

Draft Environmental Assessment

# Grosse Tete Fire Station

Grosse Tete Fire Department

EMW-2009-FC-02794

*October, 2010*



**FEMA**

**U.S. Department of Homeland Security**  
500 C Street, SW  
Washington, DC 20472

Document Prepared By:

**Terracon**

Terracon Consultants, Inc.

2822-B O'Neal Lane

Baton Rouge, Louisiana 70816

Contract No. EH107108

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>PURPOSE AND NEED .....</b>	<b>1</b>
<b>3.0</b>	<b>ALTERNATIVES.....</b>	<b>2</b>
3.1	No Action Alternative.....	2
3.2	Proposed Action.....	2
3.3	Alternatives Considered and Dismissed .....	3
<b>4.0</b>	<b>AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS.....</b>	<b>3</b>
4.1	Physical Resources.....	5
4.2	Water Resources.....	6
4.3	Biological Resources.....	8
4.4	Cultural Resources.....	9
4.5	Socioeconomic Resources .....	10
4.6	Hazardous Materials .....	11
<b>5.0</b>	<b>CUMULATIVE IMPACTS.....</b>	<b>12</b>
<b>6.0</b>	<b>MITIGATION MEASURES.....</b>	<b>12</b>
<b>7.0</b>	<b>AGENCY COORDINATION, PUBLIC INVOLVEMENT AND PERMITS .....</b>	<b>13</b>
<b>8.0</b>	<b>LIST OF PREPARERS .....</b>	<b>14</b>
<b>9.0</b>	<b>GENERAL COMMENTS.....</b>	<b>14</b>
<b>10.0</b>	<b>REFERENCES.....</b>	<b>14</b>

**Appendix A:** Figure 1- Topographic Map, Figure 2 – Site Layout, Figure 3 – Proposed Layout

**Appendix B:** Correspondence

**Appendix C:** Other Pertinent Resources

## LIST OF ACRONYMS

BMPs Best Management Practices  
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act  
CEQ Council on Environmental Quality  
CFR Code of Federal Regulations  
CWA Clean Water Act  
EA Environmental Assessment  
EIS Environmental Impact Statement  
USEPA United States Environmental Protection Agency  
ESA Endangered Species Act  
EDMS Electronic Document Management System  
FEMA Federal Emergency Management Agency  
FIRM Floodplain Insurance Rate Map  
FPPA Farmland Protection Policy Act  
FONSI Finding of No Significant Impact  
LAC Louisiana Authoritative Code  
LDEQ Louisiana Department of Environmental Quality  
LUST Leaking Underground Storage Tank  
NEPA National Environmental Policy Act  
NHPA National Historic Preservation Act  
NO<sub>x</sub> Nitrogen Oxide  
NPDES National Pollutant Discharge Elimination System  
NRCS Natural Resources Conservation Service  
RCRA Resource Conservation and Recovery Act  
SIP State Implementation Plan  
SHPO State Historic Preservation Office/Officer  
SWPPP Storm Water Pollution Prevention Plan  
US United States  
USACE United States Army Corps of Engineers  
USC United States Code  
USFWS United States Fish and Wildlife Service  
USGS United States Geological Survey

**DRAFT  
ENVIRONMENTAL ASSESSMENT**

**GROSSE TETE FIRE STATION  
GROSSE TETE, LOUISIANA**

**Terracon Project No. EH107108  
October 2010**

## **1.0 INTRODUCTION**

The Village of Grosse Tete Volunteer Fire Department is currently housed in a garage-style structure with no sleeping quarters, training space, or day room, and one administration office, which is shared by all volunteers and associated personnel. The Grosse Tete Volunteer Fire Department serves as the 'First Response' organization for a 25-square mile rural area with a population of 1,200, which includes a portion of Interstate 10. Under current conditions, the 5-minute response includes only 30% of the First Response Area. The Grosse Tete Volunteer Fire Department also provides mutual aid to three other fire departments within Iberville Parish, increasing the population served to over 4,500.

This project is being funded by the Federal Emergency Management Agency (FEMA) with an 'Assistance to Firefighters Fire Station Construction' Grant, number EMW-2009-FC-02794. The Grosse Tete Volunteer Fire Department received \$2,763,080 to be used for the construction of a new fire station. The proposed fire station will be located at 76870 Gum Street in Grosse Tete, Iberville Parish, Louisiana.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the new fire station. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

## **2.0 PURPOSE AND NEED**

The purpose and need of the project is to enhance the fire department's response capability and protection of the community from fire and fire-related hazards. The Fire Department is currently housed in a building designed to house trucks and is not a manned department. A new facility, which includes administrative office space, sleeping quarters, training room, day

areas, kitchen, equipment storage and a back-up generator, will not only increase response times by 5-6 minutes, but will make the Volunteer Fire Department more professional, efficient, and knowledgeable on emergencies. The proposed new station will be staffed and equipped to be first out on all calls within the district and for mutual and automatic aid to other communities. This will increase the 5-minute response to 100% of the First Response Area. The quicker response times directly equates to less property damage and reduced loss of life.

## **3.0 ALTERNATIVES**

### **3.1 No Action Alternative**

NEPA requires the inclusion of a No Action Alternative in the EA. The No Action Alternative is defined as maintaining the status quo with no FEMA funding for any alternative action. This is used to evaluate the effects of not providing funding for the project, thus providing a benchmark against which action alternatives can be evaluated. The No Action Alternative entails no construction of a new facility, but continued use of the existing fire station located at 18125 Willow Street, in which the 5-minute response includes only 30% of the First Due Response Area.

### **3.2 Proposed Action**

The proposed action includes the construction of a new Fire Station facility at 76870 Gum Street. The site location is depicted on Figure 1 of Appendix A, which was reproduced from a portion of the United States Geologic Survey (USGS) 7.5-minute series topographic map. This facility will have an approximate 8,950 square-foot footprint, and include a parking lot and driveway space totaling approximately 0.542 acre. Access to the site will be available from Willow Street and Gum Street via paved driveways. Utility connections are already present at the site as a result of the former and current site uses; therefore, only minor adjustments to their alignment are anticipated to connect with the proposed development.

The majority of the site was previously developed with a residence, which has been removed. The proposed fire station facility will be located on this portion of the site. The existing fire station facility, located in the position of the proposed parking lot, will remain on-site until the new building is constructed. At that time, this fire station building will be removed from the site (this action is not part of this grant). The future use of this building will be determined in the future. A site diagram depicting current conditions is included as Figure 2, and a site diagram depicting the proposed site layout is included as Figure 3.

The proposed facility will include a four bay station with dorm rooms, training areas, kitchen, day room, administrative offices and a back-up generator on-site. The intent of this facility is to meet the current needs of the fire department and continue to meet the needs of the fire department for the next thirty years.

### 3.3 Alternatives Considered and Dismissed

An alternative considered and dismissed was the construction of the new facility at a different location. The alternative location was undeveloped land located along Cedar Street, south of the railroad tracks. This location was dismissed because emergency response vehicles dispatched from this location would have to cross the adjacent railroad tracks to reach the scene of the incident, and the possibility of a train on the tracks could impede the vehicles and increase response time. Thus, this alternative location would not meet the needs of the project and was dismissed from further evaluation.

## 4.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The following table summarizes the potential impacts of the No Action and Proposed Action Alternatives and conditions or mitigation to offset those impacts.

Affected Environment	No Action Alternative	Proposed Action Alternative
Geology & Soils	No impacts to geology, soils, or prime or unique farmland are anticipated.	No impacts to geology or prime or unique farmland are anticipated. Soils will be exposed during grading and foundation work, however, soil erosion will be minimized during construction activities by implementing Best Management Practices (BMP).
Air Quality	No impacts to air quality are anticipated.	A negligible amount of emissions of NO <sub>x</sub> and VOC is anticipated from construction and post construction operations at this facility. However, the emissions are in general conformity with the State Implementation Plan (SIP), and therefore not anticipated to have a significant impact. Concurrence from Louisiana Department of Environmental Quality (LDEQ) is included in Appendix B.
Water Quality	No impacts to water quality are anticipated.	Minor impacts from erosion to surface water are possible during construction. A Storm Water Pollution Prevention Plan (SWPPP) indicating appropriate BMPs will be maintained and implemented to minimize runoff.
Wetlands	No impacts to wetlands or other waters of the US are anticipated.	No impacts to wetlands or other waters of the US are anticipated.
Floodplain	No impacts to floodplains are anticipated.	No impacts to floodplains are anticipated.
Biological Resources	No impacts to biological resources are anticipated.	No impacts to biological resources are anticipated.

Affected Environment	No Action Alternative	Proposed Action Alternative
Cultural Resources	No impacts to cultural resources are anticipated.	No impacts to cultural resources are anticipated. In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archaeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the State Historic Preservation Office (SHPO) and any appropriate Tribes. Work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.
Environmental Justice	No impacts to low-income or minority populations is anticipated.	Project will enhance fire protection capability, thus providing a benefit to entire community, including low-income and minority populations. No adverse impacts to low-income or minority populations is anticipated.
Noise	No impacts on noise are anticipated.	Short-term noise impacts are anticipated during construction, which will be limited to workday daylight hours. Post construction operations may increase noise impacts from sirens operated by emergency response vehicles, depending on the frequency and timing of emergency responses.
Traffic	No impacts to traffic are anticipated.	No impacts to traffic are anticipated.
Hazardous Materials	No impacts from hazardous materials are anticipated.	No impacts from hazardous materials are anticipated. Potentially hazardous materials handled at the site should be handled with care in accordance to manufacturer guidelines. All wastes generated should be disposed of in accordance with applicable federal, state and local requirements.

## **4.1 Physical Resources**

### **4.1.1 Geology and Soils**

The site lies within the Natural Levee Deposits of Holocene Age, as determined from the Geologic Map of Louisiana (1984), specifically as part of the Distributary Complex of the Mississippi River meander belt No. 1, as indicated on the 30 x 60 Minute Geologic Quadrangle, Baton Rouge (2000). The Natural Levee Deposits typically consist of soft to stiff silty clays and clays with some organic material. The Natural Levee deposits tend to exhibit strong layering, but grade coarser with depth. More competent sands and silty sands associated with older Pleistocene deposits usually are identified as a basal unit.

The Natural Resource Conservation Service (NRCS) Web Soil Survey for Iberville Parish identified the soils on-site to be described as Commerce, silt loam. The Commerce series consists of deep, somewhat poorly drained, moderately slowly permeable soils that formed in loamy alluvial sediments. These soils are on level with undulating alluvial plains of the Mississippi River and its distributaries.

The Farmland Protection Policy Act of 1981, Public Law 97-98, 7 United States Code 4201, as described in 7 Code of Federal Regulations Section 658, (FPPA) authorizes the US Department of Agriculture to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. This is accomplished by the NRCS's criteria to identify the effects of land use conversion via the farmland impact rating score system. The proposed project is located within the Grosse Tete city limits and "on land already in urban development or used for water storage", as defined as land with a density of 30 structures per 40-acre area (7 CFR 658). Therefore, the proposed project is exempt under FPPA and coordinate with the NRCS is not required.

Alternative 1 – No Action: The No Action Alternative would have no impact to the geology or soils within the proposed project area.

Alternative 2 – Proposed Action: The Proposed Action Alternative will cause a disruption to the soils across the site during construction of the new Fire Station. Soils will be exposed during grading and foundation work, however, soil erosion will be minimized during construction activities by implementing Best Management Practices (BMP).

### **4.1.2 Air Quality**

The Clean Air Act (42 USC 7401) requires the EPA to establish minimum national standards for air quality (National Ambient Air Quality Standards) and assigns primary responsibility with the states to ensure compliance with the standard. Any area not meeting the standards is referred to as a nonattainment area and is required to implement specific air pollution control measures. These specific controls are specified in the State Implementation Plans (SIP), which is developed to establish specific limits and controls in an attempt to return the nonattainment areas to attainment. General Conformity with the SIP is required for all federal actions, other than projects funded by the FHWA or FTA, to ensure that they do not interfere with the State's attainment methods (40 CFR Parts 51 and 93).

Iberville Parish is identified by the EPA and LDEQ as being in non-attainment with the ozone standards. As a result, a new source limit of 100 tons per year of both nitrogen oxide (NOx) and volatile organic compounds (VOC) is in place by LDEQ for Iberville Parish, as demonstrated in the SIP. Sources of these contaminants include motor vehicles, paint fumes, electricity generation, and other equipment that uses petroleum fuels.

Alternative 1 – No Action: The No Action Alternative will have no impact to the existing air quality.

Alternative 2 – Proposed Action: The Proposed Action would result in minor temporary and long term increases in air emissions from the construction and use of the Fire Station. As such, Terracon modeled scenarios for both the construction activities and post construction activities for the proposed project to determine the worst case estimated amount of emissions for NOx and VOC. The different sources of pollutants for the construction phase included emissions from use of heavy equipment typically associated with construction, travel of construction workers to/from the site, and painting of the building and interior rooms.

The post-construction phase included the emissions from employee vehicles traveling to/from the Fire Station and the dispatch of emergency vehicles (fire trucks) from the fire station on a daily basis. The specific assumptions made for each scenario are included in the correspondence in Attachment B.

The LDEQ reviewed the estimated emissions amount and provided correspondence that indicated the project was in general conformity with the State Implementation Plan for Air Quality. A copy of this correspondence is included in Appendix B.

Therefore, a negligible amount of emissions of NOx and VOC will result from the proposed project. However, the emissions are in general conformity with the SIP and are not anticipated to have a significant impact.

## **4.2 Water Resources**

### **4.2.1 Water Quality**

The Clean Water Act (33 USC 1251 et seq.) of 1972 (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting point source standards for industry, and water quality standards for all contaminants in surface waters from non-point sources. Through this act, the National Pollutant Discharge Elimination System (NPDES) was established as a permit system to control discharges.

The closest surface water body to the site is Bayou Grosse Tete, which is located approximately 785 feet northeast of the site and is a tributary to the Intracoastal Waterway (Louisiana segment 010502). The Louisiana Authoritative Code (LAC) 33:IX:1111 Table 3 indicates the designated uses for the Intracoastal Waterway to be Primary and Secondary Contact Recreation, Fish and Wildlife Propagation, and as a Drinking Water Source. The LDEQ and the EPA have compiled a list of impaired water bodies for the state. Based on the

2008 Impaired Water Body list dated August 2009, the Intracoastal Waterway was not listed on the impaired list.

The site is located above the Mississippi Alluvial Aquifer system, as indicated by the Louisiana Aquifer System Map 1999, which is known to be located approximately 185-500 feet below ground surface. This aquifer system is not indicated as a sole source aquifer by the EPA.

Alternative 1 – No Action: The No Action Alternative will have no impact on water quality.

Alternative 2 – Proposed Action: The Proposed Action is likely to cause a temporary increase in soil erosion during construction, which may impact the receiving water body during storm events. However, a Storm Water Pollution Prevention Plan (SWPPP), indicating appropriate best management practices, will be implemented and maintained during construction activities, minimizing potential impacts.

A slight increase in storm water flow from the site is anticipated after construction due to the increase in impervious surface. However, due to the size of the site, this increase will have an insignificant impact on Bayou Grosse Tete. There are no requirements for post-construction storm water controls or BMPs for the site.

#### **4.2.2 Wetlands**

Section 404 of the Clean Water Act established a program to regulate the discharge of dredged or fill materials into Waters of the United States, including wetlands. This program is overseen by the EPA and administered by the United States Army Corps of Engineers (USACE). Wetlands subject to this act are defined as “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”. Additionally, Executive Order 11990 (Protection of Wetlands) instructs federal agencies to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the values of wetlands in carrying out the agency’s responsibility.

The site was surveyed for the potential presence of Waters of the United States, including wetlands. No waters or wetlands were identified during the surveys. The proposed site is located within a historically developed area, with adjacent commercial and residential properties. The site is partially covered with grasses and a few trees. The United States Fish and Wildlife Service (US FWS) National Wetland Inventory Map was accessed on August 17, 2010 and depicted no wetland habitat in the vicinity of the site.

Alternative 1 – No Action: The No Action Alternative will have no impact on wetlands or Waters of the US, and no Section 404 permit will be required.

Alternative 2 – Proposed Action: As no wetlands or Waters of the US were determined to exist on-site or in the vicinity of the site, the proposed action will have no impact on these resources and will not require a Section 404 permit.

### **4.2.3 Floodplains**

Executive Order 11988 (Floodplain Management) requires federal agencies to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. FEMA uses Flood Insurance Rate Maps (FIRM) to identify the regulatory 100-year floodplain from the National Flood Insurance Program. A floodplain is defined as the “lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year”, except where a critical action is involved, in which case floodplain is defined as an “area subject to inundation from a flood having a 0.2 percent chance of occurring in any given year (500-year floodplain)”.

FIRM Panel Number 2200840001B dated March 1, 1978 depicts the site and surrounding area as within Zone C. FEMA defines Zone C as an area of minimal flood hazard depicted as above the 500-year flood level. The portion of the FIRM depicting the site is included in Appendix C.

Alternative 1 – No Action: The No Action Alternative will have no impact on the floodplain.

Alternative 2 – Proposed Action: The proposed action will have no impact on the floodplain.

### **4.3 Biological Resources**

The Endangered Species Act of 1973 (ESA) provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The US FWS and the US National Oceanic and Atmospheric Administration Fisheries Service administer the ESA and maintain lists of species, their habitats and known locations.

According to the US FWS Threatened and Endangered Species of Louisiana List updated January 2010, there are three species listed in Iberville Parish. These species include the Louisiana Black Bear (threatened, critical habitat), Pallid Sturgeon (endangered), and Gulf Sturgeon (threatened). The identified critical habitat for the Louisiana Black Bear was determined to be located approximately 4.8 miles west of the site, as determined from the US FWS Critical Habitat Portal.

Additionally, the Iberville Parish listing of ‘Rare, Threatened & Endangered Species & Natural Communities Tracked by the Louisiana Natural Heritage Program’ dated April 2008, was reviewed. This listing identified 11 species/community types of concern, as indicated below:

- Sink-hole Fern
- Bottomland Hardwood Forest
- Cypress Swamp
- Cypress-Tupelo Swamp
- American Swallow-tailed Kite
- Bald Eagle (state endangered)
- Snow Melanthera
- Osprey

- Powdery Thalia
- Nodding Pogonia
- Waterbird Nesting Colony

The proposed site is located within a historically developed area, with adjacent commercial and residential properties. The site is partially covered with grasses and a few trees. This habitat is not suitable for any of the species/communities listed. Neither the site nor the surrounding properties were identified by the quadrangle maps as a wildlife preserve.

Alternative 1 – No Action: The No Action Alternative will have no effect on threatened and endangered species or critical habitat.

Alternative 2 – Proposed Action: There are no threatened and endangered species, critical habitat or species of concern at the proposed site; therefore the Proposed Action will have no effect on these resources.

#### **4.4 Cultural Resources**

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies or their applicants to take into account the effects of their undertakings on historic places. Under the NHPA, the Louisiana Office of Cultural Development is given the role of the State Historic Preservation Office (SHPO). Historic properties are defined as standing structures, archaeological sites, or other historic resources listed in or eligible for listing in the National Register of Historic Places. NHPA defines historic places as ‘districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering and culture’, including structures on or eligible for inclusion on the National Register of Historic Places.

According to information on the National Register Information System website, <http://www.nps.gov/history/nr/research/index.htm>; the National Register of Historic Places website, [www.nationalregisterofhistoricplaces.com/LA/state.html](http://www.nationalregisterofhistoricplaces.com/LA/state.html); and the Louisiana National Register of Historic Places website, <http://www.crt.state.la.us/hp/nhl/searchby.asp>; neither the site, nor properties in the immediate vicinity were not listed as an historic property. Additionally, a review of maps and data available from the Bureau of Indian Affairs (BIA) revealed no Native American owned lands in the immediate vicinity of the site.

FEMA determined that no historic properties will be affected by the proposed project and requested SHPO concurrence on July 27, 2010. SHPO concurrence with FEMA’s determination was received dated August 19, 2010. A copy of the correspondence sent to/received from the SHPO is included in Appendix B of this report.

Alternative 1 – No Action: The No Action Alternative will have no effect on cultural resources.

Alternative 2 – Proposed Action: There are no historic, archaeological or Native American lands at or in the vicinity of proposed site; therefore, the Proposed Action will have no effect on these resources.

## **4.5 Socioeconomic Resources**

### **4.5.1 Environmental Justice**

Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations” requires each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations”.

The US Department of Health and Human Services defines the national poverty level by annual income for each year. Based on the 2000 US Census Bureau data, the median annual income for the village of Grosse Tete is \$32,188.

According to the US Census Bureau 2000 data for the village of Grosse Tete, 44.5% of the population identified their race to be other than Caucasian. The median annual income was \$32,188 for families, with 16.7% of families below the poverty level.

Alternative 1 – No Action: Although the No Action Alternative does not involve a federal action, and therefore Executive Order 12898 does not apply; the No Action Alternative will have no effect on low-income or minority populations in the area.

Alternative 2 – Proposed Action: The Proposed Action will not create adverse impacts to any minority or low-income population within the proposed project area. The proposed Fire Station project will provide enhanced fire protection and emergency response for all residents of Grosse Tete.

### **4.5.2 Noise**

The Noise Pollution and Abatement Act of 1972 (42 USC 4901, et seq.) established a requirement for all federal agencies to comply with applicable federal, state and local noise regulations, in addition to fostering programs in a manner that promotes an environment free from noise that jeopardized public health or welfare. NEPA further provides authority and responsibility for evaluation of noise.

Noise is commonly defined as an unwanted sound. Noise-sensitive receptors are those subject to a heightened impact from noise, such as residential and recreation areas, educational facilities, lodging, health care facilities, and religious facilities. Residential properties are located adjacent to the west of the site and a church is located approximately 150 feet south of the site. Noise levels occurring at nighttime typically produce a higher annoyance than the same levels during the day as a result of the background noise level being lower at night.

Alternative 1 – No Action: The No Action Alternative will have no impacts on noise within the proposed project area.

Alternative 2 – Proposed Action: The Proposed Action will increase noise levels within and adjacent to the site during construction activities. However, this additional noise will be predominantly limited to workday daylight hours for the duration of construction and is

expected to be minor based on the type of construction equipment expected and duration of activities.

A minor impact from noise may occur during the normal operation of the facility from the sirens and emergency vehicles, depending on the frequency and timing of emergency responses.

#### **4.5.3 Traffic**

The proposed project is located within the Village of Grosse Tete. The site is accessible from Gum Street and Willow Street, both of which connect to LA-Highway 77.

Alternative 1 – No Action: The No Action Alternative will have no impact on traffic within the proposed project area.

Alternative 2 – Proposed Action: A slight increase in traffic is expected during the construction activities; however, no major changes (detours or closures) are anticipated. No increase in traffic or changes in traffic patterns are anticipated from the normal operation of the Proposed Action.

#### **4.6 Hazardous Materials**

Hazardous materials management is regulated under a variety of federal and state laws and regulations including: Resource Conservation and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); the Emergency Response and Community Right-to-Know Act; the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. These regulations provide methods for proper handling, assessment, transportation, management and disposal of hazardous materials in order to protect human health and the environment.

Database search results indicate the proposed project location is not listed as a Louisiana Volunteer Remedial Program (VRP), state or federal Brownfields, Leaking Underground Storage Tanks (LUST), or other hazardous or solid waste management or disposal concern listed in the LDEQ Electronic Document Management System (EDMS).

Utilizing both LDEQ's EDMS and the EPA's Enviromapper database, Terracon identified two RCRA facilities and one UST facility located within 1,000 feet of the site. Each of these facilities was determined to not be of an environmental concern to the site, based on regulatory status and proximity to the site. Each of these facilities is further discussed below.

***Grosse Tete Police Department*** – The police department was identified to be located at 18125 Willow Street; this facility previously maintained a 1,000-gallon UST, positioned behind the courthouse. The former location of this UST was over 200 feet east of the site. Based on available records, the UST was operated from 1980 through 1999, at which time it was removed. There was no record of UST closure report on file at LDEQ; however, LDEQ removed this UST from their active database in 2004. No violations or incidents were noted for this facility.

**Mansfield Industrial** – This facility was identified to be located at 77635 Cedar Street, approximately 450 feet southwest of the site. This facility registered as a RCRA-SQG in 2007 and is indicated as generating used paint and paint thinner as a waste. No violations or incidents were noted for this facility.

**Woodie's Body Shop** – This facility was located approximately 800 feet north of the site at 17915 Bayou Road; this facility previously maintained a UST and a RCRA permit. Available information revealed that the UST was closed in 1992, and the RCRA permit was terminated in 1994. No violations or incidents were identified.

Alternative 1 – No Action: The No Action Alternative will not disturb any hazardous materials or create any potential hazard to human health or environmental health.

Alternative 2 – Proposed Action: Research indicates that no hazardous materials, wastes or substance are present at the site. If hazardous constituents are encountered in the subsurface during the project, appropriate measures for proper assessment and remediation will be initiated in accordance with applicable federal and state regulations.

Project construction and post-construction activities may involve the use of potentially hazardous materials (e.g. petroleum products, solvents, cleaners, paints, herbicides) and may result in the generation of small volumes of hazardous waste and on-site storage. Appropriate measures to prevent, minimize and control of hazardous materials spills will be taken. All hazardous and non-hazardous wastes generated will be disposed of in accordance with applicable federal, state and local requirements.

## 5.0 CUMULATIVE IMPACTS

Cumulative impacts are those effects on the environment that result from the incremental effect of the action when added to past, present, and reasonably foreseeable future actions, regardless of what agency or person undertake such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

No other projects or actions have been identified in which a cumulative impact on human and natural environment would be expected.

## 6.0 MITIGATION MEASURES

Mitigation is defined as the “attempt to offset potential adverse effects of human activity on the environment”. The development of mitigation measures has become an integral part of the regulatory process. Based upon the consultations undertaken in this EA, several mitigation measures must be taken by the Grosse Tete Fire Department (applicant) prior to and during project implementation. These mitigations measures are outlined as follows:

- To minimize soil erosion during construction activities, BMPs will be implemented.

- A SWPPP indicating appropriate best management practices will be implemented and maintained during construction activities, minimizing potential impacts to water quality.
- In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measure to avoid or minimize harm to the finds. All archaeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO and any appropriate Tribes. Work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.
- Noise during construction activities will be predominantly restricted to workday daylight hours to minimize impact to nearby residences.
- If hazardous constituents are encountered in the subsurface during the project, appropriate measures for proper assessment and remediation will be initiated in accordance with applicable federal and state regulations.
- Appropriate measures to prevent, minimize, and control hazardous materials spills will be taken during construction and post-construction facility operations. All hazardous and non-hazardous wastes generated post-construction will be disposed of in accordance with applicable federal, state, and local requirements.

Prior to project implementation any applicable local, state or federal permits will be obtained, which may include a building permit and Certificate of Occupancy.

## **7.0 AGENCY COORDINATION, PUBLIC INVOLVEMENT AND PERMITS**

FEMA is the lead agency for ensuring environmental compliance for the proposed fire station project. It is the goal of the lead agency to be responsive to the needs of the community and the purpose and need of the proposed action, while meeting the intent of federal environmental and cultural resource laws, including NEPA, and complying with all necessary provisions. During the course of this assessment, consultation has occurred with the following agencies: Louisiana SHPO and the LDEQ.

FEMA is inviting the public to comment on the proposed action during a 14-day comment period, in which the EA will be available at [FEMA.gov](https://www.fema.gov). FEMA will consider and respond to all public comments either individually or in the Final EA.

## **8.0 LIST OF PREPARERS**

The preparation of this Environmental Assessment was conducted by Ms. Jessica R. Keasler, MS, Environmental Scientist; and Mr. Richard M. Simon, Senior Principal/Regional Manager for Terracon Consultants, Inc.

## **9.0 GENERAL COMMENTS**

This report has been prepared for the exclusive use of the client for specific applications to the project as discussed. The analysis and opinions expressed in this report are based upon data obtained from public sources or from other information discussed in this report. This report has been prepared in accordance with generally accepted environmental engineering practices. No warranties to third parties are intended or made. In the event any changes in the nature or location of suspected sources of contamination as outlined in this report are observed, the conclusions and recommendations contained in this report shall not be valid unless these changes are reviewed and the opinions of this report are modified or verified in writing by Terracon.

## **10.0 REFERENCES**

Federal Emergency Management Agency Floodplain Map, Village of Grosse Tete, Iberville Parish, Louisiana, 2200840001B, March 1, 1978

Louisiana Authoritative Code, Part IX Water Quality, December 2009

Louisiana Department of Culture, Recreation and Tourism, 2010. Website:

<http://www.crt.state.la.us/hp/>

Louisiana Department of Environmental Quality, General State Implementation Plan, 2007

Louisiana Department of Environmental Quality, 2008 Louisiana Water Quality Inventory Integrated Report, April 2009

Louisiana Department of Wildlife and Fisheries, Natural Heritage Program, 'Rare, Threatened, & Endangered Species & Natural Communities' List, Iberville Parish, April 2008

Louisiana Geologic Society, 30 x 60 Minute Geologic Quadrangle, Baton Rouge, 2000

Louisiana Governor's Office of Indian Affairs. 2010. Website: <http://www.indianaffairs.com>

National Register of Historic Places. 2010. Website:

<http://www.nps.gov/history/nr/research/index.htm>

Natural Resource Conservation Service, Web Soil Survey. 2010. Website:

<http://websoilsurvey.nrcs.usda.gov/app/>

United States Census Bureau, Grosse Tete Fact Finder. 2010. Website:

<http://factfinder.census.gov>

United States Department of Health & Human Services, 2009 Poverty Guidelines. Website:

<http://aspe.hhs.gov/poverty/09poverty.shtml>

United States Environmental Protection Agency Region VI Sole Source Aquifers. 2010.

Website: <http://www.epa.gov/region6/water/swp/ssa/maps.htm>

United States Fish and Wildlife Service Critical Habitat Portal. 2010. Website:

<http://criticalhabitat.fws.gov/>

United States Fish and Wildlife Service National Wetlands Inventory. 2010. Website:

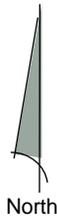
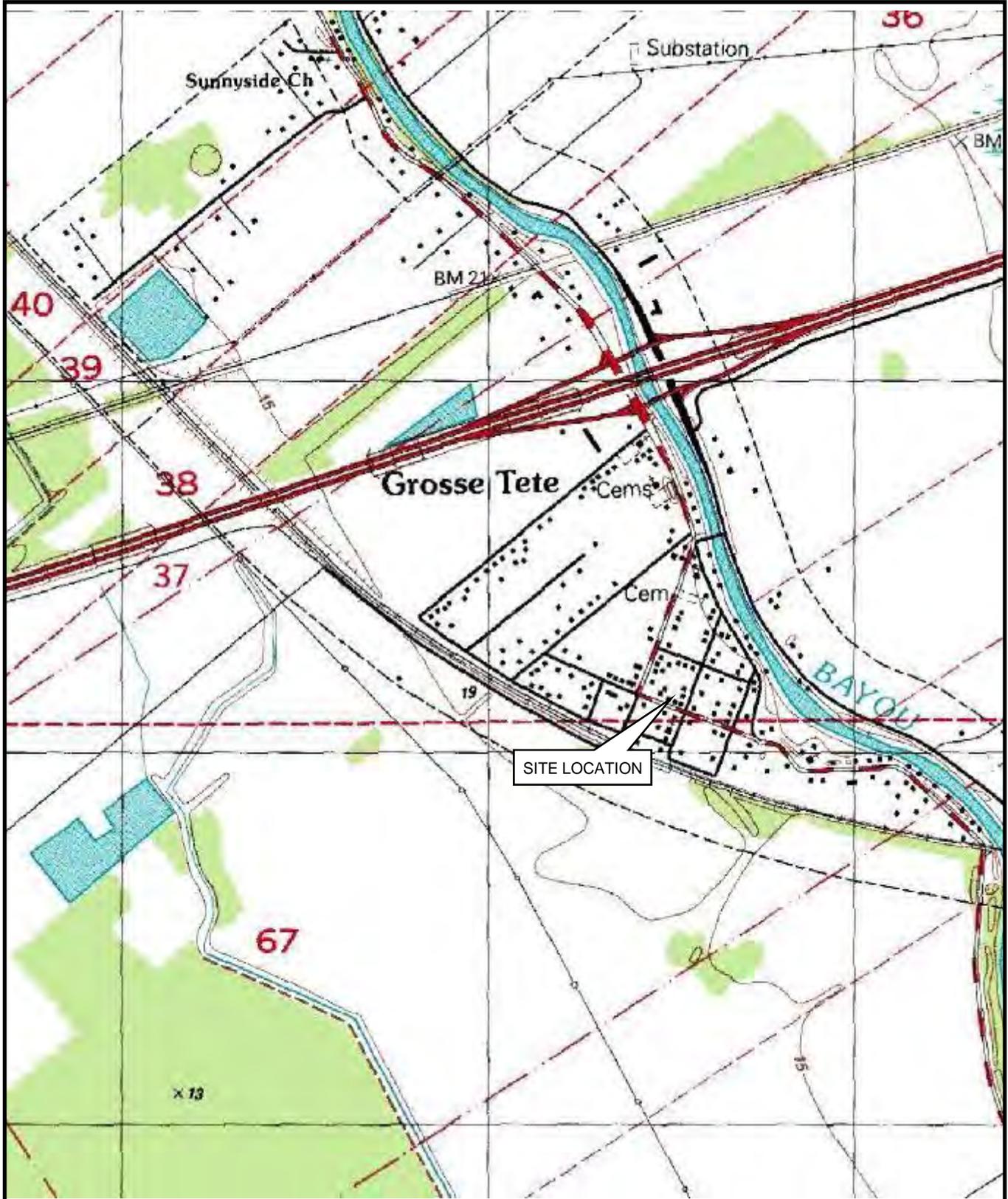
<http://www.fws.gov/wetlands/data/index.html>

United States Fish and Wildlife Service Threatened and Endangered Species List of Louisiana, January 2010

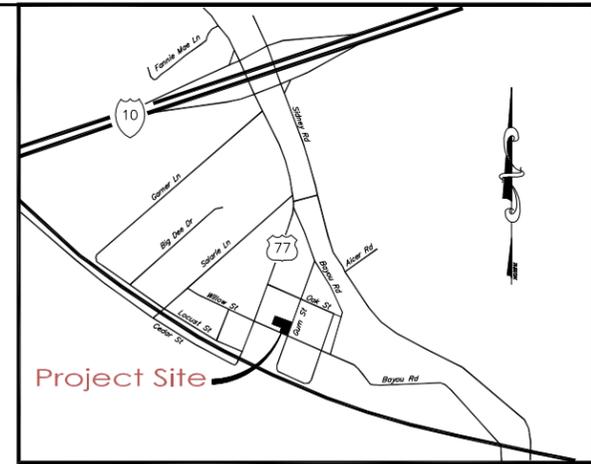
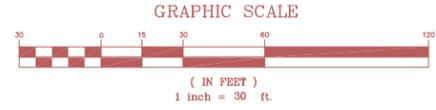
United States Geologic Survey, 7.5-Minute Topographic Map, Grosse Tete, Louisiana

## **APPENDIX A**

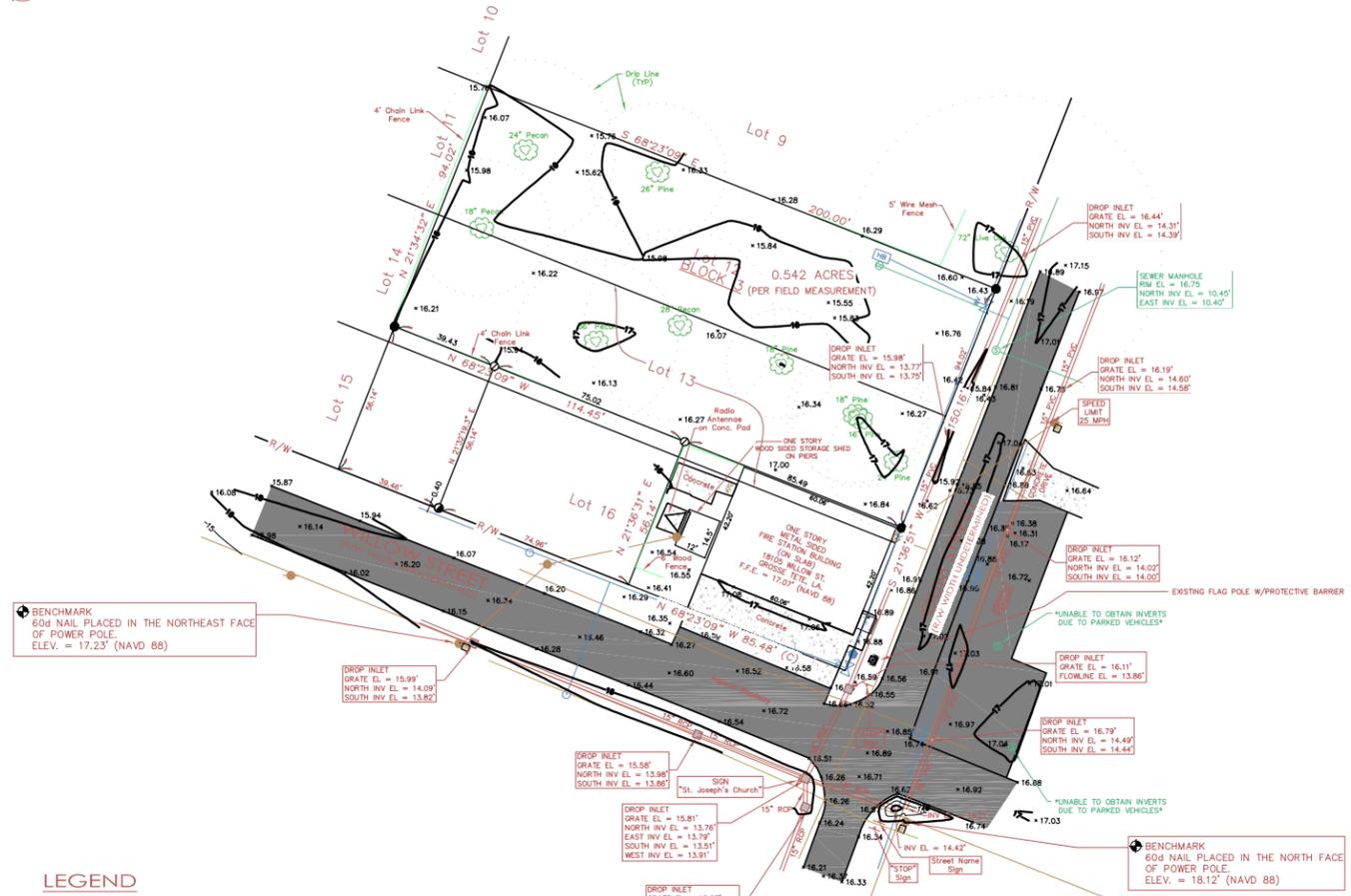
### **Figures**



<b>SITE VICINITY MAP</b>	
Grosse Tete Fire Station Gum Street, Grosse Tete, LA	
7.5-Minute Topographic Map Grosse Tete, Louisiana	
<b>Terracon</b>	<b>Fig No.</b> 1



Vicinity Map  
 (Not to Scale)



- LEGEND**
- 1/2" IRON PIPE (FOUND)
  - 1/2" IRON ROD (FOUND)
  - RAILROAD SPIKE (FOUND)
  - TREE
  - POWER POLE
  - GAS RISER
  - SANITARY SEWER MANHOLE
  - SANITARY SEWER CLEAN-OUT
  - FIRE HYDRANT
  - WATER VALVE
  - WATER METER
  - HOSE BIB
  - TELEPHONE PEDESTAL
  - WATER LINE
  - SANITARY SEWER LINE
  - TELEPHONE LINE
  - GAS LINE
  - SPOT ELEVATION
  - CONTOUR LINE
  - BENCHMARK PLACED

**GENERAL NOTES:**

1. THE NORTH ARROW, BEARINGS, AND COORDINATES AS SHOWN HEREON ARE REFERENCED TO THE STATE OF LOUISIANA STATE PLANE COORDINATE SYSTEM, (LOUISIANA SOUTH ZONE, NAD 83, GEOID 09) AS PER INFORMATION OBTAINED BY GPS STATIC OBSERVATIONS.
2. THE ELEVATIONS AS SHOWN HEREON ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AS PER INFORMATION OBTAINED BY GPS STATIC OBSERVATIONS.
3. AS PER NATIONAL GEODETIC SURVEY, THE SUBJECT PARCEL LIES WITHIN A NOTED SUBSIDENCE AREA.
4. REFERENCE MAP (AS PROVIDED BY CLIENT) - "MAP SHOWING THE SURVEY OF LOT 12, AND THE REMAINING PORTION OF LOT 13, BLOCK 3 OF THE TOWN OF GROSSE TETE FOR THE VILLAGE OF GROSSE TETE" BY CHARLES R. ST. ROMAN, PLS. NO. 4415, DRAWING DATE: OCTOBER 13, 2009, AND EXISTING FIELD MONUMENTATION.
5. ONLY SPOTTED AND VISIBLE UTILITIES HAVE BEEN FIELD LOCATED AND SHOWN HEREON. THERE MAY BE OTHER, NON-VISIBLE UTILITIES WHICH MAY AFFECT THE SUBJECT PROPERTY OF WHICH THE UNDERSIGNED DOES NOT HAVE ANY KNOWLEDGE OF.
6. THE MEASUREMENTS AS SHOWN HEREON WERE MADE IN ACCORDANCE WITH UNITED STATES STANDARDS.
7. NO TITLE SEARCH OR ABSTRACT HAS BEEN PROVIDED TO ABMB ENGINEERS, INC. FOR THE SUBJECT PROPERTY. THERE MAY BE DEEDS OF RECORD, UNRECORDED DEEDS, RIGHTS-OF-WAY, SERVITUDES, BUILDING SETBACK REQUIREMENTS, RESTRICTIVE COVENANTS, GOVERNMENTAL JURISDICTIONAL AREAS, OR OTHER INSTRUMENTS WHICH MAY AFFECT THE BOUNDARIES AND/OR USE OF SAID PROPERTY.
8. IT IS THE OPINION OF THE UNDERSIGNED THAT THE PARCEL OF LAND AS SHOWN HEREON IS LOCATED IN FLOOD ZONE 'C', BASE FLOOD ELEVATION N/A, AS PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP OF THE VILLAGE OF GROSSE TETE, IBERVILLE PARISH, LOUISIANA (INCORPORATED AREAS), COMMUNITY PANEL NUMBER 22084-0001-B, EFFECTIVE DATE MARCH 1, 1978.
9. THIS IS A TOPOGRAPHIC SURVEY FOR THE PURPOSE OF SHOWING EXISTING FEATURES OF THE PROJECT SITE AS PER THE CLIENT'S REQUEST.

**SURVEYOR'S CERTIFICATION:**

THIS PLAT REPRESENTS AN ACTUAL GROUND SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION AND WAS PREPARED IN ACCORDANCE WITH THE LOUISIANA "MINIMUM REQUIREMENTS FOR PROPERTY BOUNDARY SURVEY" FOR A CLASS 'B' SURVEY.

Sam M. Holladay, III  
 Professional Land Surveyor  
 State of Louisiana  
 Registration No. 4760

Date: \_\_\_\_\_

TOPOGRAPHIC SURVEY - PROPOSED NEW FIRE STATION SITE  
 OF  
 LOTS 12, THE REMAINING PORTION OF LOT 13, AND A PORTION OF LOT 16, BLOCK 3  
 THE TOWN OF GROSSE TETE, IBERVILLE PARISH, LOUISIANA  
 FOR  
 THE VILLAGE OF GROSSE TETE

TOPOGRAPHIC SURVEY - PROPOSED NEW FIRE STATION SITE

TOPOGRAPHIC SURVEY OF LOT 12, THE REMAINING PORTION OF LOT 13,  
 A PORTION OF LOT 16, BLOCK 3, THE TOWN OF GROSSE TETE, IBERVILLE PARISH, LA  
 FOR  
 THE VILLAGE OF GROSSE TETE

SEAL:

DATE: 6/09/10  
 DRAWN BY: tp  
 CHECKED BY: sh  
 SCALE: 1"=30'

REVISIONS:

SHEET NO:  
 1 of 1  
 PROJECT NO: 2110

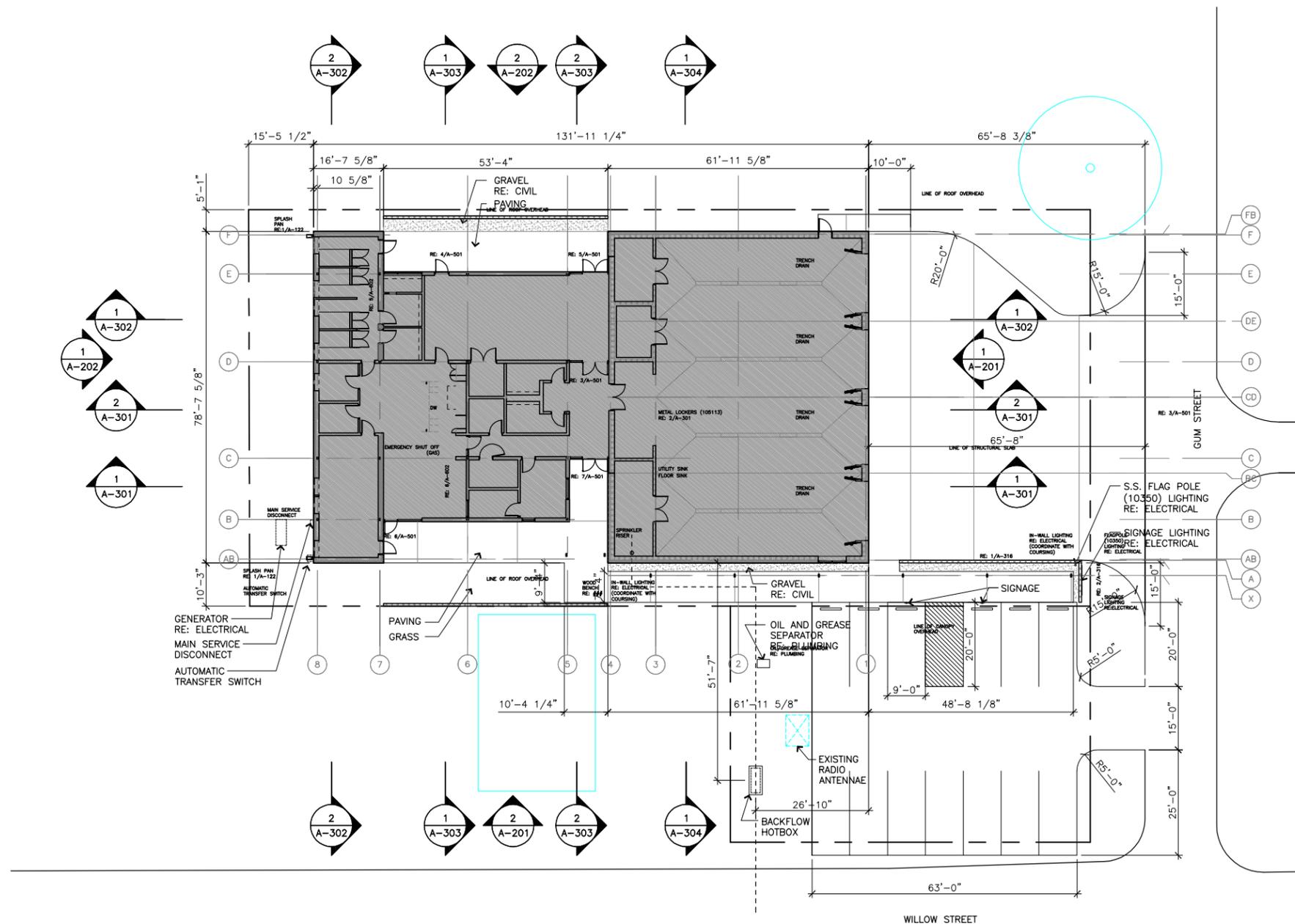
Project:

# New Fire Station for Grosse Tete Volunteer Fire Department

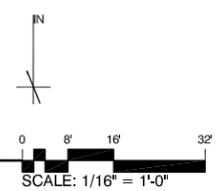
Grosse Tete, LA

Project Number: 2010.008

## Grosse Tete Fire Station



1 SITE PLAN



**chasedesigngroup**  
 A PROFESSIONAL ARCHITECTURE CORPORATION  
 1720 Kaliste Saloom Rd, Suite D8 - Lafayette, LA 70508  
 TEL. 337.326.4470  
 2727 Prytanis St, Suite 17 - New Orleans, LA 70130  
 TEL. 504.208.2676

Seal:

Copyright © 2010 Chase Design Group  
 A Professional Architecture Corporation  
 This Document is the Property of Chase Design Group  
 This Document may NOT be Copied or Used for Construction without  
 Written Consent from Chase Design Group

WHEN USED FOR CONSTRUCTION, THE CORRESPONDING  
 WRITTEN SPECIFICATIONS SHALL APPLY TO THIS DOCUMENT

Revisions:

Sheet Title:	
ARCHITECTURAL SITE PLAN	
Drawn:	AT
Checked:	NM
Date:	5/5/2010
Scale:	1/16" = 1'-0"
Drawing Number:	A-100
DESIGN DEVELOPMENT	

## **APPENDIX B**

### **Correspondence**



# FEMA

July 27, 2010

Mr. Scott Hutcheson  
State Historic Preservation Officer  
Department of Culture, Recreation and Tourism  
1051 N Third St  
Baton Rouge, LA 70806

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

*Phil Boggan* 8-19-10  
Phil Boggan Date  
Deputy State Historic Preservation Officer

RE: Request for Concurrence with Finding of "No Historic Properties Affected"  
Gum Street Fire Station, Grosse Tete, Iberville Parish, LA  
Latitude: 30.41046; Longitude: -91.43285  
Assistance to Firefighters Grant Program -- EMW-2009-FC-02794

Dear Mr. Hutcheson:

The Grants Programs Directorate (GPD) of the Federal Emergency Management Agency (FEMA) proposed to provide funding, through the (AFG), to the Grosse Tete Volunteer Fire Department (Applicant) for the construction of a new Fire Station (Undertaking). FEMA has determined that this project constitutes an Undertaking and is initiating consultation under Section 106 of the National Historic Preservation Act.

The Undertaking includes the construction of a new fire station located at 76870 Gum Street (Latitude: 30.41046; Longitude: -91.43285), Grosse Tete, Iberville Parish, Louisiana. The site consists of approximately 0.542 acres of previously disturbed residential property. The proposed fire station development will include the construction of an approximately 8,950-square foot building with four vehicle bays, office space, day area, night area, and equipment storage. A concrete paved drive and parking area will be located adjacent to Gum and Willow Streets, with access drives to Gum Street. Minimal site grading and infrastructure realignments are anticipated as the site was previously developed.

FEMA has determined that there are no properties in the project area listed or eligible for inclusion in the National Register of Historic Places. All construction activities will take place within a previously disturbed area. Therefore, FEMA has determined that there will be **No Historic Properties Affected** due to the proposed Undertaking, and FEMA requests your concurrence with this finding.

RECEIVED  
JUL 30 2010

## Keasler, Jessica R.

---

**From:** Diane Hewitt [Diane.Hewitt@LA.GOV]  
**Sent:** Tuesday, July 27, 2010 2:07 PM  
**To:** Keasler, Jessica R.  
**Subject:** DEQ SOV 100722/1420

July 27, 2010

Jessica R. Keasler, MS  
Terracon Consultants, Inc.  
2822-B O'Neal Lane  
Baton Rouge, LA 70816  
[jrkeasler@terracon.com](mailto:jrkeasler@terracon.com)

RE:  
100722/1420      Grosse Tete Fire Station  
**Air Issue**      FEMA funding  
                         Iberville Parish

Dear Ms. Keasler:

The Department of Environmental Quality (LDEQ), Offices of Environmental Services and Environmental Compliance have received your request for comments on the above referenced project. Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.

There were no objections based on the attached VOC and NOx emissions calculations submitted to us with your letter. However, the following comments have been included below. Should you encounter a problem during the implementation of this project, please notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

The Office of Environmental Services/Permits Division recommends that you investigate the following requirements that may influence your proposed project:

- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permit Division at (225) 219-3181 to determine if your proposed improvements require one of these permits.
- All precautions should be observed to control nonpoint source pollution from construction activities.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly to inquire about the possible necessity for permits. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28.Lead-Based Paint Activities, LAC 33:III.Chapter 27.Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation), and LAC 33:III.5151.Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

**Currently, Iberville Parish is classified as nonattainment with the National Ambient Air Quality Standards.**

Please forward all future requests to Ms. Diane Hewitt, LDEQ/Performance Management/ P.O. Box 4301, Baton Rouge, LA 70821-4301, and your request will be processed as quickly as possible.

If you have any questions, please feel free to contact me at (225) 219-4079 or by email at [diane.hewitt@la.gov](mailto:diane.hewitt@la.gov). Permitting questions should be directed to the Office of Environmental Services at (225) 219-3181.

Sincerely,

Diane Hewitt  
Performance Management  
LDEQ/Community and Industry Relations  
Business and Community Outreach Division  
Office of the Secretary  
P.O. Box 4301 (602 N. 5th Street)  
Baton Rouge, LA 70821-4301  
Phone: 225-219-4079  
Fx: 225-325-8208  
E-mail: [diane.hewitt@la.gov](mailto:diane.hewitt@la.gov)



July 19, 2010

**Louisiana Department of Environmental Quality**

Air Quality Assessment Division

P.O. 4301

Baton Rouge, Louisiana 70821-4301

ATTN: Ms. Diane Hewitt, LDEQ Performance Manager

Re: SIP Conformity Request  
Grosse Tete Fire Station  
76870 Gum Street  
Grosse Tete, Iberville Parish, Louisiana  
Terracon No. EH107108

Ms. Hewitt:

Terracon was contracted to assist with completing an Environmental Assessment for the development of a new Fire Station in Grosse Tete, which will be funded by the Federal Emergency Management Agency (FEMA). The proposed project will include the construction of a 8,950 square-foot structure intended to house up to four emergency vehicles, associated equipment, and quarters for the staff. During the construction process, the current fire station, located on the corners of Gum Street and Willow Street will be demolished, and the land will be used for ancillary parking for the fire station. A vicinity map and proposed site plan are included as attachments for your reference.

The proposed redevelopment will be funded through FEMA, and as such, an Environmental Assessment is required. Iberville Parish is in non-attainment for Air Quality, and this, a general conformity analysis of the proposed Fire Station was completed to ensure that the anticipated emission levels of both Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx) are less than 100 tons per year.

Direct sources of VOCs and NOx anticipated from the proposed redevelopment include paint and mobile vehicles, separated into on-road and off-road classes. Indirect sources of emissions were also considered for construction and post-construction time frames, and included indirect emissions from the use of electricity, heating and/or cooling systems, and other such processes associated with the use of these buildings; and were determined to be negligible.

Based on the proposed layout for the fire station, the paintable surface is expected to be approximately 17,850 square feet. Assuming three coats of 500 gram/liter (VOC emission) paint will be used, and one liter of paint covers approximately 100-square feet, it is anticipated that 134 liters of paint will be used. Thus, it is estimated that 66,938 grams (**0.0669 tons**) of VOCs will be emitted from the painted surfaces within the first six months after painting. It is not expected that measurable emissions would occur from the paint after six months. It is also assumed that the surfaces will not be repainted every year.

The Environmental Protection Agency's (EPA) MOBILE6 model was utilized to determine the rate of emissions for the mobile on-road sources. The EPA's NONROAD model was used to determine the



Terracon Consultants, Inc. 2822-B O'Neal Lane Baton Rouge, Louisiana 70816

P [225] 344 6052 F [225] 344 6346 terracon.com

Geotechnical



Environmental



Construction Materials



Facilities

emissions for mobile off-road sources for the entire year in question. As these models have been approved by EPA for use with general conformity for individual State Implementation Plans, default values were utilized in the models where applicable.

The year 2011 was used as the target year for emissions modeling, and is intended to encompass all emissions from construction activities. Utilizing MOBILE6, the following input assumptions were used rather than the default model values:

- No interstates or highways were taken into consideration, but only local streets.
- Hours of travel were between 0600 and 1700.
- Minimum temperature: 22°F
- Maximum temperature: 102°F
- Target year: 2011 for Construction
- Target year: 2011 for Post-Construction
- No buses or motorcycles were included in Construction.

In addition to these model assumptions, it was assumed that an average of 25 trips per working day would be made; and it would take approximately 80 working days to complete demolition and construction. The approximate distance assumed for each vehicle to travel is 40 miles per trip.

Post construction activities included one staff member at the station at all times on 12 hour shifts, thus assuming 5 trips a day, averaging 40 miles a trip. Additionally, an average of 2 trips per day at 20 miles a trip would account for the emergency vehicles.

Based on these assumptions, the MOBILE 6 model was run to calculate an emission rate for overall vehicles for each scenario: Construction and Post-Construction, resulting in the following:

- Construction & Post-Construction- All vehicles:
  - VOC – 0.977 grams/mile
  - NOx – 1.269 grams/mile
- Post-Construction Heavy Duty Vehicles:
  - VOC – 0.4285 grams/mile
  - NOx – 7.337 grams/mile

The conversion of each of these rates to the applicable tons per year value is as follows:

- Construction: 1000 mi/day \* 80 days = 80,000 miles
  - VOC:  $0.977 \text{ g/mi} * 80,000 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.07816 \text{ ton/yr VOC}}$
  - NOx:  $1.269 \text{ g/mi} * 80,000 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.10152 \text{ ton/yr NOx}}$
- Post-Construction All vehicles: 200 mi/day \* 365 days = 73,000 miles
  - VOC:  $0.977 \text{ g/mi} * 73,000 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.071321 \text{ ton/yr VOC}}$
  - NOx:  $1.269 \text{ g/mi} * 73,000 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.092637 \text{ ton/yr NOx}}$
- Post-Construction Heavy Duty Vehicles: 40 mi/day \* 365 days = 14,600 miles
  - VOC:  $0.4285 \text{ g/mi} * 14,600 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.00625 \text{ ton/yr VOC}}$
  - NOx:  $7.337 \text{ g/mi} * 14,600 \text{ mi/yr} * 100,000 \text{ g/ton} = \mathbf{0.10712 \text{ ton/yr NOx}}$



Copies of the output files from the MOBILE6 Construction and Post-Construction Scenarios is included as an attachment.

EPA's NONROAD model was used to calculate the emissions from Off-Road sources during Construction, which included construction and commercial equipment. Post-construction off-road sources include three diesel generators, which are only expected to be used in emergency conditions (i.e. due to a power outage); therefore an estimate of 25 days was used for this calculation. The following assumptions were used as project specific input into this model:

- Minimum temperature: 22°F
- Maximum temperature: 102°F
- Target year: 2010 for Construction

A list of all equipment considered is included as an attachment; the population for each equipment category was based on knowledge of equipment required for demolition and construction activities. This listing of equipment is believed to be an overestimation as it was assumed every piece of equipment would be used every day. The output reports used are included as an attachment. Based on the above assumptions and national defaults in the model, it is estimated that the emissions from the off-road sources are as follows:

- Construction:
  - VOC – 7.73 grams/day \* 80 days = 618.4 grams = **0.0006184 tons VOC**
  - NOx – 96.17 grams/day \* 80 days = 7693.6 grams = **0.007693 tons NOx**
- Post Construction:
  - VOC – 0.16 grams/day \* 75 days = 12 grams = **0.000012 tons VOC**
  - NOx – 1.44 grams/day \* 75 days = 108 grams = **0.000108 tons NOx**

Based on the estimated emissions from paint, on and off road sources for VOCs and NOx result in de minimis levels of emissions, as shown below:

- Construction:
  - VOCs – 0.0669 (paint) + 0.07816 (on-road mobile) + 0.00006184 (off-road mobile) = **0.145 tons VOC**
  - NOx – 0.10152 (on-road mobile) + 0.007693 (off-road mobile) = **0.109213 tons NOx**
- Post -Construction:
  - VOCs – 0.0071321 (on-road mobile all) + 0.006256 (on-road mobile heavy duty) + 0.000012 (off-road) = **0.0134 tons VOC**
  - NOx – 0.0092637 (on-road mobile all) + 0.1071202 (on-road mobile heavy duty) + 0.000108 (off-road) = **0.11649 tons NOx**

Based on the anticipated de minimis levels of VOC and NOx emissions from the proposed Grosse Tete Fire Station as demonstrated above, Terracon recommends that LDEQ concur that the proposed development is within general conformity to the State Implementation Plan for Iberville Parish.



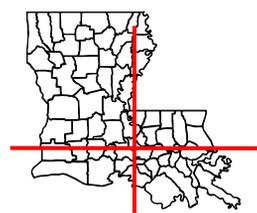
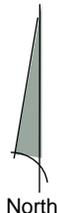
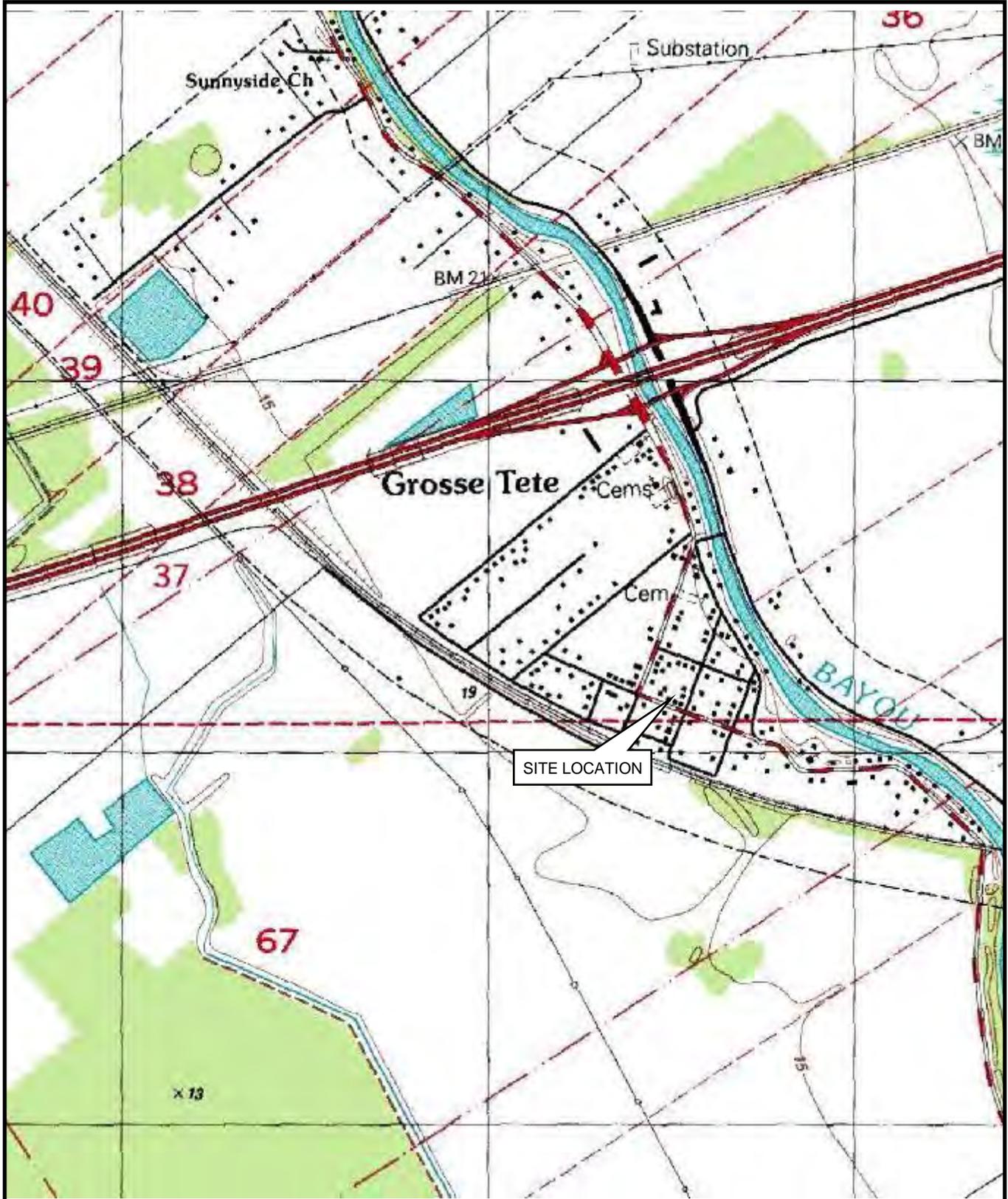
Terracon appreciates your assistance in this matter. If there are any questions, or additional information required, please don't hesitate to contact the undersigned at 225-771-9065 or by email at [jrkeasler@terracon.com](mailto:jrkeasler@terracon.com).

Sincerely,  
**Terracon Consultants, Inc.**

A handwritten signature in black ink that reads "Jessica R. Keasler".

Jessica R. Keasler, MS  
Environmental Scientist

Attachments



<b>SITE VICINITY MAP</b>	
Grosse Tete Fire Station Gum Street, Grosse Tete, LA	
7.5-Minute Topographic Map Grosse Tete, Louisiana	
<b>Terracon</b>	<b>Fig No.</b> 1

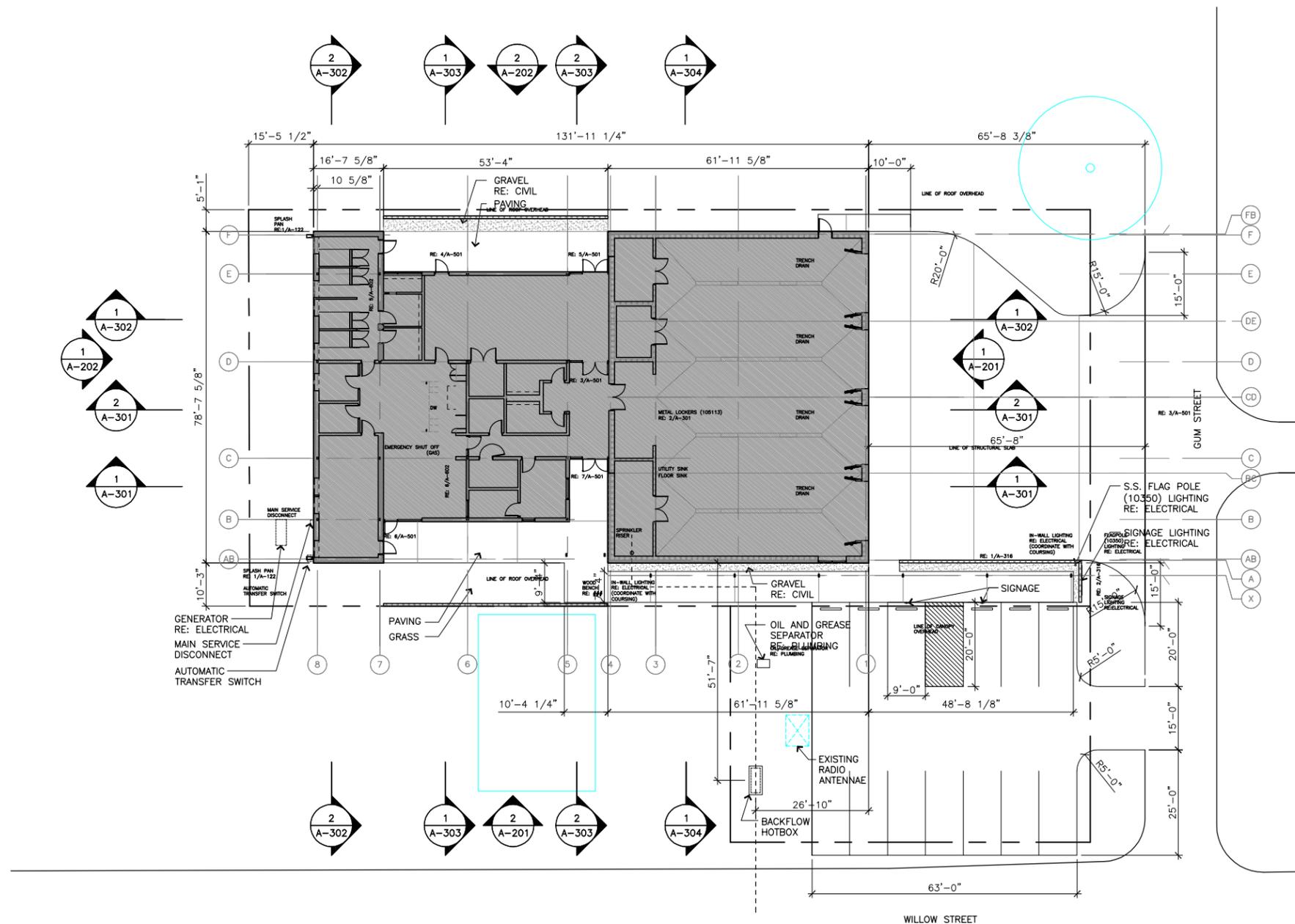
Project:

# New Fire Station for Grosse Tete Volunteer Fire Department

Grosse Tete, LA

Project Number: 2010.008

## Grosse Tete Fire Station



**chasedesigngroup**  
A PROFESSIONAL ARCHITECTURE CORPORATION  
1720 Kaliste Saloom Rd, Suite D8 - Lafayette, LA 70508  
TEL. 337.326.4470  
2727 Prytanis St, Suite 17 - New Orleans, LA 70130  
TEL. 504.208.2676

Seal:

Copyright © 2010 Chase Design Group  
This Document is the Property of Chase Design Group  
This Document may NOT be Copied or Used for Construction without  
Written Consent from Chase Design Group

WHEN USED FOR CONSTRUCTION, THE CORRESPONDING  
WRITTEN SPECIFICATIONS SHALL APPLY TO THIS DOCUMENT

Revisions:

Sheet Title:  
**ARCHITECTURAL  
SITE PLAN**

Drawn:	AT	Drawing Number:	<b>A-100</b>
Checked:	NM	Date:	
5/5/2010		Scale:	

DESIGN DEVELOPMENT

1 SITE PLAN

0 8' 16' 32'  
SCALE: 1/16" = 1'-0"

Mobile 6 Output

\*\*\*\*\*  
 \* MOBILE6. 2. 03 (24-Sep-2003) \*  
 \* Input file: GROSSE.IN (file 1, run 1). \*  
 \*\*\*\*\*

\* #####  
 \*

\* File 1, Run 1, Scenario 1.

\* #####  
 M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2011  
 Month: Jan.  
 Altitude: Low  
 Minimum Temperature: 22.0 (F)  
 Maximum Temperature: 102.0 (F)  
 Absolute Humidity: 75. grains/lb  
 Nominal Fuel RVP: 9.0 psi  
 Weathered RVP: 8.3 psi  
 Fuel Sulfur Content: 30. ppm  
 Exhaust I/M Program: No  
 Evap I/M Program: No  
 ATP Program: No  
 Reformulated Gas: No

LDVT	Vehicle Type: HDDV	LDGV MC	LDGT12 All Veh	LDGT34 >6000	LDGT (All)	HDGV	LDDV
0.0020	0.0856	0.0053	1.0000	0.1344		0.0357	0.0003

-----

Composi te Emi ssi on Factors (g/mi):							
0.404	0.381	4.75	0.977	1.689	1.120	1.287	0.159
0.664	6.360	1.27	1.269	1.182	0.834	2.183	0.357

-----

Veh. Type:	LDGT1	LDGT2	LDGT3	LDGT4	LDDT12	LDDT34
VMT Mi x:	0.0910	0.3031	0.0921	0.0423	0.0000	0.0019

-----

Composi te Emi ssi on Factors (g/mi):						
0.404	0.381	4.75	0.977	1.668	1.733	2.595
0.664	6.360	1.27	1.269	1.085	1.392	2.727

-----

HDGV8A	Veh. Type: HDGV8B	HDGV2B	HDGV3	HDGV4	HDGV5	HDGV6	HDGV7
0.0000	0.0000	0.0299	0.0010	0.0003	0.0011	0.0023	0.0009

-----

Mobile 6 Output

---

Composi te Emi ssi on Factors (g/mi ):							
3.174	Composi te VOC :	1.107	1.195	3.269	2.332	2.222	2.443
	0.000						
3.717	Composi te NOX :	2.058	2.046	2.960	2.797	2.737	3.075
	0.000						

---

HDDV8A	Veh. Type:	HDDV2B	HDDV3	HDDV4	HDDV5	HDDV6	HDDV7
	HDDV8B						
		-----	-----	-----	-----	-----	-----
0.0112	VMT Mi x:	0.0090	0.0028	0.0029	0.0013	0.0065	0.0094
	0.0398						

---

Composi te Emi ssi on Factors (g/mi ):							
0.390	Composi te VOC :	0.156	0.168	0.229	0.241	0.304	0.376
	0.467						
6.593	Composi te NOX :	2.238	2.329	3.433	3.562	4.409	5.501
	8.081						

---

	Veh. Type:	GasBUS	URBAN	SCHOOL
		-----	-----	-----
	VMT Mi x:	0.0001	0.0010	0.0018

---

Composi te Emi ssi on Factors (g/mi ):				
	Composi te VOC :	4.418	0.278	0.575
	Composi te NOX :	7.873	11.752	9.024

---

## Non-Road Equipment List

Diesel Generator Set

Diesel Pump

Air Compressor

Welder

Pressure Washer

Paver

Plate Compactor

Rollers

Surfacing Equipment

Signal Boards/ Light Plants

Trenchers

Excavators

Cement & Motor Mixer

Grader

Forklift

Rubber Tire Loaders

Tractors/Loaders/Backhoes

Crawler Tractors/Dozers

Skid Steer Loader

## Emission Factors by SCC and Pollutant

### All Fuels

Grams/Day

Iberville Parish

Grosse Tete Fire Station

2010 (Grosse Tete Fire)

Typical weekday for Winter Season, 2011

Date of Model Run: Jul 19 13:00:28: 2010

Today's Date: 7/19/2010

Fuel Type	SCC	Equipment Description	Engine Type	Exhaust THC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase THC	Diurnal THC
<b>CNG</b>											
<b>Commercial Equipment</b>											
	2268006005*	Generator Sets	CNG	4.37	1.86	6.09	0.01	0.00	119.38	1.36	0.00
	2268006010*	Pumps	CNG	9.86	4.16	14.90	0.04	0.01	314.13	2.96	0.00
	2268006015*	Air Compressors	CNG	12.57	5.20	22.25	0.06	0.01	530.67	3.43	0.00
	2268006020*	Gas Compressors	CNG	53.86	21.41	111.53	1.32	0.22	9,986.92	0.00	0.00
	2268006035*	Hydro Power Units	CNG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Construction and Mining Equipment</b>											
	2268002081*	Other Construction Equipment	CNG	14.26	4.49	22.11	0.04	0.01	306.66	4.11	0.00
<b>Diesel</b>											
<b>Commercial Equipment</b>											
	2270006005	Generator Sets	Diesel	0.16	1.44	0.69	0.13	0.03	147.17	0.00	0.00
	2270006010	Pumps	Diesel	0.19	1.82	0.89	0.16	0.04	186.55	0.00	0.00
	2270006015	Air Compressors	Diesel	0.40	4.85	2.27	0.40	0.13	599.22	0.01	0.00
	2270006020	Gas Compressors	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2270006025	Welders	Diesel	0.34	1.31	1.58	0.24	0.03	147.94	0.01	0.00
	2270006030	Pressure Washers	Diesel	0.07	0.66	0.29	0.05	0.01	65.44	0.00	0.00
	2270006035	Hydro Power Units	Diesel	0.30	3.56	1.67	0.30	0.09	436.75	0.01	0.00

#Name?

## Emission Factors by SCC and Pollutant

### All Fuels

Grams/Day

Iberville Parish

Grosse Tete Fire Station

2010 (Grosse Tete Fire)

Typical weekday for Winter Season, 2011

Date of Model Run: Jul 19 13:00:28: 2010

Today's Date: 7/19/2010

Fuel Type	SCC	Equipment Description	Engine Type	Vapor Displacement THC	Spillage THC	Hot Soak THC	Running Loss THC	Tank Permeation THC	Hose Permeation THC	Total THC
<b>CNG</b>										
<b>Commercial Equipment</b>										
	2268006005*	Generator Sets	CNG	0.00	0.00	0.00	0.00	0.00	0.00	5.73
	2268006010*	Pumps	CNG	0.00	0.00	0.00	0.00	0.00	0.00	12.81
	2268006015*	Air Compressors	CNG	0.00	0.00	0.00	0.00	0.00	0.00	15.99
	2268006020*	Gas Compressors	CNG	0.00	0.00	0.00	0.00	0.00	0.00	53.86
	2268006035*	Hydro Power Units	CNG	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Construction and Mining Equipment</b>										
	2268002081*	Other Construction Equipment	CNG	0.00	0.00	0.00	0.00	0.00	0.00	18.37
<b>Diesel</b>										
<b>Commercial Equipment</b>										
	2270006005	Generator Sets	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.16
	2270006010	Pumps	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	2270006015	Air Compressors	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.41
	2270006020	Gas Compressors	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2270006025	Welders	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.35
	2270006030	Pressure Washers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.08
	2270006035	Hydro Power Units	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.31

Fuel Type	SCC	Equipment Description	Engine Type	Exhaust THC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase THC	Diurnal THC
<b>Construction and Mining Equipment</b>											
	2270002003	Pavers	Diesel	0.58	7.65	3.71	0.67	0.24	1,117.26	0.01	0.00
	2270002006	Tampers/Rammers	Diesel	0.02	0.16	0.13	0.02	0.00	16.47	0.00	0.00
	2270002009	Plate Compactors	Diesel	0.04	0.29	0.21	0.03	0.01	31.10	0.00	0.00
	2270002015	Rollers	Diesel	0.44	5.65	3.10	0.53	0.17	779.67	0.01	0.00
	2270002018	Scrapers	Diesel	1.56	27.95	12.54	1.83	0.84	3,993.89	0.03	0.00
	2270002021	Paving Equipment	Diesel	0.30	3.65	1.94	0.34	0.10	478.68	0.01	0.00
	2270002024	Surfacing Equipment	Diesel	0.47	6.13	3.45	0.51	0.14	676.64	0.01	0.00
	2270002027	Signal Boards/Light Plants	Diesel	0.11	0.94	0.48	0.08	0.02	109.18	0.00	0.00
	2270002030	Trenchers	Diesel	0.35	4.07	2.59	0.41	0.11	515.86	0.01	0.00
	2270002033	Bore/Drill Rigs	Diesel	0.52	6.86	2.36	0.43	0.14	639.30	0.01	0.00
	2270002036	Excavators	Diesel	0.89	12.50	5.47	1.06	0.42	2,013.83	0.02	0.00
	2270002039	Concrete/Industrial Saws	Diesel	0.22	2.54	1.75	0.28	0.07	323.69	0.00	0.00
	2270002042	Cement & Mortar Mixers	Diesel	0.08	0.75	0.36	0.06	0.01	69.90	0.00	0.00
	2270002045	Cranes	Diesel	0.88	13.82	3.61	0.74	0.37	1,764.78	0.02	0.00
	2270002048	Graders	Diesel	0.94	13.00	5.00	1.03	0.44	2,101.14	0.02	0.00
	2270002051	Off-highway Trucks	Diesel	5.47	98.18	35.30	5.77	2.83	13,718.03	0.09	0.00
	2270002054	Crushing/Proc. Equipment	Diesel	0.63	9.52	3.29	0.57	0.24	1,150.67	0.01	0.00
	2270002057	Rough Terrain Forklifts	Diesel	0.47	5.51	3.63	0.59	0.16	725.31	0.01	0.00
	2270002060	Rubber Tire Loaders	Diesel	1.00	15.29	6.40	1.09	0.42	1,981.18	0.02	0.00
	2270002066	Tractors/Loaders/Backhoes	Diesel	0.85	4.50	4.36	0.70	0.11	497.81	0.02	0.00
	2270002069	Crawler Tractor/Dozers	Diesel	1.19	18.44	8.02	1.34	0.55	2,609.41	0.02	0.00
	2270002072	Skid Steer Loaders	Diesel	0.48	2.00	2.35	0.37	0.05	219.27	0.01	0.00
	2270002075	Off-Highway Tractors	Diesel	3.40	57.09	24.86	3.43	1.39	6,602.66	0.06	0.00
	2270002078	Dumpers/Tenders	Diesel	0.22	0.87	0.98	0.15	0.02	90.13	0.00	0.00
	2270002081	Other Construction Equipment	Diesel	1.24	18.73	8.91	1.33	0.45	2,127.63	0.02	0.00

**Gasoline**

#Name?

Fuel Type	SCC	Equipment Description	Engine Type	Vapor Displacement THC	Spillage THC	Hot Soak THC	Running Loss THC	Tank Permeation THC	Hose Permeation THC	Total THC
<b>Construction and Mining Equipment</b>										
	2270002003	Pavers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.59
	2270002006	Tampers/Rammers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	2270002009	Plate Compactors	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	2270002015	Rollers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.45
	2270002018	Scrapers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	1.59
	2270002021	Paving Equipment	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.31
	2270002024	Surfacing Equipment	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	2270002027	Signal Boards/Light Plants	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	2270002030	Trenchers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.35
	2270002033	Bore/Drill Rigs	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	2270002036	Excavators	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.90
	2270002039	Concrete/Industrial Saws	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.23
	2270002042	Cement & Mortar Mixers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.08
	2270002045	Cranes	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.89
	2270002048	Graders	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.96
	2270002051	Off-highway Trucks	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	5.56
	2270002054	Crushing/Proc. Equipment	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.64
	2270002057	Rough Terrain Forklifts	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	2270002060	Rubber Tire Loaders	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	1.02
	2270002066	Tractors/Loaders/Backhoes	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.87
	2270002069	Crawler Tractor/Dozers	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	1.21
	2270002072	Skid Steer Loaders	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.49
	2270002075	Off-Highway Tractors	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	3.46
	2270002078	Dumpers/Tenders	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.23
	2270002081	Other Construction Equipment	Diesel	0.00	0.00	0.00	0.00	0.00	0.00	1.27

**Gasoline**

#Name?

Fuel Type	SCC	Equipment Description	Engine Type	Exhaust THC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase THC	Diurnal THC
<b>Commercial Equipment</b>											
	2260006005*	Generator Sets	2 Stroke	0.20	0.01	1.11	0.03	0.00	4.84	0.00	0.02
	2260006010*	Pumps	2 Stroke	0.44	0.02	2.12	0.08	0.00	9.44	0.00	0.02
	2260006015*	Air Compressors	2 Stroke	1.04	0.04	5.53	0.17	0.00	22.44	0.00	0.03
	2260006035*	Hydro Power Units	2 Stroke	0.75	0.03	3.98	0.12	0.00	16.14	0.00	0.01
	2265006005*	Generator Sets	4 Stroke	0.24	0.09	9.90	0.00	0.01	31.44	0.00	0.16
	2265006010*	Pumps	4 Stroke	0.42	0.14	11.05	0.01	0.01	44.17	0.00	0.09
	2265006015*	Air Compressors	4 Stroke	0.88	0.38	25.70	0.02	0.02	114.02	0.02	0.12
	2265006025*	Welders	4 Stroke	1.06	0.51	47.15	0.02	0.04	171.01	0.02	0.13
	2265006030*	Pressure Washers	4 Stroke	0.28	0.08	8.03	0.01	0.01	28.83	0.00	0.08
	2265006035*	Hydro Power Units	4 Stroke	0.84	0.28	30.97	0.02	0.02	106.84	0.00	0.13
<b>Construction and Mining Equipment</b>											
	2260002006*	Tampers/Rammers	2 Stroke	0.63	0.01	3.12	0.10	0.00	7.74	0.00	0.02
	2260002009*	Plate Compactors	2 Stroke	0.23	0.01	1.25	0.04	0.00	5.35	0.00	0.02
	2260002021*	Paving Equipment	2 Stroke	0.29	0.01	1.57	0.05	0.00	6.67	0.00	0.02
	2260002027*	Signal Boards/Light Plants	2 Stroke	0.82	0.04	4.36	0.14	0.00	17.69	0.00	0.02
	2260002039*	Concrete/Industrial Saws	2 Stroke	3.86	0.09	19.02	0.63	0.01	46.76	0.00	0.05
	2260002054*	Crushing/Proc. Equipment	2 Stroke	0.60	0.03	3.19	0.10	0.00	12.95	0.00	0.02
	2265002003*	Pavers	4 Stroke	0.76	0.38	32.33	0.02	0.03	123.13	0.02	0.13
	2265002006*	Tampers/Rammers	4 Stroke	0.15	0.07	7.25	0.00	0.00	23.35	0.00	0.03
	2265002009*	Plate Compactors	4 Stroke	0.22	0.05	5.09	0.01	0.00	19.49	0.00	0.03
	2265002015*	Rollers	4 Stroke	1.10	0.49	50.11	0.02	0.04	190.72	0.01	0.19
	2265002021*	Paving Equipment	4 Stroke	0.30	0.10	10.33	0.01	0.01	35.43	0.00	0.13
	2265002024*	Surfacing Equipment	4 Stroke	0.68	0.21	23.30	0.01	0.02	81.10	0.00	0.13
	2265002027*	Signal Boards/Light Plants	4 Stroke	0.60	0.15	16.01	0.01	0.01	57.79	0.00	0.08
	2265002030*	Trenchers	4 Stroke	0.83	0.34	27.27	0.02	0.02	107.69	0.02	0.15
	2265002033*	Bore/Drill Rigs	4 Stroke	0.13	0.04	2.51	0.00	0.00	11.01	0.00	0.06

Fuel Type	SCC	Equipment Description	Engine Type	Vapor Displacement THC	Spillage THC	Hot Soak THC	Running Loss THC	Tank Permeation THC	Hose Permeation THC	Total THC
<b>Commercial Equipment</b>										
	2260006005*	Generator Sets	2 Stroke	0.00	0.01	0.00	0.06	0.00	0.00	0.31
	2260006010*	Pumps	2 Stroke	0.01	0.03	0.01	0.11	0.00	0.00	0.61
	2260006015*	Air Compressors	2 Stroke	0.01	0.04	0.01	0.25	0.00	0.00	1.39
	2260006035*	Hydro Power Units	2 Stroke	0.01	0.03	0.01	0.23	0.00	0.00	1.04
	2265006005*	Generator Sets	4 Stroke	0.01	0.02	0.00	0.05	0.04	0.03	0.55
	2265006010*	Pumps	4 Stroke	0.02	0.05	0.01	0.10	0.02	0.00	0.71
	2265006015*	Air Compressors	4 Stroke	0.05	0.07	0.01	0.18	0.02	0.00	1.37
	2265006025*	Welders	4 Stroke	0.08	0.15	0.01	0.13	0.02	0.00	1.60
	2265006030*	Pressure Washers	4 Stroke	0.01	0.03	0.00	0.05	0.02	0.01	0.50
	2265006035*	Hydro Power Units	4 Stroke	0.05	0.02	0.01	0.17	0.03	0.00	1.26
<b>Construction and Mining Equipment</b>										
	2260002006*	Tampers/Rammers	2 Stroke	0.00	0.00	0.01	0.00	0.01	0.00	0.69
	2260002009*	Plate Compactors	2 Stroke	0.00	0.00	0.01	0.00	0.00	0.00	0.28
	2260002021*	Paving Equipment	2 Stroke	0.00	0.00	0.02	0.00	0.00	0.00	0.34
	2260002027*	Signal Boards/Light Plants	2 Stroke	0.01	0.01	0.01	0.15	0.00	0.00	1.03
	2260002039*	Concrete/Industrial Saws	2 Stroke	0.02	0.01	0.05	0.01	0.01	0.00	4.02
	2260002054*	Crushing/Proc. Equipment	2 Stroke	0.01	0.01	0.02	0.00	0.00	0.01	0.67
	2265002003*	Pavers	4 Stroke	0.05	0.03	0.03	0.04	0.02	0.00	1.08
	2265002006*	Tampers/Rammers	4 Stroke	0.01	0.01	0.01	0.02	0.01	0.01	0.26
	2265002009*	Plate Compactors	4 Stroke	0.01	0.01	0.01	0.02	0.01	0.00	0.32
	2265002015*	Rollers	4 Stroke	0.08	0.01	0.05	0.05	0.04	0.00	1.53
	2265002021*	Paving Equipment	4 Stroke	0.02	0.01	0.02	0.02	0.03	0.02	0.54
	2265002024*	Surfacing Equipment	4 Stroke	0.03	0.01	0.04	0.05	0.03	0.00	0.98
	2265002027*	Signal Boards/Light Plants	4 Stroke	0.02	0.01	0.01	0.03	0.02	0.00	0.79
	2265002030*	Trenchers	4 Stroke	0.05	0.01	0.03	0.04	0.03	0.00	1.16
	2265002033*	Bore/Drill Rigs	4 Stroke	0.00	0.00	0.00	0.01	0.02	0.00	0.23

Fuel Type	SCC	Equipment Description	Engine Type	Exhaust THC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase THC	Diurnal THC
2265002039*		Concrete/Industrial Saws	4 Stroke	1.06	0.39	51.25	0.02	0.04	182.43	0.00	0.14
2265002042*		Cement & Mortar Mixers	4 Stroke	0.14	0.04	4.44	0.00	0.00	13.66	0.00	0.13
2265002045*		Cranes	4 Stroke	1.14	1.86	40.74	0.02	0.05	261.88	0.30	0.63
2265002054*		Crushing/Proc. Equipment	4 Stroke	0.53	0.20	18.88	0.01	0.01	67.51	0.01	0.14
2265002057*		Rough Terrain Forklifts	4 Stroke	1.38	2.65	47.39	0.04	0.09	429.89	0.41	0.69
2265002060*		Rubber Tire Loaders	4 Stroke	1.36	2.73	47.81	0.06	0.13	632.47	0.32	0.61
2265002066*		Tractors/Loaders/Backhoes	4 Stroke	1.77	0.72	83.21	0.03	0.06	281.55	0.00	0.28
2265002072*		Skid Steer Loaders	4 Stroke	0.79	0.82	33.08	0.02	0.03	160.11	0.10	0.40
2265002078*		Dumpers/Tenders	4 Stroke	0.15	0.06	6.12	0.00	0.00	18.13	0.00	0.15
2265002081*		Other Construction Equipment	4 Stroke	2.42	4.72	79.66	0.05	0.12	581.91	0.81	1.57

## LPG

### Commercial Equipment

2267006005*		Generator Sets	LPG	0.18	1.15	3.90	0.01	0.00	99.58	0.06	0.00
2267006010*		Pumps	LPG	0.21	1.32	5.18	0.01	0.00	145.79	0.06	0.00
2267006015*		Air Compressors	LPG	0.44	2.67	11.85	0.04	0.01	360.15	0.12	0.00
2267006025*		Welders	LPG	0.69	3.06	18.05	0.04	0.01	387.28	0.16	0.00
2267006030*		Pressure Washers	LPG	0.19	0.86	4.36	0.01	0.00	82.37	0.05	0.00
2267006035*		Hydro Power Units	LPG	0.25	1.54	7.40	0.03	0.01	259.31	0.06	0.00

### Construction and Mining Equipment

2267002003*		Pavers	LPG	0.41	1.82	10.76	0.02	0.00	244.47	0.09	0.00
2267002015*		Rollers	LPG	0.40	1.72	12.68	0.04	0.01	397.78	0.05	0.00
2267002021*		Paving Equipment	LPG	0.20	0.93	4.66	0.01	0.00	83.70	0.06	0.00
2267002024*		Surfacing Equipment	LPG	0.28	1.22	7.65	0.02	0.00	184.50	0.06	0.00
2267002030*		Trenchers	LPG	0.49	2.20	12.85	0.03	0.01	282.35	0.12	0.00
2267002033*		Bore/Drill Rigs	LPG	0.39	1.84	8.44	0.01	0.00	140.17	0.12	0.00
2267002039*		Concrete/Industrial Saws	LPG	0.27	1.21	8.99	0.04	0.01	407.84	0.02	0.00
2267002045*		Cranes	LPG	0.73	3.35	16.88	0.03	0.01	303.13	0.21	0.00

Fuel Type	SCC	Equipment Description	Engine Type	Vapor Displacement THC	Spillage THC	Hot Soak THC	Running Loss THC	Tank Permeation THC	Hose Permeation THC	Total THC
	2265002039*	Concrete/Industrial Saws	4 Stroke	0.08	0.01	0.05	0.03	0.02	0.00	1.40
	2265002042*	Cement & Mortar Mixers	4 Stroke	0.01	0.00	0.01	0.01	0.03	0.01	0.34
	2265002045*	Cranes	4 Stroke	0.11	0.00	0.02	0.03	0.02	0.00	2.25
	2265002054*	Crushing/Proc. Equipment	4 Stroke	0.03	0.01	0.02	0.03	0.03	0.00	0.79
	2265002057*	Rough Terrain Forklifts	4 Stroke	0.18	0.01	0.01	0.02	0.00	0.00	2.70
	2265002060*	Rubber Tire Loaders	4 Stroke	0.27	0.01	0.00	0.02	0.00	0.00	2.58
	2265002066*	Tractors/Loaders/Backhoes	4 Stroke	0.12	0.01	0.08	0.08	0.06	0.01	2.40
	2265002072*	Skid Steer Loaders	4 Stroke	0.07	0.00	0.02	0.03	0.04	0.03	1.49
	2265002078*	Dumpers/Tenders	4 Stroke	0.01	0.00	0.01	0.02	0.04	0.03	0.41
	2265002081*	Other Construction Equipment	4 Stroke	0.25	0.00	0.01	0.02	0.00	0.00	5.08

## LPG

### Commercial Equipment

	2267006005*	Generator Sets	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.24
	2267006010*	Pumps	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	2267006015*	Air Compressors	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.55
	2267006025*	Welders	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.85
	2267006030*	Pressure Washers	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.24
	2267006035*	Hydro Power Units	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.31

### Construction and Mining Equipment

	2267002003*	Pavers	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.50
	2267002015*	Rollers	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.45
	2267002021*	Paving Equipment	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	2267002024*	Surfacing Equipment	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	2267002030*	Trenchers	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.61
	2267002033*	Bore/Drill Rigs	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.51
	2267002039*	Concrete/Industrial Saws	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	2267002045*	Cranes	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.93

<b>Fuel Type</b>	<b>SCC</b>	<b>Equipment Description</b>	<b>Engine Type</b>	<b>Exhaust THC</b>	<b>Exhaust NOx</b>	<b>Exhaust CO</b>	<b>Exhaust PM10</b>	<b>Exhaust SO2</b>	<b>Exhaust CO2</b>	<b>Crankcase THC</b>	<b>Diurnal THC</b>
2267002054*		Crushing/Proc. Equipment	LPG	0.62	2.83	14.47	0.02	0.01	263.53	0.17	0.00
2267002057*		Rough Terrain Forklifts	LPG	0.68	3.03	17.08	0.03	0.01	344.12	0.17	0.00
2267002060*		Rubber Tire Loaders	LPG	0.71	3.04	20.92	0.05	0.01	498.07	0.13	0.00
2267002066*		Tractors/Loaders/Backhoes	LPG	0.51	2.12	16.54	0.05	0.01	461.80	0.06	0.00
2267002072*		Skid Steer Loaders	LPG	0.41	1.86	9.81	0.02	0.00	185.92	0.11	0.00
2267002081*		Other Construction Equipment	LPG	1.16	5.38	26.53	0.04	0.01	467.11	0.34	0.00

\* Under 25 horsepower spark-ignition engines are lumped into either 2- or 4-stroke.

<b>Fuel Type</b>	<b>SCC</b>	<b>Equipment Description</b>	<b>Engine Type</b>	<b>Vapor Displacement THC</b>	<b>Spillage THC</b>	<b>Hot Soak THC</b>	<b>Running Loss THC</b>	<b>Tank Permeation THC</b>	<b>Hose Permeation THC</b>	<b>Total THC</b>
2267002054*		Crushing/Proc. Equipment	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.79
2267002057*		Rough Terrain Forklifts	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.85
2267002060*		Rubber Tire Loaders	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.84
2267002066*		Tractors/Loaders/Backhoes	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.57
2267002072*		Skid Steer Loaders	LPG	0.00	0.00	0.00	0.00	0.00	0.00	0.52
2267002081*		Other Construction Equipment	LPG	0.00	0.00	0.00	0.00	0.00	0.00	1.50

\* Under 25 horsepower spark-ignition engines are lumped into either 2- or 4-stroke.

## **APPENDIX C**

### **Other Pertinent Resources**

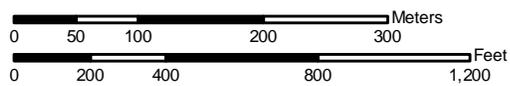
Soil Map—Iberville Parish, Louisiana  
(Grosse Tete Fire Station)



91° 26' 16"



Map Scale: 1:6,000 if printed on A size (8.5" x 11") sheet.



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Units

### Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

### Special Line Features

-  Gully
-  Short Steep Slope
-  Other

### Political Features

 Cities

### Water Features

-  Oceans
-  Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

## MAP INFORMATION

Map Scale: 1:6,000 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: UTM Zone 15N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Iberville Parish, Louisiana  
Survey Area Data: Version 4, Apr 12, 2007

Date(s) aerial images were photographed: 1998

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

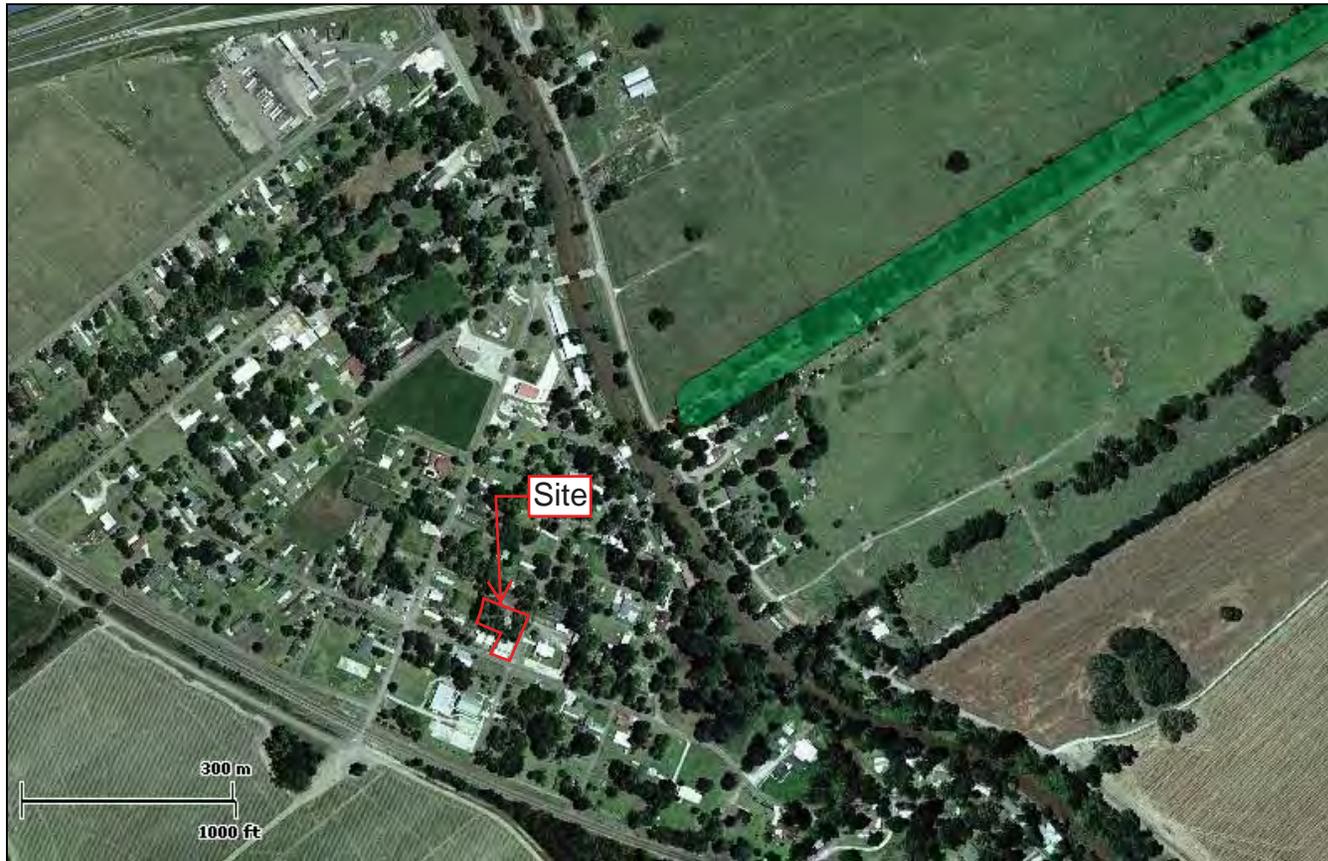
## Map Unit Legend

Iberville Parish, Louisiana (LA047)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CI	Commerce silt loam	1.0	100.0%
<b>Totals for Area of Interest</b>		<b>1.0</b>	<b>100.0%</b>



# U.S. Fish and Wildlife Service National Wetlands Inventory

Aug 17, 2010



## Wetlands

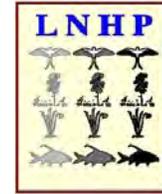
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deetwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



Rare, Threatened, & Endangered Species & Natural Communities  
 Tracked by the Louisiana Natural Heritage Program  
 Iberville Parish - April 2008



PARISH: Iberville

Scientific Name	Common Name	State Rank	Global Rank	State Status	Federal Status
<i>Blechnum occidentale</i>	Sink-hole Fern	SH	G5		
<a href="#"><i>Bottomland hardwood forest</i></a>	Bottomland Hardwood Forest	S4	G4G5		
<a href="#"><i>Cypress swamp</i></a>	Cypress Swamp	S4	G4G5		
<a href="#"><i>Cypress-tupelo swamp</i></a>	Cypress-tupelo Swamp	S4	G3G5		
<a href="#"><i>Elanoides forficatus</i></a>	American Swallow-tailed Kite	S1S2B	G5		
<a href="#"><i>Haliaeetus leucocephalus</i></a>	Bald Eagle	S2N,S3B	G5	Endangered	Delisted
<a href="#"><i>Melanthera nivea</i></a>	Snow Melanthera	S2	G5		
<a href="#"><i>Pandion haliaetus</i></a>	Osprey	S2B,S3N	G5		
<a href="#"><i>Thalia dealbata</i></a>	Powdery Thalia	S2S3	G4		
<a href="#"><i>Triphora trianthophora</i></a>	Nodding Pogonia	S2	G3G4		
<i>Waterbird Nesting Colony</i>	Waterbird Nesting Colony	SNR	GNR		

## EXPLANATION OF RANKING CATEGORIES EMPLOYED BY NATURAL HERITAGE PROGRAMS NATIONWIDE

Each element is assigned a single global rank as well as a state rank for each state in which it occurs. Global ranking is done under the guidance of NatureServe, Arlington, VA. State ranks are assigned by each state's Natural Heritage Program, thus a rank for a particular element may vary considerably from state to state. Federal ranks are designated by the U.S. Fish & Wildlife Service under the provisions of the Endangered Species Act of 1973. **DISCLAIMER:** This document is not an official copy of the laws in effect and should not be utilized or relied upon as such. For this reason, the accuracy of the information contained within this document cannot be guaranteed and the reader is cautioned that it is his/her responsibility to be apprised of the laws in effect at any given time. These laws include those contained within the Louisiana Revised Statutes, particularly Title 56, the official regulations of the Louisiana Wildlife and Fisheries Commission, federal laws, and any local or parish ordinances.

### FEDERAL RANKS (USES A FIELD):

LE = Listed Endangered

LT = Listed Threatened

PE = Proposed endangered

PT = Proposed Threatened

C = Candidate

PDL = Proposed for delisting

E (S/A) or T (S/A) = Listed endangered or threatened because of similarity of appearance

XE = Essential experimental population

XN = Nonessential experimental population

No Rank = Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and state databases, some taxa may have a status which does not yet appear.

(Rank, Rank) = Combination values in parenthesis = The taxon itself is not named in the Federal Register as having U.S. ESA status; however, all of its infraspecific taxa (worldwide) do have official status. The statuses shown in parentheses indicate the statuses that apply to infraspecific taxa or populations within this taxon. *THE SPECIES IS CONSIDERED TO HAVE A COMBINATION STATUS IN LOUISIANA*

(PS) = partial status = Status in only a portion of the species' range. Typically indicated in a "full" species record where an infraspecific taxon or population has U.S. ESA status, but the entire species does not. *THE SPECIES DOES NOT HAVE A STATUS IN LOUISIANA*

(PS: Rank) = partial status = Status in only a portion of the species' range. The value of that status appears because the entity with status does not have an individual entry in NatureServe. *THE SPECIES MAY HAVE A STATUS IN LOUISIANA*

### GLOBAL ELEMENT RANKS:

G1 = critically imperiled globally because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extinction

G2 = imperiled globally because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extinction throughout its range

G3 = either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single physiographic region) or because of other factors making it vulnerable to extinction throughout its range (21 to 100 known extant populations)

G4 = apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery (100 to 1000 known extant populations)

G5 = demonstrably secure globally, although it may be quite rare in parts of its range, especially at the periphery (1000+ known extant populations)

GH = of historical occurrence throughout its range; i.e., formerly part of the established biota, with the possibility that it may be rediscovered (e.g., Bachman's Warbler)

GU = possibly in peril range-wide, but status uncertain; need more information

G? = rank uncertain. Or a range (e.g., G3G5) delineates the limits of uncertainty

GQ = uncertain taxonomic status

GX = believed to be extinct throughout its range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered

T = subspecies or variety rank (e.g., G5T4 applies to a subspecies with a global species rank of G5, but with a subspecies rank of G4)

### STATE ELEMENT RANKS:

S1 = critically imperiled in Louisiana because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extirpation

S2 = imperiled in Louisiana because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extirpation

S3 = rare and local throughout the state or found locally (even abundantly at some of its locations) in a restricted region of the state, or because of other factors making it vulnerable to extirpation (21 to 100 known extant populations)

S4 = apparently secure in Louisiana with many occurrences (100 to 1000 known extant populations)

S5 = demonstrably secure in Louisiana (1000+ known extant populations)

(B or N may be used as qualifier of numeric ranks and indicating whether the occurrence is breeding or nonbreeding)

SA = accidental in Louisiana, including species (usually birds or butterflies) recorded once or twice or only at great intervals hundreds or even thousands of miles outside their usual range

SH = of historical occurrence in Louisiana, but no recent records verified within the last 20 years; formerly part of the established biota, possibly still persisting

SR = reported from Louisiana, but without conclusive evidence to accept or reject the report

SU = possibly in peril in Louisiana, but status uncertain; need more information

SX = believed to be extirpated from Louisiana

SZ = transient species in which no specific consistent area of occurrence is identifiable

### STATE PROTECTION STATUS:

*State status are contained in Title 56 of the Louisiana Revised Statutes as well as relevant rules and regulations adopted by the Louisiana Wildlife and Fisheries Commission and the Secretary of the Department of Wildlife and Fisheries. The Secretary of the Department of Wildlife and Fisheries is authorized to implement additional restrictions in emergency situations in order to protect fish and wildlife resources.*

Endangered = Taking or harassment of these species is a violation of state and federal laws.

Threatened = Taking or harassment of these species is a violation of state and federal laws.

Threatened/Endangered = Taking or harassment of these species is a violation of state and federal laws.

Prohibited = Possession of these species is prohibited. No legal harvest or possession.

Restricted Harvest = There are restrictions regarding the taking and possession of these species

# Grosse Tete

## LA Black Bear Critical Habitat





# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
 646 Cajundome Blvd.  
 Suite 400  
 Lafayette, Louisiana 70506



## THREATENED AND ENDANGERED SPECIES OF LOUISIANA

E=Endangered T=Threatened C=Candidate CH=Critical Habitat \*  
 (If a parish is not listed below then there are no T & E species in that parish)

<u>PARISH</u> <sup>†</sup>	<u>OCCURRENCE</u>	<u>GROUP</u>	<u>STATUS</u>
<b><u>ALLEN</u></b>			
CHAFF-SEED, AMERICAN	KNOWN	PLANT	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>ASCENSION</u></b>			
MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
MUSSEL, ALABAMA HEELSPLITTER	KNOWN	MOLLUSK	T
STURGEON, GULF	KNOWN	FISH	T
STURGEON, PALLID	KNOWN	FISH	E
<b><u>AVOUELLES</u></b>			
BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
STURGEON, PALLID	KNOWN	FISH	E
<b><u>BEAUREGARD</u></b>			
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>BIENVILLE</u></b>			
SNAKE, LOUISIANA PINE	KNOWN	REPTILE	C
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>BOSSIER</u></b>			
STURGEON, PALLID	POSSIBLE	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>CADDO</u></b>			
EARTH FRUIT	KNOWN	PLANT	T
STURGEON, PALLID	POSSIBLE	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>CALCASIEU</u></b>			
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
<b><u>CAMERON</u></b>			
MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	KNOWN	FISH	T
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**CATAHOULA**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
STURGEON, PALLID	POSSIBLE	FISH	E

**CONCORDIA**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
MUSSEL, FAT POCKETBOOK PEARLY	KNOWN	MOLLUSK	E
STURGEON, PALLID	KNOWN	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E

**PARISH<sup>†</sup>**

<u>OCCURRENCE</u>	<u>GROUP</u>	<u>STATUS</u>
-------------------	--------------	---------------

**DESOTO**

EARTH FRUIT	POSSIBLE	PLANT	T
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**EAST BATON ROUGE**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
MUSSEL, ALABAMA HEELSPLITTER	KNOWN	MOLLUSK	T
STURGEON, GULF	KNOWN	FISH	T
STURGEON PALLID	KNOWN	FISH	E

**EAST CARROLL**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
MUSSEL, FAT POCKETBOOK PEARLY	KNOWN	MOLLUSK	E
STURGEON, PALLID	KNOWN	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E

**EAST FELICIANA**

MUSSEL, ALABAMA HEELSPLITTER	KNOWN	MOLLUSK	T
STURGEON, GULF	KNOWN	FISH	T
STURGEON, PALLID	KNOWN	FISH	E

**EVANGELINE**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**FRANKLIN**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
-----------------------	----------	--------	-------

**GRANT**

MUSSEL, LOUISIANA PEARLSHELL	KNOWN	MOLLUSK	T
STURGEON, PALLID	POSSIBLE	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**IBERIA**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
STURGEON, GULF	POSSIBLE	FISH	T
STURGEON, PALLID	KNOWN	FISH	E
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**IBERVILLE**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
STURGEON, GULF	POSSIBLE	FISH	T
STURGEON, PALLID	KNOWN	FISH	E

**JACKSON**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**JEFFERSON**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	KNOWN	FISH	T, CH
STURGEON, PALLID	KNOWN	FISH	E
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**LAFOURCHE**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	POSSIBLE	FISH	T
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**LA SALLE**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**LIVINGSTON**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
MUSSEL, ALABAMA HEELSPLITTER	KNOWN	MOLLUSK	T
STURGEON, GULF	KNOWN	FISH	T
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**MADISON**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
MUSSEL, FAT POCKETBOOK PEARLY	KNOWN	MOLLUSK	E
STURGEON, PALLID	KNOWN	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E

**MOREHOUSE**

MUSSEL, PINK MUCKET PEARLY	KNOWN	MOLLUSK	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**NATCHITOCHE**

SNAKE, LOUISIANA PINE	KNOWN	REPTILE	C
STURGEON, PALLID	POSSIBLE	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**ORLEANS**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
STURGEON, GULF	KNOWN	FISH	T, CH
STURGEON, PALLID	KNOWN	FISH	E

**OUACHITA**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**PLAQUEMINES**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	KNOWN	FISH	T
STURGEON, PALLID	KNOWN	FISH	E
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**POINTE COUPEE**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
STURGEON, PALLID	KNOWN	FISH	E

**RAPIDES**

MUSSEL, LOUISIANA PEARLSHELL	KNOWN	MOLLUSK	T
STURGEON, PALLID	POSSIBLE	FISH	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**RED RIVER**

STURGEON, PALLID	POSSIBLE	FISH	E
TERN, LEAST INTERIOR	KNOWN	BIRD	E

**RICHLAND**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
-----------------------	-------	--------	-------

**SABINE**

SNAKE, LOUISIANA PINE	KNOWN	REPTILE	C
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**ST. BERNARD**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	KNOWN	FISH	T, CH
STURGEON, PALLID	KNOWN	FISH	E
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**ST. CHARLES**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
STURGEON, GULF	KNOWN	FISH	T
STURGEON, PALLID	KNOWN	FISH	E

**ST. HELENA**

STURGEON, GULF	KNOWN	FISH	T
MUSSEL, ALABAMA HEELSPLITTER	KNOWN	MOLLUSK	T

**ST. JAMES**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
STURGEON, GULF	POSSIBLE	FISH	T
STURGEON, PALLID	KNOWN	FISH	E

**ST. JOHN THE BAPTIST**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
STURGEON, GULF	KNOWN	FISH	T
STURGEON, PALLID	KNOWN	FISH	E

**ST. LANDRY**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
STURGEON, PALLID	KNOWN	FISH	E

**ST. MARTIN**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
STURGEON, PALLID	KNOWN	FISH	E

**ST. MARY**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	POSSIBLE	FISH	T
STURGEON, PALLID	KNOWN	FISH	E
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**ST. TAMMANY**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
QUILLWORT, LOUISIANA	KNOWN	PLANT	E
STURGEON, GULF	KNOWN	FISH	T, CH
TORTOISE, GOPHER	KNOWN	REPTILE	T
TURTLE, RINGED MAP	KNOWN	REPTILE	T
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**TANGIPAHOA**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
STURGEON, GULF	KNOWN	FISH	T
TORTOISE, GOPHER	KNOWN	REPTILE	T
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**TENSAS**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
MUSSEL, FAT POCKETBOOK PEARLY	KNOWN	MOLLUSK	E
STURGEON, PALLID	KNOWN	FISH	E
TERN, INTERIOR LEAST	KNOWN	BIRD	E

**TERREBONNE**

MANATEE, WEST INDIAN	POSSIBLE	MAMMAL	E
PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	KNOWN	FISH	T
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY SEA	KNOWN	REPTILE	E
TURTLE, LEATHERBACK SEA	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD SEA	KNOWN	REPTILE	T

**UNION**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**VERMILION**

PLOVER, PIPING	KNOWN	BIRD	T, CH
STURGEON, GULF	POSSIBLE	FISH	T
TURTLE, GREEN SEA	KNOWN	REPTILE	T
TURTLE, HAWKSBILL SEA	KNOWN	REPTILE	E
TURTLE, KEMP'S RIDLEY	KNOWN	REPTILE	E
TURTLE, LEATHERBACK	KNOWN	REPTILE	E
TURTLE, LOGGERHEAD	KNOWN	REPTILE	T

**VERNON**

SNAKE, LOUISIANA PINE	KNOWN	REPTILE	C
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

**WASHINGTON**

QUILLWORT, LOUISIANA	KNOWN	PLANT	E
STURGEON, GULF	KNOWN	FISH	T, CH
TORTOISE, GOPHER	KNOWN	REPTILE	T
TURTLE, RINGED MAP	KNOWN	REPTILE	T

**WEBSTER**

WOODPECKER, RED-COCKADED	KNOWN	BIRD	E
--------------------------	-------	------	---

**WEST BATON ROUGE**

STURGEON, PALLID	KNOWN	FISH	E
------------------	-------	------	---

**WEST CARROLL**

BEAR, LOUISIANA BLACK	KNOWN	MAMMAL	T, CH
-----------------------	-------	--------	-------

**WEST FELICIANA**

BEAR, LOUISIANA BLACK	POSSIBLE	MAMMAL	T, CH
STURGEON, PALLID	KNOWN	FISH	E

**WINN**

EARTH FRUIT	KNOWN	PLANT	T
STURGEON, PALLID	POSSIBLE	FISH	E
WOODPECKER, RED-COCKADED	KNOWN	BIRD	E

\* Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.

Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Candidate – plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions.

Critical Habitat – for listed species consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

† If a Parish is not listed here, there are no known occurrences of a threatened, endangered, or candidate species, or their critical habitat, for that Parish.

## THREATENED AND ENDANGERED SPECIES

<u>MAMMALS</u>	<u>STATUS</u>	<u>GENERAL DISTRIBUTION IN</u>
<u>LOUISIANA</u>		
Bear, Louisiana ( <i>Ursus americanus luteolus</i> )	Threatened	Entire state
Manatee, West Indian on North shore; ( <i>Trichechus manatus</i> )	Endangered	Lake Pontchartrain & tributaries rare along Gulf coast
Panther, Florida ( <i>Felis concolor coryi</i> )	Endangered <sup>1</sup>	Entire state
Whale, finback ( <i>Balaenoptera physalus</i> )	Endangered	Coastal waters
Whale, humpback ( <i>Megaptera novaeangliae</i> )	Endangered	Coastal waters
Whale, right ( <i>Eubalaena glacialis</i> )	Endangered	Coastal waters
Whale, sei ( <i>Balaenoptera borealis</i> )	Endangered	Coastal waters
Whale, sperm ( <i>Physeter catodon</i> )	Endangered	Coastal waters
Wolf, red Parishes ( <i>Canis rufus</i> )	Endangered <sup>1</sup>	Cameron and Calcasieu
<u>BIRDS</u>		
Curlew, Eskimo ( <i>Numenius borealis</i> )	Endangered <sup>1</sup>	Entire state
Plover, piping ( <i>Charadrius melodus</i> )	Threatened	Coast
Tern, interior least Rouge; ( <i>Sterna antillarum</i> ) & Loggy Bayou	Endangered	Mississippi River, north of Baton Red River, north of Shreveport
Warbler, Bachman's ( <i>Vermivora bachmanii</i> )	Endangered <sup>2</sup>	Entire state
Woodpecker, ivory-billed ( <i>Campephilus principalis</i> )	Endangered <sup>1</sup>	Entire state
Woodpecker, red-cockaded ( <i>Picoides borealis</i> )	Endangered	Entire state except Delta
<u>REPTILES</u>		
Alligator, American ( <i>Alligator mississippiensis</i> )	Threatened (S/A) <sup>3</sup>	Entire state
Snake, Louisiana pine and Vernon ( <i>Pituophis ruthveni</i> )	Candidate	Bienville, Natchitoches, Sabine, Parishes
Tortoise, gopher Tangipahoa ( <i>Gopherus polyphemus</i> )	Threatened	Washington, St. Tammany, and Parishes
Turtle, Kemp's (Atlantic) ridley sea ( <i>Lepidochelys kempii</i> )	Endangered	Coastal waters
Turtle, green sea	Threatened	Coastal waters

( <i>Chelonia mydas</i> ) Turtle, hawksbill sea	Endangered	Coastal waters
( <i>Eretmochelys imbricata</i> ) Turtle, leatherback sea	Endangered	Coastal waters
( <i>Dermochelys coriacea</i> ) Turtle, loggerhead sea	Threatened	Coastal waters
( <i>Caretta caretta</i> ) Turtle, ringed map (=sawback)	Threatened	Pearl and Bogue Chitto Rivers
( <i>Graptemys oculifera</i> )		

**FISH**

Sturgeon, Gulf Pontchartrain tributaries ( <i>Acipenser oxyrhynchus desotoi</i> )	Threatened	Pearl River & Lake
Sturgeon, pallid ( <i>Scaphirhynchus albus</i> )	Endangered	Mississippi River & tributaries

**INVERTEBRATES**

Mussel, fat pocketbook pearly ( <i>Potamilus capax</i> )	Endangered	Mississippi River
Mussel, Alabama heelsplitter (=inflated) River ( <i>Potamilus inflatus</i> )	Threatened	Amite River, possible in Pearl
Mussel, Louisiana pearlshell Rigolette drainages ( <i>Margaritifera hembeli</i> )	Threatened	Bayou Boeuf and Bayou
Mussel, pink mucket pearly ( <i>Lampsilis abrupta</i> )	Endangered	Rapides and Grant Parishes Bayou Bartholomew

**PLANTS**

American chaff-seed ( <i>Schwalbea americana</i> )	Endangered	Allen Parish
Earth fruit ( <i>Geocarpon minimum</i> )	Threatened	Winn and Caddo Parishes
Louisiana quillwort Parishes ( <i>Isoetes louisianensis</i> )	Endangered	Washington and St. Tammany

<sup>1</sup> The Florida panther, red wolf, Eskimo curlew, and ivory-billed woodpecker are presumed to be extinct in the state.

<sup>2</sup> There has been no confirmed Bachman's Warbler U.S. nesting ground sighting since the mid-1960s, however, several sightings of the species have occurred on wintering grounds during the last decade. This species may be extirpated in Louisiana.

<sup>3</sup> For law enforcement purposes the alligators in Louisiana are classified as "Threatened due to Similarity of Appearance." They are biologically neither endangered nor threatened. Regulated harvest is permitted under State law. September 21, 1998

# U.S. Census Bureau



American FactFinder

Fact Sheet

- Main
- Search
- Feedback
- FAQs
- Glossary
- Site Map
- Help

POPULATION FINDER

FACT SHEET

- Fact Sheet
- Fact Sheet for a Race, Ethnic, or Ancestry Group

PEOPLE

HOUSING

BUSINESS AND GOVERNMENT

ABOUT THE DATA

DATA SETS

DOWNLOAD CENTER

MAPS

TOOLS AND REFERENCES

[Main](#) ▶ [Fact Sheet](#)

FACT SHEET



[United States](#) | [Louisiana](#) | Grosse Tete village

Grosse Tete village, Louisiana

city/ town, county, or zip

state

Louisiana



[search by address »](#)

**2000** 2006-2008 data [not available](#) for this geography

View a Fact Sheet for a [race, ethnic, or ancestry group](#)

Census 2000 Demographic Profile Highlights:

[Reference Map](#)

General Characteristics - [show more >>](#)

	Number	Percent	U.S.		
Total population	670			<a href="#">map</a>	<a href="#">brief</a>
Male	302	45.1	49.1%	<a href="#">map</a>	<a href="#">brief</a>
Female	368	54.9	50.9%	<a href="#">map</a>	<a href="#">brief</a>
<a href="#">Median age</a> (years)	36.5	(X)	35.3	<a href="#">map</a>	<a href="#">brief</a>
Under 5 years	57	8.5	6.8%	<a href="#">map</a>	
18 years and over	487	72.7	74.3%		
65 years and over	93	13.9	12.4%	<a href="#">map</a>	<a href="#">brief</a>
One <a href="#">race</a>	668	99.7	97.6%		
White	372	55.5	75.1%	<a href="#">map</a>	<a href="#">brief</a>
Black or African American	287	42.8	12.3%	<a href="#">map</a>	<a href="#">brief</a>
American Indian and Alaska Native	2	0.3	0.9%	<a href="#">map</a>	<a href="#">brief</a>
Asian	5	0.7	3.6%	<a href="#">map</a>	<a href="#">brief</a>
Native Hawaiian and Other Pacific Islander	0	0.0	0.1%	<a href="#">map</a>	<a href="#">brief</a>
Some other race	2	0.3	5.5%	<a href="#">map</a>	
Two or more races	2	0.3	2.4%	<a href="#">map</a>	<a href="#">brief</a>
Hispanic or Latino (of any race)	3	0.4	12.5%	<a href="#">map</a>	<a href="#">brief</a>
Household population	669	99.9	97.2%	<a href="#">map</a>	<a href="#">brief</a>
Group quarters population	1	0.1	2.8%	<a href="#">map</a>	
Average <a href="#">household</a> size	2.56	(X)	2.59	<a href="#">map</a>	<a href="#">brief</a>
Average family size	3.06	(X)	3.14	<a href="#">map</a>	
Total housing units	294			<a href="#">map</a>	
Occupied housing units	261	88.8	91.0%		<a href="#">brief</a>
Owner-occupied housing units	205	78.5	66.2%	<a href="#">map</a>	
Renter-occupied housing units	56	21.5	33.8%	<a href="#">map</a>	<a href="#">brief</a>
Vacant housing units	33	11.2	9.0%	<a href="#">map</a>	

Social Characteristics - [show more >>](#)

	Number	Percent	U.S.		
Population 25 years and over	405				
High school graduate or higher	274	67.7	80.4%	<a href="#">map</a>	<a href="#">brief</a>
Bachelor's degree or higher	28	6.9	24.4%	<a href="#">map</a>	

<a href="#">Civilian veterans</a> (civilian population 18 years and over)	44	9.6	12.7%	<a href="#">map</a>	<a href="#">brief</a>
Disability status (population 5 years and over)	158	26.0	19.3%	<a href="#">map</a>	<a href="#">brief</a>
Foreign born	0	0.0	11.1%	<a href="#">map</a>	<a href="#">brief</a>
Male, Now married, except separated (population 15 years and over)	124	55.6	56.7%		<a href="#">brief</a>
Female, Now married, except separated (population 15 years and over)	112	41.2	52.1%		<a href="#">brief</a>
Speak a language other than English at home (population 5 years and over)	16	2.6	17.9%	<a href="#">map</a>	<a href="#">brief</a>

<b>Economic Characteristics - <a href="#">show more</a> &gt;&gt;</b>	<b>Number</b>	<b>Percent</b>	<b>U.S.</b>		
In labor force (population 16 years and over)	277	56.9	63.9%		<a href="#">brief</a>
Mean travel time to work in minutes (workers 16 years and over)	31.4	(X)	25.5	<a href="#">map</a>	<a href="#">brief</a>
Median household <a href="#">income</a> in 1999 (dollars)	27,734	(X)	41,994	<a href="#">map</a>	
Median family income in 1999 (dollars)	32,188	(X)	50,046	<a href="#">map</a>	
Per capita income in 1999 (dollars)	12,840	(X)	21,587	<a href="#">map</a>	
Families below poverty level	29	16.7	9.2%	<a href="#">map</a>	<a href="#">brief</a>
Individuals below poverty level	153	23.4	12.4%	<a href="#">map</a>	

<b>Housing Characteristics - <a href="#">show more</a> &gt;&gt;</b>	<b>Number</b>	<b>Percent</b>	<b>U.S.</b>		
Single-family owner-occupied homes	110				<a href="#">brief</a>
Median value (dollars)	82,200	(X)	119,600	<a href="#">map</a>	<a href="#">brief</a>
Median of selected monthly owner costs	(X)	(X)			<a href="#">brief</a>
With a <a href="#">mortgage</a> (dollars)	775	(X)	1,088	<a href="#">map</a>	
Not mortgaged (dollars)	241	(X)	295		

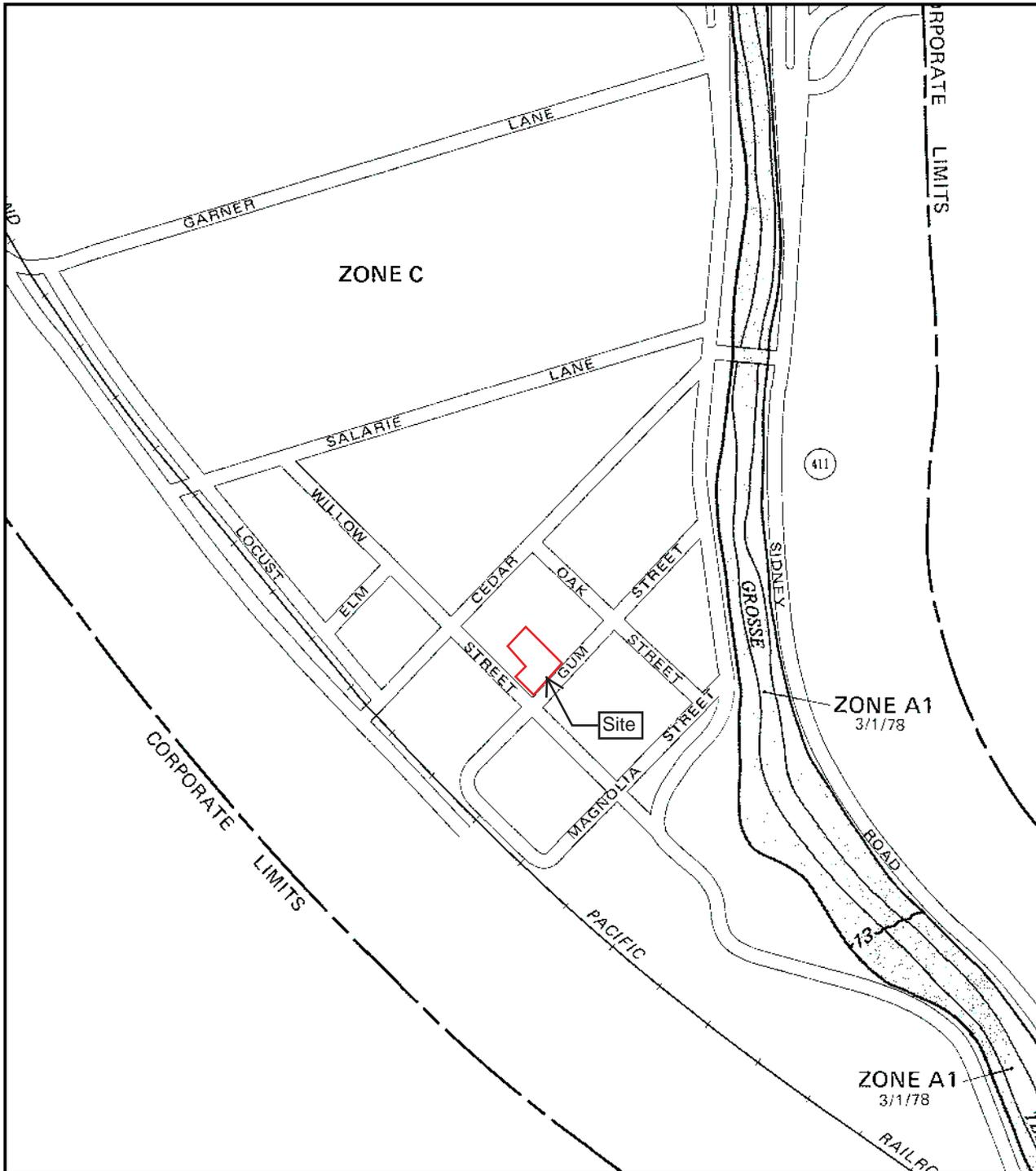
(X) Not applicable.

Source: U.S. Census Bureau, Summary File 1 (SF 1) and Summary File 3 (SF 3)

The letters PDF or symbol  indicate a document is in the [Portable Document Format \(PDF\)](#). To view the file you will need the [Adobe® Acrobat® Reader](#), which is available for **free** from the Adobe web site.

**Census Bureau Links:** [Home](#) · [Search](#) · [Subjects A-Z](#) · [FAQs](#) · [Data Tools](#) · [Catalog](#) · [Census 2010](#) · [Quality](#) · [Privacy Policy](#) · [Contact Us](#)

**U S C E N S U S B U R E A U**  
*Helping You Make Informed Decisions*



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

VILLAGE OF  
**GROSSE TETE,**  
 LOUISIANA  
 IBERVILLE PARISH

COMMUNITY-PANEL NUMBER  
 220084 0001 B

PAGE 1 OF 1

EFFECTIVE  
 MARCH 1, 1978



U.S. DEPARTMENT OF HOUSING  
 AND URBAN DEVELOPMENT  
 FEDERAL INSURANCE ADMINISTRATION

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)