58.6, for the HUD proposed action that consisted of improvements to the same five miles of Lake Hermitage Road but with approximately 1.7 miles of road elevated and asphalted. For the HUD proposed action an 8 Step Process for floodplains was completed on January 9, 2013 and no comments were received. A HUD Re-evaluation of Environmental Assessment (24 CFR 58.47) was completed June 2014 in which it was determined that the impacts analyzed under the HUD ERR would be similar under the new proposed action of all five (5) miles of Lake Hermitage Road surfaced with asphalt. This current 8 Step Process will satisfy the Federal Emergency Management Act (FEMA), National Policy Act of 1969 (NEPA) and 43 CFR 6030 requirements.

STEP 2: NOTIFICATION OF THE PUBLIC FOR EARLY REVIEW OF THE PROPOSAL AND SOLICITATION OF INVOLVEMENT BY THE AFFECTED AND INTERESTED PUBLIC IN THE DECISION MAKING PROCESS.

A public notice describing the project will be published in *The Plaquemines Gazette,* the official journal of the Plaquemines Parish Government on August 5, 2014. The public notice targets all interested federal, state, and local agencies, groups, and individuals. A copy of the published notice will be maintained in the Plaquemines Parish Grant Administrator's Office. The required fifteen (15) calendar days will be allowed for public comment.

As required by regulation, the notice will also include the name, proposed location and description of the activity, and the Plaquemines Parish contact for information as well as the location and hours of the office at which a full description of the proposed action can be viewed. Attached is a copy of the Early Public Review Notice. No comments were received during the initial public comment period.

STEP 3: IDENTIFY AND EVALUATE PRACTICAL ALTERNATIVES.

Consultation with the project engineers and Parish officials has determined that relocation of the project to alternate areas outside of all floodplains is not feasible if the objective of reducing the incidences of roadway flooding in this area of Lake Hermitage Road is to be achieved.

Plaquemines Parish considered several alternative actions.

A. Locate the Project Within the Floodplain

The existing Lake Hermitage Road is within the floodplain and raising five (5) miles of the roadway to a minimum elevation of +2.5 feet NGVD 29 through the placement of a limestone base overlain by asphalt; and 2.) the replacement of three (3) existing culverts with new culverts. This alternative is the most practical and cost efficient means of reducing the incidences of roadway flooding in this area of Lake Hermitage Road.

B. No Action or Other Alternative Actions that Serve the Same Purpose

The alternative of "no action" would result in continued inundation of Lake Hermitage Road during heavy rain events and storm surge in the project area; the Parish is committed to pursuing implementation of needed improvements to resolve the flooding and drainage issues for Parish residents. Therefore this alternative is rejected.

C. Complete Buyout Alternative

The purpose of this project is to reduce the incidences of roadway flooding in this area of Lake Hermitage Road which in turn would improve access of emergency services to nearby residents and improve access to off-shore commercial activities by businesses. The area surrounding the roadway is floodplains. Because of this, no other location for the roadway improvements is feasible. Plaquemines Parish considered a complete buyout of the structures along the roadway. The cost to complete a buyout was considered to be economically unfeasible and would result in the extended displacement of residents and businesses which rely on their close proximity to the water and coastline of Plaquemines Parish for their commercial operations and economic/financial sustenance. Therefore, the Complete Buyout Alternative was considered by Plaquemines Parish but was ultimately dismissed due to the high economic impacts it would cause to residents and businesses.

STEP 4: IDENTIFY POTENTIAL DIRECT AND INDIRECT IMPACTS ASSOCIATED WITH FLOODPLAIN DEVELOPMENT.

Project engineers have reviewed potential impacts and have advised that there will be no adverse impacts on the floodplain as a result of this project.

STEP 5: WHERE PRACTICAL, DESIGN OR MODIFY THE PROPOSED ACTION TO MINIMIZE THE POTENTIAL ADVERSE IMPACTS TO PROPERTY AND NATURAL VALUES WITHIN THE FLOODPLAIN AND TO RESTORE AND PRESERVE THE VALUES OF THE FLOODPLAIN.

The following mitigation measures will be taken to minimize adverse impacts to this activity:

- Plaquemines Parish will maintain its participation in the NFIP to mitigate possible flood damage;
- The Parish will control all filling, grading, and other construction development so as to not increase the potential for future flood damage or impacts to surrounding wetlands;
- The project will be designed to avoid any altering of the natural floodplains and/or the formation of flood barriers which increase flood hazards to adjacent lands.
- All permitting requirements will be met prior to construction and be accomplished in accordance with all federal, state, and parish construction statutes, ordinances, and regulations;
- Project construction will be closely monitored by the Project Engineer, Plaquemines Parish Department of Public Works, and administrative personnel.

If it is determined that any unknown impacts exist, activities will be modified to protect natural resources and the preservation of the floodplain and wetlands.

STEP 6: REEVALUATE THE ALTERNATIVES.

In re-evaluating alternatives, in consideration of potential impacts and minimization measures, it has been determined that is it unfeasible to modify or relocate the project and still obtain stated objectives of reducing the incidences of roadway flooding in this area of Lake Hermitage Road.

STEP 7: DETERMINATION OF NO PRACTICABLE ALTERNATIVE

The Final Notice and Public Explanation was published in *The Plaquemines Gazette*, the official journal of the Plaquemines Parish Government, on September 16, 2014 detailing the reasons why the project must be located in the floodplain, a list of alternatives considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial floodplain values. The final public comment period ended on September 24, 2014. No comments were received in the final public comments period.

STEP 8: IMPLEMENT THE PROPOSED ACTION

As of the end of the final public comment period, the 8-Step Process has been completed. The proposed project will be implemented in accordance with the approved plans and specifications. Mitigation of potential impacts to the floodplains/wetlands during construction will be implemented, and Plaquemines Parish will take an active role in monitoring the construction process to ensure no unnecessary impacts occur nor unnecessary risks are taken.

U.S. Department of Homeland Security
Louisiana Recovery Office
1500 Main St.
Baton Rouge LA, 70802

DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE LAKE HERMITAGE ROAD ELEVATION PLAQUEMINES PARISH, LOUISIANA *FEMA-1603-DR-LA*

BACKGROUND

Lake Hermitage Road is located in Plaquemine Parish on the west bank of the Mississippi River near Myrtle Grove and extends away from Louisiana Highway 23 for approximately five (5) miles. It is the primary access road for three (3) main bayou communities and is the primary evacuation route for residents and several offshore commercial activities. Lake Hermitage Road lies outside the flood protection levee system and is subject to flooding during high tidal conditions. Recent evaluations indicate that the road is regularly flooded during normal high tide events

The proposed project would raise and improve the Lake Hermitage Road for approximately five (5) miles, starting from the junction of Highway 23 and Lake Hermitage Road and extending to the bridge crossing at Hermitage Bayou (near Bayou Lane). Road improvements would include: raising the roadway approximately 10 inches, to a minimum elevation of +2.5 feet National Geodetic Vertical Datum (NGVD 29) through the installation of a limestone base followed by an asphalt pavement; and the installation of three (3) new drainage culverts. The improvements would stay within the existing right-of-way and would provide two (2) 12-foot wide driving lanes with two (2) foot wide shoulders.

In accordance with 44 CFR Part 10, FEMA's regulations to implement the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) was prepared. The purpose of the EA was to analyze the potential environmental impacts associated with the elevation of the road, and to determine whether to prepare an Environmental Impact Statement (EIS) or Finding of No Significant Impact (FONSI). The need for the proposed project is to provide safe public and municipality ingress and egress that is up to current codes and standards in order to continue to provide access to residences and emergency services in the area. The alternatives considered include 1) No Action Alternative; 2) Alternative Two (2) (Preferred) – Elevate and Pave the 5 mile stretch of the road; 3) Alternative Three (3) –Buyout All The Residences and Businesses and Remove All Structures and Facilities and Restore Marsh on the Site.

Plaquemines Parish seeks FEMA Hazard Mitigation Grant Program and the United States (U.S.) Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) federal grant funds to elevate the Lake Hermitage Road. After analyzing the alternatives, the Alternative to buyout all the residences and businesses and remove all structures and facilities and restore marsh on the site was dismissed from further consideration. The applicant is unable to meet the costs for such a Relocation associated with this Alternative. This Alternative would not meet the necessary codes and standards required to continue to provide community services and operations to residences surrounding the location in the original footprint.

FINDINGS

FEMA has evaluated the proposed project for significant adverse impacts to geology, soils, water resources (surface water, groundwater, and wetlands), floodplains, coastal resources, air quality, biological resources (vegetation, fish and wildlife, Federally-listed threatened or endangered species and critical habitats), cultural resources, socioeconomics (including minority and low income populations), safety, noise, and hazardous materials. The results of these evaluations as well as consultations and input from other federal and state agencies are presented in the EA.

CONDITIONS

The following conditions must be met as part of the implementation of the project. Failure to comply with these conditions may jeopardize federal funding:

- The applicant must complete a jurisdictional wetland determination and submit it to USACE and complete the permitting process. All correspondence must be submitted to FEMA-EHP for inclusion into the project files.

- The project is within and directly adjacent to jurisdictional wetlands as per documentation provided by the United States Army Corps of Engineers (USACE). Extreme care must be taken during the construction process through the appropriate use and maintenance of Best Management Practices (BMPs). Applicant must adhere to all conditions outlined in Clean Water Act Section 401 permits associated with the project.

- Erosion Control Devices (ECD's) such as silt fencing, hay bales, sediment traps, etc. must be used and maintained extensively to prevent any potential direct or indirect adverse impacts to nearby wetland areas per the Clean Water Act (CWA) and E.O. 11990. Any adverse impacts to adjacent wetlands resulting from the construction of this project will jeopardize receipt of federal funding.

- Proper signage must clearly identify the adjacent wetland boundaries to help prevent any potential adverse impacts from construction vehicles, equipment, or supplies accidentally leaving the boundaries of the approved Right Of Way.

- Per 44 CFR 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the National Flood Insurance Program (NFIP).

- The Parish must control all filling, grading, and other construction development so as to not increase the potential for future flood damage.

- The project must be designed to avoid any altering of the natural floodplains and/or the formation of flood barriers which increase flood hazards to adjacent lands

- Applicant must ensure compliance with all parish and city ordinances. All correspondence must be submitted to FEMA and FEMA-EHP for inclusion in the project files. Should the site plans (including drainage design) change the applicant must submit changes to FEMA-EHP for review and approval prior to the start of construction.

- Applicant is required to coordinate with the local floodplain administrator regarding building permits, clearances, drainage studies, etc. Documentation of all coordination activities with the local floodplain administrator pertaining to this project shall be submitted to the LA GOHSEP and FEMA for inclusion in the permanent project files.

- If any solid or hazardous waste materials, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, the LDEQ Single-Point-of-Contact (SPOC) must be contacted at (225) 219-3640 to initiate appropriate measures for the proper assessment, remediation, management and disposal of the contaminated material. Additionally, precautions should be taken to protect workers from these hazardous constituents.

- If human bone or unmarked grave(s) are present with the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.

- If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform its Public Assistance contacts at FEMA, who will in turn contact FEMA Historic Preservation staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO.

- Any fill or borrow material used must be sourced from areas that do not contain any buried cultural materials (e.g. brick foundations, prehistoric Indian artifacts, human burials, and the like).

- FEMA is requiring, as a condition of this grant, that no construction staging occur in areas that are not currently covered in gravel, asphalt, or concrete (i.e., previously disturbed ROWs or "protected" surfaces) surrounding the southern terminus of the APE near the intersection of Lake Hermitage Road and Bayou Lane.

CONCLUSIONS

Based upon the incorporated EA, and in accordance with Presidential Executive Orders 12898 (Environmental Justice), 11988 (Floodplain Management), and 11990 (Wetland Protection), FEMA has determined that the preferred action implemented with the conditions and mitigation measures outlined above and in the EA will not have any significant adverse effects on the quality of the natural and human environment.

As a result of this FONSI, an EIS will not be prepared (44 CFR Part 10.8) and the preferred action alternative as described in the EA may proceed.

APPROVALS

_____

Kevin Jaynes Date
Regional Environmental Officer
Region VI
FEMA 1603-1607-DR-LA

_____

Mike Womack Date
Director of the Louisiana Recovery Office
Region VI
FEMA 1603-1607-DR-LA