Draft Environmental Assessment

St. Clare Elementary School Relocation

Hancock County, Mississippi December 2007



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TABLE OF CONTENTS

| 1.0 | INTRODUCTION |
|------------|---|
| 2.0 | PURPOSE AND NEED1 |
| 3.0 | ALTERNATIVES |
| 4.0 | AFFECTED ENVIRONMENT AND IMPACTS |
| | 4.1Geology and Soils54.2Water Resources64.3Transportation84.4Environmental Justice84.5Air Quality94.6Noise94.7Biological Resources104.8Cultural Resources11 |
| 5.0 | CUMULATIVE IMPACTS |
| 6.0 | PUBLIC INVOLVEMENT |
| 7.0 | AGENCY COORDINATION AND PERMITS14 |
| 8.0 | CONCLUSIONS |
| Appendix A | Figures |
| Appendix B | Agency Coordination |



| ABFE | Advisory Base Flood Elevation |
|--------------------|--|
| ACHP | Advisory Council on Historic Preservation |
| amsl | above mean sea level |
| APE | Area of Potential Effects |
| | |
| BCES | Bay Catholic Elementary School |
| DCLS | Bast Management Practice |
| DIVII | Dest Management i lactice |
| $C \wedge \Lambda$ | Clean Air Act |
| CEO | Crean All Act |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| CWA | Clean Water Act |
| CZMA | Coastal Zone Management Act |
| | |
| dB | decibel |
| DNL | Day-Night Average Sound Level |
| | |
| EA | Environmental Assessment |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| | |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| FPPA | Farmland Protection Policy Act |
| 11171 | r armana r rotection r oney r tet |
| МДАН | Mississinni Department of Archives and History |
| MDEO | Mississippi Department of Environmental Quality |
| MDMD | Mississippi Department of Environmental Quanty |
| MDMK | Mississippi Department of Marine Resources |
| NAAOC | National Ambient Air Ovality Standarda |
| NAAQS | National Ambient Air Quanty Standards |
| NEPA | National Environmental Policy Act |
| NFIP | National Flood Insurance Program |
| NHPA | National Historic Preservation Act |
| NISTAC | Nationwide Infrastructure Support Technical Assistance Consultants |
| NOAA | National Oceanic and Atmospheric Administration |
| NO_2 | nitrogen dioxide |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NWI | National Wetlands Inventory |
| | · |
| O ₃ | ozone |
| OSHA | Occupational Safety and Health Administration |
| | |
| Ph | lead |
| | 1000 |



| PM _{2.5} | particulate matter less than 2.5 microns |
|-------------------|--|
| PM_{10} | particulate matter less than 10 microns |
| SCES | St. Clare Elementary School |
| SHPO | State Historic Preservation Office |
| SO_2 | sulfur dioxide |
| SWPPP | Stormwater Pollution Prevention Plan |
| THPO | Tribal Historic Preservation Office |
| USACE | U.S. Army Corps of Engineers |
| USDA | U.S. Department of Agriculture |
| USFWS | U.S. Fish and Wildlife Service |
| VOC | Volatile Organic Compound |



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 subsequently signed for Katrina.

The Catholic Diocese of Biloxi 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 for the proposed relocation of St. Clare Elementary School (SCES) and the interior renovation and upgrade of Bay Catholic Elementary School (BCES). SCES is located at 234 South Beach Boulevard, Waveland, Mississippi, and BCES is located at 301 Second Street, Bay St. Louis, Mississippi. Both schools are located in Hancock County (see Figure 1 in Appendix A).

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

The SCES campus consisted of five buildings totaling approximately 29,300 square feet (see Figure 2 in Appendix A). The storm surge and associated high winds from Hurricane Katrina destroyed SCES, leaving only the slabs and building foundations. SCES was located in FEMA floodplain designated zones A9 and V13, within the 100-year floodplain and within the Advisory Base Flood Elevation (ABFE) and surge inundation zone, receiving 25 to 30 feet of water. Damages to the facility exceeded the 50% repair/replacement ratio, meeting FEMA's criteria for replacement. In accordance with FEMA's policy for FEMA-1604-DR-MS, the remaining slabs and foundations will be demolished and the site returned to grade and revegetated.

Prior to Hurricane Katrina, the SCES provided private education for up to 261 students per year in kindergarten through sixth grade. SCES currently operates at a reduced capacity out of temporary mobile trailers located on the existing SCES property with the remaining students utilizing existing spaces at BCES (see Figure 2 in Appendix A). The temporary facility is not designed for long-term used and therefore, SCES requires a new permanent facility to continue providing private education for students.

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: the No Action Alternative and the Proposed Action Alternative, relocation of the SCES.

Alternative 1: No Action



Under the No Action Alternative, the Catholic Diocese of Biloxi would not rebuild a facility for SCES. SCES would continue to provide private education at a reduced capacity out of temporary mobile trailers located on the existing SCES property, with some students utilizing existing space at BCES.

Alternative 2: Relocation of St. Clare Elementary School (Proposed Action)

Under the Proposed Action Alternative, the Catholic Diocese of Biloxi proposes to relocate SCES to the BCES campus. The BCES campus is located approximately 3.6 miles northeast of the former SCES campus. BCES provides private education for 468 students from kindergarten through sixth grade. The BCES campus is located outside the ABFE and 100-year floodplain (Flood Zone C). BCES is part of a large Diocese campus that also supports St. Stanislaus College, an all-boys comprehensive college preparatory school for students in grades 6 through 12, and Our Lady Academy, a comprehensive college preparatory school for girls in grades 7 through 12.

The Proposed Action Alternative would combine SCES and BCES to create Holy Trinity Catholic School, which would be designed for a capacity of 732 students, pre-kindergarten through sixth grade. The proposed project would include the new construction of a 12,500-square-foot building on the BCES campus (as the replacement for SCES), reconfiguration of BCES through interior renovations to increase student capacity, and upgrades of BCES to meet or exceed current codes and standards (see Figure 2 in Appendix A).

Construction of New Building

Construction of the new facility would require the clearing of approximately 0.4 acre and six trees from the proposed project site. The proposed project site is bordered on the north by a segmented wooded area, to the east by Our Lady Academy's St. Joseph's Hall building, to the south by Our Lady Academy Gymnasium and McAuley Hall, and to the west by BCES. The proposed project site is located outside the 100-year floodplain (Zone C) and outside of the ABFE. The new facility is not required to be elevated since it is outside of the ABFE. The new facility will be a one-story, 12,500-square-foot building with capacity for 162 students and will include six kindergarten classrooms, two restrooms, a dining room, a kitchen, and a small office including a work room. In addition to these spaces, the building will contain a mechanical room and a janitor's closet. The new building would consist of a slab on grade structure with continuous grade beams and spot footings. The interior would mainly consist of vinyl composition floor tile and carpet. The exterior would be brick veneer with pre-finished aluminum windows. The structural system would be a steel frame with bar joists and a standing seam metal roof. The new building would be located behind the existing BCES building.

Interior Renovation and Upgrades to Existing BCES Building

Interior renovations and upgrades to BCES would increase student capacity to accommodate SCES students and would include converting the existing cafeteria and kitchen into an art room, a music room, and a library. The 90 x 60-foot space would be completely gutted, including existing concrete masonry unit walls, flooring, ceiling, light fixtures, and other electrical material. The existing air conditioning system would be removed, along with existing plumbing and kitchen equipment. New metal stud walls would be constructed along with new flooring,



new wall finishes, new finish ceilings, new lighting and electrical work, and a new air conditioning system. New plumbing would include new sinks in the art rooms. Exterior work would include new windows in these three new rooms. The existing upper level library would be partitioned to create two new classrooms. The new 24-foot-long metal stud wall would tie to the existing roof structure. The two new classrooms would get new carpet. In addition, a new pitched standing seam metal roof would be constructed over the existing BCES.

The second component of modification is to upgrade the existing BCES building to meet or exceed building code requirements, including:

- **Electrical** Remove all existing electrical work except the existing intercom and alarm systems. Install new power and lighting, as well as new telephone and data boxes, conduits, closed circuit television, and cable television.
- Heating, Ventilation and Air Conditioning Replace the existing system located in the upstairs part of the older section of the building.
- Windows Replace existing windows in the older part of the building due to lack of energy efficiency and recurring water leakage. This does not include the new windows in the new library, music and art rooms.
- Americans with Disabilities Act Compliance Construct/install an elevator to meet accessibility guidelines. This would include a new elevator shaft, and machine room.
- **Bathrooms** Gang toilets in the older part of the building would be refurbished with new fixtures and upgraded plumbing.
- Asbestos Removal Asbestos abatement would be conducted throughout the entire building.

BCES building improvements would be designed in accordance with the 2003 International Building Code and would conform to the current ABFEs as published by FEMA.

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 discussed in greater detail.

| Affected Environment | Impacts | Mitigation |
|----------------------|--|---|
| Geology and Soils | No impacts to geology; short-term impacts to soils during the construction period. | Appropriate Best Management Practices (BMPs), such as installing silt fences and revegetating bare soils immediately upon completion of construction to stabilize soils. No Farmland Conversion Impact Rating Form (AD-1006) is required since the project is located with city limits. |



| Affected Environment | Impacts | Mitigation |
|--|--|--|
| Surface Water | Short-term impacts to the Mississippi Sound would occur during the construction period due to soil erosion | A Stormwater Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit must be obtained prior to construction; appropriate BMPs, 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 waters of the United States or wetlands occur on the proposed project site. | None |
| Transportation | Minor short-term increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site. Minor long-term impacts to traffic levels in the vicinity of the BCES campus as a result of the increased number of students, parents, and staff accessing the campus. | Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways. Traffic devices including signal lights and/or stop signs may be installed during and upon completion of construction to mitigate minor, long-term impacts to traffic levels. |
| 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 would be in place prior to construction activities to alert pedestrians and motorists of project activities. |
| Hazardous Materials | No adverse impacts to hazardous materials or wastes are anticipated. Asbestos abatement would be conducted throughout the entire BCES building during building renovation and upgrades. | Excavation activities could expose or otherwise affect subsurface hazardous wastes or materials; any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with |



| Affected Environment | Impacts | Mitigation |
|-----------------------------|--|--|
| | | applicable local, state, and Federal regulations. |
| Socioeconomic Resources | No adverse socioeconomic impacts are anticipated. | None |
| Environmental Justice | 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 at the proposed project site during the construction period. | Construction would take place during normal business hours, with the bulk of the construction most likely occurring during summer vacation when students are not in class. Equipment would be maintained to meet all local, state, and Federal noise regulations. |
| Biological Resources | Minor impacts to biological resources. | The applicant would be required comply with the City of Bay St. Louis Ordinance No. 338 prior to the removal of live oak trees from the property |
| Cultural Resources | No impacts to archeological resources or historic structures are anticipated. | None. |

4.1 Geology and Soils

The proposed project site contains soil consisting of Eustis loamy fine sand with 2 to 5 percent slopes. The Eustis series consists of deep, somewhat excessively drained soils that formed in marine or fluvial sediments within parts of the Coastal plain (USDA/NRCS, 2007).

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..." The Eustis soil series is classified as prime farmland within Hancock County (USDA/NRCS, 2007a). Eustis soils are typically cleared and used for growing corn,



peanuts, melons, tung, peaches, and tobacco (USDA/NRCS, 2007). However, since the proposed project site is located within city limits, the FPPA does not apply.

<u>No Action Alternative</u> – Under the No Action Alternative, no impacts to geology or soils are anticipated because no construction would occur.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, no impacts to geology are anticipated; short-term impacts to soils are anticipated during the construction period. Appropriate BMPs would be used, such as installing silt fences and revegetating bare soils immediately upon completion of construction to stabilize soils. A Farmland Conversion Impact Rating Form (AD-1006) would not be required (USDA/NRCS, 2007b).

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.

The proposed project site slopes slightly inward from the north and west to the center, with elevations ranging from 22 feet to 20 feet above mean sea level (amsl). The nearest freshwater stream is located approximately 4,200 feet (0.8 mile) north of the proposed project site. The proposed project site is located approximately 845 feet (0.16 mile) west of the Mississippi Sound.

Surface water within the proposed project site drains south southeast toward Beach Boulevard and the Mississippi Sound via natural topography and underground stormwater drainage pipes. There are multiple stormwater inlets located throughout the BCES campus which are all connected via 12-inch underground reinforced concreted pipes (RCP) and discharge via a single underground 24-inch RCP toward Beach Boulevard and into the Mississippi Sound. The 24-inch RCP extends approximately 225 feet from a sea wall located parallel to Beach Boulevard, past the beach area, and outfalls into the Mississippi Sound. Two stormwater inlets, 2 feet by 2 feet wide and 7 feet deep, are located within the southwestern portion of the proposed project site. The inlets primarily collect surface water from the northern and western portions of the BCES Campus (GHA, 2007). A site visit conducted by Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC) and FEMA biologists on June 1, 2007, and October 25, 2007, verified these findings.

<u>No Action Alternative</u> – Under the No Action Alternative, no impacts to surface water are anticipated because no construction would occur.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, short-term impacts to the Mississippi Sound may occur during the construction period due to soil erosion. Existing stormwater inlets and associated underground RCPs located within the proposed project site would be removed and reconfigured, to provide improved drainage and accommodate building placement. The new drainage system would include the construction of 5 new stormwater inlets and 2 new drainage basins (GHA, 2007a). The applicant would be required to obtain an approved SWPPP and NPDES permit prior to the start of construction. To reduce impacts to the



Mississippi Sound, the applicant would implement appropriate BMPs, such as installing silt fences and revegetating bare soils.

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 (FEMA, 1983; FIRM Community Panel Number 285251 0004 B). The proposed project site is located in FEMA designated flood zone C, outside the 100-year floodplain. In addition, Hurricane Katrina Surge Inundation and Advisory Base Flood Elevation Maps (FEMA, 2005) were examined. The proposed project site is located outside the ABFE.

<u>No Action Alternative</u> – Under the No Action Alternative, no impacts to the floodplain would occur because there would be no construction.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, no impacts to the floodplain would occur. The new facility would not need to be elevated since it is outside the ABFE.

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 CWA. Additionally, EO 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impact of wetlands.

The proposed project site is approximately 0.16 mile west of the Mississippi Sound. A review of National Wetlands Inventory (NWI) maps indicates that no wetlands are located on or adjacent to the proposed project site (USFWS, 2007). A site visit conducted by NISTAC and FEMA biologists on June 1, 2007, confirmed that no wetlands occur on the proposed project site. Live oak (*Quercus virginiana*) and water oak (*Quercus nigra*) trees were identified. Soil profiles taken on June 19, 2007, indicated disturbed fill material. The 1987 *Corps of Engineers Wetlands Delineation Manual* requires the presence of all three parameters (greater than 50% dominance of hydrophytic vegetation, evidence of hydric soils, and hydrologic indicators) for an area to be considered a wetland (USACE, 1987). There were no hydric soils, dominance of hydrophytic plants, or hydrologic indicators identified on the proposed project site; therefore, the site does not contain wetlands.

The Coastal Zone Management Act (CZMA) 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 use of coastal areas. According to the National Oceanic and Atmospheric Administration (NOAA), the proposed project site is located within the Mississippi Coastal Zone (NOAA, 2007).

On September 14, 2007, letters requesting project review were sent to the Mississippi Department of Marine Resources (MDMR) and the USACE Mobile District (see 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> – No waters of the U.S., including wetlands, occur on the proposed project site. Therefore, under the Proposed Action Alternative, no impacts to waters of the U.S., including wetlands, would occur. In a letter dated November 27, 2007, MDMR stated that it had no objections to the project if no direct or indirect impacts to coastal wetlands would occur (see Appendix B).

4.3 Transportation

The proposed project site is located east of South Beach Boulevard, which runs north and south from Bay St. Louis to Lakeshore. Access roads in the immediately vicinity of the proposed project site include 2nd street, Easterbrook Street, City Park Avenue, Union Street, and Hancock Street. A letter dated September 14, 2007, requesting project review was sent to the Mississippi Department of Transportation; to date, no response has been received.

Alternative 1: No Action

Under the No Action Alternative, no construction would occur and there would be no impacts to transportation.

Alternative 2: Relocation of St. Clare Elementary School (Proposed Action)

Under the Proposed Action Alternative, minor short-term impacts to transportation, site access, or traffic levels would occur during the construction period and minor long-term impacts to traffic levels would occur upon completion of the construction period as a result of the increased number of students, parents, and staff accessing the campus. Construction would take place during normal business hours. There would be a 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. To mitigate potential delays, construction vehicles and equipment would be stored on-site during project construction, appropriate signage would be posted on affected roadways and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities.

Increased traffic levels in the vicinity of the BCES campus would occur due to the increased number of students, parents, and staff accessing the proposed project site. Peak daily traffic flows would occur about an hour before the start and about an hour after completion of classes. Traffic devices including signal lights and/or stop signs may be installed during and upon completion of construction at the intersections of 2nd Street and Union Street, 2nd Street and City Park Avenue, 2nd Street and Easterbrook Street, Hancock Street and Union Street, and Hancock and City Park Avenue. Existing parking areas have the capacity to accommodate the increase in vehicles and therefore would not be expanded.

4.4 Environmental Justice

EO 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. Socioeconomic and



demographic data for the project area were analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

<u>No Action Alternative</u> – Under the No Action Alternative, there would be no disproportionately high or adverse effect on minority or low-income populations.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, there would be no disproportionately high or adverse effects on minority or low-income populations.

4.5 Air Quality

The Clean Air Act (CAA) 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 the CAA, the U.S. Environmental Protection Agency (EPA) 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 (NAAQS) for the following six criteria pollutants: ozone (O₃), particulate matter (PM_{2.5}, PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). According to the Mississippi Department of Environmental Quality (MDEQ), the entire state of Mississippi is classified as in attainment with all Federal ambient air quality standards, meaning that criteria air pollutants do not exceed the NAAQS (MDEQ, 2007). On September 14, 2007, a letter requesting project review was sent to MDEQ; to date no response has been received.

Alternative 1: No Action

Under the No Action Alternative, no impacts to air quality are anticipated since no construction would occur.

Alternative 2: Relocation of St. Clare Elementary School (Proposed Action)

Under the Proposed Action Alternative, short-term impacts to air quality would occur. Short-term impacts to air quality would occur during the construction period but would not be substantial enough to affect the attainment status of the six priority pollutants. To mitigate short-term impacts to air quality, construction contractors would be required to water down construction areas when necessary. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO₂, O₃, PM_{2.5 and} PM₁₀, and non-criteria pollutants such as Volatile Organic Compounds (VOCs). To reduce the emission of criteria pollutants, fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.

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 other 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 are anticipated because no construction would occur.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, short-term increases in noise levels would occur during the construction period. To reduce noise levels during that period, construction activities would take place during normal business hours. Equipment and machinery installed at the proposed site would meet all local, state, and Federal noise regulations.

4.7 Biological Resources

The proposed project site has been previously disturbed and consists of a cleared, grassed and sandy area with a few live oak and water oak trees along the edge of the site. NISTAC and FEMA biologists conducted a site visit on June 1, 2007, and observed minimal vegetation at the proposed project site. The U.S. Fish and Wildlife Service (USFWS) lists the following federally endangered (E) and threatened (T) animal species for Hancock County (USFWS, 2007a):

| Common Name | Scientific Name | Status | |
|---|-------------------------------|--------|--|
| Louisiana black bear | Ursus americanus luteolus | Т | |
| West Indian manatee | Trichechus manatus | E (P) | |
| Brown pelican | Pelecanus occidentalis | E | |
| Piping plover | Charadrius melodus | T (CH) | |
| Gopher tortoise | Gopherus polyphemus | Т | |
| Green turtle | Chelonia mydas | T (P) | |
| Kemp's Ridley | Lepidochelys kempii | E (P) | |
| Loggerhead turtle | Caretta caretta | T (P) | |
| Gulf sturgeon | Acipenser oxyrhynchus desotoi | T (CH) | |
| Inflated heelsplitter | Potamilus inflatus | T (P) | |
| Louisiana quillwort | Isoetes louisianensis | E (P) | |
| (P) = potential to occur; (CH) = listed with critical habitat | | | |

According to the USFWS, the Louisiana quillwort is the only federally listed plant species that potentially occurs in Hancock County. It is a rare aquatic plant that occurs on sand and gravel bars, overflow channels, and areas in or near shallow, blackwater streams in riparian woodland and bayhead forests of pine flatwoods and upland pine forests (CPC, 2007). The site visit



conducted on June 1, 2007, confirmed that the proposed project site does not contain habitat for any federally listed flora and fauna species; therefore, it is unlikely that any threatened and endangered species are present. However, site plans indicate that several live oak trees will be removed. Live oak trees are protected in Bay Saint Louis by City Ordinance No. 338 entitled "Tree Preservation."

A letter dated September 14, 2007, requesting project review was sent to USFWS (see Appendix B).

<u>No Action Alternative</u> – Under the No Action Alternative, there would be no impacts to biological resources because no construction would occur.

<u>Proposed Action Alternative</u> – The proposed project site is disturbed and sparsely vegetated. Impacts to biological resources would be minor; however, the applicant would need to comply with City Ordinance No. 338 for Bay St. Louis prior to the removal of live oak trees from the property. There is no suitable habitat for any federally listed flora and fauna species at the proposed project site. Therefore, under the Proposed Action Alternative, impacts to threatened or endangered species are not anticipated. In a response dated September 24, 2007, USFWS stated that no listed, proposed, or candidate species are present on the proposed project site (see Appendix B).

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 (ACHP) 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).

On June 1, 2007, a NISTAC archeologist and architectural historian, both qualified in their respective disciplines under *Secretary of the Interior's Professional Qualification Standards* (36 CFR Part 61), conducted an assessment of the project's potential to affect historic and archeological resources 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. For above-ground historic properties, the APE extends out to a 0.5-mile radius around the proposed project site; for archeological resources, the APE consists of the entire 0.4-acre area of the proposed project site to be used for construction of the new building. This APE was previously established through FEMA coordination with the Mississippi State Historic Preservation Office (SHPO).

The APE, as well as the larger BCES campus, is located within the boundaries of the Beach Boulevard Historic District, which was listed in the National Register of Historic Places on November 25, 1980. When listed, the Beach Boulevard Historic District was defined as significant under Criterion C as an outstanding example of high style and vernacular architecture representative of Gulf Coast construction from 1790-1930, with minimal intrusion by modern non-contributing infill structures. Although Hurricane Katrina destroyed many historic structures in this District, many structures remain that could potentially be affected by this project. The



main area of concern is the adjacent campus of St. Stanislaus College Preparatory School which is less than 0.25 mile south of the BCES campus.

The proposed project site is situated on a flat plateau that rises approximately 20 feet amsl, approximately 845 feet inland from the shore of the Mississippi Sound. This plateau defines the southern portion of the City of Bay St. Louis. The nearest freshwater stream is located approximately 1.3 kilometers (0.8 mile) north of the proposed project site. Due to its location, the proposed project site is considered to be a high probability area for archeological resources. However, visual inspection of the APE did not reveal any evidence of above ground archeological resources and auger testing showed the upper soils levels (0-30 centimeters) to be significantly disturbed due to past hurricane events.

A search of Mississippi Department of Archives and History (MDAH) site files indicated six previously identified sites in a 1.6-kilometer (1-mile) radius; Site HA553 located 0.4 kilometer (0.3 mile) west, is an unevaluated Blacksmith shop that has not been assigned a National Register status; Site HA541, located 0.4 kilometer (0.3 mile) west, is a shell midden that has been determined eligible for the National Register; Site HA613, located 1.6 kilometer (1 mile) northeast, is an unevaluated scatter of ceramics; Sites HA556, located 0.40 kilometer (0.3 mile) northeast, and HA5570 located 0.96 kilometer (0.6 mile) north-northeast, are both ammunition magazines for which no National Register status has been determined; and Site HA528, located 1.6 kilometer (1 mile) northeast is a flat top mound which is considered eligible for the National Register.

A Phase I Cultural Resources Assessment of the proposed project site was conducted by FEMA Historic Preservation Specialists on October 25 and 30, 2007 (FEMA, 2007). This work consisted of a pedestrian survey and the excavation of shovel test pits (STPs) within the project's APE. The pedestrian survey revealed no visible cultural resources due to the addition of approximately 10 centimeters of sediment during Hurricane Katrina. Eustis loamy fine sand covered most of the proposed project site (USDA/NRCS, 2007a). Eight STPs were excavated within the site. The soils located at 11-32 centimeters below grade contained various construction materials, including nails, glass, mortar, brick, painted wood fragments, metal fragments, and historic ceramic sherds. No other cultural resources were recovered during the survey. The Phase I Cultural Resources Assessment concluded that the site exhibits a high degree of disturbance in the upper soils levels due to past construction and hurricanes. The lower soil levels exhibit no evidence of prehistoric or historic cultural activities.

<u>No Action Alternative</u> – Under the No Action Alternative, no impacts to archeological or cultural resources are anticipated because no ground disturbing activities would occur.

<u>Proposed Action Alternative</u> – Under the Proposed Action Alternative, no impacts to archeological or cultural resources are anticipated. In letters dated October 3, 2007, to the SHPO and Tribal Historic Preservation Office (THPO), FEMA stated that, although St. Stanislaus is considered a contributing element within the District, the new construction will be visibly separated from the campus by existing modern buildings. In fact, the new construction will be visibly separated from the entire District except to the north and northeast which includes a large open grassy area containing a pavilion and an access road for the campus. The northern extremity of this area is the CSX railroad tracks. Due to the physical isolation of the new



construction, FEMA has determined that the undertaking will have "No Adverse Effect" on historic structures or on the integrity of the Beach Boulevard Historic District.

Due to the high probability geographical location of the APE and the fact that it is situated in an area of long-term historic activity with a high density of sites, FEMA determined that the construction of the proposed facility could potentially affect National Register eligible archeological resources, if any are present. FEMA recommended that a Phase I archeological investigation be performed to determine the existence of any unknown resources prior to construction activities (see Appendix B). In correspondence dated October 4, 2007, the THPO concurred with FEMA's recommendation for a Phase I survey (see Appendix B). In a letter dated October 5, 2007, SHPO stated that no cultural resources would be affected and the project could proceed without further review (see Appendix B).

A Phase I Cultural Resources Assessment report was prepared on November 8, 2007, and submitted to the THPO for review. This report documents the Phase I survey findings, concludes that project activities will not impact known cultural resources, and recommends no further work for the proposed project site (FEMA, 2007). A response from THPO on the draft Phase I report has not been received to date.

During the construction period if 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 will not proceed until FEMA Historic Preservation staff complete consultation with the 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.

The Catholic Diocese of Biloxi has proposed the reconstruction of Our Lady Academy's St. Joseph Hall Building, located adjacent and east of the proposed project site. Prior to Hurricane Katrina, St. Joseph's Hall was a 6,092-square-foot, wood-framed building. St. Joseph's Hall was severely damaged by the storm surge, as well as by a large oak tree which fell on the south wing of the building. As a separate project, the Catholic Diocese of Biloxi has requested funding under FEMA's Public Assistance Program being administered in response to FEMA-1604-DR-MS for the replacement of the Hall at its existing location. The Catholic Diocese of Biloxi proposes to reconstruct St. Joseph's Hall and the new facility concurrently.

Bay St. Louis and the entire Mississippi Gulf coast are undergoing recovery efforts after Hurricane Katrina caused extensive damages. The recovery efforts in Gulfport include demolition, reconstruction, and new construction. These projects, the St. Joseph's Hall project, and the proposed project may have a cumulative temporary impact on air quality and surface



water in Bay St. Louis by increasing criteria pollutants and increasing erosion potential throughout construction activities. 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 SCES and the renovation and upgrade of BCES in Bay St. Louis, Mississippi. 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 Catholic Diocese will notify the public of the availability of the draft EA through publication of a public notice in a local newspaper. FEMA will conduct an expedited public comment period commencing on the initial date of publication of the public notice.

7.0 AGENCY COORDINATION AND PERMITS

The following agencies and organizations were contacted by letter requesting project review during the preparation of this EA. Responses received to date are included in Appendix B.

- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Environmental Protection Agency, Region 4, Water Management Division
- U.S. Fish and Wildlife Service, Jackson Field Office
- U.S. Army Corps of Engineers, Mobile District
- Mississippi Department of Agriculture and Commerce
- Mississippi Department of Archives and History
- Tribal Historic Preservation Officer, Mississippi Band of Choctaw Indians
- Mississippi Department of Marine Resources, Bureau of Wetlands Permitting
- Mississippi Department of Environmental Quality, Office of Pollution Control
- Mississippi Department of Transportation, Environmental Division
- Mississippi Soil and Water Conservation Commission

In accordance with applicable local, state, and Federal regulations, the applicant would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site.

8.0 CONCLUSIONS

No impacts to geology, floodplains, waters of the United States including wetlands, public health and safety, hazardous materials, socioeconomic resources, environmental justice, or cultural resources are anticipated with the Proposed Action Alternative. During the construction period, minor, short-term impacts to soils, transportation, surface water, air quality, and noise are anticipated. All short-term and minor impacts will require conditions to minimize and mitigate



impacts to the proposed project site and surrounding areas. Long-term, minor impacts to biological resources (removal of several trees) and transportation (minor increase in traffic levels) are anticipated with the Proposed Action Alternative.



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Appendix A

Figures

Appendix B

Agency Coordination