



# Final Environmental Assessment

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## SH 63/LA 8 Bridge at the Sabine River

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LADOTD Project Number: H.000986

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Newton County, Texas and Vernon Parish, Louisiana

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Prepared for:

- U.S. Department of Transportation
- Federal Highway Administration
- Texas Department of Transportation
- Louisiana Department of Transportation and Development

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## List of Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
AREF	Amphibian and Reptile Exclusion Fence
AST	Alligator Snapping Turtle
BMP	Best Management Practices
CAA	Clean Air Act
CAFE	Corporate average fuel economy
CFR	Code of Federal Regulations
CGP	Construction General Permit
CHC	County Historic Commission
CMAQ	Congestion Mitigation and Air Quality Improvement
CMP	Congestion Management Process
CO	Carbon Monoxide
CR	County Road
CRP	Clean Rivers Program
DBH	Diameter at Breast Height
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMST	Ecological Mapping System of Texas
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Environmental Permits, Issues, and Commitments
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
GIS	Geographic Information Systems
GHG	Greenhouse Gas
HBF	Historic Bridge Foundation
HRSR	Historic Resources Survey Report
IBWC	International Boundary and Water Commission
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ISA	Initial Site Assessment
ITS	Intelligent Transportation System
LA	Louisiana Highway
LADOTD	Louisiana Department of Transportation and Development
LDEQ	Louisiana Department of Environmental Quality
LDWF	Louisiana Department of Wildlife and Fisheries
LEP	Limited English Proficiency
LPDES	Louisiana Pollutant Discharge Elimination System
LRFD	Load and Resistance Factor Design
MBTA	Migratory Bird Treaty Act

MMT	Million Metric Tons
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NBI	National Bridge Inventory
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLCD	National Land Cover Database
NOA	Notice of Availability
NOI	Notice of Intent
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
OTHM	Official Texas Historical Markers
PA	Programmatic Agreement
PCN	Pre-construction Notification
PCR	Project Coordination Request
PM	Particulate Matter
PS&E	Plans, Specifications, and Estimates
PSL	Project Specific Location
PST	Petroleum Storage Tank
PWC	Parks and Wildlife Code
RAP	Recycled asphalt pavement
RAS	Recycled asphalt shingles
ROW	Right-of-way
RRC	Railroad Commission of Texas
RTEST	Rare, Threatened, and Endangered Species of Texas
SAL	State Antiquities Landmark
SGCN	Species of Greatest Conservation Need
SH	State Highway
SHPO	State Historic Preservation Officer
SRA	Sabine River Authority
SWP3	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TAQA	Traffic Air Quality Analysis
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TNM	Traffic Noise Model
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TxDOT	Texas Department of Transportation
U.S.	United States
USGS	United State Geographic Survey
USACE	United States Army Corp of Engineers
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service

VMT

Vehicle Miles Traveled

## 1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) Beaumont District, in cooperation with the Federal Highway Administration (FHWA) and the Louisiana Department of Transportation and Development (LADOTD), is proposing the relocation of the State Highway (SH) 63/Louisiana Highway (LA) 8 crossing of the Sabine River at the border between Texas and Louisiana. The existing SH 63/LA 8 Sabine River Bridge (National Bridge Inventory Number [NBI] 201760021404005), also known as Burr's Ferry Bridge, crosses the Sabine River between the community of Burkeville in Newton County, TX, and the city of Leesville in Vernon Parish, LA. The proposed project would remove the TxDOT/LADOTD jointly-owned existing bridge and construct new approach roadways and a new bridge structure approximately 0.3 mile (i.e. 1,825 feet) downstream from the existing bridge.

The purpose of this Environmental Assessment (EA) is to study the potential environmental consequences of the proposed project and determine whether such consequences warrant preparation of an Environmental Impact Statement (EIS). A TxDOT EA Classification Memo was prepared and approved on November 18, 2019, justifying the preparation of an EA. Since this project crosses the Texas/Louisiana state line, the National Environmental Policy Act (NEPA) delegation Memorandum of Understanding (MOU) between FHWA and TxDOT (December 9, 2019) does not apply, and therefore, FHWA is the lead agency for the project, TxDOT is responsible for the preparation of environmental documentation, and LADOTD has provided review of the documentation.

The draft EA was made available for public review via a Public Hearing. (Note that the Public Hearing was held at two locations – one in Texas and one in Louisiana). Following the Public Hearing comment period, FHWA, TxDOT, and LADOTD considered all comments submitted. If FHWA determines there are no significant adverse effects, a finding of no significant impact (FONSI) will be issued and made available to the public. A project location map is provided as **Figure 1** in **Appendix A**. Representative photographs of the project area are included in **Appendix B**. Excerpts of the current engineering schematic and layout of the proposed project are included in **Appendix C**. **Figures 3.1** through **3.4** in **Appendix D** provide the existing and proposed typical sections. **Appendix E** contains copies of the planning documents. Resource-specific maps are provided in **Appendix F**.

## 2.0 PROJECT DESCRIPTION

### 2.1 *Existing Facility*

The existing SH 63/LA 8 Bridge is listed on the National Register of Historic Places (NRHP) and carries two-way vehicular traffic over the Sabine River via SH 63 in Texas and LA 8. SH 63 in Texas is designated as part of the Texas Highway Freight Network. Since the original

construction of the bridge, the river channel has widened through natural migration by approximately 75 feet on the bridge's west side and 60 feet on the east side, with historic evidence indicating that the main channel of the Sabine River will continue to migrate towards the west. The continued migration of the river poses a threat to the bridge's west approach span foundations, which were not designed to be within a waterway.

The existing bridge is a two-way bridge with two 11-foot-wide travel lanes and a bridge deck that is 23.7 feet wide. The existing right-of-way (ROW) width varies from 120 to 150 feet on the Texas side (SH 63) and varies from 130 to 180 feet on the Louisiana side (LA 8). The bridge's vertical clearance is 12-feet 3-inches. This clearance height is below the mandatory 14-foot vertical clearance for all bridges in the United States (U.S.) and is also below the 18.5-foot vertical clearance requirements for Texas Highway Freight Network bridges (the bridge is located on the Texas Highway Freight Network). The existing bridge is load posted for a weight limit of 49,000 pounds gross and 29,000 pounds tandem. Photographs of the existing facility, proposed ROW, and surrounding areas are available as **Photos 1 through 20** in **Appendix B**, and the existing typical section is provided on **Figure 3.1** in **Appendix D**.

## 2.2 *Proposed Project*

The proposed project (recommended build alternative) would replace the existing SH 63/LA 8 bridge at the Sabine River through the construction of new approach roadways and a new bridge structure. The proposed approach roadways would include one relief bridge at a crossing of wetlands and low areas in the Sabine River floodplain. The proposed project is approximately 2.9 miles in length. The western limit (in Texas) is approximately 0.88 mile west of the proposed bridge or 0.16 mile west of County Road (CR) 2119. The eastern project limit (in Louisiana) is approximately 1.43 miles east of the proposed bridge or 0.12 mile east of LA 111. A project location map is provided as **Figure 1** in **Appendix A**. Excerpts from the current engineering schematic and layout of the proposed project are included in **Appendix C**. **Figures 3.2 through 3.4** in **Appendix D** provide the proposed typical sections.

The current existing ROW extends from 120 to 180 feet in width and the existing roadway approach contains two 10.5-foot-wide lanes. The proposed ROW along SH 63/LA 8 would extend 116 to 240 feet in width and would contain two 12-foot-wide lanes, two 10-foot-wide shoulders, and would include 30-foot-wide clear zone on each side of the pavement. Proposed ROW for cross streets and connectors includes 50- to 75-foot-wide ROW with two 12-foot-wide lanes, two 1-foot-wide shoulders, and two 10-foot-wide clear zones. The proposed ROW diverges from the existing ROW near the intersection of SH 63 and CR 2119 in Texas and proceeds on new ROW in both Texas and Louisiana. The proposed bridge would be 46 feet wide with two 12-foot-wide travel lanes and two 10-foot-wide outside shoulders.

The proposed project would construct a new bridge over the Sabine River with new approach roadways. The new bridge would cross the Sabine River approximately 1,825 feet downstream

(south) of the existing river crossing, in an area identified as having stable riverbanks. To accommodate the new bridge location, the proposed approach roadways would diverge south from the existing SH 63 alignment near its intersection with CR 2119 in Texas and would re-connect with the existing LA 8 alignment near its intersection with LA 111 in Louisiana. The proposed bridge and approach roadways would consist of two 12-foot-wide travel lanes (one in each direction) and two 10-foot-wide shoulders with 30-foot-wide clear zones on each side of the road. The proposed ROW along the new SH 63/LA 8 alignment would be 116 to 240 feet wide. Both the proposed Sabine River bridge and relief bridge would be designed to meet current American Association of State Highway and Transportation Officials (AASHTO), TxDOT, and LADOTD criteria. The design life for these structures will be 75 years per AASHTO Load Resistance Factor Design (LRFD) Bridge Design Specifications. Both bridges would have slab and girder superstructures, which have no overhead components, and therefore have no vertical clearance restrictions. The project would require approximately 77 acres of new ROW, much of which will be from timber farms. The total project length is 2.9 miles along the proposed new alignment.

The proposed Sabine River bridge would be 8,045 feet long and 46 feet wide, with three main spans at the river crossing and 69 approach spans. For the three main spans, each bent would consist of six 48-inch diameter drilled shafts overlain with a 31-foot by 45-foot concrete seal slab, 21-foot by 35-foot concrete footing, and 4-foot by 18-foot oval concrete column. Each approach span bent would consist of six 24-inch square prestressed concrete piles (to be driven). One relief bridge would be constructed over wetlands and low areas in the Sabine River floodplain west of the proposed Sabine River bridge. The relief bridge would be 896 feet long and 46 feet wide, with eight spans each supported by six 24-inch square prestressed concrete piles (to be driven).

The term “project area” is defined as the existing and proposed ROW along the new bridge alignment and approaches and also the existing bridge alignment and approaches; the project area includes all areas of existing and proposed ROW shown on **Figure 1** in **Appendix A**.

### *2.3 Logical Termini and Independent Utility*

Federal regulations require that federally funded transportation projects have logical termini [23 Code of Federal Regulations (CFR) §771.111(f)(1)]. Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. The logical termini of the project include the bridge replacement and approaches and are as follows: the western terminus is approximately 0.88 mile west of the proposed bridge or approximately 0.16 mile west of CR 2119, and the eastern terminus is approximately 1.43 miles east of the proposed bridge or 0.12 mile east of LA 111.

Federal regulations require that a project has independent utility and would be a reasonable expenditure even if no other transportation improvements are made in the area [23 CFR §771.111(f)(2)]. This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. The proposed bridge replacement and approach roadway would provide an independent benefit through the construction of a new bridge crossing of the Sabine River and would not require future work to function, while fulfilling the project's purpose and need; therefore, it has been determined that the project has independent utility. Because the project has independent utility, it cannot and does not irretrievably commit federal funds for other future transportation projects.

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements [23 CFR §771.111(f)(3)]. This means that a project must not dictate or restrict any future roadway alternatives. The proposed project would not predetermine or preclude future work on either side of the bridge. Excerpts from the current engineering schematic and layout of the proposed project are included in **Appendix C**, and proposed typical sections are provided on **Figures 3.2** through **3.4** in **Appendix D**.

## 2.4 *Planning Consistency*

The proposed project is consistent with and listed in TxDOT's 2023 Unified Transportation Program, adopted August 30, 2022. TxDOT is anticipating to use Category 6 (Bridge Replacement) and Category 4 (Rural Regional Connectivity), with an anticipated split of 80 percent federal funds and 20 percent state funds. The proposed project is also listed in LADOTD's DOTD Highway Priority Program for FY 2021-2022. The anticipated split is 80 percent state funds (from federal sources) and 20 percent local. See **Appendix E** for planning document excerpts.

## 3.0 PURPOSE AND NEED

### 3.1 *Need*

Based on the bridge's current condition, dimensions, and location, the project is needed because the bridge has a current sufficiency rating of 45.3 out of 100.

### 3.2 *Supporting Facts and/or Data*

The bridge has the following issues:

- Stream migration causing severe scour to the Sabine River's western bank

- Deterioration on the truss and approach spans
- Impact damage on the truss and approach spans
- Railing system is not crash-rated
- Degradation of the bridge's foundations
- Horizontal and vertical clearance restrictions

Detailed information on supporting data and facts are discussed under three main topics – River Migration, Structural Deficiencies, and Functional Inadequacies – and are outlined in the Historic Bridge Programmatic Section 4(f) Evaluation included in **Appendix H**.

### 3.3 Purpose

The purpose of the proposed project (Build Alternative) is to provide a structurally sound bridge crossing that allows access for Texas and Louisiana motorists across the Sabine River. The project would focus on providing a bridge at a location with stable riverbanks, where river migration is not anticipated (during the service life of the proposed bridge), and with adequate width and height to safely accommodate existing and foreseeable future transportation needs.

## 4.0 ALTERNATIVES

A joint SH 63/LA 8 Feasibility Study and Historic Bridge Team Report (**Appendix H**, included as part of the Section (4) evaluation) was prepared to determine a recommended preferred alternative to address deficiencies with the existing bridge structure. The goals and objectives of the study were to provide a structurally sound bridge-crossing across the Sabine River within Newton County, TX and Vernon Parish, LA; and to provide a bridge with adequate width and height to safely accommodate existing and foreseeable future transportation needs. The Feasibility Study and Historic Bridge Team Report established that there were issues with the existing bridge superstructure, substructure and foundation, and that the approach roadway on the bridge's east side is settling. The bridge is also functionally obsolete, with vertical and horizontal clearances that do not meet current design standards. Continual river migration of the Sabine River is also threatening the existing bridge and western approach roadway.

In the Feasibility Study and Historic Bridge Team Report, project engineers first analyzed eight preliminary bridge options for the SH 63/LA 8 crossing at the Sabine River:

- Bridge Option 1: No-Build,
- Bridge Option 2: Rehabilitation for Continued Two-Way Vehicular Service,
- Bridge Option 3: Rehabilitation for Continued Use as a One-Way Scenic Bypass and New Structure on New Alignment,

- Bridge Option 4: Rehabilitation for Use as a One-way Pair,
- Bridge Option 5: Rehabilitation for Use as a Pedestrian Structure with New Structure on New Alignment,
- Bridge Option 6: Structure Left in Place as a Monument with New Structure on New Alignment,
- Bridge Option 7: New Structure on Current Alignment, and
- Bridge Option 8: New Structure on New Alignment.

These bridge options are described and analyzed in detail in the Historic Bridge Programmatic Section 4(f) Evaluation in **Appendix H** and shown in **Figure 2.2** in **Appendix A**.

The bridge options were analyzed using the same criteria, which were evaluated in a matrix. Of the eight bridge options analyzed, project engineers recommended Bridge Option 8: New Structure on New Alignment as the preferred bridge option. The other bridge options either did not meet the purpose and need for the project or they were not reasonable due to economic costs or environmental impacts (see the Alternatives Analysis in Section 4.0 of the Historic Bridge Programmatic Section 4(f) Evaluation included in **Appendix H**).

In addition, route alternatives were evaluated in a separate section of the Feasibility Study and Historic Bridge Team Report. The route alternatives are described below (as shown on **Figure 2.1** in **Appendix A**):

- Route Alternative A (Green) – an alignment north of the existing SH 63/LA 8 bridge,
- Route Alternative B (Orange) – an alignment directly south of the existing bridge,
- Route Alternative C (Purple) – an alignment that crosses the Sabine River approximately 1,825 feet south of the existing bridge, utilizing much of the existing SH 63 roadway,
- Route Alternative D (Yellow) – an alignment that crosses the Sabine River approximately 1,825 feet south of the existing bridge, with a flatter horizontal curve, and
- Route Alternative E (Red) – an alignment that crosses the Sabine River approximately 4,000 feet south of the existing bridge.

These conceptual route alternatives were evaluated on environmental, engineering, cost, and public input parameters in an evaluation matrix. This matrix was shown at a public meeting held on December 11, 2018. After the public meeting, the evaluation was further refined, and Route Alternative B (Orange) was removed from further consideration because it was determined that the severity of the river migration and highly unstable bank along this route alternative would not meet the study objective or purpose and need. The remaining four

alternatives were evaluated, and Route Alternative C (Purple) was carried into the next round of refinement because it had the lowest potential impacts to the environment and was the best option for engineering considerations. The refined alternative C was named Route C-1. Route C and C-1 were compared in evaluation and ranking matrices, and Route C-1 had the lowest potential impacts to the environment and was the best option for engineering considerations. The report recommended Conceptual Route Alternative Alignment C-1 as the preferred alternative, and this alternative is evaluated in this EA.

The preferred alternative (Build Alternative) would replace the existing SH 63/LA 8 bridge at the Sabine River through the construction of new approach roadways and a new bridge structure. The proposed project is approximately 2.9 miles long, with two-lane undivided roadway sections, which matches the configuration of the existing facility. The proposed bridge structure is approximately 1,825 feet downstream (south) of the existing bridge for long term bank stability while utilizing existing roadway approaches to reduce impacts. The proposed lanes would consist of two 12-foot-wide travel lanes (one in each direction) with two 10-foot-wide outer shoulders and 30-foot-wide clear zones on each side of the road in a variable 116 to 240-foot-wide ROW footprint. The bridge would also have two 12-foot-wide lanes with 10-foot-wide outer shoulders. The Build Alternative would require approximately 77 acres of new ROW and would not add capacity. The maximum depth of impacts from the bridge would be approximately 70 feet. The Build Alternative would meet the purpose and need of the project by providing a structurally sound bridge crossing that allows access for Texas and Louisiana motorists across the Sabine River, while addressing structural and functional issues outlined in **Section 3.2**.

Under the No-Build Alternative, the existing facility would operate as it currently does, and normal maintenance activities would continue. There would be no substantial adverse environmental impacts associated with this alternative. However, the No-Build Alternative would not meet current bridge design standards, the bridge would continue to deteriorate, and the river migration would continue to cause degradation of the bridge's substructure. Therefore, the No-Build Alternative would not address the purpose and need of the proposed project. The No-Build Alternative is carried forward in this EA to provide a baseline for comparison to the Build Alternative.

## **5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

In support of this EA, the following technical reports were prepared:

- EA Classification Letter
- Community Impacts Assessment Technical Report
- Archeological Background Study

- Antiquities Permit Application (for various archeological surveys)
- Intensive Terrestrial Archeological Survey Report
- Intensive Underwater Remote-Sensing Archeological Survey Report
- Project Coordination Request (PCR) for Historical Studies Form
- Historical Studies Research Design – Texas
- Historical Studies Research Design – Louisiana
- Historic Resources Survey Report (HRSR) – Texas
- HRSR – Louisiana
- Historic Bridge Programmatic Section 4(f) Evaluation
- Air Quality Technical Report
- Hazardous Materials Initial Site Assessment (ISA) Technical Report
- Traffic Noise Analysis Technical Report – Texas
- Traffic Noise Analysis Technical Report – Louisiana
- Biological Resources Technical Report
- Louisiana Significant Tree Survey Report
- Documentation of Public Meeting
- Documentation of Public Hearing

These technical reports, maps showing the project location and design, and other information regarding the project are on file and available for inspection by appointment from Monday through Friday between the hours of 8:00 a.m. and 5 p.m. at the TxDOT Beaumont District Office located at 8350 Eastex Freeway Beaumont, Texas 77708-1701. These same files are also available for viewing at the TxDOT Public Hearing Website: <https://www.txdot.gov/projects/hearings-meetings.html> and are available on the LADOTD Environmental Website: [http://wwwsp.dotd.la.gov/Inside\\_LaDOTD/Divisions/Engineering/Environmental/](http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/).

## 5.1 *Right-of-Way/Displacements*

The Build Alternative would require approximately 77 acres of new ROW (see the project schematic excerpt in **Appendix C**). The project would acquire approximately 32 acres of new ROW in Texas and 44.11 acres of new ROW in Louisiana. See **Figure 4** in **Appendix F** for the existing and proposed ROW locations. The proposed project would not result in potential displacements, subject to final design considerations. ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

The No-Build Alternative would not require the acquisition of ROW, nor would it result in relocations.

## 5.2 *Land Use*

The Build Alternative is the replacement of an existing bridge on new alignment, connecting Newton County, Texas and Vernon Parish, Louisiana. The general land use adjacent to the proposed project is scattered rural residential development with timber farm properties and light commercial development. Due to the rural nature of the project area, and controlled access of the bridge facility, the Build Alternative is not expected to result in direct or indirect changes to the project area. **Appendix B** provides representative photographs of the project area. **Figure 4** in **Appendix F** provides an overview of the proposed project and adjacent land use, businesses, and community features.

The No-Build Alternative would not result in changes to land use.

## 5.3 *Farmlands*

The Build Alternative does not fall within a U.S. Census Bureau 2010 Urbanized Area, and the project area contains areas mapped as prime farmland by the National Resource Conservation Service (NRCS). Therefore, a NRCS-CPA-106 form was completed to evaluate potential farmland soil impacts. The proposed project received a score less than 60 on Part VI of the form; therefore, coordination with the NRCS is not required under the Farmland Protection Policy Act (FPPA) since the total score of Parts V and VI did not reach the required threshold of 160. However, the NRCS-CPA-106 form for the proposed project was submitted to the NRCS for documentation purposes. The NRCS Texas office returned the completed NRCS-CPA-106 form on May 22, 2020, and the NRCS Louisiana office returned the completed NRCS-CPA-106 form on May 26, 2020. After completing Sections IV and V of the form, the proposed project received a total score of 87 from the Texas NRCS state soil scientist and 100 from the Louisiana NRCS state soil scientist. Since the totals are less than 160, the proposed project requires no further consideration for protection and no additional evaluation is necessary. The completed NRCS-CPA-106 form and letters of concurrence from the NRCS offices are included in **Appendix G**.

The No-Build Alternative would not require coordination with the NRCS.

## 5.4 *Utility Relocation*

It is reasonably foreseeable that utilities will have to be relocated as a result of this project. The impacts resulting from removal of any utilities from within existing highway ROW have been considered as part of the project impacts under each of the resource area subheadings within this EA. Additionally, if utilities will be relocated within highway ROW, then the impacts

resulting from re-installation of the utilities within highway ROW have also been considered as part of the project impacts under each of the resource area subheadings within this EA. To the extent that the owner of any displaced utility determines to re-install the displaced utility at a location outside of highway ROW, such location will be determined by the owner of the utility subject to the rules and policies governing the utility relocation process. Additionally, in both Texas and Louisiana the owner of the utility will be responsible for acquiring any easements outside the highway ROW and ensuring that the design and construction meet all regulatory and environmental compliance requirements. See 43 Texas Administrative Code (TAC) 21.37(a)(9), (g)(1), and (g)(4); 43 TAC 21.38(e)(2).

The No-Build Alternative would not impact existing utilities.

## 5.5 *Bicycle and Pedestrian Facilities*

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the “Bipartisan Infrastructure Law”) into law. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband. Bipartisan Infrastructure Law’s Bridge Formula Program funding is subject to requirements for accommodations for bicycles and pedestrians pursuant to 23 U.S.C. 217(e). This project will receive Federal funding participation, and as such, must evaluate safe accommodation of pedestrians or bicyclists on the bridge when both of the following conditions are met:

1. The existing bridge being replaced is located on a highway on which pedestrians or bicyclists are allowed to operate at each end of the bridge, and
2. It is determined that safe accommodation can be provided at a reasonable cost.

The existing SH 63/LA 8 bridge and approach roadways do not currently include sidewalks or bicycle lanes. Additionally, the existing approach roadways do not include a shoulder or other safe accommodation for pedestrians or bicyclists. The existing SH 63 and LA 8 roadways are 21-feet wide with 6:1 slopes at the edge of the pavement. This existing condition does not allow pedestrians or bicyclists to operate at either end of the existing bridge. Additionally, there is no evidence of pedestrian movement on either end of the existing bridge.

Texas’s 2005 Bicycle Tourism Trails Act identified bicycle networks and defined recommended design criteria to accommodate bicyclists. The SH 63 corridor is not identified as part of the Bicycle Tourism Trails Network.

FHWA guidance defines “reasonable cost” for accommodating bicyclist and pedestrian facilities as “showing by the project sponsor that the cost of such accommodation would exceed twenty percent of the cost of the larger transportation project. For instances where

such accommodation exceeds twenty percent, the addition of bicyclist and pedestrian accommodation is not required...”. The recommended alternative for replacing the existing SH 63 / LA 8 bridge at the Sabine River has a total estimated cost of \$38,853,900. Providing pedestrian accommodations would require, 1) constructing a shared use path for both bridge approaches that is approximately 1.6 miles long, 2) increasing the proposed bridge width by a minimum of 6 feet, and 3) adding a pedestrian railing to the proposed bridge. The estimated cost to add these elements to the project is \$8,600,000, which exceeds 20 percent of the project cost.

Accommodation for bicyclists and pedestrians was not considered as part of the proposed project, but was dismissed based on the criteria outlined above. However, bicyclists would be able to use the outside shoulder of the road and bridge crossing.

In keeping with 23 USC 217(g) and the 1999 FHWA policy statement on accommodating bicycles and pedestrians in transportation projects, this project was designed with an outside shoulder width of 10 feet. This shoulder width reflects current roadway safety and operational design standards and has an added advantage of providing a safe place for bicyclists to use. As the FHWA policy recommends a paved 4-foot shoulder for rural areas, the proposed project exceeds this recommendation.

The No-Build Alternative would not result in impacts or benefits to bicycle or pedestrian facilities.

## 5.6 *Community Impacts*

A Community Impacts Assessment Technical Report, dated March 2020, was prepared.

No displacements are anticipated.

The proposed project would replace the existing SH 63 bridge with a newly aligned bridge approximately 1,825 feet downstream (south of the existing bridge). The existing bridge would remain open during construction, and all current access would be maintained. **Figure 4** in **Appendix F** details the existing and proposed ROW, along with community features within the community study area. After construction of the new crossing and removal of the existing bridge, driveway access up to the removed bridge structure would be maintained with the addition of cul-de-sacs on both sides of the river. Travel times and distances would increase when traveling from one proposed cul-de-sac to the other, based on a 4.35-mile difference between the existing and proposed routes. There is one timber access road, River Project Road, that would be bisected by the proposed project. The detour for this road is approximately 3.9 miles to the opposite side; however, it is anticipated that this road has limited use and would not result in a major change to traffic patterns or increase in travel times to the majority of LA 8 users. When the proposed bridge is opened to the public, drivers

would utilize the new approach roadways, resulting in a minor change in travel patterns. Because the existing bridge would remain open and all existing access would be maintained during construction, impacts to emergency response times and travel times are not anticipated. In addition, because all existing access points would be maintained after construction, current travel patterns are anticipated to remain largely unchanged.

Impacts to the character or community cohesion in the project vicinity are not anticipated because the Build Alternative would replace an existing bridge while keeping existing access. The proposed project would not result in the division or isolation of any businesses, distinct neighborhoods, or other specific groups. The project would not result in new or additional barriers between communities, nor would access be denied to existing facilities.

The replacement of the Sabine River bridge with new approach roadways is anticipated to increase safety and eliminate functional obsolescence issues with the existing bridge by providing a bridge structure that meets current design standards. This upgrade is anticipated to benefit the community and all users of the SH 63/LA 8 bridge at the Sabine River.

Limited English Proficiency (LEP) populations were analyzed at the block group level. Due to the rural nature of the project area, the Block Groups covered a large geographic area. Census data indicated that there were “Asian and Pacific Island Languages” speaking LEP persons with 6.17 percent of the total population identified in Census Tract 9503 Block Group 2. “Spanish-speaking,” “other Indo-European languages,” or “Other language” LEP speaking populations were not identified in any of the block groups within the study area. Due to the presence of “Asian and Pacific Island Language” LEP persons in Census Tract 9503, Block Group 2, further investigation was conducted, which identified a Korean-speaking population in Leesville, LA. As a result, Korean language LEP outreach was conducted prior to the December 11, 2018 public meeting. TxDOT and LADOTD offered meaningful involvement for LEP populations for public involvement, including the Public Hearings. Additionally, from November 2, 2018 to January 4, 2019, TxDOT and LADOTD solicited public input on the various alternatives under consideration for the bridge project via an online engagement tool called MetroQuest. An Online Engagement Station was also available at the December 11, 2018 public meeting. A total of 159 participants completed the MetroQuest survey. For a summary of public comments, see **Section 7.0 Public Involvement**, below. Once the EA was approved for circulation, a Public Hearing was held at two locations - one in Texas and one in Louisiana.

The No-Build Alternative would not result in direct adverse impacts to the adjacent communities.

## 5.7 *Visual/Aesthetic Impacts*

Using FHWA's Visual Impact Assessment for Highway Projects guidance (FHWA-HI-88-054), an analysis of the potential visual impacts of the proposed project was conducted. Visual impacts are defined as a change in the aesthetic value resulting from the introduction of modifications to the landscape. The project vicinity has been evaluated in terms of project impacts on visual character and scenic (visual) quality.

In an effort to determine the visual resource effects of the proposed project, an analysis of the landscape components affected by the proposed project was conducted. The regional landscape in the project area is rural. No substantial changes to the vegetation surrounding the roadway corridor are anticipated as a direct result of the proposed project.

In order to determine the scale and dominance of the proposed project, the schematic was used to evaluate changes in elevation and potential impacts to the current viewshed in the project vicinity. The scale and dominance of the proposed structures were determined to be compatible with the project surroundings because the project replaces the existing bridge with one of a comparable vertical profile.

Due to the aesthetic compatibility of the proposed improvements to the existing transportation features, the construction of a visual barrier was determined to not be necessary.

The No-Build Alternative would not result in visual impacts.

## 5.8 *Cultural Resources*

Cultural resources are structures, buildings, archeological sites, districts (a collection of related structures, buildings, and/or archeological sites), cemeteries, and objects. Both federal and state laws require consideration of cultural resources during project planning. Evaluation of impacts to cultural resources has been conducted under Section 106 of the National Historic Preservation Act (NHPA) in Texas and Louisiana. In Texas, Section 106 has been completed in accordance with the Programmatic Agreement (PA) among FHWA, TxDOT, the Texas State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) Regarding the Implementation of Transportation Undertakings. Projects in Texas involving potential adverse effects to historic bridges must include the Historic Bridge Foundation (HBF) as a Section 106 consulting party. In Louisiana, LADOTD has completed Section 106 coordination with Louisiana SHPO per direction from Louisiana FHWA. In addition, state laws such as the Antiquities Code of Texas apply to these projects. Compliance with the state and federal laws often requires consultation with the Texas Historical Commission (THC) and/or federally-recognized tribes to determine the project's effects on cultural resources. Review and coordination of this project followed approved procedures for compliance with federal and state laws. There are no state-level laws or agency in Louisiana regarding cultural

resource compliance that pertain to this project. See **Appendix F** for resource-specific cultural resource maps.

### 5.8.1 *Archeology*

Due to the project crossing state lines over a river, three archeological surveys were conducted. One terrestrial survey was conducted in Texas, another terrestrial survey was completed in Louisiana, and an underwater survey was conducted in the Sabine River. The results of all three archeology surveys are outlined below.

A Phase I terrestrial archeology survey was conducted from March 2 to March 10, 2021, along the proposed new alignment of SH 63 in Texas. The horizontal area of potential effect (APE) for the Texas terrestrial survey included 34.5 acres within a 116 to 240-foot-wide proposed ROW for approximately 6,000 feet, and the vertical APE based on depth of impacts was 2 to 60 feet. The Texas terrestrial survey was completed with systematic shovel and auger testing along pre-plotted survey lines, along with systematic metal detecting. No archeological sites were identified in the Texas terrestrial survey, and no additional work within the surveyed APE was recommended. On July 6, 2021, the Texas SHPO concurred with the findings of the Texas terrestrial survey by email (see **Appendix G**).

A Phase I underwater/marine cultural resource, remote sensing survey was conducted at the existing SH 63/LA 8 bridge crossing the Sabine River and the proposed new bridge location. The area surveyed encompassed 3.25 acres, and fieldwork was conducted on September 16-18 and December 28-29, 2020. Construction activities likely to impact state-owned bottomlands within the Sabine River include, but are not limited to, river bottom disturbance related to the removal of the existing bridge structure and pile driving and pier construction for the new bridge. The remote sensing survey adhered to standards published in TAC Title 13, Chapter 28 and to guidelines established by the Louisiana Division of Archaeology. The survey included use of a fathometer, dual-frequency side scan sonar, and total field magnetometer. Several side-scan sonar targets were recorded, all of which were identified as natural objects such as submerged trees and limbs, or are associated with the existing bridge. None of the sidescan sonar targets were interpreted as representing potentially historically significant features. No magnetic anomalies of interest were recorded. No further underwater cultural resources work is recommended. The Texas SHPO concurred with the findings of the underwater archeological survey on June 4, 2021 (by signing TxDOT's June 4, 2021 letter and by sending a separate letter), and the Louisiana SHPO concurred with the findings of the underwater survey (noted as a marine survey) on March 7, 2022 (see **Appendix G**).

In November and December of 2020, another Phase I terrestrial archeological survey was conducted along the proposed new approach roadway of LA 8 in Louisiana. The proposed ROW for the new LA 8 is 116 to 240 feet wide and extends approximately 8,700 feet from the Sabine River to a point approximately 780 feet east of the LA 8/LA 111 junction. There are

also three smaller pieces of proposed new ROW along LA 111, River Project Road, and a new connector between the existing LA 8 and the proposed project that would be approximately 770 feet west of LA 111. The total area surveyed in Louisiana consisted of approximately 48.4 acres. The survey concluded that no archeological historic properties were located in the APE, and the proposed project has no potential to affect archeological historic properties in Louisiana. The Louisiana SHPO concurred with the Phase I terrestrial archeological survey findings on March 7, 2022 (same concurrence letter as marine survey referenced above; see **Appendix G**).

Coordination with Native American tribes with an interest in the area was initiated by email in February 2022 for Texas (terrestrial and marine) and in March 2022 for Louisiana (terrestrial and marine). One response was received, which noted concurrence with the No Adverse Effect findings. Copies of this coordination and response from the Jena Band of the Choctaw Indians dated February 23, 2022 are included in **Appendix G**.

Further pedestrian survey was conducted on December 12, 2023 due to concerns expressed in written comment from the Public Hearing process regarding a potential burial site in the project area. This pedestrian survey found no additional resources or indication that there was a burial site within the project area. A detailed timeline of this process can be found in **Section 7.0 Public Involvement**.

In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease, and TxDOT or LADOTD archeological staff (depending on the location of the discovery) will be contacted to initiate post-review discovery procedures.

The No-Build Alternative would not impact archeological resources.

### 5.8.2 *Historic Properties*

TxDOT and LADOTD have conducted historic resources consultation on this project since 2017. On October 12, 2017, TxDOT and LADOTD Cultural Resources staff invited the Texas and Louisiana SHPO staff, as well as a Section 106 consulting party (the HBF), to a field meeting at the historic bridge while it was closed to traffic during TxDOT's condition assessment of the structure. The Texas and Louisiana SHPO staff attended the field visit; HBF declined the invitation. Due to the narrow width and substantial length of the bridge, accessing the bridge while it was closed allowed the group to walk on the bridge and review the bridge's current condition with the consulting engineers and TxDOT bridge engineers responsible for conducting and overseeing the condition assessment. This field visit provided the Texas and Louisiana SHPO staff an opportunity to ask questions of the bridge engineers and take photographs of the bridge and structural issues. During the alternatives analysis phase, TxDOT, LADOTD, and FHWA held an alternatives workshop on March 8, 2018 to discuss the various options for the replacement of the NRHP-listed bridge. The two primary goals of the

workshop were to receive early input on the project from potential Section 106 consulting parties, stakeholders, and agencies, and to develop alternatives for further study. TxDOT and LADOTD invited the following agencies and potential Section 106 consulting parties:

- Louisiana organizations:
  - Louisiana SHPO
  - Vernon Historical and Genealogical Society
  - Preserve Louisiana
  - Louisiana Trust for Historic Preservation
- Texas organizations:
  - Texas SHPO
  - Newton CHC
  - Preservation Texas
- National organizations:
  - ACHP
  - National Trust for Historic Preservation
  - HBF

Of the invited agencies and potential Section 106 consulting parties, representatives from the Louisiana and Texas SHPOs, the Newton CHC, and the HBF either attended in person or via conference call. TxDOT and LADOTD also invited approximately 65 stakeholders (including but not limited to representatives from local government agencies, Fort Polk Army Base, the Sabine River Authorities of Texas and Louisiana, South Toledo Bend State Park, and the Kisatchie National Forest) to participate in the alternatives workshop. The alternatives workshop included a presentation that outlined the project's Purpose and Need, as well as illustrations of the bridge's structural issues and functional inadequacies. Following the presentation, attendees were divided into groups to discuss possible bridge options, followed by the attendees voting on the suggested bridge options for further consideration by project planners and engineers.

Continuing coordination with agencies regarding potential options for the historic bridge, TxDOT met with FHWA and LADOTD on May 8, 2019. In this meeting, the group discussed the findings of the Feasibility Study and Historic Bridge Team Report, as well as next steps in completing Section 106 and NEPA documentation requirements. TxDOT invited the Texas and Louisiana SHPOs to attend the meeting in person or via telephone. The Texas SHPO declined TxDOT's invitation to attend, but they requested a copy of the Feasibility Study and HBT Report. The Louisiana SHPO attended via telephone for a portion of the meeting. Louisiana SHPO staff noted that they did not need to be on the call since they were most interested in discussing mitigation for the NRHP-listed bridge, which LADOTD was not prepared to discuss at that time.

In May 2020, historic resources surveys of the APE in Texas and Louisiana were completed. The APE for non-archeological historic-age (pre-1978) resources was determined to be variable as follows:

- The APE was the existing ROW where no new ROW is required along the current SH 63/LA 8 alignment.
- Where new ROW is proposed, the APE was determined to be the proposed ROW and a 300-foot buffer around the proposed ROW.

Per TxDOT and LADOTD instruction, the survey results were divided into two separate reports, one for each state's SHPO to review and provide concurrence for resources within their respective states. The existing SH 63/LA 8 truss bridge over the Sabine River is NRHP-listed and was included in both states' reports because the bridge straddles the Texas/Louisiana state line and is owned equally by both states.

In the Texas report, four historic-age resources were inventoried within the Texas APE. First was the SH 63/LA 8 truss bridge (NBI Number 201760021404005), which is NRHP-listed under Criterion A and Criterion C. Second, there was a previously determined NRHP-eligible Texas shaped stone Centennial marker in the APE, as well as two existing relief bridges on SH 63 that TxDOT previously determined as not NRHP eligible as part of their statewide survey of non-truss bridges completed in 1999. TxDOT submitted the Texas HRSR to the Texas SHPO on February 14, 2022. TxDOT received concurrence on NRHP eligibility of the surveyed resources from the Texas SHPO on March 4, 2022 (see **Appendix G**). The Texas HRSR recommended that there was an adverse effect to the NRHP-listed SH 63/LA 8 bridge and no adverse effect to the NRHP-eligible Texas shaped stone Centennial marker.

The Louisiana report documented that there were eight historic-age resources on four properties (including the NRHP-listed historic bridge) located in the Louisiana APE. Although the LADOTD determined that the historic properties in the APE included the NRHP-listed bridge and one NRHP-eligible corn crib, the Louisiana SHPO responded in a March 7, 2022 letter that the NRHP-listed bridge is the only historic property in the APE, and all other historic-age resources inventoried in Louisiana are not NRHP eligible (see **Appendix G**). The SHPO also concurred that the proposed project would have an adverse effect to the NRHP-listed bridge.

In May 2022, TxDOT and LADOTD hosted a meeting to discuss potential mitigation for the historic bridge. The meeting included an in-person component at the Leesville City Hall in Leesville, Louisiana and capabilities for virtual attendees to join via Zoom video call. The attendees to the meeting included FHWA Louisiana and Texas Divisions, Louisiana and Texas SHPOs, the Historic Bridge Foundation (HBF), and Vernon Parish Historical and Genealogical Society. Additionally, several stakeholders attended including the City of Leesville, Vernon Parish Tourism and Recreation Commission, Vernon Parish Police Jury, Central Louisiana Regional Port, Jasper Economic Development Corporation, Newton County Precinct 3, and I-

14 Gulf Coast Strategic Highway Coalition. Based on the ideas discussed at this meeting, TxDOT and LADOTD formulated a plan for mitigation, which was coordinated with the SHPOs and HBF in October 2022.

On October 19, 2022, TxDOT sent correspondence via letter to the Texas SHPO and HBF. In those letters, TxDOT provided a determination of adverse effects and requested endorsement of the commitment to continue consultation on the mitigation plan. On November 8, 2022, the Texas SHPO provided their concurrence by signing the TxDOT letter. HBF did not respond to TxDOT's letter (see **Appendix G**).

On October 18, 2022, LADOTD sent correspondence via letter to the Louisiana SHPO. In that letter, LADOTD provided a determination of adverse effects and requested endorsement of the commitment to continue consultation on the mitigation plan. On November 7, 2022, the Louisiana SHPO provided their concurrence by letter (see **Appendix G**).

On February 9, 2023, FHWA Texas Division sent via email the notification and supporting documentation to the ACHP regarding the potential adverse effects to the historic bridge. The packet included the Electronic Section 106 Documentation Submittal System (e106) form, a copy of TxDOT's October 19, 2022 letter to the Texas SHPO with signed concurrence on November 8, 2022, the survey forms and associated maps from the Historic Resource Survey Report for the bridge, and a consulting party list. On February 24, 2023, the ACHP responded to FHWA that they did not believe their participation in the Section 106 consultation to resolve adverse effects was needed. A Memorandum of Agreement between FHWA, TxDOT, LADOTD, Texas SHPO, and Louisiana SHPO was fully executed on November 11, 2024 (see **Appendix G**).

It should also be noted that adjacent to the existing Texas shaped stone Centennial marker are two Official Texas Historical Markers (OTHMs). TxDOT will complete the THC OTHM relocation forms to move the OTHMs to the aforementioned roadside park and coordinate the OTHM relocations with the THC and the Newton County Historical Commission (CHC).

The No-Build Alternative would not result in impacts to historic resources in the short-term; however, as illustrated in the Historic Bridge Programmatic Section 4(f) Evaluation, the No-Build Alternative would result in continued deterioration and degradation of the bridge's substructure.

## 5.9 *Protected Lands*

The SH 63/LA 8 Bridge at the Sabine River is listed on the NRHP, and the Build Alternative includes the demolition of the NRHP-listed bridge, which is a Section 4(f) property. As noted above, TxDOT and LADOTD have determined that the Build Alternative would have an adverse effect to the NRHP-listed bridge, and the Texas and Louisiana SHPOs concurred with this

determination. As a result, TxDOT and LADOTD were required to complete a Historic Bridge Programmatic Section 4(f) Evaluation, which is included as **Appendix H**. The Programmatic Section 4(f) Evaluation provides an analysis of all alternatives developed for the proposed project in relation to the historic bridge. It also outlines the prudence and feasibility of each alternative and the measures to minimize harm to the Section 4(f) property. Additionally, as an NRHP-listed bridge, it is a designated historic property that is subject to Chapter 26 of the Texas Parks and Wildlife Code (PWC), which requires a Public Hearing to be held with certain notification requirements.

Under the Build Alternative, the proposed project would demolish the NRHP-listed bridge and a new SH 63/LA 8 bridge would be built approximately 1,825 feet south of the existing bridge. TxDOT Historians, District staff, engineers, and project planners considered alternatives to minimize harm to the historic bridge. In addition to consultation efforts and meetings since 2018 with civic and preservation groups, project planners originally identified eight bridge options and several route alternatives for bridge options that required new structures to be built on new alignment (as discussed in **Section 4.0 Alternatives** and shown in **Figures 2.1** and **2.2** of **Appendix A**). In accordance with Section 106 of the NHPA, TxDOT and LADOTD have completed a mitigation plan for the historic bridge, which was codified in a Memorandum of Agreement between FHWA, TxDOT, LADOTD, Texas SHPO, and Louisiana SHPO. This Memorandum of Agreement was fully executed on November 11, 2024 (see **Appendix G**).

Based upon the Historic Bridge Programmatic Section 4(f) Evaluation (included in **Appendix H**) and the considerations outlined therein, there is no feasible and prudent alternative to the use of the current SH 63/LA 8 bridge over the Sabine River, and the proposed action includes all possible planning to minimize harm to this Section 4(f) property resulting from such use.

There are no Section 6(f) properties present in the project area.

The No-Build Alternative would not result in impacts to the Section 4(f) property in the short-term; however, as illustrated in the Historic Bridge Programmatic Section 4(f) Evaluation, the No-Build Alternative would result in continued deterioration and degradation of the bridge's substructure in the long term.

## 5.10 *Water Resources*

### 5.10.1 *Clean Water Act Section 404*

The Build Alternative would involve regulated activity in jurisdictional waters and therefore would require authorization under Section 404. The following **Table 1** shows the waters that are anticipated to be jurisdictional waters in which regulated activity is anticipated to take place (see **Appendix F, Figures 7.1** through **7.9** for resource specific maps). It also indicates whether the impacts are anticipated to be authorized under Section 404 by a non-reporting

nationwide permit (NWP) (i.e., no pre-construction notification [PCN] required), or if it is anticipated that a NWP with PCN, standard permit, letter of permission, or regional general permit would be required.

*Table 1: Summary of Waterbody/Wetland Features in the Project Area*

Name of water feature	Type of water feature	Location of water feature (on map)	Covered by non-reporting NWP under Section 404?	NWP with pre-construction notification, standard permit, letter of permission, or regional general permit required under Section 404?
PW-A1	Palustrine forested	Figure 7.1	N	Y
OW-1	Open water	Figure 7.1	N	Y
S-1a	Ephemeral stream	Figure 7.1	No permit (no impact)	No permit (no impact)
S-1b	Ephemeral stream	Figure 7.1	No permit (no impact)	No permit (no impact)
W-1a	Palustrine emergent	Figure 7.1	N	Y
W-1b	Palustrine forested	Figure 7.1	N	Y
W-2	Palustrine scrub-shrub	Figure 7.2	N	Y
W-3	Palustrine emergent	Figure 7.2	N	Y
W-4	Palustrine scrub-shrub	Figure 7.2	N	Y
W-5	Palustrine forested	Figure 7.2	N	Y
W-6	Palustrine forested	Figure 7.2	N	Y
W-7	Palustrine forested	Figure 7.2	N	Y
W-8a	Palustrine emergent	Figure 7.3	N	Y
W-8b	Palustrine forested	Figure 7.3	N	Y
S-2a (Sabine River-South)	Perennial stream	Figure 7.3	N	Y
S-2b (Sabine River-North)	Perennial stream	Figures 7.7-7.8	N	Y
S-3	Intermittent stream	Figure 7.3	N	Y
W-9a	Palustrine emergent	Figure 7.3	N	Y
W-9b	Palustrine forested	Figure 7.3	N	Y
S-4	Ephemeral stream	Figure 7.3	N	Y
W-10	Palustrine forested	Figure 7.3	N	Y
W-11	Palustrine forested	Figure 7.3	N	Y

*Table 1: Summary of Waterbody/Wetland Features in the Project Area*

Name of water feature	Type of water feature	Location of water feature (on map)	Covered by non-reporting NWP under Section 404?	NWP with pre-construction notification, standard permit, letter of permission, or regional general permit required under Section 404?
W-12	Palustrine forested	Figures 7.3-7.4	N	Y
W-13	Palustrine forested	Figure 7.4	N	Y
W-14	Palustrine emergent	Figure 7.4	N	Y
W-15	Palustrine forested	Figure 7.5	N	Y
W-16	Palustrine forested	Figure 7.5	N	Y
W-17	Palustrine forested	Figures 7.5-7.6	N	Y
P-1	Pond/impoundment	Figure 7.6	No permit (no impact)	No permit (no impact)
P-2	Pond/impoundment	Figure 7.6	No permit (no impact)	No permit (no impact)
P-3	Pond/impoundment	Figure 7.6	No permit (no impact)	No permit (no impact)
W-18a	Palustrine forested	Figure 7.7	No permit (no impact)	No permit (no impact)
W-18b	Palustrine emergent	Figure 7.7	No permit (no impact)	No permit (no impact)

<sup>1</sup> PW-A is a potential wetland that could not be confirmed because right-of-entry to the property was not provided.

Due to proposed impacts to jurisdictional waters, the project requires a standard permit under Section 404. An application for a standard permit was submitted to the U.S. Army Corps of Engineers (USACE) on March 14, 2024, and the Section 404/10 Standard Permit Application Cover Letter is included in **Appendix G**.

In accordance with the U.S. Environmental Protection Agency’s (EPA) Section 404(b)(1) Guidelines, TxDOT evaluated alternatives to the proposed project and impacts to aquatic resources. The alternatives analysis considered identification of practicable and reasonable alternatives that would meet the project purpose while minimizing aquatic resources impacts and balancing impacts to other natural and socioeconomic resources. TxDOT dismissed the No-Build Alternative because it would not address the project’s purpose and need. TxDOT initially considered eight preliminary bridge options to address the project’s purpose and need while considering impacts to the existing NRHP-listed bridge. The Sabine River has experienced substantial migration at the existing bridge location and continued river migration is expected, so TxDOT dismissed the bridge options that entailed rehabilitating the existing

bridge or replacing the bridge on the current alignment because river migration would continue to threaten the bridge crossing under those options.

As a result, TxDOT identified the need for alternatives that would construct a new bridge on a new alignment in order to resolve the functional, structural, and river migration issues. TxDOT evaluated five conceptual route alternatives, which included one route north of the existing alignment, one route adjacent to the current alignment, and three routes south of the existing alignment. A map showing the alternative routes is attached as **Figure 2.1**.

- Route Alternative A is located north of the existing crossing and would cross the Sabine River in an area identified as having moderately stable river banks. Route Alternative A is approximately 5.5 miles long and would require approximately 268 acres of new ROW.
- Route Alternative B is located directly adjacent to and south of the existing crossing, which is in an area identified as having highly unstable river banks. Route Alternative B is approximately 1.6 miles long and would require approximately 19.5 acres of new ROW.
- Route Alternative C would cross the Sabine River approximately 1,825 feet downstream of the existing bridge in an area identified as having stable river banks. Route Alternative C is approximately 3.7 miles long and would require approximately 99 acres of new ROW.
- Route Alternative D would cross the Sabine River at the same location as Route Alternative C but diverges from the existing highway alignment west of Route Alternative C, providing a more direct route and fewer curves. Route Alternative D is approximately 4.5 miles long and would require approximately 142.4 acres of new ROW.
- Route Alternative E is the southernmost alternative, crossing the Sabine River approximately 1.4 miles downstream of the existing bridge, also in an area identified as having stable riverbanks. Route Alternative E is approximately 5.3 miles long and would require approximately 142.1 acres of new ROW.

TxDOT evaluated the route alternatives based on their ability to meet the project purpose and need, engineering considerations including existing and anticipated future river migration, public input, estimated impacts to aquatic resources, and estimated impacts to other natural and community resources. The following table compares the route alternatives in relation to key engineering considerations and anticipated impacts to aquatic resources. TxDOT dismissed Route Alternative B because it was determined that the highly unstable river banks and severity of existing and anticipated future river migration along the route would not meet the project's purpose and need.

Of the remaining alternatives, Route Alternative C was selected for various reasons, including being the shortest route, requiring the least amount of new ROW, having the lowest cost and having the lowest estimated impacts to aquatic resources. Although Route Alternative E has a reduced impact on aquatic features mapped by the National Wetland Inventory, review of National Land Cover Data (NLCD) and aerial photographs indicates it would have similar or higher actual impacts to aquatic resources as Route Alternative C.

*Table 2: Alternative Analysis Matrix*

Study parameter	Unit/parameter	No-Build	Route Alt. A (Green)	Route Alt. B (Orange)	Route Alt. C (Purple)	Route Alt. D (Yellow)	Route Alt. E (Red)
Meets Study Objectives	Yes/No	No	Yes	No	Yes	Yes	Yes
Length	Miles	–	5.5	–	3.7	4.5	5.3
Proposed ROW Requirements	Acres	–	268	–	99	142.4	142.1
Construction Cost	Dollars (Millions)	–	\$70M	–	\$40M	\$45M	\$60M
River Migration/ Bank Stability at Bridge Crossing	Highly Unstable/ Moderately Stable/Stable	–	Moderately Stable	Highly Unstable	Stable	Stable	Stable
River Migration Risk	Low/Medium/ High	–	Medium	High	Low	Low	Low
Stream Crossings	No./Linear Feet (LF)	–	4/ 2,449	–	2/617	2/668	5/1,629
100-Year Floodplains	Acres	–	107	–	22	26	47
National Wetlands Inventory Features	Acres/LF	–	72.3/ 7,702	–	26.1/ 5,346	30.6/ 5,539	11.9/ 2,303
NLCD Wetlands/ Open Water	Acres	–	117	–	47	79	63
Potential Impacts to LA Natural and Scenic River (Pearl Creek)	Yes/No	–	Yes	–	No	No	No

\*The cost estimates listed are a snapshot in time from when the analysis was performed and do not reflect current estimates.

After TxDOT identified Route Alternative C as the preferred alternative, TxDOT evaluated refinements to address potential engineering issues and further reduce impacts. As a result, Route Alternative C-1 was developed and became the selected alternative (see **Figure 2.1** in **Appendix A** for the location of Route Alternative C-1). As shown in the following table, Route Alternative C-1 reduces the overall project length, ROW requirements, construction cost, and aquatic resource impacts compared to Route Alternative C.

*Table 3: Refined Route Alternative Matrix*

Study parameter	Unit/parameter	Route Alt. C (Purple)	Refined Route Alt. C-1 (Purple/Black)
Meets Study Objectives	Yes/No	Yes	Yes
Length	Miles	3.7	3.0
Proposed ROW Requirements	Acres	99	74
Construction Cost	Dollars (Millions)	\$40M	\$38M
River Migration/Bank Stability at Bridge Crossing	Highly Unstable/ Moderately Stable/Stable	Stable	Stable
River Migration Risk	Low/Medium/High	Low	Low
Stream Crossings	No/LF	2/617	1/794
100-Year Floodplains	Acres	22	25
National Wetlands Inventory Features	Acres/LF	26.1/5,346	17.6/3,230
NLCD Wetlands/Open Water	Acres	47	36
Potential Impacts to LA Natural and Scenic River (Pearl Creek)	Yes/No	No	No

### Summary of Alternatives Analysis

TxDOT considered options that would rehabilitate the existing bridge or replace the existing bridge with a new bridge on the current alignment, but those options were dismissed because the Sabine River has experienced substantial migration at the existing bridge location, and continued river migration is expected to threaten the bridge crossing under those options. Of the practicable route alternatives evaluated, the preferred alternative (Route Alternative C-1) meets the project purpose and need and minimizes the overall project length, ROW requirements, construction cost, and impacts to aquatic resources and surface water in the states; therefore, the preferred alternative (Refined Route Alternative C-1) is the least environmentally damaging practicable alternative.

The No-Build Alternative does not address the project's purpose and need. The No-Build Alternative would not impact jurisdictional waters.

### 5.10.2 *Clean Water Act Section 401*

For projects that require a NWP under Section 404 that are covered by the Texas Commission on Environmental Quality's (TCEQ) blanket 401 water quality certification, regardless of whether the NWP is non-reporting, or requires the submission of a PCN, TxDOT complies with Section 401 of the Clean Water Act by implementing TCEQ conditions for NWPs. For projects that require authorization under a NWP under Section 404 that are not covered by TCEQ's blanket 401 water quality certification, or under an Standard Permit, Letter of Permission, or Regional General Permit under Section 404, TxDOT will coordinate the Section 401 water quality certification with TCEQ and Louisiana Department of Environmental Quality (LDEQ). LDEQ approved the Section 401 water quality certification on October 1, 2024. TCEQ will either approve or deny the Section 401 water quality certification or issue a waiver. The TCEQ and LDEQ Section 401 water quality certification decision must be submitted to the USACE before use of the NWP can be confirmed, or a Standard Permit, Letter of Permission, or Regional General Permit decision can be made.

### 5.10.3 *Executive Order 11990 Wetlands*

This project is federally funded through FHWA and therefore is subject to EO 11990, Protection of Wetlands, and would involve construction in jurisdictional wetlands. See **Figures 7.1 through 7.9 in Appendix F**. In addition, see **Appendix J** for a copy of the Section 404 Standard Permit Mitigation Plan (Submitted March 14, 2024) and **Appendix G** for correspondence to date with the USACE. Mitigation is proposed through the purchase of mitigation credits.

There are no practicable alternatives to the proposed project that completely avoid wetlands. The existing SH 63/LA 8 bridge has multiple structural and functional issues and must be replaced to meet the project purpose. The Sabine River has experienced substantial migration at the existing bridge location and continued river migration is expected, so options were dismissed that entailed rehabilitating the existing bridge or replacing the bridge on the current alignment because river migration would continue to threaten the bridge crossing under those options. As a result, TxDOT identified the need to construct a new bridge on a new alignment in order to resolve the functional, structural, and river migration issues. All alternatives to relocate the bridge and realign the approaches would require impacts to wetlands due to the project's location in and adjacent to the Sabine River and its floodplain. An alternatives analysis is provided in **Section 5.10.1** above.

TxDOT has designed the project to minimize impacts to wetlands and other aquatic resources by (1) selecting a route alternative that minimizes the project length and impacts to wetlands and other aquatic resources; (2) minimizing the width of the proposed roadway and ROW to meet current design standards and the project's purpose and need; and (3) constructing bridges along much of the proposed alignment that would span wetlands and other waters,

allow for unimpeded flow under the bridges, and maximize the potential for wetlands to reestablish after construction is completed. During construction, Best Management Practices (BMPs) will be implemented to minimize erosion and sedimentation and otherwise avoid temporary impacts to wetlands adjacent to the project area.

#### 5.10.4 Rivers and Harbors Act

The Build Alternative would involve regulated activity in a navigable waterway and therefore will require authorization under Section 10 of the Rivers and Harbors Act. The following table shows the waters that are anticipated to be navigable waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 10 by a non-reporting NWP (i.e., no PCN required), or if it is anticipated that a NWP with PCN, standard permit under both Section 404 and Section 10, letter of permission, or regional general permit will be required.

*Table 4: Navigable Waters of the U.S. within Project Area*

Name of water feature	Type of water feature	Location of water feature	Covered by non-reporting NWP under Section 10?	NWP with pre-construction notification, standard permit both under Section 404 and Section 10, letter of permission, or regional general permit required under Section 10?
S-2a (Sabine River-South)	Perennial stream	Figure 7.3	N	Y
S-2b (Sabine River-North)	Perennial stream	Figures 7.7-7.8	N	Y

Due to proposed impacts to jurisdictional waters, the project requires a standard permit, which would authorize the project under both Section 404 and Section 10. An application for a standard permit was submitted to the USACE on March 14, 2024. A copy of the Section 404 Standard Permit Mitigation Plan (Submitted March 14, 2024) is provided in **Appendix J**, and **Appendix G** for correspondence to date with the USACE. Mitigation is proposed through the purchase of mitigation credits.

Pursuant to compliance with Section 9 of the Rivers and Harbors Act, FHWA initiated coordination on July 24, 2020 with the United States Coast Guard (USCG) providing notification of the proposed project. On July 27, 2020, the USCG responded in a letter stating that the project meets the criteria for the Surface Transportation Assistance Act and qualifies for exemption from USCG bridge permit requirements (**Appendix G**). TxDOT coordinated with

USCG regarding navigational lighting in an August 14, 2020 letter, which USCG responded to on August 17, 2020. The USCG determined that the proposed project was exempt from USCG navigational lighting requirements (**Appendix G**).

#### 5.10.5 *Clean Water Act Section 303(d)*

This project is not located within 5 linear miles of, is not within the watershed of, and does not drain to an impaired assessment unit under Section 303(d) of the federal Clean Water Act. The most recent 2022 Texas Integrated Report Index of Water Quality Impairments and 2022 Louisiana's Water Quality Integrated Report were utilized in this assessment (TCEQ 2022 and [LDEQ 2022]).

#### 5.10.6 *Clean Water Act Section 402*

Since Texas Pollutant Discharge Elimination System (TPDES) and Louisiana Pollutant Discharge Elimination Systems (LPDES) Construction General Permit (CGP) authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. TxDOT's Project Development Process Manual and the Plans, Specifications, and Estimates (PS&E) Preparation Manual require a storm water pollution prevention plan (SWP3) be included in the plans of all projects that disturb 1 or more acres. The Construction Contract Administration Manual requires that the appropriate CGP authorization documents (Notice of Intent [NOI] or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ, LDEQ, and the municipal separate storm sewer system (MS4) operator. It also requires that projects be inspected to ensure compliance with the CGP.

TxDOT's PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the "Required Specification Checklists" require the current version of Special Provision 506 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SWP3, and to complete the appropriate authorization documents. This compliance will be enforced in both Texas and Louisiana.

#### 5.10.7 *Floodplains*

The project is located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain. The hydraulic design for the proposed project would be in accordance with current FHWA and TxDOT design policies. The facility would permit the conveyance of the 100-year flood, inundation of the roadway being acceptable, without causing substantial damage to the facility, stream or other property.

This project is federally funded and therefore is subject to EO 11988, Floodplain Management, and would involve a substantial encroachment in the floodplain. Explanation of how the project would comply with EO 11988 is provided below.

The Build Alternative selected is building a new bridge on new alignment. As a bridge replacement project, locating the project within the 100-year floodplain was unavoidable. **Sections 4.0** and **5.10.1**, above, provide more detail on the alternatives evaluation process and criteria. TxDOT has designed the project to minimize impacts to wetlands, other aquatic resources, and floodplains. The bridge section and replacement of approach spans would serve to minimize encroachment in the floodplain and allow for through drainage. The project will comply with the project specific hydraulic criteria defined by TxDOT and LADOTD. This project specific criteria complies with standards in the TxDOT Hydraulic Design Manual for the portions of the project in Texas and the LADOTD Hydraulics Manual for the portions of the project in Louisiana.

#### 5.10.8 *Wild and Scenic Rivers*

This project is not located in a county or parish that contains resources regulated under the Wild and Scenic Rivers Act. This project is not along and does not affect any wild or scenic river; therefore, the Wild and Scenic Rivers Act is not applicable.

#### 5.10.9 *Coastal Barrier Resources*

The project is not located within a designated Coastal Barrier Resources Act map unit. Therefore, coordination with the United States Fish and Wildlife Service (USFWS) is not required.

#### 5.10.10 *Coastal Zone Management*

The project is not located within a Texas Coastal Management Plan or Louisiana Coastal Management Plan boundary. Therefore, a consistency determination is not required.

#### 5.10.11 *Sole Source Aquifers*

The proposed project is not located in a sole source aquifer within Texas. In addition, the proposed project is not located in a county regulated by the Edwards Aquifer Rules. The TCEQ Edwards Aquifer Rules do not apply. Also, the EPA Edwards Aquifer MOU does not apply.

The proposed project is located over the Chicot Sole Source Aquifer in Louisiana. Following LADOTD requirements, coordination with EPA was initiated with a Solicitation of Views letter sent out on November 16, 2018 for the December 11, 2018 Public Meeting. In response, EPA's *Region VI* (South Central) Sole Source Aquifer coordinator left a voicemail on April 24, 2019 stating he had no specific comment at the time (personal communication with Kim

Johnson). During preparation of the EA, the project team reached back out to the Sole Source Aquifer coordinator and discussed the project and its potential impacts on January 27, 2023 (personal communication with Megan Luschen and email). Additional information in the form of a memo was sent on February 28, 2024. This email was followed up with a phone call on March 14, 2024 where he requested some additional information (personal communication with Megan Luschen). A follow up email with the requested information was sent March 22, 2024. All written communication with the Sole Source Aquifer coordinator can be found in **Appendix G**.

#### 5.10.12 *International Boundary and Water Commission*

The proposed project does not cross or encroach upon the floodway of the International Boundary and Water Commission (IBWC) ROW or an IBWC flood control project; therefore, coordination with *the* IBWC is not required.

#### 5.10.13 *Drinking Water Systems*

Field investigations and site surveys did not identify water wells or source water protection areas within the project area. In accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), any drinking water wells would need to be properly removed and disposed of during construction of the project. This guidance will be followed in both the Louisiana and Texas, as LADOTD does not have a drinking water standard specification.

### 5.11 *Biological Resources*

The SH 63 Biological Technical Report, dated September 15, 2022, describes the Texas Parks and Wildlife Department (TPWD) Ecological Mapping System of Texas (EMST) vegetation in the project area (**Figures 8.1 through 8.3 in Appendix F**) and observed, or field-verified, vegetation in the project area (**Figures 9.1 through 9.9 in Appendix F**). The report also lists the federal and state-listed threatened, endangered, and candidate species, as well as those considered species of greatest conservation need (SGCN) in Texas and rare or imperiled in Louisiana and provides an assessment of their habitat requirements and the potential impacts of the proposed project. A summary of these findings is provided below.

#### 5.11.1 *Impacts on Vegetation*

The project area is located within the South Central Plains Ecoregion. This ecoregion, also known as the Pineywoods ecoregion in Texas (Griffith et al. 2007), encompasses a large area of pine-hardwood forest that includes portions of Texas, Louisiana, Arkansas, and Oklahoma. The dominant vegetation of the region includes pine and pine-hardwood forests with scattered areas of cropland, planted pastures, and native pastures. Timber and cattle production are

important industries in the region. The project area consists of existing transportation ROW, which includes the SH 63 roadway and natural and maintained vegetation, and proposed ROW, which includes pine plantation, bottomland successional shrubland, and bottomland hardwood forest.

**Table 5** and **Figures 9.1** through **9.9** provide the field-verified EMST vegetation types identified in the proposed project area and the Ecological System Type according to TPWD’s *Draft Descriptions of Systems, Mapping Subsystems, and Vegetation Types for Phase II*. Note that there is no similar mapping database in Louisiana.

*Table 5: Field-Verified EMST Vegetation*

EMST Vegetation Type	Acreage of Impacts*
Open Water	3.62
Pine Plantation 1 to 3 Meters Tall	3.26
Pine Plantation > 3 Meters Tall	28.56
Pineywoods: Bottomland Baldcypress Swamp	0.73
Pineywoods: Bottomland Deciduous Successional Shrubland	10.06
Pineywoods: Bottomland Herbaceous Wetland	0.57
Pineywoods: Bottomland Seasonally Flooded Hardwood Forest	15.84
Pineywoods: Bottomland Temporarily Flooded Hardwood Forest	16.70
Pineywoods: Bottomland Temporarily Flooded Mixed Pine/Hardwood Forest	1.72
Pineywoods: Disturbance or Tame Grassland	0.38
Pineywoods: Pine Forest or Plantation	3.76
Pineywoods: Pine/Hardwood Forest or Plantation	4.92
Urban Low Intensity	26.0

\*Based on ROW to ROW impacts

As required by LADOTD's Engineering *Directives and Standards - Treatment of Significant trees in DOTD Right-of-Way*, qualified biologists conducted a tree survey for potentially significant trees that occur within the project area along LA 8 and up to 50 feet from the project area (observed from the existing and proposed ROW) in November 2020. Sixty-eight trees belonging to the groups of interest with trunks larger than 18 inches diameter at breast height (dbh) were identified. These trees were photographed, measured, tagged, and their locations were documented. However, the identified trees were not categorized as significant, therefore, no mitigation or protection measures were required.

Under the No-Build Alternative, the proposed project would have no effect on existing vegetation habitat in the project area.

### 5.11.2 *Executive Order 13112 on Invasive Species*

This project is subject to and will comply with federal EO 13112 on Invasive Species. TxDOT implements this EO on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual. This guidance will be followed in Texas and Louisiana.

The No-Build Alternative would not be subject to EO 13112.

### 5.11.3 *Executive Memorandum on Environmentally and Economically Beneficial Landscaping*

This project is subject to and will comply with the federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, effective April 26, 1994. TxDOT implements this Executive Memorandum on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual. This guidance will be followed in Texas and Louisiana.

The No-Build Alternative would not be subject to the Executive Memorandum on Environmentally and Economically Beneficial Landscaping.

### 5.11.4 *Impacts to Wildlife*

The Pineywoods region is located in the Austroriparian Biotic Province, which is characterized by level to steep uplands that are dissected by streams and broad floodplains and terraces along larger rivers and some streams (Blair 1950). According to Blair (1950) and Dixon (2000), there are 35 species of amphibians in the Austroriparian Biotic Province, including 18 species of newts or salamanders and 17 anuran species (frogs and toads). Salamander species that could occur in the county include eastern tiger salamander (*Ambystoma tigrinum*) and Gulf Coast waterdog (*Necturus beyeri*). Anuran species in the region represent multiple genera including chorus frogs (*Pseudacris* spp.), spadefoot toads (*Scaphiopus* spp.), true frogs (*Rana* spp.), and true toads (*Bufo* spp.). At least 29 species of snakes, 10 lizard species, and two species of land turtles have been recorded in the region. American alligator (*Alligator mississippiensis*) could also occur in the study area. Common lizards in the area include green anole (*Anolis carolinensis*), Mediterranean gecko (*Hemidactylus turcicus*), eastern fence lizard (*Sceloporus undulatus*), and skinks (*Scincella* spp.). Common snakes in the area include bullsnake (*Pituophis catenifer sayi*), eastern diamondback rattlesnake (*Crotalus adamanteus*), Texas coral snake (*Micrurus fulvius tener*), Texas indigo snake (*Drymarchon corais*), rat snakes (*Elaphe* spp.), and water snakes (*Nerodia* spp.).

The study area contains abundant and diverse avifauna, especially during the spring and fall migrations. Common year-round resident bird species in the study area include American coot (*Fulica americana*), barn swallow (*Hirundo rustica*), wood duck (*Aix sponsa*), northern cardinal

(*Cardinalis cardinalis*), eastern meadowlark (*Sturnella magna*), red-bellied woodpecker (*Melanerpes carolinus*), blue jay (*Cyanocitta cristata*), killdeer (*Charadrius vociferus*), laughing gull (*Larus atricilla*), northern mockingbird (*Mimus polyglottos*), and mourning dove (*Zenaida macroura*). Common migrant/summer resident bird species in the study area include great crested flycatcher (*Myiarchus crinitus*), cliff swallow (*Petrochelidon pyrrhonota*), common nighthawk (*Chordeiles minor*), dickcissel (*Spiza americana*), eastern kingbird (*Tyrannus tyrannus*), indigo bunting (*Passerina cyanea*), orchard oriole (*Icterus spurius*), scissor-tailed flycatcher (*Tyrannus forficatus*), summer tanager (*Piranga rubra*), and yellow-billed cuckoo (*Coccyzus americanus*). Common migrant/winter resident bird species include American white pelican (*Pelecanus erythrorhynchos*), eastern phoebe (*Sayornis phoebe*), orange-crowned warbler (*Oreothlypis celata*), yellow-rumped warbler (*Setophaga 32oronate*), and many various species of ducks. Other common migrant species in the region include broad-winged hawk (*Buteo platypterus*), Franklin's gull (*Leucophaeus pipixcan*), Mississippi kite (*Ictinia mississippiensis*), savannah sparrow (*Passerculus sandwichensis*), scarlet tanager (*Piranga olivacea*), Wilson's phalarope (*Phalaropus tricolor*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

According to Blair (1950) and Schmidly (2004), 47 of the 143 mammal species in Texas occur in the Austroriparian Biotic Province. The most common mammals that potentially occur in the study area include species more tolerant of human activity such as eastern cottontail (*Sylvilagus floridanus*), bobcat (*Lynx rufus*), fox squirrel (*Sciurus niger*), eastern mole (*Scalopus aquaticus*), nine-banded armadillo (*Dasypus novemcinctus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Louisiana pocket gopher (*Geomys breviceps*) and Virginia opossum (*Didelphis virginiana*). Common rodent species in the study area include fulvous harvest mouse (*Reithrodontomys fulvescens*), hispid cotton rat (*Sigmodon hispidus*), hispid pocket mouse (*Chaetodipus hispidus*), and eastern woodrat (*Neotoma floridana*). These species may occur within undeveloped portions of the proposed ROW, and therefore may be impacted by the proposed project.

The following sections provide a summary of potential impacts to wildlife associated with the Build Alternative. The No-Build Alternative would have no effect on existing wildlife and habitat in the project area.

#### 5.11.5 Migratory Bird Protections

This project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas PWC Title 5, Subtitle B, Chapter 64, Birds. It is TxDOT's policy to avoid removal and destruction of active bird nests except through federal or state approved options. LADOTD follows federal guidelines to comply with the MBTA. In addition, it is TxDOT's policy to, where appropriate and practicable:

- use measures to prevent or discourage birds from building nests on man-made structures within portions of the project area planned for construction, and
- schedule construction activities outside of typical nesting season.
- Additional preemptive and preventative measures that may be applied, where appropriate and practicable, are described in TxDOT's Guidance – Avoiding Migratory Birds and Handling Potential Violations.

A site survey did not identify migratory birds or active nests within the project action area. While no impact to migratory birds is expected, TxDOT will take all appropriate actions to prevent the take of migratory birds, their active nests, eggs, or young should they be discovered on the project site. Direction to contractors is provided on the standard Environmental Permits, Issues, and Commitments (EPIC) sheet.

The No-Build Alternative would not require any removal or disturbance of migratory birds, their nests, or their young and would have no impact on migratory birds.

#### 5.11.6 *Fish and Wildlife Coordination Act*

The project is anticipated to require a standard permit issued by the USACE. Compliance with the Fish and Wildlife Coordination Act will be accomplished through the standard permit application process.

The No-Build Alternative would not be required to comply with the Fish and Wildlife Coordination Act (FWCA).

#### 5.11.7 *Bald and Golden Eagle Protection Act of 2007*

Within the U.S. or anywhere within its jurisdiction, bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected by the Bald and Golden Eagle Protection Act of 2007. No eagles or potential eagle nests were observed in or adjacent to the project area during field visits. Based on the information available and observations made in the project area, the Build Alternative does not have the potential to impact bald or golden eagles.

The No-Build Alternative would have no impact on Bald or Golden Eagles.

#### 5.11.8 *Magnuson-Stevens Fishery Conservation Management Act*

The proposed project is not located in a coastal county or parish; therefore, coordination with the National Marine Fisheries Service is not required.

### 5.11.9 *Marine Mammal Protection Act*

The project does not contain suitable habitat for marine mammals. Coordination with the National Marine Fisheries Service is not required.

### 5.11.10 *Threatened, Endangered, Candidate Species, and Rare Species*

A review of the USFWS Information for Planning and Consultation (IPaC) threatened and endangered species lists for the project area (retrieved April 2025), the TPWD Species List for Newton County (January 15, 2025 version, retrieved April 2025), and Louisiana Department of Wildlife and Fisheries (LDWF) Rare Species and Natural Communities list for Vernon Parish (retrieved April 2025), identified federal and state-listed threatened and endangered species, as well as other rare species considered by each state. Note, the northern long-eared bat (*Myotis septentrionalis*) is listed by LDWF as occurring in Vernon Parish, and the Louisiana pinesnake (*Pituophis ruthveni*) is listed by LDWF and TPWD as occurring in Vernon Parish and Newton County, respectively. However, USFWS's IPaC list for the project area does not include these species. In addition, there is no suitable habitat for the Louisiana pinesnake within the project area, and the project area is outside of the range of the Northern Long-eared Bat according to the USFWS range map for the species (USFWS 2025).

No habitat for threatened or endangered federally listed species was identified within or adjacent to the proposed project area. However, the project area contains suitable habitat for the alligator snapping turtle (AST) (*Macrochelys temminckii*), which is proposed by USFWS to be listed as a federally threatened. A habitat assessment was conducted in July 2023 that determined the proposed project activities would not result in direct AST mortality; therefore, the project does not meet the threshold for conferencing with USFWS. If the AST is listed during the life of this project, the impacts to AST will be reevaluated to determine the appropriate course of action, which may include consultation with USFWS. One federal candidate species, the monarch butterfly (*Danaus plexippus*), is found statewide in a variety of habitats including native prairies, pastures, open woodlands and savannas, desert scrub, roadsides and other habitats with nectar producing plants. However, based on aerial imagery and the September 2020 field visit, the project area is primarily forested habitat. Non-forested areas of the project area are heavily disturbed by plowing or mowing and contain only short grasses, and no milkweeds were observed. Therefore, it was determined there was no suitable habitat within the project area for the monarch butterfly and there would be no effect or take.

Suitable habitat for tricolored bat (*Perimyotis subflavus*) is present within the project area, and the project may affect the species. The tricolored bat has been proposed as a federally endangered species and consultation with the USFWS is not required at this time. If the species is listed, consultation with the USFWS will be conducted.

The Texas heelsplitter (*Potamilus amphichaenus*) is proposed as a federally endangered species and Louisiana pigtoe (*Pleurobema riddellii*) is proposed as a federally threatened species. The project area contains suitable habitat for the Texas heelsplitter and Louisiana pigtoe; therefore, the proposed project activities may impact the species. As a result of the potential for impact, a Qualitative Mussel Survey was conducted in July 2023, and results were recorded in a technical memorandum dated December 26, 2023. No mussels, valves, or valve fragments were observed during the site visit. Based on the Qualitative Mussel Survey, TxDOT coordinated with TPWD in August 2023 to request a waiver for quantitative mussel survey requirements. Through this coordination, TxDOT agreed to perform a quantitative survey in Winter 2024 prior to any construction on the site. A survey was conducted from October 1 through 3, 2024, and no state-listed or federal candidate species were observed or relocated; therefore, no further action is needed. If during construction the Texas heelsplitter and/or Louisiana pigtoe are found, a conference opinion with USFWS will be completed.

Suitable habitat was identified for one species listed in Louisiana as prohibited and noted below in Texas as an SGCN, the eastern tiger salamander, and seven additional Texas state-listed threatened species: the swallow-tailed kite (*Elanoides forficatus*), white-faced ibis (*Plegadis chihi*), wood stork (*Mycteria americana*), paddlefish (*Polyodon spathula*), western creek chubsucker (*Erimyzon claviformis*), Rafinesque's big-eared bat (*Corynorhinus rafinesquii*), and northern scarlet snake (*Cemophora coccinea copei*).

There is also potential habitat for 37 SGCNs: eastern tiger salamander, Gulf Coast waterdog, southern crawfish frog (*Lithobates areolatus areolatus*), spotted dusky salamander (*Lithobates areolatus areolatus*), Strecker's chorus frog (*Pseudacris streckeri*), Woodhouse's toad (*Anaxyrus woodhousii*), Bank Swallow (*Riparia riparia*), Brewer's Blackbird (*Euphagus cyanocephalus*), Common Grackle (*Quiscalus quiscula*), Common Nighthawk (*Chordeiles minor*), Loggerhead Shrike (*Lanius ludovicianus*), Northern Bobwhite (*Colinus virginianus*), Sprague's pipit (*Anthus spragueii*), Wilson's Warbler (*Cardellina pusilla*), American eel (*Anguilla rostrata*), blackspot shiner (*Notropis atrocaudalis*), Mississippi silvery minnow (*Hybognathus nuchalis*), river darter (*Percina shumardi*), Sabine shiner (*Notropis sabiniae*), silverband shiner (*Notropis shumardi*), western sand darter (*Ammocrypta clara*), arrowhead stripetail (*Isoperla sagittate*), eastern spotted skunk (*Spilogale putorius*), hoary bat (*Lasiurus cinereus*), plains spotted skunk (*Spilogale interrupta*), Seminole bat (*Lasiurus seminolus*), southeastern myotis bat (*Myotis austroriparius*), Little Spectaclecase (*Leaunio lienosus*), Louisiana Fatmucket (*Lampsilis hydiana*), Mapleleaf (*Quadrula quadrula*), Pistolgrip (*Tritogonia verrucosa*), eastern box turtle (*Terrapene carolina*), pygmy rattlesnake (*Sistrurus miliarius*), slender glass lizard (*Ophisaurus attenuatus*), smooth softshell (*Apalone mutica*), giant spiral ladies'-tresses (*Spiranthes longilabris*), and panicled indigobush (*Amorpha paniculata*). For more information, see the Biological Resources Technical Report (May 2021) and subsequent updates based on revisions to USFWS and TPWD species lists.

Early coordination with LDFW, via LADOTD's SOV process, was initiated on November 16, 2018. A response from LDFW was provided on December 28, 2018 (Project ID 802018, **Appendix I**), and provided below are their recommendations.

LDFW records indicated that Texas heelsplitter occurs within 1 mile of the project. LDFW recommended habitat protections for this species through avoiding disturbances such as water pollution, siltation, dam construction, and disturbance to stream bottoms and existing mussel beds. Please see above for a discussion regarding the Texas heelsplitter. Freshwater mussel BMPs and Water BMPs implemented in accordance with the 2021 TxDOT-TPWD MOU will also be implemented in the Louisiana portion of the project to minimize potential impacts to mussel species.

LDFW recommended protecting habitat for suckermouth minnow (*Phenacobius mirabilis*). The species occurs within the Sabine River and Toledo Bend reservoir and inhabits riffles and runs within rivers with a variety of substrate types. LDFW recommended keeping sandy-bottomed streams clean and free of silt. Water BMPs and Fish BMPs implemented in accordance with the 2021 TxDOT-TPWD MOU will also be implemented in the Louisiana portion of the project to minimize potential impacts to this species.

LDFW records indicated that western sand darter may occur within the water bodies within the project area. This species has been in decline due to siltation, poor water quality caused by pollution and agricultural runoff, and interruption of migrations by dams. Water BMPs and Fish BMPs implemented in accordance with the 2021 TxDOT-TPWD MOU will also be implemented in the Louisiana portion of the project to minimize potential impacts to this species.

LDFW records indicated that Gulf Coast waterdog may occur within the water bodies within the project area. The species is closely associated with leaf litter deposits within sandy streams. Water BMPs and Aquatic Amphibian and Reptile BMPs implemented in accordance with the 2021 TxDOT-TPWD MOU will also be implemented in the Louisiana portion of the project to minimize potential impacts to this species.

LDFW stated that no other rare, threatened, or endangered species or critical habitats are anticipated for the proposed project.

According to the 2021 MOU between TxDOT and TPWD, any project requiring an EA or EIS must be coordinated with TPWD (TxDOT 2021a). The proposed project requires an EA, therefore, coordination with TPWD was initiated when the EA was approved for circulation. TxDOT will incorporate TPWD's suggested actions and mitigation, where practicable. BMPs will be implemented to avoid impacts, where possible, including TPWD's Aquatic Amphibian and Reptile, Bat, Bird, Dewatering, Fish, General Design and Construction, Stream Crossing, Terrestrial Amphibian and Reptile, Freshwater Mussel, Vegetation, and Water Quality BMPs

(TxDOT 2021b). In addition, TxDOT will use barrier Amphibian and Reptile Exclusion Fence (AREF) to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species. All BMPs will be documented in the PS&E, as appropriate, for compliant implementation.

As noted above, wildlife BMPs will be implemented to avoid impacts, where possible, including TPWD's Aquatic Amphibian and Reptile, Bat, Bird, Dewatering, Fish, General Design and Construction, Stream Crossing, Terrestrial Amphibian and Reptile, Freshwater Mussel, Vegetation, and Water Quality BMPs (TxDOT 2021b). In addition, TxDOT will use barrier AREF to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species. All BMPs will be documented in the PS&E, as appropriate, for compliant implementation. As noted above, wildlife BMPs implemented in accordance with the 2021 TxDOT-TPWD MOU will also minimize potential impacts to species in the Louisiana portion of the project.

The No-Build Alternative would not result in impacts to existing vegetation and wildlife habitat.

## 5.12 *Air Quality*

An air quality analysis was conducted and is summarized in the Air Quality Technical Report, dated May 2023, for the proposed project in accordance with TxDOT's Guidance for Preparing Air Quality Statements, which meet federal guidelines and were followed for the joint Texas and Louisiana report (TxDOT 2023).

Under the No-Build Alternative air quality would be expected to continue with existing trends.

### 5.12.1 *Transportation Conformity*

This project is located within an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.

### 5.12.2 *Project-level Hot-spot Analysis Requirements*

The proposed project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required.

### 5.12.3 *Carbon Monoxide Traffic Air Quality Analysis (CO TAQA)*

Generally, projects such as the Build Alternative are considered exempt from a CO TAQA because they are intended to enhance traffic safety and improve traffic flow. The proposed

action would not add capacity to an existing facility. Current and future emissions should continue to follow existing trends not being affected by this project. Due to the nature of this project, further CO analysis was not required.

#### 5.12.4 *Mobile Source Air Toxics (MSAT)*

The purpose of this project is to replace the existing SH 63/LA 8 Bridge at the Sabine River with a structure at a more stable crossing location. This project does not add capacity. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the No-Build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES3 model forecasts a combined reduction of over 76 percent in the total annual emissions rate for the priority MSAT from 2020 to 2060 while vehicle-miles of travel are projected to increase by over 31 percent (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, January 2023 - [https://www.fhwa.dot.gov/ENVIRONMENT/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/](https://www.fhwa.dot.gov/ENVIRONMENT/air_quality/air_toxics/policy_and_guidance/msat/)). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

#### 5.12.5 *Congestion Management Process (CMP)*

This project is not within a Transportation Management Area (area over 200,000 population); therefore, the Congestion Management Process is not required.

#### 5.12.6 *Construction-related Emissions Reduction Strategies*

During the construction phase of this project, temporary increases in particulate matter and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel PM from diesel powered construction equipment and vehicles.

The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at: <https://www.tceq.texas.gov/airquality/terp>.

However, considering the temporary and transient nature of construction-related emissions, the use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements, it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area. The encouragement of the use of TERP would be followed in Louisiana as well.

### 5.13 Hazardous Materials

In the Hazardous Materials ISA Technical Report, dated March 2020, an ISA was conducted to identify potential hazardous materials within the proposed project area. The components of the ISA included reviewing project design and ROW requirements, existing and previous land use, and federal and state regulatory databases and files. A database search for potential hazardous materials was conducted in July 2019 in general accordance with the American Society for Testing and Materials standards and TxDOT guidelines. In addition to the database search, the project design, ROW requirements, existing and previous land use, United States Geological Survey (USGS) topographic maps, current and past aerial imagery, and federal and state regulatory databases and files were referenced for the completion of the ISA. An analysis of the ISA data indicated that there was one potential hazardous material site located adjacent to project ROW (see **Figure 10** in **Appendix F**). This was a Petroleum Storage Tank (PST) site, which is not anticipated to be of concern to the project and is considered resolved. A copy of the GeoSearch Database Radius Report is included as an appendix to the March 2020 Hazardous Materials ISA Technical Report. No unresolved hazardous materials concerns were identified and/or all potential concerns were resolved within the ISA. No further hazardous materials action is required. Any unanticipated hazardous materials impacts encountered during the project construction phase in Texas or Louisiana will be addressed in accordance with regulatory requirements and TxDOT standard specifications.

The proposed project includes the demolition of a bridge structure. Bridge structures being demolished or renovated are assessed and mitigated for asbestos and lead-containing-paint, as needed, within the construction process. This is according to the following TxDOT policy/guidance:

- Standard Specification Item 6.10 (and applicable Provisions)
- Guidance for Handling Asbestos in Construction Projects (January 2007)
- Hazardous Materials in Project Development (September 2018)

Several utilities (including gas pipelines) are located adjacent to the project. Adjustment or relocation of these and other utilities would be necessary and would be handled so that no substantial interruption in service would occur. Additionally, in both Texas and Louisiana the owner of the utility will be responsible for acquiring any easements outside the highway ROW and ensuring that the design and construction meet all regulatory and environmental

compliance requirements. See 43 Texas Administrative Code (TAC) 21.37(a)(9), (g)(1), and (g)(4); 43 TAC 21.38(e)(2) and Louisiana’s Administrative Code: Title 70 – Transportation - Part II - Utilities (§§ II-101 – II-1923).

During preliminary investigations, the Railroad Commission of Texas (RRC) Public Geographic Information System (GIS) viewer did not identify any oil/gas wells or pipelines within the proposed footprint. If oil/gas well-related contamination is encountered during construction, remediation would be conducted, as needed, prior to the continuation of construction activities.

Any unanticipated hazardous material and/or petroleum contamination encountered during construction of the proposed project would be handled in Texas and Louisiana according to applicable federal and state regulations per TxDOT Standard Specifications.

The No-Build Alternative would not result in hazardous materials impacts.

#### 5.14 Traffic Noise

Two separate traffic noise analyses were conducted, one for Louisiana and one for Texas. The Texas traffic noise analysis was conducted in accordance with TxDOT’s (FHWA-approved) Traffic Noise Policy (2019) and is documented in the Texas Traffic Noise Analysis Technical Report, dated November 2020. Traffic Noise Model version 2.5 (TNM 2.5) was utilized in the assessment.

Existing and predicted traffic noise levels were modeled at representative land use activity areas (receptors) adjacent to the project that might be impacted by traffic noise and would potentially benefit from feasible and reasonable noise abatement. The Texas Traffic Noise Analysis Technical Report identified one representative receiver within Texas along the project length (**Table 6** and **Figure 11.1** in **Appendix F**).

**Table 6: Traffic Noise Levels dB(A) Leq Texas**

Representative Receiver	NAC Category	NAC Level	Existing 2023	Predicted 2043	Change (+/-)	Noise Impact
R1 Residential	B	67	42	44	+2	No

As indicated in **Table 6**, there was one modeled noise-sensitive location, which was residential in nature. The proposed project would not result in a traffic noise impact; therefore, no abatement measures are proposed.

The Louisiana traffic noise analysis was conducted in accordance with LADOTD’s Traffic Noise Policy (July 2011) and is documented in the Louisiana Traffic Noise Technical Report, dated May 2021. LADOTD’s Traffic Noise Policy describes the implementation of the requirements

of the FHWA noise regulations for projects found in 23 Code of Regulations Part 772 (23 CFR 772).

Existing and predicted traffic noise levels were modeled at receiver locations, which represent land use activity areas adjacent to the proposed project that might be impacted by traffic noise and would potentially benefit from feasible and reasonable noise abatement. The Louisiana Traffic Noise Analysis Technical Report identified 31 representative receivers within Louisiana along the project length (Table 7 and Figure 11.2 in Appendix F).

*Table 7: Traffic Noise Levels dB(A) Leq Louisiana*

Representative Receiver	NAC Category	NAC Level	Existing 2023	Predicted 2043	Change (+/-)	Noise Impact
R1 Residence	B	67	39.6	33.1	-6.5	No
R2 Residence	B	67	38.9	29.4	-9.5	No
R3 Residence	B	67	51	32.9	-18.1	No
R4 Residence	B	67	51.8	33.3	-18.5	No
R5 Residence	B	67	49.5	34.4	-15.1	No
R6 Residence	B	67	45.2	34.6	-10.6	No
R7 Residence	B	67	37	29.7	-7.3	No
R8 Residence	B	67	40.3	30.3	-10	No
R9 Residence	B	67	46.1	31.4	-14.7	No
R10 Residence	B	67	47.3	34.4	-12.9	No
R11 Residence	B	67	35.1	39.7	+4.6	No
R12 Residence	B	67	42	30.6	-11.4	No
R13 Residence	B	67	46.9	34.5	-12.4	No
R14 Residence	B	67	41.6	30.8	-10.8	No
R15 Residence	B	67	43.8	31.2	-12.6	No
R16 Residence	B	67	44.4	31.3	-13.1	No
R17 Residence	B	67	48.7	32.4	-16.3	No
R18 Residence	B	67	47.4	34.4	-13	No
R19 Residence	B	67	45.9	34.5	-11.4	No
R20 Residence	B	67	37.3	38.1	+0.8	No
R21 Residence	B	67	35.9	40.2	+4.3	No

*Table 7: Traffic Noise Levels dB(A) Leq Louisiana*

Representative Receiver	NAC Category	NAC Level	Existing 2023	Predicted 2043	Change (+/-)	Noise Impact
R22 Residence	B	67	43.1	36.9	-6.2	No
R23 Residence	B	67	46.5	40.6	-5.9	No
R24 Residence	B	67	48.4	39.9	-8.5	No
R25 Residence	B	67	44	42.5	-1.5	No
R26 Residence	B	67	42.4	43.1	+0.7	No
R27 Church	C	67	58.4	62.3	+3.9	No
R28 Residence	B	67	51.8	55.5	+3.7	No
R29 Residence	B	67	44.4	48.5	+4.1	No
R30 Residence	B	67	36.2	39.8	+3.6	No
R31 Residence	B	67	31.9	35.2	+3.3	No

As indicated in **Table 7**, the change between the Existing 2023 measurements and the Predicted 2043 measurements reflects the noise impacts to each receiver. R1 through R10, R12 through R19, and R22 through R25 would experience a reduction in noise volume because a majority of traffic would shift to the proposed LA 8 roadway, which is further away from these receivers. R11, R20, and R21 would experience an increase in noise volume as the proposed LA 8 roadway traffic would be closer. R26 through R31 would experience an increase in noise volume due to an increase of traffic within the area. The proposed project would not result in a traffic noise impact; therefore, no abatement measurements are proposed.

To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the predicted noise impact contours (**Table 8**).

*Table 8: Predicted Noise Impact Contours*

Land Use	Impact Contour	Distance from ROW
NAC category B & C	66 dB(A)	Within the ROW
NAC category E	71 dB(A)	Within the ROW

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receptors are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

Copies of the traffic noise analyses will be available to local officials to assist in future land use planning. On the date of approval of this document (Date of Public Knowledge), FHWA, TxDOT, and LADOTD are no longer responsible for providing noise abatement for new development adjacent to the project.

Under the No-Build Alternative, the proposed project would not be constructed. If the No-Build Alternative were implemented, traffic noise levels would be expected to increase with an associated future increase in traffic volumes.

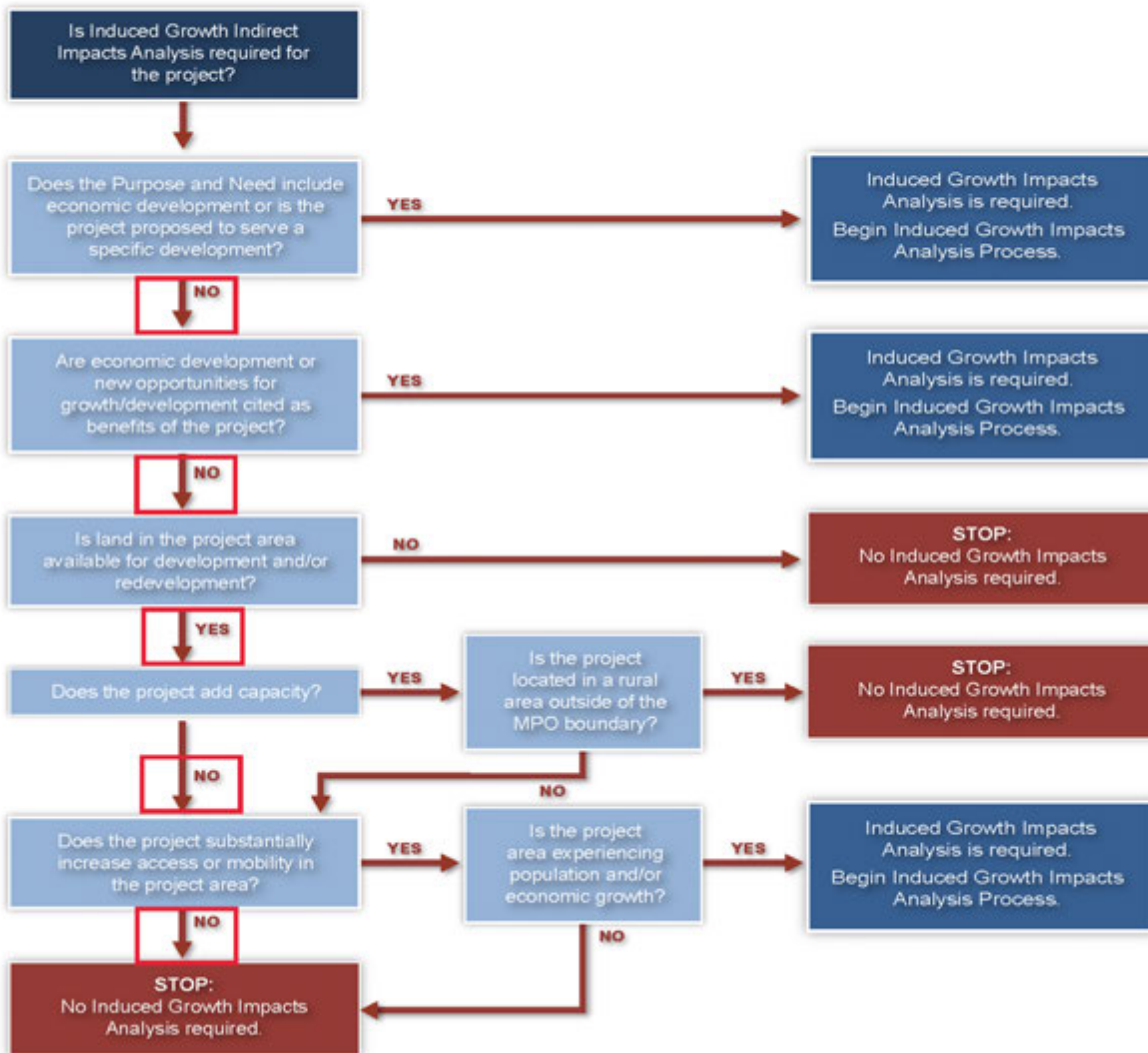
### 5.15 *Induced Growth*

Indirect impacts are defined as those caused by an action and are later in time or farther removed in distance, but still reasonably foreseeable. Indirect impacts are not directly associated with the construction or operation of the roadway and are often caused by related development and induced growth. This, in turn, can result in a variety of related impacts such as changes in land use, population density or growth rate, economic vitality, and impacts on air, water, and other natural resources. Utilizing TxDOT's Induced Growth Indirect Impacts Decision Tree (TxDOT 2014a), it was determined that an induced growth impacts analysis was not required because: 1) economic development and growth are not the purpose of the proposed project and the project is not intended to serve a specific development; 2) economic development and new opportunities for growth or development are not cited as benefits of the project; and although 3) land in the project area is available for development; 4) the project does not add capacity; and 5) the project would not substantially increase access or mobility in the project area. See **Insert 1** for the decision tree.

Insert 1



## Induced Growth Indirect Impacts Decision Tree



This is not a project likely to stimulate complementary land development (e.g., bridge replacement project in a rural area), because the proposed project consists of improvements along an existing roadway alignment (SH 63 and LA 8) with minor relocation of approach spans to accommodate new bridge location. Although certain properties may be available for redevelopment, the scope of the project (the replacement of a bridge and rebuilding the approach roadway) is not expected to influence development or redevelopment in the project area.

The improvement is not expected to be so substantial as to influence or induce growth. Therefore, the proposed project is not expected to make the area more attractive for development or redevelopment. Therefore, an induced growth impacts analysis is not required.

### 5.16 *Cumulative Impacts*

Cumulative impacts result from individually minor, but collectively substantial, actions taking place over a period of time (40 CFR §1508.7). They are defined as impacts on the environment that result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Utilizing TxDOT's Cumulative Impacts Decision Tree (TxDOT 2014b), it was determined that a cumulative impacts analysis is required. The results of the completion of the decision tree indicated the following: 1) the proposed project would not have substantial direct or indirect impacts on any resource, 2) some resources in the project area are in poor or declining health; and 3) the proposed project may result in impacts to these resources or contribute to their poor or declining health. See **Insert 2** for the decision tree. The resources determined to be in poor or declining health were the AST and tricolored bat, as well as wetlands. Although the AST may be considered a resource in poor or declining health, no impacts are anticipated to the AST. Impacts to the tricolored bat will be avoided and minimized through the implementation of BMPs (**Section 5.11.10**). Regarding impacts to waters of the U.S., a USACE Standard Permit application was submitted to the USACE for review and included mitigation for potential impacts to wetlands and other waters of the U.S. (see **Appendix J** for a detailed discussion). The Build Alternative was recommended and refined to avoid and minimize impacts to wetlands (see **Section 5.10.1** for Section 404/10 alternatives analysis discussion), and where impacts could not be avoided mitigation is proposed. This resulted in impacts being sufficiently avoided, minimized, and mitigated. Therefore, no further cumulative analysis was conducted. Based on the analysis of direct impacts and encroachment alteration effects depicted in **Table 9**, no resources will be carried forward for a cumulative impact analysis.



## Cumulative Impacts Decision Tree

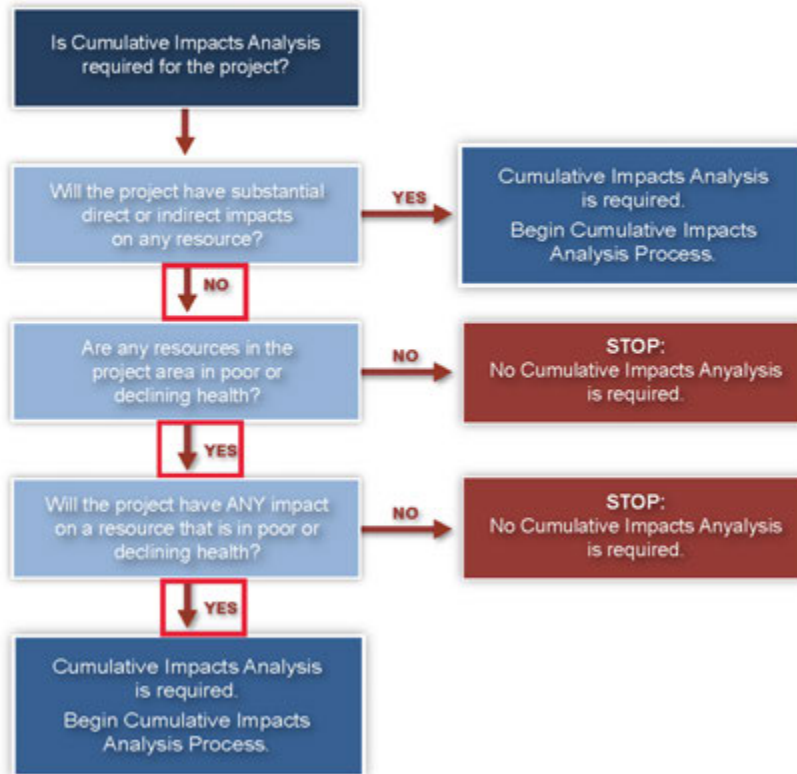


Table 9: Summary of Resources Evaluated

Resources	Potential Impacts and Effects	Carried Forward for Cumulative Effects Analysis?
Farmland	<p>According to the NRCS, important farmland soils subject to the FPPA are within the project area and would be converted to transportation use. Therefore, a NRCS-CPA-106 form was completed to evaluate potential farmland soil impacts. The proposed project received a score less than 60 on Part VI of the form; therefore, coordination with the NRCS is not required under the Farmland Protection Policy Act (FPPA) since the total score of Parts V and VI did not reach the required threshold of 160. However, the NRCS-CPA-106 form for the proposed project was submitted to the NRCS for documentation purposes. Results of the Farmland Conversion Impact Rating Form (NRCS-CPA-106) were scored at 87 (Texas) and 100 (Louisiana) after coordination with the Texas and Louisiana NRCS offices. Since the totals are less than 160, the proposed project requires no further consideration for protection and no additional evaluation is necessary.</p>	<p><b>No.</b> The Build Alternative would not result in substantial direct impacts or encroachment-alteration effects to farmland.</p>
Water Resources	<p>TxDOT has submitted a Section 404/10 Standard Permit application to the USACE for the proposed project due to potential permanent impacts to waters of the U.S., including approximately 14.21 acres of palustrine forested, scrub-shrub, and emergent wetlands. TxDOT is proposing to compensate for wetland impacts totaling approximately 14.21 acres by securing mitigation bank credits. Since the wetland impacts would occur in Texas and Louisiana, TxDOT is proposing to secure credits from two mitigation banks: TxDOT’s Blue Elbow Swamp Mitigation Bank in Texas and the Phillips Creek Mitigation Bank in Louisiana. See Section 404 Standard Permit Mitigation Plan (Submitted March 14, 2024) in <b>Appendix J</b> for a more detailed discussion, which is subject to change based on ongoing coordination with the USACE.</p>	<p><b>No.</b> Although there are permanent impacts to wetlands, TxDOT would mitigate through the use of mitigation banks. Additionally, the Build Alternative would not result in substantial encroachment-alteration effects to water resources.</p>

Table 9: Summary of Resources Evaluated

Resources	Potential Impacts and Effects	Carried Forward for Cumulative Effects Analysis?
	<p>Given the scope of the proposed improvements (new bridge with limited need for ROW) and the context of the project area (primarily rural setting), the proposed SH 63/LA 8 bridge replacement is not likely to induce or expedite growth in the study area. Therefore, the proposed project would not result in meaningful, measurable encroachment-alteration effects, access-alteration effects, or effects related to project-influenced development.</p>	
<p><b>Threatened and Endangered Species and their Habitat</b></p>	<p>No habitat for threatened or endangered federally listed species was identified within or adjacent to the proposed project area. However, the project contains suitable habitat for one species proposed by USFWS to be listed as a federally threatened, the AST and one federally proposed species, the tricolored bat.</p> <p>The project activities would not result in direct AST mortality; therefore, the project does not meet the threshold for conferencing with USFWS. If the AST is listed during the life of this project, the impacts to AST will be reevaluated to determine the appropriate course of action, which may include consultation with USFWS.</p> <p>Suitable habitat for tricolored bat may be present within the project area. Effects to the species are currently undetermined. The tricolored bat has been proposed as a federally endangered species and consultation with the USFWS is not required at this time. If the species is listed, effects to the tricolored bat will be reevaluated to determine the appropriate course of action which may include consultation with the USFWS.</p> <p>Given the scope of the proposed improvements (new bridge with limited need for ROW) and the context of the project area (primarily rural setting),</p>	<p><b>No.</b> Although the AST and tricolored bat may be considered resources in poor or declining health, no impacts are anticipated to the AST and potential impacts to the tricolored will be avoided or minimized through the implementation of BMPs.</p> <p>Potential impacts to state-listed species will be avoided and/or minimized through the implementation of BMPs.</p>

*Table 9: Summary of Resources Evaluated*

Resources	Potential Impacts and Effects	Carried Forward for Cumulative Effects Analysis?
	<p>the proposed SH 63/LA 8 bridge replacement is not likely to induce or expedite growth in the study area. Therefore, the proposed project would not result in meaningful, measurable encroachment-alteration effects, access-alteration effects, or effects related to project-influenced development. Predominant timber farming land uses within the project area would remain compatible wildlife.</p> <p>Additionally, the project area contains potential habitat for seven Texas state-threatened species, one Louisiana prohibited species, and 37 Texas SGCNs. BMPs are available and would be implemented, where possible. BMPs are not available for the state-listed plant species.</p>	
<b>Archeological Resources</b>	<p>Terrestrial surveys in Texas and Louisiana, a pedestrian survey, and an underwater (or marine) survey in the Sabine River augmented with shovel testing resulted in no sites recommended as eligible for inclusion in the NRHP under any criteria, nor for designation as a State Antiquities Landmark (SAL) in Texas.</p>	<b>No.</b>

*Table 9: Summary of Resources Evaluated*

Resources	Potential Impacts and Effects	Carried Forward for Cumulative Effects Analysis?
<p><b>Historic Resources</b></p>	<p>HRSRs for resources in Texas and Louisiana found that there was one NRHP-listed resources in the APE – the subject bridge. Since the Build Alternative requires the demolition of the bridge, it poses a direct adverse effect to the bridge.</p>	<p><b>No.</b> Section 106 consultation did not reveal any potential cumulative effects to other historic resources as a result of the subject bridge’s demolition. Adverse effects to the historic bridge are being mitigated through Section 106 consultation with the Texas and Louisiana SHPOs, consulting parties, and stakeholders.</p>
<p><b>Community Impacts</b></p>	<p>After construction of the new crossing and removal of the existing bridge, driveway access up to the removed bridge structure would be maintained with the addition of cul-de-sacs on both sides of the river. Travel times and distances would increase when traveling from one proposed cul-de-sac to the other, based on a 4.35-mile difference between the existing and proposed routes.</p>	<p><b>No.</b> The Build Alternative would not result in substantial direct impacts or encroachment-alteration effects to community resources.</p>

For all resources, the potential direct impacts anticipated as part of the project were determined to not be substantial due to the avoidance, minimization, and mitigation measures implemented for these resources. In addition, no substantial induced growth impacts to any resources are expected. Although resources within the project area do require regulatory consideration, the nature of the potential project impacts, compliance with regulations, and proposed BMPs are not expected to lead to any resource reaching a “tipping point” that could lead to irreversible declines. Therefore, although the project would result in impacts to resources, the impacts would not be substantial, and a further analysis of potential cumulative impacts was determined not to be required.

### *5.17 Construction Phase Impacts*

It is anticipated that the existing bridge would remain open during the construction of the proposed project. Therefore, no construction phase impacts to access or travel patterns are anticipated.

Sabine River Authority (SRA) operates a surface water quality sampling station located on SH 63 at the Sabine River (Station ID 10399) under a contract with TCEQ’s Texas Clean Rivers Program (CRP). During construction, there may be a period of time where there would be limited access to the sampling station. TxDOT will coordinate with SRA to provide GPS location coordinates of the new bridge at center channel, and to update the sampling station to the new bridge. Additionally, TxDOT will provide SRA with advanced notice regarding any restrictions in accessing the existing bridge and provide construction updates.

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receptors is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

During the construction phase of this project, temporary increases in PM and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel PM from diesel powered construction equipment and vehicles. The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. Considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized including

compliance with applicable regulatory requirements, it is not anticipated that emissions from construction of this project will have a significant impact on air quality in the area.

Under the No-Build Alternative, no construction impacts would occur.

## **6.0 AGENCY COORDINATION**

TxDOT and LADOTD have conducted agency coordination in association with environmental compliance for the project since 2017. This section of the document summarizes the coordination completed on the project, and the following table references the sections of the document where additional information regarding each coordination activity can be found in the following **Table 10**. As referenced, copies of agency coordination documents are included in **Appendix G** or **Appendix I**.

Table 10: Summary of Agency Coordination to Date

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
Farmlands	5.3	5/22/2020	Letter and completed NRCS-CPA-106 form from USDA NRCS (Texas)	USDA NRCS	Correspondence stating that no further protection or evaluation are necessary for impacts to farmland soils.
	5.3	5/26/2020	Letter and completed NRCS-CPA-106 form from USDA NRCS (Louisiana)	USDA NRCS	Correspondence stating that no further protection or evaluation are necessary for impacts to farmland soils.
Archeological Resources	5.8.1	7/6/2021	Email from Texas SHPO to TxDOT	Texas SHPO	Concurrence of Texas terrestrial archeological survey.
	5.8.1	6/4/2021	Letter from TxDOT to Texas SHPO	Texas SHPO	Coordination of Texas underwater (marine) archeological survey.
	5.8.1	6/4/2021	Signed concurrence on TxDOT's letter <u>AND</u> Letter from Texas SHPO to TxDOT	Texas SHPO	Signed concurrence at end of TxDOT's 6/4/2021 letter, and separate letter dated 6/4/2021 stating concurrence with underwater (marine) archeological survey.
	5.8.1	3/7/2022	Letter from Louisiana SHPO to LADOTD	Louisiana SHPO	Concurrence of the Louisiana terrestrial survey and the marine survey. This concurrence also included the Louisiana HRSR.

Table 10: Summary of Agency Coordination to Date

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
	5.8.1	2/10/2022	Email from TxDOT to Tribes	Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Caddo Nation, Jena Band of Choctaw Indians, Kiowa Tribe, Seminole Nation of Oklahoma, Shawnee Tribe, Tonkawa Tribe of Oklahoma	Tribal coordination of terrestrial and marine archeological surveys.
	5.8.1	2/23/2022	Email on behalf of Jena Band of Choctaw Indians to TxDOT	Jena Band of Choctaw Indians	Concurrence of the terrestrial and marine archeological surveys.
	5.8.1	3/21/2022	Email from TxDOT to Tribes	Coushatta Tribe of Louisiana, Mississippi Band of Choctaw Indians, and the Tunica-Biloxi Tribe of Louisiana	Tribal coordination of terrestrial and marine archeological surveys.

Table 10: Summary of Agency Coordination to Date

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
Historic Resources	5.8.2	10/12/2017	Field visit at the historic bridge	TxDOT, LADOTD, Texas SHPO, Louisiana SHPO	On-site meeting when the historic bridge was closed for inspection.
	5.8.2	3/8/2018	Alternatives Workshop	FHWA Texas, FHWA Louisiana, TxDOT, LADOTD, Texas SHPO, Louisiana SHPO, HBF, Newton CHC	This workshop focused on possible options for the historic bridge and route alternatives prior to the beginning of design. This facilitated meeting took place in-person and virtually with 15 participants and 12 project team members.
	5.8.2	5/8/2019	Alternatives Review	FHWA Texas, FHWA Louisiana, TxDOT, LADOTD, Louisiana SHPO	This in-person and virtual meeting focused on reviewing the various options for the historic bridge.
	5.8.2	2/14/2022	Letter from TxDOT to Texas SHPO (located at the THC)	Texas SHPO	Coordination of inventoried historic resources' NRHP eligibility. SHPO concurrence on 3/4/2022 by endorsement at the end of TxDOT's letter.
	5.8.2	3/4/2022	Concurrence at the end of TxDOT's 2/14/2022 letter	Texas SHPO	Signed concurrence

Table 10: Summary of Agency Coordination to Date

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
	5.8.2	3/7/2022	Letter from Louisiana SHPO to LADOTD (Same 3/7/2022 noted in Archeological Resources above)	Louisiana SHPO	Concurrence of the Louisiana HRSR, which was included in a combined cultural resources report with the terrestrial and underwater archeological survey reports.
	5.8.2	5/26/2022	Historic Bridge Mitigation Meeting	FHWA Texas, FHWA Louisiana, TxDOT, LADOTD, Texas SHPO, Louisiana SHPO, HBF, Newton CHC	This meeting focused on determining appropriate mitigation for the adverse effects to historic bridge. This meeting took place in-person and via Zoom with 28 participants.
	5.8.2	10/19/2022	Letter from TxDOT to Texas SHPO (located at the THC)	FHWA Texas, FHWA Louisiana, Texas SHPO, Louisiana SHPO, HBF, Newton CHC	Coordination of adverse effect and endorsement of the commitment to continue consultation on the mitigation plan.
	5.8.2	11/8/2022	Concurrence at the end of TxDOT's 10/19/2022 letter	Texas SHPO	Signed concurrence.
	5.8.2	10/19/2022	Letter from TxDOT to HBF	HBF	Coordination of adverse effect and endorsement of the commitment to continue consultation on the mitigation plan. No response received.

*Table 10: Summary of Agency Coordination to Date*

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
	5.8.2	10/18/2022	Letter from LADOTD to Louisiana SHPO	Louisiana SHPO	Coordination of adverse effect and endorsement of the commitment to continue consultation on the mitigation plan.
	5.8.2	11/7/2022	Letter from Louisiana SHPO to LADOTD	Louisiana SHPO	Concurrence of adverse effect and endorsement of the commitment to continue consultation on the mitigation plan.
	5.8.2	2/9/2023	Email notification from FHWA Texas Division to ACHP	ACHP	Notification and supporting documentation regarding the potential adverse effects to the historic bridge. Included the Electronic Section 106 Documentation Submittal System (e106) form.
	5.8.2	2/24/2023	Letter from ACHP to FHWA Texas Division	ACHP	Response that the ACHP would not participate in the Section 106 consultation.

*Table 10: Summary of Agency Coordination to Date*

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
	5.8.2	11/22/2024	Memorandum of Agreement for Resolution of Adverse Effects under Section 106	FHWA, TxDOT, Texas SHPO, and Louisiana SHPO	This MOA codifies TxDOT and LADOTD's commitment to complete mitigation to address adverse effects on the historic bridge.
Water Resources	5.10.4	9/26/2022	Letter from TxDOT to the USACE Galveston District	USACE	Request for Preliminary Jurisdictional Determination (PJD) for water features located in project area.
	Appendix G	3/14/2024	Letter from TxDOT to USACE Galveston District	USACE	Section 404/10 Standard Permit Application Cover Letter.
Rivers and Harbors Act	5.10.4	7/27/2020	Letter from USCG	USCG	Determination that project meets the criteria for the Surface Transportation Assistance Act and qualifies for exemption from USCG bridge permit requirements.
Coast Guard Navigational Lighting Requirements	5.10.4	8/17/2020	Letter from USCG	USCG	Determination that project is exempt from USCG navigational lighting requirements.
Solicitation of Views (SOV) Correspondence and Responses	6.0 and various sections 5.11.10	11/16/2018	Letter from TxDOT to Agencies per LADOTD requirements.	See Appendix I, Public Meeting Summary, Attachment G for a complete list of agencies the SOV was submitted to.	SOV letter outreach is a required public involvement component for LADOTD projects. Letters were submitted to agencies on 11/16/2018 prior to the Public

*Table 10: Summary of Agency Coordination to Date*

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
					Meeting held in December 2018.
		11/21/2018	Letter from Louisiana Department of Agriculture & Forestry	Louisiana Department of Agriculture & Forestry	Correspondence stated that the agency had no comments at that time on the referenced project.
		11/26/2018	Letter from the Louisiana Department of Culture, Recreation, & Tourism	Louisiana Department of Culture, Recreation, & Tourism	Correspondence stated that there are no parks, sites, or other recreational areas located near the project and the agency added they have no objections or concerns on the project.
		12/5/2018	Letter from the State of Louisiana Department of Health	State of Louisiana Department of Health	Correspondence stated that the agency had no objection to the project at that time.
		12/13/2018	Letter from the Federal Transit Administration	Federal Transit Administration	Correspondence stated that the agency had no comments at that time.
		12/19/2018	Letter from the USACE	USACE	Correspondence stated that the project may be subject to USACE jurisdiction under Section 10 of the Rivers and Harbors Act, and that a permit may be required prior to any work in waters subject to USACE jurisdiction under Section 10.

Table 10: Summary of Agency Coordination to Date

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
		12/28/2018	Letter from LDFW	LDFW	Correspondence provided recommendations to minimize impacts to habitat for certain rare and imperiled species.
		4/24/2019	Phone message from EPA's Region VI (South Central) Sole Source Aquifer coordinator (personal communication with TxDOT Consultant).	EPA's Region VI (South Central) Sole Source Aquifer	In response to the SOV, EPA's Region VI (South Central) Sole Source Aquifer coordinator left a voicemail on April 24, 2019 stating he had no specific comments on the project at that time.
Chicot Sole Source Aquifer	5.10.11	1/27/2023	Phone Call (personal communication with TxDOT Consultant) and Email	EPA's Region VI (South Central) Sole Source Aquifer	Discussion of project and it's potential impacts. Agency requested additional information.
		2/28/2024	Email		Memo with additional information on project and link to the Draft Environmental Assessment was provided to agency.
		3/14/2024	Phone Call (personal communication with TxDOT Consultant)		In response to email on 2/28/2024, EPA's Region VI (South Central) Sole Source Aquifer coordinator called to ask several clarifying questions and request additional information. This included depth of

*Table 10: Summary of Agency Coordination to Date*

Resource	Relevant EA section	Date	Type of Coordination	Agencies / Other entities	Comments
					impacts, construction information regarding bridge pillars, request for bridge schematic, and hydrology study.
		3/22/2024	Email		In response to additional information requested during the 3/14/2024 phone call, more information (including schematic with project layout and hydrology study) was sent.

## 7.0 PUBLIC INVOLVEMENT

Due to the rural nature of the project area, TxDOT and LADOD determined that the use of an online engagement tool, called MetroQuest, would be a valuable tool to solicit input from members of the public. From November 2, 2018 to January 4, 2019, TxDOT and LADOTD solicited public input on the Bridge Options and Route Alternatives being considered for the bridge project via MetroQuest. TxDOT notified members of the public about the MetroQuest survey via email blasts, newspaper advertisements for the December 2018 Public Meeting, TxDOT's website, and TxDOT's social media accounts (such as Twitter). TxDOT also had an Online Engagement Station at the December 2018 Public Meeting, where attendees could complete the MetroQuest survey with technical assistance from TxDOT staff. LADOTD also posted about the survey on their website. This outreach effort overlapped with the in-person Public Meeting.

The Solicitation of Views letter outreach is a required public involvement component for LADOTD projects. The Solicitation of Views letter mailing list was provided by LADOTD. Staff at LADOTD reviewed the letter package and final mailing lists before the letters were sent out on November 16, 2018 prior to the Public Meeting held in December 2018. The letters and responses are outlined in **Attachment G of Appendix I**.

TxDOT, LADOTD, and FHWA held a Public Meeting in Leesville, Louisiana on December 11, 2018 to present the Bridge Options and Route Alternatives. The purpose of this Public Meeting was to solicit public input on the Bridge Options and Route Alternatives. Input/Comments Copies of the Public Meeting Summary and MetroQuest Summary can be found in **Appendix I**.

Eleven written comments were received at the public meeting or via mail. A total of 159 participants completed the MetroQuest survey, with 92 comments on the various screens. In general, the public was supportive of the project. Many comments noted that the project should be built in a way to accommodate future potential expansion with the interstate. Others noted issues with safety due to the existing small lanes and other concerns. A few respondents to the MetroQuest survey were not in favor of the project. The MetroQuest survey asked participants to rank the conceptual bridge options, and Alternative D (with 80 votes) and Alternative C (with 79 votes) were the two top choices.

Following the December 2018 Public Meeting, TxDOT integrated public input into their consideration of selecting a preferred alternative for the project. During this time, one Route Alternative was refined (Route Alternative C-1) to reduce ROW impacts. TxDOT completed a combined Feasibility Study and HBT Report, which provided the final recommendations for demolishing the historic bridge and building a new bridge on Route Alternative C-1 based on engineering considerations, environmental concerns, and public input.

After the Draft EA was approved for circulation, it was made available to the public for review through a combined Notice of Availability (NOA) for a Public Hearing. The Public Hearing was held in two locations - one in Texas and one in Louisiana. The Public Hearing in Texas satisfied requirements outlined in Chapter 26 of the Texas PWC (Louisiana does not have a similar requirement). There was a virtual option for those who could not attend in person.

The Virtual Public Hearing presentation went live on the TxDOT website on Tuesday, July 25, 2023 at noon central time. The in-person Public Hearing in Louisiana was held on Tuesday, July 25, 2023 from 5 to 7 pm. Approximately 21 members of the public attended the Louisiana Public Hearing. The in-person Public Hearing in Texas was held on Thursday, July 27, 2023 from 5 to 7 pm. Approximately 43 members of the public attended the Texas Hearing.

In total, 20 comments from 16 commentors were received. Most of the comments were concerned with what would happen to the historic bridge structure and other historic sites in the area. TxDOT reached out to commentors who expressed concern or interest in the historic resources on October 16, 2023 to invite them to participate in the mitigation discussion. One commentor accepted this invitation. A copy of the Comment and Response Matrix for the Public Hearing is attached in **Appendix K**. The full Documentation of Public Hearing can be found in TxDOT's ECOS system or on file with LADOTD.

One commentor noted concern with a potential burial site in the project area. Both TxDOT and LADOTD reached out to this commentor starting in September 2023. On a phone call with LADOTD archeologist on October 2, 2023 a determination of the location of the area of concern was not possible from current information provided by the commentor, and the commentor did not want to utilize maps or aerial as an aid in location. An LADOTD archeologist traveled to the project area on October 19, 2023 to meet with the commentor; however, she was unable to meet in the field that day. Additional coordination in November 2023 did not prove fruitful, and the decision was made by LADOTD to conduct a further pedestrian survey. On December 12, 2023, the pedestrian survey did not identify any surface expression indicated by the commentor; therefore, LADOTD archeologists concluded that her concern regarded a potential burial site outside of the project area and the issue was closed.

## **8.0 POST-ENVIRONMENTAL CLEARANCE ACTIVITIES AND DESIGN/CONSTRUCTION COMMITMENTS**

### **8.1 *Post-Environmental Clearance Activities***

After issuance of a FONSI, there are unresolved environmental activities that will need to be performed and finalized. These activities are detailed below.

1. TxDOT and LADOTD have made commitments to complete Section 106 mitigation prior to construction contract close-out. These include:

- a. Creation and erection of an educational kiosk/signage regarding the bridge and its history at an existing roadside park along SH 63 approximately 2 miles west of the SH 63/LA 8 bridge.
  - b. The Texas State-shaped Centennial Marker will be relocated from its current location at the existing bridge's western approach to the aforementioned roadside park.
  - c. Adjacent to the Centennial Marker at its current location are two OTHMs. TxDOT will complete the THC forms to relocate the OTHMs to the same roadside park.
  - d. TxDOT will work with the Vernon Parish Tourism and Recreation Commission to curate a museum exhibit in Leesville, LA at the Museum of West Louisiana.
2. The Build Alternative would include 5 or more acres of earth disturbance. TxDOT would comply with TCEQ's TPDES CGP and LDEQ's LPDES CGP. An SWP3 would be prepared and implemented, and a construction site notice would be posted on the construction site. A Notice of Intent (NOI) would be required.
3. The Sabine River Authority contact for the CRP is Jerry Wiegrefe, [jwiegrefe@sratx.org](mailto:jwiegrefe@sratx.org) or 409-746-3284. TxDOT will coordinate regarding access to the water quality sampling station located on SH 63 at the Sabine River. TxDOT will coordinate with SRA to provide GPS location coordinates of the new bridge at center channel and to update the sampling station to the new bridge. Additionally, TxDOT will provide SRA with advanced notice regarding any restrictions in accessing the existing bridge and provide construction updates.
4. The proposed project includes the potential demolition of a bridge. The structure may contain asbestos containing materials. Asbestos inspections, specifications, notification, license, accreditation, abatement and disposal, as applicable, will comply with the federal and state regulations. Asbestos issues will be addressed during the ROW acquisition process prior to construction.
5. The Draft 404/10 Standard Permit proposes mitigation by the use of mitigation banking credits (**Appendix J**). Once the Standard Permit is issued, TxDOT will comply with requirements summarized in the Standard Permit, including mitigation requirements for impacts to waters of the U.S. in Texas and Louisiana.

## 8.2 *Design/Construction Commitments*

Project-specific avoidance measures and special instructions, including BMPs, are provided on the standard EPIC sheet and are detailed below. Those items that require contractor action will be inserted into the PS&E as appropriate for implementation via bid items and proper notification as needed.

1. If unanticipated archeological deposits are encountered during construction, work in the immediate area will cease and TxDOT archeological staff will be contacted to initiate post-review discovery procedures.
2. Aquatic Amphibian and Reptile BMPs
  - a. For projects within existing ROW when work is in water or will permanently impact a water feature and potential habitat exists for the target species, the following will be completed:
    - i. Minimize impacts to wetlands, temporary and permanent open water features, including depressions, and riverine habitats.
    - ii. Maintain the existing hydrologic regime and any connections between wetlands and other aquatic features.
    - iii. Use barrier AREF to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
    - iv. Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.
    - v. Proposed project specific locations (PSLs) will be located in uplands away from aquatic features.
    - vi. When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and refugia/overwinter sites (e.g., brush and debris piles, crayfish burrows, aquatic logjams, and leaf packs).
    - vii. If gutters and curbs are part of the roadway design, install gutters that do not include the side box inlet and include sloped (i.e., mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.

- b. For projects that require acquisition of additional ROW and work within that new ROW is in water or will permanently impact a water feature, implement above BMPs, plus those below for projects within existing ROW:
  - i. For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.
  - ii. For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.
  - iii. When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

### 3. Bat BMP

- a. If identification of a bat species is in question, consult with TPWD or a qualified TxDOT biologist during initial collaborative review phase.
- b. For activities that have the potential to impact structures, cliffs or caves, or trees; a qualified biologist will perform a habitat assessment and occupancy survey of the feature(s) with roost potential as early in the planning process as possible or within one year before project letting.
- c. For roosts where occupancy is strongly suspected but unconfirmed during the initial survey, revisit feature(s) at most four weeks prior to scheduled disturbance to confirm absence of bats.
- d. If bats are present or recent signs of occupation (i.e., piles of guano, distinct musky odor, or staining and rub marks at potential entry points) are observed, take appropriate measures to ensure that bats are not harmed, such as implementing non-lethal exclusion activities or timing or phasing of construction.
- e. Exclusion devices can be installed by a qualified individual between September 1 and March 31. Exclusion devices should be used for a minimum of seven days when minimum nighttime temperatures are above 50°F AND minimum daytime temperatures are above 70°F. Prior to exclusion, ensure that alternate roosting habitat is available in the immediate area. If no suitable roosting habitat is available, installation of alternate roosts is recommended to replace

the loss of an occupied roost. If alternate roost sites are not provided, bats may seek shelter in other inappropriate sites, such as buildings, in the surrounding area.

- f. If feature(s) used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design or artificial roosts should be constructed to replace these features.
- g. Conversion of property containing cave or cliff features to transportation purposes should be avoided.
- h. Large hollow trees, snags (dead standing trees), and trees with shaggy bark should be surveyed for colonies and, if found, should not be disturbed until the bats are no longer occupying these features. Post-occupancy surveys should be conducted by a qualified biologist prior to tree removal from the landscape.
- i. Retain mature, large diameter hardwood forest species and native/ornamental palm trees.
- j. If gating a cave or abandoned mine is desired, consult with TPWD before installing gates. Gating should only be conducted by qualified groups with a history of successful gating operations. Gate designs must be approved by TPWD.
- k. In all instances, avoid harm or death to bats. Bats should only be handled as a last resort and after communication with TPWD.
- l. Coordinate with TPWD about the latest bat handling restrictions and protocols involving COVID19 and bat handling. In general, all staff must follow the guidelines listed below:
- m. Do not handle bats if not part of a critical or time-sensitive research project. Contact TPWD to discuss your project needs before beginning work.
- n. All participants must follow CDC social-distancing guidelines.
- o. Wear a face mask to minimize the exchange of respiratory droplets such as a surgical mask, dust mask, or cloth mask when within 6 feet of a living bat.
- p. Use disposable exam gloves or other reusable gloves (e.g., rubber dish-washing gloves) that can be decontaminated to prevent spread of pathogens. Do not touch your face or other potentially contaminated surfaces with your gloves prior to handling bats.
- q. Limit handling to as few handlers as possible.
- r. Do not blow on bats for any reason.

- s. Use separate temporary holding containers for each bat such as disposable paper bags.
- t. Caves housing bats should be avoided unless absolutely necessary.
- u. Implement additional disinfection, quarantine, and cleaning procedures.
- v. Bat surveys of structures should include visual inspections of structural fissures (cracked or spalled concrete, damaged or split beams, split or damaged timber railings), crevices (expansion joints, space between parallel beams, spaces above support piers), and alternative structures (drainage pipes, bolt cavities, open sections between support beams, swallow nests) for the presence of bats.
- w. Before excluding bats from any occupied structure, bat species, weather, temperature, season, and geographic location must be incorporated into any exclusion plans to avoid unnecessary harm or death to bats. Winter exclusion must entail a survey to confirm either, 1) bats are absent or 2) present but active (i.e., continuously active – not intermittently active due to arousals from hibernation).
- x. Avoid using materials that degrade quickly, like paper, steel wool or rags, to close holes.
- y. Avoid using products or making structural modifications that may block natural ventilation, like hanging plastic sheeting over an active roost entrance, thereby altering roost microclimate.
- z. Avoid using chemical and ultrasonic repellents.
- aa. Avoid use of silicone, polyurethane, or similar non-water-based caulk products.
- bb. Avoid use of expandable foam products at occupied sites.
- cc. Avoid the use of flexible netting attached with duct tape.
- dd. In order to avoid entombing bats, exclusion activities should be only implemented by a qualified individual. A qualified individual or company should possess at least the following minimum qualifications:
  - i. Experience in bat exclusion (the individual, not just the company).
  - ii. Proof of rabies pre-exposure vaccinations.
  - iii. Demonstrated knowledge of the relevant bat species, including maternity season date range and habitat requirements.
  - iv. Demonstrated knowledge of rabies and histoplasmosis in relation to bat roosts.

- v. Contact TPWD for additional resources and information to assist in executing successful bat exclusions that will avoid unnecessary harm or death in bats.

#### 4. Bird BMP

- a. In addition to complying with the MBTA and Chapter 64 of the Texas PWC regarding nongame bird protections, the following BMPs will be performed:
  - i. Avoid vegetation clearing activities during the general bird nesting season, March through August, to minimize adverse impacts to birds.
  - ii. Prior to construction, perform daytime surveys for nests including under bridges and in culverts to determine if they are active before removal. Nests that are active should not be disturbed. If active nests are observed during surveys, TPWD recommends a 150-foot buffer of vegetation remain around the nests until the young have fledged or the nest is abandoned.
  - iii. Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
  - iv. If unoccupied, inactive nests will be removed, ensure that nests are not protected under the Endangered Species Act (ESA), MBTA, or Bald and Golden Eagle Protection Act .
  - v. Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
  - vi. Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.
  - vii. Minimize extended human presence near nesting birds during construction and maintenance activities. Protect sensitive habitat areas with temporary barriers or fencing to limit human foot-traffic and off-road vehicle use to alert and discourage contractors from causing any unintentional impacts.
  - viii. Minimize construction noise above ambient levels during general bird nesting season to minimize adverse impacts on birds.
  - ix. Minimize construction lighting during the general bird nesting season by scheduling work activities between dawn and dusk.

## 5. Fish BMP

- a. The following Fish BMP applies to projects for all fish species in waters of the state to minimize impacts to water quality and aquatic passage from transportation projects:
  - i. Water Quality, Stream Crossing, and Dewatering BMP.

## 6. Dewatering BMP

- a. Follow most recent TPWD Aquatic Resources Relocation Plan Guidelines (PWD LF T3200-1956).
- b. Impact avoidance measures for aquatic organisms, including all native fish and freshwater mussel species, regardless of state-listing status, should be considered during project planning and construction activities.

## 7. Freshwater Mussel BMP

- a. The following Freshwater Mussel BMP applies to projects within the range and in suitable habitat for mussel SGCN found below and that are also listed on TPWD's Rare, Threatened, and Endangered Species of Texas (RTEST) online application.
- b. In addition to Water Quality and Stream Crossing BMP, follow the most recent, "TPWD-TxDOT Annual Work Plan for Pre-Construction Surveys, Aquatic Resources Relocations, and Other Best Management Practices to Avoid, Minimize, and Mitigate Impacts to Freshwater Resources."
- c. When work is adjacent to the water: Water Quality BMP implemented as part of the TCEQ SWP3 for a construction general permit or any conditions of the 401 Water Quality Certification for the project will be implemented.

## 8. General Design and Construction BMP

- a. Employees and contractors will be provided information prior to start of construction to educate personnel of the potential for all state-listed threatened species or other SGCN to occur within the project area and should be advised of relevant rules and regulations to protect plants, fish, and wildlife.
- b. Contractors will be informed to avoid harming all wildlife species if encountered and allow them to safely leave the project site. Due diligence should be used to avoid killing or harming any wildlife species in the implementation of transportation projects.
- c. Direct animals away from the construction area with the judicious use and placement of sediment control fencing to exclude wildlife. Exclusion fence should be buried at least 6 inches and be at least 24 inches high, maintained for the life of the project, and removed after construction is completed.

Contractors should examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities.

- d. Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas.
  - e. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.
  - f. Project staging areas, stockpiles, temporary construction easements, and other project related sites should be situated in previously disturbed areas to avoid or minimize impacts to sensitive or unique habitats including intact native vegetation, floodplains, riparian corridors, wetlands, playa lakes, and habitat for wildlife species.
  - g. When lighting is added, consider wildlife impacts from light pollution and incorporating dark-sky practices into design strategies. Minimize sky glow by focusing light downward, with full cutoff luminaries to avoid light emitting above the horizontal. The minimum amount of night-time lighting needed for safety and security should be used.
9. Stream Crossings BMP
- a. Use spanning bridges rather than culverts.
  - b. If using a culvert, staggered culverts that concentrate low flows but provide conveyance of higher flows through staggered culverts placed at higher elevations is recommended.
  - c. Bottomless culverts are recommended to allow for fish and other aquatic wildlife passage in the low flow channel. If bottomless culverts are not used, making a low flow channel for fish passage is recommended.
  - d. Avoid placing riprap across stream channels and instead use alternative stabilization such as biotechnical stream bank stabilization methods including live native vegetation or a combination of vegetative and structural materials. When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of aquatic and terrestrial wildlife underneath the bridge. In some instances, rip rap may be buried, back-filled with topsoil and planted with native vegetation.
  - e. Incorporate bat-friendly design into bridges and culverts.

- f. Design bridges for adequate vertical and horizontal clearances under the roadway to allow for terrestrial wildlife to safely pass under the road.
- g. A span wide enough to cross the stream and allow for dry ground and a natural surface path under the roadway is encouraged. For culverts, incorporation of an artificial ledge inside the culvert on one or both sides for use by terrestrial wildlife is recommended.
- h. Riparian buffer zones should remain undisturbed.

#### 10. Terrestrial Amphibian and Reptile BMP

The following Terrestrial Amphibian and Reptile BMPs apply to projects within the range and in suitable habitat for herpetofauna SGCN listed below and that are also listed on TPWD's RTEST online application. Please note that some species may require both aquatic and terrestrial BMPs. It is difficult to confirm absence for most species of amphibians and reptiles; therefore, assume presence in suitable habitat and implement the following BMPs.

- a. For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling.
- b. Avoid or minimize disturbing or removing cover objects, such as downed trees, rotting stumps, brush piles, and leaf litter. If avoidance or minimization is not practicable, consider removing cover objects prior to the start of the project and replace them at project completion.
- c. Examine heavy equipment stored on site before use, particularly after rain events when reptile and amphibian movements occur more often, to ensure use will not harm individuals that might be seeking temporary refuge.
- d. Due to increased activity (mating) of reptiles and amphibian during the spring, construction activities like clearing or grading should attempt to be scheduled outside of the spring (March-May) season. Also, timing ground disturbing activities before October when reptiles and amphibians become less active and may be using burrows in the project area is also encouraged.
- e. When designing roads with curbs, consider using Type I or Type III curbs to provide a gentle slope to enable turtles and small animals to get out of roadways.
- f. If Texas tortoises (*Gopherus berlandieri*) or box turtles (*Terrepenne spp.*) are present in a project area, they should be removed from the area and relocated between 100 and 200 meters from the project area. After removal of the individuals, the area that will be disturbed during active construction and project specific locations will be fenced off with AREF to exclude reentry by

turtles, tortoises, and other reptiles. The exclusion fence should be constructed and maintained per the Special Specification 5116 Amphibian and Reptile Exclusion Fence.

#### 11. Vegetation BMP

- a. Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs should be avoided. Impacted vegetation should be replaced with in-kind onsite replacement/restoration of native vegetation.
- b. To minimize adverse effects, activities should be planned to preserve mature trees, particularly acorn, nut or berry producing varieties. These types of vegetation have high value to wildlife as food and cover.
- c. It is strongly recommended that trees greater than 12 inches in dbh that are removed be replaced. TPWD's experience indicates that for ecologically effective replacement, a ratio of three trees for every one (3:1) lost should be provided to either on-site or off-site. Trees less than 12 inches dbh should be replaced at a 1:1 ratio.
- d. Replacement trees should be of equal or better wildlife quality than those removed and be regionally adapted native species.
- e. When trees are planted, a maintenance plan that ensures at least an 85 percent survival rate after three years should be developed for the replacement trees.
- f. The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.
- g. The use of seed mix that contains seeds from only regional ecotype native species is recommended. TxDOT approved seed mix will be used on the Texas side, and LADOTD approved seed mix will be used on the Louisiana side.

#### 12. Water Quality BMP

In addition to BMPs required for a TCEQ SWP3 and/or 401 Water Quality Certification:

- a. Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges.
- b. When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.

- c. Wet-Bottomed detention ponds are recommended to benefit wildlife and downstream water quality. Consider potential wildlife-vehicle interactions when siting detention ponds.
  - d. Rubbish found near bridges on ROW should be removed and disposed of properly to minimize the risk of pollution. Rubbish does not include brush piles or snags.
13. TxDOT will include notes in the EPIC sheet for the developer/contractor to minimize, to the maximum extent practicable, clearing of brushy or wooded areas within the existing and proposed ROW.
  14. TxDOT will require all construction activities to occur during daylight hours. This will minimize the potential for harassment from noise and eliminate the potential for harassment from construction lights.
  15. Construction, operations, and maintenance vehicles and equipment will be inspected regularly to ensure that hydraulic fittings are tight, hydraulic hoses are in good condition or replaced if damaged, and there are no oil or other leaks. Maintenance and fueling of vehicles and equipment will be conducted in designated areas, and precautions will be taken to minimize, contain, and clean up drips and spills.
  16. Non-hazardous waste materials, litter, and other discarded materials, such as construction waste, will be placed in containers until removed from the construction site. Trash will be removed regularly to help prevent unintended littering.
  17. The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. TxDOT encourages construction contractors to use TERP and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions.
  18. Any unanticipated hazardous material and/or petroleum contamination encountered during construction of the proposed project would be handled according to applicable federal and state regulations per TxDOT Standard Specification.

## 9.0 CONCLUSION

The analysis of alternatives for the proposed project determined that improvements proposed under the Build Alternative would meet the purpose and need of the project. The engineering, social, economic, and environmental studies conducted on the improvements as proposed by the Build Alternative indicate that the project would not result in significant adverse impacts on the human or natural environment at a level that would warrant an EIS; therefore, a FONSI is recommended.

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## 12.0 APPENDICES