

Draft Tiered Site-Specific Environmental Assessment

Terrebonne Parish

Dual-Use Hurricane Safe Room

Houma, Terrebonne Parish, Louisiana

HMGP DR-1786-LA PROJECT #170

September 2016



FEMA

Federal Emergency Management Agency
Department of Homeland Security
800 North Loop 288
Denton, TX 76209

I. Background

In accordance with 44 Code of Federal Regulations (CFR) for the Federal Emergency Management Agency (FEMA), Subpart B, Agency Implementing Procedures, Part 10.9, a Programmatic Environmental Assessment (PEA) for Hazard Mitigation Safe Room Construction was prepared and a Finding of No Significant Impact (FONSI) was issued in on June 2, 2011, pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). This Tiered Site-Specific Environmental Assessment (SEA) is being prepared in accordance the June 2011 PEA. The focus of this Tiered SEA is on those areas of concern requiring additional discussion or analysis that are beyond the scope of the PEA.

II. Purpose and Need

Terrebonne Parish has applied for Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness under application number HMGP-DR-1786-LA Project #170. Section 404 (HMGP) of the Robert T. Stafford Relief and Emergency Assistance Act, 42 U.S.C. § 5121 et seq., authorizes FEMA to provide funding to eligible grant applicants for cost effective activities that have the purpose of reducing or eliminating risks to life and property from hazards and their effects. Mitigation grant program regulations and guidance that implement these authorities identify various types of hazard mitigation projects or activities that meet this purpose and may be eligible for funding. These projects represent a range of activities that protect structures, the contents within those structures, and/or the lives of their occupants.

The purpose of the proposed project is to provide near-absolute life safety protection for the first responders and other critical or essential services personnel who are necessary for the Parish's immediate response to an extreme wind event. The parish needs critical resources to remain in the affected area in order to begin response operations and damage assessments as soon as possible after an event. The City of Houma is the Parish seat and the only incorporated city in Terrebonne Parish. According to the US Census Bureau the 2010 population of Houma was 33,727 and the 2010 population of Terrebonne Parish was 111,860. The Terrebonne Parish Hazard Mitigation Plan Update – March 2010 identifies hurricanes as a primary concern for the Parish. As such, safe rooms for critical facilities are identified in the action plan. There have been 17 presidentially declared disasters affecting Terrebonne Parish since 1965, nine of which were hurricanes. The others were tropical storms or severe winds and flooding.

III. Alternatives

Two project alternatives are proposed in this SEA: 1) No Action Alternative and 2) Proposed Action Alternative- Construction of a dual-use safe room at 2104 Morris St., Houma, LA 70363.

Under the No Action Alternative, nothing would be done to address the risk of hurricanes in the project area. A safe room would not be constructed. As a consequence, the residents and emergency responders in Houma and surrounding areas would remain at risk and would continue to be in danger when hurricanes target the project area.

The Proposed Action Alternative involves the construction of a dual-use safe room at 2104 Morris Street, Houma, Louisiana 70363 (Latitude: 29.59290; Longitude: -90.69856). The

proposed dual-use safe room will have a gross area of approximately 1,714 square feet and a usable space of approximately 1,128 square feet. The safe room will provide near-absolute life safety protection for an estimated 56 critical/essential services personnel. When not in use as a safe room, the facility would serve as the City of Houma's Fire Training Center. The project also includes installing a generator and utilities at the safe room site, which will link into existing systems. A parking lot, funded by another source, will also be installed at the safe room site. The safe room will be built in accordance with FEMA P-361, Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms, Third Edition (2015). Figure 1 shows the proposed safe room floor plan.

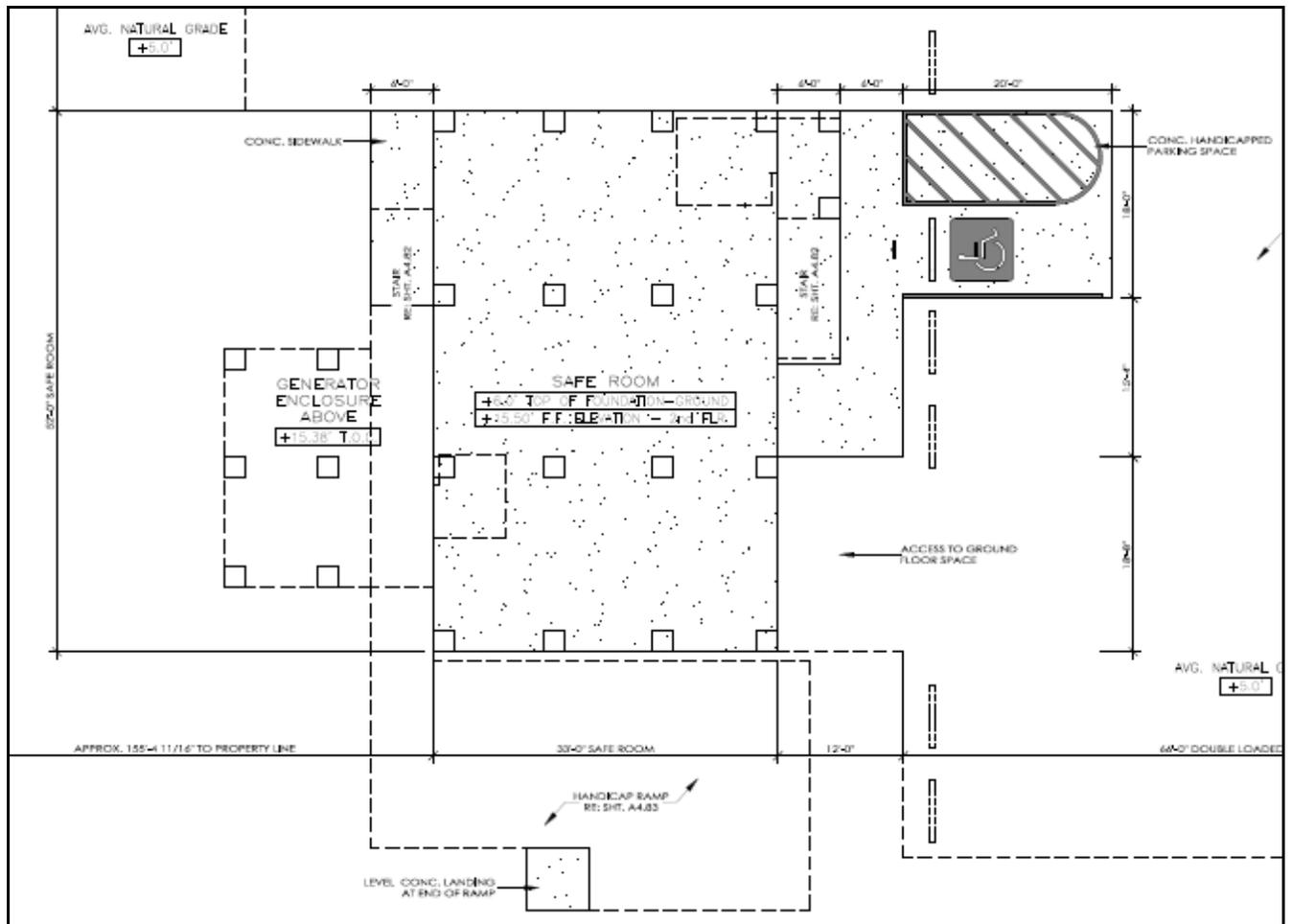


Figure 1: Floor plan for Proposed Action Alternative

IV. Environmental Impacts

Discussion of the environmental impacts associated with the No Action Alternative is included in the June 2011 PEA. This document incorporates the PEA by reference. The applicant must follow the mitigation measures as identified in Section 7 of the PEA to the maximum extent possible. The PEA can be found in FEMA's electronic library at <http://www.fema.gov/library/viewRecord.do?id=4670>.

FEMA's environmental planning and historic preservation review reveals that all environmental areas of concern are appropriately accounted for in the PEA with the exception of floodplain

impacts. Table 1 provides a summary of the findings for the environmental areas of concern that FEMA typically reviews.

Table 1: Summary of Other Environmental Areas of Concern

Area of Concern	No Action Impacts	Proposed Action Alternative Impacts
Land Use	No effect.	Land use impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The proposed action would have minor impacts to land use and would be consistent with surrounding or planned land uses in the short- or long-term. The project would disturb less than 5 acres. No special land use permit or waiver will be required. The project is within the Louisiana Coastal Zone. In a letter dated September 28, 2012, the Louisiana Office of Coastal Management determined that the granting of financial assistance is fully consistent with the Louisiana Coastal Resources Program. The applicant is responsible for coordinating with and obtaining any required Coastal Use Permit(s) or other authorizations from the Louisiana Department of Natural Resources Office of Coastal Management’s Permits and Mitigation Division prior to initiating work. The applicant must comply with all conditions of the required permits. The project is not within Coastal Barrier Resource Units.
Geology, Soils, and Seismicity	No effect.	Impacts to geology, soils, and seismicity are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The safe room project will not disturb more than 5 acres of land, and it is not located in an area subject to tsunami, seismic, volcanic, erosion, landslide, mudslide, or structural instability hazards. The project does not involve the conversion of prime and unique farmland.
Water Quality and Resources	No effect.	Water quality impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. During the construction phase, the proposed action would have minor temporary effects to water quality that would be at or below water quality standards or criteria. The proposed action would not cause or contribute to existing exceedances of water quality standards on a short-term or prolonged basis. The proposed action would not disturb more than 5 acres of land. The applicant coordinated with the Louisiana Department of Environmental Quality (LDEQ) The LDEQ has no objections to the project and provided comments and recommendations (see Appendix B).
Wetlands	No effect.	Impacts to wetlands are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The project will have no effect on wetlands because the project

Area of Concern	No Action Impacts	Proposed Action Alternative Impacts
		is located outside of designated wetlands and does not adversely affect any wetlands. U.S. Fish and Wildlife Service National Wetland Inventory Map, accessed on 9/7/2016
Biological Resources	No effect.	Impacts to biological resources, including federally threatened and endangered species and critical habitat, are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The safe room site is not designated as critical habitat for any listed species according to the United States Fish and Wildlife Service (USFWS) critical habitat mapper. Based on the species listed in Terrebonne Parish per the USFWS Information, Planning, and Consultation (IPAC) System, the scope of work, and the habitat present at the proposed project area, FEMA has determined that the Proposed Action will have no effect on listed species. The USFWS on-line technical services form suggests a “no effect” conclusion is appropriate. The Louisiana Department of Wildlife and Fisheries (LDWF) does not anticipate impacts to rare, threatened, or endangered species or critical habitats, also no state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site. Therefore, FEMA has determined the project will have no effect on threatened and endangered species and will not adversely modify or otherwise affect critical habitat. The proposed action would have negligible impacts to native species and their habitats and population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.
Human Health and Safety	No effect	Human health and safety impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Wastes resulting from the proposed action would be safely and adequately managed in accordance with all applicable regulations and policies. There would be no short- or long-term adverse impacts to public safety. All residents in the area will benefit from the safety provided by the facility. The proposed action would not result in an exceedance of available waste disposal capacity nor would it result in regulatory violation(s). Per the PEA FONSI, 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 construction activities, the work will cease until the appropriate procedures and permits are implemented. This is a required condition of the grant award.
Minority and Low-Income Populations	No effect	Impacts to minority and low-income populations were not examined in the SEA because the threshold of significance outlined in the PEA was not exceeded. Though low-income and

Area of Concern	No Action Impacts	Proposed Action Alternative Impacts
		minority populations exist in the project area, no disproportionate adverse impacts to these portions of the population is anticipated. All residents in the area will benefit from the safety provided by the facility.
Historic Properties	No effect.	Impacts to historic properties are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. FEMA determined in accordance with CFR 36 Part 800.4(d)(1) that there would be no effect to historic properties, including structural and archeological resources, due to the Proposed Action Alternative. The State Historic Preservation Office (SHPO) concurred with this determination in a response letter dated September 29, 2015 (see Appendix B). The 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. This is a required condition of the grant award. Consultation with tribes listed in Section VI, was conducted per 36 CFR §800.2(c)(2)(i)(B), dated September 9, 2015. The tribes listed in Section VI did not provide comments within 30 days or declined to comment. FEMA has determined that proposed project will not adversely affect traditional, religious, or culturally significant sites.
Air Quality	No effect.	Air quality impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Minor short-term effects to air quality are anticipated during the safe room construction. Emissions in attainment areas, such as Houma, would not cause air quality to go out of attainment for any National Ambient Air Quality Standards. The applicant coordinated with the LDEQ. The LDEQ has no objections to the project and provided comments and recommendations. Dust mitigation techniques are included in the Section 7 Mitigation Measures of the PEA.
Noise	No effect.	Noise impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Noise levels resulting from the proposed action would not exceed typical noise levels expected from construction equipment or generators. Noise generated by construction and operation of the facility would be temporary or short-term in nature. There would be minor to moderate temporary adverse noise effects during construction of the safe room. The applicant must follow the noise mitigation measures as identified in Section 7 of the PEA to the maximum extent possible. These measures include limiting construction activities to normal business hours and avoiding construction activities within 200 feet of noise-sensitive receptors such as schools, hospitals,

Area of Concern	No Action Impacts	Proposed Action Alternative Impacts
		residential areas, nursing homes, etc.

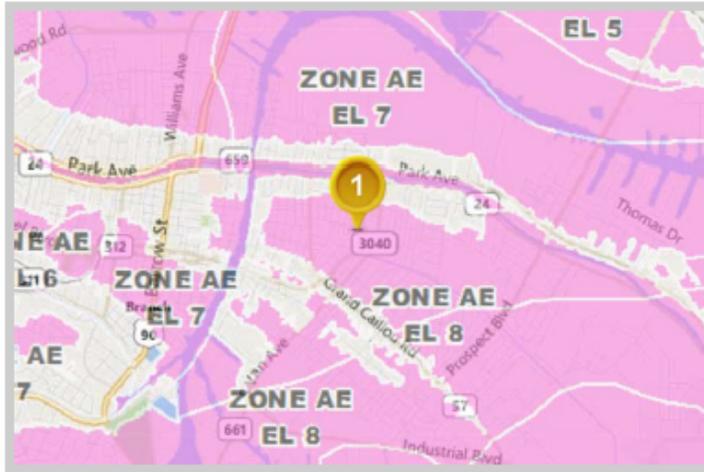
In compliance with FEMA regulations implementing Executive Order 11988, Floodplain Management, FEMA is required to carry out the 8-step decision-making process for actions proposed in the floodplain per 44 CFR §9.6. Step 1 is to determine whether the project is located in the floodplain. Because FEMA considers the construction of safe rooms as critical actions, the proposed project must be reviewed to determine whether it is located within the 100-year or 500-year floodplain. FEMA has determined the Proposed Action Alternative is located in the 100-year floodplain, Zone AE elevation 8, as depicted on Preliminary Flood Insurance Rate Map (FIRM) 22109C0255E, dated 07/30/2008 (see Figure 2). Zone AE indicates an area inundated by the 100 year flood, where flood elevations have been determined. The location is almost exactly between transects 10 and 11 on the Preliminary DFIRM. It appears that transect 11 is the dominant profile for this area. The 500-year transect elevation is 13.5 feet. The ground elevation is approximately 5.6 ft.

Step 2 is to notify and involve the public in the decision-making process, which will be incorporated into the notice of availability for this SEA.

Step 3 is to identify and evaluate practicable alternatives to locating the proposed project in the floodplain, including alternative sites and actions outside of the floodplain. There are very few areas within Terrebonne Parish that meet the operational siting requirements for this project location, and none of them are outside of the special flood hazard area (SFHA). The location selected is the best option for project siting, as it is adjacent to existing and planned emergency services facilities, has easy access to major transportation routes, and is already owned by the parish. The applicant considered constructing a safe room at Air Base Fire station at 120 James Road; however, determined the space was not sufficient to accommodate a building large enough to serve the purpose and need for the project. No practicable alternative site or action outside of the 100- or 500-year floodplain exists.

Louisiana Flood Map

2104 Morris St., Houma, LA



Visible Layers

Preliminary FIRM (07/30/2008)
Bing Roads

Point Coordinates

Point #	Lat., Long.
1	29.5931, -90.6986

Flood information in this table is from the: Preliminary FIRM (07/30/2008)

Point	Panel ID	Flood Zone	BFE	Ground Elevation	BWS('13)*
1	22109C0255E 07/30/2008	AE, EL 8	8	5.8	120-129 mph

Figure 2: Preliminary Flood Insurance Rate Map with Proposed Action Alternative Site Indicated, provided by LSU Agricultural Center.

Step 4 is to identify impacts associated with occupancy and modification of the floodplain and support of floodplain development that could result from pursuing the Proposed Action Alternative. Per 44 CFR 9.10 “Identify impacts of proposed actions,” FEMA should consider whether the proposed action will result in an increase in the useful life of any structure or facility in question, maintain the investment at risk and exposure of lives to the flood hazard, or forego an opportunity to restore the natural and beneficial values served by floodplains or wetlands. FEMA should specifically consider and evaluate impacts associated with modification of floodplains; additional impacts which may occur when certain types of actions may support subsequent action which have additional impacts of their own; adverse impacts of the proposed actions on lives and property and on natural and beneficial floodplain values; and these three categories of factors: flood hazard-related factors, natural values-related factors, and factors relevant to a proposed action’s effects on the survival and quality of wetlands. Per 44 CFR Part 9, natural values-related factors include water resource values (natural moderation of floods, water quality maintenance, and ground water recharge); living resource values (fish and wildlife and biological productivity); cultural resource values (archeological and historic sites, and open space recreation and green belts); and agricultural, aquacultural and forestry resource values. Factors relevant to a proposed action’s effects on the survival and quality of wetlands include

public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion; maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

Building the safe room in the floodplain would increase the risk of structural damage to the safe room itself due to flooding. In addition, there is safety risk to the populations that might be sheltering in the safe room during a 100-year flood event. It is not anticipated that the Proposed Action Alternative will result in an increased base discharge nor should it increase the flood hazard potential to other structures. The City of Houma and surrounding areas is already developed and the majority is located in the 100- or 500-year floodplain. The addition of a safe room to protect lives in an already built-up area is not anticipated to encourage development in the floodplain beyond what is already in place. The safe room is intended to serve existing populations and it is not anticipated that the construction of the safe room will encourage increased occupancy in the surrounding floodplain areas. The parcel does not offer suitable habitat for any federally listed species, but could support native plant and wildlife species if allowed to return to its native state.

The functions of the floodplain to provide flood storage and conveyance, filter nutrients and impurities from runoff, reduce flood velocities, reduce flood peaks, moderate temperature of water, reduce sedimentation, promote infiltration and aquifer recharge, and reduce frequency and duration of low surface flows will remain intact after the implementation of the project. There will be minor reductions in these services due to the conversion of less than 1 acre of undisturbed land, but there will not be significant adverse impacts to these services provided by the floodplain. Development of the site will not impact groundwater recharge. Water quality may be impacted during the construction phase due to sedimentation and run-off. These impacts are considered to be minor and temporary effects to water quality that would be at or below water quality standards or criteria. The proposed action would not cause or contribute to existing exceedances of water quality standards on a short-term or prolonged basis. Furthermore, the LDEQ has provided general comments to ensure temporary and permanent water quality impacts are addressed (Appendix B). There will not be impacts to wetlands.

Floodplains also provide services in the form of providing fish and wildlife habitat, breeding, and feeding grounds. These floodplain values will not be adversely impacted and the overall integrity of the ecosystem will not be impacted. FEMA has determined the project will have no effect on threatened and endangered species and will not adversely modify or otherwise affect critical habitat. The proposed action would have negligible impacts to native species and their habitats and population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.

Step 5 is to minimize the potential adverse impacts and support to or within floodplains identified under Step 4 and restore and preserve the natural and beneficial values served by floodplains. Many of the impacts discussed above are considered insignificant and mitigation is not practicable or warranted. Best management practices (BMPs) are included in the Section 7 Mitigation Measures of the PEA. Implementation of the Section 7 measures is a requirement of the PEA FONSI. As explained above, construction of the safe room is not expected to result in an increased base discharge nor will it increase flood hazard to other structures. The safe room footprint is minor when compared to the extensiveness of the 500-year and 100-year floodplain

in the City of Houma and surrounding areas. In order to reduce the impacts identified in Step 4 of flooding on the proposed new structure and its occupants, the structure and its supporting utilities will be elevated at or above the 500-year elevation because the construction of a safe room is considered a critical action. The finished floor will be at or above the 500-year flood elevation of 13.5 feet. In addition, the City of Houma has received a letter of approval from the local floodplain administrator and will obtain required permits prior to initiating work (see Appendix B) All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files. The construction of the safe room to the 500-year elevation will ensure the project will be in compliance with the National Flood Insurance Program.

Step 6 is to determine whether the proposed action is practicable and to reevaluate alternatives. Per the discussion above, including elevating to mitigate flood risk to the safe room and the unavailability of a location outside of the floodplain, the Proposed Action Alternative is the only practicable alternative.

Step 7 requires that the public be provided with an explanation of any final decision that the floodplain is the only practicable alternative. In accordance with 44 CFR §9.12, the Terrebonne Parish Government must prepare and provide a final public notice 15 days prior to the start of construction activities. Documentation of the final public notice is to be forwarded to FEMA for inclusion in the permanent project files.

Step 8 is the review of the implementation and post-implementation phases of the proposed action to ensure that the requirements stated in 44 CFR Part 9.11 are fully implemented. The proposed safe room project will be constructed in accordance with applicable floodplain development requirements and in line with the conditions outlined below.

V. Mitigation

1. 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 construction activities, the work will cease until the appropriate procedures and permits are implemented.
2. The grantee and sub grantee will follow applicable mitigation measures as identified in Section 7 of the PEA to the maximum extent possible.
3. 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.
4. Terrebonne Parish must comply with the appropriate local floodplain management ordinance or best available data as defined by Preliminary Flood Insurance Rate Map (FIRM) panel 22109C0255E, dated 07/30/2008, whichever is more restrictive per Executive Order 11988 Sec. 2(a)(1). Applicant must coordinate with the local floodplain administrator and obtain any required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions should be

documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

5. Terrebonne Parish must elevate the safe room at or above the 500-year floodplain elevation of 13.5 feet.
6. For actions located in the floodplain and/or wetlands, Terrebonne Parish must issue a final public notice per 44 CFR Part 9.12(e) at least 15 days prior to the start of work.
7. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
8. 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.
9. Terrebonne Parish must comply with the conditions stated in the PEA FONSI, dated June 2, 2011, for the Proposed Action Alternative.

VI. Agencies Consulted

1. Louisiana Department of Wildlife and Fisheries
10. Louisiana State Historic Preservation Office
11. Louisiana Department on Environmental Quality
12. Terrebonne Parish Consolidated Government Department of Planning and Zoning
13. Alabama Coushatta Tribe of Texas
14. Coushatta Tribe of Louisiana
15. Chitimacha Tribe of Louisiana
16. Jena Band of Choctaw Indians
17. Mississippi Band of Choctaw Indians
18. Tunica Biloxi Tribe of Louisiana

VII. Public Comment

A public notice advertising the availability of this Draft SEA for public review and comment will be posted in the local newspaper of record and on the FEMA website at <http://www.fema.gov/library/index.jsp>. A 15-day public comment period will commence on the initial date of the public notice. FEMA will consider and respond to all public comments in a Final SEA. If no substantive comments are received, the Draft SEA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project.

VIII. List of Preparers/Reviewers

Amber Martinez, Principal Preparer, Historic Preservation Specialist, FEMA Region 6

Linda Ryder, Principal Reviewer, Environmental Specialist, FEMA Region 6

Dorothy Cook, Preparer and Reviewer, Environmental Specialist, FEMA Region 6

Kevin Jaynes, Reviewer, Regional Environmental Officer, FEMA Region 6

IX. References

FEMA (Federal Emergency Management Agency). 2015. FEMA P-361: Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms, Third Edition. Available on-line at <http://www.fema.gov/library/viewRecord.do?id=1657>. Accessed September 7, 2016.

FEMA. 2011. Programmatic Environmental Assessment for Hazard Mitigation Safe Room Construction. Available on-line at <http://www.fema.gov/library/viewRecord.do?id=4670>. Accessed September 7, 2016.

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USFWS (U.S. Fish and Wildlife Service). 2016. Information for Planning and Conservation: Resources in Jefferson Parish, Louisiana. Available on-line at <https://ecos.fws.gov/ipac/gettingStarted/map>. Accessed September 7, 2016.