

# FINDING OF NO SIGNIFICANT IMPACT ST. JOHN THE BAPTIST SCHOOL BOARD FLOOD PROTECTION PROJECT ST. JOHN THE BAPTIST PARISH, LOUISIANA FEMA-4080-DR-LA, PWs 566 AND 606

## BACKGROUND

The St. John the Baptist School Board (SJBSB) has applied to the Federal Emergency Management Agency (FEMA) for funding assistance with a project to repair five damaged structures at East St. John High School (ESJHS) to pre-disaster condition with hazard mitigation measures. In addition, a floodwall would be construction around the perimeter of the campus and included a new drainage system to mitigate future flooding within the campus. Authority for the project is provided by the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 USC §§5121 et seq.). FEMA's Public Assistance Program funds the restoration or construction of facilities to replace facilities that have sustained damage due to presidentially declared natural disasters. The SJBSB has agreed to participate in the Public Assistance Alternate Procedures Pilot Program (PAAP) authorized under the Sandy Recovery Improvement Act of 2013 (SRIA). Under the PAAP, the SJBSB proposes to consolidate sub-grant funding, including Public Assistance and Section 406 Hazard Mitigation funding from ESJHS and the Lake Pontchartrain Elementary School.

An Environmental Assessment (EA) was prepared in accordance with the guidelines established in Code of Federal Regulations (CFR) for the FEMA, 44 CFR, Subpart B, Section 10.9; Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and regulations promulgated by the President's Council on Environmental Quality (40 CFR §§1500-1508). The purpose of this EA is to analyze the potential environmental impacts of the proposed SJBSB Flood Protection Project and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Two project alternatives were considered in this EA: 1) No Action; and 2) the construction of the St. John the Baptist School Board Flood Protection Project (Proposed Action). Under the No Action Alternative, no modifications would be made to the existing stormwater management system. Without improvements, ESJHS would continue to flood, causing damage to the high school campus, continue to displace the students attending ESJHS, and negatively affect families that directly and indirectly involved with ESJHS. SJBSB would continue providing education services for Grades 10-12 at a reduced capacity out of temporary mobile trailers located the Leon Godchaux School. The trailer units are neither expected nor intended to withstand many months of regular use and are not considered a long-term solution for the replacement of the school buildings.

The Proposed Action Alternative is to construct a new flood protection system and drainage pump station that would provide an independent forced drainage system to quickly move water

away from the ESJHS campus. The proposed flood protection system would mitigate flooding associated within the ESJHS property and reduce the likelihood of students that attend ESJHS to be relocated to a school campus farther from their residential location. The proposed project is intended to be a low impact development and is anticipated to be low maintenance, designed to reduce risks associated with the 10-year flood event (10-percent annual chance). The flood protection wall would be comprised installing a 2,510 linear feet steel sheet pile barrier extending 25 feet below grade and 5 feet above grade to the Design Flood Elevation = 8.0 feet, an earthen embankment along the flood wall, and a water pump station.

The floodwall would run along the southern boundary of the ESJHS campus, parallel to Highway. 61. Along the east property line, the floodwall would run approximately 810 feet adjacent to an existing drainage canal. Along the west property line, the floodwall would run for 700 feet to an existing tree line, and then align eastward for 170 feet. The floodwall would be 3 feet high along Highway 61 and transition to 5 feet high at the termination points with the steel sheet pile walls. The width of the earthen embankment would be 22 feet with a total footprint of 60 feet to construct the floodwall and re-grade the site to drain water away from the floodwall. The 60-foot construction corridor would be confined to the high school property. Excavation for the construction of the floodwall is required for only the top 6 inches of soil to remove vegetative material from within the floodwall section.

The steel sheet pile wall would consist of a PZ-22 (or equivalent structural material) steel sheet pile driven in place up to the level of flood protection. The height of the wall will vary from 5 feet to 6 feet. To guide water away from the wall, a 6-foot wide corridor would be graded on each side of the wall. In areas where the ground is below elevation (3 feet or less), a 1-foot high by 6-foot wide short flood wall would be constructed to keep standing water away from the sheet pile wall during regular high water events. The overall width of the finished sheet pile wall would be approximately 12 feet and would require a 40-foot wide corridor for construction. The construction corridor would be confined to the high school property and would not impact non-maintained ground beyond the existing tree line. The sheet pile wall will be driven either by an impact hammer or with a vibratory hammer.

Two existing driveways would be elevated to 4 feet above ground level (one foot above the 3-foot floodwall). The driveways would be graded at 5%, at an approximate 180 foot width, to accommodate school bus traffic. The finished driveways would be paved with asphalt. Asphalt is a flexible pavement that would accommodate the anticipated long-term settlement of the ramps with minimal maintenance.

The drainage pump station would be located near the northeast corner of the high school campus. The 16,000 gallon per minute pump station would work in conjunction with a subsurface drainage-piping network to be installed throughout the property, as well as a low, lying retention area, both designed to handle a 25-year storm event. The pump station would be comprised of two 20-inch electrical powered centrifugal pumps, one spare centrifugal pump, and a backup 325-horse power diesel engine generator set with a capacity of 175 kilowatts. The pump station would be a pile-supported structure, using 100-foot long by 14 square inch precast, concrete piles, and 60-foot long timber piles for the discharge piping. The wet well for the drainage pump

station would be excavated to a depth of 15 feet and the retaining structure would be constructed using steel sheet pile. The steel sheet piles would be installed as per the methods described above.

In order for the current drainage system to accommodate the proposed drainage pump station, approximately 2,350 linear feet of existing drainage pipe would need to be removed and replaced with 6,300 linear feet of drainage pipe. Much of the existing drainage pipe is 18 inches in diameter or smaller and is currently sloped to drain to the nearest outfall point. With the installation of the proposed pump station and associated retention basin, the pipes would need to be re-sloped to this one outfall location. As the proposed drainage path is significantly longer, the drainage line sizes would need to be increased. A new trunk line, consisting of 36 inch and 48 inch lines would be installed to relay all runoff to the drainage pump station. Trenching would be used to remove the old drainage pipe system and to install the new drainage line system. Trench dimensions would vary according to pipe size and depth but would be within the range of 3 to 8 feet wide and 2- to 7- foot deep. Excess material from the drainage line installation would be used for onsite grading activities to further assist in guiding water to the low-lying retention area and pump station.

In order to retain water away from the high school buildings, a 0.8-acre storm water retention area would be constructed. The location for the retention area was selected as the only space on the campus that would not cause damage if it unexpectedly held water for several days. Parking lots, streets and green space around the buildings were ruled out as potential areas for the retention basin as severe rainfall can happen at any time, including while school is in session. The football and baseball fields were excluded due to concerns that the field surface could be damaged if it sustained ponding for a long period of time. The area selected for the retention basin is currently used as an auxiliary practice field, mainly by the marching band and soccer club. The retention basin would be graded to an elevation of 1.5 feet on all 4 sides a cross slope of 1% to the basin centerline. The addition of the retention basin, to the overall proposed site plan, adds an additional 0.5 acre-foot of water retention below the roadway and 1acre-foot of water retention below the building floor elevations.

The total estimated earthwork, for the development of the proposed project, would be around 21,500 cubic yards. Approximately 8,000 cubic yards of new lean clay will be imported onto the site for the construction of the floodwalls and driveway ramps. An additional 9,000 cubic yards of sand would be brought in for new paving assemblies and re-grading in the athletic areas where a clay top soil is not appropriate. Excess material from onsite activities, including trenching for drainage pipe installation and spoil piles from pump station and retention pond installation would be an additional 4,500 cubic yards. This excess material would be used for overall, on-site grading where clay material is appropriate, including areas along the new floodwalls and sheet pile walls, where sand would not be a suitable fill material.

In order to accommodate the installation of the flood protection and drainage features, several items would need to be relocated. These include the relocation of approximately 40 parking spaces from the front of the school to the rear west side of the property. Other items to be relocated include the batting cages in the rear of the property, some wooden bleachers and a shot

put slab on the west side of the athletic fields. The batting cages will be relocated to the same area, but relocated northward by approximately 30 feet. The shot put slab and bleachers will be relocated to the other side of the football field. Additionally, driveway gates located in the front of the property are no longer in use and will need to be removed to accommodate the new floodwall and driveway ramps. These gates will be reused to secure the access roadway to the drainage pumping station.

Building hardening activities at the campus would include replacement of existing windows and storefronts with wind rated and large missile impact resistant windows and storefronts at the Main Building, Gym/Cafeteria Building, Vocational Tech Building, and Small Classroom Building. Repairs within the 5 buildings would include replacement of damaged dry wall, mold removal, replacement of damaged flooring and other affected items such as desks and chairs.

In summary, the Proposed Action Alternative would provide flood mitigation for ESJHS through the construction of a flood wall around the perimeter of the campus, and the installation of a stormwater conveyance system, water pump station with outlet structures, sewer and stormwater backflow preventers, a retention basin, fencing, elevated ingress/egress driveway ramps, and drainage swales for directing sheet flow around the floodwall protecting the structures and contents of ESJHS from future flood damage.

In accordance with 44 CFR §§ 9.6 and 9.8, an *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain* for the project was published in the local newspaper of record *L'Observateur* on July 12, 2014 providing the public with a 30-day public comment period for the proposed project. No comments were received from the public during the 30-day comment period.

In addition, FEMA had provide notification to the public of the availability of the draft EA through publication of a *Final Floodplain Notice and Notice of Availability for the Draft Environmental Assessment* for the proposed project in the *L'Observateur* newspaper informing the public of FEMA's decision to proceed with the project. Per 44 CFR § 9.12, this notice was published a minimal 15 days prior to any construction. The Draft Environmental Assessment was made available for comment at St John the Baptist Parish Central Library, the St John the Baptist Parish School Board Administration Office, and on the FEMA website for a 7-day public comment period. No comments were received from the public during the 7-day comment period.

#### **FINDINGS**

The Proposed Action as described in the EA will not significantly impact the resources associated with climate, geology and soils, and air quality; water quality, wetlands, and floodplains; biological resources; cultural resources; and socioeconomic resources. All populations, including minority and low-income populations, will benefit from the Proposed Action.

### **CONDITIONS**

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of Federal funding.

- 1. This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
- 2. A Storm Water Pollution Prevention Plan (SWPPP) and a Louisiana Pollutant Discharge Elimination System (LPDES) permit must be obtained prior to construction. Implementation of appropriate BMPs would be required at the construction location. BMPs could include the installation of silt fences and the revegetation of disturbed soils to minimize the potential for erosion. Excavated soil and waste materials will be managed and disposed of in accordance with applicable local, state, and federal regulations. If contaminated materials are discovered during the construction activities, the work will cease until the appropriate procedures and permits can be implemented.
- 3. 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.
- 4. SJBSB will notify the Louisiana Department of Natural Resources Office of Coastal Management (LDNR OCM) of the date on which initiation of the proposed activity begins. In addition, the SJBSB must adhere to the special conditions assigned to the LDNR OCM determination.
- 5. If ground-disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 6. During construction, petroleum products for fueling and maintenance will be located within construction and staging areas. These hazardous materials will be the responsibility of the contractor. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, state, and federal regulations.
- 7. Construction would take place during normal business hours and equipment would meet all local, State, and Federal noise regulations.
- 8. Construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways. The appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.
- 9. Qualified personnel would perform all construction activities 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. The construction contractor would be responsible for adhering to the Louisiana Underground Utilities and Facilities Damage Prevention Law ("Call Before You Dig").

10. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

#### CONCLUSIONS

Based on the findings of the EA, coordination with the appropriate agencies, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major Federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (44 CFR § 10.9) and the proposed project as described in the associated EA may proceed.

APPROVAL

Kevin Jaynes **Regional Environmental Officer** FEMA Region 6

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George A. Robinson **Regional Administrator** FEMA Region 6

20/14 Date

Date