

# Bay-Waveland School District Emergency/Fire Access Road Project

Hancock County, Mississippi

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This document was prepared for: The Bay Waveland School District 201 Carroll Avenue Bay St. Louis, MS 39520

*By:* 

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# ENVIRONMENTAL ASSESSMENT BAY WAVELAND SCHOOL DISTRICT – EMERGENCY/FIRE ACCESS ROAD

#### 1.0 INTRODUCTION

On August 29, 2005, Hurricane Katrina struck the Mississippi Gulf Coast, causing extensive damage. A Presidential Disaster Declaration, FEMA-1604-DR-MS, was signed for Katrina.

The Bay Waveland School District has submitted an application for Federal Emergency Management Agency (FEMA) funding under FEMA's Public Assistance Program being administered in response to FEMA-1604-DR-MS. In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended, and implementing regulations at 44 Code of Federal Regulations (CFR) Part 206, FEMA is required to review the environmental effects of the proposed action prior to making a funding decision. This Environmental Assessment (EA) has been prepared in accordance with FEMA's National Environmental Policy Act (NEPA) regulations found in 44 CFR Part 10.

#### 2.0 PURPOSE AND NEED

Hurricane Katrina winds and storm surge damaged the campus of Lower Bay Elementary School in Waveland, Hancock County, Mississippi. Lower Bay Elementary School is located at 1101 Saint Joseph Street just south of Old Spanish Trail Road. The school consisted of three main buildings prior to Katrina: the original Center Building, a North Kindergarten Building, and a South Classroom Building. A modular classroom building was also located on the site. The original Center Building had repair costs exceeding 50% of the cost of a new structure. The North and South buildings sustained damage not exceeding 50%. The modular classroom building was destroyed.

The Bay Waveland School District has submitted a separate application for FEMA funding under FEMA's Public Assistance Program in response to FEMA-1604-DR-MS, to construct a new 49,695 SF structure that was designed in accordance with the 2003 International Building Code and was raised approximately two to three feet. The parking lot was not damaged; but, local officials contend that to meet local Fire Code, a second fire access road is necessary.

Under the Proposed Action Alternative, the Bay Waveland School District proposes to construct a 510 foot long, 20 foot wide emergency access road for the Lower Bay Elementary School providing an alternate fire apparatus access road to the building in case one of the access roads becomes impaired by vehicle congestion or other factors.

#### 3.0 ALTERNATIVES

This section describes the alternatives that were considered in addressing the purpose and need stated in Section 2 above. Two alternatives were evaluated further: the No Action Alternative, and the Proposed Action Alternative, for the construction of the emergency access road.

### Alternative 1: No Action

Under the No Action Alternative, the Bay Waveland School District would not build the emergency access road. If no road is built, then the school will only have one fire apparatus access road that has the potential to be impaired by vehicle congestion or other factors.

# Alternative 2: Construction of the Emergency Access Road (Proposed Action)

Under the Proposed Action Alternative, the Bay Waveland School District proposes to construct an emergency access road for the Lower Bay Elementary School providing an alternate fire apparatus access road to the building in case one of the access roads becomes impaired by vehicle congestion or other factors.

# 4.0 AFFECTED ENVIRONMENT AND IMPACTS

The following table summarizes the potential impacts of the Proposed Action Alternative and conditions or mitigation measures to offset those impacts. Following the summary table, any areas where potential impacts were identified will be treated in greater detail.

Affected Environment	Impacts	Mitigation
Geology and Soils	No impacts to geology; short term impacts to soil during the construction period.	Appropriate Best Management Practices (BMPs) will be used; such as installing silt fences and revegetating bare soils immediately upon completion of construction to stabilize soils.
Surface Water	Temporary impacts to surface water are possible during construction activities.	A Stormwater Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit must be obtained prior to construction; appropriate BMP's such as installing silt fences and revegetating bare soils, would minimize runoff.
Floodplains	No impacts to the floodplain are anticipated.	None.
Waters of the U.S. including Wetlands	No impacts to Waters of the United States including wetlands are anticipated.	None.
Transportation	Minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site.	Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways.
Public Health and Safety	No impacts to public health and safety are anticipated.	All construction activities would be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations; appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.
Hazardous Materials	No impacts to hazardous materials or wastes are anticipated.	None.
Socioeconomic Resources	No adverse socioeconomic impacts are anticipated.	None.
<b>Environmental Justice</b>	No disproportionately high or adverse effect on minority or low-income populations is anticipated.	None.

Air Quality	Short-term impacts to air quality would occur during the construction period. No adverse long-term impacts are anticipated.	Construction contractors would be required to water down construction areas when necessary; fuel-burning equipment running times would be kept to a minimum; engines would be properly maintained.
Noise	Short-term impacts to noise would occur during the construction period.	Construction would take place during normal business hours and equipment would meet all local, state and federal noise regulations.
<b>Biological Resources</b>	No adverse impacts to biological resources are anticipated.	None.
Cultural Resources	No adverse impacts to cultural resources are anticipated.	None.

# 4.1 Geology and Soils

The proposed project site contains soil consisting of Escambia loam according to NRCS Web Soil Survey.

The Farmland Protection Policy Act (FPPA) states that federal agencies must "minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses . . ." According to Ralph Thornton of the National Resources Conservation Service, "no conversion of prime farmland will occur for this project." Letter attached in Appendix B. The proposed project site does not contain soils classified as prime or unique farmland.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to geology or soils would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no impacts to geology would occur; short-term impacts to soils would occur during the construction period. Appropriate BMP's would be used.

#### **4.2 Water Resources**

#### 4.2.1 Surface Water

The Clean Water Act (CWA) as amended in 1977, established the basic framework for regulating discharges of pollutants into the waters of the United States.

Storm water from the site will be controlled and conveyed to the existing City Drainage System by means of sheet flow, grassed swales, and underground drainage structures. The proposed project slopes are designed not exceed 1 vertical to 3 horizontal (1:3).

#### 4.2.2 Floodplains

Executive Order (EO) 11988 (Floodplain Management) requires federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National

Flood Insurance Program (NFIP). Consistent with EO 11988, FIRMs were examined during the preparation of this EA (see attached FIRM map in Appendix B). The proposed site is located in Flood Zone "X" unshaded which is determined to be outside the 100 and 500-year floodplain.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to floodplain would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no impacts to floodplain would occur.

# 4.2.3 Waters of the U.S. including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. Additionally, Executive Order 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impact to wetlands.

Correspondence from the USACE states that a Section 404 permit would not be required for the project. The project site is located in non-wetland or upland areas based on an USACE Wetland Delineation Manual and a site visit that was conducted. Correspondence from the USACE is attached in Appendix B.

The Coastal Zone Management Act enables coastal states, including Mississippi, to designate state coastal zone boundaries and develop coastal management programs to improve protection of sensitive shoreline resources and guide sustainable uses of coastal areas. A letter from the Mississippi Department of Marine Resources states the agency has not objections to the project provided there are no direct or indirect impacts to coastal wetlands. Letter attached in Appendix B.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to waters of the U.S. including wetlands would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no impacts to waters of the U.S. including wetlands would occur.

# 4.3 Transportation

The proposed project is located at 1101 St. Joseph Street, in Waveland, Mississippi, at the Bay Waveland Lower Elementary School. Access to the project site would be from Old Spanish Trail from the north or Tiffany Street from the south.

*No Action Alternative*- Under the No Action Alternative, no construction would occur; thus, there would be no impacts to transportation.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no significant adverse impacts to transportation or site access are anticipated. There would be a very minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site that could potentially result in a slower traffic flow for the duration of the construction phase. No road closures are anticipated.

#### 4.4 Environmental Justice

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority and low-income populations.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to environmental justice would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no impacts to environmental justice would occur.

# 4.5 Air Quality

The Clean Air Act requires that states adopt ambient air quality standards. The standards have been established in order to protect the public from potentially harmful amounts of pollutants. Under this Act, the Environmental Protection Agency establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary air quality standards protect public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. EPA has set national ambient air quality standards based on 6 criteria pollutants: ozone, particulate matter, nitrogen dioxide, carbon monoxide, sufur dioxide, and lead. According to the Mississippi Department of Environmental Quality, the entire state of Mississippi is classified as in attainment, meaning that criteria air pollutants to not exceed the ambient air quality standards.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to air quality would occur because no construction would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, short-term impacts to air quality are possible during construction but BMP's would be used.

#### 4.6 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many federal agencies, state that outdoor sound levels in excess of 55 dB DNL are "normally unacceptable" for noise-sensitive land uses such as residences, schools, or hospitals.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to noise would occur because no construction would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, short-term impacts to noise levels are possible during construction but construction will take place during normal business hours and all equipment and machinery used at the project site would meet all local, state and federal noise regulations.

#### 4.7 Biological Resources

The proposed project location is within the city limits of Waveland, Mississippi. The U.S. Fish and Wildlife Service has determined that the project should pose no adverse effect to any federally listed threatened or endangered species or their habitats. The correspondence aforementioned is attached in Appendix B.

In addition, the Mississippi Department of Wildlife, Fisheries and Parks wrote a letter with their concerns and recommendations, however, stated that the project likely poses no threat to the listed species or their habitats if BMP's are properly utilized. This letter is attached in Appendix B.

<u>No Action Alternative</u>- Under the No Action Alternative, there would be no impacts to biological resources.

<u>Proposed Action Alternative</u>- There is no suitable habitat for any federally listed or state species of concern at the proposed project site. Therefore, under the Proposed Action Alternative, there would be no impacts to biological resources.

# 4.8 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800, requires federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation an opportunity to comment on federal projects that will have an effect on historic properties prior to implementation. Historic properties are defined as archeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

A FEMA archeologist and architectural historian, both qualified in their respective disciplines under Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61), conducted an assessment of the project's potential to affect historic properties within the Area of Potential effects (APE). The APE is the geographic area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist.

The proposed project site is located within the city limits of Waveland, Mississippi at a preexisting elementary school which is not listed, or eligible for listing, on the NRHP.

Agency consultation with the Mississippi Department of Archives and History determined that the proposed project would not affect cultural resources. Letter attached in Appendix B. Both the Choctaw Nation of Oklahoma (Tribal Historic Preservation Officer (THPO)) and the Mississippi Band of Choctaw Indians (THPO) were notified of the proposed project. To date no response has been received from either THPO.

<u>No Action Alternative</u>- Under the No Action Alternative, no impacts to cultural resources would occur.

<u>Proposed Action Alternative</u>- Under the Proposed Action Alternative, no impacts to cultural resources are anticipated. If, during the course of work, archeological artifacts or human remains are inadvertently discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize further harm to the finds. Work should not proceed until FEMA Historic Preservation staff have completed consultation with the Mississippi State Historic Preservation Office (SHPO) and the THPO.

#### 5.0 CUMULATIVE IMPACTS

According to the Council on Environmental Quality (CEQ) regulations, cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)." In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site. With the exception of minor short-term potential impacts as described above, no other cumulative effects are anticipated.

### 6.0 PUBLIC INVOLVEMENT

FEMA is the lead federal agency for conducting the NEPA compliance process for the construction of the Bay Waveland School District's secondary emergency access road for the Lower Bay Elementary School. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the proposed action while meeting the intent of NEPA and complying with all NEPA provisions.

The Bay Waveland School District	notified the	e pubic of the availabili	ity of the draft
Environmental Assessment through	publicatio	on of a public notice in a	a local newspaper. The
public notice was published on	and	, in the	, the proof of
publication is attached in Appendix	C. FEMA	conducted an expedite	ed public comment period
commencing on the initial date of p	ublication	of the public notice and	l ending on
No comments were received from the	he public.		

# 7.0 AGENCY COORDINATION AND PERMITS

The following agencies and organizations were contacted by letter requesting project review during the preparation of this EA. The following agencies/persons were asked to submit a formal response. Responses received to date are marked with an \* and are included in Appendix B.

- Mississippi Department of Archives and History\*
- Mississippi Band of Choctaw Indians
- Choctaw Nation of Oklahoma
- U.S. Army Corps of Engineers\*
- Mississippi Department of Marine Resources\*
- U.S. Fish and Wildlife Service\*
- Mississippi Wildlife, Fisheries, and Parks\*
- National Resources Conservation Service\*
- Stennis International Airport\*
- Project Engineer\*

# Other Attachments:

FEMA FIRM Map\*

# 8.0 CONCLUSIONS

No adverse impacts to geology, groundwater, floodplains, waters of the U.S. including wetlands, public health and safety, hazardous materials, socioeconomic resources, environmental justice, biological resources, or cultural resources are anticipated with the Proposed Action Alternative. During the construction period, it is possible that short-term impacts to soils, transportation, air quality and noise may arise. All short-term impacts will require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.