Final Draft

Environmental Assessment Supplement

State Project No. H.007970
City-Parish Project No. 12-CS-HC-0043
Old Hammond Highway Segment 1
Route LA 426
Boulevard De Province to Millerville Road (Phase 2)
East Baton Rouge Parish

City of Baton Rouge/Parish of East Baton Rouge
April 5, 2019
Revised September 15, 2020

Executive Summary

This document summarizes the potential environmental impacts resulting from the proposed widening of Old Hammond Highway (LA 426) from an existing two-lane roadway to a four-lane divided curb and gutter roadway with a raised median, sidewalks, and subsurface drainage. This project is identified as State Project No. H.007970 (Louisiana Department of Transportation and Development) and City-Parish Project No. 12-CS-HC-0043 (Department of Public Works). Old Hammond Highway between Boulevard de Province and Millerville Road is a highly traveled corridor in a densely populated area of Baton Rouge.

In 1997 and 1998, the Louisiana Department of Transportation and Development (DOTD) performed an Environmental Assessment (EA) for Old Hammond Highway from Airline Highway to Millerville Road (S. P. No. 700-17-0110 & 817-09-0028). The 1998 EA divided the project into two phases. The first phase was Airline Highway to Boulevard De Province, and the second phase was Boulevard De Province to Millerville Road. In June 1998, the Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) for the entire corridor. DOTD constructed the first phase from Airline Highway to Boulevard De Province, but the second phase was not completed due to funding. The section of Old Hammond Highway is surrounded by recently improved roadways, with Old Hammond Highway from Airline Highway to Boulevard De Province on the west and the intersection at Millerville Road to the east. These improvements provided additional capacity. The City of Baton Rouge/East Baton Rouge Parish and DOTD have determined a need to increase capacity along LA 426 between Boulevard De Province and Millerville Road (Phase 2). On December 9, 2014 a meeting was held with DOTD, FHWA, Green Light Plan (GLP) program managers, and the consulting firms to discuss the relevance and validity of the 1998 EA. DOTD and FHWA determined that since revisions have been made to DOTD Engineering and Design Standards, a new document titled “EA Supplement” would be generated for the 1998 EA for the Old Hammond Highway Phase 2 project.

The logical termini are still defined from Airline Highway (N30°26'25", W91°05') to Millerville Road (N30°27'02", W91°01'36"). This proposed project calls for upgrading Old Hammond Highway between Boulevard De Province and Millerville Road in East Baton Rouge Parish, which is approximately 150 feet west of Boulevard De Province to 800 feet west of the intersection of Old Hammond Highway and Millerville Road. These termini are the beginning and ending points of the proposed construction and study area. This project includes studies of intersections along Old Hammond Highway, including the major intersection of Old Hammond Highway and South Flannery Road, and bridge improvements.

The purpose of the proposed project is to provide roadway continuity with two through lanes in each direction and to improve roadway safety and traffic operations. The need for the project is to address existing capacity deficiencies, to accommodate future traffic growth, and to address roadway and intersection improvements needed for operational safety.

Traffic operations were assessed using Level of Service analysis. Levels of Service (LOS) represents a qualitative and quantitative evaluation of the traffic operation of a given intersection. Levels of Service range from LOS A, a condition of little or no delay, to LOS F, a condition of capacity breakdown represented by heavy delay and congestion. The capacity analysis indicated

that several intersection approaches currently operate with a LOS E or F in the AM or PM peak hours of travel. Traffic volumes on Old Hammond Highway are expected to increase approximately one percent (%) per year to the design year, representing an approximately 28 percent increase by 2040. In the design year 2040 "No-Build" conditions, i.e., if no improvements are implemented, traffic operations are expected to further deteriorate.

When the 1998 Environmental Assessment was completed, the preferred alternative was Alternative A, which was a five-lane section following the existing centerline of Old Hammond Highway. The five-lane roadway section consisted of four travel lanes and a single continuous turn lane. That alternative has been dropped from further consideration because DOTD's Engineering Directives and Standards Manual (EDSM) IV.2.1.4 now requires any multi-lane roadway to be constructed with a median, which excludes a continuous center turn lane. In addition, that alternative does not comply with DOTD's Access Management Policy and it does not comply with DOTD's Complete Streets Policy.

Alternatives considered include the following:

- No-Build alternative – A No-Build Alternative is required by the National Environmental Policy Act (NEPA) for the purpose of comparison and consideration in cases where adverse impacts to the environment may outweigh the benefits of addressing the purpose and need. The effects of taking no action are compared with the effects of permitting the proposed action.

- Build Alternative 1 (Signalized Intersection) – Four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a signalized intersection at South Flannery Road with additional turn lanes. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

  Alternative 1 has the lowest estimated property cost for right-of-way (ROW) expansion; no owner occupied residences will be displaced; commercial property is not impacted by this option; and the alternative does not interfere with local service station or local "staple" commercial property. However, Alternative 1 was the least desirable in the traffic study; it requires numerous bulb-outs to accommodate the Restricted Crossing U-turn (RCUT) intersection configuration needed to maintain the alternative and construction duration is expected to take the longest.

- Build Alternative 2 (Double Roundabouts) – Four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a roundabout at the South Flannery Road intersection and a roundabout at the Boulevard De Province intersection. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

  Alternative 2 is the most effective alternative per traffic analysis; while it is impactful of commercial properties, the majority of the impact is parking spaces and the alternative does not interfere with local service station or local "staple" commercial property. However, Alternative 2 has the highest estimated property cost for ROW expansion; public meeting

comments expressed distaste in excessive roundabouts; and Alternative 2 has the largest negative impact on commercial properties in the area.

- Build Alternative 3 (Hybrid) – Four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a roundabout at the South Flannery Road intersection. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

  Alternative 3 is only $20,000 greater than the lowest estimated property cost for ROW expansion; it does not interfere with local service station or local “staple” commercial property; and commercial property is not impacted by this option. However, with this alternative, the Boulevard de Province intersection will not operate at optimum capacity.

The No-Build alternative would not provide an acceptable Level of Service. All of the build alternatives are consistent with the project purpose and need and provide acceptable Level of Service. However, based on the findings of this EA and pertinent input from the public and Cooperating Agencies, **Alternative 3**, the Hybrid, has the least adverse impacts and thus was the selected and recommended alternative for this project.

Generally, the environmental evaluation factors show similar impacts among the three build alternatives. There should be minimal variability among the quantity of potential affected wetlands and other waters, air and noise impacts, and land use impacts. All of the build alternatives received a "low/medium" rating for potential contamination impact due to their close proximity to facilities with previous reported spills and/or clean-ups. All three Build alternatives require no further action at this time (NFA-ATT) with the stipulation that the Louisiana Department of Environmental Quality (LDEQ) be notified before any materials are removed from the site.

Funding for the construction of the Old Hammond Highway Segment 1, Route LA 426, Boulevard de Province to Millerville Road (Phase 2) improvements is not allocated at this time, and the letting date is to be determined. However, all ongoing studies are being prepared under the supervision of FHWA using NEPA guidelines which may allow for the use of federal funds should they become available.

List of Acronyms

ACP	Advanced Check Print
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BER	Business Environmental Risk
BFE	Base Flood Elevation
BMPs	Best Management Practices
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CEMVN	District of Army, Corps of Engineers, New Orleans District
CESQG	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations
CMP	Corrugated Metal Pipe
CO	Carbon Monoxide
C-P	City-Parish
CREC	Controlled Recognized Environmental Condition
CRPC	Capital Region Planning Commission
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	Decibel
dBA	A-weighted Decibel
DHH	Department of Health and Hospitals
DOT	United States Department of Transportation
DOTD	Louisiana Department of Transportation and Development
DSS	Decent, Safe, and Sanitary (Department of Children & Family Services)
DPW	Department of Public Works
EA	Environmental Assessment
EB	Eastbound
EDR	Environmental Data Resources, Inc.
EDSM	Engineering Directives and Standards Manual
EJ	Environmental Justice
EO	Executive Order
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GIS	Geographic Information Systems
GLP	Green Light Plan
GRO	Gasoline Range Organics
HCM	Highway Capacity Manual

HCS	Highway Capacity Software
HREC	Historical Recognized Environmental Condition
LDAF	Louisiana Department of Agriculture and Forestry
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDWF	Louisiana Department of Wildlife and Fisheries
Leq	Sound level measurement
Leq(h)	Sound level measurement over one-hour period of time
LSHAA	Louisiana High School Athletic Association
LOS	Level of Service
LUSTs	Leaking Underground Storage Tanks
MO	Management Option
MPH	Miles Per Hour
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NB	Northbound
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NFA-ATT	No Further Action At This Time
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NRHP	National Registry of Historic Places
OCM	Office of Coastal Management
R	Receiver
RCP	Reinforced Concrete Pipe
RCRA	Resource Conservation and Recovery Act
RCUT	Restricted Crossing U-Turn Intersection
REC	Recognized Environmental Condition
RECAP	Risk Evaluation/Corrective Action Program
REM	Radioactivity Environmental Monitoring
RIRO	Right-in/right-out
ROW	Right-of-Way
SB	Southbound
SHPO	State Historic Protection Officer
SIP	State Implementation Plan
SOV	Solicitation of Views
SSA	Sole Source Aquifer
STL	Steel
SU	Single-Unit Truck
TIP	Transportation Improvement Program
TNM	Traffic Noise Model

TNW	Traditional Navigable Waters
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
US EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Service
USTs	Underground Storage Tanks
VOC	Volatile Organic Compounds
WB	Westbound
WB-67	53-foot Interstate Semitrailer
%	Percent

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Summary of Permits, Mitigation, and Commitments

The proposed Build alternatives were developed to avoid or minimize impacts. Where avoidance is not practical, minimization or mitigation measures will be applied. A summary of environmental commitments and anticipated required permits associated with the construction of this project are listed below. A discussion of permits, mitigation, and commitments required for the proposed action is included in Section 3 of this document.

Permits required for the proposed project:

- Department of the Army Clean Water Act (CWA) Section 404/10 Permit | US Army Corps of Engineers (USACE) New Orleans District (CEMVN) | Preliminary Jurisdictional Determination (wetlands) approval/concurrence will be required from the USACE, and any required mitigation of the wetlands will be made as directed by the USACE prior to construction activities. A USACE Nationwide Permit will also be required.
- CWA Section 401 Water Quality Certification | LDEQ | Under the authority contained in the Louisiana Revised Statutes of 1950, Title 30, Chapter 11, Part IV, Section 2074 A (3) and provisions of Section 401 of the CWA (PL 95 217), LDEQ must certify that any work placing dredged or fill material into waters of the state including wetlands will not violate the state's water quality standards. In accordance with the CWA, a Section 401 WQC will be obtained prior to construction to mitigate for impacts to waters of the state including wetlands.
- Louisiana Pollutant Discharge Elimination System (LPDES) Stormwater General Permit for Construction Activities | Louisiana Department of Environmental Quality (LDEQ) | A stormwater discharge permit for general construction activities will be required per Louisiana Administrative Code (LAC) 33:I.2511.B.14.j. As a part of general stormwater permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) will be implemented prior to the start of construction activities.
- Floodplain Administrator Approvals | Parish of East Baton Rouge, City of Baton Rouge Floodplain Manager | Coordination will be made with the East Baton Rouge Floodplain Manager to ensure that appropriate permits are obtained, including a Letter of No Objection and No Rise Certification.

Mitigation Measures and Commitments required for the proposed project:

- A mitigation plan will be developed to offset losses to wetland acres.
- Implementation of Best Management Practices and utilization of proper specification and construction techniques during construction to mitigate nonpoint source pollution and minimize impacts to natural resources.
- Noise abatement measures were evaluated for the Design Year 2040 Build alternatives. Since potential noise impacts were predicted to occur with construction of any of the three Build alternatives, noise abatement measures were studies. Noise barriers were found to be not

feasible and/or unreasonable at all locations according to DOTD criteria. Further discussion can be found in **Section 3.16**.

- Measures to minimize noise impacts during construction will be the responsibility of the construction contractor. All construction equipment will be properly muffled and all motor panels closed to minimize construction noise impacts to nearby areas. Nighttime activities in noise sensitive areas should be avoided where possible.
- Air quality impacts will be minimized by the construction contractor through a combination of fugitive dust control, equipment maintenance, and compliance with state and local regulations.
- A construction sequencing plan will be developed to minimize disruption of traffic on Old Hammond Highway and accommodate access to local businesses and residences during construction.
- Acquisition of right-of-way (ROW) will be handled in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
- During the development of final design plans, DOTD will coordinate with impacted utility companies along the selected alternative.
- The State Historic Preservation Officer (SHPO) concurred wit the finding of No Historic Properites Affected (**Appendix I**). If archaeological remains are discovered during the process of construction, construction should be stopped and the DOTD Environmental Section should be contacted immediately. Contact Stacie Palmer, DCL, at (225) 242-4517.
- Further investigation of the five sites identified in the Phase I Environmental Site Assessment (ESA) will be conducted in accordance with DOTD Policy and Memorandum No. 48: Underground Storage Tank and Contaminated Site Policy. Investigations are to occur during Pre-Design, Design, Acquisition, and Construction phases. During the Pre-Design phase, “Immediately upon beginning the development of a project, representatives of the respective Design Section(s), Materials and Testing Section, Environmental Section, and Real Estate Directorate will be advised.”

ENVIRONMENTAL CHECKLIST

WBS No.: H007970
Name: Old Hammond Segment 1
Route: La 426, Boulevard DeProvince to Millerville Road (Phase 2)
Parish: East Baton Rouge

1. General Information

☒Conceptual Layout	☐Line and Grade	☐Preliminary Plans
☐Survey	☐Plan-in-Hand	☐Advance Check Prints

2. Class of Action

☐ Environmental Impact Statement (E.I.S.)
☒ Environmental Assessment (E.A.)
☐ Categorical Exclusion (C.E.)
☐ State Funded Only (EE/EF/ER)

☐ Programmatic C.E. (P.C.E.)
☐ 23 CFR 771.177(c)_____
☐ 23 CFR 771.177(d)_____

3. Project Description

The Louisiana Department of Transportation and Development (DOTD) and the City of Baton Rouge/Parish of East Baton Rouge Department of Public Works (City-Parish) are proposing to construct improvements to widen Old Hammond Highway, State Rouge LA 426, from an existing two lane roadway with open ditches to a four lane divided curb and gutter roadway with a raised median, sidewalk and a closed drainage system. Old Hammond Highway between Boulevard De Province and Millerville Road is a highly traveled corridor in a densely populated area of Baton Rouge. This project includes studies of intersections along Old Hammond Highway, including the major intersection of Old Hammond Highway and South Flanner Road, and bridge improvements, over a total length of 1.33 miles.

4. Public Involvement

☒ Views were solicited. **July 16, 2015 (See Appendix E of EA)**
☐ Views were not solicited.
☒ Public Involvement events held. (List events and dates in Section 11.)[1]
☒ A public hearing/opportunity for requesting a public hearing required. (List dates in Section 11.)
☐ A public hearing/opportunity for requesting a public hearing not required.

5. Real Estate

	NO	YES	N/A
a. Will additional **right-of-way** be required?	☐	☒	☐
Is right-of-way required from a **burial/cemetery** site?	☒	☐	☐
Is right-of-way required from a Wetland Reserve Program (**WRP**) property?	☒	☐	☐
Is required right-of-way prime **farmland**? (Use form AD 1006, if needed) ...	☒	☐	☐
b. Will any **relocation** of residences or businesses occur?	☐	☒	☐
c. Are construction or drainage **servitudes** required?	☐	☒	☐

6. Section 4(f) and Section 6(f)

	NO	YES	N/A
a. Will historic sites or publicly owned parks, recreation areas, wildlife or waterfowl refuges (**Section 4f**) be affected?	☒	☐	☐
b. Are properties acquired or improved with **L&WC** funds affected?	☒	☐	☐

7. Cultural Section 106

		NO	YES	N/A
a.	Are any **known historic properties** adjacent or impacted by the project? (If so, list below)……..	☒	☐	☐
b.	Are any **known archaeological sites** adjacent or impacted by the project? (If so, list site # below) ……..	☒	☐	☐
c.	Would the project affect property owned by or held in trust for a federally recognized **tribal government**?	☒	☐	☐

8. Natural & Physical Environment

		NO	YES	N/A
a.	Are **wetlands** affected? …….....	☐	☒	☐
b.	Are **other waters** of the U.S. affected? …….....	☒	☐	☐
c.	Are **Endangered/Threatened Species**/Habitat affected? ……	☒	☐	☐
d.	Is project within 100 Year **Floodplain**?	☐	☒	☐
e.	Is project in **Coastal Zone** Management Area? …....	☒	☐	☐
f.	Is project in a **Coastal Barrier Resources** area? ……...	☒	☐	☐
g.	Is project on a **Sole Source Aquifer**? ……..……..	☐	☒	☐
h.	Is project impacting a **navigable waterway**? ….....	☒	☐	☐
i.	Are any State or Federal **Scenic Rivers/Streams** impacted? ……	☒	☐	☐
j.	Is a **noise** analysis warranted (Type I project) ……..……	☐	☒	☐
k.	Is an **air** quality study warranted?	☒	☐	☐
l.	Is project in a **non-attainment** area? …….....	☐	☒	☐
m.	Is project in an approved Transportation Plan, Transportation Improvement Program (TIP) and State Transportation Improvement Program (**STIP**)?	☐	☒	☐
n.	Are **construction** air, noise, & water impacts major? ……..	☒	☐	☐
o.	Will the project affect or be affected by a **hazardous waste site**, leaking underground storage tank, oil/gas well, or other potentially contaminated site?	☐	☒	☐

9. Social Impacts

		NO	YES	N/A
a.	Will project change **land use** in the area? ……	☒	☐	☐
b.	Are any **churches and schools** impacted by or adjacent to the project? ….. (If so, list below)	☐	☒	☐
c.	Has **Title VI** been considered? ……	☐	☒	☐
d.	Will any **specific groups** be adversely affected? (i.e., *minorities, low-income, elderly, disabled,* etc.) ……	☒	☐	☐
e.	Are any **hospitals, medical facilities, fire police** facilities impacted by or adjacent to the project? (If so, list below)……	☐	☒	☐
f.	Will **Transportation patterns** change? ……..	☐	☒	☐
g.	Is **Community cohesion** affected by the project? ……	☒	☐	☐
h.	Are **short-term social/economic** impacts due to construction considered major?	☒	☐	☐
i.	Do conditions warrant **special construction times?** (i.e., *school in session, congestion, tourist season, harvest*) ……	☒	☐	☐
j.	Were **Context Sensitive Solutions** considered? (If so explain below)…….	☒	☐	☐
k.	Were **bike and pedestrian** accommodations considered? (explain below)…..	☐	☒	☐

		NO	YES	N/A
l.	Will the **roadway/bridge be closed?** (If yes, answer questions below)…….	☒	☐	☐
	Will a **detour bridge** be provided?	☒	☐	☐
	Will a **detour road** be provided?	☒	☐	☐
	Will a **detour route** be signed?	☒	☐	☐

10. Permits (Check all permits that may be required)

☒Corps Nationwide	☐CUP/Consistency Determination	☐LA Scenic Stream
☒Corps Section 404/10	☐USCG Bridge	☒DEQ WQC
☐Levee	☐USCG Navigational Lights	☒LPDES Stormwater
☐Other (explain below)		

11. Other (Use this space to explain or expand answers to questions above.)

4. A public meeting was held at the Fairwood Branch Library on August 4, 2016. A public hearing will be scheduled, and a public hearing will be scheduled once the EA is approved.

5b. Alternate 3 will impact 1 residence and 12 rental units.

5c. Construction and/or drainage servitude to be determined see section 2.1.8.

8a. Yes, see section 3.11 for clarification.

8d. Yes, see section 3.13 for clarification.

8j. Yes, see section 3.16 for clarification.

8l. Yes, see section 3.15 for clarification.

8g. Lies in the Southern Hills Regional Auqifer System.

8o. A Texaco gas station is listed within the UST, SPILLS, NPDES, RCRA CESQG, and REM databases. An Exxon gas station is listed within UST, LUST, SPILLS, and REM databases. An Eagle station and carwash is listed within UST, EDR US Historical Auto Stations, NPDES, and REM databases as Eagle Station and in the SPILLS database (closed status) as Kourco Environmental. The Eagle Cleaners is listed in the Drycleaners and EDR US Historical Cleaners databases.

9b. Faith Presbyterian Church is located at 12855 Old Hammond Hwy, Baton Rouge, LA 70816. Minimal right-of-way will be acquired at the property; will not affect buildings or parking

9e. Baton Rouge Fire Station 17, 14450 Old Hammond Hwy, Baton Rouge, LA 70816, is located just beyond the eastern terminus of the project. There will be no impact. There were no comments about the fire station at the public meeting in August 2016.

9f. Transportation patterns will be affected by medians and roundabout(s).

9k. Sidewalks are provided on both sides of the boulevard. A wide vehicular lane will be shared with bikes.

Preparer: Forte and Tablada Inc. & GHD
Title: Mark Kessler, Mikeila N. Morgan & Linda M. McConnell, PE
Date: September 15, 2020

Attachments

- ☒ S.O.V. and Responses
- ☒ Wetlands Finding
- ☒ Project Description Sheet
- ☒ Conceptual Stage Relocation Plan
- ☒ Noise Analysis
- ☐ Air Analysis
- ☒ Exhibits and/or Maps
- ☐ 4(f) Evaluation
- ☐ Form AD 1006 (Farmlands)
- ☒ 106 Documentation
- ☒ Other: Appendix D: Public Meeting Transcript

1 Introduction

1.1 Project Description

This document is an EA Supplement for State Project No. H.007970, City-Parish Project No. 12-CS-HC-0043, Old Hammond Highway Segment 1, Route LA 426, from Boulevard De Province to Millerville Road (Phase 2).

In 1997 and 1998, the Louisiana Department of Transportation and Development (DOTD) performed an Environmental Assessment (EA) for Old Hammond Highway from Airline Highway to Millerville Road, State Project Nos. 700-17-0110 & 817-09-0028, Federal Aid Nos. STP-8034(012)M & STP-8034(013)M, Route LA 426, East Baton Rouge Parish. The 1998 EA divided the project into two phases. The first phase was Airline Highway to Boulevard De Province, and the second phase was Boulevard De Province to Millerville Road. In June 1998, the Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) for the entire corridor. DOTD constructed the first phase from Airline Highway to Boulevard De Province in 1999. The letting date for the second phase was anticipated for October 2002, but was not completed due to lack of funding.

The City of Baton Rouge/East Baton Rouge Parish and DOTD have determined a need to implement the second phase of the project to increase capacity along Old Hammond Highway (LA 426) between Boulevard De Province and Millerville Road. Due to the date of the FONSI and revisions to DOTD Engineering and Design Standards, this document will be a supplement to the previous 1998 EA.

The proposed project will widen Old Hammond Highway from an existing two-lane roadway with open ditches to a four-lane divided curb and gutter roadway with a raised median, sidewalk, and a closed drainage system. Old Hammond Highway between Boulevard de Province and Millerville Road is a highly traveled corridor in a densely populated area of Baton Rouge. The section of Old Hammond Highway is surrounded by recently improved roadways, with Old Hammond Highway from Airline Highway to Boulevard De Province on the west and the intersection at Millerville Road to the east, which provided additional capacity. This project includes studies of intersections along Old Hammond Highway, including the major intersection of Old Hammond Highway and South Flannery Road, and bridge improvements.

1.1.1 Project Location

This proposed project calls for upgrading Old Hammond Highway (LA 426) between Boulevard De Province and Millerville Road in Baton Rouge, East Baton Rouge Parish, Louisiana, which is approximately 150 feet west of Boulevard De Province to 800 feet west of the intersection of Old Hammond Highway and Millerville Road. The logical termini are defined from Airline Highway (N30°26'25", W91°05') to Millerville Road (N30°27'02", W91°01'36"). These termini are the beginning and ending points of the proposed construction and study area. *These termini have not changed since the 1998 EA.*

The scope of this document includes the logical termini described above and improvements at the intersection of South Flannery Road. **Figure 1** is a vicinity map showing the location of the project and **Figures 2a** and **2b** show the project area and logical termini.

This section was intentionally left blank.

Figure 1 Vicinity Map

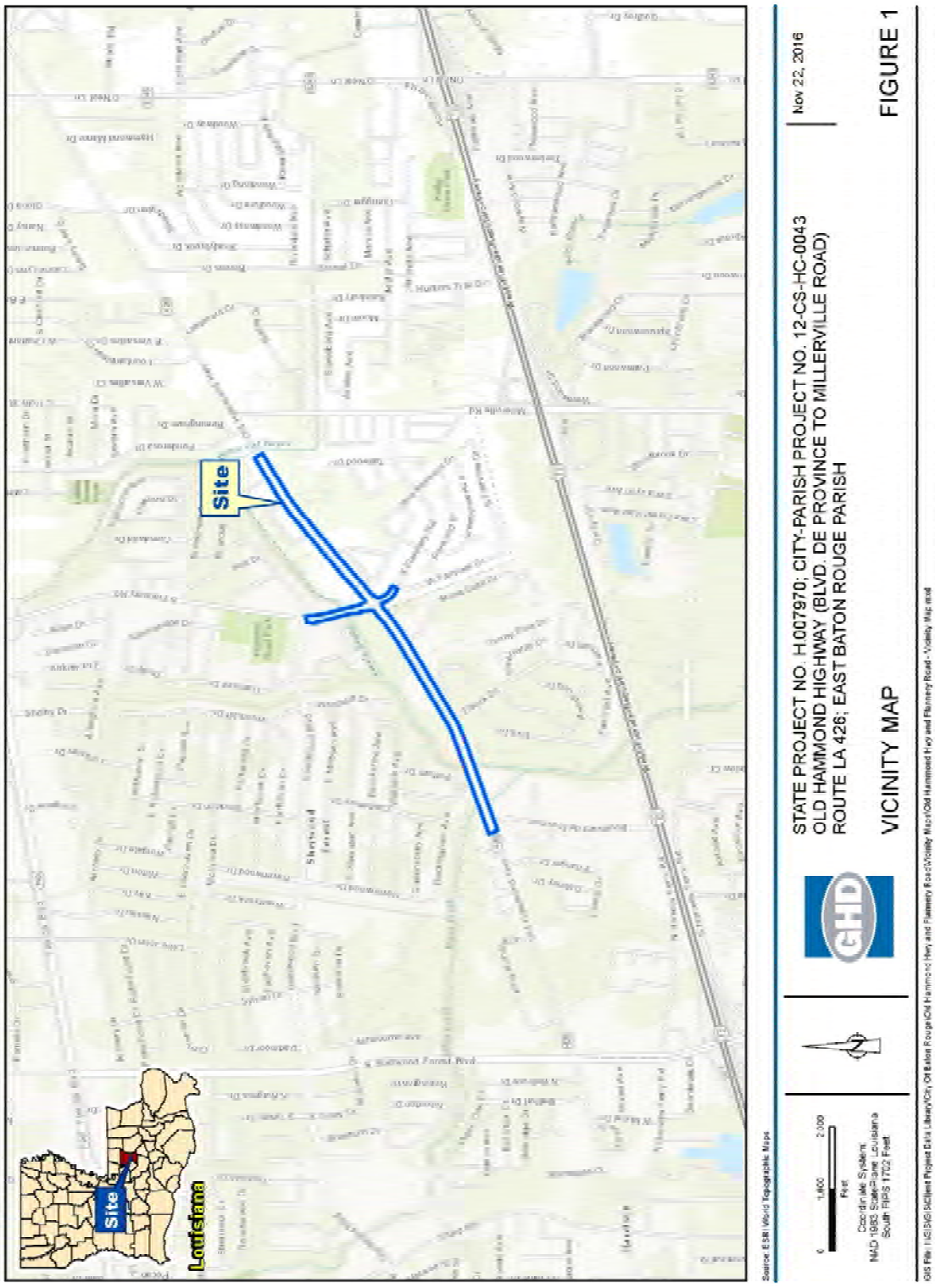


Figure 2a Project Area and Logical Termini – West Section

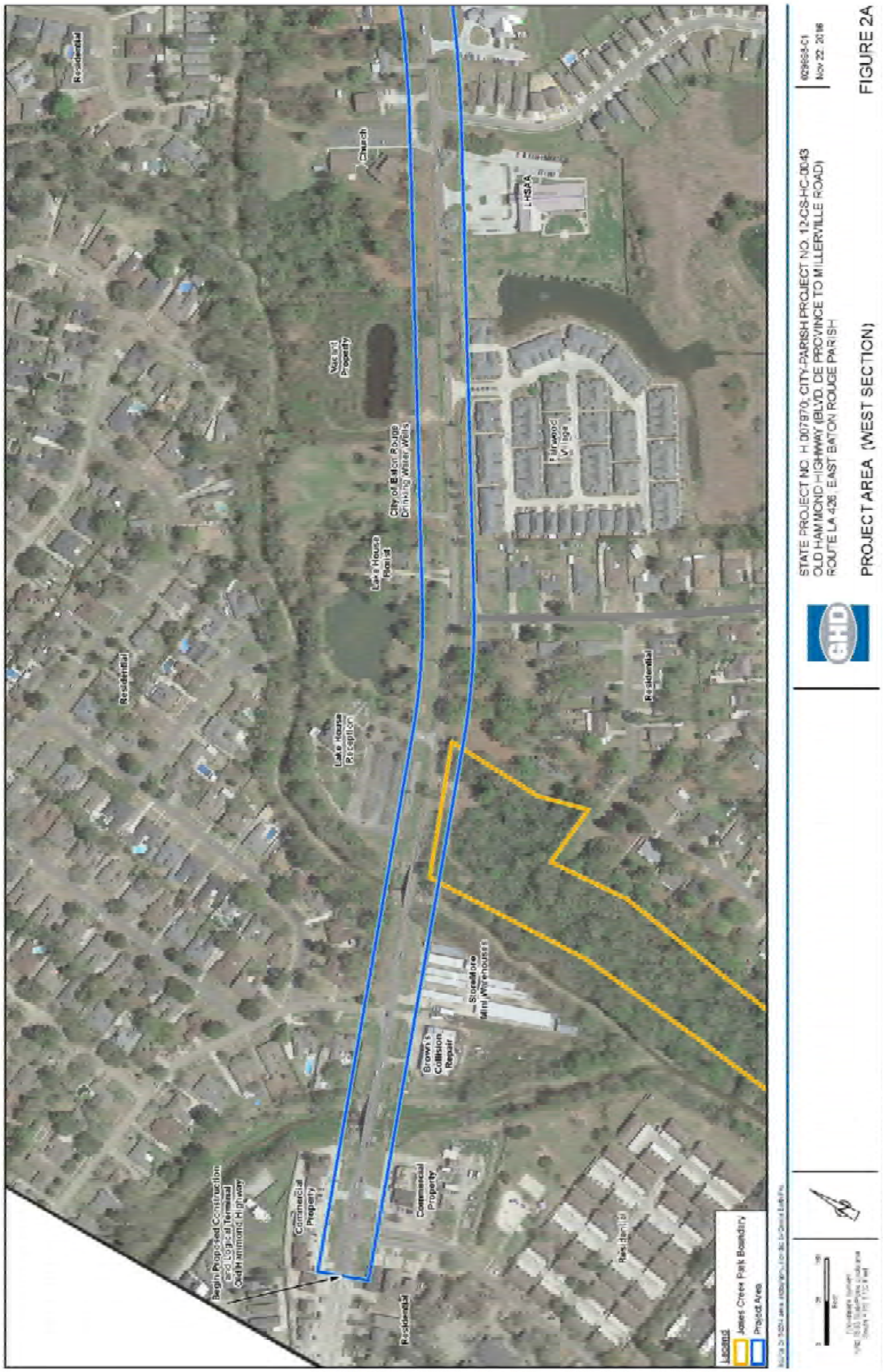
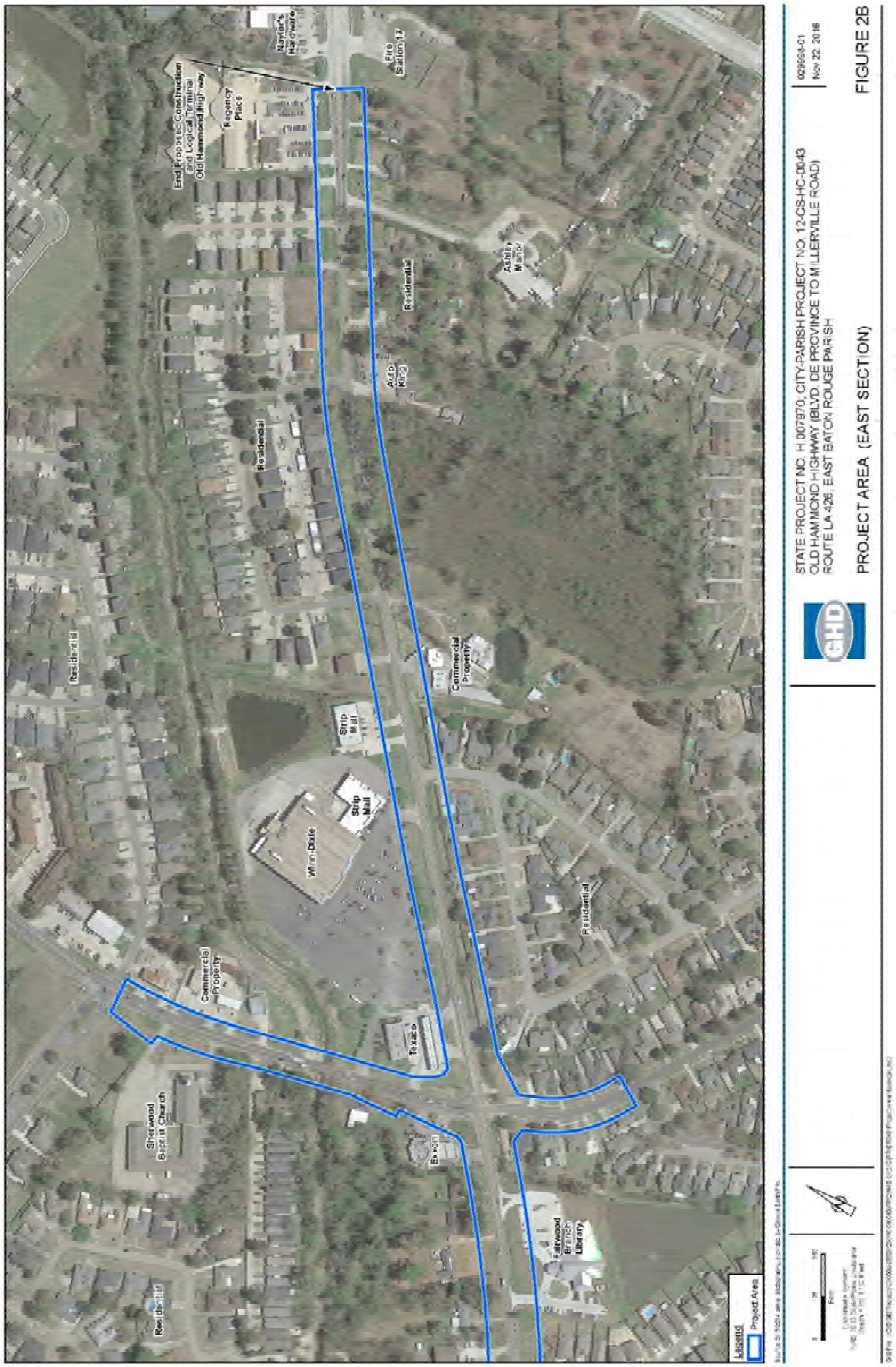


Figure 2b Project Area and Logical Termini – East Section



1.1.2 Current Conditions

Old Hammond Highway is a state route and is considered a principal urban arterial that generally runs in an east-west direction. DOTD constructed the first phase of this project from Airline Highway to Boulevard de Province in 1999. Phase 2 from Boulevard de Province to Millerville Road is a two-lane roadway with open ditches. There is a mixture of commercial and residential land uses north and south of the roadway and there are very few undeveloped properties. There are generally no shoulders on the two-lane portion of the road and there are no existing sidewalks, pedestrian crosswalks, or Americans with Disabilities Act (ADA) accommodations, including the signalized intersection of Old Hammond Highway and South Flannery Road.

The construction of Phase 1 to the west and the improvement to the intersection of Old Hammond and Millerville Road to the east of the proposed project provided additional capacity until Phase 2 could be implemented.

The posted speed of Old Hammond Highway is 45 miles per hour (mph). There is one existing signalized intersection at South Flannery Road and there are eight unsignalized intersections within the project.

The signalized intersection of Old Hammond Highway and South Flannery Road has the following existing lane configurations:

- Eastbound (EB) Old Hammond Highway: One Left Turn Lane and One Through Lane
- Westbound (WB) Old Hammond Highway: One Left Turn Lane and One Through Lane
- Northbound (NB) South Flannery Road: One Through Lane
- Southbound (SB) South Flannery Road: One Left Turn Lane and One Through Lane

The results of the traffic analyses and the environmental inventory are included in the individual technical reports and summarized in subsequent sections.

1.1 Purpose and Need for Action

The purpose of the proposed project is to provide roadway continuity with two through lanes in each direction and to improve roadway safety and traffic operations. The need for the project is to address existing capacity deficiencies, to accommodate future traffic growth, and to address roadway and intersection improvements needed for operational safety.

> *This corresponds to the purpose and need in the 1998 EA, which described traffic that exceeded design capacity, estimating traffic to increase by 50 percent (%) by 2015. The 1998 study also stated consistency with transportation plans for the Baton Rouge Metropolitan Area at the time, including the Major Street Plan for East Baton Rouge Parish that was adopted as a part of the Horizon Plan.*

Traffic operations in 1998 and the current EA were assessed using Level of Service (LOS) analysis. LOS represent a qualitative and quantitative evaluation of the traffic operation of a given intersection. Levels of Service range from LOS A, a condition of little or no delay, to LOS F, a condition of capacity breakdown represented by heavy delay and congestion. LOS B is

characterized as stable flow. LOS C is considered to have a stable traffic flow, but is becoming susceptible to congestion with general levels of comfort and convenience declining noticeably. LOS D approaches unstable flow as speed and freedom to maneuver are severely restricted and LOS E represents unstable flow at or near capacity levels with poor levels of comfort and convenience.

The capacity analysis indicated that several intersection approaches currently operate with a LOS E or F in the AM or PM peak hours of travel. Traffic volumes on Old Hammond Highway are expected to increase approximately one percent per year to the design year, representing an approximately 28 percent increase by 2040.

In the design year 2040 No-Build conditions, i.e., if no improvements are implemented, traffic operations are expected to further deteriorate.

2 Alternatives

2.1 Alternatives Considered

Several alternatives have been considered during the environmental study. The environmental analysis includes a four-lane divided highway with a 30-foot median and designated turn lanes; a four-lane divided highway with a 16-foot median and designated turn lanes; and alternatives that would implement a roundabout at the intersection of Old Hammond Highway and South Flannery Road in lieu of a signalized intersection, with a possible additional roundabout at the intersection of Old Hammond Highway and Boulevard De Province.

FHWA is the lead federal agency for the EA. As with all National Environmental Policy Act (NEPA) EAs, the No-Build alternative is being considered. The No-Build alternative would not have any direct impacts to right-of-way (ROW), structures, or utilities, but the increased traffic demand would impact the public if additional travel lanes are not provided. There would be no additional environmental impacts other than those that exist today, and the short-term adverse impacts due to construction activity would be avoided. However, the capacity analysis indicated that several intersection approaches currently operate with an LOS E or F in the AM or PM peak hours of travel. Traffic volumes on Old Hammond Highway are expected to increase approximately one percent per year to the design year, representing an approximately 28 percent increase by 2040. The No-Build Alternative would provide no improvement to the capacity of the roadway.

2.1.1 Previous Study Alternatives

When the 1998 Environmental Assessment was completed, four alternatives were assessed. The preferred alternative was Alternative A, which was a five-lane section following the existing centerline of Old Hammond Highway. The five-lane roadway section consisted of four travel lanes and a single continuous turn lane. Alternative B, as a similar expansion, included widening along and to the north of the existing roadway to Boulevard de Province. It was also a five-lane section. Alternative C was a five-lane section that included widening the existing roadway only on the south side for the full length of the project to Boulevard de Province. The No-Build alternative, which was

identified as Alternative D, was not selected because it did not adequately address the purpose and need.

Alternative A has been dropped from further consideration in the EA Supplement because DOTD's Engineering Directives and Standards Manual (EDSM) IV.2.1.4 now requires any multi-lane roadway be constructed with a median, which excludes a continuous center turn lane. In addition, that alternative does not comply with DOTD's Access Management Policy and it does not comply with DOTD's Complete Streets Policy. These policies have been adopted since the 1998 EA and are discussed further in this section.

2.1.2 Build Alternatives under Consideration

The No-Build alternative and three Build alternatives are evaluated in this EA. The three alternatives were pared down from five alternatives presented in an Alternatives Study dated March 2014. The alternatives considered minimizing ROW takings and the alignments are shifted to minimize impacts to existing residences and businesses. A brief summary of the No-Build and Build alternatives follows.

Each of the build alternatives being considered will be designed to DOTD criteria for urban arterials using a 45 mph design speed. Per the DOTD EDSM IV.2.1.4, the median openings are spaced at approximately ¼-mile distances to minimize the distance traveled to no more than ½-mile for a vehicle to turn right, make a U-turn, and get back to where they started. In addition, per EDSM IV.2.1.4 and DOTD policy, full access median openings are only considered where a traffic signal is warranted in accordance with EDSM VI.3.1.6 or where other options are not feasible or preferable.

Figure 2 indicates the beginning and ending points of the proposed Old Hammond Highway (Phase 2) construction. In addition to the widening of Old Hammond Highway, intersection improvements, median openings, turn lanes, and pedestrian and bicyclist accommodations are being considered. When studying the alternatives, consideration is given to land use, improvements on properties along Old Hammond Highway, utilities, safety, previous studies, public input and traffic and environmental analyses. The additional widening may include the relocation of businesses and/or homes. The environmental analyses include wetlands, threatened and endangered species, water resources, cultural resources and noise/air impact studies to name a few.

No-Build Alternative

A No-Build Alternative is required by the National Environmental Policy Act for the purpose of comparison and consideration in cases where adverse impacts to the environment may outweigh the benefits of addressing the purpose and need. The effects of taking no action are compared with

the effects of permitting the proposed action. The No-Build will leave Old Hammond Highway as it currently exists, other than the continuation of maintenance as needed.

Figure 3 represents the proposed typical section for Build alternatives 1-3.

Build Alternative 1 – Signalized Intersection

Build Alternative 1 (**Figures 4a-d**) consists of a four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a signalized intersection at South Flannery Road with additional turn lanes. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

Build Alternative 2 – Double Roundabouts

Build Alternative 2 (**Figures 5a-c**) consists of a four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a roundabout at the South Flannery Road intersection and a roundabout at the Boulevard De Province intersection. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

Build Alternative 3 – Hybrid

Build Alternative 3 (**Figures 6a-c**) consists of a four-lane divided highway (12-foot inside lanes with 14-foot outside shared lanes) with raised 16-foot-wide medians and designated turn lanes. The alternative includes a roundabout at the South Flannery Road intersection. A six-foot-wide sidewalk would be constructed along both sides of the roadway for pedestrians; curb and gutter drainage would be provided; and a 14-foot outside shared lane would accommodate cyclists.

Figure 3 Build Alternatives 1-3, Typical Section

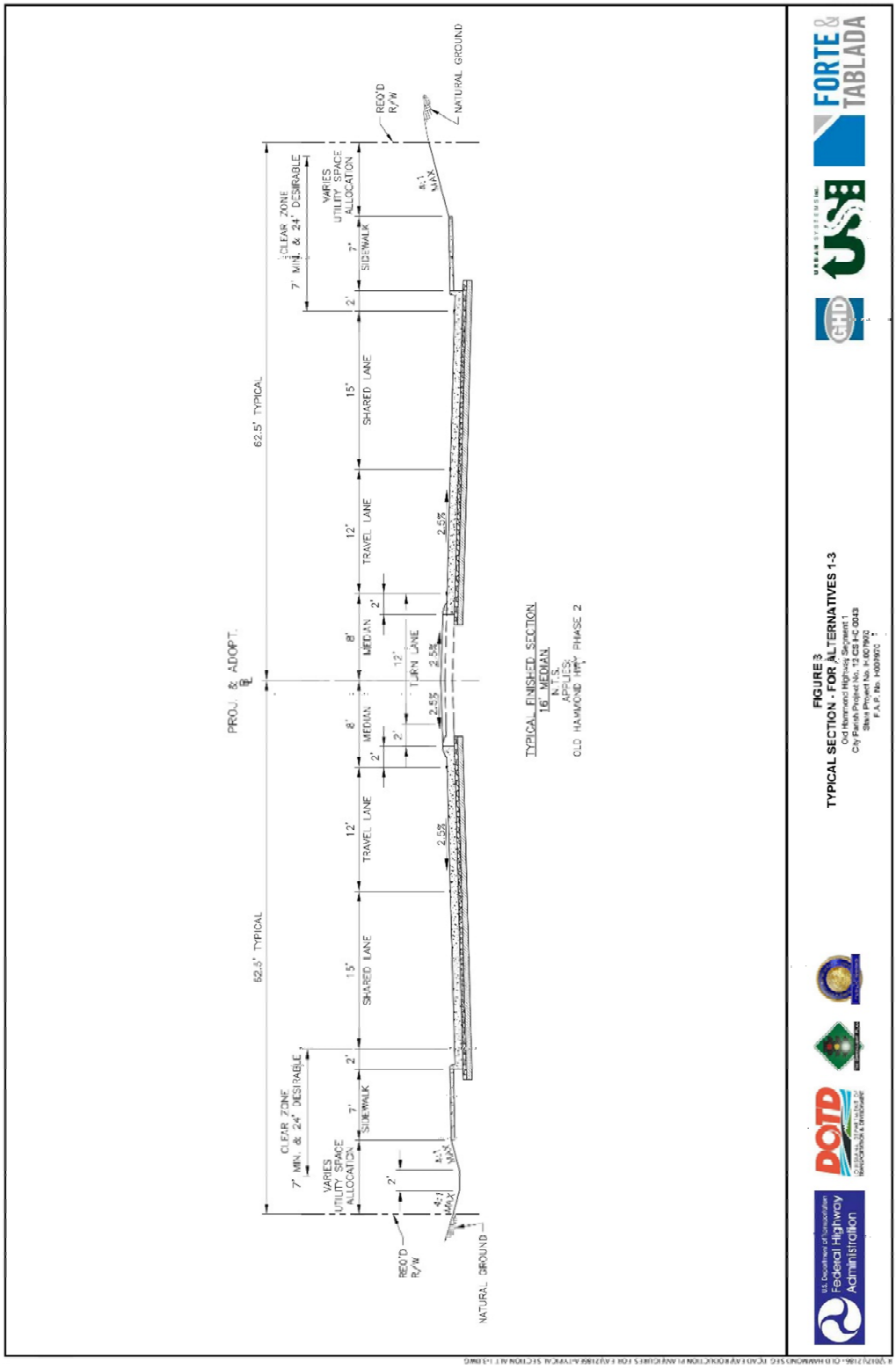


Figure 4a Build Alternative 1, Plate 1 of 4

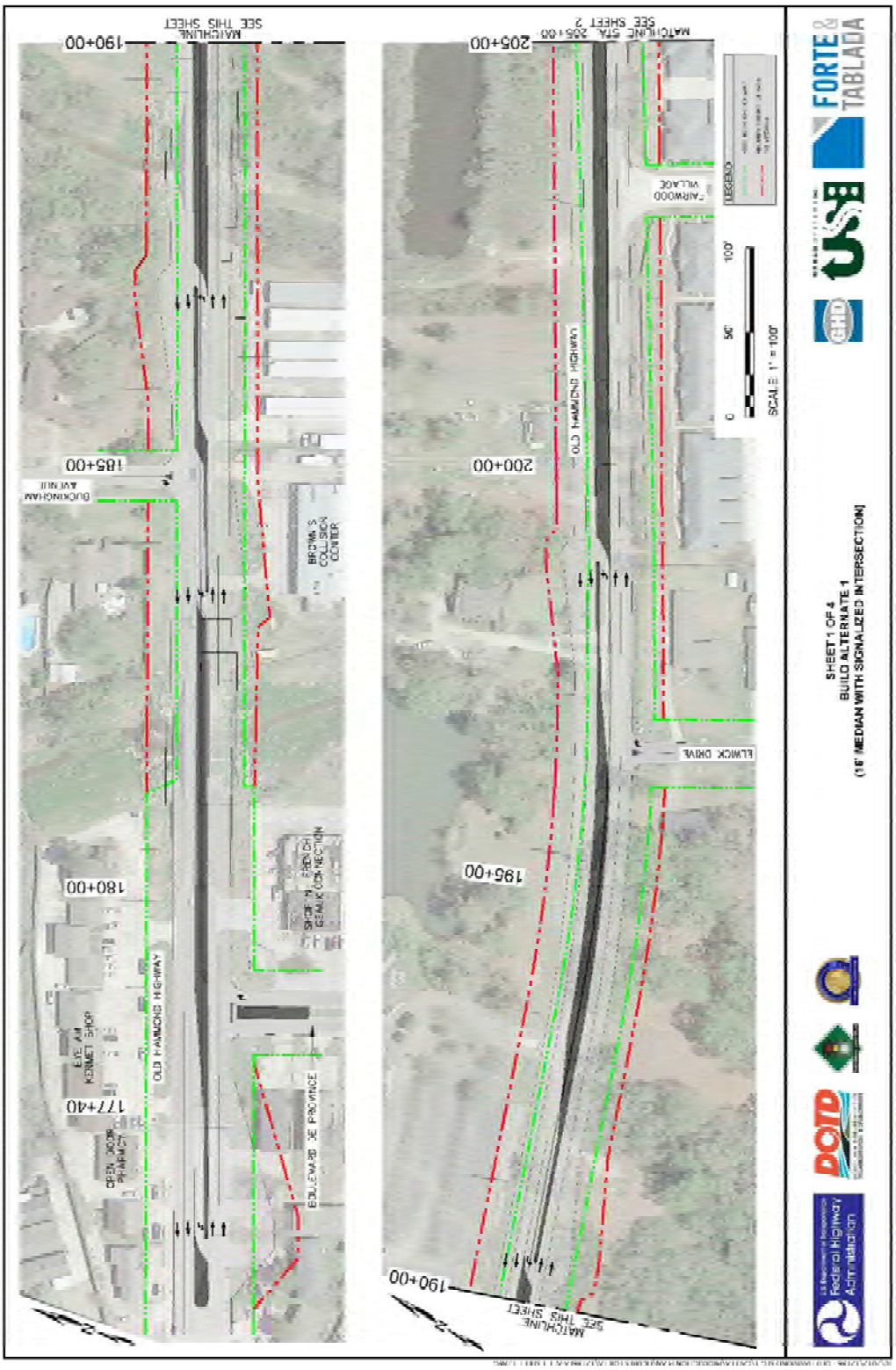


Figure 4b Build Alternative 1, Plate 2 of 4

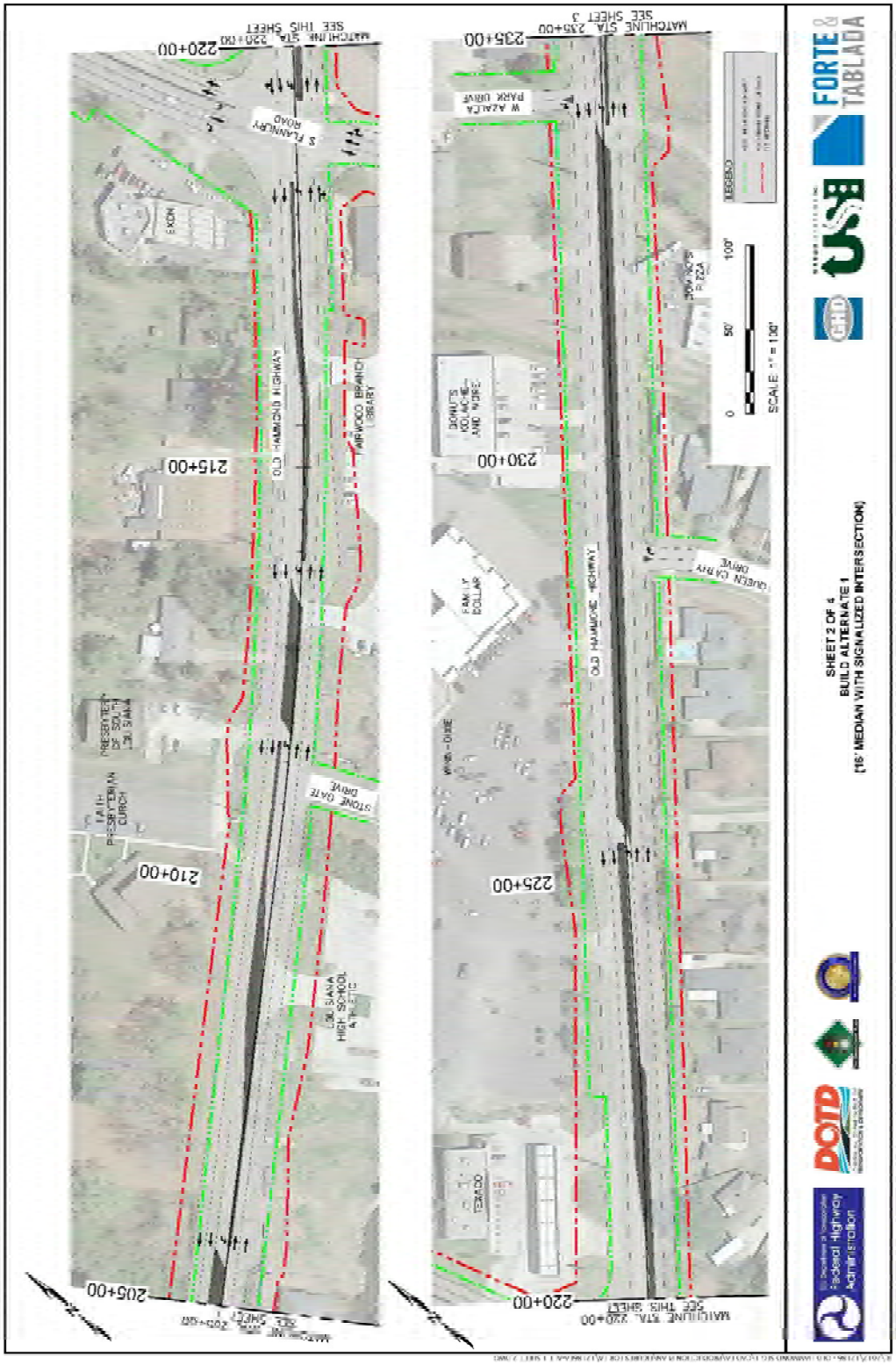


Figure 4c Build Alternative 1, Plate 3 of 4

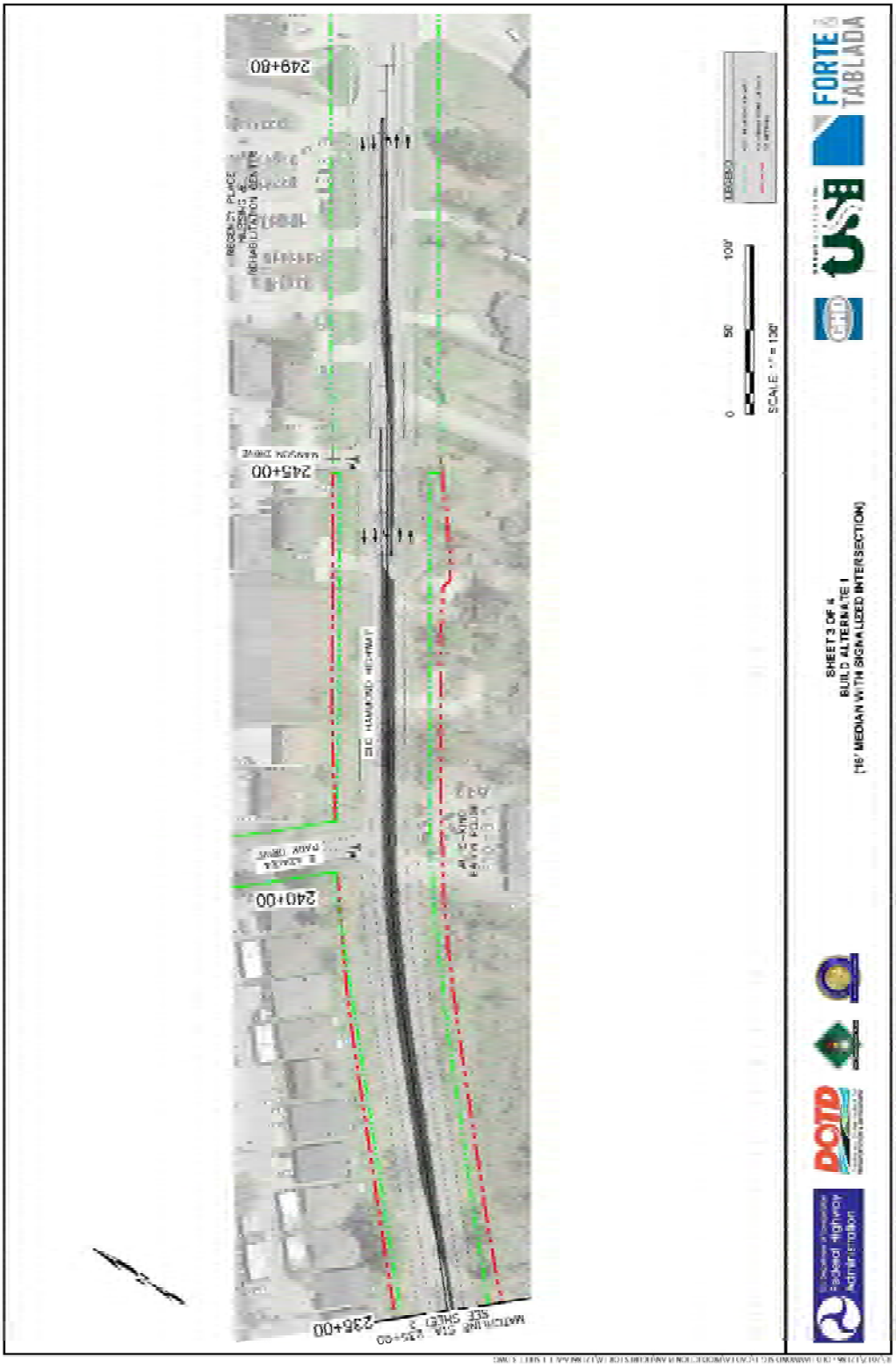


Figure 4d Build Alternative 1, Plate 4 of 4

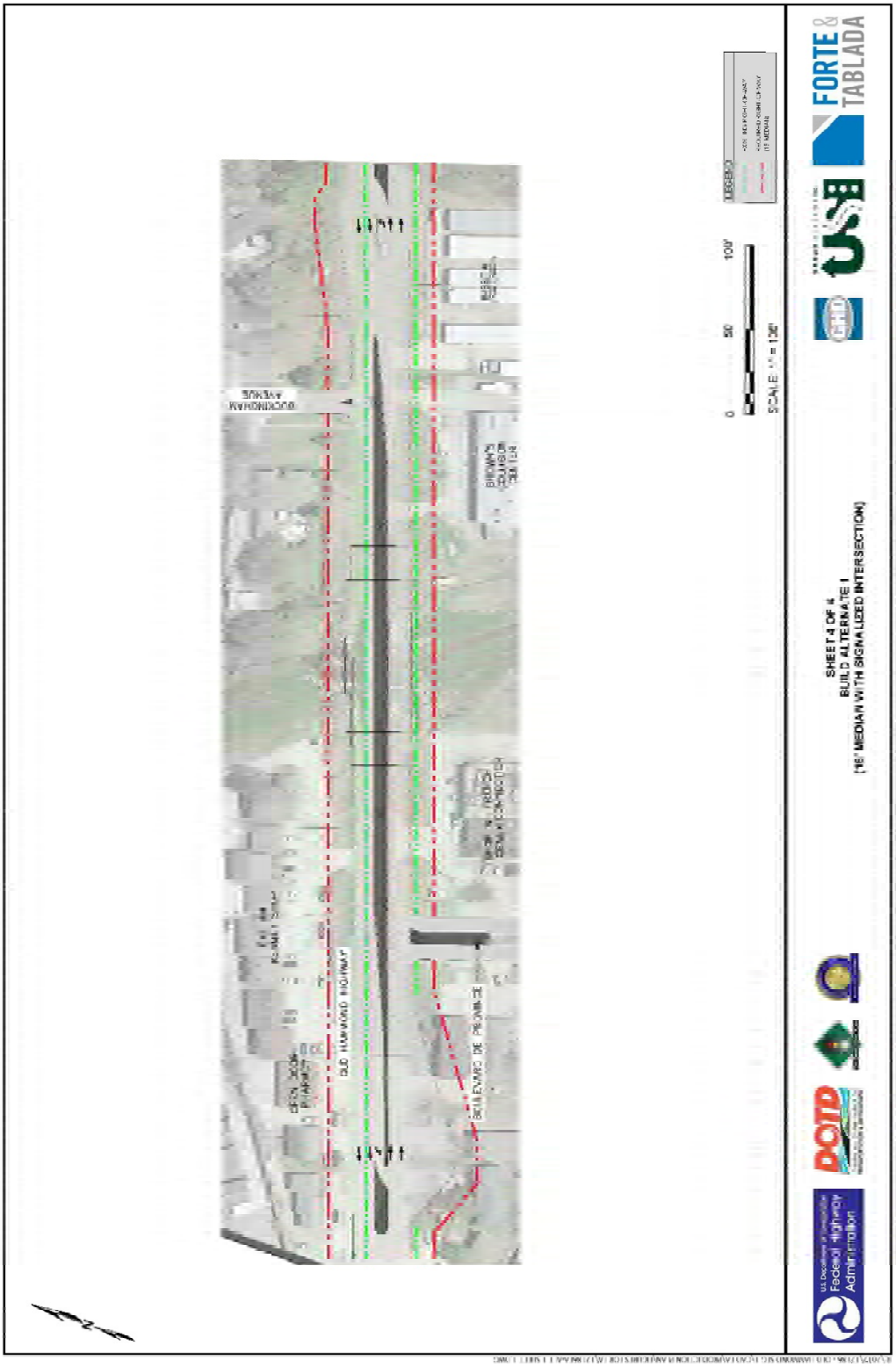


Figure 5a Build Alternative 2, Plate 1 of 3

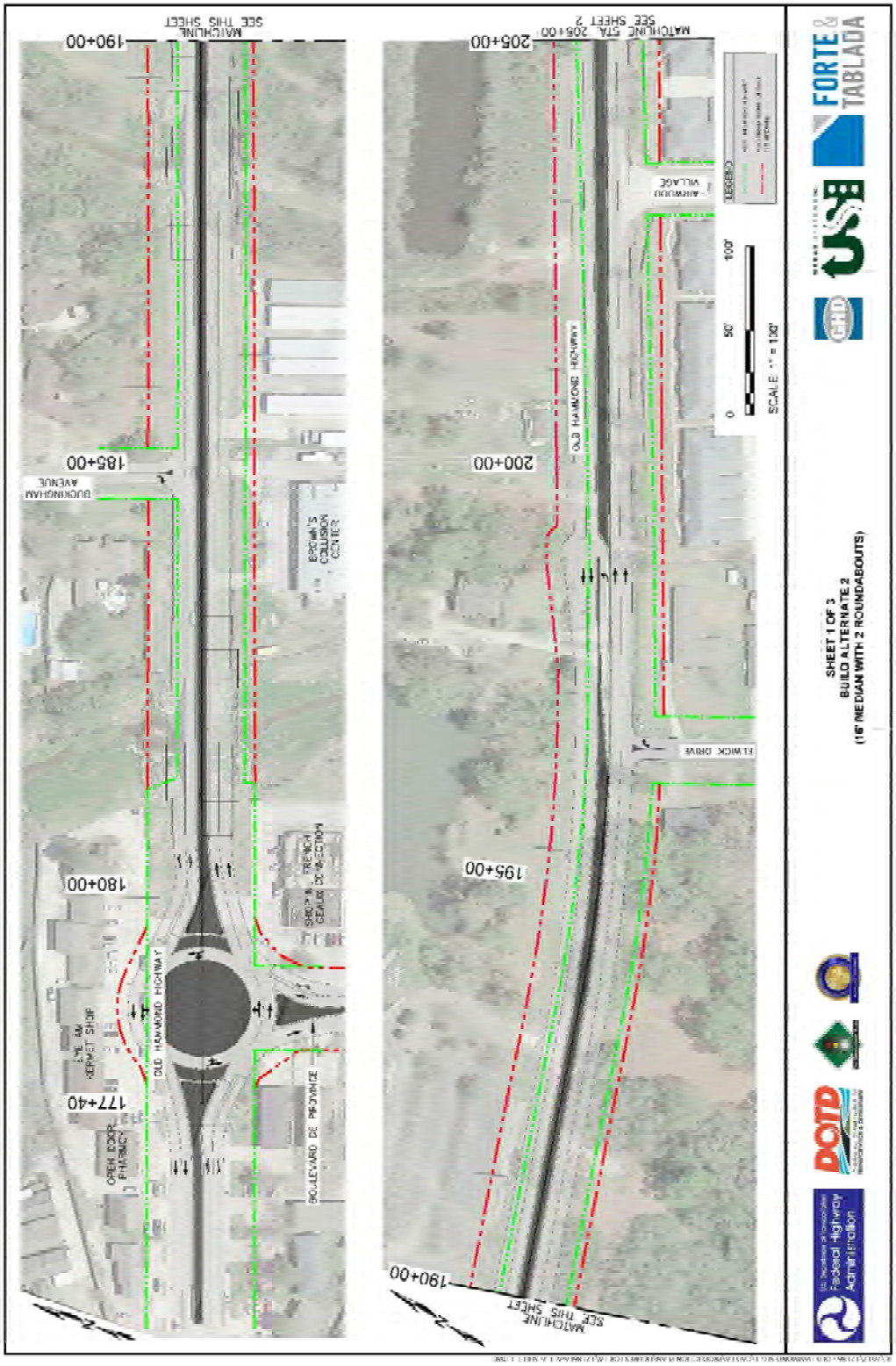


Figure 5b Build Alternative 2, Plate 2 of 3

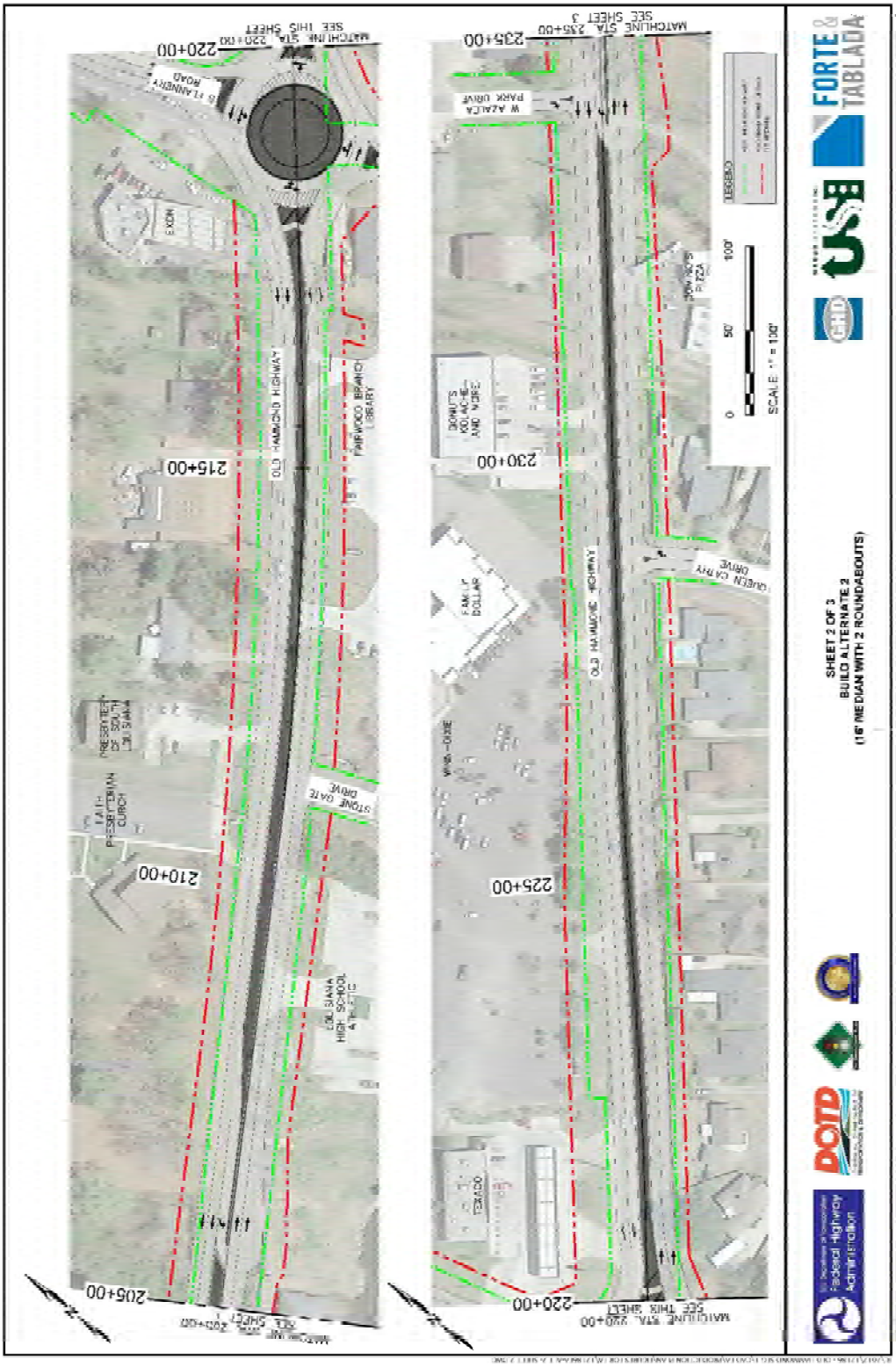


Figure 5c Build Alternative 2, Plate 3 of 3

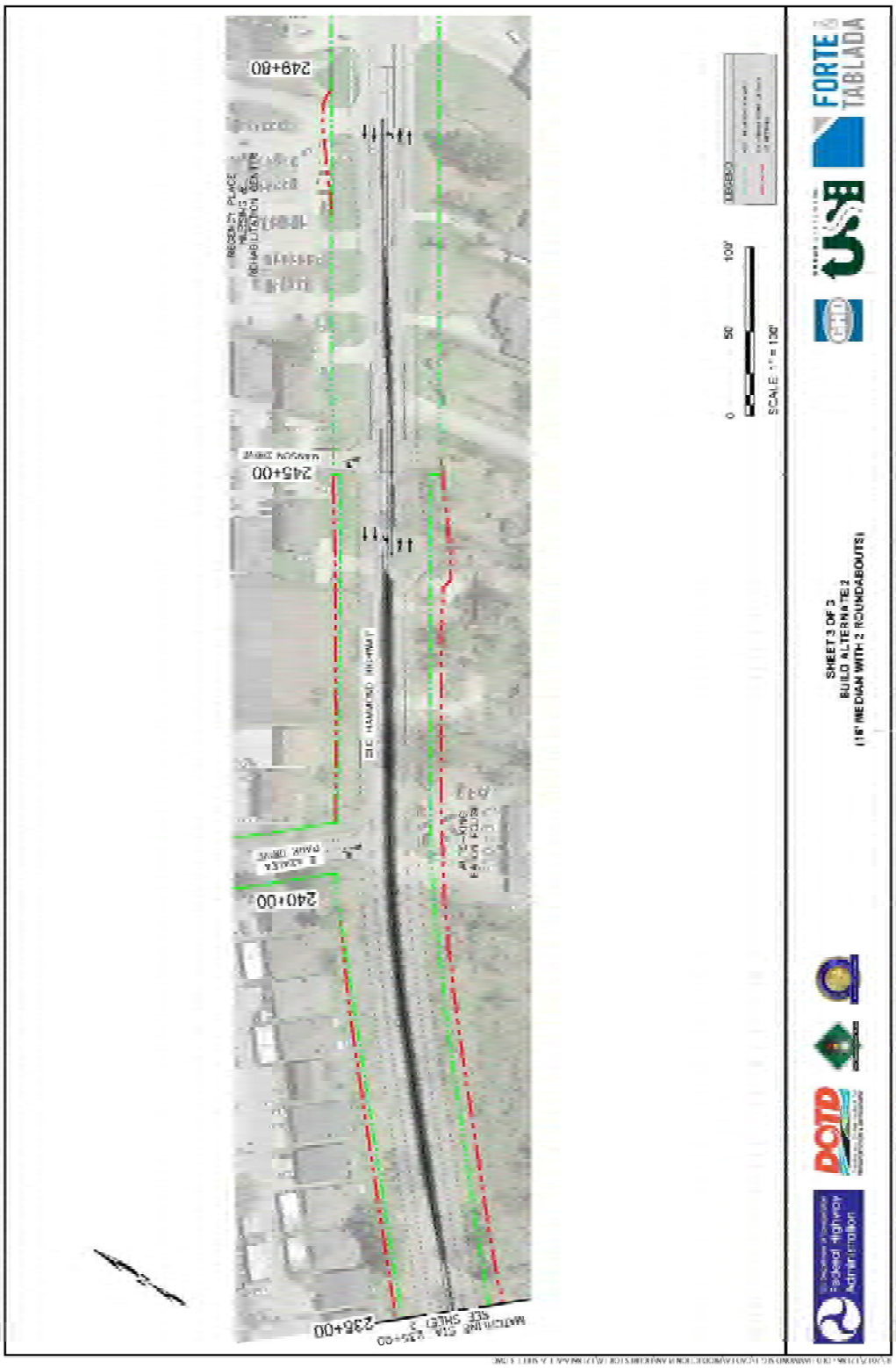


Figure 6a Build Alternative 3, Plate 1 of 3

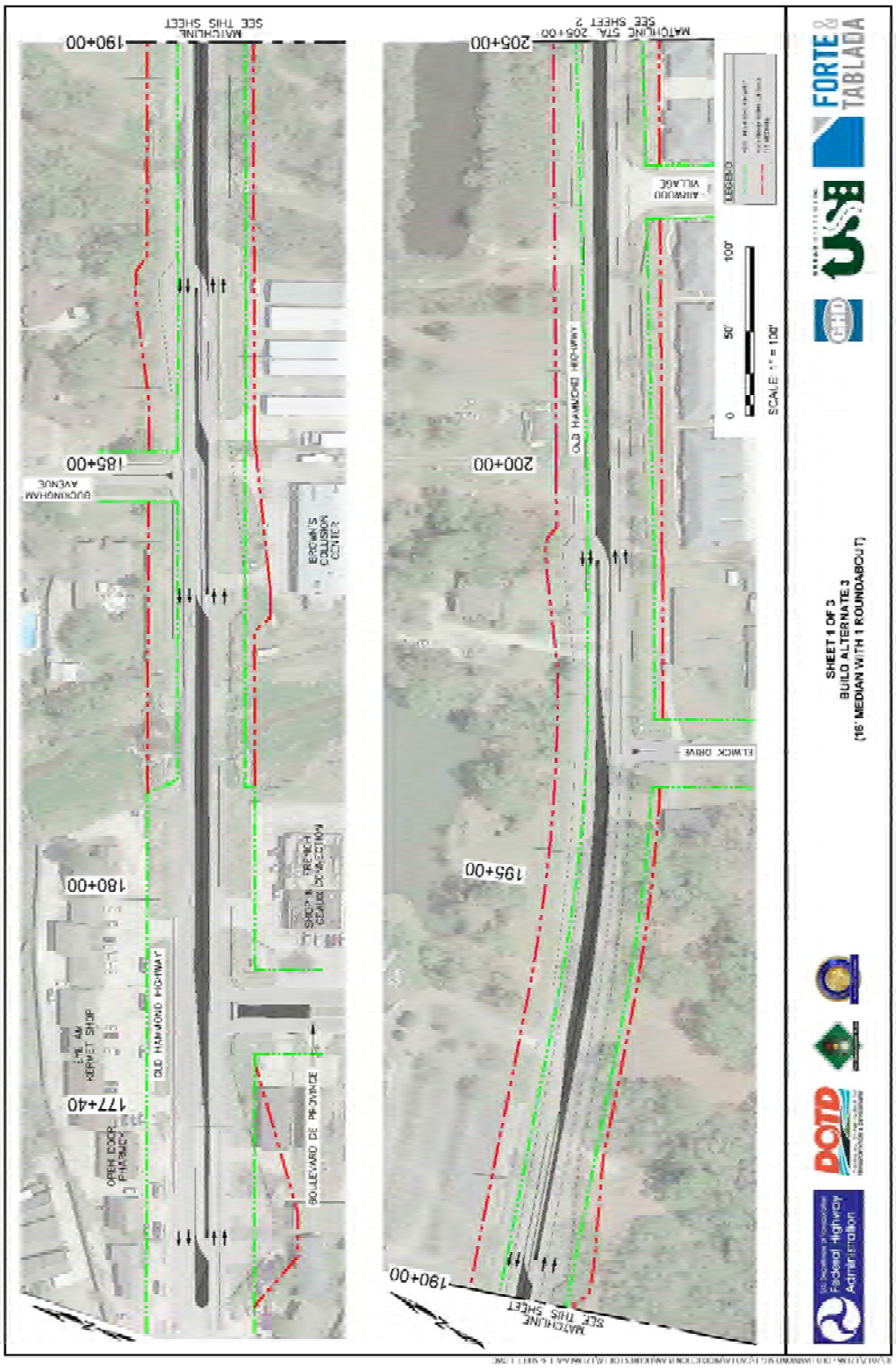


Figure 6b Build Alternative 3, Plate 2 of 3

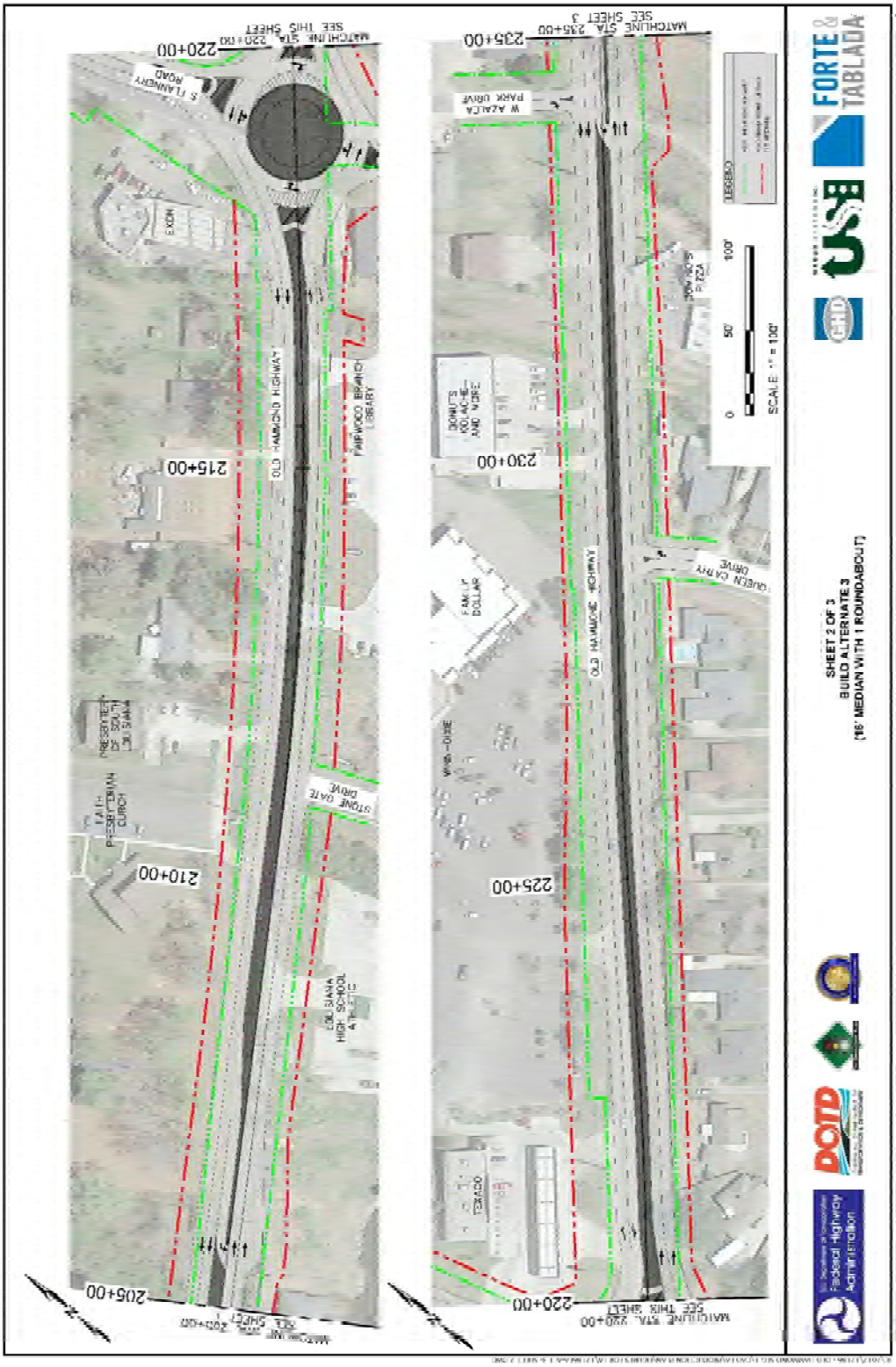
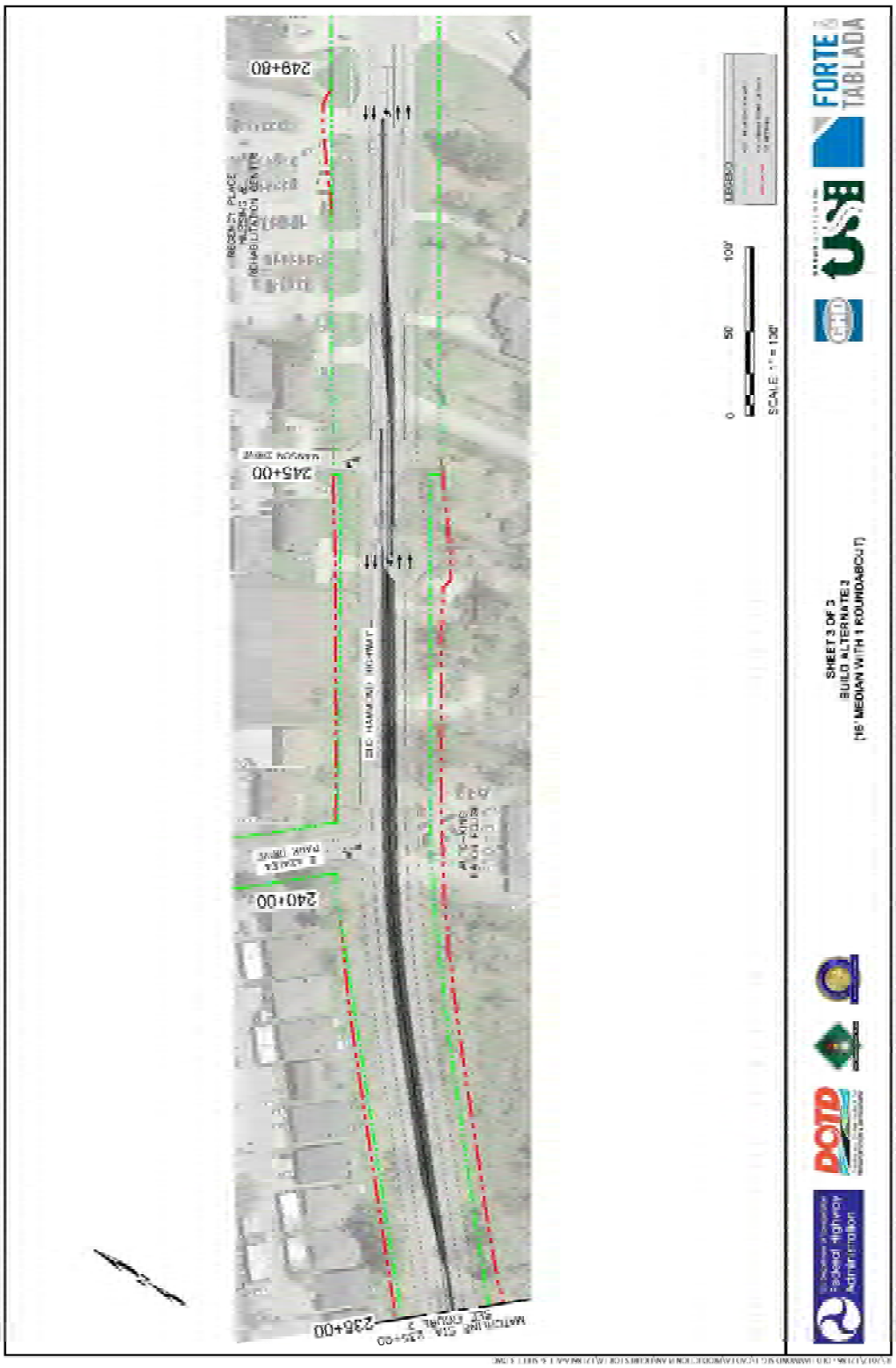


Figure 6c Build Alternative 3, Plate 3 of 3



2.1.3 Design Criteria

Regarding the intersection of Old Hammond Highway and South Flannery Road, South Flannery north of Old Hammond Highway is classified as an Urban Arterial and South Flannery south of Old Hammond Highway is classified as an Urban Local. The design criteria for this project would require the use of DOTD's Minimum Design Guidelines for each respective classification. All side street intersections are designed with radii that satisfy the requirements of the DOTD's Roadway Design Procedures and Detail Manual (Road Design Manual). At the intersection of Old Hammond and South Flannery, the following turnouts were designed to accommodate the full turning radius of a 53-foot Interstate Semitrailer (WB-67) from outside lane to outside lane with truck aprons:

- Old Hammond Highway WB turning right (north) onto South Flannery Road
- Old Hammond Highway EB turning left (north) onto South Flannery Road
- South Flannery Road NB turning left (east) onto Old Hammond Highway, and
- South Flannery Road SB turning right (west) onto Old Hammond Highway.

The following turnouts were designed to accommodate the full turning radius of a Single Unit Truck (SU) turning from outside lane to outside lane:

- Old Hammond Highway EB turning right (south) onto South Flannery Road and
- South Flannery Road NB turning right (east) onto Old Hammond Highway.

In addition, RCUTs (Restricted Crossing U-turn Intersections) were designed for this project utilizing DOTD's "Directional Crossover with Median U-turns" detail for the geometric design, as well as EDSM IV.2.1.4 for the locations of the RCUTs. These RCUT locations vary by Alternative. For Alternatives 2 and 3, the roundabouts serve as U-turns. For the Roundabout Alternative 2, geometry was developed to ensure adherence to DOTD Roundabout Design Section 6.9 in the DOTD Road Design Manual with turning movements for a WB-67. Design Criteria for Old Hammond Highway Segment 1 and for South Flannery Road are summarized in **Table 2.1**.

Table 2.1 Design Criteria

Old Hammond Highway Segment 1

Design Report
for
2017 Minimum Design Guidelines

Status:
- (•) Preliminary
- ( ) Final
- ( ) Revised

Project Information:

State Project No.	H.007970
Federal Aid Project No.	H007970
Control Section(s)	817-09
Project Name	Old Hammond Highway (La 426) Segment 1
Route(s)	La 426
Parish	EAST BATON ROUGE

Description of Work (or Revision Description)

The scope of this project is to construct a 4 lane divided highway with sidewalks. A roundabout or conventional intersection of Old Hammond Highway (La 426) and South Flannery road. A new bridge on South Flannery Road over Lively Baryou.

Traffic

Control Section	817-09 OH (W of FI)	817-09 OH(E of FI)
Current ADT (2016)	19877	18343
Design ADT (2036)	24253	18722
D	0.78	0.59
K	8%	8%
T	3.4%	2.5%
TODHV	48	23

Design Waivers

1) Outside Shoulder Width
2) Median Width

Design Exceptions

Route and Design Classification

- [x] Urban
- [ ] Rural
- [ ] Freeway
- [x] Arterial
- [ ] Collector
- [ ] Local
- [ ] Ramp

Recommended By:

Engineer of Record:	Title:	
Signature:		Date:
DOTD Technical Task Manager (Road):	Title:	
Signature:		Date:
DOTD Technical Task Manager (Bridge):	Title:	
Signature:		Date:
DOTD Project Manager:	Title:	
Signature:		Date:

Work Classification

Work Type	System	Oversight
[x] New/Reconstruction	[ ] NHS	[ ] PoDI
[ ] Major Rehabilitation	[x] Non NHS	[x] Assumed
[ ] Structural Improvement		[ ] None
[ ] Spot Replacement		
[ ] Minor Rehabilitation		
[ ] Preventive Maintenance		

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Revised 2/15/2018

State Project No. | Route | Control Section

Roadway Features:

Design Feature	Preferred	Acceptable	Proposed Value	Design Waiver Required	Design Exception Required	Remarks or Explanation for Proposed Value
Design Speed (mph)		30-60	45			
Lane Width (ft)	12	11	12			
Shoulder Width (ft)						
Inside	1	1	1			
Outside	4	1	1	✓		
Shoulder Type						
Inside	Paved	Paved	Paved			
Outside	Paved	Paved	Paved			
Lateral Offset (ft)	8	1.5	8			
Clear Zone (ft)		24-28	24			
Cross Slope (%)		2.5	2.5			
Longitudinal Grade		Max 5%	Max 0.8%			
Slopes (ft/ft)						
Fore Slope	4:1	4:1	4:1			
Back Slope	3:1	3:1	3:1			
Median Width (ft)	50	6	16	✓		

Stopping Sight Distance: *Vertical and horizontal distances must be met.*

Do plans meet Stopping Sight Distance requirements?	Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes ☐ No	☐	

Complete Streets: *Accommodations for bikes and pedestrians must be considered. See Design Guidelines for accommodation requirements.*

Do plans meet Complete Streets accommodations?	Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes ☐ No	☐	

Horizontal Curves Radius/Superelevation:

Max Super-elevation rate (%) e_{max}	Design Speed (mph)	Required Minimum Radius (ft)			Minimum radius and appropriate superelevation are being used for all curves?	Design Exception Required	Remarks or Explanation for Proposed Value
		Normal Crown	Reverse Crown	Full Super			
4	45	1080	772	711	☑ Yes ☐ No	☐	
					☐ Yes ☐ No	☐	

State Project No. | Route | Control Section

Bridge Features:						
Design Feature	*Preferred*	*Acceptable*	*Proposed Value*	*Design Waiver Required*	*Design Exception Required*	*Remarks or Explanation for Proposed Value*
Bridge Width (ft)						
Curb	82	74	74	☑	☐	
Shoulder				☐	☐	

Structural Capacity:		
Do all structures meet requirements for Structural Capacity?	*Design Exception Required*	*Remarks or Explanation for Proposed Value*
☑ Yes ☐ No	☐	

Vertical Clearance:		
Are minimum required roadway clearances met for all structure types?	*Design Exception Required*	*Remarks or Explanation for Proposed Value*
☑ Yes ☐ No	☐	

Additional Comments:

Table 2.1 Design Criteria

Flannery Road

Design Report
for
2017 Minimum Design Guidelines

Status:
- ◉ Preliminary
- ○ Final
- ○ Revised

Project Information:

State Project No.	H.007970
Federal Aid Project No.	H007970
Control Section	317-09
Project Name	Old Hammond Highway (La 426) Segment 1
Route(s)	La 426
Parish	EAST BATON ROUGE

Description of Work (or Revision Description)

The scope of this project is to construct a 4 lane divided highway with sidewalks. A roundabout or conventional intersection of Old Hammond Highway (La 426) and South Flannery road. A new bridge on South Flannery Road over Lively Bayou.

Traffic:

Control Section	Flannery N of OH	Flannery S of OH	
Current (AADT - 2016)	14730	4685	
Design (ADT - 2036)	17974	5717	
D	0.50	0.59	
K	7%	9%	
T	3.9%	3.6%	
T (DHV)	25	11	

Design Waivers

1) Outside Shoulder Width

Design Exceptions

Route and Design Classification

☑ Urban ☐ Rural

☐ Freeway ☐ Arterial ☐ Collector ☑ Local ☐ Ramp

Work Classification

Work Type	System	Oversight
☑ New Construction	☐ NHS	☐ PoDI
☐ Major Rehabilitation	☑ Non NHS	☑ Assumed
☐ Structural Improvement		☐ None
☐ Skid Reduction		
☐ Minor Rehabilitation		
☐ Preventive Maintenance		

Recommended By:

Engineer of Record:	Title:	
Signature:		Date:
DOTD Technical Task Manager (Road):	Title:	
Signature:		Date:
DOTD Technical Task Manager (Bridge):	Title:	
Signature:		Date:
DOTD Project Manager:	Title:	
Signature:		Date:

PRELIMINARY

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State Project No. | Route | Control Section

Roadway Features:

Design Feature	Preferred	Acceptable	Proposed Value	Design Waiver Required	Design Exception Required	Remarks or Explanation for Proposed Value
Design Speed (mph)		30-60	30			
Lane Width (ft)	12	11	12			
Shoulder Width (ft)						
Inside	1	1	1			
Outside	4	1	1	✓		
Shoulder Type						
Inside	Paved	Paved	Paved			
Outside	Paved	Paved	Paved			
Lateral Offset (ft)	8	1.5	8			
Clear Zone (ft)		24-28	24			
Cross Slope (%)		2.5	2.5			
Longitudinal Grade		Max 5%	Max 0.8%			
Slopes (ft/ft)						
Fore Slope	4:1	4:1	4:1			
Back Slope	3:1	3:1	3:1			
Median Width (ft)	50	6	16	✓		

Stopping Sight Distance: *Vertical and horizontal distances must be met.*

Do plans meet Stopping Sight Distance requirements?		Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes	☐ No	☐	

Complete Streets: *Accommodations for bikes and pedestrians must be considered. See Design Guidelines for accommodation requirements.*

Do plans meet Complete Streets accommodations?		Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes	☐ No	☐	

Horizontal Curves Radius/Superelevation:

Max Super-elevation rate (%) e_{max}	Design Speed (mph)	Required Minimum Radius (ft)			Minimum radius and appropriate superelevation are being used for all curves?	Design Exception Required	Remarks or Explanation for Proposed Value
		Normal Crown	Reverse Crown	Full Super			
4	45	1080	772	711	☑ Yes ☐ No	☐	
					☐ Yes ☐ No	☐	

State Project No. | Route | Control Section

Bridge Features:

Design Feature	Preferred	Acceptable	Proposed Value	Design Waiver Required	Design Exception Required	Remarks or Explanation for Proposed Value
Bridge Width (ft)						
Curb	51	51	51	☐	☐	
Shoulder				☐	☐	

Structural Capacity:

Do all structures meet requirements for Structural Capacity?		Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes	☐ No	☐	

Vertical Clearance:

Are minimum required roadway clearances met for all structure types?		Design Exception Required	Remarks or Explanation for Proposed Value
☑ Yes	☐ No	☐	

Additional Comments:

2.1.4 Typical Sections

Based on past studies, the Green Light Plan (GLP) has proposed to improve the intersection of Old Hammond Highway at South Flannery Road and to widen Old Hammond Highway from two lanes to four lanes with 12-foot travel lanes, a 16-foot median section, and six-foot-wide sidewalks in both directions along Old Hammond Highway and South Flannery Road. The median width is measured from the inside lane line of the eastbound travel lanes to the inside lane line of the westbound travel lanes. A pavement design will be provided during the design phase of the project. To the extent possible, the pavement designs assumed come from the Old Hammond Highway - Segment 2 and Pre-Advanced Check Print (ACP) Old Hammond Highway - Segment 1 projects. The remaining sections are the product of engineering judgment.

According to as-built plans of Old Hammond Highway Segment 1, the total apparent ROW width is 62.5 feet centered on the existing centerline of Old Hammond Highway. The utility space allocation widths shown on the typical sections were derived by studying the existing utility locations and developing a utility space allocation plan for utility relocations based on the City-Parish's standard plan CPS S/D-02A "Typical Section Showing Space Allocation for Utilities in New Subdivision Developments Curb & Gutter Construction." The utility plan allows for a minimum of 12.5-foot width for cable, phone, sewer, water, gas lines and other utilities. A clear and wide area was maintained throughout the project for overhead electric poles. The spacing for utility relocations varied between 12.5 feet and 20.5 feet based on utility requirements. A six-foot-wide sidewalk adjacent to the back of curb was used throughout the project to cause minimal impact on the existing area. **Figure 3** shows the typical section that could be applied to all alternatives. Throughout final design and ROW acquisition phases, width of ROW will be evaluated and consideration will be given to minimize impact on existing and occupied properties.

Both a 16-foot and 30-foot median were initially considered for this project; however, due to this project's developed status, similar projects in the area, and reasonable expectations of the existing area, a 16-foot median is desirable with a four-foot minimum maintained at turning points. This allows for a 12-foot left turn lane with a four-foot separation from oncoming traffic maintained throughout. A 16-foot median was chosen due to the negative impact a larger median would have on the urban environment. The area is densely populated with residences, major utilities, and commercial properties within the potential project area. The choice of a 16-foot median minimizes impact on those existing structures, while maintaining safety for users.

2.1.5 Complete Streets

In addition to access management improvements along Old Hammond Highway, the proposed alternatives include several elements that are noted in DOTD's Complete Streets policy adopted in 2010 and the City's Complete Streets policy adopted in 2014. The Complete Streets Policy provides guidance for integrating vehicles, bicycles, and pedestrians of all ages and abilities into roadway design. The alternatives considered in this EA all include widened shared lanes for vehicles and bicycles, delineated crosswalks, sidewalks, ADA accessible ramps, and a median to separate traffic and provide a pedestrian refuge. Some of the benefits of these design elements may include reducing pedestrian and bicycle injuries, increasing mobility and safety, and increasing the likelihood that other modes of transportation will be used. The median also allows for aesthetic improvements, such as landscaping, should such improvements to the streetscape be desired.

2.1.6 Horizontal Alignment and Geometric Design Features

Each of the three alternatives being considered meets or exceeds the Design Criteria listed in **Table 2.1**. For each alternative, any shifts in horizontal alignment were accomplished using smooth curvature. DOTD's Road Design Manual was used to define the geometry of the roadway.

The horizontal alignment for Old Hammond Highway Build Alternatives 1, 2, and 3 was created primarily by using the geometry of the existing roadway. The alignment was adjusted at the western extent of the project to account for planned future construction of the Old Hammond Highway corridor by straightening the curve somewhat and pushing the roadway slightly north. All side street intersections are designed with radii that satisfy the requirements of the DOTD Road Design Manual. The curvature used to transition from an undivided roadway to a roadway section with a median exceeds the requirements of the Road Design Manual. By designing the roadway to appropriate design standards at the appropriate design speed, an improved, more driver-friendly roadway will be provided.

When studying the alternative alignments, consideration was given to the land use, improvements on properties along Old Hammond Highway, utilities, previous studies, public input, and traffic analyses.

RCUTs were designed for this project utilizing DOTD's "Directional Crossover with Median U-Turns" detail for the geometric design, as well as EDSM IV.2.1.4 for the locations of the RCUTs. EDSM IV.2.1.4 requires that median U-turn openings be spaced at ¼-mile distances because no median existed previously on the current road. In Alternatives 2 and 3 where a roundabout is present, the roundabout serves as a point for turnaround reducing the presence of RCUTs. Roundabout geometry was developed to ensure adherence to DOTD Roundabout Design with turning movements for a WB-67. **Table 2.2** shows directional median U-turn openings, side of centerline median, and design vehicle for each. Wherever possible, the access connection criteria were used concerning the location, design, and operation of the median openings. **Figures 4a-6c** show plan views of each alternative for more visually descriptive displays of the horizontal alignments.

By providing a median and limiting the number of median openings in accordance with DOTD's Access Connections guidelines, the number of left turn movements and conflict points between opposing traffic and through traffic are reduced. This practice improves traffic flow on the major roadway and helps reduce the potential for vehicular crashes throughout the corridor. The median openings and turn lane lengths were modeled and determined in the traffic study.

Table 2.2 Median U-Turn Opening Locations and Design Vehicles

Location	Side of Centerline Median	Design Vehicle
Alternative 1		
176+55.30	EB	WB67
183+77.20	EB	SU
187+25.95	WB	SU
190+33.59	EB	SU
199+00.74	WB	SU
205+56.73	EB	SU
211+87.40	WB	SU
213+60.68	EB	SU
225+58.12	WB	SU
233+78.14	EB	SU
243+84.74	EB	SU
249+49.83	WB	SU
Alternative 2		
178+52.85	ROUNDABOUT	WB67
199+02.18	WB	SU
205+60.00	EB	SU
218+98.00	ROUNDABOUT	WB67
233+79.95	EB	SU
243+86.18	EB	SU
249+33.08	WB	SU
Alternative 3		
176+55.30	EB	WB67
183+30.19	EB	SU
187+23.88	WB	SU
190+32.93	EB	SU
199+00.16	WB	SU
205+57.98	EB	SU
218+96.08	ROUNDABOUT	WB67
233+78.03	EB	SU
243+84.16	EB	SU
248+50.00	EB	SU

2.1.7 Vertical Profile

The proposed profile of Old Hammond Highway generally follows specifications of the DOTD Minimum Design Guidelines. The profile is maintained as closely as possible to the existing vertical profile to minimize embankment costs. Old Hammond Highway is designed for 45 mph and uses vertical curves that are larger than or equal to the minimum length of curvature, which is three times the design speed or 135 feet, and create a smooth, comfortable drive. The grading of this project also follows or exceeds DOTD standards of a minimum grade of 0.4 percent specified for curbed roadways. The curve length does not exceed the allowable K value of 167. The design speed calls for a minimum stopping sight distance of 360 feet that is also maintained. The proposed roadway alignment and profile can be found in the appendices. For determination of roadway grade, the 2011 DOTD Hydraulics Manual was used.

The DOTD Hydraulics Manual gives guidance on determining the roadway grade stating:

- If gage data is available at a site, a statistical analysis, such as the Log-Pearson Type III analysis, should be performed to determine the stage for design event.
- Flood studies performed by the US Army Corps of Engineers (USACE), or the US Geological Survey (USGS) can be used if available.
- For some urban sections, it may not be practical to raise the roadway above the design event if this is considerably higher than the existing roadway. Considerably raising the roadway grade in urban sections may result in ROW acquisition problems, undesirable grades for driveways and other connections to the roadway, as well as storm water impoundment outside of the ROW.

Based on topographic survey data from the beginning of the project just before Boulevard de Province beyond the project limits to the Millerville intersection, the average elevation of the existing centerline of Old Hammond Highway is 41.47 feet and the centerline of South Flannery is 40.57 feet in elevation. Based on DOTD's suggested methods, determination of the roadway grade is described below:

- Gage data: there are two gage points in the project area, Jones Creek at Old Hammond Highway (Latitude 30°26'26", Longitude 91°02'40" NAD27) and Lively Bayou on South Flannery (Latitude 30°26'47", Longitude 91°02'04" NAD27). These two points exist at opposing ends of the project; because of their encompassing nature of the project area, these points seemed accurate representation of the flood stage in the project area.
- Inundation Elevation (Flood of Record): The highest recorded flood elevation came in 1961 with a height of 39.68 feet. This information come from a report made by the USGS. Waters of this level would remain below the proposed roadway elevation.
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs): According to the most recent (May 2, 2008) FEMA FIRMs, the Base Flood Elevation (BFE) for the project area is as follows:

- The entire project is inside the limits of Flood Zone AE, meaning the area is subject to inundation of one-percent-annual-chance (100-year) flood event. The BFE for the area is 41 feet.

FEMA FIRMs for the area are included on **Figures 7a** and **b**. FEMA flood profiles for Jones Creek and Lively Bayou are included on **Figures 8** and **9**, respectively.

The design 50-year water surface elevation is 40.08 feet and the 100-year water surface elevation is 40.32 feet. Therefore, the low chord must be set at the greater value of the existing 50-year water surface elevation at *40.08 feet and one-foot equals 41.08 feet* or the 100-year water surface elevation of 40.32 feet. To satisfy the bridge hydraulic design requirements, the low chord was set at or above 41 feet.

Using the above data, the original design stage elevation was determined to be 41.08 feet (40.08--foot base flood plus one-foot freeboard). Following the above suggestions from the DOTD Hydraulics Manual, the design stage elevation was maintained at 41.08 feet. From this, the intersection at Old Hammond Highway and South Flannery is designed at an elevation of 43.09 feet and designed such that low points were not created at intersecting side streets.

2.1.8 Drainage Considerations

Locations of existing drainage features are summarized in **Table 2.3**.

Table 2.3 Existing Drainage Locations

Location	Description
205+50	3'x3' Reinforced Concrete Pipe (RCP)
217+30	28" Steel Pipe (STL PIPE)
219+30	60" Corrugated Metal Pipe (CMP)

An existing 20 foot drainage servitude at station 205+35+/- will be utilized to drain the subsurface drainage from the roadway into the existing drainage ditch that traverses north into Lively Bayou. The existing ditch will be checked for capacity and cleaning during construction plan development. The USACE will make the final determination as to whether this area will be considered jurisdictional wetlands. No impact is anticipated at this time.

Figure 7a FEMA FIRM – West Section

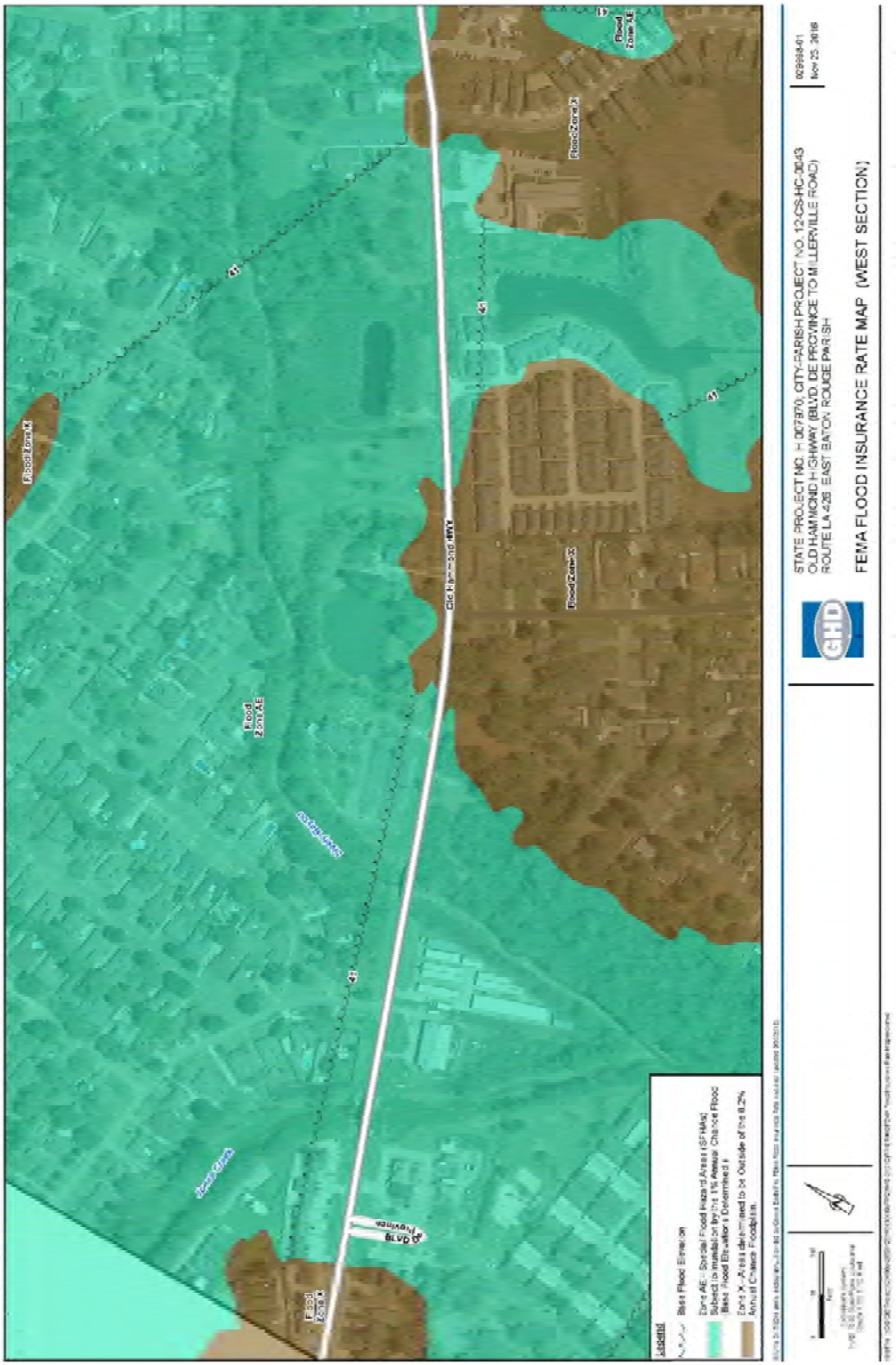


Figure 7b FEMA FIRM – East Section

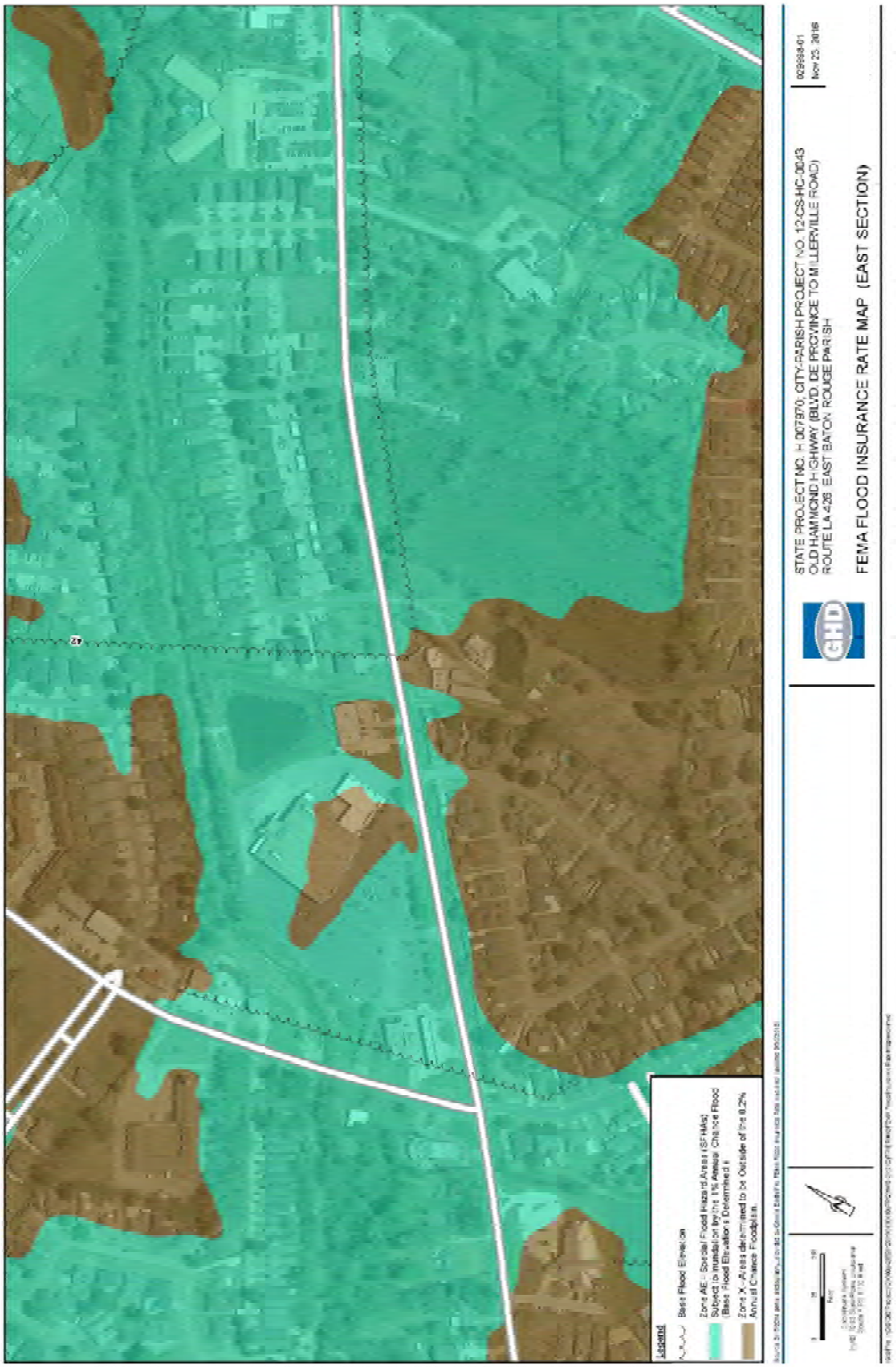


Figure 8 FEMA Flood Profile – Jones Creek

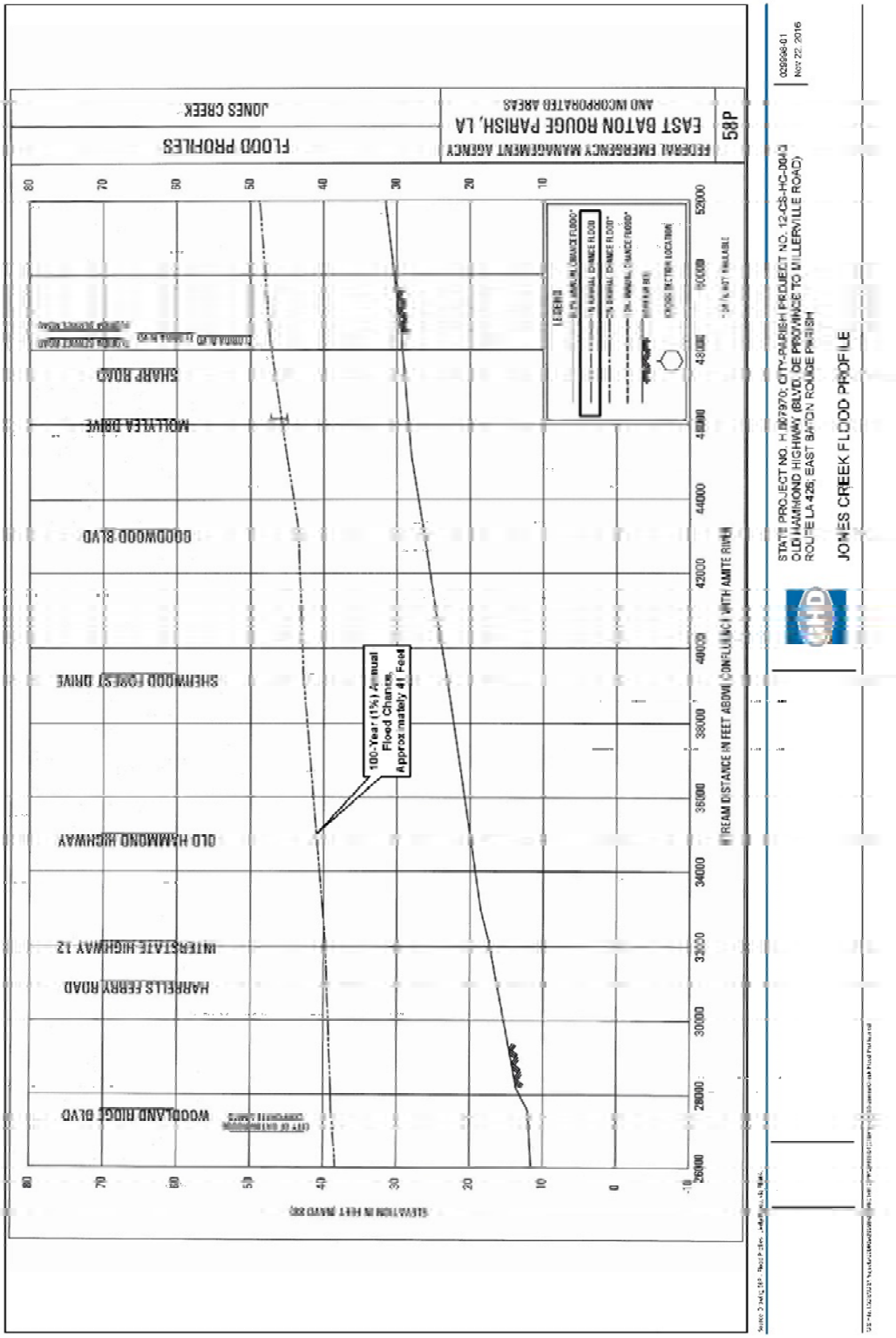
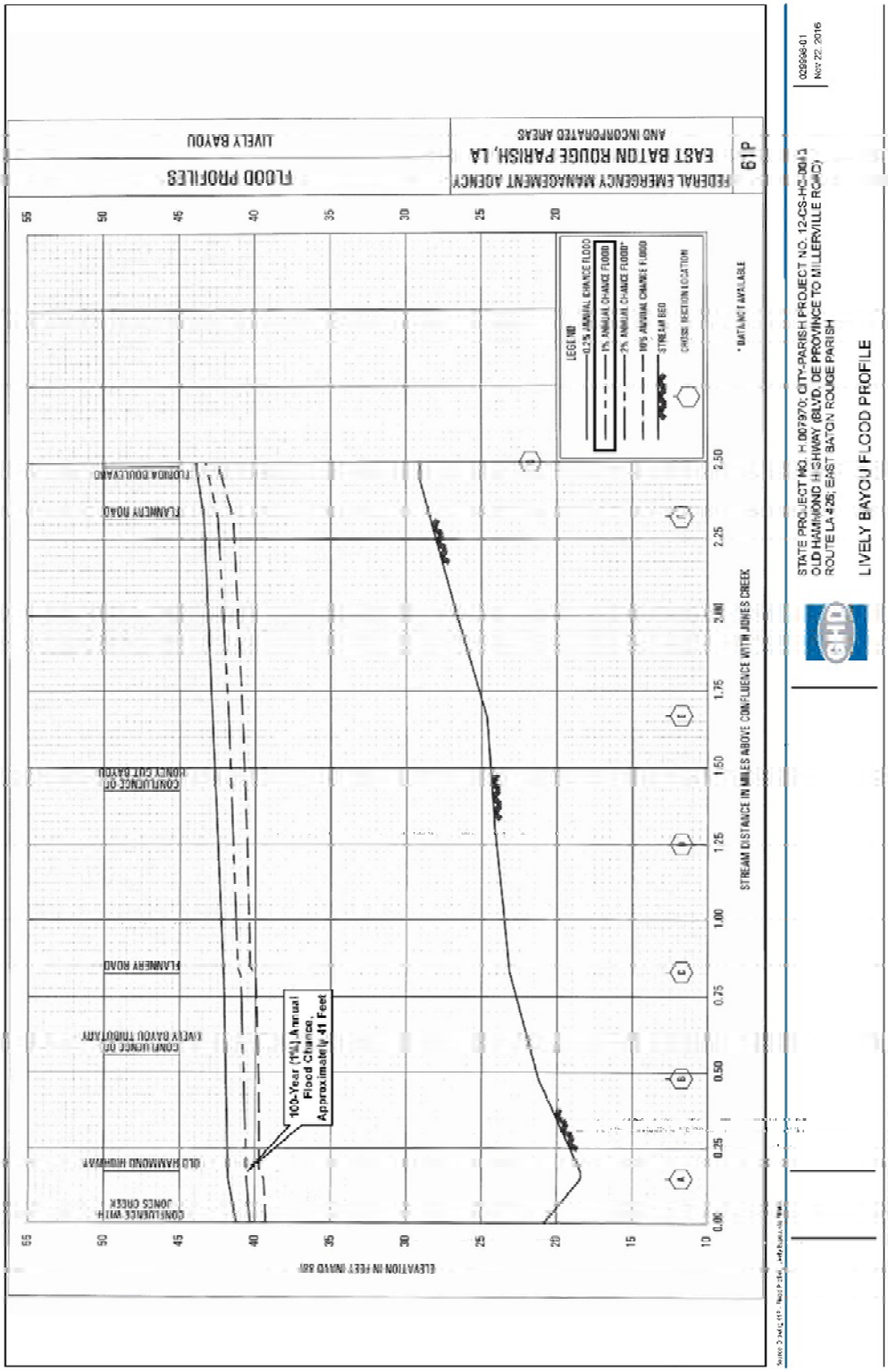


Figure 9 FEMA Flood Profile Lively Bayou



2.1.9 Traffic Analyses

The Traffic Study for Old Hammond Highway Phase 2 was submitted November 2016. The objectives of the traffic study were to identify the existing operational and safety needs, estimate the projected demand conditions, develop and analyze potential improvements, and compare the alternatives based on traffic operation and safety.

2.1.9.1 Traffic Volumes and Projections

More complete detail of the existing and projected traffic volumes can be found in the Traffic Study. The project limits begin along Old Hammond Highway east of Boulevard de Province and continue along Old Hammond Highway ending where the roads transition to a five-lane section between Manson and Ponderosa. The adjacent intersection of Millerville was also included in the traffic analysis. Traffic data was collected September 2015. AM and PM peak period turning movement counts were taken for specific intersections and 15-minute spot turning movement counts were taken for all 42 unsignalized driveways or intersections. Existing turning movement counts were taken at eight unsignalized intersections as well as the two signalized intersections at South Flannery and Millerville Drive.

Traffic analyses were performed for both a No-Build Alternative as well as a Build Alternative with four divided lanes on Old Hammond Highway at three points: existing conditions 2010, upon implementation 2027, and for design year 2037. These traffic analyses were provided through the Capitol Region Planning Commission (CRPC) TransCAD models. Future improvements that were considered in the traffic projections consisted of the change from a two-lane undivided highway to a four-lane divided highway on Old Hammond Highway. However, future improvements should have minor impact to the corridor as the area is fully developed. The build alternative is a 16-foot median with U-turns spaced according to DOTD guidelines, as well as two signalized intersections and one roundabout at South Flannery. All minor intersections will operate as right-in/right-out (RIRO). The variance of impact between the various alternates was not large enough to conduct more than one Build alternative study.

Capacity analyses were performed for both AM and PM peak hours for all design scenarios previously mentioned but for the design years of 2015, 2020, and 2040 using Synchro, Version 8. The TransCAD model runs were applied to determine growth rates and future trips for the study area. The TransCAD models were useful in presenting comprehensive consideration to developments of the area. Considering the range of data presented in TransCAD, a growth rate of one percent per year growth was recommended and approved to be applied to the traffic volumes of the 2015 base conditions.

Table 2.4 Design Year Average Daily Traffic (ADT)

Bidirectional ADTs	ADT
Old Hammond Highway (East of Blvd De Province)	23,540
Old Hammond Highway (West of Manson)	18,170
Flannery (North of Old Hammond Highway)	17,450
Flannery (South of Old Hammond Highway)	5,550

2.1.9.2 Traffic Signal Warrants

There is currently one signalized intersection on Old Hammond Highway within the project limits at South Flannery; in addition, the signalized intersection at Millerville was used for analysis. As previously mentioned, all minor intersections along Old Hammond Highway will be RIRO access with a directive median in place.

Signal warrants were conducted based on the EDSM requirement that full median openings and traffic signal installations must satisfy the Manual on Uniform Traffic Control Devices (MUTCD) signal Warrant 1A. Warrant analysis was conducted for existing (2015) and projected (2040) traffic volumes, intersection geometry, and speed using PC-Warrants software. Signal Warrants were conducted for Old Hammond at Boulevard de Province and South Flannery Road. Peak hour volumes were reviewed at other intersections; however, none had volumes high enough to warrant consideration for a signal. The warrant analysis indicates that a signal is warranted at South Flannery, but not at Boulevard de Province.

2.1.9.3 Operational Analyses and Lane Configurations

The Build scenario assumes a four-lane section on Old Hammond Highway with a dividing median. The median width and specific roadway alignments between each alternative have a marginal variance on impact on traffic volumes and operational analyses; for this purpose, only one Build alternative was used in the traffic study.

Traffic analyses were performed at Boulevard de Province and South Flannery Road to determine intersection geometry, turn storage lengths, and number of required travel lanes for the design year 2040. The LOS results for each analysis are reported in the Traffic Study. Intersection geometry, turning movement volumes, and traffic control parameters were entered into Synchro Version 8 for the signalized and stop-controlled intersections to determine the expected LOS. Signalized intersection analysis was based on the intersection.

Right turn lane warrant analyses were conducted for the unsignalized intersections in the existing conditions and Alternatives 1 and 2. The analyses were based on the 2015, 2020, and 2040 critical peak volumes using spreadsheets based on the findings of the National Cooperative Highway Research Program (NCHRP) Report 457. Storage length analyses were reviewed for the unsignalized critical U-turns in Alternatives 1 and 2. Storage lengths were calculated using the 95 percent queue reports from Synchro. Since a typical minimum required storage length is 150 feet, only those with a 95 percent queue greater than 150 feet are listed in **Table 2.5**.

Table 2.5 Turn Lane Storage Length for Old Hammond Highway (LA 426) at Flannery Road

U-turn Location	95% Queue (feet)
2040, AM Peak: East of Buckingham Ave (EB to WB)	349
2040, AM Peak: East of LHSAA Dw (EB to WB)	166

The two locations were analyzed with a signal due to the high delay estimated for the unsignalized condition. These U-turns are expected to have a 95 percent queue of less than 150 feet if signalized.

Storage lengths for right turn bays are based on the operating speed. Using 45 mph, the length of the turn bay needed for deceleration is 214 feet. However, if the Alternative 2 roundabout is constructed, the operating speed may be lower. Using a value of 35 mph, the length of turn bay needed for deceleration is 93 feet.

2.1.9.4 Intersection Analyses

Intersection: Boulevard de Province

Several options were considered at Boulevard de Province. The northbound approach currently operates with an LOS F in the AM peak, and the intersection is expected to operate with excessive delay in the design year No-Build. There is an alternate route to exit via North Harrell's Ferry Road to Sherwood Forest Boulevard. Some drivers may choose this route if the delay exiting at Old Hammond is excessive.

Since a signal was not warranted, other options were a RIRO with U-turns or a roundabout.

The RIRO concept fits with the overall alternative concept; however, analyses showed that an unsignalized U-turn accommodating the exiting left at Boulevard de Province might fail in the implementation and design peak hour conditions. Per the EDSM VI.1.1.5, a roundabout may be justified to increase the capacity of an intersection and intersections where U-turns need to be accommodated. Therefore, a roundabout was included for consideration in addition to the RIRO with unsignalized or signalized U-turns. **Table 2.6** shows the results for the analyses to justify roundabout consideration:

Table 2.6 Roundabout Justification at Boulevard de Province: Synchro Analysis

	Northbound Left				U-turn to Accommodate Northbound Left			
Boulevard de Province	2015 AM		2040 No Build AM		2020 Build AM		2040 Build AM	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay	LOS	Delay
	F	77.5	F	414.1	F	73.1	F	313.3

Since the U-turn to the west of Boulevard de Province and the roundabout are expected to have geometric impacts, the partial median opening to accommodate the westbound left turn into Boulevard de Province was also included in analysis, but is not a viable option for safety concerns.

Intersection: South Flannery Road

South Flannery Road volumes meet the Warrant 1A for a signal. The roundabout at South Flannery was approved in the original study; therefore, no additional justification is included. In addition, the original design study (March 2014) proposed a lane geometry/timing for a traditional signalized intersection improvement. Both alternatives from this accepted study were included. The geometry from the original study was used and the traffic volumes were updated. The 2014 report showed that the roundabout geometry is expected to operate with substantially less delay and queue in the design year and was recommended.

U-Turn Configuration

The various U-turn configurations were examined to select configurations for further analysis. The selection was based on traffic volumes and geometric/safety concerns such as minimizing sight obstruction and avoiding U-turns at intersections. From the cursory analysis of signal and roundabout alternatives, the “blue,” or “equal space 1” U-turn configuration was eliminated as it was less favorable for the traffic volumes, sight obstruction, and included U-turns at the South Flannery intersection. The “pink” or “equal space 2” U-turn configuration appeared the most favorable to accommodating the traffic patterns and was selected for further analysis.

Table 2.7 Summary of SIDRA Results, AM Peak Hour

Intersection Approach	AM Peak					
	2015 Base		2020		2040 Design Year	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
Boulevard de Province at Old Hammond Highway						
Boulevard de Province Northbound	F	77.5	F	110.9	F	414.1
Buckingham Avenue at Old Hammond Highway						
Buckingham Avenue Southbound	E	45.2	F	60.4	F	257.8
Elwick Drive at Old Hammond Highway						
Elwick Drive Northbound	E	39.5	E	48.4	F	170.3
Stone Gate Drive at Old Hammond Highway						
Stone Gate Drive Northbound	E	36.0	E	44.7	F	193.9
S Flannery Road at Old Hammond Highway						
OVERALL	E	58.5	E	67.2	F	121.8
S Flannery Road Northbound	F	103.8	F	123.2	F	233.4
S Flannery Road Southbound	D	53.7	D	54.7	E	66.5
Old Hammond Highway Eastbound	C	24.7	C	26.1	C	33.5
Old Hammond Highway Westbound	E	59.2	E	74.3	F	169.8
Queen Cathy Drive at Old Hammond Highway						
Queen Cathy Drive Northbound	C	17.6	C	18.6	D	25.7
W Azalea Park Drive at Old Hammond Highway						
W Azalea Park Drive Southbound	C	16.0	C	16.7	C	21.7
E Azalea Park Drive at Old Hammond Highway						
E Azalea Park Drive Southbound	C	19.3	C	20.6	D	29.4
Manson Drive at Old Hammond Highway						
Manson Drive Southbound	B	13.5	B	14.0	C	16.6
Ponderosa Drive at Old Hammond Highway						
Ponderosa Drive Southbound	C	16.6	C	17.7	D	27.0
Millerville Drive at Old Hammond Highway						
OVERALL	B	17.2	B	17.8	C	25.4
Millerville Drive Northbound	D	39.8	D	39.9	D	41.5
Millerville Drive Southbound	A	0.0	A	0.0	A	0.0
Old Hammond Highway Eastbound	A	5.1	A	5.3	A	6.0
Old Hammond Highway Westbound	A	7.2	A	8.2	C	23.0

Table 2.8 Summary of SIDRA Results, PM Peak Hour

Intersection Approach	PM Peak					
	2015 Base		2020		2040 Design Year	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
Boulevard de Province at Old Hammond Highway						
Boulevard de Province Northbound	E	43.4	F	54.8	F	201.8
Buckingham Avenue at Old Hammond Highway						
Buckingham Avenue Southbound	C	20.9	C	23.7	F	54.1
Elwick Drive at Old Hammond Highway						
Elwick Drive Northbound	D	30.6	D	35.0	F	76.8
Stone Gate Drive at Old Hammond Highway						
Stone Gate Drive Northbound	C	24.3	D	26.8	F	85.2
S Flannery Road at Old Hammond Highway						
OVERALL	F	60.7	F	67.9	F	118.7
S Flannery Road Northbound	F	80.3	F	85.3	F	102.0
S Flannery Road Southbound	F	67.3	F	83.9	F	191.5
Old Hammond Highway Eastbound	E	43.5	E	47.5	E	67.4
Old Hammond Highway Westbound	F	70.6	F	73.7	F	123.2
Queen Cathy Drive at Old Hammond Highway						
Queen Cathy Drive Northbound	E	41.2	E	48.8	F	170.6
W Azalea Park Drive at Old Hammond Highway						
W Azalea Park Drive Southbound	C	17.9	C	18.8	D	27.0
E Azalea Park Drive at Old Hammond Highway						
E Azalea Park Drive Southbound	D	25.2	DD	28.0	E	47.8
Manson Drive at Old Hammond Highway						
Manson Drive Southbound	B	13.4	B	13.8	C	17.0
Ponderosa Drive at Old Hammond Highway						
Ponderosa Drive Southbound	C	15.9	C	16.8	C	24.2
Millerville Drive at Old Hammond Highway						
OVERALL	C	22.8	C	23.4	C	26.5
Millerville Drive Northbound	E	48.1	E	49.5	D	53.5
Millerville Drive Southbound	F	57.9	F	58.4	E	62.5
Old Hammond Highway Eastbound	A	8.1	A	8.3	B	10.8
Old Hammond Highway Westbound	A	8.0	A	8.2	B	10.7

2.1.10 Traffic Analyses Recommendations

Based on the results of the Highway Capacity Software (HCS) traffic analyses in the Traffic Study, the Old Hammond Highway Segment 1 should operate acceptably in the implementation year once it is widened to four lanes with each intersection improvement. All alternatives include Old Hammond Highway as a four-lane divided roadway with U-turns. Boulevard de Province is RIRO in Alternative 1, a roundabout in Alternative 2, and either RIRO or a partial median opening in Alternative 3. South Flannery is a traditional signalized intersection with added turn lanes in Alternative 1 and a roundabout in Alternatives 2 and 3. Both configurations analyzed for South Flannery were derived from the previous study.

Based on traffic operations and safety alone, Alternative 2 with roundabouts at Boulevard de Province and South Flannery, is preferred. This alternative provided improvement in delay and capacity over Alternative 1. In addition, roundabouts can offer safety benefits, provide traffic calming and can be less expensive to maintain than a traditional traffic signal.

If Alternative 2 is eliminated for other reasons, Alternative 1 or the Alternative 3 hybrid is expected to operate acceptably. The partial median at Boulevard de Province could be considered if the U-turn west of it is also eliminated for non-traffic related reasons. An additional consideration is that there is an alternate route to exit the neighborhood via North Harrell's Ferry to Sherwood Forest Boulevard. Some drivers may choose this route if the delay on Boulevard to Province at Old Hammond is excessive.

3 Affected Environment and Environmental Consequences

The term significant is defined in 40 Code of Federal Regulations (CFR) 1508.27 for implementing NEPA and requires considerations of both context and intensity. Context means that the significance of an action must be analyzed in several settings, such as society as a whole, the affected region, the affected interests, and the locality. Short and long-term impacts are relevant when considering the significance of an impact. Intensity refers to the severity of impact. Factors contributing to the evaluation of the intensity of an impact include, but are not limited to, the following:

- The balance of beneficial and adverse impacts in a situation where an activity has both.
- The degree to which the action affects public health or safety.
- The unique characteristics of the geographic area where the action is proposed, such as proximity to parklands, historic or cultural resources, wetlands, prime farmlands, wild and scenic rivers, and ecologically critical areas.
- The degree to which the impacts on the quality of the human environment are likely to be controversial.
- The degree to which the impacts of the action on the quality of the human environment are likely to be highly uncertain or involve unique or unknown risks.

- The degree to which the action might establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration.
- Whether the action is related to other actions that are individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action might adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Registry of Historic Places (NRHP) or might cause loss or destruction of significant scientific, cultural, or historical resources.
- The degree to which the action might adversely affect an endangered or threatened species or habitat that has been determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

This section describes the current socioeconomic characteristics and natural resources in the project study area, as well as potential impacts of the project to these resources and mitigation options for impacts. The four-lane divided typical section is similar in each alternative, including minor intersections. Major intersections varied between signalized intersection alternatives and roundabout options. For the purpose of environmental impacts discussion, the similarity among the Build alternatives' footprints allowed comparison between No-Build and Build, rather than repeating the same data for each Alternative. **Build Alternatives** refers to Alternatives 1, 2, and 3.

3.1 Social and Economic Characteristics

Census Bureau data for 1990, 2000, and, when available, 2010 is used to describe the general socioeconomic setting and determine minority and low income populations within the area effected by the project. Additional available data and field inspections are used to describe short-term and long-term project impacts.

The proposed project area lies within the City of Baton Rouge. The southwestern terminus of the project corridor is located just west of Boulevard De Province on Old Hammond Highway and encompasses a number of local businesses, such as a Domino's Pizza, a Family Dollar store, a Winn Dixie grocery store, Texaco and Exxon gas stations, the Fairwood Public Library, the Louisiana High School Athletic Association (LHSAA).and a small shopping center. The northeastern terminus of the project corridor is located near the intersection of Millerville Road, and is a commercial area with businesses such as an Allstate Insurance Company, a Shop Go store, Brown's Collision Center, a Store More facility, the Lake House Reception Center, and the Lake House Florist.

Surrounding the clusters of commercial development, the character of the corridor is residential. The land surrounding the corridor that is used as residential property is split evenly between residential areas and natural areas. Houses and apartment complexes are generally visible from the roadway and are located on tracts of land that were once undeveloped natural land.

3.1.1 Population and Housing

Below in **Table 3.1**, East Baton Rouge Parish population growth is shown from 1990 to 2012. Estimates are used for years 2011 and 2012. East Baton Rouge Parish has experienced a population growth of 14 percent from April 1, 1990, to April 1, 2010.

Table 3.1 East Baton Rouge Parish Population Growth Data

	1990	2000	2010	2011	2012
Population	380,105	412,852	440,171	441,158	442,980
Housing Units	156,767	169,073	187,353	99,936	100,091

Source: US Census Bureau: Census 1990, 2000, 2010, 2007-2011, and 2008-2012 ACS 5-year Estimation.

3.1.2 Census Block Data

The US Census Bureau provides selected data by census tract, census block groups, and census blocks. The project is located in Census Tract 37.03, Census Block Group 5; Census Tract 39.04, Census Block Groups 1, 2, and 3; as well as Census Tract 45.03, Census Block Group 3. **Table 3.2** contains household, family, nonfamily, and total population data available for the state of Louisiana, East Baton Rouge Parish, Census Block Groups adjacent to the project, and Census Blocks adjacent to the project. Ten thousand ninety-seven households lie in the Census Blocks directly adjacent to Old Hammond Highway. Seventy-seven percent of households in these adjacent blocks are families.

Table 3.2 Population, Household, and Family Data

Area	Total Population	Households	Families	Non Family Households
Louisiana	4,533,372	1,728,360	1,160,118	568,242
East Baton Rouge Parish	440,171	172,057	107,124	64,933
Tract 39.04 Block Group 1	1,245	1,429	1,043	386
Tract 39.04 Block Group 2	3,205	2,881	1,890	991
Tract 39.04 Block Group 3	1.989	2,063	1,612	451
Tract 37.03 Block Group 5	1,495	1,613	1,515	98
Tract 45.03 Block Group 3	2,148	2,111	1,754	357
Total Project Block Group Area (Sum of Adjacent Blocks)	10,082	10,097	7,814	2,283

Source: US Census Bureau: Census 2010, Summary File 1, "Households and Families."

Housing structure data and status of those structures are shown in **Table 3.3**. There are relatively few unoccupied structures, at a vacancy rate of only nine percent, in the blocks surrounding Old Hammond Highway within the project. The Louisiana state vacancy rate is 12 percent and United States vacancy rate is 11 percent.

Table 3.3 Housing Structure Occupancy Data

Area	Total	Occupied	Unoccupied
Louisiana	1,964,981	1,728,360	236,621
East Baton Rouge Parish	187,353	172,057	15,296
Tract 39.04	3,153	2,772	381
Tract 37.03	2,358	2,239	119
Tract 45.03	2,432	2,238	194
Total Project Tract Area (Sum of Adjacent Tracts)	7,943	7,249	694

Source: US Census Bureau: Census 2010, Summary File 3, "Selected Housing Characteristics."

The **No-Build Alternative** would have no impact on ROW, structures, or utilities along the project corridor, but increased traffic demand will impact the public if additional travel lanes are not provided. Old Hammond Highway at the major intersections operates as an LOS E or F in 2016 and an LOS F in 2040 with the existing two-lane section. There are very few undeveloped properties along Old Hammond Highway, but increased traffic congestion could have negative impacts on existing residential and commercial developments along Old Hammond Highway.

The **Build Alternatives** would have no direct impacts to population and housing; however, they would result in improved traffic conditions for the residential and commercial developments.

Table 3.4 Race & Ethnicity by Census Block

Area	Total Population	Black		American Indian & Alaskan Native		Asian	
		Population	%	Population	%	Population	%
Louisiana	4,533,372	1,452,396	32.8	30,579	0.7	70,132	1.5
East Baton Rouge Parish	440,171	202,478	46.0	132	0.3	1,408	3.2
Tract 39.04 Block Group 1	1,245	185	14.9	8	0.6	54	4.3
Tract 39.04 Block Group 2	3,205	2,380	74.3	10	0.3	40	1.2
Tract 39.04 Block Group 3	1,989	1,077	54.1	8	0.4	41	2.1
Tract 37.03 Block Group 5	1,495	272	18.0	1	0.1	143	9.6
Tract 45.03 Block Group 3	2,148	797	37.1	9	0.42	74	3.4
Total Project Block Group Area (Sum of Adjacent Blocks)	10,082	4,711	46.7	36	0.4	352	3.5

Source: US Census Bureau 2009-2013. American Community Survey 5-Year Estimates.

3.1.3 Race and Poverty

In accordance with FHWA policies and procedures for use in complying with Title VI of the Civil Rights Act and Executive Order (EO) 12898 which require federal actions to address environmental justice (EJ) in minority populations and low-income populations, a review of the race and ethnicity data for the census block groups adjacent to the project was conducted to determine if any minority group(s) would be disproportionately affected by impacts associated with the proposed project. The results of this review are provided in **Table 3.4**.According to the 2010 Census, roughly half of the residents within the project area were not members of any minority. As detailed in **Table 3.4**, only 46.7 percent of the population in the Census Block Groups adjacent to Old Hammond Highway was black, 3.5 percent was Asian, and 0.4 percent was American Indian. The non-White percentage of the population in East Baton Rouge Parish was 51.6 percent. The non-White percentage of the population in the project area is lower than the Parish-wide percentage.

A review was also conducted to determine whether any low-income populations would be disproportionally affected. A low-income population is a population whose median household income is at or below the Department of Health and Human Services (DHH) poverty guidelines. Because income data is not available on a census block level, the Census Tract economic data was utilized for this review. The income data for the aforementioned Census Tracts 37.03, 39.04 and 45.03 are identified in **Table 3.5**.

Table 3.5 Household Income and Poverty Levels by Census Tract

Census Geography	Median Family Income	Families with Income Below Poverty Level	Families with Income below $10,000
Louisiana	$46,710	19.6%	6.4%
Tract 39.04	$36,543	21.4%	6.9%
Tract 37.03	$68,294	4.5%	2.8%
Tract 45.03	$54,564	6.2%	1.3%

Source: US Census Bureau 2017. American Community Survey 5-Year Estimates.

The median family incomes in the three Census tracts affected are higher than the State median income. Conversely, the percent of families with income below the poverty level for the project area tracts are below that of the State. The small percentage of low-income persons within the census tract indicates that the proposed project would not disproportionally affect an identified low-income population.

Likewise, the project would not affect any known unique social groups. There is no information to suggest that any person's civil rights will be violated, as set forth in the US Department of Transportation (DOT) regulations relating to Title VI of the Civil Rights Act of 1964**.** There are no known disproportionately high or adverse effects borne by minority and/or low-income populations.

The **No-Build Alternative** will have no direct impacts to minority or low-income populations; however, this alternative would not improve traffic conditions to the community.

The **Build Alternatives** would result in no direct impacts to minority or low-income populations. The area surrounding the project contains high median incomes, high home values, low poverty

share, average minority share, and low ethnic share in comparison to surrounding areas. Alternative roadways, such as Florida Boulevard and Interstate 12, which run parallel to Old Hammond Highway in District 8 of East Baton Rouge Parish, have adjacent area populations, such as Census Tract 36.04, with disproportionately higher low income and minority share.

3.1.4 Economy and Employment

The 2006-2010 American Community Survey Five-Year Estimates for the income of local Census Tract areas 37.03, 39.04, and 45.03, District 8 of East Baton Rouge Parish, East Baton Rouge Parish, the State of Louisiana and the United States are shown below in **Table 3.6**.

Table 3.6 Comparative Selected Economic Characteristics Data

	Louisiana	E. Baton Rouge Parish	EBR – District 8	Census Tract 37.03	Census Tract 39.04	Census Tract 45.03
Population Over 16 Years of Age	3,674,007	356,149	28,570	5,436	4,881	4,116
Civilian Labor Force	2,118,424	232,341	21,657	3,201	3,372	2,899
Civilian Labor Force Employed	2,031,238	216,397	20,597	2,869	3,077	2,793
Civilian Labor Force Unemployed	157,186	15,944	1,060	332	295	106
Percentage of Civilian Labor Force Unemployed	7.2%	6.9%	4.9%	10.4%	8.7%	3.7%

Source: 2017 American Community Survey 5-Year Estimates.

Per capita income and median home value data are only available at the Block Group level, not at the individual Census Block level. **Table 3.7** below expresses per capita income and median home value for the Block Groups immediately adjacent to the project, as well as Parish and State level comparisons.

Table 3.7 Income and Home Value Data

Area	Population	Per Capita Income	Median Home Value
Louisiana	4,533,372	26,205	152,900
East Baton Rouge Parish	440,171	30,162	177,800
Tract 39.04 Block Group 1	1,245	27,344	153,000
Tract 39.04 Block Group 2	3,205	30,655	137,500
Tract 39.04 Block Group 3	1,989	13,926	154,900
Tract 37.03 Block Group 5	1,495	30,907	215,300
Tract 45.03 Block Group 3	2,148	20,395	128,100
Total Project Block Group Area (Sum of Adjacent Blocks)	10,082	24,645	157,760

Source: US Census Bureau: Census 2010, Summary File 3, "Selected Housing Characteristics"; Summary File 3 Sample Data, "Per Capita Income in 1999 (Dollars); Summary File 3, "Total Population", and 2017 American Community Survey 5-Year Estimates.

The Census Block Groups within Census Tracts 37.03, 39.04, and 45.03 each have higher median income values than state and parish data. The project, or summary of the Census Block Groups as a whole, has a per capita income of $24,645 and median home value of $157,760, substantially above the state and parish data.

The area surrounding the project involves two zip codes, both of which reside inside District 8 of East Baton Rouge Parish. **Table 3.8** contains business data for the zip codes that surround the project. These two zip codes contain 17.2 percent of East Baton Rouge Parish Parish's annual payroll. East Baton Rouge Parish general business data is shown in **Table 3.9**.

Table 3.8 ZIP Code Business Data

ZIP Code	Total Establishments	Paid Employees	Annual payroll x $1,000
70815	796	15,541	669,528
70816	1,524	27,477	1,109,324

Source: US Census Bureau: 2016 County Business Patterns; ZIP Code Business Statistics.

Table 3.9 East Baton Rouge Parish Business Data

Sector	Total Establishments	Paid Employees	Annual payroll x $1,000
Total for all sectors	121,815	230,086	11,982,551
Agriculture, forestry, fishing and hunting	11	43	1,924
Mining, quarrying, and oil and gas extraction	23	204	17,539
Utilities	29	1,047	76,938
Construction	860	43,132	3,093,133
Manufacturing	334	10,051	757,244
Wholesale trade	656	8,811	543,961
Retail trade	1,846	30,196	806,990
Transportation and warehousing	249	4,545	234,576
Information	189	5,161	276,201
Finance and insurance	949	12,137	880,175
Real Estate Rental and Leasing	614	3,572	150,210
Professional, scientific, and technical services	1,754	19,971	1,406,167
Management of companies and enterprise	98	7,704	519,316
Administrative and support and waste management and remediation services	601	13,860	515,374
Educational service	202	5,155	166,622
Health care and social assistance	1,403	38,310	1,656,701
Arts, entertainment, and recreation	147	3,606	63,146
Accommodation and food services	1,042	26,346	428,299
Other services (except public administration)	1,239	11,579	388,035

Source: US Census Bureau: 2016 County Business Patterns; Geography Area Series.

The **No-Build Alternative** would not provide any new construction jobs in addition to normal needed minor maintenance and repair. Construction expenditures and indirect jobs would not be added to the local economy or East Baton Rouge Parish economy. As such, the No-Build alternative would not have an economic impact on the project area. Increased traffic congestion could have negative impacts on existing commercial developments along Old Hammond Highway.

The **Build Alternatives** would have a positive economic impact on the project and surrounding communities. The Construction workers for the proposed project would likely be drawn primarily from the City of Baton Rouge, but also from the surrounding suburban communities in East Baton Rouge, Ascension, and Livingston Parishes. A portion of construction workers' salaries would be spent in and near the project for lunches and incidentals. However, the larger region as a whole may realize the balance of these direct spending benefits. A substantial portion of raw materials would likely be purchased locally. Specialty materials may constitute the only material purchases that may occur outside the region. The Build Alternatives would also result in improved traffic conditions for the commercial developments.

3.2 Community Facilities and Services

In the project corridor, there is the Fairwood public library, a Presbyterian Church, and the headquarters for the LHSAA. There are no public schools located within the project area. There are no other known community facilities within the proposed project or extended study area.

The **No-Build Alternative** would have no impact on community facilities and services. However, this alternative would not improve traffic conditions to community facilities and services.

The **Build Alternatives** would cause minor, unavoidable adverse impacts on traffic, primarily related to the delays associated with restricted traffic flow and access issues created by construction operations and equipment. It is anticipated that at least one lane of traffic in each direction would be maintained along Old Hammond Highway throughout the construction period. While not anticipated, the construction of the project could require minor temporary detours. A detailed Maintenance of Traffic Plan would be prepared during a subsequent stage of project design. Maintenance of traffic, construction sequencing, and temporary lane closures and detours would be planned and scheduled to minimize impacts to local residences, businesses, and the traveling public. Access to residences and businesses within the corridor would be maintained at all times, including by use of temporary driveways or connections where necessary. Public service announcements of planned detours would be distributed to local media in advance to alert the public and minimize traffic disruptions and confusion. Local police, fire departments, and other emergency service providers would be notified in advance of any construction-related activities to allow for proper planning and alternative route identification.

3.3 Community Cohesion

The expanded roadway will provide improved community cohesion, improving access to businesses and residences, because there will be less traffic congestion, increased leisure and walking accessibility through added sidewalks, and added safety through a raised median. Access

management principles will be used on this project which have been shown to improve safety and traffic flow by reducing the number of left turns and conflict points, providing median refuge for pedestrians, and increasing throughput by reducing the number of left turn movements. There will be an adjustment period for road users, but the median and the openings provided have been designed in accordance with DOTD's Access Management Policy, which has proven to provide successful traffic solutions throughout the state.

The **No-Build Alternative** would have no impact on community cohesion.

The **Build Alternatives** include widening an existing roadway. The impacts to community cohesion will be improved access for all modes including bicycling and walking.

3.4 Visual Resources

The visual resources within the proposed project mimic the current land uses. These visual resources are typical of roadways within an urban developed landscape which include business facades with signage at various heights and dimensions along the ROW, vacant commercial lots, residential driveways, utility ROWs, vegetated drainage swales and either landscape vegetation or natural woody vegetation.

The project area will have temporary aesthetic impacts during the construction phase. These visual impacts will include road construction equipment and other four-wheeled track vehicles. Temporary traffic cones and road signs will be present for motor vehicle safety. Activities associate with Best Management Practices (BMPs), such as silt fencing, will impact visual quality but are essential to stormwater pollution prevention and erosion control. Permanent impacts will include surrounding land transformation to conform to the physical expansion of the highway.

The **No-Build Alternative** would not impact the visual resources within the study area.

The **Build Alternative**s would widen the existing roadway within existing ROW and would require additional ROW. This may cause removal of some visual resources, such as manicured lawns, trees, fences, etc. Many of these visual resources will be reestablished once the construction of the roadway is complete; therefore, minimal long-term impacts to visual resources are anticipated.

3.5 Land Use

The existing land use adjacent to the roadway corridor (excluding the existing roadway and existing ROW) is displayed in **Table 3.10** and mapped on **Figure 10**. The predominant land uses consist of Commercial, Institutional, Low Density Residential, and Undeveloped coverage.

Table 3.10 Percent Coverage of Land Use Within Old Hammond Highway Corridor

Existing Land Use Category	Corridor Area and Percent Coverage	
	Acres	Percent of Total
Commercial	4.32	27.54
Industrial	0.0	0.00
Institutional	1.16	7.38
Low Density Residential	4.05	25.87
Medium Density Residential	1.63	10.43
High Density Residential	0.20	1.29
Office	0.82	5.22
Park	0.37	2.34
Utilities	0.32	2.05
Undeveloped	1.59	10.14
Vacant	1.21	7.74
Total	15.67	

Source: City of Baton Rouge and Parish of East Baton Rouge, Louisiana, City-Parish Planning Commission, Department of Information Services, Existing Land Use, Created December 1, 2014.

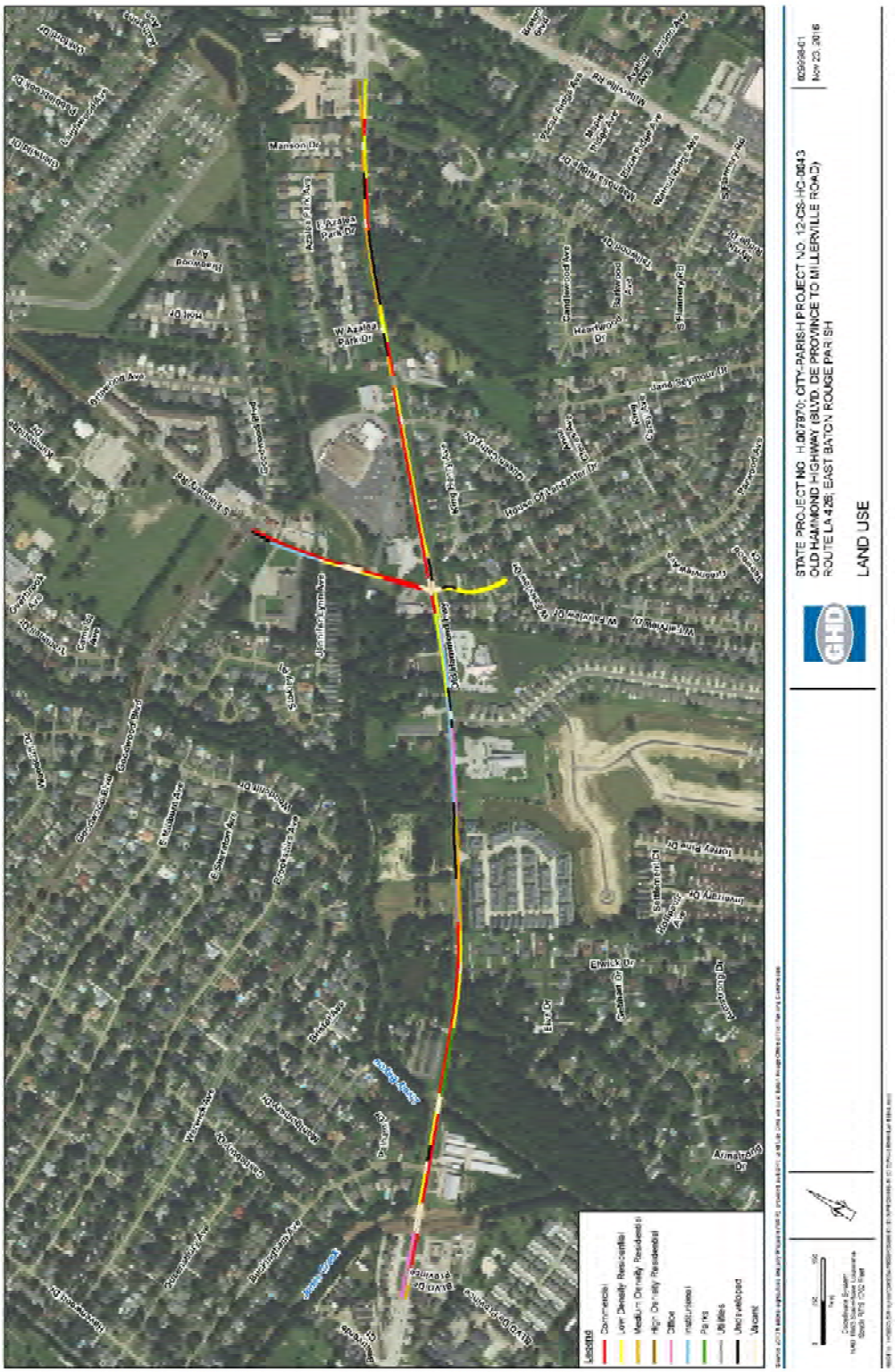
An undeveloped property owned by the Baton Rouge Recreation and Park Commission (BREC) is being reserved for potential future recreational use, most likely for a limited bike path. The property, identified as Jones Creek Park, lies on the south side of the Old Hammond Highway ROW and the east side of Lively Bayou (**Figure 2a**).

The **No-Build Alternative** would have no physical impact on the current land use. A decision to not build may cause impacts to compound in the future as traffic congestion increases in the area. Furthermore, this congestion eventually may be a deterrent for the local population to travel this road and visit local businesses, which may yield a negative impact on economics in the area.

The **Build Alternative**s will widen existing roadway, a small acreage of undeveloped herbaceous land and previously developed lands, so it is anticipated there are no adverse impacts associated with the proposed Old Hammond Highway project. The roadway expansion would not alter the land use categorization for the current land use; however, it may decrease the amount of acreage in those specific categories.

It is not expected that the project will have significant impacts on the property identified as Jones Creek Park, which is owned by BREC and remains undeveloped.

Figure 10 Land Use



3.6 Changes in Travel Patterns and Traffic Operations

Construction of the Old Hammond Highway project from Boulevard De Province to Millerville Road will be performed in such a manner as to minimize inconvenience to the traveling public and the residences and businesses within the project. However, it is anticipated that the proposed construction will produce short-term adverse consequences on the traveling public, residences, and businesses, especially those adjacent to Old Hammond Highway. Construction can be performed while maintaining two travel lanes, but detours and short-term lane closures will be used as needed to construct items such as drainage structure crossings. The contractor will be required to coordinate with home and business owners and provide and maintain temporary driveway connections for access. Appropriate safety measures will be taken to protect the construction workers and the safety of the public. Signing, barricades, lighting, traffic control devices, traffic striping and warning devices complying with the current version of the MUTCD and all State and City regulations will be required. Any temporary detours that may be required will also be appropriately signed and maintained.

The **No-Build Alternative** would not have any temporary construction impacts because no construction would take place. Traffic would continue to operate on the existing two-lane roadway and congestion would continue to worsen.

Under the **Build Alternatives**, sequence of construction and therefore traffic patterns would likely be slightly different depending on which alternative is constructed. Each alternative requires multiple phases of construction and would have similar temporary impacts to traffic patterns and access to residences and businesses. Since two travel lanes should be maintained at all times, it is not expected that any of the three build alternatives would cause any meaningfully detrimental impacts to traffic flow, but they will all produce short-term inconvenience.

3.7 Section 4(f) Evaluation

Section 4(f) of the Department of Transportation Act of 1966, as amended, (49 US Code 303) states that the US Department of Transportation may not approve the use of publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge, or land from any historic site of national, state, or local significance unless determination is made that: 1) there is no feasible and prudent alternative to the use of land from the property; and 2) the action includes all possible planning to minimize harm to the property resulting from such use. In a solicitation of views letter response dated July 31, 2015, the Louisiana Department of Wildlife and Fisheries (LDWF) indicated there are no state or federal parks, wildlife refuges, scenic streams or wildlife management areas within the Old Hammond Highway Segment 1 study corridor. A search of the Baton Rouge Parks and Recreation website revealed no public parks in the project area. There are also no historic sites of national, state, or local significance as discussed in **Section 3.17** of this EA. Therefore, no Section 4(f) impacts will occur and a Section 4(f) evaluation is not required for this project.

3.8 Regional Geology, Hydrology, and Groundwater

The site is located on the Prairie Terrace, which is a Quaternary (Pleistocene) alluvial surface landform on the Gulf Coastal Plain. The site is nearly flat, with an elevation of approximately 40 feet

above mean sea level relative to the National Geodetic Vertical Datum (NGVD). Natural drainage is to Lively Bayou, which flows into Jones Creek to the west. A water well map is included on **Figure 11**.

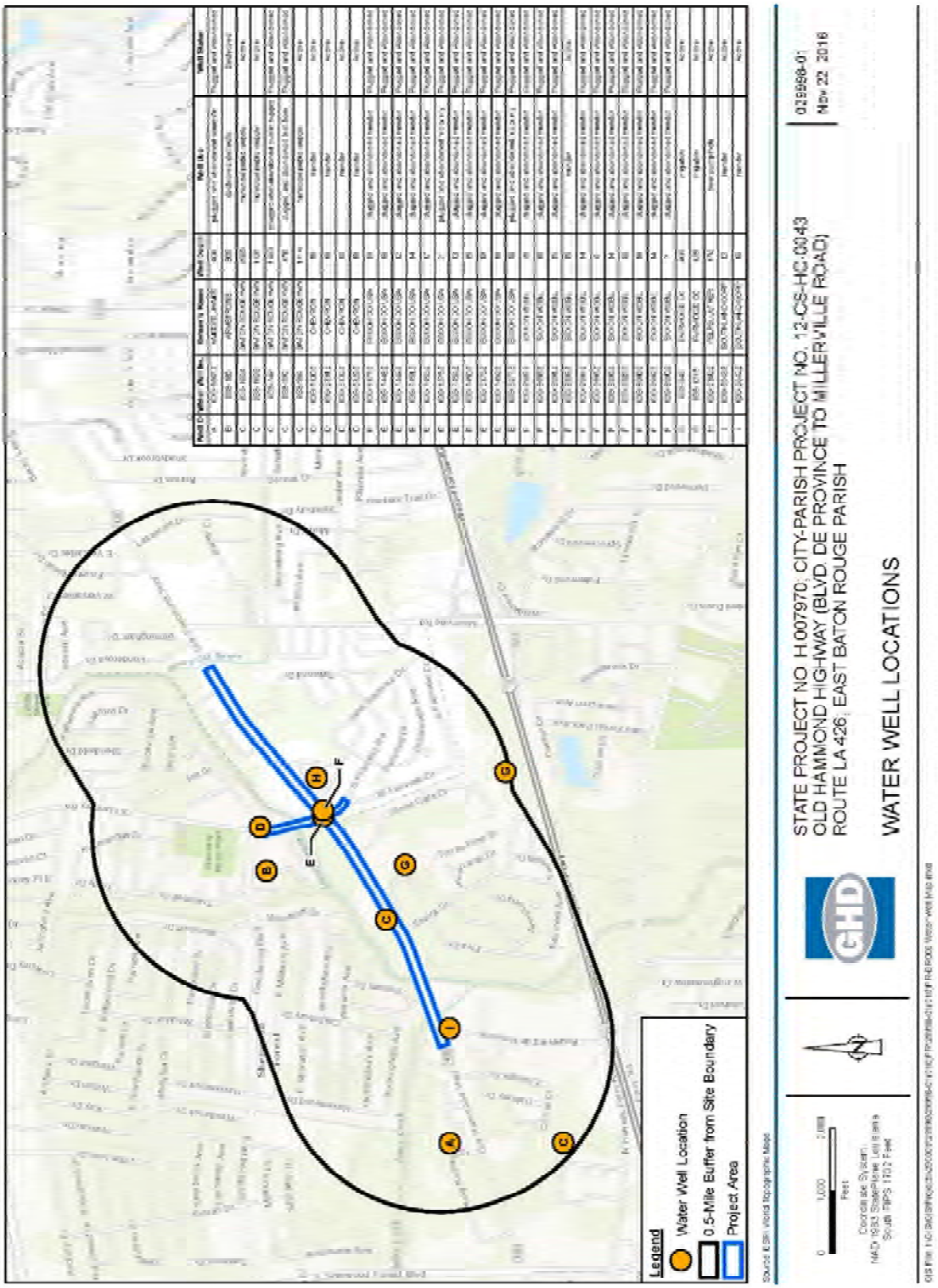
Surface soils of the terrace are commonly silty clays derived from loess (wind-blown deposits), with fine-grained clays and clayey silts with lenses of fine sands which are typical of the alluvial sediments that compose the majority of the terrace deposits. The shallow sediments overlie several hundred feet of earlier Pleistocene alluvium and deltaic deposits composed of 20 to 200 feet thick, relatively continuous and interconnected sand strata separated by clay horizons. These are, in turn, underlain by many thousands of feet of Tertiary aged and older fluvial, deltaic, and marine sediments that dip and thicken to the south. The site is listed as being within the 100-year flood zone.

The groundwater resources in the Baton Rouge area are divided into a shallow zone composed of Holocene and Pleistocene alluvial deposits and a deeper zone composed of older Pleistocene through Miocene sand strata. The water-bearing units of the shallow zone consist of discontinuous sandy strata that generally exhibit low potential for groundwater production because of low permeability, small areal extent, and variable water quality. The deeper groundwater zone consists of numerous productive aquifers developed in the Pleistocene through older Miocene sand strata, beginning with the 400-foot depth aquifer and continuing at intervals down to approximately 2,800 feet. The uppermost aquifer of concern is the "400-foot" aquifer that occurs in the uppermost, widespread Pleistocene sand, and is a main source of groundwater for industrial use in the area. The "400-foot" aquifer sands typically occur at approximately 300 feet below the ground surface. The aquifers generally deeper than 1,200 feet are sources for municipal drinking water and industrial uses.

The Southern Hills Regional Aquifer System, one of the state's two sole source aquifer systems, lies within the region of the project area. This aquifer system is designated as a major source of water for the eastern Louisiana/western Mississippi population. However, the Aquifer Recharge Potential Map showed that the Old Hammond Highway project area is located approximately 16 miles south of the southernmost limit of the recharge area for this aquifer. The Aquifer Recharge Potential Map of the Baton Rouge Quadrangle (1988) was reviewed for this study. A dashed line on the map indicates the approximate limit of the recharge area for the Southern Hills Aquifer System. South of this line, water infiltration is inhibited by extensive clays. The Greater Baton Rouge Area, including the subject site, lies to the south of this line.

A water well map showing water wells and monitoring wells within a one-mile radius of the project area is included on **Figure 11**. Active municipal supply wells are located near the project area, to the north of Old Hammond Highway.

Figure 11 Water Wells Map



3.8.1 Groundwater Quality

Water quality for the state is regulated by the Louisiana Department of Environmental Quality (LDEQ) under the Clean Water Act (CWA), Sections 305(b) and 303(d) National Water Quality Inventory Report to Congress. The Louisiana Department of Natural Resources (LDNR) is tasked with managing groundwater resources and actively provides guidance for the management and sustainability of Louisiana's groundwater resources. The quality of groundwater within aquifers in the Baton Rouge area is general very good, although shallower aquifers may have harder water with a higher iron content than deeper aquifers. Groundwater from the shallower aquifers, approximately 400 to 1,200 feet deep is generally used for industrial purposes whereas the deeper aquifers, from 1,200 to 2,800 feet deep, are typically used for municipal drinking water. In recent years, salt water intrusion from south of the Baton Rouge Fault has become an issue of concern due to high demand of aquifer resources in the Baton Rouge area for residential, commercial, and industry uses. (Water Bulletin No. 13, Department of Conservation Louisiana Geological Survey, 1969; Meyer and Turcan, 1955).

The **No-Build Alternative** will have no impact to natural resources or water quality. The proposed construction will not take place and preexisting conditions will be sustained.

The **Build Alternatives** are projected to have no adverse impacts on groundwater, hydrology, or geology.

3.8.2 Aquatic Ecology

The expansion of Old Hammond Highway (Route LA 426) will intersect Jones Creek and Lively Bayou and also impinge upon several man-made ditches running parallel to the highway that transfer stormwater run-off into Jones Creek and Lively Bayou. The aquatic species on site are contained in, or reside nearby, Lively Bayou and Jones Creek. Due to their intermittent water supply, the creeks and man-made ditches do not provide a suitable habitat for most aquatic species. The dominant species are various amphibians and reptiles, such as, but not limited to, frogs and toads (Anura), turtles (Testudines), salamanders (Caudata), and snakes (Squamata). Small populations of fish and crustaceans may be observed during high water table seasons. The surrounding residential and commercial development also attributes to the low quality aquatic habitat.

The **No-Build Alternative** will have no impact to aquatic biota. The proposed construction will not take place and preexisting conditions will be sustained.

The proposed **Build Alternatives** will have little to no impact on aquatic biota. The water bodies within the project footprint are Jones Creek, Lively Bayou, and man-made ditches. These regimes have intermittent water flow making it an undesirable habitat for species that require aquatic respiration or breathe exclusively underwater. Reptiles and Amphibians have adapted lungs for breathing air, but require water to complete metamorphous life cycles. Intermittent streams would be a desired habitat for these species, but they are highly tolerable to anthropogenic activities. Any aquatic vegetation disrupted should be regenerated within one growing season. BMPs will be utilized to keep unwanted contaminants from entering the water sources.

3.8.3 Soils and Erosion

The Natural Resources Conservation Service (NRCS) Web Soil Survey was used to determine mapped soil series. The revised official series descriptions were used to confirm profile matrix, redox features, and texture of soils underlying the site. According to the soil survey, the site is underlain by Calhoun silt loam soils, Deerford-Verdun complex soils, Oprairie silt, Scotlandville silt, and Udarents soils. The Calhoun silt loam soils are of level, poorly drained, slowly permeable soils that formed from loess or loess-like material with low sand content. They mainly are at low local elevations on Pleistocene age terraces, and less commonly on flood plains. Slopes range from zero to one percent. The Deerford-Verdun complex soils are very deep, somewhat poorly drained, slowly permeable soils that are high in exchangeable sodium. These soils formed in silty Coastal Plain sediments with low sand content on late Pleistocene age terraces. Slopes range from zero to two percent. Oprairie silt soils are somewhat poorly drained soils that formed in loess deposits. These soils are on silty upland terraces of Pleistocene age. Slopes range from zero to three percent. Scotlandville silt soils are somewhat poorly drained, moderately permeable soils that formed in loess deposits. These soils are on terraces of Pleistocene age. Slopes range from zero to eight percent. The Udarents unit consists of areas that have been filled, graded, and disturbed in the process of urbanization; borrow areas where the soil material has been removed and used in the construction of roadbeds or as fill material for construction sites; and sanitary landfills.

Soil type distribution is shown on **Figure 12**, and **Table 3.11** displays the soils types and associated acres in the study area.

Table 3.11 Acreage of Soil Series Within Study Area

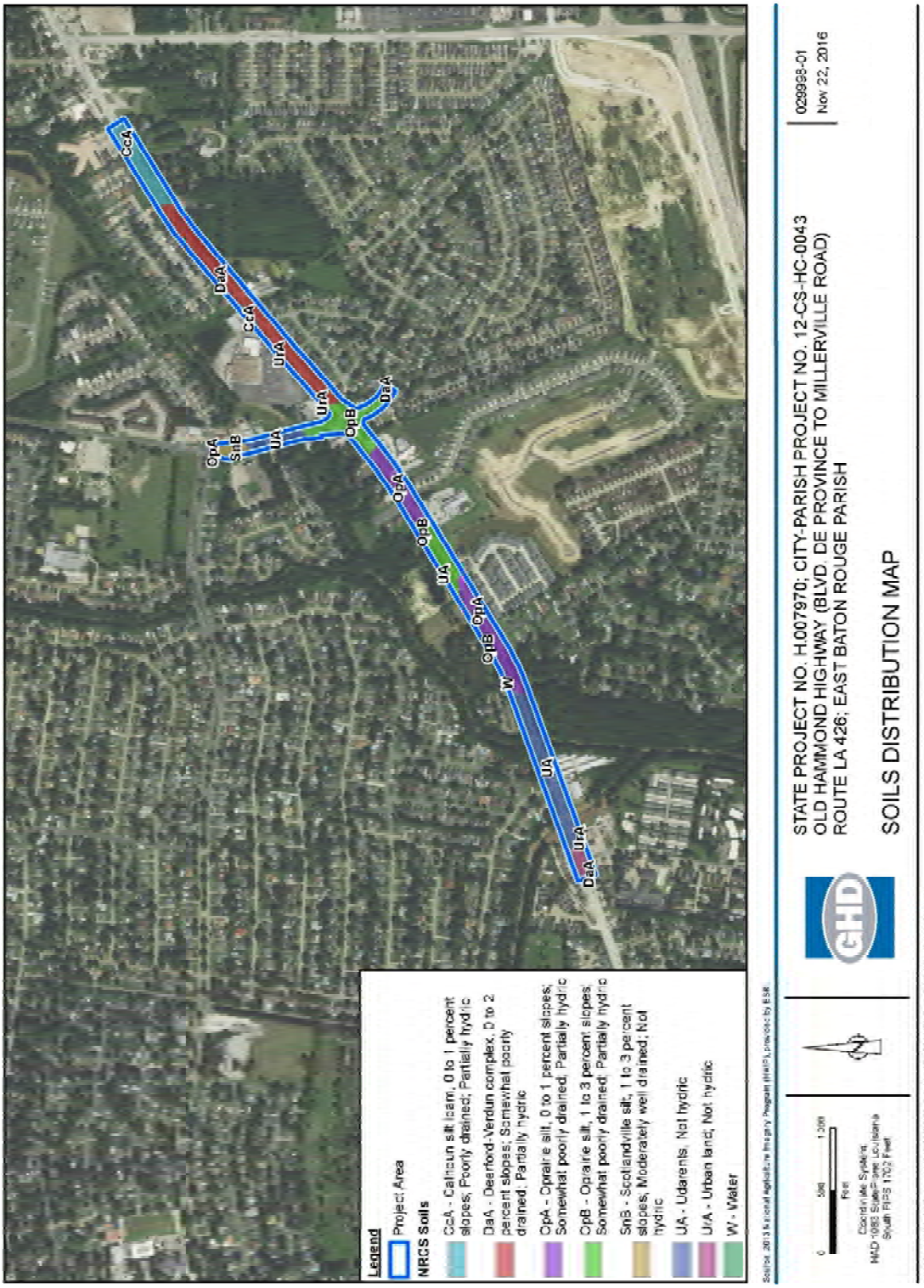
Soil Series	Acres	Percent
Urban Land / Udarents	6.71	23.7%
Calhoun silt loam soils	2.88	10.2%
Deerford-Verdun complex soils	6.90	24.4%
Oprairie silt	11.05	39.0%
Scotlandville silt	0.71	2.5%

Acreages were calculated within geographic information system (GIS) software.

The **No-Build Alternative** will have no impact to soils or erosion. The construction will not take place and preexisting conditions will be sustained.

The expansion of the highway under the **Build Alternatives** will have permanent impacts upon the soils directly within the proposed roadway area. Drainage ditches adjacent to the existing roadway would be filled and brought to a rough grade elevation contiguous with that of the engineering design specifications. Temporary drainage ditches would be constructed to allow for flow patterns similar to pre-construction flow and drainage capacities until the subsurface drainage system construction is complete. All soils within the construction area would be permanently impacted and overlain with road construction material. Soils within the ROW but outside the proposed roadway will be temporarily impacted and brought back to pre-construction conditions after construction is complete. BMPs will be put into place to minimize soil erosion, and re-establishment of the original grade and drainage pattern, to the best extent practicable, will be performed upon project completion.

Figure 12 Soils Map



3.9 Vegetation and Wildlife

The project area has been significantly altered by anthropogenic activities and is located in a mixed residential and commercial area. Only the herbaceous stratum is present within the maintained highway ROW. The dominant species observed were broad leaf carpet grasses consisting of Florida paspalum (*Paspalum floridanum*), Bahia grass (*Paspalum notatum*), St. Augustine grass (*Stenotaphrum secundatum*), barnyard grass (*Echinochloa crus-galli*), and Johnson grass (*Sorghum halepense*). Other dominant species observed consist of *Rhynchospora* sp., *Scirpus* sp, white edge sedge (*Carex debilis*), herb of grace (*Bacopa monnieri*), alligator weed (*Alternanthera philoxeroides*), pennywort (*Hydrocotyle umbellata*), white clover (*Trifolium repens*), climbing dayflower (*Commelina diffusa*), poorland flatsedge (*Cyperus compressus*), and peppervine (*Ampelopsis arborea*).

The wildlife species within the project area are generalist species that are able to adapt to a variety of environmental conditions, such as the anthropogenic activities occurring on site. The area does not provide sustainable habitat for species with specific dietary needs or narrow environmental necessities. The majority of these species on site are small, ground-dwelling mammals and birds such as, but not limited to, American crows (*Corvus brachyrhynchos*), American robins (*Turdus migratorius*), blue jays (*Cyanocitta cristata*), house sparrows (*Passer domesticus*), northern cardinals (*Cardinalis cardinalis*), opposums (*Didelphimorphia* sp.), squirrels (*Sciurus carolinensis, Sciurus niger*), rabbits (*Sylvilagus floridanus, Sylvilagus aquaticus*) and raccoons (*Procyon lotor*).

The **No-Build Alternative** will have no impact to wildlife or vegetation. The construction will not take place and preexisting conditions will be sustained.

Under the **Build Alternatives**, a small amount of cluster trees and shrub scrub will be removed to widen the highway corridor. The only vegetation that currently exists within the highway ROW is opportunistic herbaceous vegetation that develops with manicured landscaping. Regular mowing inhibits natural vegetation from thriving. Because of the project's urban location, no critical wildlife habitats are present and therefore habitat quality will not be further degraded.

3.10 Threatened and Endangered Species

The LDWF *Endangered, Threatened, and Candidate Species of East Baton Rouge Parish, Louisiana*, lists the following species.

Key to Federal Status: DL - Delisted; E - Endangered; T - Threatened; C - Species of Concern. (Federal ranks are designated by the US Fish & Wildlife Service under the provisions of the Endangered Species Act of 1973.)

Key to State Protection Status: E - Endangered. (The state protection status assignments are those contained in Title 56 of the Louisiana Revised Statutes as well as relevant rules and regulations adopted by the Louisiana Wildlife and Fisheries Commission and the Secretary of the Department of Wildlife and Fisheries.)

Key to State Rank: S1 - critically imperiled in Louisiana because of extreme rarity (five or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extirpation; S2 - imperiled in Louisiana because of rarity (six to 20 known extant populations) or

because of some factor(s) making it very vulnerable to extirpation; S3 - rare and local throughout the state or found locally (even abundantly at some of its locations) in a restricted region of the state, or because of other factors making it vulnerable to extirpation (21 to 100 known extant populations). SH - of historical occurrence in Louisiana, but no recent records verified within the last 20 years. (State ranks are assigned by the state's Natural Heritage Program.)

The **No-Build Alternative** will have no impact to threatened or endangered species. The construction will not take place and preexisting conditions will be sustained.

Suitable habitat for some listed species is found within the vicinity of the proposed **Build Alternatives**, although the construction actives are not anticipated to impact any threatened or endangered species. If threatened or endangered species are discovered within the vicinity of the proposed road expansion project during implementation of the highway expansion, a plan will be developed for avoidance or mitigation. Any such activities will be coordinated with the LDWF.

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Table 3.12 Federally and State Listed Threatened, Endangered, and Rare Species with the Potential to Occur in East Baton Rouge Parish

Rare Animal Species	Common Name	Federal Status	State Status	State Rank
Alosa alabamae	Alabama shad	C		S1
Anodontoides radiatus	rayed creekshell	--		S2
Elanoides forficatus	American swallow-tailed kite	--		S1S2
Farancia erytrogramma	rainbow snake	--		S2
Haliaeetus leucocephalus	American bald eagle	DL	E	
Hemidactylium scutatum	four-toed salamander	--		S1
Lampsilis ornata	southern pocketbook	--		S3
Mustela frenata	long-tailed weasel	--		S3
Obovaria jacksoniana	southern hickorynut	--		S1S2
Ophisaurus ventralis	eastern Glass Lizard	--		S3
Potamilus inflatus	inflated heelsplitter	T		S1
Reithrodontomys humulis	eastern harvest mouse	--		S3
Scaphirhynchus albus	pallid sturgeon	E	E	
Sorex longirostris	southeastern shrew	--		S2
Sternula antillarum athalassos	interior least tern	E	E	
Trichechus manatus	manatee	E	E	
Villosa vibex	southern rainbow	--		S2
Rare Plant Species				
Dryopteris ludoviciana	southern shield wood-fern	--		S2
Eleocharis wolfii	wolf spikerush	--		S3
Mimulus ringens	square-stemmed monkey-flower	--		S2
Platythelys querceticola	low erythrodes	--		S1
Sida elliottii	Elliott sida	--		SH
Stewartia malacodendron	silky camellia	--		S2S3
Thalia dealbata	Powdery Thalia	--		S2S3
Trichomanes petersii	dwarf filmy-fern	--		S2
Natural Communities				
Bottomland Hardwood Forest	--	--		S4
Cypress-Tupelo Swamp	--	--		S4
Hackberry-American Elm-Green Ash Forest	--	--		S4
Prairie Terrace Loess Forest	--	--		S1
Spruce Hardwood Flatwood	--	--		S1
Sweetgum-Water Oak Forest	--	--		S4

3.11 Wetlands and Other Waters

The man-made drainage ditches in the project area displayed evidence of all three diagnostic characteristics for wetlands in several areas, totaling approximately 0.53 acres. The drainage ditches on the site drain to Lively Bayou or Jones Creek, which are traditionally navigable waters (TNW). Although the ditches exhibit the technical characteristics of wetlands and carry runoff to the TNW, it appears that the ditches were excavated through historically non-hydric soils.

Two potentially jurisdictional wetlands were identified in the project area, totaling approximately 0.06 acres (**Figures 13a-d**). Both wetland features are located adjacent to the potentially jurisdictional man-made drainage ditches that are adjacent to Old Hammond Highway and South Flannery Road. Wetlands were delineated using the three parameters (dominant vegetation, soil characteristics, and hydrology) and methods described within the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (November 2010) and the *Corps of Engineers Wetland Delineation Manual* (USACE 1987).

The project area also contains 622.3 linear feet of other waters. This includes Lively Bayou, which crosses South Flannery Road under a bridge and continues westward, then crosses Old Hammond Highway conjoining with Jones Creek and flowing southward to the Amite River. Jones Creek crosses Old Hammond Highway at the southwestern portion of the site, approximately 700 feet southwest of Lively Bayou.

The **No-Build Alternative** will have no impact to wetlands or other waters. The construction will not take place and preexisting conditions will be sustained.

The impact to wetlands is the same for all three **Build Alternatives**. The construction would create a wetland impact of 0.59 acres, which includes man-made drainage ditches (approximately 0.53 acres) and two potentially jurisdictional wetlands (approximately 0.06 acres). There are 622.3 linear feet of other waters, which include Lively Bayou and Jones Creek. The USACE will make the final determination as to whether these areas will be considered jurisdictional wetlands. No impact is anticipated for the other waters.

3.12 Farmlands

According to the NRCS, prime farmland soil has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods. NRCS classified prime farmland soils within the project area include Calhoun silty loam soils, Frost silty loam soils, and Oprairie silty soils. Although historically prime farmland did occur on the site, none of the prime farmland soil characteristics is currently met within our project area. This is a consequence of the urban development in the area.

The **No-Build Alternative** will have no impact to farmlands. The construction will not take place and preexisting conditions will be sustained.

The **Build Alternatives** will have no impact to farmlands. Farmland soil is present, but the urban project vicinity inhibits prime farmland function.

3.13 Floodplains and Flood Hazard Areas

The 100-year floodplain is defined as the area that would be inundated by a precipitation event that has a one-in-100 chance of occurring every year. Floodplains are protected by Executive Order 11988, Floodplain Management; 23 CFR Part 650, Location and Hydraulic Design of Encroachments on Floodplains; and the US Department of Transportation 5650.2, Floodplain Management and Protection. These regulations require that encroachments within the 100-year floodplain are minimized and that land development inconsistent with floodplain values is avoided.

According to the FEMA FIRM for East Baton Rouge Parish, approximately 95 percent of the project area is listed as being within the 100-year floodplain. The 100-year floodplain has a one percent annual chance of flooding and, within the project area, is characterized as Zone AE, an area with the base flood elevation determined, on the FIRM maps. The remaining five percent of the project area is designated as Zone X in the FIRM, which is categorized by FEMA as being outside of the 0.2 percent chance floodplain. Further detail is provided in **Section 2.1.7**.

The **No-Build Alternative** will have no impact to floodplains or flood hazard areas. The proposed construction will not take place and preexisting conditions will be sustained.

The FEMA FIRM maps indicate much of the project **Build Alternatives** are within the 100-year floodplain. The project will be designed to accommodate the drainage associated with highway expansion. The overall impact to the watershed is to be minimal.

Figure 13a Wetlands and Other Waters, 1 of 4

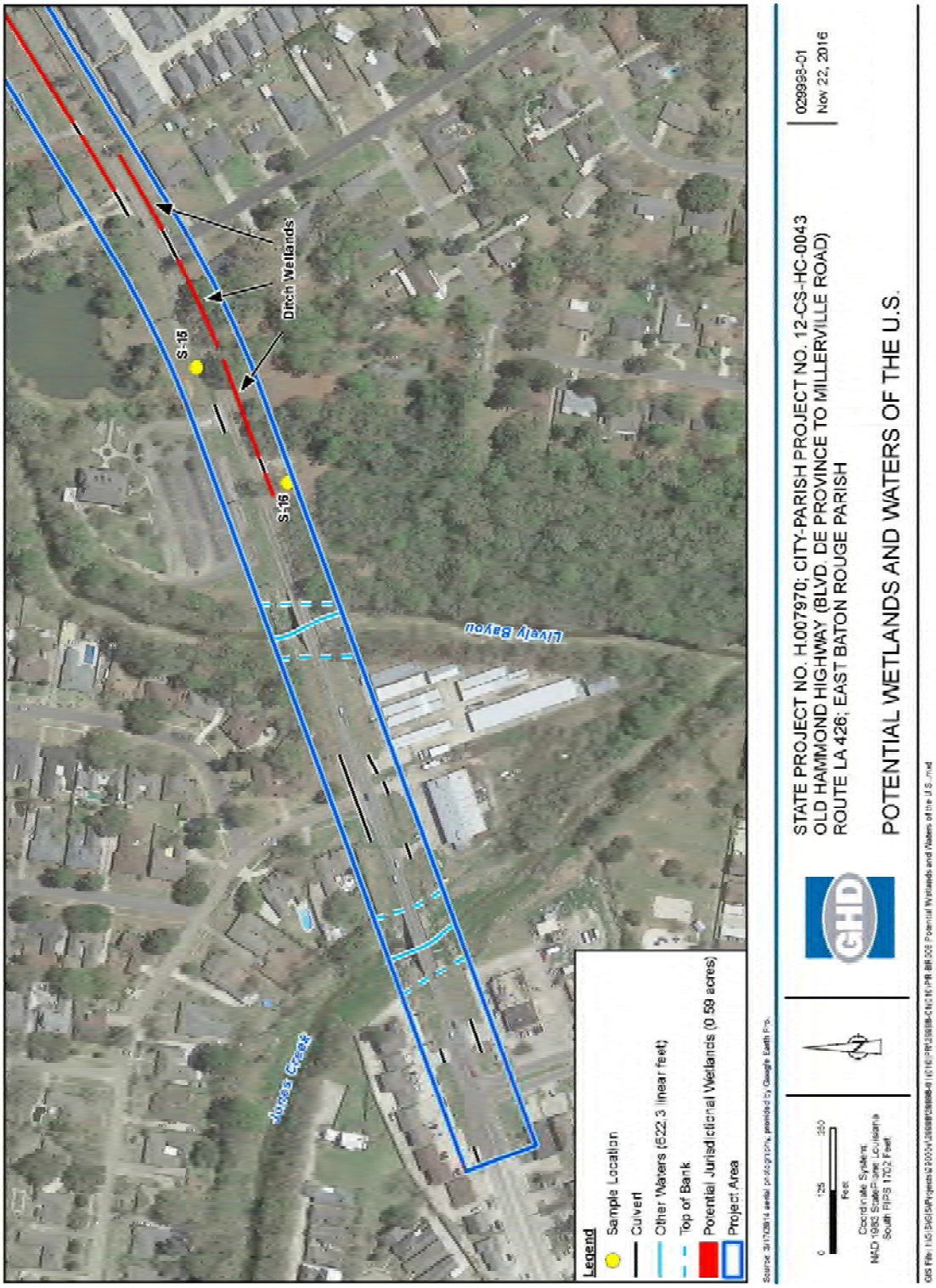


Figure 13b Wetlands and Other Waters, 2 of 4

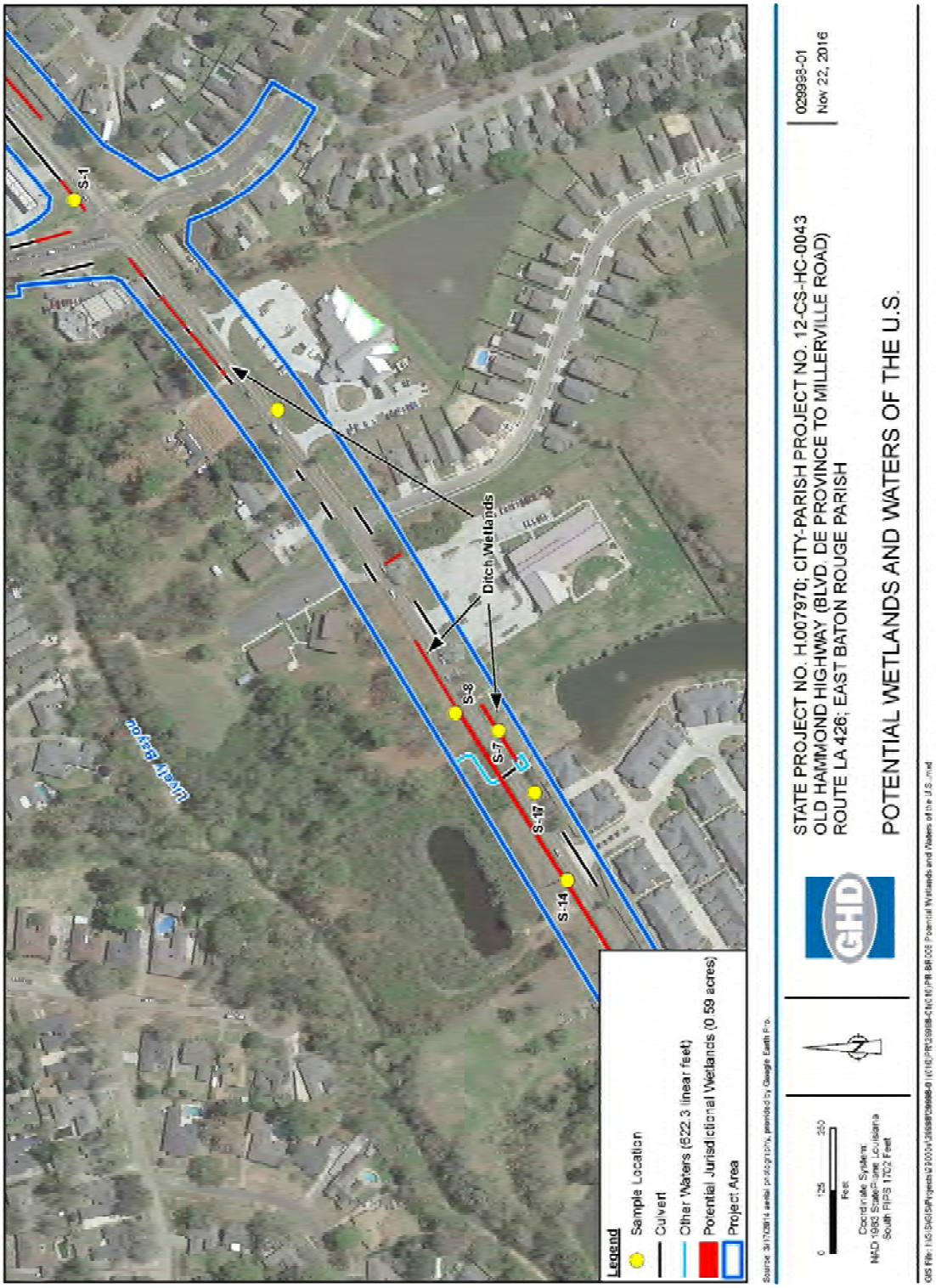


Figure 13c Wetlands and Other Waters, 3 of 4

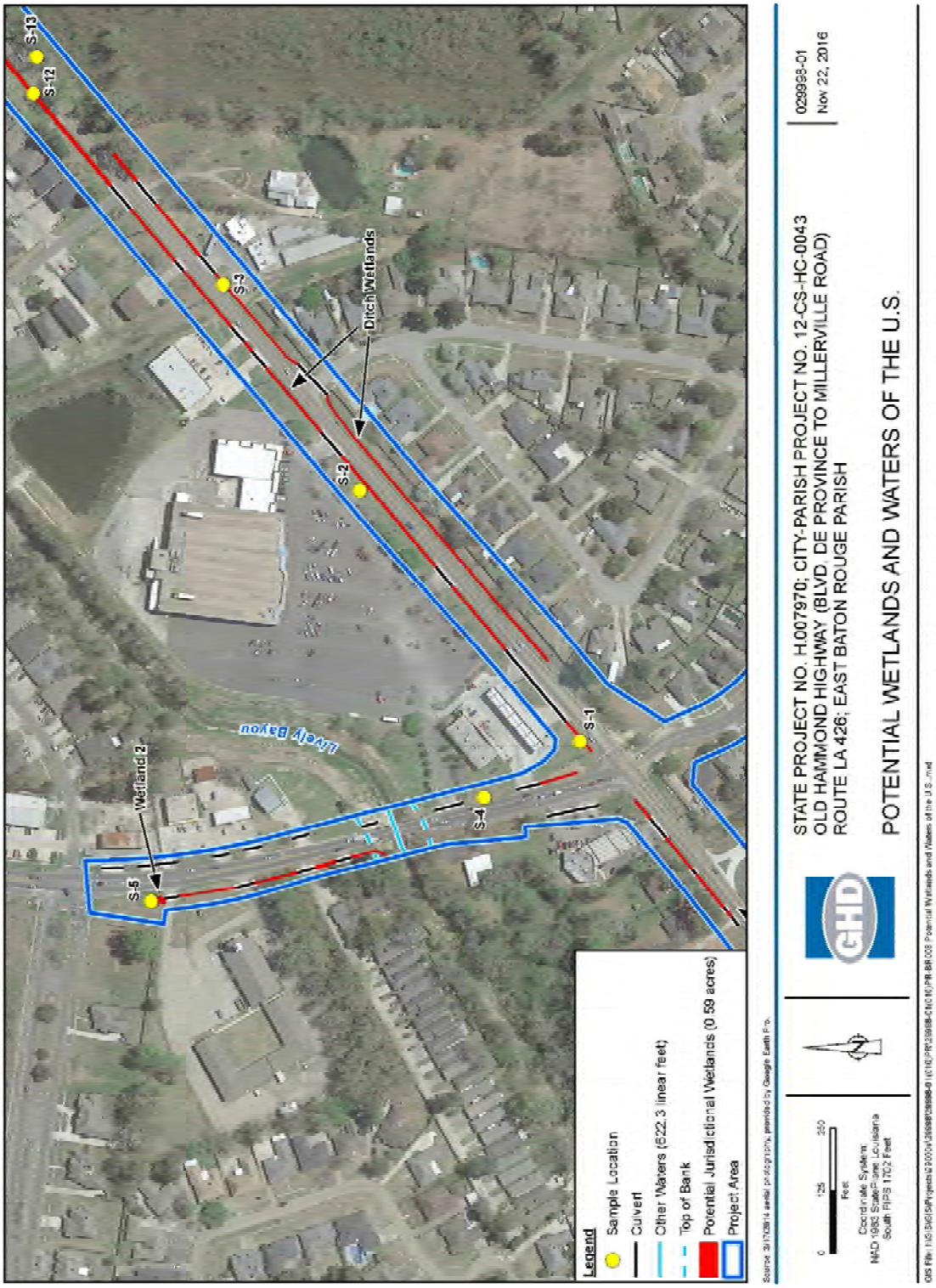
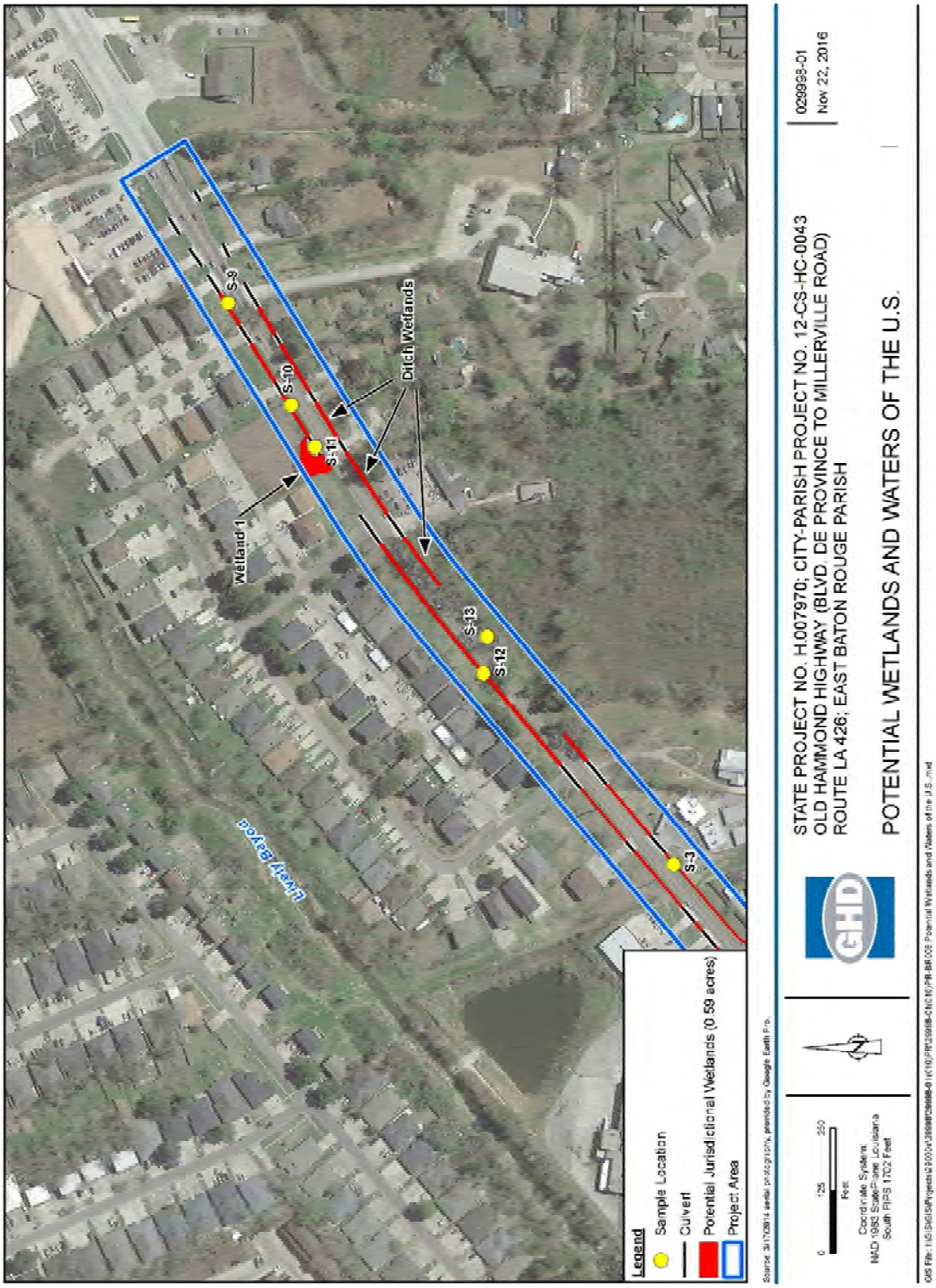


Figure 13d Wetlands and Other Waters, 4 of 4



3.14 Waste Management Activities and Underground Storage Tanks

A Phase I Environmental Site Assessment (ESA) was conducted of property located property located along Old Hammond Highway between Boulevard de Province and Millerville Road, in Baton Rouge, Louisiana (Site). The purpose of the Phase I ESA was to identify recognized environmental conditions (RECs), as defined in ASTM International (ASTM) Standard E1527-13 (the Standard), at the Site.

Based on the Phase I ESA, including the Site reconnaissance, database search, historical records reviewed, information provided by Site personnel, and interviews, the following findings were identified regarding RECs, historical recognized environmental conditions (HRECs), controlled recognized environmental conditions (CRECs), business environmental risks (BERs), and de minimis conditions, as defined in the Standard, at the site. The sites identified by the ESA that may have concerns to the project are briefly discussed below, and the location of each site is shown on **Figures 14a** and **b**.

i) ***Adjoining Texaco Food Mart Convenience Store (former Country Club Exxon):*** The adjoining Texaco Food Mart Convenience Store operates a service center on the northeast corner of the intersection of Old Hammond Highway and Flannery Road (13315 Old Hammond Highway). The site was listed in the Underground Storage Tank (UST) database as having eight removed USTs and two active USTs. The site was also listed in the SPILLS, National Pollutant Discharge Elimination System (NPDES), Resource Conservation and Recovery Act – Conditionally Exempt Small Quantity Generators (RCRA-CESQG), and Radioactivity Environmental Monitoring (REM) databases. No violations were noted for the site in the RCRA-CESQG, and the site has a closed status in the SPILLS and REM databases. Based on documentation reviewed, in 1985, approximately 2,000 gallons of gasoline were released to the soil and groundwater. The site was partially remediated using vacuum extraction techniques. In February 2009, LDEQ issued a status of No Further Action-At This Time (NFA-ATT) for the site, since analytical results for soil and groundwater at the site were below LDEQ Risk Evaluation/Corrective Action Program (RECAP) standards.

   At the time of the GHD site reconnaissance, the release from the UST was considered a CREC based on the prior release.

ii) ***Adjoining Store 149 (former Circle K #3797):*** The adjoining Store 149 (currently Exxon), located at 13289 Old Hammond Highway, operates a fuel service center located at the northwest corner of Old Hammond Highway and Flannery Road. The site was listed in the UST database as having three active USTs. The site was also listed in the Leaking Underground Storage Tank (LUST), SPILLS, and REM databases. Because of Conoco-Phillips' divestiture of the Circle K retail stores, a Phase II ESA was conducted and gasoline range organics (GRO) were detected at concentrations above the LDEQ RECAP Screening Standards. In addition, during a recent inspection of this site, LDEQ determined that a diesel line was improperly capped and had released an unknown amount of product to a sump and surrounding concrete.

   Insufficient information existed with which to evaluate the extent to which the diesel leak may have adversely impacted the Site; therefore, the diesel leak was considered a REC.

Figure 14a Phase I ESA Site Features – West Section

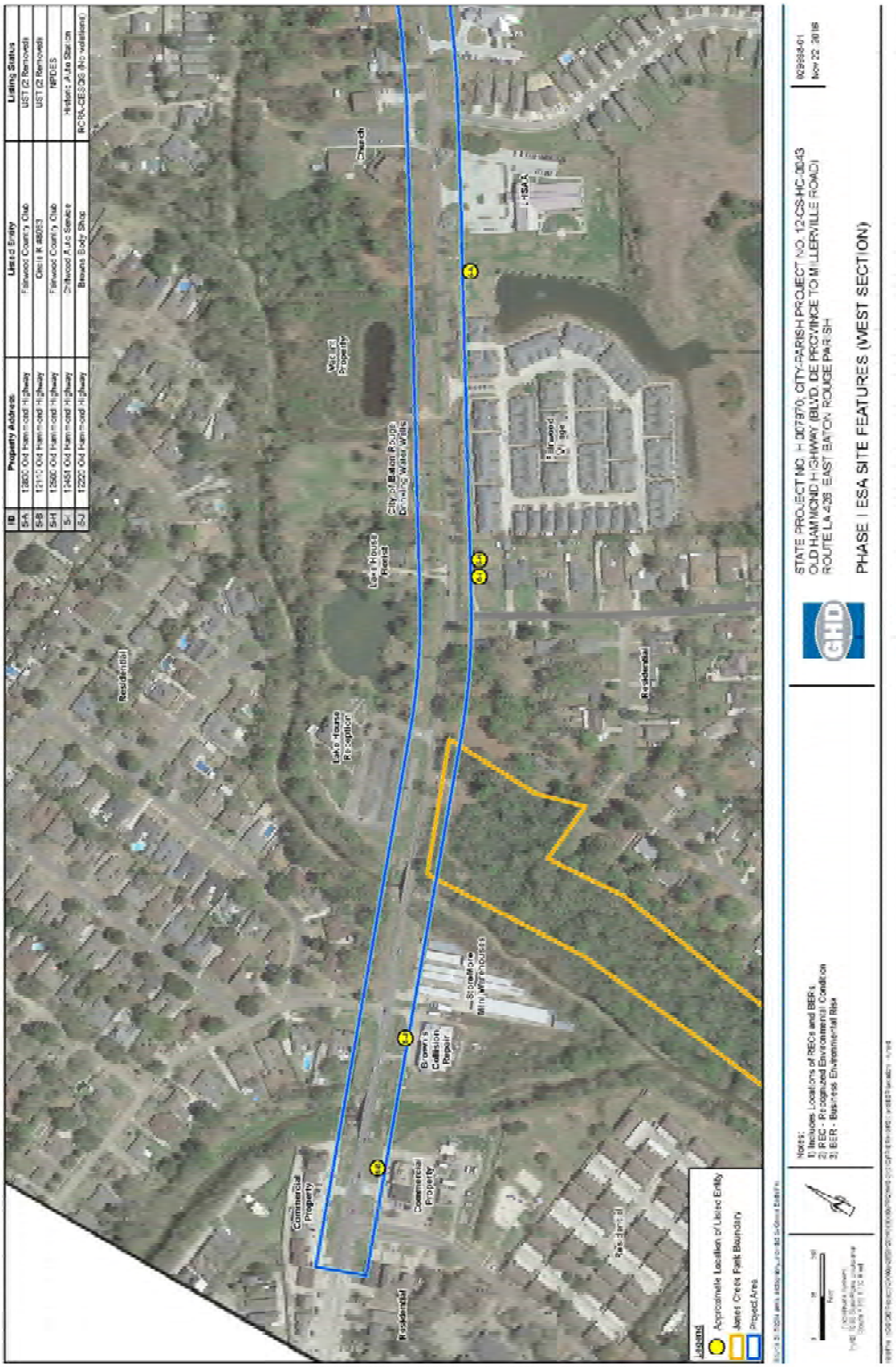
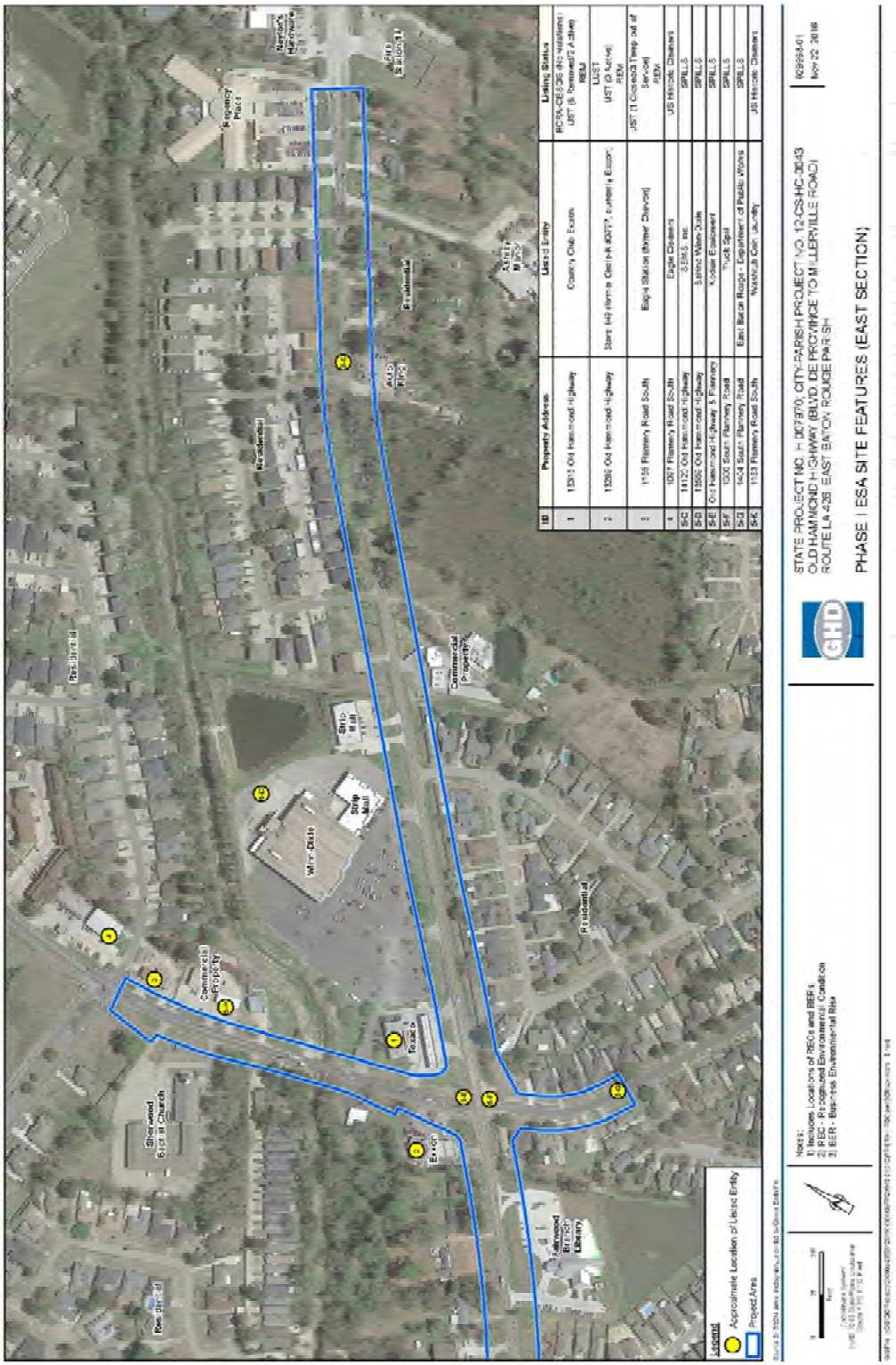


Figure 14b Phase I ESA Site Features – East Section



iii) ***Adjoining Eagle Station (former Chevron):*** The adjoining Eagle Station, located at 1155 South Flannery Road, operates a fuel service station and car wash on the southeast corner of Goodwood Drive and Flannery Road. The site was listed in the UST database as having one closed UST and three temporarily out of service USTs. In addition, this site was listed in the US Historical Auto Stations, NPDES, and REM databases as Eagle Station and in the SPILLS database (closed status) as Kourco Environmental. Based on documentation reviewed, benzene, toluene, ethylbenzene, and xylene (BTEX) constituents were detected in a downgradient monitoring well at the site. The car wash discharges washwater to Lively Bayou.

Insufficient information existed with which to evaluate the extent to which the release may have adversely impacted the Site; therefore, the release was considered a REC.

iv) ***Adjoining Eagle Cleaners:*** The adjoining Eagle Cleaners operates a dry cleaning business in the strip mall on the northeast corner of Goodwood Drive and Flannery Road (1097 South Flannery Road). The site was listed in the Drycleaners and US Historical Cleaners databases for reporting years 2003, 2004, 2007, 2010, 2011, and 2012. No information exists to determine if dry cleaning operations were conducted at this location.

This adjoining property and associated business operation were considered a BER.

v) ***Additional Adjoining Properties:*** Numerous other properties were listed in the UST, SPILLS, US Historical Auto Stations, and US Historical Cleaners. These properties are addressed as 12830 Old Hammond Highway, 12110 Old Hammond Highway, 14120 Old Hammond Highway, 13559 Old Hammond Highway, Old Hammond Highway & Flannery (Kodiak Equipment), 1300 South Flannery Road, 1404 South Flannery Road, 12500 Old Hammond Highway, 13315 Old Hammond Highway, 12451 Old Hammond Highway, 12220 Old Hammond Highway, and 1183 Flannery Road South. Other than what is noted in the Radius Map report, no documentation was available for review to determine if the subject Site has been adversely impacted by these additional adjoining businesses.

These additional adjoining properties and associated business operations were considered a BER.

The **No-Build Alternative** will have no impact on waste management sites or USTs. The proposed construction will not take place and preexisting conditions will be sustained.

A Phase I ESA conducted along the corridor of the proposed project limit identified RECs, CRECs, or locations of BER adjacent to the **Build Alternatives**. Additional investigation or other action may be required for the preferred Build Alternative. The locations of these sites are shown on **Figures 14a** and **b**. ROW is not anticipated to be acquired from these sites.

i) ***Adjoining Texaco Food Mart Convenience Store (former Country Club Exxon):*** For this site, listed with eight removed and two current USTs, LDEQ issued a status of NFA ATT, since analytical results for soil and groundwater at the site were below LDEQ RECAP standards. Since impacted soil and groundwater are present at the site, no soils may be removed from the site without prior approval from LDEQ, unless the soils are removed and disposed at a permitted disposal facility. The release from the UST would be considered a CREC based on the prior release.

ii) ***Adjoining Store 149 (former Circle K #3797):*** Adjoining Store 149 (currently Exxon), located at 13289 Old Hammond Highway, is listed in the UST database as having three active USTs, previously identified concentrations of GRO above the LDEQ RECAP Screening Standards, and a more recent release of diesel to a sump and surrounding concrete.

Since groundwater impact was present at the site, no soils may be removed from the site without prior approval from LDEQ, unless the soils are removed and disposed at a permitted disposal facility. The release of gasoline from the UST would be considered a CREC based on the prior release. Insufficient information presently exists with which to evaluate the extent to which the diesel leak may have adversely impacted the site; therefore, the diesel leak would be considered a REC.

iii) ***Adjoining Eagle Station (former Chevron):*** The adjoining Eagle Station, located at 1155 South Flannery Road, operates a fuel service station and car wash on the southeast corner of Goodwood Drive and Flannery Road. Documentation indicates that BTEX constituents were detected in a downgradient monitoring well at the site, and the car wash discharges washwater to Lively Bayou. Insufficient information presently exists with which to evaluate the extent to which the release may have adversely impacted the Site; therefore, the release would be considered a REC.

iv) ***Adjoining Eagle Cleaners:*** While no evidence exists to suggest a release of hazardous substances or petroleum products associated with dry cleaning operations has occurred, insufficient information exists to evaluate potential adverse impact to soil and groundwater at the site. Therefore, this adjoining property and associated business operations should be considered when evaluating BER and future land use at the site.

v) ***Additional Adjoining Properties:*** While no evidence exists to suggest a release of hazardous substances or petroleum products associated with operations conducted at the adjoining properties has occurred, insufficient information exists to evaluate potential adverse impact to soil and groundwater at the Site. Therefore, the adjoining properties and associated business operations should be considered when evaluating BER and future land use at the Site.

3.15 Air Quality

Tailpipe emissions from motor vehicles can contain a number of pollutants for which ambient air quality standards have been established by the US Environmental Protection Agency (EPA) and the State of Louisiana. In particular, vehicular exhausts are significant direct and indirect contributors to atmospheric levels of carbon monoxide (CO), volatile organic carbon compounds (VOCs), nitrogen oxides, ozone, and, in some cases, particulate matter. Nitrogen oxide and VOC emissions are of concern principally because of their role as precursors in the formation of ozone. Impacts of these emissions are usually evaluated on a regional level because the chemical reactions that must take place in the atmosphere in the presence of sunlight occur over a period of hours or even days after discharge, and the pollutants become dispersed from the point where they are emitted and mix with the ambient air.

On a localized project level, CO emissions have historically been the focus of quantitative analysis to determine potential impacts of proposed transportation improvements on air quality. Transportation sources have usually accounted for the largest source of CO emissions on a national level, and the adverse effects of CO emissions are usually experienced within a relatively short distance (usually 300-600 feet) from a transportation source, supporting the validity of this parameter to assess the localized air quality effects of project proposals. CO emissions have significantly decreased over the past 20 years, and, corresponding with this decrease, the need for detailed, computer-based air quality modeling at the project (microscale) level on transportation projects has been reduced. As a result, the FHWA has identified simpler, alternative screening methodologies to determine the potential air quality impacts of proposed roadway improvements other than major new highway projects, projects that are thought to pose a risk to human health from air emissions, or projects in nonattainment areas where transportation sources are significant contributors to violations of the National Ambient Air Quality Standards (NAAQS). A number of screening techniques have been identified ranging from computer-based screening tools to comparative analyses (FHWA, 2004). The FHWA's approach has allowed state DOTs more flexibility in determining the best methodology for assessing air quality impacts while avoiding unnecessarily complex analyses that add little to the reliability of the results. However, CO concentrations in the atmosphere in the five-parish Baton Rouge metropolitan area are not a significant issue. The region is in compliance per the NAAQS for CO and all other air pollutants for which standards have been promulgated except for ozone. Consequently, a screening analysis for evaluating potential project impacts on CO concentrations, on either the local or the regional level, is unwarranted.

As mentioned previously in the discussion of existing air quality conditions in the project vicinity, the Baton Rouge region has been classified as a marginal nonattainment area for the eight-hour ozone NAAQS. Ozone forms in the atmosphere on a regional level when other pollutants such as VOCs and nitrogen oxides react chemically in the presence of sunlight. In states where there are violations of the NAAQS, the Clean Air Act of 1990 requires preparation and regular updating of a State Implementation Plan (SIP) that describes the sources of air pollutants in the state and the measures that will be used to attain (if in violation of) or maintain (if in attainment of) the NAAQS. The SIP identifies specific measures that must be implemented for both on-road (vehicular) sources and stationary sources.

CRPC, the regional planning agency for the five-parish Baton Rouge metropolitan area, must update a Transportation Improvement Program (TIP) every four years that lists all transportation projects receiving or expected to receive federal funding during that period. The TIP represents a realistic plan for the implementation of these projects based on available financing (i.e. the TIP must be financially constrained). Under federal law, in NAAQS nonattainment and maintenance areas, a TIP must demonstrate (through a conformity determination) that implementation of the planned transportation improvements will comply with provisions in the SIP to achieve or maintain air quality standards that apply to mobile sources of air emissions, including any specific control measures that must be implemented. In order to support a conformity determination, the CRPC models vehicular emissions on a regional level, assigning projections of future traffic and vehicle miles of travel for the proposed projects in the TIP superimposed on the existing roadway network. Tailpipe pollutant emissions emanating from proposed projects, including ozone precursors, are assumed to

have no adverse effects on regional air quality if included as part of the regional modeling analysis and the analysis demonstrates compliance with the SIP.

As mentioned above, the US EPA has set NAAQS for six principal air pollutants (also referred to as criteria pollutants): CO, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. The State of Louisiana has adopted the federal standards for these criteria pollutants. East Baton Rouge Parish is currently in attainment for all NAAQS except the eight-hour standard for ozone (US EPA, 2013). For this standard, East Baton Rouge Parish and four surrounding parishes have been classified by the US EPA as marginally nonattainment.

The **No-Build Alternative** will have no immediate impact on air quality. However, as the surrounding urban area expands, more vehicles will be utilizing the highway causing congestion. If the highway is not expanded, extended commute time will be the alternative, which has a direct correlation to VOCs suspended in the air per vehicle over time. Traveling at a lower speed because of traffic congestion creates a longer time interval of carbon emission releases.

The **Build Alternatives** are anticipated to maintain air quality standards that apply to mobile sources of air emissions. During construction, air quality impacts will be minimized by the construction contractor through a combination of fugitive dust control, equipment maintenance, and compliance with state and local regulations.

3.16 Noise Quality

A noise analysis for the proposed project was conducted to address FHWA and DOTD requirements for assessing noise impacts of transportation projects. The objectives of the noise study were to:

- Identify potential noise-sensitive receivers (R) that may experience noise impacts from the proposed project and characterize the existing ambient noise environment in the vicinity of these receivers.
- Predict existing and future noise levels and associated noise impacts from the proposed project.
- Determine if there are any feasible and reasonable noise abatement measures that would eliminate or reduce the identified noise impacts.
- Satisfy the requirements of Title 23 of the Code of Federal Regulations Part 772 (23 CFR Part 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise and the LDOTD Highway Traffic Noise Policy (July 2011).

The 66 and 71 “A-weighted” decibel (dBA) noise impact exposure thresholds are critical to inform highway traffic noise planning as identified in the DOTD Highway Traffic Noise Policy. These thresholds will be discussed for illustrative purposes and to define the noise impact exposure potential for the proposed improvement project within the Study Area of interest based on land uses. All structures within the Study Area were evaluated for noise impacts.

3.16.1 Fundamentals of Sound and Noise

Sound is the vibration of air molecules in waves. When these vibrations reach a person's ears, sounds are heard. Noise is defined as unwanted sound. Sounds are described as noise if they interfere with an activity or disturb the person hearing them. Sound is measured in a logarithmic unit called a decibel (dB). The human ear is more sensitive to middle and high frequency sounds than it is to low frequency sounds, so sound levels are weighted to more closely reflect human perceptions. These "A-weighted" sounds are measured using the decibel unit dBA. Because the dBA is based on a logarithmic scale, a 10 dBA increase in sound level is generally perceived as twice as loud, while a three dBA increase is just barely perceptible to the human ear.

Sound levels fluctuate with time depending on the sources of the sound audible at a specific location. In addition, the degree of annoyance associated with certain sounds varies by time of day, depending on other ambient sounds affecting the listener and the activities of the listener. The time-varying fluctuations in sound levels at a fixed location can be quite complex, so they are typically reported using statistical or mathematical descriptors that are a function of sound intensity and time. A commonly used descriptor is Leq, which represents the equivalent of a steady, unvarying sound level over a defined period of time containing the same amount of sound energy as the time-varying sound generated over that same time period. Leq (h) is an equivalent sound level averaged over a time period of one hour. For highway projects, the Leq (h) is commonly used to describe traffic-generated noise levels at locations of outdoor human use and activity.

3.16.2 Existing Conditions

Existing ambient noise levels were measured in September 2015 at five sites that are identified on **Figure 15**. The sites were selected to be generally representative of noise-sensitive, ground level, outdoor human use or activity areas in proximity to the build alternatives. The noise measurement methodology is further outlined in the separate noise technical report.

The noise levels measured at the ambient noise measurement sites are summarized in **Table 3.13**. The ambient noise levels measured at measurement sites one through five are representative of the structures within the Study Area. Receiver locations (R01-R64) are shown on **Figure 16**. Generally, the structures in the Study Area consist of single and multi-family residences, businesses, churches, and a library. The lowest existing noise measurement taken in the Study Area was 64.6 dBA during the PM peak period, and the highest measurement recorded was 74.3 dBA.

Existing exterior noise levels at structures in the vicinity of the proposed build alternatives were modeled using the Traffic Noise Model Version 2.5 (TNM 2.5) and compared to the measured noise levels to calibrate the model for future analysis purposes. Data for the existing roadway network and on-site traffic counts conducted during the noise measurements were used as part of this calibration. The model was assumed calibrated when the model results were within three decibels of the field measurements taken at the five locations. The results of the model calibration are included in **Table 3.13**.

Figure 15 Ambient Noise Receivers

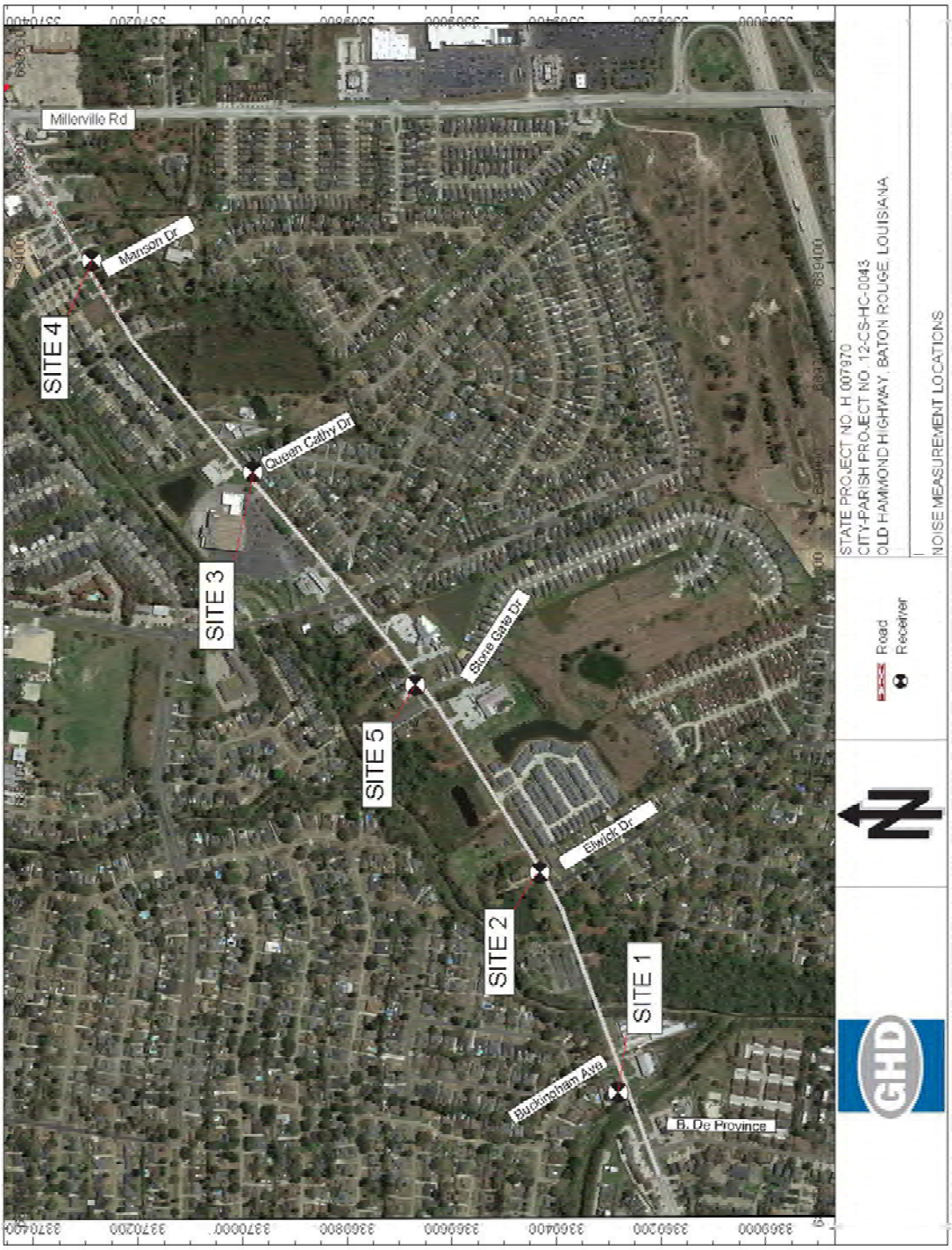


Figure 16 Noise Study Receiver Locations

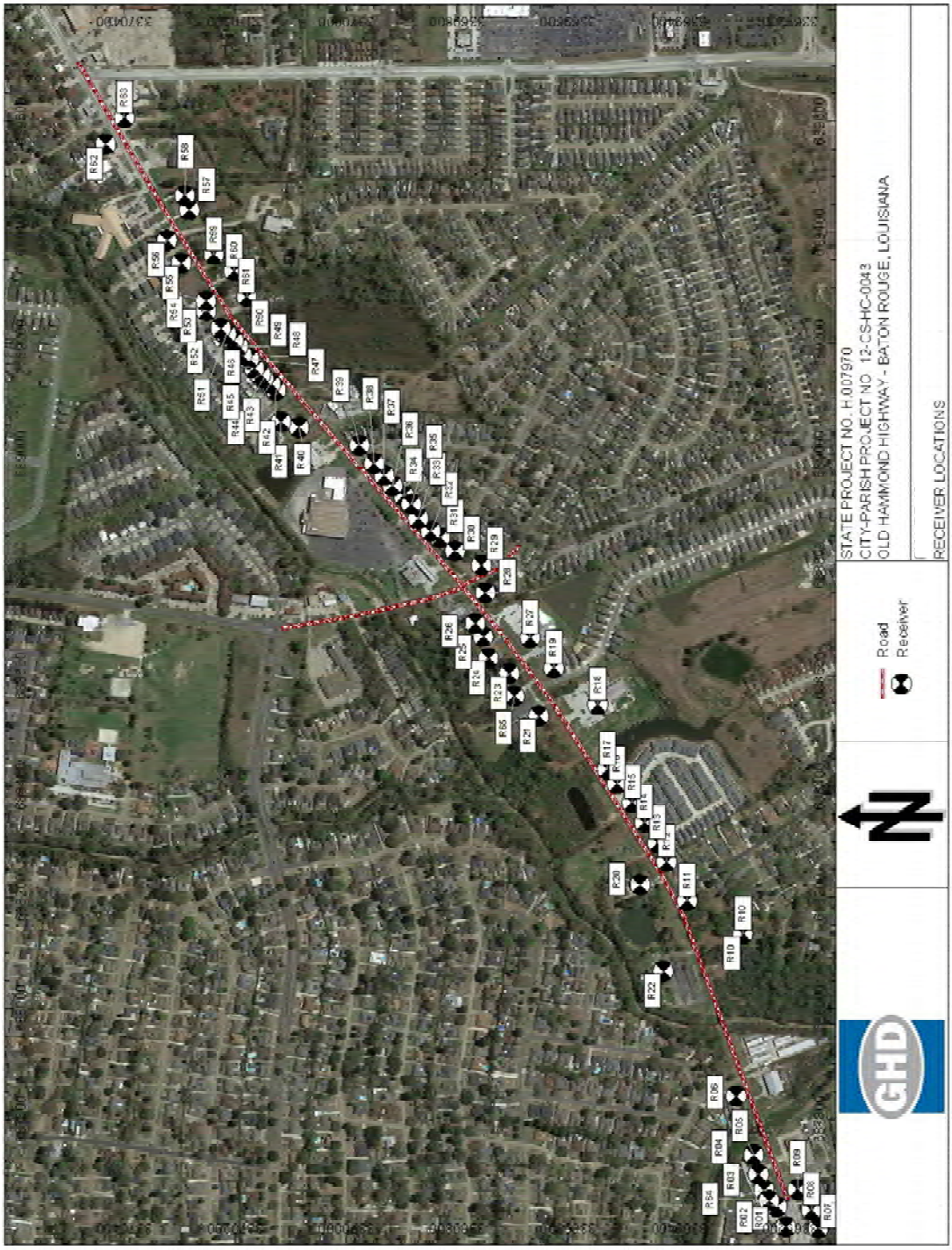


Table 3.13 Existing Ambient Noise and Model Calibration Summary

Measurement Site	General Location	Peak Period	2015 Modeling Noise Level (dBA)	2015 Measured Noise Level Hourly Leq (dBA)(3)	Difference (dBA)
Site 1 Representative of R06	12626 Buckingham Avenue Residence	AM Peak(1)	63.7	66.2	-2.5
		PM Peak(2)	63.5	64.6	-1.1
Site 2 Representative of R12	12451 Old Hammond Highway Lake House Florist	AM Peak(1)	71.9	74.3	-2.4
		PM Peak(2)	71.7	71.1	0.6
Site 3 Representative of R60	1201 Queen Cathy Drive Residence	AM Peak(1)	65.8	67.9	-2.1
		PM Peak(2)	66.4	68.7	-2.3
Site 4 Representative of R53	14214 Old Hammond Hwy Ashley Manor Reception Hall	AM Peak(1)	67.0	69.6	-2.6
		PM Peak(2)	66.7	68.2	-1.5
Site 5 Representative of R15	12909 Old Hammond Hwy Presbytery of South Louisiana	AM Peak(1)	68.3	71.2	-2.9
		PM Peak(2)	68.1	67.2	0.9

(1) Morning peak traffic occurs between 7:15 am and 8:15 am
(2) Evening peak traffic occurs between 4:45 pm and 5:45 pm
(3) Average value from 3 days of monitoring during the peak hour

3.16.2.1 Noise Impact Criteria

The DOTD highway Traffic Noise Policy was used to analyze project related noise impacts (July 2011). The standards are presented in **Table 4.1**. Noise impacts occur when noise levels are equal to or exceed DOTD Noise Abatement Criteria (presented in **Table 4.1**), or when noise exceeds pre-existing conditions by 10 dBA.

3.16.2.2 2040 No-Build Alternative

The 23 CFR 772 does not require the consideration of impacts associated with the No-Build Alternative. However, a future No-Build scenario was modeled for comparison to the existing conditions and to the build Alternatives 1, 2, and 3. There are no known planned developments in the Study Area at this time, noted in section 3.16.3.1.

Table 3.14 DOTD Noise Abatement Criteria [1, 2]

Activity Category	Leq(h) (dBA)[3]	Description of Activity Category
A	56 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	66 (Exterior)	Residential (includes undeveloped lands permitted for residential).
C	66 (Exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. (Includes undeveloped land permitted for these activities).
D	51 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	71 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (includes undeveloped lands permitted for these activities).
F	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, minoring, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	Undeveloped lands that are not permitted.

Notes:
(1) Source: DOTD Highway Traffic Noise Policy (July 2011)
(2) These criteria are consistent with the FHWA Noise Abatement Criteria (23 CFR Part 772) allowing for consideration of traffic noise impacts one dBA below the NAC.
(3) Hourly A-weighted sound level in decibels (dBA).

3.16.2.3 Design Year 2040 Build Alternatives

Predicted noise levels at the locations of the measurement sites are expected to increase under the three build alternatives in the design year 2040 as presented in **Table 4.2**. The noise impact is entirely due to expected traffic growth as opposed to the Build Alternatives under consideration. Predicted noise level contours were also established for the 66 dBA and 71 dBA highway traffic noise levels for each of the build alternatives. The contours were used to aid in illustrating the predicted noise impacts under each build alternative. The results of this evaluation are described for each alternative below and shown on **Figures 17-19**.

Figure 17 Alternative 1 2040 Noise Contours

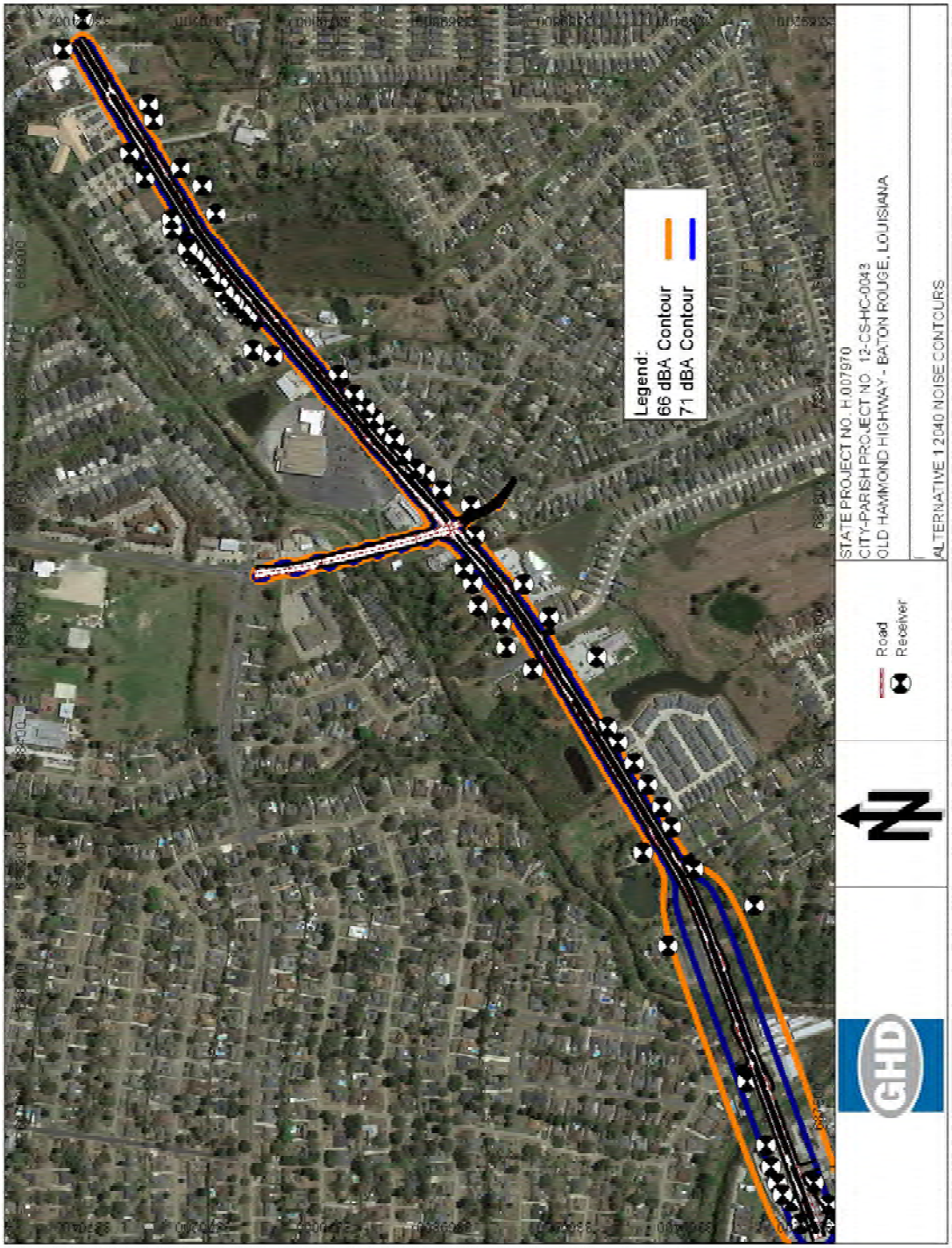


Figure 18 Alternative 2 2040 Noise Contours

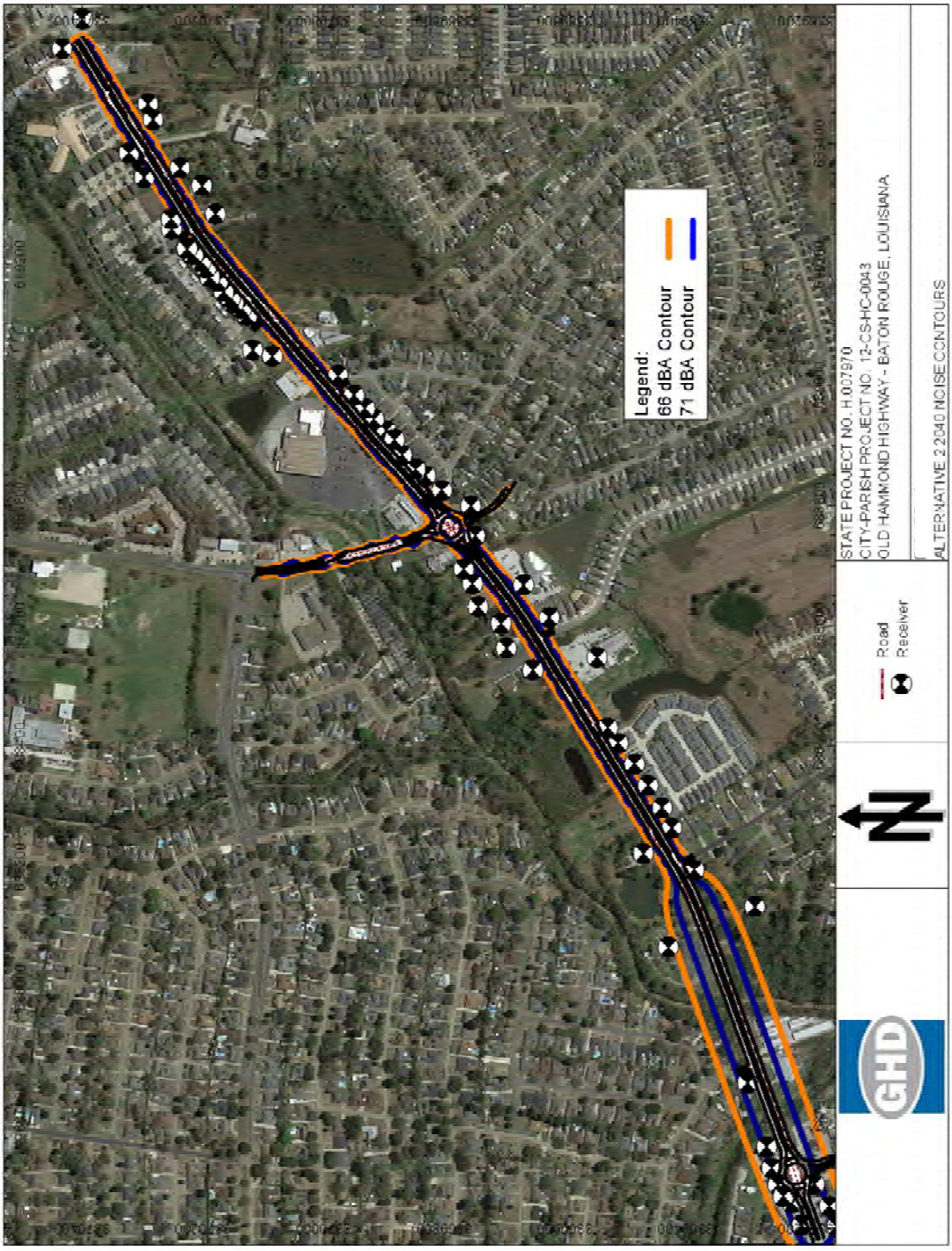
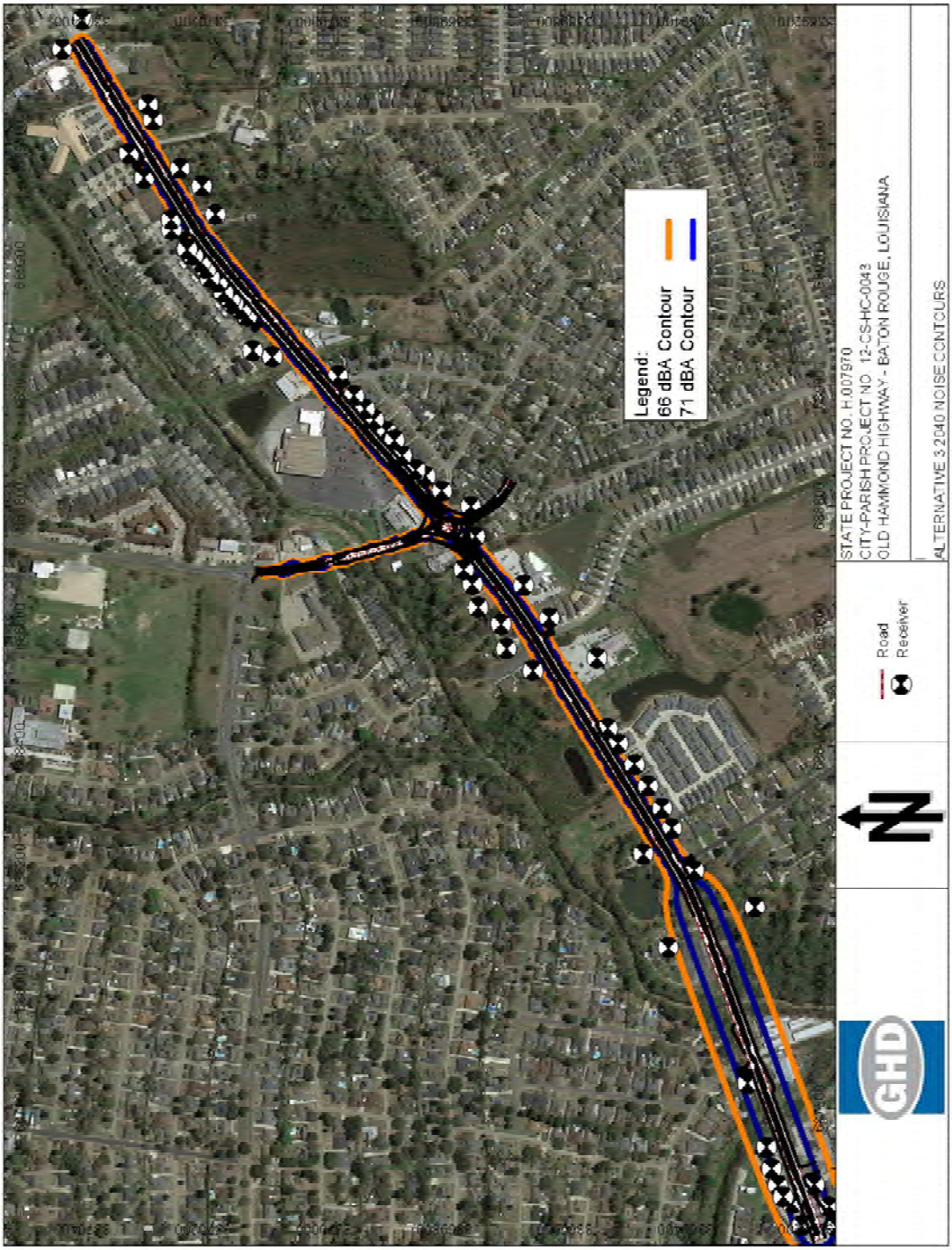


Figure 19 Alternative 3 2040 Noise Contours



3.16.3 Summary of Noise Impacts

Twelve sensitive receptors are expected to experience traffic noise impacts in 2040 under each of Alternatives 1, 2, and 3. For comparison purposes, 12 sensitive receptors are also expected to experience traffic noise impacts under the No-Build Scenario. The summary of impacts is presented in **Table 4.3**. Receiver locations are shown on **Figure 16**.

Table 3.15 Summary of Traffic Noise Impacts

Alternative	# Sensitive Receivers Impacted ≥ NAC	Receiver IDs	Sensitive Receivers ≥ 10 dBA Over Existing Noise Levels	Receiver IDs
No-Build	11	R01-R09, R11, R64	12	R01-R10, R22, R64
Alternative 1	11	R01-R09, R11, R64	12	R01-R10, R22, R64
Alternative 2	12	R01-R09, R11, R33, R64	12	R01-R10, R22, R64
Alternative 3	12	R01-R09, R11, R33, R64	12	R01-R10, R22, R64

3.16.4 Potential Noise Mitigation Measures

Since noise impacts have been identified for this project, the feasibility and reasonableness of potential noise abatement measures must be evaluated per the DOTD Highway Traffic Noise Policy. Specific abatement measures including traffic management measures, alteration of horizontal and vertical alignments, acquisition of property rights to provide noise buffers, noise insulation of public use or nonprofit institutional structures, and the construction of noise barriers were evaluated for feasibility and reasonableness. Abatement measures determined to be feasible and reasonable per DOTD criteria can be recommended as effective measures to reduce identified noise impacts associated with the proposed intersection improvements.

The DOTD considers noise abatement in the form of a noise barrier such as a wall or berm to be feasible when 75 percent of the first row of impacted receivers adjacent to a proposed noise barrier would receive at least a five dBA reduction in traffic noise and when the barrier is generally considered to be constructible in terms of such factors as safety, maintenance, and property access. The DOTD considers noise abatement to be reasonable if the following three criteria are met:

1. The noise reduction design goal is met - a minimum of one benefited receptor must receive a noise reduction of at least eight dBA.

2. The cost-effectiveness goal is met - the cost of the abatement measure should be equal to or less than $35,000 per benefited receiver.

3. Concurrence from the public on the noise abatement measure - at least 50 percent of the affected property owners support the proposed abatement.

Receivers in the Study Area are anticipated to exceed the noise abatement criteria; therefore, the complete range of possible abatement measures described above were evaluated for reasonableness and feasibility. The specific potential noise abatement measures that were

evaluated for this project to reduce or eliminate adverse noise impacts are discussed below along with a determination of their feasibility and reasonableness.

Traffic management measures may be feasible for noise abatement. These measures may include the prohibition/restriction of certain vehicle types and speed limit reductions. Prohibition of truck traffic is most meaningful in terms of noise reduction benefit but is not possible for this project because it would be against the purpose and need to improve capacity. Based on these considerations, traffic management measures are not feasible for this project.

The horizontal alignments associated with the proposed roadway improvements have been conceptually designed to maximize functionality in terms of movement and access while minimizing costs and potential residential and commercial relocations. The three build alternatives are designed at grade; no changes in vertical alignment would be possible without significant increase to the project costs. Slight shifts in the proposed horizontal alignments during the design phase could potentially minimize noise impacts to some extent, and these were considered in the three different design alternatives. However, typical engineering estimates indicate that changes in alignment must at least double the distance between the roadway and the receptor to produce a significant benefit (considered a reduction of at least three dBA), which is not with the current residential layout. Based on these considerations, alteration of horizontal and vertical alignments are not feasible for this project.

The acquisition of property rights to allow a noise buffer zone would be constrained by cost and existing abutting development and would be contrary to the project goal of minimizing environmental impacts. Based on these considerations, acquisition of property rights is not feasible for this project.

Based on the predicted traffic noise impacts above the DOTD abatement criteria, noise barriers were evaluated on feasibility and reasonableness. Of the 12 residences with elevated impacts, barriers were not feasible at R01, R02, R07, and R08 due to the number of driveways present that would obstruct construction and create breaks in the noise barrier that negate the potential noise reduction effectiveness. In total, five barrier wall locations were evaluated. The evaluation started with a barrier height of 10 feet, and increased the height in one-foot increments until the required noise reduction was achieved. If the required noise reduction could not be achieved with a 26-foot barrier, it was determined to be either not feasible or not reasonable, as reflected in the worksheets. The DOTD barrier costs used to evaluate the cost effectiveness of the barriers are included in the noise technical report.

Of the five barrier walls under consideration, one was determined to not be feasible as the predicted noise reduction was less than five dBA at the first row receiver location (R11). A barrier wall to mitigate noise at R09 was determined to be feasible, but was not reasonable, as it could not achieve an eight dBA reduction. The remaining three barrier walls were determined to be feasible but not reasonable, based on their cost effectiveness (R03, R04, R05, and R64; R06; and R32 and R33). The feasibility and reasonableness worksheets are provided in the noise technical report.

For reference, a previous noise assessment for Old Hammond Highway was completed in 1998. Although based on an older version of the DOTD Highway Traffic Noise Policy and a different road layout, this assessment found four barrier locations to be feasible and two locations to be feasible and reasonable. Those two locations were identified as the Stonegate subdivision and the Azalea

Park duplexes, of which only the Azalea Park duplexes are within the current project area. The current assessment did not find the noise impacts at the Azalea Park duplexes (R41 to R55) high enough to warrant a noise barrier assessment. The previous assessment was based on a five-lane highway and predicted a future possible noise impact of 1.6 dBA above the DOTD criteria. Based on the current four-lane design configuration the predicted worst-case noise impact is 62.9 dBA at R55, which is 3.1 dBA below the DOTD criteria.

The **No-Build Alternative** is expected to result in impacts to 12 sensitive receptors.

The **Build Alternatives** are expected to result in potential noise impacts in the Design Year 2040. Twelve sensitive receivers are expected to experience traffic noise impacts in 2040 under Alternatives 1, 2, and 3. Abatement measures were evaluated as discussed in Section 3.16.5, but were determined to be not feasible and/or unreasonable.

3.17 Wild and Scenic Rivers

The Louisiana Scenic Rivers Act was established in 1988. It was created for the protection, preservation, and enhancement of the 3000 miles of Louisiana designated Natural and Scenic Rivers. The proposed Study Area does not contain any scenic rivers as recognized by the LDWF (LDWF 2009); therefore, there are no anticipated impacts to wild and scenic rivers in the **No-Build** or **Build Alternatives**.

3.18 Coastal Barriers

The footprint of the Old Hammond Highway expansion will not impact any coastal barrier resource system units. The road expansion project is located within East Baton Rouge Parish, which is located approximately 95 miles inland from the coastal barrier zones. According to the US Fish and Wildlife Service (USFWS) coastal barrier maps, the closest units to the parish are LA-05P, S07, and S06. Therefore, there are no anticipated impacts to coastal barriers in the **No-Build** or **Build Alternatives**.

3.19 Coastal Zone Impacts

The Louisiana Coastal Zone is regulated by LDNR, Office of Coastal Management (OCM), in accordance with the Coastal Zone Management Act (CZMA). The goals of the CZMA are to preserve, protect, develop, and where possible, restore or enhance, the nation's resources within the coastal zone. The project area is located in East Baton Rouge Parish, which lies outside of the coastal zone boundary. Therefore, there are no anticipated impacts to the coastal zone in the **No-Build** or **Build Alternatives**.

3.20 Historical and Archaeological Resources

Phase I cultural resources investigation of the project's Area of Potential Effect (APE) was conducted to determine if there are historical or archaeological resources in the Study Area. The investigation consisted of a record review of prior surveys and systematic shovel testing within the APE. The record search revealed two archaeological sites recorded within one-mile of the project area; but no previously identified archaeological and architectural resources in the APE. The field

investigation of the APE identified 20 structures (17 in the indirect APE and three in the direct APE) that met the age criteria for National Register of Historic Places (NRHP) consideration but no archaeological resources were recovered. None of the 20 structures was recommended eligible for listing on the NRHP. As a result of the survey, it was determined that the proposed project would not have an effect on historic properties. The State Historic Preservation Officer (SHPO) provided its concurrence with this determination on April 26, 2018. (Appendix I).

The **No-Build Alternative** will not result in impacts to historic, archaeological, or cultural resources.

The **Build Alternatives** are anticipated to have no impact on historic, archaeological, or cultural resources. There were no archaeological resources recovered during the survey, and no impacts to historical or archaeological resources are expected. Cultural resources concurrence has been provided by SHPO. If any artifacts are discovered during construction activities, the SHPO will be notified immediately.

4 Comments and Coordination

4.1 Public Information Program

A public meeting for the Old Hammond Highway (LA 426) Boulevard De Province to Millerville Road EA was held at the Fairwood Branch Library in Baton Rouge, Louisiana, on August 4, 2016. The meeting was held as an open house format from 5:00 p.m. to 8:00 p.m. City Parish officials, Green Light Plan program representatives, and project team engineers were on hand to receive comments and address questions related to the proposed project.

Twenty-nine people registered their attendance on the sign-in sheets. The public was offered opportunities for submitting their comments for the record. A comment form was provided in the handout packet and a transcriber was available during the course of the meeting to record verbal comments. Two written comments were received at the meetings. Two comments were received via email prior to the meeting.

It is anticipated that a public hearing will be held before publication of the final Environmental Assessment. The advertisement, handouts, sign-in sheets, and written comments from the public meeting are included in **Appendix D**.

4.2 Solicitation of Views

Information about the proposed project was sent to local, state, and federal agencies in the form of a Solicitation of Views (SOV) request on July 16, 2015. The address list for the SOV was obtained from DOTD. A summary of the comments received are included in Table 4.1 and the full comments are included in **Appendix E**.

Table 4.1 Summary Solicitation of Views Comments

Respondent	Date Received	View/Comment	Response
Capital Region Planning Commission	July 20, 2015	Project does not conflict with any region-wide plans; is not redundant with other federally funded projects; and CRPC staff supports the project.	Comment noted.
US Department of Agriculture (USDA), Natural Resource Conservation Service	July 21, 2015	Project is within an urban area and exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA); USDA does not predict impacts to NRCS work in the vicinity.	Comment noted.
Federal Emergency Management Agency	July 29, 2015	Referred project to area floodplain administrator and requested project comply with EO 11988 and EO 11990.	City of Baton Rouge Floodplain Manager will be contacted for permit requirements and EO compliance.
Capital Area Groundwater Conservation District	July 27, 2015	"…in addition to numerous water wells located near gas stations along the project right of way, Baton Rouge Water Company has an active public supply well field on the north side of Old Hammond Highway."	Comment noted.
LDEQ, Office of Environmental Compliance, Assessment Division	July 28, 2015	"If this project is deemed regionally significant it must be included in a conforming metropolitan transportation plan, i.e. included in a comprehensive regional emissions analysis which demonstrates conformity to the State Implementation Plan for control of ozone."	Comment noted; CRPC is aware of and in favor of the project.
Louisiana Department of Health and Hospitals	July 29, 2015	No objection to the project at this time.	Comment noted.
United States Fish and Wildlife Service Louisiana Field Office	July 31, 2015	"…no impacts to rare, threatened, or endangered species or critical habitats… are anticipated." "No state or federal parks, wildlife	Comment noted.

Table 4.1 Summary Solicitation of Views Comments

Respondent	Date Received	View/Comment	Response
		refuges, scenic streams, or wildlife management areas are known at the specified site"	
LDNR, Office of Conservation	August 5, 2015	"…no oil, gas, or injection wells located in the project area." "…there are registered water wells in the vicinity of the project area. Also, it is possible that unregistered water wells may be located in the area." Reference SONRIS for additional records research.	Comment noted and SONRIS website application was referenced for additional data.
Louisiana Department of Agriculture and Forestry (LDAF)	August 7, 2015	Responded with no comment at this time.	Comment noted.
Baton Rouge Police Department	August 10, 2015	Does not foresee any issues.	Comment noted.
State Senator, District 6, Mack "Bodi" White	August 14, 2015	"I frequently use this stretch and am supportive of this project that will improve traffic flow."	Comment noted.
US Environmental Protection Agency (EPA), Sole Source Aquifer Program	August 17, 2015	"The project… is located on the Southern Hills aquifer system which has been designated a sole source aquifer (SSA) by the EPA." "…we have determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site."	Comment noted.
Office of Culture, Recreation and Tourism, Division of Archaeology, State Historic Preservation Officer	August 26, 2016	"No known historic properties will be affected by this undertaking."	Comment noted.
Alabama-Coushatta Tribe of Texas, Historic	August 27, 2015	"…no known impacts to cultural assets of the Alabama-Coushatta Tribe of Texas are anticipated in	Comment noted.

Table 4.1 Summary Solicitation of Views Comments

Respondent	Date Received	View/Comment	Response
Preservation Officer		conjunction with this proposal."	
Department of the Army, Corps of Engineers, New Orleans District (CEMVN)	September 9, 2015	"We do not anticipate any adverse impacts to any Corps of Engineers projects." "DA permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional wetlands or waters."	Comment noted, Wetlands delineation was completed as a part of this EA, appropriate permits will be obtained.

4.3 Agency Coordination

Agency coordination is an important part of attaining environmental clearance through the NEPA process. The following agency coordination was essential to the development of this environmental assessment.

- Kick-off Meeting for the Old Hammond Highway (LA 426) project was held at DOTD Headquarters on December 9, 2014. Staff from FHWA, DOTD, Department of Public Works (DPW), Green Light Plan program managers and the consultant team attended to discuss the scope and schedule of the project. The relevance and validity of the 1998 EA was discussed. DOTD and FHWA determined that since revisions have been made to DOTD Engineering and Design Standards a new document titled "EA Supplement" would be generated for the 1998 EA Old Hammond Highway Phase 2.
- Recommended Alternative Meeting was held January 27, 2016, at DOTD Headquarters to review alternatives and the alternatives matrix for choosing the preferred alternative. Staff from FHWA, DOTD, DPW, the Green Light Plan program managers, and the consultant team attended.
- Public Meeting was held August 4, 2016, and several staff members from public agencies attended. The agency sign-in sheet is included in **Appendix D**.
- DOTD and the City-Parish reviewed draft copies of the technical reports used as a basis for this study and comments were received and incorporated in November and December 2016 and March 2017. Comments were received from FHWA in March 2019 and were incorporated in April 2019.

4.4 Public Involvement

4.4.1 Public Meeting

A public meeting for the Old Hammond Highway Segment 1 EA was held on August 4, 2016, at the Fairwood Branch Library in Baton Rouge, Louisiana, to provide information about the proposed project, the proposed Build alternatives, the environmental process, estimated project timeline, and

the next steps in the process. The meeting was held as an open house format from 5:00 pm to 8:00 pm. The meeting provided an opportunity for the public to view the proposed alternatives, ask questions of the project team, and provide comments for consideration. The public meeting was advertised in the Baton Rouge Advocate Newspaper on July 18 and 25, 2016; posted on the Green Light Plan website with a link to the posted Advocate notice, and announced on WBRZ television station's website on August 3, 2016. An informational letter about the project and public meeting was mailed to stakeholders and elected officials.

Twenty-nine people attended the meeting and four comments were received during the public comment period – two at the public meeting and two via email. All respondents agreed there is a need for this project, but voiced differing opinions on intersection and lane preferences. A public meeting summary including copies of the presentation, advertisements, informational letter, and public comments is included in **Appendix D**.

It should be noted in the weeks following the public meeting, the 2016 floods occurred; due to this occurrence, the limited amount of comments made does not accurately reflect interest generated in this project. Comments were open-ended and assessed as positive, negative, or neutral toward one or more alternatives; therefore, the total number of positive and negative comments does not equal the total number of meeting comments received.

Table 4.2 Summary of Comments Received from Public Meeting

Name	Comment Summary	Alt 1: 16' Median Signalized	Alt 2: 16' Median Roundabouts	Alt 3: 16' Median Hybrid
Mrs. Pam Bercegeay West	Prefers roundabouts over lights, excited for lane increase to reduce bottle necking; wishes it would continue to O'Neil; wants speed increased		Favorable	Favorable
Mr. Carroll Percoux	Wants bike paths; wants improvements to continue to O'Neil Lane			
Mr. Phillip Fetterman	Against Roundabout at Old Hammond & South Flannery; not in favor of medians	Favorable		
Mr. and Mrs. David Hebert	Against Roundabouts and Median, prefers five-lane			

4.4.2 Public Hearing

A public hearing will be conducted after the Final Draft EA is approved by FHWA and DOTD. The EA will be available to the public for review prior to the public hearing.

5 Alternatives Comparison and Preferred Alternative

Each potential build alternative is consistent with the purpose and need of the project. The four-lane divided typical section is similar in each alternative and provides similar capacity for Old Hammond Highway from Boulevard de Province through South Flannery just east of Millerville. Each alternative provides similar access management concepts (RCUT median openings, RIRO medians) and pedestrian and bicycle accommodations. Minor intersections along Old Hammond were treated similarly in each alternative, while major intersections varied between signalized intersection alternatives and roundabout options. Traffic analyses have shown improved LOS and traffic flow with each proposed alternative making all alternatives viable for consideration. Beyond traffic flow, several factors were taken into consideration before selecting the proposed alternative. Environmental and socioeconomic factors as well as construction, utility, and ROW costs were thoroughly sought out and analyzed. Specific values and scenarios for each alternative will be discussed in the sections below.

5.1 Alternative 1

As previously discussed, Alternative 1 consists of a four-lane divided highway with 12-foot inside lanes and 14-foot outside lanes to be shared with cyclists. In the ROW, a six-foot-wide sidewalk is included on each side and the drainage is curb and gutter. The alternative includes a 16-foot median throughout and a signalized intersection at South Flannery with additional turn lanes. This alternative follows along the existing centerline and has a ROW width of 125 feet. The total land area for this alternative is 6.65 acres.

5.1.1 Advantages of Alternative 1

- Alternative 1 has the lowest estimated property cost for ROW expansion.
- No owner occupied residences will be displaced.
- Commercial property is not impacted at all by this option.
- Alternative 1 does not interfere with local service station or local “staple” commercial property.

5.1.2 Disadvantages of Alternative 1

- Alternative 1 was the least desirable in the traffic study.
- Alternative 1 requires numerous bulb-outs to accommodate the RCUT configuration needed to maintain this alternative.
- Construction duration is expected to take the longest.

5.2 Alternative 2

As previously discussed, Alternative 2 consists of a four-lane divided highway with 12-foot inside lanes and 14-foot outside lanes to be shared with cyclists. In the ROW, a six-foot-wide sidewalk is included on each side and the drainage is curb and gutter. The alternative includes a 16-foot median throughout. Roundabouts are present at both South Flannery and Boulevard de Province. This alternative follows along the existing centerline and has a ROW width of 125 feet.

5.2.1 Advantages of Alternative 2

- Alternative 2 is the most effective alternative per traffic analysis.
- While it is impactful of commercial properties, majority of the impact is parking spaces.
- Alternative does not interfere with local service station or local “staple” commercial property.

5.2.2 Disadvantages of Alternative 2

- Alternative 2 has the highest estimated property cost for ROW expansion.
- Public meeting comments expressed distaste in excessive roundabouts.
- Alternative 2 has the largest negative impact on commercial properties in the area.

5.3 Alternative 3

As previously discussed, Alternative 3 consists of a four-lane divided highway with 12-foot inside lanes and 14-foot outside lanes to be shared with cyclists. In the ROW, a six-foot-wide sidewalk is included on each side and the drainage is curb and gutter. The alternative includes a 16-foot median throughout. A hybrid of Alternatives 1 and 2, Alternative 3 is designed with a roundabout at South Flannery and a U-turn bulb-out west of Boulevard de Province. This alternative follows along the existing centerline and has a ROW width of 125 feet.

5.3.1 Advantages of Alternative 3

- While Alternative 3 is not the lowest estimated property cost for ROW expansion, it is less than $20,000 greater than the lowest estimate.
- Alternative does not interfere with local service station or local “staple” commercial property.
- Commercial property is not impacted at all by this option.

5.3.2 Disadvantages of Alternative 3

- Boulevard de Province intersection will not operate at optimum capacity.

5.4 Right-of-Way Impacts, Displacements, and Relocations

The proposed project will displace an estimated one owner occupied household for Alternatives 2 and 3, and zero with Alternative 1. Per demographic data, this single-family household will not exceed four members and will not be owned by persons considered elderly or minority. The estimated value of this residence is $150,000. It is a combination of brick and siding and is estimated to have three bedrooms and two bathrooms. The residence appears to be under renovation due to the August 2016 flood.

In addition to owner occupied housing this area has several multi-family rental units. Alternatives 1 and 3 will displace 12 of these units. It is projected that 10 of these units will be minority households and that one will be an elderly household. It is also estimated per demographics that each unit is likely to house five or more persons per household. The estimated values of the displaced multi-family buildings (four-plex) are $80,000 per building. All buildings are a combination of brick and siding with an effective age of 25 years. Each unit is estimated to have two bedrooms and two bathrooms.

The supply of comparable decent, safe, and sanitary (DSS) housing in the area is low due to the area being inundated in the August 2016 flood. Many residences in the area are being renovated and thus the supply of comparable DSS housing will increase by the beginning of the project.

No commercial buildings will be displaced for any alternative. Six buildings are economically impacted on Alternatives 1 and 3, and 11 are economically impacted on Alternative 2. The impacts or damages are mainly due to reduced parking. The five additional buildings in Alternative 2 are heavily impacted by the reduction of parking and may cause tenant and owner occupied businesses to move if parking cannot be restored. The storage building impacted by all three alternatives will lose 10 storage units. These units are tenant occupied and would require the relocation of personal property. There is a sufficient supply of self-storage facilities in the market area to facilitate this relocation. Existing ROW for each Build Alternative is 10.99 acres. The required ROW acres for the Build Alternatives are listed below and shown in **Figures 20a** - **c**.

- Build Alternative 1: 5.37 acres
- Build Alternative 2: 4.16 acres
- Build Alternative 3: 3.71 acres

The ROW and relocation costs for each alternative are included in the Opinion of Probable Cost **Table 5.1** and are further discussed and detailed in the Final Conceptual Stage Relocation Plan dated January 31, 2017. The acquisition of ROW does not necessarily constitute a relocation impact. The Uniform Relocation Act of 1970 ensures fair compensation and assistance to those whose property is compulsorily acquired for public use under eminent domain law. It is a policy of DOTD to provide just compensation for properties taken for a public project.

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Figure 20a Alternative 1 Required ROW

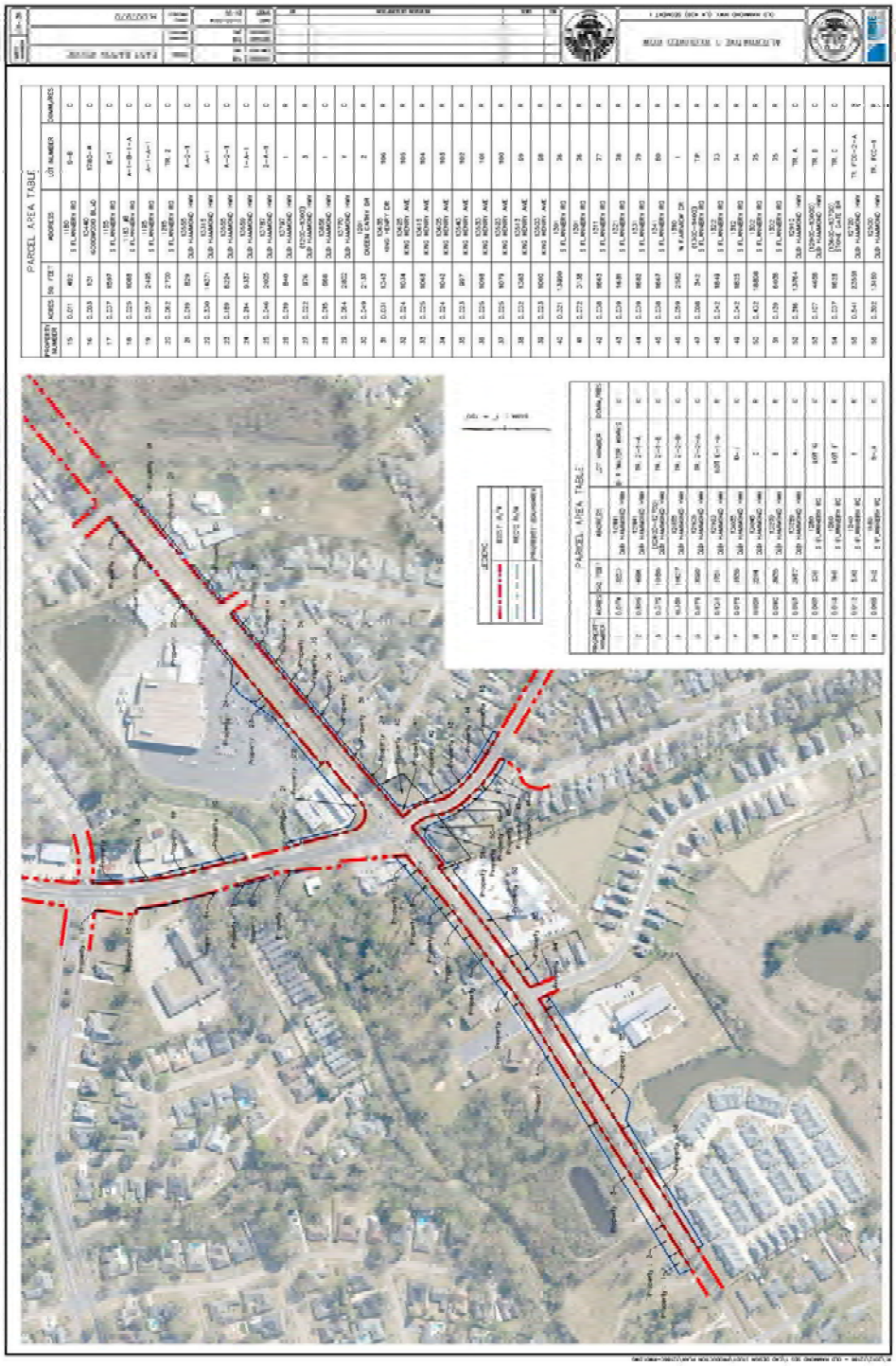


Figure 20b Alternative 2 Required ROW

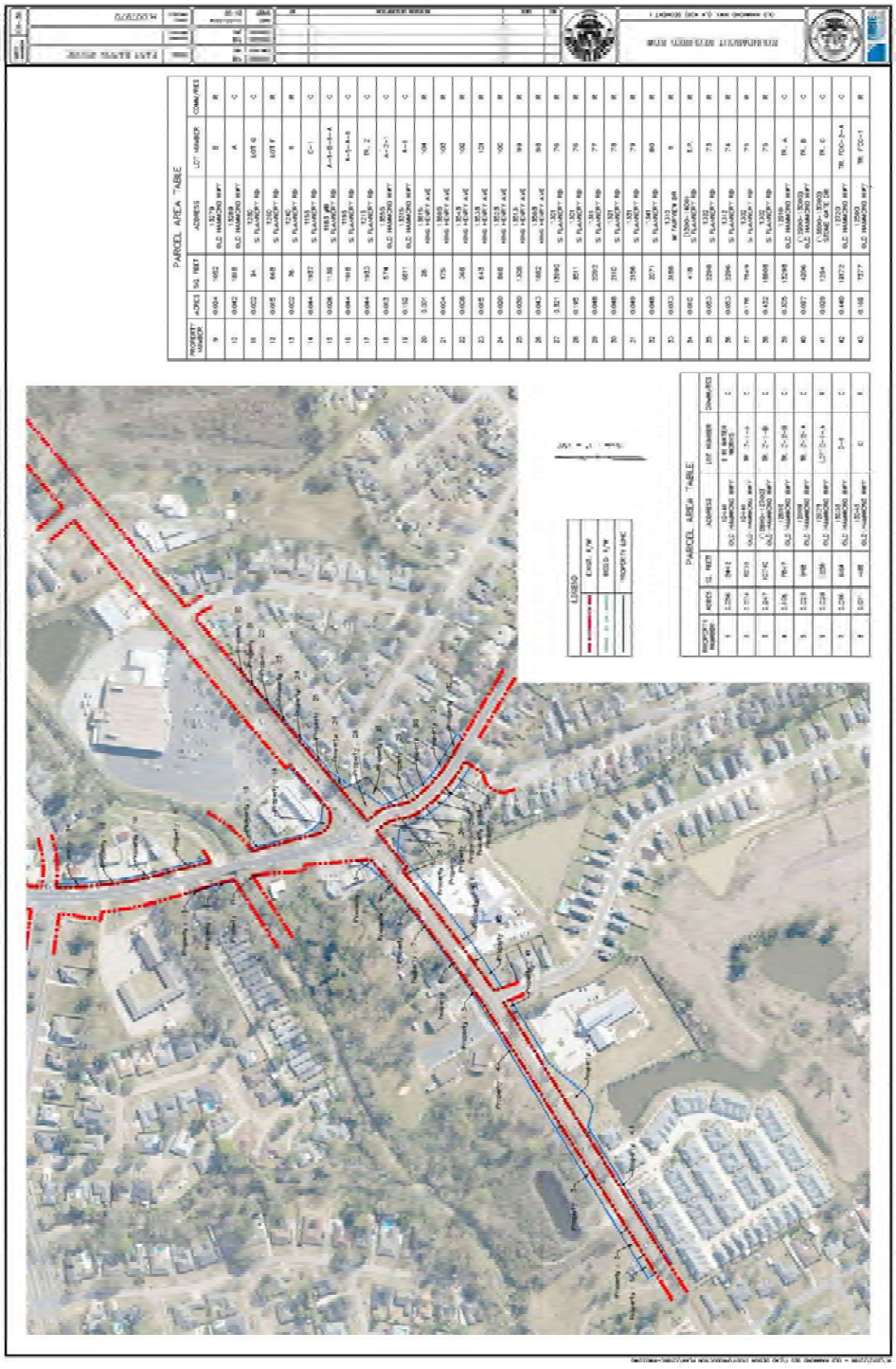
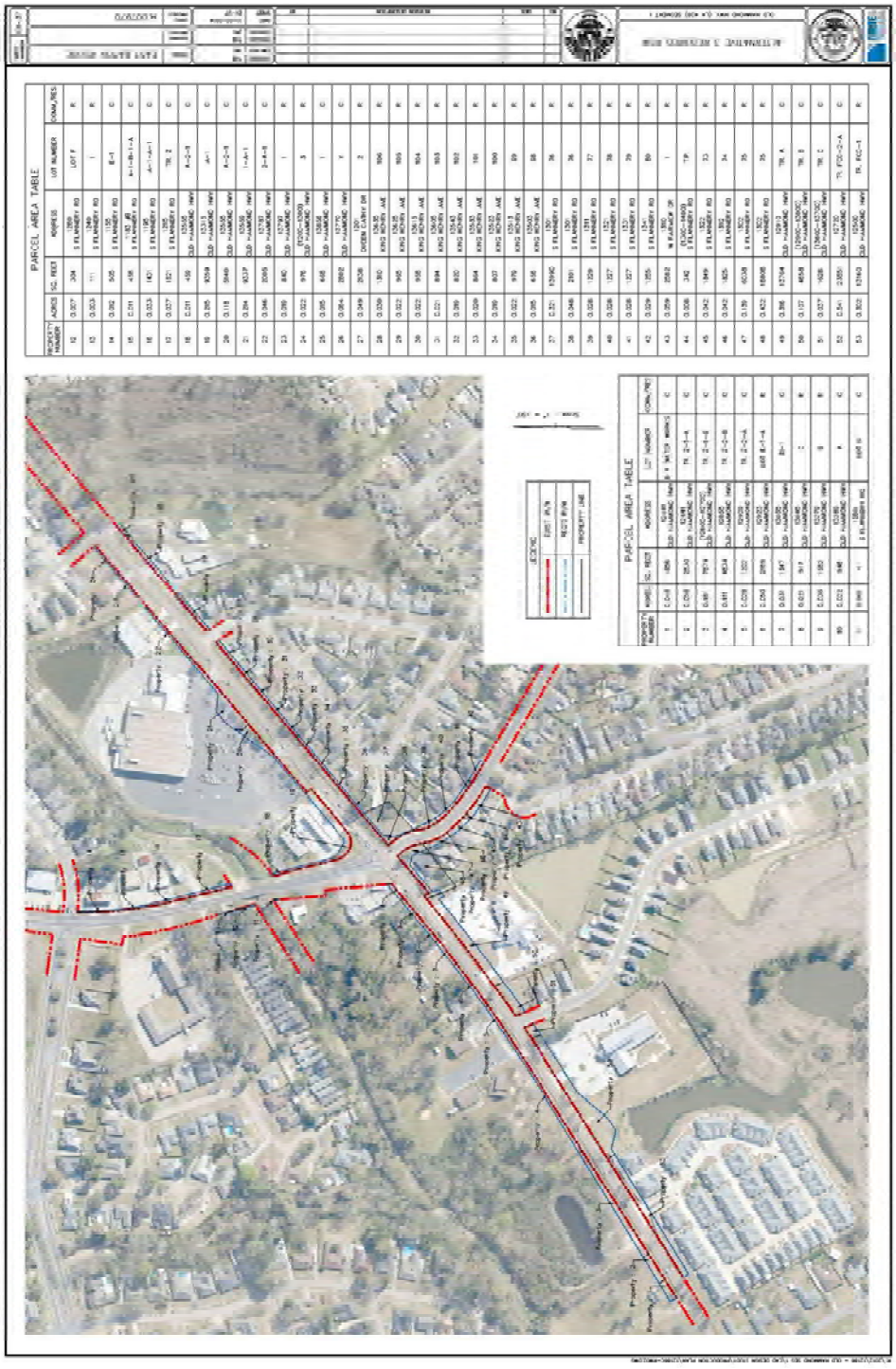


Figure 20c Alternative 3 Required ROW



5.5 Environmental Factors and Conceptual Mitigation

The environmental technical reports summarizing the environmental impacts identified through database research, field reviews and other studies have been provided under separate cover and discussed with their potential impacts in **Section 3**. For all matrix values listed as an "R1," there are no known impacts. A rating of "R2", a low to medium impact, is assigned for Hazardous Material Impacts because these alternatives impact a former Circle K (currently Exxon) store and an Eagle Station (former Chevron) where oil or hazardous materials may exist.

The USACE will have the final say on the jurisdictional wetlands and other waters acreages, but the values identified range from 12.5 percent to 13 percent of the total ROW required for each alternative. No compensatory mitigation costs are anticipated. None of the project area can be considered prime farmland, since it is urban. Generally, the environmental evaluation factors show a similar degree of impacts for the three build alternatives.

5.6 Utility Impacts

Located along the roadway are numerous utilities that service the commercial, residential, and municipal developments in the surrounding areas. When the project area was surveyed, LA One Call was contacted and four locate request tickets (130220627, 130220674, 130220754, and 130220782) were submitted. The resulting ground markings aided in the location of the existing underground utilities. The following list displays the utilities that were called out on the tickets.

- Water – Baton Rouge Water Company
- Gas – Entergy Gas
- Overhead Electric – Entergy Electric
- Underground Electric – Entergy Electric
- Overhead Telephone – AT&T
- Underground Telephone – AT&T
- Underground Fiber Optics – Level 3 Communications
- Traffic Signals – EBRP Department of Public Works
- TV/ Cable – Cox Communications
- Gas – City of Denham Springs
- Underground Electric – DEMCO
- Gas Pipeline – Shell
- Gas Pipeline – Marathon Petroleum Corporation

Major Utility Relocation Inventory is based on a combination of field investigation, topographic surveying, and information - including maps and drawings - provided by individual utility companies. It shows a projected list of major utilities that will have to be relocated to accommodate the widening of Old Hammond Highway and South Flannery Road. Stationing is based on the Old Hammond Highway and South Flannery Road projected and adopted alignments. The required ROW shown in this design study is set to accommodate all required utility relocations; however, Entergy may prefer to acquire their own servitude outside the ROW for their main overhead transmission lines, which currently runs parallel to Old Hammond Highway inside the corridor ROW along the north side of the road. This transmission line will remain in place under the design for the roundabout alternative, Alternative 2. Conversely, if the design for the traditional intersections in Alternative 1 or 3 were

used, the transmission line would need to be relocated farther north. The existing Shell and Marathon high-pressure gas pipelines may have to be lowered to accommodate drainage of the roadway and the required drainage improvements.

Utility relocation cost assumes that Entergy Transmission and AT&T will absorb all of their relocation costs because their utilities are within the existing Old Hammond Highway ROW. In addition, this cost assumes the Shell and Marathon Pipelines under Old Hammond Highway will need to be lowered due to construction clearances over the pipes. Furthermore, this cost also accounts for the costs associated with the coordination necessary to have these lines relocated.

5.7 Construction Costs

The preliminary cost estimates for construction are shown in **Table 5.1**. Costs are shown for each major component of the construction project, including ROW and utilities. The roadway construction costs are reflective of the total project cost, the selected alternative is both least expensive in construction, as well as requires the smallest amount of ROW to acquire. These cost estimates are based on the assumption that Entergy Transmission will absorb utility relocation costs wholly because their lines already exist within the Old Hammond Highway ROW. The ROW costs are based on taking lines only; whole lot buyouts that may be required are not included in ROW costs.

Table 5.1 Opinion of Probable Cost Table

		Alternative 1 Signalized Intersection	Alternative 2 Double Roundabouts	Alternative 3 Hybrid
Construction		$18,722,671.59	$19,008,363.47	$18,758,363.47
Right-of-way, Relocation		$6,558,652.00	$6,817,221.00	$6,577,575.00
Mitigation		$395,000.00	$395,000.00	$395,000.00
Utilities		$1,860,000.00	$1,860,000.00	$1,860,000.00
Subtotal		**$27,536,323.59**	**$28,080,584.47**	**$27,590,938.47**
Engineering & Contingency		$5,507,264.72	$5,616,116.89	$5,518,187.69
Total		**$33,043,588.31**	**$33,696,701.36**	**$33,109,126.16**

5.8 Funding

The environmental assessment phase of this project has been made possible by the support of The Green Light Plan. The Green Light Plan is a comprehensive transportation program to expedite and improve roadway infrastructure throughout East Baton Rouge Parish funded through an existing half percent sales tax. This program is overseen by the Baton Rouge area CRPC to ensure the project is needed and desirable for improvement to the entire Parish. This project has been identified as a candidate for federal assistance. All ongoing studies are being prepared under supervision of FHWA using NEPA guidelines, which will allow for the use of federal funds upon availability.

5.9 Preferred Alternative

The impacts of each Alternative are seen in **Table 5.2**, the design matrix. The design matrix was created by factoring the weight of each area of impact and multiplying that weighted percentage by the ranked value for each alternative. The ranked value shown in **Table 5.3** was created by using the largest raw value for each as the denominator and dividing the raw value by that amount. The factors that were considered are expressed in each table. The raw values of each factor can be seen in **Table 5.4**. Exact values could not be calculated for minority impact, traffic efficiency, and construction duration. These three values were ranked on a scale one to five with five being of highest impact and one being the least. Other important factors that are not shown in the table are waters of the US that were impacted and wetland mitigation; these factors are not shown because they have the same impact for each alternative.

Table 5.2 Comparison of Alternatives – Design Matrix

Design Matrix	Weight %	Alternative 1 Signalized Intersection	Alternative 2 Double Roundabouts	Alternative 3 Hybrid
Initial Build Cost	24	24%	24%	24%
Construction Duration	8	8%	6%	3%
Traffic Efficiency	20	20%	8%	12%
Right-of-Way Acquirement	16	15%	16%	15%
Commercial Property Impacted	16	10%	16%	9%
Noise Impacted	4	4%	4%	4%
Adverse Impact to Minority or Low Income Populous	12	9%	5%	9%
Total Values:	100	91%	79%	77%

Table 5.3 Comparison of Alternatives – Ranked Values

Ranked Value	Maximum Value	Alternative 1 Signalized Intersection	Alternative 2 Double Roundabouts	Alternative 3 Hybrid
Initial Build Cost (dollars)	$19,008,363	0.98	1.00	0.99
Construction Duration (years)	5	1.00	0.80	0.40
Traffic Efficiency (rank)	5	1.00	0.40	0.60
Right-of-Way Acquirement Cost	$6,817,221	0.96	1.00	0.96
Commercial Property Impacted (# of Parcels)	22	0.64	1.00	0.55
Noise Impacted	13	0.92	1.00	1.00
Adverse Impact to Minority or Low Income Populous	5	0.80	0.40	0.80

Table 5.4 Comparison of Alternatives – Raw Values

Raw Values		Alternative 1 Signalized Intersection	Alternative 2 Double Roundabouts	Alternative 3 Hybrid
Initial Build Cost (dollars)		$18,722,671.59	$19,008,363.47	$18,758,363.47
Construction Duration (years)		5	4	2
Traffic Efficiency (rank)		5	2	3
Right-of-Way Acquirement Cost		$6,558,652	$6,817,221	$6,577,575
Commercial Property Impacted (# of Parcels)		14	22	12
Noise Impacted		12	12	12
Adverse Impact to Minority or Low Income Populous		4	2	4

Table 5.5 Comparison of Alternatives – Environmental Factors

Factor	Units	Alternative 1 Signalized Intersection	Alternative 2 Double Roundabouts	Alternative 3 Hybrid
Wetland Impacts	Acres	0.59	0.59	0.59
Water of the US	Linear Ft	622.3	622.3	622.3
Prime Farmland	Acres	0	0	0
Hazardous Material Impacts	Rating	R2	R2	R2
Potential T&E Impacts	Rating	R1	R1	R1
Noise Receivers Impacted (>NAC or >10 dBA increase)	Number	12	12	12
4f Impacts	Rating	R1	R1	R1
Cultural Resource Impacts	Rating	R1	R1	R1
ROW Impacts	Acres	5.37	4.16	3.71

Ranking Scale: R1 – Low Impact; R2 – Low/Medium Impact; R3 – Medium Impact; R4 – Medium/High Impact; R5 – High Impact

It can be seen that with rounded values the difference between initial build costs is minimal. Alternative 3 is expected to take the least amount of time. The traffic efficiency for Alternative 2 would have the most improvement, but ultimately is not at a great difference to Alternative 3. The differences between Alternative 2 and Alternative 3 are minimal. A major difference appears in the commercial impacts of Alternative 2.

Overall, Alternative 3, the hybrid, meets the purpose and need and has the least overall negative impacts. Alternative 3 is the recommended alternative for this project.

6 References

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APPENDIX A

Alternative 1

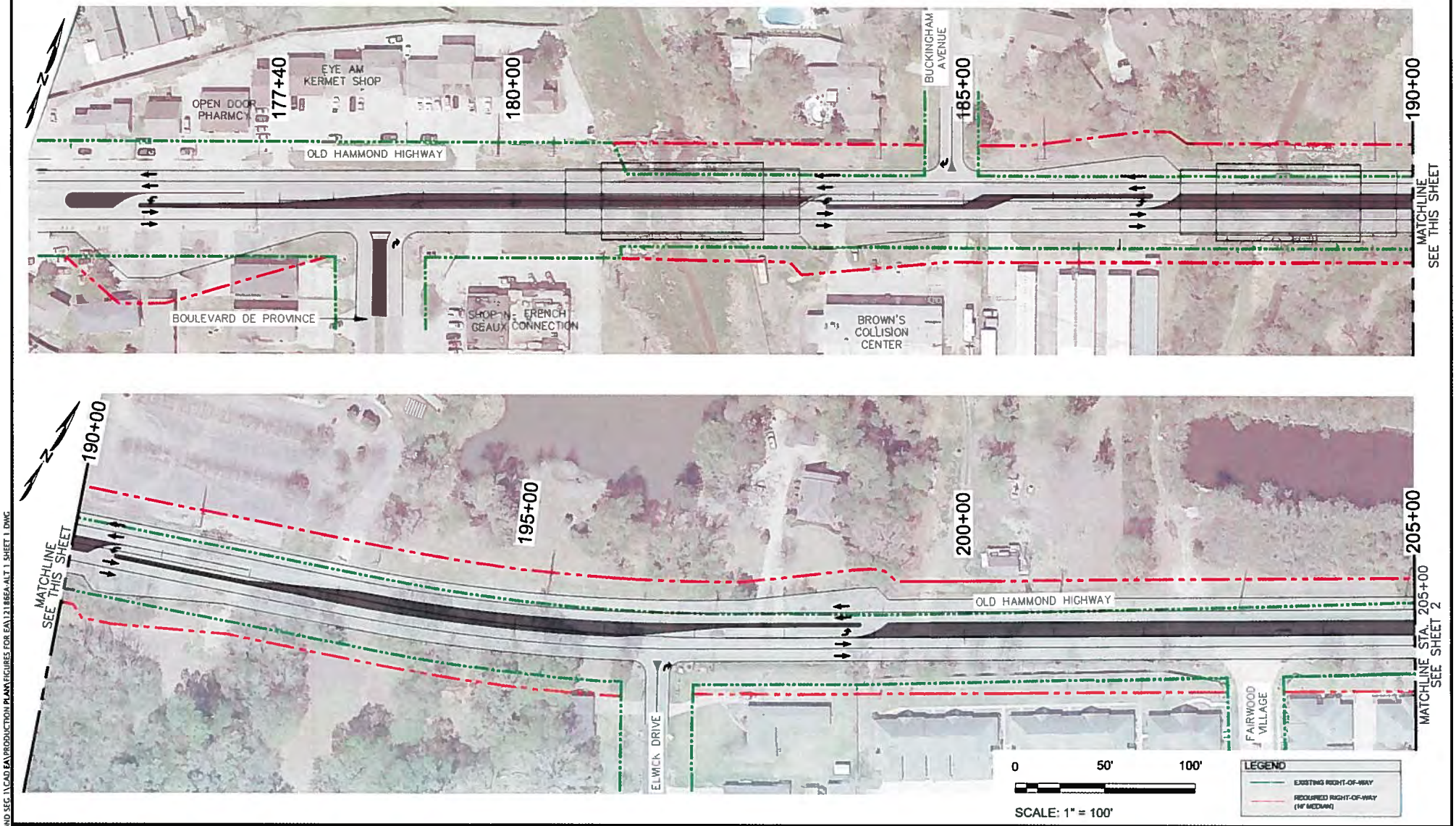

FIGURE 7
SHEET 1 OF 4
BUILD ALTERNATE 1
(16' MEDIAN WITH SIGNALIZED INTERSECTION)

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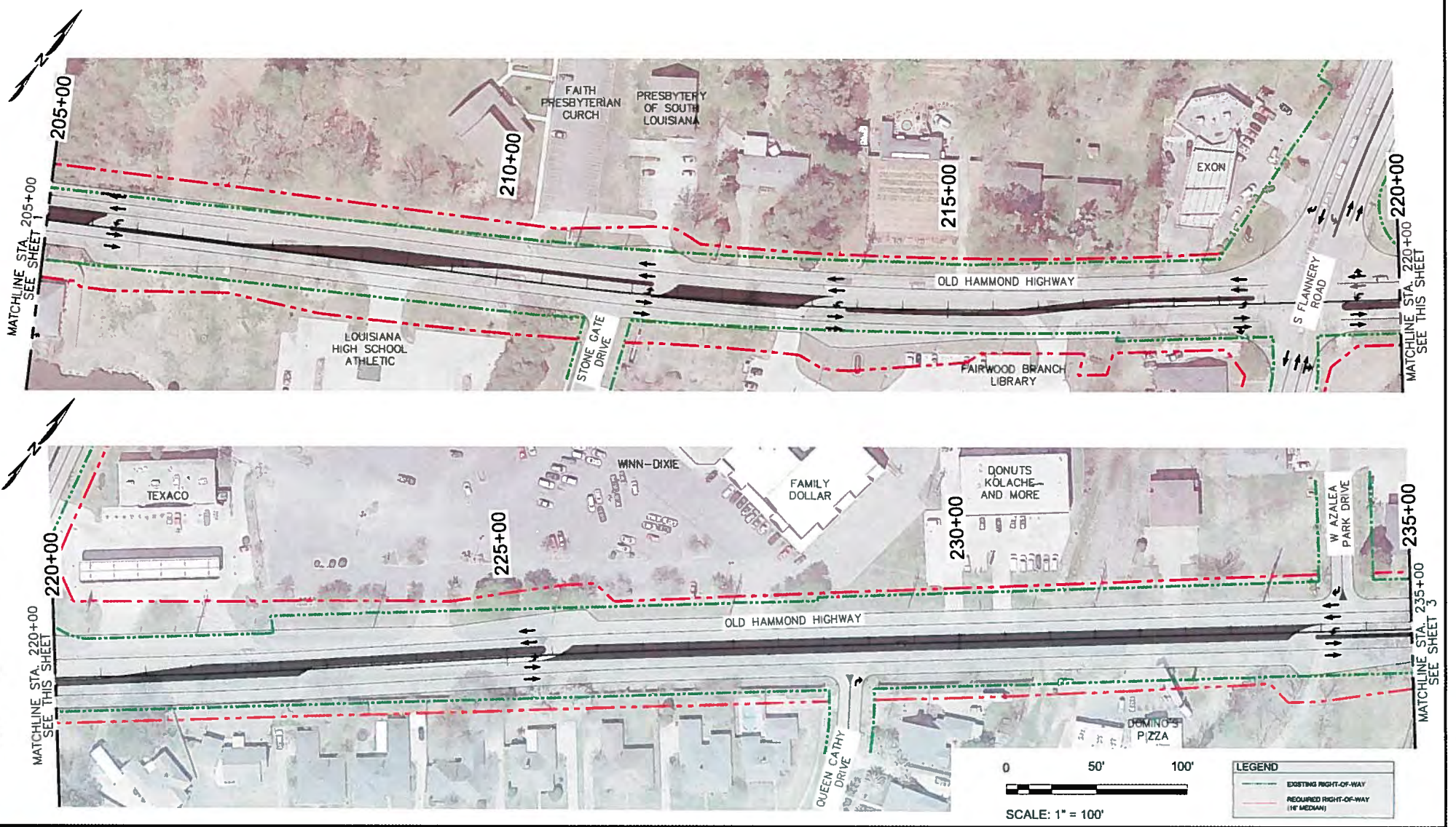

FIGURE 7
SHEET 2 OF 4
BUILD ALTERNATE 1
(16' MEDIAN WITH SIGNALIZED INTERSECTION)

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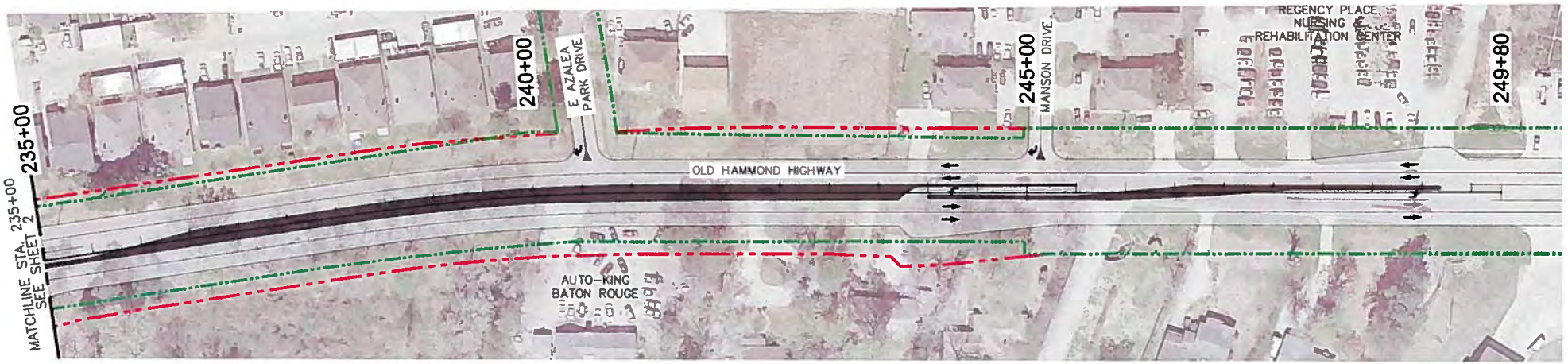

0 50' 100'

SCALE: 1" = 100'

LEGEND

EXISTING RIGHT-OF-WAY

REQUIRED RIGHT-OF-WAY (16' MEDIAN)

U.S. Department of Transportation Federal Highway Administration

DOTD Louisiana Department of Transportation & Development

FIGURE 7
SHEET 3 OF 4
BUILD ALTERNATE 1
(16' MEDIAN WITH SIGNALIZED INTERSECTION)

GHD URBAN SYSTEMS USI FORTE & TABLADA

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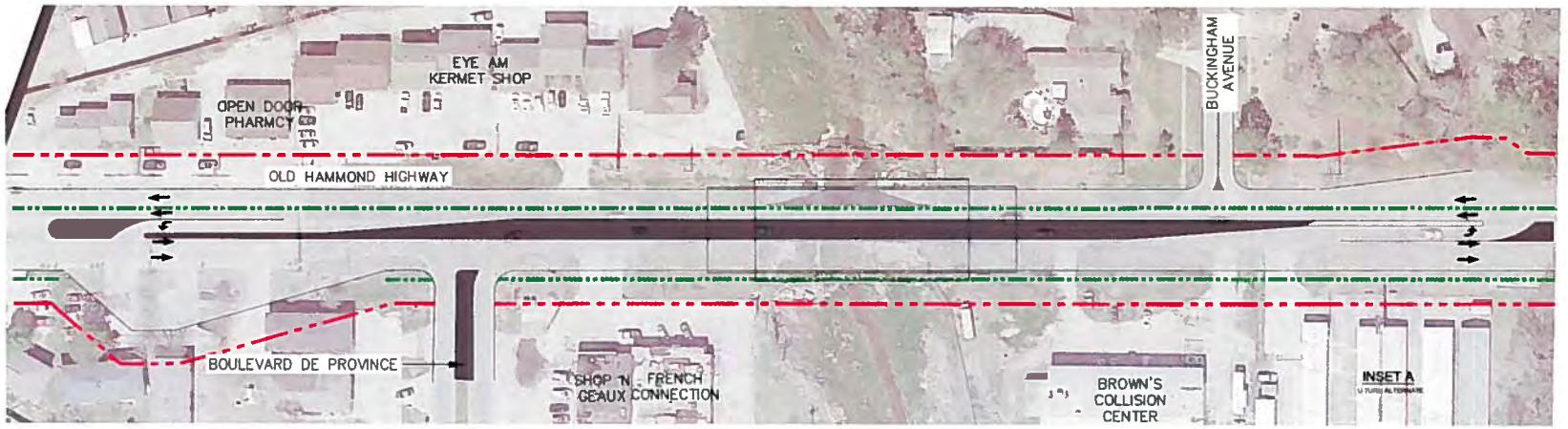

0 50' 100'

SCALE: 1" = 100'

LEGEND

EXISTING RIGHT-OF-WAY

REQUIRED RIGHT-OF-WAY (16' MEDIAN)

U.S. Department of Transportation Federal Highway Administration

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

FIGURE 7
SHEET 4 OF 4
BUILD ALTERNATE 1
(16' MEDIAN WITH SIGNALIZED INTERSECTION)

GHD URBAN SYSTEMS Inc. USI FORTE & TABLADA

R:\2012\12186 - OLD HAMMOND SEG 1\CAD EA\PRODUCTION PLANS\FIGURES FOR EA\12186EA_ALT 1 SHEET 1.DWG

APPENDIX B

Alternative 2

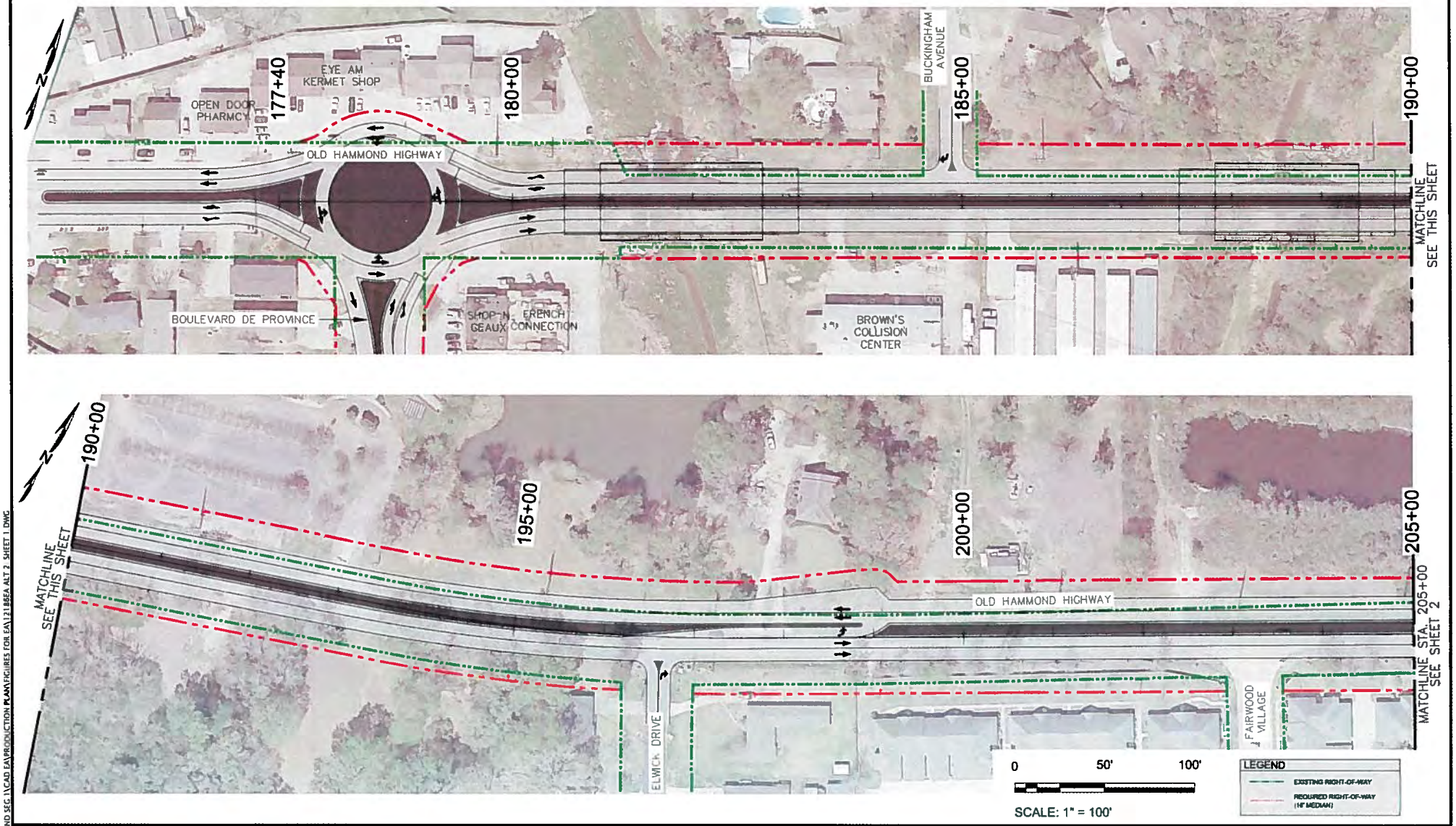

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FIGURE 8
SHEET 1 OF 3
BUILD ALTERNATE 2
(16' MEDIAN WITH 2 ROUNDABOUTS)

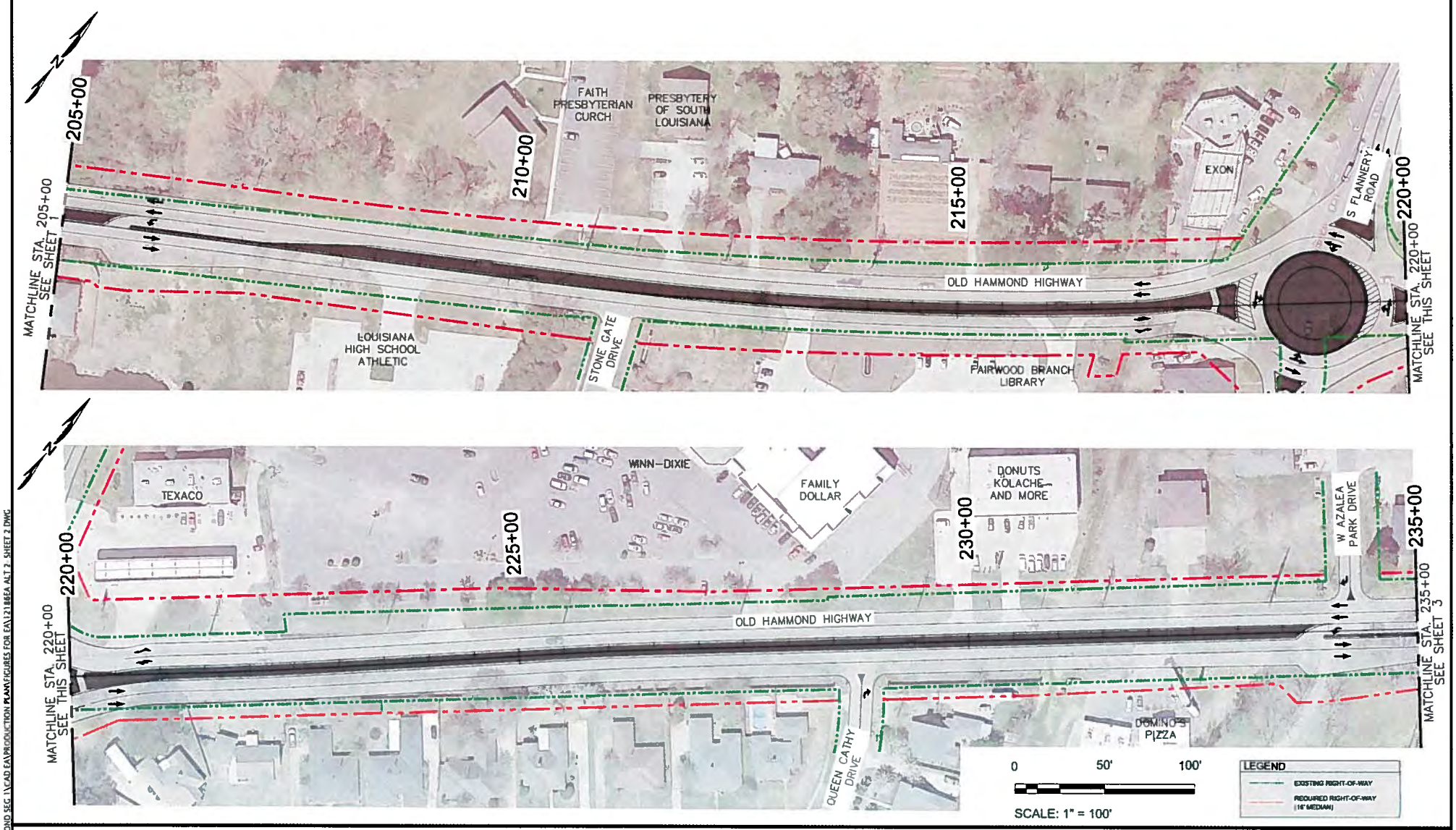

FIGURE 8
SHEET 2 OF 3
BUILD ALTERNATE 2
(16' MEDIAN WITH 2 ROUNDABOUTS)

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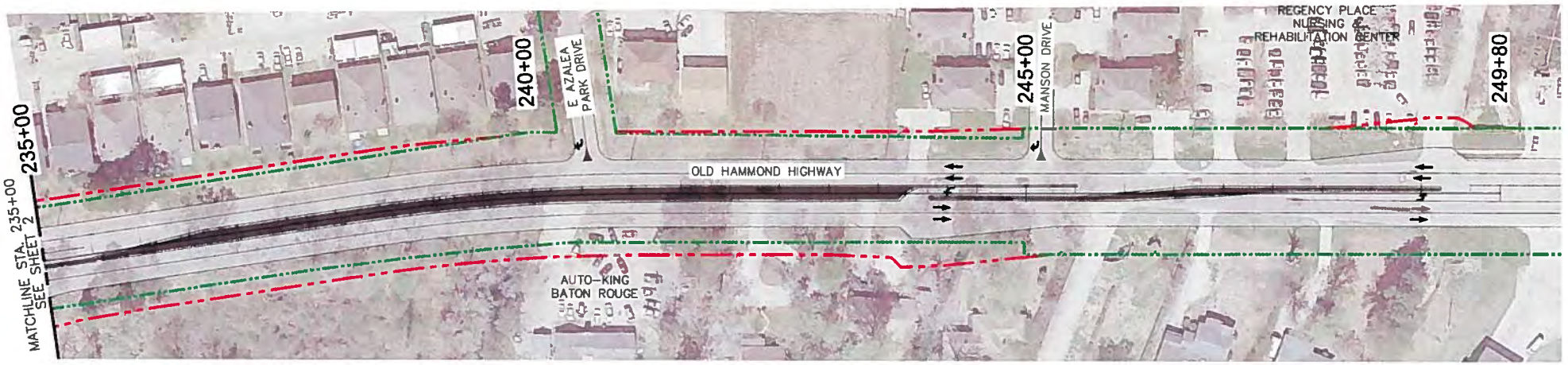

0 50' 100'

SCALE: 1" = 100'

LEGEND

EXISTING RIGHT-OF-WAY

REQUIRED RIGHT-OF-WAY (16' MEDIAN)

U.S. Department of Transportation Federal Highway Administration

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

FIGURE 8
SHEET 3 OF 3
BUILD ALTERNATE 2
(16' MEDIAN WITH 2 ROUNDABOUTS)

GHD URBAN SYSTEMS INC. USI FORTE & TABLADA

I:\2012\12186 - OLD HAMMOND SEC 1\CAD EA\PRODUCTION PLANS\FIGURES FOR EA\12186EA ALT 2 SHEET 3.DWG

APPENDIX C

Alternative 3

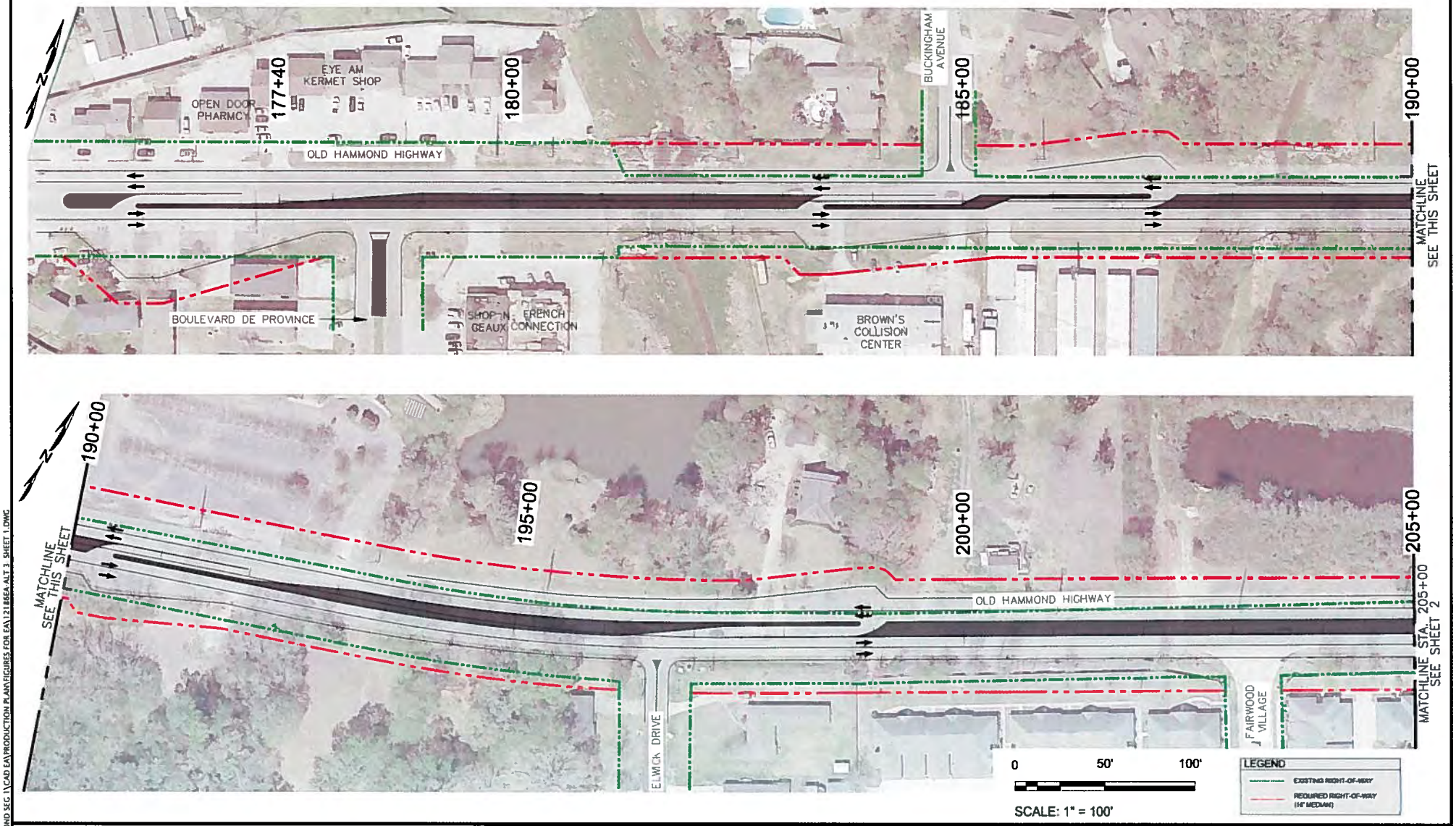

FIGURE 9
SHEET 1 OF 3
BUILD ALTERNATE 3
(16' MEDIAN WITH 1 ROUNDABOUT)

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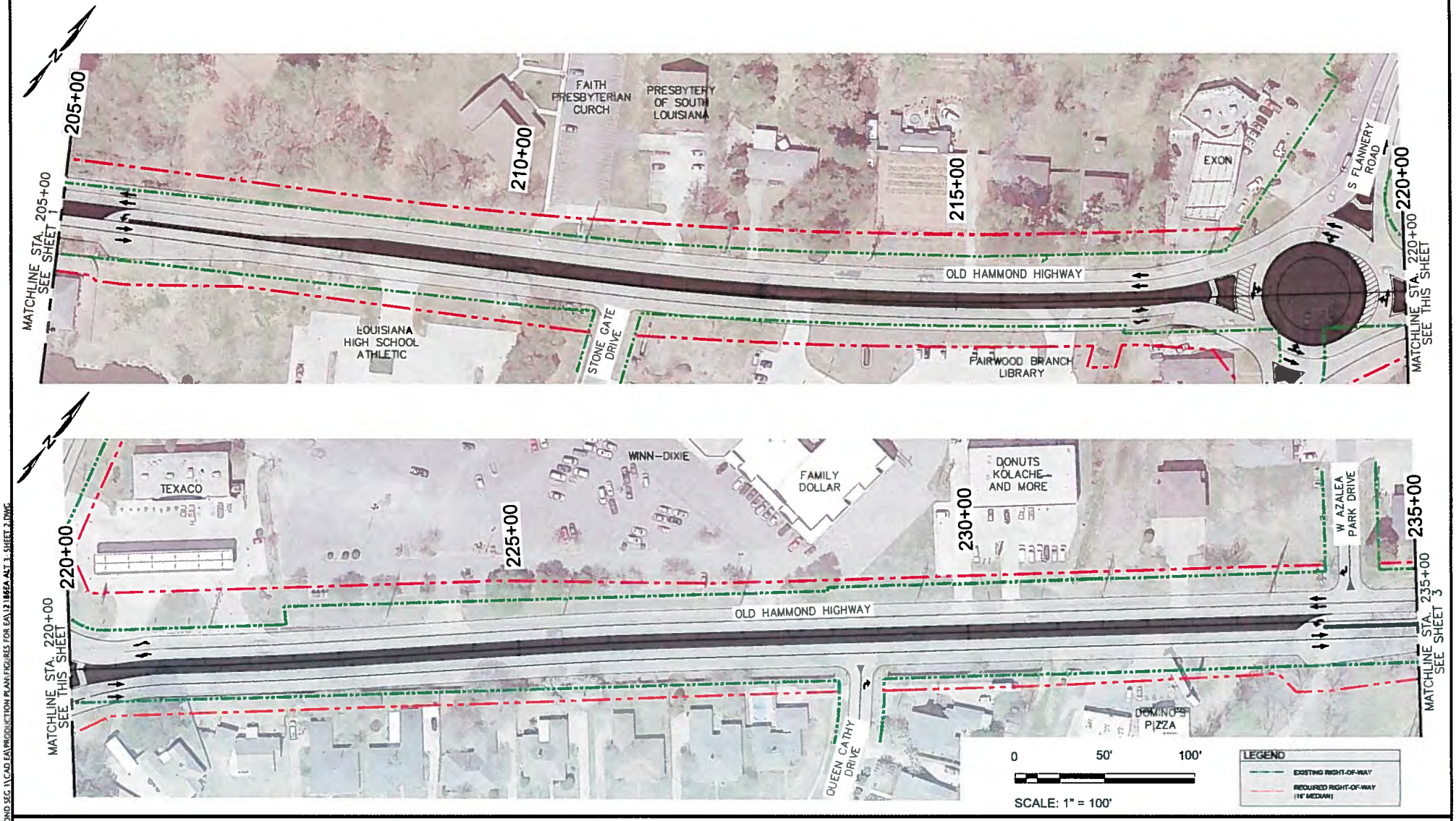

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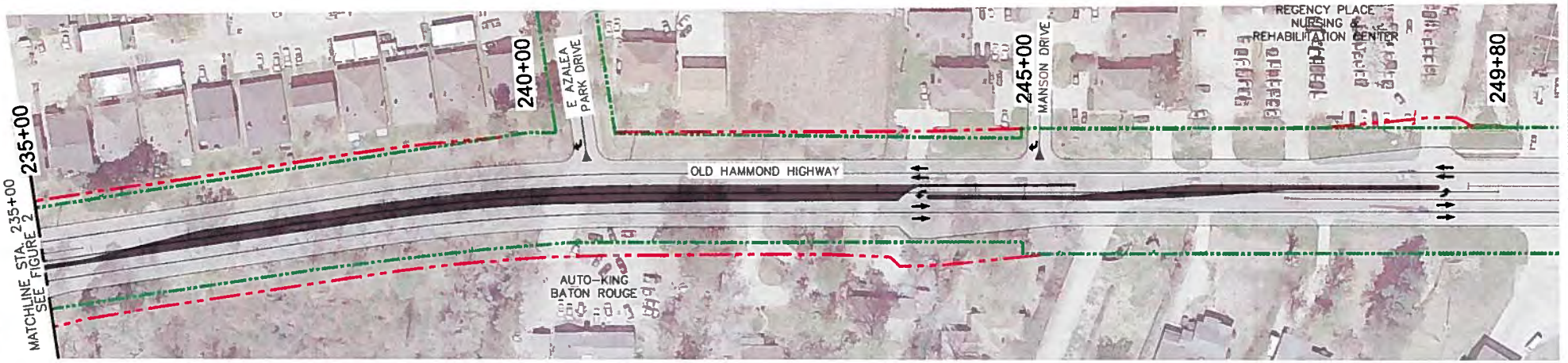
FIGURE 9
SHEET 2 OF 3
BUILD ALTERNATE 3
(16' MEDIAN WITH 1 ROUNDABOUT)



0 50' 100'

SCALE: 1" = 100'

LEGEND

EXISTING RIGHT-OF-WAY

REQUIRED RIGHT-OF-WAY (16' MEDIAN)

FIGURE 9
SHEET 3 OF 3
BUILD ALTERNATE 3
(16' MEDIAN WITH 1 ROUNDABOUT)

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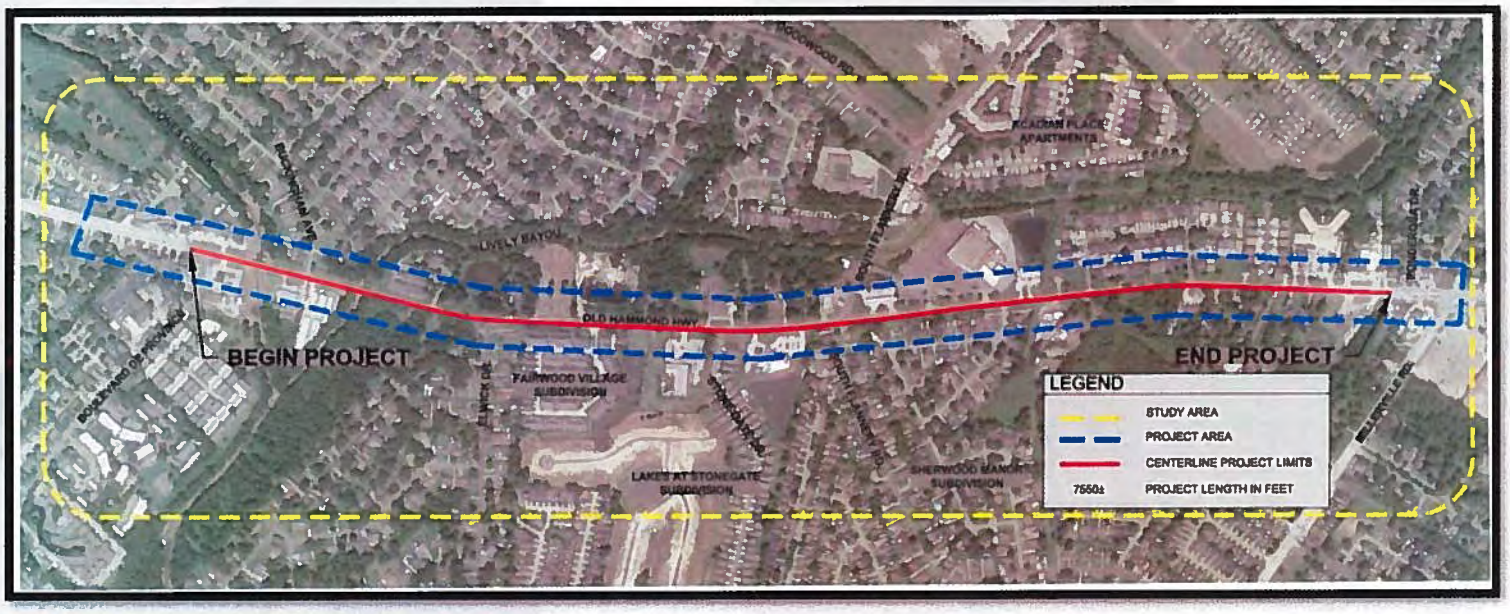
APPENDIX D

Public Meeting

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Old Hammond Highway (LA 426)

Boulevard De Province to Millerville Road



Summary of Public Meeting 1

August 4, 2016

THE GREEN LIGHT PLAN

Prepared by:

FORTE & TABLADA

CITY OF BATON ROUGE PARISH OF EAST BATON ROUGE
DEPARTMENT OF PUBLIC WORKS

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

TABLE OF CONTENTS

I. INTRODUCTION

A public meeting for the Old Hammond Highway (LA 426) Boulevard De Province to Millerville Road Environmental Assessment was held at the Fairwood Branch Library in Baton Rouge, Louisiana, on August 4, 2016. The meeting was held as an open house format from 5:00 p.m. to 8:00 p.m. City Parish officials, Green Light Plan program representatives, and project team engineers were on hand to receive comments and address questions related to the proposed project.

This document provides a summary of the August 4, 2016 public meeting events, copies of the public meeting material, sign-in sheets, and media coverage.

II. PUBLIC MEETING NOTICE

A public notice was published in the Baton Rouge Advocate Newspaper on July 18, 2016 and July 25, 2016. The copy of the advertisement and affidavit proof of publication are provided in Appendix A. An informational letter indicating the project name, purpose of the meeting, date, place, and time was mailed to stakeholders and elected officials. The sample letter and the list of addresses are provided in Appendix B.

The public meeting was also advertised on Green Light Plan website with a link to the posted Advocate notice.

III. PRESS RELEASE / MEDIA COVERAGE

The Old Hammond Highway (LA 426) Boulevard De Province to Millerville Road Environmental Assessment was announced on the Baton Rouge news WBRZ television station's website on August 3, 2016. Copies of media coverage for the public meeting are provided in Appendix C.

IV. MEETING EVENTS

The public meeting was organized in an open house format. The meeting included a prerecorded loop power point presentation, which provided information on the proposed Old Hammond Highway widening project and the environmental process of the National Environmental Policy Act (NEPA). The presentation played on a continuous loop lasting approximately 20 minutes in length. The power point presentation and the handouts are provided in Appendix D. The meeting also included walk-in exhibit rooms which displayed project information to provide members of the public the opportunity to interact directly with program and public officials to discuss the planned study. Copies of the exhibits are provided in Appendix D.

The purpose of the public meeting was to provide information about the proposed project, the proposed build alternatives, the environmental process, estimated project timeline and the next step in the process.

V. ATTENDANCE

Twenty nine people registered their attendance on the sign-in sheets.

Copies of the sign-in sheets for the public information meeting are provided in Appendix E.

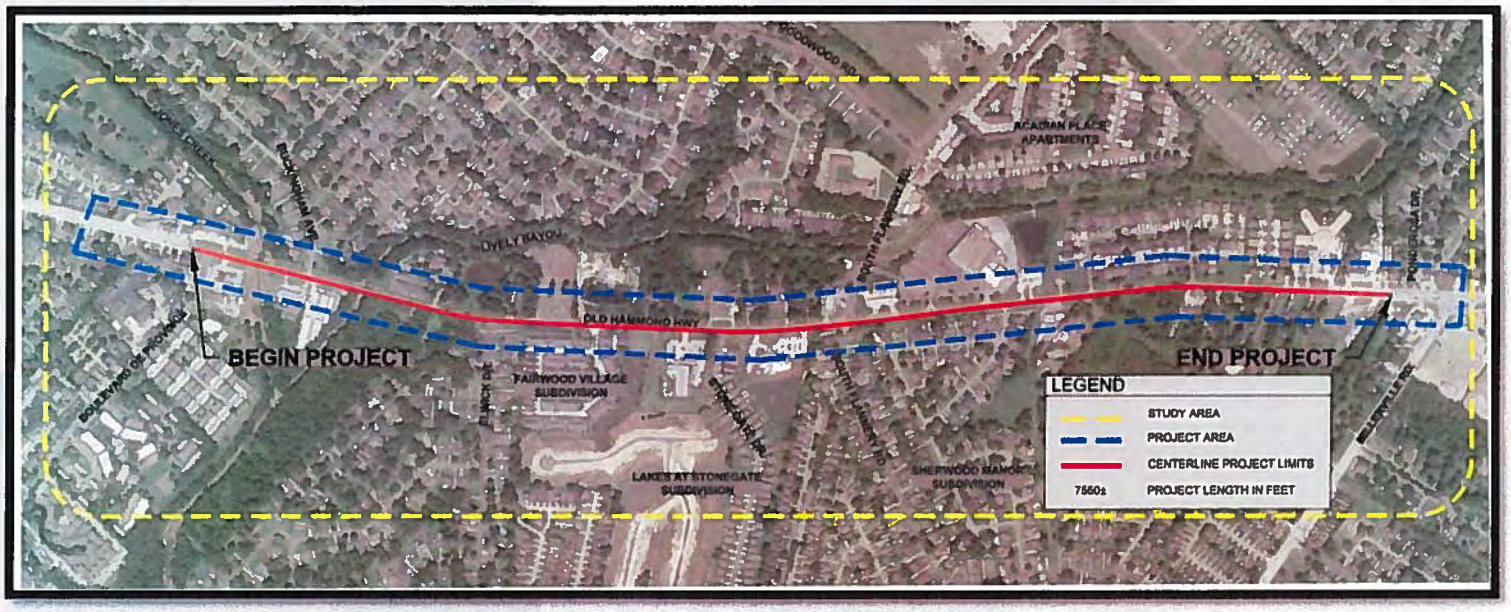
VI. PUBLIC COMMENTS

The public was offered opportunities for submitting their comments for the record. A comment form was provided in the handout packet and a transcriber was available during the course of the meeting to record verbal comments. Two written comments were received at the meetings. Two comments were received via email prior to the meeting. Copies of the comments received are provided in Appendix F.

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Old Hammond Highway (LA 426)

Boulevard De Province to Millerville Road



Summary of Public Meeting 1

August 4, 2016

THE GREEN LIGHT PLAN

Prepared by:

FORTE & TABLADA

CITY OF BATON ROUGE PARISH OF EAST BATON ROUGE
DEPARTMENT OF PUBLIC WORKS

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendices

A. Newspaper Advertisement/ Proof of Publication
B. Elected Officials Agency Invitation Contact List
C. Media Coverage
D. PowerPoint Presentation/Handouts/ Exhibits
E. Sign-In Sheets
F. Public Comments

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix A

Newspaper Advertisement/ Proof of Publication

CAPITAL CITY PRESS

Publisher of
THE ADVOCATE

PROOF OF PUBLICATION

The hereto attached notice was published in THE ADVOCATE, a daily newspaper of general circulation published in Baton Rouge, Louisiana, and the Official Journal of the State of Louisiana, City of Baton Rouge, and Parish of East Baton Rouge or published daily in THE NEW ORLEANS ADVOCATE, in New Orleans Louisiana, or published daily in THE ACADIANA ADVOCATE in Lafayette, Louisiana, in the following issues:

07/18/2016, 07/25/2016

Kristi Bunch, Public Notices Representative

Sworn and subscribed before me by the person whose signature appears above

7/25/2016

M. Monic McChristian,
Notary Public ID# 88293
State of Louisiana
My Commission Expires: Indefinite

OPEN HOUSE PUBLIC MEETING

OLD HAMMOND HIGHWAY (LA 426)
(BOULEVARD DE PROVINCE TO MILLERVILLE ROAD – PHASE 2)
EAST BATON ROUGE PARISH, LOUISIANA CITY PARISH
PROJECT NO. 12-CS-HC-0043 STATE PROJECT NO. H.007970
FEDERAL AID PROJECT H007970

The City of Baton Rouge, Parish of East Baton Rouge Department of Transportation and Drainage (DTD) and the Green Light Plan, in conjunction with the Federal Highway Administration (FHWA) and the Louisiana Department of Transportation and Development (DOTD), will hold an open house style public meeting on August 4, 2016 to present the proposed alternatives on widening Old Hammond Highway (LA 426) from two lanes to four lanes with access management changes along Old Hammond Highway from Boulevard De Province to Millerville Road – Phase 2.

City-Parish officials, Green Light Plan program representatives, and project team engineers will be on-hand to receive comments and answer questions related to the proposed project. Additionally, officials will provide attendees with information about the project's anticipated timeframe, the environmental study process, proposed alternatives, and future public involvement opportunities. All interested parties are invited and encouraged to attend this public meeting, scheduled for the following location, date, and time:

Fairwood Branch Library,
12910 Old Hammond Highway,
Baton Rouge, LA 70816
Thursday, August 4, 2016
5:00 P.M. to 8:00 P.M. (OPEN HOUSE)

The meeting will be held as an open house format. A prerecorded presentation will play continuously throughout the meeting. Members of the public may arrive at any time between 5:00 p.m. and 8:00 p.m. Verbal public comments can be recorded. Written statements may also be submitted at the meeting, sent via postal mail to the address shown below, or submitted via email to Ohh-seg1-env@forteandtablada.com. All comments received or postmarked within 10 days following the meeting will become part of the official meeting transcript.

This meeting will be held in accordance with regulatory requirements including the American with Disabilities Act. In the event a member of the public wishes to participate in this meeting but may require special assistance due to a disability, please contact Forte and Tablada, Inc. at the address shown below or by telephone at (225) 927-9321 at least five working days prior to the meeting.

Forte and Tablada, Inc.
Attn: Mark Kessler
9107 Interline Ave.
Baton Rouge, LA 70809

93354-jul 18-25-2t

M. MONIC McCHRISTIAN NOTARY PUBLIC NOTARY NO. 88293 STATE OF LOUISIANA

FORTE & TABLADA 093354-01

9107 INTERLINE AVE
BATON ROUGE, LA 70809

OPEN HOUSE PUBLIC MEETING

OLD HAMMOND HIGHWAY (LA 426)

(BOULEVARD DE PROVINCE TO MILLERVILLE ROAD – PHASE 2) EAST BATON ROUGE PARISH, LOUISIANA CITY PARISH PROJECT NO. 12-CS-HC-0043 STATE PROJECT NO. H.007970 FEDERAL AID PROJECT H007970

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Forte and Tablada, Inc.
Attn: Mark Kessler
9107 Interline Ave.
Baton Rouge, LA 70809

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix B

Elected Officials Agency Invitation Contact List

Amite River Basin Commission
3535 S Sherwood Forest Blvd. Suite 135
Baton Rouge, LA, 70816

Baton Rouge Bicycle Club
P.O. Box 253
Baton Rouge, LA, 70821

Baton Rouge Police Dept
9000 Airline Hwy
Baton Rouge, LA, 70815

Baton Rouge Green Association
439 N 11th Street
Baton Rouge, LA, 70802-4607

Capital Area Groundwater Conservation Commission
3535 S Sherwood Forest Blvd. Suite 137
Baton Rouge, LA, 70816

Capital Area Transit System
2250 Florida Blvd.
Baton Rouge, LA, 70802

Capital Region Planning Commission
Post Office Box 3355
Baton Rouge, LA, 70821

Capital Soil & Water Conservation District of LA.
907 Florida Ave. SW
Denham Springs, LA, 70726

Chamber Of Commerce
564 Laurel St.
Baton Rouge, LA, 70801

Department Of Emergency Management
Emergency Operations Center
3773 Harding Blvd.
Baton Rouge, LA, 70807

East Baton Rouge Parish City Government
P.O. Box 1471
Baton Rouge, LA, 70821

East Baton Rouge Parish Metro Council
P.O. Box 1471
Baton Rouge, LA, 70821

East Baton Rouge Parish School Board
P.O. Box 2950
Baton Rouge, LA, 70821

East Baton Rouge Parish Sheriff
P.O. Box 2406
Baton Rouge, LA, 70821

EBR City Planning Commission Planning Director
P.O. Box 1487
Baton Rouge, LA, 70821

Hon. Alfred C. Williams LA House Of Representatives (District 61)
701 S. Acadian Thruway
Baton Rouge, LA, 70806

Hon. Barry Ivey LA House Of Representatives (District 65)
P.O. Box 78286
Baton Rouge, LA, 70837

Hon. Dale Erdey Louisiana State Senate (District 13)
P.O. Box 908
Baton Rouge, LA, 70754

Hon. Dalton W. Honore' LA House Of Representatives (District 63)
8776 Scenic Hwy.
Baton Rouge, LA, 70807

Hon. Dan Claitor Louisiana State Senate (District 16)
320 Somerulos St.
Baton Rouge, LA, 70802

Hon. Darrel P. Ourso LA House Of Representatives (District 66)
17451 Jefferson Hwy. Suite C
Baton Rouge, LA, 70817

Hon. Edward C. James III LA House Of Representatives (District 101)
3213 Monterrey Blvd. Suite B
Baton Rouge, LA, 70814

Hon. Erich Edward Ponti LA House Of Representatives (District 69)
7341 Jefferson Hwy. Suite J
Baton Rouge, LA, 70806

Hon. Franklin J. Foil LA House Of Representatives (District 70)
320 Somerulos St.
Baton Rouge, LA, 70802

Hon. Kenneth E. Havard LA House Of Representatives (District 62)
P.O. Box 217
Baton Rouge, LA, 70748

Hon. Mack "Bodi" White Jr. Louisiana State Senate (District 6)
808 O'Neal Lane
Baton Rouge, LA, 70816

Hon. Patricia Haynes Smith LA House Of Representatives (District 67)
251 Florida St. Suite 300
Baton Rouge, LA, 70801

Hon. Regina Ashford Barrow LA House Of Representatives (District 29)
4811 Harding Blvd.
Baton Rouge, LA, 70811

Hon. Rick Ward III Louisiana State Senate (District 17)
3741 Hwy. 1
Port Allen, LA, 70767

Hon. Sharon Weston Broome Louisiana State Senate (District 15)
P.O. Box 52783
Baton Rouge, LA, 70892-2783

Hon. Stephen F. Carter LA House Of Representatives (District 68)
3115 Old Forge
Baton Rouge, LA, 70808

Hon. Valarie Hodges LA House Of Representatives (District 64)
35055 LA Hwy. 16 Suite 2A
Denham Springs, LA, 70706

Hon. Yvonne Dorsey-Colomb Louisiana State Senate (District 14)
1520 Thomas H. Delpit Dr. Suite 226
Baton Rouge, LA, 70802

Mayor City of Baton Rouge Hon. Melvin "Kip" Holden
P.O. Box 1471
Baton Rouge, LA, 70821

Mississippi River Trail, Inc.
858 North Jackson Dr.
Fayetteville, AR, 72701

U.S. House Of Representatives Hon. Cedri Richmond (District 2)
2021 Lakeshore Dr. Suite 309
New Orleans, LA, 70122

Coalition To Restore Coastal Louisiana Kimberly Reyher, Executive Director
6160 Perkins Rd. Suite 225
Baton Rouge, LA, 70808

Department Of Agriculture And Forestry Office Of Forestry
P.O. Box 1628
Baton Rouge, LA, 70821

Department Of Agriculture And Forestry Office Of Soil/Water Conservation
P.O. Box 3554
Baton Rouge, LA, 70821

Department Of Culture Recreation & Tourism Division Of Archaeology
P.O. Box 44247
Baton Rouge, LA, 70804

Department Of Health And Hospitals Divisions Of Environmental Health ATTN: Yuanda ZHU
P.O. Box 4489
Baton Rouge, LA, 70821

Department Of Health And Hospitals Tenney Sibley, Chief Sanitarian
P.O. Box 629
Baton Rouge, LA, 70821-0629

Department Of Public Safety Highway Safety Commission
P.O. Box 66336
Baton Rouge, LA, 70896

Department Of Environmental Quality

Baton Rouge, LA, 70802

Department Of Wildlife & Fisheries Louisiana Natural Heritage Program
P.O. Box 98000
Baton Rouge, LA, 70898

Division Of Administration Facility Planning & Control
P.O. Box 94095
Baton Rouge, LA, 70804

Division Of Administration State Land Office
P.O. Box 44124
Baton Rouge, LA, 70804

Louisiana Department Of Natural Resources Office Of Conservation
P.O. Box 94275
Baton Rouge, LA, 70804-9275

Louisiana Department Of Natural Resources Office Of Mineral Resources
P.O. Box 2827
Baton Rouge, LA, 70821

Louisiana Forestry Association ATTN: Mr. Buck Vandersteen
P.O. Box 5067
Alexandria, LA, 71307

Louisiana Good Roads Association
P.O. Box 3713
Baton Rouge, LA, 70821

Louisiana State University Sea Grant Legal Advisory Service James G. Wilkins
227B Sea Grant Building
Baton Rouge, LA, 70803

National Park Service Southeast Region ATTN: Anita Jackson
100 Alabama St., SW 1924 Building
Atlanta, GA, 30303

Natural Resources Conservation Service Kevin D. Norton
3737 Government St.
Alexandria, LA, 71302

U.S. House Of Representatives Hon.
Charles W. Boustany, Jr. MD (District 3)
800 Lafayette St. Suite 1400
Lafayette, LA, 70501

U.S. House Of Representatives Hon.
Garret Graves (District 6)
2351 Energy Drive Suite 1200
Baton Rouge, LA, 70808

U.S. House Of Representatives Hon. John Fleming (District 4)
6425 Youree Dr. Suite 350
Shreveport, LA, 71105

U.S. House Of Representatives Hon. Ralph Abraham (District 5)
417 Cannon House Office Building
Washington, DC, 20515

U.S. House Of Representatives Hon. Steve J. Scalise (District 1)
110 Veterans Blvd. Suite 500
Metarie, LA, 70005

United States Senate Senator Bill Cassidy M.D.
5555 Hilton Avenue Suite 100
Baton Rouge, LA, 70808

, ,
United States Senate Senator David Vitter
2800 Veterans Memorial Blvd. Suite 201

«AddressBlock»

Re: Notice of Open House Public Meeting
Old Hammond Highway (LA 426)
(Boulevard De Province to Millerville Road – Phase 2)
City Parish Project Number 12-CS-HC-0043
State Project No. H.007970
Federal Aid Project No. H007970
East Baton Rouge Parish, Louisiana

«GreetingLine»

The City of Baton Rouge, Parish of East Baton Rouge Department of Transportation and Drainage (DTD) and the Green Light Plan, in conjunction with the Federal Highway Administration (FHWA) and the Louisiana Department of Transportation and Development (DOTD), will hold an Open House Public Meeting for the captioned project from 5:00 to 8:00 pm, on Thursday, August 4, 2016. The meeting will be held at the Fairwood Branch Library at 12910 Old Hammond Highway. A notice with this information will be published in the Advocate to inform the public.

The purpose of this meeting is to inform the public of the proposed project and to provide an opportunity for them to express their comments, views, and concerns. For your reference and information, attached is a copy of the public notice.

If you have any questions or require additional information, please contact Mark Kessler at kesslerm@forteandtablada.com or (225) 927-9321.

Very truly yours,

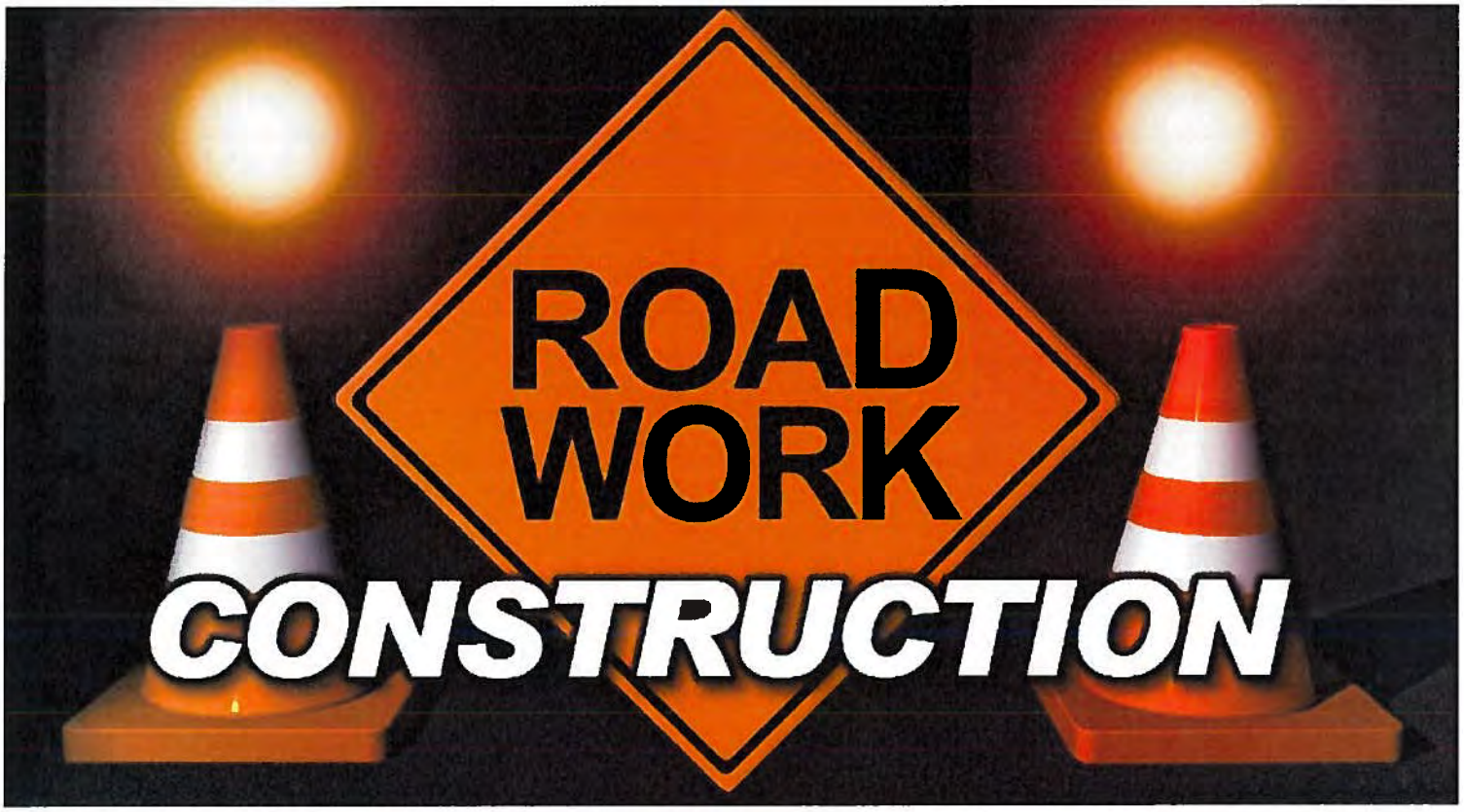
Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix C

Media Coverage

Public meeting set on Old Hammond Hwy. widening project

August 03, 2016 12:07 PM in News Source: WBRZ By: Alicia Serrano Share:



BATON ROUGE – A public meeting will be held on Thursday to present proposed alternatives on widening Old Hammond Highway.

The widening will expand the highway from two lanes to four lanes with access management changes along the Old Hammond Highway from Boulevard De Province to Millerville Road.

The City of Baton Rouge, Parish of East Baton Rouge Department of Transportation and Drainage, the Green Light Plan, the Federal Highway Administration and the Louisiana Department of Transportation and Development are hosting the meeting. Officials will be at the meeting to address comments and questions about the project.

Officials will also provide attendees with information about the project's time frame, the environmental study process and proposed alternatives.

The meeting is scheduled for Thursday from 5 p.m o 8 p.m. at the Fairwood Branch Library on Old Hammond Highway.

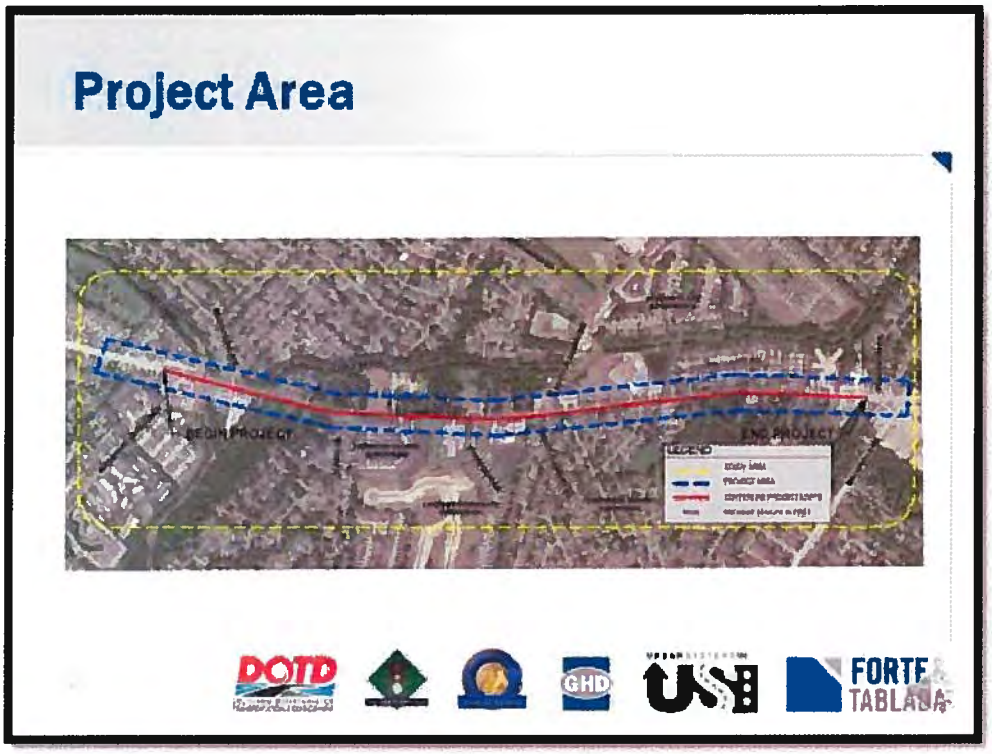
Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix D

Power Point Presentation/ Handouts/Exhibits

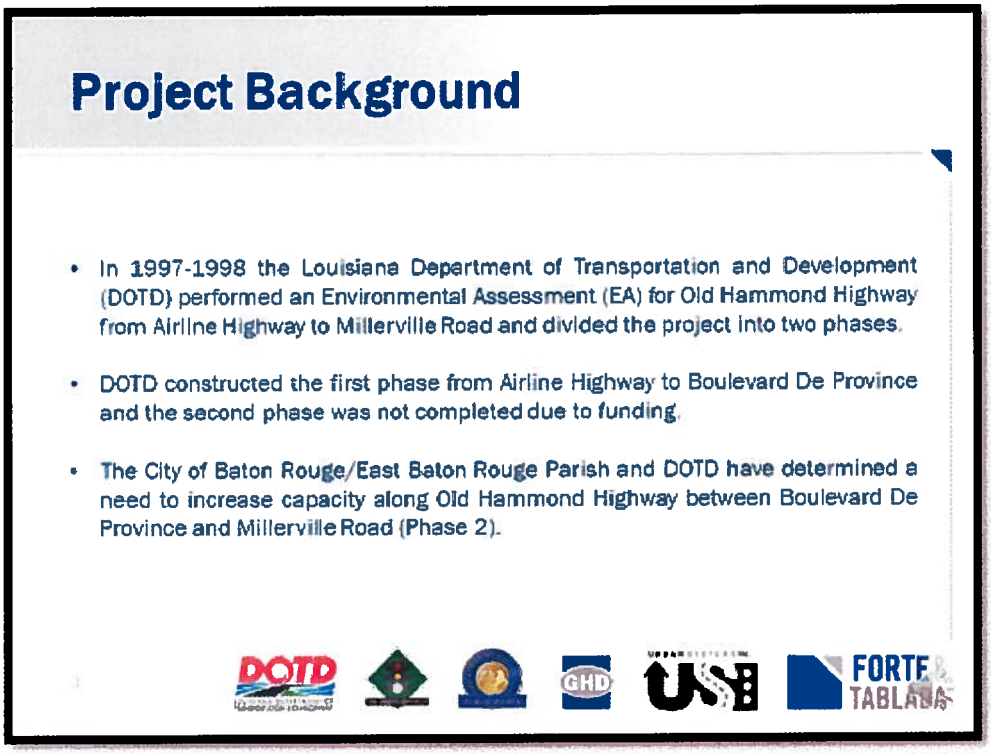
Introduction:

- Welcome to the Public Meeting presentation for Old Hammond Highway (LA 426) Boulevard De Province to Millerville Road.



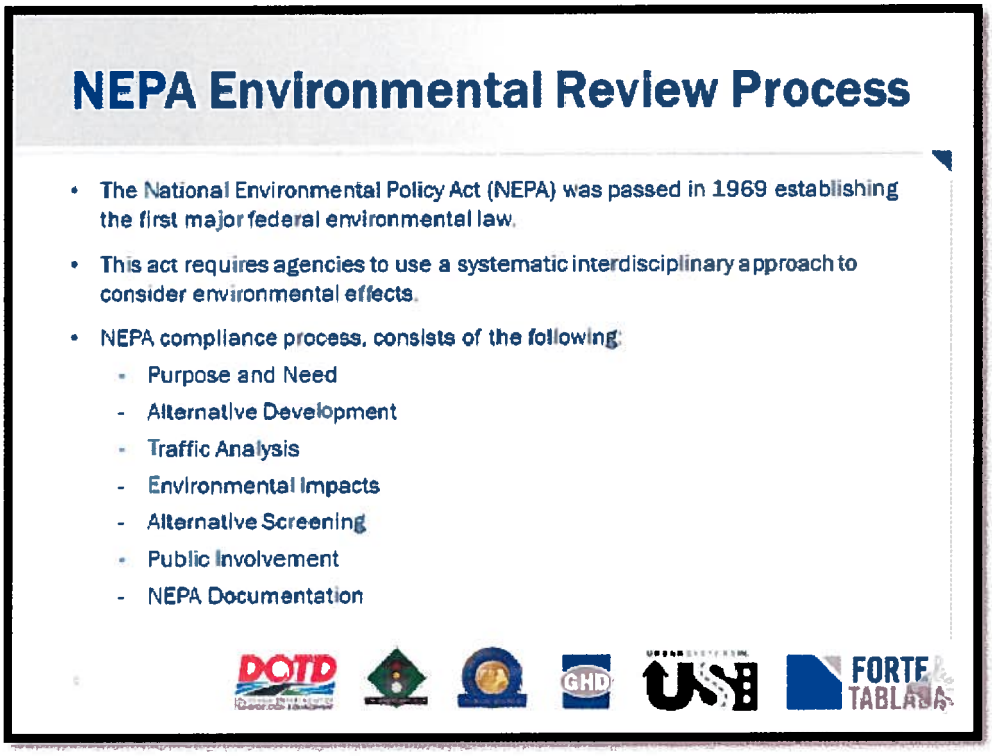
Project Area

- The project begins at Boulevard De Province and runs northeast along Louisiana Highway 426 or Old Hammond Highway for 7550 feet to tie into the Millerville Intersection. The area within the yellow dashed rectangle is considered the study area and the area encompassed by the blue dashes is the Project Area.



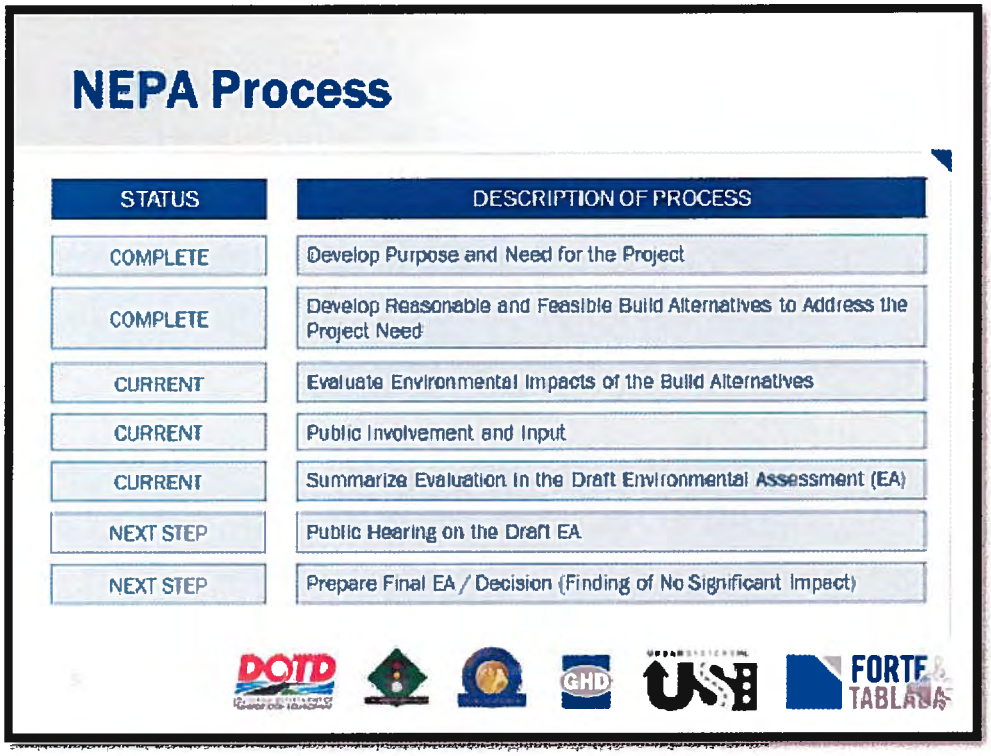
Project Background

- In 1997-1998 the Louisiana Department of Transportation and Development (DOTD) performed an Environmental Assessment (EA) for Old Hammond Highway from Airline Highway to Millerville Road and divided the project into two phases.
- DOTD constructed the first phase from Airline Highway to Boulevard De Province and the second phase was not completed due lack of funding .
- The City of Baton Rouge/East Baton Rouge Parish and DOTD have determined a need to increase capacity along Old Hammond Highway between Boulevard De Province and Millerville Road which is Phase 2. We are now updating this Environmental Assessment .



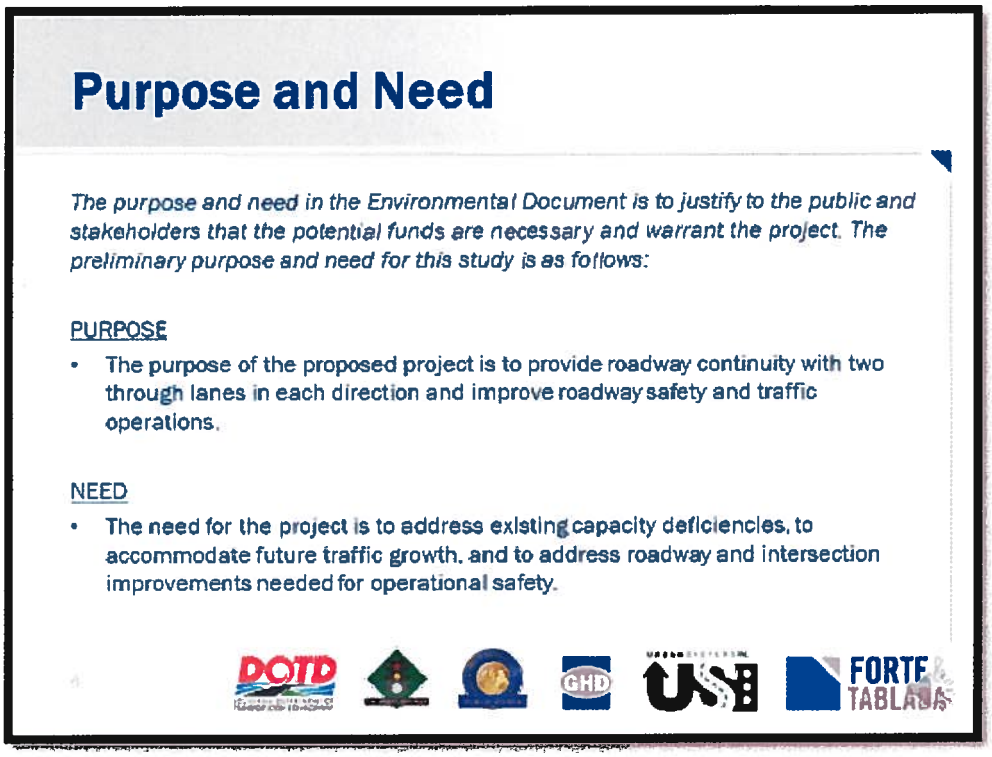
NEPA Environmental Review Process

- The National Environmental Policy Act or NEPA was passed in 1969 establishing the first major federal environmental law.
- This act requires agencies to use a systematic interdisciplinary approach to consider environmental effects on a project.
- The NEPA compliance process, consists of the following:
    - A Purpose and Need
    - An Alternative Development
    - A Traffic Analysis
    - An Environmental Impacts
    - An Alternative Screening
    - With Public Involvement
    - And then the NEPA Documentation



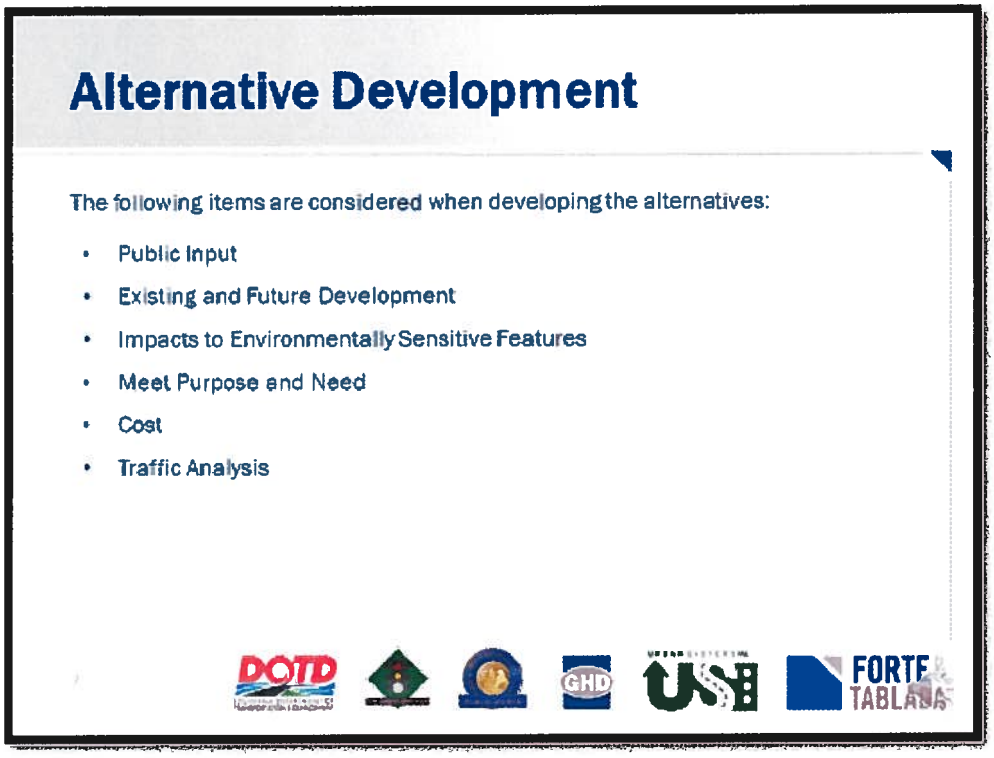
NEPA Process to Date

- So far in the NEPA process, we have developed a purpose and need for the project along with reasonable and feasible alternatives to address the project need.
- We are currently evaluating environmental impacts of the build alternatives, summarizing the evaluation in the Draft Environmental Assessment, and analyzing the public involvement and input.
- The next step of our project will be to hold a public hearing on the Draft Environmental Assessment and prepare a Final Environmental Assessment.



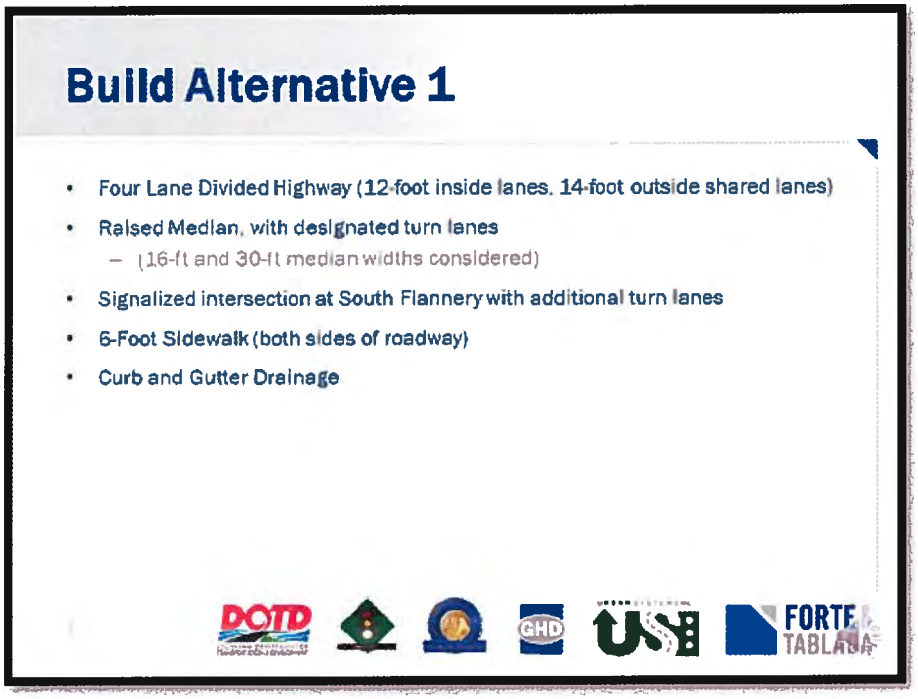
The Purpose and Need

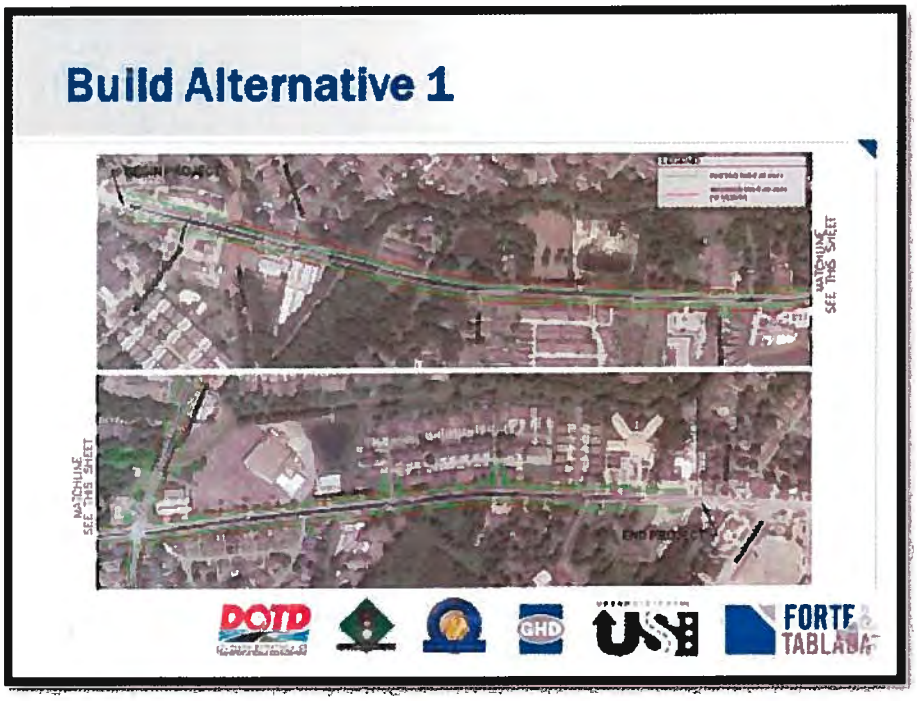
- The purpose and need in the Environmental Document is to justify to the public and stakeholders that the potential funds are necessary and warrant the project. The preliminary purpose and need for this study is as follows:
    - The purpose of the proposed project is to provide roadway continuity with two through lanes in each direction and improve roadway safety and traffic operations
    - The need for the project is to address existing capacity deficiencies, to accommodate future traffic growth, and to address roadway and intersection improvements needed for operational safety.



Alternative Development

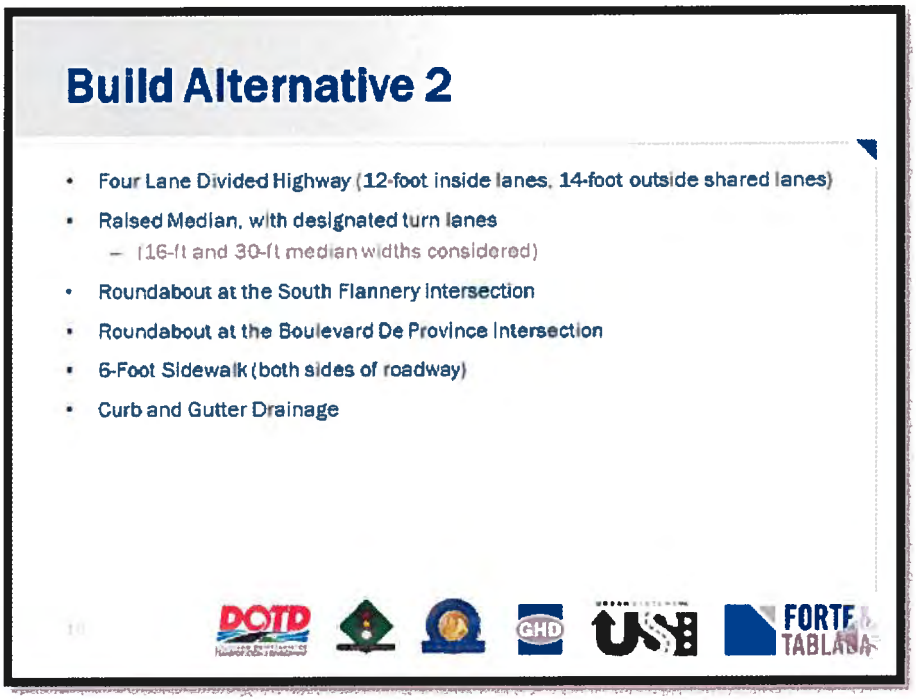
- The following items are considered when developing alternatives
  - Public Input
  - Existing and Future Developments of the area
  - Impacts to Environmentally Sensitive Features in the area
  - Meet the Purpose and Need of the proposed project
  - Develop a Cost of the proposed project
  - And perform Traffic Analysis of the existing and future development

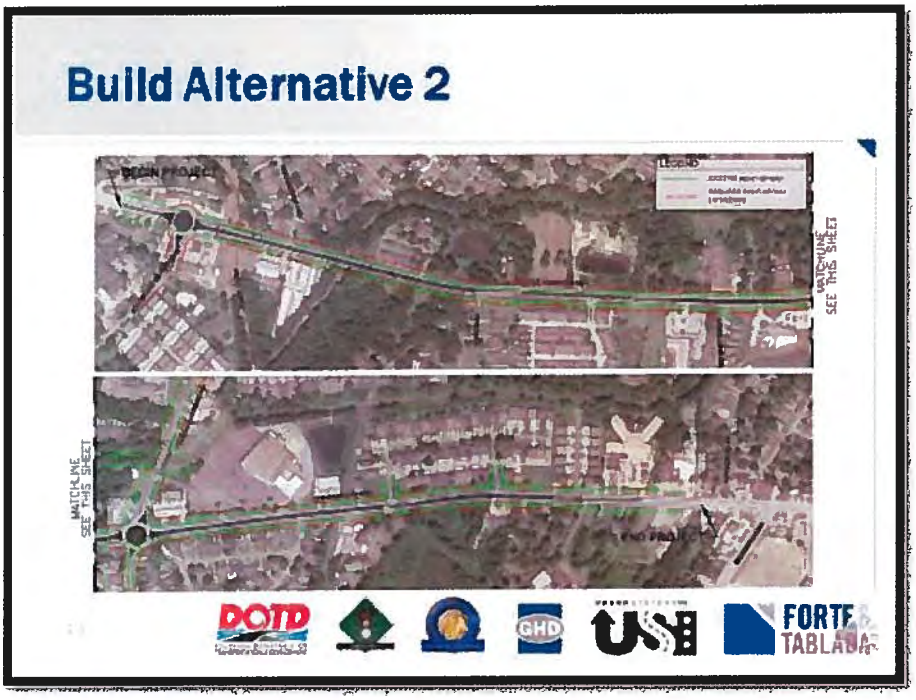




Build Alternative 1

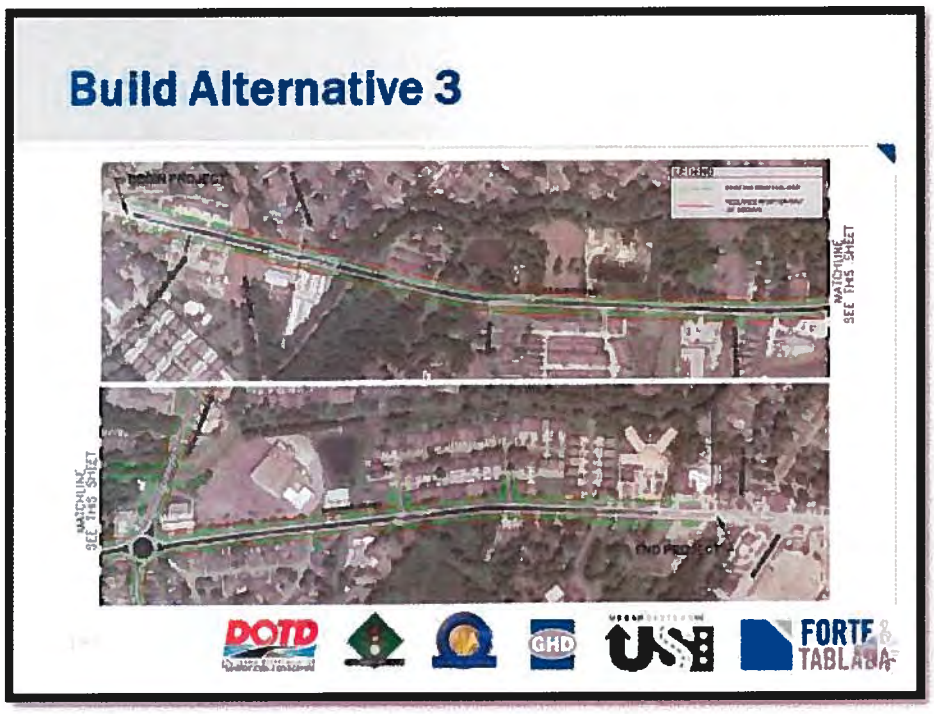
- A Four Lane Divided Highway with Raised 16' or 30' width medians with designated turn lanes was considered. Along with signalized intersection at South Flannery with additional turn lanes.
- A 6-foot sidewalk would be along both sides of the roadway for pedestrians and a 14 foot outside shared lane for cyclists.

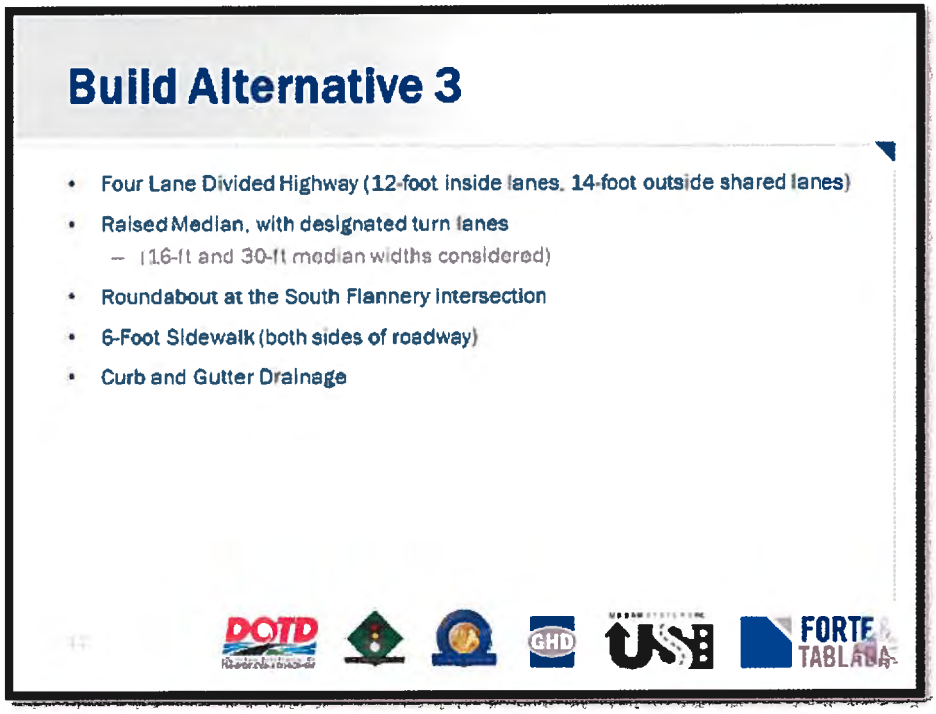




Build Alternative 2

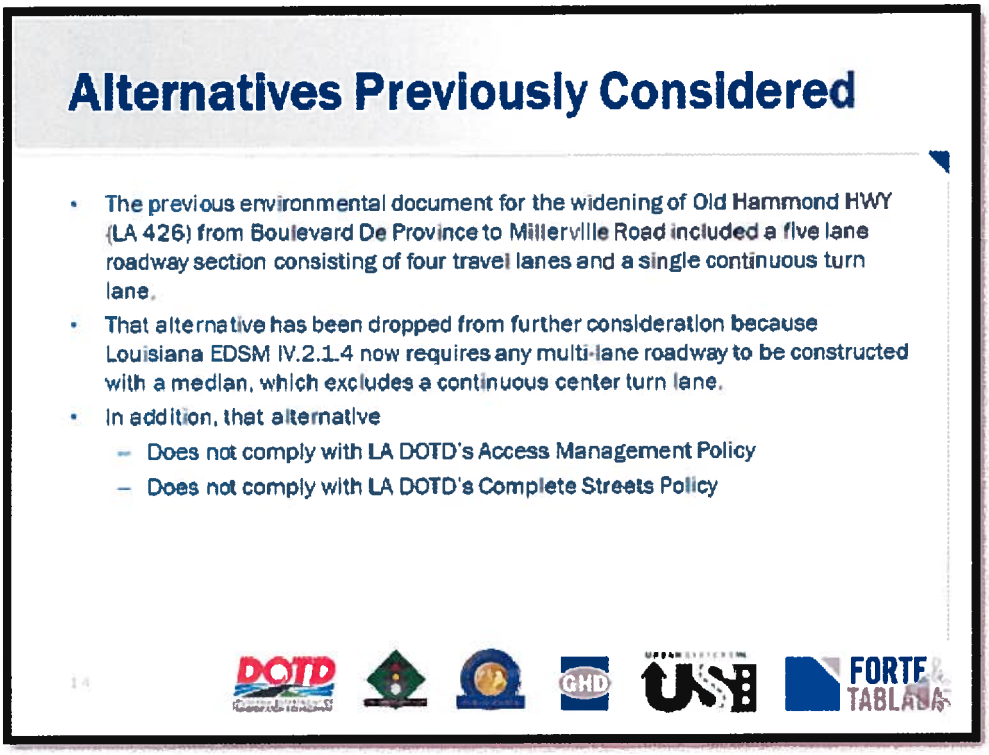
- A Four Lane Divided Highway with Raised 16' or 30' width medians with designated turn lanes was considered. A Roundabout at the South Flannery intersection and a Roundabout at the Boulevard De Province intersection was considered.
- A 6-foot sidewalk would be along both sides of the roadway for pedestrians and a 14 foot outside shared lane for cyclists.





Build Alternative 3

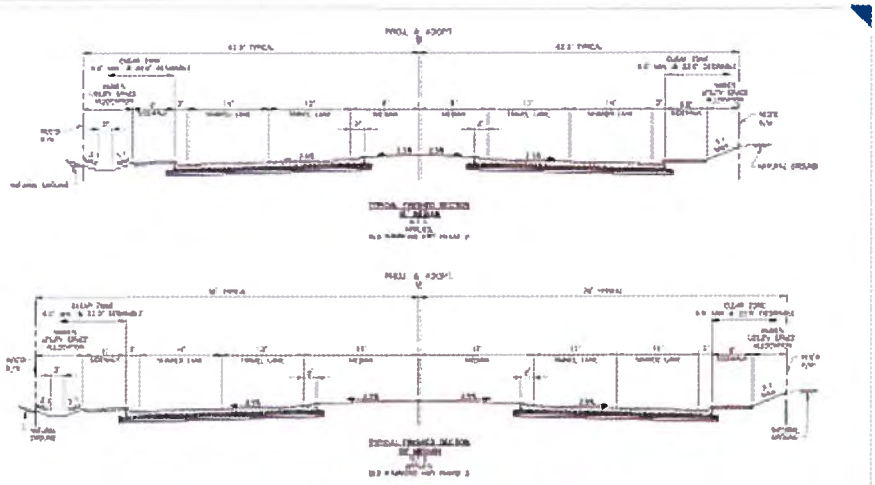
- A Four Lane Divided Highway with Raised 16' or 30' width medians with designated turn lanes was considered. A Roundabout at the South Flannery intersection was considered.
  A 6-foot sidewalk would be along both sides of the roadway for pedestrians and a 14 foot outside shared lane for cyclists.

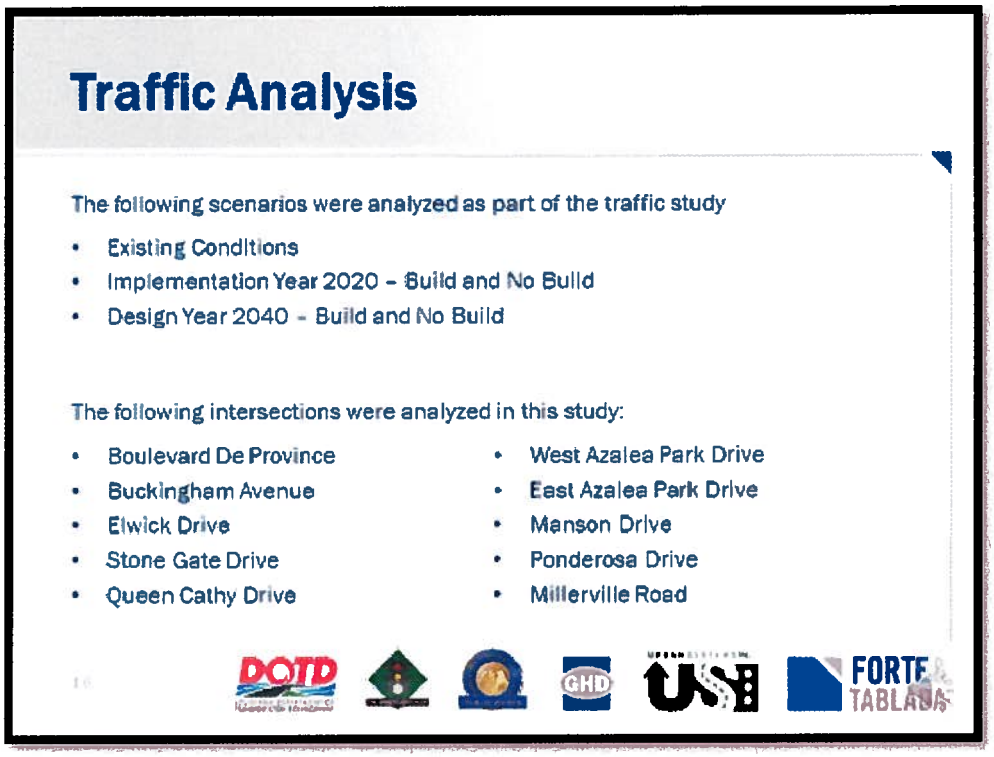


Alternatives Previously Considered

- The previous environmental document for the widening of Old Hammond HWY (LA 426) from Boulevard De Province to Millerville Road included a five lane roadway section consisting of four travel lanes and a single continuous turn lane.
- That alternative has been dropped from further consideration because Louisiana EDSM IV.2.1.4 now requires any multi-lane roadway to be constructed with a median, which excludes a continuous center turn lane.
- In addition, that alternative does not comply with LA DOTD's Access Management Policy and it also does not comply with LA DOTD's Complete Streets Policy

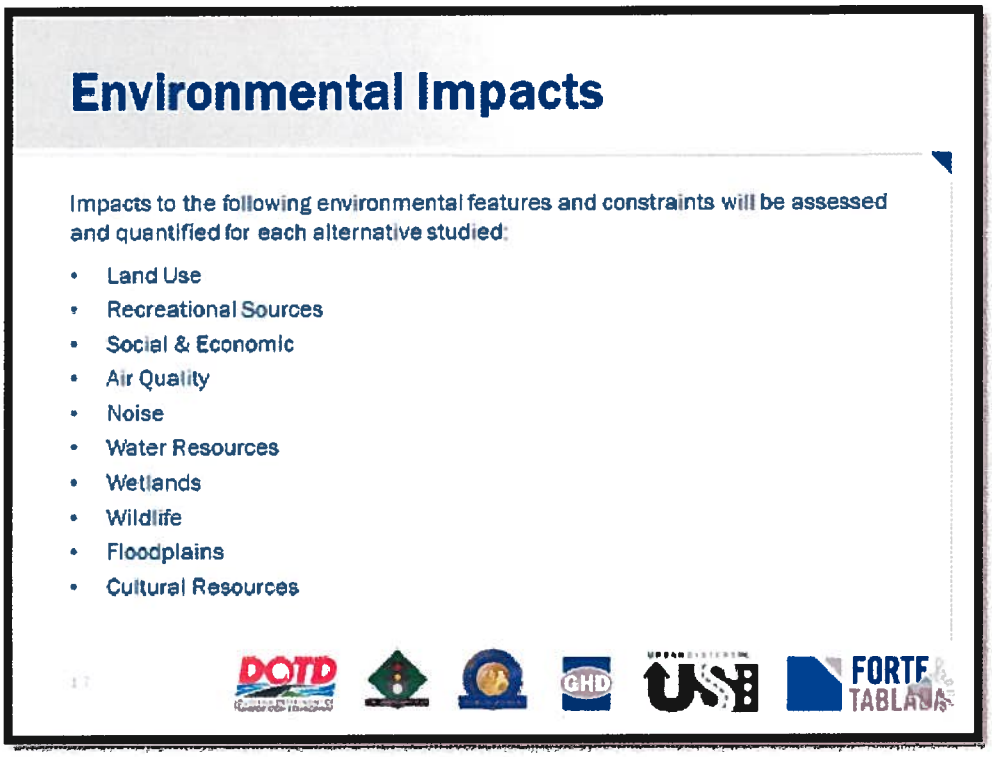
Typical Boulevard Sections





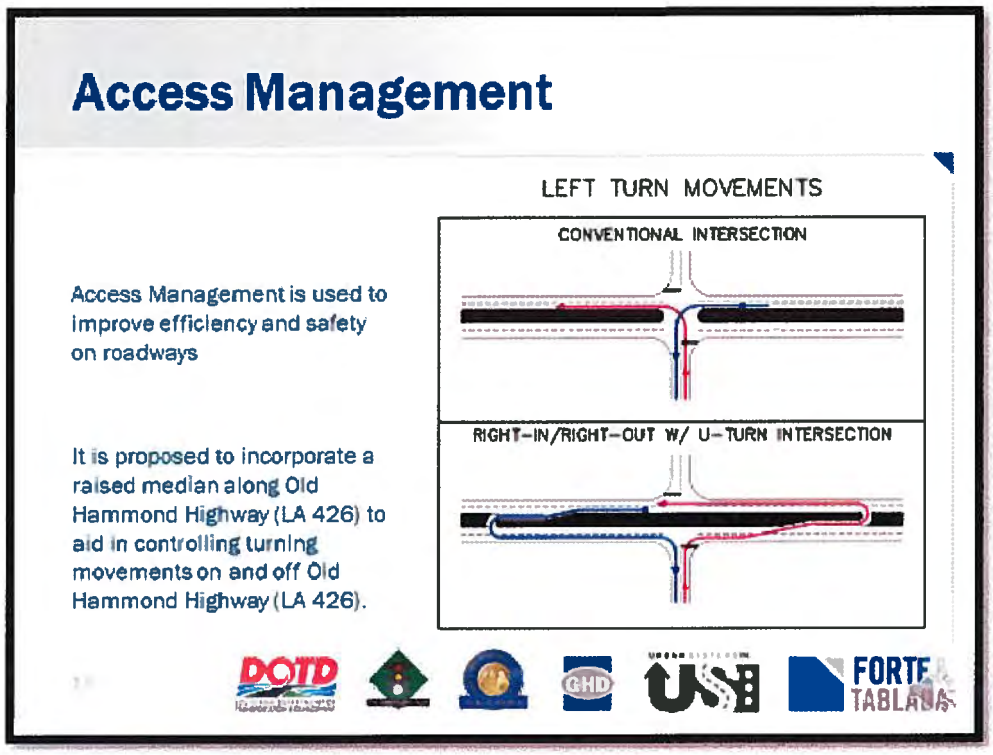
Traffic Analysis

- The following scenarios were analyzed as part of the traffic study
  - Existing Conditions, implementation Year 2020 – Build and No Build, and Design Year 2040 – Build and No Build
- The following intersections were analyzed in the study:
  - Boulevard De Province
  - Buckingham Avenue
  - Elwick Drive
  - Stone Gate Drive
  - Queen Cathy Drive
  - West Azalea Park Drive
  - East Azalea Park Drive
  - Manson Drive
  - Ponderosa Drive
  - Millerville Road



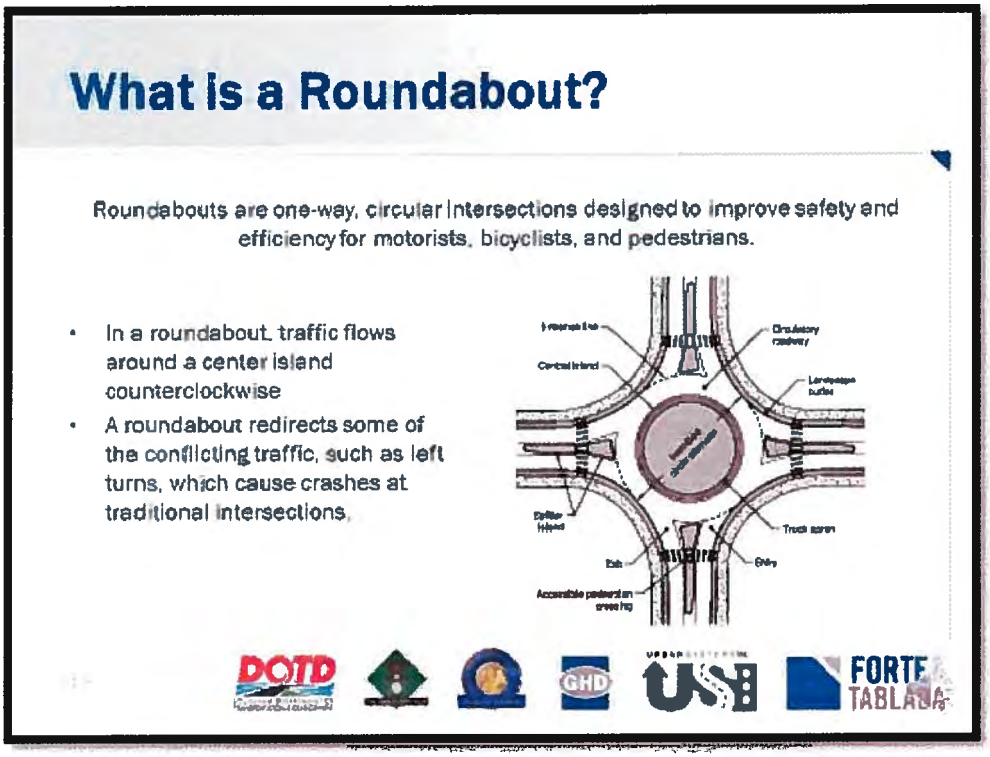
Environmental Impacts

- Impacts to the following environmental features and constraints will be assessed and quantified for each alternative studied:
    - Land Use
    - Recreational Sources
    - Social & Economic
    - Air Quality
    - Noise
    - Water Resources
    - Wetlands
    - Wildlife
    - Floodplains
    - Cultural Resources



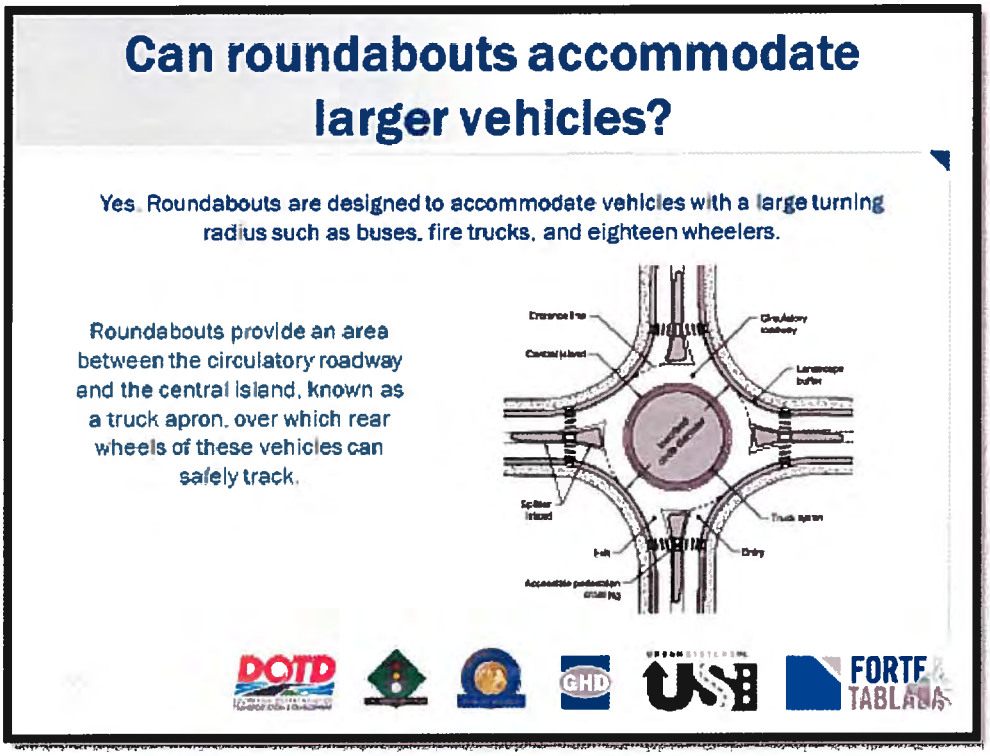
Access Management

- Access Management is used to improved efficiency and safety on roadways
- It is proposed to incorporate a raised median along Old Hammond Highway (LA 426) to aid in controlling turning movements on and off Old Hammond Highway (LA 426)



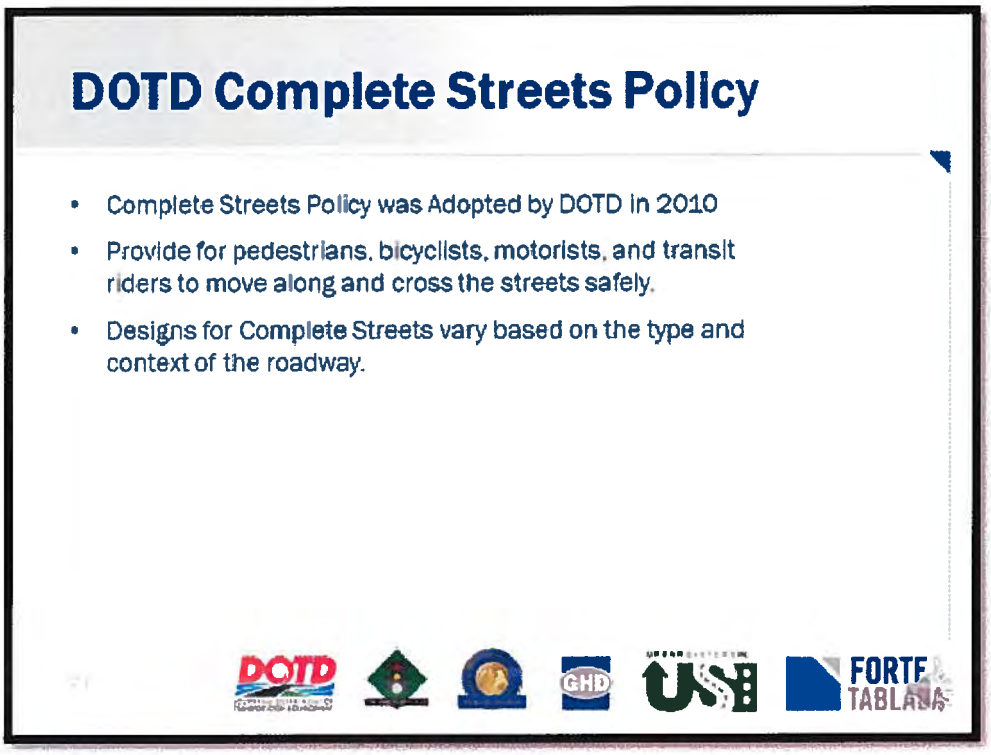
What is a Roundabout?

- Roundabouts are one-way, circular intersections designed to improve safety and efficiency for motorists, bicyclists, and pedestrians
- In a roundabout, traffic flows around a center island counterclockwise
- A roundabout redirects some of the conflicting traffic, such as left turns, which cause crashes at traditional intersections.



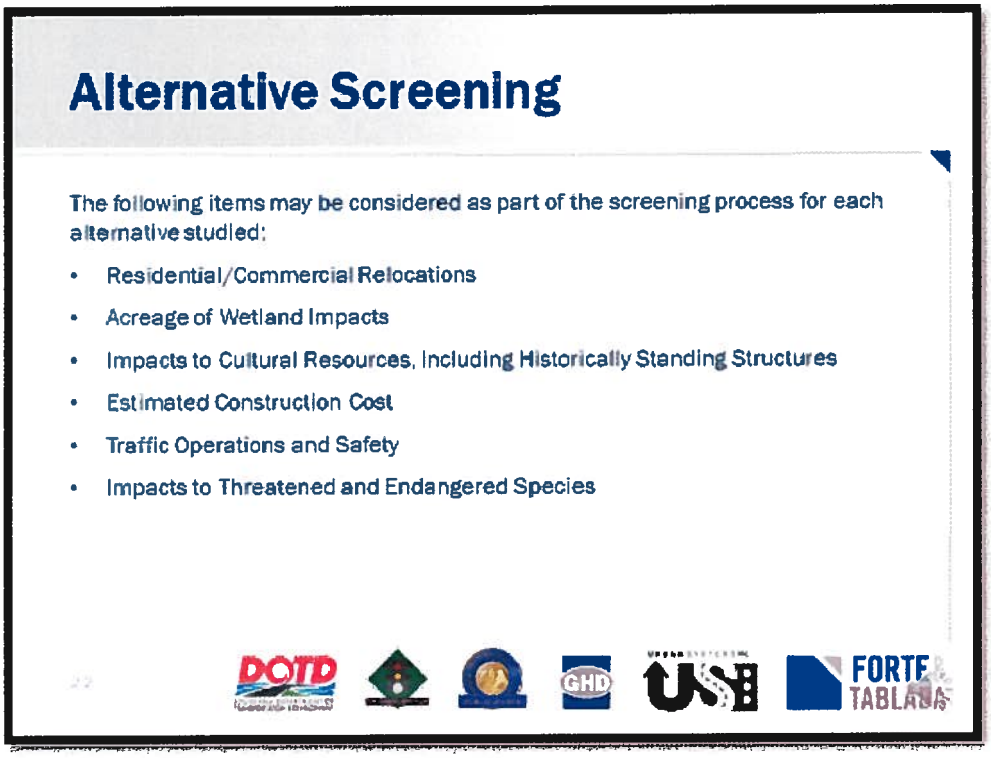
Can roundabouts accommodate larger vehicles?

- Yes, roundabouts are designed to accommodate vehicles with a large turning radius such as buses, fire trucks, and eighteen wheelers.
- Roundabouts provide an area between the circulatory roadway and the central island, known as a truck apron. Over which rear wheels of these vehicles can safely track.



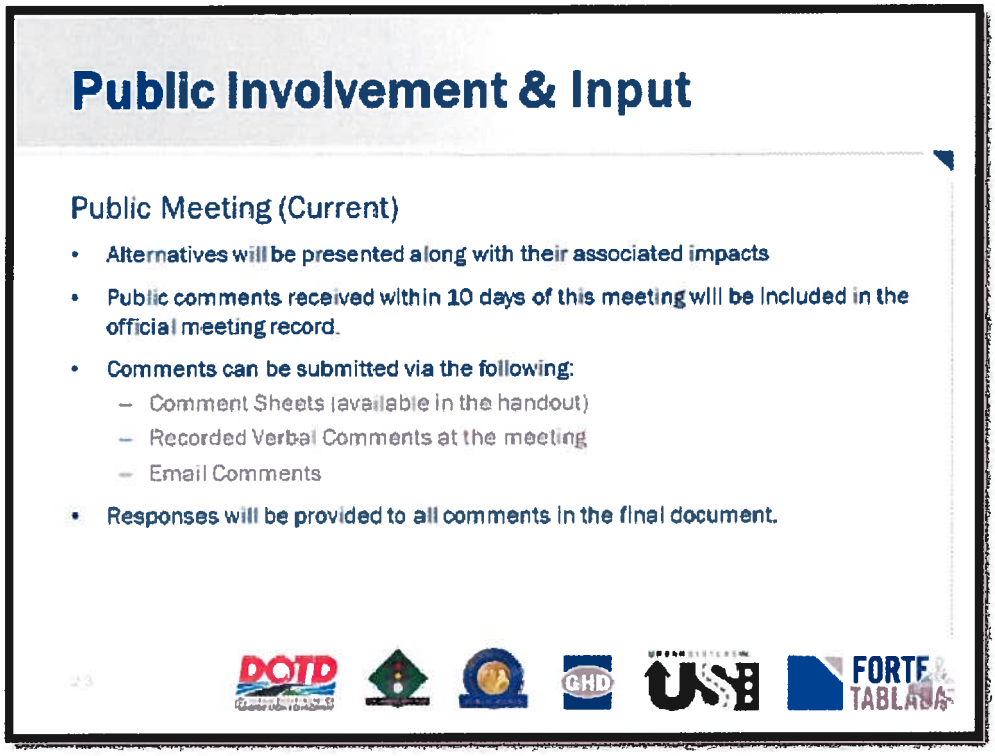
DOTD Complete Streets Policy

- Complete streets policy was adopted by DOTD in 2010
- Provide for pedestrians, bicyclists, motorists, and transit riders to move along and cross the streets safely.
- Designs for the complete streets vary based on the type and context of the roadway.



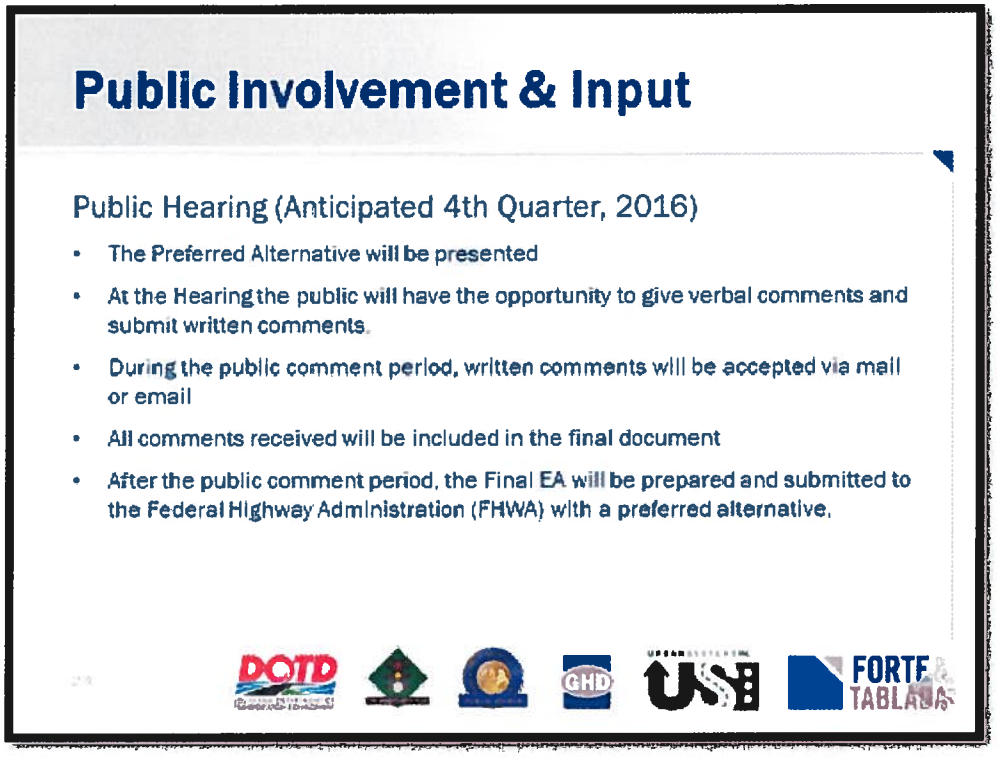
Alternative Screening

- The following items may be considered as part of the screening process for each alternative studied:
    - Residential/Commercial Relocations
    - Acreage of Wetland Impacts
    - Impacts to Cultural Resources, including historically standing structures
    - Estimated construction cost
    - Traffic Operations and safety
    - Impacts to threatened and endangered species

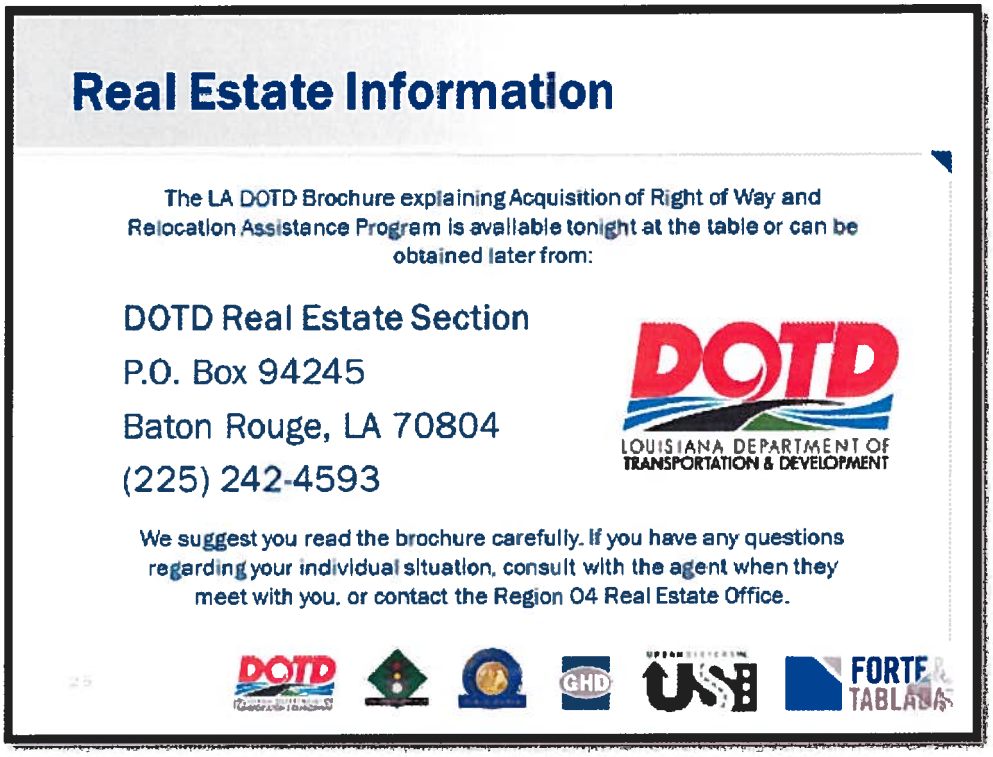


Public Involvement & Input

- Current public meetings:
  - Alternatives will be presented along with their associated impacts
  - Public comments received within 10 days of this meeting will be included in the official meeting record
  - Comments can be submitted via the following:
    - Comment Sheets (available in the handout)
    - Recorded Verbal Comments at the meeting
    - Email Comments
  - Responses will be provided to all comments in the final document



- Public hearings (Anticipated 3rd Quarter, 2016)
  - The preferred alternative will be presented
  - At the hearing the public will have the opportunity to give verbal comments and submit written comments
  - During the public comment period, written comments will be accepted via mail or email
  - All comments received will be included in the final document
  - After the public comment period, the final EA will be prepared and submitted to the Federal Highway Administration (FHWA) with a preferred alternative.



Real Estate Information

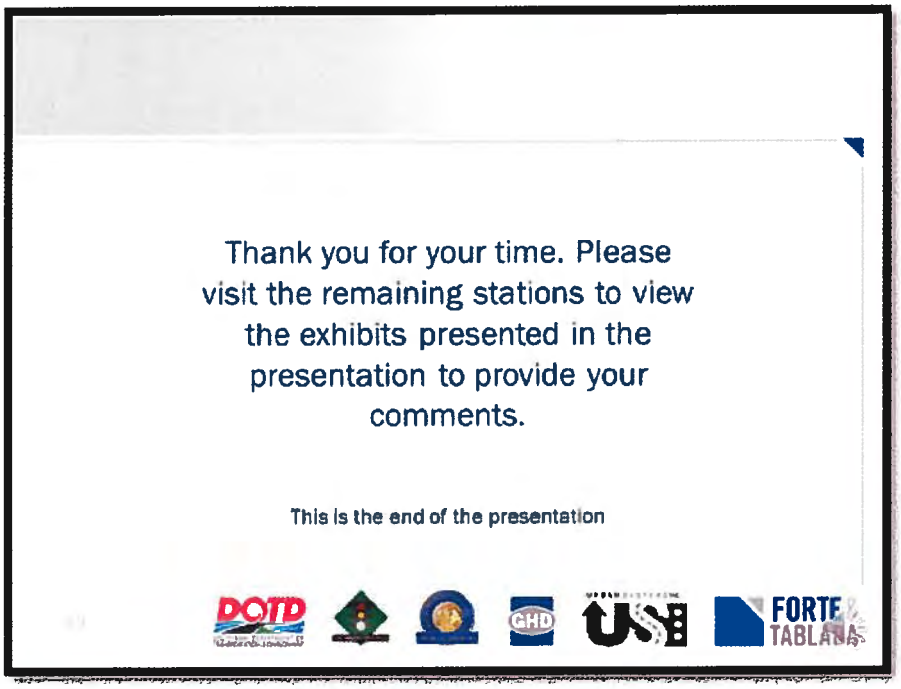
- The LA DOTD Brochure explaining the Acquisition of Right of Way and Relocation Assistance Program is available tonight at the table or can be obtained later from the **DOTD Real Estate Section, P.O. Box 94245 Baton Rouge, LA 70804.**
- The DOTD Real Estate Section can be reached at (225)242-4593
- We suggest you read the brochure carefully. If you have any questions regarding your individual situation, consult with the agent when s/he meets with you, or contact the Region 04 Real Estate Office.

Submit Comments To

- For Comments and concerns, please contact Mark J. Kessler of Forte & Tablada, Inc., located at 9107 Interline Avenue Baton Rouge, LA 70809
- You may also address comments via email at kesslerm@forteandtablada.com

Stay Informed

- To stay up to date and informed on the latest progression of the project, you can follow the Green Light Plan at brgov.com/greenlight



Ending

- Thank you for your time. Please visit the remaining stations to view the exhibits and provide your comments.

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix E

Sign-In Sheets

PUBLIC MEETING HANDOUT
PUBLIC MEETING NO. 1
Old Hammond Highway (LA 426)
(Millerville Road to Boulevard De Province)
Environmental Assessment

City Parish Project No. 12-CS-HC-0043
State Project No. H.007970
F.A.P. No. H007970
East Baton Rouge Parish, Louisiana
http://www.brgov.com/greenlight

Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

Contact Information

Date:_____

Name:_____

Address:_____

Email:_____

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

~~Comments~~s: SIGN - IN

NAME	ADDRESS
CRAIG RABALAIS	6767 PERKINS
Roger Pupin	2351 TORREY PINE, DR. 70816
Landon Corbin	9055 Fox Run Ave
LINDA McCONNELL	5551 Corporate Blvd, STE 200 70808
SHARRY HOFFMAN	8381 Bluebonnet Blvd 70808
JOHNNIE J. JONES	12174 ARMSTRONG 70816
NANCY R. JONES	12174 ARMSTRONG 70816
Kathleen Kelly	Council Dist 7
Deanna Young	Council Dist. 8
Susan Fulkerson	Office of Neighborhoods

PUBLIC MEETING HANDOUT
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Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

Contact Information

Date:_____

Name:_____

Address:_____

Email:_____

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

Comments: SIGN-IN

NAME	ADDRESS
Paula Coleman	12500 Old Hammond Hwy.
Roberta Farrell	Fairwood Village
Carol La Motte	12500 Old Hammond Hwy
Marvin Bishop	11464 Sheraton Dr.
Helen Bishop	" " "
Jerry Kiger	8282 Goodwood Blvd.
Arlen Faucheux	345 Bonnie Dr
Janice Williams	14425 Marwood Ave 70816
Laura Williams	" "
Clara Fosher	" "

PUBLIC MEETING HANDOUT
PUBLIC MEETING NO. 1
Old Hammond Highway (LA 426)
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Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

~~Contact Information~~

Date: _____

Name: _____

Address: _____

Email: _____

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

SIGN IN SHEET

~~Comments:~~

CARROLL PETRIOUX
Lloyd Gavion, Jr.
Pamela (Bercegeay) West
Scott Wilson
Brian Keiser
[illegible]
Lauren [illegible]
Mark Kessler
[illegible]

Federal Aid Project No. H007970
State Project No. H.007970
City Parish Project No. 12-CS-HC-0043
East Baton Rouge Parish, LA

Appendix F

Public Comments

PUBLIC MEETING HANDOUT
PUBLIC MEETING NO. 1
Old Hammond Highway (LA 426)
(Millerville Road to Boulevard De Province)
Environmental Assessment

City Parish Project No. 12-CS-HC-0043
State Project No. H.007970
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East Baton Rouge Parish, Louisiana
http://www.brgov.com/greenlight

Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

Contact Information

Date: 8/4/16

Name: Pam Bercegeay West

Address: 10784 Stone Pine Dr.
Greenwell Springs, LA 70739

Email: Like Alternate 2

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

Comments:

I've been saying for years (ever since other section was 4 laned) that it should be 4 laned all the way to O'Neal! It is a horrible bottle neck where the 4 lane turn ints 2 @ Blvd. de Province in the afternoon rush hours. I would prefer ~~Roundabouts~~ lights. + NO 3/3/4 way stop signs.

If you stop at Millerville you'll have another bottle neck bet. Millerville & O'Neal. It needs to be 4 laned to O'Neal Dr. Speed of 45 is too slow... should be 50mph.

PUBLIC MEETING HANDOUT
PUBLIC MEETING NO. 1
Old Hammond Highway (LA 426)
(Millerville Road to Boulevard De Province)
Environmental Assessment

City Parish Project No. 12-CS-HC-0043
State Project No. H.007970
F.A.P. No. H007970
East Baton Rouge Parish, Louisiana
http://www.brgov.com/greenlight

Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

Contact Information

Date: AUGUST 4 2016

Name: Carroll Perkins

Address: _____

Email: _____

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

Comments:

1) MAKE SURE AMPLE SIZE BIKE PATHS

2) WHY NOT CONTINUE TO FLORIDA BLVD

OVER/ @ LEAST

Lloyd Harris Jr.

old hammond highway to millerville

PF

phillip fetterman <psfetterman@yahoo.com>

Sun 8/14, 7:45 PM

Old Hammond Segment 1 Environmental; Jonathan Charbonnet <charbonnet@csrsonline.com>

Reply all

Mr Kessler, like many people in Sherwood, I am flooded...so my comments on the Old Hammond job will be brief:

- Preferred option - five lanes with middle turn lane like the rest of Old Hammond.
- Since the state is stating that the work must have a medium, seek a deviation to the specification.
- Do NOT put a roundabout at Old Hammond and South Flannery. There is too much traffic at that intersection, especially from about 3 pm until 7 pm. A roundabout will slow down the traffic to a crawl. Trust me, I am very familiar with roundabouts - I drove them for years in Singapore and the UK.
- If a medium is required, to NOT use U-turns for people to get back to their subdivision. With the speed limit on Old Hammond being 45 mph and the volume of traffic on it, people will get T-boned turning around to get their subdivision.
- If a medium is required, provide a standard turning lane for people to turn their vehicle to enter their subdivision, Winn-Dixie, library, etc.

I have more comments...but Entergy is about ready to turn off our power...and I thought it important to get this note to you.

Should you have any questions, please let me know.

Sincerely,

PUBLIC MEETING HANDOUT
PUBLIC MEETING NO. 1
Old Hammond Highway (LA 426)
(Millerville Road to Boulevard De Province)
Environmental Assessment

City Parish Project No. 12-CS-HC-0043
State Project No. H.007970
F.A.P. No. H007970
East Baton Rouge Parish, Louisiana
http://www.brgov.com/greenlight

Comments must be marked within 10 days of this meeting. Comments received tonight and those that are post marked by August 15, 2016 will be included in the official meeting transcript.

Contact Information

Date: August 10, 2016

Name: Terry V. Hebert, David C. Hebert

Address: 12606 Fairhaven Dr, 70815
12234 E. Sheraton Ave, 70815

Email: heberteng@bellsouth.net

Please submit comments to:
Mark J. Kessler, Project Design Manager
Forte & Tablada
9107 Interline Ave.
Baton Rouge, LA 70809

Ohh-seg1-env@forteandtablada.com

Comments:

See Attachment A

Attachment A

The City-Parish is requested to return to the 5-lane concept with the caveat that the middle turning lane will be striped to safely control left turn usage at designated locations. This caveat should allow the State to approve this variance to current design practices. The 5-lanes will complete Old Hammond Highway in a congruent manner.

The controlled usage of the middle lane is the "right" compromise between current left turn anywhere and proposed blocking out left turn at many current high usage areas, such as Buckingham access and Fairwood Village Condominiums access and egress to the highway. Striping control of middle lane usage will facilitate a left turn slowing lane for egress and left turn accelerating lane for access to Old Hammond Highway. Future changes in land use along the corridor can be easily facilitated with striping changes and not require expensive, disruptive construction of new turn lanes in the median.

Please do not use traffic circles as these are not appropriate for these busy intersections.

APPENDIX E

Solicitation of Views

July 16, 2015 Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Forte & Tablada Inc. and GHD Services, Inc. (GHD) are conducting an environmental evaluation and engineering study for the City of Baton Rouge to assess the construction of widening improvements to Old Hammond Highway (LA 426) from an existing 2-lane roadway to a 4-lane divided roadway. During the planning stages of this Environmental Assessment, we are soliciting the views of those federal, state, and local public agencies, groups, and individuals, or organizations which by special expertise or interest, can assist Forte & Tablada and GHD in identifying possible impacts or concerns in the project area.

We request your review of the attached information and would like for you to provide your views and comments by August 17, 2015. Replies should be addressed to:

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Please reference State Project No. H.007970 in your reply. Your assistance is appreciated.

Sincerely,

GHD

Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

Environmental Assessment – Solicitation of Views
Old Hammond Highway (LA 426) Segment 1, Phase 2,
Boulevard de Province to Millerville Road
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

PRELIMINARY PROJECT DESCRIPTION

Project History

In 1997-1998 the Louisiana Department of Transportation and Development (DOTD) performed an Environmental Assessment (EA) for Old Hammond Highway from Airline Highway to Millerville Road (S. P. No. 700-17-0110 & 817-09-0028). The 1998 EA divided the project into two phases. The first phase was Airline Highway to Boulevard De Province and the second phase was Boulevard De Province to Millerville Road. In June of 1998 the Federal Highway Administration issued a Finding of No Significant Impact for the entire corridor. DOTD constructed the first phase from Airline Highway to Boulevard De Province and the second phase was not completed due to funding. This section of Old Hammond Highway is surrounded by recently improved roadways with Old Hammond from Airline Highway to Boulevard De Province on the west and Millerville Road and the intersection of Millerville and Old Hammond Highway to the east. These improvements provided for additional capacity. The City of Baton Rouge/East Baton Rouge Parish and DOTD have determined a need to increase capacity along LA 426 between Boulevard De Province and Millerville Road (phase 2). Due to the date of the FONSI and current revisions to DOTD Engineering and Design Standards, this document will be a supplement to the previous 1998 EA.

Preliminary Purpose and Need

In the East Baton Rouge Parish (EBR) "Major Street Plan Inventory," this study section of Old Hammond Highway is classified as an arterial road indicating that the road is a major thoroughfare in the parish. The current average daily traffic count on Old Hammond Highway east of Airline Highway is noted as 15,800 in the East Baton Rouge Parish Horizon Plan. Estimated traffic along the corridor in this location is expected to increase by approximately 52% to 24,150 during the 20 year planning period.

The Capital Region Planning Commission, which is the Metropolitan Planning Organization for the region encompassing the proposed project, has indicated that there are no travel demand management schemes that would eliminate the need for additional capacity as proposed for the Old Hammond corridor under study. While carpooling, vanpooling, traffic signal synchronization, and other congestion management alternatives may help in reducing congestion, the management techniques would not improve the current condition in measurable quantities.

The Louisiana Department of Transportation and Development (LDOTD) has indicated that a Level of Service (LOS) of 'F' exists along this section of Old Hammond Highway. This 'F' rating equates to a volume to capacity (v/c) ratio greater than or equal to 1.0, which is generally characterized by forced or breakdown flow, low operating speeds, congestion, and extensive queuing at intersections. Traffic conditions worsen as vehicles arrive at a rate greater than the rate at which they are discharged. The v/c ratio is 1.9 for the subject Old Hammond Highway section. Examples of some of the current traffic conditions along the corridor include high traffic volume, extended traffic peaks, frequent stops, accidents, and difficulty exiting cross streets onto Old Hammond Highway.

The target LOS for the proposed segment is 'C'. Once the project is completed, disruptions to traffic flow should be noticeably reduced, congestion should be minimized, the accident rate will likely decline, and queuing should be lessened substantially.

The Major Street Plan for East Baton Rouge Parish calls for widening Old Hammond Highway from Airline Highway to Florida Boulevard. The proposed project is being designed and is proposed to be constructed in partial fulfillment of that objective. It is noteworthy that because this proposed project involves state funding, its widening is not considered a priority in the Horizon Plan which only prioritizes City-Parish Capital Improvement projects. However, in the "Staged Improvement Program" portion of the Baton Rouge Metropolitan Area Transportation Plan Update" of 1992 which is based primarily on traffic needs, the widening of Old Hammond Highway from Airline Highway to Sherwood Forest Boulevard was given a 'Stage I' priority signifying immediate implementation Sherwood Forest Boulevard to Millerville Road was given a 'Stage II' priority to be 'undertaken immediately after the Airline Highway to Sherwood Forest Boulevard section is completed. The design and approach as presented herein follows that recommendation.

In summary, current traffic exceeds the present design capacity of Old Hammond Highway along the study corridor. In addition, traffic is expected to increase by 50% within the planning period to 2015. These plans to widen Old Hammond Highway are consistent with the various transportation plans for the Baton Rouge Metropolitan Area, and the widening is included in the Major Street Plan for EBR which was adopted as part of the Horizon Plan.

Therefore, the logical termini is still defined from Airline Highway (N30°25', W91°05') to Millerville Road (N30°27', W91°01'). This proposed project calls for upgrading Old Hammond Highway (LA 426) between Boulevard De Province and Millerville Road in East Baton Rouge Parish which is approximately 150 feet west of Boulevard De Province to 800 feet west of the intersection of Old Hammond Highway and Millerville Road. These termini are the beginning and ending points of the proposed construction and study area. This project will also include additional studies of intersections along Old Hammond Highway, including the major intersection of Old Hammond Highway and South Flannery Road and bridge improvements.

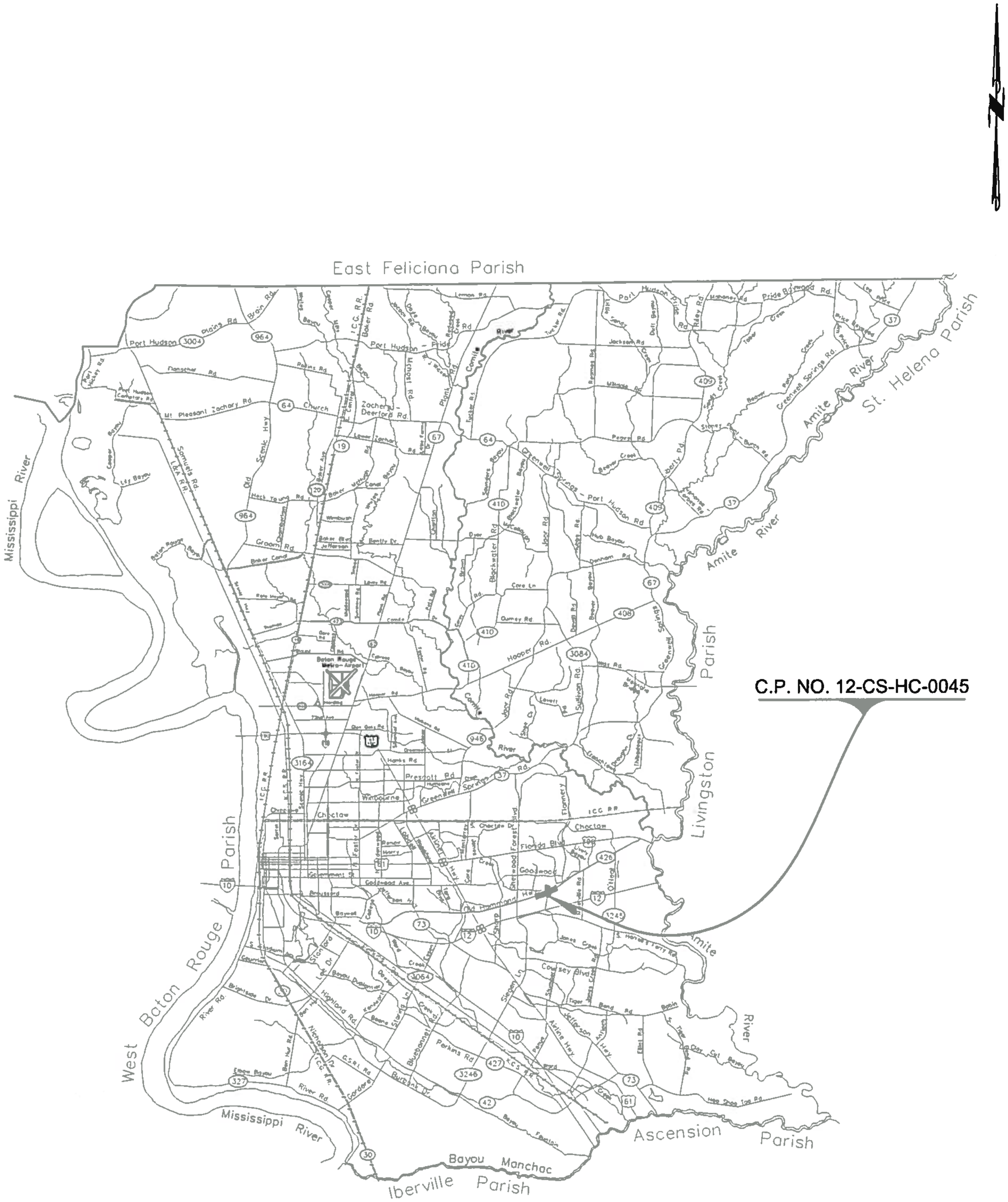
Environmental Assessment – Solicitation of Views
Old Hammond Highway (LA 426) Segment 1, Phase 2,
Boulevard de Province to Millerville Road
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Alternatives Currently Being Considered

When the 1998 Environmental Assessment was completed, the preferred alternative was Alternative A which was a five lane section following the existing centerline of Old Hammond Highway. Since that date, the use of a five lane roadways are not recommended by DOTD, as this is a DOTD policy. Several alternatives will be considered during the environmental study. The environmental analysis will include a four lane divided highway with a 30 foot median and designated turn lanes, a four lane divided highway with a 16' median and designated turn lanes, and an alternative that would implement a roundabout at the intersection of Old Hammond Highway and South Flannery Road in lieu of a signalized intersection.

The Supplement to the Environmental Assessment is currently underway. FHWA is the lead Federal Agency for the Environmental Assessment. As with all NEPA Environmental Assessments, the no-build alternative is being considered. The no-build alternative would not have any impacts to right of way, structures or utilities, but the increased traffic demand would impact the public if additional travel lanes are not provided.

Each of the build alternatives being considered will be designed to DOTD criteria for urban arterials using a 45 mph design speed. The attached exhibit indicates the beginning and ending points of the proposed Old Hammond Highway (phase 2) construction. In addition to the widening of Old Hammond Highway, intersection improvements, median openings, turn lanes, pedestrian and bicyclist accommodations will be considered. When studying the alternatives, consideration will be given, but not limited to, land use, improvements on properties along Old Hammond Highway, utilities, safety, previous studies, public input and traffic and environmental analyses. The additional widening may include the relocation of businesses and/or homes. The environmental analyses include: wetlands, threatened and endangered species, water resources, cultural resources and noise/air impact studies to name a few. It is anticipated that one public meeting and one public hearing will be held to obtain public input about the alternatives being considered. The supplement to the Environmental Assessment approved for public distribution will have a preferred alternative for widening Old Hammond Highway between Boulevard De Province to just west of Millerville Road.



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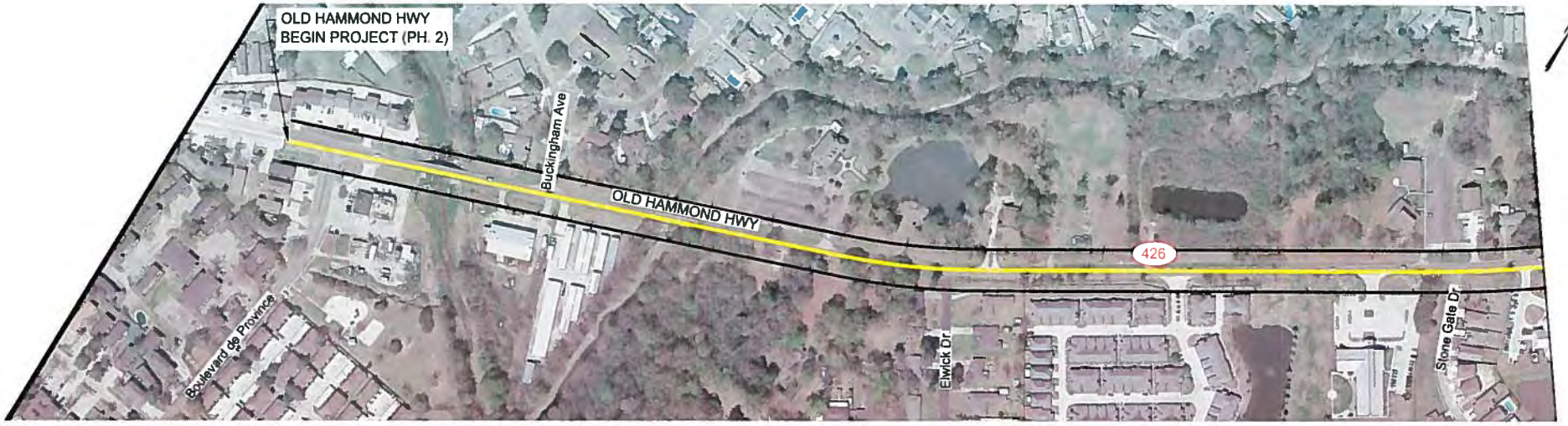
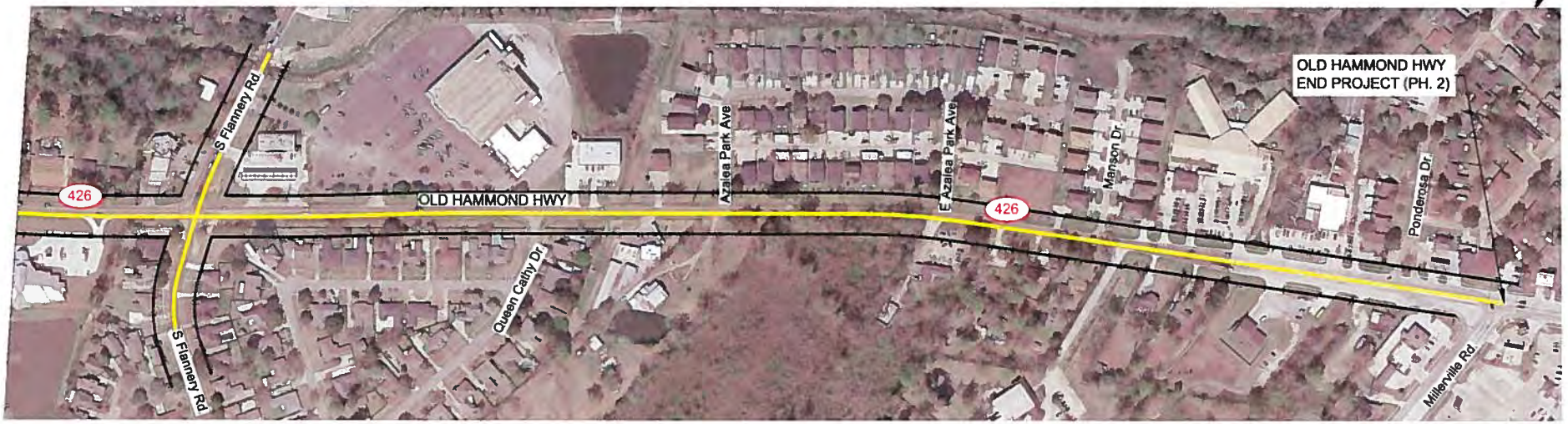
1"=18,000'

VICINITY MAP EXHIBIT A

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA





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(IN FEET)
1"=300'

PROJECT MAP EXHIBIT B

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA

Capital Region Planning Commission
Staff Review Form
E. O. 12372 Process

Contact Person: Linda McConnell Phone: (225) 292-9007 Date: 07/20/2015

Applicant: Forte & Tablada, Inc. and GHD Services, Inc.
Project Title: *Old Hammond Highway (LA 426)*
State Project: ***H.007970***
F.A.P. No.: *H007970*
Total$: Solicitation of Views Only
Total $: N/A

RECEIVED
JUL 27 2015
BY: Lmm

	Yes	No
Does the project conflict with any region-wide plans?	☐	☒
Is the project redundant with other federally funded projects?	☐	☒

The Capital Region Planning Commission (CRPC) staff on 07/16/2015 has reviewed the above referenced project and offers the following comments:

☐

The CRPC staff supports the above referenced project.	☒
The CRPC staff has neutral comments toward the above referenced project.	☐
The CRPC staff has negative comments regard the above referenced project. *(See comments below)*	☐

James C. Setze
Executive Director

Post Office Box 3355, Baton Rouge, Louisiana 70821-3355
Phone: 225.383.5203 ✦ Fax: 225.383.3804

July 16, 2015

Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

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Baton Rouge, LA 70808

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Sincerely,

GHD

Linda M. McConnell

Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

Environmental Assessment – Solicitation of Views
Old Hammond Highway (LA 426) Segment 1, Phase 2,
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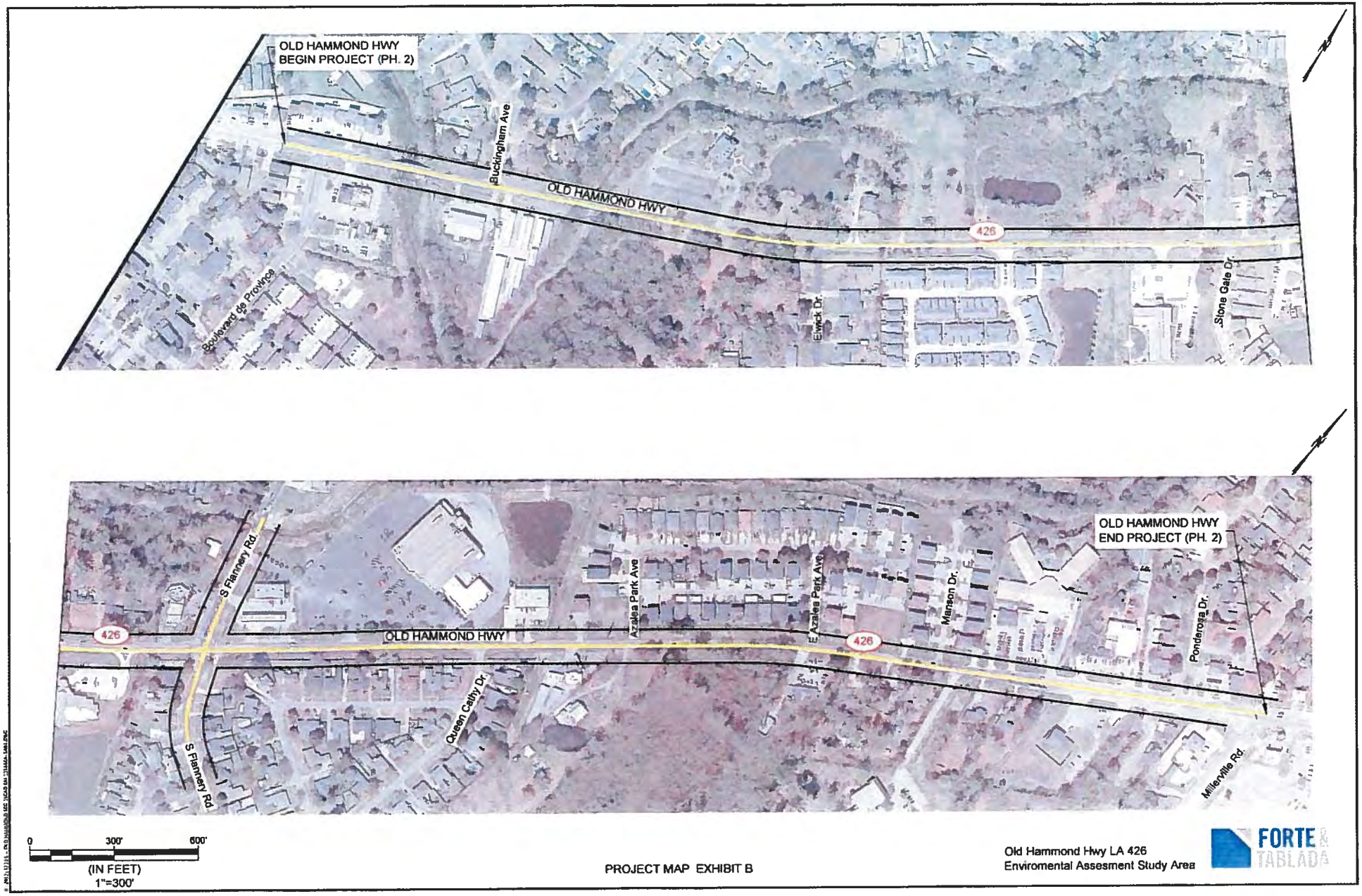
VICINITY MAP EXHIBIT A

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA



PROJECT MAP EXHIBIT B

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA

USDA

United States Department of Agriculture

July 21, 2015

RECEIVED
JUL 24 2015
BY: LMM

Ms. Linda M. McConnell, P.E.
GHD Services, Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

RE: Old Hammond Highway (LA 426) – State Project No. H.007970

Dear Ms. McConnell:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resources Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project map and narrative submitted with your request indicates that the proposed construction areas are within urban areas and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Attached is our completed form NRCS-CPA-106. Furthermore, we do not predict impacts to NRCS work in the vicinity.

For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location: http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown above.

Respectfully,

(ACTING FOR)
Kevin D. Norton
State Conservationist

Enclosure

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: 1-844-325-6947

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 7/21/15	4. Sheet 1 of _____
1. Name of Project **Old Hammand Highway Road Widening**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Road Construction - State Proj. No. H.007970**	6. County and State **East Baton Rouge Parish, Louisiana**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 7/20/15	2. Person Completing Form M. Mouton
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☑		4. Acres Irrigated / Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS 7/21/15

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — Maximum Points				
1. Area in Nonurban Use — 15				
2. Perimeter in Nonurban Use — 10				
3. Percent Of Corridor Being Farmed — 20				
4. Protection Provided By State And Local Government — 20				
5. Size of Present Farm Unit Compared To Average — 10				
6. Creation Of Nonfarmable Farmland — 25				
7. Availablility Of Farm Support Services — 5				
8. On-Farm Investments — 20				
9. Effects Of Conversion On Farm Support Services — 25				
10. Compatibility With Existing Agricultural Use — 10				
TOTAL CORRIDOR ASSESSMENT POINTS — 160	0	0	0	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)* — 260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

RECEIVED
JUL 29 2015
BY:

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

We offer the following comments:

WE WOULD REQUEST THAT THE COMMUNITY'S FLOODPLAIN ADMINISTRATOR BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO 11988 AND EO 11990.

REVIEW:

Floodplain Management and Insurance Branch
Mitigation Division
(940) 898-5541

DATE: July, 2015

2015 JUL 20 P 3:29

July 16, 2015

Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Forte & Tablada Inc. and GHD Services, Inc. (GHD) are conducting an environmental evaluation and engineering study for the City of Baton Rouge to assess the construction of widening improvements to Old Hammond Highway (LA 426) from an existing 2-lane roadway to a 4-lane divided roadway. During the planning stages of this Environmental Assessment, we are soliciting the views of those federal, state, and local public agencies, groups, and individuals, or organizations which by special expertise or interest, can assist Forte & Tablada and GHD in identifying possible impacts or concerns in the project area.

We request your review of the attached information and would like for you to provide your views and comments by August 17, 2015. Replies should be addressed to:

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Please reference State Project No. H.007970 in your reply. Your assistance is appreciated.

Sincerely,

GHD

Linda M. McConnell

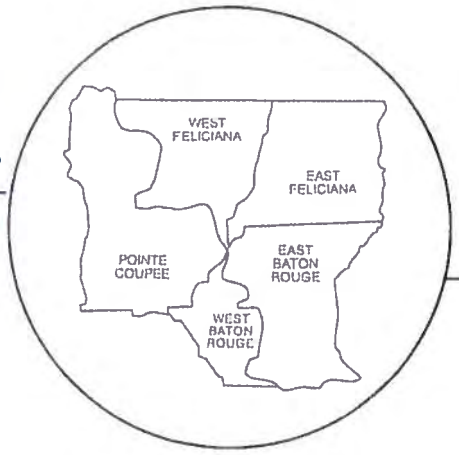
Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

CAPITAL AREA GROUND WATER
ANTHONY J. DUPLECHIN
DIRECTOR



CONSERVATION DISTRICT
3535 S. Sherwood Forest Blvd., Suite 137
Baton Rouge, Louisiana 70816-2255
Telephone (225) 293-7370

July 27, 2015

Ms. Linda McConnell
GHD Services
5551 Corporate Blvd.
Baton Rouge, LA 70808

Re: Solicitation of Views
Old Hammond Hwy (LA 426)
Boulevard de Province to Millerville Road – Phase2
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish

RECEIVED
JUL 30 2015
BY: LMM

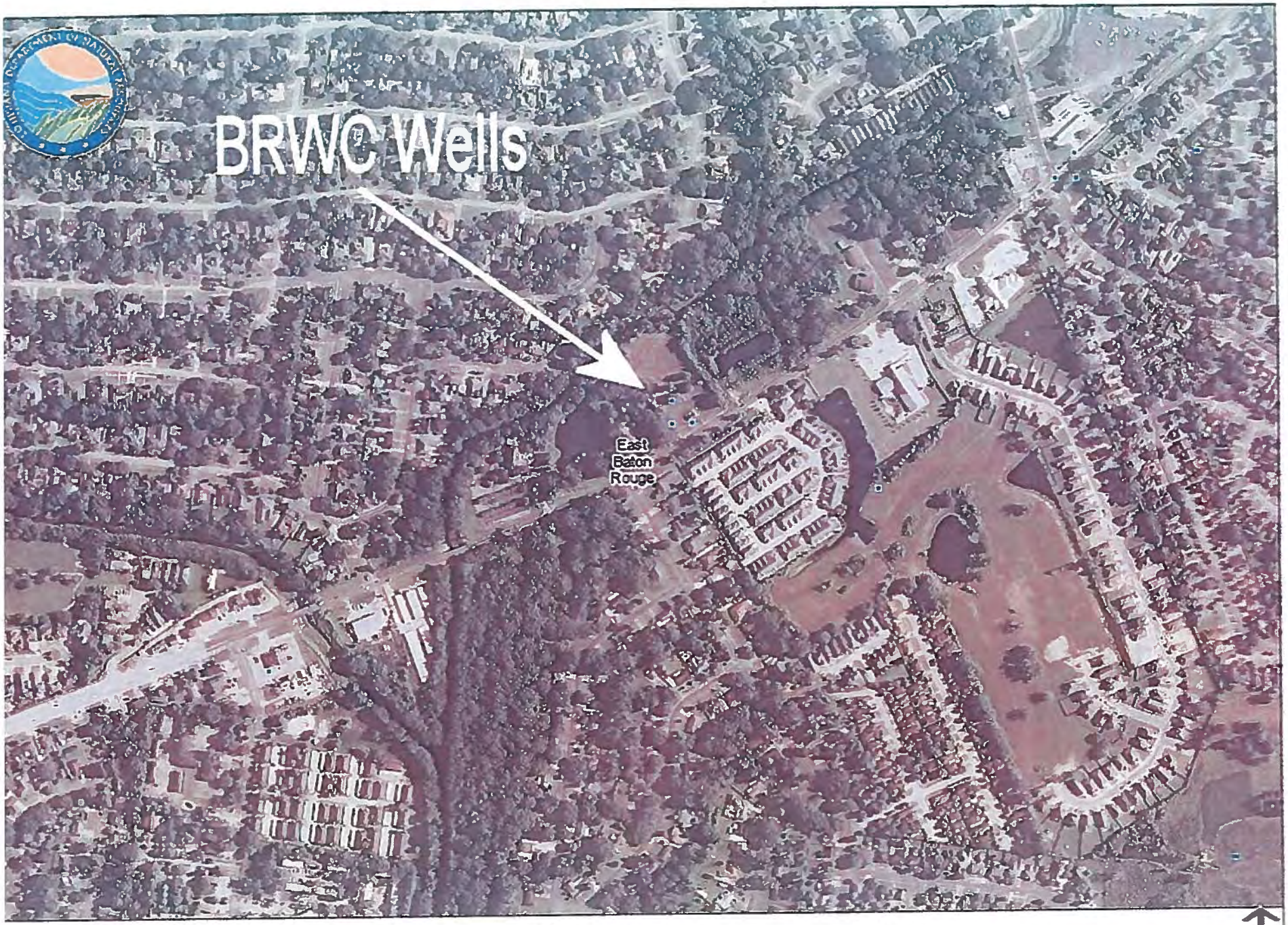
Dear Ms. Connell:

Please be advised that, in addition to numerous monitor wells located near gas stations along the project right of way, Baton Rouge Water Company has an active public supply well field on the north side of Old Hammond Highway. See attached map. If I can be of further assistance, please do not hesitate to call.

Sincerely,

Anthony J. Duplechin
Director

enclosure



0.05 0.1 Absolute Scale 1:6,536

mi Relative Scale 1 inch = 545 feet

Old Hammond Hwy.

Disclaimer: This data is not to be used for legal purposes

Date: 7/27/2015

N

McConnell, Linda

From: Linda (Brown) Hardy <Linda.Hardy@la.gov>
Sent: Tuesday, July 28, 2015 3:13 PM
To: McConnell, Linda
Cc: Yasoob Zia
Subject: DEQ SOV 150724/1050 Old Hammond Highway Environmental Assessment ~COR-029998-01~ [Copy]

July 28, 2015

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808
Linda.McConnell@GHD.com

RE: 150724/1050 Old Hammond Highway Environmental Assessment
H.007970 DOTD Funding
East Baton Rouge Parish

Dear Ms. McConnell:

The Assessment Division of the Office of Environmental Compliance has reviewed the information provided in your letter of July 16, 2015, regarding the referenced project in East Baton Rouge Parish. Effective July 20, 2012, East Baton Rouge Parish was designated by EPA as an ozone nonattainment parish under the 8-hour standard (77 FR 30088, May 21, 2012). Federal actions proposed for construction in a nonattainment area are subject to the State's transportation conformity regulations as promulgated under *LAC 33:III.Chapter 14, Subchapter B.*

If this project is deemed regionally significant it must be included in a conforming metropolitan transportation plan, i.e., included in a comprehensive regional emissions analysis which demonstrates conformity to the State Implementation Plan for control of ozone.

Should you have any questions regarding state rules and regulations pertaining to transportation conformity, please contact Yasoob Zia at (225) 219-2969. Thank you for affording us the opportunity to comment on this transportation project.

Sincerely,

Yasoob Zia
Environmental Senior Scientist
Assessment Division

SOV 150724/1050

Linda M. Hardy
Technical Assistant to the Deputy Secretary
Louisiana Department of Environmental Quality
Office of the Secretary
P.O. Box 4301
Baton Rouge, LA 70821-4301
Ph: (225) 219-3954
Fax: (225) 219-3971

Email: linda.hardy@la.gov

This e-mail has been scanned for viruses

Bobby Jindal
GOVERNOR

Kathy H. Kliebert
SECRETARY

State of Louisiana

Department of Health and Hospitals
Office of Public Health

July 29, 2015

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Re: Solicitation of Views;
Old Hammond Highway (LA 426), Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project Number H.007970; F.A.P. No. H007970;
Baton Rouge, East Baton Rouge Parish, Louisiana

This office is in receipt of a Solicitation of Views regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comments on the referenced project(s).

In the event of any future discovery of evidence of non-compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any .applicable public health laws or statutes which may have escaped our awareness during the course of this cursory review, please be advised that this office's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant of responsibility, if any, with respect to compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any other applicable public health laws or statutes.

Sincerely,

Yuanda Zhu, P.G., Ph.D.
Louisiana Department of Health and Hospitals
Office of Public Health Engineering Services
Telephone: (225) 342-7432
Electronic mail: yuanda.zhu@la.gov

July 16, 2015

Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Forte & Tablada Inc. and GHD Services, Inc. (GHD) are conducting an environmental evaluation and engineering study for the City of Baton Rouge to assess the construction of widening improvements to Old Hammond Highway (LA 426) from an existing 2-lane roadway to a 4-lane divided roadway. During the planning stages of this Environmental Assessment, we are soliciting the views of those federal, state, and local public agencies, groups, and individuals, or organizations which by special expertise or interest, can assist Forte & Tablada and GHD in identifying possible impacts or concerns in the project area.

We request your review of the attached information and would like for you to provide your views and comments by August 17, 2015. Replies should be addressed to:

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Please reference State Project No. H.007970 in your reply. Your assistance is appreciated.

Sincerely,

GHD

Linda M. McConnell

Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,
(X) Will have no effect on those resources
( ) Is not likely to adversely affect those resources.
This finding fulfills the requirements under Section 7(a)(2) of the Act.

Acting Supervisor
Louisiana Field Office
U.S. Fish and Wildlife Service

July 29 2015
Date

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date	July 31, 2015
Name	Linda M. McConnell
Company	GHD Services, Inc.
Street Address	5551 Corporate Blvd., Suite 200
City, State, Zip	Baton Rouge, LA 70808
Project	State Project No. H.007970 Old Hammond Highway(LA 426)
Project ID	1692015
Invoice Number	15073113

RECEIVED
AUG 0 5 2015
BY: LMM

Personnel of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats within Louisiana's boundary are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

for Amity Bass, Coordinator
Natural Heritage Program

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

INVOICE

RETURN THIS COPY OF INVOICE WITH PAYMENT

Date	July 31, 2015
Invoice Number	15073113
Project	State Project No. H.007970 Old Hammond Highway(LA 426)
Name	Linda M. McConnell
Company	GHD Services, Inc.
Street Address	5551 Corporate Blvd., Suite 200
City, State, Zip	Baton Rouge, LA 70808
Number of Quads Reviewed	1
Total Due	$30.00

Payment should be made to "Louisiana Department of Wildlife & Fisheries" within 30 days of the date of this invoice. Please include the invoice number on your check and return a copy of this invoice with your remittance to the following address:

Louisiana Department of Wildlife & Fisheries
Attn: Jennifer Riddle
P.O. Box 80399
Baton Rouge, LA 70898-0399

Should you have any questions regarding this invoice, for review of the Louisiana Natural Heritage database for information on known sensitive elements at a charge of $30.00 per quad reviewed, please contact LNHP at (225) 765-2357.

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

INVOICE

RETAIN THIS COPY FOR YOUR RECORDS

Date	July 31, 2015
Invoice Number	15073113
Project	State Project No. H.007970 Old Hammond Highway(LA 426)
Name	Linda M. McConnell
Company	GHD Services, Inc.
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Baton Rouge, LA 70898-0399

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McConnell, Linda

From: Mike Kline <Mike.Kline@LA.GOV>
Sent: Thursday, August 06, 2015 11:55 AM
To: McConnell, Linda
Subject: FW: SOV H.007970 ~COR-029998-01~ [Copy]
Attachments: SOV H.007970.pdf

Ms. McConnell: please let me know that you have received this SOV response.

Thanks,

Mike Kline
La. Office of Conservation
Geological Oil and Gas Division

-----Original Message-----
From: Xerox5855_ENG@la.gov [mailto:Xerox5855_ENG@la.gov]
Sent: Thursday, August 06, 2015 11:56 AM
To: Mike Kline
Subject: SOV H.007970

Please open the attached document. It was scanned and sent to you using a Xerox Multifunction Device.

Attachment File Type: pdf, Multi-Page

Multifunction Device Location: machine location not set Device Name: Xerox5855_ENG

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

STEPHEN CHUSTZ
SECRETARY
JAMES H. WELSH
COMMISSIONER OF CONSERVATION

August 5, 2015

TO: Ms. Linda McConnell, P.E.
GHD Services, Inc.
5551 Corporate Blvd.
Baton Rouge, Louisiana 70808

RE: Solicitation of Views
State Project No. H.007970
City-Parish Project Number: 12-CS-HC-0045
Project Name: Old Hammond Hwy (LA 426)
East Baton Rouge Parish

Dear Ms. McConnell:

In response to your letter dated July 16, 2015, concerning the referenced matter, please be advised that the Office of Conservation collects and maintains many types of information regarding oil and gas exploration, production, distribution, and other data relative to the petroleum industry as well as related and non-related injection well information, surface mining and ground water information and other natural resource related data. Most information concerning oil, gas and injection wells for any given area of the state, including the subject area of your letter can be obtained through records search via the SONRIS data access application available at:

http://www.dnr.louisiana.gov

A review of our computer records for the referenced project area indicates that there are no oil, gas or injection wells located in the project area. The DNR water well database indicates that there are registered water wells in the vicinity of the project area. Also, it is possible that unregistered water wells may be located in the area.

The Office of Conservation maintains records of all activities within its jurisdiction in paper, microfilm or electronic format. These records may be accessed during normal business hours, Monday through Friday, except on State holidays or emergencies that require the Office to be closed. Please call 225-342-5540 for specific contact information or for directions to the Office of Conservation, located in the LaSalle Building, 617 North Third Street, Baton Rouge, Louisiana. For pipelines and other underground hazards, please contact Louisiana One Call at 1-800-272-3020 prior to commencing operations. Should you need to direct your inquiry to any of our Divisions, you may use the following contact information:

Division	Contact	Phone No.	E-mail Address
Engineering	Jeff Wells	225-342-5638	jeff.wells@la.gov
Pipeline	Steven Giambrone	225-342-2989	steven.giambrone@la.gov
Injection & Mining	Brad Bourgoyne	225-342-4286	brad.bourgoyne@la.gov
Geological	Mike Kline	225-342-3335	mike.kline@la.gov
Environmental	Gary Snellgrove	225-342-7222	gary.snellgrove@la.gov

If you have difficulty in accessing the data via the referenced website because of computer related issues, you may obtain assistance from our technical support section by selecting Help on the SONRIS tool bar and submitting an email describing your problems and including a telephone number where you may be reached.

Sincerely,

James H. Welsh
Commissioner of Conservation

JHW:MSK

McConnell, Linda

From: McConnell, Linda
Sent: Thursday, August 06, 2015 11:56 AM
To: 'Mike Kline'
Subject: RE: SOV H.007970

Received. Thanks,
Linda McConnell

Linda M McConnell, PE

GHD
T: +1 225 292 9007 | D: +1 225 296 6548 | M: +1 225 773 6478 | E: linda.mcconnell@ghd.com
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA | www.ghd.com

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

-----Original Message-----
From: Mike Kline [mailto:Mike.Kline@LA.GOV]
Sent: Thursday, August 06, 2015 11:55 AM
To: McConnell, Linda
Subject: FW: SOV H.007970

Ms. McConnell: please let me know that you have received this SOV response.

Thanks,

Mike Kline
La. Office of Conservation
Geological Oil and Gas Division

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Sent: Thursday, August 06, 2015 11:56 AM
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Subject: SOV H.007970

Please open the attached document. It was scanned and sent to you using a Xerox Multifunction Device.

Attachment File Type: pdf, Multi-Page

Multifunction Device Location: machine location not set Device Name: Xerox5855_ENG

This e-mail has been scanned for viruses

LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY
MIKE STRAIN DVM
COMMISSIONER

August 7, 2015

Agricultural & Environmental Sciences
P.O. Box 3596
Baton Rouge, LA 70821
(225) 925-3770
Fax: 925-3760

Agro-Consumer Services
P.O. Box 3098
Baton Rouge, LA 70821
(225) 922-1341
Fax: 923-4877

Animal Health & Food Safety
P.O. Box 1951
Baton Rouge, LA 70821
(225) 925-3982
Fax: 925-4103

Forestry
P.O. Box 1628
Baton Rouge, LA 70821
(225) 925-4500
Fax: 922-1356

Management & Finance
P.O. Box 3481
Baton Rouge, LA 70821
(225) 922-1255
Fax: 925-6012

Soil & Water Conservation
P.O. Box 3554
Baton Rouge, LA 70821
(225) 922-1269
Fax: 922-2577

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

RE: Solicitation of Views

STATE PROJECT NO.: H.007970
FEDERAL AID PROJECT NO.: H007970
NAME: OLD HAMMOND HIGHWAY (LA 426)
BOULEVARD DE PROVINCE TO MILLERVILLE RD. – (PHASE 2)
PARISH: EAST BATON ROUGE

Dear Ms. McConnell,

I have no comment at this time regarding the above referenced project.

Sincerely,

Brad Spicer KH

Bradley E. Spicer
Assistant Commissioner

BES:kh

BATON ROUGE POLICE DEPARTMENT

Nationally Accredited

Lt. James Vernon
Traffic Bureau
Traffic Commander
7261 Florida Blvd
Baton Rouge, Louisiana 70806
Phone: 225-389-3874
Email: jvernon@brgov.com

RECEIVED
AUG 14 2015
BY: LMM

Date: August 10, 2015

To: Ms. Linda McConnell

From: Sgt. David Wallace

Subject: Old Hammond (LA 426) Project # H.007970

Hi Ms. McConnell,

I have received your notification of roadwork to Old Hammond Hwy (LA 426). We do not foresee any issues, and thank you for the notification. If you need any assistance form us, Please let me know.

Thank you,

Sgt. D. Wallace 4472

Sgt. David Wallace
Baton Rouge Police Department.
Assistance Traffic Commander
(225)389-3874

Please forward to
Traffic Commander LT. J. Vernon
To review & comment if applicable.
Dep. Chief D. Hamilton 7/21/15

July 16, 2015

Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Forte & Tablada Inc. and GHD Services, Inc. (GHD) are conducting an environmental evaluation and engineering study for the City of Baton Rouge to assess the construction of widening improvements to Old Hammond Highway (LA 426) from an existing 2-lane roadway to a 4-lane divided roadway. During the planning stages of this Environmental Assessment, we are soliciting the views of those federal, state, and local public agencies, groups, and individuals, or organizations which by special expertise or interest, can assist Forte & Tablada and GHD in identifying possible impacts or concerns in the project area.

We request your review of the attached information and would like for you to provide your views and comments by August 17, 2015. Replies should be addressed to:

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Please reference State Project No. H.007970 in your reply. Your assistance is appreciated.

Sincerely,

GHD

Linda M. McConnell

Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

Environmental Assessment – Solicitation of Views
Old Hammond Highway (LA 426) Segment 1, Phase 2,
Boulevard de Province to Millerville Road
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

PRELIMINARY PROJECT DESCRIPTION

Project History

In 1997-1998 the Louisiana Department of Transportation and Development (DOTD) performed an Environmental Assessment (EA) for Old Hammond Highway from Airline Highway to Millerville Road (S. P. No. 700-17-0110 & 817-09-0028). The 1998 EA divided the project into two phases. The first phase was Airline Highway to Boulevard De Province and the second phase was Boulevard De Province to Millerville Road. In June of 1998 the Federal Highway Administration issued a Finding of No Significant Impact for the entire corridor. DOTD constructed the first phase from Airline Highway to Boulevard De Province and the second phase was not completed due to funding. This section of Old Hammond Highway is surrounded by recently improved roadways with Old Hammond from Airline Highway to Boulevard De Province on the west and Millerville Road and the intersection of Millerville and Old Hammond Highway to the east. These improvements provided for additional capacity. The City of Baton Rouge/East Baton Rouge Parish and DOTD have determined a need to increase capacity along LA 426 between Boulevard De Province and Millerville Road (phase 2). Due to the date of the FONSI and current revisions to DOTD Engineering and Design Standards, this document will be a supplement to the previous 1998 EA.

Preliminary Purpose and Need

In the East Baton Rouge Parish (EBR) "Major Street Plan Inventory," this study section of Old Hammond Highway is classified as an arterial road indicating that the road is a major thoroughfare in the parish. The current average daily traffic count on Old Hammond Highway east of Airline Highway is noted as 15,800 in the East Baton Rouge Parish Horizon Plan. Estimated traffic along the corridor in this location is expected to increase by approximately 52% to 24,150 during the 20 year planning period.

The Capital Region Planning Commission, which is the Metropolitan Planning Organization for the region encompassing the proposed project, has indicated that there are no travel demand management schemes that would eliminate the need for additional capacity as proposed for the Old Hammond corridor under study. While carpooling, vanpooling, traffic signal synchronization, and other congestion management alternatives may help in reducing congestion, the management techniques would not improve the current condition in measurable quantities.

The Louisiana Department of Transportation and Development (LDOTD) has indicated that a Level of Service (LOS) of 'F' exists along this section of Old Hammond Highway. This 'F' rating equates to a volume to capacity (v/c) ratio greater than or equal to 1.0, which is generally characterized by forced or breakdown flow, low operating speeds, congestion, and extensive queuing at intersections. Traffic conditions worsen as vehicles arrive at a rate greater than the rate at which they are discharged. The v/c ratio is 1.9 for the subject Old Hammond Highway section. Examples of some of the current traffic conditions along the corridor include high traffic volume, extended traffic peaks, frequent stops, accidents, and difficulty exiting cross streets onto Old Hammond Highway.

The target LOS for the proposed segment is 'C'. Once the project is completed, disruptions to traffic flow should be noticeably reduced, congestion should be minimized, the accident rate will likely decline, and queuing should be lessened substantially.

The Major Street Plan for East Baton Rouge Parish calls for widening Old Hammond Highway from Airline Highway to Florida Boulevard. The proposed project is being designed and is proposed to be constructed in partial fulfillment of that objective. It is noteworthy that because this proposed project involves state funding, its widening is not considered a priority in the Horizon Plan which only prioritizes City-Parish Capital Improvement projects. However, in the "Staged Improvement Program" portion of the Baton Rouge Metropolitan Area Transportation Plan Update" of 1992 which is based primarily on traffic needs, the widening of Old Hammond Highway from Airline Highway to Sherwood Forest Boulevard was given a 'Stage I' priority signifying immediate implementation Sherwood Forest Boulevard to Millerville Road was given a 'Stage II' priority to be 'undertaken immediately after the Airline Highway to Sherwood Forest Boulevard section is completed. The design and approach as presented herein follows that recommendation.

In summary, current traffic exceeds the present design capacity of Old Hammond Highway along the study corridor. In addition, traffic is expected to increase by 50% within the planning period to 2015. These plans to widen Old Hammond Highway are consistent with the various transportation plans for the Baton Rouge Metropolitan Area, and the widening is included in the Major Street Plan for EBR which was adopted as part of the Horizon Plan.

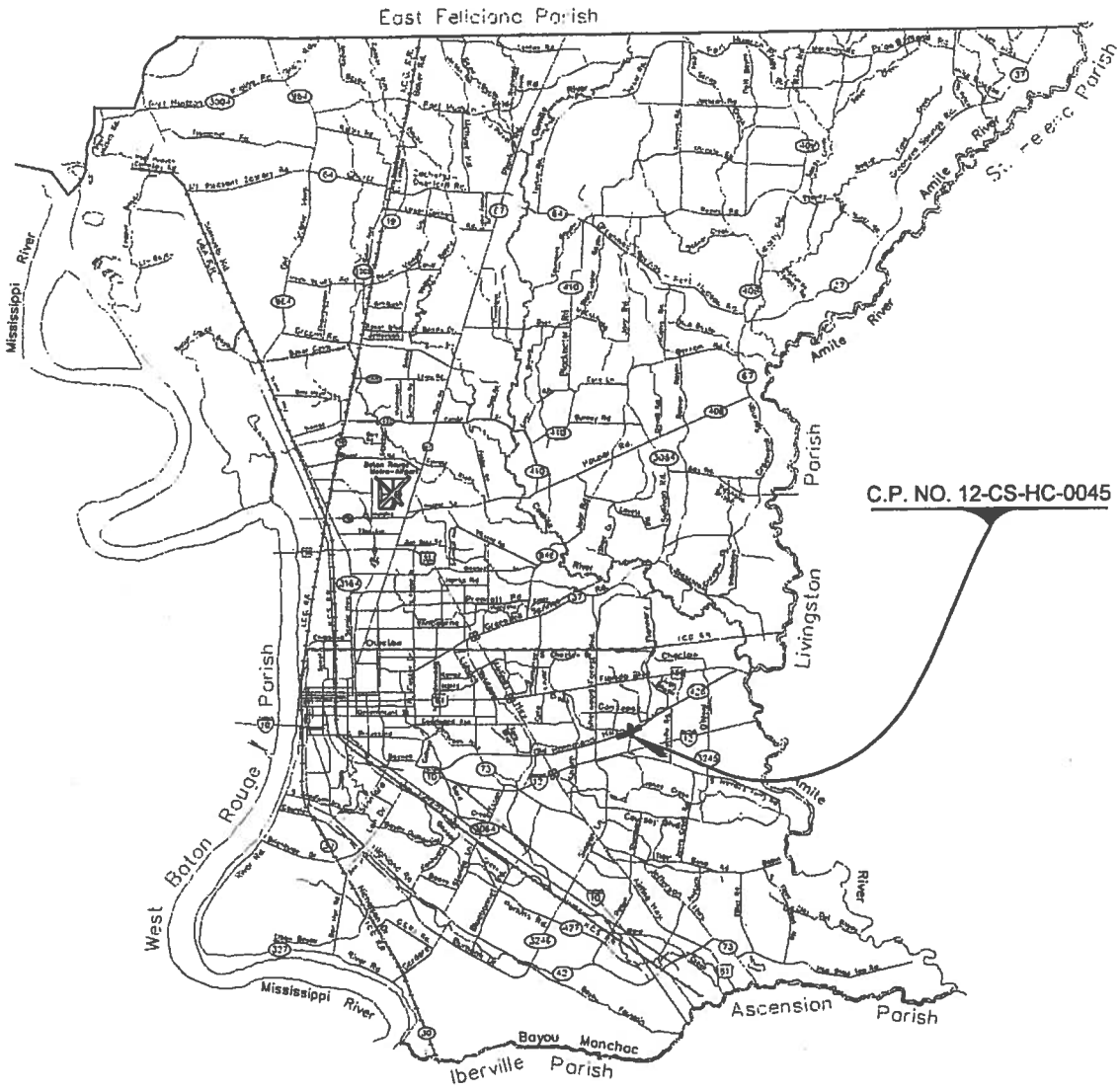
Therefore, the logical termini is still defined from Airline Highway (N30°25', W91°05') to Millerville Road (N30°27', W91°01'). This proposed project calls for upgrading Old Hammond Highway (LA 426) between Boulevard De Province and Millerville Road in East Baton Rouge Parish which is approximately 150 feet west of Boulevard De Province to 800 feet west of the intersection of Old Hammond Highway and Millerville Road. These termini are the beginning and ending points of the proposed construction and study area. This project will also include additional studies of intersections along Old Hammond Highway, including the major intersection of Old Hammond Highway and South Flannery Road and bridge improvements.

Alternatives Currently Being Considered

When the 1998 Environmental Assessment was completed, the preferred alternative was Alternative A which was a five lane section following the existing centerline of Old Hammond Highway. Since that date, the use of a five lane roadways are not recommended by DOTD, as this is a DOTD policy. Several alternatives will be considered during the environmental study. The environmental analysis will include a four lane divided highway with a 30 foot median and designated turn lanes, a four lane divided highway with a 16' median and designated turn lanes, and an alternative that would implement a roundabout at the intersection of Old Hammond Highway and South Flannery Road in lieu of a signalized intersection.

The Supplement to the Environmental Assessment is currently underway. FHWA is the lead Federal Agency for the Environmental Assessment. As with all NEPA Environmental Assessments, the no-build alternative is being considered. The no-build alternative would not have any impacts to right of way, structures or utilities, but the increased traffic demand would impact the public if additional travel lanes are not provided.

Each of the build alternatives being considered will be designed to DOTD criteria for urban arterials using a 45 mph design speed. The attached exhibit indicates the beginning and ending points of the proposed Old Hammond Highway (phase 2) construction. In addition to the widening of Old Hammond Highway, intersection improvements, median openings, turn lanes, pedestrian and bicyclist accommodations will be considered. When studying the alternatives, consideration will be given, but not limited to, land use, improvements on properties along Old Hammond Highway, utilities, safety, previous studies, public input and traffic and environmental analyses. The additional widening may include the relocation of businesses and/or homes. The environmental analyses include: wetlands, threatened and endangered species, water resources, cultural resources and noise/air impact studies to name a few. It is anticipated that one public meeting and one public hearing will be held to obtain public input about the alternatives being considered. The supplement to the Environmental Assessment approved for public distribution will have a preferred alternative for widening Old Hammond Highway between Boulevard De Province to just west of Millerville Road.



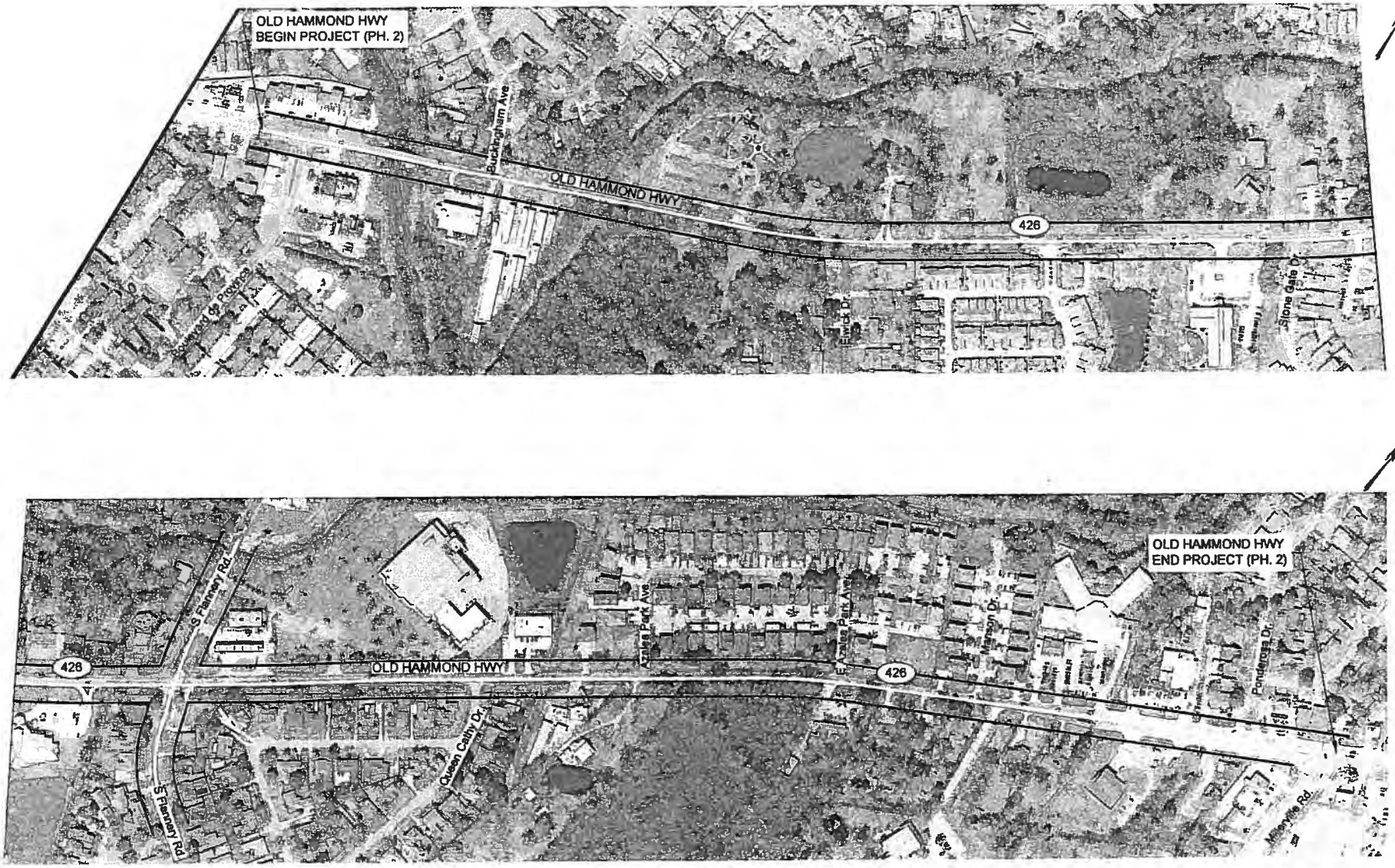
0 18,000' 36,000'

(IN FEET)
1"=18,000'

VICINITY MAP EXHIBIT A

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA



0 300' 600'

(IN FEET)
1"=300'

PROJECT MAP EXHIBIT B

Old Hammond Hwy LA 426
Enviromental Assesment Study Area

FORTE & TABLADA

McConnell, Linda

From: White, Sen. (District Office) <whitem@legis.la.gov>
Sent: Friday, August 14, 2015 11:45 AM
To: McConnell, Linda
Subject: solicitations of views- state project no. H.007970

Re: Old Hammond Highway
Boulevard De Province to Millerville
East Baton Rouge Parish, LA

This location of highway is near my distict office on 808 O'Neal Lane, Baton Rouge, LA 70816. I frequently use this stretch and am supportive of this project that will improve traffic flow.

Mack "Bodi" White
State Senator, District 6

This e-mail has been scanned for viruses

McConnell, Linda

From: McConnell, Linda
Sent: Friday, August 14, 2015 11:53 AM
To: 'White, Sen. (District Office)'
Subject: RE: solicitations of views- state project no. H.007970

Senator White:
Thank you for your response. It will be included in the Environmental Assessment for the project.
Linda McConnell

Linda M McConnell, PE

GHD
T: +1 225 292 9007 | D: +1 225 296 6548 | M: +1 225 773 6478 | E: linda.mcconnell@ghd.com
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA | www.ghd.com

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

From: White, Sen. (District Office) [mailto:whitem@legis.la.gov]
Sent: Friday, August 14, 2015 11:45 AM
To: McConnell, Linda
Subject: solicitations of views- state project no. H.007970

Re: Old Hammond Highway
Boulevard De Province to Millerville
East Baton Rouge Parish, LA

This location of highway is near my distict office on 808 O'Neal Lane, Baton Rouge, LA 70816. I frequently use this stretch and am supportive of this project that will improve traffic flow.

Mack "Bodi" White
State Senator, District 6

This e-mail has been scanned for viruses

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

August 17, 2015

Ms. Linda M. McConnell, P.E.
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, LA 70808

Dear Ms. McConnell:

We have received your July 16, 2015, letter requesting our evaluation of the potential environmental impacts that might result from the following project:

Upgrading Old Hammond Hwy (LA 426)
Hwy 426 between Boulevard De Province and Millerville Road
SP No: H.007970 & FAP No: H007970
East Baton Rouge Parish
Baton Rouge, Louisiana

The project, proposed for financial assistance through the Louisiana Department of Transportation and Development funds, is located on the Southern Hills aquifer system which has been designated a sole source aquifer (SSA) by the EPA. Based on the information provided for the project, we have determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site.

This approval of the proposed project does not relieve the applicant from adhering to other State and Federal requirements, which may apply. This approval is based solely upon the potential impact to the quality of ground water as it relates to the EPA's authority pursuant to Section 1424(e) of the Safe Drinking Water Act.

If you did not include a project description, project location, the parish and the federal funding agency if available, please do so in future Sole Source Aquifer correspondence.

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-8485.

Sincerely yours,

Omar T. Martinez, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Jesse Means, LDEQ

McConnell, Linda

From: Robin Daigle <rdaigle@crt.la.gov>
Sent: Wednesday, August 26, 2015 1:09 PM
To: McConnell, Linda
Subject: Emailing: OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE)
Attachments: OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

<<OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE).pdf>> Robin Daigle Office of Cultural Development Department of Culture, Recreation, & Tourism P.O. Box 44247 Baton Rouge, LA 70804
(225) 342-6931
Section 106 submissions: Section106@crt.la.gov

Your message is ready to be sent with the following file or link attachments:

OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE)

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

This e-mail has been scanned for viruses

This e-mail has been scanned for viruses

July 16, 2015

Reference No. 029998-01

Dear Interested Party:

Re: Solicitation of Views
Old Hammond Highway (LA 426)
Boulevard de Province to Millerville Road – (Phase 2)
City/Parish Project No. 12-CS-HC-0045
State Project No. H.007970
F.A.P. No. H007970
Baton Rouge, East Baton Rouge Parish, Louisiana

Forte & Tablada Inc. and GHD Services, Inc. (GHD) are conducting an environmental evaluation and engineering study for the City of Baton Rouge to assess the construction of widening improvements to Old Hammond Highway (LA 426) from an existing 2-lane roadway to a 4-lane divided roadway. During the planning stages of this Environmental Assessment, we are soliciting the views of those federal, state, and local public agencies, groups, and individuals, or organizations which by special expertise or interest, can assist Forte & Tablada and GHD in identifying possible impacts or concerns in the project area.

We request your review of the attached information and would like for you to provide your views and comments by August 17, 2015. Replies should be addressed to:

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Please reference State Project No. H.007970 in your reply. Your assistance is appreciated.

Sincerely,

GHD

Linda M. McConnell

Linda M. McConnell, PE
Linda.McConnell@GHD.com

LMM/cmp/1

Encl. Preliminary Project Description and Exhibit

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Phil Boggan 8-21-15
Phil Boggan Date
Deputy State Historic Preservation Officer

RECEIVED
JUL 17 2015

GHD Services Inc.
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA
T 225 292 9007 F 225 952 2978 W www.ghd.com

McConnell, Linda

From: McConnell, Linda
Sent: Wednesday, August 26, 2015 1:16 PM
To: 'Robin Daigle'
Subject: RE: Emailing: OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE)

Thank you for your response.

Linda M McConnell, PE

GHD
T: +1 225 292 9007 | D: +1 225 296 6548 | M: +1 225 773 6478 | E: linda.mcconnell@ghd.com
5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana 70808 USA | www.ghd.com

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

-----Original Message-----
From: Robin Daigle [mailto:rdaigle@crt.la.gov]
Sent: Wednesday, August 26, 2015 1:09 PM
To: McConnell, Linda
Subject: Emailing: OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE)

<<OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE).pdf>> Robin Daigle Office of Cultural Development Department of Culture, Recreation, & Tourism P.O. Box 44247 Baton Rouge, LA 70804
(225) 342-6931
Section 106 submissions: Section106@crt.la.gov

Your message is ready to be sent with the following file or link attachments:

OLD HAMMOND HWY (BOULEVARD DE PROVINCE TO MILLERVILLE)

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ALABAMA-COUSHATTA TRIBE OF TEXAS
571 State Park Road 56 • Livingston, Texas 77351 • (936) 563-1100

August 27, 2015

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, LA 70808

Dear Ms. McConnell:

On behalf of Mikko Colabe III Clem Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding the Old Hammond Road proposal in East Baton Rouge Parish.

Our Tribe maintains ancestral associations throughout the state of Louisiana despite the absence of written records to completely identify Tribal activities, villages, trails, or burial sites. However, it is our objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations.

Upon review of your July 16, 2015 submission, no known impacts to cultural assets of the Alabama-Coushatta Tribe of Texas are anticipated in conjunction with this proposal. In the event of the inadvertent discovery of archaeological artifacts or human remains, activity in proximity to the location must cease and appropriate authorities, including this office, notified without delay for additional consultations.

Should you require further assistance, please do not hesitate to contact us.

Sincerely,

Bryant J. Celestine
Historic Preservation Officer

Office (936) 563 – 1181 celestine.bryant@actribe.org Fax (936) 563 – 1183

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
P. O. BOX 60267
NEW ORLEANS LA 70160-0267

SEP 0 9 2015

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

Ms. Linda McConnell
GHD Services, Inc.
5551 Corporate Boulevard
Baton Rouge, Louisiana 70808

Dear Ms. McConnell:

This is in response to your Solicitation of Views request dated July 16, 2015, on behalf of the City of Baton Rouge and Louisiana Department of Transportation and Development, concerning the widening of Old Hammond Highway (LA 426) Phase 2 from Airline Highway to Millerville Road, at Baton Rouge, Louisiana, in East Baton Rouge Parish (State Project No. H.007970).

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Information and signatures obtained from recent maps, aerial photography, information provided with your request, and local soil surveys concerning this site are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional wetlands or waters. If an approved delineation is needed, please furnish us with the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional wetlands or waters occurring on this property.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. John Herman by telephone at (504) 862-1581 or by email at John.M.Herman@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2015-01755-MS. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

We apologize for missing the target date of August 17, 2015, listed in your request. Thank you for your patience in this matter.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

APPENDIX F

Agency Coordination

This page intentionally left blank for future content.

APPENDIX G

Wetlands

Source: ESRI World Topographic Maps

0 1,000 2,000
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

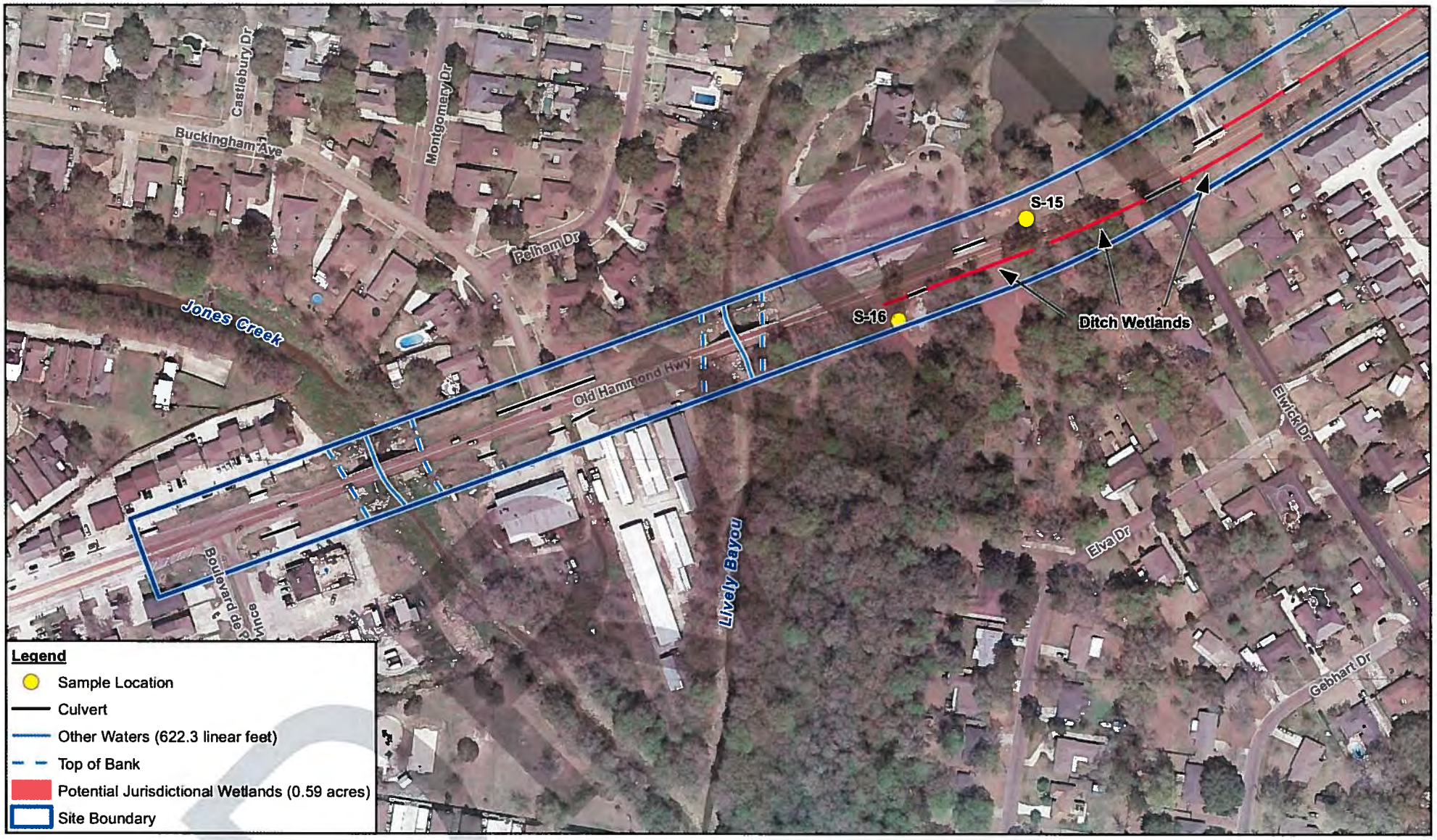
STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

Nov 5, 2015

VICINITY MAP

FIGURE 1

GIS File: J:\GIS\Client Project Data Library\City Of Baton Rouge\Old Hammond Hwy and Flannery Road\Vicinity Maps\Old Hammond Hwy and Flannery Road - Vicinity Map.mxd



Source: 3/17/2014 aerial photography, provided by Google Earth Pro.

0 125 250
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

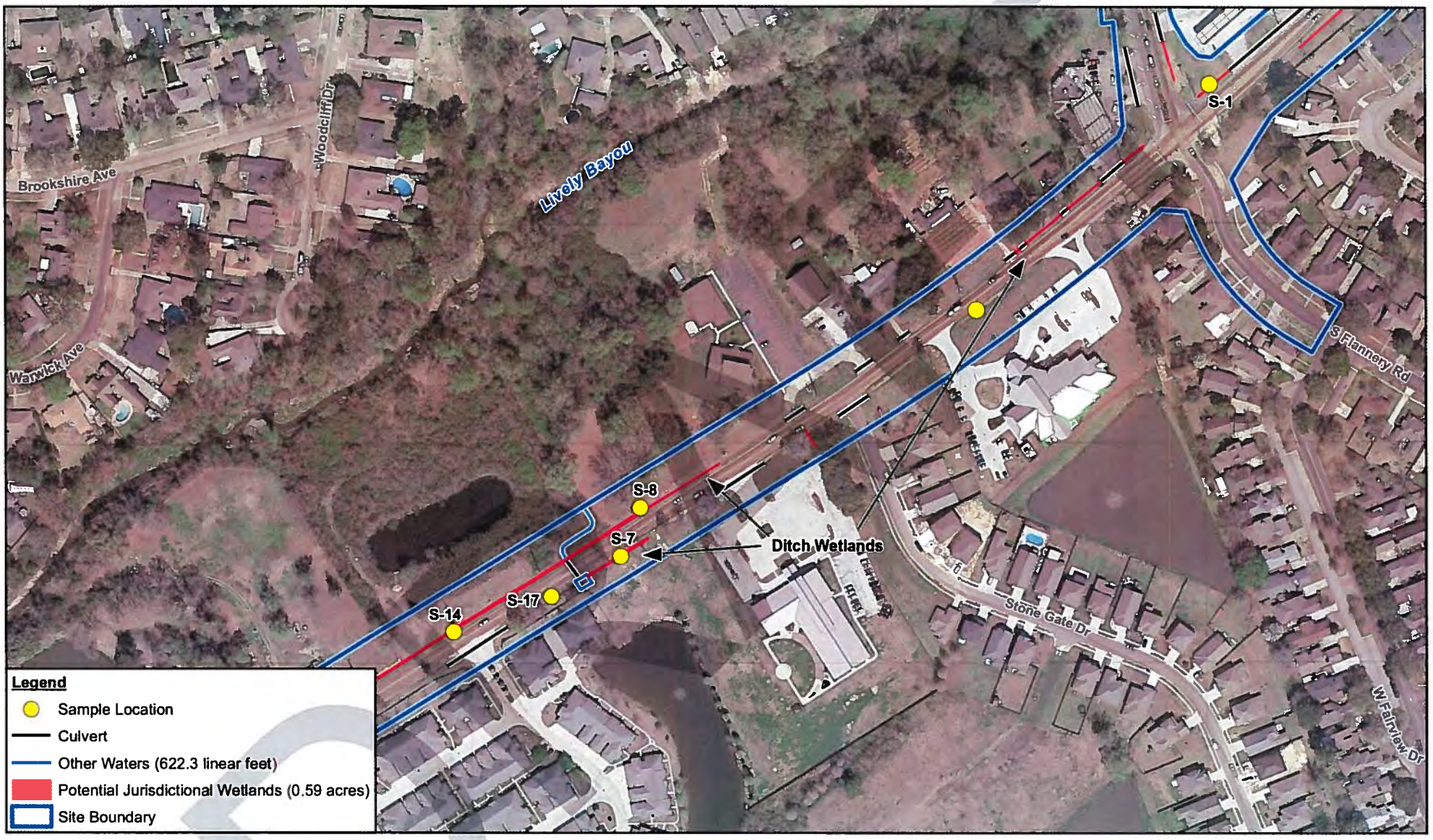
STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

SITE PLAN DETAIL

FIGURE 2A

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR001 Site Plan Detail.mxd



Source: 3/17/2014 aerial photography, provided by Google Earth Pro

0 125 250
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

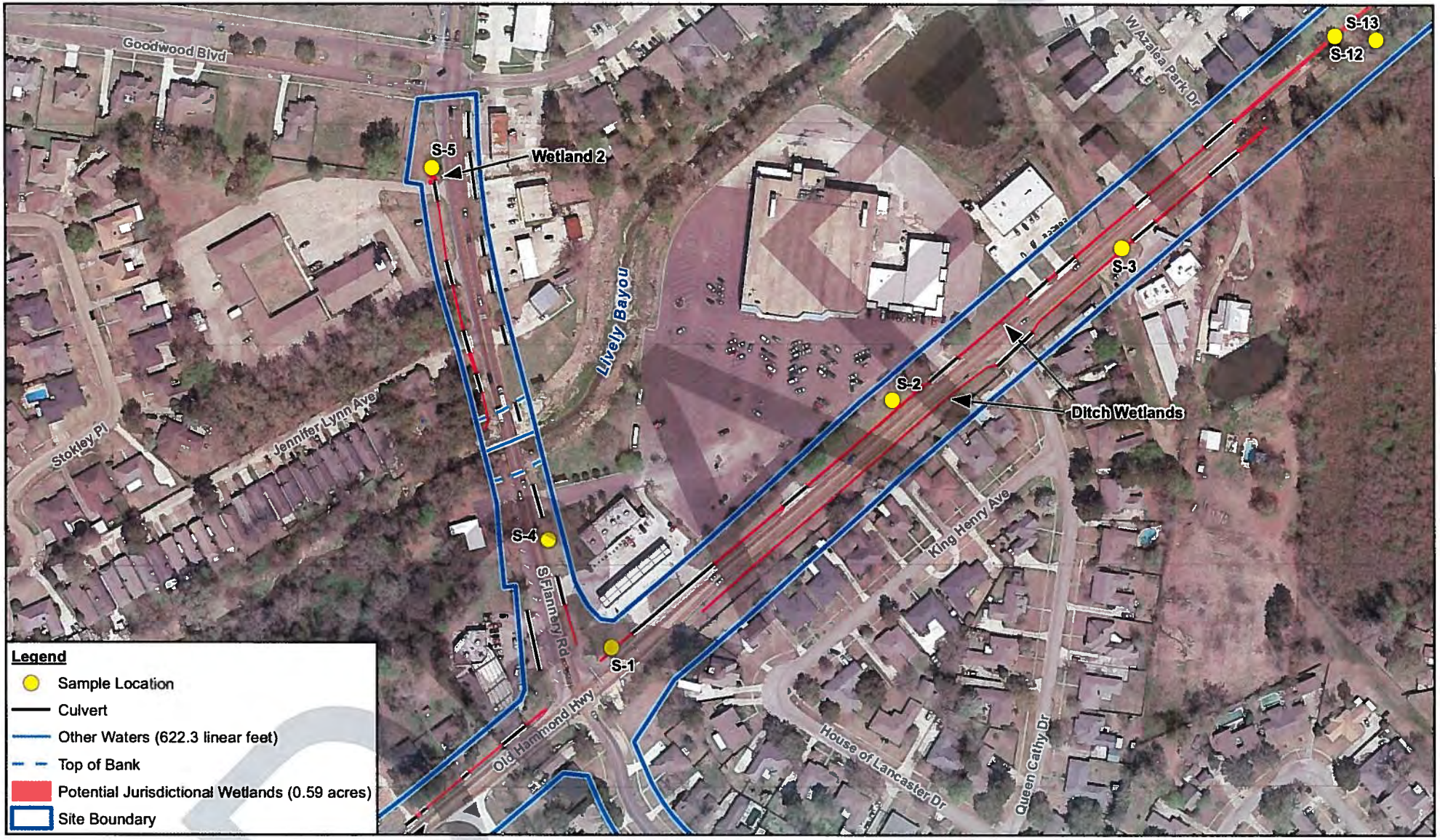
STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

SITE PLAN DETAIL

FIGURE 2B

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR001 Site Plan Detail.mxd



Source: 3/17/2014 aerial photography, provided by Google Earth Pro

0 125 250
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

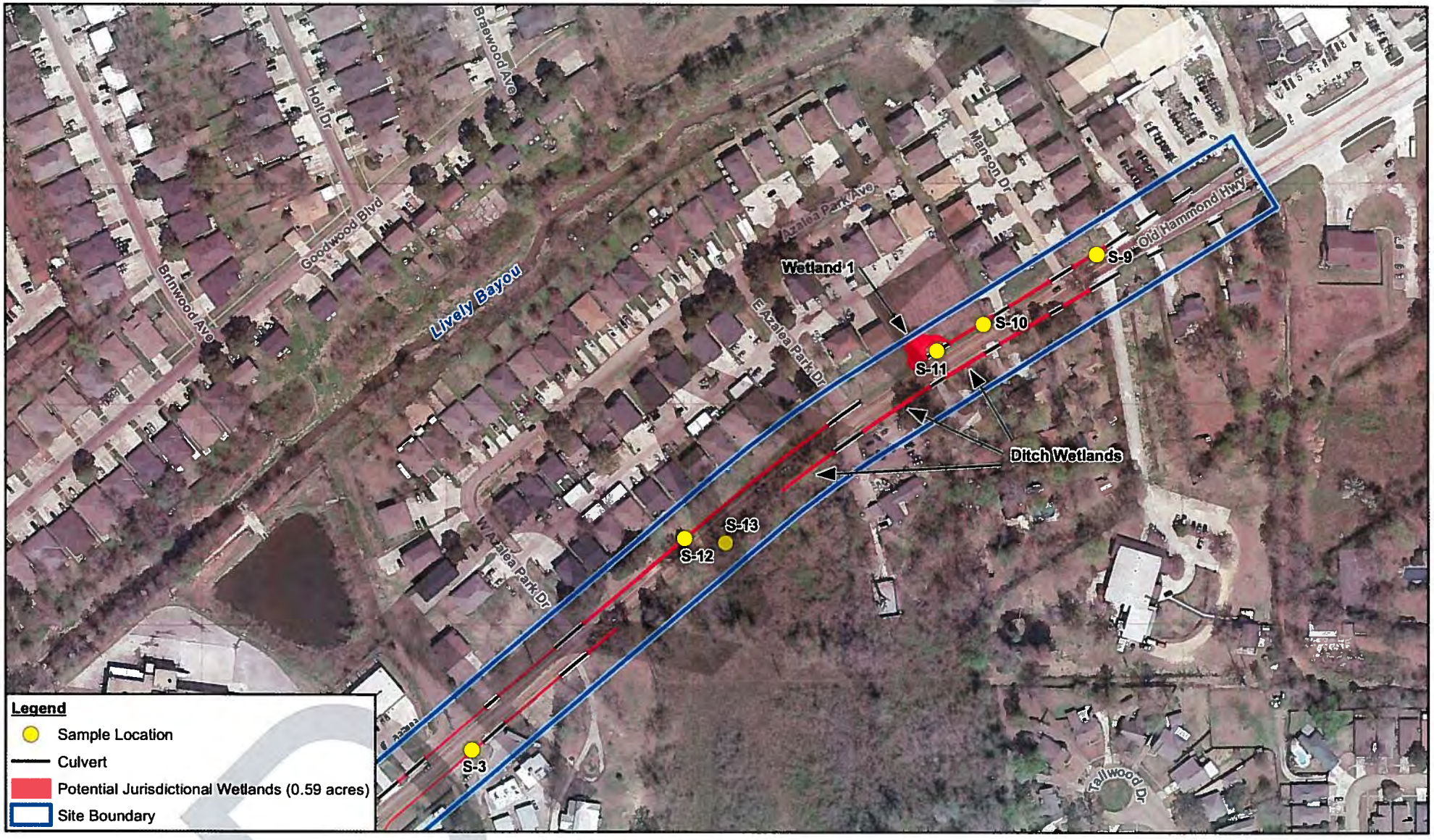
STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

SITE PLAN DETAIL

FIGURE 2C

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR001 Site Plan Detail.mxd



Source: 3/17/2014 aerial photography, provided by Google Earth Pro

0 125 250
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

SITE PLAN DETAIL

FIGURE 2D

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR001 Site Plan Detail.mxd

Source: 2013 National Agriculture Imagery Program (NAIP), provided by ESRI.

0 500 1,000
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana South FIPS 1702 Feet

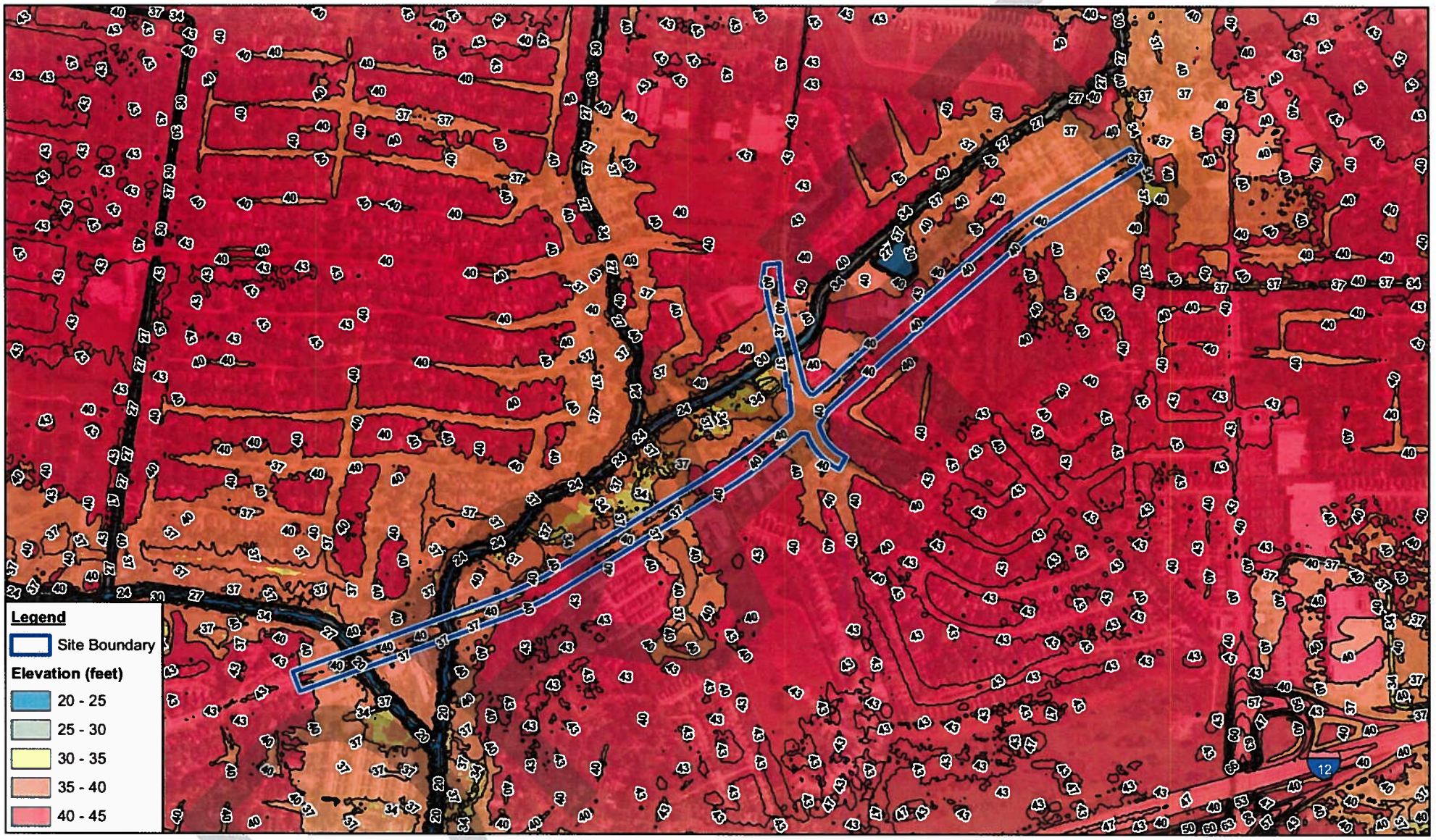
STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

NRCS SOILS MAP

FIGURE 3

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR002 Soil Map.mxd



Source: 2013 National Agriculture Imagery Program (NAIP), provided by ESRI

0 500 1,000
Feet

Coordinate System:
NAD 1983 StatePlane Louisiana
South FIPS 1702 Feet

STATE PROJECT NO. H.007970; CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY (BLVD. DE PROVINCE TO MILLERVILLE ROAD)
ROUTE LA 426; EAST BATON ROUGE PARISH

29998-01
Nov 5, 2015

LIDAR MAP

FIGURE 4

GIS File: J:\GIS\Projects\29000s\29998\29998-01(006)PR\29998-01(006)PR-BR003 LIDAR Map.mxd

APPENDIX H

Noise Study

GHD

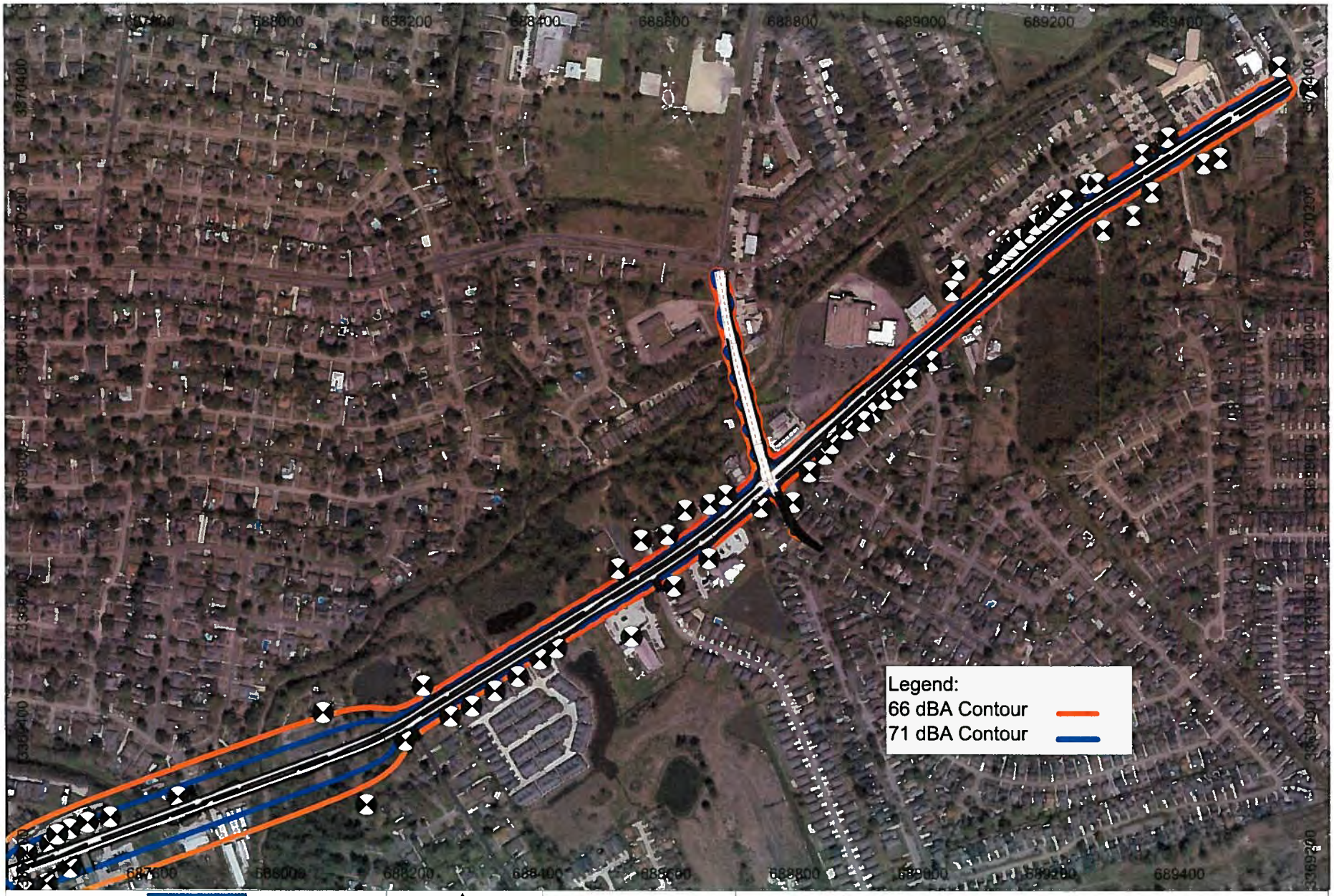
Road
Receiver

PROTOCOL FOR NOISE TECHNICAL ANALYSIS
STATE PROJECT NO. H.007970
CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY, BATON ROUGE, LOUISIANA

FIGURE 1
SITE LOCATION PLAN

NOISE TECHNICAL REPORT
STATE PROJECT NO. H.007970
CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY - BATON ROUGE, LOUISIANA

FIGURE 7
RECEIVER LOCATIONS



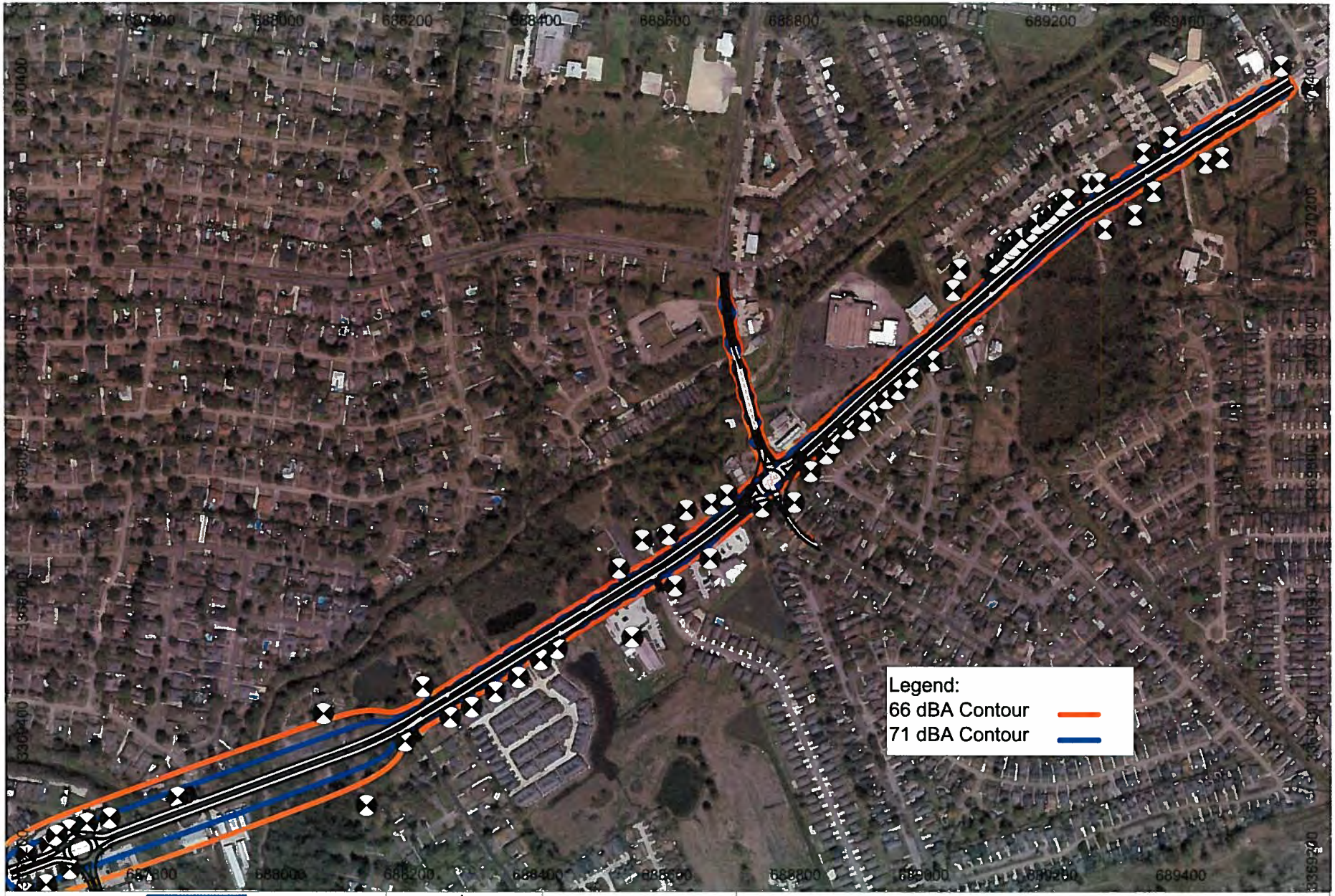
GHD

N

Road
Receiver

NOISE TECHNICAL REPORT
STATE PROJECT NO. H.007970
CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY - BATON ROUGE, LOUISIANA

FIGURE 8
ALTERNATIVE 1 2040 NOISE CONTOURS



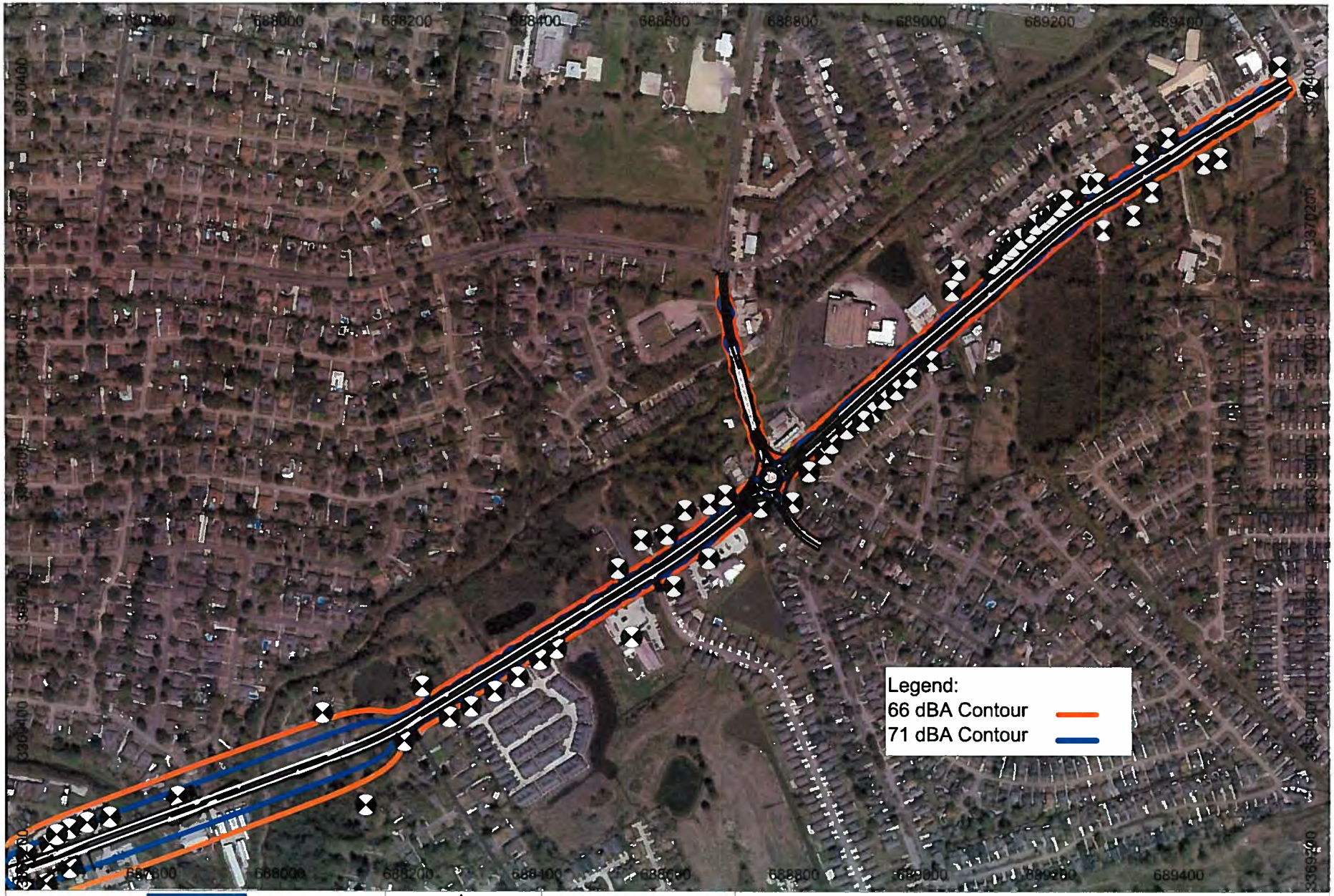
GHD

N

Road
Receiver

NOISE TECHNICAL REPORT
STATE PROJECT NO. H.007970
CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY - BATON ROUGE, LOUISIANA

FIGURE 9
ALTERNATIVE 2 2040 NOISE CONTOURS



GHD

N

Road
Receiver

NOISE TECHNICAL REPORT
STATE PROJECT NO. H.007970
CITY-PARISH PROJECT NO. 12-CS-HC-0043
OLD HAMMOND HIGHWAY - BATON ROUGE, LOUISIANA

FIGURE 10
ALTERNATIVE 3 2040 NOISE CONTOURS

APPENDIX I

SHPO Concurrence

Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
Phone: 225-242-4502

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

April 11, 2018

STATE PROJECT NO.: H.007970
F.A.P. NO.: H007970
OLD HAMMOND HWY WIDENING
BOULEVARD DE PROVINCE TO MILLERVILLE RD
LA 426
EAST BATON ROUGE PARISH

Ms. Kristen Sanders
Interim State Historic Preservation Officer
Department of Culture, Recreation and Tourism
Office of Cultural Development
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

SUBJECT: Draft Phase I Cultural Resources Survey

Dear Ms. Sanders:

Enclosed for your review are two copies of the draft cultural resources survey titled *"A Cultural Resources Survey of 1.36 Mile Segment of the Old Hammond Highway (LA 426) Widening Project in East Baton Rouge Parish, Louisiana"* dated December 15, 2016, and prepared by Cultural Resource Analysts, Inc. (CRA) for the above captioned project.

The City of East Baton Rouge, in conjunction with Louisiana Department of Transportation and Development (LADOTD) and the Federal Highway Administration (FHWA) is proposing a project to improve and widen Old Hammond Highway (LA 426) in East Baton Rouge Parish, Louisiana (see attached map). The Old Hammond Highway reconstruction project is divided into segment phases. This cultural resource survey was for the Phase 2 segment which includes the portion of Old Hammond Highway extending from Boulevard de Province to Millerville Road. Three (3) alternatives are proposed and includes the reconstruction of the existing two-lane highway into a four-lane highway with a 9 m (30 ft) median and designated turn lanes; a four-lane highway with a 5 m (16 ft) median and designated turn lanes; and an alternative that would implement a roundabout at the intersection of Old Hammond Highway and South Flannery Road instead of a signalized intersection.

CRA performed a Phase I cultural resources survey for the proposed improvements. The project's direct Area of Potential Effect (APE) consists of the existing and required right-of-way (ROW) for the highway reconstruction and construction servitude, whereas the indirect APE was defined as encompassing the structures for which the construction would have a visual effect, generally including the first row of standing structures on each side of the roadway.

The direct APE measures approximately 2.19 km (1.36 mi) along Old Hammond Highway; 0.09 km (0.06 mi) along Anne Cleaves Avenue; 0.86 km (.53 mi) along S. Flannery Road; 0.13 km (0.08 mi) along Goodwood Boulevard; and 0.06 km (0.04 mi) along West Fairview Drive. The entire direct APE included approximately 13.2 ha (32.6 acres).

A total of 220 shovel tests were excavated throughout the direct APE. No archaeological sites were recorded as a result of the survey. A total of 17 standing structures (17-01782 – 17-01795) were recorded in the indirect APE (12 residential, one church, 2 businesses, and 2 mixed commercial/residential) and 3 standing structures (17-01776 – 17-01778) were recorded in the indirect APE (3 bridges). None of the structures in the indirect APE were recommended eligible for nomination to the National Register of Historic Places (NRHP) under criteria a-d (36 CFR part 60.4). The three bridge structures in the direct APE were previously determined ineligible during DOTD's Historic Bridge Inventory (HBI).

DOTD in conjunction with FHWA, believe that no historic properties will be affected by this proposed project. We request your concurrence. If you have any questions or comments, please call Sharon Gage at (225) 242-4515.

Sincerely,

for Noel Ardoin
Environmental Engineer Administrator

Enclosures
NA/sg
cc: FHWA (copy of letter)

BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

RICHARD H. HARTLEY
DEPUTY SECRETARY

KRISTIN P. SANDERS
ASSISTANT SECRETARY

April 26, 2018

Noel Ardoin
Environmental Engineer Administrator
Louisiana Department of Transportation and Development
Environmental Section
PO Box 94245
Baton Rouge, LA 70804

Re: **Draft Review of the *Cultural Resources Survey of 1.36 Mile Segment of the Old Hammond Highway (LA 426) Widening Project in East Baton Rouge Parish, Louisiana***
State Project No.: H007970
Old Hammond Hwy Widening
Boulevard De Province to Millerville Rd. LA 426
East Baton Rouge Parish

Ms. Ardoin:

We have completed our review of the draft report ***Cultural Resources Survey of 1.36 Mile Segment of the Old Hammond Highway (LA 426) Widening Project in East Baton Rouge Parish, Louisiana***. The Phase 1 Cultural Resources Survey identified 17 structures more than 50 years old (17-01776 to 17-01778, and 17-01782 to 17-01795). We concur with your determination that none of these structures are eligible for listing on the National Register of Historic Places. Our office also concurs that no archaeological historic properties will be impacted by this project, and that the project as proposed would have no effect on historic properties.

We look forward to receiving one bound copy (printed double sided), one pdf of the final report and any available shapefiles. If you have questions, please contact Andrea McCarthy at 225-342-8164 or by email at amccarthy@crt.la.gov.

Sincerely,

Kristin Sanders
State Historic Preservation Officer

P.O. BOX 44247 • BATON ROUGE, LOUISIANA 70804-4247
PHONE (225) 342-8200 • FAX (225) 219-9772 • WWW.CRT.LA.GOV