

Draft Environmental Assessment

Burden Center Infrastructure Improvements

LSU AgCenter – State of Louisiana, Office of
Facility Planning and Control

FEMA-1603-DR-LA

Baton Rouge, East Baton Rouge Parish, Louisiana

August 2015



FEMA

**U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
1500 Main Street
Baton Rouge, Louisiana 70802**

<u>SECTION</u>	<u>PAGE</u>
TABLE OF CONTENTS	ii
LISTS OF TABLES, FIGURES, & APPENDICES	iv
LIST OF ACRONYMS AND ABBREVIATIONS	v
1 INTRODUCTION.....	1
1.1 Hurricane Katrina	1
1.2 Project Authority	1
1.3 Background	1
1.4 General Site Description.....	2
2 PURPOSE AND NEED	4
3 ALTERNATIVES	6
3.1 Overview of Alternatives.....	6
3.2 Alternative 1	6
3.3 Alternative 2	6
3.4 Alternative 3	6
4 AFFECTED ENVIRONMENT AND ALTERNATIVES ANALYSIS.....	9
4.1 Geology, Soils, and Topography	9
4.1.1 Regulatory Setting	9
4.1.2 Existing Conditions.....	9
4.1.3 Environmental Consequences.....	10
4.2 Wetlands and other Waters of the United States.....	11
4.2.1 Regulatory Setting	11
4.2.2 Existing Conditions.....	12
4.2.3 Environmental Consequences.....	14
4.3 Floodplains.....	15
4.3.1 Regulatory Setting	15
4.3.2 Existing Conditions.....	15
4.3.3 Environmental Consequences.....	15
4.4 Coastal Resources	17
4.4.1 Regulatory Setting	17
4.4.2 Existing Conditions.....	18
4.4.3 Environmental Consequences.....	18

<u>SECTION</u>	<u>PAGE</u>
4.5 Federally Protected Species, Critical Habitats, and Other Biological Resources	19
4.5.1 Regulatory Setting	19
4.5.2 Existing Conditions.....	19
4.5.3 Environmental Consequences.....	21
4.6 Air Quality.....	21
4.6.1 Regulatory Setting	21
4.6.2 Existing Conditions.....	22
4.6.3 Environmental Consequences.....	23
4.7 Noise.....	24
4.7.1 Regulatory Setting	24
4.7.2 Existing Conditions.....	24
4.7.3 Environmental Consequences.....	25
4.8 Traffic.....	26
4.8.1 Regulatory Setting	26
4.8.2 Existing Conditions.....	26
4.8.3 Environmental Consequences.....	26
4.9 Cultural Resources.....	27
4.9.1 Regulatory Setting	27
4.9.2 Existing Conditions – Identification and Evaluation of Historic Properties	27
4.9.3 Environmental Consequences.....	28
4.10 Hazardous Materials	28
4.10.1 Regulatory Setting	28
4.10.2 Existing Conditions.....	29
4.10.3 Environmental Consequences.....	29
4.11 Environmental Justice.....	30
4.11.1 Regulatory Setting	30
4.11.2 Existing Conditions.....	30
4.11.3 Environmental Consequences.....	30
5 CUMULATIVE IMPACTS	32
6 CONDITIONS AND MITIGATION MEASURES	36
7 PUBLIC INVOLVEMENT.....	38
8 AGENCY COORDINATION.....	39
9 LIST OF PREPARERS.....	40
10 REFERENCES.....	41

<u>SECTION</u>	<u>PAGE</u>
TABLES	
Table 1 – Federally Listed Species Known to Occur in East Baton Rouge Parish	20
Table 2 – Projects that May Have the Potential to Contribute to Cumulative Impacts	34
FIGURES	
Figure 1 – LSU AgCenter’s Burden Center, project vicinity	2
Figure 2 – Current project conditions	4
Figure 3 – Schematic proposed site plan restroom	8
Figure 4 – Generalized Geologic Map of Louisiana indicating project area	10
Figure 5 – U.S. Fish and Wildlife Service National Wetlands Inventory map	13
Figure 6 – Effective Flood Insurance Rate Map 2200580265F	17
Figure 7 – Baton Rouge zoning map	25
Figure 8 – Locations of FEMA-funded projects occurring within a one-mile radius around the proposed project site	33
APPENDICES	
Proposed Site Plan	Appendix A
Agency Correspondence	Appendix B
8-Step Decision Making Process	Appendix C
Clean Air Act General Conformity Applicability Calculations	Appendix D
Public Notice	Appendix E
Finding of No Significant Impact	Appendix F

LIST OF ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historical Preservation
APE	Area of Potential Effects
BFE	Base Flood Elevation
BMP	Best Management Practices
CAA	Clean Air Act
CARS	Coastal Area Research Station
CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CTR	In-House Contract Consultant
CUP	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dBA	decibel, on the A-weighted scale
DEA	Draft Environmental Assessment
DHS	U.S. Department of Homeland Security
DNL	Day-Night Average Sound Level
EA	Environmental Assessment
EDMS	Electronic Document Management System
EIS	Environmental Impact Statement
E.O.	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FP&C	State of Louisiana, Office of Facility Planning and Control
FPPA	Farmland Protection Policy Act
GCR	General Conformity Rule under the Clean Air Act
GHG	Greenhouse Gas
GPO	U.S. Government Printing Office
LA GOHSEP	Louisiana Governor's Office of Homeland Security and Emergency Preparedness
LaDOTD	Louisiana Department of Transportation and Development
LCRP	Louisiana Coastal Resources Plan
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDWF	Louisiana Department of Wildlife and Fisheries
LPDES	Louisiana Pollutant Discharge Elimination System
LSU	Louisiana State University
NAAQS	National Ambient Air Quality Standards
NAVD88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program

NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
NWP	nationwide permit
OCM	Office of Coastal Management
OSHA	Occupational Safety and Health Administration
PA	Public Assistance
PCB	Polychlorinated Biphenyl
P.L.	Public Law
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act
R.S.	Revised Statutes
SARA	Superfund Amendments and Reauthorization Act
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
SIP	State Implementation Plan
SRIA	Sandy Recovery Improvement Act
TSCA	Toxic Substances Control Act
U.S.	United States
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USDA	U.S. Department of Agriculture
USDOI	U.S. Department of the Interior
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

1 INTRODUCTION

1.1 Hurricane Katrina

Hurricane Katrina made landfall on 29 August 2005, near the town of Buras, Louisiana, with sustained winds of more than 125 miles per hour. The accompanying storm surge caused extensive flooding throughout most of the Louisiana coastal zone. In addition, high winds, wind-blown debris, and wind-driven rain damaged a significant number of facilities, both within the coastal zone and farther inland, including many within Baton Rouge.

1.2 Project Authority

President George W. Bush declared a major disaster for the state of Louisiana (FEMA-1603-DR-LA) on August 29, 2005, authorizing the United States (U.S.) Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. This assistance is pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), Public Law (P.L.) 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance (PA) Program to assist with funding the repair, restoration, reconstruction, or replacement of public facilities damaged as a result of the declared disaster.

This Draft Environmental Assessment (DEA) has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality (CEQ) regulations implementing NEPA (Title 40 of the Code of Federal Regulations [C.F.R.] §§ 1500-1508) (Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 2005), and FEMA's regulations implementing NEPA (44 C.F.R. §§ 9-10).

The purpose of this DEA is to analyze potential environmental impacts of the proposed project. FEMA will use the findings in this DEA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.3 Background

On January 29, 2013, the Sandy Recovery Improvement Act (SRIA) of 2013 was signed. This law amended the Stafford Act through the addition of Section 428, which authorizes alternative procedures for PA Program permanent work funding. The law also authorizes FEMA to implement these alternative procedures through a pilot program. This PA Alternative Procedures Pilot Program for Permanent Work applies to large permanent work projects in any major disaster declared on or after May 20, 2013, and to large permanent work projects in major disasters declared prior to this date if construction has not yet begun. The Permanent Work Pilot Program will remain in place while FEMA assesses its effectiveness in achieving program goals and until regulations are promulgated to implement permanent program changes. Currently there is not a set end date for the Permanent Work Pilot Program. For permanent work, the law allows FEMA to make grants for permanent projects on the basis of fixed estimates, which allows the timely and/or cost-effective completion of work if an applicant (a state, tribal, or local government, or owner or operator of the private, nonprofit facility) agrees to be responsible for actual costs that exceed the estimate.

The State of Louisiana, Office of Facility Planning and Control (FP&C) submitted an application through the State of Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP) for funding under FEMA's PA Program. FEMA has determined that FP&C, the Applicant, is an eligible applicant in control of critical or non-critical facilities that serve the needs of the general public and that are eligible for repair or replacement. Louisiana State University (LSU) properties are under the purview of FP&C.

As a result of Hurricane Katrina, a number of coastal LSU AgCenter facilities were severely impacted. The “AgCenter’s mission is to provide the people of Louisiana with research-based educational information that will improve their lives and economic well-being” (LSU 2015). In response to the damage to its research facilities and their surroundings, as well as departmental reorganization and budget reductions, the AgCenter has developed a plan to consolidate efforts and facilities at fewer locations. In accordance with 44 C.F.R. § 206.203(d), FP&C has requested an Alternate Project under the SRIA Permanent Work Pilot Program in order to accomplish this goal. An Alternate Project is any project where, in lieu of restoring a damaged facility, the Applicant chooses to repair or expand other selected public facilities, to construct new facilities, or to fund hazard mitigation measures. Under SRIA, the usual mandatory 25% reduction in funds for Alternate Projects is waived. For the current request, FP&C proposes expansion and infrastructure improvements to its existing research station at the Burden Center, with a street address of 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809. The property is bisected by Interstate 10, which runs in a northwest-southeast direction through the tract (Figure 1).

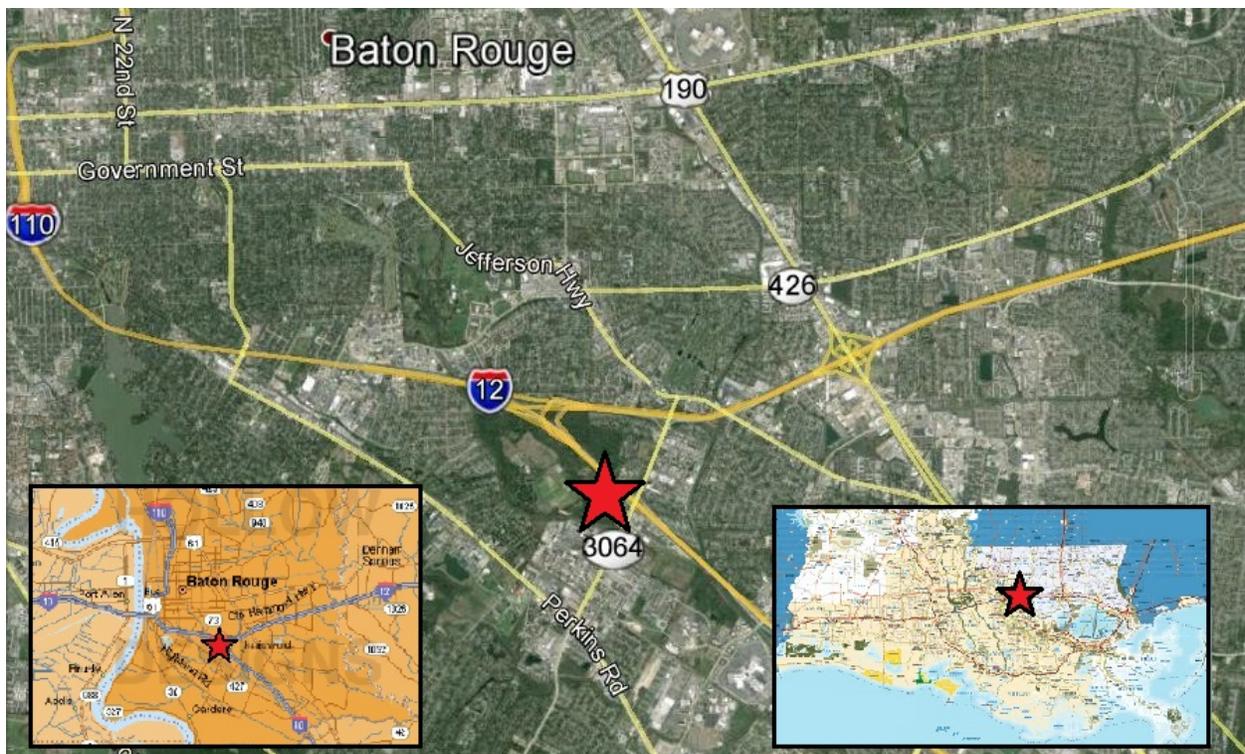


Figure 1 – LSU AgCenter’s Burden Center (denoted by red star), project vicinity (Google Earth 2015a)

1.4 General Site Description

The city of Baton Rouge is located primarily within the parish of East Baton Rouge, although the metropolitan area extends into several of the surrounding parishes. Within East Baton Rouge Parish, slightly more than half of the surface area is urban land, with the remainder consisting primarily of agricultural, field, forested, or environmentally constrained parcels. The Mississippi River constitutes the western boundary of the parish and contributes to the environmental constraints for development, along with wetlands and other lands within the base, or 100-year, floodplain (Baton Rouge Government 2013). The parish has a subtropical, humid climate with relatively high rainfall. The average winter temperature is 53 °F and the average summer temperature is 82 °F. East Baton Rouge Parish typically receives 61 inches of rainfall annually. Snow is uncommon (Dance et al. 1968; NOAA 2015).

The city of Baton Rouge was incorporated in 1817 and became the state capital of Louisiana in 1849. By 1882, the population was about 7,200 persons. In 1945, the city limits included slightly more than five (5) square miles, with 35,000 to 40,000 inhabitants. Today, Baton Rouge's population is approximately 230,000, residing in an incorporated area of 472 square miles. Unlike most cities, Baton Rouge is governed by a combined body known as the City-Parish Government. This body exerts jurisdiction over the entirety of East Baton Rouge Parish (Baton Rouge Government 2015b).

By the start of the 20th Century, the industrial development of Baton Rouge was beginning to increase due to its strategic location along the first major Mississippi River bluff encountered when traveling upstream from the Gulf of Mexico. The Second World War also saw the expansion of industry and business within the city. This boom made Baton Rouge one of the leading educational, industrial, and business centers within the South (Baton Rouge Government 2015b). Although East Baton Rouge Parish is the state's most populous parish, the year 1990 began a downward population trend, with most emigrants moving to one of the surrounding parishes. Unaffordable housing is one reason often given for this out-migration (Baton Rouge Government 2013).

The proposed project site is located within City-Parish Planning District 14. Based on the number of building permit and land development applications received in 2012, major growth "hotspots" within the District are located immediately to the northwest (residential) and south (commercial) of the project site. The Burden Center property itself is considered to be within the "institutional" category (Baton Rouge Government 2012). For Baton Rouge as a whole, the majority of planned new growth will consist of entirely new communities. A considerable area, approximately 27 square miles, is currently undeveloped but already has urban utilities (sewer and water) in place. An estimated 10% of new growth will occur through infill activities, however, primarily consisting of redevelopment and adaptive re-use of existing buildings (Baton Rouge Government 2013).

2 PURPOSE AND NEED

The objective of FEMA's PA Grant Program is to provide assistance to state, tribal, and local governments, as well as certain types of private, nonprofit organizations, such that communities can quickly respond to, recover from, and mitigate major disasters and emergencies. The high winds, wind-driven rain and debris, and massive flooding associated with Hurricane Katrina severely impaired the operation of a number of the AgCenter's research stations, especially the Coastal Area Research Station on the Louisiana coast. This station's focus was research on citrus crops. In response to the damage to these various facilities and their surroundings, as well as departmental reorganization and budget reductions, the AgCenter has developed a plan to consolidate efforts and facilities at fewer locations.

In light of this decision, the purpose of the project currently under consideration is threefold: (1) to reduce flooding of AgCenter facilities, (2) to diversify agricultural research, and (3) to expand capacity at an existing AgCenter location. Infrastructure improvements are being proposed in order to provide additional services and capacity at the Burden Center in Baton Rouge, Louisiana, to be constructed in accordance with the Center's Master Plan (Portico Group 2009). These improvements, which consist of a new restroom building, two greenhouses, and a sewerage system, would allow the AgCenter to restore some of its lost research capabilities, while also providing additional amenities for the visiting public (Figure 2). Mitigation of threats from future flooding at this location would occur by incorporating the minimum design standards of the National Flood Insurance Program (NFIP).

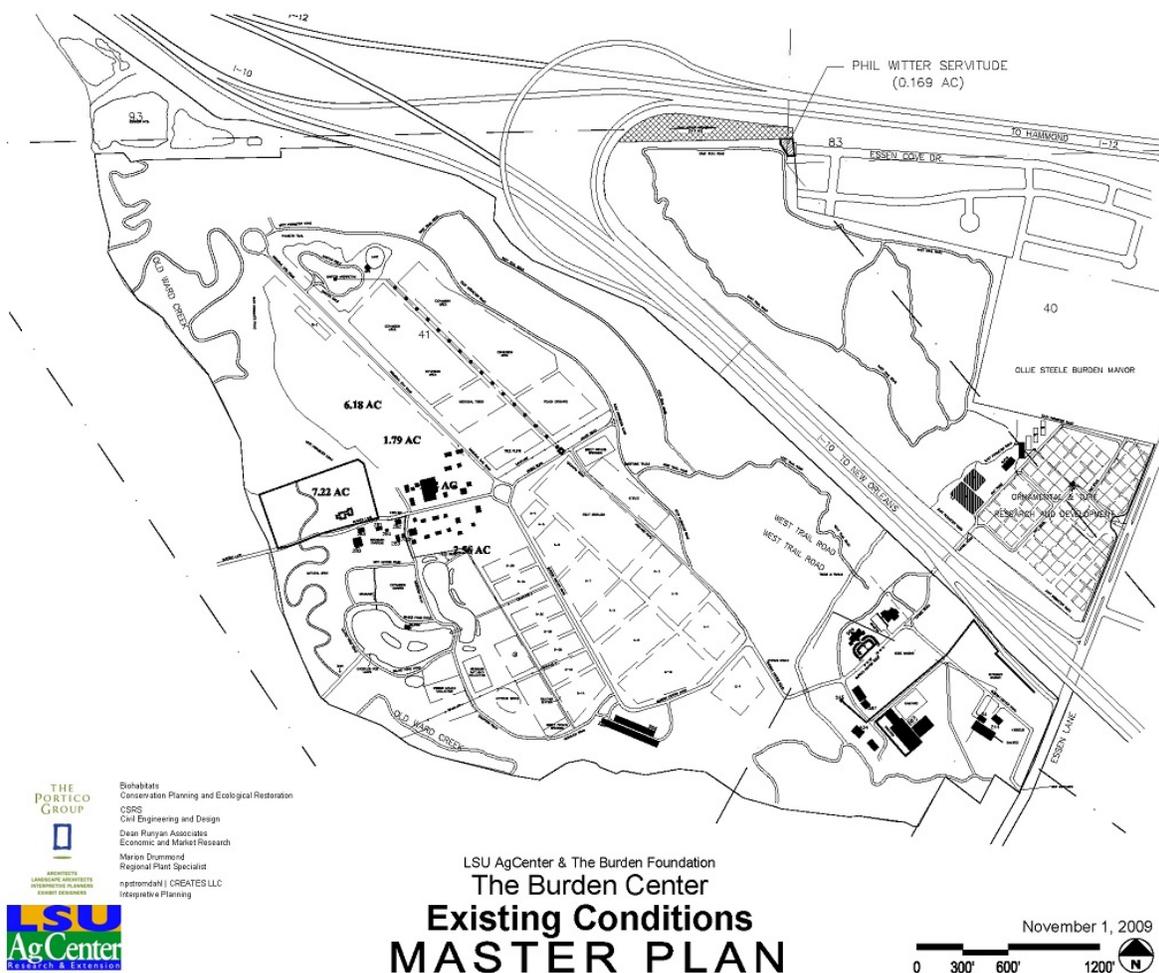


Figure 2 – Current project conditions (Portico Group 2009)

As described in the Master Plan, the new proposed greenhouses are intended to replace other greenhouses that were removed in order to accommodate construction of a new entry road and headquarters building. In the case of the restroom, it would be located near a trailhead and would serve visitors walking the corresponding loop trail (Portico Group 2009).

With regard to the proposed sewerage system, at the present time buildings within the portion of the Burden Center currently under review rely either on small individual mechanical treatment units or on septic tanks/drain fields to accommodate sewage generated on-site. Septic drain fields allow the resulting effluent ultimately to infiltrate into the soil or discharge into laterals of the adjoining Ward Creek Flood Channel. This watercourse comprises the western boundary of the property (Portico Group 2009).

The proposed Master Planned development of the Center necessitates a more efficient and effective solution for the collection and disposal of on-site sewage; however, the construction of alternative, natural-based treatment systems (e.g., constructed wetlands) is unlikely to be permitted within this region of the city. Although there is an existing community sewage collection line running parallel to the Ward Creek Flood Channel on the opposite side of the creek from the Burden Center, a direct connection to this line is not feasible. Instead, the City-Parish Department of Public Works is planning to upgrade the pump station adjacent to the Center's main entrance on Essen Lane, allowing it to accept additional waste. The AgCenter proposes to install a new sewerage system to connect to this upgraded station (Portico Group 2009).

3 ALTERNATIVES

3.1 Overview of Alternatives

The NEPA review process consists of an evaluation of the environmental effects of a federal undertaking, including its alternatives. Three (3) alternatives have been proposed and reviewed including 1) the “No Action” alternative, 2) Replacement of the Coastal Area Research Station, with Upgrades to Current Codes and Standards, and 3) Construction of Infrastructure Improvements at the Burden Center (Proposed Action).

The Coastal Area Research Station (CARS) is located at 22193 Highway 23, Port Sulphur, Plaquemines Parish, Louisiana 70083. At the present time, the station is non-functional due to the hurricane damage it received. The property is slated for transfer to the Plaquemines Parish government in accordance with the original land use agreement.

3.2 Alternative 1 – No Action

Under the “No Action” alternative, there would be no installation of new infrastructure at the Burden Center nor replacement of buildings at CARS. Consequently, the Burden Center would continue to operate under current conditions, but CARS would lose its important research capability. “No Action” would forego the opportunity to relocate AgCenter research functions to a less hazardous location. It also would prevent the expansion of functionality at the Burden Center.

3.3 Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

This alternative would rebuild the damaged CARS facility to pre-disaster configuration, function, and capacity at its original location. The station’s various buildings would be reconstructed within their respective original footprints, incorporating stringent and costly construction requirements in order to meet minimum NFIP standards in a coastal high hazard zone.

3.4 Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

The Applicant proposes to use eligible funding to construct infrastructure improvements that would provide additional services and capacity at the Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809. The Burden Center tract is bisected by Interstate 10, which runs in a northwest-southeast direction through the property. The proposed improvements would allow the LSU AgCenter to restore some of its lost research capabilities, while also providing additional amenities for the visiting public. Mitigation of threats from future flooding at this location would occur by incorporating minimum NFIP design standards, as appropriate. The approximate geographic coordinates of the center of the project site are Latitude 30.40892°, Longitude -91.10586°.

The proposed construction would consist of a new restroom building, sewerage system, and two greenhouses. The restroom would be situated immediately northwest of the Orangerie Building on the portion of the property southwest of Interstate 10 (*Figure 3*). The 33- × 40-foot restroom building would be of wood frame construction with brick veneer and placed near the Trees and Trails Pavilion, where it would serve visitors walking the Trees and Trails loop trail. FEMA funds also would be used for a retaining wall and two (2) short, paved walkways leading from the restroom to the trail. The two proposed 30- × 96-foot greenhouses would be constructed in the northeastern corner of the tract. Finally, a gravity flow and force main sewerage system with concrete manholes and package lift stations would be installed to convey wastewater from the Conference Center, Louisiana Garden Center, and Ornamental and Turf Research Facility to the parish’s upgraded lift station. Pipe diameters would not exceed 12 inches for the gravity flow lines nor 4 inches for the force main. A previously filled and mounded area

near the center of the property would be used as a source for borrow material for the project on an as-needed basis. Another potential borrow area would be located near the proposed restroom building.

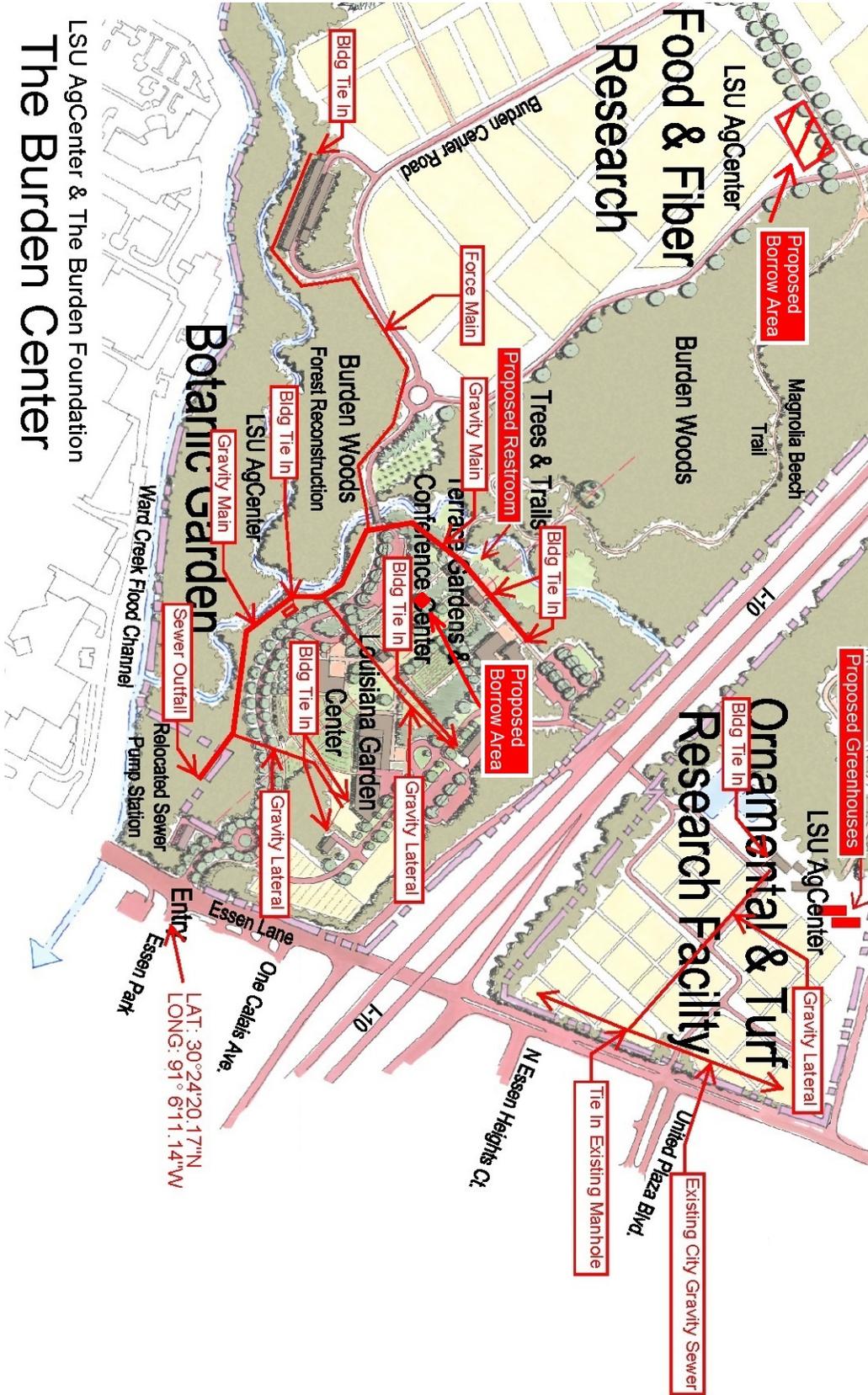


Figure 3 – Schematic proposed site plan

4 AFFECTED ENVIRONMENT AND ALTERNATIVES ANALYSIS

4.1 Geology, Soils, and Topography

4.1.1 Regulatory Setting

The Farmland Protection Policy Act (FPPA) (P.L. 97-98, §§ 1539-1549; 7 U.S.C. § 4201, et seq.) was enacted in 1981 and is intended to minimize the impact federal actions have toward the unnecessary and irreversible conversion of farmland to non-agricultural uses. This law assures that, to the extent possible, federal programs and policies are administered in a way that is compatible with state and local farmland protection policies and programs. In order to implement the FPPA, federal agencies are required to develop and review their policies and procedures every two (2) years. The FPPA does not authorize the federal government to regulate the use of private or non-federal land or, in any way, affect the property rights of owners.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of essential food or environmental resources. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and farmland of statewide or local importance. Prime farmland is characterized as land with the best physical and chemical characteristics for production of food, feed, forage, fiber, and oilseed crops (USDA 2013). Farmland subject to FPPA requirements does not currently have to be used for cropland; it also can be forest land, pastureland, or other land, but not water or built-up land.

4.1.2 Existing Conditions

Within East Baton Rouge Parish, approximate surface elevations range from 20 feet above sea level along the Mississippi River up to 135 feet along ridges in the northern part of the parish. According to the Louisiana Geological Survey, the geology in the vicinity of the project site is predominantly Pleistocene Terraces, which also cover about 20% of the state (*Figure 4*). The Pleistocene Epoch began about 1.8 million years ago and lasted until the beginning of the Holocene Epoch, approximately 11,700 years ago. These terrace deposits consist of sand, gravel, and mud, but underlie raised, flat surfaces that are remnants of pre-existing floodplains formed during periods of glaciation (Louisiana Geological Survey 2010). Today, with the exception of the western fringe along the Mississippi River, the parish consists of loess-like, silty soils deposited by wind action and of moderate natural fertility. Two active faults, running in an east-west direction, are present within East Baton Rouge Parish. The Baton Rouge Fault is located very near the project site. Although these faults are known to be active due to the structural damage they cause over time, they apparently do not cause earthquakes (McCulloh 2001).

The soils of East Baton Rouge Parish vary in their potential for land use and urban development (Dance et al. 1968). According to the Web Soil Survey (USDA 2015), soils in and surrounding the project location consist primarily of three (3) series/complexes, namely Deerford-Verdun complex, Frost silt loam, and Oprairie (formerly Olivier) silt. Of these, only Oprairie silt is classified as prime farmland. All three soil groups formed in loess-like deposits and are poorly or somewhat poorly drained. The Deerford-Verdun complex is characterized by a matrix of large and small, level or nearly level areas interposed with depressions only a few inches deep. Frost soils are found on broad flats and in narrow depressions on broad terraces, while Oprairie soils are typically located on silty upland terraces (Dance et al. 1968).

In East Baton Rouge Parish, the water used for public consumption and certain industrial applications is taken either from the Mississippi River (12.6%) or from groundwater (87.4%). Surface water accounts for about one-quarter of industrial water use. The remaining industrial uses, as well as all other municipal and public supply uses, are satisfied via groundwater withdrawals. Groundwater beneath the study area is located in four (4) major aquifers. These aquifers consist of the Mississippi River alluvial aquifer (above

a depth of about 200 feet below the soil surface), the Chicot equivalent aquifer system (up to about 950 feet deep), the Evangeline equivalent aquifer system (up to about 2,400 feet deep), and the Jasper equivalent aquifer system extending to about 3,000 feet. North of the Baton Rouge Fault, the water in these aquifers is fresh. South of the fault line, freshwater is present above a depth of approximately 400 feet. Below this depth, the groundwater is saline. Due to large groundwater withdrawals by the city of Baton Rouge, saltwater is beginning to encroach into the Chicot equivalent aquifer system north of the fault line. In 2014, there were 838 registered wells in East Baton Rouge Parish (White and Prakken 2015).

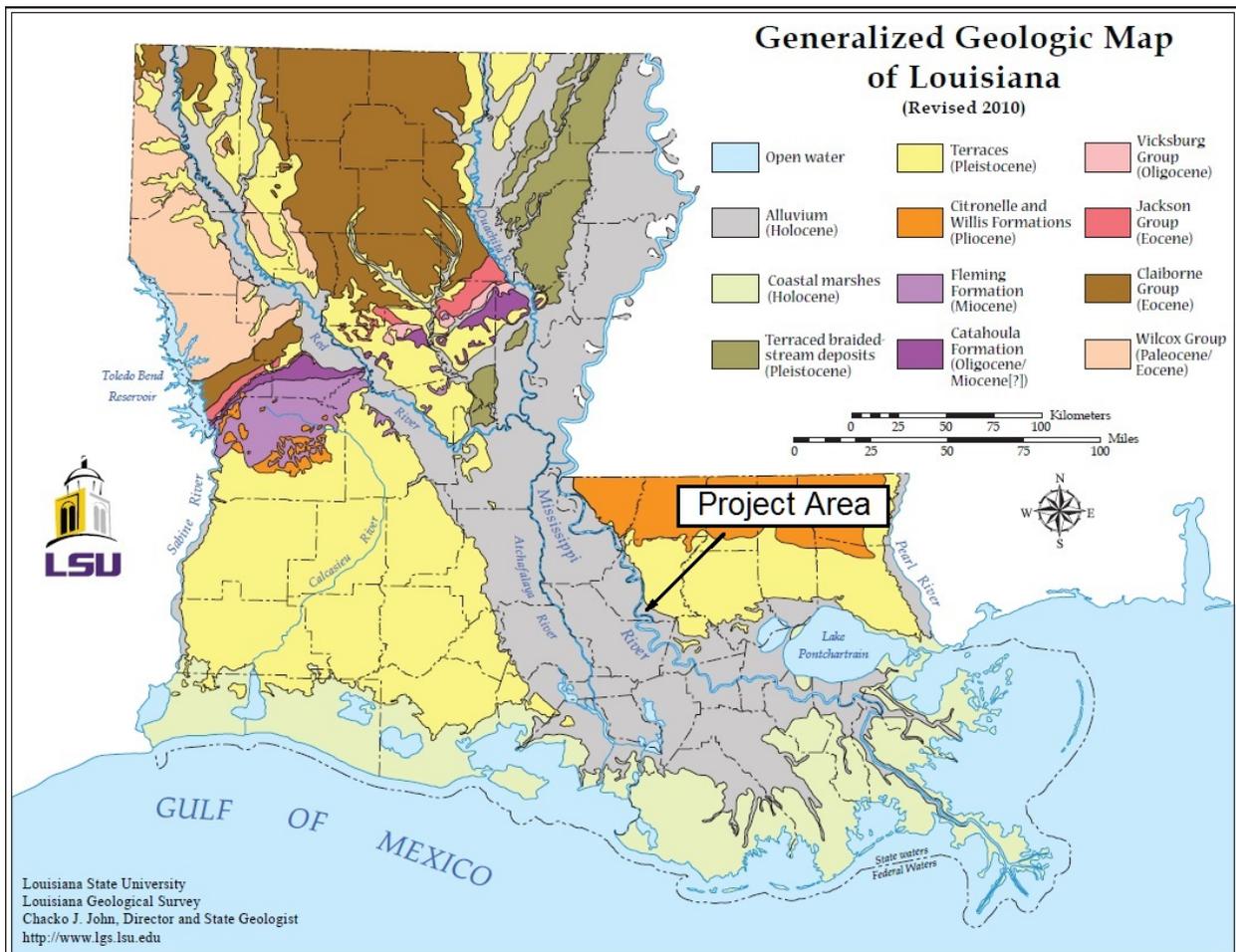


Figure 4 – Generalized Geologic Map of Louisiana indicating project area (Louisiana Geological Survey 2010)

4.1.3 Environmental Consequences

Alternative 1 – No Action

The “No Action” alternative would have no significant impacts on prime farmland, unique farmland, farmland of statewide or local importance, or other important geologic resources.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Although the Cancienne and Schriever soils mapped at the CARS facility are classified as prime farmland, restoration of the facility to its pre-disaster condition would cause no new impacts to important

farmland or other geologic resources. All work performed would be restricted to replacement of currently existing structures in their respective original footprints.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

The Burden Center location does involve new construction within designated prime farmland (USDA 2015); however, the FPPA addresses the conversion of farmland to non-farmland uses only. In its 23 December 2014, letter, the NRCS stated that areas where work will be performed “are being utilized for on-farm structures needed for farm operations or are located in urban areas and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)-Subtitle I of Title XV, Section 1539-1549” (Appendix B). No other significant impacts to geologic resources resulting from Alternative 3 are anticipated.

4.2 Wetlands and Waters of the United States

4.2.1 Regulatory Setting

4.2.1.1 Section 401 of the Clean Water Act

Section 401 of the Clean Water Act (CWA) requires state certification of all federal licenses and permits in which there is a “discharge of fill material into navigable waters.” The certification process is used to determine whether an activity, as described in the federal license or permit, would impact established site-specific water quality standards. A water quality certification from the issuing state, the Louisiana Department of Environmental Quality (LDEQ) in this case, is required prior to the issuance of the relevant federal license or permit. The most common federal license or permit requiring certification is the U.S. Army Corps of Engineers (USACE) CWA § 404 permit.

4.2.1.2 Section 402 of the Clean Water Act

The National Pollutant Discharge Elimination System (NPDES) program was created by § 402 of the CWA. This program authorizes the U.S. Environmental Protection Agency (USEPA) to issue permits for the point source discharge of pollutants into waters of the U.S. Through a 2004 Memorandum of Agreement, the USEPA delegated its permit program for the state of Louisiana to LDEQ. The ensuing Louisiana Pollutant Discharge Elimination System (LPDES) program authorizes individual permits, general permits, stormwater permits, and pretreatment activities that result in discharges to jurisdictional waters of the state.

4.2.1.3 Section 404 of the Clean Water Act

As defined in 33 C.F.R. § 328.3,

(a) The term *waters of the United States* means

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

- (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
- (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
- (5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;
- (6) The territorial seas;
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 C.F.R. § 328.3[b]) (Regulatory Programs of the Corps of Engineers 1986). The USACE, through its permit program, regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to § 404 of the CWA. In addition, the USEPA has regulatory oversight of the USACE permit program, allowing the agency under § 404c to veto USACE-issued permits where there are unacceptable environmental impacts.

4.2.1.4 Section 10 of the Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 (RHA) regulates structures or work in or affecting navigable waters. Navigable waters under this statute are defined as “those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce” (33 C.F.R. § 329.4) (Regulatory Programs of the Corps of Engineers 1986). The USACE implements a permit program to evaluate impacts to navigable waters and their navigable capacity under § 10 (jointly with § 404 of the CWA when a discharge of fill material is also involved). Regulated structures include such objects as buoys, piers, docks, bulkheads, and jetties, while work includes dredging or filling activities.

4.2.1.5 Executive Order 11990 – Protection of Wetlands

Executive Order (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 (U.S. President 1977b). FEMA regulations for complying with E.O. 11990 are found at 44 C.F.R. § 9, Floodplain Management and Protection of Wetlands (1980).

4.2.2 Existing Conditions

Past human interventions have significantly modified the natural hydrologic regime within and around Baton Rouge. Levees along the Mississippi River constructed circa 1812 now prevent the annual overbank flooding that previously occurred (Dance et al. 1968). Many of the city’s urban streams and canals have been channelized, making them straighter, deeper, and lined with concrete in order to accommodate increased runoff. In some cases, urban flooding actually has increased due to these efforts. As part of its Comprehensive Plan, the City-Parish Government proposes to restore a large number of these modified streams to their natural conditions (Baton Rouge Government 2013).

As with stream impacts, the local hydrology also has been altered through the filling of large acreages of wetland watersheds for development. For example, the Bluebonnet Swamp, located approximately two (2) miles south of the project site, lost 50% of its watershed during the period 1941-2001. As a result, the

40-acre wetland has undergone increased sedimentation, resulting in lower water storage capacity and increased nearby flooding (Faulkner 2004). The City-Parish Government plans to prevent further wetland losses through financial incentives for preservation, a requirement for mitigation within the same watershed for unavoidable impacts, and enhancement of existing degraded or low-value wetlands (Baton Rouge Government 2013).

A site inspection of the study tract was performed on 26 January 2015. There are no navigable waters present on the property; however, based on the field inspection, a preliminary jurisdictional determination made by the USACE for a portion of the site, and the U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory map, waters of the U.S., including wetlands, do exist on the subject tract (*Figure 5*) (USDOI 2015e). Most of the stormwater on the property is routed to swales/ditches that direct the flow to other undeveloped areas of the tract, allowing the water to infiltrate naturally into the soil. A smaller percentage of the runoff discharges directly into the Ward Creek Flood Channel (Portico Group 2009).

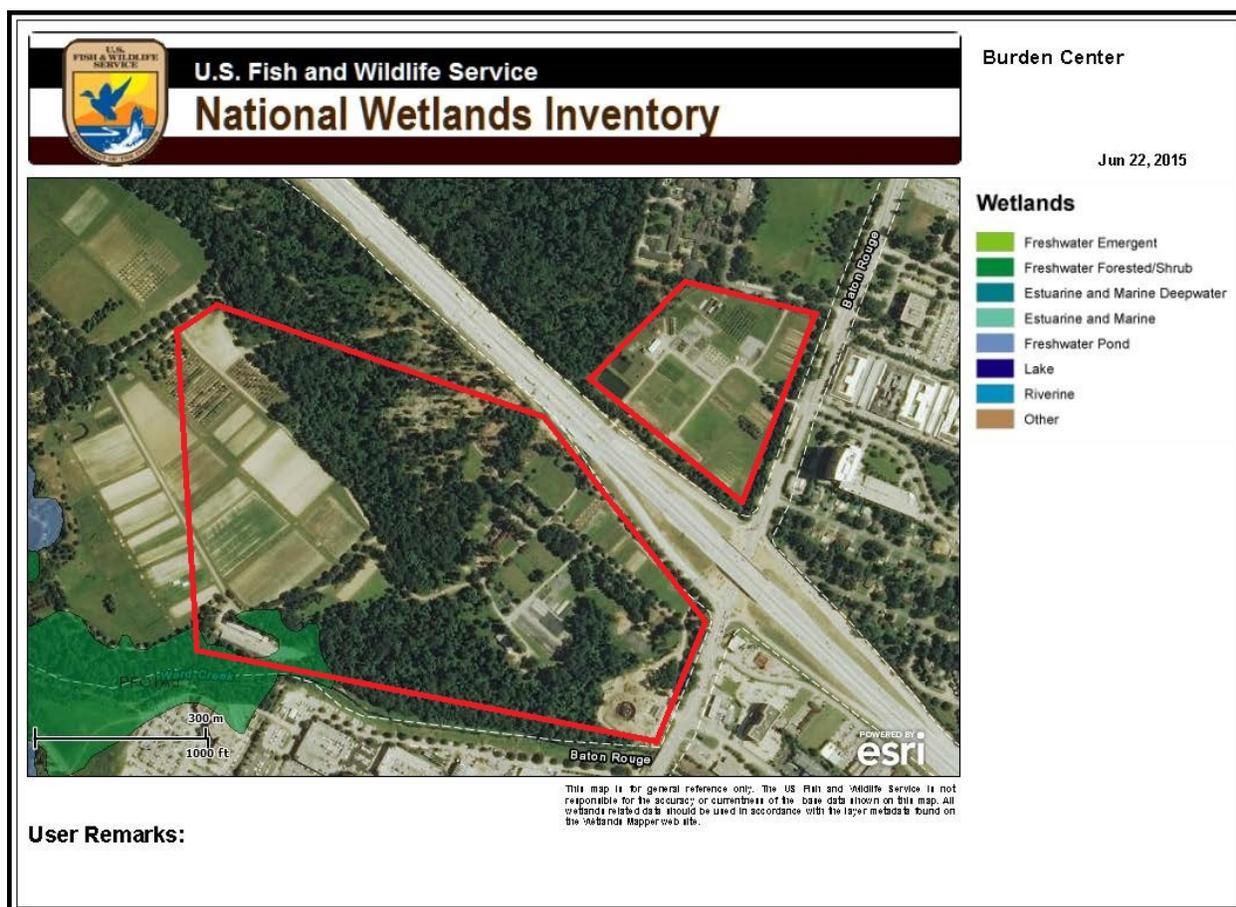


Figure 5 – U. S. Fish and Wildlife Service National Wetlands Inventory map, with approximate boundaries of project site shown in red (USDOI 2015e)

Within the city of Baton Rouge, the setting is decidedly urban. Much of the land surface has been paved, the native vegetation removed, and the remaining open space landscaped with ornamental plants. At the Burden Center, however, this situation is not the case. About half of the Center’s property has been cleared for agriculture, demonstration gardens, or structures, but the remainder is forested. At the proposed locations of the new restroom, the two (2) new greenhouses, and the sewer lines northeast of Interstate 10, observed vegetation was dominated by the lawn grasses, Bermuda grass (*Cynodon dactylon*) and St. Augustine grass (*Stenotaphrum secundatum*).

Data also was collected at several locations along the proposed sewer line route southwest of Interstate 10. In the forested riparian zone adjacent to the remnant flow channel of Ward Creek (in the southeast corner of the tract), vegetation consisted of sugarberry (*Celtis laevigata*), Chinese privet (*Ligustrum sinense*), deciduous holly (*Ilex decidua*), dwarf palmetto (*Sabal minor*), and several minor herbaceous species. Farther to the west, the sewer route follows along the side of an improved road, with planted vegetation characterized by live oak (*Quercus virginiana*), shortleaf pine (*Pinus echinata*), and ornamental camellia (*Camellia japonica*). Finally, a previously filled and mounded area near the center of the property is proposed for use as a source of borrow material (*Figure 3*) for the current project on an as-needed basis. The dominant vegetation present on the designated borrow area consisted of annual blue grass (*Poa annua*), dallisgrass (*Paspalum dilatatum*), and robin's plantain (*Erigeron pulchellus*). The forested wetland adjacent to the new proposed restroom site was dominated by water oak (*Quercus nigra*), red maple (*Acer rubrum*), dwarf palmetto (*Sabal minor*), and sedge (*Carex* sp.). This wetland would not be impacted by the project.

4.2.3 Environmental Consequences

Alternative 1 – No Action

The “No Action” alternative would have no impact on wetlands or other waters of the U.S. and would not require permits under § 404 of the CWA or § 10 of the RHA.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Replacement of the CARS facility to its pre-disaster condition would likewise have no impact on wetlands or waters of the U.S. The locations of the damaged structures are previously-disturbed sites and not wetlands under E.O. 11990. The scope of work would not require permits under § 404 of the CWA or § 10 of the RHA.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

Via written comments dated 9 February 2015, the USACE did not anticipate any adverse impacts to any USACE projects, nor were the proposed project sites located in wetlands subject to USACE jurisdiction (Appendix B). In a 13 January 2015, electronic mail message, the USEPA concurred that, according to its preliminary review, no potential jurisdictional waters of the U.S. are present at the proposed work sites (Appendix B). Thus, the project as proposed apparently would not require permits under § 404 of the CWA or § 10 of the RHA. Although a small area in the southwestern corner of the tract is mapped as a palustrine forested wetland according to the USFWS National Wetlands Inventory map, field observations did not confirm this designation. There would be one sewer line crossing of a stream meeting USFWS wetland criteria at a location near the proposed restroom, however. The Applicant would be responsible for restoring the pre-construction contour of this stream and ensuring that there is no net loss of wetlands under E.O. 11990. Should a more detailed review subsequently determine jurisdictional wetlands to be present in this area, in accordance with 33 C.F.R. § 330 and Section 404(e) of the CWA, nationwide permit 12 authorizes “[a]ctivities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than ½-acre of waters of the United States for each single and complete project,” and provided USACE is informed before construction occurs in accordance with the pre-construction notification procedure (Reissuance of Nationwide Permits 2012).

If project activities cause a discharge to offsite waters of the state, an LPDES permit also may be required in accordance with the CWA and Title 33 of the Louisiana Environmental Regulatory Code. For example, since the proposed project would result in a new 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 addition, proposed construction activities may require an LDPES stormwater permit.

In order to minimize indirect impacts (erosion, sedimentation, dust, and other construction-related disturbances) to waters of the state or well defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet LDEQ permitting specifications for stormwater and also include the following into the daily construction routine: silt screens, barriers (e.g., hay bales), berms/dikes, and or fences to be placed as and where needed. Fencing should be placed to mark staging areas for storage of construction equipment and supplies, as well as for sites where maintenance/repair operations occur.

4.3 Floodplains

4.3.1 Regulatory Setting

E.O. 11988, Floodplain Management, requires federal agencies to avoid direct or indirect support to development within or affecting the 1%-annual-chance Special Flood Hazard Area (SFHA) (i.e., the 100-year floodplain) whenever there is a practicable alternative (U.S. President 1977a) (for “Critical Actions,” within the 0.2%-annual-chance SFHA, i.e., the 500-year floodplain). FEMA’s regulations for complying with E.O. 11988 are found at 44 C.F.R. § 9, Floodplain Management and Protection of Wetlands (1980). These regulations apply to Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains or wetlands.

This DEA forms part of the “Eight Step Planning Process” outlined in 44 C.F.R. § 9 (See Appendix C, 8-Step Decision-Making Process). Additionally, FEMA PA grant-funded projects carried out in the base floodplain or affecting the base floodplain must be coordinated with the relevant local floodplain administrator for a floodplain development permit and the action must be undertaken in compliance with relevant, applicable, and required local codes and standards. This will reduce the risk of future flood loss; minimize the impacts of floods on safety, health, and welfare; and preserve and possibly restore beneficial floodplain values as required by E.O. 11988. Mitigation of potential adverse impacts, if any, must be accomplished by incorporating mitigation and minimization measures, including elevation or flood-proofing of the proposed building and appurtenances to or above the base flood elevation (BFE), when required by state or local ordinances implemented for participation in the NFIP.

4.3.2 Existing Conditions

Approximately 42% of the land area in East Baton Rouge Parish has the potential of being flooded by a 1% -annual-chance flood. The principle flood source in the parish is backwater flooding associated with larger, regional floods along the Amite and Comite Rivers and their tributaries. Besides the flooding directly caused by the Amite River, located on the eastern boundary of the parish, the major tributaries that are affected by backwater include: the Comite River, Jones Creek, Claycut Bayou, and Bayou Manchac. The backwater of Bayou Manchac, which forms the southern boundary of the parish, in turn affects Ward Creek and Bayou Fountain. Backwater from the Comite River also causes major flooding to its tributaries, which consist of Draughan Creek, Beaver Bayou, Shoe Creek, Blackwater Bayou, Hurricane Creek, and lower Cypress Bayou. The major floods that have caused the most damage on the Amite River, Comite River, and their tributaries occurred in 1953, 1977, 1979, 1980, 1983, 1990, 1994, 1995, and 2001. These floods ranged from 10%- to 2%-annual-chance events (DHS 2012d).

4.3.3 Environmental Consequences

Practicable alternatives to locating the proposed action in the floodplain were identified and evaluated. Various practicability factors were considered including feasibility, social concerns, hazard reduction, mitigation costs, and environmental impacts.

Alternative 1 – No Action

The “No Action” alternative would not entail any repair or reconstruction of the CARS facilities, nor any work at the Burden Center. This course would have no further adverse impacts to the floodplain.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Alternative 2 was reviewed for possible impacts associated with occupancy or modification to a floodplain. Plaquemines Parish enrolled in the NFIP on 1 January 1985. According to the NFIP revised preliminary Flood Insurance Rate Map (FIRM) panel number 22075C0475E, dated 9 November 2012, the CARS site lies within a coastal high hazard area “VE” Zone, Elevation 15 feet North American Vertical Datum 1988 (NAVD88) (DHS 2012b). This zone is distinguished as one of special flood hazard, extending from offshore to the inland limit of a primary frontal dune along an open coast, as well as any other area subject to high velocity wave action from storms or seismic sources. Special floodplain management requirements apply in “VE” Zones, including the condition that all buildings be elevated on piles or columns. The ground surface at the project site for this alternative ranges in elevation from 0 to 3 feet above mean sea level (Google Earth 2015b).

This alternative would restore infrastructure in the base floodplain that accommodates the maintenance of existing uses of the floodplain (i.e., reinforces existing land use patterns, which have developed without reflection on hazard and risk minimization). Repairs in coastal high hazard V Zones can have increased costs associated with flood mitigation and minimization requirements. In addition, access to the project would be restricted in the event of a flood and would adversely affect the ability to evacuate.

Per 44 C.F.R. § 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 its participation in the NFIP. The Applicant would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside or above the base floodplain.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

In compliance with FEMA policy implementing E.O. 11988, the proposed project was reviewed for possible impacts associated with occupancy or modification of a floodplain. East Baton Rouge Parish enrolled in the NFIP on 9 September 1970. According to effective FIRM panel number 22033C0265F (*Figure 6*), dated 19 June 2012, parts of the Burden Center site lie within a SFHA Zone “AE,” BFE 31 feet NAVD88 (1%-annual-chance-flood area, i.e., the 100-year floodplain), and parts of the site lie within a flood zone Shaded “X,” (0.2%-annual-chance-flood area, i.e., the 500-year floodplain) (DHS 2012c). Site elevations range from 25 to 40 feet (Google Earth 2015a).

The Proposed Action Alternative would construct facilities to provide additional services and capacity at the Burden Center site. Two proposed greenhouses and new site sewer appurtenances would be constructed on the northern portion of the Burden Center site in a Shaded “X” flood zone, an area of the 500-year floodplain. Additionally, a new restroom and site sewer appurtenances are proposed to be constructed in an area of the base floodplain in flood zone “AE,” BFE 31 feet NAVD88. Finally, two borrow areas have been designated for use during construction that are also located within the “AE” flood zone, BFE 31 feet NAVD88.

Due to the previously developed character of the site, construction of the Burden Center facilities would not significantly affect the functions and values of the 100-year floodplain; adverse impacts to the nature of the floodplain itself from this alternative have been determined to be negligible. This alternative would result in restoration and creation of functions outside the coastal high hazard V Zone, thereby mitigating

flood risk and limiting the chance of isolation or impeded evacuation during flood events. This alternative would construct new facilities in compliance with minimum NFIP building standards, including elevation above the BFE where required, thereby reducing the likelihood of damage from future floods, as well as the need for additional disaster assistance.

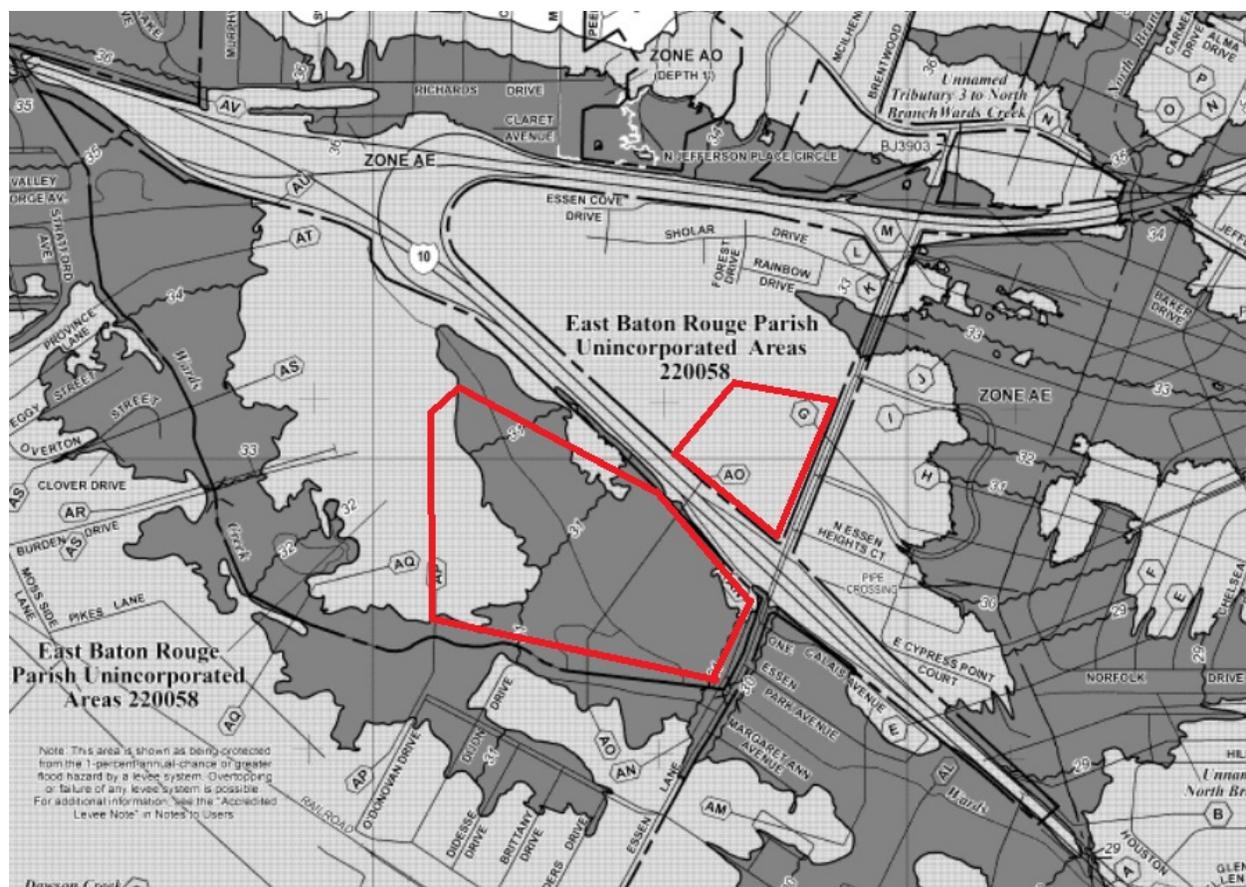


Figure 6 – Effective Flood Insurance Rate Map 22033C0265F, with approximate boundaries of project site shown in red (DHS 2012c)

Per 44 C.F.R. 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 its participation in the NFIP. The Applicant would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside or above the BFE.

4.4 Coastal Resources

4.4.1 Regulatory Setting

4.4.1.1 Coastal Zone Management Act of 1972

The Coastal Zone Management Act (CZMA) encourages the management of coastal zone areas and provides grants to be used in maintaining these areas. It requires that federal agencies be consistent in enforcing the policies of state coastal zone management programs when conducting or supporting

activities that affect a coastal zone. This is intended to ensure that federal activities are consistent with state programs for the protection and, where possible, enhancement of the nation's coastal zones.

The Act's definition of a coastal zone includes coastal waters extending to the outer limit of state submerged land title and ownership, adjacent shorelines, and land extending inward to the extent necessary to control shorelines. A coastal zone includes islands, beaches, transitional and intertidal areas, and salt marshes.

The CZMA requires that coastal states develop a State Coastal Zone Management Plan or program and that any federal agency conducting or supporting activities affecting the coastal zone conduct or support those activities in a manner consistent with the approved state plan or program. To comply with the CZMA, a federal agency must identify activities that would affect the coastal zone, including development projects, and review the state coastal zone management plan to determine whether a proposed activity would be consistent with the plan.

4.4.1.2 Louisiana State and Local Coastal Resources Management Act of 1978

Pursuant to the CZMA, the State and Local Coastal Resources Management Act of 1978 (R.S. 49:214:21 et seq. Act 1978, No. 361), is the state of Louisiana's legislation creating the Louisiana Coastal Resources Program (LCRP). The LCRP establishes policy for activities including construction in the coastal zone, defines and updates the coastal zone boundary, and creates regulatory processes. The LCRP is under the authority of the Louisiana Department of Natural Resources (LDNR) Office of Coastal Management (OCM). If a proposed action is within the coastal zone boundary, OCM will review the eligibility of the project prior to its review from other federal agencies (USACE, USFWS, and National Marine Fisheries Service [NMFS]). The mechanism used to review these projects is the Coastal Use Permit (CUP). Per the CZMA, proposed federal projects within the coastal zone must undergo a Consistency Determination by OCM for that project's consistency with the state's Coastal Resource Program (i.e., LCRP) (LDNR 2015b).

4.4.1.3 Coastal Barrier Resources Act of 1972

The USFWS regulates federal funding in John H. Chafee Coastal Barrier Resources System (CBRS) units under the Coastal Barrier Resources Act (CBRA). CBRA protects undeveloped coastal barriers and related areas (e.g., Otherwise Protected Areas) by restricting direct or indirect federal funding of projects that support development in these areas. CBRA promotes appropriate use and conservation of coastal barriers along the Atlantic and Gulf coasts (USDOJ 2015a).

4.4.2 Existing Conditions

Although the CARS facility is located within the regulated coastal zone, the Burden Center is outside this boundary. Neither the existing facilities nor the proposed project site is located within a regulated CBRS unit, however.

4.4.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would entail no undertaking and, therefore, would have no impact on a coastal zone or a CBRS unit.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Replacement of the damaged CARS facility to pre-disaster condition would involve construction in a designated coastal zone. The LSU AgCenter would be responsible for coordinating with LDNR OCM to

obtain any CUP that might be required for authorization of the project. Consistency with the LCRP does not exempt applicants from the need to obtain a CUP, if required. The CARS site is not located within a CBRS unit; therefore CBRA requirements do not apply.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

In accordance with a letter from LDNR OCM dated 9 January 2015, the Proposed Action is outside the Louisiana Coastal Zone (Appendix B). Consequently, a CUP would not be required. Similarly, the project site is not located within a CBRS unit; therefore CBRA requirements do not apply.

4.5 Federally Protected Species, Critical Habitats, and Other Biological Resources

4.5.1 Regulatory Setting

4.5.1.1 Endangered Species Act

The Endangered Species Act (ESA) of 1973 (16 U.S.C. §§ 1531-1543) prohibits the taking of listed, threatened, and endangered species unless specifically authorized by permit from the USFWS or the NMFS. “Take” is defined in 16 U.S.C. § 1532 (19) as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” “Harm” is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 C.F.R. § 17.3) (Endangered and Threatened Wildlife and Plants 1975).

Section 7(a)(2) of the ESA requires the lead federal agency to consult with either the USFWS or the NMFS, depending which agency has jurisdiction over the federally listed species in question, when a federally funded project either may have the potential to adversely affect a federally listed species, or a federal action occurs within or may have the potential to impact designated critical habitat. The lead agency must consult with the USFWS, the NMFS, or both (Agencies) as appropriate and will determine if a biological assessment is necessary to identify potentially adverse effects to federally listed species, their critical habitat, or both. If a biological assessment is required, it will be followed by a biological opinion from the USFWS, the NMFS, or both depending on the jurisdiction of the federally listed species identified in the biological assessment. If the impacts of a proposed federal project are considered negligible to federally listed species, the lead agency may instead prepare a letter to the Agencies with a “May Affect, but Not Likely to Adversely Affect” determination requesting the relevant agency’s concurrence. This DEA serves to identify potential impacts and meet the ESA § 7 requirement by ascertaining the risks of the proposed action and alternatives to known federally listed species and their critical habitat, as well as providing a means for consultation with the Agencies.

4.5.1.2 Migratory Bird Treaty Act

Unless otherwise permitted by regulation, the Migratory Bird Treaty Act of 1918 (16 U.S.C. § 703-712) prohibits pursuing; hunting; taking; capturing; killing; attempting to take, capture, or kill; possessing; offering for sale; selling; offering to purchase; purchasing; delivering for shipment; shipping; causing to be shipped; delivering for transportation; transporting; causing to be transported; carrying or causing to be carried by any means whatever; receiving for shipment, transportation, or carriage; or exporting; at any time or in any manner, any migratory bird or any part, nest, or egg of any such bird, that is included on the list of protected bird species (General Provisions; Revised List of Migratory Birds 2013). The USFWS is responsible for enforcing the provisions of this Act.

4.5.2 Existing Conditions

One (1) mammal species, the West Indian manatee, two (2) fish species, the Gulf sturgeon and pallid sturgeon, and one (1) invertebrate, the Alabama heelsplitter mussel, are federally listed as threatened or

endangered and are known to occur in select waterways of East Baton Rouge Parish (Table 1) (USDOI 2015c). Both the CARS facility and the proposed project site are located within the Mississippi Flyway (Mississippi Flyway Council n.d.).

Table 1 – Federally Listed Species Known to Occur in East Baton Rouge Parish

Common Name	Scientific Name	Federal Status	Critical Habitat	Habitat Requirements	Impact* / Rationale
Fishes					
Atlantic sturgeon	<i>Acipenser oxyrinchus desotoi</i>	Threatened	Yes ¹	Anadromous fish species that spends most of its life in freshwater habitats and spawns in estuarine bays. Found in a variety of substrate areas based on age class of species.	None / Project area is located upstream of critical habitat areas. Any potential storm runoff would not impact this species.
Pallid sturgeon	<i>Scaphirhynchus albus</i>	Endangered	No	Prefers large, free-flowing turbid rivers. Little information available on life history of species.	None / Less than significant impacts would occur from storm runoff even without proper BMPs in place at storm drain locations.
Mammals					
West Indian manatee	<i>Trichechus manatus</i>	Endangered	Yes ²	Found in marine, estuarine, and freshwater environments with a strong preference for warm and well-vegetated waters.	None / There is no suitable habitat on the proposed project site that is close or directly connected hydrologically to potential habitat for this species.
Invertebrates					
Alabama heelsplitter mussel	<i>Potamilus inflatus</i>	Threatened	No	Inhabits rivers with slow to moderate currents and stable sand or silt bottoms.	None / No suitable rivers are present on or near the proposed project site. Any potential storm runoff would not impact this species.
* Considers potential impacts of Alternatives 1 - 3. ¹ Species may occur in East Baton Rouge Parish, but not within the proposed project area. ² Critical habitat is not designated in Louisiana.					

Note: Data accessed June 2015 from USFWS IPaC Web Portal (<http://ecos.fws.gov/ipac/>) (USDOI 2015d).

Baton Rouge is home to a number of animals adapted to urban conditions, including raccoons (*Procyon lotor*), opossums (*Didelphis marsupialis*), nine-banded armadillos (*Dasypus novemcinctus*), coyotes (*Canis latrans*), white-tailed deer (*Odocoileus virginianus*), eastern gray squirrels (*Sciurus carolinensis*) and various species of snakes and turtles. Over 100 species of common birds are also present (LDWF 2011).

4.5.3 Environmental Consequences

Alternative 1 – No Action

The “No Action” alternative would entail no undertaking and, therefore, would have no impact on species federally listed as threatened or endangered, migratory birds, or federally listed critical habitats.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Replacement of the CARS facility to pre-disaster condition at its current location would have no effect on species federally listed as threatened or endangered, migratory birds, or federally listed critical habitats. USFWS has interpreted § 7(p) of the ESA to mean that restoring any infrastructure damaged or lost due to Hurricane Katrina back to its original footprint does not require ESA consultation per USFWS letter of 15 September 2005, to FEMA.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

An inspection of the affected areas of the Burden Center site did not indicate the presence of any species federally listed as threatened or endangered. In addition, the portions of the property proposed for the new restroom and greenhouses are previously disturbed areas with little value to migratory birds. They would not be included in the USFWS migratory bird management program. The proposed sewerage system route would be disturbed temporarily, but would be restored to pre-project conditions soon thereafter. In correspondence dated 23 January 2015, the Louisiana Department of Wildlife and Fisheries (LDWF) stated that “no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project” (Appendix B). FEMA has determined that this project will have “No Effect” on federally protected species. Concurrence from the USFWS is still pending.

4.6 Air Quality

4.6.1 Regulatory Setting

4.6.1.1 Clean Air Act of 1970 (Including 1977 and 1990 Amendments)

The Clean Air Act (CAA) (42 U.S.C. § 7401 et seq.) is the federal law that regulates air emissions from stationary and mobile sources. This law tasks the USEPA, among its other responsibilities, with establishing primary and secondary air quality standards. Primary air quality standards protect the public’s health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect the public’s welfare by promoting ecosystem health, preventing decreased surface visibility, and reducing damage to crops and buildings. The USEPA also has set National Ambient Air Quality Standards (NAAQS) for the following six (6) criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen oxides (NO_x), ozone (O₃), particulate matter (less than 10 micrometers [PM₁₀] and less than 2.5 micrometers [PM_{2.5}]), and sulfur dioxide (SO₂).

Under the 1990 amendments to the CAA, the USEPA may delegate its regulatory authority to any state which has developed an approved State Implementation Plan (SIP) for carrying out the mandates of the CAA. The State of Louisiana’s initial SIP was approved on 5 July 2011, and its CAA implementing regulations are codified in Title 33.III of the Louisiana Environmental Regulatory Code. The SIP has been revised several times since its original approval.

According to 40 C.F.R. § 93.150(a), “No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.” In addition, 40 C.F.R. § 93.150(b) states, “A Federal agency must make a determination that a Federal action conforms

to the applicable implementation plan in accordance with the requirements of this subpart before the action is taken.” As a result, when FEMA provides financial assistance for a project that is located in a “non-attainment area” for any one (1) of the six (6) criteria pollutants, such as the site currently under review in this DEA, the CAA requires an evaluation of the applicability of the General Conformity Rule (GCR) (Revisions to the General Conformity Regulations 2010).

The GCR currently applies to federal actions that are taken in designated nonattainment or maintenance areas, with the following exceptions: (1) actions covered by the Transportation Conformity Rule, (2) actions with associated emissions clearly at or below specified *de minimis* levels, (3) actions listed as exempt in the rule, or (4) actions covered by an approved “presumed to conform” list (see 40 C.F.R. § 93.153[c]). GCR *de minimis* emission thresholds were created by the USEPA with the intent of limiting the need for General Conformity determinations when actions generate minimal emissions. These thresholds are defined in 40 C.F.R. § 93.153(b) and represent the maximum level of allowable emissions to remain within the *de minimis* exemption, in tons per calendar year for each criteria pollutant or its precursor compound. *De minimis* levels for nonattainment areas in Louisiana, identified in Title 33:III.1405.B of the Louisiana Environmental Regulatory Code, are identical to those defined in the federal statute.

When the total direct and indirect emissions from the project or action are clearly below the *de minimis* threshold, the project or action would not be subject to a General Conformity determination and may proceed. If, on the other hand, emissions are equal to or exceed the 40 C.F.R. § 93.153 or LAC 33:III.1405.B *de minimis* levels, a General Conformity determination must be made by the federal agency involved. In nonattainment parishes, LDEQ usually requests a “general conformity applicability determination” in order to demonstrate that a formal General Conformity determination is not required. Project-associated emissions are quantified using (1) direct emissions and (2) indirect emissions within the scope of the federal agency’s authority. Where state or local projects are funded via FEMA’s PA Grant Program, measurable indirect emissions under FEMA’s authority would be unlikely, thus allowing the CAA applicability determination to be based solely upon direct emissions from vehicles and engines used to construct the project.

4.6.1.2 Executive Order 13514

E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, signed on 5 October 2009, directs federal agencies to reduce greenhouse gas (GHG) emissions and address climate change in NEPA analyses. It expands upon the energy reduction and environmental performance requirements of E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management. E.O. 13514 identifies numerous energy goals in several areas, including GHG management, management of sustainable buildings and communities, and fleet and transportation management. The GHGs covered by this E.O. are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). These GHGs have varying heat-trapping abilities and atmospheric lifetimes (U.S. President 2009).

On 23 January 2012, FEMA issued a written statement, FEMA Climate Change Adaptation Policy Statement (2011-OPPA-01), affirming the directive of E.O. 13514 and enacting as policy measures to “integrate climate change adaptation considerations” into its programs and operations (DHS 2012a).

4.6.2 Existing Conditions

According to *The Green Book Nonattainment Areas for Criteria Pollutants* (USEPA 2015d), the Parish of East Baton Rouge is considered to be a “nonattainment area” for the criteria pollutant, ozone, based upon the 2008 8-hour standard (Implementation of the 2008 National Ambient Air Quality Standards for Ozone 2015). In addition, in electronic mail correspondence dated 29 December 2014, LDEQ confirmed that East Baton Rouge Parish is currently classified by the USEPA as a NAAQS nonattainment area for ozone

and has General Conformity obligations (Appendix B). As a result, a general conformity applicability determination is required for FEMA-funded projects within this parish. Pursuant to both 40 C.F.R. § 93.153(b) and Title 33:III.1405.B.1, the applicable rate and *de minimis* threshold for direct and indirect ozone emissions (Volatile Organic Compounds [VOC] or Nitrogen Oxides [NO_x]) is 100 tons per year per pollutant for each of these two ozone precursors.

4.6.3 Environmental Consequences

Alternative 1 – No Action

The “No Action” alternative would involve no undertaking and, therefore, would cause no short- or long-term impacts to air quality.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

This alternative potentially includes short-term impacts to air quality resulting from construction activities. Particulate emissions from the generation of fugitive dust during project construction would likely be increased temporarily in the immediate project vicinity. Other emission sources on site could include internal combustion engines from work vehicles, air compressors, or other types of construction equipment. These effects would be localized and of short duration. Plaquemines Parish is not a nonattainment area under the CAA and has no General Conformity obligations.

To reduce potential short term effects to air quality from construction-related activities, the contractor would be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. Emissions from the burning of fuel by internal combustion engines would temporarily increase the levels of some of the criteria pollutants, including CO₂, NO_x, O₃, and PM₁₀, and non-criteria pollutants such as VOCs. To reduce these emissions, running times for fuel-burning equipment should be kept to a minimum and engines should be properly maintained.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

In its 29 December 2014 letter, LDEQ states, “If the net total of VOC and NO_x emissions is determined to be less than the prescribed *de minimis* level of 100 tons per year per pollutant, then this action will comply with the conformity provisions of Louisiana’s State Implementation Plan (SIP) and the Assessment Division will not object to implementation of the project” (Appendix B). The LSU AgCenter provided detailed lists of equipment and vehicles proposed for use in constructing the three sub-projects (restroom, greenhouses, and sewerage system), which were used to calculate the estimated quantity of VOC and NO_x emissions.

Calculations were made using the data and equations found in the USEPA publication *AP-42: Compilation of Air Pollutant Emissions Factors* (USEPA 1995), as supplemented by numerous other non-road equipment technical publications, and are in accordance with the methods described in Title 33:III.1411 of the Louisiana Environmental Regulatory Code. No other indirect federal action is anticipated or likely to be required by or related to the proposed construction activities. Indirect emissions, should they occur, would be negligible. Therefore, the conformity applicability determination was based upon calculated direct emissions from estimated vehicle road mileage and construction equipment hours of operation.

FEMA’s air quality analysis for the three (3) proposed sub-projects resulted in calculated VOC emissions of no more than 0.11 ton and NO_x emissions of no more than 0.51 ton for the three sub-projects combined. Consequently, because the calculated emissions for each of the ozone precursors is less than 100 tons, emissions from project construction would be classified as *de minimis* and would not require a

determination under the CAA GCR. Detailed results per sub-project for each individual type of vehicle or piece of equipment are presented in Appendix D.

The Proposed Action alternative does include short-term impacts to air quality that are likely to occur during earth moving, trenching, site preparation, and construction. Particulate emissions from the generation of fugitive dust during project excavation and construction would be temporarily increased in the immediate vicinity of the project area. Other on-site sources of emissions would include internal combustion engines and heavy construction equipment; however, these effects would be localized and of short duration.

To reduce potential short term effects to air quality from construction-related activities, the contractor would be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. For example, the contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from the burning of fuel by internal combustion engines (e.g., heavy equipment and earthmoving machinery) would temporarily increase the levels of some of the criteria pollutants, including CO₂, NO₂, O₃, and PM₁₀, and non-criteria pollutants such as VOCs. To reduce emissions of criteria pollutants, running times for fuel-burning equipment should be kept to a minimum and engines should be properly maintained.

4.7 Noise

4.7.1 Regulatory Setting

Noise is commonly defined as unwanted or unwelcome sound and most commonly measured in decibels (dBA) on the A-weighted scale (i.e., the scale most similar to the range of sounds that the human ear can hear). The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. Sound is federally regulated by the Noise Control Act of 1972, which charges the USEPA with preparing guidelines for acceptable ambient noise levels. USEPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dBA DNL are “normally unacceptable” for noise-sensitive land uses including residences, schools, or hospitals (USEPA 1974). The Noise Control Act, however, only charges implementation of noise standards to those federal agencies that operate noise-producing facilities or equipment.

The Baton Rouge, East Baton Rouge Parish Noise Ordinance (Title 12, Chapter 2 - Noise) places restrictions on any source of sound exceeding the maximum permissible sound level based on the time of day and the zoning district within or adjacent to which the sound is emitted. A number of exemptions exist for certain types of activities, however. In accordance with Noise Ordinance § 12.101, “The following acts, among others, are declared to create loud and raucous noises and shall be deemed a violation of this chapter...: ... (9) The creation of loud and raucous noise by construction work in or adjacent to a residential area other than between the hours of 7:00 a.m. and sunset on weekdays and Saturdays, except in the case of urgent necessity in the interest of public safety for which permission must be obtained from the director of public works. ‘Construction work’ includes but is not limited to the erection, excavation, demolition, alteration, or repair of any building” (Baton Rouge, East Baton Rouge Parish 2015). Zones “A1” and “A4” are residential; Zones “C2” and “HC1” are heavy commercial.

4.7.2 Existing Conditions

All of the work in Baton Rouge under consideration in this DEA is within a residential Zone “A1,” which is intended for single family residences (*Figure 7*) (Baton Rouge Government 2015a). In accordance with the City-Parish Unified Development Code, use of A1 zones by educational, religious, and philanthropic institutions is allowed provided plans are submitted for review by the Planning Commission (Baton Rouge Government 2015c).

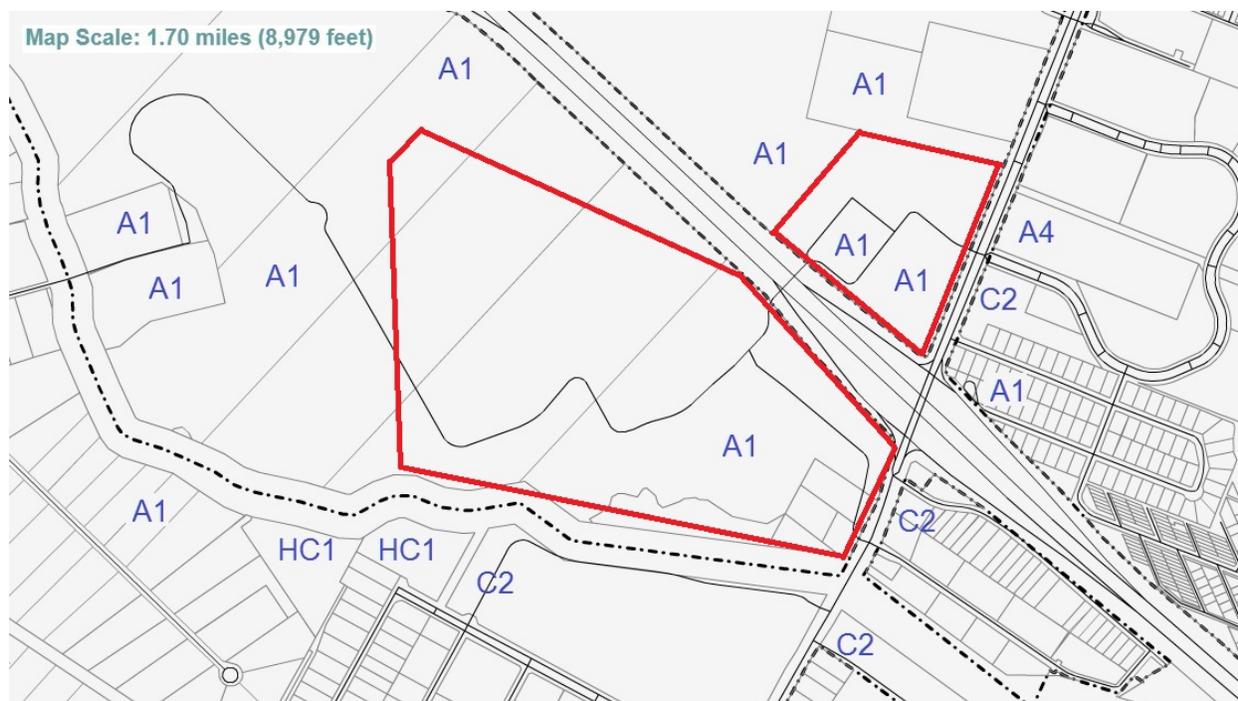


Figure 7 – Baton Rouge zoning map, with approximate boundaries of project site shown in red (Baton Rouge Government 2015a)

4.7.3 Environmental Consequences

Alternative 1 – No Action

Under the “No Action” alternative there would be no short- or long-term impact to noise levels because no construction would occur.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Under this alternative, replacement of the CARS facility would result in short-term increases in noise during the reconstruction period. Equipment and machinery utilized on the project site would be expected to meet all federal, state, and local noise regulations. This work would be subject to the Plaquemines Parish Noise Ordinance (Chapter 17, Article IX - Noise), which restricts noise based on land use and time of day. This ordinance does not provide exemptions for construction activities. For commercial operations, the maximum sound level is 65 dBA between 7:00 a.m. and 10:00 p.m. and 60 dBA between 10:01 p.m. and 6:59 a.m. (Plaquemines Parish 2015). Following completion of construction activities, operations at the rebuilt facility would not result in any significant permanent increases in noise levels.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

For the Proposed Action alternative, construction activities would result in short-term increases in noise during the construction period. Equipment and machinery utilized on the project site would be expected to meet all federal, state, and local noise regulations. Because the site is within a residential area, loud noise would be restricted to between the hours of 7:00 a.m. and sunset on weekdays and Saturdays. Following completion of construction activities, operations at the new proposed facility would not result in any significant permanent increases in noise levels.

4.8 Traffic

4.8.1 Regulatory Setting

The Louisiana Department of Transportation and Development (LaDOTD) is responsible for maintaining public transportation, state highways, interstate highways under state jurisdiction, and bridges located within the state of Louisiana. These duties include the planning, design, and building of new highways in addition to the maintenance and upgrading of current highways. Roads not part of any highway system usually fall under the jurisdiction of and are maintained by applicable local government entities; however, the LaDOTD is responsible for assuring that local agency federal-aid projects comply with all applicable federal and state requirements (LaDOTD 2015a).

4.8.2 Existing Conditions

The Burden Center is surrounded by a large concentration of houses, businesses, and two (2) hospitals. Interstate 10 bisects the tract but does not provide any direct access to the site. Essen Lane, where the main entrance driveway to the property is located, is a heavily traveled road, with two (2) northbound and three (3) southbound vehicle lanes. During morning and afternoon rush periods, traffic congestion is often considerable. The western boundary of the site is demarcated by the Ward Creek Flood Channel. Burden Lane, a narrow one-lane road, crosses this channel and provides restricted access to the western portion of the property.

4.8.3 Environmental Consequences

Alternative 1 – No Action

Implementation of the “No Action” alternative would not adversely affect site traffic patterns as no construction would occur.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

By implementing this alternative, a temporary increase in construction-related traffic during reconstruction of the facility would be anticipated. Highway 23 is not a heavily traveled road, so traffic disruptions likely would be negligible. Once this work has been completed, traffic would be expected to return to normal. Only minimal long-term effects, if any, on current traffic patterns would likely occur.

During construction the contractor would be expected to take all reasonable precautions to control site access. All activities would be conducted in a safe manner in accordance with Occupational Safety and Health Administration (OSHA) work zone traffic safety requirements. The contractor would post appropriate signage and fencing to minimize foreseeable public safety concerns. Proper signs and barriers would be in place prior to the initiation of construction activities in order to alert pedestrians and motorists of the upcoming work and traffic pattern changes (e.g., detours or lanes dedicated for construction equipment egress).

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

Under the Proposed Action alternative, a temporary increase in traffic during construction of the new facility would be expected; however, the Burden Center property is very large and the proposed activities would take place away from the road. Once heavy equipment is staged at the site, there should be no further traffic disruptions until the equipment is removed at the conclusion of the work. A minor increase in daily traffic from construction workers arriving and departing is anticipated. Once the new work is complete, the net result of the construction of the Proposed Action alternative would likely be a minimal

upsurge in traffic levels along Essen Lane due to an increased number of visitors and vehicles to the Center.

During construction the contractor would be expected to take all reasonable precautions to control site access. All activities would be conducted in a safe manner in accordance with OSHA work zone traffic safety requirements. The contractor would post appropriate signage and fencing to minimize foreseeable public safety concerns. Proper signs and barriers would be in place prior to the initiation of construction activities in order to alert pedestrians and motorists of the upcoming work and traffic pattern changes (e.g., detours or lanes dedicated for construction equipment egress).

4.9 Cultural Resources

4.9.1 Regulatory Setting

The consideration of impacts to historic and cultural resources is mandated under § 101(b)(4) of NEPA, as implemented by 40 C.F.R. § 1501-1508 (Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act 2005). 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 NHPA as implemented through 36 C.F.R. § 800.

In order to fulfill its § 106 responsibilities, FEMA has initiated consultation on this project in accordance with the Statewide Programmatic Agreement (Statewide Agreement) dated 17 August 2009, and amended on 22 July 2011, between FEMA, the Louisiana State Historic Preservation Officer (SHPO), LA GOHSEP, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the ACHP (DHS 2009). This Statewide Agreement, as amended, was created to streamline the § 106 review process.

The “Section 106 process” outlined in the Statewide Agreement 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 § 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.

4.9.2 Existing Conditions – Identification and Evaluation of Historic Properties

FEMA Historic Preservation staff consulted the NRHP database and the Louisiana Cultural Resources Map, and determined that the standing structures APE is not located within a NRHP-listed historic district, nor are there any structures within the APE that are individually listed or have been determined eligible for individual listing on the NRHP. The APE for standing structures is located at the southeastern section of the Burden Center that, as a whole, contains large acreage devoted to its historical agricultural use, along with a number of historic buildings associated with the Burden family, who owned the property from the 1850s until the time it was deeded to LSU beginning in the 1960s. The area within the APE, however, has been substantially altered by the construction of Interstate 10 and the Ione Burden Conference Center itself. Substantial changes within the APE to support the conference center during the 1990s included the introduction of new buildings, parking areas, and other associated development. As a result of this development, the portion of the Burden Center located within the APE no longer retains sufficient integrity to convey any association with the historic agricultural use of the Burden property and, therefore, is ineligible for listing in the NRHP.

Upon consultation of data provided by SHPO, there are no recorded archaeological sites within one mile of the APE. A FEMA archaeologist and a SHPO Liaison for Archaeology conducted a site visit to the project area and no archaeological material was identified.

4.9.3 Environmental Consequences

Alternative 1 – No Action

This alternative does not include any FEMA undertaking; therefore FEMA has no further responsibilities under § 106 of the NHPA.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

A review of this alternative was conducted in accordance with FEMA’s Programmatic Agreement dated 17 August 2009, and amended on 22 July 2011. Based on research using the NRHP database and the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation’s website, FEMA has determined that the project area is not located within a National Register Historic District. Upon consultation of data provided by the SHPO, the APE is located within an archaeological site that has not been assessed for its inclusion on the NRHP, however. This alternative would therefore require a review under the § 106 process prior to its implementation.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

FEMA has determined that there will be “No Effect” to historic properties. SHPO concurrence with this determination was received, dated 3 April 2012, and 14 May 2015 (Appendix B). Consultation with affected tribes (Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, Muscogee Creek Nation, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Tunica-Biloxi Tribe of Louisiana) was conducted per FEMA’s Statewide Agreement dated 17 August 2009, and amended on 22 July 2011. The Jena Band of Choctaw Indians submitted written concurrence with the determination. The remaining Tribes did not object within the regulatory timeframes; therefore, in accordance with Stipulation VIII.E(1) of the Statewide Agreement and 36 C.F.R. § 800.5(c)1, FEMA may proceed with funding the undertaking assuming concurrence. The Applicant must comply with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) and the Inadvertent Discovery Clause, which can be found in Section 6 of this DEA, Conditions and Mitigation Measures.

4.10 Hazardous Materials

4.10.1 Regulatory Setting

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including but not limited to the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act (TSCA); the Emergency Planning and Community Right-to-Know provisions of the Superfund Amendments and Reauthorization Act (SARA); the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of the laws provide for the investigation and cleanup of sites already contaminated by releases of hazardous materials, wastes, or substances.

The TSCA (codified at 15 U.S.C., Ch. 53), authorizes the USEPA to protect the public from “unreasonable risk of injury to health or the environment” by regulating the introduction, manufacture,

importation, sale, use, and disposal of specific new or already existing chemicals. “New Chemicals” are defined as “any chemical substance which is not included in the chemical substance list compiled and published under [TSCA] § 8(b).” Existing chemicals include any chemical currently listed under § 8(b), including polychlorinated biphenyls (PCBs), asbestos, radon, lead-based paint, chlorofluorocarbons, dioxin, and hexavalent chromium.

TSCA Subchapter I, “Control of Toxic Substances” (§§ 2601-2629), regulates the disposal of PCB-containing products, sets limits for PCB levels present within the environment, and authorizes the remediation of sites contaminated with PCBs. Subchapter II, “Asbestos Hazard Emergency Response” (§§ 2641-2656), authorizes the USEPA to impose requirements for asbestos abatement in schools and requires accreditation of those who inspect asbestos-containing materials. Subchapter IV, “Lead Exposure Reduction” (§§ 2681-2692), requires the USEPA to identify sources of lead contamination in the environment, to regulate the amounts of lead allowed in products, and to establish state programs that monitor and reduce lead exposure.

4.10.2 Existing Conditions

USEPA and LDEQ database searches for the proposed project site revealed that there are no known hazardous wastes or leaking underground storage tank sites located on or in close proximity to the Burden Center or the CARS facility. No sites of concern were found on or within 0.5 miles of either of the two (2) project areas during a review of LDEQ’s Electronic Document Management System (EDMS) database for other hazardous waste management and disposal, solid waste disposal, enforcement, or related activities. There are no recorded oil or gas wells on or near the project areas; however, there are three (3) registered active water wells on the Burden Center property. Neither tract has any record or indication of past or present hazardous waste activities (LDEQ 2015a, 2015b; USEPA 2015a, 2015c, 2015e).

4.10.3 Environmental Consequences

Alternative 1 – No Action

The “No Action” alternative would not disturb any hazardous materials or create any potential hazard to human health.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Findings indicate that no hazardous materials, wastes, or substances, including contaminated soil or groundwater, appear to be present at the CARS site. If this alternative were implemented, any hazardous constituents unexpectedly encountered in the project area during the reconstruction operation would require that appropriate measures for the proper assessment, remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations.

Project construction could involve the use of hazardous materials (e.g., petroleum products, cement, caustics, acids, solvents, paints, electronic components, pesticides/herbicides and fertilizers, and/or treated timber), and result in the generation of small amounts of hazardous wastes. BMPs should be followed; appropriate measures to prevent, minimize, and control spills of hazardous materials taken; and any generated hazardous or non-hazardous wastes disposed of in accordance with applicable federal, state, and local requirements.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

As with CARS, findings indicate that no hazardous materials, wastes, or substances, including contaminated soil or groundwater, appear to be present within the Burden Center project area. Any

hazardous constituents unexpectedly encountered in the project area during construction operations would require that appropriate measures for the proper assessment, remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations.

Project construction may involve the use of hazardous materials (e.g., petroleum products, cement, caustics, acids, solvents, paints, electronic components, pesticides/herbicides and fertilizers, and/or treated timber) and may result in the generation of small amounts of hazardous wastes. BMPs should be followed; appropriate measures to prevent, minimize, and control spills of hazardous materials taken; and any generated hazardous or non-hazardous wastes disposed of in accordance with applicable federal, state, and local requirements.

4.11 Environmental Justice

4.11.1 Regulatory

E.O. 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” was signed on 11 February 1994 (U.S. President. 1994). The E.O. directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health, environmental, economic, and social effects of their programs, policies, and activities on minority and/or low-income populations.

4.11.2 Existing Conditions

Information obtained from the U.S. Census Bureau (USDOC 2010), compiled and extrapolated by the USEPA and presented on its Enforcement and Compliance History website, indicates that the population within a one-mile radius of the proposed project site is composed of 74.9% White, 15.0% African-American, 3.9% Hispanic, 3.2% Asian/Pacific Islander, and 3.0% other groups. Of these households, 22.7% have incomes less than \$25,000 per year, with approximately 19.2% of individuals existing below the poverty level. For the 5-year dataset 2009-2013, the U.S. Census Bureau’s American Community Survey (USDOC 2013) estimated median household income over the preceding 12 months for the city of Baton Rouge at \$38,593 (in 2013 inflation-adjusted dollars).

4.11.3 Environmental Consequences

In compliance with E.O. 12898, the following key questions were addressed with regard to potential Environmental Justice concerns:

- Is there an impact caused by the proposed action? *No*
- Is the impact adverse? *No*
- Is the impact disproportionate? *No*
- Has an action been undertaken without considerable input by the affected low-income and/or minority community? *No*

Alternative 1 – No Action

The “No Action” alternative would not involve the implementation of a federal program, policy, or activity. As a result, there would be no disproportionately high adverse effects on low-income or minority populations.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Replacement of the CARS facility to current codes and standards likewise would generate no disproportionately high adverse impacts on low-income or minority populations, since pre-disaster functionality would be restored.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

The proposed action would have no disproportionately high adverse human health, economic, or social effects on minority or low-income populations as specified in E.O. 12898. Instead, the proposed project would benefit the entire community by providing additional agricultural research capabilities and the resulting dissemination of research findings, as well as a new amenity for the visiting public. Input from all populations will be solicited through a public notice process.

5 CUMULATIVE IMPACTS

CEQ regulations state that the cumulative impact of a project represents 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 (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 C.F.R. § 1508.7).

In its comprehensive guidance on cumulative impacts analysis under NEPA, CEQ notes that “the range of actions that must be considered includes not only the project proposal, but all connected and similar actions that could contribute to cumulative effects” (Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act 2005). The term, “similar actions,” may be defined as “reasonably foreseeable or proposed agency actions [having] similarities that provide a basis for evaluating the environmental consequences together, such as common timing or geography” (40 C.F.R. § 1508.25[a][3]).

Not every potential issue identified during cumulative effects scoping need be included in a DEA. Because some effects may be irrelevant or inconsequential to decisions about the proposed action and alternatives, the focus of the cumulative effects analysis should be narrowed to important issues of national, regional, or local significance. To assist agencies in this narrowing process, CEQ (2007) provides a list of several basic questions to be considered, including: (1) Is the proposed action one of several similar past, present, or future actions in the same geographic area?; (2) Do other activities (governmental or private) in the region have environmental effects similar to those of the proposed action?; (3) Have any recent or ongoing NEPA analyses of similar or nearby actions identified important adverse or beneficial cumulative effect issues?; and (4) Has the impact been historically significant, such that the importance of the resource is defined by past loss, past gain, or investments to restore resources?

It is normally insufficient when conducting a cumulative effects analysis to merely analyze effects within the immediate area of the proposed action. Geographic boundaries should be expanded for cumulative effects analysis and conducted on the scale of human communities, landscapes, watersheds, or airsheds. Temporal frames should be extended to encompass additional effects on the resources, ecosystems, and human communities of concern. A useful concept in determining appropriate geographic boundaries for a cumulative effects analysis is the project impact zone, that is, the area (and resources within that area) that could be affected by the proposed action. The area appropriate for analysis of cumulative effects will, in most instances, be a larger geographic area occupied by resources outside of the project impact zone (CEQ 2007).

The proposed project site is located at 4560 Essen Lane, on the southern edge of the 70809 zip code geographic region. FEMA has determined that the area within a 0.5-mile radius of the site constitutes an appropriate project impact zone. Due to the site’s position near the edge of the zip code boundary, use of the territory contained within the 70809 zip code perimeter was not appropriate for a cumulative impact investigation of the proposed action and alternatives. Instead, a one-mile radius around the project site was used for this analysis.

In accordance with NEPA, and to the extent reasonable and practical, this DEA considered the combined effects of the Proposed Action alternative and other actions undertaken by FEMA, as well as actions by other public and private entities, that affect the environmental resources the proposed action also would affect, and occur within the considered geographic area and temporal frame(s).

Specifically, a range of past, present, and reasonably foreseeable future actions undertaken by FEMA within the designated geographic boundary area were reviewed: (1) for similarities such as scope of work, common timing and geography; (2) to determine environmental effects similar to those of the proposed action, if any; and (3) to identify the potential for cumulative impacts. As part of the cumulative impacts analysis, FEMA also reviewed known past, present, and reasonably foreseeable future projects of federal

agencies and other parties identified within the designated geographic boundary. These reviews were performed in order to assess the effects of proposed, completed, and ongoing activities and to determine whether the incremental impact of the current proposed action, when combined with the effects of other past, present, and reasonably foreseeable future projects, are cumulatively considerable or significant.

From August 2005 continuing through July 2015, approximately 15 FEMA PA-program-funded emergency protective measure and repair projects have occurred, are occurring, or are reasonably foreseen to occur to buildings, recreational and educational facilities, public utilities, and watercourses within a one-mile radius of the proposed project (*Figure 8*). FEMA-funded undertakings are divided into six (6) categories, three (3) of which are represented within the subject one-mile radius: Category B – emergency protective measures, Category E – public buildings, and Category G – recreational or other. The percentage for each type of project is as follows: Category B – 86.6%, Category E – 6.7%, and Category G – 6.7%. All FEMA-funded actions are subjected to various levels of environmental review as a requirement for the receipt of federal funding. An applicant’s failure to comply with any required environmental permitting or other condition is a serious violation which can result in the loss of federal assistance, including funding.

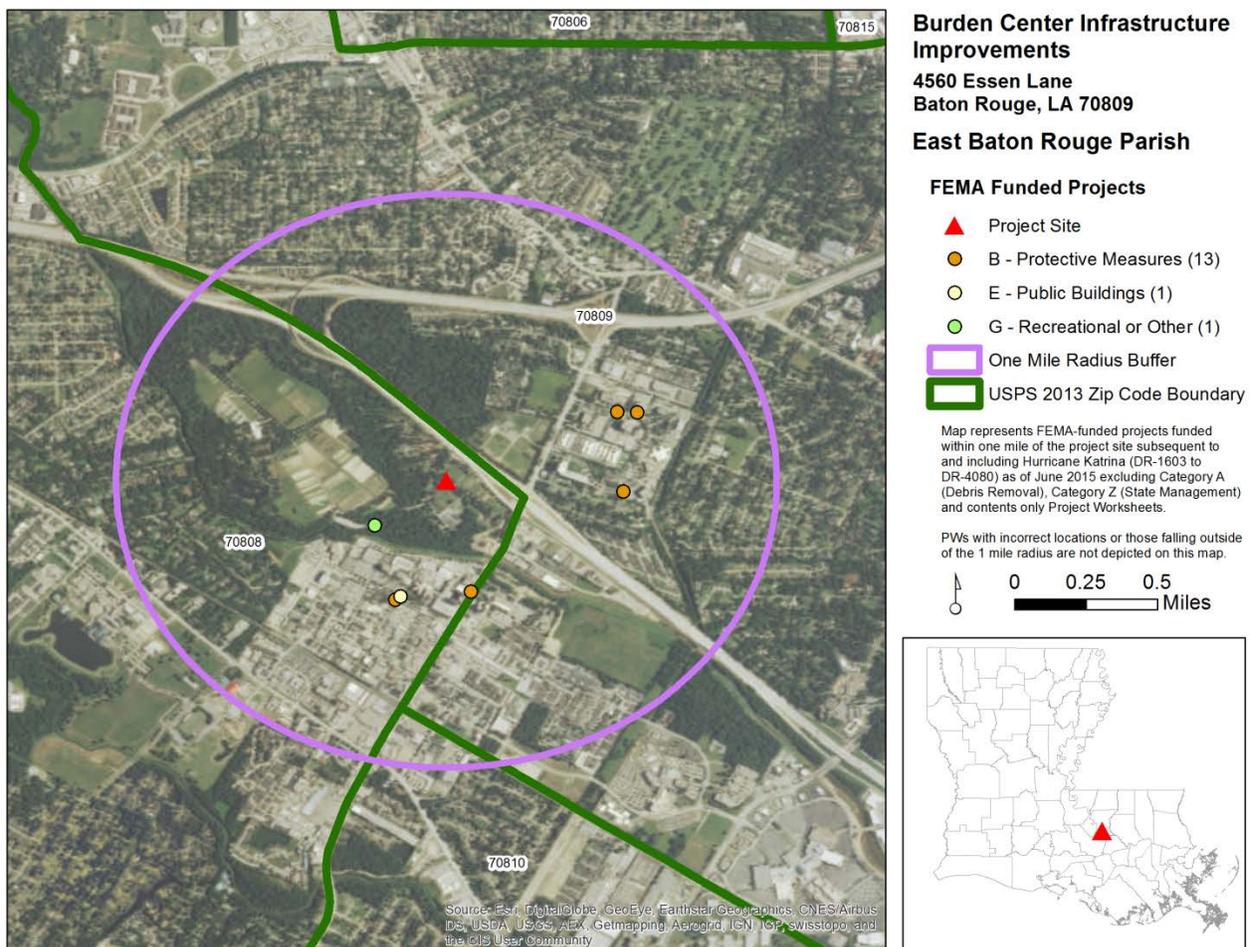


Figure 8 – Locations of FEMA-funded projects occurring within a one-mile radius around the proposed project site. Only one dot is shown for multiple projects at the same facility. The zip code boundaries depicted are approximate.

Table 2 below lists and briefly describes known present, past, and reasonably foreseeable infrastructure and recovery improvement projects, including activities identified by FEMA but not FEMA-funded, within a one-mile radius of the proposed project, for which environmental assessments were performed and/or that may have the potential for cumulative impacts when combined with the effects of the present proposed action. The table also identifies the potential for cumulative impacts when combined with the effects of the proposed action and the rationale for that assessment.

Table 2 – Projects that May Have the Potential to Contribute to Cumulative Impacts

Project Name / Status	Lead Agency	Location	Description	Cumulative Impact	Rationale
LSU Health Care Services Division	FEMA	8550 United Plaza Blvd. Baton Rouge, LA 70809	Emergency protective measures	Negligible	Post-Hurricane Katrina emergency measures such as purchase of damaged equipment and force account labor costs; no impact on proposed action
Our Lady of the Lake Regional Medical Center	FEMA	5000 Hennessy Blvd. Baton Rouge, LA 70808	Emergency protective measures; in-kind building repairs	Negligible	Post-Hurricane Gustav emergency measures such as force account labor costs and replacement of medical equipment, plus in-kind roof and window repairs; no impact on proposed action
Interstate 10 Intelligent Transport System (ITS) deployment - Phase 3 Project # H.006831 (Proposed but not yet authorized) (LaDOTD 2015c)	LaDOTD	Interstate 10, both northwest and southeast of its intersection with Essen Lane	Improvements to Interstate 10, consisting primarily of cable, equipment, and utility pole installation as upgrades to the highway communications system	Negligible	Improvements to existing infrastructure within previously disturbed areas; no impact on proposed action
Essen Lane Bridge widening: Perkins Road to Interstate 10 (Phase 1) Project # H.011668 (Work ongoing) (USDOT and LaDOTD 2014, LaDOTD 2015b)	LaDOTD	Essen Lane, from Wards Creek to a point just north of Interstate 10	Widening of the bridge over Wards Creek, addition of 2 turn lanes to Essen Lane at Interstate 10, and addition of another lane to the Interstate 10 on- and off-ramps. Work at Wards Creek will impact approximately 0.16 acre of waters of the U.S.	Less than significant	Improvements to existing infrastructure, primarily within previously disturbed areas; increased capacity may bring additional visitors to the Burden Center; no significant impact on proposed action
Essen Lane Road widening: Interstate 10 to Perkins Road (Phase 2) Project # H.010560 (Planned for 2016) (USDOT and LaDOTD 2014, LaDOTD 2015b)	LaDOTD	Essen Lane, from Perkins Road to Interstate 10	Widening of Essen Lane to 6 lanes (from 5 lanes) with a center turn lane, including curbs, gutters, and sidewalks. Approximately 0.67 acre of additional right-of-way required.	Less than significant	Improvements to existing infrastructure, primarily within previously disturbed areas; increased capacity may bring additional visitors to the Burden Center; no significant impact on proposed action

CUMULATIVE IMPACTS

Project Name / Status	Lead Agency	Location	Description	Cumulative Impact	Rationale
Essen Lane New concrete pavement Project # H.002361 (Work ongoing) (LaDOTD 2015b)	LaDOTD	Essen Lane at Interstate 10	Repavement of the intersection	Negligible	Repair of existing infrastructure within previously disturbed areas; no impact on proposed action

As identified in Table 2, the cumulative effect of these present, past, and reasonably foreseeable future undertakings is not anticipated to result in a significant impact to any resource. Each of the FEMA-funded projects is either for hurricane-related emergency measures or in-kind building repairs, with minimal impacts to the natural and human environment. Projects related to LaDOTD efforts to improve roads near the Burden Center will result in minor impacts to the human and natural environment; however, the resulting decrease in traffic congestion, vehicle emissions, and reduced transit times are viewed to be a net positive effect. To reduce the environmental impacts from road construction, mitigation measures for impacted resources would be implemented where possible and where required (USDOT and LaDOTD 2014).

6 CONDITIONS AND MITIGATION MEASURES

Construction of the proposed improvements at the proposed location was analyzed based on the studies, consultations, and reviews undertaken as reported in this DEA. The findings of this DEA conclude that no significant adverse impacts to geology, groundwater, floodplains, public health and safety, hazardous materials, socioeconomic resources, environmental justice, or cultural resources are anticipated from the proposed action at the proposed site under the Proposed Action Alternative.

During project construction, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated and conditions have been incorporated to mitigate and minimize the effects. Project short-term adverse impacts would be mitigated using BMPs, such as silt fences, proper vehicle and equipment maintenance, and appropriate signage. No long-term adverse impacts are anticipated from the proposed project. Therefore, FEMA presently finds the proposed action meets the requirements for a FONSI under NEPA and the preparation of an EIS will not be required. If new information is received that indicates there may be significant adverse effects, then FEMA would revise these findings and issue a second public notice for additional comments; however, if there are no changes, this Draft EA will become the Final EA.

Based upon the studies, reviews, and consultations undertaken in this DEA, several conditions must be met and mitigation measures taken by the Applicant prior to and during project implementation:

- The Applicant must follow all applicable federal, state, and local laws, regulations, and requirements and obtain and comply with all required permits and approvals prior to initiating work.
- If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservations 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 (24) hours of the discovery. The Applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two (72) 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 their Public Assistance contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The Applicant will not proceed with work until FEMA HP completes consultation with the State Historic Preservation Office and others, as appropriate.
- The Applicant is responsible for acquiring any §401/404 Clean Water Act permits. When these permits are required, Applicant must maintain documentation of compliance with applicable nationwide permit (NWP), general permit, individual permit, or exemption from permit requirements from the U.S. Army Corps of Engineers prior to construction, unless exempt by the NWP from pre-construction notification. The Applicant must comply with all conditions of any required permit. All coordination pertaining to these activities must be documented and copies forwarded to the state and FEMA as part of the permanent project files.
- Project construction would involve the use of potentially hazardous materials (e.g., petroleum products, including but not limited to gasoline, diesel, brake and hydraulic fluid, cement, caustics, acids, solvents, paint, electronic components, pesticides, herbicides, fertilizers, and/or treated timber) and may result in the generation of small volumes of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials must be taken and generated hazardous or non-hazardous wastes are required to be disposed in accordance with applicable federal, state, and local regulations.

- Per 44 C.F.R. § 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. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside the base floodplain or above the base flood elevation. The Applicant is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. All coordination pertaining to these activities and Applicant compliance with any conditions must be documented and copies forwarded to the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP) and FEMA for inclusion in the permanent project files.
- If the project results in a discharge to waters of the State, a Louisiana Pollutant Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act 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 nearby waters of the U.S. and surrounding drainage areas, the contractor must ensure compliance with all federal, state, and local 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 must be forwarded to LA GOHSEP and FEMA for inclusion in the permanent project files.
- Unusable equipment, debris, and material must be disposed of in an approved manner and location. The Applicant shall handle, manage, and dispose of petroleum products, hazardous materials, and/or toxic waste in accordance with all federal, state, and local agency requirements. All coordination pertaining to these activities must be documented and copies forwarded to the state and FEMA as part of the permanent project files.
- Contractor and/or sub-contractors must properly handle, package, transport and dispose of hazardous materials and/or waste in accordance with all federal, state, and local regulations, laws, and ordinances, including all Occupational Safety and Health Administration worker exposure regulations covered within 29 C.F.R. § 1910 and 1926.

7 PUBLIC INVOLVEMENT

The public is invited to comment on the proposed action. A legal notice was published in *The Advocate*, the journal of record for East Baton Rouge Parish, from Monday, 3 August through Friday, 7 August 2015. Additionally, the Draft Environmental Assessment was made available for review at the Bluebonnet Regional Branch of the East Baton Rouge Parish Public Library located at 9200 Bluebonnet Boulevard, Baton Rouge, LA 70810. Further, there was a 15-day comment period, beginning on Saturday, 8 August, and concluding on Sunday, 23 August 2015, at 4:00 p.m. The document also was published on FEMA's websites. A copy of the Public Notice is attached in Appendix E.

8 AGENCY COORDINATION

Louisiana Department of Environmental Quality

Louisiana Department of Natural Resources

Louisiana Department of Wildlife and Fisheries

Louisiana State Historic Preservation Office

Natural Resources Conservation Service

Tribal Historic Preservation Office and/or cultural offices

U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service

U.S. Army Corps of Engineers

9 LIST OF PREPARERS

Tiffany Spann-Winfield – Deputy Environmental Liaison Officer, FEMA, Louisiana Recovery Office

Darrell Smith – Environmental Specialist (CTR), FEMA, Louisiana Recovery Office

Megan Myers – Lead Environmental Protection Specialist, FEMA, Louisiana Recovery Office

Jason Emery – Lead Historical Preservation Specialist, FEMA, Louisiana Recovery Office

Richard Williams – Historical Preservation Specialist, FEMA, Louisiana Recovery Office

John Renne – Floodplain Specialist (CTR), FEMA, Louisiana Recovery Office

10 REFERENCES

- Baton Rouge, East Baton Rouge Parish. 2015. Code of Ordinances – Title 12, Chapter 2 - Noise; available from https://www.municode.com/library/la/baton_rouge_east_baton_rouge_parish/codes/code_of_ordinances?nodeId=TIT12NU_CH2NO; Internet; accessed 22 June 2015.
- Baton Rouge Government. 2012. Planning District 14 Profile. Office of the Planning Commission; available from <http://brgov.com/dept/planning/econdev/pdf/Pdep14a.pdf>; Internet; accessed 22 June 2015.
- Baton Rouge Government. 2013. Comprehensive Plan. Office of the Planning Commission; available from <http://brgov.com/dept/planning/cpElements.htm>; Internet; accessed 22 June 2015.
- Baton Rouge Government. 2015a. BRmap – Internet Property Finder. Office of the Planning Commission; available from <http://ebrmap.brgov.com/ebrgis/>; Internet; accessed 23 June 2015.
- Baton Rouge Government. 2015b. Our City-Parish Government; available from <http://brgov.com/aboutus.htm>; Internet; accessed 23 June 2015.
- Baton Rouge Government. 2015c. Unified Development Code Online, Chapter 8: Zoning Districts. Office of the Planning Commission; available from <http://brgov.com/dept/planning/udcodeonline.asp>; Internet; accessed 1 July 2015.
- Clean Air Act of 1970. Statutes at large.* 1970. Vol. 84, secs. 1-16, 1676; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-84/pdf/STATUTE-84-Pg1676.pdf>. Amended: *Clean Air Act Amendments of 1977. Statutes at large.* 1977. Vol. 91, secs. 1-406, 685; <http://www.gpo.gov/fdsys/pkg/STATUTE-91/pdf/STATUTE-91-Pg685.pdf>. Amended: *Clean Air Act Amendments of 1990.* 1990. Vol. 104, secs. 101-1101, 2399; <http://www.gpo.gov/fdsys/pkg/STATUTE-104/pdf/STATUTE-104-Pg2399.pdf>; Internet; accessed 14 July 2015.
- Clean Water Act of 1977. Statutes at large.* 1977. Vol. 91, secs. 1-78, 1566; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-91/pdf/STATUTE-91-Pg1566.pdf>. Original: *Federal Water Pollution Control Act. Statutes at large.* 1972. Vol. 86, secs. 1-13, 816; <http://www.gpo.gov/fdsys/pkg/STATUTE-86/pdf/STATUTE-86-Pg816.pdf>. Amended: *Water Quality Act. Statutes at large.* 1987. Vol. 101, secs. 1-525, 7; <http://www.gpo.gov/fdsys/pkg/STATUTE-101/pdf/STATUTE-101-Pg7.pdf>; Internet; accessed 14 July 2015.
- Coastal Zone Management Act of 1972. Statutes at large.* 1972. Vol. 86, secs. 301-315, 1280; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-86/pdf/STATUTE-86-Pg1280.pdf>; Internet; accessed 14 July 2015.
- Comprehensive Environmental Response, Compensation, and Liability Act. Statutes at large.* 1980. Vol. 94, secs. 101-308, 2767; as amended through 31 December 2002; available from <http://www.epw.senate.gov/cercla.pdf>; Internet; accessed 14 July 2015.
- Council on Environmental Quality. 2007. *Considering Cumulative Effects Under the National Environmental Policy Act.* Executive Office of the President. Washington, DC: GPO; available from http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf; Internet; accessed 14 July 2015.
- Dance, Ray E., B. J. Griffis, B. B. Nutt, and A. G. White. 1968. *Soil survey of East Baton Rouge Parish, Louisiana.* USDA Soil Conservation Service (now Natural Resources Conservation Service); available from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/louisiana/LA033/0/EBR.pdf; Internet; accessed 14 July 2015.
- Endangered and Threatened Wildlife and Plants.* 1975. 17 C.F.R. §§ 1-108. *Federal Register* 40 (26 September): 44415 ff.

- Endangered Species Act of 1973. Statutes at large.* 1973. Vol. 87, secs. 1-17, 884; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-87/pdf/STATUTE-87-Pg884.pdf>; Internet; accessed 14 July 2015.
- Environmental Considerations.* 1980. 44 C.F.R. §§ 10. *Federal Register* 45 (18 June): 41142 ff. Amended 2009. *Federal Register* 74 (3 April): 15328-15357; available from <http://www.gpo.gov/fdsys/pkg/FR-2009-04-03/pdf/E9-6920.pdf>; Internet; accessed 14 July 2015.
- Farmland Protection Policy Act. Statutes at large.* 1981. Vol. 95, secs. 1539-1549, 1341; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-95/pdf/STATUTE-95-Pg1213.pdf>. Amended 1985. *Statutes at large*, Vol. 99, sec. 1255, 1518; <http://www.gpo.gov/fdsys/pkg/STATUTE-99/pdf/STATUTE-99-Pg1354.pdf>; Internet; accessed 14 July 2015.
- Faulkner, Stephen. 2004. Urbanization impacts on the structure and function of forested wetlands. *Urban Ecosystems*; 7: 89–106; available from http://www.sfrc.ufl.edu/urbanforestry/Resources/PDF/downloads/Faulkner_2004.pdf; Internet; accessed 29 June 2015.
- Floodplain Management and Protection of Wetlands.* 1980. 44 C.F.R. §§ 9. *Federal Register* 45 (9 September): 59526 ff. Amended 2009. *Federal Register* 74 (3 April): 15328-15357; available from <http://www.gpo.gov/fdsys/pkg/FR-2009-04-03/pdf/E9-6920.pdf>; Internet; accessed 14 July 2015.
- General Provisions; Revised List of Migratory Birds.* 2013. 50 C.F.R. §§ 10 and 21. *Federal Register* 78 (1 November): 65844-65864; available from <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/MBTA%20List%20of%20Brds%20Final%20Rule.pdf>; Internet; accessed 14 July 2015.
- Google Earth. 2015a. Version 7.1.2.2041, Google Inc., Mountain View, CA. Aerial photography of the Burden Center, Baton Rouge, LA, from 17 March 2014.
- Google Earth. 2015b. Version 7.1.2.2041, Google Inc., Mountain View, CA. Aerial photography of the CARS facility, Port Sulphur, LA, from 27 January 2015.
- Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements.* 2015. 40 C.F.R. §§ 50, 51, 52, 70, and 71. *Federal Register* 80 (6 March): 12264-12319; available from <http://www.gpo.gov/fdsys/pkg/FR-2015-03-06/pdf/2015-04012.pdf>; Internet; accessed 1 July 2015.
- Louisiana Department of Environmental Quality. 2014. Electronic mail correspondence dated 29 December 2014, from Yasoob Zia, Environmental Senior Scientist, Assessment Division, in response to FEMA Solicitation of Views.
- Louisiana Department of Environmental Quality. 2015a. *Electronic Document Management System (EDMS)*. Database on-line; available from <http://edms.deq.louisiana.gov/>; Internet; accessed 2 July 2015.
- Louisiana Department of Environmental Quality. 2015b. *SONRIS Interactive Maps*. Database on-line; available from <http://sonris-www.dnr.state.la.us/gis/agsweb/IE/JSViewer/index.html?TemplateID=181>; Internet; accessed 2 July 2015.
- Louisiana Department of Natural Resources. 2015a. Correspondence dated 9 January 2015, from Karl L. Morgan, Administrator, Office of Coastal Management, in response to FEMA Solicitation of Views.
- Louisiana Department of Natural Resources. 2015b. Permits/Mitigation Division; available from <http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=90&pnid=0&nid=189>; Internet; accessed 14 July 2015.

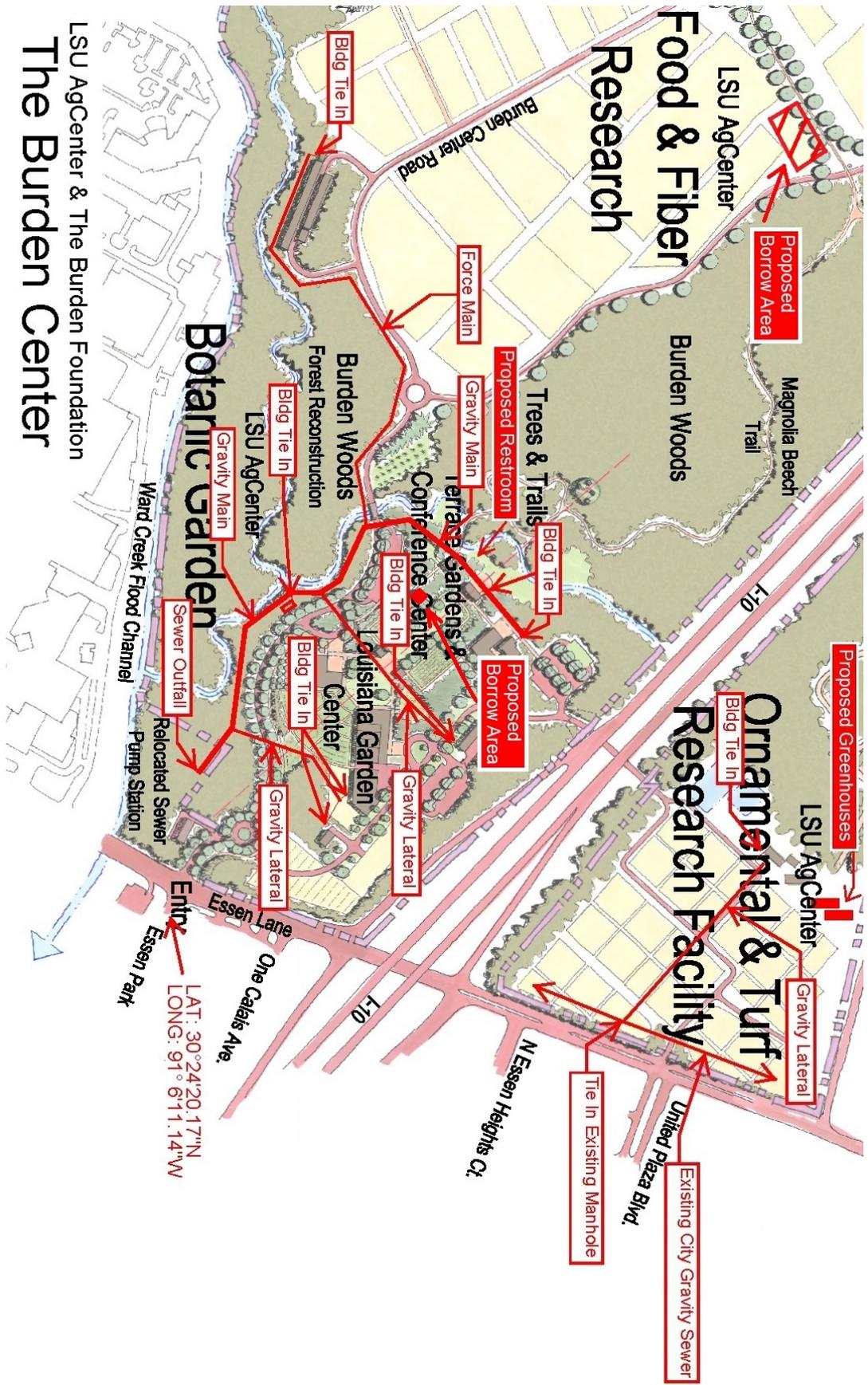
- Louisiana Department of Transportation and Development. 2015a. LaDOTD website; available from <http://www.dotd.louisiana.gov/>; Internet; accessed 7 July 2015.
- Louisiana Department of Transportation and Development. 2015b. Essen Lane Widening Project; available from http://wwwapps.dotd.la.gov/administration/public_info/projects/home.aspx?key=70; Internet; accessed 8 July 2015.
- Louisiana Department of Transportation and Development. 2015c. Proposal H.006831.6 Item Summary; available from <http://wwwapps.dotd.la.gov/engineering/lettings/bidsadvn/includes/ntcItems.aspx?Let=20140813&Prop=H.006831.6&Purp=P>; Internet; accessed 8 July 2015.
- Louisiana Department of Wildlife and Fisheries. 2011. *Louisiana Natural Areas Registry Quarterly Newsletter*, 8 (April); available from http://www.wlf.louisiana.gov/sites/default/files/natural_area_newsletter-april_2011.pdf; Internet; accessed 1 July 2015.
- Louisiana Department of Wildlife and Fisheries. 2015. Correspondence dated 23 January 2015, from Carolyn Michon, signing for Amity Bass, Coordinator, Natural Heritage Program, in response to FEMA Solicitation of Views.
- Louisiana Geological Survey. 2010. *Generalized geologic map of Louisiana*; available from <http://www.lgs.lsu.edu/deploy/content/PUBLI/contentpage17.php>; Internet; accessed 14 July 2015.
- Louisiana State University. 2015. Message from Bill Richardson, LSU Vice President for Agriculture and Dean of the College of Agriculture; available from http://www.lsuagcenter.com/en/administration/about_us/chancellors_office/; Internet; accessed 19 June 2015.
- McCulloh, Richard P. 2001. Active Faults in East Baton Rouge Parish, Louisiana. Louisiana Geological Survey Public Information Series No. 8. Baton Rouge, LA.
- Migratory Bird Treaty Act of 1918. Statutes at large.* 1918. Vol. 40, 755, as amended; summary available from <https://www.fws.gov/laws/lawsdigest/migtrea.html>; Internet; accessed 14 July 2015.
- Mississippi Flyway Council. n.d. The Mississippi Flyway; available from <http://mississippi.flyways.us/>; Internet; accessed 14 July 2015.
- National Environmental Policy Act of 1969. Statutes at large.* 1970. Vol. 83, secs. 1-207, 852; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-83/pdf/STATUTE-83-Pg852.pdf>. Amended 1975. *Statutes at large*, Vol. 89, sec. 102, 424; <http://www.gpo.gov/fdsys/pkg/STATUTE-89/pdf/STATUTE-89-Pg424.pdf>; Internet; accessed 14 July 2015.
- National Historic Preservation Act. Statutes at large.* 1966. Vol. 80, secs. 1-205, 915; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-80/pdf/STATUTE-80-Pg915.pdf>. Amended 2006. *Statutes at large*, Vol. 120, secs. 1 and 216, 3367; <http://www.gpo.gov/fdsys/pkg/STATUTE-120/pdf/STATUTE-120-Pg3367.pdf>; Internet; accessed 14 July 2015.
- National Oceanic and Atmospheric Administration. 2015. 1981-2010 Annual/Seasonal Normals for Baton Rouge Ryan Airport. National Centers for Environmental Information; available from <http://www.ncdc.noaa.gov/cdo-web/datatools/normals>; Internet; accessed 23 June 2015.
- Noise Control Act of 1972. Statutes at large.* 1972. Vol. 86, secs. 1-19, 1234; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-86/pdf/STATUTE-86-Pg1234.pdf>; Internet; accessed 14 July 2015.
- Plaquemines Parish. 2015. Code of Ordinances – Chapter 17, Article IX - Noise; available from https://www.municode.com/library/la/plaquemines_parish/codes/code_of_ordinances?nodeId=PT_IICOOR_CH17OFIS_ARTIXNO; Internet; accessed 1 July 2015.

- Portico Group. 2009. *The Burden Center Master Plan*. Seattle, WA; available from http://www.lsuagcenter.com/NR/rdonlyres/EBF81DC1-A6EA-4E30-8C3A-DEBC61FA563B/83606/LSUBurden_CenterMaster_Plan20091102.pdf; Internet; accessed 23 June 2015.
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. 2005. 40 C.F.R. §§ 1500-1508. Original edition, *Federal Register* 45 (28 August 1980): 57488-57514; available from http://energy.gov/sites/prod/files/NEPA-40C.F.R.1500_1508.pdf; Internet; accessed 14 July 2015.
- Regulatory Programs of the Corps of Engineers*. 1986. 33 C.F.R. §§ 320-330. *Federal Register* 51 (13 November): 41206-41260; available from <http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/FRs/FR13nov86.pdf>; Internet; accessed 14 July 2015.
- Reissuance of Nationwide Permits*. 2012. 33 C.F.R. § 330 and Section 404(e) of the Clean Water Act (33 U.S.C. § 1344). *Federal Register* 77 (21 February): 10184-10290; available from http://www.mvn.usace.army.mil/Portals/56/docs/regulatory/permits/nationwidepermits/NWP_2012_Federal_Register.pdf; Internet; accessed 10 July 2015.
- Resource Conservation and Recovery Act. Statutes at large*. 1976. Vol. 90, secs. 1-4, 2795; as amended through 31 December 2002 available from <http://www.epw.senate.gov/rcra.pdf>; Internet; accessed 14 July 2015.
- Revisions to the General Conformity Regulations*. 2010. 40 C.F.R. §§ 51 and 93. *Federal Register* 75 (5 April): 17254-17279; available from <http://www.gpo.gov/fdsys/pkg/FR-2010-04-05/pdf/2010-7047.pdf>; Internet; accessed 14 July 2015.
- Rivers and Harbors Act of 1899. Statutes at large*. 1899. Vol. 30, secs. 1-22, 1121.
- State and Local Coastal Resources Management Act of 1978. Louisiana State Legislature*. 1978. No. 361, R.S. 49, sec. 214.21; available from <http://www.legis.la.gov/Legis/Law.aspx?d=103626>; Internet; accessed 14 July 2015.
- Superfund Amendments and Reauthorization Act. Statutes at large*. 1986. Vol. 100, secs. 1-531, 1613; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-100/pdf/STATUTE-100-Pg1613.pdf>; Internet; accessed 14 July 2015.
- Toxic Substances Control Act. Statutes at large*. 1976. Vol. 90, secs. 1-31, 2003; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-90/pdf/STATUTE-90-Pg2003.pdf>; Internet; accessed 14 July 2015.
- Transportation Safety Act of 1974. Statutes at large*. 1974. Vol. 88, secs. 101-309, 2156; available from <http://www.gpo.gov/fdsys/pkg/STATUTE-88/pdf/STATUTE-88-Pg2156.pdf>; Internet; accessed 14 July 2015.
- U.S. Department of Agriculture. 2013. *National soil survey handbook, Title 430-VI*. Natural Resources Conservation Service; available from http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/nedc/training/soil/?cid=nrcs142p2_054242; Internet; accessed 14 July 2015.
- U.S. Department of Agriculture. 2014. Correspondence dated 23 December 2014, from Sarah Haymaker, signing for Kevin D. Norton, State Conservationist, Natural Resources Conservation Service, in response to FEMA request for FPPA determination.
- U.S. Department of Agriculture. 2015. Web Soil Survey. Natural Resources Conservation Service; available from <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>; Internet; accessed 29 June 2015.

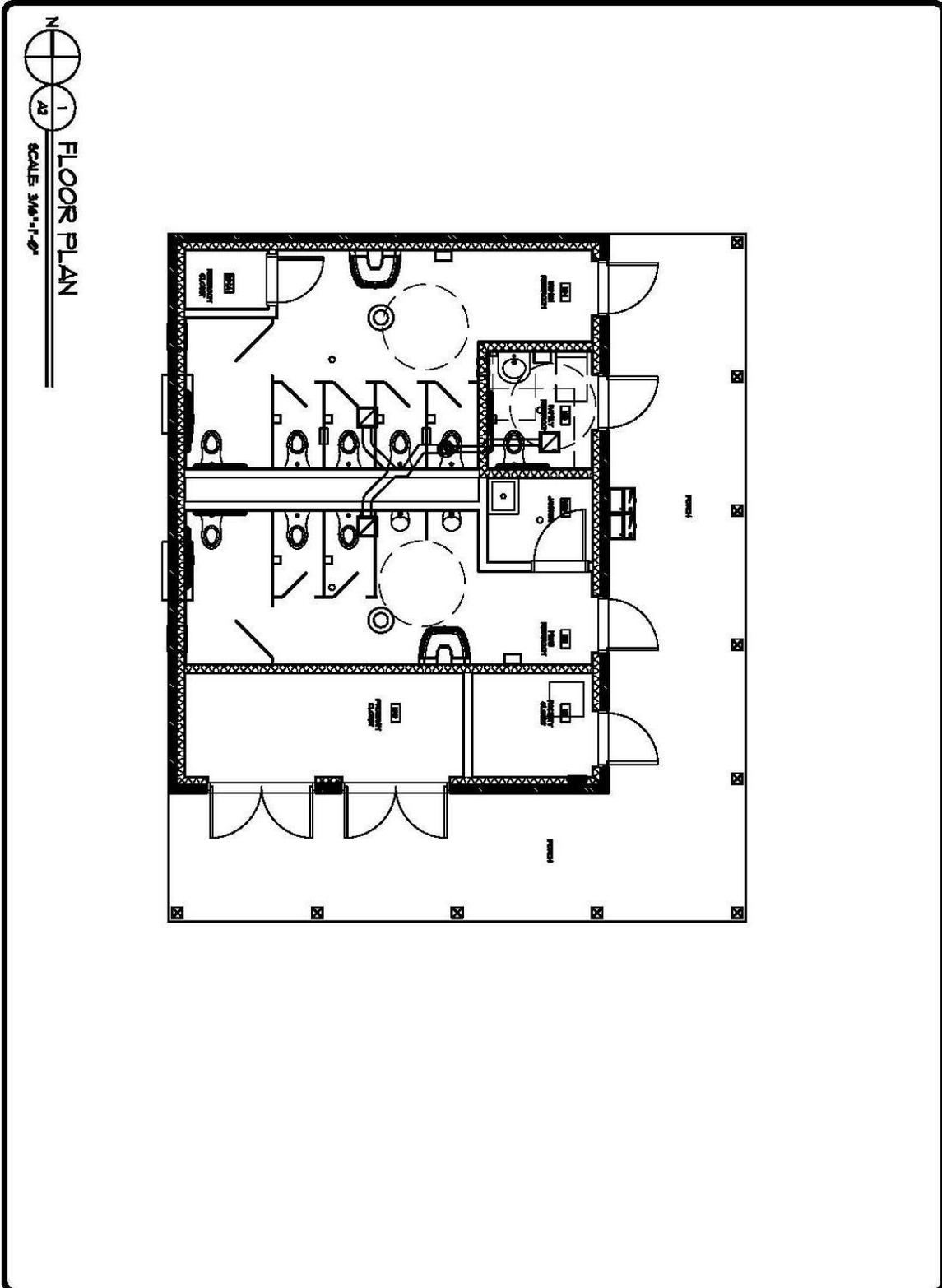
- U.S. Department of Commerce. 2010. Data from the U.S. Census Bureau compiled and extrapolated by Enforcement and Compliance History Online. U.S. Environmental Protection Agency; available from <http://echo.epa.gov/>; Internet; accessed 10 July 2015.
- U.S. Department of Commerce. 2013. American FactFinder: Median income in the past 12 months (in 2013 inflation-adjusted dollars). U.S. Census Bureau; available from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_5YR_B19013&prodType=table; Internet; accessed 2 July 2015.
- U.S. Department of Homeland Security. 2009. Statewide Programmatic Agreement (amended 2011). FEMA; available from <http://www.fema.gov/new-orleans-metropolitan-area-infrastructure-projects-2#2>; Internet; accessed 14 July 2015.
- U.S. Department of Homeland Security. 2012a. FEMA Climate Change Adaptation Policy Statement. FEMA; available from http://www.fema.gov/media-library-data/20130726-1919-25045-3330/508_climate_change_policy_statement.pdf; Internet; accessed 14 July 2015.
- U.S. Department of Homeland Security. 2012b. *Flood Insurance Rate Map*. Map number: 22075C0475E (9 November). FEMA; available from <http://maps.riskmap6.com/LA/Plaquemines/>; Internet; accessed 10 July 2015.
- U.S. Department of Homeland Security. 2012c. *Flood Insurance Rate Map*. Map number: 22033C0265F (19 June). FEMA; available from <http://msc.fema.gov/portal/viewProduct?filepath=/22/P/Firm/22033C0265F.tif&productID=22033C0265F>; Internet; accessed 29 June 2015.
- U.S. Department of Homeland Security. 2012d. *Flood Insurance Study – East Baton Rouge Parish, Louisiana* (19 June). FEMA; available from <http://map1.msc.fema.gov/data/22/S/PDF/22033CV000B.pdf>; Internet; accessed 10 July 2015.
- U.S. Department of the Army. 2015. Correspondence dated 9 February 2015, from Karen L. Clement, Solicitation of Views Manager, Corps of Engineers, New Orleans District, in response to FEMA Solicitation of Views (reference account MVN-2015-00264-SB).
- U. S. Department of the Interior. 2015a. *Coastal Barrier Resources Act*. U. S. Fish and Wildlife Service; available from <http://www.fws.gov/CBRA/>; Internet; accessed 14 July 2015.
- U.S. Department of the Interior. 2015c. Endangered, Threatened, and Candidate Species of Louisiana. U.S. Fish and Wildlife Service; available from http://www.fws.gov/lafayette/pdf/LA_T&E_Species_List.pdf; Internet; accessed 10 July 2015.
- U.S. Department of the Interior. 2015d. Information, Planning, and Conservation System (IPaC). U.S. Fish and Wildlife Service; available from <http://ecos.fws.gov/ipac/>; Internet; accessed 7 July 2015.
- U.S. Department of the Interior. 2015e. National Wetlands Inventory Wetland Mapper. U.S. Fish and Wildlife Service; available from <http://www.fws.gov/wetlands/Data/Mapper.html>; Internet; accessed 7 July 2015.
- U.S. Department of Transportation and Louisiana Department of Transportation and Development. 2014. Environmental Assessment/Finding of No Significant Impact: Essen Lane Widening (Perkins Road to I-10). Federal Highway Administration; available from http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Documents/H.010560%20Essen%20Lane%20Widening%20-%20I-10%20to%20Perkins%20Rd/5-23-14%20EA-FONSI.pdf; Internet; accessed 8 July 2015.
- U.S. Environmental Protection Agency. 1974. *EPA Identifies Noise Levels Affecting Health and Welfare*; available from <http://www2.epa.gov/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare/>; Internet; accessed 14 July 2015.

- U.S. Environmental Protection Agency. 1995. AP-42: Compilation of Air Pollutant Emissions Factors, Vol. II: Mobile Sources (unreleased 5th edition); available from <http://www.epa.gov/oms/ap42.htm>; Internet; accessed 1 July 2015.
- U.S. Environmental Protection Agency. 2015a. *Cleanups in my Community*; available from <http://www2.epa.gov/cleanups/cleanups-my-community>; Internet; accessed 2 July 2015.
- U.S. Environmental Protection Agency. 2015b. Electronic mail correspondence dated 13 January 2015, from Raul Gutierrez, Wetlands Section, Water Quality Protection Division, in response to FEMA Solicitation of Views.
- U.S. Environmental Protection Agency. 2015c. *NEPAassist*; available from <http://nepassisttool.epa.gov/nepassist/entry.aspx>; Internet; accessed 14 July 2015.
- U.S. Environmental Protection Agency. 2015d. *The Green Book nonattainment areas for criteria pollutants*; available from <http://www.epa.gov/oaqps001/greenbk/>; Internet; accessed on 1 July 2015.
- U.S. Environmental Protection Agency. 2015e. Toxics Release Inventory (TRI) Program; available from <http://www2.epa.gov/toxics-release-inventory-tri-program>; Internet; accessed 2 July 2015.
- U.S. President. 1977a. Executive Order. Floodplain Management, Executive Order 11988. *Federal Register* 42 (25 May): 26951; available from <http://www.fema.gov/media-library-data/20130726-1438-20490-9495/eo11988.pdf>; Internet; accessed 14 July 2015.
- U.S. President. 1977b. Executive Order. Protection of Wetlands, Executive Order 11990. *Federal Register* 42 (25 May): 26961; available from <http://www.archives.gov/federal-register/codification/executive-order/11990.html>; Internet; accessed 14 July 2015.
- U.S. President. 1994. Executive Order. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Executive Order 12898. *Federal Register* 59 (16 February): 7629; available from <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>; Internet; accessed 14 July 2015.
- U.S. President. 2009. Executive Order. Federal Leadership in Environmental, Energy, and Economic Performance, Executive Order 13514. *Federal Register* 74 (8 October): 52117; available from <http://www.gpo.gov/fdsys/pkg/FR-2009-10-08/pdf/E9-24518.pdf>; Internet; accessed 14 July 2015.
- Voluntary Investigation and Remedial Action. Louisiana State Legislature*. 1995. No. 1092, R.S. 30, secs. 2285-2290; available from <http://www.deq.louisiana.gov/portal/Portals/0/planning/regs/eqa.pdf>; Internet; accessed 14 July 2015.
- White, Vincent E., and Lawrence B. Prakken. 2015. Water Resources of East Baton Rouge Parish, Louisiana. Baton Rouge, LA: Louisiana Department of Transportation and Development and the U.S. Geological Survey. Fact Sheet; available from http://pubs.usgs.gov/fs/2015/3001/pdf/fs2015_3001.pdf; Internet; accessed 29 June 2015.

Appendix A
Proposed Site Plans



LSU AgCenter & The Burden Foundation
The Burden Center



**TREES & TRAILS RESTROOM
RESTROOM BUILDING**

RODGEN STATION
EVEN LAND
BATON ROUGE, LOUISIANA

NUMBER:	SCALE: AS SHOWN
DRAWN BY:	SHEET OF SHEETS
DATE:	FILE NAME:
REVISION:	ORDERED BY:

--	--

Appendix B
Agency Correspondence



MEMORANDUM TO: See Distribution

SUBJECT: Scoping Notification/Solicitation of Views

Facility Planning and Control, Louisiana State University Agricultural Center (LSU Ag)
Change in Location Project, with Construction of New LSU Ag Center Facilities. Project
#AI 2360 FEMA-1603-DR-LA

To Whom It May Concern:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is mandated by the U.S. Congress to administer Federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. The Stafford Act authorizes FEMA's Public Assistance Program to provide emergency temporary administrative, educational, medical, or other support facilities for areas impacted by disasters while repairs and reconstruction of storm damaged facilities are being undertaken.

The attached scope of work and drawings correspond to a proposed project for which FEMA funding has been requested.

On August 29, 2005 the intense tidal surge and high winds from Hurricane Katrina caused extensive damage to the LSU Agricultural Center facilities and has numerous FEMA funded projects. The Coastal Area Research Station, located near Port Sulphur in Plaquemines Parish, was severely damaged by Hurricane Katrina. In lieu of reconstructing the Coastal Area Research Station, the applicant has requested to close the facilities and utilize the funding for rebuilding and enhancing research facilities in other locations throughout the state.

This alternate project is the applicant's request to 1) Construct a shop/equipment/storage building at Rice Research Station, 1373 Caffey Road, Rayne, LA 70578; 2) Construct a facility sewer collection system at Burden Center 4560 Essen Lane, Baton Rouge, LA 70809; 3) Construct public restrooms at Burden Center, 4560 Essen Lane, Baton Rouge, 70809; and 4) Renovate an existing building to serve as a commercial kitchen at the Food Technology Incubator Cooperative Extension Storage Building at 4161 Gourrier Lane, Baton Rouge, LA 70803.

To ensure compliance with the National Environmental Policy Act (NEPA), Executive Orders (EOs), and other applicable Federal regulations, FEMA-EHP will be preparing an Environmental Assessment (EA). To assist us in preparation of the EA, FEMA-EHP request that your office review the attached documents for a determination as to the requirements of any formal consultations, regulatory permits, determinations, or authorizations.

Please respond within thirty (30) calendar days of the date of this scoping notification. If our office receives no comments at the close of this period, we will assume that your agency does not object to the project as proposed.

Comments may be emailed to bianca.kinglondon@fema.dhs.gov or mailed to the attention of Bianca King London, Environmental Department, at the address above.

For questions regarding this matter, please contact Bianca King London, Environmental Specialist at (225)202-5463.

Sincerely,

Tiffany Spann-Winfield,
Deputy Environmental Liaison Officer, FEMA LRO
FEMA 1603/1607-DR-LA

Distribution: LDEQ, USEPA, LDWF, LDNR, USACE

Attachments: Damage Description/ Four (4) Proposed Scopes of Work
Site Drawings at the Four (4) Proposed Project Areas for the

Melanie Pitts
Environmental & Historic Preservation (EHP)
Lead Environmental Preservation Specialist
1603/1607-DR-LA
BB (504) 427-8000

Scope of work for Facility Planning and Control, Louisiana State University Agricultural Center:

Facility Planning and Control (FP&C), State of Louisiana, Louisiana State University Agricultural (LSU Ag) Center is requesting a change in location project. Hurricane Katrina caused substantial damage to the applicant's original facility located at their Coastal Area Research Station in Port Sulphur, Louisiana. This request is to close the Coastal Area Research Station and utilize the funding for rebuilding the facilities damaged or destroyed in other locations throughout the state. FP&C wishes to apply eligible funding toward separate construction projects, outside the coastal V-zone in other less hazardous areas LSU owns, while still meeting the research needs of the LSU Ag Center.

Previous authorizations were issued for much of the LSU Ag Center relocation work. FEMA has determined this improved project, as requested by the applicant, encompasses four (4) new projects which were not included in any previous request. Maps for each project are included, and each would be constructed to incorporate all of the same functions as the original buildings, in a new footprint, outside the V-zone as follows:

- Construction of a shop/equipment/storage building at Rice Research Station, 1373 Caffey Road, Rayne, LA 70578 with three (3) covered open bays in a pre-engineered metal building measuring 50 feet in width and 150 feet in length. The enclosed bay would include a framed build-out for an office, restrooms, break room, tool rooms, and an open floor space for a mechanic shop and farm equipment storage area. The project would include all necessary site work, utilities, and construction for a complete and functional facility. See Figure 1 which shows the work would be located at the following coordinates:

Latitude 30.245833 and Longitude -92.345278

Latitude 30.245833 and Longitude -92.344722

Latitude 30.245556 and Longitude -92.344722

Latitude 30.245556 and Longitude -92.345278

- Construction of a facility sewer collection system at Burden Center 4560 Essen Lane, Baton Rouge, LA 70809. The new system would consist of PVC gravity and pressure pipes, concrete sewer manholes, and package lift stations to collect and route all existing and future Burden Center sewer waste into the Baton Rouge municipal sewer treatment system. The project is shown in Figure 2, and would be located at:

Latitude 30.405603 and Longitude -91.103094

- Construction of public restrooms at Burden Center, 4560 Essen Lane, Baton Rouge, 70809. A new public restroom facility at the Burden Center would support educational and outreach programs and other visitors. The project would build a stand-alone restroom facility with storage, to comply with standards of the Burden Center. The project would include "green features" such as solar lighting, water saving plumbing fixtures, recycled construction material. All site work, utilities and construction would be included for a complete and functional facility shown in Figures 3 and 4, and would be located at:

Latitude 30.408478 and Longitude -91.106867

- Construction of commercial kitchen at Food Technology Incubator Cooperative Extension Storage Building at 4161 Gourrier Lane, Baton Rouge, LA 70803. The project would include renovation, remodeling and build-out of an existing 16,500 square foot warehouse. The project would build two (2) diverse commercial type kitchens and all necessary support space (coolers, freezers, packaging and bottling, storage, etc.) to expand capabilities of the Food Technology Incubator. The project would include all necessary fixed equipment, site work, parking, utilities and construction for a complete and functional facility shown in Figure 5 located at:

Latitude 30.403692 and Longitude -91.175358

Figure 2

Facility Sewer Collection System Burden Center Site Plan

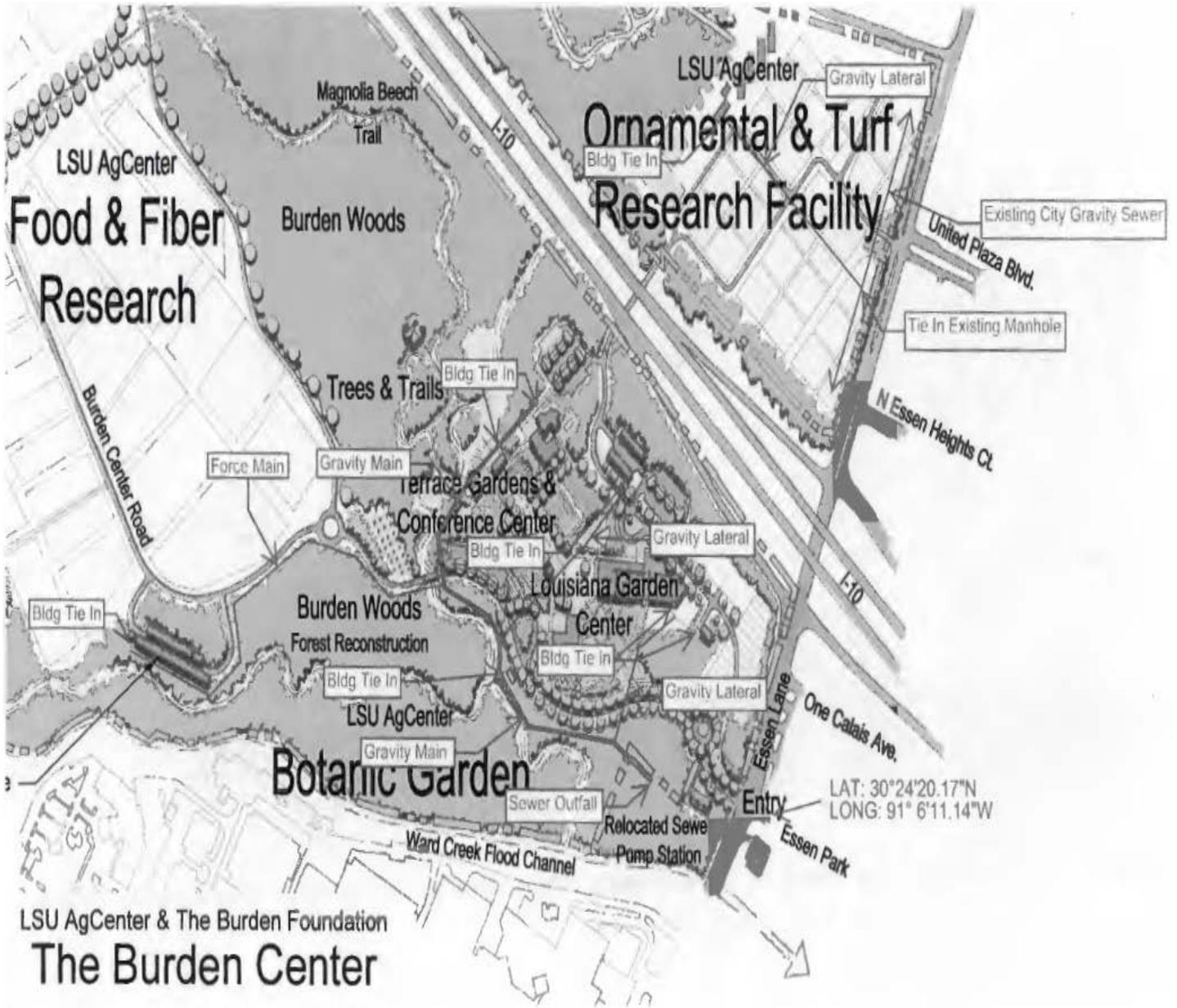


Figure 2a Facility Sewer Collection System Burden Center Site at Burden Center 4560 Essen Lane, Baton Rouge, LA 70809

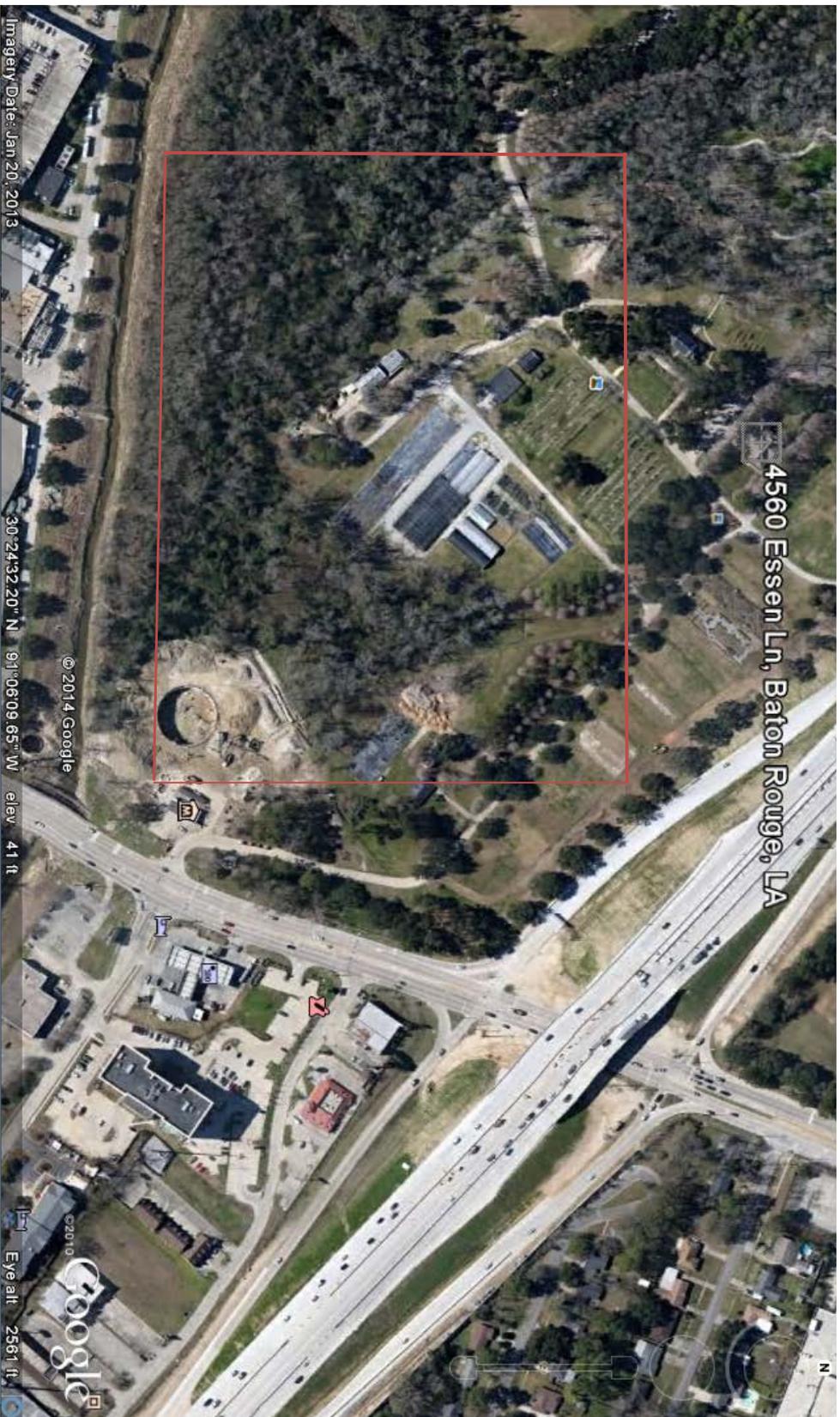
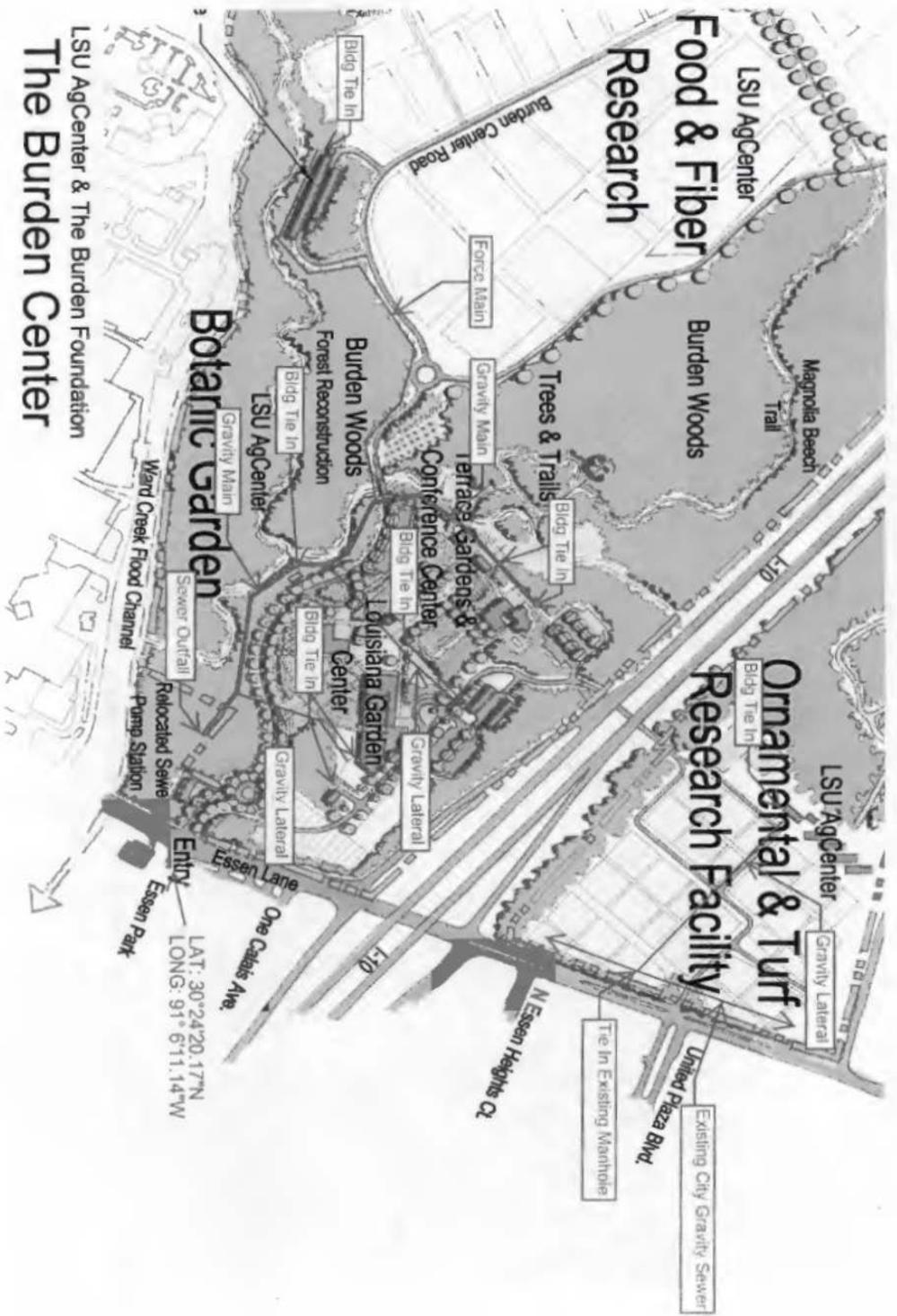


Figure 2b Facility Sewer Collection System Burden Center Site at Burden Center 4560 Essen Lane, Baton Rouge, LA 70809



LSU AgCenter & The Burden Foundation
The Burden Center

Figure 3

Public Restroom Burden Center Site Plan and Floor Plan

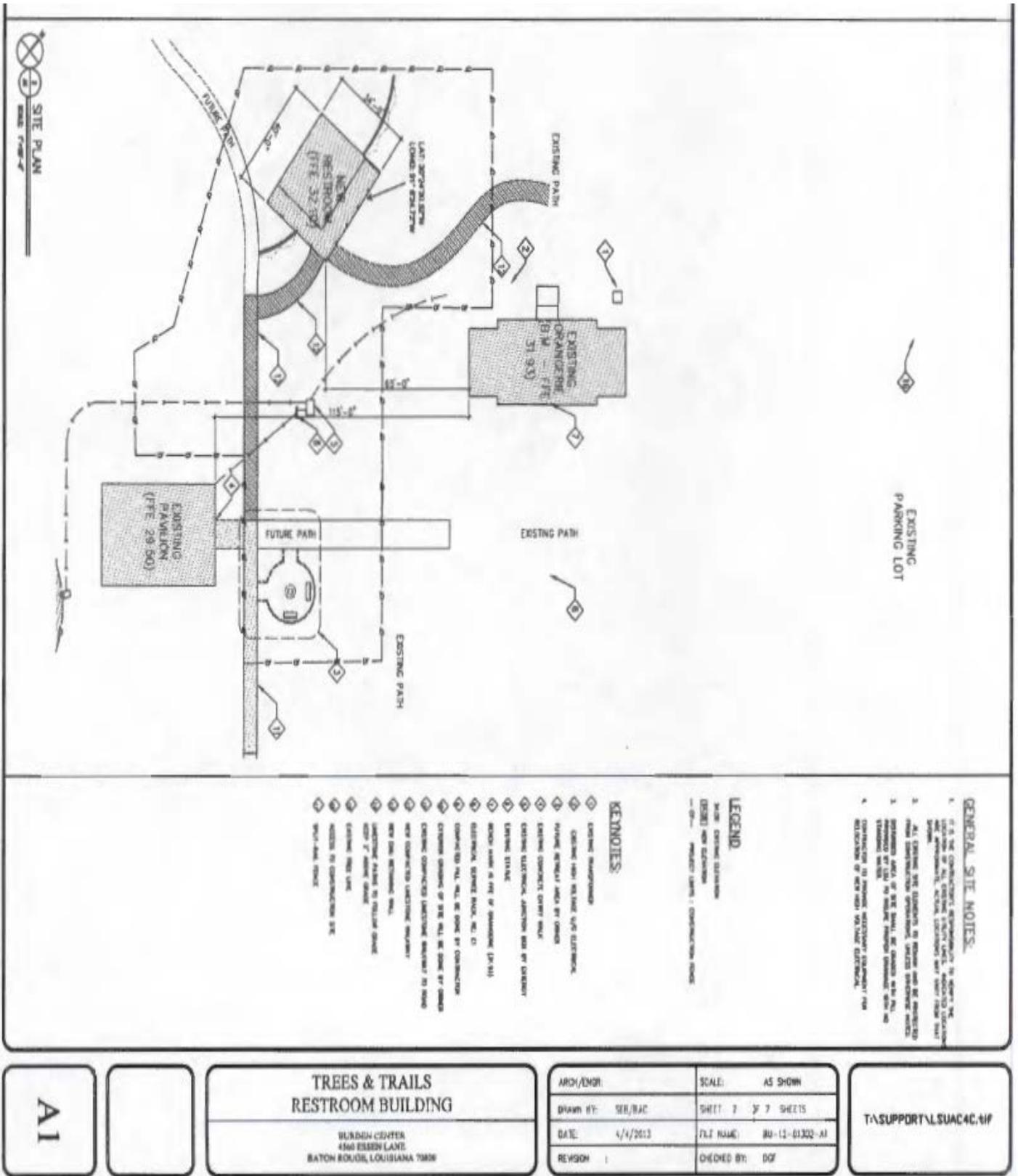
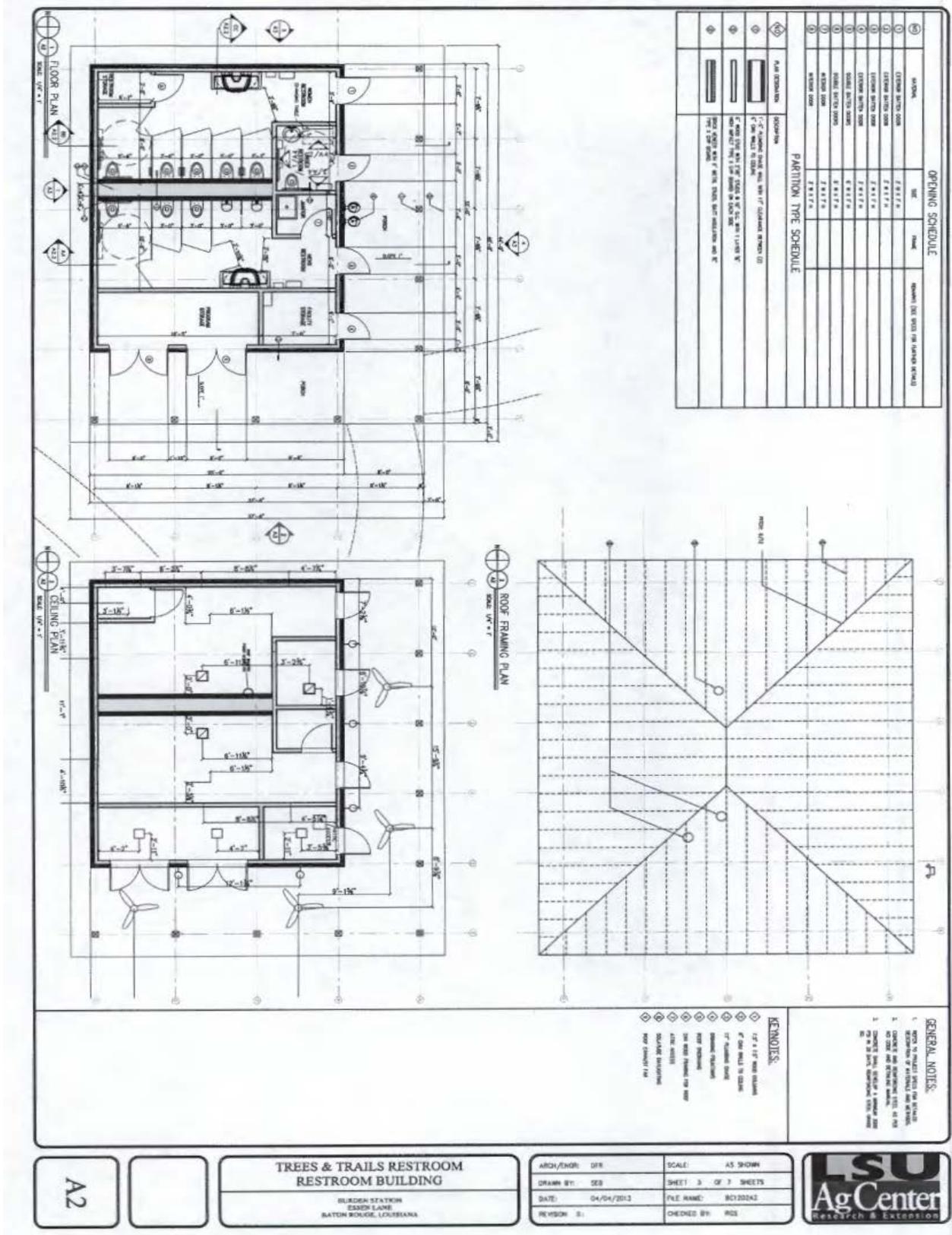


Figure 4

Public Restroom Burden Center Site Plan and Floor Plan





December 23, 2014

Bianca King London
U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA-DR 1603/1607 LA
Louisiana Recovery Office
1500 Main Street
Baton Rouge, Louisiana 70802

RE: LSU AgCenter - Research Facilities

Dear Ms. London:

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 map and narrative submitted with your request indicates that the proposed construction areas are being utilized for on-farm structures needed for farm operations or are located in urban areas and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Attached is the completed AD-1006 form *Farmland Conversion Impact Rating*. Furthermore, we do not predict impacts to NRCS work in the vicinity.

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**

Enclosure

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 12/16/2014				
Name of Project: Louisiana State Center		Federal Agency Involved FEMA				
Proposed Land Use LSU Ag Center Research Facilities		County and State 1373 Caffey Road, Rayne, LA 70578				
PART II (To be completed by NRCS)		Date Request Received By NRCS 1		Person Completing M. Mon		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		Irrigated _____ Average Farm Size _____		
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: _____ %	Amount of Farmland As Defined in FPPA Acres: _____ %				
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land _____ by NRCS 12 2				
PART III (To be completed by Federal Agency)		Site				
A. Total Acres To Be Converted Directly		Site A	Site B	Site C	Site D	
B. Total Acres To Be Converted Indirectly		0.5				
C. Total Acres In Site		1				
		10				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland						
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted In Govt. _____ Same Or Higher Relative Value _____						
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted of 0 to 100						
PART VI (To be completed by Federal Agency) Site Assessment Criteria are in 7 CFR 658.5 b. For use form		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use		(15)				
2. Perimeter In Non-urban Use		(10)				
3. Percent Of Site Being Farmed		(20)				
4. Protection Provided By State and Local Government		(20)				
5. Distance From Urban Built-up Area		(15)				
6. Distance To Urban Support Services		(15)				
7. Size Of Present Farm Unit Compared To Average		(10)				
8. Creation Of Non-farmable Farmland		(10)				
9. Availability Of Farm Support Services		(5)				
10. On-Farm Investments		(20)				
11. Effects Of Conversion On Farm Support Services		(10)				
12. Compatibility With Existing Agricultural Use		(10)				
TOTAL SITE ASSESSMENT POINTS		160	0	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	0	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	0	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	0	0	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used?		
				YES <input type="checkbox"/> NO <input type="checkbox"/>		

Reason For Selection:

Name of Federal agency representative completing this form: _____ Date: _____

From: [Linda \(Brown\) Hardy](#)
To: [King London, Bianca](#)
Cc: [Yasoob Zia](#)
Subject: 141218/1705 Facility Planning and Control, LSU Ag Center
Date: Monday, December 29, 2014 10:29:01

December 29, 2014

Tiffany Spann-Winfield, Deputy Environmental Liaison Officer
Federal Emergency Management Agency
1100 Robert E. Lee Boulevard
New Orleans, LA 70124
bianca.kinglondon@fema.dhs.gov

RE: 141218/1705 Facility Planning and Control, LSU Ag Center
Change in Location Project, With Construction of New Ag Centers
FEMA Funding
Acadia & East Baton Rouge Parishes

Dear Ms. Spann-Winfield:

The Assessment Division of the Office of Environmental Compliance has reviewed the information provided in your letter dated December 17, 2014 regarding the referenced project. Effective July 20, 2012, East Baton Rouge Parish was designated by EPA as an ozone nonattainment parish under the 8-hour standard (77 FR 30088, May 21, 2012). As part of the Baton Rouge ozone nonattainment area, federal activities proposed in East Baton Rouge Parish may be subject to the State's general conformity regulations as promulgated under LAC 33:III.Chapter 14, Subchapter A, *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*.

In order to determine if the proposed project in East Baton Rouge Parish is subject to the full requirements of the general conformity regulations, the project sponsor must first make a general conformity applicability determination. This determination can be made by summing the total of direct and indirect volatile organic compound (VOC) and nitrogen oxide (NOx) emissions caused by the project. If the net total of VOC and NOx emissions is determined to be less than the prescribed *de minimis* level of 100 tons per year per pollutant, then this action will comply with the conformity provisions of Louisiana's State Implementation Plan (SIP) and the Assessment Division will not object to implementation of the project.

Please email your general conformity applicability determination to linda.hardy@la.gov. Should you have any questions regarding state rules and regulations pertaining to general conformity, please contact me at (225) 219-3803. Thank you for affording us the opportunity to comment on the proposed action.

Sincerely,

Yasoob Zia
Environmental Senior Scientist
Assessment Division

SOV #141218/1705

Linda M. Hardy

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



State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT

01/09/2015

FEMA
1500 MAIN STREET
BATON ROUGE, LA 70802

**RE: P20150007, Solicitation of Views
FEMA**

Description: Construct a shop/equipment/storage buildings at Rice Research Station in Rayne; construct a facility sewer collection system and public restrooms at Burden Center, Baton Rouge; and renovate an existing building to serve as a commercial kitchen at the Food Technology Incubator Cooperative Extension Storage Building in Baton Rouge.

Location: In Rayne @ Lat 30° 14' 44"N, Long -92° 20' 42"W. In Baton Rouge @ Lat 30° 24' 20"N, Long -91° 06' 11"W; Lat 30° 24' 30"N, Long -91° 06' 24"W; and Lat 30° 24' 13"N, Long -91° 10' 31"W.
Acadia, East Baton Rouge Parishes, LA

Dear Bianca King London:

We have received your Solicitation of Views for the above referenced project, which has been found to be outside the Louisiana Coastal Zone. Therefore, pursuant to the provisions of LA R.S. 49:214.25.E, 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. Please note that your solicitation packet has not been forwarded to the USACE, or any other agency outside of OCM and the Parish local coastal program. If you would like a determination from other regulatory and/or resource agency(ies) regarding this project, please submit your request directly to that/those agency(ies) from which you would like a determination.

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.

The drawings submitted with your referenced application are attached hereto and made a part of the record. If you have any questions regarding this authorization, please contact our office at (225) 342-7591 or (800) 267-4019.

Sincerely,

A handwritten signature in black ink that reads "Karl L. Morgan". The signature is written in a cursive style with a long, sweeping underline.

Karl L. Morgan
Administrator

Karl L. Morgan/aw

Attachments

Final Plats:

1) [P20150007](#) [Final Plats](#) [01/06/2015](#)

cc: Jessica Diez, OCM w/plats

From: [Gutierrez, Raul](#)
To: [King London, Bianca](#)
Subject: RE: Request for Solicitation of Views (SOV) for LSUAg Center New Construction Projects
Date: Tuesday, January 13, 2015 16:17:09
Attachments: [image001.png](#)

Ms. Bianca King London,

The U.S. Environmental Protection Agency (EPA) has completed your request for a review of the scoping notification and solicitation of views concerning the LSU Ag Center. The comments that follow are being provided relative to the EPA's *404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230)*.

At this time, the EPA does not object to the project as our preliminary review did not reveal any potential jurisdictional waters of the U.S. on the proposed sites. Thanks for the opportunity to review the proposed project. If you have any questions or would like to discuss the issue further, please do not hesitate to contact me at Gutierrez.raul@epa.gov or 214-665-6697.

Raul Gutierrez, Ph.D.
Wetlands Section (6WQ-EM)
US EPA Region 6
(504) 862-2371

Office:
US Army Corps of Engineers
New Orleans District
CEMVN-OD-SC
Post Office Box 60267
New Orleans, Louisiana 70160-0267

From: Pitts, Melanie [mailto:melanie.pitts@fema.dhs.gov]
Sent: Wednesday, December 17, 2014 1:08 PM
To: Linda.Hardy@la.gov; Amy.E.Powell@usace.army.mil; Gutierrez, Raul; cmichon@wlf.la.gov; keith.lovell@la.gov; jeff.harris@la.gov
Cc: Spann, Tiffany; Christoffersen, Merina; King London, Bianca; Holmes, Leschina
Subject: Request for Solicitation of Views (SOV) for LSUAg Center New Construction Projects

Department of Homeland Security
December 17, 2014
Federal Emergency Management Agency

DR 1603/1607 LA

Main St., Baton Rouge, LA 70802

Louisiana Recovery Office

U.S.

FEMA-

1500



BOBBY JINDAL
GOVERNOR

State Of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date January 23, 2015

Name Melanie Pitts

Company FEMA

Street Address 1500 Main St

City, State, Zip Baton Rouge, LA 70802

Project LSU Ag Center New Construction Projects

Project ID

Invoice Number 15012312

Personnel of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no 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



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

REPLY TO
ATTENTION OF

FEB 09 2015

Operations Division
Operations Manager,
Completed Works

Ms. Melanie Pitts
Federal Emergency Management Agency
1500 Main Street
Baton Rouge, Louisiana 70802

Dear Ms. Pitts:

This is in response to the Solicitation of Views request dated December 17, 2014, on behalf of the Louisiana State University Agricultural Center (LSU Ag), concerning the relocation of the LSU Ag facilities from Plaquemines Parish to other locations throughout 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.

Based on review of recent maps, aerial photography, and soils data, we have determined that the specific sites of your project are not in a wetland subject to Corps of Engineers' jurisdiction. A Department of the Army permit under Section 404 of the Clean Water Act will not be required for the deposition or redistribution of dredged or fill material on the project sites.

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

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 in Acadia Parish may be addressed to Mr. Darrell Barbara by telephone at (504) 862-2260 or by email at Darrell.Barbara@usace.army.mil. and questions concerning regulatory permit

requirements in East Baton Rouge Parish may be addressed to Mr. John Herman by telephone at (504) 862-1581 or by email at John.M.Herman@usace.army.mil

Future correspondence concerning this matter should reference our account number MVN-2015-00264-SB. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

A handwritten signature in blue ink that reads "Karen L. Clement". The signature is written in a cursive, flowing style.

Karen L. Clement
Solicitation of Views Manager



July 1, 2015

MEMORANDUM TO: See Distribution

SUBJECT: Scoping Notification/Solicitation of Views
Facility Planning and Control, Louisiana State University Agricultural Center (LSU AgCenter)
Change in Location Project, #AI 2360 FEMA-1603-DR-LA

To Whom It May Concern:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is mandated by the U.S. Congress to administer federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. The Stafford Act authorizes FEMA's Public Assistance (PA) Program to repair, restore, reconstruct, or replace a public facility damaged or destroyed by a major disaster and make grants available for the purpose of removing disaster generated debris. FEMA applicants may elect to make improvements beyond the pre-disaster design of PA grant-eligible repairs or, as in the current proposal, an applicant may choose to repair or expand other selected public facilities, to construct new facilities, or to fund hazard mitigation measures instead of restoring a damaged facility.

Hurricane Katrina made landfall on August 29, 2005, near the town of Buras, Louisiana, with sustained winds of more than 125 miles per hour. The accompanying storm surge caused extensive damage to the LSU AgCenter's Coastal Area Research Station, located near Port Sulphur in Plaquemines Parish. In lieu of reconstructing this station, the applicant has requested to close the facility and utilize eligible grant funds toward rebuilding and enhancing its research facilities elsewhere in Louisiana. One of these facilities is the Burden Center, with a street address of 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809. The Burden Center tract is bisected by Interstate 10, which runs in a northwest-southeast direction through the property. The approximate geographic coordinates of the center of the project site are Latitude 30.40892°N, Longitude -91.10586°W.

Funding has been requested through FEMA's Public Assistance Program to make infrastructure improvements at the Burden Center. The proposed construction would consist of a new restroom building, sewerage system, and two greenhouses. The restroom would be situated immediately northwest of the Orangerie Building on the portion of the site southwest of Interstate-10. The 33- × 40-foot restroom building would be of wood frame construction with brick veneer and placed near the Trees and Trails Pavilion, where it would serve visitors walking the Trees and Trails loop trail. The two proposed 30- × 96-foot greenhouses would be constructed in the northeastern corner of the property. Finally, a gravity and force main sewerage system with concrete manholes and package lift stations would be installed to convey wastewater from the Conference Center, Louisiana Garden Center, and Ornamental and Turf Research Facility to the parish's upgraded lift station on the property, near Essen Lane.

To ensure compliance with the National Environmental Policy Act (NEPA), Executive Orders, and other applicable federal regulations, FEMA-EHP will be preparing an Environmental Assessment (EA). To assist us in preparation of the EA, FEMA-EHP requests that your office review the attached documents for a

determination as to the requirements of any formal consultations, regulatory permits, determinations, or authorizations. Based on a review of the proposed project, FEMA has determined that the work will have no effect on the four federally protected species listed for East Baton Rouge Parish, namely, the Gulf sturgeon, pallid sturgeon, West Indian manatee, and Alabama heelsplitter mussel.

Please respond within thirty (30) calendar days of the date of this scoping notification. If our office receives no comments at the close of this period, we will assume that your agency does not object to the project as proposed.

Comments may be e-mailed to robert.smith@associates.fema.dhs.gov or mailed to the attention of R. Darrell Smith, Environmental Department, at the address above.

For questions regarding this matter, please contact Darrell Smith, Environmental Specialist, at (504) 875-1192.

Tiffany Spann-Winfield
Deputy Environmental Liaison Officer

Distribution: USFWS

R. DARRELL SMITH (CTR)
ENVIRONMENTAL SPECIALIST
1603-DR-LA
BB (504) 875-1192



Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: FEMA

Point of Contact: Darrell Smith

Address: 1500 Main Street

City: Baton Rouge

State: Louisiana

Zip Code: 70802

Phone Number 1: 504-875-1192

Phone Number 2: _____

Email Address: robert.smith@associates.fema.dhs.gov

Proposed Project Information

Project Reference ID: 5173

Project Latitude: 30.40892 **Project Longitude:** -91.10586

Project Parish(es): East Baton Rouge

Project Description: Construction of a new restroom building, sewerage system, and two greenhouses at the Burden Center in Baton Rouge. See accompanying cover letter and figures.

The information provided indicates that: (1) your project occurs in a parish where one or more federally listed species and/or their critical habitat may occur; and (2) may involve disturbance or clearing of previously undisturbed areas or may involve new construction activities that may negatively impact surrounding potential habitat.

Based on these factors, this project requires further review. You may submit your project information and a request for review via fax or mail to the Louisiana Ecological Services Office at the one of the addresses below in order to complete coordination under Section 7(a)(2) of the Endangered Species Act of 1973 (Act).

Please include the following project information in your submission:

- Full Project description of work to be completed
- Project Contact name and number
- Project Location in latitude and longitude, including staging areas
- Approximate date for project to begin and end
- A copy of this pre-development coordination report
- Any other information that may be helpful for our review process

Please keep a copy of this pre-development coordination for your records.

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: **Non-Emergency FEMA Project**

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**

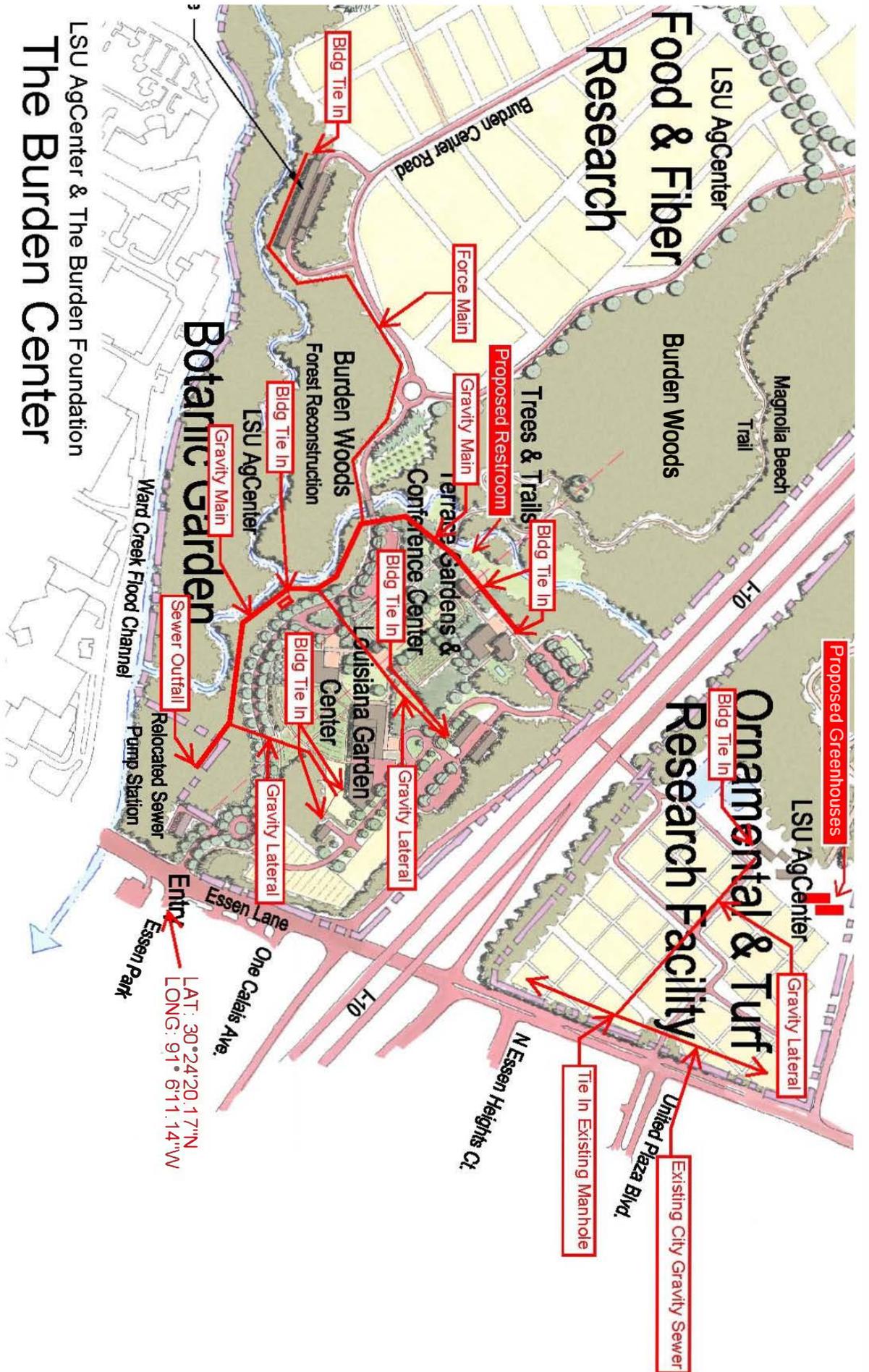
Does the project propose to reconstruct, resurface, or enhance infrastructure and/or cityscape (e.g. streets, sewers, sidewalks, etc.) within the current footprint of the infrastructure and in a manner that does not disturb previously undisturbed ground? **No**

Does the project propose to remove urban blight through the demolition of unwanted and unsightly structures in a manner that does not disturb surrounding plant or animal habitat; including the planned locations for disposal and stockpiling of demolition debris? **No**

Is the construction project located entirely within the footprint of an established urban/suburban area (incorporated villages, towns, or cities)? **No**

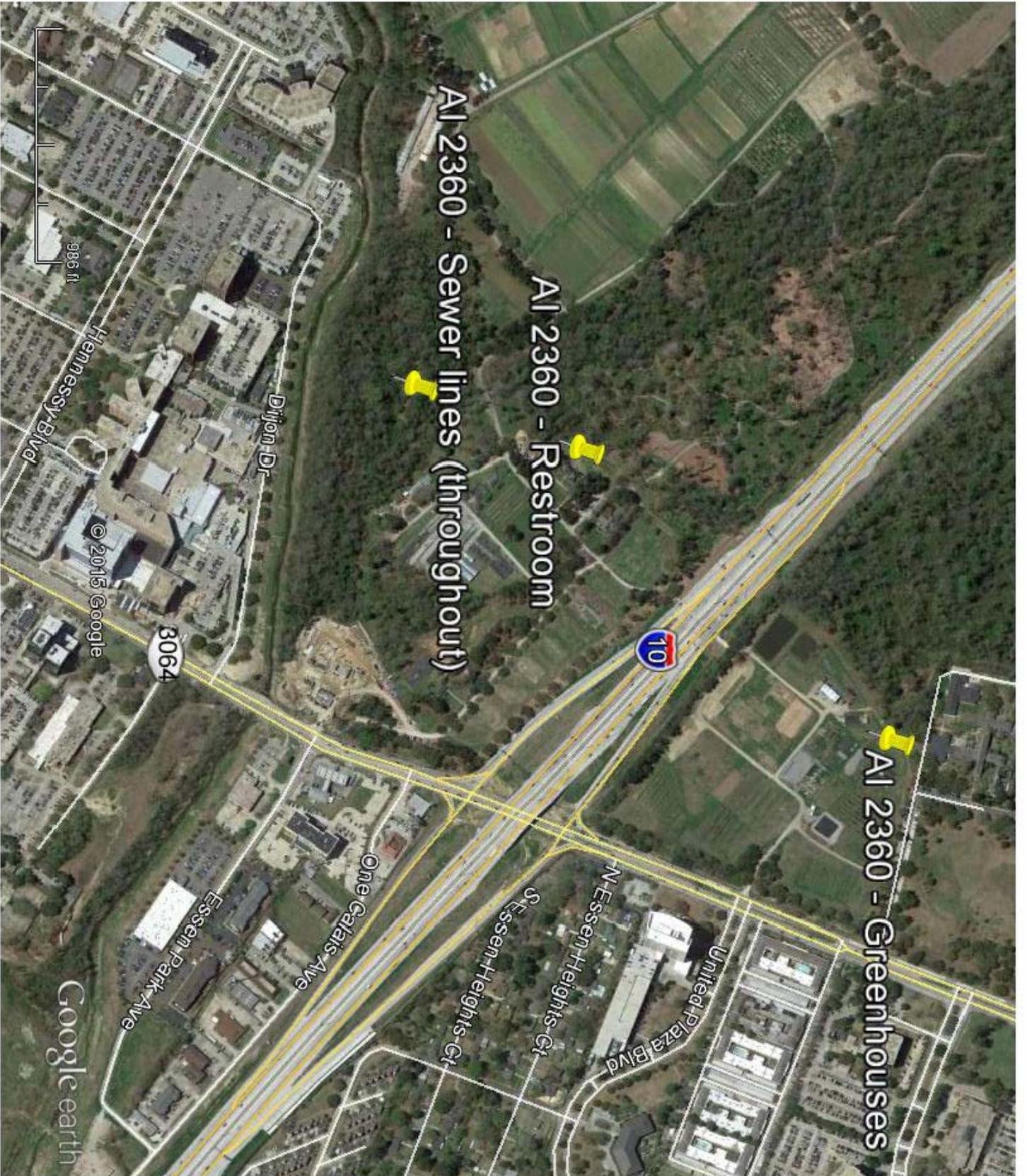
Does the project propose to construct new buildings, streets, sidewalks or other urban/suburban infrastructure in an area that has been previously undisturbed? **Yes**

Does the project propose to conduct any activity in a natural area or water body? **Yes**



LSU AgCenter & The Burden Foundation
The Burden Center

LAT: 30°24'20.17"N
 LONG: 91° 6'11.14"W



AI 2360 - Greenhouses

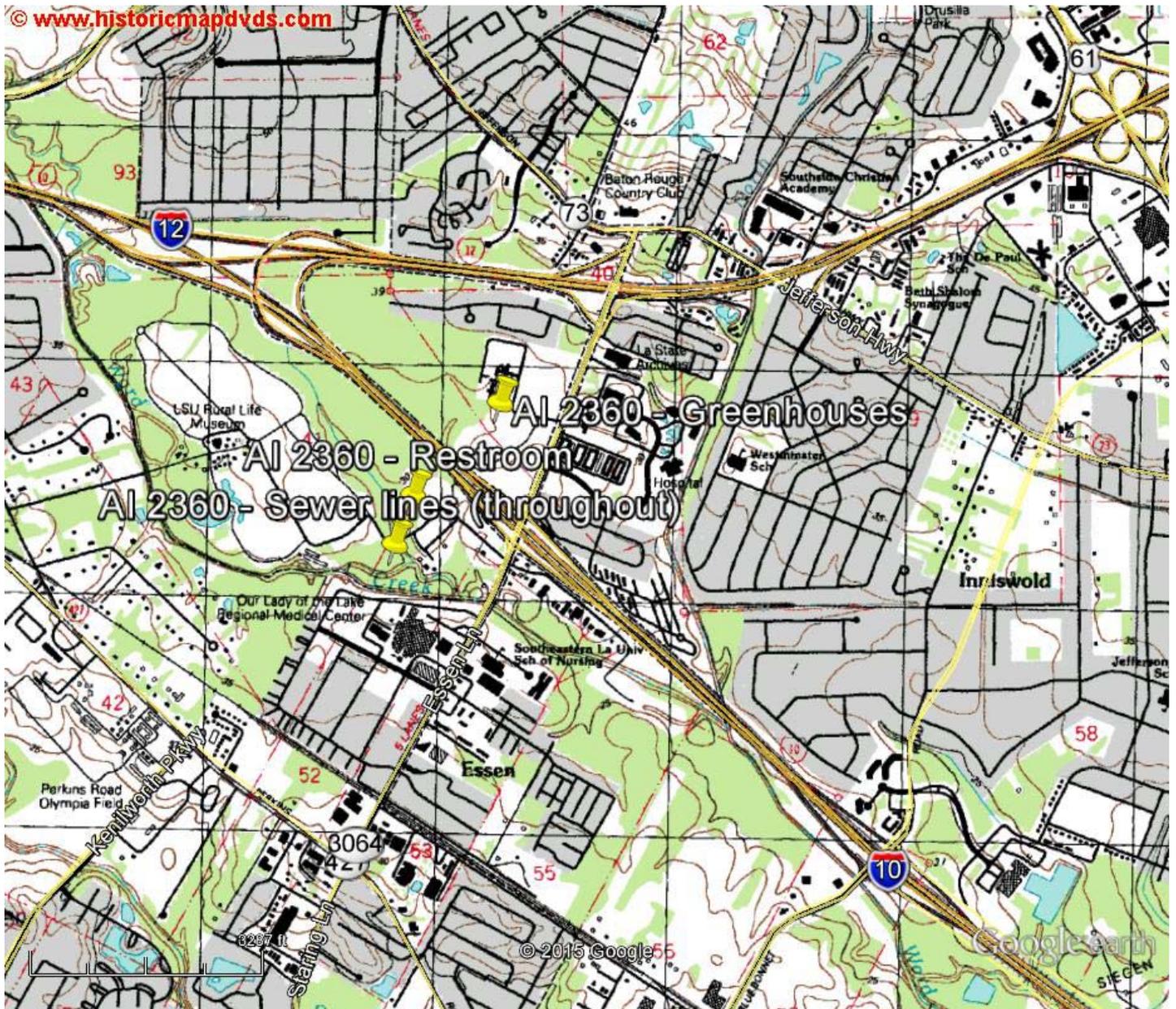
AI 2360 - Restroom

AI 2360 - Sewer lines (throughout)

986 ft

© 2015 Google

Google earth



Google earth





FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA-1603/1607/1786/1792 -DR-LA
Louisiana Recovery Office
Environmental/Historic Preservation
1 Seine Court
New Orleans, LA 70114

March 21, 2012

Pam Breaux
State Historic Preservation Officer
Department of Culture, Recreation & Tourism
P.O. Box 44247
Baton Rouge LA 70804

RE: Section 106 Review Consultation, Hurricane Katrina, FEMA-1603-DR-LA

Applicant: State of Louisiana Facility Planning & Control

Undertaking: Construction of a Storage Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Parish, LA (A/I 1578 and 1593)

Determination: No Historic Properties Affected

Dear Ms. Breaux:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the following major Disaster Declarations:

FEMA-1603-DR-LA, dated August 29, 2005, as amended.

FEMA, through its Public Assistance Program, proposes to fund the construction of a storage building addition and the relocation of two greenhouses at LSU's Burden Center (Undertaking) as requested by the Facility Planning and Control (Applicant). FEMA is initiating Section 106 review for the above referenced properties in accordance with the "Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation" executed on August 17, 2009 and amended on July 22, 2011 (2009 Statewide PA as amended) and providing the State Historic Preservation Office with the opportunity to consult on the proposed Undertaking. Documentation in this letter is consistent with the requirements in 36 CFR §800.11(d).

Description of the Undertaking

The Applicant proposes to construct an addition on an existing work building and install two greenhouses at Burden Center adjacent to the northeast side of I-10 in East Baton Rouge Parish (Figure 1). The addition will include a 25 foot bay to existing State Building 14245. The addition will measure 750 square feet and will require the enlargement of the existing concrete slab. The two greenhouses will be disassembled and moved from the Citrus Research Station at 22193 Highway 23, Port Sulphur, LA and will also require the construction of concrete slab foundations. Water lines and electricity already exist on site. The existing concrete slabs in Port Sulphur will not be demolished and ground disturbing activities will not occur during the disassembly.

Area of Potential Effects (APE)

In accordance with Stipulation VII.A of the 2009 Statewide PA as amended, the APE for both the standing structures and archaeology were developed in coordination with SHPO staff. Two standing structures APEs exist: 1) at the Burden Center, the APE consists of the viewshed from the locations of the proposed addition and from the new location of the greenhouses (Figure 2); and 2) at the Citrus Research Station the APE consists of the viewshed from the location of the existing greenhouses to be relocated (Figure 3). The archaeological APE consists of the area immediately surrounding the proposed addition and proposed greenhouse locations, which takes into account all ground-disturbing activities including construction of the concrete slabs and the installation of utilities from existing utility lines and transformers. The archaeological APE measures 0.4 acres (Figure 2).

Identification and Evaluation

FEMA Historic Preservation Staff consulted the National Register of Historic Places (NRHP) Database on January 10, 2012 and the Louisiana Cultural Resources Map on January 10, 2012 and determined that the proposed locations for the addition and greenhouses are not within a historic district and that the location of the existing greenhouses to be relocated is ineligible for the NRHP. The Burden Center was created in 1973 when the Ione Burden Foundation began donating property to LSU for the purpose of agricultural research. The Burden Center encompasses more than 400 acres of land. At the Burden Center, the standing structures APE includes 6 structures less than fifty years of age. At the Citrus Research Center, the standing structures APE includes 2 structures less than fifty years of age. The Citrus Research Station was determined ineligible for the National Register of Historic Places (NRHP) in 2008 and SHPO concurred on April 4, 2008 (concurrence letter attached). Table 1 summarizes FEMA's NRHP eligibility determinations for all properties within the Burden Center and Citrus Research Center APEs. Photographs are attached to this letter.

Table 1.

Building Name (State ID#)	Location	Construction Date	FEMA's Determination of NRHP Eligibility	Photograph No.
Support/Storage (14245)	Burden Center	2006	Does not meet 50 year age criterion or Criterion Consideration G	1
Greenhouse A (14247)	Burden Center	2006	Does not meet 50 year age criterion or Criterion Consideration G	3
Greenhouse B (NA)	Burden Center	Ca. 2006	Does not meet 50 year age criterion or Criterion Consideration G	4
Greenhouse C (NA)	Burden Center	Ca. 2006	Does not meet 50 year age criterion or Criterion Consideration G	4
Greenhouse D (NA)	Burden Center	Ca. 2006	Does not meet 50 year age criterion or Criterion Consideration G	4
Greenhouse E (NA)	Burden Center	Ca. 2006	Does not meet 50 year age criterion or Criterion Consideration G	4
Citrus Packing Shed #2 (12119)	Citrus Research Station	1995	Does not meet 50 year age criterion or Criterion Consideration G	5
Shop Storage (10425)	Citrus Research Station	1983	Does not meet 50 year age criterion or Criterion Consideration G	6
Greenhouse 1 (22043)	Citrus Research Station	2011	Does not meet 50 year age criterion or Criterion Consideration G	5
Greenhouse 2 (22059)	Citrus Research Station	2011	Does not meet 50 year age criterion or Criterion Consideration G	5

On February 7, 2012 FEMA Historic Preservation Specialists consulted data provided by SHPO and determined that there are no previously identified archaeological sites within 0.5 miles of the APE. The current undertaking is located predominantly on Oprairie Silt that consists of somewhat poorly drained soils formed on rises between drainages from loess deposits. The earliest map located that includes the current project area was the 1939 Baton Rouge 7.5' USGS Topographic map that indicates no development within the project area although structures are shown to the east, south, and west (Figure 4). Similarly, according to the 1953 Baton Rouge East 7.5' USGS Topographic Map no development occurs within the vicinity of the project area (Figure 5) and fewer structures are located along Ward Creek and its tributaries. Similarly, the 1963 map shows no development although I-10 is shown as under construction. The 1970 map shows a road constructed northeast/southwest adjacent to the project area and no mention of the proposed route for the I-10 (Figure 6). Interstate 10 appears on the 1980 topographic map and bisects the road adjacent to the project area although no development is present within the current project area (Figure 7).

A site visit and pedestrian walkover of the archaeological APE was carried out on February 16, 2012 by FEMA Historic Preservation Specialists Daphne Owens and Annette Carroll and the SHPO liaison Bryan Guervin. The Archaeological APE for the addition consists of a gravel driveway leading up to an existing maintenance building and open work shed. The APE for the two greenhouses consists of a grassy space located northeast of an existing greenhouse. A large electric transformer stands along the southeast edge of the proposed location for the greenhouses. In addition, a narrow ditch surrounds the project area. This ditch and the ground surface in the location

3/21/2012

AI 1578 and 1593, Construction of a Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA

of the proposed addition and greenhouses was visibly inspected. No archaeological material was observed by FEMA during the field work.

Assessment of Effects

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within 15 days.

We look forward to your concurrence with this determination. Should you have any questions or need additional information regarding this Undertaking, please contact Jeramé Cramer, Deputy Environmental Liaison Officer, at (504) 762-2917 or jerame.cramer@dhs.gov or Daphne L. Owens, Historic Preservation Archaeologist, at (504) 762-2235 or daphne.owens@associates.dhs.gov; or Annette Carroll, Historic Preservation Specialist, at (504) 762-2935 or annette.loomis@associates.dhs.gov.

Sincerely,

Katherine Zeringue
Environmental Liaison Officer
FEMA-DR-1603-LA, FEMA-DR-1607-LA,
FEMA-DR-1786-LA, FEMA-DR-1792-LA.

CC: File
Bryan Guevin, Division of Archaeology Reviewer
David Livingstone, Division of Historic Preservation Reviewer
State Historic Preservation Office

Enclosures

The Division of Archaeology Reviewer concurs with the finding that there will be **No Historic Properties Affected** as a result of this Undertaking.

Division of Archaeology Reviewer

Date

The Division of Historic Preservation Reviewer concurs with the finding that there will be **No Historic Properties Affected** as a result of this Undertaking.

Division of Historic Preservation Reviewer

Date

3/21/2012

AI 1578 and 1593, Construction of a Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA

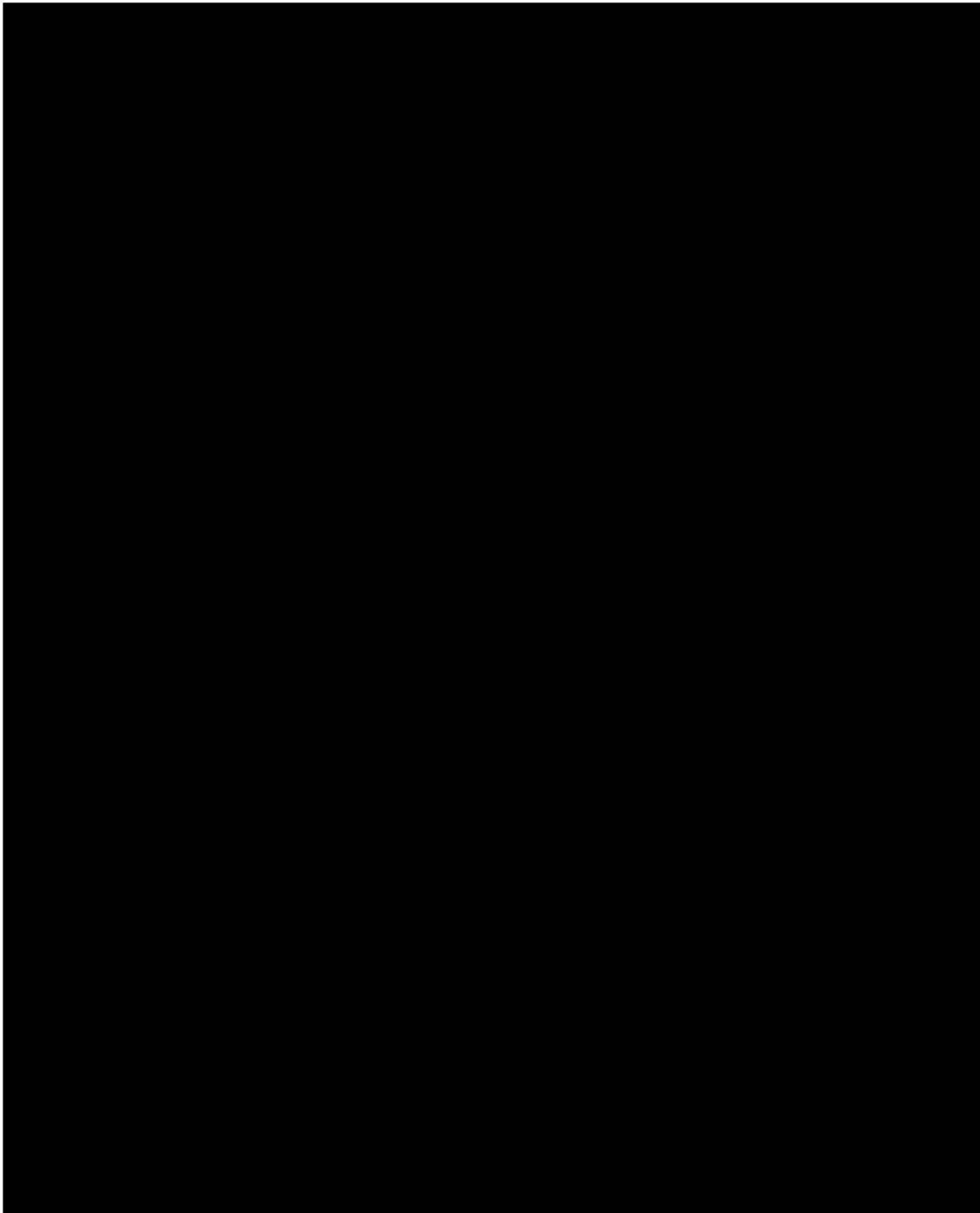


Figure 1. A portion of the Baton Rouge East 7.5' USGS topographic map showing the location of the project area .

3/21/2012

AI 1578 and 1593, Construction of a Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA

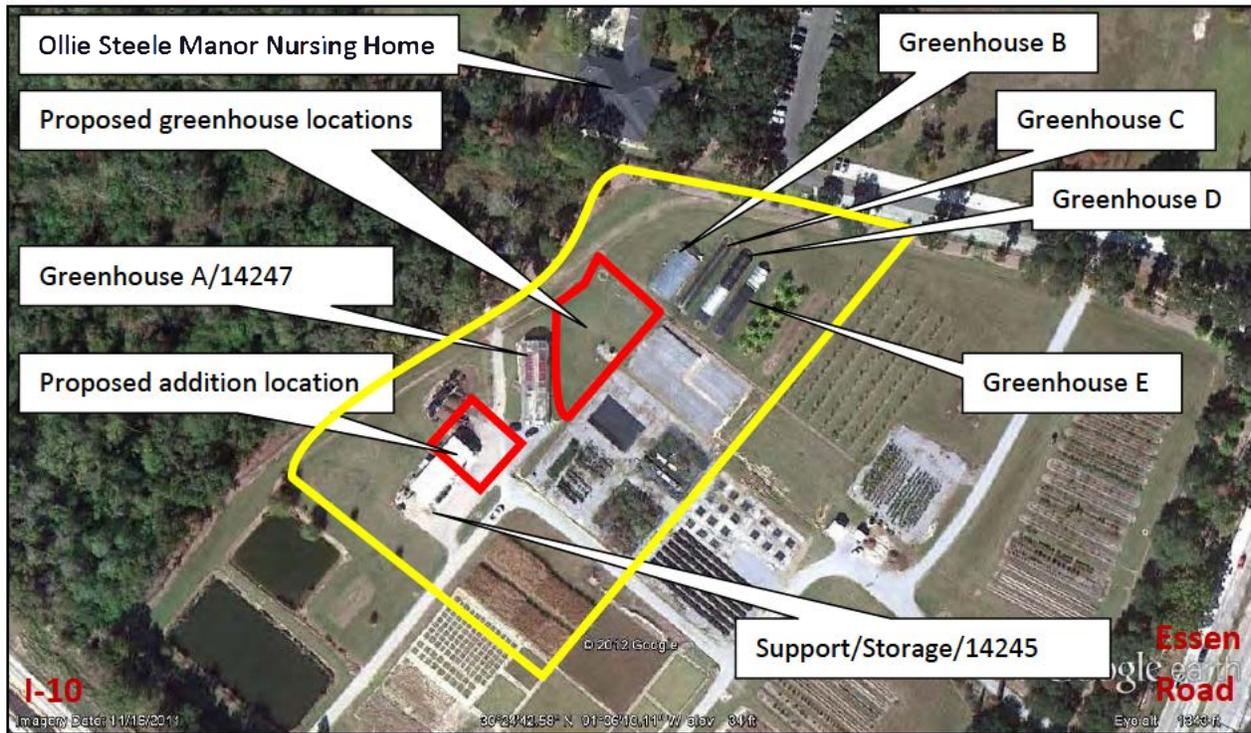


Figure 2. Burden Center. Aerial photographs showing the location of the archaeological APEs outlined in red and the standing structures APE outlined in yellow.



Figure 3. Citrus Research Station. Aerial photographs showing the location the standing structures APE outlined in yellow. The existing slabs will not be demolished and ground disturbance will not occur during disassembly.

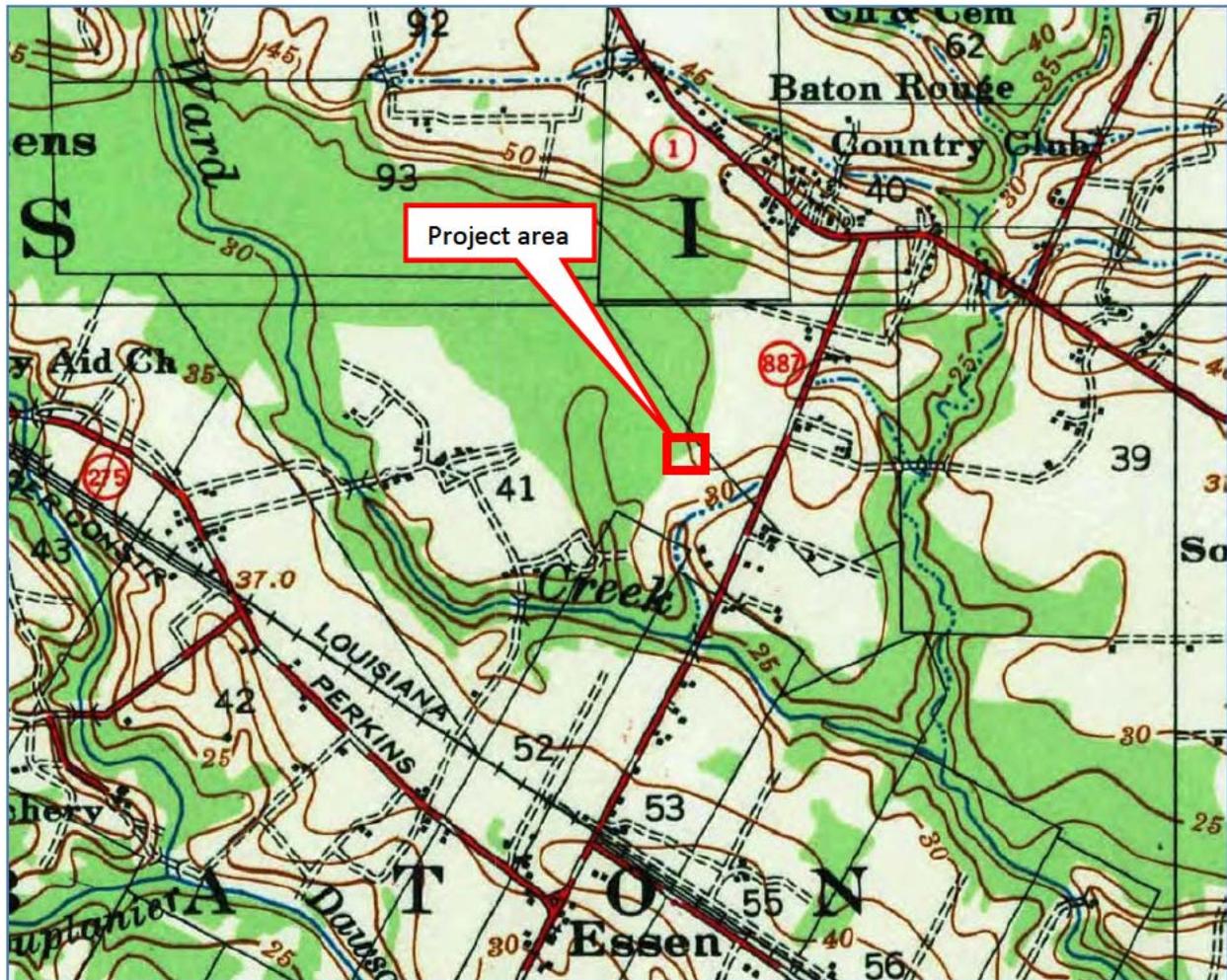


Figure 4. A portion of the 1939 7.5' Baton Rouge USGS topographic map showing the approximate location of the project at the LSU Burden Center.

AI 1578 and 1593, Construction of a Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA

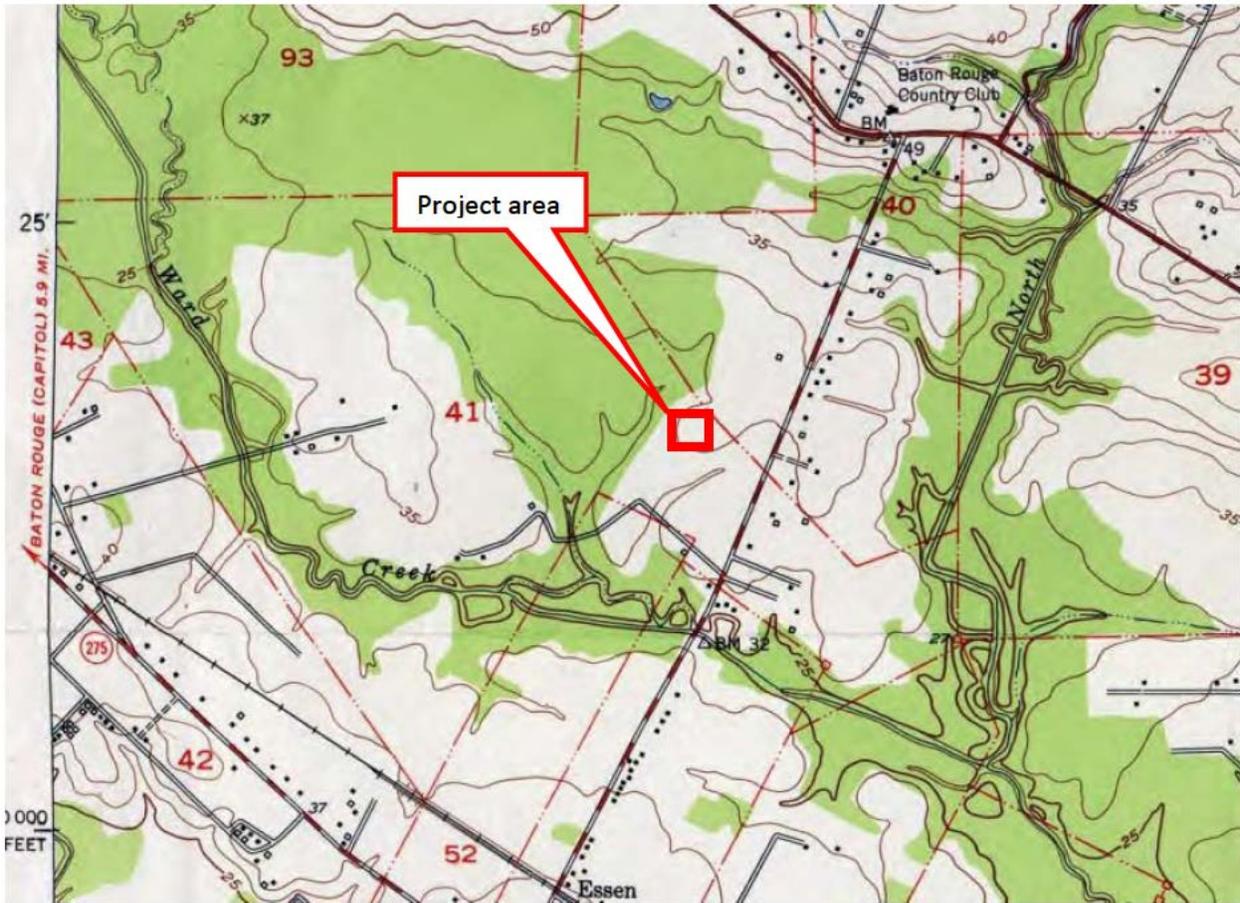


Figure 5. A portion of the 1953 7.5' Baton Rouge East USGS topographic map showing the approximate location of the project at the LSU Burden Center.

3/21/2012

AI 1578 and 1593, Construction of a Building Addition and Relocation of Two Greenhouses at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA

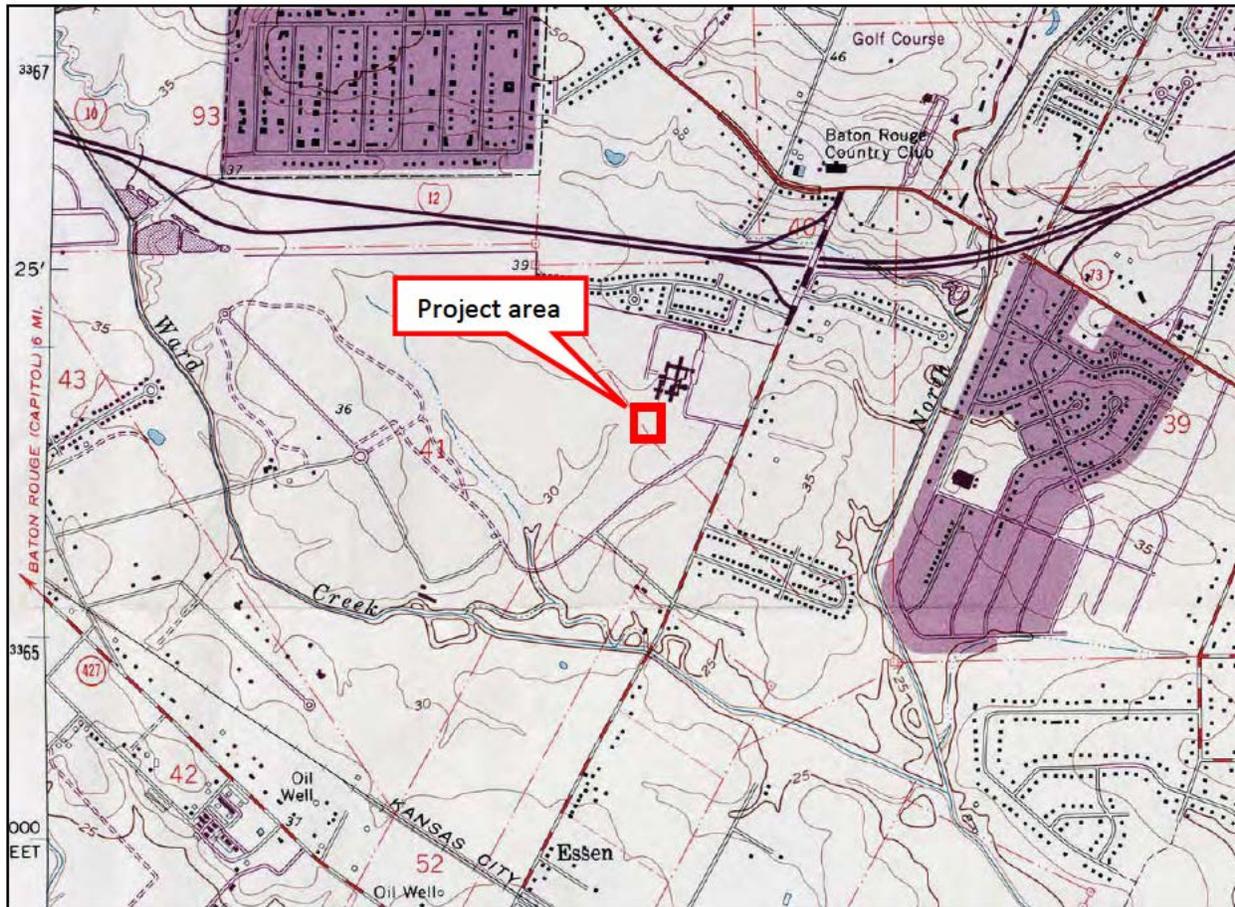


Figure 6. A portion of the 1970 7.5' Baton Rouge East USGS topographic map showing the approximate location of the project at the LSU Burden Center.

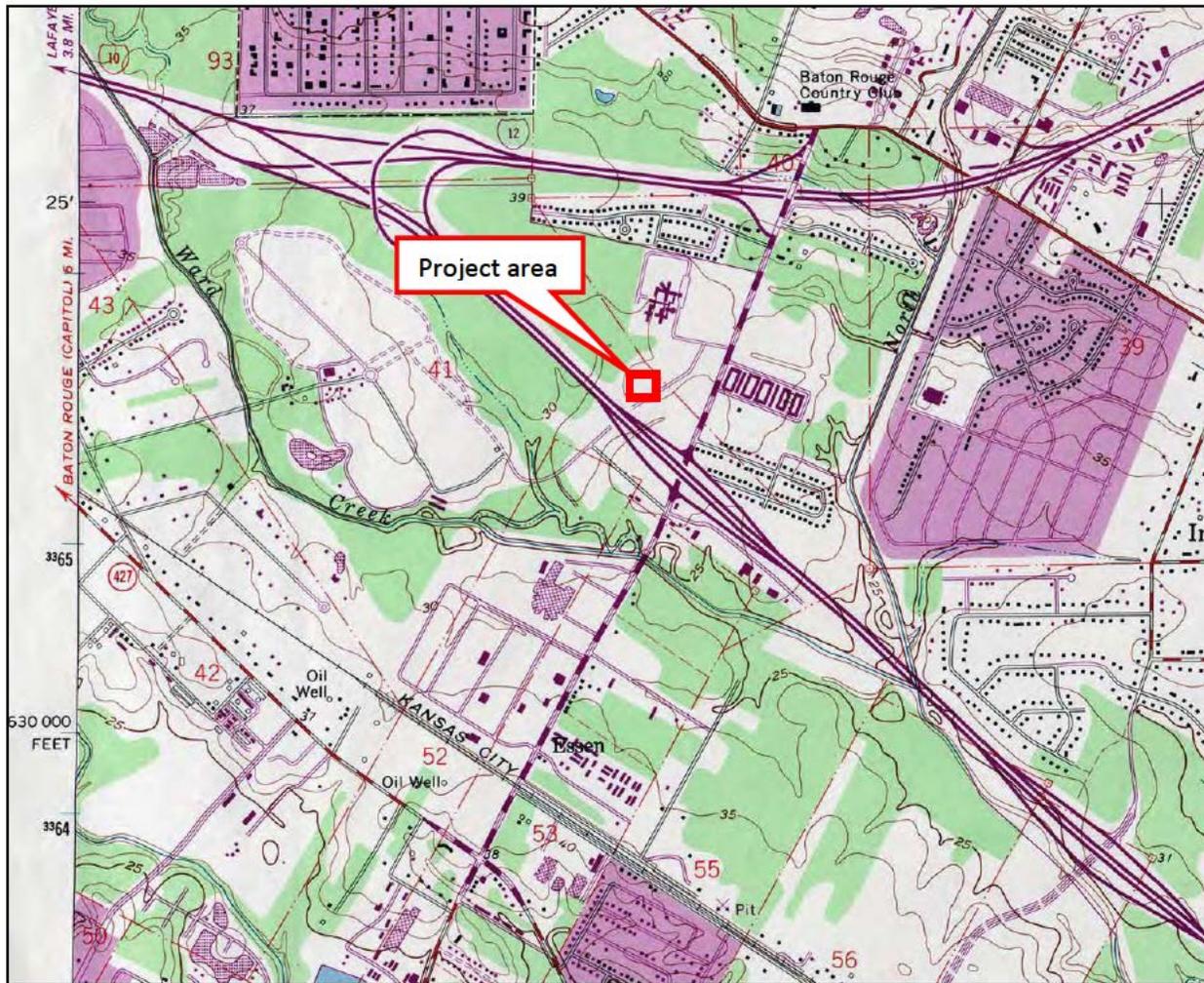


Figure 7. A portion of the 1980 7.5' Baton Rouge East USGS topographic map showing the approximate location of the project at the LSU Burden Center.

A/I 1578 and 1593, Construction of a Storage Building Addition and a Greenhouse at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, Louisiana	
<p>Photograph 1: Support/Storage (State ID#14245) (built 2006). View of northeast corner, looking west. Project would enclose the northernmost bay. (FEMA, February 2012)</p>	
<p>Photograph 2: Location for new greenhouses. View looking north. (FEMA, February 2012)</p>	

A/I 1578 and 1593, Construction of a Storage Building Addition and a Greenhouse at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, Louisiana	
<p>Photograph 3: Greenhouse A (State ID#14247) (built 2006). View of west facade, looking east. (FEMA, February 2012)</p>	
<p>Photograph 4: Greenhouses B, C, D, and E (no state ID #) (ca.2006). View of southwest facades, looking northeast. (FEMA, February 2012)</p>	

A/I 1578 and 1593, Construction of a Storage Building Addition and a Greenhouse at LSU's Burden Center, 4560 Essen Lane, Baton Rouge, Louisiana	
<p>Photograph 5: Citrus Packing Shed #2 (State ID#12119) (built 1995). View of southwest facade, looking northeast. Greenhouses (state ID#s 22043 and 22059, built in 2011) to be relocated are in background. (FEMA, January 2012)</p>	 <p>A photograph showing a large, open-sided structure with a corrugated metal roof supported by wooden posts. In the background, there are several large, rectangular greenhouses. The ground is a mix of dirt and sparse grass. A red timestamp in the bottom right corner reads "4 11:08AM".</p>
<p>Photograph 6: Shop Storage (State ID #10425) (ca.1983). View of southwest corner, looking east. (FEMA, January 2012)</p>	 <p>A photograph of a long, single-story building with vertical corrugated metal siding. A green tractor is parked under a smaller structure to the right. The foreground is a grassy area. A red timestamp in the bottom right corner reads "1 11:15AM".</p>



FEMA

March 17, 2008

Pam Breaux
State Historic Preservation Officer
Office of Culture Recreation and Tourism
Post Office Box 44247
Baton Rouge, LA 70804

Date: 4-4-08

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

Pam Breaux: Pam Breaux
State Historic Preservation Officer

RE: Section 106 Review Consultation. Hurricane Katrina

Undertaking: Building replacement at the Louisiana State University (LSU) Agricultural Research
Citrus Center. Residence #2. Port Sulphur, LA

Applicant: Facility. Planning & Control

Determination: **No Historic Properties Affected**

Dear Ms. Breaux:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the following major Disaster Declarations:

- 1) FEMA-DR-1603-LA, dated August 29, 2005, as amended
- 2) FEMA-DR-1607-LA, dated September 23, 2005.

FEMA is initiating Section 106 review for the above referenced property in accordance with the Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer (SHPO), the Louisiana Office of Homeland Security and Emergency Preparedness (LOHSEP) and the Advisory Council on Historic Preservation dated December 3, 2004. Due to wind and water damage, it is proposed that federal funding through FEMA's Public Assistance program be provided to Facility, Planning & Control (Applicant) for building demolition and replacement at the Louisiana State University (LSU) Agricultural Center, Citrus Research Residence #2 (Undertaking).

FEMA has determined that LSU Agricultural Research Citrus Center, Residence #2 is ineligible for listing in the National Register of Historic Places (NRHP). A determination of eligibility, photographs of the plant, a location map, and a site plan are attached. For the purposes of this Undertaking, the building's footprint serves as the Area of Potential Effect (APE). The scope of work indicates ground disturbing activities associated with demolishing the structure and removing the foundations. Upon consultation of data provided by the State Historic Preservation Office (SHPO), there are no known archaeological sites within 0.5 miles of the Area of Potential Effect (APE) (Figure 2). The soils consist of Schriever Clay, likely indicating that this area was former swamp. Although the area is

poorly represented on historic maps. the 1883 Mississippi River Commission (MRC) map (Figure 3) shows the APE to be agricultural land. The 1935 MRC map similarly shows the area as "cultivated". A site visit to the project area was conducted on 3/11/08 by FEMA archaeologist Dale Wolke. Pedestrian survey revealed no cultural resources at that time.

Based on FEMA's research and investigations, the replacement of LSU Agricultural Research Citrus Center, Residence #2, 22193 Highway 23, Port Sulphur, LA will result in **No Historic Properties Affected**.

Your prompt review of this project is greatly appreciated. Should you need additional information please contact Corri Jimenez, Historic Preservation Specialist at (337) 281-5028.

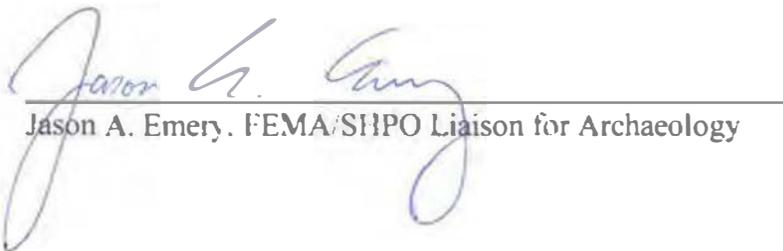
Sincerely,



Howard R. Bush
Environmental Liaison Officer
FEMA-DR-1603-LA, FEMA-DR-1607-LA.

Attachments

The FEMA/SHPO liaison for Archaeology concurs with the eligibility determination and finding of **No Historic Properties Affected** as a result of this Undertaking.



Jason A. Emery, FEMA/SHPO Liaison for Archaeology

3/21/2008
Date

The SHPO Reviewer for Standing Structures concurs with the eligibility determination and the finding of **No Historic Properties Affected** as a result of this undertaking.

Derek A. Galosi

For

3/31/08

Michael Varnado, SHPO Reviewer for Standing Structures

Date

National Register Eligibility Evaluation

Section 106 Review Consultation, Hurricane Katrina

Undertaking: Replacement of the Louisiana State University (LSU) Agricultural Center. Citrus Research Residence #2. Port Sulphur, Louisiana

Applicant: Facility. Planning & Control

Building History

The Louisiana State University (LSU) Agricultural Center (also known as the Coastal Area Research Station, the Plaquemines Parish Experiment Station, and the Citrus Research Station) was established in 1948 when the Plaquemines Parish Police Jury purchased 100-acres of land, and donated it to the university for research in assisting area farmers with agricultural needs out of the twenty LSU Agricultural Centers in the state, the Port Sulphur center provided Satsuma and navel orange research, insect control studies, pesticide testing, salt intrusion, freeze protection, as well as research on Formosan termites. The first superintendent of the center was Ralph Brown, who served from February 1949 to April 1978, followed by Alvin J. Adams became superintendent until his retirement in July 1992. On October 11, 2001, the center was devastated by a tornado that damaged the original office along with several buildings and much of the farm equipment: for four years, the office was temporarily housed in one of the residences located at the station. During Hurricanes Katrina and Rita, Citrus Research Residence #2 was damaged by 5-6 feet of salt water: 75% of the citrus trees were either damaged or died in the wake of the storm and had to be removed.

Building Description

LSU Agricultural Center Citrus Research Residence #2 is a c. 1949 Ranch-style, four bedroom/two bath house that is wood-framed building, which is situated on 32-inch high brick piers on concrete footings. The roof is asphalt covered with multi-pitches and the building is sheathed with cement shingles. The original porch was enclosed at some time probably in the 1950s. The doors in the house are solid core whereas the windows are six-over-six double hung sash wooden windows. The flooring is tongue-and-groove wood floors, and the partition walls were made of gypsum and painted.

Eligibility Evaluation

LSU Agricultural Center Citrus Research Residence #2 is not eligible for listing in the National Register of Historic Places (NRHP). Under Criterion A, the LSU Agricultural Center Citrus Research Residence #2 does not appear to be individually eligible as a resource. Available information provides no evidence that this LSU Agricultural Center is directly associated with any significant events or research developments in citriculture. In addition, due to Hurricane Katrina, the landscape and its buildings were severely damaged and due not appear to retain sufficient integrity for district eligibility. The residence does not appear to be eligible in association with any significant agricultural event on a local, state, or national level. Under Criterion B, the building does not appear to be associated with an important individual. Under Criterion C, the LSU Agricultural Center Citrus Research Residence #2 has historical integrity but is not significant example of a Ranch style home. In conclusion, Residence #2 does not meet the criteria of being eligible to the National Register.

Prepared by: Corri Jimenez, FEMA Historic Preservation Specialist

Date: February 28, 2008

U.S. Department of Homeland Security
Federal Emergency Management Agency
Section 106 Review : Aerial View Location Map

Resource Name: Louisiana State University Agricultural Center. Citrus Research Residence #2

Resource Address: 22193 Highway 23, Port Sulphur, Louisiana 70124

Resource Coordinates: 29.57994 N; -89.82228 W



Figure 1. LSU Agricultural Center APE.

Section 106 Review : USGS Quad Location Map

Map Name: Pointe A La Hache

Resource Name: Louisiana State University Agricultural Center. Citrus Research Residence #2

Resource Address: 22193 Highway 23, Port Sulphur, Louisiana 70124

Resource Coordinates: 29.57994 N: -89.82228 W

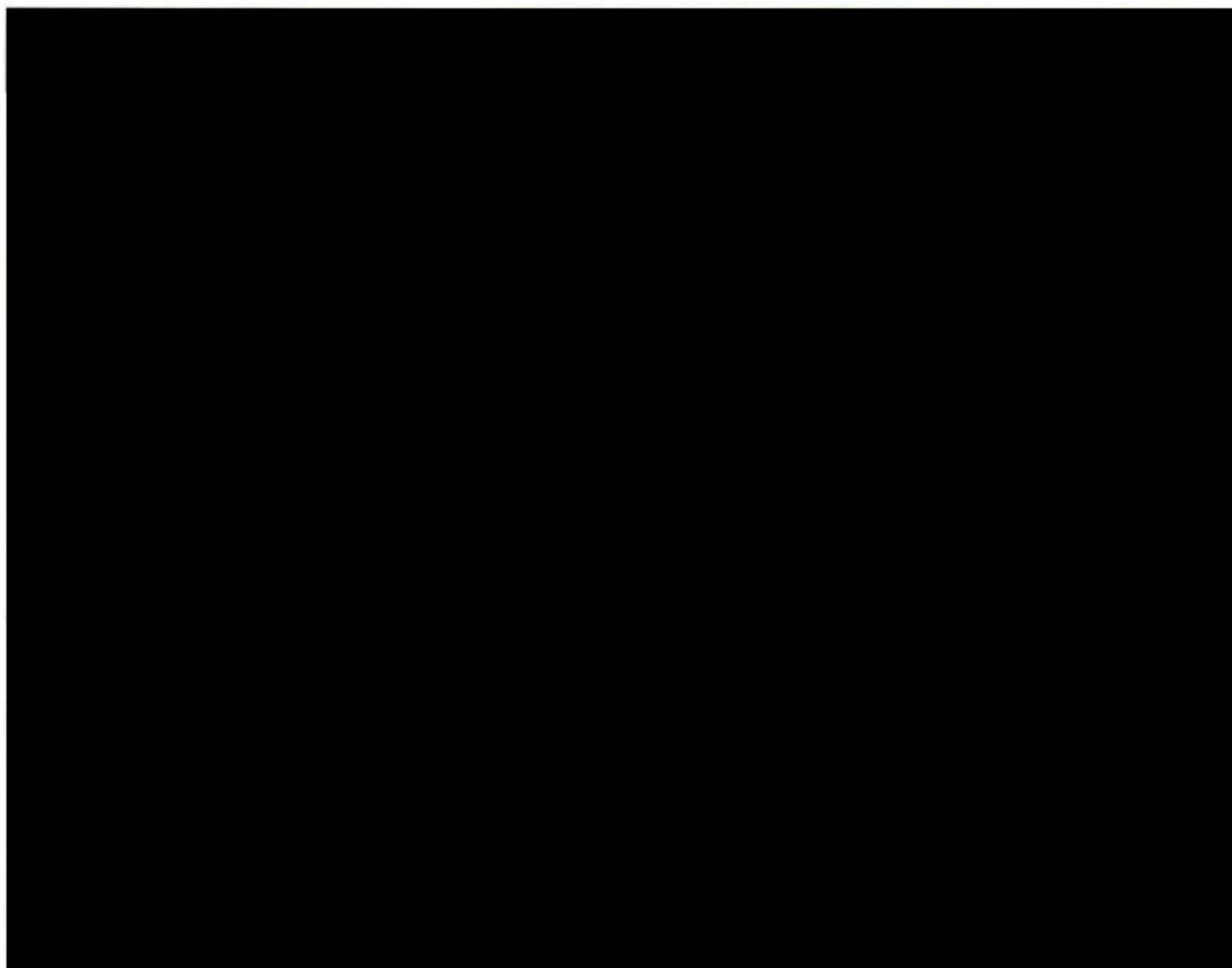


Figure 2. LSU Agricultural Center/ Citrus Research Station APE. Nearest known archaeological site.

Section 106 Review : USGS Quad Location Map

Map Name: Mississippi River Commission Map, 1883.

Resource Name: Louisiana State University Agricultural Center. Citrus Research Residence #2

Resource Address: 22193 Highway 23. Port Sulphur. Louisiana 70124

Resource Coordinates: 29.57994 N: -89.82228 W

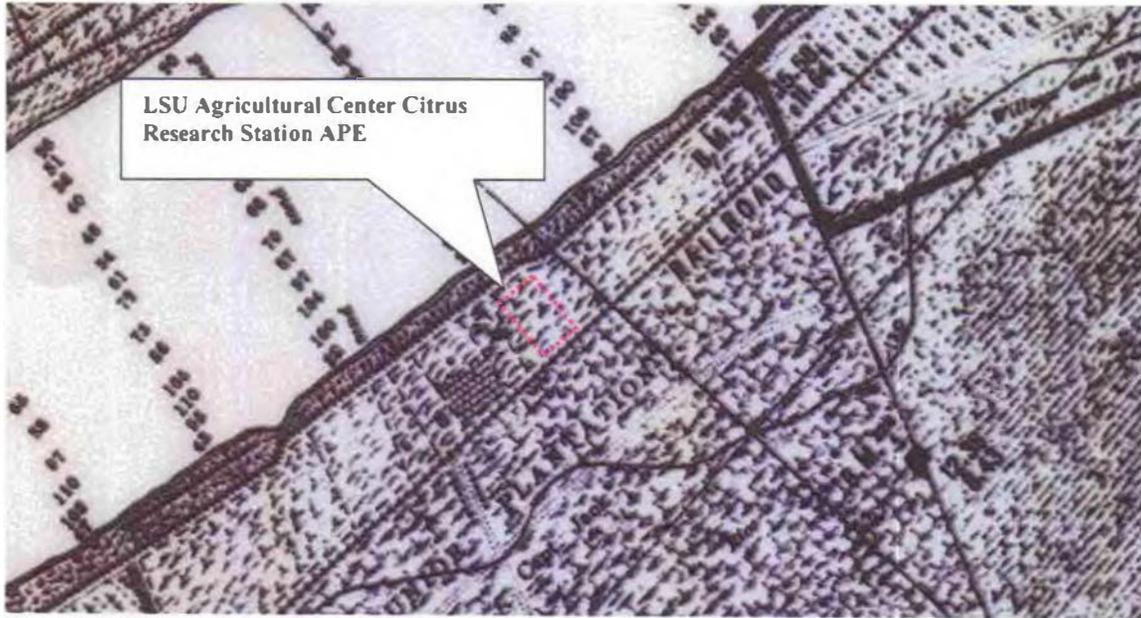
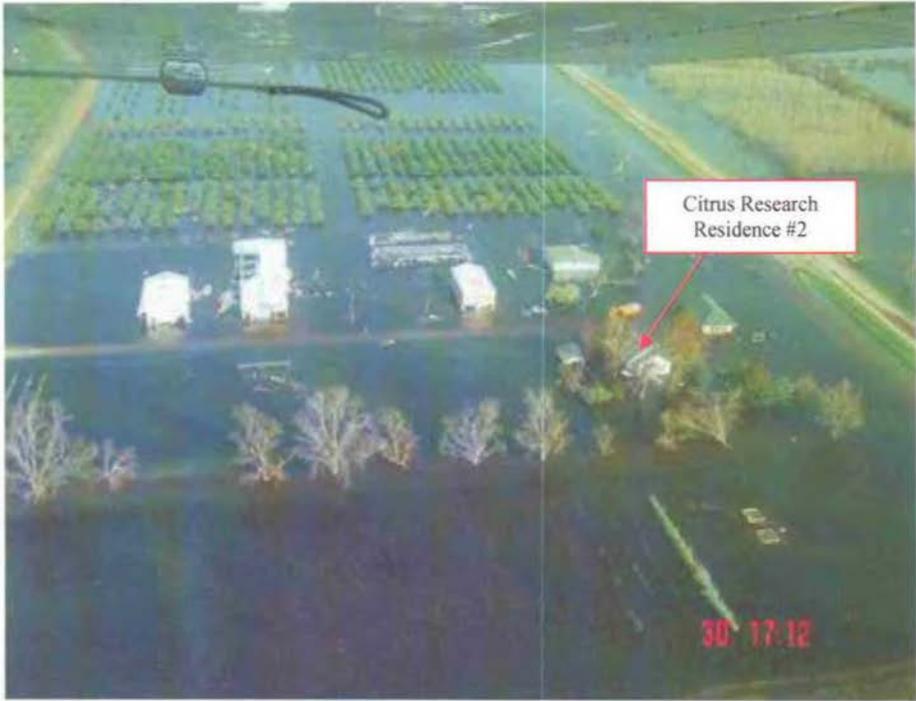


Figure 3. LSU Agricultural Center/ Citrus Research Station APE. Mississippi River Commission Map, 1883.

Louisiana State University Agricultural Center, Citrus Research Residence #2, 22193 Highway 23, Port Sulphur, Plaquemines Parish

Site view of after Katrina, (www.lsuagcenter.com, 8/29/05).



Structure after Katrina (S. Reed, 8/29/05).



North Elevation,
(S. Reed,
12/7/07).



South Elevation,
(S. Reed,
12/7/07).



Northwest view,
(S. Reed,
12/7/07).



Door from the
north porch(S.
Reed, 12/7/07).



Windows in laundry room on porch (S. Reed, 12/7/07).



Electrical panel, (S. Reed, 12/7/07).





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 BREAU
ASSISTANT SECRETARY

April 3, 2012

Ms. Katherine Zeringue
Environmental Liaison Officer
Federal Emergency Management Agency
FEMA Mail Center—First Floor
1 Seine Ct.
New Orleans, LA 70114

RE: Section 106 Consultation, Hurricane Katrina, FEMA-1603-DR-LA
Applicant: State of Louisiana Facility Planning & Control
Undertaking: Construction of a Storage Building Addition and Relocation of Two Greenhouses at the LSU Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana (A/I #1578 and #1593)
Determination: No Historic Properties Affected

Dear Ms. Zeringue:

Thank you for your letter of March 21, 2012, received March 22, 2012, regarding the above-referenced project. We understand that FEMA through its Public Assistance Program proposes to provide funding for the construction of a storage building addition and relocation of two greenhouses at the LSU Burden Center in Baton Rouge, East Baton Rouge Parish, Louisiana (Undertaking). Section 106 review for this project has been conducted in accordance with the *"Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation"* dated August 17, 2009 and amended on July 22, 2011 (2009 Statewide PA as amended).

We agree that the Area of Potential Effects (APE) for standing structures includes two locations. Standing structure APE # 1 is located at the LSU Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, and the view shed consists of the proposed addition and the new location of the greenhouses as depicted in Figure 2 of your letter dated March 21, 2012. As depicted in Figure 1 of your letter dated March 21, 2012, the addition will be constructed on an existing work building on the subject property, and includes

construction of a 25-foot bay to existing support-storage building #14245. The addition will measure 750 square feet and require the enlargement of the existing concrete slab. Two greenhouses will be installed in the northeast portion of the subject property requiring construction of new concrete slabs. These two greenhouses will be disassembled and moved from standing structure APE # 2: defined as the Citrus Research Station located at 22193 Highway 23, Port Sulphur, Cameron Parish, Louisiana. The Citrus Research Station APE view shed consists of the existing greenhouses to be relocated. The existing concrete slabs at the Citrus Research Station APE will not be demolished and as such, no ground-disturbing activities will result from the disassembly of the two greenhouses.

A summary of the ten (10) buildings located within both standing structure APE's (LSU Burden Center and Citrus Research Station) is provided in Table 1 of your letter dated March 21, 2012. All six (6) standing structures identified within the LSU Burden Center (support/storage bldg #14245 and greenhouses A, B, C, and D) are of modern construction (circa 2006) and therefore, do not meet the National Register of Historic Places (NRHP) eligibility under criterion consideration G (36 CFR 60.4). All four (4) standing structures identified within the Citrus Research Station APE (citrus packing shed #2, shop storage bldg #10425, and greenhouses #1 and #2) are also of modern construction (circa 1983 to 2011), and therefore, do not meet the National Register of Historic Places (NRHP) eligibility under criterion consideration G (36 CFR 60.4).

We also agree that the archaeological APE consists of the area proposed for addition and proposed greenhouse relocations at the LSU Burden Center property. The archaeological APE measures 0.4 acres and includes the construction of the concrete slabs and the installation of utilities from existing utility lines and transformer stations. An archaeological APE is not defined for the Citrus Research Station (Port Sulphur) since no ground disturbing activities associated with the disassembly of the greenhouses will occur at this property. FEMA Environmental Historic Preservation staff conducted a pedestrian site inspection of the LSU Burden Center project area on February 16, 2012. Initial review of the proposed project indicates that the project site area is situated on landform topography associated with nearby Ward Creek, a signature natural drainage of south Baton Rouge, and therefore could potentially yield cultural deposits of both a prehistoric and early historic nature. However, the results of the pedestrian inspection and limited land-use history research conducted for the site area confirms that the subject property has been extensively altered and modified by recent development associated with the operations of the LSU Burden Center property itself. Based on these conditions, little potential exists for the subject property to yield significant archaeological deposits that would be considered eligible for the NRHP, and therefore, no further investigations are warranted within the archeological APE.

Page 3
Katherine Zeringue
April 3, 2012

Therefore, we concur with FEMA's determination that the Undertaking as described in your letter would result in No Historic Properties Affected. For more information, please contact David Livingstone (504) 762-2264, david.livingstone@associates.dhs.gov, or Bryan Guevin at (504) 762-2941, bryan.guevin@associates.fema.dhs.gov.

Sincerely,



Pam Breaux
State Historic Preservation Officer

PB: DL/BG:s



FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA-1603/1607 -DR-LA
FEMA Louisiana Recovery Office
Environmental/Historic Preservation
1500 Main Street
Baton Rouge, LA 70802

April 30, 2015

Pam Breaux
State Historic Preservation Officer
Department of Culture, Recreation & Tourism
P.O. Box 44247
Baton Rouge LA 70804

RE: Section 106 Review Consultation, Hurricane Katrina, FEMA-1603-DR-LA

Applicant: Louisiana State University

**Undertaking: LSU Burden Center Restrooms and Sewer System, 4560 Essen Lane,
Baton Rouge, East Baton Rouge Parish L (AI #2360)**

Determination: No Historic Properties Affected

Dear Ms. Breaux:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the following major Disaster Declarations:

FEMA-1603-DR-LA, dated August 29, 2005, as amended.

FEMA, through its Public Assistance Program, proposes to fund LSU Burden Center Restrooms and Sewer System (Undertaking) as requested by the Louisiana State University (Applicant). FEMA is initiating Section 106 review for the above referenced properties in accordance with the "Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation" executed on August 17, 2009 and amended on July 22, 2011 (2009 Statewide PA as amended) and providing the State Historic Preservation Office with the opportunity to consult on the proposed Undertaking. Documentation in this letter is consistent with the requirements in 36 CFR §800.11(e).

Description of the Undertaking

LSU intends to construct a new restroom building and install a new sewer system at the LSU Burden Center, in a developed portion of the site near the main entry off Essen Lane. The restroom will be a one story masonry building, 40'-2" X 33'-8," surrounded on two sides by a porch. The new sewer line will include both forced and gravity lines with the gravity lines being 5 to 6 feet deep and the forced line being 2 feet deep. In addition, two areas that contain previously stored soil will be used for soil needed for the Undertaking. Native soils will not be removed (or "borrowed")

from these locations. A 7.5 USGS map of the Undertaking Location is attached (Figure 1.) Sewer site plans and restroom floor plans are attached as Figures 3-5.

Area of Potential Effects (APE)

In accordance with Stipulation VIII.A of the 2009 Statewide PA as amended, the APE for both the standing structures and archaeology were developed in coordination with SHPO staff. The Standing Structures APE includes the southeastern portion of the Burden Center site, adjacent to the Essen Lane entrance, bordered by the I-10 freeway on the north, Essen Lane on the east, and an existing creek on the south and west. Photographs depicting the general character of the Standing Structures APE are included as Figures 9 and 10. The archaeological APE takes into account all ground-disturbing activities including demolition, staging, and site prepping. The archaeological APE totals 4.1 acres (1.7 ha). The archaeological APE can be broken down into four distinct activities and locations. The APE for the restroom is 0.1 acres; the APE for the northern borrow area is 2.1 acres; the APE for the southern borrow area is 0.2 acres; and the sewer line is 7458 linear feet or 1.7 acres, assuming a five foot buffer on either side of the line. The APEs can be observed in Figure 2.

Identification and Evaluation

FEMA Historic Preservation staff consulted the National Register of Historic Places (NRHP) Database, and the Louisiana Cultural Resources Map, and determined that the standing structures APE is not located within a NRHP-listed historic district, nor are there any structures within the APE that are individually listed or have been determined eligible for individual listing on the NRHP. FEMA preservation staff also consulted historic maps, aerial photographs, and project files.

The APE for standing structures is located at the southeastern section of the Burden Center that, as a whole, contains large acreage devoted to its historical agricultural use, along with a number of historic buildings associated with the Burden family, who owned the property from the 1850s until the time it was deeded to LSU beginning in the 1960s. However, the area within the APE has been substantially altered by the construction of the I-10 Interstate and the Ione Burden Conference Center itself. This area incurred substantial changes in use in the 1990s, due to the introduction of new buildings, parking areas and other development to support the conference center. As a result of this development, the portion of the Burden Center located within the APE no longer retains sufficient integrity to convey any association with the historic agricultural use of the Burden property and, therefore, is ineligible for listing in the NRHP. A review of the Burden property's potential eligibility for listing in the NRHP is beyond the scope of this review.

Upon consultation of data provided by SHPO on April 7, 2015, there are no recorded archaeological sites within one mile of the APE (Figure 1). Two archaeological background/literature search surveys have been conducted near the APE; one for the Amite River and the other for a fiber-optic line that runs along the I-10 corridor (Figure 6). As these were background surveys, no archaeological field investigations occurred.

The archaeological APE consists of the agricultural field section of what was once the Windmere Plantation. Historic USDA aerial photos from 1931 (Figure 7) to 1989 (Figure 8) identifies little change within the APE, the largest being the construction of Interstate 10. The construction of the restroom is within the Burden Center's Conference Center area where a pavilion and an orangerie

was recently constructed. The borrow areas are locations where previously stockpiled soil is stored; no native soils will be removed from these areas. The sewer line construction is along a road way that is previously disturbed and within the main complex of the Conference Center area. Although the sewer line is lengthy, the ground disturbance associated with it is linear rather than planar.

FEMA archaeologist and SHPO Liaison for Archaeology conducted a site visit on January 25, 2015. No test probes were conducted, but the entire APE was pedestrian surveyed with no archaeological material identified. There is not an archaeological probability zone for this area. The soils in the northwest portion of the APE consist of Jeanerette-Acy-Essen, an upland and terrace loess. The soils in the rest of the APE consist of Memphis-Loring-Oliver, also an upland and terrace loess.

Based on the available evidence, it is unlikely that intact NRHP-eligible archaeological deposits would be recovered during the construction of the new sewer lines and restroom as the area was historically used as agricultural fields, the ground disturbance is limited, and a field visit did not identify any archaeological material.

Assessment of Effects

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within 15 days.

We look forward to your concurrence with this determination. Should you have any questions or need additional information regarding this Undertaking, please contact me at (504) 247-7771 or jerame.cramer@fema.dhs.gov, or Kathryn Wollan, Lead Historic Preservation Specialist at (504) 289-1941 or kathryn.wollan@fema.dhs.gov Jason Emery, Lead Historic Preservation Specialist at (504) 570-7292 or jason.emery@fema.dhs.gov.

Sincerely,

Jeramé J. Cramer
Environmental Liaison Officer
FEMA-DR-1603-LA, FEMA-DR-1607-LA

CC: File
Division of Archaeology Reviewer
Division of Historic Preservation Reviewer
State Historic Preservation Office

Enclosures

The Division of Archaeology Reviewer concurs with the finding that there will be **No Historic Properties Affected** as a result of this Undertaking.

Division of Archaeology Reviewer

Date

The Division of Historic Preservation Reviewer concurs with the finding that there will be **No Historic Properties Affected** as a result of this Undertaking.

Division of Historic Preservation Reviewer

Date

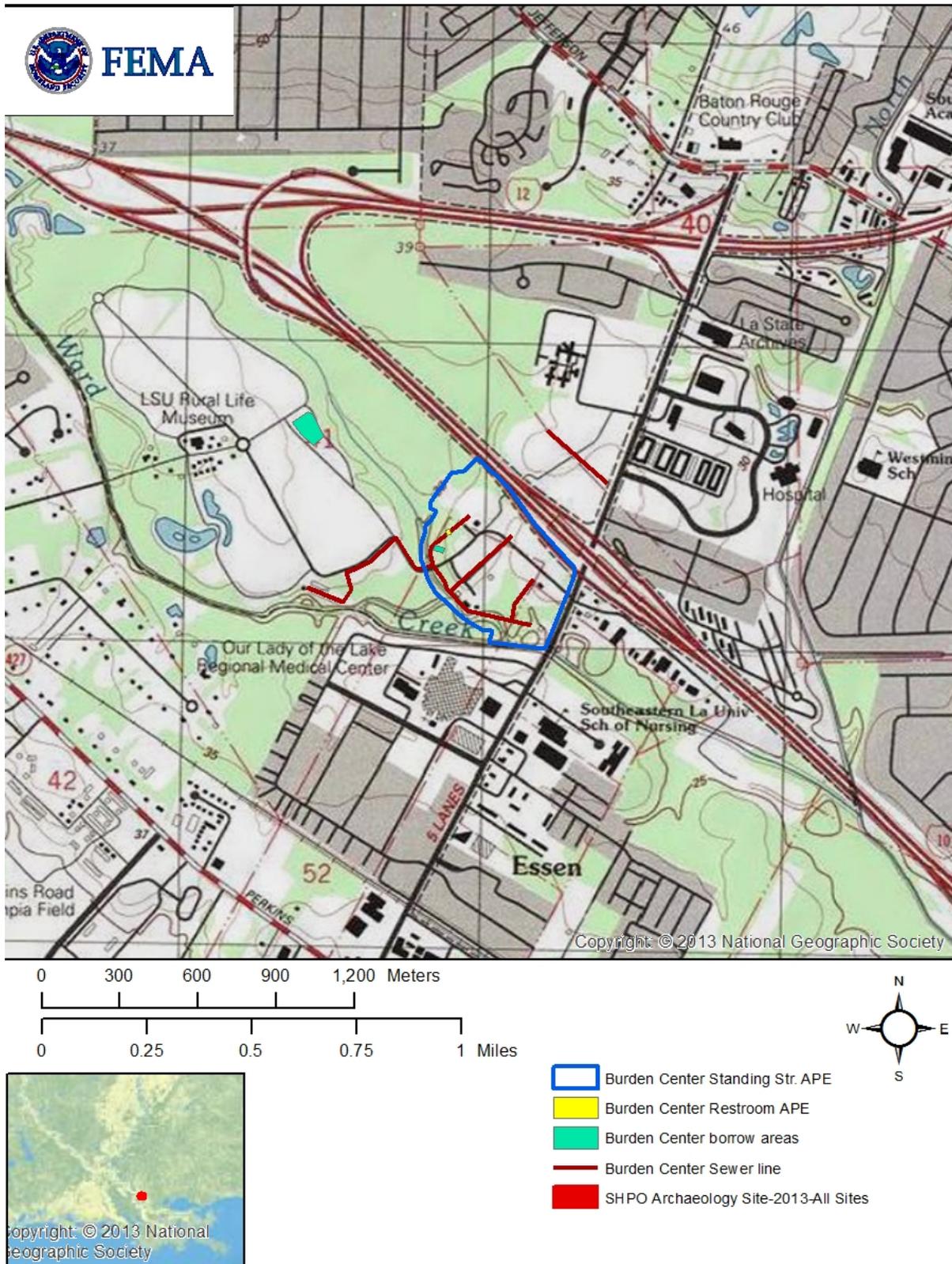


Figure 1. Undertaking overview seen on a portion of the Baton Rouge East 7.5' USGS Quad with archaeological sites. Note: There are no archaeological sites within one mile of the APE.

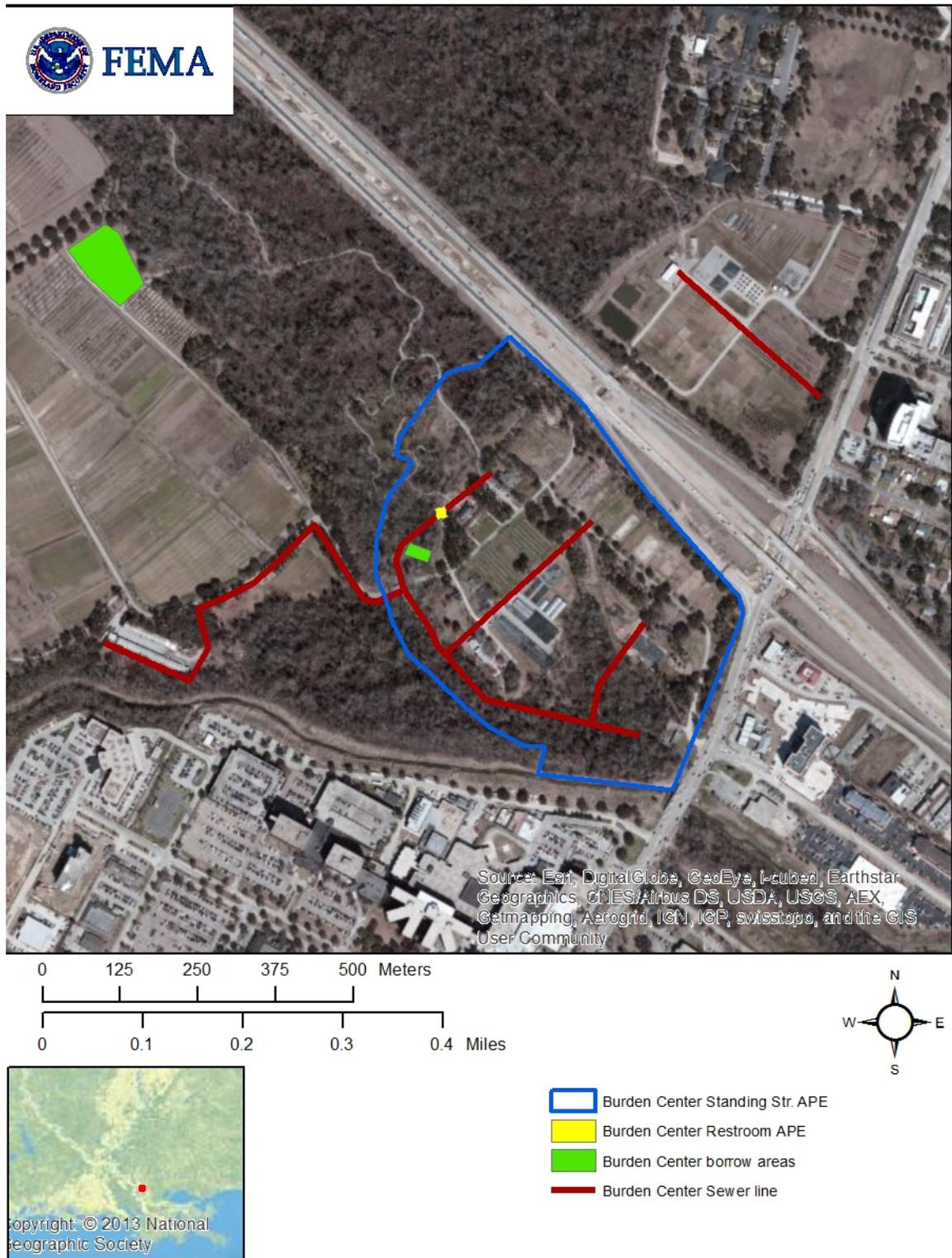


Figure 2. Aerial overview of Undertaking with Standing Structure and Archaeological APEs.

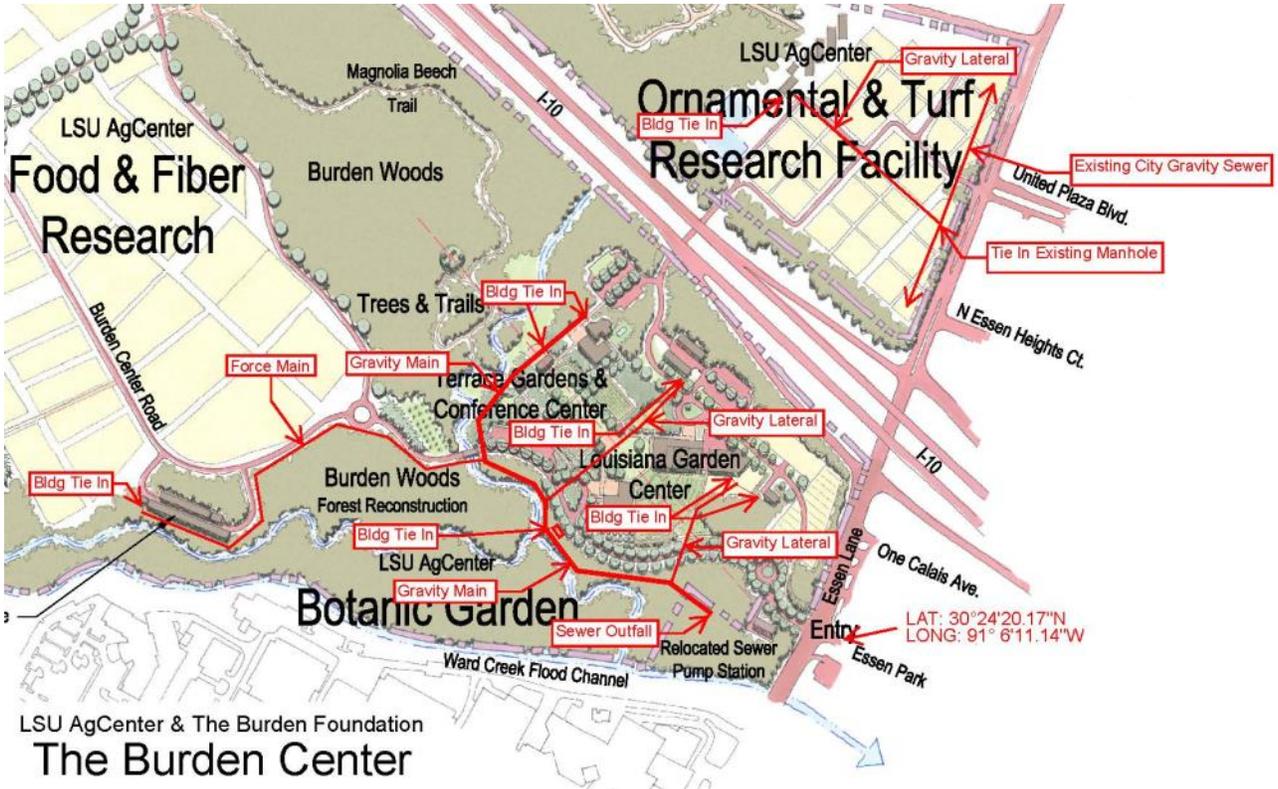


Figure 3. Site plan of the sewer system.



Figure 4. Site plan of the restroom.

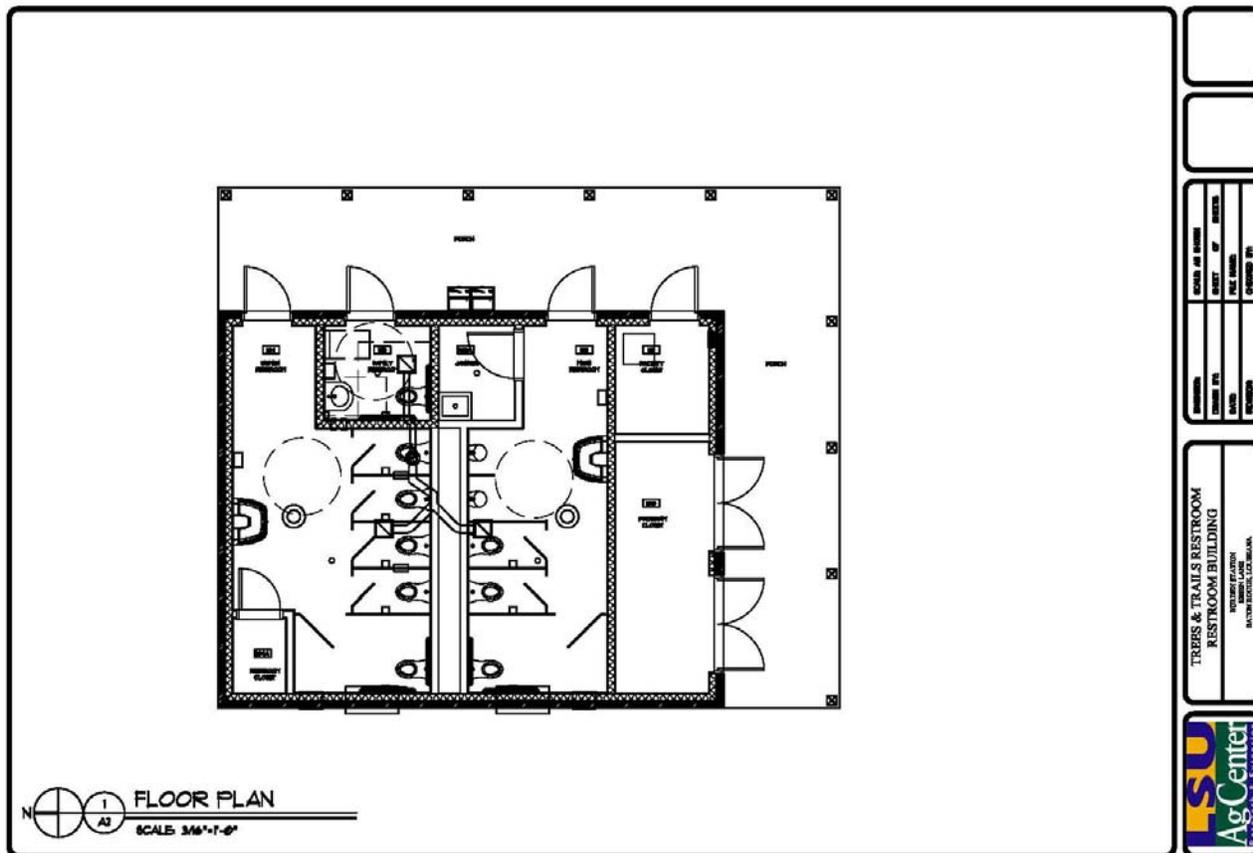


Figure 5. Floor plan of the restroom.



Figure 6. Locations of previous archaeological literature/background reviews.



Figure 7. 1931 Historic Aerial photograph. Red circle indicates general location of Undertaking.



Figure 8. 1989 Historic Aerial photograph. Red circle indicates general location of Undertaking.

LSU Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana

Figure 9:
General view of
Standing
Structures APE



Figure 10:
General view of
Standing
Structures APE





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

May 14, 2015

Mr. Jeramé Cramer
Environmental Liaison Officer
Federal Emergency Management Agency
1500 Main St.
Baton Rouge, LA 70802

RE: Section 106 Review Consultation, Hurricane Katrina, FEMA-1603-DR-LA
Applicant: Louisiana State University
Undertaking: LSU Burden Center Restrooms and Sewer System, 4560 Essen Lane,
Baton Rouge, East Baton Rouge Parish, LA (A/I 2360)
Determination: No Adverse Effect to Historic Properties

Dear Mr. Cramer:

Thank you for your letter dated April 30, 2015 regarding the above referenced project. We understand the Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to a major Disaster Declaration designated as FEMA-1603-DR-LA, and dated August 29, 2005, as amended. Furthermore, we understand FEMA, through its Public Assistance Program, proposes to fund the Louisiana State University Burden Center Restrooms and Sewer System project in Baton Rouge, East Baton Rouge Parish (Undertaking) as requested by Louisiana State University (LSU) (Applicant).

Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), is in accordance with the *Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation*, executed on August 17, 2009 and amended on July 22, 2011 (2009 Statewide PA as amended).

We agree the Area of Potential Effects (APE) for the structures includes the southeastern portion of the LSU Burden Center site, adjacent to Essen Lane entrance, bordered by the 1-

10 freeway on the north, Essen Lane on the east, and an existing creek on the south and west. We also agree that the archaeological APE comprises four distinct activity areas that total 4.1 acres as depicted on Figure 2 of your letter. The four areas include the proposed restroom location, two areas of stockpiled soil (referred to as the north and south borrow areas), and 7458 linear feet of sewer line with a five-foot buffer on either side of the line. These APEs take into account all ground-disturbing activities, staging and site prepping; and your letter indicates no excavation of native soils will occur within the north and south borrow areas.

Regarding structures, the APE is not located within an NRHP-listed historic district, nor are there any structures within the APE that are individually listed or have been determined eligible for individual listing on the NRHP. The APE encompasses the southeastern portion of the LSU Burden Center property, 400+ acres previously owned by the Burden family from the 1850s until it was deeded to LSU in the 1960s. While there are historic buildings and structures associated with the Burden family still remaining on or adjacent to the LSU Burden Center property, these are located well outside of the APE. The APE, while historically associated with the Burden family, no longer retains sufficient integrity to convey its association with the historic agricultural use of the Burden property. The APE contains a recently developed conference center along with associated improvements such as roadways, parking lots, and picnic areas. Furthermore, the construction of I-10 through the LSU Burden Center has severely impacted the historic integrity of this portion of the property. Consequently, we concur that the area within the APE is ineligible for listing in the NRHP due to a lack of historic integrity. It should be noted that the historic Burden family homestead and any remaining associated buildings and structures are located well outside of the APE and a determination of eligibility is beyond the scope of this review.

Regarding archaeological review, we understand FEMA performed standard background review utilizing the requisite Louisiana Division of Archaeology files, FEMA Cultural Resources Maps, and other applicable source data to determine historical land-use conditions within the APE. While historical maps indicate the archaeological APE was formerly a part of the Burden family property, we understand the historic buildings and main activity area associated with the Burden family are located outside the APE. Within the archaeological APE, historical maps indicate the area was mainly agricultural in nature, which would have presumably disturbed the upper soil deposits. There is no archaeological probability model for this area and the soils consist of Jeanerette-Acy-Essen and Memphis-Loring-Oliver, both upland and terrace loess. According to your letter, there are no previously recorded archaeological sites within the APE. Furthermore, a FEMA archaeologist and the FEMA/SHPO liaison conducted a site visit on January 25, 2015. While they did not conduct subsurface testing, they did inspect numerous areas of exposed soils and did not observe any archaeological material. Based on the information presented in your letter, we agree that it is unlikely construction activities related to the Undertaking would uncover NRHP-eligible archaeological deposits within the APE.

Therefore, we concur with FEMA's determination that the Undertaking as described would result in No Historic Properties Affected.

Page 3
Jeramé Cramer
May 14, 2015

For more information, please contact Andrea White at (504) 491-1071,
andrea.white@associates.fema.dhs.gov, or Sherry Anderson at (504) 875-1252,
sherry.anderson@associates.dhs.gov.

Sincerely,



Pam Breaux
State Historic Preservation Officer

PB:sa/aw:s

Appendix C

8-Step Decision-Making Process

Burden Center Infrastructure Improvements
LSU AgCenter – State of Louisiana, Office of Facility Planning and Control
FEMA 1603-DR-LA

Executive Order 11988 - FLOODPLAIN MANAGEMENT
Executive Order 11990 - WETLAND PROTECTION

8-STEP PROCESS CHECKLIST

Date: 9 July 2015

Prepared by: John Renne (CTR), CFM, Floodplain Specialist

Project: Hurricane Katrina, DR-1603, impacted Plaquemines Parish, Louisiana, and resulted in a presidentially declared major disaster. As a result of Hurricane Katrina, a number of Facility Planning and Control (FP&C), the Applicant, coastal facilities were severely impacted, including the Louisiana State University (LSU) AgCenter’s Coastal Area Research Station (CARS) in Plaquemines Parish. The CARS facility was deemed eligible for repair and/or replacement by the FEMA Public Assistance (PA) grant program. The “AgCenter’s mission is to provide the people of Louisiana with research-based educational information that will improve their lives and economic well-being” (LSU 2015). In response to the damage to its various research facilities, as well as departmental reorganization and budget reductions, the AgCenter has developed a plan to consolidate efforts and facilities at fewer locations.

In accordance with 44 C.F.R. § 206.203(d), FP&C has requested an Alternate Project under the Sandy Recovery Improvement Act (SRIA) Permanent Work Pilot Program to accomplish this goal. An Alternate Project is any project where, in lieu of restoring a damaged facility, an applicant chooses to repair or expand other selected public facilities, to construct new facilities, or to fund hazard mitigation measures. Under SRIA, the usual mandatory 25% reduction in funds for Alternate Projects is waived. The current request proposes expansion and infrastructure improvements to the existing research station at the Burden Center, with a street address of 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809, but a location bisected by Interstate 10, which runs in a northwest-southeast direction through the property. A scope of work has been provided, which is incorporated herein by reference.

PA grant-funded projects carried out in the floodplain or affecting the floodplain must be coordinated with the local floodplain administrator for a floodplain development permit prior to the undertaking, with the action carried out in compliance with relevant, applicable, and required local codes and standards, thereby reducing the risk of future flood loss; minimizing the impacts of floods on safety, health, and welfare; and preserving and possibly restoring beneficial floodplain values as required by presidential Executive Order (E.O.) 11988. This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in E.O. 11988, “Floodplain Management,” E.O. 11990, “Protection of Wetlands,” and the implementing regulations found at 44 C.F.R. § 9, “Floodplain Management and Protection of Wetlands.” These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains.

STEP 1

Determine whether the proposed actions are located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions [44 C.F.R. § 9.4]), or whether they have the potential to affect or be affected by a floodplain or a wetland (see 44 C.F.R. § 9.7).

The project is located in relation to floodplains as mapped by:

4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, LA 70809
Latitude: 30.40892°; Longitude: -91.10586°
Effective FIRM Panel: 22033C0265F, dated 19 June 2012

Restroom, Borrow Areas, and Sewer Appurtenances
Flood Zone: "AE," special flood hazard area, 1%-annual-chance-flood zone
Base Flood Elevation (BFE): 31 feet NAVD88

Greenhouses and Sewer Appurtenances
Flood Zone: Shaded "X," 0.2%-annual-chance-flood zone

The project is located in a wetland as identified by:

A review of the U.S. Fish and Wildlife National Wetland Inventory indicates the proposed project location is not located in a mapped wetland or U.S. waters.

STEP 2

Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision making process (see 44 C.F.R. § 9.8).

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Notice will be or has been provided by:

A Cumulative Initial Public Notice was published statewide from 7-9 November 2005. Additional public notice shall be provided as required by the Executive Order. The public is invited to comment on this proposed action. A legal notice was published in *The Advocate*, the journal of record for East Baton Rouge Parish, from Monday, 3 August through Friday, 7 August 2015. Additionally, the Draft Environmental Assessment was made available for review at the Bluebonnet Regional Branch of the East Baton Rouge Parish Public Library located at 9200 Bluebonnet Boulevard, Baton Rouge, LA 70810. Additionally, there was a 15-day comment period, beginning on Saturday, 8 August, and concluding on Sunday, 23 August 2015, at 4:00 p.m. The document also was published on FEMA's websites. A copy of the Public Notice is attached in Appendix E.

STEP 3

Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions and the "no action" option) [see 44 C.F.R. § 9.9]. If a practicable alternative exists outside the floodplain or wetland, FEMA must locate the action at the alternative site.

- Not applicable - Project is not located in a floodplain or in a wetland.
- Applicable - Alternatives identified as described below:

Alternative 1 – No Action

Under the “No Action” alternative, there would be no installation of new infrastructure at the Burden Center nor replacement of buildings at CARS.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

This alternative would rebuild the damaged CARS facility to pre-disaster configuration, function, and capacity at its original location. The station’s various buildings would be reconstructed within their respective original footprints, incorporating stringent and costly construction requirements in order to meet minimum National Flood Insurance Program (NFIP) standards in a coastal high hazard zone.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

The Applicant proposes to use eligible funding to construct infrastructure improvements that would provide additional services and capacity at the Burden Center, 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809. The Burden Center tract is bisected by Interstate 10, which runs in a northwest-southeast direction through the property. The proposed improvements would allow the LSU AgCenter to restore some of its lost research capabilities, while also providing additional amenities for the visiting public. Mitigation of threats from future flooding at this location would occur by incorporating minimum NFIP design standards, as appropriate.

The proposed construction would consist of a new restroom building, sewerage system, and two greenhouses. The restroom would be situated immediately northwest of the Orangerie Building on the portion of the site southwest of Interstate-10. The 33- × 40-foot restroom building would be of wood frame construction with brick veneer and placed near the Trees and Trails Pavilion, where it would serve visitors walking the Trees and Trails loop trail. FEMA funds also would be used for a retaining wall and two (2) short, paved walkways leading from the restroom to the trail. The two proposed 30- × 96-foot greenhouses would be constructed in the northeastern corner of the property. Finally, a gravity flow and force main sewerage system with concrete manholes and package lift stations would be installed to convey wastewater from the Conference Center, Louisiana Garden Center, and Ornamental and Turf Research Facility to the parish’s upgraded lift station. Pipe diameters would not exceed 12 inches for the gravity flow lines nor 4 inches for the force main. A previously filled and mounded area near the center of the property would be used as a source for borrow material for the project on an as-needed basis. Another potential borrow area would be located near the proposed restroom building.

STEP 4

Identify the full range or potential direct or indirect impacts associated with, the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 C.F.R. § 9.10).

- Not applicable - Project is not located in a floodplain or in a wetland.
- Applicable - Alternatives identified as described below:

Alternative 1 – No Action

With no action, the Burden Center would continue to operate under current conditions, but CARS would lose its important research capability. “No Action” would forego the opportunity to relocate AgCenter research functions to a less hazardous location. It also would prevent the expansion of functionality at the Burden Center.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Alternative 2 was reviewed for possible impacts associated with occupancy or modification to a floodplain. The CARS site lies within a coastal high hazard area “VE” Zone (Elevation 15 feet NAVD88), an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Special floodplain management requirements apply in “VE” Zones including the requirement that all buildings be elevated on piles or columns. The ground surface at the project site ranges in elevation from 0 to 3 feet above mean sea level (Google Earth 2015b)

Due to the previously developed character of the site, replacement of the CARS facility would not affect the functions and values of the 100-year floodplain; adverse impacts to the nature of the floodplain itself from this alternative have been determined to be negligible. This alternative would restore infrastructure in the base floodplain that accommodates the maintenance of existing uses of the floodplain (i.e., reinforces existing land use patterns which have developed without reflection on hazard and risk minimization). Repairs in coastal high hazard V Zones can have increased costs associated with flood mitigation and minimization requirements. Access to the project would be restricted in the event of a flood, adversely affecting the ability to evacuate.

Per 44 C.F.R. § 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 would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside or above the base floodplain.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

In compliance with FEMA policy implementing E.O. 11988, the proposed project was reviewed for possible impacts associated with occupancy or modification of a floodplain. Parts of the Burden Center site lie within a special flood hazard area zone “AE,” BFE 31 feet NAVD88, and parts of the site lie within a Shaded “X” flood zone, (0.2%-annual-chance-flood area, i.e., the 500-year floodplain). Site elevations range from 25 to 40 feet (Google Earth 2015a).

The Proposed Action Alternative would construct facilities to provide additional services and capacity at the Burden Center site. Two proposed greenhouses and new site sewer appurtenances would be constructed on the northern portion of the Burden Center site in a Shaded “X” flood zone, an area of the 500-year floodplain. Additionally, a new restroom and site sewer appurtenances are proposed to be constructed in an area of the base floodplain in flood zone “AE,” BFE 31 feet NAVD88. Finally, two borrow areas have been designated for use during construction that are also located with the “AE” flood zone, BFE 31 feet NAVD88.

Due to the previously developed character of the site, construction of the Burden Center facilities would not significantly affect the functions and values of the 100-year floodplain; adverse impacts to the nature of the floodplain itself from this alternative have been determined to be negligible. This alternative would result in restoration and creation of functions outside the coastal high hazard V Zone, thereby mitigating flood risk and limiting the chance of isolation or impeded evacuation during flood. This alternative would construct new facilities in compliance with minimum NFIP building standards, including elevation above the BFE where required, thereby reducing the likelihood of damage in future flooding events, as well as the need for additional disaster assistance.

Per 44 C.F.R. 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 would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside or above the base floodplain.

A review of the natural environment, social concerns, and the economic aspects of the proposed project indicates that construction of the new facility is a practicable alternative.

STEP 5

Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 C.F.R. § 9.11).

Not applicable - Project is not located in a floodplain or in a wetland.

- Applicable - Mitigation measures identified in the EA Document or as described below:

Alternative 1 – No Action

The “No Action” alternative would not result in adverse impacts to or within the base floodplain or wetlands.

Alternative 2 – Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards

Adverse impacts to or within the base floodplain would be mitigated and minimized by meeting current codes and standards, including meeting minimum NFIP requirements. This would lessen the likelihood of damages in the next flood.

Alternative 3 – Construction of Infrastructure Improvements at the Burden Center (Proposed Action)

Adverse impacts to or within the base floodplain would be mitigated and minimized by meeting current codes and standards, including meeting minimum NFIP requirements. This would lessen the likelihood of damages in the next flood.

STEP 6

Reevaluate the proposed action to determine first, if it’s still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at Step # 3 are practicable in light of the information gained in Steps # 4 and # 5. FEMA shall not act in a floodplain or wetland unless it’s the only practicable location.

- Not applicable - Project is not located in a floodplain or in a wetland.
- Applicable - Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain and community and socioeconomic expectations.

STEP 7

Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 C.F.R. § 9.12).

- Not applicable - Project is not located in a floodplain or in a wetland.
- Applicable - Finding is or will be prepared as described below:

An initial/final Cumulative Public Notice was published.

STEP 8

Review the implementation and post-implementation phases of the proposed action to ensure that the requirements of the order are fully implemented. Oversight responsibility shall be integrated into existing processes.

- Not applicable - Project is not located in a floodplain or in a wetland.
- Applicable - Approval conditioned on review of implementation and post-implementation phases to ensure compliance with the order(s).

Review the implementation and post-implementation phase of the proposed action to ensure that the requirements stated in 44 C.F.R. § 9.11 are fully implemented.

- Applicable - Oversight responsibility established as follows:

Oversight responsibility shall be integrated into existing processes and project completion in accordance with all applicable floodplain ordinances and codes and standards shall be verified at project.

Appendix D

Clean Air Act General Conformity Applicability Calculations

Results of Clean

All values shown on this Results page are derived from data entered manually on the other worksheets. Do not edit any of the numbers or formulas on this page.

Air Act applicability

determination - Ozone

LSU Ag Center - Greenhouse
4560 Essen Ln, RR, LA
East Baton Rouge Parish

Temp. Correction	Gasoline Hwy. Duty	Gasoline Temp. Correction	Gasoline T/F or LT Duty Operating Mode/TCF (OMTTC)	Gasoline Tampering Offset (OMTTAM)	Speed Correction Factor (SALCF)	Travel Weighting Fraction (TF) (Not Used)	Calculated Exhaust Emission Factor (BEF) (g/mi)	Gasoline and Expansive Emissions (CCEVAT)	Gasoline Refueling Emissions	Gasoline Running Loss Emissions	Gasoline Resting Loss Emissions	Calculated Total Hydrocarbon (HC) Emissions Factor (g/mi)	Calculated Total VOC (g/mi)	Miles of Travel per Trip	Total Number of Trips	Total Emissions (metric tons)	Total Emissions (U.S. tons)
0.021	0.021	0.021	1.0000000	0.021	1.2200000	0.4471677	3.8353	0.366	0	0.000	4.648433981	5.58234329	60	48	0.0160771	0.0177218	
0.021	0.021	0.021	1.0000000	0.021	1.2200000	3.7100200	3.8353	0.366	0	0.000	4.648433981	5.58234329	60	48	0.0160849	0.0177279	

Section 1 - Road Vehicles

Heavy duty gasoline vehicles	Tractor/Semi-Trailer	Concrete Truck	Crane
VOC NO _x	VOC NO _x	VOC NO _x	VOC NO _x
1.260 3.020	1.0244737 1.0000000	2.100 6.490	2.100 6.490
0.021 0.021	0.021 0.021	N/A N/A	N/A N/A
0.3408714 1.2200000	0.5168513 0.9548032	0.5648955 0.8976276	0.5648955 0.8976276
0.4471677 3.7100200	1.0853878 6.1966730	1.1852306 5.8259031	1.1852306 5.8259031
3.8353	N/A	N/A	N/A
0.366	N/A	N/A	N/A
0	N/A	N/A	N/A
0.000	N/A	N/A	N/A
4.648433981	1.085387802	1.185230588	1.185230588
5.58234329	1.142913356	1.248047809	1.248047809
60	20	10	5
48	20	1	2
0.0000229	0.0000252	0.0000125	0.0000125
0.0106849	0.0001239	0.0000583	0.0000583
0.0177218	0.0001366	0.000138	0.000138
0.0177279	0.0001366	0.000642	0.000642
0.0160771	0.0001366	0.000138	0.000138
0.0160849	0.0001366	0.000642	0.000642

Section 1 - Table of Formulas

Gasoline	Diesel	Formula 1	Formula 2	Formula 3	Formula 4	Formula 5
[(Col. D x Col. E) + Col. F] x Col. G	[(Col. D x Col. E) + Col. F] x Col. G	Sum of Col. 1 through M	Col. N (adj. by fuel terms)	Col. O x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023
[(Col. D x Col. E) + Col. F] x Col. G	[(Col. D x Col. E) + Col. F] x Col. G	Sum of Col. 1 through M	Col. N (adj. by fuel terms)	Col. O x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023

Sub-Total Road Vehicles:

Road Sub-Total VOC (tons) 0.0161250
Road Sub-Total NO_x (tons) 0.0108253
Road Combined (tons) 0.0270993

Section 2 - Non-Road Equipment

Steady-State Engine Emission Factors	Transient Adjustment Factor (Spark Ignition >25 HP and All Diesel)	Temperature Correction Factor (Certain 4-Stroke Spark Ignition Only)	Calculated Emission Factor (BEF) (g/hp-hr) (Stop for NO _x)	Calculated Total VOC (g/hp-hr)	Number of HP	Number of Hours (or Miles)	Total Emissions (metric tons)	Total Emissions (U.S. tons)
0.167	1.050	1.006503	0.1771114	0.1864983	700	20	0.0026110	0.0028781
2.500	1.040	1.003157	2.6082047	0.3365451	700	20	0.0365149	0.0402503
0.309	1.000	1.036000	0.3196060	0.3365451	210	40	0.0028270	0.0031162
5.577	1.000	1.024000	5.7110528	0.8385119	210	40	0.0479728	0.0528805
0.338	2.290	1.027585	0.7963076	0.8385119	100	20	0.0016770	0.0018486
5.652	1.100	1.038857	6.3318436	1.2820322	100	20	0.0126937	0.0139592
0.521	2.290	1.0398760	1.2175045	1.2820322	60	40	0.0030769	0.0033916
5.599	1.100	1.032507	6.2402865	0.2161500	60	40	0.0149767	0.0165088
0.203	1.000	1.0136822	0.2052707	0.2161500	300	16	0.0010375	0.0011437
6.015	1.000	1.0091215	6.0701685	0.2161500	300	16	0.0291368	0.0321175

Section 2 - Table of Compression Formulas

Col. D x Col. E x Col. F	Col. X table VOC conversion factor	Formula 6	Formula 7	Formula 8	Formula 9
Col. D x Col. E x Col. F	NO _x	Col. O x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023	Col. R x 1.1023

All non-road emissions factors taken from tabular or calculated values derived from various EPA non-road engine technical reports. (http://www.epa.gov/oaq/nonrmdl/lnhntechrpt)

Sub-Total - Non-Road:

Non-Road Sub-Total VOC (tons) 0.0112294
Non-Road Sub-Total NO_x (tons) 0.1412649
Non-Road Combined (tons) 0.1524943

Grand Total:

The de minimis threshold for each of the two pollutants (VOC and NO_x) is 100 tons/year within the five parishes surrounding Baton Rouge.

Combined Grand Total VOC (tons)	Combined Grand Total NO _x (tons)	Combined Grand Total of VOC and NO _x Emissions (tons)
0.0273543	0.0301527	0.0575070
0.1521902	0.1617593	0.3139495
0.1795445	0.1979119	0.3774564

Results of Clean

All values shown on this Results page are derived from data entered manually on the other worksheets. Do not edit any of the numbers or formulas on this page.

Air Act applicability

Determination - Ozone

Temp. Correction	Gasoline Hwy. Duty	Gasoline Temp. Correction	Basic Exhaust Emission (g/mi)	Gasoline and Evaporative Emissions (CCEVAT)	Gasoline Running Loss Emissions	Gasoline Resting Loss Emissions	Calculated Total Hydrocarbon (HC) Emissions (g/mi)	Calculated Total VOC (g/mi)	Miles of Travel per Trip	Total Number of Trips	Total Emissions (metric tons)	Total Emissions (U.S. tons)
Basic Exhaust Emission Level (BER)	LT Duty Operating-Mode/TCE (OMTCE)	Gasoline Tampering Offset (OMTTAM)	Speed Correction Factor (SALCF)	Weighting Fraction (WF) (Not Used)	Gasoline Running Loss Emissions	Gasoline Resting Loss Emissions	Calculated Total Hydrocarbon (HC) Emissions (g/mi)	Calculated Total VOC (g/mi)				
Factor (TCE) or LT Duty Operating-Mode/TCE (OMTCE)	Gasoline Tampering Offset (OMTTAM)	Speed Correction Factor (SALCF)	Weighting Fraction (WF) (Not Used)	Gasoline Running Loss Emissions	Gasoline Resting Loss Emissions	Calculated Total Hydrocarbon (HC) Emissions (g/mi)	Calculated Total VOC (g/mi)					
Level (BER)	(OMTCE)	(OMTTAM)	(SALCF)	(Not Used)	(CCEVAT)	(CCEVAT)	(CCEVAT)	(CCEVAT)				

Section 1 - Road Vehicles

Heavy duty gasoline vehicles	Tractor Semi-Trailer (equipment)	Concrete Truck	Crane Truck	Table:	Formula 1	Formula 2	Formula 3	Formula 4	Formula 5
VOC	VOC	VOC	VOC	X1(A/B)1	X2B	X2B.1	X3C	Downloads	Formula 1
NO _x	NO _x	NO _x	NO _x	X1(A/B)1	X2B	X2B.1	X3C	Downloads	Formula 1
1.260	1.0244737	0.021	0.3408714						
3.020	1.0000000	0.021	1.2200000						
0.4471677	3.7100200	3.8353	0.366	0	0.000	4.64843981	5.58234329	60	48
1.0853878	6.1966730	N/A	N/A	N/A	N/A	1.085387802	1.142913356	20	20
1.1852306	5.8259031	N/A	N/A	N/A	N/A	1.185230588	1.248047809	15	15
1.1852306	5.8259031	N/A	N/A	N/A	N/A	1.185230588	1.248047809	5	5
5.8259031	1.1852306	N/A	N/A	N/A	N/A	1.185230588	1.248047809	5	5
0.0000686	0.0000756	0.0003718	0.0004098						
0.0160771	0.0177218	0.0106849	0.0117779						
0.0160771	0.0177218	0.0106849	0.0117779						

Section 1 - Table of Formulas:

Gasoline:	Formula 1	Formula 2	Formula 3	Formula 4	Formula 5
Gasoline: [(Col. D x Col. E) + Col. F] x Col. G	Gasoline: Sum of Col. 1 through M = Col. I	Gasoline: Col. N (adj. by fuel form)	Col. O x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023
Diesel: [Col. D x Col. G [K Col. E LT. Duty]]	Diesel: Diesel = Col. I	Diesel: Col. N (adj. by fuel form)	Col. O x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023

All road vehicle emissions factors taken from tabular or calculated values derived from EPA publication AP-42 Vol. 2, planned 5th edition. (http://www.epa.gov/oms/ap42.htm)

Sub-Total Road Vehicles:

Road Sub-Total VOC (tons) 0.0161707 0.0178249
 Road Sub-Total NO_x (tons) 0.0111732 0.0123162
 Road Combined (tons) 0.0273439 0.0301411

Section 2 - Non-Road Equipment

Steady-State Engine Emission Factors	Adjustment Factor (Spark Ignition >25 HP and All Diesel)	Transient Correction Factor (Certain 4-Stroke Spark Ignition Only)	Temperature Correction Factor (Certain 4-Stroke Spark Ignition Only)	Calculated Emission Factor (BEF) (g/hp-hr)	Calculated Total VOC (g/hp-hr)	Number of HP	Number of Hours (or Miles)	Total Emissions (metric tons)	Total Emissions (U.S. tons)
0.167	1.050	1.006503	N/A	0.1771114	0.1864983	700	40	0.0052220	0.0057562
2.500	1.040	1.003157	N/A	2.6082047	0.3365451	210	4	0.0730297	0.0805007
0.309	1.000	1.036000	N/A	0.3196060	0.3365451	210	4	0.0002827	0.0003116
5.577	1.000	1.024000	N/A	5.7110528	0.0047973	210	4	0.0047973	0.0052880
0.338	2.290	1.027585	N/A	0.7963076	0.8385119	100	20	0.0016770	0.0018486
5.652	1.100	1.038857	N/A	6.3318436	0.8385119	100	20	0.0126937	0.0139592
0.521	2.290	1.0398760	N/A	1.2175045	1.2820322	60	40	0.0030769	0.0033916
5.599	1.100	1.032507	N/A	6.2402865	1.2820322	60	40	0.0149767	0.0165088
0.203	1.000	1.0136822	N/A	0.2052707	0.2161500	300	12	0.0007781	0.0008577
6.015	1.000	1.0091215	N/A	6.0701685	0.2161500	300	12	0.0218526	0.0240881
A4	A5	1, 2, & A6		Formula 6	Formula 7			Formula 8	Formula 9

Section 2 - Table of Compression Formulas:

Col. D x Col. E x Col. F	Formula 6	Formula 7	Formula 8	Formula 9
Col. D x Col. E x Col. F	Formula 6	Formula 7	Formula 8	Formula 9
Col. D x Col. E x Col. F	Formula 6	Formula 7	Formula 8	Formula 9
Col. D x Col. E x Col. F	Formula 6	Formula 7	Formula 8	Formula 9

All non-road emissions factors taken from tabular or calculated values derived from various EPA non-road engine technical reports. (http://www.epa.gov/oaq/nonroad/infotech/rep1)

Sub-Total - Non-Road:

Non-Road Sub-Total VOC (tons) 0.0110367 0.0121657
 Non-Road Sub-Total NO_x (tons) 0.1272200 0.1403448
 Non-Road Combined (tons) 0.1382567 0.1525106

Grand Total:

The de minimis threshold for each of the two pollutants (VOC and NO_x) is 100 tons/year within the five parishes surrounding Baton Rouge.
 Combined Grand Total VOC (tons) 0.0272074 0.0299907
 Combined Grand Total NO_x (tons) 0.1386932 0.1525610
 Combined Grand Total of VOC and NO_x Emissions (tons) 0.1657005 0.1825517

Results of Clean

Air Act applicability

determination - Ozone

LSU Ag Center - Sewerage
4560 Essen Ln, BR LA
East Baton Rouge Parish

All values shown on this Results page are derived from data entered manually on the other worksheets. Do not edit any of the numbers or formulas on this page.

Basic Exhaust Emission Level (BER)	Temp. Correction Factor (TCF) or LT Duty Operating Model/TCF (OMTFC)	Gasoline Temp. Correction Factor (GTFC) or LT Duty Operating Model/TCF (OMTAM)	Speed Correction Factor (SALCF)	Travel Weighting Fraction (TF) (Not Used)	Calculated Basic Exhaust Emission Factor (BEF) (g/mi)	Gasoline and Evaporative Emissions (CCERT)	Gasoline Refueling Emissions	Gasoline Running Loss Emissions	Gasoline Resting Loss Emissions	Calculated Total Hydrocarbon (HC) Emissions Factor (g/mi)	Calculated Total VOC (g/mi)	Miles of Travel per Trip	Total Number of Trips	Total Emissions (metric tons)	Total Emissions (U.S. tons)
														(metric tons)	(U.S. tons)
NO _x	1.260	1.0244737	0.021	0.3408714	0.4471677	3.8553	0.366	0	0.000	4.644433981	5.58234329	60	90	0.0301447	0.0332285
VOC	3.020	1.0000000	0.021	1.2200000	3.7100200							60	90	0.0203041	0.0220836

Section 1 - Road Vehicles

Heavy duty gasoline vehicles
Crew-cab Pickup

NO _x	1.260	1.0244737	0.021	0.3408714	0.4471677	3.8553	0.366	0	0.000	4.644433981	5.58234329	60	90	0.0301447	0.0332285
VOC	3.020	1.0000000	0.021	1.2200000	3.7100200							60	90	0.0203041	0.0220836

Heavy duty diesel vehicles
Tractor Semi-Trailer VOC
(equipment delivery) NO_x

NO _x	2.100	N/A	N/A	0.5168513	1.0853878	N/A	N/A	N/A	N/A	1.085387802	1.142913356	20	2	0.0000457	0.0000504
VOC	6.490	N/A	N/A	0.9548032	6.1966730							20	2	0.0002479	0.0002732

Crane Truck
NO_x

NO _x	2.100	N/A	N/A	0.5643955	1.1852306	N/A	N/A	N/A	N/A	1.185230588	1.248047809	5	2	0.0000125	0.0000138
VOC	6.490	N/A	N/A	0.8976276	5.8256031							5	2	0.0000593	0.0000642

Section 1 - Table of Formulas

Gasoline:	Formula 1	Formula 2	Gasoline:	Formula 2	Sum of Cols. 1 through M	Gasoline:	Formula 3	Col. N (add. by fuel forms)	Col. N - methane offset	NO _x :	Formula 4	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023	Formula 5
Diesel:	Col. D x Col. E ÷ Col. F x Col. G	Diesel:	Col. D x Col. E ÷ Col. F x Col. G	Col. I	Col. I	Col. N (add. by fuel forms)	Col. N - methane offset	NO _x :	Col. I x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023	Col. O x Col. P x Col. Q ÷ 1000000	Col. I x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023	Col. O x Col. P x Col. Q ÷ 1000000

Section 2 - Non-Road Equipment

Steady-State Engine Factor (Spark Ignition >25 HP and All Diesel) Factors	Transient Adjustment Factor (Spark Ignition >25 HP and All Diesel)	Temperature Correction Factor (Certain 4-Stroke Spark Ignition Only)	Calculated Emission Factor (BEF) (g/hp-hr) (Stop for NO _x)	Calculated Total VOC (g/hp-hr)	Number of HP	Number of Hours (or Miles)	Total Emissions (metric tons)	Total Emissions (U.S. tons)	
VOC	0.167	1.050	1.0106503	0.1771114	0.1864983	700	20	0.0026510	0.0028781
NO _x	2.500	1.040	1.0031577	2.6082047	0.3365451	210	40	0.0028270	0.0031162
Light Crane	VOC	0.309	1.000	1.0360000	0.3196060	5.7110528	40	0.0479728	0.0528805
Backhoe	VOC	0.338	2.290	1.0275785	0.7963076	0.3885119	100	0.0016770	0.0018486
NO _x	5.652	1.100	1.0183857	6.3318436	1.2820322	100	20	0.0126637	0.0139592
Skid Steer Loader	VOC	0.521	2.290	1.0198760	1.2175045	1.2820322	60	0.0030769	0.0033916
NO _x	5.599	1.100	1.0132507	6.2402865	0.5971249	60	40	0.0149767	0.0165088
Trencher	VOC	0.521	1.050	1.0360000	0.5670701	0.5971249	60	0.0042993	0.0047391
NO _x	5.599	1.050	1.0240000	5.4465126		120	20	0.0392149	0.0432266

Section 2 - Table of Compression Formulas	Formula 6	Formula 7	Formula 8	Formula 9	Formula 7	Formula 8	Formula 9
Col. D x Col. E x Col. F	Col. I x table VOC conversion factor	VOC:	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023	Col. I x Col. P x Col. Q ÷ 1000000	Col. O x Col. P x Col. Q ÷ 1000000	Col. R x 1.1023

All non-road emissions factors taken from tabular or calculated values derived from various EPA non-road engine technical reports. (<http://www.epa.gov/oaqpg/nonroad/ndlr/nrtechrpt/>)

Sub-Total - Non-Road:

NO _x	0.0446940	0.1376832	0.1892464	0.2169772	0.2385126
VOC	0.0144912	0.0159736	0.1513430	0.1668254	0.1658341

Grand Total:

NO _x	0.0446940	0.1376832	0.1892464	0.2169772	0.2385126
VOC	0.0144912	0.0159736	0.1513430	0.1668254	0.1658341

The *de minimis* threshold for each of the two pollutants (VOC and NO_x) is 100 tons/year within the five parishes surrounding Baton Rouge. Combined Grand Total VOC (tons) and NO_x Emissions (tons)

Appendix E

Public Notice

PUBLIC NOTICE
FEMA NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT
STATE OF LOUISIANA, OFFICE OF FACILITY PLANNING AND CONTROL
LOUISIANA STATE UNIVERSITY AGCENTER
BURDEN CENTER INFRASTRUCTURE IMPROVEMENTS
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

Interested parties are hereby notified that the Federal Emergency Management Agency (FEMA) has prepared a draft Environmental Assessment (EA) and a 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 of the Louisiana State University (LSU) AgCenter's proposed infrastructure improvements at the Burden Center in Baton Rouge, Louisiana 70809, an action for which FEMA is considering providing funding assistance. LSU AgCenter properties are under the purview of the State of Louisiana, Office of Facility Planning and Control (FP&C).

Hurricane Katrina made landfall on 29 August 2005, near the town of Buras, Louisiana, with sustained winds of more than 125 miles per hour. The accompanying storm surge caused extensive flooding throughout most of the Louisiana coastal zone. In addition, high winds, wind-blown debris, and wind-driven rain damaged a significant number of facilities, both within the coastal zone and farther inland. As a result of Hurricane Katrina, a number of coastal LSU AgCenter facilities were severely impacted.

In response to the damage to its research facilities and their surroundings, as well as departmental reorganization and budget reductions, the AgCenter has developed a plan to consolidate efforts and facilities at fewer locations. In accordance with 44 C.F.R. § 206.203(d), FP&C has requested an Alternate Project under the auspices of the Sandy Recovery Improvement Act (SRIA) Alternative Procedures Pilot Program for Permanent Work in order to accomplish this goal. An Alternate Project is any project where, in lieu of restoring a damaged facility, an applicant chooses to repair or expand other selected public facilities, to construct new facilities, or to fund hazard mitigation measures. Under SRIA, the usual mandatory 25% reduction in funds for Alternate Projects is waived. For the current request, FP&C proposes expansion and infrastructure improvements to its existing research station at the Burden Center, with a street address of 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809, but a location bisected by Interstate 10, which runs in a northwest-southeast direction through the property. The approximate geographic coordinates of the center of the project site are Latitude 30.40892°, Longitude -91.10586°.

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; the Preferred Action Alternative, which is to construct infrastructure improvements at the Burden Center; and an Alternative Action, which is to repair the existing buildings at the Coastal Area Research Station, 22193 Highway 23, Port Sulphur, Plaquemines Parish, Louisiana 70083, with upgrades to current codes and standards.

The draft FONSI is FEMA's finding that the preferred action 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 location: at the Bluebonnet Regional Branch of the East Baton Rouge Parish Public Library located at 9200 Bluebonnet Boulevard, Baton Rouge, Louisiana 70810 (hours of operation are 9:00 a.m. to 9:00 p.m. Monday-Thursday, 9:00 a.m. to 6:00 p.m. Friday and Saturday, and 2:00 p.m. to 6:00 p.m. on Sunday). The documents also can be downloaded from FEMA's website at <http://www.fema.gov/resource-document-library>. A public notice for the project will be published in *The Advocate*, the journal of record for East Baton Rouge Parish, from Monday, 3 August through Friday, 7 August 2015. Additionally, there will be a 15-day

comment period, beginning on Saturday, 8 August, and concluding on Sunday, 23 August 2015, at 4:00 p.m. Written comments may be mailed to: DEPARTMENT OF HOMELAND SECURITY-FEMA EHP-CEPC, 1500 MAIN STREET, BATON ROUGE, LOUISIANA 70802. Comments may be e-mailed to fema-noma@dhs.gov or faxed to (225) 346-5848. Verbal comments will be accepted or recorded at (225) 267-2962. If no substantive comments are received, the draft EA and associated FONSI will become final.

Appendix F

FONSI



FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
1500 Main Street
Baton Rouge, Louisiana 70802

**DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FOR
STATE OF LOUISIANA, OFFICE OF FACILITY PLANNING AND CONTROL
LOUISIANA STATE UNIVERSITY AGCENTER
BURDEN CENTER INFRASTRUCTURE IMPROVEMENTS
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
*FEMA-1603-DR-LA***

BACKGROUND

Hurricane Katrina made landfall on 29 August 2005, near the town of Buras, Louisiana, with sustained winds of more than 125 miles per hour. The accompanying storm surge caused extensive flooding throughout most of the Louisiana coastal zone. In addition, high winds, wind-blown debris, and wind-driven rain damaged a significant number of facilities, both within the coastal zone and farther inland. As a result of Hurricane Katrina, a number of coastal Louisiana State University (LSU) AgCenter facilities were severely impacted. LSU AgCenter properties are under the purview of the State of Louisiana, Office of Facility Planning and Control (FP&C), the Applicant.

The Applicant has requested, via the State of Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP), that the Federal Emergency Management Agency (FEMA) provide disaster assistance through federal grant funds 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 Public Assistance Program to fund projects to repair, restore, and replace facilities damaged as a result of the declared event. The Applicant has determined that repair of the original damaged facilities at the Coastal Area Research Station in Port Sulphur, Plaquemines Parish, Louisiana, to their pre-Hurricane Katrina specifications would not be in the best interest of the public, however. Consequently, in accordance with 44 C.F.R. § 206.203(d), FP&C has requested an Alternate Project under the auspices of the Sandy Recovery Improvement Act (SRIA) Alternative Procedures Pilot Program for Permanent Work. An Alternate Project is any project where, in lieu of restoring a damaged facility, the Applicant chooses to repair or expand other selected public facilities, to construct new facilities, or to fund hazard mitigation measures.

In response to the damage to its coastal research facilities and their surroundings, as well as departmental reorganization and budget reductions, the LSU AgCenter has developed a plan to consolidate efforts and facilities at fewer locations. For the current request, the AgCenter proposes expansion and infrastructure improvements to its existing research station at the Burden Center, with a street address of 4560 Essen Lane, Baton Rouge, East Baton Rouge Parish, Louisiana 70809, but a location bisected by Interstate 10, which runs in a northwest-southeast direction through the property. The proposed scope of work would consist of a new restroom building, sewerage system, and two 30- × 96-foot greenhouses. The 33- × 40-foot restroom would be of wood frame construction with brick veneer and placed near the head of an existing pedestrian trail in order to serve visitors to the Burden Center. FEMA funds also would be used for a retaining wall and two (2) short, paved walkways leading from the restroom to the trail. The gravity

flow and force main sewerage system with concrete manholes and package lift stations would be installed to convey wastewater from existing buildings to East Baton Rouge Parish's upgraded lift station on the Burden Center property. A previously filled and mounded area near the center of the tract would be used as a source for borrow material for the project on an as-needed basis. Another potential borrow area would be located near the proposed restroom building.

Pursuant to the Council on Environmental Quality's procedures for implementing the National Environmental Policy Act (NEPA) at 40 C.F.R. § 1506.3 and in accordance with 44 C.F.R. § 10, FEMA regulations to implement NEPA, an Environmental Assessment (EA) was prepared. The alternatives considered consist of: 1) No Action, 2) Replace the Coastal Area Research Station at the Current Location, with Upgrades to Current Codes and Standards, and 3) Construction of Infrastructure Improvements at the Burden Center (Proposed Action).

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. During the construction period, short-term impacts to water quality, air quality, and noise are anticipated. All short-term impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

CONDITIONS

Based upon the studies, reviews, and consultations undertaken in this DEA, several conditions must be met and mitigation measures taken by the Applicant prior to and during project implementation:

- The Applicant must follow all applicable federal, state, and local laws, regulations, and requirements and obtain and comply with all required permits and approvals prior to initiating work.
- If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservations 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 (24) hours of the discovery. The Applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two (72) 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 their Public Assistance contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The Applicant will not proceed with work until FEMA HP completes consultation with the State Historic Preservation Office and others, as appropriate.
- The Applicant is responsible for acquiring any §401/404 Clean Water Act permits. When these permits are required, Applicant must maintain documentation of compliance with applicable nationwide permit (NWP), general permit, individual permit, or exemption from permit requirements from the U.S. Army Corps of Engineers prior to construction, unless exempt by the NWP from pre-construction notification. The Applicant shall comply with all conditions of any required permit. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

- Project construction would involve the use of potentially hazardous materials (e.g., petroleum products, including but not limited to gasoline, diesel, brake and hydraulic fluid, cement, caustics, acids, solvents, paint, electronic components, pesticides, herbicides, fertilizers, and/or treated timber) and may result in the generation of small volumes of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials must be taken and generated hazardous or non-hazardous wastes are required to be disposed in accordance with applicable federal, state, and local regulations.
- Per 44 C.F.R. § 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. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside the base floodplain or above the base flood elevation. The Applicant is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. All coordination pertaining to these activities and Applicant compliance with any conditions must be documented and copies forwarded to the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP) and FEMA for inclusion in the permanent project files.
- If the project results in a discharge to waters of the State, a Louisiana Pollutant Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act 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 nearby waters of the U.S. and surrounding drainage areas, the contractor must ensure compliance with all federal, state, and local 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 LA GOHSEP and FEMA for inclusion in the permanent project files.
- Unusable equipment, debris, and material shall be disposed of in an approved manner and location. The Applicant shall handle, manage, and dispose of petroleum products, hazardous materials, and/or toxic waste in accordance with all federal, state, and local agency requirements. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.
- Contractor and/or sub-contractors must properly handle, package, transport and dispose of hazardous materials and/or waste in accordance with all federal, state, and local regulations, laws, and ordinances, including all Occupational Safety and Health Administration worker exposure regulations covered within 29 C.F.R. § 1910 and 1926.

CONCLUSION

The results of these evaluations, as well as consultations and input from other federal and state agencies, are presented in the EA. Based on the information analyzed, FEMA has determined that the implementation of the proposed action would not result in significant adverse impacts to the quality of the natural and human environment. In addition, the proposed project does not appear to have the potential for significant cumulative effects when combined with past, present, and reasonably foreseeable future actions. As a result of this FONSI, an Environmental Impact Statement will not be prepared (per 44 C.F.R. § 10.9) and the proposed project as described in the EA may proceed.

