U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program
City of Alexandria, Louisiana
Tier 2 Site Specific Environmental Assessment
NGDISM-FY22-EA-2023-33

PHMSA Approval:

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Overview:

The purpose of this Tier 2 Site Specific Environmental Assessment (Tier 2) is to: (1) document the proposed action (the Project) and the need for the action; (2) identify existing conditions; (3) assess the social, economic, and environmental effects using appropriate tools and agency coordination to comply with local, state, and federal environmental laws, regulations, and ordinances; (4) document applicable mitigation commitments that would avoid, minimize, or mitigate potential effects; and (5) seek comments from the public. This Tier 2 analysis informs the Pipeline and Hazardous Materials Safety Administration's (PHMSA) assessment as to whether the Project is consistent with the impacts described in the Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program.[1]

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-33 in your response.

At the conclusion of the EA process, PHMSA will either issue a "Finding of No Significant Impact," further supplement this EA with additional analysis, mitigation measures or prepare an Environmental Impact Statement.

I. Project Description/Proposed Action

Project Title	City of Alexandria- Lower 3rd Street Neighborhood Area Gas System Replacement
Project Location	Alexandria, Rapides Parish, Louisiana

Project Description/Proposed Action:

The Proposed Action for the lower 3rd Street neighborhood area gas system replacement project includes the replacement of approximately 33,000 liner feet of 4- inch and 2-inch aged steel gas mains with polyethylene (PE) gas mains, which would enhance safety, improve operations, and reduce methane emissions of natural gas of the City of Alexandria's natural gas transmission system. This service area includes approximately 250 service accounts. The pipeline replacement activities would include installing the new pipeline adjacent to the existing pipeline by directional boring and trenching construction methods. The Tier 1 EA described that the majority of site-specific projects would utilize the insertion method of pipe replacement. As described in this document, the City of Alexandria would utilize directional bore and open trench methods, which generally involves greater soil disturbance and use of heavy equipment and related impacts than the insertion method.

The project has been divided into two segments:

Segment 1 - Bounded on the North by Main Street/Lower Third Street; on the South by Los Angeles Street (Parkway Subdivision); on the West by Landa Street; and on the East by River Bend Drive.

Segment 2 - Bounded on the North by Lower Third Street/LA Hwy 1; on the South by West Sandy Bayou Drive; on the West by Willow Glen Street; and on the East by Avoyelles Drive (predominantly the Acadian Village area); continuing along Lower Third Street/LA Hwy 1, serving accounts on both sides of the road, to the

[1] https://www.federalregister.gov/documents/2022/11/09/2022-24378/pipeline-safety-notice-of-availability-of-the-tier-1-nationwide-environmental-assessment-for-the

southern terminus at Old River Road.

Upon completion of the new PE pipe installation, approximately 33,000 feet of steel mains would be purged and abandoned in place. The City of Alexandria would abandon the legacy pipe in place after utility services have been moved to the new pipeline. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner. PHMSA has specific requirements for gas and hazardous liquid pipeline abandonment, found in 49 CRF 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place. By complying with PHMSA requirements for purging and sealing abandoned pipelines, City of Alexandria would ensure that the abandoned pipelines pose no risk to safety in their abandoned state.

See Appendix A, Project Maps, for more information on the location of the proposed pipeline replacement work.

No Action:

The No Action alternative, as required under NEPA, serves as a baseline, and is used to compare impacts resulting from the Proposed Action. Under the No Action alternative, PHMSA would not fund this pipeline replacement project. Additionally, PHMSA would not be able to reduce the inventory of methane leaks and reduce safety risks by replacing pipe prone to leakage. Under this alternative, the City of Alexandria would continue to use steel pipeline material and conduct repairs or replacements in the future using non-federal sources of funding, and potentially on an emergency basis, when a pipeline fails. Impacts and benefits associated with replacing the leak prone pipeline within the City of Alexandria, with updated material would not be seen in the near term. The safety risks and methane leaks would persist. The replacement pipeline activities would either not be taken or they would be undertaken at a later, uncertain date. Even if pipe replacement were to happen at some point in the future, environmental mitigation measures during such a replacement would be unknown. Furthermore, existing economic losses, and increased risk associated with prolonged gas leaks would continue.

Need for the Project:

The existing natural gas system was constructed in the 1950's and 1960's. The gas mains were constructed of steel that in many cases was tape wrapped or coal tar coated. Most of the mains are 2-inch diameter; with ¾-inch to 1-inch diameter service taps with service lines running to meters that are set adjacent to the residential or commercial structures. Pressure regulators and meters are set on risers adjacent to the structures. The age of the steel gas mains and the urban environment with routine ongoing utility excavations over the years, has resulted in numerous repairs with double compression repair couplings. The system is challenged to keep cathodic protection in place due to the many unknown gaps in current conditions.

The project is needed to ensure the safe, reliable operation and delivery of energy to the community, replacing leak prone steel and reduce the likelihood of future leaks. The overall needs addressed by this project would include (1) improving upon the safe delivery of energy by reducing the likelihood of incidents, as well as methane leaks; (2) avoiding economic losses caused by pipeline failures; and (3) protecting our environment and reducing climate impacts by remediating aged and failing pipelines and pipe prone to leakage.

Description of the Environmental Setting of the Project Area:

The project area is developed residential, light commercial, and suburban areas. The housing in this area is 40 to 60 years old. The natural gas system in this area of the City usually operates with pressures ranging from 20 PSIG to a maximum of 60 PSIG. City Gas Department Operations try to keep the operating pressure in the 25 PSIG range while maintaining full load capacity as often as possible. As demand increases, during winter cold spells or hurricane power outages, the gas pressure is typically increasing to accommodate attendant increase in load volume. The gas mains are typically reported to have approximately 30 inches of cover. In areas where sloughs or drains have been crossed, the cover is sometimes less than 1 foot. Service lines are reported to typically have been installed with 12-24 inches of cover.

II. Resource Review

Air Quality and Greenhouse Gases (GHG)	
Question	**Information and Justification**
Is the project located in an area designated by the EPA as non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)?	No, based on review of the EPA Greenbook.[2]
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year) described in the initial Tier 2 EA worksheet?	N/A
Will mitigation measures be used to capture blowdown[3]?	No
Does the system have the capability to reduce pressure on the segments to be replaced? If yes, what is the lowest psi your system can reach prior to venting?	Yes. The system can run anywhere from a low of 25 pounds per square inch (PSI) to a high of 40 PSI. The system typically operates at 30 PSI.
Will project proponent commit to reducing pressure on the line to this psi prior to venting? Please calculate venting emissions based on this commitment and also provide comparison figure of venting emissions volume without pressure reduction/drawdown using calculation methods identified in the initial Tier 2 EA worksheet.	No. Based on operating pressure of 30 PSI & 1,000 linear feet (LF) of 2 inch main and 32,000 LF of 4-inch mains, the emissions are estimated at 8.6 MCF. [4]
Estimate the current leak rate per mile based on the type of pipeline material. Based on mileage of replacement and new pipeline material, estimate the total reduction of methane.	The existing leak rate is estimated to be 13,264 kg/year. Replacement would result in a leak rate of approximately 180 kg/year or a reduction of approximately 261,425 kg over a 20-year timeframe.

[2] https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information
[3] Blowdown refers to the venting of natural gas in current facilities, in order to begin rehabilitation, repair, or replacement activities.
[4] Leak rates are based on Pre-1990 Installation emission factors found in *Table 1 Average methane emission factors for natural gas pipelines (adopted from EPA GHG Inventory, Annex 3.6, Table 3.62)* in the November 9, 2022, PHMSA: Natural Gas Distribution Infrastructure Safety and Modernization Grant Program Programmatic Environmental Assessment, Tier 1 Nationwide Environmental Analysis.

Conclusion:

The project area is located within the City of Alexandria in the Rapides Parish, Louisiana which is designated by the EPA as in attainment for all National Ambient Air Quality Standards (NAAQS). The existing pipelines within the project area consist of leak prone steel and were installed in the 1950's and 1960's.

No Action:

Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone steel pipes. The total methane emissions for the pipelines within the project area were extrapolated over 20 years to represent the continuation of methane release under the No Action alternative. Under the No Action alternative, PHMSA estimates that 13,264 kg of methane would be released each year from the existing pipelines within the project area. This amounts to 265,288 kg of methane over a 20-year time frame. See Appendix B, Methane Calculations, for estimated methane leak rate calculations.

Proposed Action:

The Proposed Action alternative consists of replacing approximately 6.25 miles of steel mains and approximately 250 associated service lines. The associated construction activities would result in minor air quality impacts including the intentional venting of methane contained in the existing pipelines prior to replacement. Pipeline blowdowns are typically necessary to ensure that construction and maintenance work can be conducted safely on depressurized natural gas facilities and pipelines. Venting methane is required when service is switched from the existing line to the newly constructed line, but the volume of vented gas can depend on the ability to reduce pressure on the pipe segment or other mitigative actions. Therefore, some methane would be vented into the atmosphere during construction. Based on an operating pressure of 30 PSI and an average inside pipe diameter of 2-4 inches, PHMSA estimates 8.6 MCF of methane (or 262 kg) would be vented into the atmosphere during construction. See Appendix B for the methane blowdown calculations.

As described in the Tier 1 EA, methane leaks from natural gas distribution pipelines increase with age and are considerably higher for cast iron and steel pipelines, as compared with plastic. Replacing leak prone pipe with newer, more durable materials would reduce leaks and methane emissions. Based on the current leak rate of the existing pipe within the project area, this project would reduce overall emissions by 12,822 kg in the first year (when considering the methane that would be released from blowdown that would occur during construction) and would reduce 13,084 kg of methane per year thereafter. This amounts to a total reduction of approximately 261,425 kg of methane emissions over a 20-year timeframe, post construction. See Appendix B for the methane reduction calculations.

Therefore, it is PHMSA's assessment that the proposed project would provide a net benefit to air quality from the overall reduction of greenhouse gas emissions and that no indirect or cumulative impacts would result from the Proposed Action.

Mitigation Measures:

The City of Alexandria shall implement the following mitigation measures:

- Efficient use of on-road and non-road vehicles, by minimizing speeds and vehicles;
- Minimizing excavation to the greatest extent practical;
- Use of cleaner, newer, non-road equipment as practicable;

- Minimizing all vehicle idling and at minimum, conforming with local idling regulations;
- Ensuring that all vehicles and equipment are in proper operating condition;
- On-road and non-road engines must meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89);
- Covering open-bodied trucks while transporting materials;
- Watering, or use of other approved dust suppressants, at construction sites and on unpaved roadways, as necessary;
- Minimizing the area of soil disturbance to those necessary for construction;
- Minimizing construction site traffic by the use of offsite parking and shuttle buses, as necessary.

Water Resources	
Question	**Information and Justification**
Are there water resources within the project area, such as wetlands, streams, rivers, or floodplains? If so, would the project temporarily or permanently impact wetlands or waterways?	Yes. Replacement gas mains would be located within existing public ROW, with no direct impact on streams, wetlands or any open water resource.
Under the Clean Water Act, is a Section 401 State certification potentially required? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No.
Under the Clean Water Act, is a USACE Section 404 Permit required for the discharge of dredge and fill material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No.
Under the Clean Water Act, is an EPA or State Section 402 permit required for the discharge of pollutants into the waters of the United States? Is a Stormwater Pollution Prevention Plan (SWPPP) required?	Yes. The SWPPP would follow all EPA guidelines regarding Stormwater runoff and erosion in compliance with Louisiana Department of Environmental Quality regulations.
Will work activities take place within a FEMA designated floodplain? If so, describe any permanent or temporary impacts and the required coordination efforts with state or local floodplain regulatory agencies.	Yes. According to FEMA's National Flood Hazard Layer Viewer.[5]
Will the proposed project activities potentially occur within a coastal zone[6] or affect any coastal use or natural resource of the coastal zone, requiring a Consistency Determination and Certification?	No. The project does not fall within Louisianna's coastal zone.
Conclusion: PHMSA reviewed NWI maps to assist in identifying aquatic features including wetlands, streams, and other water resources in or near the project area. Based on a review of the NWI maps, NRCS soils maps, topographic maps, there are several water bodies in the project area inclusion Mill Bayou, Sandy Bayou and Persimmon	

[5] FEMA's National Flood Hazard Layer (NFHL) Viewer (arcgis.com)

[6] The term "coastal zone" means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.)

Bayou. These water resources are often dry during summer and drought conditions but otherwise have a wet bayou bottom. At their deepest, the main named drains are approximately 3 feet deep or less. It is noted that the Chatlin Lake Canal is a major drain running through Alexandria and has been channelized and lined in concrete for large potions. Other water resources located in neighborhoods are smaller sloughs and bayous varying in depth. The Red River and the Red River levee are located to the northeast of the project area. See Appendix C, Water Resources.

PHMSA also reviewed FEMA's National Flood Hazard Layer to identify any floodplains in the project area. FEMA maps indicate the project area includes FEMA Flood Zones X, A, and AE. Areas designated as Zone X are outside of any designated special flood hazard areas. Areas designated as Zone A and AE are special flood hazard areas and correspond to the one percent annual chance of flooding (100-year floodplain).

The project area is not located in Louisiana's Coastal Zone.

No Action:

Under the No Action alternative, the existing pipeline would remain in its current location and normal maintenance activities would continue. Depending on the location of the activities, the work could be near an aquatic resource where the City of Alexandria would need to take precautions to avoid adverse impacts to these sensitive areas. Additionally, if work was to occur in an area identified as a special flood hazard area, coordination with the local floodplain administrator may be required.

Proposed Action:

Work would be conducted in several areas where the project area crosses tributaries and bayous. All water resources would be crossed by directional bore methods and no direct impacts would occur. The contractor would set up approximately 30-50 feet back from each water resource/bayou on either side. Bore pits would be approximately 6 feet in length and 4 feet deep. Best management practices would be identified in a SWPPP and used to control sediments from migrating into adjacent waters. Because the pipeline in these areas would be installed by directional boring methods, the aquatic resources identified in these areas would not be impacted by the project. The proposed work would include activities within 1500 feet from the toe of the Red River levee and as such, must obtain a permit from the Red River, Atchafalaya and Bayou Boeuf Levee District[7] and the US Army Corps of Engineers.

The National Flood Insurance Program (NFIP) requires a permit before new construction or development begins within any special flood hazard area to ensure that project development projects meet the requirements of the NFIP program and the local community's floodplain management ordinances. The proposed pipeline replacement is not considered new construction or development as pipes would be installed in existing, previously impacted ROW and all areas would be restored to their existing contours and condition. These activities would not affect the flood-holding capacity of the 100-year floodplain or cause any adverse impacts to the special flood hazard areas. There could be temporary impacts from bore pits; however, all areas would be restored to pre-construction contours and conditions and there would be no permanent impacts. To ensure compliance with local floodplain ordinances, the City of Alexandria should coordinate with the local floodplain administrator to inquire and obtain all necessary permits, prior to beginning work.

Based on information provided by the City of Alexandria and a review of available information, PHMSA has

[7] https://www.rrabb.net/

determined that there would be no permanent impacts to water resources located within the project area. The pipeline placement and abandonment of the existing pipeline is not anticipated to cause any reasonably foreseeable indirect effects or cumulative effects to water resources. Therefore, it is PHMSA's assessment that there would be no adverse impacts to water resources.
Mitigation Measures: The City of Alexandria shall avoid staging in wetlands or floodplains and all preconstruction contours shall be restored with natural areas reseeded or repaved as soon as practical. Best Management Practices shall be used during construction to control sediment and erosion and prevent pollutants from entering adjacent waterways. The City of Alexandria shall coordinate with the local floodplain administrator to obtain any necessary permits for conducting work in special flood hazard areas, prior to the commencement of work. The City of Alexandria shall avoid direct impacts to all water resources (sloughs/ coulees/ bayous) by using directional bore methods and maintaining a 30–50-foot buffer from the edge of any water resources for entrance and exit pits and tie-ins. The City of Alexandria shall obtain appropriate permits from the Red River, Atchafalaya and Bayou Boeuf Levee District and the US Army Corps of Engineers prior to the commencement of work.

Groundwater and Hazardous Materials/Waste	
Question	**Information and Justification**
Does the project have potential to encounter and impact groundwater? If yes, describe potential impacts from construction activities.	No
Will the project require boring or directional drilling that may require pits containing mud and inadvertent return fluids? If yes, describe measures that will be taken during construction activities to prevent impacts to groundwater resources.	Yes. Any contaminated soils would be treated in the ground or removed from the site for remediation. Proper equipment and personal protection would be used on site if there is reason to believe hazardous waste or materials may be present.
Will the project potentially involve a site(s) contaminated by hazardous waste? Is there any indication that the pipeline was ever used to convey coal gas? If yes, PHMSA will work with the project proponent for required studies.	No. The gas system only used natural gas in its system. (i.e., no coal gas)
Does the project have the potential to encounter or disturb lead pipes or asbestos?	No
Conclusion: PHMSA reviewed EPA's NEPAssist website to identify any brownfields properties, hazardous waste sites, and superfund sites. One brownfield site is near the intersection of 3rd Street and Bogan Street. According to EPA's Cleanups in My Community[8], a Phase I Environmental Assessment was conducted on the property in 2010. The previous operations include a gas station and a carwash. No additional information was available identifying potential contaminants. One brownfield site was identified at 2901 3rd Street for Gaines and Gaines Property. No information was available for assessment activities pr potential contaminants for this property. There were	

[8] https://ordspub.epa.gov/ords/cimc/f?p=CIMC:31::::Y,31,0:P31_ID:121621

numerous hazardous waste sites identified in the project area. Hazardous waste information is identified in the Resource Conservation and Recovery Act Information (RCRAInfo), which is a national program that includes an inventory of all generators, transporters, treaters, storers, and disposers of hazardous waste that are required to provide information about their activities to state environmental agencies.[9] It is noted that the presence of a hazardous waste site does not indicate an identified environmental concern. There were no leaking underground storage tanks identified in the project area (See Appendix D, Hazardous Materials). PHMSA obtained a custom soil report for the project area from the United Stated Department of Agriculture Natural Resources Conservation Service's (NRCS) web soil survey which indicates that somewhat poorly drained soils are located in the project area and the water table could be found within 12 inches of the surface.

No Action:

Under the No Action alternative, the existing steel pipes would remain in their current location and ongoing and routine maintenance activities would occur, as needed. Pipes would be replaced under failed circumstances. While there are no adverse impacts to groundwater anticipated by the No Action alternative, increased methane emissions are likely to occur if the leak prone pipes remain (EPA, PRO Fact Sheet No. 402[10]) and the risk of failure is higher among these types of pipes. Therefore, under the no action alternative, PHMSA anticipates an increased risk for the release of methane, both as leaks and during a pipeline failure, which could then result in ground disturbances from construction activities, potentially impacting groundwater.

Proposed Action:

The new pipeline would be installed within the existing ROW at a depth of approximately 3 to 6 feet. All of the existing gas lines would be abandoned, in accordance with PHMSA requirements, and would be purged of natural gas and sealed on each end. The new gas lines would be installed in the grassy areas adjacent to the roadway, within the ROW. When the pipeline installation would cross drainageways or roads, the installation would be conducted by directional boring methods. Should groundwater be intercepted by construction activities, dewatering may be required during construction. All excavated trench materials would be stored on site and used to back fill, unless otherwise deemed unsuitable. In these cases, any contaminated soils would be treated in ground or removed from the site for remediation. The City of Alexandria would develop and follow Stormwater Pollution Prevention Plan to minimize runoff. All disturbed areas would be re-seeded or paved (as appropriate) and restored to preexisting conditions. PHMSA's assessment is that there would be no adverse impacts to groundwater associated with the project. Additionally, there are no hazardous waste, brownfield, or superfund sites within the immediate project area that could be potentially impacted by the Proposed Action Alternative. PHMSA has not identified any indirect or cumulative effects to groundwater or hazardous materials.

Mitigation Measures:

In the event of a release of hazardous materials/waste into the environment during construction, the City of Alexandria shall notify the appropriate emergency response agencies, potentially impacted residents, and regulatory agencies of the release or exposure.

The City of Alexandria shall develop a Stormwater Pollution Prevention Plan to identify appropriate construction and restoration activities to minimize the potential impacts to groundwater. All impacted areas would be

[9] RCRAInfo Overview | US EPA

[10] Insert Gas Main Flexible Liners at https://www.epa.gov/sites/default/files/2016-06/documents/insertgasmainflexibleliners.pdf#:~:text=Methane%20emissions%20reductions%20come%20from%20lower%20leakage%20rates,pipe%20and%20external%20corrosion%20in%20unprotected%20steel%20piping.

restored to pre-construction conditions.

Soils	
Question	**Information and Justification**
Will all bare soils be stabilized using methods using methods identified in the initial Tier 2 EA worksheet? Will additional measures be required?	Yes. During construction, disturbed areas would be protected with temporary erosion control measures such as straw bales, silt fencing, etc. Once construction is complete, permanent stabilization would be accomplished with seeding required.
Will the project require unique impacts related to soils?	No

Conclusion:

PHMSA obtained a custom soil report for the project area from the NRCS's web soil survey which indicates that the project area is comprised several different soil types, including Moreland clays and loams, Coushatta silts and loams and Roxana loams. Mooreland soils are somewhat poorly drained soils while Coushatta and Roxana are well drained. Most of the soils in the project area are mapped as Moreland clay. It is noted that the project area is a mostly developed residential area where ground disturbance activities have already occurred. Therefore, while the soils report provides valuable information, the soils have been disturbed and likely contain some degree of fill material brought in as a suitable base for construction.

No Action:

Under the No Action alternative, the existing steel pipes would remain in their current location and soils would remain in their current state and condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Some soil disturbance would occur during emergency repairs and the affected areas would be restored upon completion. Under either scenario, no adverse impacts to soils would be anticipated under the No Action alternative.

Proposed Action:

The City of Alexandria would install new gas lines at a depth of 3-6 feet below grade and would be installed by either directional drilling or trenching methods. All main line and service line installation would be associated with replacing existing lines. All disturbed areas would be re-seeded or paved (as appropriate) and restored to pre-existing conditions and work would take place within the existing ROW. Therefore, PHMSA has determined that there would be no adverse impact to soils resulting from the Proposed Action alternative. Additionally, there are no indirect or cumulative impacts anticipated from the proposed work.

Mitigation Measures:

The City of Alexandria shall utilize best management practices, as appropriate, to control sediment and erosion during construction which may include silt fencing, check dams, and promptly covering all bare areas. All impacted areas shall be restored to pre-construction conditions.

Biological Resources

Question	Information and Justification
Based on review of IPaC and NOAA Fisheries database, are there any federally threatened or endangered species and/or critical habitat potentially occurring within the geographic range of the project area? If no, no further analysis is required.	Yes, based on review of the USFWS's Information for Planning and Consultation (IPaC) and NOAA Fisheries website. Additionally, Louisiana state resources were inventoried to identify potential state listed species.
Will the project impact any areas in or adjacent to habitat for Federally, listed threatened or endangered species or their critical habitat? If no, provide justification and avoidance measures. If yes, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No.

Conclusion:

The project area is developed and comprised of residential areas. PHMSA requested an official species list through the USFWS's IPaC website. The northern Long-eared Bat (*Myotis septentrionalis)* and red-cockaded woodpecker (*Picoides borealis*) are two federally listed endangered species, potentially occurring within the project boundary, based on the project's location. Additionally, an experimental population of whooping crane (*Grus americana*) can be found within the general geographic area. The alligator snapping turtle (*Macrochelys temminckii*) and the monarch butterfly (*Danaus plexippus)* were identified as proposed threatened and candidate species that could potentially occur in the project area. There is no designated critical habitat within the project area. Additionally, the Louisiana Department of Wildlife and Fisheries database was reviewed to assist in identifying potential state protected species occurring in the Rapides Parish.[11] See Appendix D, Biological Resources, for federal and state species lists.

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. The project area is in an urbanized environment and therefore has very limited biological resources present. Additionally, the project area does not contain suitable habitat for listed species, therefore no impacts to biological resources would occur under the No Action alternative.

Proposed Action:

The project area is in an urbanized environment where the areas of disturbance would occur within the existing ROW. The two identified federally protected species potentially occurring in the area rely on forested habitats, which do not exist in the project area. The replacement mains would be installed approximately three feet, adjacent to and paralleling the existing steel gas mains. New pipelines would be installed mostly by directional boring methods and minimal surface ground disturbances would occur at the tie in points between gas main segments. Because work would occur within ROW that has been previously impacted (pipeline laid in the ground in close proximity to the location where new pipes would be laid and subsequently paved), and is a maintained transportation corridor, the immediate project area has very limited biological resources present.

Therefore, in accordance with Section 7 of the Endangered Species Act,[12] PHMSA's assessment is that the project would have no effect to the northern Long-eared Bat or the red-cockaded woodpecker. Under Section

[11] https://www.wlf.louisiana.gov/page/rare-species-and-natural-communities-by-parish
[12] 50 CFR § 402.02

7(a)(4) of the Endangered Species Act (ESA), federal agencies must confer with the USFWS if their action would jeopardize the continued existence of a proposed species. The alligator snapping turtle is proposed for listing and the project is unlikely to jeopardize this species existence. For the purposes of consultation, non-essential experimental populations (including the whooping crane) are treated as a proposed species on private land (no section 7(a)(2) requirements, but Federal agencies must not jeopardize their existence (section 7(a)(4))). The project is unlikely to jeopardize the existence of the whooping crane. As a candidate species, the monarch butterfly receives no statutory protection under the ESA. Furthermore, PHMSA's assessment is that the project would have no adverse impacts to state listed species or other biological resources and that there are no indirect or cumulative impacts anticipated because of the Proposed Action alternative.
Mitigation Measures: The City of Alexandria is responsible for abiding by all applicable federal, state, and local regulations.

Cultural Resources	
Question	**Information and Justification**
Does the project include any ground disturbing activities, modifications to buildings or structures, or construction or installation of any new aboveground components?	Yes. The project would involve the replacement of existing underground gas lines.
Is the project located within a previously identified local, state, or National Register historic district or adjacent to any locally or nationally recognized historic properties? This information can be gathered from the local government and/or State Historic Preservation Office.[13]	No
Does the project or any part of the project take place on tribal lands or land where a tribal cultural interest may exist?[14]	No. The proposed project footprint would not take place on any tribal land or land where a tribal cultural interest may exist. In the case something is found during construction, an Inadvertent Discovery Clause would be added to the project Specifications and Plans.
Are there any nearby properties or resources that either appear to be or are documented to have been constructed more than 45 years ago?[15] Does there appear to be a group of properties of similar age, design, or method of construction? Any designed landscapes such as a park or cemetery? Please provide photographs to show the context of the project area and adjacent properties.	
Has the entire area and depth of construction for the project been previously disturbed by the original	

[13] Many SHPOs have an online system at https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm that can tell you previously identified historic properties in your project area. The National Register list at https://www.nps.gov/subjects/nationalregister/database-research.htm can also be accessed online.

[14] The SHPO may have information on areas of tribal interest, or a good source is the HUD TDAT website at https://egis.hud.gov/TDAT/.

[15] Local tax and property records or historic maps may indicate dates of construction.

installation or other activities? If so, provide any documentation of prior ground disturbances.	
Will project implementation require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other old or unique features? Please provide photos of the project area that include the roadway and sidewalk materials in the project and staging areas.	No. The proposed project footprint would not require the removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other old unique features.

Conclusion:

PHMSA must consider the impact of projects for which they provide funding on historic and archeological properties in accordance with Section 106 of the National Historic Preservation Act (Section 106). Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this project to encompass the ROW, which ranges from 50 feet in residential areas to 100 feet for highways, and adjacent parcels where the service line replacements may take place. The APE extends from 31.30546, -92.43761 to the north to 31.25405, - 92.38819 to the south. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential effects of the Undertaking and extends to the depth of proposed ground disturbance of up to six feet. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. See Appendix G, Cultural Resources, for a map of the APE.

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. These activities could result in ground disturbance that might affect historic resources. However, no federal funding would be applied and therefore Section 106 would not be required.

Proposed Action:

PHMSA staff identified properties based on available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana State Historic Preservation Office. PHMSA staff also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP. A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. As a result, two archaeological surveys and 12 archaeological sites were identified. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.)

Based on PHMSA's assessment, there are no historic properties as defined in 36 CFR 800.16(l) within the APE. While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts. Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA's assessment is that the Undertaking will result in No Historic Properties Affected.

A letter was sent on March 14, 2024, to the Louisiana Office of Cultural Development's State Historic Preservation Officer (SHPO) and potential consulting parties, outlining the Section 106 process, including a description of the undertaking, delineation and justification of the APE, identification of historic properties and an evaluation and proposed finding of no historic properties affected. PHMSA has requested comments on the Section 106 process, identification of historic properties, and proposed finding within 30 days. See Appendix G, Cultural Resources, for more information.

PHMSA also sent letters on March 14, 2024, to the following federally recognized tribes with a potential interest in the project area, inviting them to participate in consultation:

- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Choctaw Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Jena Band of Choctaw Indians
- Mississippi Band of Choctaw Indians
- Tunica-Biloxi Indian Tribe

The letter to the tribes initiated Section 106 consultation to determine if there were any historic properties of cultural or religious significance to the tribes, to determine of the tribes would like to be consulting parties, to notify the tribes of PHMSA's assessment, and to request concurrence with PHMSA's determination of effect. PHMSA requested comments within 30 days.

Mitigation Measures:

If, during project implementation, a previously undiscovered archaeological or cultural resource that is or could reasonably be a historic property is encountered or a previously known historic property will be affected in an unanticipated manner, all project activities in the vicinity of the discovery will cease and the City of Alexandria will immediately notify PHMSA. This may include discovery of cultural features (e.g., foundations, water wells,

trash pits, etc.) and/or artifacts (e.g., pottery, stone tools and flakes, animal bones, etc.) or damage to a historic property that was not anticipated. PHMSA will notify the State Historic Preservation Office and participating federally recognized tribes and conduct consultation as appropriate in accordance with 36 CFR § 800.13. Construction in the area of the discovery must not resume until PHMSA provides further direction.

In the event that unmarked human remains are encountered during permitted activities, all work shall halt, and the City of Alexandria shall immediately contact PHMSA as well as the proper authorities in accordance with applicable state statutes to determine if the discovery is subject to a criminal investigation, of Native American origin, or associated with a potential archaeological resource. At all times human remains must be treated with the utmost dignity and respect. Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be photographed, collected, or removed until PHMSA has conducted the appropriate consultation and developed a plan of action. Project activities shall not resume until PHMSA provides further direction.

All work, material, equipment, and staging to remain within the road's existing right-of-way or utility easement or other staging areas as identified in the environmental documentation. If the scope of work changes in any way that may alter the effects to historic properties as described herein, the grant recipient must notify PHMSA, and consultation may be reopened under Section 106.

Staging areas for the Undertaking are currently unknown. Staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect archaeological features and artifacts.

Section 4(f)	
Question	**Information and Justification**
Are there Section 4(f) properties within or immediately adjacent to the project area? If yes, provide a list of properties or as an attachment.	Cheatham Park is located adjacent to the project along Broadway Avenue, south of Jones Avenue.
Will any construction activities occur within the property boundaries of a Section 4(f) property? If so, please detail these activities and indicate if these are temporary or permanent uses of the Section 4(f) property. Further coordination with PHMSA is required for all projects that might impact a Section 4(f) property.	No

Conclusion:

Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 as amended (Section 4(f)) (49 U.S.C. § 303(c)); is a federal law that applies to transportation projects that require funding or other approvals by the USDOT. Section 4(f) prohibits the Secretary of Transportation from approving any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or any land from an historic site of national, state, or local significance unless:

- There is no feasible and prudent alternative to the use of the land;
- The program or project includes all possible planning to minimize harm to such park, recreational area,

wildlife and waterfowl refuge, or historic site, resulting from such use.

PHMSA conducted a review of the Project Area to identify potential properties that qualify as Section 4(f). Cheatham Park is located adjacent to the project along Broadway Avenue, south of Jones Avenue (see Appendix H.)

No Action:

Under the No Action alternative, there would be no change to existing pipeline infrastructure pursuant to federal funding provided by the Program. Therefore, there would be no use of Section 4(f) property under the No Action alternative.

Proposed Action:

Under the Proposed Action alternative, construction activities would not impact the resources identified above. Directional bore methods would be used at the driveways entering and exiting Cheatham Park. Access to the facility would remain throughout the duration of construction and no physical use of the park would occur. In addition, as described in the Noise section of this Tier 2 EA, no adverse impacts associated with construction noise have been identified that could affect the use of this property. Therefore, PHMSA has determined there would be no use of any Section 4(f) resources.

Mitigation Measures:

The City of Alexandria shall utilize directional bore methods under the driveways entering and exiting Cheatham Park and will ensure public access to the Park is maintained during construction.

Land Use and Transportation	
Question	**Information and Justification**
Will the full extent of the project boundaries remain within the existing right-of-way or easements? If no, please describe any right-of-way acquisitions or additional easements needed.	Yes. All construction would take place within the existing right-of-way. No acquisition would be required.
Will the project result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction? Will there be any permanent change to existing transportation facilities? If so, what are the changes, and how would changes affect the public?	Yes. Any work that may result in detours, transportation restrictions or other impacts to normal traffic flow would follow the Louisiana Department of Transportation and Development (LaDOTD) standards when this occurs. Any guidelines or permits needed would be obtained prior to work. There would be no permanent changes to transportation facilities.
Will the project interrupt or impede emergency response services from fire, police, ambulance or any other emergency or safety response providers? If so, describe any coordination that will occur with emergency response providers?	No. The City of Alexandria would ensure all emergency response services would be alerted of the construction and they would not be impeded or have any interruptions during Construction.

Conclusion:

The project is in Alexandria, in residential and suburban areas. The public owns and maintains the road ROW. It is envisioned that the new gas lines would be installed on both sides of the public roadway and 1-5 feet from the existing gas mains. The ROW consists of roadways and sidewalks and pipelines would likely be installed in the grassy areas adjacent to the roadways.

No Action:

Under the No Action alternative, the existing pipes would remain in their current location and no changes to land use would occur. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances or when funding becomes available for pipeline replacement.

Proposed Action:

The City of Alexandria is proposing to replace pipeline infrastructure within the existing ROW and would not include adding pipeline to serve new areas. The ROW in Alexandria ranges from 50 feet in residential areas to 100 feet for highways. It is noted that in rare circumstances additional easements could be needed to extend a gas main around a 90-degree corner to avoid conflicts with existing utilities, or if similar logistical issues arise. Should this occur as the project undergoes further design, the City of Alexandria would notify PHMSA and obtain an easement compliant with the Uniform Relocation and Assistance Act. No existing ROW or easements are anticipated but if logistical issues arise, any acquisition of additional easements would be minor and would only be needed to cut a corner connecting two public ROW areas. During construction, there may be short-term impacts to adjacent residences, businesses and normal traffic patterns. Potential impacts include an increase in noise, dust, and transportation accessibility, because of construction and construction staging. Any work that would result in detours, transportation restrictions or other impacts to normal traffic flows would follow LaDOTD standards and any applicable permits would be obtained prior to work commencing. There are no permanent impacts to transportation facilities anticipated. The City of Alexandria would ensure that all emergency responses entities would be informed of construction schedule and emergency response services would not be impeded or interrupted during construction. Therefore, because the work consists of the replacement of existing pipelines, would not convert any new areas into a different use and impacts would only occur during construction, PHMSA's assessment is that there would be no impact to land use.

PHMSA considered the cumulative effects of this action with ongoing and planned transportation related construction projects that could cumulatively impact land use and transportation. The City of Alexandria would coordinate with appropriate authorities. All municipalities and businesses must abide by the same requirements and coordinate with the appropriate authorities regarding any disruptions to normal traffic patterns. Through this coordination, the overall cumulative effects of multiple projects occurring would be minimized by planning and scheduling efforts with responsible agency oversight.

Mitigation Measures:

Should any new right-of way or new easement be needed for pipeline installation, the City of Alexandria shall notify PHMSA, prior to acquisition.

The City of Alexandria shall maintain traffic flows to the extent possible and use traffic control measures to assist traffic negotiating through construction areas, as needed.

The City of Alexandria shall coordinate with state and local agencies regarding detours and/or routing adjustments during construction and will notify any potentially impacted residents and/or business owners.

The City of Alexandria shall have a traffic control plan in place, prior to construction, and coordinate with the appropriate agency well in advance of any impacted emergency services or essential agency functions.

Noise and Vibration	
Question	**Information and Justification**
Will the project construction occur for longer than a month at a single project location?	No.
Will the project location be in proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.)? If so, what measures will be taken to reduce noise and vibration impacts to sensitive receptors?	Yes. The nature of the type of small equipment required to install small diameter gas mains do not typically have operational noise levels beyond general ambient decibels. (i.e., small backhoe, trencher, boring rig, etc.)
Will the project require high-noise and vibration inducing construction methods? If so, please specify.	No.
Will the project comply with state and local ordinances? If so, identify applicable ordinances and limitations on noise/vibration times or sound levels.	Yes. All State, Parish and City laws would be strictly enforced. Construction would be limited to daylight hours.
Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 ft of a structure?	No.

Conclusion:

The project is in Alexandria, Rapides Parish, consisting of residential and light commercial areas. The ambient noise in the project area consists of a combination of environmental noise from road traffic, the built environment, population density and other sources. There are several sensitive noise receptors (residences, schools, etc.) along the streets where work would occur.

No Action:

Under the No Action alternative, the project would not move forward and the pipelines along the designated streets in the project area would not be replaced at this time. If replacement or repairs occur under emergency conditions, noise from construction equipment would add to that of the current ambient noise and would likely be of a shorter duration.

Proposed Action:

Excavators, drill rigs, rollers, pavers, and other similar construction equipment would be used to excavate trenches, drill, lay pipes, compact soils, re-pave the affected areas, etc. Sensitive noise receptors are likely to experience temporary noise impacts. The City of Alexandria would limit work to daylight hours and ensure that all construction activities abide by State, Parish, and City noise regulations. Therefore, PHMSA's assessment is that the noise impacts would be minor and temporary and no adverse vibration impacts would result from the

proposed work.

PHMSA considered the cumulative effects of this action with other potential transportation related construction projects that could cumulatively contribute to noise and/or vibration impacts in the project area. Cities often have paving, drainage improvement, and other construction or maintenance projects occurring throughout the year. These construction and maintenance projects could occur at the same time as the Proposed Action Alternative and would contribute to an increase in cumulative noise effects during construction. However, adhering to state and local noise ordinances would ensure the project does not cause cumulatively more than minor adverse noise or vibration impacts.

Mitigation Measures:

The City of Alexandria shall ensure adherence to the state, local, and parish noise regulations and limit construction activities to only during normal weekday business hours, when noise restrictions are not in place.

Environmental Justice	
Question	**Information and Justification**
Using the EPA EJScreen or census data[16], is the project located in an area of minority and/or low-income individuals as defined by USDOT Order 5610.2(c)? If so, provide demographic data for minority and/or low-income individuals within ½ mile from the project area as a percentage of the total population.	Based on review of socioeconomic data using EPAs EJScreen tool, the population residing within the general project area contains 68% low income and 95% minority populations.
Will the project displace existing residents or workers from their homes and communities? If so, what is the expected duration?	No. All work would be conducted within the existing right of way. Replacement of existing gas line only. No residents would be displaced, and all workers are likely to be from the surrounding communities.
Will the project require service disruptions to homes and communities? If so, what is the expected communication and outreach plan to the residents and the duration of the outages?	Yes. During transfer of service a short time period of loss of service is anticipated for each structure. (less than 2 hours) Affected customers would be notified appropriately at such a time. All avenues of media would be used to reach the residents of this interruption (TV, Radio, Social Media, US Mail and Newspaper).
Are there populations with Limited English Proficiency located in the project area? If so, what measures will be taken to provide communications in other languages?	No.

Conclusion:

Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation will continue until further guidance is provided regarding the implementation of the new E.O. 14096 on

[16] https://www.census.gov/quickfacts/fact/table/US/PST045222

environmental justice.

PHMSA reviewed socioeconomic data using the EPAs EJScreen and found the population residing within the project area contains 68% low income and 95% minority populations. The percentage of these populations is above the Rapides Parish average of 41 % low income and 39 % minority populations. See Appendix I, Environmental Justice, for socioeconomic data.

No Action:

Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The City of Alexandria would continue to use leak prone pipe material that could lead to safety incidents and service disruptions. Additionally, if a pipeline segment is not repaired or replaced prior to failure, it is likely to be associated with even more emissions under the No Action alternative. Thus, emissions benefits to the community associated with repairing or replacing existing pipelines with updated material would not be achieved and the incident risks and leaks would remain. There may be some degree of air pollution associated with construction activities for maintenance and repairs of existing pipelines under the No Action alternative, either through planned repair or replacement efforts or unplanned, emergency repairs or replacements.

Proposed Action:

The Proposed Action alternative would result in an overall reduction in GHG emissions. Construction activities would result in minor temporary air quality impacts, including the intentional venting of existing distribution lines prior to replacement. Noise impacts associated with construction are anticipated to be minor. Traffic impacts would be temporary and only minor disruptions or delays would occur. However, removal of leak prone pipe would reduce leaks and the potential for incidents, resulting in an increase in pipeline safety across the system while also improving operation and reliability. All work would occur within existing ROW and no residents or businesses would be displaced due to the project. There would be a short time period where residents and business would experience a short loss of service during the transfer of service to the new system. Outages are expected to last less than two hours. Affected customers would be notified appropriately and all avenues of media (TV, radio, social media, US mail notifications and newspapers) would be used to reach the residents of this interruption. Therefore, consistent with Executive Order 12898 and DOT Order 5610.2(c), PHMSA's assessment is that the project would not result in disproportionately high and adverse effects on minority or low-income populations, or other underserved and disadvantaged communities. The project would have an overall beneficial effect on environmental justice populations and would not result in indirect or cumulative impacts.

Mitigation Measures:

The City of Alexandria shall provide advanced notification of service disruptions and traffic impacts to all affected parties including residents and businesses adjacent to the project area.

Safety	
Question	**Information and Justification**
Has a risk profile been developed to describe the condition of the current infrastructure and potential safety concerns?	Yes. A DIMP for the system is a regulatory requirement and the last plan update was 2020. It has a (5) year inspection cycle. This plan contains the risks and threats to the integrity of the system and is updated to

	meet all requirements for continued safe operation and reliability of the gas system in accordance with API RP 1162.
Has a public awareness program been developed and implemented that follows the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162?	Yes. A public awareness plan is updated and was recently inspected on the required (4) year compliance schedule.
Does the project area include pipes prone to leakage?	Yes.
Will construction safety methods and procedures to protect human health and prevent/minimize hazardous materials releases during construction, including personal protection, workplace monitoring and site-specific health and safety plans, be utilized? If yes, document measures and reference appropriate safety plans.	Yes. The City of Alexandria and its Contractors are required to meet all current safety aspects per Operator Qualification, OSHA, and City of Alexandria established best safety practices. Pre-work job site meetings are required. All workers performing any tasks on the City of Alexandria Gas System are required to be Operator Qualified (OQ) or fall under such span of control. This includes contractors and subcontractors. PPE as well as flame resistant clothing is required.
Has an assessment of the project been performed to analyze the risk and benefits of implementation?	The City of Alexandria's DIMP includes an assessment of risks and threats to the integrity of the system.

Conclusion:

The proposed project would replace steel pipes in the system. Pipelines that are known to leak based on their material include cast iron, bare steel, wrought iron, and historic plastics (PIPES Act of 2020). PHMSA establishes safety regulations for all pipelines (49 CFR Parts 190-199). In 2011, following major natural gas pipeline incidents, DOT and PHMSA issued a Call to Action to accelerate the repair, rehabilitation, and replacement of the highest-risk pipeline infrastructure. Among other factors, pipeline age and material are significant risk indicators. Pipelines constructed of cast and wrought iron, as well as bare steel, are among the pipelines that pose the highest risk. PHMSA continues to encourage legacy pipeline repair or replacement to increase the safety of these segments of the gas distribution systems. Pipeline incidents can result in death, injury, property damage, and environmental damage.

No Action:

Under the No Action alternative, the existing steel pipes would remain in their current location and condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances or as funding is available. Safety risks resulting from existing leak prone pipes remaining in place would persist until the existing steel pipes are replaced.

Proposed Action:

The proposed project is necessary to replace the existing dated steel pipes and is in alignment with the City of Alexandria's Distribution Integrity Management Program. The project would reduce the risk profile of the existing pipeline system prone to methane leakage and would also benefit disadvantaged communities with the safe provision of natural gas. The project responds to the need to address the potentially unsafe condition of the

natural gas distribution system of pipelines. The replacement of pipelines would be constructed in accordance with industry best practices and would comply with all local, state, and federal regulations, including those for safety. The abandonment of the existing pipeline would be conducted in accordance with PHMSA requirements found in 49 CRF 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place. These requirements for purging and sealing abandoned pipelines would ensure that the abandoned pipelines are properly purged and cleaned and pose no risk to safety in their abandoned state. Therefore, PHMSA's assessment is that this replacement project would improve the overall safety of the City of Alexandria's infrastructure.
Mitigation Measures: The City pf Alexandria shall ensure their DIMP procedures are updated as necessary, the work is constructed in accordance with industry best practices and the project will comply with all local, state, and federal regulations, including those for safety.

III. Public Involvement

On November 9, 2022, PHMSA published a Federal Register notice (87 FR 67748) with a 30-day comment period soliciting comments on the "Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program." During the 30-day comment period, PHMSA received one comment letter from the APGA on various aspects of the program and air quality related analysis in the EA on December 9, 2022. This APGA letter is available for public review at the Docket No: PHMSA-2022-0123[17]. PHMSA reviewed the comment letter and determined the comments were not substantial and did not warrant further analysis. One comment provided by the APGA indicated that the majority of construction methods used for pipe replacements would be replacement by open trenching and that some may want to abandon the existing pipe rather than removing it for replacement. Any departures from methods described in the Tier 1 EA will require additional documentation from the project proponent, as reflected in this Tier 2.

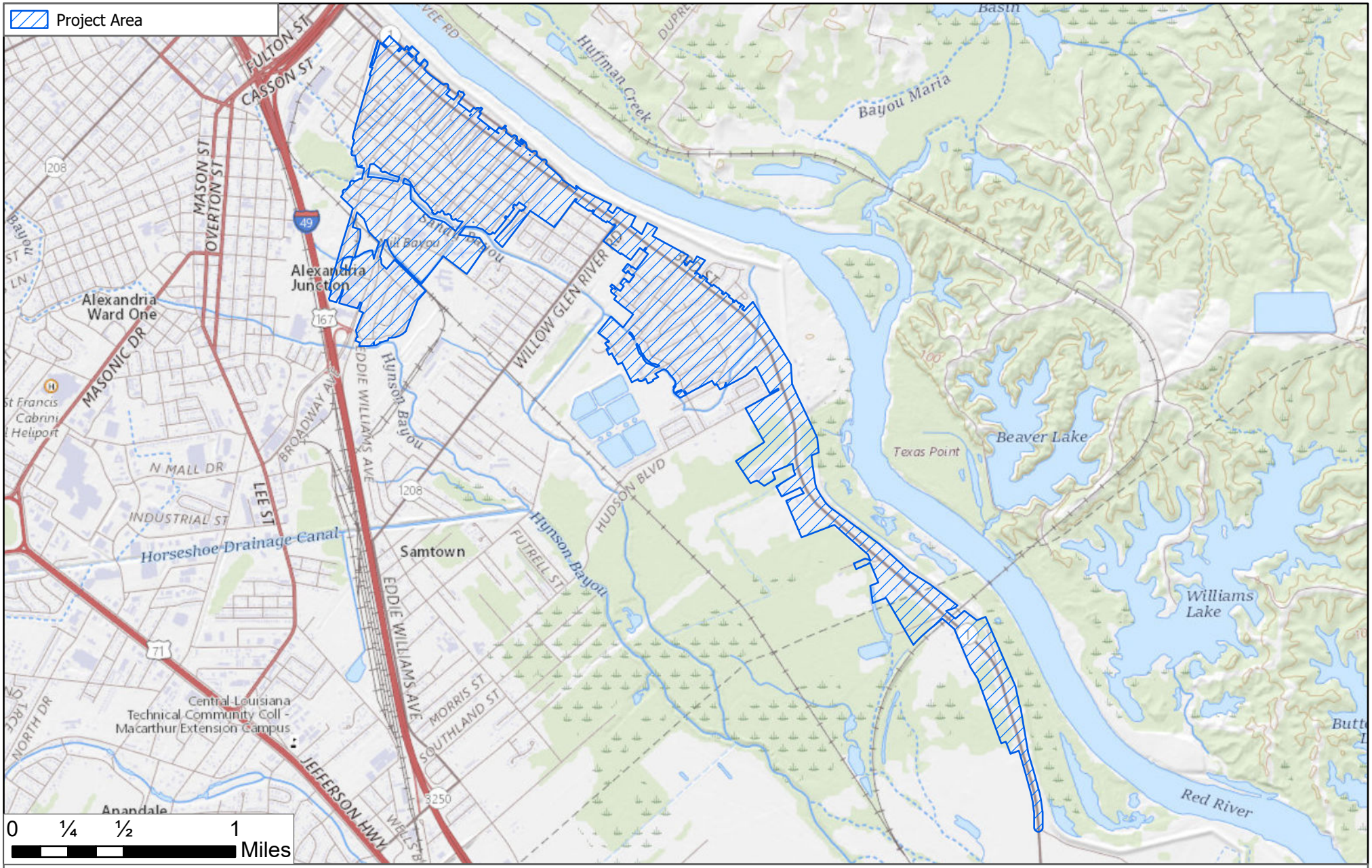
As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-33 in your response.

[17] https://www.regulations.gov/document/PHMSA-2022-0123-0002/comment

Appendix A

Project Maps

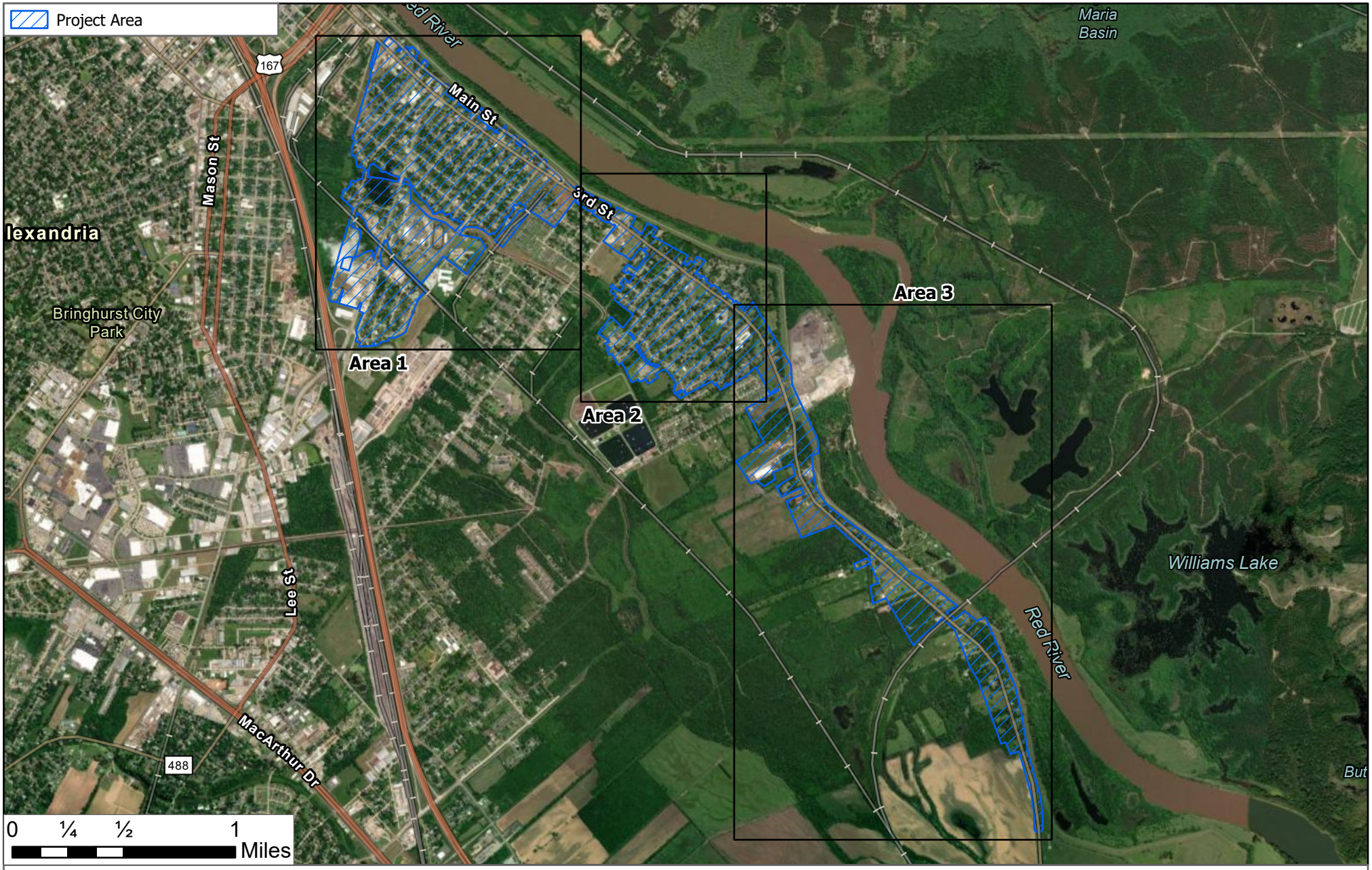
City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



Name: Alexandria Louisiana Gas Line Replacement
Scale: 37,000
Total Acreage: 1,905
USGS Basemap: Alexandria
Alexandria, LA, Rapides Parish

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement

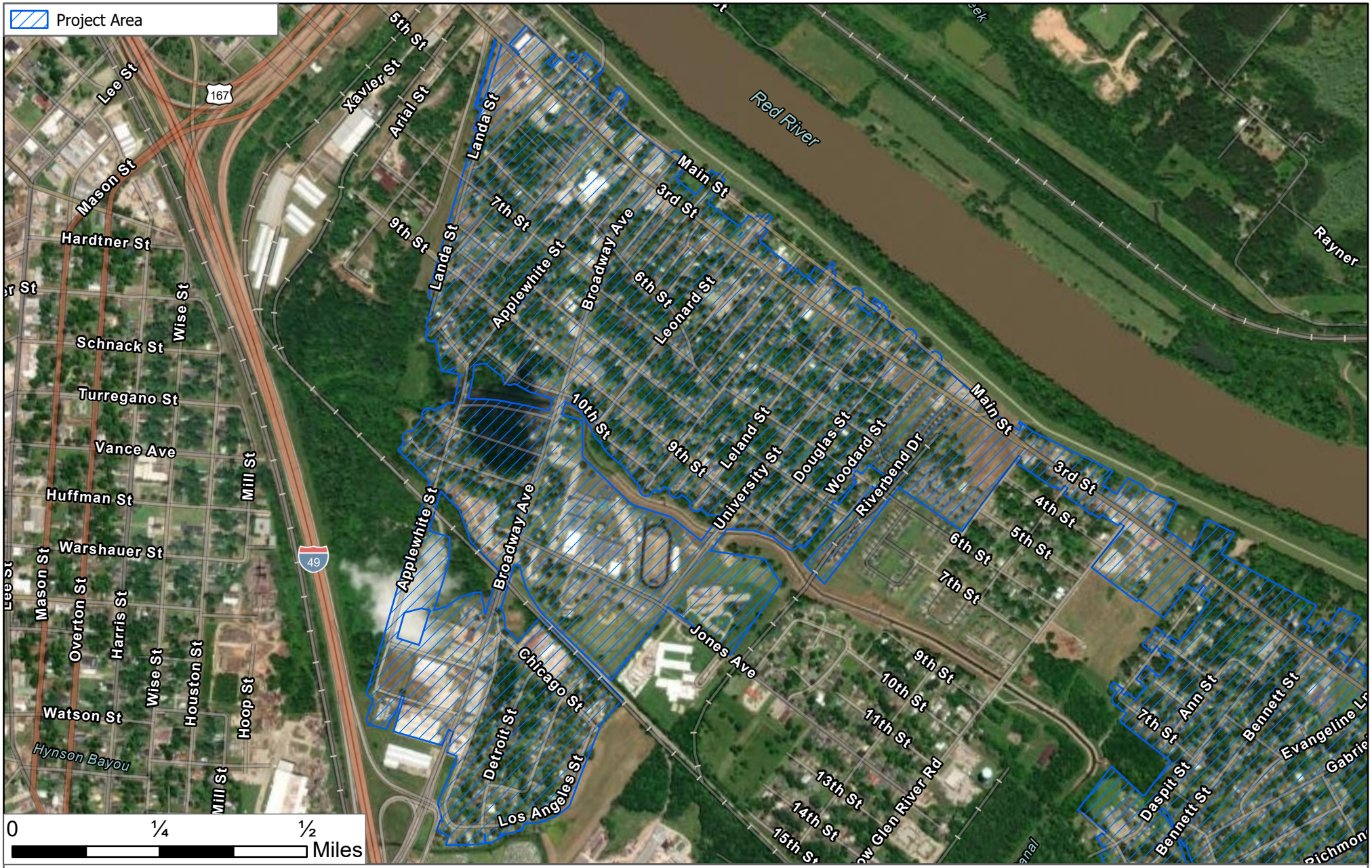


Name: Alexandria Louisiana Gas Line Replacement
Scale: 37,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish

N

Service Layer Credits: CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Maxar

City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



Name: Alexandria Louisiana Gas Line Replacement
Scale: 14,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 1

N

Service Layer Credits: Esri Community Maps Contributors, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement

Name: Alexandria Louisiana Gas Line Replacement
Scale: 8,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 2

N

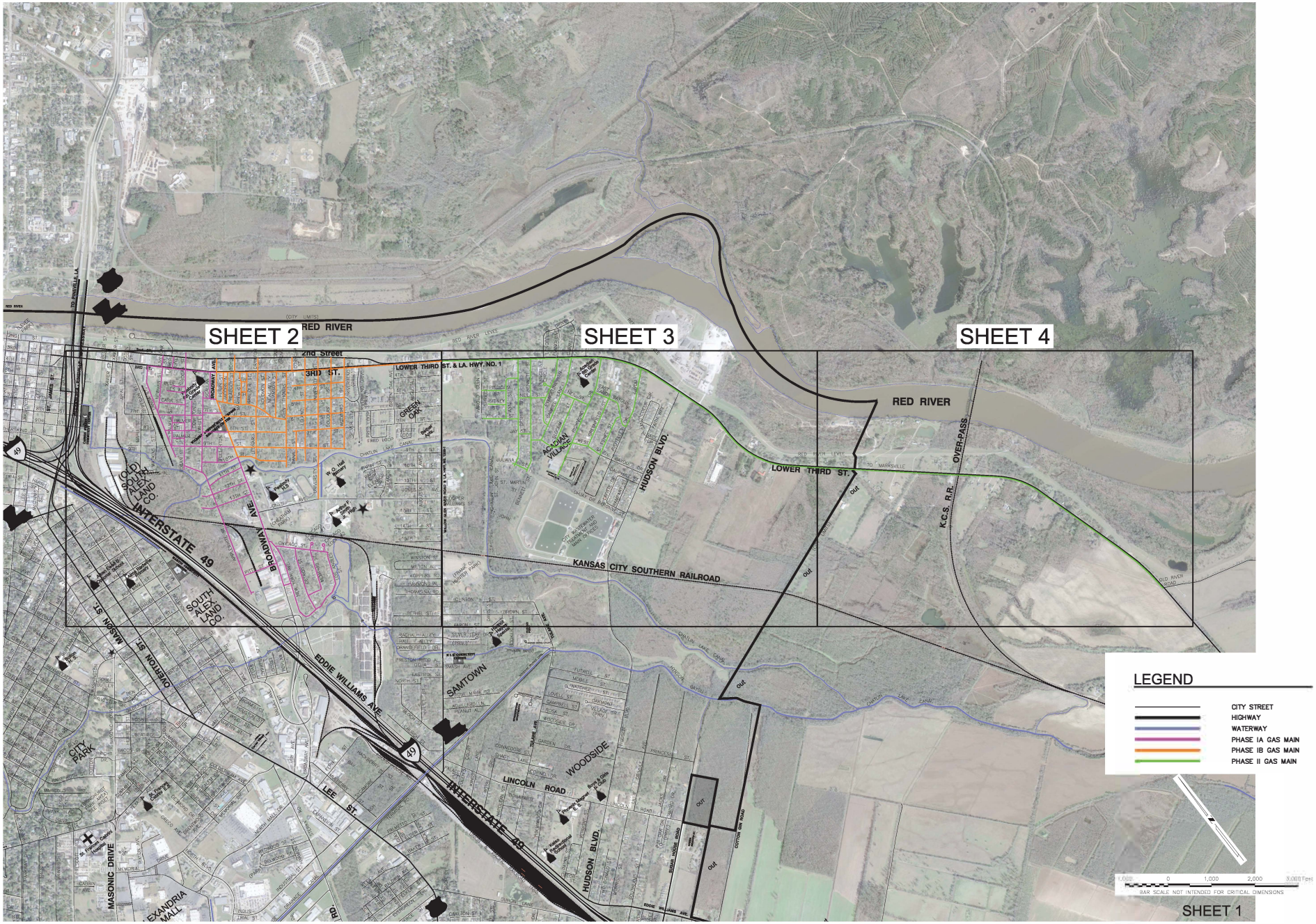
City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement

Name: Alexandria Louisiana Gas Line Replacement
Scale: 18,900
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 3

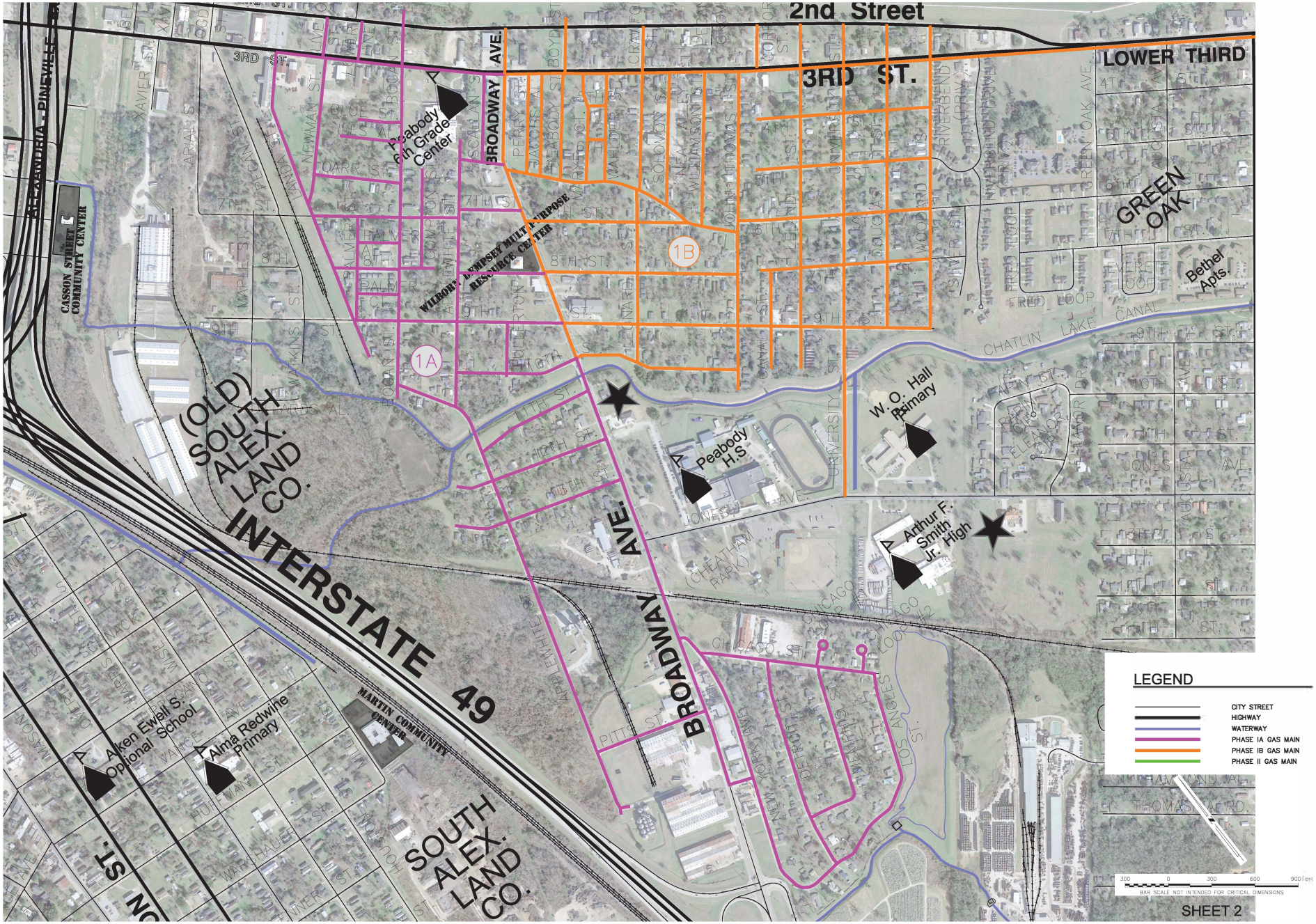
N

Service Layer Credits: CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

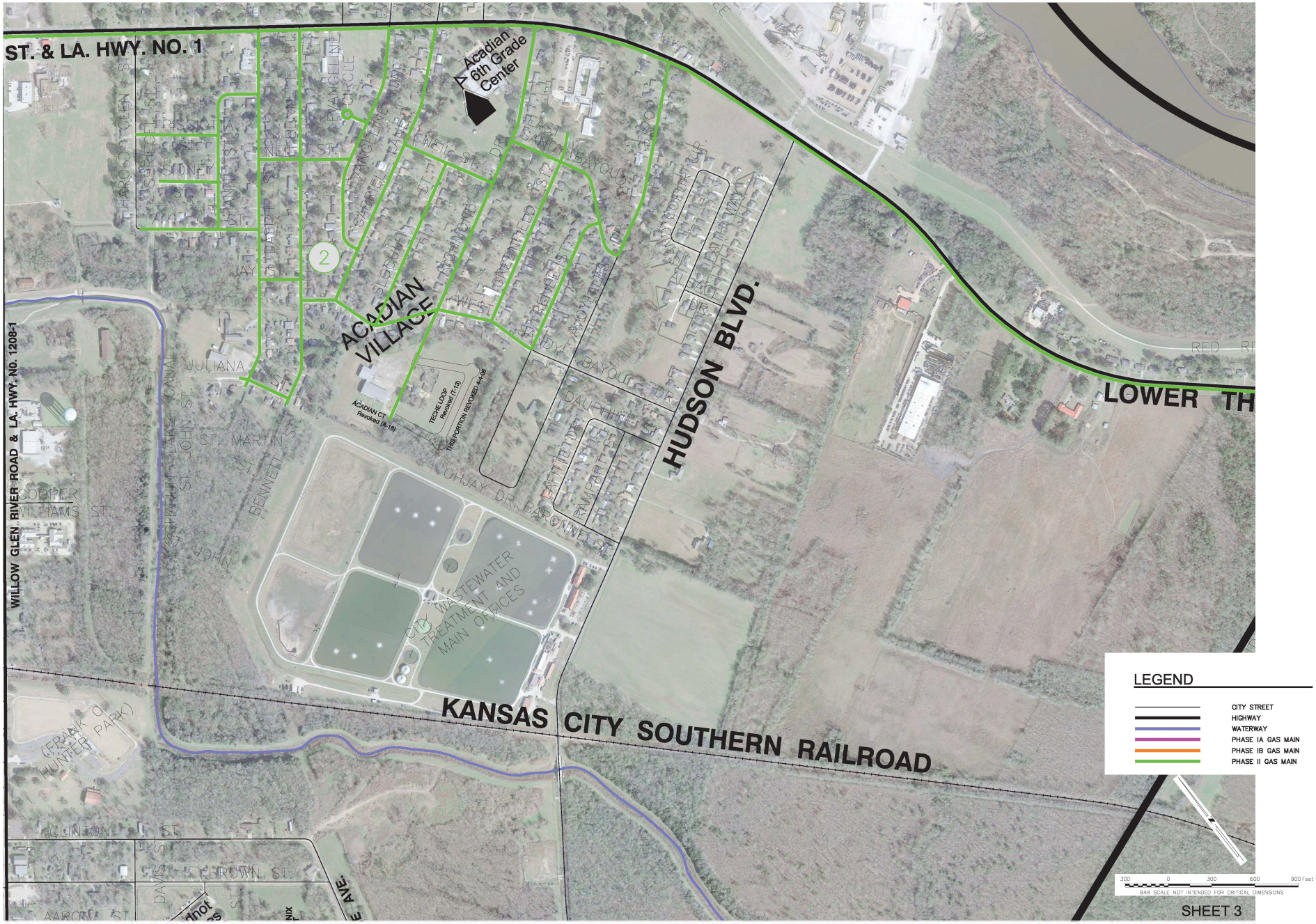
City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



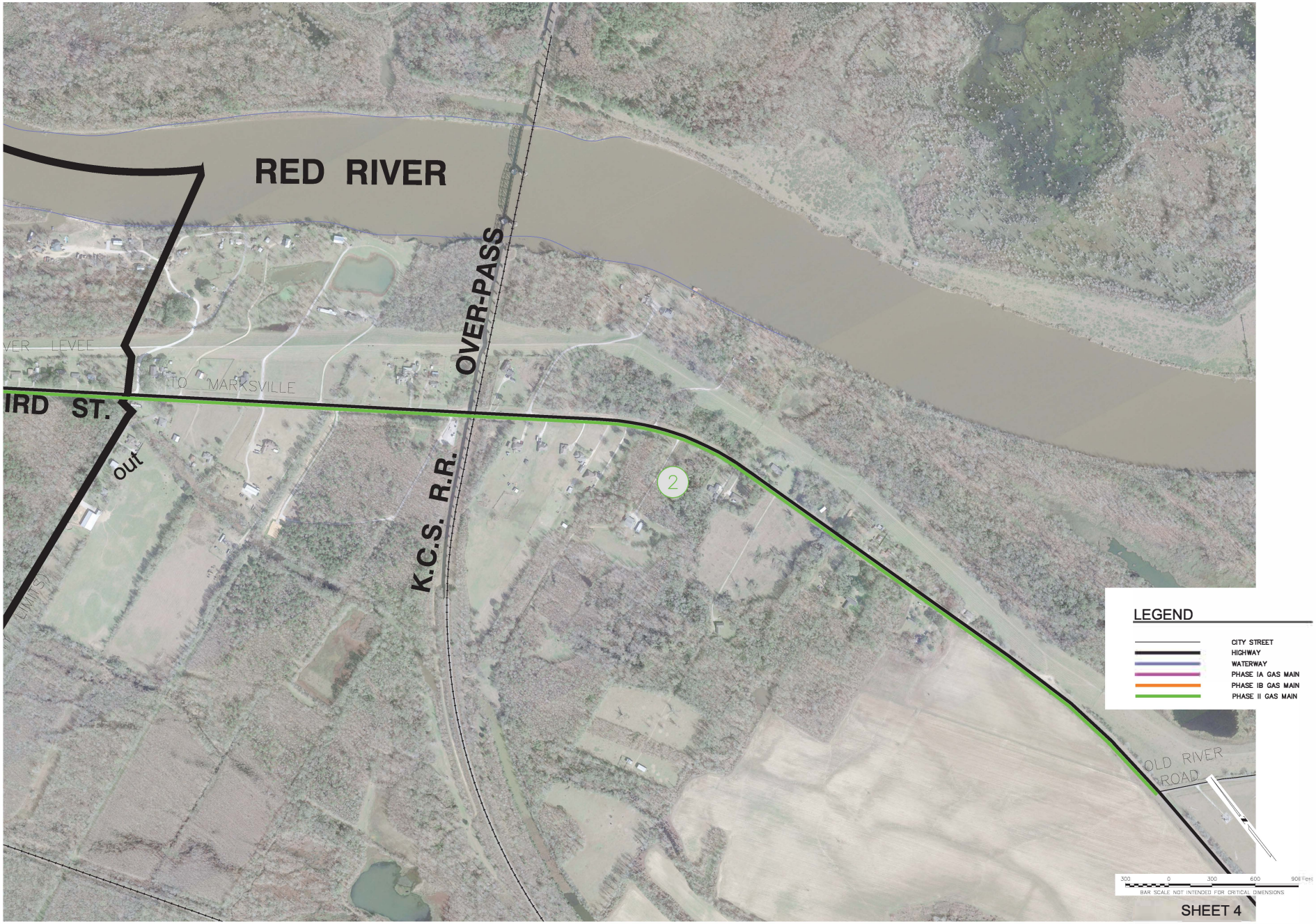
City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



City of Alexandria, Lower 3rd Street Neighborhood Gas System Replacement



Appendix B

Methane Calculations

Table 1. Average methane emission factors for natural gas pipelines (adapted from EPA GHG Inventory, Annex 3.6, Table 3.6-2)

Pipeline Material	Pre-1990 Installation (kg/mile)	1990-2020 Installation (kg/mile)	Average Rate (kg/mile/year)
Cast Iron	4,597.40	1,157.30	2,877.35
Unprotected steel	2,122.30	861.3	1,491.80
Protected steel	59.1	96.7	77.90
Plastic	190.9	28.8	109.85

Table 2. No Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	Current Methane Leak Rate (kg/year)
Cast Iron	4,597.40	0	0
Unprotected steel	2,122.30	6.25	13264
Protected steel	59.1		0
Plastic	190.9		0
Total Annual Methane Leak Rate			13264
20-year Methane Emissions			265288

Table 3. Proposed Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	New Methane Leak Rate (kg/year)
Plastic	28.8	6.25	180
Year 1 Methane Reduction			12822
Annual Methane Reduction			13084
20-year Methane Reduction			261425

Equation 1 was used to estimate blowdown emissions in MCF, assuming a pipeline diameter (d) and pressure (P) described in Table 3.

$$E_{blowdown} = V \times \frac{P_{pipe} + P_{atm}}{P_{atm}} \qquad (1)$$

Where the pipeline volume (V) is calculated by multiplying the cross-sectional area of the pipe by the length of pipeline (L):

$$V = \pi \times \frac{d^2}{4} \times L \qquad (2)$$

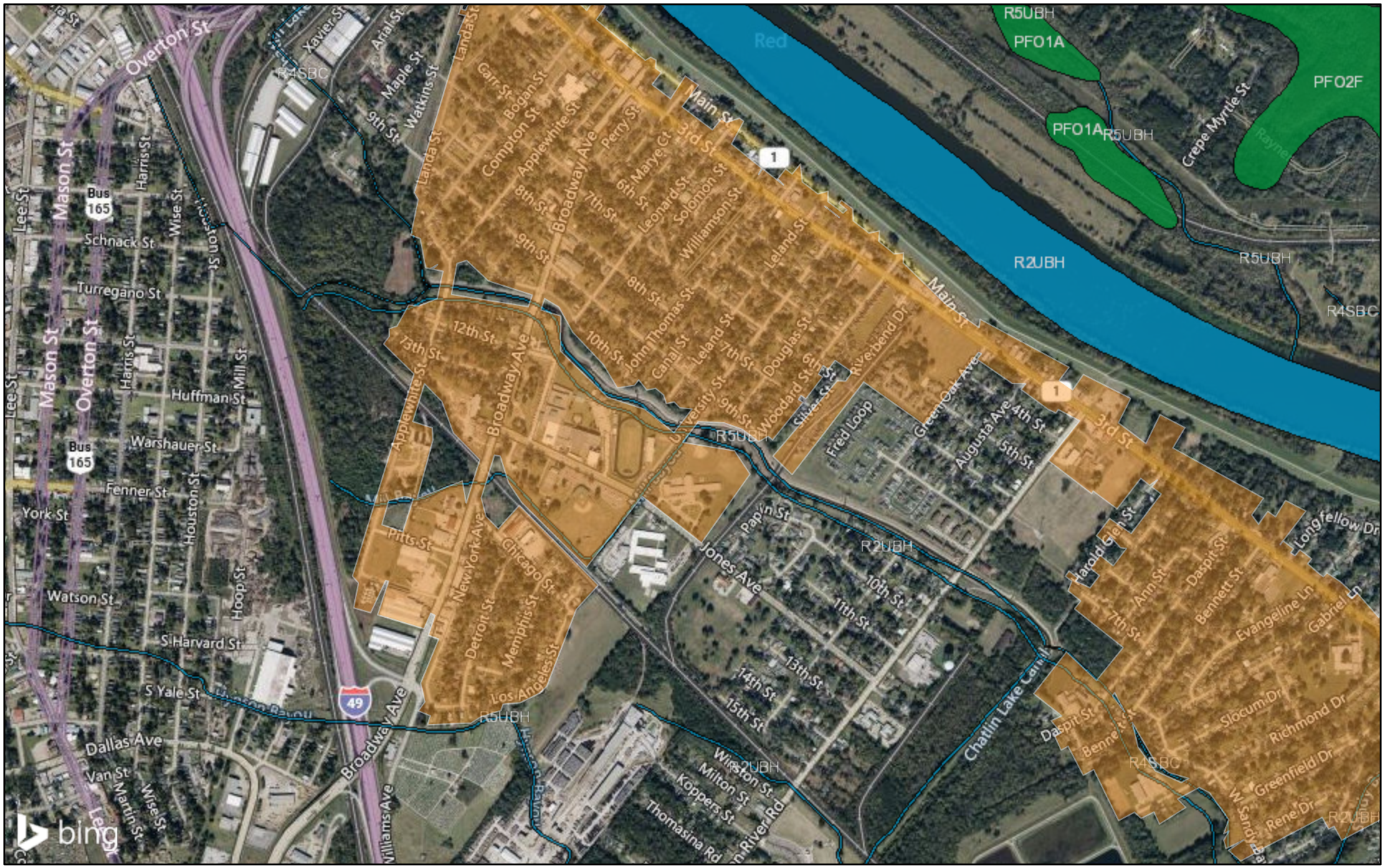
Table 4 Proposed Action - Methane Blowdown

Equation Inputs		
Diameter (inches)	2	4
Blowdown Pressure	30	30
Length of Blowdown (feet)	1000	32000
Blowdown (MCF)	0.1	8.5
Total MCF	8.5	
Total kg	262.4	

Appendix C

Water Resources

NEPAssist: Water Resources



February 28, 2024

project area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

NEPAssist: Water Resources

February 28, 2024

project area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

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- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

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- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

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- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

Wetlands

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1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

Wetlands

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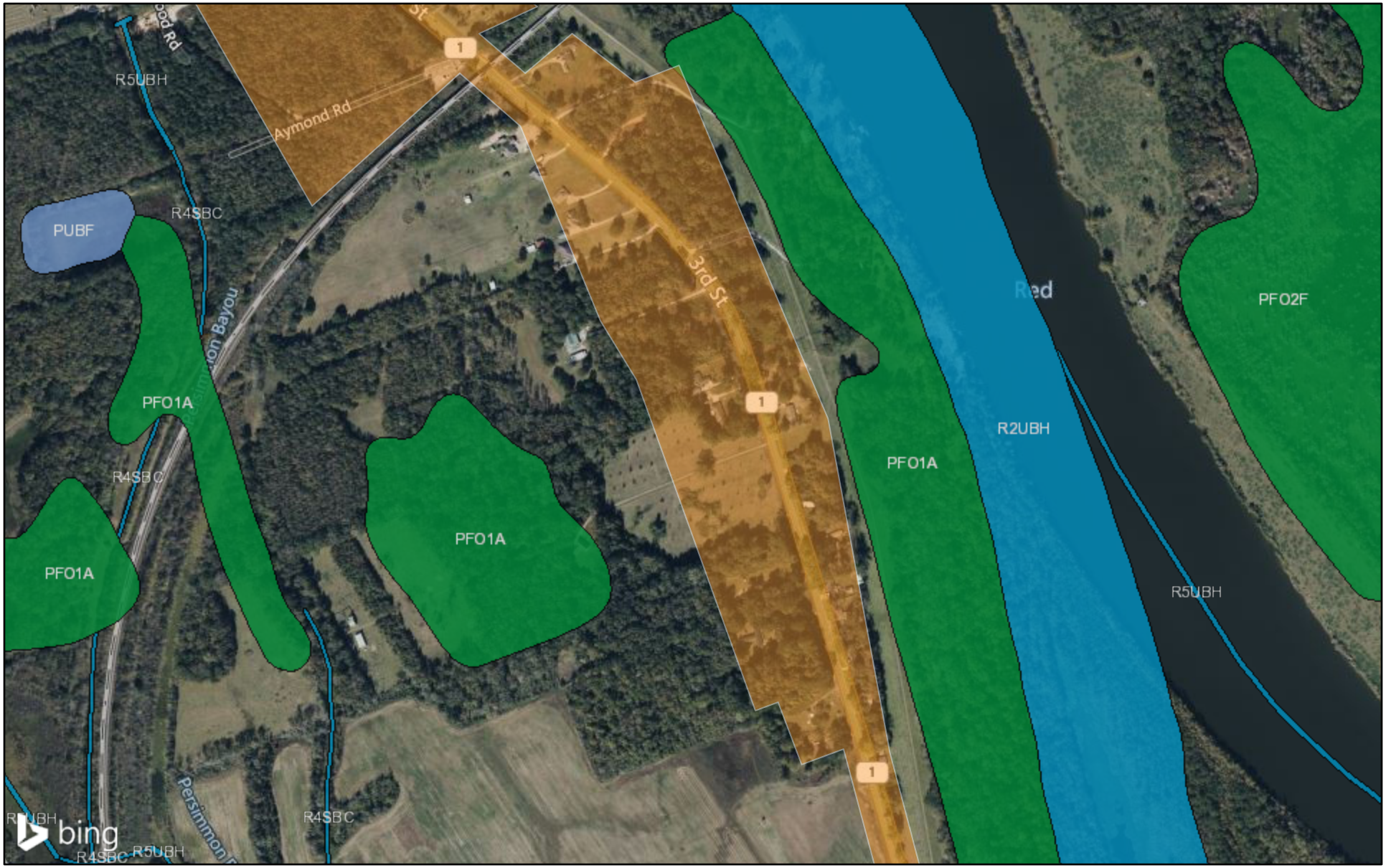
- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources



February 28, 2024

project area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

NEPAssist: Water Resources

February 28, 2024

project area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- **ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage area less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside 500-year floodplain.
- **ZONE D** Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS†

Identified 1983 | Identified 1990 | Otherwise Protected Areas

†Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 Base Flood Elevation Line; Elevation in Feet*
- (D)—(D) Cross Section Line
- (EL 987) Base Flood Elevation in Feet Where Uniform Within Zone*
- RM7× Elevation Reference Mark
- ×M1.5 River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFEs, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, A1-A30, AH, AO, A99, V, VE and V1-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 1/20 inch.

Coastal base flood elevations apply only landward of 0.0 NGVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For adjoining panels, see separately printed Map Index.

For description of Elevation Reference Marks, see Panel 220146 0010

MAP REPOSITORY
Utility Building
1546 Jackson Street
Alexandria, Louisiana 71309
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION:
AUGUST 2, 1974

FLOOD HAZARD BOUNDARY MAP REVISION:
DECEMBER 26, 1975

FLOOD INSURANCE RATE MAP EFFECTIVE:
JULY 17, 1978

FLOOD INSURANCE RATE MAP REVISIONS:
MAY 15, 1984
FEBRUARY 4, 1987
FEBRUARY 2, 1994
Map revised September 3, 1997 to update corporate limits, to change base flood elevations, to add base flood elevations, to change special flood hazard areas, to change zone designations, to add roads and road names, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
ALEXANDRIA,
LOUISIANA
RAPIDES PARISH

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
220146 0015 F

MAP REVISED:
SEPTEMBER 3, 1997

Federal Emergency Management Agency

KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations*
100-Year Flood Boundary
500-Year Flood Boundary
Base Flood Elevation Line With Elevation In Feet**
Base Flood Elevation In Feet Where Uniform Within Zone**
Elevation Reference Mark
Zone D Boundary
River Mile
Approximate 100- Year Flood Boundary

ZONE B
ZONE A1
ZONE A5
ZONE B
513
(EL 987)
RM7×
•M1.5
ZONE A

**Reference to the National Geodetic Vertical Datum of 1929

UNDEVELOPED COASTAL BARRIERS†

Identified 1983 | Identified 1990 | Otherwise Protected Areas

†Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFEs, and for any information on flooding that occurs prior to use of this map for property purchase or construction purposes.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Coastal base flood elevations apply only landward of 0.0 NGVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For adjoining map panels see separately printed Map Index.

INITIAL IDENTIFICATION:
JANUARY 10, 1975

FLOOD HAZARD BOUNDARY MAP REVISION:
AUGUST 30, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE:
SEPTEMBER 5, 1984

FLOOD INSURANCE RATE MAP REVISIONS:

Map revised September 3, 1997 to update corporate limits, to change base flood elevations, to add base flood elevations, to change special flood hazard areas, to change zone designations, to add roads and road names, to incorporate previously issued letters of map revision, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE
1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

RAPIDES PARISH, LOUISIANA
(UNINCORPORATED AREAS)

PANEL 255 OF 425

COMMUNITY-PANEL NUMBER
220145 0255 C

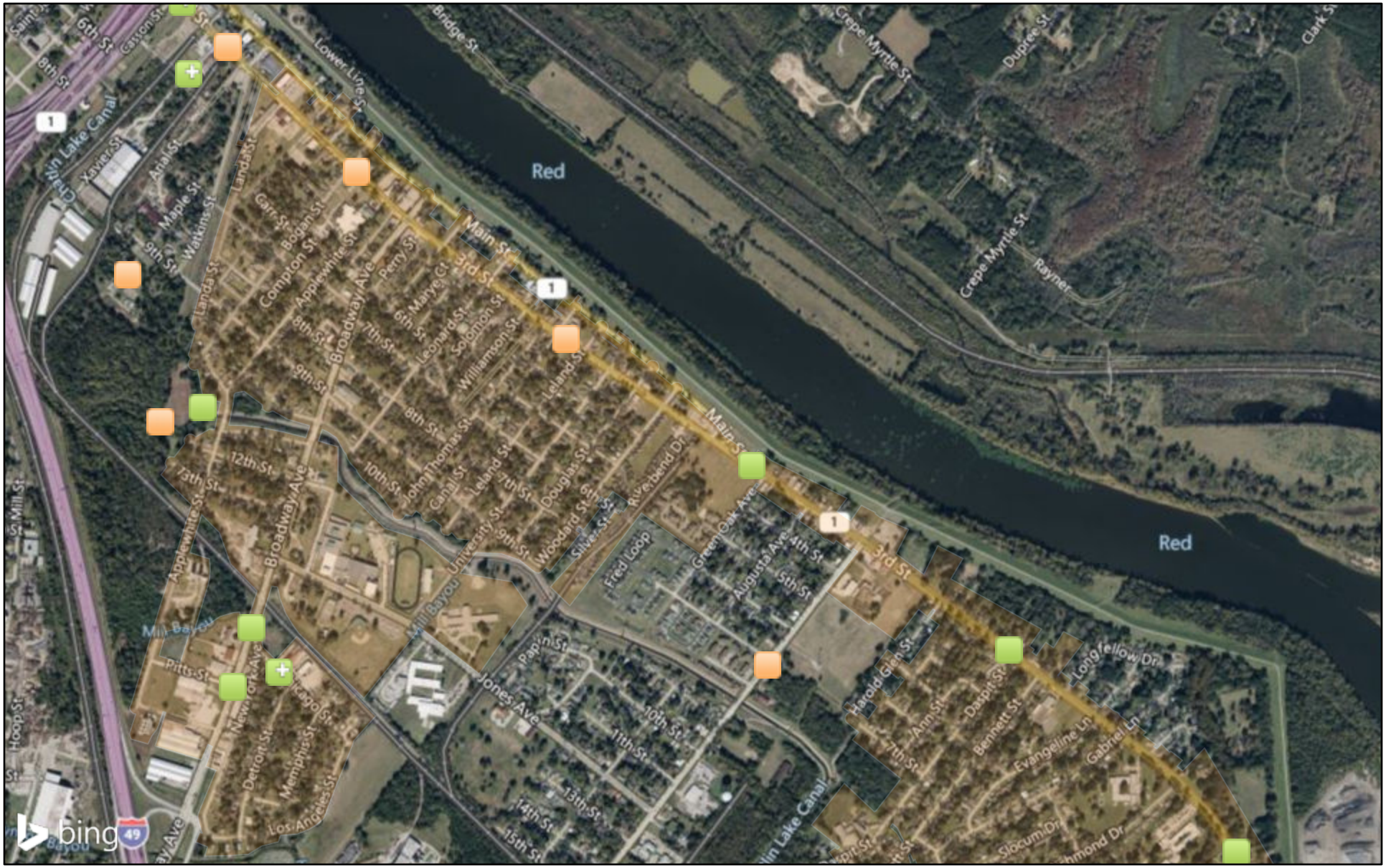
MAP REVISED:
SEPTEMBER 3, 1997

Federal Emergency Management Agency

Appendix D

Hazardous Materials

Alexandria NEPAssist- EPA Facilities



March 1, 2024

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Hazardous Waste (RCRAInfo)

Hazardous Waste (RCRAInfo)

Brownfields (ACRES)

project area

Alexandria NEPAssist- EPA Facilities

March 1, 2024

Hazardous Waste (RCRAInfo)

project area

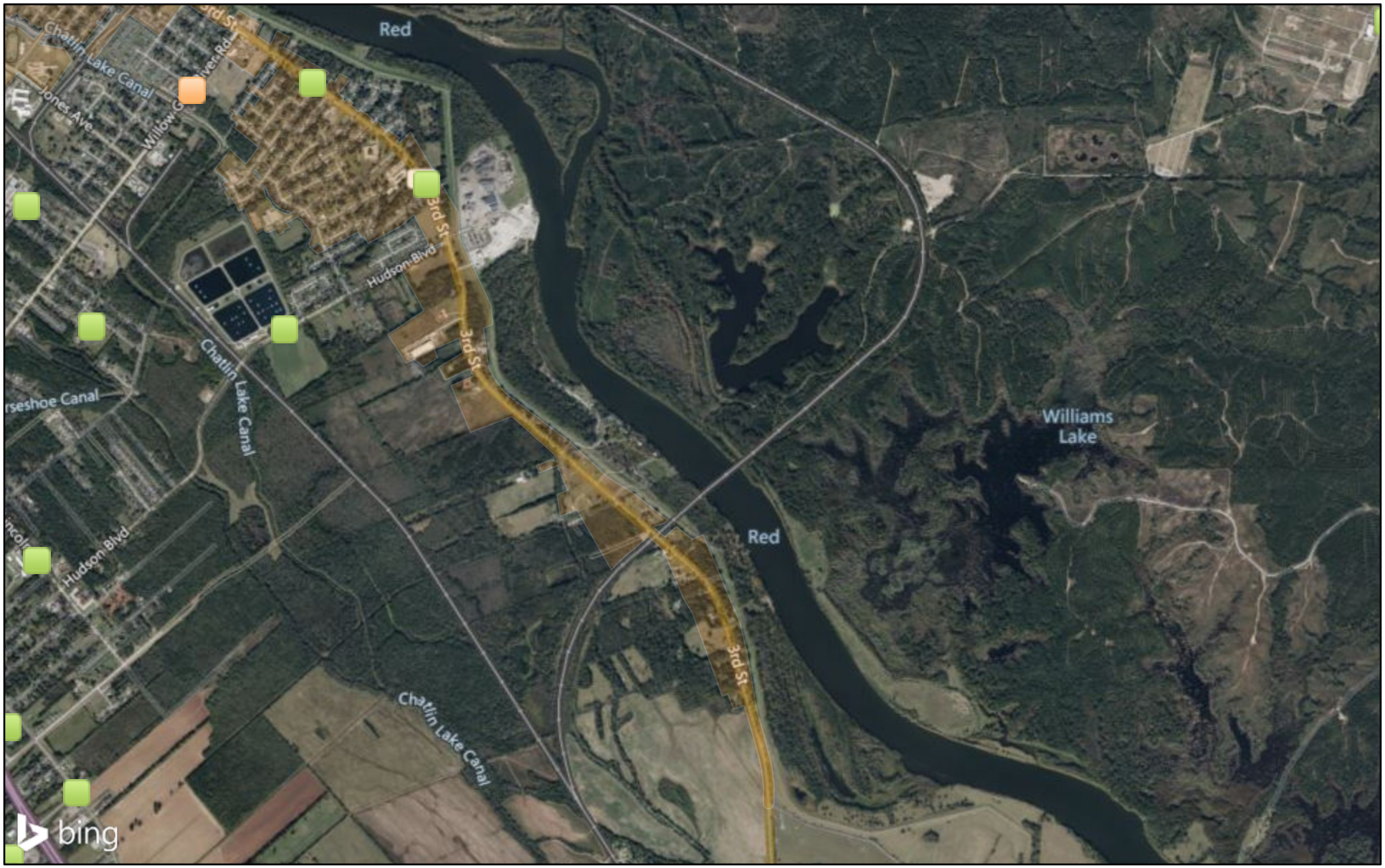
Brownfields (ACRES)

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Alexandria NEPAssist- EPA Facilities



March 1, 2024

Hazardous Waste (RCRAInfo)

Brownfields (ACRES)

project area

1:36,112

0 0.25 0.5 1 mi

0 0.42 0.85 1.7 km

Appendix E

Soils Report

United States Department of Agriculture

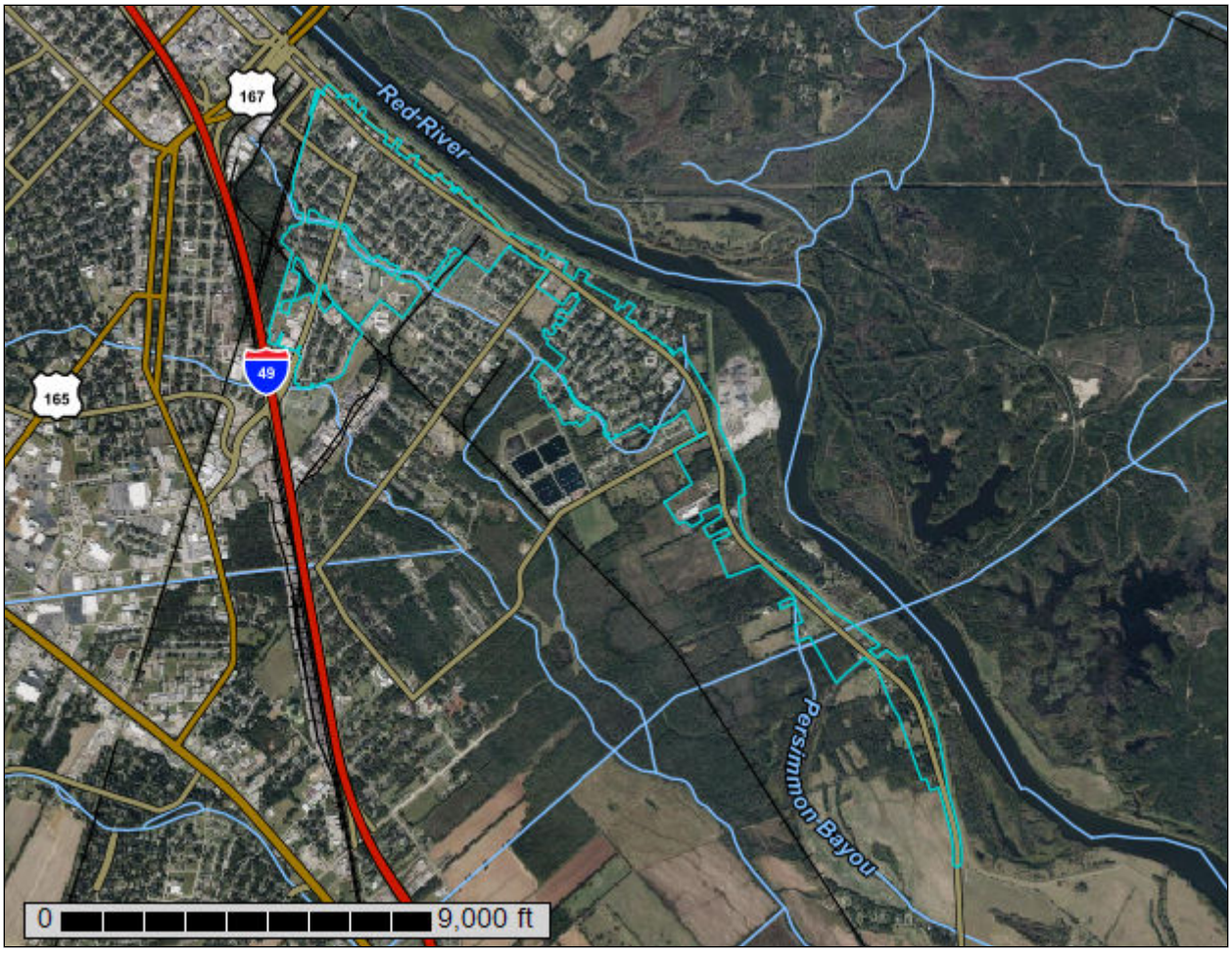
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Rapides Parish, Louisiana

Alexandria Natural Gas Pipeline Replacement



March 1, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

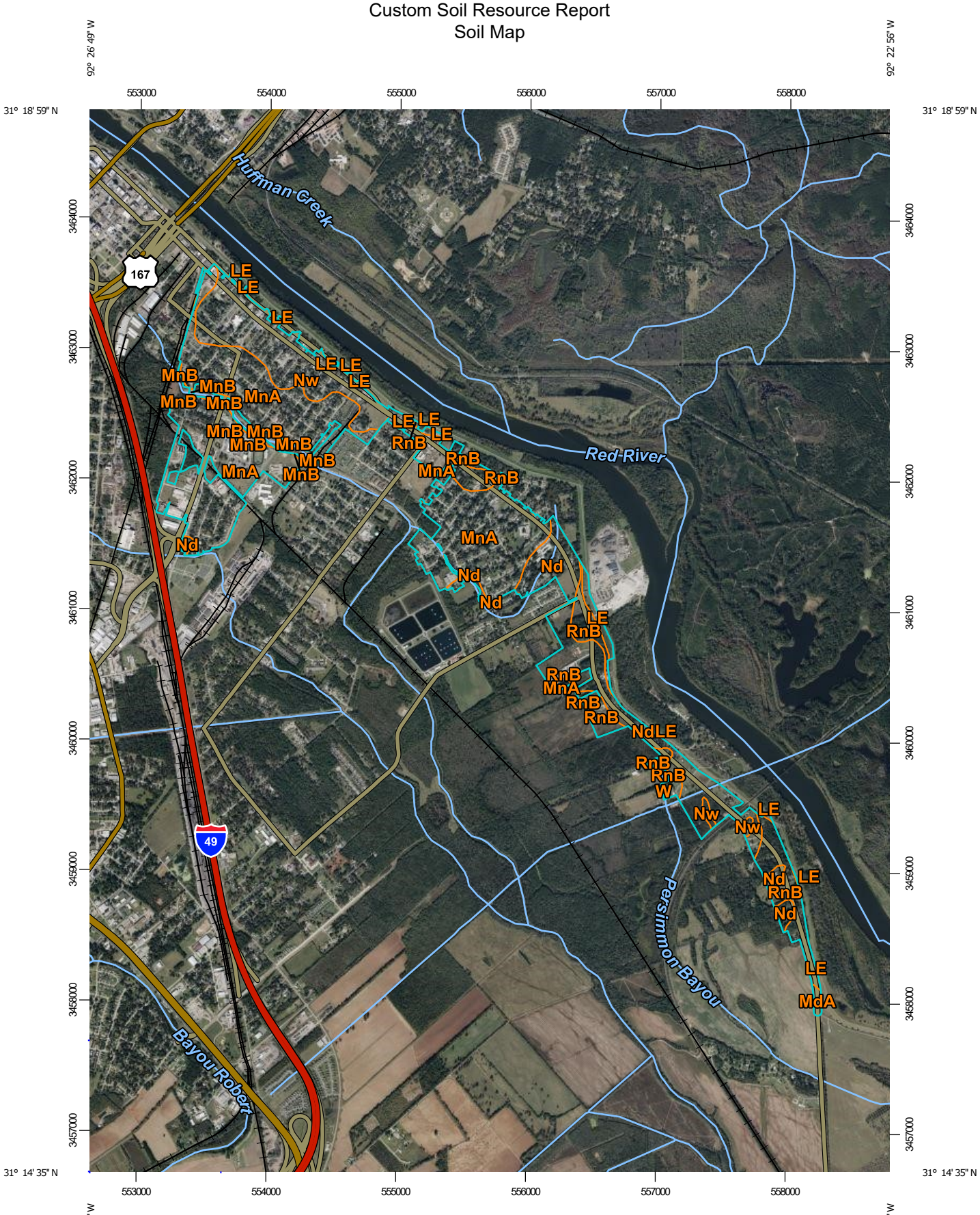
alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:39,700 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 1500 3000 6000 9000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rapides Parish, Louisiana
Survey Area Data: Version 19, Sep 14, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 7, 2022—Nov 13, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LE	Levees-Borrow pits complex, nearly level to strongly sloping, rarely flooded, frequently ponded	9.9	1.1%
MdA	Moreland silty clay loam, 0 to 1 percent slopes, rarely flooded	3.2	0.4%
MnA	Moreland clay, 0 to 1 percent slopes, rarely flooded	460.8	50.4%
MnB	Moreland clay, 0 to 3 percent slopes, rarely flooded	6.9	0.8%
Nd	Coushatta silt loam, 0 to 1 percent slopes	167.5	18.3%
Nw	Coushatta silty clay loam, 0 to 1 percent slopes	173.4	19.0%
RnB	Roxana very fine sandy loam, 0 to 3 percent slopes, gently undulating	91.7	10.0%
Ro	Roxana very fine sandy loam, 0 to 3 percent slopes, gently undulating, occasionally flooded	0.0	0.0%
W	Water	0.6	0.1%
Totals for Area of Interest		**914.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a

particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Rapides Parish, Louisiana

LE—Levees-Borrow pits complex, nearly level to strongly sloping, rarely flooded, frequently ponded

Map Unit Setting

National map unit symbol: 2lp7k
Elevation: 10 to 450 feet
Mean annual precipitation: 47 to 63 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 228 to 289 days
Farmland classification: Not prime farmland

Map Unit Composition

Levees: 60 percent
Pits, borrow: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Levees

Setting

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Spoil from pits

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Pits, Borrow

Setting

Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Mississippi alluvium, surface removed

Properties and qualities

Slope: 0 to 1 percent
Runoff class: Negligible
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: Frequent

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: D
Hydric soil rating: Yes

MdA—Moreland silty clay loam, 0 to 1 percent slopes, rarely flooded

Map Unit Setting

National map unit symbol: 2tgl8
Elevation: 40 to 210 feet
Mean annual precipitation: 45 to 63 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 219 to 291 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Moreland, silty clay loam, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Moreland, Silty Clay Loam

Setting

Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Red river clayey alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
Bw - 8 to 19 inches: silty clay
Bkss - 19 to 41 inches: clay
Akb - 41 to 63 inches: clay
Bkb - 63 to 83 inches: silty clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline (0.2 to 0.4 mmhos/cm)
Sodium adsorption ratio, maximum: 3.0
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Minor Components

Coushatta, silt loam
Percent of map unit: 7 percent
Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Latanier, clay
Percent of map unit: 2 percent
Landform: Natural levees
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F131CY003LA - Clay Cap Flood Plain
Hydric soil rating: No

Moreland, occasionally flooded
Percent of map unit: 1 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

MnA—Moreland clay, 0 to 1 percent slopes, rarely flooded

Map Unit Setting
National map unit symbol: 2tgl2
Elevation: 30 to 210 feet
Mean annual precipitation: 42 to 61 inches
Mean annual air temperature: 59 to 72 degrees F
Frost-free period: 219 to 315 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Moreland and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Moreland

Setting

Landform: Flood-plain steps
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Red river clayey alluvium

Typical profile

Ap - 0 to 16 inches: clay
Bw - 16 to 26 inches: clay
Bkss - 26 to 80 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.06 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 8 percent
Maximum salinity: Nonsaline (0.1 to 0.3 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Minor Components

Latanier

Percent of map unit: 10 percent
Landform: Natural levees
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F131CY003LA - Clay Cap Flood Plain
Hydric soil rating: No

Coushatta, silt loam

Percent of map unit: 4 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Moreland, occasionally flooded

Percent of map unit: 1 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

MnB—Moreland clay, 0 to 3 percent slopes, rarely flooded

Map Unit Setting

National map unit symbol: 2tgl4
Elevation: 50 to 220 feet
Mean annual precipitation: 45 to 63 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 219 to 291 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Moreland, gently undulating, rarely flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Moreland, Gently Undulating, Rarely Flooded

Setting

Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Red river clayey alluvium

Typical profile

Ap - 0 to 10 inches: clay
Bss - 10 to 14 inches: clay
Bkss - 14 to 58 inches: clay
2Ab - 58 to 63 inches: clay
2Btb - 63 to 80 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 inches

Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.1 to 0.3 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 30.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Minor Components

Latanier, rarely flooded

Percent of map unit: 6 percent
Landform: Natural levees
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F131CY003LA - Clay Cap Flood Plain
Hydric soil rating: No

Gallion, silt loam

Percent of map unit: 3 percent
Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Moreland, occasionally flooded

Percent of map unit: 1 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Nd—Coushatta silt loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2s5kx
Elevation: 40 to 210 feet
Mean annual precipitation: 42 to 61 inches

Mean annual air temperature: 59 to 77 degrees F
Frost-free period: 219 to 315 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Coushatta and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coushatta

Setting

Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Holocene loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 9 inches: silt loam
Bw - 9 to 28 inches: silt loam
Ck - 28 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.1 to 0.3 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Minor Components

Latanier, clay

Percent of map unit: 8 percent
Landform: Natural levees
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F131CY003LA - Clay Cap Flood Plain
Hydric soil rating: No

Moreland, clay

Percent of map unit: 6 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Moreland, occasionally flooded

Percent of map unit: 1 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Nw—Coushatta silty clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2tgl1
Elevation: 50 to 210 feet
Mean annual precipitation: 42 to 71 inches
Mean annual air temperature: 59 to 77 degrees F
Frost-free period: 219 to 315 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Coushatta and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coushatta

Setting

Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Holocene loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 11 inches: silty clay loam
Bw - 11 to 50 inches: silt loam
Ck - 50 to 80 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.1 to 0.2 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Minor Components

Moreland

Percent of map unit: 4 percent
Landform: Flood-plain steps
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

Moreland, occasionally flooded

Percent of map unit: 1 percent
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: No

RnB—Roxana very fine sandy loam, 0 to 3 percent slopes, gently undulating

Map Unit Setting

National map unit symbol: 2tglg
Elevation: 30 to 150 feet
Mean annual precipitation: 53 to 61 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 219 to 315 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Roxana and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Roxana

Setting

Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Holocene loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 5 inches: very fine sandy loam
C - 5 to 35 inches: very fine sandy loam
Ck - 35 to 80 inches: stratified very fine sandy loam to silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.1 to 0.3 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Minor Components

Coushatta

Percent of map unit: 8 percent
Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Roxana, frequently flooded

Percent of map unit: 2 percent
Landform: Natural levees

Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: Yes

Ro—Roxana very fine sandy loam, 0 to 3 percent slopes, gently undulating, occasionally flooded

Map Unit Setting

National map unit symbol: 2tgln
Elevation: 50 to 150 feet
Mean annual precipitation: 45 to 63 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 228 to 291 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Roxana, occasionally flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Roxana, Occasionally Flooded

Setting

Landform: Natural levees
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Holocene loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 6 inches: very fine sandy loam
C1 - 6 to 47 inches: very fine sandy loam
C2 - 47 to 65 inches: stratified very fine sandy loam
C3 - 65 to 80 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent

Maximum salinity: Nonsaline (0.1 to 0.3 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Minor Components

Coushatta

Percent of map unit: 6 percent
Landform: Natural levees
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: No

Roxana, frequently flooded

Percent of map unit: 3 percent
Landform: Natural levees
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F131CY002LA - Loamy Flood Plain
Hydric soil rating: Yes

Moreland, frequently flooded

Percent of map unit: 1 percent
Landform: Natural levees
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F131CY005LA - Clayey Flood Plain
Hydric soil rating: Yes

W—Water

Map Unit Setting

National map unit symbol: 1qvs3
Mean annual precipitation: 51 to 68 inches
Mean annual air temperature: 55 to 77 degrees F
Frost-free period: 228 to 291 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: No

Appendix F

Biological Resources

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
Phone: (337) 291-3100 Fax: (337) 291-3139

In Reply Refer To: March 01, 2024
Project Code: 2024-0056785
Project Name: City of Alexandria- Lower 3rd Street Neighborhood Area Gas System Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
(337) 291-3100

PROJECT SUMMARY

Project Code: 2024-0056785

Project Name: City of Alexandria- Lower 3rd Street Neighborhood Area Gas System Replacement

Project Type: Natural Gas Distribution

Project Description: This natural gas pipeline replacement project includes the replacement of approximately 33,000 linear feet of gas mains and associated service lines.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@31.2799093,-92.40705286005633,14z

Counties: Rapides County, Louisiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Red-cockaded Woodpecker *Picoides borealis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered
Whooping Crane *Grus americana* Population: U.S.A (Southwestern Louisiana) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Department of Transportation
Name: Elizabeth Williams
Address: 55 Broadway
City: Cambridge
State: MA
Zip: 02142
Email elizabeth.williams1@dot.gov
Phone: 8572599218

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

COMMON NAME	SCIENTIFIC NAME	GLOBAL RANK	STATE RANK	FEDERAL STATUS	STATE STATUS	PARISH
Alligator Snapping Turtle	Macrochelys temminckii	G3	S3	Proposed Threatened	Restricted	Acadia, Allen, Ascension, Avoyelles, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Caldwell, Catahoula, Concordia, De Soto, East Baton Rouge, East Carroll, Franklin, Grant, Iberia, Iberville, Jefferson, La Salle, Lafayette, Lafourche, Livingston, Madison, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Sabine, St. Charles, St. John the Baptist, St. Landry, St. Martin, St. Tammany, Tangipahoa, Tensas, Terrebonne, Union, Vernon, Washington, West Feliciana, Winn
Atlantic Camas	Camassia scilloides	G4G5	S3			Bossier, Caddo, Morehouse, Natchitoches, Rapides, Webster, Winn
Bachman's Sparrow	Peucaea aestivalis	G3	S3			Allen, Beauregard, Bienville, Bossier, Calcasieu, Claiborne, Grant, Jackson, Jefferson Davis, Livingston, Natchitoches, Rapides, Sabine, St. Tammany, Tangipahoa, Vernon, Washington
Bald Eagle	Haliaeetus leucocephalus	G5	S3	Delisted	Delisted	Ascension, Assumption, Avoyelles, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Caldwell, Cameron, Catahoula, Claiborne, Concordia, De Soto, East Baton Rouge, Franklin, Grant, Iberia, Iberville, Jackson, Jefferson, La Salle, Lafourche, Livington, Morehouse, Natchitoches, Orleans, Ouachita, Plaquemines, Pointe Coupee, Rapides, Red River, Richland, Sabine, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Tensas, Terrebonne, Union, Vermilion, West Baton Rouge, West Feliciana
Bay Starvine	Schisandra glabra	G3	S3			Caldwell, Catahoula, East Feliciana, Evangeline, Iberia, Jackson, Lincoln, Natchitoches, Rapides, St. Helena, St. Mary, West Feliciana, Winn
Bayhead Swamp	Bayhead swamp	G3?	S3			Beauregard, Jackson, Natchitoches, Ouachita, Rapides, St. Tammany, Vernon, Washington, Winn
Big Brown Bat	Eptesicus fuscus	G5	S2			Allen, Beauregard, Bienville, Bossier, Caldwell, De Soto, Grant, Jackson, La Salle, Lincoln, Natchitoches, Orleans, Ouachita, Rapides, Sabine, St. Helena, Tangipahoa, Tensas, Union, Vernon, West Feliciana, Winn

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Blue Sucker	Cycleptus elongatus	G3G4	S3	Beauregard, Bossier, Caddo, Calcasieu, Concordia, Morehouse, Plaquemines, Rapides, Red River, Sabine, Union, Vernon
Bluehead Shiner	Pteronotropis hubbsi	G3	S2	Avoyelles, Catahoula, La Salle, Madison, Morehouse, Ouachita, Rapides, Union
Bog Moss	Mayaca fluviatilis	G5	S2	Evangeline, Rapides, St. Charles, St. Tammany, Washington
Bottomland Hardwood Forest	Bottomland hardwood forest	G4G5	S4	Avoyelles, Bossier, Caddo, Calcasieu, Caldwell, Catahoula, Concordia, East Baton Rouge, East Carroll, Franklin, Grant, Iberville, Lincoln, Livingston, Madison, Natchitoches, Orleans, Plaquemines, Rapides, Richland, Sabine, St. Landry, St. Martin, St. Tammany, Tangipahoa, Tensas, Union, Vernon, Webster, West Baton Rouge, West Carroll, Winn
Calcasieu Creek Crawfish	Procambarus pentastylus	G3	S3	Allen, Beauregard, Calcasieu, Rapides, Vernon
Calcasieu Painted Crawfish	Faxonius hathawayi blacki	G3T2	S1	Allen, Beauregard, Calcasieu, Rapides, Vernon
Chub Shiner	Notropis potteri	G4	S3	Avoyelles, Bossier, Caddo, Caldwell, Catahoula, Concordia, Grant, Natchitoches, Rapides, Red River
Coastal Plain Lobelia	Lobelia flaccidifolia	G5	S3	Allen, Beauregard, Calcasieu, Jefferson Davis, Rapides, Vernon
Creeper	Strophitus undulatus	G5	S2	Claiborne, Lincoln, Madison, Rapides, Union
Crested Coralroot	Hexalectris spicata	G5	S2	Caldwell, Claiborne, Evangeline, Jackson, Lincoln, Natchitoches, Ouachita, Rapides, Union, Vernon, Webster, West Feliciana
Cypress Swamp	Cypress swamp	G4G5	S4	Ascension, Bienville, Bossier, Catahoula, Evangeline, Franklin, Iberia, Iberville, Rapides, Richland, St. Landry, St. Martin, St. Mary, Tangipahoa, Vermilion, Webster

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Cypress-tupelo Swamp	Cypress-tupelo swamp	G3G5	S4	Ascension, Assumption, Bossier, East Baton Rouge, Franklin, Iberia, Iberville, Livingston, Natchitoches, Pointe Coupee, Rapides, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, West Feliciana, Winn
Dusky Roadside-Skipper	Amblyscirtes alternata	G2G3	S2S3	Caddo, Natchitoches, Rapides, St. Helena, Vernon
Dusted Skipper	Atrytonopsis hianna	G4G5	S3	Bienville, Caldwell, East Baton Rouge, East Feliciana, Grant, Jackson, La Salle, Livingston, Natchitoches, Rapides, St. Helena, Tangipahoa, Vernon, Winn
Eastern Hog-nosed Snake	Heterodon platirhinos	G5	S3	Bienville, Catahoula, Rapides, Sabine, St. Tammany, Tangipahoa, Vernon, Winn
Fleming Calcareous Prairie	Fleming calcareous prairie	G1	S1	Natchitoches, Rapides, Vernon
Fleming Glade	Fleming glade	G1	S1	Rapides
Frosted Elfin	Callophrys irus	G2G3	S2S3	Bossier, Caddo, Claiborne, De Soto, Grant, Natchitoches, Rapides, Red River, Sabine, Vernon, Webster
Georgia Satyr	Neonympha areolatus	G3G4	S3	Beauregard, Calcasieu, Evangeline, Grant, Natchitoches, Rapides, St. Helena, St. Tammany, Vernon
Gulf Chub	Macrhybopsis tomellerii	GNR	SNR	Allen, East Baton Rouge, East Feliciana, Pointe Coupee, Rapides, St. Helena, West Baton Rouge, West Feliciana
Gulf Coast Waterdog	Necturus beyeri	GNR	S3	Allen, Ascension, Beauregard, East Feliciana, Grant, Livingston, Rapides, Sabine, St. Helena, St. Tammany, Tangipahoa, Vernon, Washington
Hardwood Slope Forest	Hardwood slope forest	G2G3	S3	Bienville, Bossier, Caddo, Caldwell, Catahoula, East Carroll. East Feliciana, Evangeline, Grant, Jackson, La Salle, Natchitoches, Ouachita, Rapides, St.

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

					Helena, St. Mary, St. Tammany, Tangipahoa, Union, Washington, West Carroll, West Feliciana
Henslow's Sparrow	Centronyx henslowii	G4	S3N		Allen, Beauregard, Bossier, Morehouse, Natchitoches, Rapides, Sabine, St. Tammany, Tangipahoa, Vernon
Hispid Pocket Mouse	Chaetodipus hispidus	G5	S2		Beauregard, Natchitoches, Rapides, Sabine, Vernon
Hurter's Spadefoot	Scaphiopus hurterii	G5	S3		Bienville, Bossier, Caddo, Calcasieu, De Soto, Grant, Jackson, La Salle, Lincoln, Natchitoches, Ouachita, Rapides, Red River, Sabine, Union, Vernon, Webster, Winn
Ironcolor Shiner	Notropis chalybaeus	G4	S3		Beauregard, Bossier, Grant, Jackson, Lincoln, Madison, Morehouse, Rapides, St. Tammany, Tangipahoa, Tensas, Washington, Webster, Winn
Javelin Crawfish	Procambarus jaculus	G4	S1		Avoyelles, Rapides
King's Hairstreak	Satyrium kingi	G3G4	SU		Jefferson, Natchitoches, Orleans, Rapides, St. Tammany, Tangipahoa, Vernon, Washington, West Feliciana
Kisatchie Painted Crawfish	Faxonius maletae	G2	S2		Grant, Natchitoches, Rapides, Red River, Sabine, Winn
Long-tailed Weasel	Mustela frenata	G5	S3	Restricted	Allen, Bienville, Bossier, East Baton Rouge, Lincoln, Livingston, Ouachita, Pointe Coupee, Rapides, Sabine, St. James, St. Tammany, Union, Vernon, West Feliciana
Louisiana Bluestar	Amsonia ludoviciana	G3	S3		Allen, Bienville, Calcasieu, Grant, Natchitoches, Ouachita, Rapides, Red River, Sabine, Union, Vernon, Winn
Louisiana Needlefly	Leuctra szczytkoi	G1	S1		Grant, Jackson, Ouachita, Rapides

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Louisiana Pearlshell	Margaritifera hembeli	G1G2	S1	Threatened	Threatened	Grant, Rapides
Louisiana Pigtoe	Pleurobema riddellii	G1G2	S1S2			Allen, Natchitoches, Rapides, Red River, Vernon
Louisiana Pinesnake	Pituophis ruthveni	G1G2	S2	Threatened	Threatened	Beauregard, Bienville, Grant, Jackson, Natchitoches, Rapides, Sabine, Vernon
Louisiana Slimy Salamander	Plethodon kisatchie	G3G4	S1			Catahoula, Grant, Jackson, La Salle, Natchitoches, Ouachita, Rapides, Winn
Meske's Skipper	Hesperia meskei	G3G4	S1			Natchitoches, Rapides, Vernon
Millet Beak Sedge	Rhynchospora miliacea	G5	S2			Allen, Calcasieu, Livingston, Rapides, St. Mary, Terrebonne, Vernon, Winn
Mixed Hardwood-loblolly Forest	Mixed hardwood-loblolly forest	G3G4	S3			Allen, Bienville, Bossier, Caddo, Caldwell, Catahoula, Claiborne, East Feliciana, Evangeline, Franklin, Grant, Jackson, La Salle, Lincoln, Natchitoches, Ouachita, Rapides, Richland, Sabine, St. Tammany, Tangipahoa, Union, Vernon, Washington, Webster, West Carroll, West Feliciana, Winn
Mottled Duskywing	Erynnis martialis	G3	S3			Natchitoches, Rapides, St. Helena, St. Tammany, Vernon
Nodding Pogonia	Triphora trianthophora	G4	S2			Bossier, Caddo, Iberville, Natchitoches, Rapides, St. Martin, West Feliciana
Northern Burmannia	Burmannia biflora	G4G5	S3			Bienville, Bossier, Caddo, Catahoula, De Soto, Grant, La Salle, Natchitoches, Ouachita, Rapides, St. Tammany, Vernon, Webster, Winn

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Northern Long-eared Bat	Myotis septentrionalis	G2G3	S1	Threatened	Threatened	Avoyelles, Bienville, Bossier, Caldwell, Catahoula, De Soto, Grant, Jackson, La Salle, Morehouse, Natchitoches, Ouachita, Rapides, Richland, Sabine, Union, Vernon, Webster, West Feliciana, Winn
Northern Red Oak	Quercus rubra	G5	S1S3			Caddo, Caldwell, De Soto, East Carroll, Morehouse, Ouachita, Rapides, Richland, St. Tammany, Union, Washington, West Carroll
One-flowered Broomrape	Orobanche uniflora	G5	S1			Rapides, Tangipahoa, Vernon
Ouachita Fencing Crawfish	Faxonella creaseri	G2	S2			Avoyelles, Bienville, Caldwell, Catahoula, Claiborne, Grant, Jackson, La Salle, Lincoln, Natchitoches, Ouachita, Rapides, Red River, Union, Webster, Winn
Pepper and Salt Skipper	Amblyscirtes hegon	G5	SU			Bienville, Claiborne, De Soto, Grant, Lincoln, Natchitoches, Rapides, Red River, Sabine, Union, Vernon, Webster, Winn
Pine Flatwoods	Pine flatwoods	G2G3	S3			Allen, Grant, Rapides, St. Tammany, Vernon
Pitcher Plant Spiketail	Cordulegaster sarracenia	GNR	S1			Grant, Jackson, Natchitoches, Ouachita, Rapides, Vernon
Prairie Evening Primrose	Oenothera pilosella ssp. sessilis	G5T2	S1?			Allen, Bossier, Claiborne, Jefferson Davis, Morehouse, Rapides
Pygmy Rattlesnake	Sistrurus miliarius	G5	S2			Allen, Bienville, Bossier, Caddo, Catahoula, De Soto, East Baton Rouge, East Feliciana, Evangeline, Grant, Iberia, Jackson, Lafayette, Livington, Morehouse, Natchitoches, Orleans, Plaquemines, Rapides, Sabine, St. Bernard, St. Helena, St. Landry, St. Tammany, Tangipahoa, Union, Washington, Winn
Red Milkweed	Asclepias rubra	G4G5	S3			Beauregard, Natchitoches, Rapides, Vernon

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Red River Mudpuppy	Necturus louisianensis	G4	S3			Bienville, East Carroll, Evangeline, Grant, Jackson, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Union, Webster, Winn
Red-cockaded Woodpecker	Dryobates borealis	G3	S2	Endangered/Proposed Threatened	Endangered	Allen, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Catahoula, De Soto, Evangeline, Grant, Jackson, La Salle, Lincoln, Livingston, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Sabine, St. Helena, St. Tammany, Tangipahoa, Union, Vernon, Webster, Winn
Redspot Darter	Etheostoma artesiae	G5	S3			Catahoula, East Feliciana, Grant, La Salle, Natchitoches, Rapides, Sabine, Washington, West Feliciana
Sandbank Pocketbook	Lampsilis satura	G2?	S2			Allen, Beauregard, Calcasieu, Rapides, Vernon
Sandhill Crane	Antigone canadensis	G5	S2N			Calcasieu, Cameron, Franklin, Madison, Morehouse, Rapides, Vermilion, West Carroll
Sandstone Glade	Sandstone glade	G1G2	S2			Natchitoches, Rapides, Sabine, Vernon
Shortleaf Pine/oak-hickory Forest	Shortleaf pine/oak-hickory forest	G2G3	S1			Bienville, Bossier, Caddo, De Soto, Grant, Lincoln, Natchitoches, Rapides, St. Tammany, Tangipahoa, Vernon, Washington, Webster, Winn
Shrub Swamp	Shrub swamp	GNR	S4			Avoyelles, Concordia, Rapides
Silver-haired Bat	Lasionycteris noctivagans	G3G4	SNA			Avoyelles, Catahoula, La Salle, Lincoln, Rapides, Vernon, Winn
Slash Pine/Post Oak Forest	Slash pine/post oak	GNR	S3S4			Rapides, St. Tammany
Slender Glass Lizard	Ophisaurus attenuatus	G5	S3			Acadia, Allen, Beauregard, Bossier, Caddo, Calcasieu, Caldwell, Cameron, De Soto, Evangeline, Grant, Morehouse, Natchitoches, Ouachita, Rapides, St. Tammany, Vermilion, Vernon, Webster, Winn

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

Small Stream Forest	Small stream forest	G3	S2		Bienville, Bossier, Caddo, Claiborne, De Soto, East Baton Rouge, East Feliciana, Franklin, Grant, La Salle, Lincoln, Livingston, Natchitoches, Rapides, Sabine, St. Helena, St. Tammany, Tangipahoa, Vernon, Washington, Webster, West Feliciana, Winn
Small-toothed Caric Sedge	Carex microdonta	G4	S3		Acadia, Calcasieu, Grant, Iberia, La Salle, Natchitoches, Rapides, Vernon, Winn
Snow Melanthera	Melanthera nivea	G5	S2		Ascension, Avoyelles, Concordia, Iberia, Iberville, La Salle, Rapides, St. Helena, Tensas
Southern Crawfish Frog	Lithobates areolatus areolatus	G4T4	S1		Acadia, Allen, Beauregard, Caddo, Ouachita, Rapides, Richland, Vernon, Webster
Southern Creekmussel	Pseudodontoideus subvexus	G3	S1		Ascension, Beauregard, Calcasieu, Livingston, Rapides, Vernon, Winn
Southern Hickorynut	Obovaria arkansasensis	GNR	S1S2		Allen, Beauregard, East Baton Rouge, East Feliciana, Livingston, Natchitoches, Rapides, Sabine, St. Helena, St. Tammany, Vernon
Southern Lady's-slipper	Cypripedium kentuckiense	G3	S1		Bienville, Bossier, Caldwell, Catahoula, De Soto, Evangeline, Grant, Jackson, Lincoln, Natchitoches, Ouachita, Rapides, Red River, Sabine, Union, Vernon, Winn
Southern Red-backed Salamander	Plethodon serratus	G5	S1	Prohibited	Catahoula, De Soto, Natchitoches, Rapides
Southern Shield Woodfern	Dryopteris ludoviciana	G4	S2		Bienville, East Baton Rouge, East Feliciana, Grant, Iberia, Rapides, St. Mary, Tangipahoa, West Feliciana
Southwestern Creek Crawfish	Procambarus dupratzi	G5	S2		Beauregard, Natchitoches, Rapides, Sabine, Vernon

Louisiana Department of Wildlife & Fisheries
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Strecker's Giant-Skipper	Megathymus streckeri	G5	S1		Bienville, De Soto, Grant, Natchitoches, Rapides, Red River, Sabine, Vernon, Winn
Summer Spurge	Euphorbia discoidalis	G4	S1		Rapides
Teche Painted Crawfish	Faxonius hathawayi	G3	S3		Acadia, Allen, Evangeline, Jefferson Davis, Rapides
Texas Emerald	Somatochlora margarita	G2G3	S2		Bienville, Bossier, Caldwell, Claiborne, Jackson, Lincoln, Natchitoches, Ouachita, Rapides, Red River, Webster, Winn
Threeway Sedge	Dulichium arundinaceum	G5	S2		Bienville, Caddo, Rapides, St. Tammany, Washington
Tricolored Bat	Perimyotis subflavus	G3G4	S4	Proposed Endangered	Allen, Bienville, Bossier, Caddo, Caldwell, Catahoula, De Soto, Grant, Jackson, La Salle, Lincoln, Natchitoches, Ouachita, Rapides, Red River, Sabine, St. Tammany, Tangipahoa, Union, Vernon, Webster, West Feliciana, Winn
Waterbird Nesting Colony	Colonial Waterbird Nesting Area	GNR	SNR		Acadia, Allen, Ascension, Assumption, Avoyelles, Beauregard, Bossier, Caddo, Calcasieu, Caldwell, Cameron, Catahoula, Concordia, Evangeline, Franklin, Grant, Iberia, Iberville, Jefferson, Jefferson Davis, Lafourche, Livingston, Madison, Morehouse, Natchitoches, Orleans, Ouachita, Plaquemines, Pointe Coupee, Rapides, Red River, Richland, Sabine, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Tensas, Terrebonne, Vermilion, Vernon, Washington, Webster, West Baton Rouge, West Feliciana
Western Acidic Longleaf Pine Savanna	Western acidic longleaf pine savanna	G2G3	S2		Allen, Beauregard, Calcasieu, Jefferson Davis, Natchitoches, Rapides, Vernon
Western Chicken Turtle	Deirochelys reticularia miaria	G5T5	S2		Acadia, Allen, Avoyelles, Beauregard, Caddo, Calcasieu, Caldwell, Cameron, Catahoula, Concordia, De Soto, East Carroll, Evangeline, Franklin, Iberia, Iberville, Jefferson Davis, Lincoln, Morehouse, Natchitoches, Ouachita, Pointe Coupee, Rapides, Richland, St. John the

Louisiana Department of Wildlife & Fisheries
Source: Rare Species and Natural Communities by Parish | Louisiana Department of Wildlife and Fisheries

				Baptist, St. Landry, St. Martin, Union, Vermilion, Vernon, West Baton Rouge, West Carroll, Winn
Western Hillside Seepage Bog	Western hillside seepage bog	G2G3	S1	Beauregard, Grant, Natchitcohes, Rapides, Vernon, Winn
Western Sand Darter	Ammocrypta clara	G3	S2	Avoyelles, Beauregard, Bossier, Caddo, De Soto, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Sabine, Union, Vernon
Western Umbrella Sedge	Fuirena simplex var. aristulata	G5T4	S1	Natchitoches, Rapides, St. Charles, St. Landry
Western Upland Longleaf Pine Forest	Western upland longleaf pine forest	G2G3	S3	Allen, Beauregard, Bienville, Grant, Natchitoches, Rapides, Sabine, Vernon, Winn
Worm-eating Warbler	Helmitheros vermivorum	G5	S3B	Catahoula, East Feliciana, La Salle, Natchitoches, Rapides, St. Helena, Vernon, West Feliciana
Yellow Coneflower	Ratibida pinnata	G5	S2	Bossier, Caddo, Caldwell, La Salle, Natchitoches, Rapides, Vernon, Winn
Yucca Giant-Skipper	Megathymus yuccae	G5	S1	Caddo, Catahoula, Natchitoches, Rapides, Tangipahoa, Vernon, West Feliciana

Appendix G

Cultural Resources

March 14, 2024

Kristin Sanders
State Historic Preservation Officer
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-4241

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Kristin Sanders:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106).

Project Description/Background

The Undertaking involves the replacement of approximately 33,000 liner feet of 4- inch and 2-inch aged steel gas mains with polyethylene (PE) gas mains within the existing right-of-way (ROW) and utility easements, which will enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system. The existing ROW encompasses various roadways, sidewalks, water mains, gas mains, sewer gravity lines, and telecommunication cables. In rare situations, a small easement may need to be acquired in areas where a gas main could not be extended around a 90-degree corner because of existing utilities; however, this work would take place within previously disturbed soils or immediately adjacent to previously disturbed ROW. The pipeline replacement activities would include the installation of replacement pipeline adjacent to and approximately one to five feet away from the existing pipeline by directional boring and trenching construction methods. The maximum depth of ground disturbance for the pipeline replacement is expected to be six feet, and the width of disturbance will be between 12 and 48 inches.

The Undertaking will also involve the replacement of service lines on properties adjacent to the pipelines. Most service lines are expected to extend to the front of the buildings, typically approximately 30 feet into the property. Ground disturbance for the service line replacements is expected to be two feet in depth and one to 12 to 18 inches in width. After utility services have been moved to the replacement pipeline, the City will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the ROW, which ranges from 50 feet in residential areas to 100 feet for highways, and adjacent parcels where the service line replacements may take place. The APE extends from 31.30546, -92.43761 to the north to 31.25405, -92.38819 to the south. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential effects of the Undertaking and extends to the depth of proposed ground disturbance of up to six feet. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

Historic Architecture

A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. As a result, two archaeological surveys and 12 archaeological sites were identified.

One of the identified surveys overlaps with the APE. In 2022, Sura, Inc. conducted a Phase I archaeological survey of 5.8 acres for a proposed outfall channel to prevent flooding. This survey took place in the northern portion of the APE between the Red River and the Chatlin Lake Canal. No archaeological sites were identified as a result of this survey. In 1982, an underwater survey was conducted near but outside of the southern end of the APE. The purpose of the survey was to investigate magnetic anomalies within the Red River. No cultural material was identified within the APE.

Twelve sites were identified within one quarter of a mile but outside of the APE (see Table 1). Each of the twelve sites were recorded in the early 1980s during a cultural resource survey for a proposed expressway. The survey area is not provided on the Louisiana Cultural Resource Map and the associated report is not accessible. Information on the site forms state the survey originally provided a general location of several historic houses that were to be demolished. A SHPO staff member generated a site form and subsequent site number for each individual house within the generalized area. Only one site, 16RA287, is potentially eligible for listing in the NRHP and all others are not eligible.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16RA286	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA287	Historic house	Potentially Eligible	Hartfield, Price, and Green 1981
16RA292	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA296	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA299	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA301	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA309	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA310	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA311	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA312	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA313	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA315	Historic house	Not Eligible	Hartfield, Price, and Green 1981

An examination of Web Soil Survey data within the APE reveals seven soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 2. Well drained and moderately well drained soils can be indicative of human habitation during both the pre-contact and historic periods. Less than 50 percent of soils within the APE are well draining soil types. Typically, slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE are less than 15 percent slope. Almost half of the APE consists of soils indicating some suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located along the western bank of the Red River and overlaps or abuts the Sandy Bayou and Hynson Bayou in certain portions. Proximity to major waterways, such as the Red River, can indicate a suitable environment for both precontact and historic human activity.

Table 2. Soil Types within the APE

Soil Type	Drainage Class	Slope	Percent of APE
Levees-Borrow pits complex	NA	Nearly level to strongly sloping	1.1
Moreland silty clay loam	Somewhat poorly drained	0-1 percent	<1
Moreland clay	Somewhat poorly drained	0-1 percent	50.4
Moreland clay, 0 to 3 percent slopes	Somewhat poorly drained	0-3 percent	<1
Coushatta silt loam	Well drained	0-1 percent	18.3
Coushatta silty clay loam	Well drained	0-1 percent	19
Roxana very fine sandy loam	Well drained	0-3 percent	10

Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the

likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

Historic aerial photography from 1955 and 1971 was examined for archaeological resource sensitivity within the APE. The 1955 imagery reflects the development shown in the 1957 topographic map, with dense clusters of residential development in the northern portion of the APE, while the central and southern portions of the APE show agricultural fields and sparse residences in the more rural setting. The 1971 imagery shows that development increased in the northern portion of the APE while the central and southern portions remained much the same.

The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Consulting Party Outreach

PHMSA identified parties that may be interested in the Undertaking and its effects on historic properties. PHMSA invites the individuals/organizations copied on this letter to participate as Section 106 consulting parties. Invited parties should indicate their willingness to participate as a consulting party and provide comments on the enclosed form (**Attachment C**) within 30 calendar days from the date on this letter. Note that a non-response is considered to be a declination to participate; however, interested parties can request to join consultation at any time in the process. If any invited party expresses concerns about the

Undertaking's potential effects to historic properties, PHMSA will consult with the party to resolve those concerns prior to project implementation.

PHMSA will also invite the following federally recognized tribes to participate in consultation by separate letter:

- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Choctaw Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Jena Band of Choctaw Indians
- Mississippi Band of Choctaw Indians
- Tunica-Biloxi Indian Tribe

Request for Section 106 Concurrence

Based on the information presented above, PHMSA finds that the Undertaking will result in No Historic Properties Affected. PHMSA is submitting this Undertaking to your office for your review and comment. PHMSA requests your concurrence with this determination of effect within 30 calendar days of the date of this letter. Should you need additional information, please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

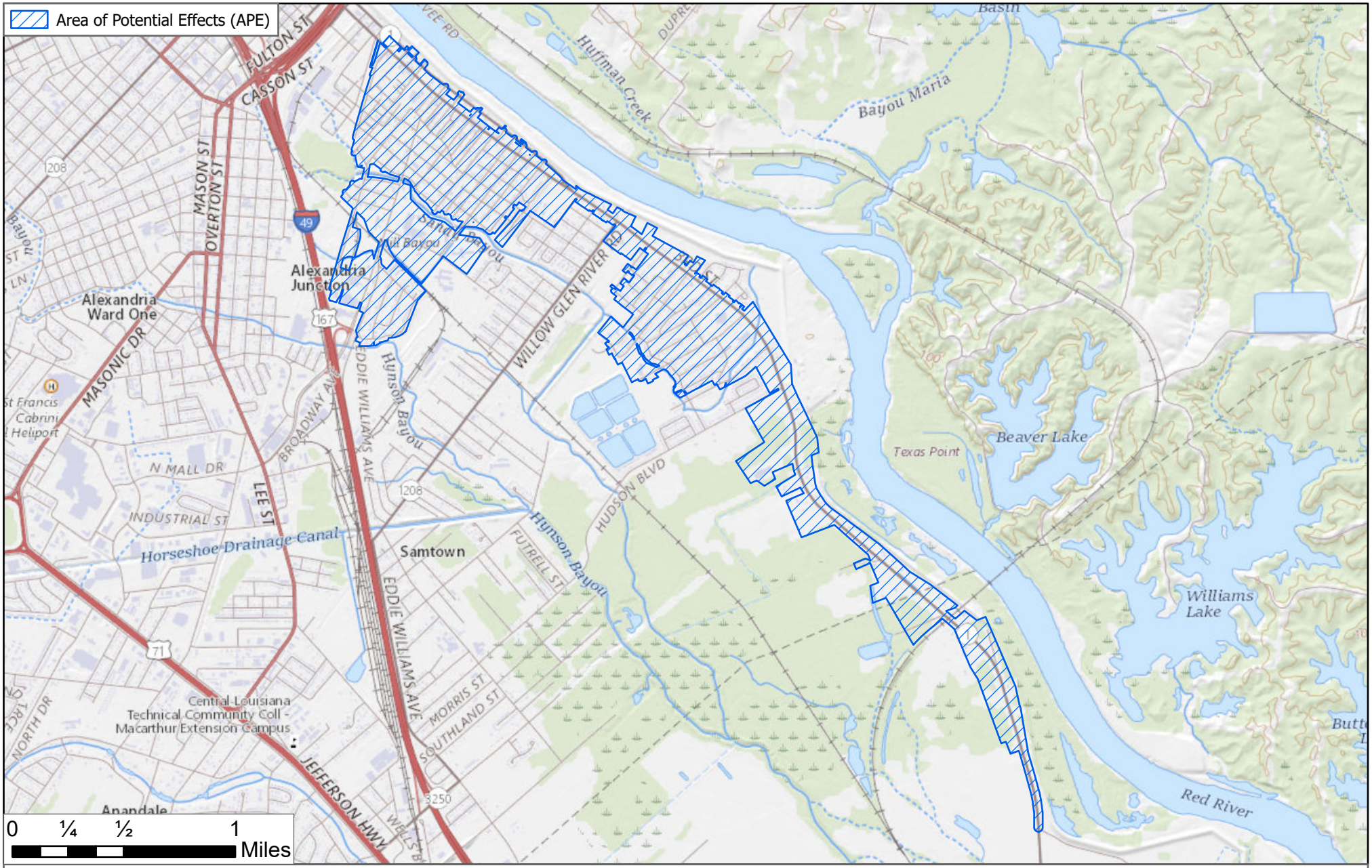
cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Mike Marcotte, Utility Director, City of Alexandria
Rick Ranson, Director of Economic Development, Alexandria Historic Preservation Commission
Pat Boone, Museum Director, Louisiana History Museum
The Historical Society of Central Louisiana

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs
Attachment C: Consulting Party Response Form

ATTACHMENT A

Project Location and APE Maps

Area of Potential Effects Map

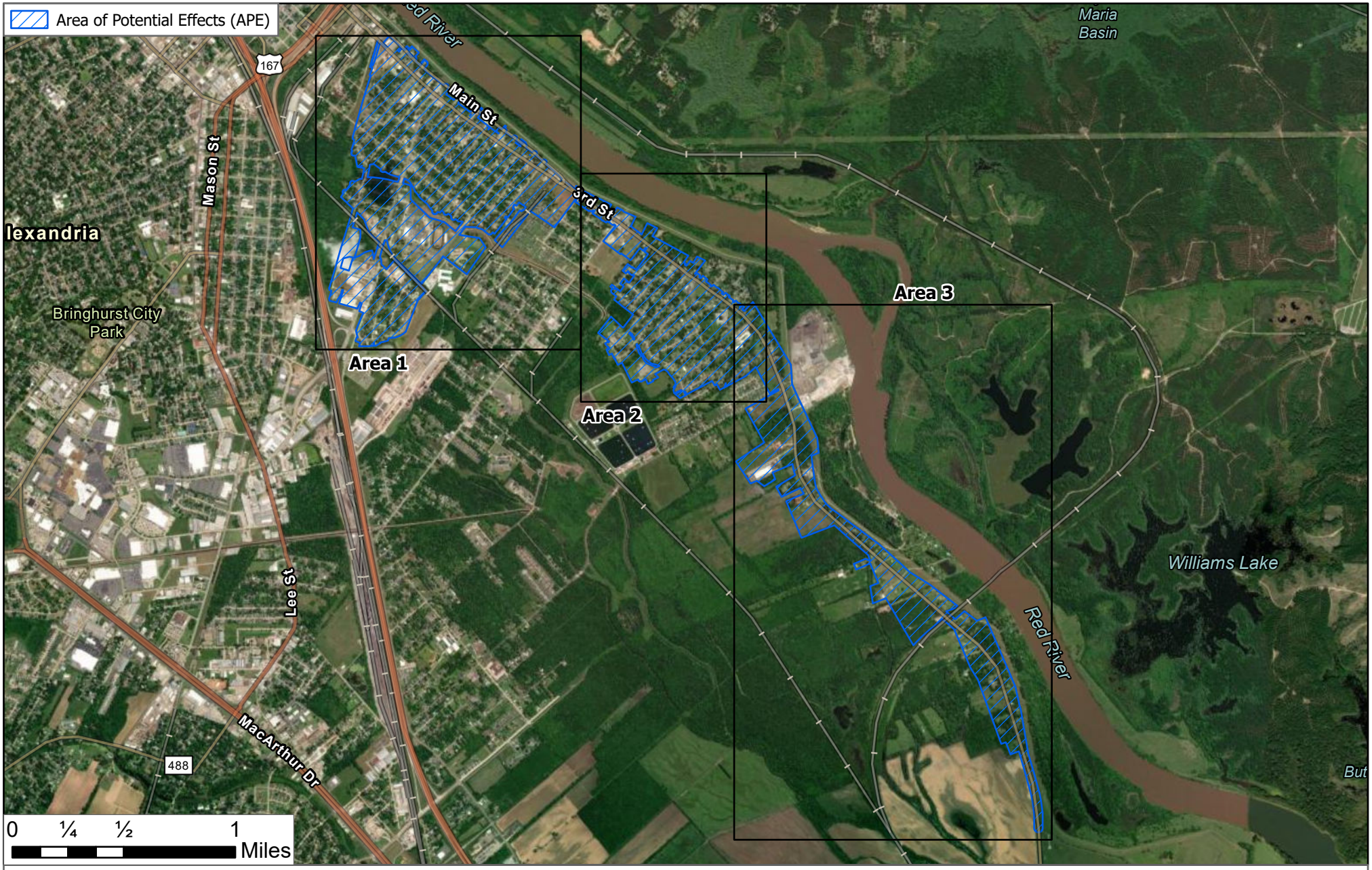


Name: Alexandria Louisiana Gas Line Replacement
Scale: 37,000
Total Acreage: 1,905
USGS Basemap: Alexandria
Alexandria, LA, Rapides Parish

N

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

Area of Potential Effects Map



Name: Alexandria Louisiana Gas Line Replacement
Scale: 37,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish

N

Service Layer Credits: CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Maxar

Area of Potential Effects Map

Name: Alexandria Louisiana Gas Line Replacement
Scale: 14,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 1

N

Service Layer Credits: Esri Community Maps Contributors, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Area of Potential Effects Map

Name: Alexandria Louisiana Gas Line Replacement
Scale: 8,000
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 2

N

Area of Potential Effects Map

Name: Alexandria Louisiana Gas Line Replacement
Scale: 18,900
Total Acreage: 1,905
Alexandria, LA, Rapides Parish
Area 3

N

Service Layer Credits: CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

ATTACHMENT B

Project Area Photographs

Photo 1. APE along 7th Street, view facing northwest.

Photo 2. APE along Ann Street, view facing southeast.

Photo 3. APE along Daspit Street, view facing northeast.

Photo 4. APE along Highway 1, view facing northwest.

Photo 5. APE along Highway 1, view facing southeast.

Photo 6. APE along Jay Street, view facing southeast.

Photo 7. APE along Neil Street, view facing northwest.

Photo 8. APE along Slocum Drive, view facing northeast.

Photo 9. APE along 3rd Street, view facing northwest.

Photo 10. APE along 5th Street, view facing southwest.

Photo 11. APE along 7th Street, view facing west.

Photo 12. APE along Bogan Street, view facing northwest.

ATTACHMENT C

Consulting Party Response Form

Section 106 Consulting Party Response Form

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

Project Name/Location:

Date: _____

Organization: _____

Name: _____

Affiliation: _____

Address: _____

_____

_____

Phone Number: _____

E-mail: _____

Please check one of the following:

○ **Yes,** I, or my organization, would like to participate in consultation on the project's potential effects to historic properties. I, or my organization, has a legal or economic relation to the project or affected properties or have a concern with the project's effects on historic properties.

○ **No,** I, or my organization, do(es) not wish to participate as a consulting party for the project.

Do you know of any other potential consulting parties that should be contacted? If so, please list the name, email, or other contact information below.

_____

_____

_____

Comments: _____

_____

_____

_____

Please return by:

Please return to: Kathering Giraldo
USDOT Volpe Center
220 Binney Street, Cambridge, MA
E-mail: PHMSASection106@dot.gov

March 14, 2024

Wamblee Smith
Acting Environmental Director
Apache Tribe of Oklahoma
PO Box 1330
Anadarko, OK 73005

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Director Smith:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking involves the replacement of approximately 33,000 liner feet of 4- inch and 2-inch aged steel gas mains with polyethylene (PE) gas mains within the existing right-of-way (ROW) and utility easements, which will enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system. The existing ROW encompasses various roadways, sidewalks, water mains, gas mains, sewer gravity lines, and telecommunication cables. In rare situations, a small easement may need to be acquired in areas where a gas main could not be extended around a 90-degree corner because of existing utilities; however, this work would take place within previously disturbed soils or immediately adjacent to previously disturbed ROW. The pipeline replacement activities would include the installation of replacement pipeline adjacent to and approximately one to five feet away from the existing pipeline by directional boring and trenching construction methods. The maximum depth of ground disturbance for the pipeline replacement is expected to be six feet, and the width of disturbance will be between 12 and 48 inches.

The Undertaking will also involve the replacement of service lines on properties adjacent to the pipelines. Most service lines are expected to extend to the front of the buildings, typically approximately 30 feet into the property. Ground disturbance for the service line replacements is expected to be two feet in depth and one to 12 to 18 inches in width. After utility services have been moved to the replacement pipeline, the City

will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the ROW, which ranges from 50 feet in residential areas to 100 feet for highways, and adjacent parcels where the service line replacements may take place. The APE extends from 31.30546, -92.43761 to the north to 31.25405, -92.38819 to the south. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential effects of the Undertaking and extends to the depth of proposed ground disturbance of up to six feet. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

Historic Architecture

A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. As a result, two archaeological surveys and 12 archaeological sites were identified.

One of the identified surveys overlaps with the APE. In 2022, Sura, Inc. conducted a Phase I archaeological survey of 5.8 acres for a proposed outfall channel to prevent flooding. This survey took place in the northern portion of the APE between the Red River and the Chatlin Lake Canal. No archaeological sites were

identified as a result of this survey. In 1982, an underwater survey was conducted near but outside of the southern end of the APE. The purpose of the survey was to investigate magnetic anomalies within the Red River. No cultural material was identified within the APE.

Twelve sites were identified within one quarter of a mile but outside of the APE (see Table 1). Each of the twelve sites were recorded in the early 1980s during a cultural resource survey for a proposed expressway. The survey area is not provided on the Louisiana Cultural Resource Map and the associated report is not accessible. Information on the site forms state the survey originally provided a general location of several historic houses that were to be demolished. A SHPO staff member generated a site form and subsequent site number for each individual house within the generalized area. Only one site, 16RA287, is potentially eligible for listing in the NRHP and all others are not eligible.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16RA286	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA287	Historic house	Potentially Eligible	Hartfield, Price, and Green 1981
16RA292	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA296	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA299	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA301	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA309	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA310	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA311	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA312	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA313	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA315	Historic house	Not Eligible	Hartfield, Price, and Green 1981

An examination of Web Soil Survey data within the APE reveals seven soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 2. Well drained and moderately well drained soils can be indicative of human habitation during both the pre-contact and historic periods. Less than 50 percent of soils within the APE are well draining soil types. Typically, slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE are less than 15 percent slope. Almost half of the APE consists of soils indicating some suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located along the western bank of the Red River and overlaps or abuts the Sandy Bayou and Hynson Bayou in certain portions. Proximity to major waterways, such as the Red River, can indicate a suitable environment for both precontact and historic human activity.

Table 2. Soil Types within the APE

Soil Type	Drainage Class	Slope	Percent of APE
Levees-Borrow pits complex	NA	Nearly level to strongly sloping	1.1
Moreland silty clay loam	Somewhat poorly drained	0-1 percent	<1
Moreland clay	Somewhat poorly drained	0-1 percent	50.4
Moreland clay, 0 to 3 percent slopes	Somewhat poorly drained	0-3 percent	<1
Coushatta silt loam	Well drained	0-1 percent	18.3
Coushatta silty clay loam	Well drained	0-1 percent	19

Soil Type	Drainage Class	Slope	Percent of APE
Roxana very fine sandy loam	Well drained	0-3 percent	10

Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

Historic aerial photography from 1955 and 1971 was examined for archaeological resource sensitivity within the APE. The 1955 imagery reflects the development shown in the 1957 topographic map, with dense clusters of residential development in the northern portion of the APE, while the central and southern portions of the APE show agricultural fields and sparse residences in the more rural setting. The 1971 imagery shows that development increased in the northern portion of the APE while the central and southern portions remained much the same.

The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe/Nation that may be present in the APE and affected by the Undertaking. If your Tribe/Nation is unaware of any historic properties, PHMSA is notifying your Tribe/Nation of our intention to make a No Historic Properties Affected finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

March 14, 2024

Jonathan Rohrer
Tribal Historic Preservation Officer
Caddo Nation of Oklahoma
P.O. Box 487
Binger, OK 73009

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Mr. Rohrer:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

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will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

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Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

Historic Architecture

A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

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16RA310	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA311	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA312	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA313	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA315	Historic house	Not Eligible	Hartfield, Price, and Green 1981

An examination of Web Soil Survey data within the APE reveals seven soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 2. Well drained and moderately well drained soils can be indicative of human habitation during both the pre-contact and historic periods. Less than 50 percent of soils within the APE are well draining soil types. Typically, slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE are less than 15 percent slope. Almost half of the APE consists of soils indicating some suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located along the western bank of the Red River and overlaps or abuts the Sandy Bayou and Hynson Bayou in certain portions. Proximity to major waterways, such as the Red River, can indicate a suitable environment for both precontact and historic human activity.

Table 2. Soil Types within the APE

Soil Type	Drainage Class	Slope	Percent of APE
Levees-Borrow pits complex	NA	Nearly level to strongly sloping	1.1
Moreland silty clay loam	Somewhat poorly drained	0-1 percent	<1
Moreland clay	Somewhat poorly drained	0-1 percent	50.4
Moreland clay, 0 to 3 percent slopes	Somewhat poorly drained	0-3 percent	<1
Coushatta silt loam	Well drained	0-1 percent	18.3
Coushatta silty clay loam	Well drained	0-1 percent	19

Soil Type	Drainage Class	Slope	Percent of APE
Roxana very fine sandy loam	Well drained	0-3 percent	10

Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

Historic aerial photography from 1955 and 1971 was examined for archaeological resource sensitivity within the APE. The 1955 imagery reflects the development shown in the 1957 topographic map, with dense clusters of residential development in the northern portion of the APE, while the central and southern portions of the APE show agricultural fields and sparse residences in the more rural setting. The 1971 imagery shows that development increased in the northern portion of the APE while the central and southern portions remained much the same.

The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe/Nation that may be present in the APE and affected by the Undertaking. If your Tribe/Nation is unaware of any historic properties, PHMSA is notifying your Tribe/Nation of our intention to make a No Historic Properties Affected finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

March 14, 2024

Gary Batton
Chief
Choctaw Nation of Oklahoma
1802 Chukka Hina Dr.
Durant, Ok 74701

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Chief Batton:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking involves the replacement of approximately 33,000 liner feet of 4- inch and 2-inch aged steel gas mains with polyethylene (PE) gas mains within the existing right-of-way (ROW) and utility easements, which will enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system. The existing ROW encompasses various roadways, sidewalks, water mains, gas mains, sewer gravity lines, and telecommunication cables. In rare situations, a small easement may need to be acquired in areas where a gas main could not be extended around a 90-degree corner because of existing utilities; however, this work would take place within previously disturbed soils or immediately adjacent to previously disturbed ROW. The pipeline replacement activities would include the installation of replacement pipeline adjacent to and approximately one to five feet away from the existing pipeline by directional boring and trenching construction methods. The maximum depth of ground disturbance for the pipeline replacement is expected to be six feet, and the width of disturbance will be between 12 and 48 inches.

The Undertaking will also involve the replacement of service lines on properties adjacent to the pipelines. Most service lines are expected to extend to the front of the buildings, typically approximately 30 feet into the property. Ground disturbance for the service line replacements is expected to be two feet in depth and one to 12 to 18 inches in width. After utility services have been moved to the replacement pipeline, the City

will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the ROW, which ranges from 50 feet in residential areas to 100 feet for highways, and adjacent parcels where the service line replacements may take place. The APE extends from 31.30546, -92.43761 to the north to 31.25405, -92.38819 to the south. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential effects of the Undertaking and extends to the depth of proposed ground disturbance of up to six feet. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the map in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

Historic Architecture

A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

Archaeology

The Louisiana Office of Cultural Development's Cultural Resources Map database was reviewed for the presence of previously recorded archaeological sites and previously conducted archaeological surveys within one quarter of a mile of the APE. As a result, two archaeological surveys and 12 archaeological sites were identified.

One of the identified surveys overlaps with the APE. In 2022, Sura, Inc. conducted a Phase I archaeological survey of 5.8 acres for a proposed outfall channel to prevent flooding. This survey took place in the northern portion of the APE between the Red River and the Chatlin Lake Canal. No archaeological sites were

identified as a result of this survey. In 1982, an underwater survey was conducted near but outside of the southern end of the APE. The purpose of the survey was to investigate magnetic anomalies within the Red River. No cultural material was identified within the APE.

Twelve sites were identified within one quarter of a mile but outside of the APE (see Table 1). Each of the twelve sites were recorded in the early 1980s during a cultural resource survey for a proposed expressway. The survey area is not provided on the Louisiana Cultural Resource Map and the associated report is not accessible. Information on the site forms state the survey originally provided a general location of several historic houses that were to be demolished. A SHPO staff member generated a site form and subsequent site number for each individual house within the generalized area. Only one site, 16RA287, is potentially eligible for listing in the NRHP and all others are not eligible.

Table 1. Archaeological Sites within One Quarter of a Mile of the APE

Site Number	Type	NRHP	Citation
16RA286	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA287	Historic house	Potentially Eligible	Hartfield, Price, and Green 1981
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16RA311	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA312	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA313	Historic house	Not Eligible	Hartfield, Price, and Green 1981
16RA315	Historic house	Not Eligible	Hartfield, Price, and Green 1981

An examination of Web Soil Survey data within the APE reveals seven soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 2. Well drained and moderately well drained soils can be indicative of human habitation during both the pre-contact and historic periods. Less than 50 percent of soils within the APE are well draining soil types. Typically, slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE are less than 15 percent slope. Almost half of the APE consists of soils indicating some suitable conditions for human habitation in both the pre-contact and historic periods. Additionally, topographic maps reveal that the APE is located along the western bank of the Red River and overlaps or abuts the Sandy Bayou and Hynson Bayou in certain portions. Proximity to major waterways, such as the Red River, can indicate a suitable environment for both precontact and historic human activity.

Table 2. Soil Types within the APE

Soil Type	Drainage Class	Slope	Percent of APE
Levees-Borrow pits complex	NA	Nearly level to strongly sloping	1.1
Moreland silty clay loam	Somewhat poorly drained	0-1 percent	<1
Moreland clay	Somewhat poorly drained	0-1 percent	50.4
Moreland clay, 0 to 3 percent slopes	Somewhat poorly drained	0-3 percent	<1
Coushatta silt loam	Well drained	0-1 percent	18.3
Coushatta silty clay loam	Well drained	0-1 percent	19

Soil Type	Drainage Class	Slope	Percent of APE
Roxana very fine sandy loam	Well drained	0-3 percent	10

Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

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The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

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Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Ian Thompson, Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

March 14, 2024

Jonathan Cernek
Chairman
Coushatta Tribe of Louisiana
1940 C.C. Bel Road
Elton, LA 70532

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Chairman Cernek:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

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will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

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To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

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Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Kristian Poncho, Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

March 14, 2024

Libby Rogers
Tribal Chief
Jena Band of Choctaw Indians
1052 Chanaha Hina Street
Trout, LA 71371

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Tribal Chief Rogers:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

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will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

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Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Louisiana Division of Historic Preservation. Individuals who meet the SOI Professional Qualification Standards also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for listing in the NRHP and assess the archaeological sensitivity of the APE.

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A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

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Table 2. Soil Types within the APE

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Coushatta silt loam	Well drained	0-1 percent	18.3
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Soil Type	Drainage Class	Slope	Percent of APE
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Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

Historic aerial photography from 1955 and 1971 was examined for archaeological resource sensitivity within the APE. The 1955 imagery reflects the development shown in the 1957 topographic map, with dense clusters of residential development in the northern portion of the APE, while the central and southern portions of the APE show agricultural fields and sparse residences in the more rural setting. The 1971 imagery shows that development increased in the northern portion of the APE while the central and southern portions remained much the same.

The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe/Nation that may be present in the APE and affected by the Undertaking. If your Tribe/Nation is unaware of any historic properties, PHMSA is notifying your Tribe/Nation of our intention to make a No Historic Properties Affected finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Johnna Flynn, Acting Tribal Historic Preservation Officer

Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

March 14, 2024

Cyrus Ben
Chief
Mississippi Band of Choctaw Indians
101 Industrial Road
Choctaw, MS 39350

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Chief Ben:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

Project Description/Background

The Undertaking involves the replacement of approximately 33,000 liner feet of 4- inch and 2-inch aged steel gas mains with polyethylene (PE) gas mains within the existing right-of-way (ROW) and utility easements, which will enhance safety, improve operations, and reduce methane emissions of natural gas of the City's natural gas transmission system. The existing ROW encompasses various roadways, sidewalks, water mains, gas mains, sewer gravity lines, and telecommunication cables. In rare situations, a small easement may need to be acquired in areas where a gas main could not be extended around a 90-degree corner because of existing utilities; however, this work would take place within previously disturbed soils or immediately adjacent to previously disturbed ROW. The pipeline replacement activities would include the installation of replacement pipeline adjacent to and approximately one to five feet away from the existing pipeline by directional boring and trenching construction methods. The maximum depth of ground disturbance for the pipeline replacement is expected to be six feet, and the width of disturbance will be between 12 and 48 inches.

The Undertaking will also involve the replacement of service lines on properties adjacent to the pipelines. Most service lines are expected to extend to the front of the buildings, typically approximately 30 feet into the property. Ground disturbance for the service line replacements is expected to be two feet in depth and one to 12 to 18 inches in width. After utility services have been moved to the replacement pipeline, the City

will abandon the existing pipe in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner.

Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this Undertaking to encompass the ROW, which ranges from 50 feet in residential areas to 100 feet for highways, and adjacent parcels where the service line replacements may take place. The APE extends from 31.30546, -92.43761 to the north to 31.25405, -92.38819 to the south. The APE includes the limits of disturbance and any resources that may be particularly susceptible to any potential effects of the Undertaking and extends to the depth of proposed ground disturbance of up to six feet. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the map in **Attachment A**.

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Historic Architecture

A search of the NRHP database and Louisiana Office of Cultural Development's Cultural Resources Map database found no NRHP-listed or NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines primarily within the existing ROW and utility easements, the identification effort for additional above-ground resources focused on identifying properties that are susceptible to the effects of this work and could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual or audible effects. Although several other buildings within the APE have been previously surveyed, they are either ineligible or have not been evaluated for NRHP eligibility, and work near these properties will be below-ground and will not have the potential to affect the buildings. A review of the APE found no other potentially significant above-ground resources that have the potential to be affected by the Undertaking.

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Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator

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March 14, 2024

Marshall Pierite
Chairman
Tunica-Biloxi Indian Tribe
150 Melacon Drive
Marksville, LA 71351

Section 106 Consultation: PHMSA Pipeline Replacement Project in Alexandria, Louisiana
Grant Recipient: City of Alexandria
Project Location: City of Alexandria, Rapides Parish, Louisiana

Dear Chairman Pierite:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the City of Alexandria (City) for the replacement of pipelines (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project to determine if there are historic properties of cultural or religious significance to your Tribe/Nation that may be affected by the Project, to determine if you want to be a consulting party, and/or to notify your Tribe/Nation of PHMSA's intention to make a finding of No Historic Properties Affected. PHMSA is also available for Government-to-Government consultation on this Program.

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Historic Architecture

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Moreland clay, 0 to 3 percent slopes	Somewhat poorly drained	0-3 percent	<1
Coushatta silt loam	Well drained	0-1 percent	18.3
Coushatta silty clay loam	Well drained	0-1 percent	19

Soil Type	Drainage Class	Slope	Percent of APE
Roxana very fine sandy loam	Well drained	0-3 percent	10

Historic topographic maps from 1941 and 1957 were examined for archaeological resource sensitivity within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of a suburban area outside of the downtown section of the City. Currently, most of the APE is made up of residential properties, though some commercial and municipal properties do exist. The 1941 topographic map shows the APE as mostly undeveloped except for the northernmost portion nearest downtown where several blocks of buildings appear. Some structures do appear in the central and southern portions of the APE but are situated in more rural settings. The northern portion of the APE also contains a few small railroad tracks. The 1957 topographic map shows the same pattern of development as the 1942 map, with more dense building clusters in the northern portion of the APE and more rural and agricultural areas toward the southern end. This map also shows several schools as being located within the APE, all in the northern end. Both maps show the location of "Indian Mounds" approximately half a mile from the southern end of the APE. However, this location is on the other side of the Red River, along a bend on the eastern bank and will not be affected by the Undertaking. The presence of this resource illustrates the potential for precontact archaeological sites in the area.

Historic aerial photography from 1955 and 1971 was examined for archaeological resource sensitivity within the APE. The 1955 imagery reflects the development shown in the 1957 topographic map, with dense clusters of residential development in the northern portion of the APE, while the central and southern portions of the APE show agricultural fields and sparse residences in the more rural setting. The 1971 imagery shows that development increased in the northern portion of the APE while the central and southern portions remained much the same.

The Undertaking involves the replacement of approximately 33,000 linear feet of existing underground gas pipelines. While most of the APE has not been surveyed for archaeological resources, disturbance from previous road construction and utility installation has likely compromised the integrity of any archaeological deposits that may exist within the APE. Based on the location of existing sites in the area and examination of historic maps and aerial photography, there is a low potential for significant and intact archaeological deposits to exist within the APE. Thus, due to the limited scope of work, low likelihood of encountering significant and intact archaeological deposits, and previous disturbance of the APE, an archaeological survey of the APE is not recommended at this time. While no known cemeteries were identified within the APE, small family plots and unmarked burials may exist and are subject to Louisiana state burial laws -- Unmarked Human Burial Sites Preservation Act (R. S. 8:671-681) and the Louisiana Historic Cemetery Preservation Act (R.S. 25:931-943.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE.

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Therefore, in accordance with 36 CFR § 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Request for Information and Comments

PHMSA requests that you provide any information you have regarding historic properties of religious or cultural significance to your Tribe/Nation that may be present in the APE and affected by the Undertaking. If your Tribe/Nation is unaware of any historic properties, PHMSA is notifying your Tribe/Nation of our intention to make a No Historic Properties Affected finding. Please notify us within 30 days from the date of receipt of this letter if you have any concerns about the project's effects to historic properties. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Dana White, PHMSA Grant Coordinator
Earl Barbry, Jr., Tribal Historic Preservation Officer

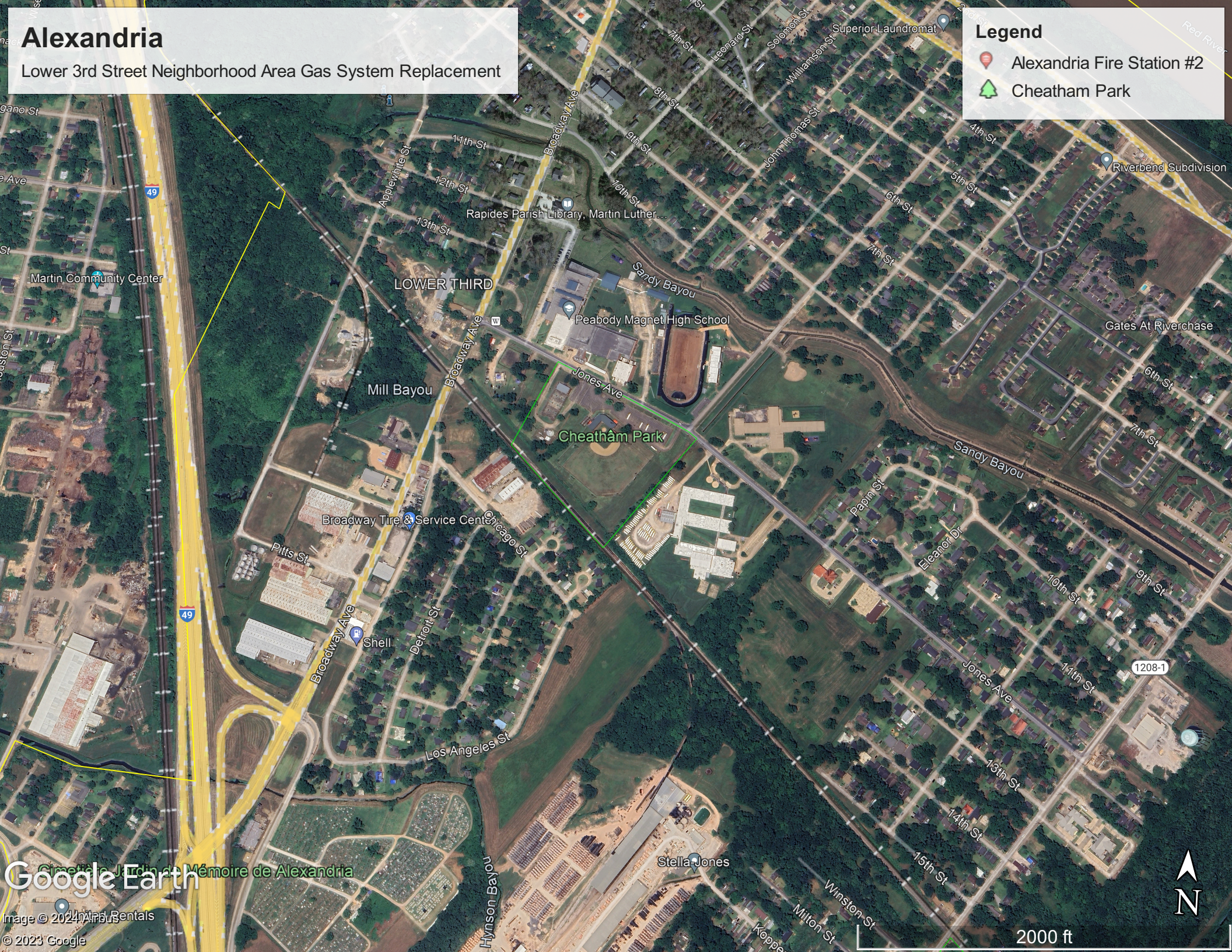
Enclosures:
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

Appendix H

Section 4(f)

Alexandria

Lower 3rd Street Neighborhood Area Gas System Replacement



Appendix I

Environmental Justice

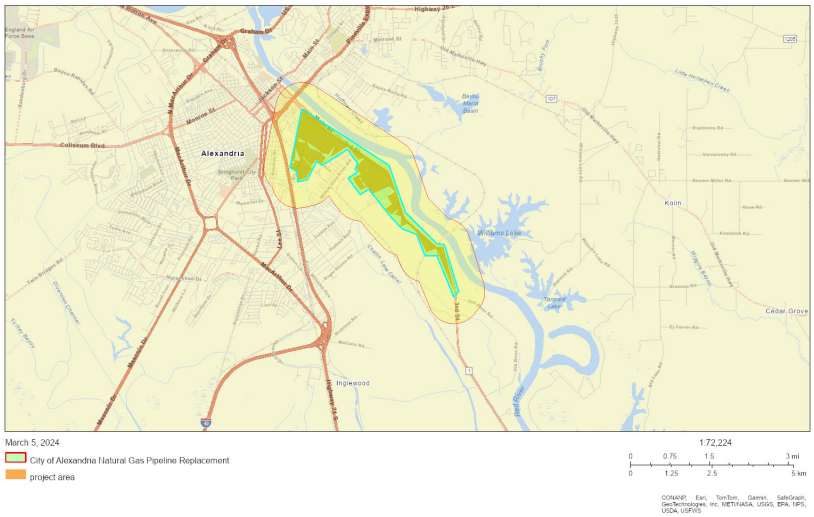
EJ creen Communit Repor E

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Alexandria, LA E

0.5 miles Ring around the Area
Population: 6,614
Area in square miles: 8.35

A3 Landscape



COMMUNITY INFORMATION

Low income: 68 percent	People of color: 95 percent
Less than high school education: 24 percent	Limited English households: 0 percent
Unemployment: 14 percent	Persons with disabilities: 20 percent
Male: 42 percent	Female: 58 percent
65 years Average life expectancy	$17,114 Per capita income
Number of households: 2,378	Owner occupied: 54 percent

BREAKDOWN BY RACE

White: 5%	Black: 91%	American Indian: 0%	Asian: 1%
Hawaiian/Pacific Islander: 0%	Other race: 0%	Two or more races: 2%	Hispanic: 1%

BREAKDOWN BY AGE E

From Ages 1 to 4	7%
From Ages 1 to 18	26%
From Ages 18 and up	74%
From Ages 65 and up	16%

LANGUAGES SPOKEN AT H E

LANGUAGE	PERCENT
English	99%
French, Haitian, or Cajun	1%
Total Non-English	1%

LIMITED ENGLISH SPEAKING BREAKDOWN E

Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data E comes from the Centers for Disease Control.

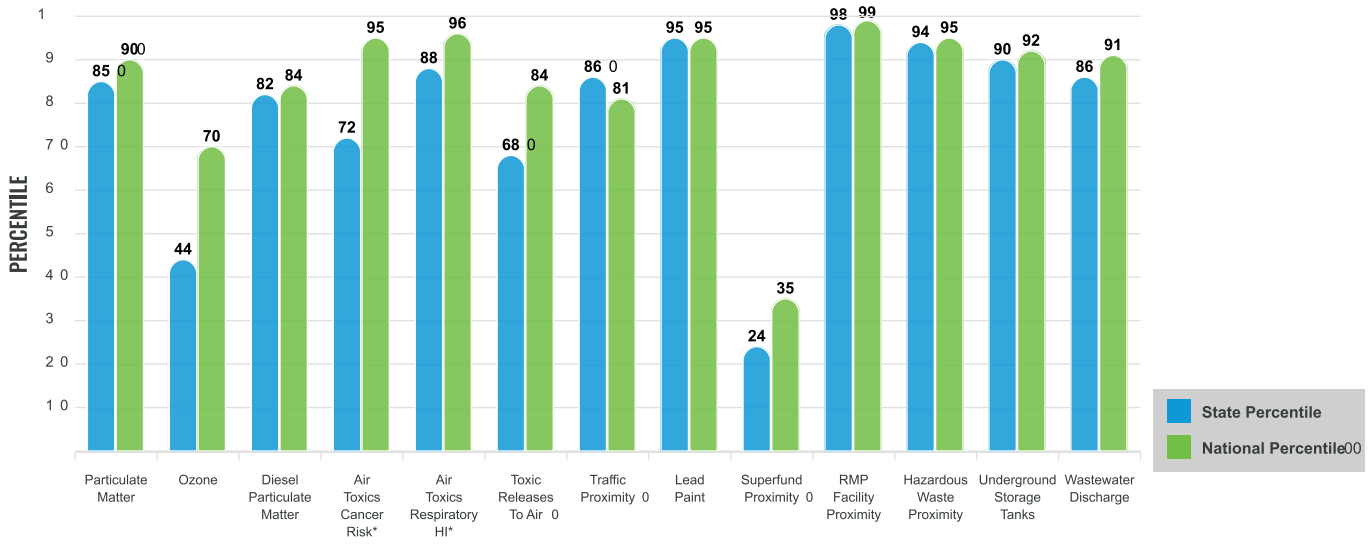
Env ronmental Just ce & Supplemental Indexes

l i lli i i of environmental and socioeconomic i i . i en EJ indexes and supplemental indexes i . i r a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

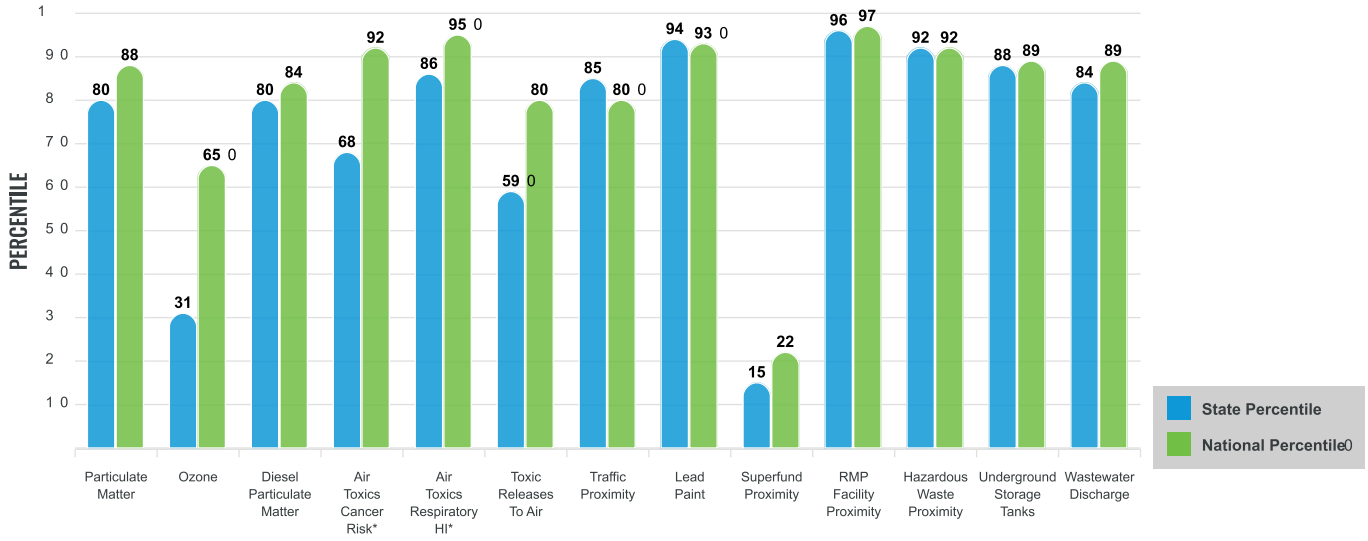
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES 0

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These perce es pr v de perspec ve h w he se ec ed b ck gr up r buffer area c mpares he e re s a e r a . 0

Report for .5 miles Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data w

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.5	8.62	50	8.08	58
Ozone (ppb)	58.6	59.8	16	61.6	28
Diesel Particulate Matter (µg/m^3)	0.228	0.247	57	0.261	52
Air Toxics Cancer Risk* (lifetime risk per million)	30	32	10	25	52
Air Toxics Respiratory HI*	0.4	0.38	43	0.31	70
Toxic Releases to Air	440	15,000	33	4,600	44
Traffic Proximity (daily traffic count/distance to road)	81	86	72	210	51
Lead Paint (% Pre-1960 Housing)	0.48	0.22	85	0.3	72
Superfund Proximity (site count/km distance)	0.014	0.076	7	0.13	9
RMP Facility Proximity (facility count/km distance)	3.7	0.62	98	0.43	99
Hazardous Waste Proximity (facility count/km distance)	2.1	1.1	81	1.9	74
Underground Storage Tanks (count/km^2)	3.3	2.2	75	3.9	68
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0084	49	70	22	66
SOCIOECONOMIC INDICATORS					
Demographic Index	81%	41%	92	35%	96
Supplemental Demographic Index	27%	17%	87	14%	91
People of Color	95%	43%	90	39%	92
Low Income	68%	40%	84	31%	93
Unemployment Rate	14%	7%	84	6%	90
Limited English Speaking Households	0%	2%	76	5%	0
Less Than High School Education	24%	15%	80	12%	86
Under Age 5	7%	6%	68	6%	72
Over Age 64	16%	17%	52	17%	51
Low Life Expectancy	24%	22%	65	20%	85

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional w significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://____.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	1
Water Dischargers	30
Air Pollution	5
Brownfields	6
Toxic Release Inventory	1

Other community features within defined area:

Schools	7
Hospitals	0
Places of Worship	39

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 0.5 miles Ring around the Area w

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	24%	22%	65	20%	85
Heart Disease	9.7	7	93	6.1	96
Asthma	12.6	9.9	93	10	94
Cancer	5.9	5.9	46	6.1	43
Persons with Disabilities	19.3%	15.9%	73	13.4%	84

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	29%	25%	74	12%	91
Wildfire Risk	0%	7%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	27%	20%	69	14%	85
Lack of Health Insurance	13%	8%	82	9%	77
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for les R ng around the Area o

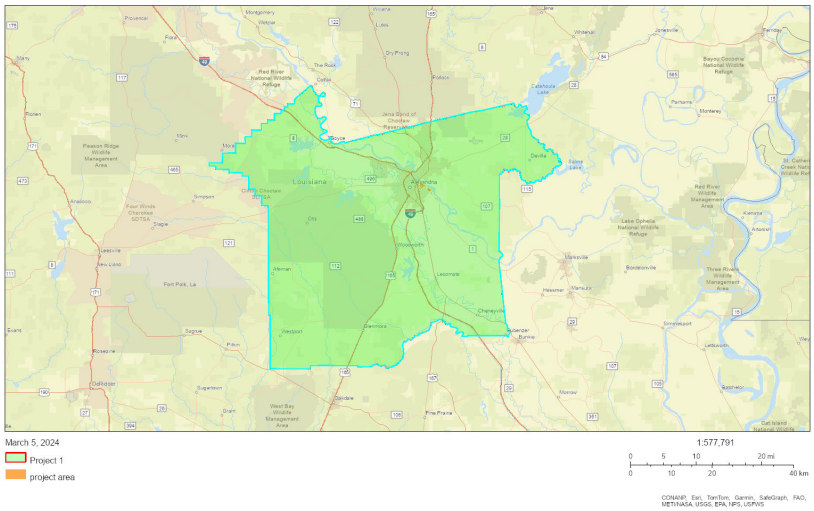
EJ creen Communit Repor E

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Rapides Parish, LA E

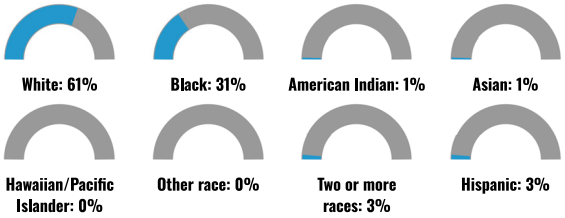
County: Rapides Parish
Population: 130,459
Area in square miles: 1361.51

A3 Landscape



COMMUNITY INDICATORS

BREAKDOWN BY RACE



BREAKDOWN BY AGE E

LANGUAGES SPOKEN AT H E

LANGUAGE	PERCENT
English	95%
Spanish	2%
French, Haitian, or Cajun	1%
Total Non-English	5%

LIMITED ENGLISH SPEAKING BREAKDOWN E

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

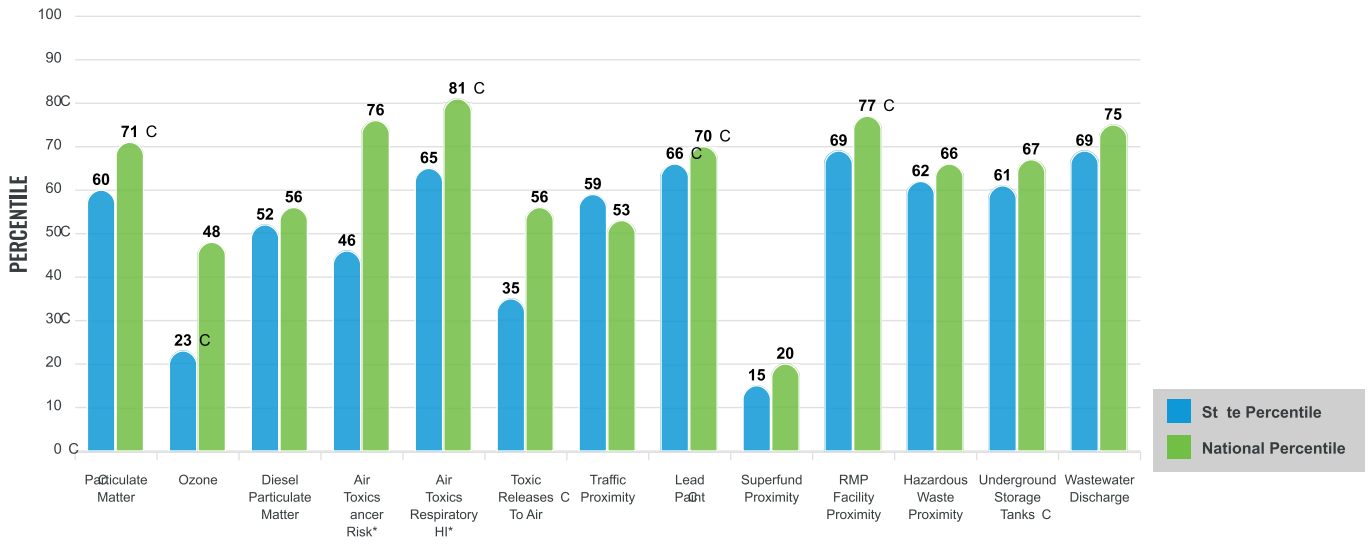
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes i i of environme l i nomic information. are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

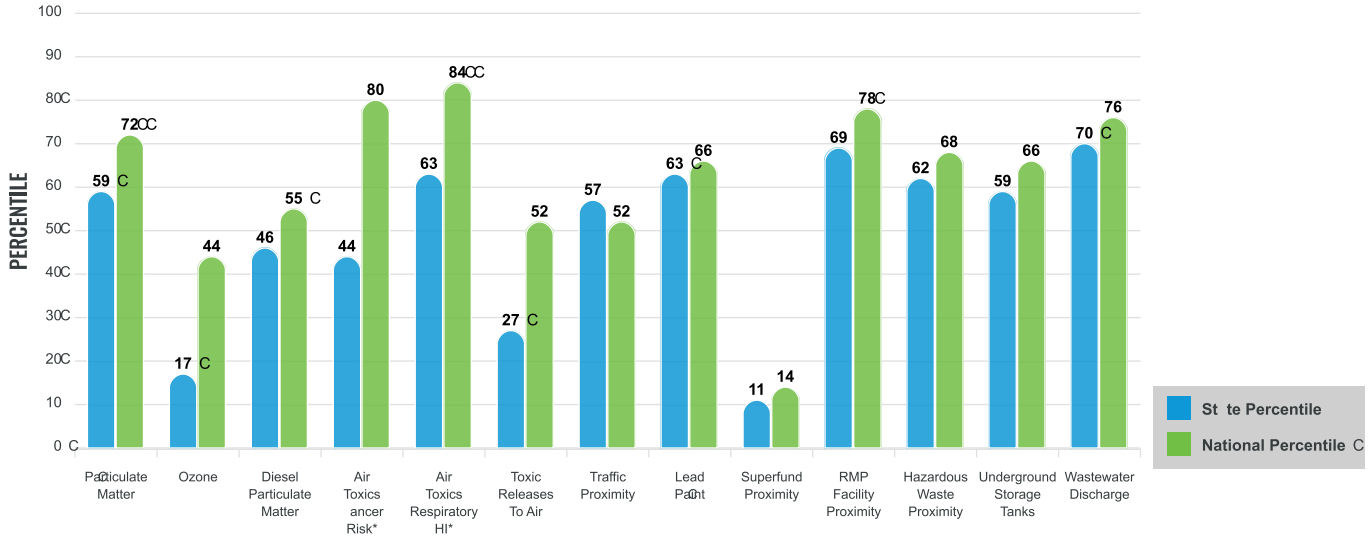
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL NDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These perce es pr v de perspec ve h w he se ec ed b ck gr up r buffer area c mpares he e re s a e r a .

EJScreen Environmental and Socioeconomic Indicators Data w

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.45	8.62	45	8.08	56
Ozone (ppb)	58.5	59.8	14	61.6	28
Diesel Particulate Matter (µg/m^3)	0.155	0.247	38	0.261	33
Air Toxics Cancer Risk* (lifetime risk per million)	30	32	10	25	52
Air Toxics Respiratory HI*	0.38	0.38	1	0.31	31
Toxic Releases to Air	250	15,000	22	4,600	35
Traffic Proximity (daily traffic count/distance to road)	42	86	55	210	36
Lead Paint (% Pre-1960 Housing)	0.23	0.22	65	0.3	51
Superfund Proximity (site count/km distance)	0.014	0.076	9	0.13	9
RMP Facility Proximity (facility count/km distance)	1.2	0.62	83	0.43	91
Hazardous Waste Proximity (facility count/km distance)	0.96	1.1	61	1.9	60
Underground Storage Tanks (count/km^2)	1.8	2.2	64	3.9	57
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.074	49	87	22	80
SOCIOECONOMIC INDICATORS					
Demographic Index	40%	41%	54	35%	64
Supplemental Demographic Index	17%	17%	52	14%	68
People of Color	39%	43%	52	39%	58
Low Income	41%	40%	52	31%	70
Unemployment Rate	6%	7%	61	6%	66
Limited English Speaking Households	1%	2%	78	5%	59
Less Than High School Education	13%	15%	52	12%	67
Under Age 5	7%	6%	63	6%	66
Over Age 64	16%	17%	53	17%	52
Low Life Expectancy	22%	22%	41	20%	70

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional w significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://____.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	11
Water Dischargers	647
Air Pollution	78
Brownfields	15
Toxic Release Inventory	19

Other community features within defined area:

Schools	53
Hospitals	16
Places of Worship	298

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	22%	22%	41	20%	70
Heart Disease	7.4	7	57	6.1	74
Asthma	10	9.9	56	10	52
Cancer	6.4	5.9	64	6.1	52
Persons with Disabilities	17.7%	15.9%	65	13.4%	78

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	17%	25%	53	12%	82
Wildfire Risk	13%	7%	89	14%	82

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	17%	20%	50	14%	67
Lack of Health Insurance	9%	8%	62	9%	63
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for o t Rapides Parish **a**