Draft Supplemental Environmental Assessment

City of New Orleans
Desire Area Road Network Infrastructure Recovery Restoration

FEMA-1603-DR-LA

Orleans Parish, Louisiana

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U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
1500 Main Street
Baton Rouge, LA 70802

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LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material
ADA	American Disabilities Act
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BFE	Base Flood Elevation
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CNO	City of New Orleans
CTR	In-house contract consultant
DFIRM	Digital Flood Insurance Rate Map
DHS	U.S. Department of Homeland Security
DoA	U.S. Department of the Army
EA	Environmental Assessment
EIS	Environmental Impact Statement
E.O.	Executive Order

FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GPO	U.S. Government Printing Office
HSDRRS	Hurricane and Storm Damage Risk Reduction System
HUD	U.S. Department of Housing and Urban Development
JIRR	Joint Infrastructure Recovery Request Project
LA GOHSEP	Louisiana Governor's Office of Homeland Security and Emergency Preparedness
LAC	Louisiana Administrative Code
LDEQ	Louisiana Department of Environmental Quality
LPDES	Louisiana Pollutant Discharge Elimination System
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOMA	New Orleans Metropolitan Area
NRHP	National Register of Historic Places
PA	Public Assistance; Programmatic Agreement
PCB	Polychlorinated biphenyl
PEA	Programmatic Environmental Assessment
P.L.	Public Law
RCRA	Resource Conservation and Recovery Act
R.S.	Louisiana Revised Statutes
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheets
SEA	Supplemental Environmental Assessment
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
SOV	Solicitation of Views
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USDHHS	U.S. Department of Health and Human Services
USDOC	U.S. Department of Commerce
USEPA	U.S. Environmental Protection Agency

1.0 INTRODUCTION

1.1 Hurricane Katrina

Hurricane Katrina made landfall on 29 August 2005, near the town of Buras, Louisiana, as a Category 3 storm with sustained winds of more than 125 miles per hour. The accompanying high winds, heavy rains, and flooding caused an accumulation of various types of debris on the streets and rights-of-way of New Orleans. Rain accumulation, in combination with debris blockage, saturated soils, and insufficient drainage, caused flooding and standing water in most of the parish/city. As a result of this event, the roadway system incurred considerable damage.

1.2 Project Authority

President George W. Bush declared a major disaster for the State of Louisiana (FEMA-1603-DR-LA) on 29 August 2005, authorizing the U.S. Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. This assistance is pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), Public Law (P.L.) 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance (PA) Program to assist with funding the repair, restoration, reconstruction, or replacement of public facilities damaged as a result of the declared disaster.

In accordance with FEMA Instruction 108-1-1, a Programmatic Environmental Assessment (PEA) was prepared 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) (Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act 2005). The PEA, entitled "*The City of New Orleans Sewerage and Water Board of New Orleans Joint Infrastructure Recovery Request Project*" (JIRR), which would encompass the project now under review, was developed by FEMA to streamline approval of road and utility repair and replacement projects in the City of New Orleans within the PA Program. The JIRR PEA concluded with a Finding of No Significant Impact (FONSI), dated 16 June 2016. The JIRR PEA, which includes additional work not part of the grant application to FEMA, may be accessed at https://www.fema.gov/media-library/assets/documents/116899.

This draft Supplemental Environmental Assessment (SEA) also has been conducted in accordance with NEPA and the associated CEQ regulations, as well as FEMA's own regulations implementing NEPA (44 C.F.R. Parts 9-10) (Floodplain Management and Protection of Wetlands 1980; Environmental Considerations 1980). The purpose of this SEA is to analyze potential environmental impacts of the proposed project that were not considered previously in the JIRR PEA. FEMA will use the findings in this SEA in order to determine whether a FONSI adopting the JIRR EA is appropriate or whether preparation of an Environmental Impact Statement (EIS) is warranted.

1.3 Background

The City of New Orleans (CNO or Applicant) has requested, through the State of Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP), that FEMA provide disaster assistance consisting of federal grant funds in accordance with the provisions of the Stafford Act. FEMA has determined that CNO is eligible for federal disaster public assistance and that the streets proposed for reconstruction in the vicinity of the Applicant's Desire Area Road Network qualify for repair/reconstruction as a critical or non-critical facility serving the needs of the general public. The streets to be repaired/reconstructed are all located within the Desire Area Road Network *(Table 1 and Figure 1)*, New Orleans, Louisiana, 70126.

Table 1 – List of Streets and Block Numbers in the Project Scope

Street Name	100 Block Number	Beginning Street	Ending Street
Abundance Street	2800	St. Ferdinand Street	Press Street
Abundance Street	2900-3000	Montegut Street	Feliciana Street
Abundance Street	3100	Feliciana Street	Clouet Street
Abundance Street	3100	Clouet Street	Metropolitan Street
Abundance Street	3200	Metropolitan Street	Louisa Street (RB)
Abundance Street	3200	Louisa Street (LB)	Piety Street
Acacia Street	3100	Metropolitan Street	Louisa Street (RB)
Alja Meyers Place	3100	Clouet Street	Metropolitan Street
Alja Meyers Place	3150	Metropolitan Street	Louisa Street (RB)
Alja Meyers Place	3200	Louisa Street (LB)	Piety Street
Benefit Street	2900	St. Ferdinand Street	Press Street
Benefit Street	3000	Press Street	Montegut Street
Benefit Street	3015	Montegut Street	Feliciana Street
Benefit Street	3030	Feliciana Street	Clouet Street
Benefit Street	3100	Clouet Street	Metropolitan Street
Benefit Street	3140	Metropolitan Street	Louisa Street (RB)
Benefit Street	3300	Piety Street	Olive White Street
Chickasaw Street	3200	Metropolitan Street	Louisa Street (RB)
Clouet Street	2800-2900	Industry Street	Abundance Street
Clouet Street	3000-3100	Abundance Street	Benefit Street
Clouet Street	3200	Benefit Street	Humanity Street
Clouet Street	3300	Humanity Street	Pleasure Street
Clouet Street	3400	Pleasure Street	Higgins Boulevard (RS)
Clover Street	3200	Metropolitan Street	Louisa Street (RB)
Elder Street	3100	Metropolitan Street	Louisa Street (RB)
Feliciana Street	2800-2900	Industry Street	Agriculture Street
Feliciana Street	3000	Abundance Street	Treasure Street
Feliciana Street	3100	Treasure Street	Benefit Street
Feliciana Street	3200	Benefit Street	Humanity Street

Street Name	100 Block Number	Beginning Street	Ending Street
Feliciana Street	3300	Humanity Street	Pleasure Street
Feliciana Street	3400	Pleasure Street	Higgins Boulevard (RS)
Humanity Street	3000	Montegut Street	Feliciana Street
Humanity Street	3040	Feliciana Street	Clouet Street
Humanity Street	3150	Clouet Street	Metropolitan Street
Humanity Street	3140	Metropolitan Street	Louisa Street (RB)
Humanity Street	3200	Louisa Street (LB)	Piety Street
Metropolitan Street	2800-2900	Industry Street	Abundance Street
Metropolitan Street	3000-3100	Abundance Street	Benefit Street
Metropolitan Street	3200	Benefit Street	Humanity Street
Metropolitan Street	3200	Humanity Street	Pleasure Street
Metropolitan Street	3400	Pleasure Street	Lafreniere Street
Metropolitan Street	3500	Lafreniere Street	Higgins Boulevard (RS)
Metropolitan Street	3600	Higgins Boulevard (LS)	Elder Street
Metropolitan Street	3639	Elder Street	Myrtle Street
Metropolitan Street	3700	Myrtle Street	Acacia Street
Metropolitan Street	3750	Acacia Street	Clover Street
Metropolitan Street	3800	Clover Street	Chickasaw Street
Metropolitan Street	3850	Chickasaw Street	Tecumseh Street
Metropolitan Street	3900	Tecumseh Street	Powhatan Street
Metropolitan Street	3950	Powhatan Street	Hiawatha Street
Metropolitan Street	4000	Hiawatha Street	Almonaster Street
Montegut Street	3200	Benefit Street	Humanity Street
Montegut Street	3300	Humanity Street	Pleasure Street
Myrtle Street	3200	Metropolitan Street	Louisa Street (RB)
Piety Street	2700	Florida Avenue	Industry Street
Piety Street	2800	Industry Street	Agriculture Street
Piety Street	2900	Agriculture Street	Abundance Street
Piety Street	3000	Abundance Street	Treasure Street
Piety Street	3100	Treasure Street	Benefit Street
Piety Street	3200	Benefit Street	Humanity Street
Piety Street	3300	Humanity Street	Pleasure Street
Piety Street	3400	Pleasure Street	Lafreniere Street
Piety Street	3500	Lafreniere Street	Higgins Boulevard (RS)
Pleasure Street	2900	Higgins Boulevard (RS)	Montegut Street
Pleasure Street	3000	Montegut Street	Feliciana Street
Pleasure Street	3040	Feliciana Street	Clouet Street
Pleasure Street	3100	Clouet Street	Metropolitan Street
Pleasure Street	3200	Metropolitan Street	Louisa Street (RB)
Pleasure Street	3200	Louisa Street (LB)	Piety Street

Street Name	100 Block Number	Beginning Street	Ending Street
Powhatan Street	3100	Metropolitan Street	Louisa Street (RB)
Tecumseh Street	3200	Metropolitan Street	Louisa Street (RB)
Treasure Street	3200	Louisa Street (LB)	Piety Street

Figure 1 – Desire Area Road Network Project Location

2.0 PURPOSE AND NEED

The objective of FEMA's PA Grant Program is to provide assistance to state, tribal, and local governments, as well as certain types of private non-profit organizations, such that communities can quickly respond to, recover from, and mitigate major disasters and emergencies. Prior to Hurricane Katrina, a major disaster, the project area (*Figure 2*) was served by numerous residential streets. Although these roads were somewhat deteriorated before the storm, due to the hurricane's negative influence, they have since worsened considerably. Restoration of facilities and services lost as a result of Hurricane Katrina in a manner that best serves the local community is needed.

Figure 2 – Project area location (Google Earth 2016)

3.0 ALTERNATIVES

3.1 Overview of Alternatives

The NEPA process consists of an evaluation of the environmental effects of a federal action, including its alternatives. Three alternatives have been proposed and will be analyzed in this SEA, including 1) the "No Action" alternative, 2) Repair of Damaged Street Sections Pre-Katrina Condition, and 3) Repair/Reconstruction of the Desire Area Road Network (Proposed Action). FEMA will consider the following:

3.2 Alternative 1 – No Action

Under the "No Action" alternative, no repairs/reconstruction would be made to the Desire Area Roads. The already deteriorated condition of these streets would continue to worsen, possibly causing damage to vehicles, impairing response times by emergency services, and eventually preventing homeowners from accessing their properties. In addition, the placement of accessible ramps at street corners in compliance with the Americans with Disabilities Act (ADA) would not be performed.

3.3 Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

This alternative would entail restoring the street blocks currently under review to their pre-storm condition. Only those sections damaged as a direct result of the hurricane would be repaired, leaving any other deteriorated portions as is. The work would include in-kind resurfacing of the damaged street segments (either asphalt or concrete), repairs to driveways affected by the street resurfacing, repairs to sidewalks and curbs, and the installation of ADA-compliant ramps where they do not currently exist.

3.4 Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

According to the Proposed Action Alternative, rather than leave these streets in an undesirable state, the Applicant would use eligible funding to repair/reconstruct the blocks under consideration in their entirety (*Figure 3*). The planned work would involve the reconstruction and/or major or minor rehabilitation. Work would be accomplished via demolition, removal, and restoration of damaged roadway components as specified in the respective project scopes of work, which shall consist of approved design drawing and specifications for the following roadway infrastructure systems/components: drainage, water and/or sewage, catch basins and/or inlet structures, utility house connections, water meters, utility manholes, city-owned underground utility lines/conduit/piping and bedding, valves, hydrants, compacted base and/or sub-grade geogrid/geotextile, ditches, gutters, roadway pavement, curbs, sidewalks, street fixtures, drive aprons, ADA compliant handicapped ramps, bioswales, foot laps, roadway striping, signs, sidewalk tiles, and medians within the public right-of-way. Drainage structures may require assessment, clean out, closed circuit television inspection and/or other analysis. All work would occur within previously disturbed rights-of-way.

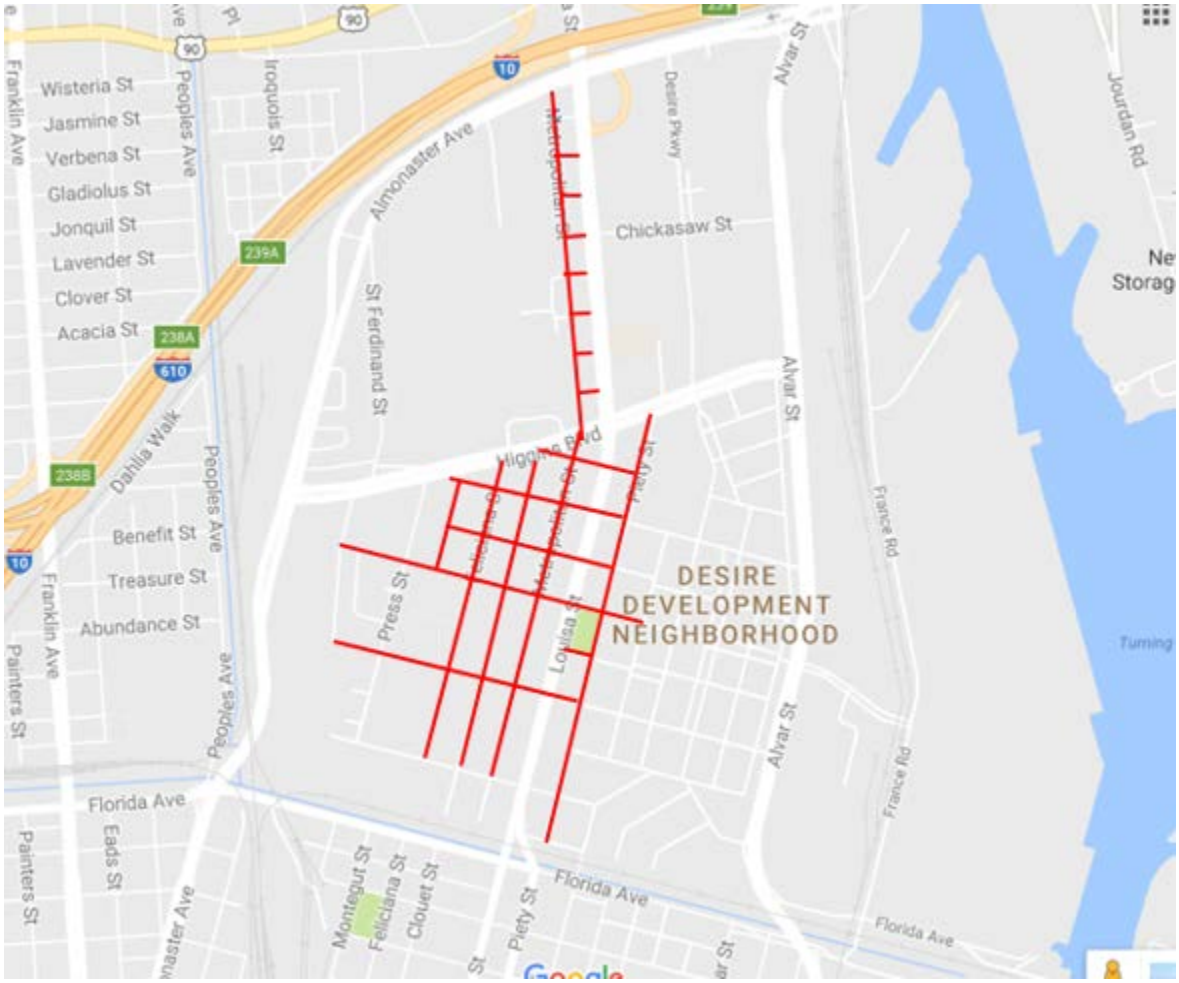

Figure 3 – Street map showing blocks of streets to be repaired/reconstructed highlighted in red

4.0 AFFECTED ENVIRONMENT AND ALTERNATIVES ANALYSIS

4.1 Water Resources – Floodplains

4.1.1 Regulatory Setting

E.O. 11988, *Floodplain Management*, requires federal agencies to avoid direct or indirect support or development within or affecting the 1% annual chance Special Flood Hazard Area (SFHA) (i.e., the 100-year floodplain) or, for "Critical Actions," within the 0.2% annual chance SFHA (i.e., the 500-year floodplain), whenever there is a practicable alternative (U.S. President 1977a). FEMA's regulations for complying with E.O. 11988 are found at 44 C.F.R. Part 9, Floodplain Management and Protection of Wetlands (1980).

4.1.2 Existing Conditions

In July 2005, prior to Hurricane Katrina, FEMA initiated a series of flood insurance studies for many of Louisiana's coastal parishes as part of the Flood Map Modernization Effort through FEMA's National Flood Insurance Fund. These studies were necessary because the flood hazard and risk information shown on the effective Flood Insurance Rate Maps (FIRMs) was developed during the 1970s. Since that time, the physical terrain had changed considerably, including a significant loss of wetland areas. After Hurricanes Katrina and Rita (August and September 2005, respectively), FEMA expanded the scope of work to include all of coastal Louisiana. The magnitude of impacts caused by the two (2) hurricanes reinforced the urgency to obtain additional flood recovery data for the coastal zones of the state. More detailed analysis was possible because new data obtained after the hurricanes included information on levees and levee systems, new high-water marks, and new hurricane parameters.

Updated preliminary flood hazard maps from an intensive five-year mapping project guided by FEMA subsequently were provided to all Louisiana coastal parishes. These maps, released in early 2008, known as Preliminary Digital Flood Insurance Rate Maps (DFIRMs), were based on the most technically advanced flood insurance studies ever performed for Louisiana, followed by multiple levels of review. The DFIRMs provided communities with a more scientific approach to economic development, hazard mitigation planning, emergency response, and post-flood recovery.

The U.S. Army Corps of Engineers (USACE) is currently working on the new Hurricane and Storm Damage Risk Reduction System (HSDRRS) for the Greater New Orleans area. This 350-mile system of levees, floodwalls, surge barriers, and pump stations will reduce the flood risk associated with future storm events. In September 2011, the USACE provided FEMA with assurances that the HSDRRS is capable of defending against a storm surge with a 1% annual chance of occurrence (DHS 2011). The areas protected include portions of St. Bernard, St. Charles, Jefferson, Orleans, and Plaquemines Parishes. Although the 100-year perimeter system is now complete, additional contracts for armoring and environmental mitigation are either ongoing or have not yet been awarded (DoA 2014). In November 2012, FEMA revised the 2008 preliminary DFIRMs within the HSDRRS to incorporate the reduced flood risk associated with the system improvements. The preliminary DFIRMs were subsequently revised in 2013 and 2014.

The 2014 Revised Preliminary DFIRMs, which became Effective on 30 September 2016, are currently viewed as the best available flood risk data for Orleans Parish. In many areas, the flood

risk has been significantly reduced due to heightened protection. No project should be built to a floodplain management standard that is less protective than what a community has adopted in local ordinances through its participation in the National Flood Insurance Program (NFIP) (DHS 2011). As a result of its new floodplain ordinance adopted May 2016, the New Orleans/Orleans Parish NFIP community uses these 2014 maps for floodplain management purposes (CNO 2016).

Orleans Parish enrolled in the NFIP on 3 August 1970. This project is located within a levee-protected area of the 100-year floodplain. Effective DFIRM Panels 22071C 00118F and 22071C 00231F, dated 30 September, 2016, indicate that a small portion of the project area is located within Flood Zone "Shaded X" (light gray areas on the DFIRMs), an area levee-protected from the base flood but subject to the 0.2% annual chance flood, based upon shallow ponding only (*Figures 4 and 5*). The majority of the project work would occur in Flood Zone AE EL -3.0 (dark gray areas on the DFIRMs). Ground elevations within the area are approximately -3.0 feet below sea level to 3.0 feet above sea level (North American Vertical Datum of 1988). In compliance with E.O. 11988, an 8-step process was completed and documentation is attached in Appendix B.

Figure 4 – Effective FIRM Panel Number 22071C 00118F, dated 1 December 2014, which became effective on 30 September 2016. The streets included in the project scope are highlighted in red.

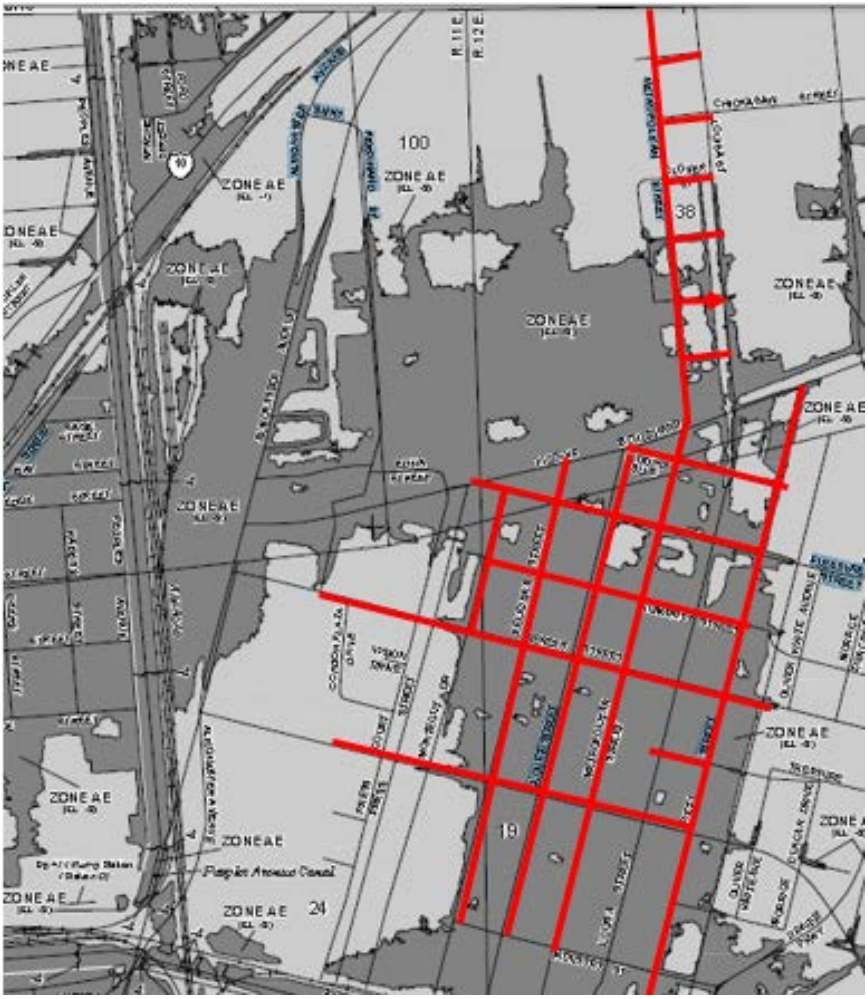

Figure 5. Effective FIRM Panel Number 22071C 00231F, dated 1 December 2014, which became effective on 30 September 2016. The streets included in the project scope are highlighted in red.

4.1.3 Environmental Consequences

Practicable alternatives to locating the proposed action in the floodplain were identified and evaluated. Various practicability factors were considered including feasibility, social concerns, hazard reduction, mitigation costs, and environmental impacts.

Alternative 1 – No Action

Under the "No Action" alternative, there would be no repairs to the streets in the vicinity of the Desire Area Road Network. This course would have no further adverse impacts on the floodplain, but would leave the damaged facilities and their environs in an unsafe condition, which would represent a safety hazard to the public and nearby properties.

Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

Alternative 2 was reviewed for possible impacts associated with occupancy or modification to a floodplain. This alternative would restore damaged infrastructure to its pre-storm condition.

Due to the local topography and the previously developed character of the work area, impacts to the nature of the floodplain itself have been determined to be negligible. Repair of the existing streets would not affect the functions and values of the 100-year floodplain since they would not impede or redirect flood flows.

Per 44 C.F.R. § 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the NFIP. The Applicant would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities.

Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

The Proposed Action Alternative also was reviewed for possible impacts associated with occupancy or modification to a floodplain. Under this alternative, infrastructure would be reconstructed at its original location in substantially the same footprint, but include applicable codes and standards upgrades, as well as necessary adjustments and/or relocations of storm sewers, manholes, and drain lines in order to improve drainage. As with Alternative 2, due to the local topography and the previously developed character of the proposed site, impacts to the nature of the floodplain itself have been determined to be negligible. The proposed reconstruction and upgrading of the streets likely would not affect the functions and values of the 100-year floodplain since the result would not impede or redirect flood flows.

Per 44 C.F.R. 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the NFIP. The Applicant would be required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities.

4.2 Cultural Resources

4.2.1 Regulatory Setting

The consideration of impacts to historic and cultural resources is mandated under § 101(b)(4) of NEPA as implemented by 40 C.F.R. Parts 1501-1508. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account their effects on historic properties (i.e., historic and cultural resources, including American Indian Cultural Sites) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Additionally, it is the policy of the federal government to consult with Indian Tribal Governments on a Government-to-Government basis as required in E.O. 13175 (U.S. President 2000). FEMA has chosen to address potential impacts to historic properties through the "Section 106 consultation process" of NHPA as implemented through 36 C.F.R. Part 800.

In order to fulfill its § 106 responsibilities, FEMA has initiated consultation on this project in accordance with the Statewide Programmatic Agreement (Statewide Agreement) dated 17 August 2009, and amended on 22 July 2011, between the Louisiana State Historic Preservation Officer (SHPO), LA GOHSEP, the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi

Tribe of Louisiana, and the Advisory Council on Historic Preservation (DHS 2009). The 2009 Statewide Programmatic Agreement (PA) was created to streamline the § 106 review process, and may be reviewed at http://www.achp.gov/docs/fema_pa/ LA%20PA%20executed.pdf. The 2011 Amendment to PA may be viewed at http://www.fema.gov/media-library-data/ 20130726-1845-25045-1490/lapa_amend.pdf.

The "Section 106 process" outlined in the Statewide Agreement requires the identification of historic properties that may be affected by the proposed action or alternatives within the project's area of potential effects (APE). Historic properties, defined in § 101(a)(1)(A) of NHPA, include districts, sites (archaeological and religious/cultural), buildings, structures, and objects that are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). Historic properties are identified by qualified agency representatives in consultation with interested parties. Below is a consideration of various alternatives and their effects on historic properties.

4.2.2 Existing Conditions – Identification and Evaluation of Historic Properties

On 23 September 2016, FEMA Historic Preservation Staff consulted the NRHP database, the Louisiana Cultural Resources Map, and project files and determined that the Undertaking is not located within a listed or eligible National Register Historic District nor is it located within view-shed of a property individually listed in the NRHP.

4.2.3 Environmental Consequences

Alternative 1 – No Action

This alternative does not include any FEMA undertaking; therefore FEMA has no further responsibilities under § 106 of the NHPA.

Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

The proposed undertaking would utilize FEMA funding to repair damaged street sections to pre-hurricane condition. Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined that the project area is not located within a listed National Register Historic District nor is it located within the view-shed of a property individually listed in the NRHP. The structures located within the project area were found to be less than 50 years of age and do not exhibit the significance to qualify for listing under Criterion Consideration G.

The scope of work meets the criteria in Appendix B: Programmatic Allowances, Item I, Sections A, C, D, H, I, K, and L, and Item III, Sections A, B, C, D, E, of FEMA's Programmatic Agreement (PA) dated August 17, 2009 and amended on July 22, 2011. In accordance with this PA, FEMA is not required to determine the National Register eligibility of properties where work performed meets the Appendix B criteria.

Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

The proposed undertaking would utilize FEMA funding to reconstruct and upgrade the affected streets. Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined

that the project area is not located within a listed National Register Historic District nor is it located within the view-shed of a property individually listed in the NRHP. The structures located within the project area were found to be less than 50 years of age and do not exhibit the significance to qualify for listing under Criterion Consideration G. FEMA determined that the scope of work meets the criteria in Appendix B: Programmatic Allowances, Item I, Sections A, C, D, H, I, K, and L, and Item III, Sections A, B, C, D, E, of FEMA's Programmatic Agreement (PA) dated August 17, 2009 and amended on July 22, 2011. In accordance with this PA, FEMA is not required to determine the National Register eligibility of properties where work performed meets the Appendix B criteria. The applicant must comply with the NHPA conditions set forth in this EA. (Louisiana Unmarked Human Burial Sites Preservation Act and Inadvertent Discovery Clause).

4.3 Socioeconomic Resources

4.3.1 Environmental Justice

4.3.1.1 Regulatory

E.O. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was signed on 11 February 1994 (U.S. President 1994). This E.O. directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health, environmental, economic, and social effects of their programs, policies, and activities on minority and/or low-income populations.

4.3.1.2 Existing Conditions

Information obtained from the U.S. Census Bureau (USDOC 2010), compiled and extrapolated by the U.S. Environmental Protection Agency (USEPA) and presented on its Enforcement and Compliance History website, indicates that the population within a three (3)-mile radius of the proposed project site is composed of 91.3% African-American, 5.6% White, 2.5% Hispanic, and 0.6% other groups. Of these households, 47.3% have incomes less than $25,000 per year, with approximately 36.2% of individuals existing below the poverty level. For the 5-year dataset 2010-2014, the U.S. Census Bureau's American Community Survey (USDOC 2014) estimated median household income over the preceding 12 months for New Orleans at $36,964 (in 2014 inflation-adjusted dollars), with a margin of error of +/- $767.

4.3.1.3 Environmental Consequences

In compliance with E.O. 12898, the following key questions were addressed with regard to potential Environmental Justice concerns:

- Is there an impact caused by the proposed action? Yes
- Is the impact adverse? No (conditionally)
- Is the impact disproportionate? No
- Has an action been undertaken without considerable input by the affected low-income and/or minority community? No

Alternative 1 – No Action

The "No Action" alternative would not involve the implementation of a federal program, policy, or activity. Under this alternative, no repairs would be made to the Desire Area roads. The already deteriorated condition of these streets would continue to worsen, possibly causing damage to vehicles, impairing response times by emergency services, and eventually preventing homeowners from accessing their properties. Although the streets in question are currently passable, this alternative has the potential to permit disproportionately high adverse impacts to minority and/or low-income populations to occur in the future.

Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

This alternative would involve repairing the street blocks currently under review to their pre-storm condition. Only those sections damaged as a direct result of the hurricane would be repaired, leaving any other deteriorated portions as is. Alternative 2 would meet minimum federal agency responsibilities under E.O. 12898 and would not result in adverse impacts to any population.

Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

Under the Proposed Action Alternative, work would consist of repairing or completely reconstructing the streets down to the sub-grade. As necessary, storm sewers, manholes, and drain lines would be adjusted, relocated, or removed. Due to the likely presence of hazardous material under the existing roads, the proposed scope of work has the potential to create disproportionately high adverse impacts to minority and/or low-income populations unless precautions are taken (see Sections 4.3.2 and 4.3.3 for additional discussion). If the conditions and mitigation measures described in Section 7.0 are implemented, this alternative is unlikely to cause adverse impacts to any population.

4.3.2 Hazardous Material

4.3.2.1 Regulatory Setting

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including but not limited to the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act (TSCA); the Emergency Planning and Community Right-to-Know provisions of the Superfund Amendments and Reauthorization Act (SARA); the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these regulated materials. Some of the laws provide for the investigation and cleanup of sites already contaminated by releases of hazardous materials, wastes, or substances.

The TSCA (codified at 15 U.S.C. § 53), authorizes the USEPA to protect the public from "unreasonable risk of injury to health or the environment" by regulating the introduction, manufacture, importation, sale, use, and disposal of specific new or already existing chemicals. "New Chemicals" are defined as "any chemical substance which is not included in the chemical substance list compiled and published under [TSCA] § 8(b)." Existing chemicals include

any chemical currently listed under § 8(b), including polychlorinated biphenyls (PCBs), asbestos, radon, lead-based paint, chlorofluorocarbons, dioxin, and hexavalent chromium.

TSCA Subchapter I, "Control of Toxic Substances" (§§ 2601-2629), regulates the disposal of PCB-containing products, sets limits for PCB levels present within the environment, and authorizes the remediation of sites contaminated with PCBs. Subchapter II, "Asbestos Hazard Emergency Response" (§§ 2641-2656), authorizes the USEPA to impose requirements for asbestos abatement in schools and requires accreditation of those who inspect asbestos-containing materials. Subchapter IV, "Lead Exposure Reduction" (§§ 2681-2692), requires the USEPA to identify sources of lead contamination in the environment, to regulate the amounts of lead allowed in products, and to establish state programs that monitor and reduce lead exposure.

The Small Business Liability Relief and Revitalization Act (the Brownfield Amendments) clarified CERCLA liability provisions for potential property owners. If the potential property owners meet the specific provisions of the act, including an adequate inquiry on past uses of the property, the landowner will be able to assert the innocent landowner defense, contiguous property exemption, and bona fide prospective purchaser exemption to CERCLA liability. The USEPA has published the final "all appropriate inquiries" rule (40 CFR § 312.10) that establishes the criteria for conducting Environmental Site Assessments on properties considered for acquisition. This would apply to proposed activities which may require land acquisition for the establishment of new rights-of-way.

In addition, the USEPA regulates hazardous air pollutants, such as asbestos, under the "air toxics" provisions of the Clean Air Act. Section 112 of the CAA established the National Emission Standards for Hazardous Air Pollutants (NESHAP) and required the USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. Major health effects associated with asbestos include lung cancer, mesothelioma, and asbestosis (USEPA 2016a).

4.3.2.2 Existing Conditions

Hazardous substances are defined as any solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that pose either a substantial present, or potential future hazard to human health and the environment. Improper management and disposal of hazardous substances can lead to contamination of groundwater and/or surface water, including drinking water supplies, and soils. Evaluations of hazardous substances and wastes must consider whether any hazardous material will be generated by a proposed activity and whether a hazardous material already exists at the site or in the general vicinity of the site that could adversely impact the community or site workers. Existing hazardous materials and waste concerns can impact future uses of a site.

Transit projects may encounter hazardous materials during construction, especially if a project is built on a Brownfield or a previously disturbed site. Hazardous material is a generic term for anything toxic to humans or the environment. It includes dangerous waste, problem waste, petroleum products, and other hazardous substances. Materials that may constitute a hazardous waste include petroleum products, pesticides, organic compounds, heavy metals, or other compounds injurious to human health and the environment. The nature and extent of hazardous contamination can vary widely. Early detection, evaluation, and remediation of hazardous waste are essential to minimize project delays and protect the environment.

The following construction concerns are associated with areas of soil and/or groundwater contamination and/or building/structure demolition:

- Asbestos;
- Lead-based paint;
- Health and safety of workers encountering contaminated material;
- Special handling and disposal requirements for contaminated material and a corresponding cost increase;
- Inability to reuse contaminated soil as fill in other areas of the project.

The flood events in Louisiana resulting from the levee breaches caused by Hurricanes Katrina and Rita left behind sediments ranging in depth from less than an inch to several feet throughout various areas in Orleans, Plaquemines, and St. Bernard Parishes. USEPA conducted environmental testing and assessment of the sediment material. The results of those tests, which can be found at http://www.epa.gov/katrina/testresults/sediments/summary.htm, are incorporated by reference into this SEA.

A portion of the Desire Area Road Network project area overlies the footprint of the Agriculture Street Landfill, an identified Superfund site on the EPA National Priorities List, which occupies approximately 95 acres in east central New Orleans (*Table 2 and Figure 6*). This landfill operated in the City from 1909 until the mid-1960s, then reopened again in 1969 to accept debris resulting from Hurricane Camille. This activity resulted in hazardous materials contamination in the soil and groundwater underlying the landfill. The USEPA conducted cleanup operations and maintenance and monitoring are ongoing. Approximately 47 acres of the site were developed for private and public housing that included the Press Park Community Center, a recreation center, and the Moton Elementary School. A series of removal actions, or short-term cleanups, addressed remediation of threats to human health and the environment. The remedy for subsurface contamination at the Agriculture Street Landfill Superfund Site includes a subsurface geotextile mat over contaminated material left in place. The geotextile mat is covered by 18 inches of clean soil and a vegetative cover in the rights-of-ways. No waste source material was removed from beneath roadways, sidewalks, parking areas, or building foundation slabs.

Table 2. List of Streets and Block Numbers located within the Agriculture Street Landfill Footprint that were part of the EPA's response action.

Street Name	100 Block Number	Beginning Street	Ending Street
Abundance Street	2800	St. Ferdinand Street	Press Street
Abundance Street	2900-3000	Montegut Street	Feliciana Street
Abundance Street	3100	Feliciana Street	Clouet Street
Benefit Street	2900	St. Ferdinand Street	Press Street
Benefit Street	3000	Press Street	Montegut Street
Benefit Street	3015	Montegut Street	Feliciana Street
Feliciana Street	2800-2900	Industry Street	Agriculture Street
Feliciana Street	3000	Abundance Street	Treasure Street

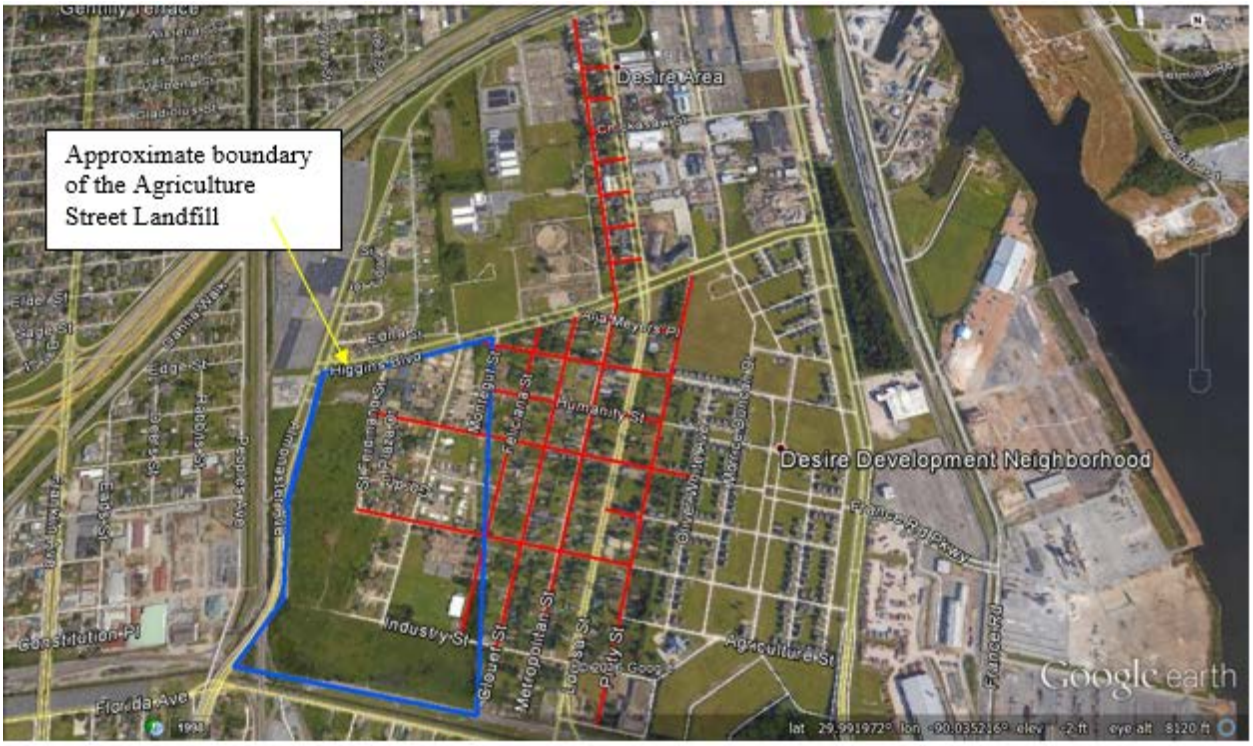

Figure 6. Project area location depicting the approximate footprint of the Agriculture Street Landfill outlined in blue

Subsequent to the cleanup, the City entered into a Consent Decree with the USEPA to protect the remedy on the site, and thereby, the public health or welfare and the environment. As part of the Consent Decree, the City agreed to development of a Technical Abstract for Utility Operations within the Agriculture Street Landfill Superfund Site (USEPA 2006). This document stipulates procedures that must be followed when utility work affects the Agriculture Street Landfill site. The Consent Decree mandates that the City direct all its agencies and departments, including the Sewerage and Water Board and Public Works, to incorporate the technical abstract and its included procedures as standard operating procedures for all work at the Agriculture Street Landfill Superfund Site.

USEPA and Louisiana Department of Environmental Quality (LDEQ) database searches for the proposed project vicinity revealed several known offsite hazardous waste site in close proximity. There are ten (10) Hazardous Waste Generators and two (2) sites that report their water discharges to the EPA. There are no reported leaking underground storage tank sites in close proximity.

There were three (3) reported incidents in project vicinity in LDEQ EDMS database. The first incident occurred in June 2013. There was a report incident of car transmissions being drained into the soil at a facility in the 4000 block of Metropolitan Street. Fluids, including battery acid, motor oil, and radiator fluids were also spilled or not properly contained. This incident was closed by the LDEQ on 17 June 2013. The second incident occurred in the 3200 block of Piety Street, where there was a complaint of suspect asbestos-containing material being illegally dumped. The materials were removed and the incident was closed by LDEQ on 14 June 2004. The third incident was discovered by Entergy in August 2009 in the 3700 block of Louisa Street. The incident involved an oil release that occurred at an undetermined time after Hurricane Katrina. The oil

release was at an above ground vault structure containing transformers at an abandoned school. Entergy estimated that a total of 138 gallons of mineral oil were released as a result of vandalism.

No sites of concern outside the immediate project area were found within one-half (½) mile of the outer project boundary during a review of LDEQ's Voluntary Remediation Program/Brownfields Initiative database, as well as its EDMS database for other hazardous waste management and disposal, solid waste disposal, enforcement, or related activities. There are no recorded active oil or gas wells within one (1) mile of the project area.

4.3.2.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would not disturb any hazardous materials or create any additional hazards to human health.

Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

Because Alternative 2 would deal with surface repairs to the Desire Area Road Network Streets, removal of paving material to a point deep enough to encounter potential hazardous material would not be expected. Should deeper excavation be necessary for repairs, however, any hazardous constituents encountered would require that appropriate measures for the proper assessment, remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations. In addition, work under this alternative would require that best management practices (BMPs) be followed; appropriate measures to prevent, minimize, and control spills of hazardous materials taken; and any generated hazardous or non-hazardous wastes disposed of in accordance with applicable federal, state, and local requirements.

Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

The Proposed Action Alternative could involve disturbance of potentially contaminated soil through actions including but not limited to compacting and shaping the subgrade, removal of culvert pipes, installation of new manholes, and removal of drain lines. In addition, culvert pipes and drain lines made of cement-asbestos material were used extensively in the mid- to late-20th Century. Disturbing or removing this type of pipe could potentially release friable asbestos into the air. As a result of these construction activities, nearby residents and young children, as well as City and contract construction workers, would face potential health hazards due to exposure to contaminated soil and dust (see Section 4.3.3 for additional discussion).

On 1 September 2016, FEMA coordinated with the USEPA and LDEQ through a Solicitation of Views (SOV) (Appendix A). The LDEQ responded on 17 and 31 October 2016 and had no objections to the proposed project. The LDEQ also provided a number of recommendations, which are included in Section 7 Conditions and Mitigation Measures.

In a response dated 6 September 2016, USEPA indicated that April 2002, "the EPA completed the final phase of its response action at the Agriculture Street Landfill site. The response action involved excavation, removal, and disposal of contaminated soil to an appropriate facility, and the restoration of remediated properties, including sidewalks and residential driveways. In these areas, a permeable geotextile membrane and an orange marker was placed in the excavated areas, before

the areas were backfilled with clean soil and restored. This marker serves as an indicator for owners to be mindful that landfill material may exist below the marker, and the proper protocols should be followed should work be required below the permeable marker. All property owners and utility companies were provided with a copy of the post-removal maintenance guidelines in the event the excavation below the marker is needed."

The EPA enclosed a 2013 Technical Abstract (Appendix A) that provides the protocol utility companies and the Railroad Company follow when performing work within the boundaries where EPA implemented the response action. This Abstract should also be included in the plans associated with the street and sidewalks that are within the proposed project site and overlie the Agriculture Street Landfill.

Under this Alternative, the proposed infrastructure repairs could disturb subsurface hazardous materials or increase potential hazards to human health. The sites could be adjacent to hazardous material or solid waste facilities. Any hazardous constituents encountered at the site during construction operations would require that appropriate measures for the proper assessment, remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations. BMPs must be followed; appropriate measures to prevent, minimize, and control spills of hazardous materials taken; and any generated hazardous or non-hazardous wastes disposed of in accordance with applicable federal, state, and local requirements (see conditions).

Additionally, facilities must immediately report accidental releases of EHS chemicals and "hazardous substances" in quantities greater than corresponding Reportable Quantities defined in CERCLA to State and local officials. This information must be made available to the public. Facilities manufacturing, processing, or storing designated hazardous chemicals must make Safety Data Sheets (SDSs) (formerly Material Safety Data Sheets) (formerly MSDSs) describing the properties and health effects of these chemicals available to State and local officials and local fire departments. Facilities must also report, to State and local officials and local fire departments, inventories of all onsite chemicals for which SDSs exist. This information must be made available to the public.

An asbestos survey and a lead/lead-based paint survey should be conducted where piping demolition is required. If the analytical results indicate asbestos, lead piping, or lead-based paint is present, proper measures would be incorporated in the design documents and implemented during construction activities to minimize worker and public exposure to asbestos and lead and to ensure that demolition materials are handled and disposed of in accordance with applicable regulations. If analytical results indicate any materials contain asbestos, a comprehensive Asbestos Operations and Maintenance Plan would be developed in accordance with applicable regulations. This Plan would address worker training, as well as safety measures to be taken when disturbing asbestos-containing materials, and during abatement activities. Work would be undertaken in accordance with applicable federal, state and local requirements.

All work undertaken for complete repair on a system basis affecting the Agriculture Street Landfill Superfund Site must be undertaken in accordance with the Consent Decree between the City and

USEPA including the Technical Abstract for Utility Operations within the Agriculture Street Landfill Superfund Site.

4.3.3 Public Health and Safety

4.3.3.1 Background

A considerable number of health and safety laws and regulations exist for a wide variety of activities; however, an exhaustive review of these various rules is beyond the scope of this SEA.

The presence of adjacent residences with children to streets to be repaired/reconstructed triggers a consideration of E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. The Policy section of this E.O. acknowledges that "children may suffer disproportionately from environmental health risks and safety risks. These risks arise because: children's neurological, immunological, digestive, and other bodily systems are still developing; [and] children eat more food, drink more fluids, and breathe more air in proportion to their body weight than adults." Federal agencies are required to make identifying and assessing "environmental health risks and safety risks that may disproportionately affect children" a high priority (U.S. President 1997). As a result, extra precautions must be taken when work occurs where children may be near.

4.3.3.2 Existing Conditions

Construction activities frequently involve the use of hazardous materials such as fuels, oils, solvents, cleaners, and degreasers. Culverts and pipes may contain asbestos or lead, which could present a risk to workers and nearby populations from dust and fume inhalation. Excavation, filling, saw-cutting, jack-hammering, and paving activities have the potential for the generation of large quantities of dust and asphalt emissions. Impacts would be especially adverse for sensitive subpopulations such as children, hospital patients, the elderly, and infirm.

Workers also may be exposed to environmental contamination beneath roadways due to the consequences of historical construction, land use, or waste management practices. Unanticipated conditions could exist whereby workers are directly exposed to hazardous substances, such as chemicals from a leaking underground storage tank or, as in the current case, from prior land disposal of hazardous materials in the Agriculture Street Landfill.

Due to the time period in which the Agriculture Street Landfill of the project area (beginning approximately in 1909 and continuing until the landfill was closed in 1965), the nature and origin of the materials that were dumped in the landfill cannot be determined with certainty. Because the site is an EPA Superfund site, the chemical composition of the material has been substantially characterized. Soil constituents of concern exceeding LDEQ screening standards consisted of various metals (such as arsenic and arsenic compounds, lead, and mercury), as well as several PAHs, including benzo(a)pyrene and benzo(b)fluoranthene.

The health hazards from any potential contaminant depend primarily on the concentration and the degree/nature of exposure. In the current situation, the primary method of exposure would likely be from airborne dust particles suspended during earthwork and from contaminated runoff during rain events. Although both children and adults could come into contact with hazardous substances

through either of these routes, the concentration of any individual contaminant within the generated dust or runoff is unknown and cannot currently be predicted. Thus, any definitive statements about hazards to public health cannot be made with certainty.

In lieu of assigning probabilities of potential effects for the constituents of concern, only general health risks from inhalation or dermal exposure to these contaminants can be provided. The actual potential for exposure to nearby residents and young children may be quite low.

Arsenic – Arsenic is a known carcinogen. Inhalation of high levels of inorganic arsenic can cause a sore throat and irritated lungs, with possible changes to the blood vessels of the skin. Longer exposure at lower concentrations also can lead to skin changes, as well as circulatory and peripheral nervous disorders. Arsenic can be passed from mother to child in breast milk. Direct dermal contact with high concentrations of inorganic arsenic compounds can cause the skin to become irritated; however, this contact is not likely to lead to any serious internal effects (USDHHS 2007a).

Lead – Lead may be absorbed both through inhalation and dermal exposure, with inhalation as the most effective route. In the body, the main target is the central nervous system; however, children are most susceptible to adverse health effects, including consequences to mental and physical development, behavior, and intelligence. Lead can be present in breast milk. No safe level for lead has been determined (USDHHS 2007b).

Mercury – Mercury can vaporize and be inhaled. In the body, the main targets are the central nervous system, lungs, and kidneys. Pregnant women can mercury to her unborn child, and mercury can be passed from a mother to child through breast milk. Some of the problems mercury in the body can cause include shortness breath, chest pain, nausea, vomiting, diarrhea, headache, vision problems, and tremors. There is no safe level for mercury exposure (USDHHS 2012).

PAHs – PAHs are a class of chemicals formed as by-products of burning, including fossil fuels, cigarettes, and barbecue grills. Many are carcinogenic. They can be absorbed through inhalation and dermal contact. Long-term exposure can decrease respiratory function. Without repeated exposure, these chemicals are not stored in the body for long periods (i.e., are excreted within a few days) (USDHHS 1995).

4.3.3.3 Environmental Consequences

Alternative 1 – No Action

Under the "No Action" alternative there would be no repair/reconstruction of the streets, so no hazardous materials would be disturbed. Any unknown health or safety concerns would remain to be discovered.

Alternative 2 – Repair of Damaged Street Sections to Pre-Hurricane Condition

Because Alternative 2 would deal with surface repairs to Desire Area Road Network Streets, removal of paving material to a point deep enough to encounter potential hazardous material would not be expected. Should deeper excavation be necessary for repairs, however, any hazardous constituents encountered would require that appropriate measures for the proper assessment,

remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations. These measures would substantially reduce any potential for contaminants to cause negative health effects to construction workers, nearby residents, and young children.

Work under this alternative would require that BMPs be followed, including appropriate measures to prevent, minimize, and control spills of hazardous materials. In addition, in order to minimize the potential for inhalation exposure, the contractor would be responsible for using BMPs to reduce fugitive dust generation. For example, the contractor would be required to water down construction areas when necessary to minimize suspended particulate matter. Section 7.0 of this SEA includes additional conditions.

Alternative 3 – Repair/Reconstruction of the Desire Area Road Network (Proposed Action)

The Proposed Action Alternative would involve disturbance of potentially contaminated soil through actions including but not limited to compacting and shaping the subgrade, removal of culvert pipes, installation of new manholes, and removal of drain lines. In addition, culvert pipes and drain lines made of cement-asbestos, which could potentially release friable asbestos into the air, also may be encountered. As a result of these construction activities, nearby residents and young children, as well as City and contract construction workers, would face potential health hazards due to exposure to unknown quantities of contaminated soil and dust.

Any hazardous constituents encountered at the site during construction operations would require that appropriate measures for the proper assessment, remediation, and management of the contamination be initiated in accordance with applicable federal, state, and local rules and regulations. In order to pursue work under this alternative, BMPs must be followed, including appropriate measures to prevent, minimize, and control spills of hazardous materials. In addition, in order to minimize the potential for inhalation exposure, the contractor must use BMPs to reduce fugitive dust generation. For example, the contractor is required to water down construction areas when necessary to minimize suspended particulate matter. Section 7.0 of this SEA includes additional conditions.

5.0 CUMULATIVE IMPACTS

CEQ regulations state that the cumulative impact of a project represents 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 its comprehensive guidance on cumulative impacts analysis under NEPA, CEQ notes that "the range of actions that must be considered includes not only the project proposal, but all connected and similar actions that could contribute to cumulative effects" (Regulations for Implementing the Procedural Provisions of the NEPA 2005). The term, "similar actions," may be defined as "reasonably foreseeable or proposed agency actions [having] similarities that provide a basis for evaluating the environmental consequences together, such as common timing or geography" (40 CFR § 1508.25[a][3]).

Not all potential issues identified during cumulative effects scoping need be included in an EA. Because some effects may be irrelevant or inconsequential to decisions about the proposed action and alternatives, the focus of the cumulative effects analysis should be narrowed to important issues of national, regional, or local significance. To assist agencies in this narrowing process, CEQ (2007) provides a list of several basic questions to be considered, including: (1) Is the proposed action one of several similar past, present, or future actions in the same geographic area?; (2) Do other activities (governmental or private) in the region have environmental effects similar to those of the proposed action?; (3) Have any recent or ongoing NEPA analyses of similar or nearby actions identified important adverse or beneficial cumulative effect issues?; and (4) Has the impact been historically significant, such that the importance of the resource is defined by past loss, past gain, or investments to restore resources?

It is normally insufficient when conducting a cumulative effects analysis to merely analyze effects within the immediate area of the proposed action. Geographic boundaries should be expanded for cumulative effects analysis and conducted on the scale of human communities, landscapes, watersheds, or airsheds. Temporal frames should be extended to encompass additional effects on the resources, ecosystems, and human communities of concern. A useful concept in determining appropriate geographic boundaries for a cumulative effects analysis is the project impact zone, that is, the area (and resources within that area) that could be affected by the proposed action. The area appropriate for analysis of cumulative effects will, in most instances, be a larger geographic area occupied by resources outside of the project impact zone (CEQ 2007).

In accordance with NEPA, and to the extent reasonable and practical, this EA considered the combined effects of the proposed project to be undertaken by FEMA, as well as actions by other public and private entities, that affect the environmental resources the proposed action also would affect, and occur within the considered geographic area and temporal frame(s). Specifically, a range of past, present, and reasonably foreseeable future actions undertaken by FEMA within the designated geographic boundary area were reviewed: (1) for similarities such as scope of work, common timing and geography; (2) to determine environmental effects similar to those of the proposed action, if any; and (3) to identify the potential for cumulative impacts. As part of the cumulative effects analysis, FEMA also reviewed known past, present, and reasonably foreseeable future projects of federal agencies and other parties identified within the designated geographic boundary. These reviews were performed in order to assess the effects of proposed, completed, and ongoing activities and to determine whether the incremental impact of the current proposed action, when combined with the effects of other past, present, and reasonably foreseeable future projects, are cumulatively considerable or significant.

FEMA has determined the boundary of a one mile radius from the approximate center of the proposed work area constitutes an appropriate project impact zone for this cumulative impacts analysis. The one mile radius study area includes portions of the 70126, 70122 and 70117 zip codes. Table 3 and Figure 7 focus on FEMA-funded project sites that meet two specific criteria within the study area: (1) project sites with obligated funding above FEMA's 2005 "small projects" threshold of $55,000 and (2) reviews for all project categories that were cleared with an Environmental Assessment (EA).

Using the above criteria, FEMA-funded undertakings for the study area total 130 project sites. The sites represent less than 1% of over 10,000 FEMA program-funded projects that have occurred, are occurring, or are reasonably foreseen to occur to from August 2005 through September 2016 within Orleans Parish.

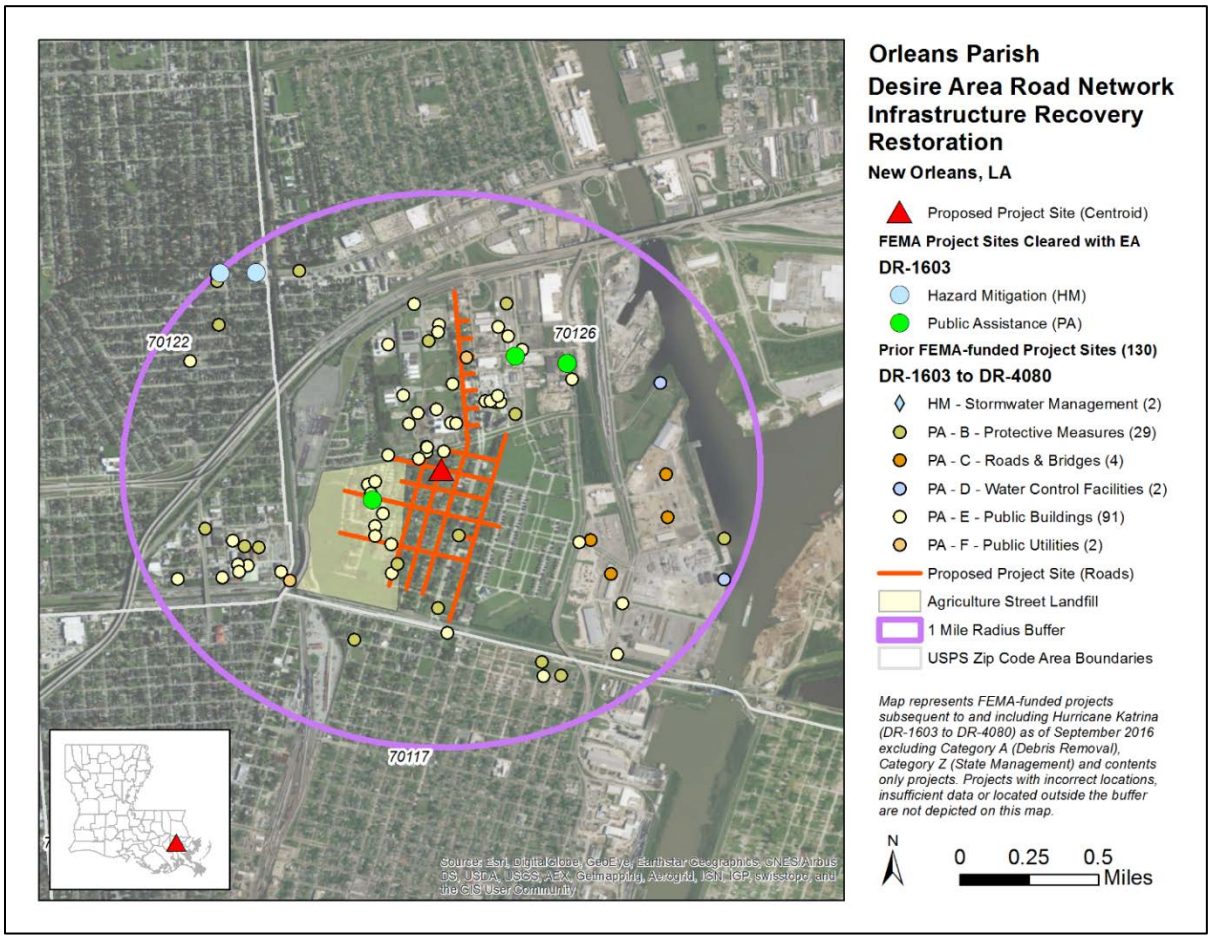

Figure 7. Map of FEMA-funded Projects within One Mile Radius Study Area (FEMA).

After the devastation of the 2005 hurricane season, the USACE, Mississippi Valley Division, New Orleans District was tasked with the planning, design, and construction of a 350-mile system of levees, floodwalls, surge barriers, and pump stations to "increase public safety and enable the physical and economic recovery of the area to occur through the reduction of storm damage risk to residences, businesses, and other infrastructure from hurricanes (100-year storm events) and other high-water events within the Greater New Orleans Metropolitan Area." Referred to as the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS), it is one of the largest civil works projects ever undertaken, at an estimated cost of $14 billion (DoA 2013a). Major drainage features associated with this infrastructure project within Orleans Parish include the Mississippi River (Waterbody ID# LA070301) and the Industrial Canal (Waterbody ID# LA041501). Except during major river flooding events, these watercourses serve to remove excess water from the local area more efficiently, providing a positive cumulative benefit to residents and businesses.

Table 3 below lists and briefly describes known present, past, and reasonably foreseeable infrastructure and recovery improvement projects, including activities identified by FEMA that may have the potential for cumulative impacts when combined with the effects of the present proposed action. The table also identifies the potential for cumulative impacts when combined with the effects of the proposed action and the rationale for that assessment.

Table 3. Projects that May Have the Potential to Contribute to Cumulative Impacts

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
City of New Orleans City-Wide Road Repairs	City of New Orleans Department of Public Works	New Orleans City-Wide	Repairs, replacements, and improvements to roads and components damaged as a result of Hurricane Katrina. Elements include upgrades to current codes and standards including mitigation measures to reduce the risk of future damages in the next flood.	Less than significant	Effects of this project when combined with those of the proposed action will not result in significant cumulative impacts.
Comprehensive Environmental Document, Phase I Study for HSDRRS	USACE	217 miles of post-Katrina HSDRRS work located within the Greater New Orleans Metropolitan Area; the area within Lake Pontchartrain and West Bank and vicinity.	Evaluates the cumulative impacts associated with the implementation of the HSDRRS; describes cumulative impacts of HSDRRS construction completed as of July 2011; and incorporates information from Individual Environmental Reports (IERs) and supplemental IERs completed as of 15 November 2010	Less than significant	Adversely affected resources for the HSDRRS project (regional soils, habitat supporting wildlife, wetlands and jurisdictional bottomland hardwood resources) are significantly different from those in the currently proposed action. Through mitigation and compensation measures, the overall socioeconomic benefits are expected to outweigh the unavoidable natural resources impacts and, thus, would not impact the proposed action.

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
Hurricane Storm Damage Risk Reduction System	U.S. Army Corps of Engineers	New Orleans Regional Metropolitan Area	Complete re-engineering the levee system in New Orleans and surrounding areas in order to withstand effects from a "100 year storm," or a storm that has a 1% chance of occurring each year.	Less than significant	Effects from this project reduce overall impacts in the areas levee protected from the base flood including the site of the proposed action.
New Orleans East Streetscape	HUD	Eastern New Orleans	Addition of sidewalks, street lights, trees, a bike lane, and trash receptacles	Less than significant	Restoration and improvement to existing infrastructure
New Orleans Rail Gateway	Federal Railroad Administration	Rail corridors citywide	Environmental Impact Statement currently in preparation for upgrades to the city's rail system (LaDOTD 2014)	Less than significant	Although the NOPBR is adjacent to the proposed cruise terminal, close coordination will occur with the railroad to minimize traffic disruption.
New Orleans Sewer and Water Board Water Supply and Sanitary Sewer System-Wide Repairs	Sewer and Water Board of New Orleans	New Orleans City-Wide	Repairs and improvements to water and sanitary sewer system components damaged as a result of Hurricane Katrina. Elements include upgrades to current codes and standards including mitigation measures to reduce the risk of future damages in the next flood.	Less than significant	Project is conditioned to comply with minimum NFIP floodplain development regulations as adopted by the local community and will thereby reduce risk and increase protection from future damage.
Recovery School District Single Settlement Request	Recovery School District	New Orleans City Wide	Refurbishment, repair, reconstruction, and new construction for restoration of the school system	Less than significant	Project is conditioned to comply with minimum NFIP floodplain development regulations as adopted by the local community and will thereby reduce risk and increase protection from future damage.

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
Response to Hurricanes Katrina and Rita	USACE	Orleans, St. Bernard, Jefferson, Plaquemines, St. Mary's, Terrebonne, and Lafourche Parishes	Evaluates emergency actions to dewater New Orleans Metropolitan Area; rehabilitate federally authorized levees, and restore non-federal levees and pump stations (Orleans, St. Bernard, Jefferson and Plaquemines Parishes); and flood prevention operations (St. Mary, Terrebone, and Lafourche Parishes)	No effect	Adverse impacts to resources (wetlands) required compensatory mitigation and are significantly different from those in the currently proposed action; no similar resources associated with proposed action; no impact on proposed action
SWBNO Pump Stations	USACE	Throughout Orleans Parish	Pump station elevation	Negligible	Restoration and improvements to existing infrastructure; no impact on proposed action

As identified in Table 3, the cumulative effect of these present, past, and reasonably foreseeable future actions is not anticipated to result in a significant impact to any resource. Each of the projects either aims to restore or improve the function of pre-existing infrastructure within an urban setting or proposes redevelopment consistent with current zoning requirements, with minimal impacts to the natural and human environment.

6.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

The public is invited to comment on the proposed action. A legal notice will be published on Wednesday, 11 January and Wednesday, 18 January 2017 in the *Times-Picayune*, the journal of record for Orleans Parish, as well as in *The Advocate – New Orleans Edition* on Tuesday, 10 January and Wednesday, 11 January 2017. Additionally, the draft Supplemental Environmental Assessment will be made available for review at the New Orleans Public Library located at 219 Loyola Avenue, New Orleans, LA 70112 and the Norman Meyer Library located at 3001 Gentilly Boulevard, New Orleans, LA 70122. Further, there will be a 15-day comment period, beginning on Tuesday, 10 January, and concluding on Thursday, 26 January 2017, at 4:00 p.m. The document also has been published on FEMA's websites. A copy of the Public Notice is attached in Appendix C.

The state and federal agencies consulted were:

- Louisiana Department of Environmental Quality
- U.S. Environmental Protection Agency

7.0 CONDITIONS AND MITIGATION MEASURES

Construction of the proposed improvements at the proposed location was analyzed based on the studies, consultations, and reviews undertaken as reported in this SEA. The findings of this SEA conclude that no significant adverse impacts to geology, groundwater, floodplains, public health and safety, hazardous materials, socioeconomic resources, environmental justice, or cultural resources are anticipated from the proposed action at the proposed site under the Preferred Alternative.

During project construction, short-term impacts to soils, surface water, air quality, and noise are anticipated and conditions have been incorporated to mitigate and minimize the effects. Project short-term adverse impacts would be mitigated using BMPs, such as silt fences, proper vehicle and equipment maintenance, and appropriate signage. No long term adverse effects are anticipated from the proposed project. Therefore, FEMA finds the proposed action meets the requirements for a Finding of No Significant Impacts (FONSI) under NEPA and the preparation of an EIS will not be required.

FEMA requires that the subgrantee take the following measures to the extent practicable and applicable to avoid or further minimize impacts to the quality of the human environment. The general mitigation measures outlined in this section may be superseded by higher or more stringent standards required by the particular federal, or territory, Tribe, or local government agency issuing a permit, license, or approval for the project.

- Follow applicable state, territory, tribal, and local permitting requirements for construction;
- Fugitive dust from earth moving activities, storage piles, disturbed surface areas, unpaved areas and other construction related activities will be controlled using one or more of the following measures: watering, coverings, wind fencing, covering of haul beds, wheel washers, vegetation, restricted site access, and/or street sweeping;
- Enclose or water down exposed dirt storage piles;
- Minimize the disturbed area and preserve vegetation to the maximum extent possible;
- Maintain topsoil whenever possible;
- Phase construction activities to the extent possible;
- The contractor shall prepare and maintain a Storm Water Pollution Prevention Plan (SWPPP), which describes in specific details the Contractor's program to prevent contamination of the storm water collection system for this project. The subgrantee's Stormwater Pollution Prevention Plan and its related conditions is located in Appendix C. All project will have a SWPPP that is consistent with the Municipal Separate Storm Sewer System (MS4) Permit for the Orleans Parish area and contractors will be required to take every reasonable precaution to prevent fuels, oils, asphalts, concrete, chemical, and other harmful materials from entering the drainage system and/or ground water table in accordance with the Section C204 of the DPW General Specifications. Storm Water Control Measures (SCMs) may include storm drain system protection, spill prevention and

clean-up, employee training, project site housekeeping, and temporary erosion controls. Residue from dust collectors, concrete mixers, vehicles wash racks, an entrance/exits debris will be disposed of in an approved disposal facility;

- Establish stabilized construction entrances/exits (e.g. large crushed rocks, stone pads, steel wash racks, hose-down systems, and pads);

- Work will primarily be performed between 7:00am and 5:00pm, Monday through Friday. subgrantee should limit construction activities, including operation of heavy machinery, to normal business hours (M-F 7am-5pm). Contractors will be required to conform to noise level restrictions as established in Section 66-202 of the City of New Orleans Municipal Code (50-75 dBA, depending on the zoning of the area). All construction machinery and vehicles shall be equipped with practical sound muffling devices and operated in a manner to cause the least noise, consistent with efficient performance of work. Activities near noise and vibration sensitive areas such as churches, hospitals, and schools will be minimized as much as practically possible.

- Ensure adequate maintenance of equipment, including proper engine maintenance, adequate tire inflation, and proper maintenance of pollution control devices;

- Existing trees and other vegetation within the construction area that may be impacted within the public right-of-way will be protected on a location-by-location basis. In general, the Recovery Roads Program will attempt to maintain the existing healthy canopy in place. Protective measures may include fencing and signage. Any trimming, root pruning, or removal of any tree or stump within the public right-of-way due to construction will be minimized as much as possible and be conducted under the supervision of a licensed arborist. Any trees removed from the construction site within the public right-of-way will be relocated if possible to an area in close proximity to the project site. Trenching within the critical root zone of a tree of a tree will not be permitted on tree roots or within the canopy limits unless approved by Parks and Parkways. Existing vegetation or cover disturbed by construction activities will be seeded and fertilized;

- At least 48 hours notice will be given in advance of any street closures and anticipated areas of low water pressure to residents and emergency response agencies;

- The subgrantee is responsible for acquiring any Section 401/404 Clean Water Act (CWA) permits and/or Section 10 permits under the Rivers and Harbors Act. When these permits are required, subgrantee must maintain documentation of compliance with applicable Nationwide Permit (NWP), exemption from requirements, or obtain individual permits from U.S. Army Corps of Engineers prior to construction, unless exempt by the NWP from pre-construction notification. The subgrantee shall comply with all conditions of the required permit. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files;

- Care should be taken to ensure that any potentially hazardous or toxic materials used for, generated, or encountered during pressure washing, cleaning, or any other construction activities, do not impact groundwater, waterways, wetlands, or nearby stormwater conveyance systems. Potentially hazardous and toxic wastes generated or encountered

during these processes should be isolated, contained, and disposed of in an approved manner. This condition includes petroleum products and by-products use in machinery and equipment. The subgrantee shall be responsible for complying with all relative rules of the Clean Water Act (CWA). No activity performed should have any impact on waters of the state;

- Appropriate measures for the proper assessment, remediation, management, and disposal of any contamination discovered in the course of construction activities must be initiated in accordance with applicable federal, state, and local regulations. The contractor is required to take appropriate actions to prevent, minimize, and control the spill of hazardous materials at the proposed site;

- Contractor and/or sub-contractors must properly handle, package, transport and dispose of hazardous materials and/or waste in accordance with all local, state, and federal regulations, laws, and ordinances, including all Occupational Safety and Health Administration worker exposure regulations covered within 29 CFR Parts 1910 and 1926;

- All work affecting the Agriculture Street Landfill Superfund Site must be undertaken in accordance with the Consent Decree between the City and USEPA including the *Technical Abstract for Utility Operations within the Agriculture Street Landfill Superfund Site*;

- A spill prevention and emergency response plan (SPERP) will be required for all construction contractor groups. The SPERP will need to identify at a minimum: emergency contact numbers for local, state and federal environmental and public health agencies, material safety data sheets (MSDS) for all hazardous substances, hazardous material inventory, spill prevention plan, spill response plan/emergency response plan, spill response equipment (e.g. absorbent pads, disposal containers) and reporting requirements;

- If any asbestos containing materials (ACM) and/or other hazardous materials are found during remediation or repair/replacement activities, the subgrantee shall comply with all federal, state, and local abatement and disposal requirements under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Louisiana Administrative Code 33:III 5151. Demolition activities related to possible asbestos-containing materials (PACM) must be inspected for ACM/PACM where it is safe to do so. Should ACM be present, the subgrantee is responsible for ensuring proper disposal in accordance with the previously referenced administrative orders. Regardless of the asbestos content, the subgrantee is responsible for ensuring that all renovation or demolition activities are coordinated with the LDEQ to the extent required prior to initiating work. All documentation pertaining to these activities and subgrantee compliance with any conditions should be forwarded to the state and FEMA for inclusion in the permanent project files;

- Unusable equipment, debris, and material shall be disposed of in an approved manner and location. The subgrantee must handle, manage, and dispose of petroleum products, hazardous materials, and/or toxic waste in accordance with all local, state, and federal agency requirements. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files;

- Contractors will be responsible for maintaining, securing, and protecting any staging area, containers, or bins set up for construction purposes. The storage of any equipment or materials will not be permitted immediately adjacent to canals or other water bodies, trees, transportation or utility servitudes, or private property without prior approval from the respective owner or regulatory agency. The contractors will be responsible to ensure all equipment arriving at or departing from the construction limits remains clean and to take any necessary measures to ensure foreign materials or debris is not tracked or deposited on opened streets or outside the construction site limits. The contractor will also be required to store and handle any fuels or other hazardous material in accordance with OSHA requirements, and ensure any such materials required at a construction site be adequately secured and protected at all times;

- In order to minimize indirect impacts (erosion, sedimentation, dust, and other construction-related disturbances) to nearby waters of the U.S. and surrounding drainage areas, the contractor must ensure compliance with all local, state, and federal requirements related to sediment control, disposal of solid waste, control and containment of spills, and discharge of surface runoff and stormwater from the site. All documentation pertaining to these activities and subgrantee compliance with any conditions should be forwarded to LA GOHSEP and FEMA for inclusion in the permanent project files;

- The subgrantee shall ensure that best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the clean water act and executive order 11990;

- The Louisiana Department of Natural Resources (LDNR) requires that a complete Coastal Use Permit (CUP) Application package (Joint Application Form, location maps, project illustration plats with plan and cross section views, etc.) along with the appropriate application fee, be submitted to their office prior to construction. The subgrantee is responsible for coordinating with and obtaining any required CUPs or other authorizations from the LDNR OCM's Permits and Mitigation Division prior to initiating work. The subgrantee must comply with all conditions of the required permits. All documentation pertaining to these activities and subgrantee compliance with any conditions should be forwarded to the state and FEMA for inclusion in the permanent project files;

- Coordination with the appropriate local levee district(s) and USACE would be required for work within 1,500 feet of Mississippi River levees and/or within 300 feet of hurricane protection levees. CNO and SWBNO are responsible for obtaining any required permits from these districts and following any conditions imposed;

- Avoid engaging in construction activities within 660 feet of a bald or golden eagle nest during nesting and fledging where there is no visual buffer or 330 feet where there is a visual buffer, as nesting eagles are quite sensitive to human activities during these times;

- No project may be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the

NFIP. FEMA PA-funded projects carried out in the floodplain must be coordinated with the local floodplain administrator for a floodplain development permit prior to the undertaking, and the action must be carried out in compliance with relevant, applicable, and required local codes and standards and thereby, will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by EO 11988. Coordination pertaining to these activities and subgrantee compliance with any conditions should be documented and copies forwarded to the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and FEMA for inclusion in the permanent project files;

- Adverse effects must be minimized in accordance with FEMA's minimization standards in 44 CFR § 9.11. Treatment measures would be required to reduce adverse impacts below the level of significance;

- Louisiana law (Part VII of Chapter 8 of Title 40, and the sections as R.S. 40:1749.11 to 40:1749.26) requires excavators and demolishers to call a regional notification center prior to beginning work. Prior to any excavation or demolition, each excavator or demolisher, including cable television owners or operators, shall serve telephonic notice of the intent to excavate or demolish to the regional notification center serving the area in which the proposed excavation or demolition is to take place. Such notice shall be given to the notification center at least 96 hours, but not more than 120 hours (excluding weekends and holidays) prior to the commencement of any excavation or demolition activity. See entire laws at www.laonecall.com or call 1-800-272-3020 for more information;

- This project involves the modification of a public structure that may contain surfaces coated with lead-based paint. The subgrantee is responsible complying with all local, state, and federal laws and ensuring that project activities are coordinated with the Louisiana Department of Environmental Quality for abatement activities;

- The subgrantee is responsible for obtaining and/or complying with all federal, state and local permits, ordinances and/or requirements for the collection, handling, storage, transportation and disposal of any medical, hazardous, biological, radiological, pharmaceutical or toxic related waste or debris. Equipment such as ice machines, refrigerators, generators, air conditioning units, computers, and televisions may contain chlorofluorocarbons (CFCs), used oil, diesel and other petroleum products, mercury switches, used oil filters, fuel filters, and batteries. The subgrantee shall handle, manage, and dispose of damaged materials and equipment that may be hazardous waste, universal waste, and hazardous materials in accordance with the requirements of local, state, and federal regulations;

- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary;

- All waste is to be transported by an entity maintaining a current "waste hauler permit" specifically for the waste being transported, as required by Louisiana Department of Transportation and Development (DOTD), LDEQ, and other regulations;

- Disposal of demolition debris must be in accordance with all federal, state, and local laws, regulations, and rules. Prior to disposal, the subgrantee must identify and provide to FEMA and GOHSEP the waste disposal site, including the complete name, location, telephone number, and contact person of the facility. Due to the presence of the Agriculture Street Landfill Superfund site and the potentially hazardous nature of material to be removed from the site, all construction and demolition debris must be disposed in a Type I Industrial Landfill. The disposal facility must be permitted by the State of Louisiana Department of Environmental Quality Permit Support Division to receive Regulated Asbestos Containing Material. Waste must be packaged, labeled, manifested, and transported in accordance with LDEQ regulations and requirements. Further, the subgrantee must comply with Best Management Practices for Demolition, Construction, and Renovation Sites Under Five Acres (See Appendix C);

- To minimize worker and public health and safety risks from project construction and closure, all construction and closure work must be done using qualified personnel trained in the proper use of construction equipment, including all appropriate safety precautions. Additionally, all activities must be conducted in a safe manner in accordance with the standards specified in OSHA regulations;

- Appropriate signage and barriers shall be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes. The contractor will implement traffic control measures, as necessary. This shall include Subgrantee 24-hour emergency contact information;

- Subgrantee is responsible for maintaining construction site perimeter fencing where possible;

- The subgrantee and its contractor(s) must take all reasonable precautions to control construction site access during project implementation, including posting appropriate signage and fencing, where possible, to minimize foreseeable potential public safety concerns. All activities shall be conducted in a safe manner in accordance with OSHA work zone traffic safety requirements. Truck and equipment routes must be kept free of construction debris;

- The subgrantee and its contractor(s) are responsible for implementing all traffic control and warning in accordance with the Manual of Uniform Traffic Control Devices, including placing signs and signals in advance of construction activities in order to alert pedestrians and motorists of the upcoming work and traffic pattern changes. Subgrantee is responsible for compliance with Section C129, Temporary Signs, Barricades Pavement Markings, Construction Signing, Traffic Maintenance and Public Safety (See Appendix C);

- Subgrantee will perform all Treatment Measures identified by FEMA in consultation with SHPO and other consulting parties through the Section 106 review to offset any adverse effects;

- Subgrantee will implement an **Inadvertent Discovery Clause** to account for unanticipated discoveries. It shall read: If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the subgrantee shall stop work in the vicinity of the discovery

and take all reasonable measures to avoid or minimize harm to the finds. The subgrantee shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The subgrantee will not proceed with work until FEMA HP completes consultation with the SHPO, and others as appropriate;

- Subgrantee will implement a **Louisiana Unmarked Human Burial Sites Preservation Act** discovery provision, as well. It shall read: If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The subgrantee shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four (24) hours of the discovery. The subgrantee shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two (72) hours of the discovery;

- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater;

- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.

General comments/conditions provided by LDEQ:

- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit is required. An application or Notice of Intent will be required if the sludge management practice includes preparing biosolids for land application or preparing sewage sludge to be hauled to a landfill. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 9371;
- All precautions should be observed to protect the groundwater of the region;
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary;
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents;

- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.

8.0 LIST OF PREPARERS

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