WAFER ROAD EXTENSION

ENVIRONMENTAL ASSESSMENT AND LINE AND GRADE STUDY

REVISED DRAFT













AUGUST 2012

State Project No. 700-08-0132 Federal Project No. DE-0807 (502) BOSSIER PARISH, LOUISIANA

LEAD AGENCIES: Louisiana Department of Transportation and Development Federal Highway Administration

> COOPERATING AGENCY: U.S. Army Corps of Engineers

ENVIRONMENTAL DETERMINATION CHECKLIST

State Project No. 700-08-0132 Federal Aid No. DE-0807 (502) Name: Wafer Road Extension Route: New two-lane urban collector roadway facility with right of way for a two-lane facility between Winfield Road and Bellevue Road Parish: Bossier

1. General Information

Status:

() Conceptual Layout(X) Line and Grade() Survey

() Plan-in-Hand() Preliminary Plans() Final Design

2. Class of Action

- () Environmental Impact Statement (E.I.S.)
- (X) Environmental Assessment (E.A.)
- () Categorical Exclusion (C.E.)

() Programmatic C.E. (as defined in letter of agreement dated 03/15/95, does not require FHWA approval)

3. Project Description (use attachment if necessary)

The scope of the project consists of the development of a new two-lane urban collector roadway facility with right of way for a two-lane facility. The new roadway facility will run in a general north-south direction between Winfield Road and Bellevue Road. This new roadway facility will provide an additional north-south roadway corridor that will enhance existing transportation infrastructure and linkage, help to alleviate congestion along existing roadways in the parish, and reduce travel delays between the rapidly growing residential areas of Bossier Parish and the employment centers of Shreveport and Bossier City. See Sections 1.0 and 2.0 of the EA.

4. Public Involvement

- (X) Views were solicited on January 14, 2010 Responses are attached (See Appendix B).
- () No adverse comments were received.
- (X) Comments are addressed in attachment.
- () A public hearing (P/H)/Opportunity is not required.
- () An opportunity for requesting a P/H will be afforded upon your concurrence.
- () Opportunity was afforded, with no requests for P/H.
- (X) A Public Hearing will be scheduled.
- (X) A Public Meeting was held on July 13, 2010.

Near	Estate (If yes, use attachment)	
	NO	YES
a. W	Vill additional right-of-way be required?()	(X)
b. W	Vill any relocations be required?	()
	(Attach conceptual stage relocation plan if yes)	
cΔ	re construction or drainage servitudes required?()	(V)
U. A		(X)
		(A)
	ural and 106 Impacts (If yes, use attachment)	(x) YES
	ural and 106 Impacts (If yes, use attachment)	()
Cultu	ural and 106 Impacts (If yes, use attachment) NO	

ENVIRONMENTAL DETERMINATION CHECKLIST (CONTINUED)

b.	Known Historic sites/structures	
	Are any impacted by the project? (If so, list below)	()
	Are any adjacent to the project? (If so, list below)	()
C.	Known Archaeological sites	
	Are any impacted by the project? (If so, list site # below)(X)	()
	Are any adjacent to the project? (If so, list site # below)	()
d.	Cemeteries	
	Are any impacted by the project? (If so, list below)(X)	()
	Are any adjacent to the project? (If so, list below)	()
e.	Historic Bridges(X)	()

7. Wetlands (Attach wetlands finding, if applicable)

	NO	YES
a.	Are wetlands being affected? ()	(X)
b.	Are other waters of the U.S. being affected?	
c.	Can C.O.E. Nationwide Permit be used?	()

8. Natural Environment (use attachment if necessary)

		NO	YES
a.	Endangered/Threatened Species/Habitat	(X)	()
b.	Within 100 Year Floodplain?	()	(X)
	Is project a significant encroachment in Floodplain?	(X)	()
C.	In Coastal Zone Management Area?	(X)	()
	Is the project consistent with the Coastal Management Program?	()	()
d.	Coastal Barrier Island (Grand Isle only)	(X)	()
e.	Farmlands (use form AD 1006 if necessary)	()	(X)
f.	Is project on Sole Source Aquifer?	(X)	()
	Is coordination with EPA necessary?	()	()
g.	Natural & Scenic Stream Permit required	(X)	()
ĥ.	Is project impacting a waterway?	()	(X)
	Has navigability determination been made?	()	(X)
	Will a US Coast Guard permit or amended permit be required?	(X)	()

9. Physical Impacts (use attachment if necessary)

		NO	YES
a.	Is a noise analysis warranted (Type I project)	()	(X)
	Are there noise impacts based on violation of the (NAC)?	(X)	()
	Are there noise impacts based on the 10 dBA increase?	(X)	()
	Are noise abatement measures reasonable and feasible?	()	(X)
b.	Is an air quality study warranted?	(X)	()
	Do project level air quality levels exceed the NAAQS for CO?	(X)	()
C.	Is project in a non-attainment area for Carbon monoxide (CO),		
	Ozone (O ₃), Nitrogen dioxide (NO ₂), or Particulates (PM-10)?	(X)	()
d.	Is project in an approved Transportation Plan, Transportation		
	Improvement Program (TIP) and State Transportation		
	Improvement Program (STIP)?	()	(X)
e.	Are construction air, noise, & water impacts major?	(X)	()
f.	Are there any known waste sites or U.S.T.s?	(X)	()
	Will these sites require further investigation prior to purchase?	()	()

	NO	YES
a.	Land use changes ()	(X)
b.	Churches and Schools	
	Are any impacted by the project? (If so, list below)(X)	()
	Are any adjacent to the project? (If so, list below)()	(X)
C.	Title VI Considerations(X)	()
d.	Will any specific groups be adversely affected	
	(i.e., minorities, low-income, elderly, disabled, etc.)?	()
e.	Hospitals, medical facilities, fire police	
	Are any impacted by the project? (If so, list below)(X)	()
	Are any adjacent to the project? (If so, list below)	()
f.	Transportation pattern changes	(X)
g.	Community cohesion)
ĥ.	Are short-term social/economic impacts due to construction	
	considered major?(X)	()
I.	Do conditions warrant special construction times	
	(i.e., school in session, congestion, tourist season, harvest)?(X)	()
j.	Were Context Sensitive Solutions considered? (If so explain below)()	(X)
k.	Will the roadway/bridge be closed? (If yes, answer questions below) (X)	()
	Will a detour bridge be provided?	()
	Will a detour route be signed?(X)	()

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

- Item No. 7-c <u>C.O.E. Nationwide Permit:</u> The Project, when taken as a whole, will not qualify as a Nationwide Permit (NWP) based on the acres of impact to waters of the United States, including wetlands. Refer to NWP--14 for further details for linear transportation criteria.
- Item No. 8-b Is project a significant encroachment in Floodplain?: Refer to Section 4.3.2.1 of the EA entitled "Floodplains" for further details.
- Item No. 8-e Farmlands: Refer to Section 4.3.7 and Appendix D of the EA for further details.
- Item No. 9-a <u>Noise Analysis:</u> Refer to Section 4.2.8 of the EA and supplemental report entitled *Supplemental Report: Noise and Air Quality Assessment Report* prepared September 2010 for further details. The predicted noise levels are lower than the Louisiana NAC for all receivers and the existing noise levels at all modeled receivers is less than 10 dbA. The results of the study show that there are no impacted receivers within the study area, therefore, noise abatement measures are not required to be evaluated for this project.
- Item No. 10-b <u>Churches and Schools</u>: Refer to Section 4.2.4 of the EA for further details regarding churches and schools in the study area. A day care facility, Kids Unlimited After School, located at 717 Winfield Road, is immediately adjacent to the beginning of the project corridor.

Item No. 10-j Context Sensitive Solutions: Early involvement and participation by community leaders, federal and state resource agencies, Native American tribes, and the public to receive comments regarding possible adverse economic, social or environmental effects or concerns.

Identification of potential impacts to natural, cultural and physical resources as a means to locate proposed alignments and avoid impacts.

Design considerations include the use of culverts in order to minimize impact to water resources and implementation of BMPs to reduce erosion and minimize sediment transport during construction.

ENVIRONMENTAL DETERMINATION CHECKLIST (CONTINUED)

Preparer: C.H. Fenstermaker & Associates, Inc. Date: August 24, 2011

Attachments

- (X) S.O.V. and Responses (Summary in Table 5.1 of the EA)
- (X) Wetlands Finding (See Section 4.3.5 of the EA and Supplement Report)
- (X) Project Description Sheet (See Sections 1.0 and 2.0 of EA)
- (X) Noise Analysis (See Section 4.3.11 of the EA and Supplement Report)
- (X) Air Analysis (See Section 4.3.11.1 of the EA and Supplement Report)
- (X) Exhibits and/or Maps (See Appendix A of the EA)
- (X) Form AD 1006 (Farmlands) (NRCS-CPA-106) (Appendix C of the EA)
- (X) Other: Public Meeting Summary (Appendix B of the EA)
- (X) Other: References (Appendix D of the EA)

SUMMARY OF PERMITS, MITIGATION MEASURES AND COMMITMENTS

The Louisiana Department of Transportation and Development will implement the following permits, mitigation measures and commitments to ensure that adverse environmental impacts associated with the project are avoided or minimized to the extent practicable. Please refer to Section 4.7 of the report for further discussion.

1. Wetlands adjacent to the project area and three drainage features that cross the project area and connect to Fifi Bayou will likely be jurisdictional and require a US Army Corps of Engineers (COE) permit under Section 404 and/or Section 10 prior to any work activities being performed in them.

A bridge structure will be required for the crossing of Fifi Bayou. A portion of Connell Bayou, a tributary of Fifi Bayou, will be relocated north from its current location to eliminate conflicts with the improvements to the intersection of Winfield Road and Wafer Road. A Corps of Engineers permit will be required for these activities.

Potential mitigation measures to offset unavoidable wetland impacts would be considered on an as needed basis during the permitting process. The potential mitigation measures include restoration, creation, or purchase of replacement wetlands through an approved mitigation bank.

- 2. A Water Quality Certification (WQC) under Section 401 of the Clean Water Act will be required for any dredge or fill activities that may occur in wetlands or navigable waters associated with Fifi Bayou. The WQC would be obtained in conjunction with the COE Section 404 permit process.
- 3. A Louisiana Pollutant Discharge Elimination System (LPDES) Permit and Storm Water Pollution Prevention Plan will be required. The contractor will be required to implement and maintain best management practices to reduce and/or eliminate any potential impacts to surface water quality in the immediate area due to discharges associated with construction activities.

Should the project result in a discharge of wastewater to an existing wastewater treatment system, the wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.

- 4. Waterway impacts will be minimized through proper specification and construction techniques, as listed in the Louisiana Standard Specifications for Roads and Bridges, 2006 edition.
- 5. Bossier Parish is a participating community in the National Flood Insurance Program (NFIP) and the project area is located in a special flood hazard area with a designated floodway. If work activities occur in the floodway, a "No-Rise Certification" will need to be completed to show that the construction will have no adverse effect on the floodway. Any activities that anticipate encroachment into the floodway would need to comply with Federal regulations 44 CFR Part 65.12.

A Floodplain Development Application must be submitted to the Bossier Parish Floodplain Administrator and an Engineering "No Rise" Certification must be obtained from a registered professional engineer upon completion of a hydraulic study in order to obtain a Floodplain Development Permit. Impacts associated with the preferred alternative will be mitigated during the final design phase of the project.

SUMMARY OF PERMITS, MITIGATION MEASURES AND COMMITMENTS (CONTINUED)

- 6. The contractor will be required to adhere to provisions of the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, concerning erosion control. Other federal, state, and local permits may be required.
- 7. Should archaeological remains be discovered during the process of construction, construction should be stopped and the State Historic Preservation Office will be contacted immediately.
- 8. Construction practices will be implemented to maintain the surrounding area clear of debris and other obstacles that will cause the accumulation and prevent the flow of water in flood plain areas. The 2006 edition of the Louisiana Standard Specifications for Roads and Bridges details preventative measures to be taken by contractors in order to minimize and mitigate environmental damages.
- 9. All construction equipment, such as pumps, compressors, generators, bulldozers, cranes, trucks, etc., will be properly muffled and all motor panels will be closed in order to minimize the construction noise impacts to nearby areas.
- 10. During the preparation of final design plans, field surveying will be performed to identify and verify existing oil, gas or water wells along the selected alternative. Should a well fall within the proposed Right of Way, minor adjustments may be made to the selected alternative in order to avoid direct impacts to existing wells with the approval of Bossier Parish.
- 11. During the final design phase of the project, specific relocation plans for utilities would be developed and would be completed prior to construction of the roadway improvements. Functional or financial responsibility for relocation of a specific facility or utility may differ depending on prior agreements between the utility providers, current landowners, local government, and LDOTD. The determination of responsibility would be in accordance with Bossier Parish and LDOTD policies and procedures.
- 12. Four federally protected species have been recorded in Bossier Parish. The pallid sturgeon, the interior least tern and red-cockaded woodpecker are listed as endangered, while the bald eagle has been delisted from its threatened status. To ensure avoidance of any disturbances to endangered species and bald eagles, a survey should be conducted prior to the initiation of construction activities. Should endangered species and bald eagles be present in the project area, activities will be conducted in accordance with the Endangered Species Act of 1973 and the USFWS National Bald Eagle Management Guidelines
- 13. Prior to construction, pipeline owners shall be consulted to determine exact locations and depth of cover of their pipelines and requirements for crossing the lines.
- 14. All precautions shall be observed to protect the groundwater of the region.
- 15. If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions shall be taken to protect workers from these hazardous constituents.

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INTRODUCTION

This document is an Environmental Assessment (EA) prepared to evaluate the effects that the proposed project would have on the natural and human environment.

The National Environmental Policy Act (NEPA) directs federal agencies to conduct environmental reviews to consider the potential impacts from proposed federal undertakings. The NEPA process requires coordination with local, state, and federal agencies throughout planning and project development decision-making.

The Federal Highway Administration (FHWA) and Louisiana Department of Transportation and Development (LADOTD) are committed to the examination and minimization of potential impacts to the social and natural environment when considering approval of proposed transportation projects. NEPA project development considers a range of alternatives that would serve the purpose of the project while balancing the potential impacts on the human and natural environment with the public's need for safe and efficient transportation.

The NEPA process must be clearly documented to ensure transparency. Potentially affected communities and other stakeholders are offered the opportunity to ask questions and provide comments about proposals, alternatives, and environmental impacts. Public input is formalized in the document as are the responses to public concerns and the choices made about the project.

When the significance of impacts from a proposed transportation project is uncertain, an EA is prepared. Unlike an Environmental Impact Statement (EIS) that is prepared when significant impacts are known, an EA is a concise public document that presents sufficient evidence and analysis for determining whether the impacts from the proposed action warrant further analysis in an EIS, or whether a finding of no significant impact (FONSI) is appropriate.

This document records the environmental assessment process undertaken for the extension of Wafer Road from Winfield Road to Bellevue Road.

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1.0 DESCRIPTION OF PROPOSED ACTION

1.1 PROPOSED ACTION

The Northwest Louisiana Council of Governments (NLCOG) and the Bossier Parish Police Jury (Bossier Parish) in cooperation with the Louisiana Department of Transportation and Development (LDOTD) and the Federal Highway Administration (FHWA) propose the development of a new two-lane urban collector roadway facility with right of way for a two-lane facility. The functional classification of this roadway facility is proposed to be a collector with a LDOTD classification of Urban Collector-2 (UC-2). The roadway will consist of a bi-directional two lane roadway having 12 foot travel lanes with a design speed of 45 miles per hour (mph). This new roadway facility will run in a general north-south direction between Winfield Road and Bellevue Road. This roadway will provide an additional north-south connection that will enhance mobility of the area, improve transportation linkage, help to minimize congestion along existing roadways within the project study area, and reduce travel delay between the rapidly growing residential areas of Bossier Parish and the employment centers of Shreveport and Bossier City.

This proposed north-south transportation facility is part of the Northwest Louisiana Council of Government's (NLCOG) long range regional transportation plan and is identified in the Bossier Comprehensive Land Use and Development Plan and the Northwest Louisiana Metropolitan Planning Area Unified Planning Work Program for Fiscal Year 2011. NLCOG does not typically include planning and environmental studies within their short range Transportation Improvement Program (TIP). This proposed action will be included as a project in the TIP upon completion of all planning and environmental phases and as the project moves into the advanced project development stages (i.e. engineering, right-of-way acquisition, utility relocation, and construction). No funding has been currently identified for design or construction of this project as of this time.

The project consists of new roadway construction across undeveloped land. Three proposed build alternatives for the Proposed Action are shown on *Figure 1-2*. For more details of the alternatives, see sections 3.3 through 3.5 of this report.

1.2 PROJECT STUDY AREA

The Project Study Area (See *Figure 1-1*) is located in the central portion of Bossier Parish, Louisiana. The Project Study Area is bounded on the north and west by Bellevue Road, east by Louisiana Highway 157, and on the south by US Highway 79/80. This area encompasses the logical termini and the area that may be generally affected by primary or secondary impacts of the Proposed Action. The southern logical terminus (#1) is located at the intersection of Wafer Road and U.S. Highway 79/80. The northern logical terminus (#2) is located at a point along Bellevue Road, dependent upon which alternative is selected.

The designated area for developing alternatives for the proposed roadway facility is proposed to be within the area indicated as the "Proposed Federal Action Area", beginning at the intersection of Winfield Road and Wafer Road and terminating along Bellevue Road and of sufficient width to accommodate reasonable and feasible proposed alternatives (See *Figure 1-2*). A detailed environmental study has been performed within the designated "Proposed Federal Action Area". The area indicated as

"Study Area" on *Figure 1-1* has been assessed for both direct and indirect environmental impacts through the use of Geographic Information Systems (GIS) databases.

A general assessment of environmental impacts, using the National Environmental Policy Act (NEPA) guidelines, has been performed within the Project Study Area to identify secondary impacts associated with the construction of a north-south roadway within the Federal Action Area. A full NEPA assessment of environmental impacts was performed within the Federal Action Area to determine reasonable and feasible alternatives for the proposed project, and to assess impacts to the natural and human environment along with associated mitigation measures.

1.3 LOGICAL TERMINI

According to FHWA guidelines, logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. The environmental impact review frequently covers a broader geographic area than the strict limits of the transportation improvements. The most common termini are points of major traffic generation, especially intersecting roadways. Choosing a corridor of significant length to look at all impacts need not preclude staged construction. Therefore, related improvements within a transportation facility should be evaluated as one project, rather than selecting termini based on what is programmed as short range improvements. Construction may then be "staged", or programmed for shorter sections or discreet construction elements as funding permits.

To capture any direct or indirect environmental effects associated with the proposed project improvements, the project's southern logical terminus is proposed to be located approximately two miles south of Winfield Road at the intersection of Wafer Road and US 79/80 (Logical Terminus No. 1). The project's northern logical terminus is to be located along Bellevue Road within the "Proposed Federal Action Area" (Logical Terminus No. 2). (See *Figure 1-1* for location of logical termini.)

In summary, the two proposed logical termini shown on *Figure 1-1* were the result of discussions held amongst the project sponsors and the project team. These two proposed logical termini are rational endpoints for this proposed transportation facility. The Proposed Action and the logical termini are wholly contained within the Project Study Area. Environmental issues associated with the Proposed Action were examined closely to determine impacts to the human and natural environment from the proposed project. Environmental issues relating to the proposed study area outside of the proposed Federal Action Area (See Figure 1-1) have been treated with a broad scope and evaluated as one project to ensure that the proposed action functions properly without requiring additional improvements elsewhere, thereby not restricting consideration of alternatives for other reasonably foreseeable transportation improvements.

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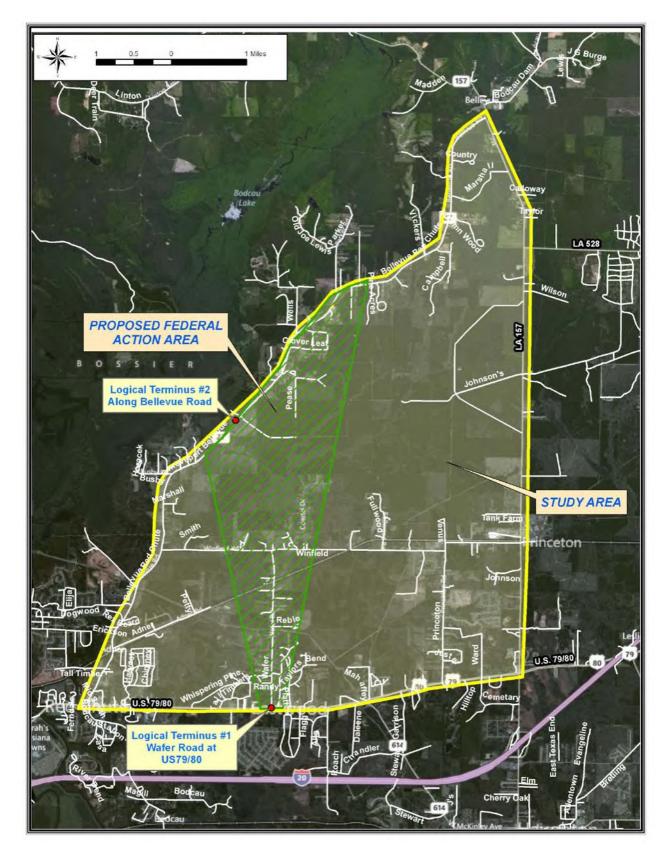


FIGURE 1-1: PROJECT STUDY AREA

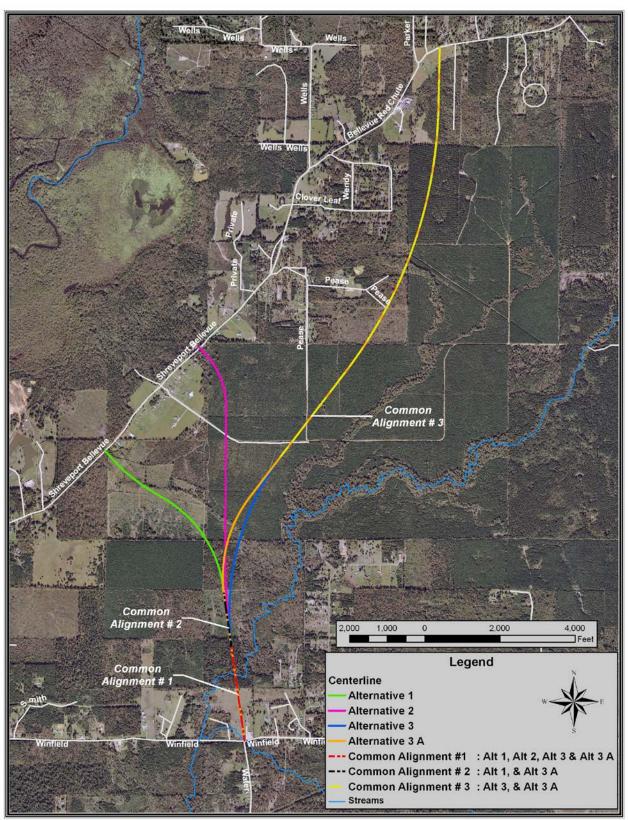


FIGURE 1-2: PROJECT ALTERNATIVES

2.0 PURPOSE AND NEED FOR ACTION

Bossier Parish is located in northwest Louisiana, bordering the State of Arkansas, and is within 20 miles of the State of Texas. Bossier Parish contains 839 square miles, with a 2009 population estimate of 111,492 citizens. Bossier City and Bossier Parish have gained in population in recent decades, with Bossier Parish growing at a faster pace (14.20% between 1990 and 2000) than the statewide rate of 5.90% for Louisiana. Recently, the area experienced positive growth and change due to the incoming industries of natural gas exploration in association with the Haynesville Shale and the movie production industry.

2.1 PROJECT PURPOSE

The purpose of this project is to improve vehicular transportation linkage by offering an additional north-south roadway within the central portion of Bossier Parish that will attempt to enhance mobility of area, provide access to developable lands, help to minimize congestion along existing roadways within the project study area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within this area of the parish.

2.2 PROJECT NEED

Over the past several years, the most significant residential development in the parish has occurred beyond the city limits of Bossier City, and growth within the areas north of Bossier City is projected to continue. According to officials of Bossier Parish, existing subdivisions along with several planned large scale subdivisions will continue to hinder the efficiency of the existing parish transportation infrastructure. Planning in advance for thoroughfare development is important to:

- Meet future transportation demands as both the City and Parish continue to develop,
- Improve safe and efficient movement of people and goods throughout this area,
- Create opportunity for new commercial and residential development within the project study area; and
- Improve area-wide mobility.

SUPPORTING INFORMATION

The following items support the need for the proposed project improvements. These items have been identified as regional transportation based needs:

Minimize Congestion

According to the U.S. Census Bureau, Bossier City and Bossier Parish have grown at a faster pace than the State of Louisiana as a whole in each of the last three censuses. Population growth is projected to continue in the Parish. This project is an identified need in the 2002 "Bossier Comprehensive Land Use and Development Master Plan (Bossier Plan)" Thoroughfare Plan Update as a principal arterial. The proposed improvements would lessen congestion by providing an additional connector to Bellevue Road.

• Optimize Use of Existing Transportation

The Proposed Action is in line with the Parish's long-term development plan for the upgrading and extending of the transportation network in an orderly and timely fashion to accommodate the mobility of the public. The Proposed Action is consistent with the Bossier Parish's plans to enhance Wafer Road and extend it south to US 79/80.

Relate Transportation to Economic Growth

The Proposed Action will help meet future travel demands in the Study Area as both the City and Parish continue to experience population growth by extending the transportation network in the Parish. This Proposed Action will aid in the improvement of the economic condition of the Project Study Area by increasing accessibility to developable lands, and address the need to create north/south expressways throughout the parish.

In preparation for accommodating future growth, the parish has been planning and integrating a wastewater treatment plant and collection system. A project corridor has been developed consisting of four phases with phase one being a new sewer system along the Highway 79/80 corridor. Phase two is a new treatment plant on the Red River. Phases three and four will include new sewer lines in north Bossier. This new sewer district will attract new development to available lands within the project study area, as proposals for new subdivisions have been turned down due to lack of sewer service. Currently, Bossier Parish is in the process of obtaining funding as it becomes available to purchase existing local utility systems throughout the parish in hopes of linking them together for the purpose of creating a parish-wide water and sewer district.

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3.0 ALTERNATIVES ANALYSIS

3.1 GENERAL

In accordance with NEPA and FHWA regulations and guidance, project planners and design engineers have developed and evaluated a range of reasonable alternatives for meeting the purpose and need of the proposed Wafer Road Extension. The alternatives evaluated include four (4) alternatives along with the "no-build" Alternative. Please refer to Section 4.6.2 for preferred alternative analysis. Illustrative details of all alternatives can be found in the "Project Plates and Atlas" section of *Appendix A*.

A Line and Grade Study was prepared in 2011 as a technical supplement to this Environmental Assessment (EA). The NEPA process requires the study and development of alternatives to the Proposed Action be evaluated to determine whether there are "no-build" options that would achieve the identified purpose and need. Environmental impacts were evaluated against the four alternatives and "no-build" alternative to arrive at a preferred alternative.

The purpose and need for the project has been previously identified as providing for a new highway facility between Winfield Road and Bellevue Road. This Proposed Action will enhance transportation linkage to the region, and attempt to alleviate traffic congestion at intersections within the Project Study Area, thereby providing increased vehicular mobility and reduced travel delays along other existing north-south roadway facilities (i.e., Louisiana Highway 157). The project will also attempt to shorten emergency response times within central areas of the Parish.

As part of the alternatives analysis, development and examination of project alternatives to aid in minimizing current and future projected traffic congestion were undertaken as part of an iterative process that:

- Developed preliminary engineering concepts that would provide for a preferred method to minimize traffic congestion along this transportation facility;
- Developed preliminary engineering line and grade alignments that meet project constraints and appropriate design criteria as required by LADOTD; and
- Developed line and grade alternatives that will seek to minimize impacts to existing properties, utility facilities, and structures.

All project design criteria are outlined in the Supplemental Report: *Line and Grade Feasibility Study, March 2011, Revised August, 2012*).

Within the Federal Action Area, four different roadway alignment alternatives were identified and studied (i.e. Alternative No. 1, Alternative No. 2, Alternative No. 3, and Alternative No. 3A). Each of the alternatives proceed in a northerly direction along different routes after sharing a common path for approximately 2,470 feet, beginning on the north side of Winfield Road across from the current termination of Wafer Road. As a response to agency comments following the Public Hearing, Alternative 3 was modified slightly to lessen impacts to a wetland area. The modified alignment was identified as Alternative 3A.

Factors that influenced the development of the proposed build alternatives included:

- Input from Bossier Parish and NLCOG officials during a project scoping meeting held in February of 2010;
- Parish plans to open up the area to residential development;
- Desire of Bossier Parish to expand their utility infrastructure to promote economic development;
- Bossier Comprehensive Land Use and Development Master Plan, 2002; and the
- Caddo-Bossier Metropolitan Area Transportation Plan Update 2001-2025, July 2003.

3.2 FIELD INVENTORY

A field inventory of the study area was conducted to obtain an overall understanding of the surrounding area. It was determined that the lands within the project area consist primarily of timberland along with residential properties in sparsely spaced rural subdivisions along Bellevue Road, Winfield Road, and the existing Wafer Road. Fifi Bayou runs diagonally through the area in the general direction of Bellevue Road, and Connell Bayou branches off from Fifi Bayou in a southerly direction near Wafer Road. The Louisiana and Arkansas Railroad runs in a northeasterly direction from Red Chute Bayou to Winfield Road, at which point it parallels Winfield Road. Oil and gas wells are scattered throughout the study area.

3.3 COMMON CORRIDOR

All proposed alternatives begin at the north side of Winfield Road across from the current termination of Wafer Road, and then proceed in a northerly direction along a common corridor for approximately 2,470 feet before diverging into separate paths as previously illustrated in *Figure 1-2*.

3.4 ALTERNATIVE NO. 1

From the common corridor previously described in Section 3.3, Alternative No. 1 diverges northwesterly to a termination point on Bellevue Road approximately 0.4 miles south of Pease Meadow Lane. Alternative No. 1 is approximately 9,100 feet in length and is considered the shortest route of all three alternatives. The land use along this alternative is mostly undeveloped properties with commercial timber tracts and some low density residential tracts of land. Alternative No. 1 is classified as an urban collector roadway throughout its length. A typical section of this alternative is shown in *Figure 3-1*. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes and eight foot wide paved shoulders with open drainage ditches on both sides of the roadway.

3.5 ALTERNATIVE NO. 2

From the common corridor previously described in Section 3.3, Alternative No. 2 continues in a northerly direction until it curves to the northwest just before intersecting with Bellevue Road, approximately 0.3 miles north of Pease Meadow Lane. Alternative No. 2 is approximately 10,749 feet in length. Large commercial timber tracts of land and low density residential land use represent the majority of the mostly undeveloped land along this alternative. Alternative No. 2 is classified as an urban collector roadway throughout its length. A typical section of this alternative is shown in *Figure 3-1*. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes with eight foot wide paved shoulders and open drainage ditches on both sides of the roadway.

3.6 ALTERNATIVE NO. 3

From the common corridor previously described in Section 3.3, Alternative No. 3 makes a gradual curve to the northeast before straightening out to the north. This alternative intersects with Bellevue Road (midway between Parker Road and Keri Lane) approximately 3.3 miles south of the intersection of Bellevue Road and LA 157 and 4.5 miles north of the intersection of Bellevue Road and Winfield Road. Alternative No. 3 is approximately 19,917 feet in length. This alternative traverses many of the same commercial timber tracts and low density residential tracts of lands as the other alternatives. Alternative No. 3 (a) is classified as an urban collector roadway throughout its length. A typical section of this alternative is shown in *Figure 3-1*. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes with eight foot wide paved shoulders and open drainage ditches on both sides of the roadway.

3.7 ALTERNATIVE NO. 3A - PREFERRED ALTERNATIVE

In response to agency comments regarding impacted wetlands along the preferred corridor, Alternative 3 was modified to minimize the impact to an area of bottomland hardwood. This adjusted version of Alternative 3 has been designated as Alternative 3A. The alternative begins at the common corridor previously described in Section 3.3, then continues straight up to an area past the bottomland hardwood area, then goes into a curve meeting up with and continuing along the same path as Alternative 3. Alternative 3A also intersects with Bellevue Road (midway between Parker Road and Keri Lane) approximately 3.3 miles south of the intersection of Bellevue Road and LA 157 and 4.5 miles north of the intersection of Bellevue Road and Winfield Road. Alternative No. 3A is approximately 20,072 feet in length. This alternative traverses many of the same commercial timber tracts and low density residential tracts of lands as the other alternatives. Alternative No. 3A is classified as an urban collector roadway throughout its length. A typical section of this alternative is shown in *Figure 3-1*. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes with eight foot wide paved shoulders and open drainage ditches on both sides of the roadway.

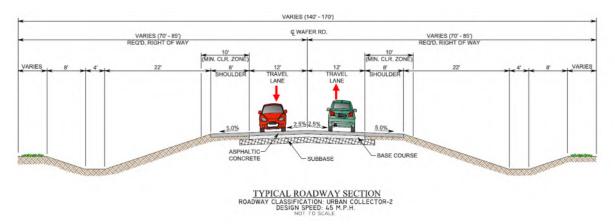


FIGURE 3-1: PROPOSED TYPICAL ROADWAY SECTION

3.8 NO-BUILD ALTERNATIVE

The "no-build" alternative provides a baseline condition for comparing the impacts of the study alternatives, and is the projected future condition that would exist if the proposed project were not constructed. To analyze the "no-build" alternative, traffic volume projections for estimated implementation year 2013 and design year 2033 within the project study area were developed based on existing traffic, knowledge of planned projects, and engineering judgment. A projected annual growth rate of 1% was provided by the LDOTD Office of Planning and Programming to develop "no-build" traffic volumes.

The traffic study performed for this EA suggests that the "no-build" alternative will yield a substantial increase in Average Daily Traffic (ADT) near and around the project area to include surrounding roads such as the existing Wafer Road, Winfield Road, Bellevue Road, LA 157, and US 79/80.

Quantitative values for the design year "no-build" alternative validating increases in ADT can be found in a supplemental to this EA document entitled: *Wafer Road Extension, Winfield Road to Bellevue Road Supplemental Report Traffic Study* (2010). The projected values suggest an increase in the ADT near and around the project area with the "no-build" alternative in the year 2033. The magnitude of differential ADT suggests a potential increase in traffic congestion in the year 2033.

A result of a "no-build" alternative will be the continued use of existing roadways by local commuters to travel from regions north of US 79/80 to areas near or around the urbanized areas of Bossier City. This continued use will cause these roadways to become more congested in the future with no reductions in travel time, thereby causing impacts to emergency response times, transporting of commodities, means of egress and ingress into the central portions of Bossier Parish, and a continued stress to the transportation infrastructure of the rural areas of Bossier Parish.

As a result of anticipated congestion problems to the surrounding transportation infrastructure, the "nobuild" alternative is inconsistent with the transportation goals outlined in the Purpose and Need and the Bossier Master Plan. It would also be inconsistent with the requests of officials with NLCOG and Bossier Parish and the police juror who represents the district in which the project study area encompasses.

3.9 TRAFFIC PROJECTIONS

Level of Service (LOS), a measure of congestion, is broken into six categories ranging from "A" to "F". LOS A is the most efficient, described as conditions where traffic flows are at or above the posted speed limit and all motorists have complete mobility between lanes. LOS F is the lowest measurement of efficiency for the performance of a road, whereby, flow is forced with frequent drops in speed to nearly zero miles per hour. The traffic study performed for this EA indicated that the existing two-lane roadways in the study area (i.e. Bellevue Road, Wafer Road, Winfield Road, and Princeton Road) are expected to operate at a LOS D and E for both the morning and afternoon peak hours for a "no-build" condition during the design year of 2033; however, the volumes are well below capacity of two-lane roadways. The proposed two-lane Wafer Road Extension is expected to operate at LOS C or better through 2033 and reduce the volume of traffic on Bellevue Road and LA 157.

The traffic study performed concluded that the signalized intersections within the study area are expected to operate with significant levels of congestion without geometric improvements. Each of the

un-signalized intersections except US79/80 at Wafer Road is expected to operate at acceptable conditions. The installation of a signal may be justified by the year 2033 at US 79/80 at Wafer Road which, along with geometric improvements, is expected to yield acceptable LOS conditions. The extension of Wafer Road is expected to operate at acceptable conditions through the design year of 2033 with the proposed two-lane roadway typical section as previously described.

Tables 3.2 and 3.3 illustrate LOS results for the "no-build," as well as the build alternatives, for comparison. The traffic study details the rationale and procedures used in developing these projections.

Table 3.1 illustrates Average Daily Traffic Projections (ADT) for the "no-build," as well as the build alternatives, for comparison. The traffic study details the rationale and procedures used in developing these projections.

AVERAGE DAILY TRAFFIC PROJECTIONS "NO-BUILD"								
Highway Segment	Existing Year 2010	Year 2013	Year 2033					
Wafer Road between Winfield Road and US 79/80	1,302	1,342	1,637					
Winfield Road between Bellevue Road and Wafer Road	1,355	1,397	1,703					
Winfield Road between Wafer Road and Princeton Road	1,278	1,316	1,607					
Bellevue Road north of Winfield Road	3,130	3,225	3,935					
Bellevue Road between Winfield Road and US 79/80	4,136	4,261	5,199					
US 79/80 west of Bellevue Road	25,987	26,765	32,659					
US 79/80 between Bellevue Road and Wafer Road	21,664	22,320	27,236					
US 79/80 between Wafer Road and LA 157	16,136	16,625	20,285					
AVERAGE DAILY TRAFFIC PROJECTIONS, AL	TERNATIVES NO. 1 AND	NO. 2						
Highway Segment	Existing Year 2010	Year 2013	Year 2033					
Wafer Road Extension, Alternatives No. 1 and No. 2*	-	1,264	4,511					
Wafer Road between Winfield Road and US 79/80	1,302	2,112	4,526					
Winfield Road between Bellevue Road and Wafer Road	1,355	1,397	1,872					
Winfield Road between Wafer Road and Princeton Road	1,278	1,316	1,776					
Bellevue Road north of Winfield Road	3,130	2,224	2,713					
Bellevue Road between Winfield Road and US 79/80	4,136	3,462	4,473					
US 79/80 west of Bellevue Road	25,978	26,765	34,309					
US 79/80 between Bellevue Road and Wafer Road	21,664	22,705	29,023					
US 79/80 between Wafer Road and LA 157	16,136	16,735	21,388					
*Alternatives No. 1 and No. 2 were combined in the traffic study as the differen AVERAGE DAILY TRAFFIC PROJECTIONS			close proximity					
Highway Segment	Existing Year 2010	Year 2013	Year 2033					
Wafer Road Extension, Alternative No. 3	-	1.072	3,739					
Wafer Road between Winfield Road and US 79/80	1,302	2,116	4,565					
Winfield Road between Bellevue Road and Wafer Road	1,355	1,397	1,864					
Winfield Road between Wafer Road and Princeton Road	1,278	1,316	1,748					
Bellevue Road north of Winfield Road	3,130	2,700	3,295					
Bellevue Road between Winfield Road and US 79/80	4,136	3,871	4,949					
US 79/80 west of Bellevue Road	25,978	26,765	34,428					
US 79/80 between Bellevue Road and Wafer Road	21,664	22,547	28,972					
US 79/80 between Wafer Road and LA 157	16,136	16,625	21,139					

TABLE 3-1: AVERAGE DAILY TRAFFIC PROJECTIONS

		2	009		Im	plementati	on Year (201	3)				Design Y	'ear (2033)		
Intersection	Direction	Base C	onditions	No	Build	Build	Alt 1& 2	Build	Alt 3	No	Build	Build	Alt 1& 2	Buil	d Alt 3
		LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*
							TWO-LAN	E							
Bellevue Rd btwn	Overall	D	0.09	D	0.09					E	0.11				
	Northbound Southbound													-	
Bellevue Rd btwn	Overall					D	0.06	D	0.08	(mar 1		D	0.08	D	0.09
	Northbound		-								1				
	Southbound					-		-		_		_			
Bellevue Rd btwn Winfield Rd and		E	0.11	E	0.11	E	0.08	E	0.10	E	0.14	E	0.11	E	0.12
	Northbound Southbound									-					
	Overall	E	0.05	E	0.05	E	0.07	E	0.07	E	0.06	E	0.15	E	0.16
	Northbound									-					
	Southbound														
	Overall	D	0.05	D	0.05	D	0.05	D	0.05	D	0.06	D	0.06	D	0.06
	Eastbound				-		1			-					
	Westbound Overall					В	0.04	В	0.04	_		С	0.12	С	0.12
	Northbound					в	0.04	в	0.04			U.	0.12	U	0.12
	Southbound				Contractor in										
Princeton Rd btwn		E	0.04	E	0.04	E	0.04	E	0.04	E	0.05	E	0.06	E	0.06
Wafer Rd and LA					120000				1102010						
157	Westbound		in the summer of the		A COLUMN TWO IS NOT		-		The second second		11		-		1

TABLE 3-2: LEVEL OF SERVICE, ROADWAY ANALYSIS (A.M. PEAK HOURS)

Note: Results for Alternative 3A (build) are the same as Alternative 3 shown above.

Intersection	Direction	20	009	Implementation Year (2013)				Design Year (2033)							
		Base Conditions		No Build		Build /	Build Alt 1& 2		Build Alt 3		No Build		Build Alt 1& 2		Build Alt 3
		LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*
							TWO-LAN	E							
Bellevue Rd btwn	Overall	E	0.10	E	0.11					E	0.13				
LA 157 and	Northbound		1												
Winfield Rd	Southbound								I DE LE COMPANY						
Bellevue Rd btwn	Overall					D	0.07	D	0.09			D	0.09	E	0.11
Wafer and	Northbound														
Winfield Rd	Southbound										Learning and the second second				
	Overall	E	0.15	E	0.16	E	0.13	E	0.15	E	0.19	E	0.17	E	0.19
Winfield Rd and	Northbound											-			
US 79/80	Southbound		and the second second	-			10000000000		Contraction (Sec.)	-	ALC: NO POINT OF	-	1.000		and the second second
Wafer Rd btwn	Overall	E	0.05	E	0.05	E	0.08	E	0.08	E	0.06	E	0.17	E	0.18
Winfield Rd and	Northbound									-				1	
US 79/80	Southbound		The second is		Contraction of the	1	and the other states of the		The state of the local division of the local						The state
	Overall	D	0.06	D	0.06	D	0.06	D	0.06	D	0.07	D	0.08	D	0.08
Bellevue Rd and	Eastbound			Record Prove 1			and the second s		And States					1	
Wafer Rd	Westbound	_				-								_	
Wafer Rd Ext	Overall					B	0.04	B	0.04			С	0.15	С	0.14
otwn Winfield Rd	Northbound		-							-		And in case of the local division of the loc			And Personnel Property lies
and Bellevue	Southbound	-	0.05	-	0.00	-	0.00	-	0.00	-	0.07	-	0.07	-	0.07
rinceton Rd btwn		E	0.05	E	0.06	E	0.06	E	0.06	E	0.07	E	0.07	E	0.07
Vafer Rd and LA 157												-			
157	Westbound					A COLUMN TWO IS NOT									

TABLE 3-3: LEVEL OF SERVICE, ROADWAY ANALYSIS (P.M. PEAK HOURS)

Note: Results for Alternative 3A (build) are the same as Alternative 3 shown above.

3.10 PROJECT COSTS

Estimated roadway opinions of probable costs have been developed for each of the alternatives. Project costs include right-of-way, all aspects of construction, design, and construction testing fees. Item quantities have been estimated based on preliminary design and unit prices based upon several data sources to include the LDOTD weighted bid prices for the year 2010 (2ndQuarter). Minor pay items were not included; however, a 15% increase was added to the construction costs to account for contingencies. A project cost comparison is shown below in *Table 3-4*.

A detailed description of each cost estimate can be found in the supplemental technical report to this EA document entitled *Line and Grade Feasibility Study, March 2011, Revised August 2012*.

	Alternative	Alternative	Alternative	Alternative
	No. 1	No. 2	No. 3	No. 3A
Construction without	\$2,803,535.60	\$3,289,937.65	\$6,956,573.70	\$6,980,991.20
Contingencies				
Construction with	\$3,224,065.94	\$3,783,428.30	\$8,000,059.76	\$8,028,139.88
Contingencies				
Right of Way Acquisition	\$181,800.00	\$210,600.00	\$415,440.00	\$416,880.00
Design Fees & Testing	\$322,406.59	\$378,342.83	\$800,005.98	\$802,813.99
TOTAL ESTIMATED COST (Year 2010)	\$3,728,272.53	\$4,372,371.13	\$9,215,505.73	\$9,247,833.87
Includes 15% Construction Contingencies				

TABLE 3-4: PROJECT COSTS

3.11 TRAVEL TIME

In an effort to assess the ability for each of the build alternatives to reduce travel delays within the project study area, a travel time analysis was performed. Travel times were determined for each project alternative by documenting the average drive time to and from the intersection of Winfield Road and Wafer Road, and each of the proposed alternative termini along Bellevue Road (See *Figure 1-2*). Markers were set at the proposed intersections of each of the alternative routes and a time was recorded as the driver passed the markers. Each of the proposed alignments was computed mathematically using the distance and an average operating speed of 45 mph. An acceleration and deceleration time of 10 seconds was added to each end of the alternate routes when computing the total time of travel. The results of the travel time data collection is shown in *Table 3-5* below. The terminus points noted in the table are located at the proposed intersections of the Alternatives and Bellevue Road.

TABLE 3-5: TRAVEL TIME DATA

	Terminus 1	Terminus 2	Terminus 3	Time Decrease
Alternative No. 1	2.6 minutes	-	-	2.2 minutes
Alternative No. 2	-	3.0 minutes	-	2.7 minutes
Alternative No. 3	-	-	5.4 minutes	3.0 minutes
Alternative No. 3A	-	-	5.4 minutes	3.0 minutes
"No-Build"	4.8 minutes	5.7 minutes	8.4 minutes	-

3.12 TRAFFIC STUDY RECOMMENDATIONS

During the process of generating the traffic study, several intersection and traffic control improvements were identified. Improvements include signal timing and phasing adjustments at key signalized intersections to accommodate new traffic patterns during design year conditions and additional turning lanes. Further details of the traffic analysis can be found in a supplemental report to this EA entitled: *Wafer Road Extension, Winfield Road to Bellevue Road Supplemental Report Traffic Study*, dated July 2010. A summary of recommendations relative to improvements to traffic movement are included in *Table 3-6*.

Location	Recommendations				
US 79/80 at Bellevue Road	The addition of a northbound left turn lane.				
	The addition of a southbound right turn lane.				
US 79/80 at LA 157	The addition of a northbound left turn lane.				
LIS 70/90 at Wafer Boad	The addition of a southbound left turn lane.				
US 79/80 at Wafer Road	Future consideration for a traffic signal.				

TABLE 3-6: ADDITIONAL TRAFFIC STUDY RECOMMENDATIONS

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4.0 IMPACTS

4.1 GENERAL

This section presents a description of the potential impacts from the proposed action alternatives, including the "no-build" alternative, to relevant resources within the Project Study Area.

4.2 IMPACTS TO THE HUMAN ENVIRONMENT

4.2.1 LAND USE IMPACTS

The Study Area lies within rural land sparsely developed that includes timber farming, floodplains, and wetlands. Fifi Bayou runs diagonally through the study area in the general direction of Bellevue Road, and Connell Bayou branches off from Fifi Bayou in a southerly direction near Wafer Road. Floodplain areas parallel these bayous. The Louisiana and Arkansas Railroad runs in a northeasterly direction from Red Chute to Winfield Road, at which point it parallels Winfield Road. Oil and gas wells are scattered throughout the study area. The US 79/80 corridor contains a mixture of business and residential land use. LA 155 is primarily timberland scattered with homes and businesses.

Land directly used to construct the project would be converted from its present usage to transportation use. For the most part, land would be converted from timber production and undeveloped agricultural. A breakdown of land use impacts follows in *Table 4-1*.

ALIGNMENTS	TOTAL ACRES TO BE CONVERTED	PRIME FARMLAND ACRES	ACREAGE IN FLOODWAYS & FLOODPLAINS	ACREAGE IN WETLANDS	ACREAGE IN OTHER WATERS
Alternative 1	30.3	0.9	11.25	1.77	0.16
Alternative 2	35.4	8.8	13.91	1.93	0.46
Alternative 3	69.0	28.1	15.59	3.59	0.23
Alternative 3A	70.8	28.1	16.75	2.43	0.32

TABLE 4-1: LAND USE IMPACTS

Build Alternatives

The extension of Wafer Road north of Winfield will be constructed through land currently used for timber production. Residential development is clustered in small neighborhoods along existing roads in the study area. The build alternatives have the potential to open up vacant undeveloped lands into both residential and commercial development as well as indirectly affecting areas north of Bellevue Road by making these areas more accessible to LA Hwy 79/80.

In the Bossier Master Plan, the existing land use map identifies the project area as "Rural Development". The future land use map shows the same area as being a "Sensitive Development Area". Sensitive Development Areas (SDA) are those areas that are faced with natural or manmade constraints such as floodplains, wetlands, and the flight paths associated with Barksdale AFB. Preferred uses in a SDA are agricultural activity, parks, and natural areas because of their limited impact on the environment and low intensity use. However, it is recognized that limited development may occur and guidelines are provided for location, intensity, layout, and design. In the Bossier Master Plan, it states that "While many of these areas are most suitable for agriculture use or as natural areas, development pressure will

likely mean that development in sensitive areas will continue. Changes to development patterns may allow development to continue in a manner that is coordinated with the sensitive nature of certain sites."

Although a new highway through a natural area will bring with it the likelihood of residential development, the areas can be developed with an appreciation for sensitive environments by limiting development in the floodplains and wetlands to development types that are considerate of natural resource conservation. Sensitive areas may provide a series of open spaces that maintain the natural setting of the area and provide natural buffers

Barksdale Air Force Base lies less than four miles south of the project area and part of the project area falls in the AICUZ (Air Installation Compatible Use Zone-Decibel Level over 65). The AICUZ is designed to ensure awareness that locations within the flight path of Barksdale AFB are subject to impacts such as significant noise and potential safety risk. Sites within this zone generally require significantly reduced density to comply with recommendations suggested by Barksdale AFB. The contour includes a small portion of the Project Area.

To fill a need for public parks in the future, the Bossier Master Plan has identified generalized locations of proposed neighborhood and community parks to serve developed and developing areas of the MPC (Metropolitan Planning Commission) Planning Area. The proposed build alternatives come within one mile of one of the community parks proposed for future development.

No-Build Alternative

The "no-build" alternative would not result in an immediate change of current land use within the Project Study Area. However, based on current growth patterns seen in Bossier Parish, development in the Project Study Area is likely to occur. Growth is likely to continue with or without the proposed project until the remaining lands are developed. Development would occur at a less rapid rate and in a less well defined corridor. As previously mentioned, the parish is planning to expand their sewer distribution system within the study area should this project progress in anticipation of growth in these areas. A "no-build" alternative would lessen the chance for this expansion to occur as result of the study area not having proper roadway linkage to promote development accordingly.

4.2.2 RESIDENTIAL, BUSINESS AND PUBLIC FACILITY RELOCATIONS

Build Alternatives

Efforts to minimize residential, business, and community facility impacts were made during the development of alternatives. Residential relocations have been avoided on all of the build alternatives. No businesses or public facilities are projected to be displaced. Since the proposed project consists of the construction of a new roadway through timberland, there will be minimal divisive or disruptive effects on existing neighborhoods.

Although no relocations are foreseen on this project, should relocations be required, an acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and relocation resources are available to all residential and business relocates without discrimination.

It should be noted that a residential home is located within 50 feet of the corridor's required right-ofway for the Common Alignment near Winfield Road (see Inset A of *Figure 4-1*). A residential home is also located within 50 feet of the required right-of-way for Alternative No. 2 near Bellevue Road (see Inset C of *Figure 4-1*). Lastly, an old barn lies partially within the right-of-way of Alternative No. 1 approximately 200 feet from Bellevue Road (see Inset B of *Figure 4-1*). *Figure 4-1* shows these structures in relationship to the proposed alignments. Should either Alternative No. 1 or No. 2 progress further into the design phase of the project, the proximity of these aforementioned structures to the required right of way will require further investigation with more definitive impacts determined during real estate appraisals.

No-Build Alternative

The "no-build" alternative will have no impacts to residential, business or public facilities within the Project Study Area.

4.2.3 ECONOMIC IMPACTS

Build Alternatives

By reducing vehicle congestion at the roadway intersections within the project study area, the build alternatives will support the continued growth of the study area and the region. The proposed highway project will benefit the local and regional economy in several ways. In the short-term, the direct effects of highway payrolls and material purchases should have a positive impact on the regional economy. Most of the economic benefits generated by the expenditures for project labor will be retained within the state, mainly within the Bossier Parish area. Additionally, the improved convenience of commuting to business locations will help this area remain viable and competitive for commercial and retail interests in the region. The improvements will also provide a safer and more efficient transportation facility.

Implementing the build alternatives could result in direct population growth of the study area resulting in positive economic impacts relating to an increase in tax base of the parish and provide increases to the purchasing of goods and services with the local vendors of the area.

No-Build Alternative

A "no-build" alternative could cause this study area to not develop further, thereby, limiting the positive economic impact to the area.

4.2.4 SCHOOLS, CHURCHES AND PUBLIC FACILITIES IMPACTS

Build Alternatives

This proposed roadway project will aid in alleviating intersection traffic congestion at peak hours in the Study Area by offering an additional route for cars and buses to travel to and from local schools. The only facility with the potential for impact is Kids Unlimited After-School, located at 717 Winfield Road, which is adjacent to the beginning of the project corridor. No direct impacts to the facility itself are anticipated and the relocation of an existing driveway at this facility is the only anticipated indirect impact.

Several schools, child care facilities, and places of worship exist in the study area, as shown on *Table 4-2* and *Figure 4-2*.

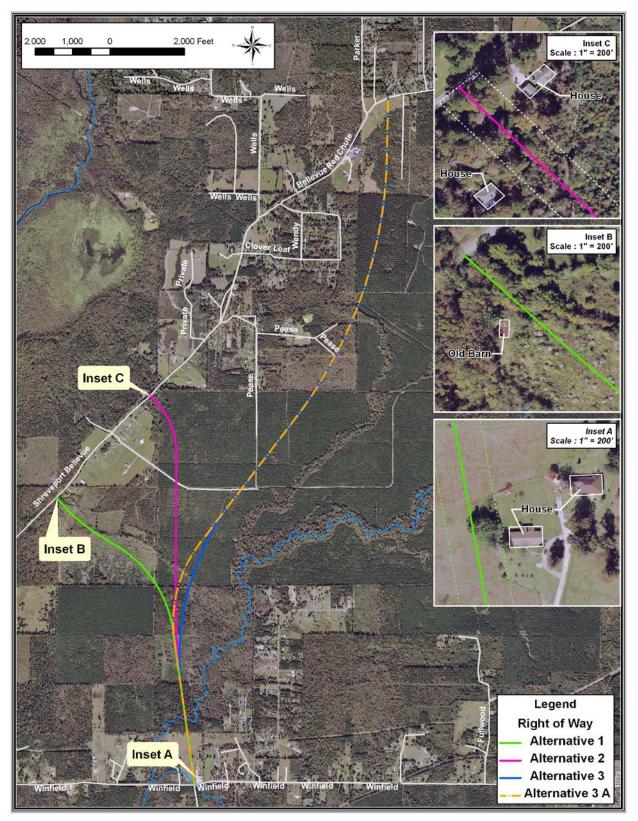


FIGURE 4-1: POTENTIAL RESIDENTIAL IMPACTS

LOCATION	ADDRESS				
US HIGHWAY 79/80					
Fillmore Baptist Church	6304 Highway 80, Haughton				
Wesley Chapel Christian Methodist Church	6018 Highway 80, Princeton				
Wesley Chapel City Head Start	6020 Highway 80, Princeton				
US Post Office	5491 Highway 80. Princeton				
Platt Elementary School	4680 Highway 80, Haughton				
T.L. Rodes Elementary School	4670 Highway 80, Haughton				
Love Chapel United Methodist Church	4600 Highway 80, Haughton				
ECBP District 1 Fire Station	4494 Highway 80, Haughton				
Southern Methodist Church of Haughton	4206 Highway 80, Haughton				
Eastwood Church of Christ	4100 Highway 80, Haughton				
All About Kids Daycare	4075 Highway 80, Haughton				
Eastwood Baptist Church	2810 Highway 80, Haughton				
Evergreen Presbyterian Church	2101 Highway 80, Haughton				
BELLEVUE ROAD					
Country Place Daycare/After School	1045 Bellevue Road, Haughton				
East 80 Library	1050 Bellevue Road, Haughton				
ECBP District 1 Fire Station	Bellevue at Adner Road				
Pease Chapel	3384 Bellevue Road, Haughton				
Saint John's Baptist Church	3703 Bellevue Road, Haughton				
LA HIGHWAY 157					
Mt. Canaan CME Church	13156 Highway 157, Haughton				
Belle Park Baptist Church	13061 Highway 157, Haughton				
Hawkins Cemetery	Hawkins Cemetery Road, Haughton				
Fire District No. 1, Station No. 3	Highway 157 at Creekside Lane Haughton				
WINFIELD ROAD / PRINCETON ROAD					
St. James Church of God in Christ	102 Winfield Road, Haughton				
Smith Chapel CME Church	121 Smith Circle, Haughton				
Sunlight Baptist Church	526 Winfield Road, Princeton				
Kids Unlimited After School	717 Winfield Road, Princeton				
Ealy Chapel Christian Church	1045 Princeton Road, Princeton				
First Baptist Church	1298 Princeton Road, Princeton				
WAFER ROAD					
Red Chute Baptist Church	1341 Wafer Road				
SOUTH OF STUDY AREA					
Haughton High School *	210 E McKinley Avenue, Haughton				
Haughton Middle School*	395 South Elm, Haughton				

TABLE 4-2: SCHOOLS, CHILD CARE FACILITIES AND PLACES OF WORSHIP IN THE STUDY AREA

*The Haughton Schools are located at 210 E McKinley Avenue and 395 South Elm in Haughton, which is outside of the study area, but traffic travelling to and from the school has an impact on traffic within the study area.

As per Mr. Keith Norwood, Bossier Parish Supervisor of Planning and Construction, an additional school site is currently being planned near the 700 block of Hwy. 3227 in Haughton.

No-Build Alternative

The "no-build" alternative would not offer any relief to traffic congestion at peak school hours.

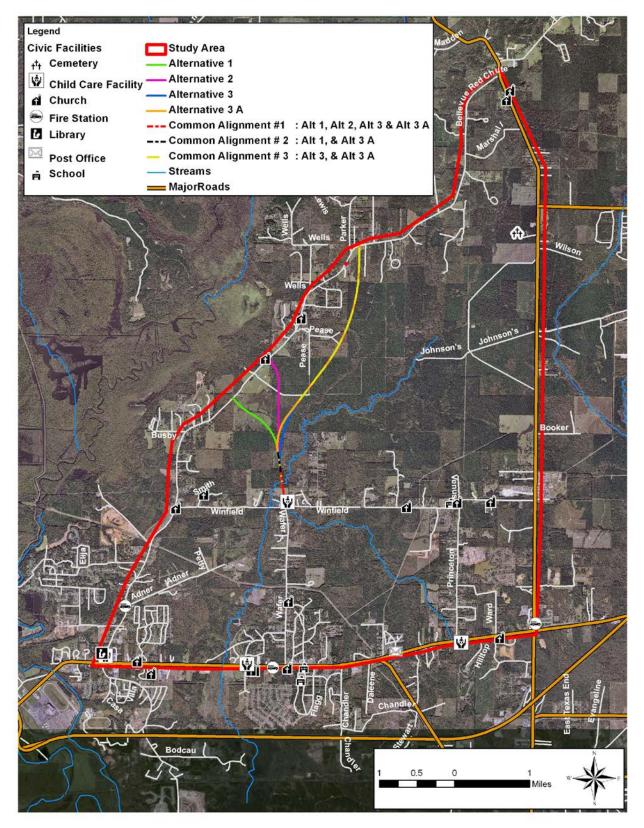


FIGURE 4-2: LOCATION OF SCHOOLS, CHILD CARE FACILITIES AND PLACES OF WORSHIP IN THE STUDY AREA

4.2.5 ENVIRONMENTAL JUSTICE

Build and No-Build Alternatives

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", was issued to focus attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The FHWA has developed an environmental justice strategy to assess the benefits and adverse effects of transportation activities among different population groups. The proposed action has been reviewed for compliance with the FHWA strategy and Executive Order 12898.

There is no known disproportionately high or adverse human health or environmental effects borne by minority and/or low-income populations' resultant from any of the alternatives, including the "no-build" alternative, as shown on *Table 4-3*.

Census	Geography				Race/E	thnicity			Inc	come
Census Tract	Block Group	Total Pop	% Caucasian	% African American	% Hispanic	% Native American	% Asian & Pacific Islander	% Other & Multi- Race	% Below Poverty Line	\$ Median Household Income
111.03	1	1,532	79.8	17.9	1.2	0.5	0.1	0.5	12.9	35,838
111.05	1	1,232	84.2	9.7	3.0	0.7	0.9	1.5	10.9	44,792
111.05	2	1,772	80.2	13.8	3.1	0.6	1.2	1.1	13.9	54,926
111.05	3	1,245	88.3	5.0	3.9	1.0	0.6	1.2	4.8	45,469
111.05	4	1,938	88.1	6.7	2.5	0.5	0.6	1.6	10.4	44,583
111.06	2	974	59.2	38.9	0.7	0.2	0.1	0.9	13.1	34,219
111.06	3	1,574	83.6	12.5	1.5	0.4	0.4	1.6	5.8	39,694
Study Are	a Average	1467	80.4	14.9	2.3	0.6	0.6	1.2	10.2	42,789
Bossier Pa	arish	98,310	72.9	20.7	3.1	0.5	1.3	1.5	10.5	39,203

TABLE 4-3: POPULATION AND INCOME STATISTICS

4.2.6 CULTURAL RESOURCES

Build Alternatives

A Phase I Cultural Resources Survey and Archeological Inventory of the common corridor of the project alternatives was performed by R. Christopher Goodwin and Associates, Inc. At the point in which the alternatives diverge, Alternative No. 3 was the alternative selected to complete the resource and archeological survey as a result of a meeting held amongst representatives of Bossier Parish and NLCOG. It was determined during this meeting that Alternative No. 3 would provide the most benefit to the parish in terms of development, thus it was decided to focus all ground surveys for Alternative No. 3. Alternative No. 3 was subsequently modified to minimize impact to an area of bottomland hardwood, with the revised alignment designated as Alternative No. 3A.

The investigation consisted of a pedestrian survey and systematic subsurface testing. The investigation failed to identify any cultural material or evidence of intact cultural deposits within the corridor of Alternative No. 3. No archeological sites or standing structures were identified as a result of this investigation. It must be noted that only database research was performed for Alternatives No. 1 and No. 2, however, this research yielded no evidence of previously documented cultural material or evidence of intact cultural deposits. Details of the Cultural Resources Survey and Archeological Inventory findings can be found in the supplemental technical report to this EA document entitled *Phase I Cultural Resources Survey and Archeological Inventory of the 6.1 km (3.8 mi.) Long Wafer Road Extension Project, Bossier Parish, Louisiana, October 2010.*

NOTE: A supplemental Phase I cultural resources investigation was performed on the portion of Alternative 3A that was considered high probability and not covered in the original survey. No cultural material or evidence of intact cultural deposits was identified as a result of the archaeological inventory. No further investigation was recommended.

No-Build Alternative

The "no-build" alternative will have no impact to cultural resources or archeological sites within the Project Study Area.

4.2.7 SECTIONS 4(f) AND 6(f) FACILITIES

Section 4(f) applies to any significant publicly owned public park, recreation area, or wildlife and waterfowl refuge and any land from a historic site of national, state, or local significance. Section 6(f) applies to resources funded through the Land and Water Conservation Fund Act.

Build Alternatives

No Section (4f) or Section (6f) properties will be affected by any of the build alternatives.

No-Build Alternative

Should the proposed project not be constructed, no resources protected by Sections 4(f) or 6(f) would be affected.

4.2.8 NOISE IMPACTS

Build Alternatives

According to the DOTD Highway Traffic Noise Policy, impacts from highway generated noise occur when (1) predicted traffic noise levels equal or exceed the DOTD Noise Abatement Criteria (NAC) or when (2) the predicted traffic noise levels exceed the existing noise levels by 10 decibels (dBA). If either of these two criteria occurs, noise abatement should be considered and evaluated. The NAC for Category B land activities is 66dBA. A sensitive receptor is defined as an existing activity that may be affected by highway generated noise. Category B land activities include picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals (See *Table 4-4*).

Activity Category	Louisiana NAC Leq(h)	Description of Activity Category
	56 dBA	Lands on which serenity and quiet are of extraordinary significance & serve an
А	(Exterior)	important public need & where the preservation of those qualities is essential if
		the lands are to continue to serve their intended purpose.
В	66 dBA	Picnic areas, recreation areas, playgrounds, active sports area, parks, residences,
Б	(Exterior)	motels, hotels, schools, churches, libraries & hospitals.
С	71 dBA	Developed lands, properties or activities not included in Categories A or B above.
C	(Exterior)	
D		Undeveloped lands.
Е	51 dBA	Residences, motels, hotels, public meeting rooms, schools, churches, libraries,
C .	(Interior)	hospitals & auditoriums.

TABLE 4-4: LOUISIANA NOISE ABATEMENT CRITERIA

The predicted noise levels for 2010 (existing year), 2013 build (all alternatives), "no-build" alternative, and 2033 (Design Year) for proposed Alternatives No. 1, 2, and 3 at all modeled receivers do not exceed the Louisiana NAC of 66dbA. Further, the difference between the predicted noise levels for 2033 (Design Year) for proposed Alternatives No. 1, 2, and 3 and the existing noise levels at all modeled receivers is less than 10dbA. Therefore, based on the Louisiana Highway Traffic Noise Policy, it can be concluded that the proposed project is not expected to cause traffic noise impacts for any of the potential noise sensitive receivers in the study area. Refer to Table 4-2 located on Pages 20 through 29 of the Noise and Air Quality Supplemental Report prepared by Trinity Consultants.

According to the DOTD Highway Traffic Noise Policy, noise abatement measures should be considered and evaluated for all impacted receivers identified in the noise impact analysis. As noted above, the results of the noise assessment study show that there are no impacted receivers within the study area. Therefore, noise abatement measures are not required to be evaluated for this project. The proposed project is not expected to cause traffic noise impacts for any of the potential noise sensitive receivers in the study area.

Details of the noise impact findings can be found in the supplemental technical report to this EA document entitled: *Supplemental Report: Noise and Air Quality Assessment Report, Wafer Road Extension Project, Bossier Parish, Louisiana, September 2010,* prepared by Trinity Consultants.

No Build Alternative:

Future noise impacts will also occur in the "no build" Alternative. If the proposed project is not constructed, noise modeling analysis predicts that the noise level at receivers along Bellevue Road may exceed the levels predicted for the proposed alternatives by 0.6 to 1.7 dBA.

4.2.9 OIL AND GAS WELLS

Build Alternatives

Crude oil and natural gas are the predominant mineral products in Bossier Parish. According to information obtained from the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS), there are eleven (11) oil and gas wells within the Federal Action Area. SONRIS records indicate six (6) plugged and abandoned (P&A) dry holes and five (5) P&A wells. One of the wells, Wurtsbaugh No. 1, which was plugged in 1962, falls some 66 feet west of the centerline of Alternative No. 3 and 3A, at latitude 32°38'11.04" and longitude -93°33'20.52". Precautions will need to be taken to avoid the well location. Table 4-5 lists the SONRIS well status and distribution.

Upon completion of accurate field surveys during engineering design process of this project, a determination should be made to verify if oil and gas wells are present within the project's required right of way. In particular, the Wurtsbaugh No. 1 well (Serial #88353) is listed in the Dept. of Natural Resources database as "dry and plugged" since 1962. Plugging procedures regulated by the Louisiana Administrative Code, Title 43, Part XIX, Subpart 1, Chapter 137, states that after plugging "the operator shall be required on all locations to cut the casing a minimum of two feet below plow depth." During project engineering, the location of the Wurtsbaugh well shall be confirmed, and should it fall within the project right of way, minor adjustments may be made to the selected alternative right of way in order to avoid direct impacts.

No impacts are anticipated to any of the build alternatives from the oil and gas wells. *Figure 4-3* shows the locations of the eleven (11) oil and gas wells nearest the proposed project roadways. *Table 4-5* identifies the status of the wells.

Well Status	Number of Wells
Plugged & Abandoned	6
Dry and Plugged	5
Total	11

TABLE 4-5: OIL & GAS WELL STATUS

No-Build Alternative

The "no-build" alternative will have no effect on any oil and gas wells in the Project Study Area.

4.2.10 PIPELINES

Build Alternatives

Pipeline research was conducted by reviewing information provided by Pipeline and Hazardous Materials Safety Administration utilizing their National Pipeline Mapping System Public Map Viewer. A search of gas transmission and hazardous liquid (crude oil) lines revealed a crude oil pipeline and a natural gas transmission line that would be crossed by the proposed alternatives. The pipelines are shown on Figure 4-3. Prior to construction, pipeline owners shall be consulted to determine exact locations and depth of cover of their pipelines and their requirements for crossing these lines.

No-Build Alternative

The "no-build" alternative will have no adverse impacts to pipelines in the Project Study Area.

4.2.11 HAZARDOUS WASTE SITES AND UNDERGROUND STORAGE TANKS

The Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulate hazardous materials and waste sites. Hazardous waste is generally defined as any material that has, or, when combined with other materials, will have a deleterious effect on humans or the natural environment. Hazardous wastes are characterized as reactive, toxic, infectious, flammable, explosive, corrosive, or radioactive. Hazardous wastes may occur as solids, sludges, liquids, or gases.

Potential hazardous waste sites include landfills, dumps, pits, lagoons, salvage yards, and industrial sites, as well as above and below ground storage tanks. Service stations are one of the most common generators of potential hazardous material sites because older underground storage tanks may deteriorate and contaminate surrounding soil and groundwater with gasoline.

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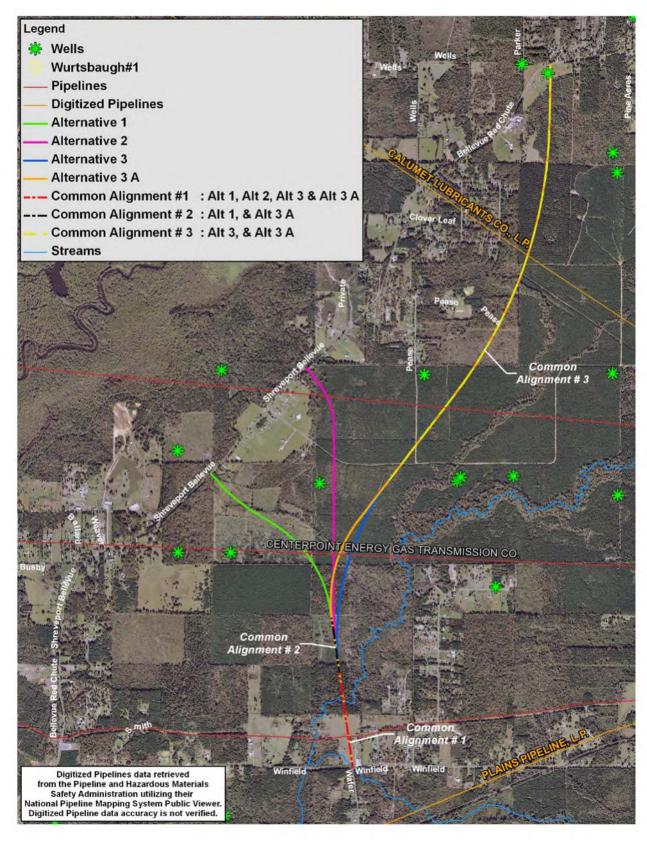


FIGURE 4-3: LOCATION OF OIL AND GAS WELLS AND PIPELINES

4.2.11.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was conducted for this project. The purpose of the Phase I was to identify, to the extent feasible, *recognized environmental conditions* in connection with the Federal Action Area. A *recognized environmental condition* is defined as "the presence or likely presence of any hazardous substance or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property." Regulatory database information was obtained from GeoSearch. In addition, a field reconnaissance was conducted in the project area. The assessment revealed no evidence of Recognized Environmental Conditions (RECs). Details can be found in the supplemental report entitled: *Phase I Environmental Site Assessment, Wafer Road Extension, December, 2010.*

Build Alternatives

A review of the regulatory database showed no listed sites or spills within the Federal Action Area. No RECs were identified from the historic topographic maps or aerial photography. Power, gas, and water infrastructure were observed within the Federal Action Area during the site reconnaissance. No obvious evidence of spills or releases of hazardous materials or petroleum products were observed during the field reconnaissance. No RECs were identified during the field reconnaissance.

No-Build Alternative Not Applicable.

4.3 IMPACTS TO THE NATURAL ENVIRONMENT

4.3.1 WATER QUALITY

Build Alternatives

Soil erosion is generally the most critical water quality impact resulting from construction activities. The degree of erosion is dependent on factors such as the amount of vegetation and soil removal, slope of the exposed area, and the effectiveness of erosion-control measures. Erosion can lead to deposition of sediment in waterways resulting in slowing of the natural flow of the waterway and degraded water quality. All of the build alternatives will result in impacts to the soils during construction.

Adverse impacts to water quality will be reduced by application of Best Management Practices (BMPs) and adhering to an erosion and sedimentation control plan. Appropriate measures, such as provisions for proper disposal and storage of materials and wastes, will also be taken to avoid accidental spillage of fuels or other chemicals and to control runoff into public drainage systems. National Pollution Discharge Elimination System (NPDES) guidelines for Phase II construction activities will be followed during construction, and a site specific Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project. Any water quality degradation that may occur during construction activities will be localized and short term.

No-Build Alternative

The "no-build" alternative will have no effect on water quality.

4.3.2 WATER RESOURCES

4.3.2.1 Floodplains

Build Alternatives

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), a large percentage of the proposed action is located in the 100-year flood zone map hazard area. *Figure 4-4* shows the 100-year flood zone and all proposed alternatives. *Table 4-6* lists the floodplain acreage that will be impacted by all the build alternatives, including the "no-build" alternative.

Floodways/Floodplains	No-Build Alternative	Alternative No. 1	Alternative No. 2	Alternative No. 3	Alternative No. 3A (Preferred Alternative)
Floodway	0 Acres	1.59 Acres	1.59 Acres	1.59 Acres	1.59 Acres
500 Year Flood Zone	0 Acres	1.06 Acres	1.32 Acres	0.84 Acres	1.50 Acres
Zone A	0 Acres	0 Acres	1.88 Acres	3.22 Acres	3.86 Acres
Zone AE	0 Acres	8.60 Acres	9.12 Acres	9.94 Acres	9.75 Acres
TOTAL FLOODWAY/ FLOODPLAIN ACREAGE	0 Acres	11.25 Acres	13.91 Acres	15.59 Acres	16.75 Acres

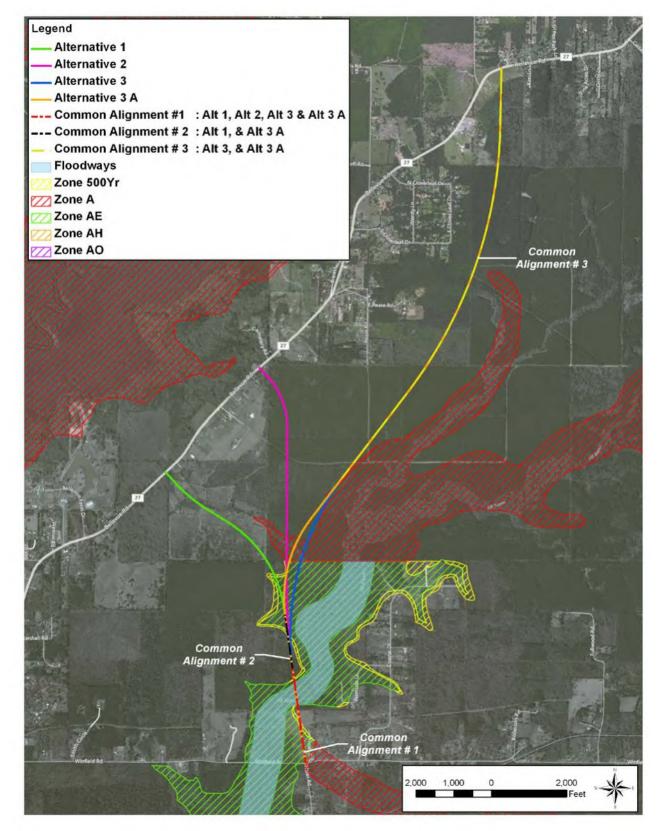
TABLE 4-6:	POTENTIAL IMPACTS TO FLOODPLAINS

Encroachments to the floodplains by any of the build alternatives should not significantly increase the base-flood elevation to a level that would violate applicable floodplain regulations. The hydraulic design and construction practices for the preferred alternative would be in accordance with current LDOTD and FHWA design policies and standards, and should allow for occurrence of a base flood inundation, accumulation, and flow of floodwater. This can be achieved by implementing adequate roadway cross drains, roadside ditches, and other hydraulic conveyance means necessary to convey flood waters as necessary. This type of design is considered a normal practice in Louisiana considering that a large percentage of Louisiana lies in a floodplain. Impacts to the 100-year floodplain that may occur with the construction of any of the built alternatives will be mitigated during the design phase through the development of properly engineered hydraulic design of project improvements with results to be approved by the Bossier Parish Floodplain Administrator. The geometric design standards for this project require that the finished road elevation be above the calculated water surface for the design frequency event. According to the LDOTD Hydraulics manual, a 50 year design frequency is required for this project. The project will require a "No-Rise Certification" to comply with Federal regulations 44 CFR Part 65.12 for any portions of the build alternatives located in the designated floodway. Mitigation of project improvements within the designated floodway is done during the design phase through the development of properly engineered hydraulic design of project improvements with results to be approved by the Bossier Parish Floodplain Administrator.

No-Build Alternative

The "no-build" alternative would have no impact on floodplains.

FIGURE 4-4: FLOODPLAINS



4.3.2.2 Public and Domestic Water Wells

A review of water wells registered with the Water Resources Division of LDOTD as shown on DNR's website showed that approximately 80 domestic water wells are located in the federal action area. The water well registration data file contains only wells registered with LDOTD. These wells are shown on *Figure 4-5*. It is possible that additional wells that are not registered have been drilled in the Federal Action Area. None of the registered wells appear to be located within the proposed right of way for any of the build alternatives.

Build and No-Build Alternatives

No impacts to water wells are anticipated in any of the build alternatives, or the "no-build" alternative.

4.3.2.3 Groundwater

Shallow groundwater exists in layers of silt or sand deposited by the nearby Red River. The Red River Alluvial Aquifer is the primary aquifer in the area, and is used primarily for irrigation. Water levels are generally within 30 to 40 feet of the land surface and movement is down gradient and towards rivers and streams. The maximum depths of occurrence of freshwater in the Red River Alluvial range from 20 feet above sea level to 160 feet below sea level.

Review of the US Environmental Protection Agency, Sole Source Aquifer Designation Map indicates that Bossier Parish is not located within the boundaries of a designated sole source aquifer; therefore there will be no impact to any sole source aquifers from a "Build" or "No-Build" alternative.

The construction of the proposed highway and subsequent storm water runoff would have minimal impacts on groundwater quality. Construction would increase the amount of impervious cover within the local watersheds, which would reduce the amount of infiltration to recharge underlying aquifers. However, because of the remaining amount of undeveloped land available for groundwater recharge, the change in land use associated with the proposed project would have a negligible effect on recharge.

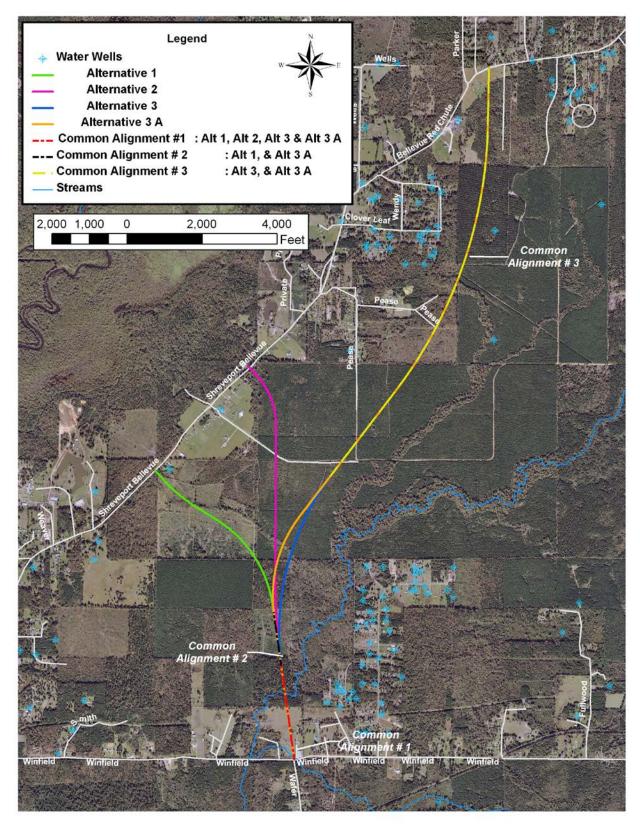
Build Alternative

Potential short-term impacts associated with the construction of any of the build alternative include the increase of impervious surfaces and potential impacts resulting from spillage of fuels, oils, greases, or other materials. However, none of the build alternatives would likely have any long-term impact on the groundwater resources of the area. During construction, any potential spills would be mainly limited to fuels (gasoline and diesel) and lubricants used by construction equipment. Such spills and their adverse impacts would be controlled through proper equipment maintenance, management of these materials, and by prompt response and cleanup of spills and leaks. Potential impacts to the groundwater resources would be minimized by the implementation of Best Management Practices (BMPs) during construction.

No-Build Alternative

Growth in the area is expected to continue even with the "no-build" alternative, and impacts associated with resulting development could occur.

FIGURE 4-5: WATER WELLS



4.3.3 BIOLOGICAL RESOURCES

4.3.3.1 Plant Communities

Build Alternative

Several plant communities occur in the Federal Action Area. These include forested and herbaceous communities. The forested communities can be characterized as pine, mixed-pine/hardwood and bottomland hardwoods. Forested areas, currently being managed for timber production, consist of mature and mid-rotation timberland, pine plantations, and cutovers. The herbaceous communities can be characterized as hay fields and maintained grassy areas.

Trees identified during the wetland delineation included green ash, white ash, black cherry, American elm, winged elm, sweet gum, Black gum, mockernut hickory, water hickory, honey locust, American hornbeam, red maple, mulberry, wax myrtle, pecan, common persimmon, loblolly pine, white oak, water oak, cherrybark oak, willow oak, post oak, overcup oak, eastern red cedar, sassafras, Chinese tallow and black willow.

Identified plants and shrubs included eastern baccharis, American beautyberry, blackberry, common buttonbush, deerberry, devil's walkingstick, roughleaf dogwood, white fringetree, roundleaf greenbrier, parsley hawthorn, black mimosa, European privet, Partridgeberry, Possumhaw, common rush, American witchhazel, slender woodoats, yaupon, Alabama supplejack, American buckwheat vine, arrowleaf violet, bahiagrass, Bosc's panicgrass, bushy bluestem, camphorweed, Canada goldenrod, cat greenbrier, clustered yellowtops, common buttonbush, common rush, crossvine, eastern poison ivy, eastern woodland sedge, evening trumpetflower, globe beaksedge, grassleaf rush, Indian woodoats, Japanese honeysuckle, lanceleaf fogfruit, lateflowering thoroughwort, Maryland meadowbeauty, muscadine, oval-leaf sedge, panicgrass, partridge pea, peppervine, redroot flatsedge, slender woodoats, southern crabgrass, swamp smartweed, tall morning-glory, trumpet creeper, thicket sedge, whitegrass, Vasey's grass, woolly rosette grass, Alabama supplejack, evening trumpetflower, and muscadine

Each of the Build Alternatives has a right of way of 160 feet with the exception of a 325 foot section of 170 foot wide right of way for a stream crossing. For all of the proposed alternatives, vegetation would be removed from the right of way limits, and simplified grassland would replace the existing land cover within the limits of construction. The original characteristics would be removed within the roadway alignment and disturbed along adjacent roadsides and ditches.

The primary effects to plant communities from the proposed project would be direct vegetation loss because of ROW clearing and modification of surface hydrology. During construction, fugitive dust may accumulate on adjacent vegetation causing a temporary reduction in photosynthesis and transpiration rates. Modification to surface hydrology may affect moist soil or wetland plant communities allowing for the encroachment of invasive and upland species. Soil erosion may result in sedimentation within off-project plant communities. Surface runoff may carry oil and grease from heavy equipment to adjacent plant communities. These potential impacts will be avoided or mitigated by implementing proper stormwater runoff and erosion control measures, dust suppression, and countermeasures to respond to accidental spills of fuel, oil, or grease during construction.

No-Build Alternative

The "no-build" alternative would have no impact on the plant communities in the Federal Action Area. However, growth in the area is expected to continue and impacts associated with resulting development could occur.

4.3.3.2 Terrestrial Wildlife

Build Alternative

Construction-related activities would directly and/or indirectly affect terrestrial wildlife residing within or traveling across the proposed ROW resulting in population fluctuations. Slow-moving, burrowing, or subterranean species may experience increased mortality by direct contact with construction vehicles and heavy machinery. Larger, more mobile animals will likely avoid clearing and construction activities and move into areas adjacent the ROW. Because adjacent habitat is presumed to be at carrying capacity, animals displaced from the proposed ROW would either displace neighboring animals or immigrate to suitable habitat. Because of expected increases in vehicular traffic and speed as a result of the project, an increase in negative wildlife and traffic interactions would be expected.

No-Build Alternative

The "no-build" alternative would have no impact on terrestrial wildlife in the study area. However, growth in the area is expected to continue and impacts associated with resulting development could occur.

4.3.3.3 Aquatic Wildlife

Build Alternative

Potential impacts to aquatic wildlife could result from physical habitat loss or modification, water quality degradation, erosion and sedimentation, and petroleum or chemical spills. Because aquatic wildlife is acutely sensitive to environmental change, some minor impacts to aquatic wildlife may result. Slow motility organisms such as small fish, amphibians, reptiles, and invertebrates would likely be affected. Turbidity could diminish respiration and feeding rates of benthic organisms, fish, and amphibians. These organisms are slow to recover and usually do not, if the water body has been severely impacted.

In-stream construction across Fifi Bayou may alter near-field substrate and impact adjacent streamside vegetation. Because area streams typically exhibit relatively high turbidities during and following rainfall events, small increases in suspended solids during construction are likely to occur but are not likely to have any discernible adverse impact. Similarly, soil disturbances due to construction activities within the drainage basins for Fifi and Connell Bayous will result in increased turbidity. Following construction Best Management Practices would limit water quality degradation by minimizing erosion, sedimentation, and turbidity.

No-Build Alternative

The "no-build" alternative would have no impact on aquatic wildlife in the study area. However, growth in the area is expected to continue and impacts associated with resulting development could occur.

4.3.4 THREATENED AND ENDANGERED SPECIES

Section 7 of the Endangered Species Act of 1973, as amended, requires that any action likely to adversely affect a federally protected species be subject to review by appropriate Federal and State resource agencies. An endangered species is one in danger of extinction throughout all or a significant portion of its

range, while a threatened species is one that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Critical habitat, as defined by the Endangered Species Act, is a term for habitat given special protection for the benefit of federally protected species.

At the time that this report was prepared, four federally protected species were recorded in Bossier Parish as shown in *Table 4-7*.

Scientific Name	Common Name	State Status	Federal Status
Haliaeetus leucocephalus	bald eagle	Endangered	Delisted
Picoides borealis	red-cockaded woodpecker	Endangered	Listed Endangered
Sterna antillarum athalassos	interior least tern	Endangered	Partial Status: Listed Endangered
Scaphirhynchus albus	pallid sturgeon	Endangered	Endangered

TABLE 4-7: BOSSIER PARISH THREATENED AND ENDANGERED SPECIES

The bald eagle was delisted from its threatened status in the lower 48 states on June 28, 2007. Its protection was transferred to the "Bald and Golden Eagle Protection Act" [16 U.S.C. 668-668c] and "The Migratory Bird Treaty Act" [16 U.S.C. 703-712]. To ensure avoidance of any disturbances to bald eagles, a survey should be conducted prior to the initiation of construction activities. Should bald eagles be present in the project area, activities will be conducted in accordance with the USFWS National Bald Eagle Management Guidelines.

The Natural Heritage Section of the Louisiana Department of Wildlife and Fisheries (LDWF) was consulted regarding the presence of rare, threatened or endangered species or critical habitats that may occur within the project area. No impacts are anticipated for the proposed project. The Louisiana Field Office of the U.S. Fish and Wildlife Service reviewed the project for effects to Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act. The project, as proposed, will have no effect on those resources.

Build Alternatives

The proposed project is not anticipated to have impacts to threatened or endangered species, or resources protected by the Endangered Species Act.

No-Build Alternative

The "no-build" Alternative will have no effect on any protected species or habitat.

4.3.5 WATERS OF THE U.S. AND WETLANDS

Activities conducted in wetlands and/or navigable waters of the United States may be subject to regulation by the U.S. Army Corps of Engineers (USACE). Current federal decision-making authority for activities affecting wetlands and navigable waters of the U.S. lies principally with the USACE through Section 404 of the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Subsequent amendments to the CWA established a permit program and authorized the USACE to issue permits for regulating the discharge of dredged or fill material into all waters of the U.S. The USACE is responsible for enforcement, implementation, and permitting of the Act's provisions. Any action that proposes to place fill into wetlands and other waters of the U.S.

requires a jurisdictional determination from the USACE. Each of the principles of avoidance, minimization, restoration and compensation must be considered in sequential order. *Table 4-8* presents the hydric soils listed for Bossier Parish.

Map symbol and map unit name	Component	% of map unit	Landform	Hydric rating	Hydric criteria (Explained below)
AsA: Ashford silty clay, 0 to 1 % slopes	Ashford	96	Alluvial flats	Yes	2B3, 3
BmA: Bossier clay, frequently flooded	Bossier	84	Alluvial flats	Yes	2B3, 4
BwA: Buxin clay, occasionally flooded	Buxin	95	Alluvial flats	Yes	4
BxA: Buxin clay, frequently flooded	Buxin	87	Alluvial flats	Yes	4
CYA: Cypress silty clay loam, 0 to 1% slopes, ponded	Cypress	90	Flood plains, Swamps	Yes	2B3, 3, 4
EsA: Estes silty clay loam, 0 to 1% slopes, frequently flooded	Estes	92	Flood plains	Yes	2A, 4
GuA: Guyton silt loam, ponded	Guyton	90	Flood plains	Yes	2B3, 3, 4
GYA: Guyton-Ouachita silt foams, frequently flooded	Guyton	50	Flood plains	Yes	2B3, 4
	Ouachita	35	Natural levees	Yes	4
MGA: Mollicy-Guyton complex, 0 to 1% slopes, occasionally flooded	Guyton	28	Flood plains	Yes	2B3
MrA: Moreland clay, occasionally flooded	Moreland	93	Alluvial flats	Yes	4
MsA: Moreland clay, frequently flooded	Moreland	87	Alluvial flats	Yes	4
SrB: Sonnier clay, 1 to 3% slopes, frequently flooded	Sonnier	90	Natural levees	Yes	4
WrA: Wrightsville silt loam, 0 to 1% slopes	Wrightsville	88	Depressions	Yes	2B3
YOA: Yorktown clay, 0 to 1% slopes, frequently flooded	Yorktown	100	Backswamps	Yes	2B3, 3, 4

TABLE 4-8: BOSSIER PARISH HYDRIC SOILS

Data acquired from USDA Natural Resources Conservation Service

EXPLANATION OF HYDRIC CRITERIA FOR BOSSIER PARISH SOILS

1. All Histels except for Folistels, and Histosois except for Folists.

a. Are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or

b. Are poorly drained or very poorly drained and have either:

- water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
- water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of inches, or
- water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.

3. Soils that are frequently pond for long or very long duration during the growing season.

4. Soils that are frequently flooded for long or very long duration during the growing season.

^{2.} Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:

4.3.5.1 Waters of the US

The Definition of "Waters of the United States" from 40 CFR 122.2 is:

- All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters, including interstate "wetlands;"
- All other waters such as intrastate lakes, rivers, streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

Which are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce;

- All impoundments of waters otherwise defined as waters of the United States under this definition;
- Tributaries of waters previously identified in this definition;
- The territorial sea; and
- "Wetlands" adjacent to waters (other than waters that are themselves wetlands) Previously identified in of this definition;

Waste treatment systems, including treatment ponds or lagoons are not waters of the United States. Waters of the United States do not include prior converted cropland.

Build Alternatives

All of the build Alternatives will cross Waters of the United States ("other waters"), as summarized in *Table 4-9*.

No-Build Alternative

The "no-build" Alternative will have no effect on wetlands and/or navigable waters of the United States.

4.3.5.2 Wetlands

The USACE and the U.S. Environmental Protection Agency (USEPA) define wetlands as: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The definition emphasizes hydrology, vegetation and soil conditions. Each of the criteria must be present for an area to be identified as wetlands. The following are diagnostic environmental characteristics of a wetland:

• <u>Hydrology</u>: The area is inundated either permanently or periodically at mean water depths ≤ 6.6 ft., or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation (cutoff is ≥ 5% of growing season; continuously).

- <u>Vegetation</u>: The prevalent vegetation consists of macrophytes that are typically adapted to areas having hydrologic and soil conditions as described in the definition of a wetland. Hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions.
- <u>Soil</u>: Soils are present and have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions.

In the wetland definition, normal circumstances are defined as "the soil and hydrologic conditions that are normally present, without regard to whether vegetation has been removed."

For the purposes of Section 404 of the CWA, the USACE has developed a manual that describes technical guidelines and methods using a multi-parameter approach for the identification and delineation of wetlands. Use of the 1987 Corps of Engineers Wetlands Delineation Manual (TR Y-87-1) to identify and delineate wetlands potentially subject to regulation under Section 404 is mandatory.

Build Alternatives

A Geographic Information System was used to map the hydric soils along the project corridors. Using this GIS soils information along with 2004/2005 aerial infrared photography as references, a wetlands investigation plan was developed.

According to the Bossier Parish Soil Surveys, the proposed right of way for the proposed Alternatives crosses various soils types including the Ashford silty clay, 0 to 1 percent slopes (AsA), Bodcau silt loam, 0 to 1 percent slopes (BkA), Forbing silt loam, 1 to 5 percent slopes (FoC), Gore silt loam, 1 to 5 percent slopes (GoC), Guyton-Ouchita silt loam (GYA), and Wrightsville silt loam, 0 to 1 percent slopes. According to the National Resources Conservation Service (NRCS) National Hydric Soils List, the AsA, GYA, and WrA soil types are listed as being "hydric".

An Onsite Wetland Delineation was conducted along the portion of the alignments that are common, and the (originally) preferred project alternative, Alternative No. 3. The delineation was conducted in accordance with the 2008 Interim Regional Supplement to the Corps of Engineers (COE) Wetlands Delineation Manual: Atlantic and Gulf Coast Plain Region and the 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual. This delineation was conducted on August 30, 31, and September 1, 2010. Details can be found in the supplemental technical report entitled: *Wetland Delineation Report: Wafer Road Extension, October, 2010.*

The delineation documented wetlands presence/absence using vegetation, hydrology, and soils criteria. Sample points (Plots) were obtained at changes in topography and/or vegetation along the project corridors. Plot locations were selected based on visual observations of changes in vegetation and topography. Traditional and non-traditional navigable waters of the U.S. were also documented. Soils, vegetation, and hydrology at each sample point were examined and documented. Twenty-one recorded data points (Plots) were taken along the proposed right of way along the alignment previously described; five of which were determined to be in wetlands. Photographs were taken to document on-site conditions. *Table 4-9* presents the findings of the wetlands investigation. *Figure 4-6* illustrates the results of the wetland investigations.

An offsite desktop delineation was prepared for those portions of Alternatives No. 1 and No. 2 that are not common to all three alignments. To perform the offsite delineation, published soil information in

conjunction with false color aerial photography were used to reveal potential wetlands. National Wetlands Inventory maps were reviewed and Natural Resource Conservation Service soil service maps were checked to compare the given soil types against the list of hydric soils in Bossier Parish. Recent aerial photography was reviewed along with site-specific observation in the area. The offsite delineation showed that a tributary of FiFi Bayou traverses through the alignments, as shown in *Table 4-9. Figure 4-6* illustrates the results of the wetland investigations. Digital Lidar Data was used to project the boundary of Wetland No. 3 west of the field delineated corridor of Alternative No. 3 in order to calculate impacted acreage.

The proposed right of way for the preferred alternative (Alternative No. 3A) traverses approximately 2.43 acres of jurisdictional wetlands including one herbaceous wetlands (Wetland #1), and three hardwood forest wetlands (Wetlands #2, #3 and #4). The proposed right of way also intersects three waters (Water #1, Water #2, and Water #6, which is Fifi Bayou). All waters and wetlands along the right of way should be considered jurisdictional by the Corps of Engineers due to both direct and indirect connectivity with Fifi Bayou, its tributaries, and associated wetlands. FiFi Bayou is a named waterway/stream on the United States Geological Survey (USGS) quadrangle maps. The nearest traditional navigable waterway is Red River. Fifi Bayou is a tributary of Loggy Bayou, which is a tributary of Red River. Table 4-9 (C.) breaks down the wetland and other water acreages of all four alternatives.

A jurisdictional wetland determination can only be made by the Corps of Engineers (COE). Field investigations (delineations) and data was collected in a prescribed manner and submitted to the COE along with recommendations; however, it is the COE that makes the final determination. A jurisdictional determination request has been submitted to the Vicksburg District US Army Corps of Engineers which has jurisdiction in the area of this project.

Wetlands	Туре	Methodology	Acres	Corridor
Name				
Wetland # 1	Herbaceous	Field Delineation	0.16	Alternative No. 3
Wetland # 2	Bottomland Hardwood	Field Delineation	0.04	Alternative No. 3
Wetland # 3	Bottomland Hardwood	Field Delineation	3.02	Alternative No. 3
Wetland # 3	Bottomland Hardwood	Projected	1.40	Alternative No. 1
Wetland # 3	Bottomland Hardwood	Projected	1.56	Alternative No. 2
Wetland # 3	Bottomland Hardwood	Projected	1.86	Alternative No. 3A
Wetland # 4	Bottomland Hardwood	Field Delineation	0.37	Common to all 3 Alternatives

TABLE 4-9: SUMMARY OF WETLAND INVESTIGATION

A. WETLANDS

Waters	Waterway	Methodology	Water Dimensions	Acres	Corridor
Name Other Waters # 1	Fifi Bayou Tributary (Non-Relatively Permanent Waterway)	Field Delineation	20'wide x 3'deep	0.09	Alternative No. 3
Other Waters # 2	Fifi Bayou Tributary (Non-Relatively Permanent Waterway)	Field Delineation	15' wide x 2.5'deep	0.06	Alternative No. 3
Other Waters # 3	Fifi Bayou (Relatively Permanent Waterway)	Field Delineation	24' wide x 4'deep	0.08	Common to all 3 Alternatives
(Suspected) Other Waters #4	Fifi Bayou Tributary (Non-Relatively Permanent Waterway)	Desktop Analysis	Varies (depth not established)	0.08 (Approx.)	Alternative No. 1
(Suspected) Other Waters #5	Fifi Bayou Tributary (Non-Relatively Permanent Waterway)	Desktop Analysis	15' wide x 2.5'deep (estimation)	0.38 (Approx.)	Alternative No. 2
(Suspected) Other Waters #6	Fifi Bayou Tributary (Non-Relatively Permanent Waterway)	Desktop Analysis	15' wide x 2.5'deep (estimation)	0.15 (Approx.)	Alternative No. 3A

B. OTHER WATERS

C. BREAKDOWN OF WETLANDS & OTHER WATERS WITHIN ALTERNATIVES

Alternative	Wetland/Other Waters	Acres	Methodology	Totals
Alternative	Wetland #4 (Bottomland Hardwood)	0.37 acres	Delineated	Wetlands in Alt. 1
No.1	Wetland #3 (Bottomland Hardwood)	1.40 acres	Projected	1.77 acres
	Other Waters #3	0.08 acres	Delineated	Other Waters in Alt. 1
	Other Waters #4	0.08 acres	Projected	0.16 acres
Alternative	Wetland #4 (Bottomland Hardwood)	0.37 acres	Delineated	Wetlands in Alt. 2
No. 2	Wetland #3 (Bottomland Hardwood)	1.56 acres	Projected	1.93 acres
	Other Waters #5	0.38 acres	Projected	Other Waters in Alt. 2
	Other Waters #3	0.08 acres	Delineated	0.46 acres
Alternative	Wetland #4 (Bottomland Hardwood)	0.37 acres	Delineated	
No. 3	Wetland #3 (Bottomland Hardwood)	3.02 acres	Delineated	Wetlands in Alt. 3
	Wetland #2 (Bottomland Hardwood)	0.04 acres	Delineated	3.59 acres
	Wetland #1 (Herbaceous)	0.16 acres	Delineated	
	Other Waters #3	0.08 acres	Delineated	Other Waters in Alt. 3
	Other Waters #2	0.06 acres	Delineated	0.23 acres
	Other Waters #1	0.09 acres	Delineated	0.23 acres
Alternative	Wetland #4 (Bottomland Hardwood)	0.37acres	Delineated	
No. 3A	Wetland #3 (Bottomland Hardwood)	1.86 acres	Projected	Wetlands in Alt. 3A
	Wetland #2 (Bottomland Hardwood)	0.04 acres	Delineated	2.43 acres
(Preferred)	Wetland #1 (Herbaceous)	0.16 acres	Delineated	
	Other Waters #3	0.08 acres	Delineated	Other Materia in Alt. 24
	Other Waters #6	0.15 acres	Suspected	Other Waters in Alt. 3A 0.32 acres
	Other Waters #1	0.09 acres	Delineated	U.32 dures

No-Build Alternative

The selection of the "no-build" alternative would not impact any waters of the U.S. However, growth in the area is expected to continue and impacts associated with resulting development could occur.

4.3.5.3 Mitigation of Wetlands

The Council of Environmental Quality (CEQ) [Title 40 CFR Part 1500 – 1508] regulations define mitigation as:

- Avoiding impacts all together by not taking an action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating or restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and
- Compensating for the impact by replacing or providing substitute resources or environments.

Compensatory mitigation for unavoidable impacts to wetlands would be developed during the permit application process. Mitigation will be developed in accordance with USACE Regulatory Guidance Letter No. 02-2, Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

4.3.6 WILD AND SCENIC RIVERS

The Louisiana Natural and Scenic Rivers System, established in 1970, is administered by the Louisiana Department of Wildlife and Fisheries. Its purpose is to preserve, develop, reclaim and enhance the wilderness quality, scenic beauty, and ecological regimen of designated free-flowing water bodies.

Build Alternatives

No waterways in the Louisiana Natural and Scenic Rivers System are located in Bossier Parish, therefore, a Scenic River Use Permit is not required. No National Wild and Scenic Rivers will be impacted by the build alternative.

No-Build Alternative

Since there are no National Wild and Scenic Rivers, nor are there any waterways in the Louisiana Natural and Scenic Rivers System within the study area, this discussion is not applicable.

4.3.7 PRIME AND UNIQUE FARMLANDS

Build Alternatives

Prime farmland is one of several types of important farmland defined by the U.S. Department of Agriculture (USDA). Prime farmland soils, as defined by the USDA, are soils that are best suited to producing food, feed, forage, fiber, and oilseed crops. Such soils have properties that are favorable for the economic production of sustained yields of crops. Prime farmland soils produce the highest yields with minimal inputs of energy and other economic resources. For these reasons, Prime Farmland soils are of major importance in meeting the nation's short-term and long-term food and fiber needs.

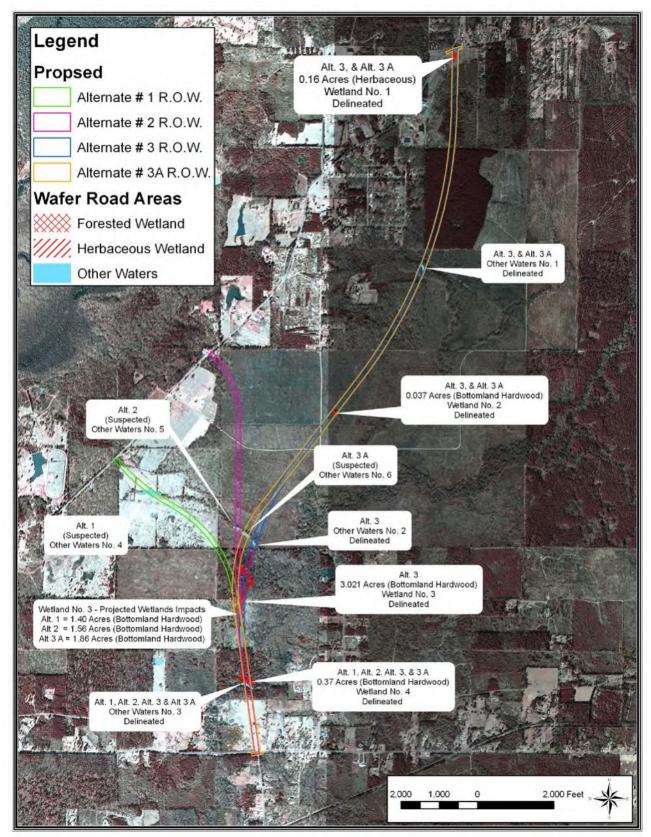


FIGURE 4.6: WATERS OF THE U.S. AND WETLANDS

According to National Resource Conservation Service (NRCS) digital soil maps, prime farmland soils are extensively present throughout the Project Study Area. NRCS reviewed the soils information for the project site as it pertains to prime farmlands. *Figure 4.7 and Table 4-10* summarize the approximate impacted prime farmland soils acreage for each of the proposed alternatives as determined by mapped soil type. Consultation with the NRCS was conducted and the completed NRCS-CPA-106 (Farmland Conversion Impact Rating) form is attached in Appendix D. A relatively low conversion impact rating was assessed for all three of the alternatives for the proposed project. This rating indicates that the proposed project will not cause unacceptable impacts to farmland, therefore the proposed alignments do not require further consideration for farmland protection.

TABLE 4-10: IMPACTS TO PRIME FARMLAND

	Alternative No.	Alternative No.	Alternative No.	Alternative No.	No-Build
	1	2	3	3A	Alternative
Prime Farmland	1.03 acres	8.97 acres	28.19 acres	28.19 acres	0 acres

No-Build Alternative

The "no-build" Alternative would have no direct impact on prime farmlands. However, prime farmland in this area may be impacted by continued development but at a slower rate than with the proposed project roadway improvements.

4.3.8 WETLANDS RESERVE PROGRAM

No-Build and Build Alternatives

The Wetlands Reserve Program (WRP) is a voluntary program that provides technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resource concerns on private lands in an environmentally beneficial and cost-effective manner. The program provides an opportunity for landowners to receive financial incentives to restore, protect, and enhance wetlands in exchange for retiring marginal land from agriculture.

According to Mr. Rick Adams, District Conservationist with the U.S. Department of Agriculture, Benton Field office, no properties along any of the proposed build alternatives have been accepted into the Wetlands Reserve Program and no applications for acceptance along this corridor are pending.

Neither the Build nor the "no-build" alternatives will have impacts to any lands enrolled in the Wetlands Reserve Program.

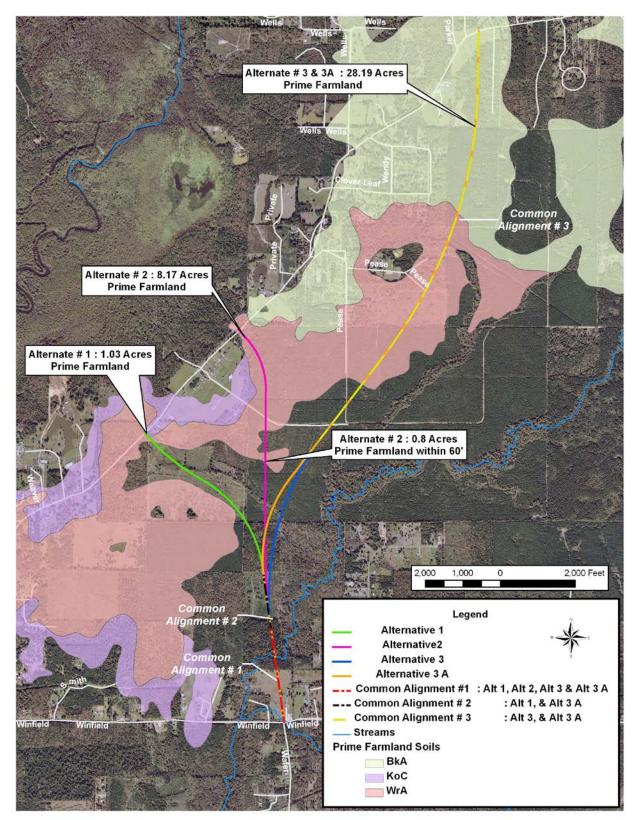
4.3.9 FARM BILL PROGRAMS

No-Build and Build Alternatives

The Farmland Protection Program is a voluntary program that helps farmers and ranchers keep their land in agriculture. The program provides matching funds to State, Tribal, or local governments and nongovernmental organizations with existing farmland protection programs to purchase conservation easements or other interests in land.

According to Mr. Rick Adams, District Conservationist with the U.S. Department of Agriculture - Benton Field office, lands enrolled in Farm Bill programs exist within the Federal Action Area. These lands were

FIGURE 4.7: FARMLANDS



identified and located by Mr. Adams. Although within the Federal Action Area, no Farm Bill Program lands will be directly impacted by any of the proposed alternatives.

4.3.10 LOUISIANA COASTAL ZONE IMPACTS

No-Build and Build Alternatives

Bossier Parish is not located in the Louisiana Coastal Zone Management Area as established under Act 361 of the Louisiana Legislature. Therefore, there will be no impacts to the Coastal Zone and the coastal zone management plan is not applicable to either the build or "no-build" alternative.

4.3.11 AIR QUALITY IMPACTS

An Air Quality Assessment was performed for the proposed project area. The United States Environmental Protection Agency (USEPA) and the Louisiana Department of Environmental Quality (LDEQ) are responsible for the protection of air quality within Louisiana. USEPA established criteria for evaluating air quality in accordance with the 1990 Clean Air Act Amendments. Bossier Parish has been designated as an attainment area, which indicates the historical pollutant levels are below the NAAQS. Therefore, the project is in an area where the Louisiana State Implementation Plan (SIP) does not require any transportation control measures.

Per U.S. Environmental Protection Agency (EPA), on-road vehicles contribute the majority of all Carbon Monoxide (CO) emissions nationwide. Louisiana is in attainment statewide for CO. CO analyses performed, assuming worst-case scenarios, for projects similar to the proposed project for many years have shown no violations of the National Ambient Air quality Standards (NAAQS).

Since the existing (pre-expansion) and predicted (post-expansion) levels of traffic are relatively low compared to other highway projects for which this type of analysis is typically performed, in accordance with the approved protocol provided to DOTD, the consultant provided a comparative analysis in lieu of performing a full scale air quality assessment for this report. This comparative analysis uses an air quality assessment report that was prepared in October 2003 for the proposed highway expansion of North Sherwood Forest Boulevard located in Baton Rouge, East Baton Rouge Parish, Louisiana (State Project No. 700-30-0246, F.A.P. No. STP 8020 (025)). The North Sherwood Forest Boulevard project was a recent highway project with higher traffic volumes that demonstrates compliance with applicable air quality standards after the expansion, meeting the criteria specified by the Louisiana DOTD. Therefore, the proposed project is deemed to also meet the LDOTD air quality standards, and will result in negligible air quality impacts. Refer to the technical supplement entitled *Noise and Air Quality Assessment Report, Wafer Road Extension Project*, and dated September 2010 for further details.

Build Alternatives

Temporary air pollution can be expected during the construction phase of this project. However, this pollution has generally short-term effects which terminate upon completion of the project or shortly thereafter. Construction operations shall conform to the construction regulations proclaimed by DEQ in the implementation of the Federal Clean Air Act of 1970. The provisions of the Standard Specifications and Special Provisions will keep related pollution to a minimum.

EPA has designated Bossier Parish as in attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations. The construction of this project is not expected to have a significant effect on that status. Therefore, associated health impacts should be minor. Any demolition, construction, rehabilitation, repair, dredging or filling activities have the potential to emit air pollutants and it is recommended that best management practices be implemented to minimize the impact of any air pollutants. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations.

No Build Alternative

The traffic volume in the study area expected to increase and it is anticipated that the long term air quality in the no-action alternative will not be substantially different than that anticipated in the proposed action alternative. As such, associated health impacts should be minor.

4.3.11.1 Air Quality Mitigation

The proposed project will result in negligible adverse air quality impacts. Therefore, no mitigation measures are required.

4.4 ENGINEERING CONSTRAINTS AND TRAFFIC IMPACTS

4.4.1 ENGINEERING CONSTRAINTS

During development of the alternatives, the following engineering constraints were identified: flood zone areas; existing residential development immediately north of Winfield Road; existing residential development along Bellevue Road and existing and proposed Connell Bayou Bridge. Utilizing the conceptual development, existing LIDAR contours, LDOTD geometric standards, and the design constraints, three separate alternatives were developed for the proposed Wafer Road Extension.

Build Alternatives

According to the LDOTD Hydraulics manual, a 50-year design frequency is required for this roadway corridor. Therefore, the road elevation must be above the calculated water surface elevation for the 50-year design frequency event. The road profile was designed based on a minimum elevation of one (1) foot above the base flood elevation at the edge of the proposed shoulder. The remainder of the proposed profile was designed based on minimal fill along the route with the exception of proposed storm drain locations.

The majority of the common alignment roadway elevation will be dictated by the 100-year flood elevation. As the alignments travel away from the 100-year flood areas, the roadway elevation will generally follow the existing grade allowing for reasonable cut and fill volumes in the roadside ditches. The proposed roadway corridor will need to be elevated 0 to 9.5 feet according to the existing LIDAR contours. A summary of the approximate finished road elevation and corresponding fill quantities for selected points along the alternate alignments are shown on *Table 4-11*.

Station	Minimum Elev. (ft)	Natural Ground	Required Fill (ft)
15+00	188.6	184.0	4.6'
35+00	190.1	189.5	0.6'
55+00	188.8	187.0	1.8′
75+00	205.0	203.1	1.9′
95+00	206.3	204.0	2.3′
	Alternative 2 Route Road	d Elevation Summary	
Station	Minimum Elev. (ft)	Natural Ground	Required Fill (ft)
15+00	188.6	184.0	4.6'
40+00	190.5	192.0	-1.5′
65+00	195.3	193.3	2.0'
90+00	200.4	199.1	1.3
155+00	206.8	206.0	0.8′
	Alternative 3 Route Road	d Elevation Summary	
Station	Minimum Elev. (ft)	Natural Ground	Required Fill (ft)
20+00	189.7	186.8	2.9′
50+00	191.0	183.0	8.0'
100+00	199.7	195.0	4.7′
150+00	209.5	200.0	9.5′
200+00	221.3	218.0	3.3′
	Alternative 3A Route Roa	d Elevation Summary	
Station	Minimum Elev. (ft)	Natural Ground	Required Fill (ft)
20+00	189.7	186.8	2.9'
50+00	191.0	184.6	6.4 '
100+00	199.7	195.0	4.7′
150+00	209.5	200.0	9.5′
200+00	221.3	218.0	3.3′

TABLE 4-11: ROAD ELEVATION SUMMARY

4.4.2 TRAFFIC IMPACTS

Build Alternatives

A traffic study was performed to determine the expected impact of extending Wafer Road from Winfield Road to Bellevue Road on surrounding traffic conditions. Traffic conditions for the base year of 2010, an implementation year of 2013, and a design year of 2033 were analyzed. Also, an evaluation was conducted for left turn lanes and right turn lanes at the signalized intersections in the project area.

Alternatives No. 1 and No. 2 were combined in the traffic study as the difference in traffic would be insignificant due to their close proximity. Therefore, analyses were performed for seven (7) scenarios:

- 2010 Base Conditions
- 2013 "No-Build" Scenario
- 2033 "No-Build" Scenario
- 2013 Alternative No. 1 or No. 2 "Build"
- 2013 Alternative No. 3 or No. 3A "Build"
- 2033 Alternative No. 1 or No. 2 "Build"
- 2033 Alternative No. 3 or No. 3A "Build"

Collected data and engineering judgment were utilized to develop projected traffic volumes for the years 2013 and 2033. Capacity analysis was performed at select intersections and roadway segments utilizing the projected volumes and proposed geometry.

Design year analyses indicated that the signalized intersections within the study area are expected to operate with significant levels of congestion without geometric improvements. Each of the unsignalized intersections except US 79/80 at Wafer Road is expected to operate at acceptable conditions. The installation of a signal may be justified by 2033 at US 79/89 at Wafer Road which, along with geometric improvements, is expected to yield acceptable level of service (LOS) conditions.

No-Build Alternative

US 79/80 at Bellevue Road is expected to operate unacceptably by the 2013 "no-build" condition. The northbound approach at LA 157 at US 79/80 is expected to experience significant delays under existing conditions and get progressively worse. Delays were observed at this intersection during field observations.

4.4.3 CONSTRUCTION IMPACTS AND TRAFFIC FLOW

Build Alternatives

Construction impacts for each of the build alternatives will be similar. Impacts due to construction activities typically include temporary air quality impacts resulting from dust and emissions from heavy equipment, temporary increases in noise, and loss of vegetation resources due to clearing within the ROW.

Impacts on traffic flow may also occur but are expected to be minimal for those portions of the project constructed on previously undeveloped land. Unavoidable impacts to traffic flow, however, can be expected during construction where intersections are located. Some traffic control will be required. A traffic control plan will be implemented to minimize traffic impacts during construction. Signs will be strategically placed as a method of controlling traffic during construction activities. Access to any affected properties will be maintained throughout the construction period. Maintenance of traffic flow and the phasing of construction will be scheduled to minimize traffic delays. Signing plans will be developed and implemented to inform the general public of work zones, road closures, detours, and other temporary changes.

No-Build Alternative

There will be no construction impacts for the "no-build" alternative.

4.4.4 SAFETY

Build Alternatives

The build alternatives would have a positive impact on both highway and overall public safety by reducing area congestion, providing an alternative route that can improve mobility and improving access to medical care. All alignments would have similar effects on safety.

No-Build Alternative

The "no-build" alternative will not address the safety concerns expressed above.

4.5 INDIRECT IMPACTS

CEQ defines indirect impacts as those effects "caused by the action" that occur "later in time or farther removed in distance, but are still reasonably foreseeable". In the FHWA's Environmental Policy Statement, the agency uses the term "indirect impacts" to encompass both secondary and cumulative effects, which may involve impacts to the social and economic base of a community, as well as impacts to natural resources such as floodplains, water quality, and wetlands. Secondary impacts are those that occur later in time or are removed in distance, while cumulative impacts are those that result from the incremental consequences of an action when added to past and reasonably foreseeable future actions. Secondary and cumulative impacts are less defined than direct impacts and may not be readily observable.

4.5.1 SECONDARY IMPACTS

Build Alternatives

The purpose of the proposed action is to increase vehicular mobility and transportation linkage by offering an additional north-south roadway within the central portion of Bossier Parish that will attempt to enhance mobility of area, improve transportation linkage, provide access to developable lands, help to minimize congestion along existing roadways within the project study area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within this area of the parish. Typical secondary impacts related to a roadway project of this type are growth and development and changes in land use. Such growth is the result of access being provided to undeveloped areas of the parish that have otherwise been inaccessible. The build alternatives would require the conversion of undeveloped agricultural, floodplains and wetland areas.

Residential, commercial, and industrial secondary development associated with the new roadway will be required to comply with federal and state regulations, as well as with local planning and land use development guidelines. Overall compliance with these regulations and policies would minimize adverse effects of secondary impacts. Indirect impacts to water quality resulting from the proposed project are expected to result from an increase in storm water runoff from the impervious surface of the roadway itself, as well as the impervious surfaces of the buildings, driveways, and parking lots of the secondary development induced by the proposed roadway.

As a result of the project being developed to meet transportation needs created by growth in the Project Study Area, implementation of any of the build alternatives would include beneficial secondary effects such as the relief of congestion on existing roads in the surrounding area.

No-Build Alternative

Secondary impacts can be expected to occur regardless of the build alternative selected; however, the impacts will occur at a slower rate in the "no-build" alternative.

4.5.2 CUMULATIVE IMPACTS

As previously stated, cumulative impacts are those that result from the incremental consequences of an action when added to unrelated past, present and reasonably foreseeable future actions of other actions.. These impacts are incremental, not easily quantifiable, and less-defined than secondary impacts. While the addition of a new roadway to the Federal Action Area could contribute to the development of the area, many other factors influence the development of residential and commercial properties, making it difficult to quantify the cumulative consequences of a particular action.

Build Alternatives

The Build Alternatives traverse predominately through undeveloped land. Development of any of the build alternatives can expect to transform agricultural and undeveloped land into residential, commercial, and/or industrial development. It is reasonable to assume that the predicted land values would accelerate the rate of abandonment of farming in the area as families turn to land development to produce income. Such development would cause environmental impacts from the loss of prime farmland, open space, and natural habitat. An increase in storm water runoff from large areas of impervious surfaces may also be expected. It is foreseeable that air emissions, traffic, and noise will increase if the growth occurs as predicted.

Offsetting these adverse cumulative effects are the economic benefits that would be derived from new development and increased land values. The increased demand for groundwater resources from commercial and residential use may be offset by the decreased demand from farm-related activities.

Projects within and beyond the study area that could potentially induce cumulative effects on the social, natural, and cultural environments within the Federal Action Area include the extension of Winfield from Bellevue Road to Airline Highway and improvements of Bellevue Road from Hwy 80 to Winfield. The predominant cumulative effects are change in land use and increase in traffic to and through the study area.

No-Build Alternative

Cumulative impacts can be expected to occur regardless of the build alternative selected; however, the impacts will occur at a slower rate in the "no-build" alternative.

4.6 SELECTION OF PREFERRED ALTERNATIVE

This proposed transportation facility is part of NLCOG's long range regional transportation plan. The purpose and need for the project has been identified as provision for an additional north-south roadway facility to enhance transportation linkage, spur development, lessen traffic congestion thereby reducing travel delays along other existing north-south roadway facilities (i.e., LA 157), and shortening emergency response time for the central rural areas of Bossier Parish.

4.6.1 COMPARISON OF ALTERNATIVES AND CONCLUSIONS

The screening criteria identified in *Table 4-12* represent both human and natural environmental impacts as well as engineering impacts on the three identified proposed alternatives and the "no-build" alternative. These criteria were selected to represent transportation linkage, efficiency, safety, community issues, land acquisition, and costs that are addressed in this study.

Consideration	Alternative	Alternative	Alternative	Alternative	No-
	No. 1	No. 2	No. 3	No. 3A	Build
Increase Capacity	Yes	Yes	Yes	Yes	No
Ability to Provide Mobility Along Wafer Road	Yes	Yes	Yes	Yes	No
Enhancement of Safety	Yes	Yes	Yes	Yes	No
Relocations	No	No	No	No	No
Impacts to Existing Residences	2	2	1	1	No
Impacts to Existing Businesses	No	No	No	No	No
Floodplains Direct Impacts	11.25 ac	13.91 ac	15.59 ac	16.75 acres	No
Wetland Impacts	1.77 acres	1.93 acres	3.59 acres	2.43 acres	None
Impacts to Other Waters	0.16 acres	0.46 acres	0.23 acres	0.32 acres	None
Prime Farmland	1.03 acres	8.97 acres	28.19 acres	28.19 ac.	None
Consistent with Local Plans for Development	No	No	Yes	Yes	No
Cultural Impacts	No	No	No	No	No
Length	9,100 feet	10,749 feet	19,917 feet	20,072 feet	-
ROW Acquisition Acreage	30.3 acres	35.1 acres	69.24 acres	70.77 acres	-
ROW Costs	\$181,800	\$210,600	\$415,440	\$416,880	-
Construction cost (with contingencies)	\$3,224,065.94	\$3,783,428.30	\$8,000,059.76	\$8,028,139.88	-

TABLE 4-12: ALTERNATIVE SCREENING DETAILS MATRIX

4.6.1.1 Human Environment Impacts

4.6.1.1.1 Land Use

Portions of each of the build alternatives will be constructed through agricultural land currently used for timber production. These previously inaccessible areas will become available for residential and/or commercial development, changing the current land use. The "no-build" alternative does not preclude development of these agricultural lands. Development may occur in these areas under the "no-build" alternative but at a slower rate than with any of the build alternatives.

4.6.1.1.2 Residential, Commercial or Public Facilities

No residences or commercial facilities will be displaced by any of the proposed alternatives. Each alternative may impact up to two residential properties with required right of way acquisition. The Common Alignment right of way is located within 50 feet of a residence near Winfield Road. An old barn lies partially within the right-of-way of Alternative No. 1 approximately 200 feet from Bellevue Road. A residence is also located within 50 feet of the right-of-way of Alternative No. 2 near Bellevue Road.

4.6.1.1.3 Pipelines and Utilities

All of the build alternatives will cross existing transmission lines, requiring possible deepening of these structures if adequate depth of cover cannot be achieved during the project design phase. Existing utilities in the area consist of water lines from the Village Water System and the Bellevue Water System. Proposed sanitary sewer improvements are currently planned near the beginning of the alignments at the southern end of the project. The sanitary sewer mains do not appear to conflict with any improvements however the water lines must be adjusted to below the roadside ditch grades. The "no-build" alternative will have no impacts to pipelines or utilities.

4.6.1.2 Natural Environment

4.6.1.2.1 Floodways and Floodplains

All of the build alternatives will affect floodways and floodplains to some extent. Alternative No. 1 will encroach upon 11.25 acres of floodways and floodplains. Alternative No. 2 will encroach upon 13.91 acres of floodways and floodplains, Alternative No. 3 will encroach upon 15.59 acres of floodways and floodplains, and Alternative No. 3A will encroach upon 16.75 acres of floodways and floodplains. Construction of any of the build alternatives will be in accordance with Bossier parish, LDOTD, FEMA, and FHWA policies relating to impacts to the 100-year floodplain. The "no-build" alternative will have no new impacts to floodplains within the Project Study Area.

4.6.1.2.2 Water Quality

The build alternatives may result in local, minor, temporary impacts to water quality due to erosion and runoff. Implementation of BMPs as required in the Storm Water Pollution Prevention Plan will facilitate minimization of water quality impacts. The "no-build" alternative will have no adverse impacts to water quality within the Project Study Area.

4.6.1.2.3 Groundwater

Potential short-term impacts associated with the construction of any of the alternative roadways include the increase of impervious surfaces and potential impacts resulting from spillage of fuels, oils, greases, or other materials. Such spills and their adverse impacts would be controlled through proper equipment maintenance, management of these materials, and by prompt response and cleanup of spills and leaks. Potential impacts to the groundwater resources would be minimized by the implementation of BMPs. Growth in the area is expected to continue even with the "no-build" alternative, and impacts associated with resulting development could occur.

4.6.1.2.4 Biological Resources – Terrestrial Wildlife

Construction activities associated with any of the build alternatives would directly and indirectly affect terrestrial wildlife through direct mortality and/or loss of habitat. Secondary impacts, both direct and indirect, would be anticipated with development along the preferred alternative corridor. Construction of any roadway in rural areas increases the potential for negative interactions between traffic and wildlife. The "no-build" alternative would have no direct impact to terrestrial wildlife in the Project Study Area.

4.6.1.2.5 Biological Resources – Aquatic Wildlife

All of the build alternatives have potential to adversely impact aquatic wildlife. Potential impacts to aquatic wildlife would result from physical habitat loss or modification (direct impact), water quality degradation, erosion and sedimentation, and petroleum or chemical spills (indirect impacts). All three alternatives have the potential for direct impacts with construction in and around Fifi Bayou. Cumulative impacts will depend on roadway design and construction. Implementation of construction BMPs would limit water quality degradation by minimizing habitat impacts, erosion, sedimentation, and turbidity. The "no-build" alternative will have no adverse impacts to aquatic resources.

4.6.1.2.6 Wetlands

All build alternatives will impact jurisdictional wetlands along the common corridor. It was determined during project meetings during the development of this EA that Alternative No. 3 was likely to be the preferred alternative of Bossier Parish. As such, a field wetland delineation was performed on only this alternative with desktop studies performed on Alternatives No. 1 and No. 2. A jurisdictional determination request has been submitted to the Corps of Engineers, Vicksburg District. Compensatory mitigation for unavoidable impacts to wetlands would be developed during the permit application process. Mitigation will be developed in accordance with USACE Regulatory Guidance Letter No. 02-2, *Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899*. The "no-build" alternative will have no impacts to wetlands. However, growth in the area is expected to continue and impacts to wetlands associated with resulting development could occur.

4.6.2 Preferred Alternative

Three alternatives were developed based on local agency input, previous planning documents (i.e. Bossier Parish Master Plan), and environmental and technical considerations. Through input from Bossier Parish and the Bossier Parish Police Juror who represents the district that this project study area encompasses, the alignment corridor of Alternative No. 3 provides for a longer route that traverses through lands that are more favorable to spurring development than Alternatives No. 1 and No. 2. This is evident in that the alignment of Alternative No. 3 traverses closer to existing established residential subdivisions adjacent to Bellevue Road, hence making new developments more favorable and provides greater interconnectivity between existing local streets to this new roadway facility. In addition, the terminus of Alternative No. 3 along Bellevue Road is proposed to be located within the more populated areas of the study area as compared to both Alternatives No. 1 and No. 2 which will give areas north of Bellevue Road the ability to develop more rapidly. The terminus of both Alternatives No. 1 and No. 2 along Bellevue Road is not anticipated to spur development north of Bellevue Road primarily because these lands north of Bellevue Road are predominantly floodplain areas that could deter development in those areas. Additionally, Alternative No. 3 has fewer impacts to existing residences as compared to Alternatives No. 1 and No. 2.

In response to agency comments following the Public Hearing regarding impacted wetlands along the preferred corridor, Alternative No. 3 was modified to minimize the impact to an area of bottomland hardwood. This adjusted version of Alternative No. 3 has been designated as Alternative No. 3A. This adjusted alignment will provide the same favorable conditions to spurring development as the original Alternative No. 3. Alternative No. 3A is consistent with local plans in the parish for development as identified by Bossier Parish; therefore Alternative No. 3A is recommended to be the preferred alternative.

4.7 PERMITS, MITIGATION AND COMMITMENTS

4.7.1 PERMITS

4.7.1.1 USACE Section 404 and Section 10 Permits

Activities conducted in wetlands and/or navigable waters of the United States may be subject to regulation by the USACE. Current federal decision-making authority for activities affecting wetlands and navigable waters of the United States lies principally with the USACE through Section 404 of the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA) and Section 10 of the Rivers and

Harbors Act. Subsequent amendments to the CWA established a permit program and authorized the USACE to issue permits for regulating the discharge of dredged or fill material into all waters of the U.S. The USACE is responsible for enforcement, implementation, and permitting of the Act's provisions.

Based on a review of available published resources such as topographic maps and aerial photography, and a site specific wetlands delineation, wetlands and jurisdictional waters of the United States occur along each of the proposed build alternatives. Construction in wetland areas and across jurisdictional waterways will require authorization by an individual permit. A final jurisdictional determination will be issued for the selected alternative upon receipt of a formal permit application and project plans.

A bridge structure will be required for the crossing of Fifi Bayou. A portion of Connell Bayou, a tributary of Fifi Bayou, will be relocated north from its current location to eliminate conflicts with the improvements to the intersection of Winfield Road and Wafer Road. A Corps of Engineers permit will be required for these activities.

4.7.1.2 CWA Section 401 Water Quality Certification

Under the provisions of the Clean Water Act (§401), any project that involves placing dredged or fill material in waters of the United States or wetlands or mechanized clearing of wetlands requires a water quality certification (WQC). The Louisiana Department of Environmental Quality (LDEQ) has been delegated authority for issuance of the WQC. The WQC would be obtained in conjunction with the COE Section 404 permit process.

4.7.1.3 LPDES Permit and Storm Water Pollution Prevention Plan

In accordance with the 40 CFR 122, 123 and 124, National Pollutant Discharge Elimination System (NPDES) and the Louisiana Pollutant Discharge Elimination System (LPDES) requirements for construction sites greater than 5 acres (Phase I), a storm water discharge permit will be required (LAR 100000 – AI83363). A Notice of Intent (NOI) for coverage under the Multi-Sector General Permit is required. As a part of the LPDES storm water discharge permitting process, the contractor responsible for construction will be required to implement and maintain best management practices to reduce and/or eliminate any potential impacts to surface water quality in the immediate area due to discharges associated with construction activities.

Adverse impacts to water quality will be reduced by application of BMPs and adhering to an erosion and sedimentation control plan. Appropriate measures, such as provisions for proper disposal and storage of materials and wastes, will also be taken to avoid accidental spillage of fuels or other chemicals and to control runoff into public drainage systems. National Pollution Discharge Elimination System (NPDES) guidelines for Phase II construction activities will be followed during construction, and a site specific Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project. Any water quality degradation that may occur during construction activities will be localized and short term.

4.7.1.4 Other Permits

Bossier Parish is a participating community in the National Flood Insurance Program (NFIP) and the project area is located in a special flood hazard area with a designated floodway. If work activities occur in the floodway, a "No-Rise Certification" will need to be completed to show that the construction will have no adverse effect on the floodway. Any activities that anticipate encroachment into the floodway would

need to comply with Federal regulations 44 CFR Part 65.12. In a letter from Butch Ford, Bossier Parish Flood Plain Administrator, Mr. Ford states that "the flood plain issues will have to be addressed during the subsequent design process of the project. This is not unusual and we will require a Hydrologic/Hydraulic Analysis which determines the impact to the special flood hazard area. Of course, any encroachments must meet all of the National Flood Insurance Program (44 CFR, Chapter 1, Section 65.12) Regulations."

In order to obtain a Floodplain Development Permit, a Floodplain Development Application must be submitted to the Bossier Parish Floodplain Administrator, and an Engineering "No Rise" Certification must be obtained from a registered professional engineer upon completion of a hydraulic study. Impacts associated with the preferred alternative will be mitigated during the final design phase of the project.

The proposed roadway will be owned and maintained by Bossier Parish, and will not link directly to any state or federal transportation systems. As a result, no permitting requirements are anticipated from either LDOTD or FHWA. In addition, no special Bossier Parish construction permitting is anticipated. Permits will, however, be required from the Bossier Levee District for construction alternatives that connect to or cross any of their maintained levee systems or cross any of the drainage canals or waterways under their jurisdiction.

4.7.2 MITIGATION MEASURES FOR ENVIRONMENTAL CONSEQUENCES

4.7.2.1 General

Noise, air, and water pollution associated with the construction activities of the project are generally short-term effects which terminate upon completion of the project or shortly thereafter. As a result, short-term mitigation measures, as specified below, need be employed.

The Louisiana Standard Specifications for Roads and Bridges, 2006 edition, requires contractors to take preventative measures for minimizing and mitigating environmental damages. These measures are detailed in, but not limited to, the following sections of the specifications:

- 1. Scope of Work Section 104
- 2. Control of Work Section 105
- 3. Legal Relations and Responsibility to Public Section 107, in particular Subsections 107.14 and 107.15.
- 4. Clearing and Grubbing Section 201
- 5. Removal of Structures and Obstructions Section 202
- 6. Excavation and Embankment Section 203
- 7. Temporary Erosion Control Section 204
- 8. Erosion Control Systems Section 720

These sections of the specifications require measures such as re-vegetation with grasses and indigenous plants, protected by erosion control coverings of fiberglass roving or curled wood matting to facilitate plant establishment for long-term erosion control. For temporary erosion control, the specifications require items such as hay bales, silt fences, slope drains and settling basins.

4.7.2.2 Wetlands

Total wetland impact by the proposed work varies with each project alternative, and would be subject to obtaining a Section 404 permit. Potential mitigation measures to offset unavoidable wetland impacts would be considered on an as needed basis during the permitting process.

The potential mitigation measures include restoration, creation, or purchase of replacement wetlands through an approved mitigation bank. On-site creation of wetlands would be one form of mitigation, if space were available. The created wetlands would have to be viable, functional wetlands of a predetermined value and approved by the Corps of Engineers.

With regards to mitigation banks, similar (in-kind) habitat within the same hydrologic unit to offset unavoidable impacts is considered first. Other options include in-kind offsite, out-of-kind onsite, and out-of-kind offsite, in descending order of preference. The USACE will recommend the preferred method. While there are mitigation banks available elsewhere, there is one option for a bank within the same hydrological unit as the project study area. The USACE will determine what the ratio of replacement would be with a minimum of a 1:1 ratio.

4.7.2.3 Floodplains

Bossier Parish is a participating community in the National Flood Insurance Program (NFIP) and the project area is located in a special flood hazard area with a designated floodway. If work activities occur in the floodway, a "No-Rise Certification" will need to be completed to show that the construction will have no adverse effect on the floodway. Any activities that anticipate encroachment into the floodway would need to comply with Federal regulations 44 CFR Part 65.12. Impacts associated with the preferred alternative will be mitigated during the final design phase of the project.

4.7.2.4 Water Resources

Surface waters will be protected by temporary erosion control measures such as hay bales, silt fences, slope drains, and settling basins. Long term erosion control will be achieved by re-vegetation with grasses and indigenous plants.

4.7.2.5 Land Uses and Socioeconomic Impacts

No mitigation measures are expected to be necessary as there is no meaningful impact expected on land use. No businesses or private residences expected to be relocated. Should it be necessitated, assistance will be provided in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Any impacts to the economy resulting from this action are considered to be positive.

4.7.2.6 Geology, Topography, and Soils

Cut and fill operations will be minimized, as practicable, to meet grade and level requirements set forth by Bossier Parish, LDOTD, and FHWA. Design and construction activities will incorporate Best Management Practices (BMP) to prevent future erosion. BMP's used during construction and development activities include temporary soil erosion control measures, permanent control measures, and low-impact land use practices. Temporary control measures include the planning phase of the project, and such things as

limiting the amounts of impervious surfaces created, preservation of stream buffers and sensitive areas such as riparian corridors, limiting disturbance of soil and vegetation, and maintaining the natural infiltrative capacity of an area.

In compliance with EPA's Stormwater quality guidelines, BMP for soil erosion and sediment control would be implemented to reduce impacts caused by construction of the project. These measures may include the use of sediment barriers, temporary and permanent vegetative cover for soil stabilization, dust control, and the use of riprap for the protection of soils from the erosive forces of water.

Any required mitigation measures are covered by sections 201, 202, 203, and 204 of the Louisiana Standard Specifications for Roads and Bridges. These sections provide the specification requirements for clearing and grubbing, removal of structures and obstructions, excavation and embankment, and temporary erosion control.

Mitigation measures for soils and geology will be enforced under Sections 201 (Clearing and Grubbing), 202 (Removal of Structures and Obstructions), 203 (Excavation and Embankment), and 204 (Temporary Erosion Control) of the Louisiana Standard Specifications for Roads and Bridges.

4.7.2.7 Cultural Resources

If evidence of archeological resources should be found during construction, work in the area of the find will be suspended and the DOTD Environmental Engineer Administrator and the State Historic Preservation Officer will be contacted.

Mitigation for unavoidable adverse effects to cultural resources would be identified and, if an adverse effect is determined to be unavoidable, mitigation measures could be agreed upon in a Memorandum of Agreement between the parish, LDOTD, the FHWA, the SHPO, and the Advisory Council on Historic Preservation.

4.7.2.8 Traffic and Circulation Impacts

Construction sequence, traffic maintenance criteria, and plans would be developed as part of the final design of construction plans to coordinate construction activities and ensure continued access to all properties. Needs for special considerations would be identified and addressed in the construction plans.

4.7.2.9 Air Quality

Short term decreases in air quality due to construction can be controlled by Best Available Control Technology (BACT) measures such as functioning catalytic converters and mufflers of construction equipment, and construction area water sprinkling to minimize dust generated by heavy machinery traffic during all construction phases.

Standard erosion control strategies include the transport of materials in tarpaulin-covered trucks, and selected wetting of soils within the construction zone would minimize airborne particulate matter. Any burning of material would be undertaken according to relevant local laws and ordinances. Appropriate traffic control plans may serve to limit localized concentrations of emissions during construction.

4.7.2.10 Noise

In addition to items discussed in Section 4.2.8, construction equipment that is operated with internal combustion engines would be properly muffled to minimize noise production. Shielding of stationary noise resources such as generators with temporary barriers would occur. As appropriate, construction noise abatement measures referenced in Section 107.15 of the *Louisiana Standard Specification for Roads and Bridges*, and the FHWA Technical Advisory T 6160 2,. Dated March 13, 1984, would be utilized.

4.7.2.11 Utilities

Specific relocation plans would be developed during the final design phase of the project, and would be completed prior to construction of the roadway improvements. Functional or financial responsibility for relocation of a specific facility or utility may differ depending on prior agreements between the utility providers, current landowners, local government, and LDOTD. The determination of responsibility would be in accordance with Bossier Parish and LDOTD policies and procedures.

4.7.2.12 Oil, Gas, and Water Wells

During the preparation of design plans, field surveying would be performed to identify and verify existing wells along the selected alternative.

4.7.3 COMMITMENTS

Under the provisions of the Clean Water Act (§401), any project that involves placing dredged or fill material in waters of the United States or wetlands or mechanized clearing of wetlands requires a water quality certification (WQC). The Louisiana Department of Environmental Quality (LDEQ) has been delegated authority for issuance of the WQC. The WQC would be obtained in conjunction with the COE Section 404 permit process.

In accordance with the 40 CFR 122, 123 and 124, National Pollutant Discharge Elimination System (NPDES) and the Louisiana Pollutant Discharge Elimination System (LPDES) requirements for construction sites greater than 5 acres (Phase I), a storm water discharge permit will be required (LAR 100000 – Al83363). A Notice of Intent (NOI) for coverage under the Multi-Sector General Permit is required. As a part of the LPDES storm water discharge permitting process, the contractor responsible for construction will be required to implement and maintain best management practices to reduce and/or eliminate any potential impacts to surface water quality in the immediate area due to discharges associated with construction activities.

Four federally protected species have been recorded in Bossier Parish as shown. The pallid sturgeon, the interior least tern and red-cockaded woodpecker are listed as endangered, while the bald eagle has been delisted from its threatened status. To ensure avoidance of any disturbances to endanger species and bald eagles, a survey should be conducted prior to the initiation of construction activities. Should endangered species and bald eagles be present in the project area, activities will be conducted in accordance with the Endangered Species Act of 1973 and the USFWS National Bald Eagle Management Guidelines.

Upon completion of accurate field surveys during engineering design process of this project, a determination should be made to verify if oil and gas wells are present within the project's required right

of way. Should a well indeed fall in the project right of way, the depth of the casing below grade shall be determined, or minor adjustments may be made to the selected alternative in order to avoid direct impacts to existing wells with approval of Bossier Parish

Prior to construction, pipeline owners shall be consulted to determine exact locations and depth of cover of their pipelines and their requirements for crossing their lines.

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5.0 COMMENTS AND COORDINATION

5.1 PUBLIC INVOLVEMENT PLAN

A Public Involvement Plan (PIP) was developed for the Wafer Road Extension Project to ensure that every reasonable opportunity was available to interested citizens, civic groups, public officials, and state and federal resource agencies to participate in the planning process. The PIP included a variety of methods for providing project feedback and obtaining information on the project.

Information about the public involvement process is provided in this section up to the date of the publication of the Draft EA. Upon approval by FHWA, the Draft EA will be circulated to local, state, and regional clearinghouses and the public will be notified through appropriate channels of the Draft EA's availability. There will be a 30-day comment period following the Notice of Availability. During that time, a Public Hearing will be held in Bossier Parish. Comments from the public received during the comment period will be considered.

5.2 SOLICITATION OF VIEWS

Early in the project planning stages, federal, state, and local agency involvement was provided through the Solicitation of Views (SOV) process. This input helped target issues for social, economic and environmental impacts of the Build Alternatives. A comprehensive list various federal, state, and local environmental agencies; conservation organizations; public advisory groups; community interests group; minority organizations, and others was developed. A SOV packet (cover letter, project description and site map) was mailed to each group requesting their views and comments.

SOV packets were mailed by on January 10, 2010 to the compiled list of federal, state and local agencies. This list is included in *Appendix C*. During the 30-day response period, 11 responses were received and are summarized below in *Table 5-1*.

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Respondent	Date	View/Comment	Response to Comment
	Received	· · · · · · · · · · · · · · · · · · ·	
Bossier City Engineer	1/20/10	No adverse economic, social or environmental effects or concerns with the project.	None
Natural Heritage Program LA Wildlife & Fisheries	1/21/10	No impacts to rare, threatened or endangered species or critical habitats anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site.	None
Director of Outdoor Recreation, Louisiana Office of State Parks	1/21/10	There does not appear to be any conflict regarding this proposed project with existing recreational facilities identified in the most recent (2009-2014) Statewide Comprehensive Outdoor Recreation Plan (SCORP)	None
US EPA Sole Source Aquifer Program, Ground Water/UIC Section	1/25/10	The project does not lie within the boundaries of a designated sole source aquifer and is not eligible for review under the SSA program.	None
Louisiana Field Office US Fish & Wildlife Service	1/26/10	The project is not likely to adversely impact Federal trust resources currently protected by the Endangered Species Act of 1973. The site may contain wetlands, contact the USACOE in Vicksburg, MS for a jurisdictional determination.	A Wetland Delineation was submitted to Vicksburg COE on 5/27/11.
Planning, Programs, and Project Division USACOE, Vicksburg District	1/28/10	USACOE, Vicksburg District, has an ongoing repair project on the Bayou Bodcau Dam No. 4 that is within close proximity to the proposed project area. If the proposed work involves the discharge of dredged or fill materials into wetlands or any other waters of the US, a Dept. of the Army Permit may be needed prior to construction.	A Wetland Delineation was submitted, permits are discussed in "Summary of Permits, Mitigation Measures and Commitments". If the Bayou Bodcau dam is opened, water could potentially be diverted to Fifi Bayou. A hydraulic analysis will need to be performed during the design phase of the project.
Department of Natural Resources Office of Conservation	1/28/10	A review of computer records for the referenced project area indicates the existence of numerous plugged and abandoned wells drilled in search of oil and gas within and adjacent to the project area. Additionally, the LADOTD database indicates several registered water wells located in the area. Due care should be taken to locate other water wells installed in the area before registration was required.	A database search was made of wells in the project area. Upon completion of accurate field surveys during engineering design process of this project, a determination should be made to verify if oil and gas wells are present within the project's required right of way.
Dept. of Homeland Security FEMA, Region VI Natural Hazards Program Specialist	2/04/10	As Bossier Parish is a participating community in the National Flood Insurance Program (NFIP), project must be reviewed by the appropriate Floodplain Administrator in the community to ensure compliance with their Flood Damage Prevention Ordinance. Contact Butch Ford, Parish Engineer. It appears that part of the project study area contains not only floodplains but also floodways on FIRM panels 220 15C0426D, 0427D and 0429D. Federal regulations 44 CFR Part 65.12 must be strictly enforced when encroachments into a floodway are anticipated.	Encroachments into floodways are discussed in "Summary of Permits, Mitigation Measures and Commitments".

(Continued)				
Respondent	Date Received	View/Comment	Response to Comment	
LDEQ Office of Environmental Assessment Office of Environmental Services	2/02/10	 There were no objections, but the Office of Environmental Services/Permits Division recommends that the following requirements that may influence the proposed project be investigated: If the project results in a discharge to waters of the state, submittal of a LPDES application may be necessary. If the project results in wastewater discharge to an existing wastewater treatment system, that system may need to modify its LPDES permit before accepting additional wastewater. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. All precautions should be observed to control nonpoint source pollution from construction activities. If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, the Corps should be contacted directly to inquire about the possible necessity for permits. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ. All precautions should be observed to protect the groundwater of the region. If water system improvements include water softeners, special water quality-based limitations may be necessary. Any renovation or remodeling must comply with LAC 33:III.Chapter 28.Lead-Based Paint Activities, LAC 33:III.Chapter 27.Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation), and LAC 33:III.515.Emission Standard for Asbestos for any renovations or demolitions. If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ is required. Additionally, precautions should be taken to protect workers from these hazardous constituents. 	Permits from LDEQ are discussed in "Summary of Permits, Mitigation Measures and Commitments".	
LA Dept. of CRT, Office of Cultural Development, Division of Archaeology	2/05/10	There are no recorded archaeological sites in the proposed study area, however comments cannot be offered until a corridor for the extension has been selected.	A Phase I Cultural Resources Survey and Archeological Inventory was performed and was submitted as a Supplemental Technical Report to the EA	
NRCS	2/11/10	NRCS has no comment at the present time; however as the project moves forward and federal funds are utilized, a Farmland Conversion Impact Rating may be necessary as required by the Farmland Protection Policy Act, PL 97-98 7 U.S.C. 4207.	A Farmland Conversion Impact Rating (CPA-106 Form) was obtained from NRCS and is included as Appendix D of the EA.	

TABLE 5-1: SUMMARY OF RESPONSES TO SOLICITATION OF VIEWS

(Continued)

(Continued)				
Respondent	Date Received	View/Comment	Response to Comment	
LDOTD Floodplain Management Program	2/09/10	 The Project study area appears to include a special flood hazard area with a designated floodway. If a person wishes to build in a floodway and can show through technical analysis that the construction would have no adverse effect on the floodway and provide a "No-Rise Certification", then the floodplain administrator has the authority to grant the permit. During construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must also be given to the responsibility for clearing debris and keeping the surrounding area clear in order to allow for the accumulation and flow of flood water. Development in the floodway fringe area may alter drainage patterns, reduce the natural storage of flood waters, and/or compound the damages caused by smaller floods. In order to assure compliance with parish requirements for the National Flood Insurance Program and so that appropriate permits are obtained, the floodplain administrator for Bossier Parish, Mr. Butch Ford shall be contacted. 	Encroachments into floodways and "No-Rise Certificate" are discussed in "Summary of Permits, Mitigation Measures and Commitments".	
Bossier Parish School Board	2/23/10	"suggest the need for a traffic study to evaluate specifically the traffic impact of Highway 80 at Platt Elementary School and T.L. Rhodes Elementary School. The situation currently is that traffic is crossing the four lane highway at Wrangler Drive. Buses and parent cars with children have to be carefully scheduled and routed and closely monitored to avoid conflict. Any additional traffic load on Highway 80 should consider the adverse effects on the current traffic in and out of the elementary schools there."	A Traffic Study was conducted and was submitted as a Supplemental Technical Report to the EA.	
LA Senator Adley's Office	3/12/10	Would like to see the proposed path of the road.	Map provided	
US Coast Guard Bridge Administrator	7/8/11	It has been determined that this (Fifi and Connell Bayou) is not a waterway over which the Coast Guard exercises jurisdiction for bridge administration purposes.	Noted	
Bossier Parish Flood Plain Administrator	8/24/11	The flood plain issues will have to be addressed during subsequent design process of the project. This is not unusual and we will require a Hydrologic/Hydraulic Analysis which determines the impact to the special flood hazard area. Of course, any encroachments must meet all of the National Flood Insurance Program Regulations.	Impacts to floodplains were addressed in the Water Resources discussion in the EA and the "Summary of Permits, Mitigation Measures and Commitments".	

TABLE 5-1: SUMMARY OF RESPONSES TO SOLICITATION OF VIEWS (Continued)

5.3 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

This section identifies agencies, organizations, and persons who were consulted during the EA process and a discussion of the methods used to solicit public involvement.

5.3.1 AGENCY AND ELECTED OFFICIALS SCOPING MEETING

A letter regarding the agency and elected official scoping process was sent on January 10, 2010, to local, state, and federal resource and regulatory agencies advising them that the EA process was beginning for the Wafer Road Extension Project and soliciting their comments about the project. The letter also invited them to attend the project's agency and elected officials scoping meeting, which was held on February 19, 2010 at the Bossier Parish Courthouse Louisiana.

The agency scoping meeting was attended by members of NLCOG representatives from the Bossier Parish Police Jury and US EPA, the project consultants C.H. Fenstermaker & Associates (Fenstermaker) with sub-consultants Coyle Engineering, Urban Systems, and Trinity Consultants. Present via conference call was LDOTD staff assigned to the project, representatives from FHWA, and sub consultants R.C. Goodwin & Associates.

The purpose of the meeting was to review the project scope and preliminary schedule; receive comments on the project and provide an opportunity to ask related questions; and provide the opportunity to identity potential project constraints.

During this meeting, the following topics were discussed:

- Logical Termini
- The project's draft purpose and need
- Scope and study approaches
- SOV Responses
- Draft Alternatives
- Draft Public Involvement Plan and Project Schedule

5.3.2 COOPERATING AGENCY COORDINATION

Regulatory agencies have been consulted, as needed, during the EA process. Three primary issues, wetlands, floodplains and prime farmlands, were identified from the responses to the SOV. Subsequently, information was compiled and submitted to the responsible agencies. Communications regarding wetland issues were made with the U.S. Army Corps of Engineers, Vicksburg District office, and data related to farmland issues were submitted to the Natural Resource Conservation Service (NRCS), Benton Field Office.

5.4 PUBLIC MEETING

A public meeting was held in keeping with the intent of the PIP to allow the public to participate in the planning process. This meeting was conducted to identify possible adverse and beneficial social, economic, and environmental effects and concerns related to the project and to solicit comments

concerning the proposed alternatives. The meeting was advertised in the Bossier Press Tribune, a local newspaper near the project study area.

The public meeting was held on July 13, 2010 at the Bossier Parish Court House, main auditorium. The meeting was held as an informal open house with a station format including a short presentation on the project and project exhibits. The objective of the public meeting was to seek input from individuals and community organizations on issues and concerns related to the potential impacts associated with the proposed Wafer Road Extension. The meeting was attended by seven local officials or agency representatives and five project team members. No interested neighbors were present at the meeting. No written comments were received at the Public Meeting.

5.4.1 Additional Public Involvement

Prior to the field investigation for the wetland delineation of the preferred alternative, residents were contacted by mail requesting permission to enter their property. Maps of the proposed alignments were included. The letters were followed up with phone calls and they were asked about their opinion of the proposed alignment. One landowner, Mr. Robert Williams, preferred Alternative No. 3 for two reasons. First, it will take more traffic off of Bellevue Road earlier from the north end, thereby easing congestion on Bellevue Road and allowing faster access to US 79/80, and second, it will open up the largest amount of undeveloped land in the area for additional residential development. A representative of Caddo-Bossier Land & Timber Company, who is the largest landowner in the corridors of both Alternative No. 2 and Alternative No. 3, expressed that Alternative No. 1 would be their preference as it only cuts through a small corner of their property, and Alternative No. 2 would be their second choice, but would prefer to have enough land west of the proposed roadway to create residential lots. They did not care for Alternative No. 3 as they believe that it would "devastate their timber plantation".

5.5 PUBLIC HEARING

The Draft EA, which identified Alternative 3 as the Preferred Alignment, was distributed to federal and state agencies, local officials, state and Bossier Parish Libraries, NLCOG, Bossier Parish Police Jury and DOTD District 4 offices. The Public Hearing was advertised in the Bossier Press Tribune and the Shreveport times, and a press release was emailed to local media. Meeting notices were mailed to landowners along the alignments identified in the Draft EA. The Public Hearing was held on January 10, 2012 at the Bossier Parish Courthouse Police Jury Meeting Room. The hearing was attended by approximately seventeen citizens, six state and local elected officials, one agency representative, and seven project team members. A summary of the Public Hearing can be found in Appendix D.

A total of thirteen comments were received at the Public Hearing and during the comment period. A matrix of the comments and responses can be found in Attachment K of Appendix D.

A suggestion from a representative of EPA was made that a reduction in impacts to wetlands would occur if the alignment for the Alternative No. 3 were modified to avoid an area of bottomland hardwood. As a result of this suggestion, the curvature of the route was adjusted, and the impact to the wetland area was reduced. This adjusted route is Alternative No. 3A, the preferred alternative.

5.6 **RESPONSE TO COMMENTS**

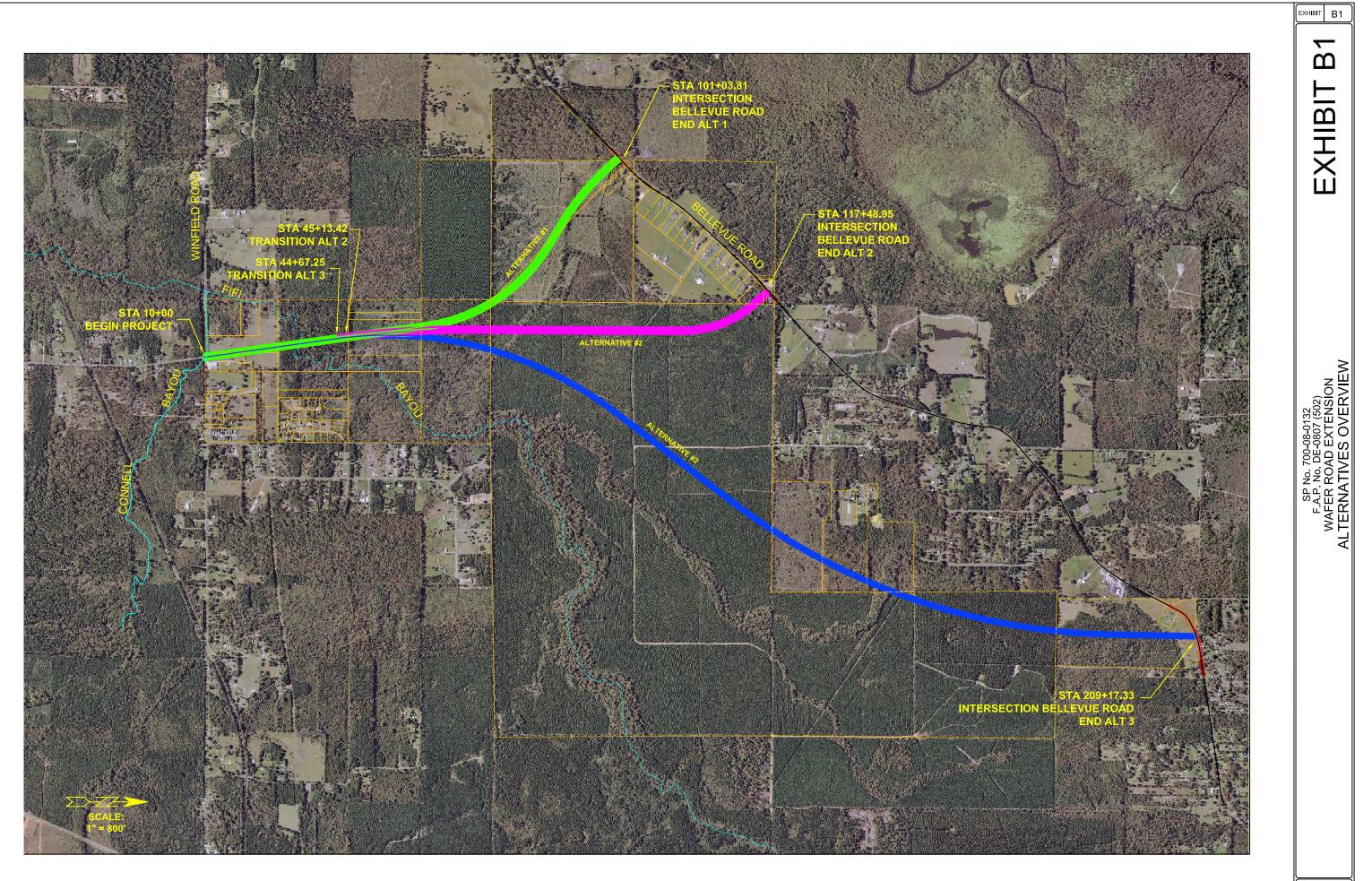
All comments received during the Public Hearing and the 30 day review period were addressed according to FHWA and DOTD standards.

6.0 LIST OF PREPARERS

Title/Topic	Team Member
Project Manager	Dax Douet, P.E. – C.H. Fenstermaker & Associates
Deputy Project Manager/ Biology	Sherry Eastin – C.H. Fenstermaker & Associates
Line & Grade Study	Micha Duffy, P.E., Coyle Engineering
Cultural Resources	James Eberwine, M.S., R.P.A. – R. Christopher Goodwin & Assoc.
	William Athens, M.A., R.P.A. – R. Christopher Goodwin & Assoc.
Air & Noise	Weiping Dai, Ph.D., P.E Trinity Consultants
	Vikram Kashyap – Trinity Consultants
Traffic	Alison Catarella-Michel, P.E., PTOE – Urban Systems
	Alben Cooper, E.I. – Urban Systems
Report Production	C.H. Fenstermaker & Associates

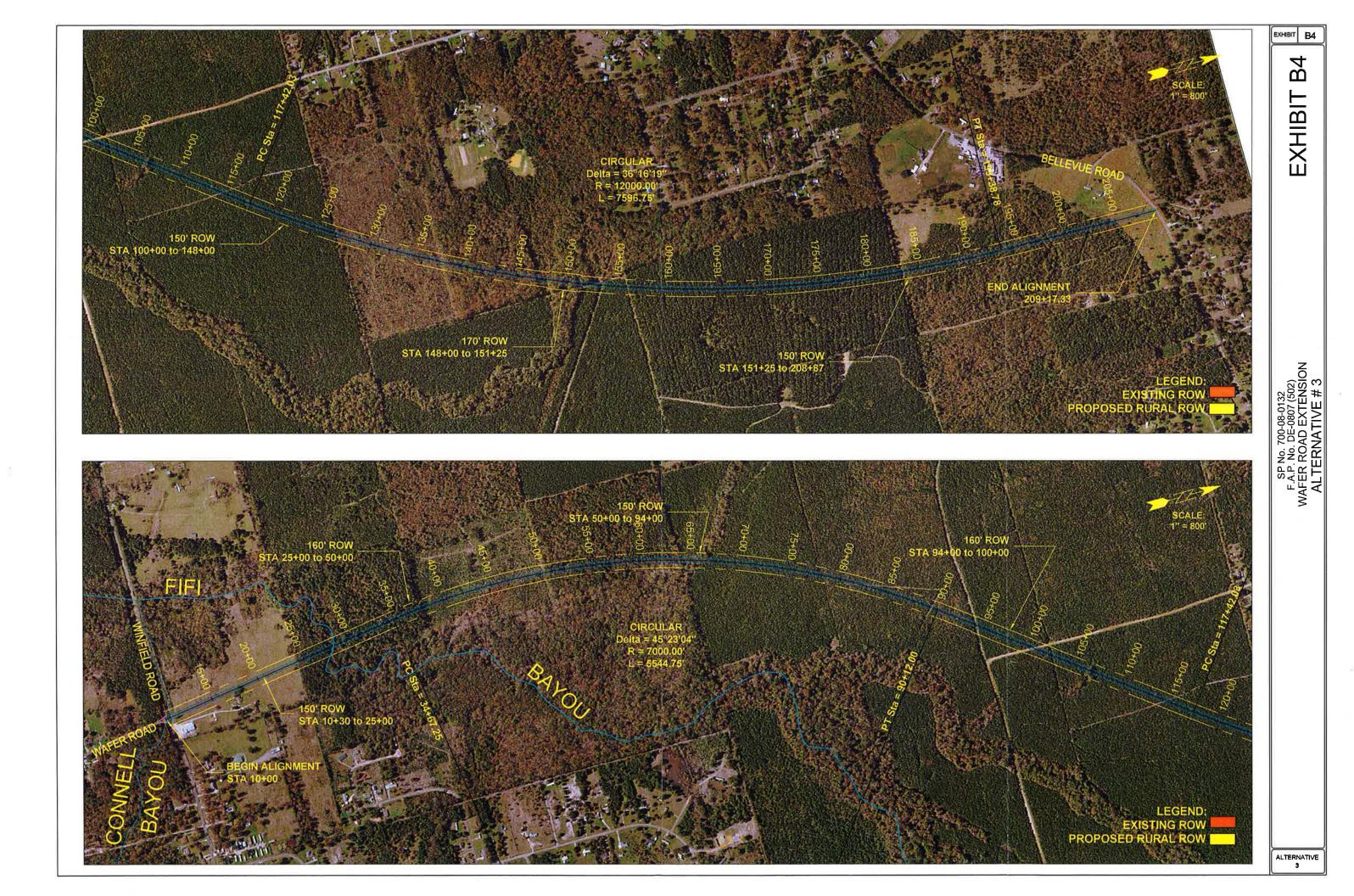
APPENDIX A

ALTERNATIVE LAYOUTS











APPENDIX B

RESPONSES TO SOLICITATION OF VIEWS LETTERS

Solicitation of Views

An initial Solicitation of Views letter with accompanying project description and map was sent to all potential cooperating and participating agencies on January 15, 2010. Deadline for responses was February 16, 2010. Responses are summarized below:

	SUMMARY OF RESPONSES TO SOLICITATION OF VIEWS				
#	Respondent	Dated	View/Comment	Response to Comment	
1	Bossier City Engineer	1/20/10	No adverse economic, social or environmental effects or concerns with the project.	None	
2	Natural Heritage Program LA Wildlife & Fisheries	1/21/10	No impacts to rare, threatened or endangered species or critical habitats anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site.	None	
3	Director of Outdoor Recreation, Louisiana Office of State Parks	1/21/10	There does not appear to be any conflict regarding this proposed project with existing recreational facilities identified in the most recent (2009-2014) Statewide Comprehensive Outdoor Recreation Plan (SCORP)	None	
4	US EPA Sole Source Aquifer Program, Ground Water/UIC Section	1/25/10	The project does not lie within the boundaries of a designated sole source aquifer and is not eligible for review under the SSA program.	None	
5	Louisiana Field Office US Fish & Wildlife Service	1/26/10	The project is not likely to adversely impact Federal trust resources currently protected by the Endangered Species Act of 1973. The site may contain wetlands, contact the USACOE in Vicksburg, MS for a jurisdictional determination.	A Wetland Delineation was submitted to Vicksburg COE on 5/27/11.	
6	Planning, Programs, and Project Division USACOE, Vicksburg District	1/28/10	USACOE, Vicksburg District, has an ongoing repair project on the Bayou Bodcau Dam No. 4 that is within close proximity to the proposed project area. If the proposed work involves the discharge of dredged or fill materials into wetlands or any other waters of the US, a Dept. of the Army Permit may be needed prior to construction.	A Wetland Delineation was submitted, permits are discussed in "Summary of Permits, Mitigation Measures and Commitments". If the Bayou Bodcau dam is opened, water could potentially be diverted to Fifi Bayou. A hydraulic analysis will need to be performed during the design phase of the project.	
7	Department of Natural Resources Office of Conservation	1/28/10	A review of computer records for the referenced project area indicates the existence of numerous plugged and abandoned wells drilled in search of oil and gas within and adjacent to the project area. Additionally, the LADOTD database indicates several registered water wells located in the area. Due care should be taken to locate other water wells installed in the area before registration was required.	A database search was made of wells in the project area. Upon completion of accurate field surveys during engineering design process of this project, a determination should be made to verify if oil and gas wells are present within the project's required right of way.	
8	LDEQ Office of Environmental Assessment Office of Environmental Services	2/02/10	 There were no objections, but the Office of Environmental Services/Permits Division recommends that the following requirements that may influence the proposed project be investigated: If the project results in a discharge to waters of the state, submittal of a LPDES application may be necessary. If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. All precautions should be observed to control nonpoint source pollution from construction activities. If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, the Corps should be contacted directly to inquire about the possible necessity for permits. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ. All precautions should be observed to protect the groundwater of the region. Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if water system improvements include water softeners, contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary. Any renovation or remodeling must comply with LAC 33:III.Chapter 28.Lead-Based Paint Activities, LAC 33:III.Chapter 27.Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation), and LAC 33:III.5151.Emission Standard for Asbestos for any renovations or demolitions. If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ is required. Additionally, precautions should be tak	Permits from LDEQ are discussed in "Summary of Permits, Mitigation Measures and Commitments".	

	SUMMARY OF RESPONSES TO SOLICITATION OF VIEWS				
#	Respondent	Dated	View/Comment	Response to Comment	
9	Dept. of Homeland Security FEMA, Region VI Natural Hazards Program Specialist	2/04/10	As Bossier Parish is a participating community in the National Flood Insurance Program (NFIP), project must be reviewed by the appropriate Floodplain Administrator in the community to ensure compliance with their Flood Damage Prevention Ordinance. Contact Butch Ford, Parish Engineer. It appears that part of the project study area contains not only floodplains but also floodways on FIRM panels 220 15C0426D, 0427D and 0429D. Federal regulations 44 CFR Part 65.12 must be strictly enforced when encroachments into a floodway are anticipated.	Encroachments into floodways are discussed in "Summary of Permits, Mitigation Measures and Commitments".	
10	LA Dept. of CRT, Office of Cultural Development, Division of Archaeology	2/05/10	There are no recorded archaeological sites in the proposed study area, however comments cannot be offered until a corridor for the extension has been selected.	A Phase I Cultural Resources Survey and Archeological Inventory was performed and was submitted as a Supplemental Technical Report to the EA	
11	LDOTD Floodplain Management Program	2/09/10	 The Project study area appears to include a special flood hazard area with a designated floodway. If a person wishes to build in a floodway and can show through technical analysis that the construction would have no adverse effect on the floodway and provide a "No-Rise Certification", then the floodplain administrator has the authority to grant the permit. During construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must also be given to the responsibility for clearing debris and keeping the surrounding area clear in order to allow for the accumulation and flow of flood water. Development in the floodway fringe area may alter drainage patterns, reduce the natural storage of flood waters, and/or compound the damages caused by smaller floods. In order to assure compliance with parish requirements for the National Flood Insurance Program and so that appropriate permits are obtained, the floodplain administrator for Bossier Parish, Mr. Butch Ford shall be contacted. 	Encroachments into floodways and "No-Rise Certificate" are discussed in "Summary of Permits, Mitigation Measures and Commitments".	
12	NRCS	2/11/10	NRCS has no comment at the present time; however as the project moves forward and federal funds are utilized, a Farmland Conversion Impact Rating may be necessary as required by the Farmland Protection Policy Act, PL 97-98 7 U.S.C. 4207.	A Farmland Conversion Impact Rating (CPA-106 Form) was obtained from NRCS and is included as Appendix D of the EA.	
13	Bossier Parish School Board	2/23/10	"suggest the need for a traffic study to evaluate specifically the traffic impact of Highway 80 at Platt Elementary School and T.L. Rhodes Elementary School. The situation currently is that traffic is crossing the four lane highway at Wrangler Drive. Buses and parent cars with children have to be carefully scheduled and routed and closely monitored to avoid conflict. Any additional traffic load on Highway 80 should consider the adverse effects on the current traffic in and out of the elementary schools there."	A Traffic Study was conducted and was submitted as a Supplemental Technical Report to the EA.	
14	LA Senator Adley's Office	3/12/10	Would like to see the proposed path of the road.	Map provided	
15	US Coast Guard Bridge Administrator	7/8/11	It has been determined that this (Fifi and Connell Bayou) is not a waterway over which the Coast Guard exercises jurisdiction for bridge administration purposes.	Noted	
16	Bossier Parish Flood Plain Administrator	8/24/11	The flood plain issues will have to be addressed during subsequent design process of the project. This is not unusual and we will require a Hydrologic/Hydraulic Analysis which determines the impact to the special flood hazard area. Of course, any encroachments must meet all of the National Flood Insurance Program Regulations.	Impacts to floodplains were addressed in the Water Resources discussion in the EA and the "Summary of Permits, Mitigation Measures and Commitments".	



Engineers · Surveyors Environmental Consultants

January 14, 2010

State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana

Re: Solicitation of Views

Early in the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist the Louisiana Department of Transportation and Development (LDOTD) with the early identification of possible adverse economic, social or environmental effects or concerns. Your assistance in this regard will be appreciated.

Due to the earliness of this request for your views, very limited data concerning the proposed project exists. We have, however, attached a map showing the general location and study area of the project, along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by February 16, 2010. Please reference the above State Project number in your reply. Replies should be addressed to C. H. Fenstermaker & Associates, Inc., 135 Regency Square, Lafayette, LA, 70508.

Very truly yours, C. H. Fenstermaker & Associates, Inc.

Dax Douet, P.E. Project Manager

PRELIMINARY PROJECT DESCRIPTION

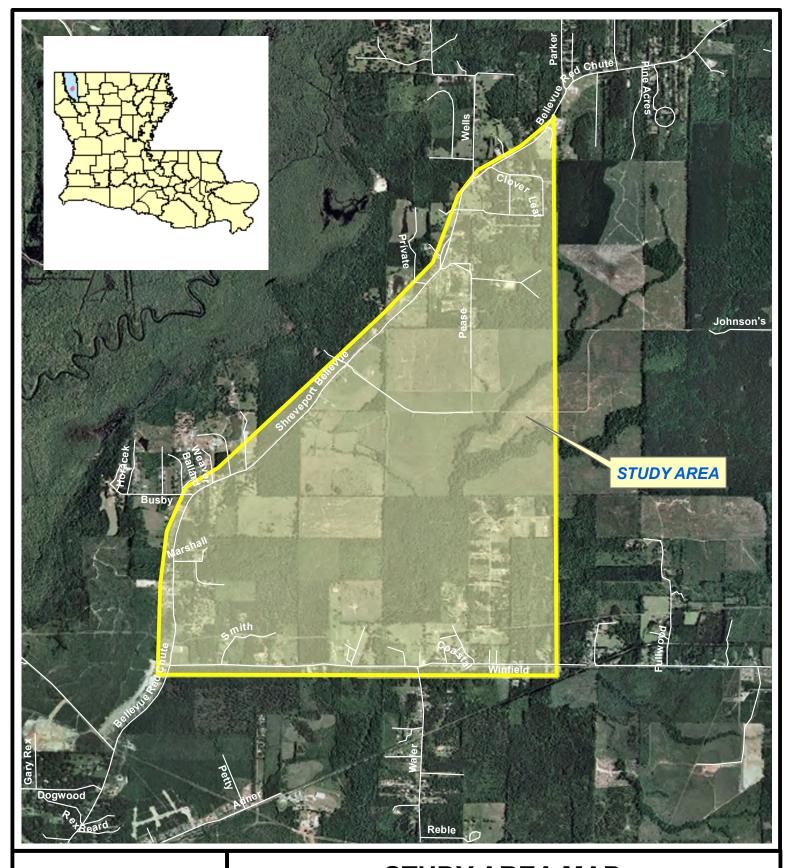
The improvements that are to be undertaken under this Project consist of the development of a new two-lane urban collector facility with right of way clearance for a new four-lane urban collector. The new facility will run in a general North-South direction between Winfield Road to Bellevue Road. This new facility will provide an additional North-South connection that will alleviate congestion, and reduce travel delay along the other facilities that will link the rapidly growing residential areas of Bossier Parish to the employment centers of Shreveport and Bossier City.

This phase of the project will include the preparation of an Environmental Assessment, limited Line and Grade Study, and other related items for improvements and development of the Bossier Parish Wafer Road Extension in accordance with the National Environmental Policy Act (NEPA).









N W E S 1,500 3,000 6,000

STUDY AREA MAP Northwest Louisiana Council of Governments

SP No. 700-08-0132 F.A.P. No. DE-0807 (502) Wafer Road Extension Bossier Parish, Louisiana





JAN 21 2010

OFFICE OF CITY ENGINEER

MARK B. HUDSON, P.E. CITY ENGINEER P. O. BOX 5337 BOSSIER CITY, LOUISIANA 71171-5337

(318) 741-8568 FAX NO. (318) 741-8792

January 20, 2010

Mr. Dax Douet, P.E. Fenstermaker and Associates 135 Regency Square Lafayette, Louisiana 70508

Subject: Solicitation of Views Wafer Road Extension Bossier Parish

Dear Mr. Douet:

I have no adverse economic, social or environmental effects or concerns with the subject project. Please let me know if Bossier City can assist in any way.

Sincerely,

Mark B. Hudson, P.E City Engineer





FEB 25 2010

C. H. FENSTERMAKER & ASSOC.

BOSSIER PARISH SCHOOL BOARD

D.C. Machen Jr. Superintendent P.O. Box 2000 Benton, Louisiana 71006-2000 Telephone (318) 549-5000 FAX (318) 549-5044

Michael S. Mosura II President

February 23, 2010

Re:

Dr. Jack E. Raley P.O. Box 85 Haughton, LA 71037 District 1

Brad Bockhaus 111 Harvost Lane Haughton, LA 71037 District 2

Dr. Allison O. Brigham Vice President 511 Lee Street Benton, LA 71006 District 3

Tammy A. Smith 183 Willow Bend Road Benton, LA 71006 District 4

Michael S. Mosura II President 6014 Jason Street Bossier City, LA 71111 District 5

William C. Kostelka 309 Audubon Drive Bossier City, LA 71111 District 6

J. W. Slack 2424 Douglas Drive Bossier City, LA 71111 District 7

Kenneth M. Wiggins 3201 Cloverdale Place Bossier City, LA 71111 District 8

Eddy Ray Presley 1816 Lee Street Bossier City, LA 71112 District 9

Julian Darby 1130 Beverly Street Bossier City, LA 71112 District 10

Lindell Webb 1830 Venus Bossier City, LA 71112 District 11

Mack Knotts 5007 Kenilworth Drive Bossier City, LA 71112 District 12 Mr. Dax Douet, P.E. Project Manager Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508

> State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana Solicitation of Views

Dear Mr. Douet:

I recently received a letter requesting review and comment from you dated January 14, 2010 with attached map showing general location and study area in reference to the above project.

My comments are as follows: I'd like to suggest the need for a traffic study to evaluate specifically the traffic impact of Highway 80 at Platt Elementary School and T. L. Rodes Elementary School. The situation currently is that traffic is crossing the four lane highway at Wrangler Drive. Buses and parent cars with children have to be carefully scheduled and routed and closely monitored to avoid conflict. Any additional traffic load on Highway 80 should consider the adverse effects on the current traffic in and out of the elementary schools there.

Thank you for the opportunity to comment. Please keep me informed of this project's status.

Sincerely,

KE NOMON

Keith E. Norwood, P.E. Supervisor of Planning and Construction

Cc: Scott Smith

BOSSIER PARISH SCHOOL SYSTEM "An Equal Opportunity Educational Agency" From:Dax DouetTo:Sherry EastinSubject:FW: DEQ SOV: 700-08-0132/0070 Wafer Road ExtensionDate:Wednesday, February 03, 2010 8:29:51 AM

See below, print, document, and file. Thanks 🙂

Dax A. Douet, P.E. (LA, TX, MS) Engineering Director FENSTERMAKER

Engineers, Surveyors, Environmental Consultants 135 Regency Square Lafayette, LA 70508 T-(337) 237-2200 ext 1173 F-(337) 232-3299 E-mail: dad@fenstermaker.com www.fenstermaker.com

From: Diane Hewitt [mailto:Diane.Hewitt@LA.GOV] Sent: Tuesday, February 02, 2010 7:41 AM To: Dax Douet Subject: DEQ SOV: 700-08-0132/0070 Wafer Road Extension

February 2, 2010

Dax Douet, P.E., Proj. Manager C., H. Fenstermaker & Assoc., Inc. 135 Regency Square Lafayette, LA 70508 dad@fenstermaker.com

RE: 700-08-0132/0070 Wafer Road Extension LADOTD Bossier Parish

Dear Mr. Douet:

The Department of Environmental Quality (LDEQ), Offices of Environmental Assessment and Environmental Services have received your request for comments on the above referenced project. Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.

There were no objections based on the information in the document submitted to us. However, the following comments have been included below. Should you encounter a problem during the implementation of this project, please notify LDEQ's Single-Point-ofcontact (SPOC) at (225) 219-3640.

The Office of Environmental Services/Permits Division recommends that you investigate the following requirements that may influence your proposed project:

- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permit Division at (225) 219-3181 to determine if your proposed improvements require one of these permits.
- All precautions should be observed to control nonpoint source pollution from construction activities.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly to inquire about the possible necessity for permits. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28.Lead-Based Paint Activities, LAC 33:III.Chapter 27.Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation), and LAC 33:III.5151.Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, Bossier Parish is classified as an attainment parish with the National Ambient Air Quality Standards for all criteria air pollutants.

Please forward all future requests to Ms. Diane Hewitt, LDEQ/Performance Management/ P.O. Box 4301, Baton Rouge, LA 70821-4301, and your request will be processed as quickly as possible.

If you have any questions, please feel free to contact me at (225) 219-4079 or by email at <u>diane.hewitt@la.gov</u>. Permitting questions should be directed to the Office of Environmental Services at (225) 219-3181.

Sincerely,

Diane Hewitt Performance Management LDEQ/Community and Industry Relations Business and Community Outreach Division Office of the Secretary P.O. Box 4301 (602 N. 5th Street) Baton Rouge, LA 70821-4301 Phone: 225-219-4079 Fx: 225-325-8208 E-mail: **diane.hewitt@la.gov**



168 04 2010



SCOTT A. ANGELLE SECRETARY

JAMES H. WELSH COMMISSIONER OF CONSERVATION

BOBBY JINDAL GOVERNOR C. H. FENSTERMAKER & State of Louisiana DEPARTMENT OF NATURAL RESOURCES OFFICE OF CONSERVATION

January 28, 2010

TO: Mr. Dax Douet, P.E.
C. H. Fenstermaker & Associates, Inc.
135 Regency Square
Lafayette, LA 70508

RE: State Project No.: 700-08-0132 Federal Aid Project No.: DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana (Solicitation of Views)

Dear Mr. Douet:

In response to your letter dated January 14, 2010, 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.state.la.us/CONS/Conserv.ssi

A review of our computer records for the referenced project area indicates the existence of numerous plugged and abandoned wells drilled in search of oil and gas within and adjacent to the project area. Additionally, the LADOTD database indicates several registered water wells located in the area. Due care should be taken to locate other water wells installed in the area before registration was required.

SPN. 700-08-0132

The Office of Conservation maintains records of all activities within its jurisdiction in either 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	JeffW@dnr.state.la.us
Pipeline	Steven Giambronne	225-342-2989	StevenG@dnr.state.la.us
Injection & Mining	Laurence Bland	225-342-5515	LaurenceB@dnr.state.la.us
Geological	Mike Kline	225-342-3335	MikeKl@dnr.state.la.us
Ground Water	Tony Duplechin	225-342-5528	TonyD@dnr.state.la.us

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:MBK



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

January 25, 2010

Mr. Dax Douet, P.E. Project Manager FENSTERMAKER & Associates, Inc. . . 135 Regency Square Lafayette, LA 70508

Dear Mr. Douet:

We have received your January 14, 2010, letter requesting our evaluation of the potential environmental impacts which might result from the following project:

Wafer Road Extension Bossier Parish Shreveport, Louisiana

In administering the sole source aquifer (SSA) program under Section 1424 of the Safe Drinking Water Act our Office performs evaluations of projects with federal financial assistance which are located over a designated sole source aquifer.

Based on the information provided, we have concluded that the project does not lie within the boundaries of a designated sole source aquifer and is thus not eligible for review under the SSA program.

If you did not include the Parish/County; a legal description; project location and the latitude and longitude if available, please do so in future Sole Source Aquifer correspondence. To view a map of the Sole Source Aquifer delineation(s) for your state go to the following website. http://www.epa.gov/region6/water/swp/ssa/maps.htm

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-7133.

Sincerely yours,

Michael Bechdol, Coordinator Sole Source Aquifer Program Ground Water/UIC Section

cc: Howard Fielding, LDEQ Noel Ardoin, LDOTD

U.S. Department of Homeland Security FEMA Region 6 800 North loop 288 Denton, TX 76209-3698



February 4, 2010

Mr. Dax Douet, P.E. Project Manager Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508

Re: Wafer Road Extension State Project: 700-08-0132

Dear Mr. Douet:

We are in receipt of the captioned projects submitted to this office for review.

As Bossier Parish is a participating community in the National Flood Insurance Program (NFIP), these projects must be reviewed by the appropriate Floodplain Administrator in the community to ensure compliance with their Flood Damage Prevention Ordinance.

It appears that part of the project study area contains not only floodplains but also floodways on FIRM panels 22015C0426D, 0427D and 0429D. Federal regulations 44 CFR Part 65.12 must be strictly enforced when encroachments into a floodway are anticipated. Please contact Butch Ford, Parish Engineer, at (318) 965-2329 for additional information.

If you have any other questions, please feel free to contact me at (940) 898-5523 or via email at Diana.b.herrera@dhs.gov.

Sincerely,

int Ahren

Diana B. Herrera, CFM Natural Hazards Program Specialist

cc: Butch Ford, Parish Engineer, Bossier Parish Cindy, O'Neal, LA NFIP State Coordinator



STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT P.O. Box 94245 Baton Rouge, Louisiana 70804-9245 www.dotd.la.gov {put your office/section's telephone number here}



SHERRI LEBAS

INTERIM SECRETARY

BOBBY JINDAL GOVERNOR

February 9, 2010

STATE PROJECT NO. 700-08-0132 F.A.P. NO.: DE-0807(502) PROJECT NAME: WAFER ROAD EXTENSION PARISH: BOSSIER, LOUISIANA

Dax Douet, P.E. Project Manager Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508 C. H. HENENERMANER & ASSOC.

Dear Mr. Douet:

The project study area appears to include a special flood hazard area with a designated floodway.

Section 60.3(d)(3) of National Flood Insurance Program Regulations states: "Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory *floodway*, unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;"

If a person wishes to build in a floodway and can show through technical analysis that the construction would have no adverse effect on the floodway and provide a "No-Rise Certification" (copy enclosed), then the floodplain administrator has the authority to grant the permit.

During construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must also be given to the responsibility for clearing debris and keeping the surrounding area clear in order to allow for the accumulation and flow of flood water.

Our office cautions that development in the floodway fringe area may alter drainage patterns, reduce the natural storage of flood waters, and/or compound the damages caused by smaller floods.

Mr. Douet February 9, 2010 Page 2

In order to assure compliance with parish requirements for the National Flood Insurance Program (NFIP), and so that appropriate permits are obtained; please contact the floodplain administrator for Bossier Parish. The contact person is: Mr. Butch Ford, P.O. Box 70, Benton, LA 71006 and telephone no. 318-965-2329.

We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225) 274-4354.

Sincerely,

Usan Villon

Susan Veillon, CFM Floodplain Management Program Coordinator

pc: Butch Ford

Engineering "No Rise" Certification

This is to certify that I am a duly qualified registered professional engineer licensed to practice in the State of Louisiana.

It is further to certify that the attached technical data supports the fact that proposed

(Name of Development)

will not impact (0.000 foot rise) the base (100-year) flood elevations, floodway elevations and floodway widths on

(Name of Stream)

at published sections in the Flood Insurance Study for ______(Name of Community)

dated ______ and will not impact (0.000 foot rise) the base (100-year) flood elevations, floodway elevations, and floodway widths at unpublished cross sections in the vicinity of the proposed development.

(Date)

(Signature)

(Title)

(Address)

SEAL:

(License number)





State of Louisiana DEPARTMENT OF WILDLIFE AND FISHERIES OFFICE OF WILDLIFE

Jar

Date

January 21, 2010

Name	Dax Douet
Ivame	Dax Douet
Company	C. H. Fenstermaker & Associates, Inc.
Street Address	135 Regency Square
City, State, Zip	Lafayette, LA 70508
Project	State Project No. 700-08-0132
	Wafer Road Extension
	Bossier Parish, LA
Project ID	152010
Invoice Number	10012101

Personnel of the Habitat Section 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 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,

-0(

Jeem Mudes

Gary Lester, Coordinator Natural Heritage Program



JAN 22 2010

C. H. FERSEER MAGARHAM ASSOC. SECRETARY JIMMY L. ANTHONY Assistant Secretary



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	January 21, 2010
Invoice Number	10012101
Project	State Project No. 700-08-0132 Wafer Road Extension Bossier Parish, LA
Name	Dax Douet
Company	C. H. Fenstermaker & Associates, Inc.
Street Address	135 Regency Square
City, State, Zip	Lafayette, LA 70508
Number of Quads Reviewed	2
Total Due	\$40.00

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: Nancy Hunter 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 \$20.00 per quad reviewed, please contact LNHP at (225) 765-2357.

United States Department of Agriculture Department of Agriculture BERIEVEND FEB 25 2010 FEB 25 200 FEB 25

February 11, 2010

Mr. Dax Douet, P.E. Project Manager C.H. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, Louisiana 70508

Dear Mr. Douet:

RE: SPN # 700-08-0132 F.A.P. # DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana

Thank you for the opportunity to provide comments regarding the above referenced project.

NRCS has no comment at the present time; however, as the project moves forward and federal funds are utilized, a Farmland Conversion Impact Rating may be necessary as required by the Farmland Protection Policy Act, PL 97-98 7 U.S.C. 4207.

Should you have questions regarding the above comments, please feel free to contact Rick Adams, District Conservationist in our Benton Field Office, at phone number (318) 965-2185, Ext. 3.

Sincerely,

Brodligh State

Bradley A. Sticker, P.E. State Conservation Engineer

cc: Rick Adams, District Conservationist, NRCS, Benton, Louisiana

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State of Couisiana

MITCHELL J. LANDRIEU LIEUTENANT GOVERNOR

OFFICE OF THE LIEUTENANT GOVERNOR DEPARTMENT OF CULTURE, RECREATION & TOURISM OFFICE OF STATE PARKS PAM BREAUX SECRETARY

STUART JOHNSON, PH.D. Assistant Secretary

January 21, 2010

C.H. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508

Re: State Project No. 700-08-0132 Wafer Road Extension

To Whom It May Concern:

I am in receipt of the solicitation of views request for extension of Wafer Road in Bossier Parish, Louisiana.

The Division of Outdoor Recreation in the Louisiana Office of State Parks administers the Land and Water Conservation Fund program for Louisiana. In this capacity we compile an inventory of recreational sites within the state for publication in the Statewide Comprehensive Outdoor Recreation Plan (SCORP) published periodically. The most recent SCORP was published for the period of 2009-2014 with an inventory developed in 2009.

Based on the information provided, there does not appear to be any conflict regarding this proposed project with existing recreational facilities identified in the most recent SCORP.

Sincerely,

Cleve Hardman Director of Outdoor Recreation

REGENAR

ROBERT ADLEY STATE SENATOR DISTRICT 36 611 Jessie Jones Drive Benton, LA 71006 (318) 965-1755 (800) 878-8005 Fax: (318) 965-1757 adleyr@legis.state.la.us



MAR 1 5 2010

SENATE C. H. FENSTERMAKER & ASSOC.

COMMITTEES Revenue and Fiscal Affairs Vice Chairman Transportation, Highways C. and Public Works Joint Capital Outlay Chairman Energy Council Executive Committee Consumer Affairs

March 12, 2010

Mr. Dax Douet, P. E. Project Manager Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70808

Re: State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana

Dear Mr. Douet:

Your letter of January 14th requested solicitation of views for the abovereferenced project, and your letter included a map of the study area.

Senator Adley would like to see the proposed path of the road. Could you provide him with this information?

Thank you for your assistance.

Very truly yours,

Jeannine James Legislative Assistant



1 - 3 - 1 2010

State of Confisianta C. H. FENSTERMAKER PAM BREAUX

SCOTT HUTCHESON ASSISTANT SECRETARY

MITCHELL J. LANDRIEU LIEUTENANT GOVERNOR

OFFICE OF THE LIEUTENANT GOVERNOR DEPARTMENT OF CULTURE, RECREATION & TOURISM OFFICE OF CULTURAL DEVELOPMENT DIVISION OF ARCHAEOLOGY

February 5, 2010

Mr. Dax Douet, P.E. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508

Re: Wafer Road Extension State Project No. 700-08-0132 Bossier Parish, Louisiana

Dear Mr. Douet:

This is in response to your letter dated January 14, 2010, regarding the above-referenced project. There are no recorded archaeological sites in the proposed study area. However, our office cannot offer comments until a corridor for the extension has been selected.

If you have any questions concerning these comments, please contact Rachel Watson in the Division of Archaeology at (225) 342-8165.

Sincerely,

Scott Hutcheson State Historic Preservation Officer

SH:RW:kf



Engineers · Surveyors Environmental Consultants

January 14, 2010

State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana RECEIVED JAN 1 9 2010 FISH & WLDL. SERV LAFAYETTE, LA.

REGENARD

JAN 29 2010

C. H. FENSTERMAKER & ASSOC.

SITE MAY CONTAIN WETLANDS Contact the U.S. Army Corps of Engineers for a jurisdictional determination.

VICKS burg, MS District: Telephone No.

Re: Solicitation of Views

Early in the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist the Louisiana Department of Transportation and Development (LDOTD) with the early identification of possible adverse economic, social or environmental effects or concerns. Your assistance in this regard will be appreciated.

Due to the earliness of this request for your views, very limited data concerning the proposed project exists. We have, however, attached a map showing the general location and study area of the project, along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by February 16, 2010. Please reference the above State Project number in your reply. Replies should be addressed to C. H. Fenstermaker & Associates, Inc., 135 Regency Square, Lafayette, LA, 70508.

Very truly yours, C. H. Fenstermaker & Associates, Inc.

Dax Douet, P.E. Project Manager

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, () 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.

~ 26, 2010



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 391833435

REPLY TO ATTENTION OF:

January 28, 2010

REEN

C. H. FENSTERMAKER & ASSOC

Planning, Programs, and Project Management Division Environmental and Economic Analysis Branch

Dax Douet, P.E. C. H. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, Louisiana 70508

Dear Mr. Douet:

I refer to your letter of January 14, 2010, regarding a proposed two-lane urban collector facility in Bossier Parish, Louisiana (State Project No. 700-08-0132). The U.S. Army Corps of Engineers, Vicksburg District, has an ongoing repair project on the Bayou Bodcau Dam No. 4 that is within close proximity to your proposed project area.

If your proposed work involves the discharge of dredged or fill material into wetlands or any other waters of the United States, you may need a Department of the Army permit prior to construction. For further information, please visit our website at <u>http://www.mvk.usace.army.mil/offices/od/odf</u> or contact Mr. David Lofton (telephone (601) 631-5147).

I trust this information meets your needs. If you have any further questions, please contact Mr. Brian LaBarre of this office (telephone (601) 631-5437).

Sincerely,

Patricia R. Hemphill, P.E. Assistant Chief, Planning, Programs, and Project Management Division U.S. Department of Homeland Security

United States Coast Guard



Commander Eighth Coast Guard District 1222 Spruce Street St. Louis, MO 63103-2832 Staff Symbol: dwb Phone: (314)269-2379 Fax: (314)269-2737 Email: rodney.l.wurgler@uscg.mil www.uscg.mil/d8/westernriversbridges

16591.1/ LA July 8, 2011

Ms. Sherry Eastin Regulatory Specialist Fenstermaker 135 Regency Square Lafayette, Louisiana 70508

Subj: FIFI AND CONNELL BAYOU, PROJECT # 208428, BOSSIER PARISH, LA

Dear Ms. Eastin:

Please refer to your correspondence of June 30, 2011. We have determined that pursuant to the Coast Guard Authorization Act of 1982, it has been determined this is not a waterway over which the Coast Guard exercises jurisdiction for bridge administration purposes. A Coast Guard bridge permit is not required.

If there are any questions, please contact Mr. Rodney Wurgler at the above listed number.

Sincerely,

WASHBURN

Bridge Administrator, Western Rivers By direction of the District Commander

August 24, 2011

Mr. Dax Douet, P.E. C.H. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, LA 70508

Re: State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Wafer Road Extension Bossier Parish, Louisiana

Dear Mr. Douet:

We reviewed the Line and Grade Study for the abovementioned project dated November 2010 and realized that all three (3) alternative routes encroach into the Fifi Bayou special flood hazard area.

The flood plain issues will have to be addressed during the subsequent design process of the project. This is not unusual and we will require a Hydrologic/Hydraulic Analysis which determines the impact to the special flood hazard area. Of course, any encroachments must meet all of the National Flood Insurance Program (44 CFR, Chapter 1, Section 65.12) Regulations.

If any additional information is needed, please contact our office at 318-965-2329.

Sincerely,

Joe E. Ford Jr., P.E. Bossier Parish Flood Plain Administrator

JEF:rn

Cc: Mr. Bill Altimus, Parish Administrator Mr. Patrick Jackson, Parish Attorney Mr. Winfred Johnston, Police Juror District No. 4 Mr. Glenn Benton, Police Juror District No. 2

APPENDIX C

JULY 13, 2010 PUBLIC MEETING SUMMARY

Environmental Assessment Wafer Road Extension

PUBLIC MEETING SUMMARY

WAFER ROAD EXTENSION ENVIRONMENTAL ASSESSMENT AND LINE AND GRADE STUDY

STATE PROJECT NO. 700-08-0132 FEDERAL PROJECT NO. DE-0807 (502) BOSSIER PARISH, LA

PREPARED BY: FENSTERMAKER & ASSOCIATES, INC. LAFAYETTE, LA

PUBLIC MEETING

JULY 13, 2010, 5:00PM TO 8:00PM BOSSIER PARISH COURTHOUSE 204 BURT BOULEVARD BENTON, LA

PUBLIC MEETING SUMMARY

A public meeting was held on July 13th, 2010 for the Wafer Road Extension project as part of the Environmental Assessment process. The meeting was held as an informal open house with a station format including a short presentation on the project and project exhibits.

MEETING OBJECTIVES

The objective of the public meeting was to seek input from individuals and community organizations on issues and concerns related to the potential impacts associated with the proposed extension of Wafer Road as a new roadway facility from Winfield Road to Bellevue Road.

MEETING ADVERTISEMENT

The public meeting was advertised in the Bossier Press Tribune on June 29th and July 6th, 2010. A copy of the advertisement is included as an attachment.

MEETING FORMAT

The meeting followed an informal open house style. Five (5) Stations were organized around the meeting facility and are described below:

- STATION #1 Welcome and Sign-In Station. Meeting attendees were asked to provide their contact information. They also received a project brochure describing the project and NEPA process, a station checklist, and a comment form. Copies of the meeting handouts are included as an attachment.
- STATION #2 Meeting attendees were able to watch a 15-minute presentation to familiarize themselves about the NEPA process and project information. The presentation played on a loop. A copy of the presentation is included as an attachment.
- STATION #3 Meeting attendees were able to visit with project team members to ask questions and to view the proposed typical sections, proposed alternatives and a rendering.
- STATION #4 Station #4 was provided for verification of property owners' contact information for future public meetings.
- STATION #5 Meeting attendees were able to drop off their completed comment forms and had the opportunity to record verbal comments on a voice recorder.

MEETING SUMMARY

The meeting was attended by 7 local officials or agency representatives and 6 project team members. No members of the public were in attendance.

Public Comments

No public comments were received during the public comment period.

LIST OF ATTACHMENTS

Public Meeting Notice Ad Press Release Affidavit of Publication Public Notice Verification Meeting Sign-In Sheet Project Brochure Station Checklist/Comment Form Powerpoint Presentation (PDF)

LIST OF ATTACHMENTS

Public Meeting Notice Ad Press Release Affidavit of Publication Public Notice Verification Meeting Sign-In Sheet Project Brochure Station Checklist/Comment Form Powerpoint Presentation (PDF) Wafer Road Extension State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Bossier Parish, Louisiana

What: Public Meeting for the proposed Wafer Road Extension (from Winfield Road to Bellevue Road) in Bossier Parish, Louisiana

When: Tuesday, July 13, 2010

Where: Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006 Time: 5:00 PM to 8:00 PM

The Northwest Louisiana Council of Governments (NLCOG), in conjunction with the Louisiana Department of Transportation and Development (LDOTD) and the Federal Highway Administration (FHWA), is conducting a Public Meeting for the proposed Wafer Road Extension (from Winfield Road to Bellevue Road). The purpose of the public meeting is to provide information, and to obtain input on the proposed project.

The meeting will follow an open house format. There will be a continuous multi-media presentation about the project. Additional project exhibits will be available for viewing. Comments and suggestions will be invited from all interested parties to help ensure that the study team addresses the full range of environmental issues during the Environmental Assessment study process. Representatives from NLCOG and its consultants will be at the open house to receive comments, answer questions, and discuss issues related to the project. Verbal comments may be recorded at the meeting. Written statements can be submitted at the meeting or mailed to the address shown below, postmarked no later than July 27, 2010.

Should you require special assistance due to a disability in order to participate in this public meeting, please contact C.H. Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the public meeting date.

For more information relating to the meeting, contact Sherry Eastin at C.H. Fenstermaker & Associates, Inc. at (337) 237-2200.

FOR IMMEDIATE RELEASE

CONTACT:

Mike LaFleur Project Manager, LA Dept of Transportation and Development (225) 242-4512, Mike.LaFleur@la.gov

OR Sherry Eastin Senior Planner, C.H. Fenstermaker & Associates, Inc. (337) 237-2200, sherrye@fenstermaker.com

DOTD to Hold Public Meeting on Wafer Road Extension

DOTD and its consultants to engage interested citizens on proposed extension of Wafer Road (from Winfield Road to Belleview Road).

Bossier Parish (July 2010) – The Northwest Louisiana Council of Governments (NLCOG), in conjunction with the Louisiana Department and Transportation and Development (LDOTD) and the Federal Highway Administration (FHWA) is conducting a public meeting in an **open house format** for the proposed Wafer Road Extension (from Winfield Road to Bellevue Road) on **Tuesday, July 13th from 5:00PM to 8:00PM**. The purpose of the open house is to provide information and to obtain input on the proposed project.

The meeting will follow an open house format. There will be a continuous multi-media presentation about the project. Additional project exhibits will be available for viewing. Comments and suggestions will be invited from all interested parties to help ensure that the study team addresses the full range of environmental issues during the Environmental Assessment study process. Representatives from DOTD, FHWA and its consultants will be at the open house to receive comments, answer questions, and discuss issues related to the project. Interested citizens are encouraged to attend!

Open House Details:

- What: Public Meeting on proposed Wafer Road Extension (from Winfield Road to Bellevue Road)
- When: Tuesday, July 13th, 2010
- Where: Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006
- Time: 5:00PM to 8:00PM

For more information relating to the meeting, contact Mike LaFleur with DOTD at (225)242-4512 OR Sherry Eastin with C.H. Fenstermaker & Associates, Inc. at (337) 237-2200.

Wafer Road Extension State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Bossier Parish, Louisiana

The Bossier Press Tribune

4250 Viking Drive Bossier City, LA 71111 318-747-7900

STATE OF LOUISIANA

PARISH OF BOSSIER

BEFORE ME, the undersigned authority,

James J. Knudsen

deposes and says:

That he is the Publisher of the Bossier Press Tribune, a five day a week daily newspaper published in the City of Bossier City, Bossier Parish, Louisiana, and that the attached Notice was duly published in the said newspaper on the following dates:

June 29, 2010 July 6, 2010

James J. Knudsen, Publisher

Sworn to and subscribed before me this

<u>1971</u> day of <u>July</u>, 20<u>10</u>.

Caroi C. Andrews, Notary ID#061483

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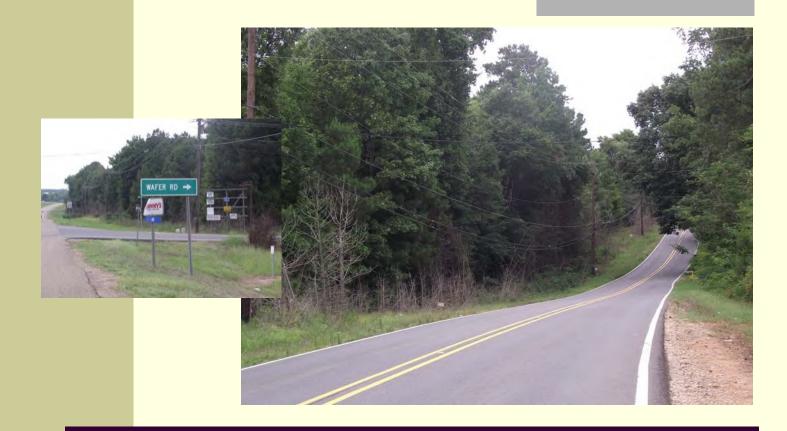




WAFER ROAD EXTENSION PUBLIC MEETING State Project No. 700-08-0132 Federal Project No. DE-0807(502)

TELEPHONE	575E_106	1580-026	965-2329	- 50 318-746- 8987	318 8415350		10	318-965-2329	1152-223-2211				
EMAIL	WIIIAn QUT (Q & UL. Con 94) 2325	PArish P.J. Glenn Benton @444. not 949-0851	monica grapped adlam 965-2329	cgethree Coop kenjineering-bossie, com 318-746-8987	Kentrogers Bulcog. Org	beaster have bellswith . net	Lismary Convillanodot-min 225-757-7004	TEFBUSSENES Part . Con	bperilloux Qurbansystemscom				
AGENCY	Bruch Parish 1.5.	Bossier Parish P.J.		Cark Engineering		RAN)	FHWA	BPPT	Urban Systems				
NAME	En Attons	Chene Benton	Monce Signe	Charlie Conte	J. Kent Kogers	Bruce Easterly	Vi Smarry Caullour	But the	Brandon Perillour				

PUBLIC MEETING



STATE PROJECT NO. 700-08-0132 FEDERAL PROJECT NO. DE-0807 (502)

WAFER ROAD EXTENSION

ENVIRONMENTAL ASSESSMENT AND LINE AND GRADE STUDY

JULY 13, 2010, 5:00 PM to 8:00 PM

BOSSIER PARISH COURTHOUSE 204 BURT BOULEVARD BENTON, LA



What Is an Environmental Assessment?

An Environmental Assessment (EA) is a concise public document that a Federal agency prepares under the National Environmental Policy Act (NEPA) to provide sufficient evidence and analysis to determine whether a proposed agency action would require preparation of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). It also includes a public involvement process.

Why is an EA being prepared?

This EA is being prepared to assess potential impacts associated with the proposed Wafer Road Extension project. This purpose of this roadway extension project is to increase vehicular mobility and safety by offering an additional north-south roadway within Bossier Parish that will attempt to alleviate traffic congestion at intersections within the Project Study Area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within central areas of the parish.

The EA will analyze the following major issues and/or impacts to: wetlands, air and water quality, noise, floodplains, scenic streams, endangered and threatened species, historical and cultural resources, hazardous wastes (Phase I environmental site assessment), land use impacts, prime farmland soils, social impacts, environmental justice, relocation impacts, and economic impacts.

The EA will also evaluate a range of alternatives to the proposed action, including the no action alternative. Information obtained following the public meeting will be considered in finalizing the array of alternatives to be evaluated in the EA.

What Is the National Environmental Policy Act?

The National Environmental Policy Act of 1969 (NEPA) requires the analysis of potential environmental effects associated with major federal actions. NEPA ensures that environmental factors are considered equally with the technical and economic components of a decision to be considered. NEPA also requires that potential environmental effects, and any adverse effects that cannot be avoided, be identified and alternatives to the proposed be considered. NEPA requires consultation with all relevant federal agencies to determine these impacts.

NEPA is a full disclosure law with provisions for public access to and full participation in the federal decision-making process. The act's intent is to protect, restore, or enhance the environment through well-informed federal decisions.

There will be two major NEPA compliance documents associated with this action, to include:

An Environmental Assessment (EA) which analyzes environmental and socio-economic impacts of the proposed action;

Finding of No Significant Impacts (FONSI) is a document that briefly presents the reasons why a proposed action, not otherwise excluded, will not have a significant effect on the human environment and for which, therefore, an Environmental Impact Statement will not be prepared.

What Is the Proposed Action?

The Proposed Action is the study of the implementation of an extension of Wafer Road from Winfield Road to Bellevue Road. There are currently three (3) proposed roadway alignment alternatives being presented.

What Is the Purpose and Need for this project?

PURPOSE

The purpose of this project is to increase vehicular mobility and safety by offering an additional north-south roadway within Bossier Parish that will attempt to alleviate traffic congestion at intersections within the Project Study Area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within central areas of the parish.

NEED

Over the past several years, the most significant residential development in the parish has occurred beyond the city limits of Bossier City, and growth within the areas north of Bossier City is projected continue. According to officials of Bossier Parish, existing subdivisions along with several planned large scale subdivisions will continue to hinder the efficiency of the existing parish transportation infrastructure.

Planning in advance for thoroughfare development is important to:

- Meet future transportation demands as both the City and Parish continue to develop,
- Ensure safe and efficient movement of people and goods throughout this area,
- Improve the economic condition of the Project Study Area by increased accessibility to developable lands, and improve area-wide mobility and safety.

SUPPORTING INFORMATION

The following items support the need for the proposed project improvements. These items have been identified as regional transportation based needs

Minimize Congestion

According to the U.S. Census Bureau, Bossier City and Bossier Parish have grown at a faster pace than the State of Louisiana as a whole in each of the last three censuses. To adapt to what is expected to be a continuing growth in population, this project is part of the Bossier Master Plan's Thoroughfare Plan, which is the long-term general plan for developing an overall system of thoroughfares for the area. The proposed improvements would alleviate congestion by providing an additional connector to Bellevue.

Optimize Use of Existing Transportation

The Proposed Action is in line with the Parish's long-term development plan for the upgrading and extending of the transportation network in an orderly and timely fashion to accommodate the mobility of the public. The Proposed Action is consistent with the Bossier Parish's plans to enhance Wafer Road and extending it South to US 79/80.

Relate Transportation to Economic Growth

- The Proposed Action will help to meet future travel demands in the Study Area as both the City and Parish continue to develop by extending the transportation network of the area. It will aid in the improvement of the economic condition of the Project Study Area by increasing accessibility to developable lands, and address the need to create north/south expressways throughout the parish.
- The parish has been working on creating new sewer systems and treatment facilities. They have developed a project consisting of four phases with phase one being a new sewer system along the Highway 80 corridor. Phase two is a new treatment plant on the Red River. Phases three and four will concern new sewer lines in north Bossier. This new sewer district will open up property in the area to development, as proposals for new subdivisions have been turned down due to lack of sewer service. These improvements are expected to begin in August of 2010.

Transportation Safety

An objective of the Bossier Master Plan is to provide sufficient interconnection between neighborhoods and other areas to insure appropriate emergency access and response times.

What Is the Purpose of this Public Meeting?

The purpose of this public meeting is to seek input from individuals and community organizations on issues and concerns related to the potential impacts associated with the proposed Wafer Road Extension project.

The meeting is an informal open-house style (open forum), with display exhibits set up for the public to review the proposed project study area, project alternatives, and to identify issues and concerns they believe should be addressed in the Environmental Assessment. This open forum will allow the public time to review project exhibits and talk informally with representatives from the project team.

A comment form is attached to this brochure with additional forms located at Station #5 as well as the sign-in table. These comment forms can be filled out and left at the comment form collection boxes, emailed, or mailed to the appropriate address shown on the comment form.

Bossier Parish is located in Northwest Louisiana, bordering the State of Arkansas, and is within 20 miles of the State of Texas. Bossier Parish contains 839 square miles, with a current population estimate of over 113,000 citizens. Bossier City and Bossier Parish have gained in population in recent decades, and both the City and the Parish are growing at a faster pace than statewide rates for Louisiana. Recently the area experienced positive growth and change due to the incoming industries of movie production and natural gas exploration in the field of the Haynesville Shale.

PUBLIC MEETING STATION CHECKLIST

The format of this public meeting is an open-house style where attendees can visit each "station" to learn about the project, visit with the project team members and provide comments. Please use this form to track your visit to each station.



STATION #1 - PLEASE SIGN IN

Welcome and please sign in. Please pick up your meeting handouts and comment form.



STATION #2 – PRESENTATION

A 15-minute presentation to familiarize yourself with the NEPA process and proposed project.



STATION #3 – PROPOSED ALTERNATIVES

Visit with team members and view the project exhibits.



STATION #4 – PROPERTY OWNERS

Please verify your information for future public meetings.



STATION #5 – COMMENTS

Please take a moment to let us know your thoughts. Either fill out the comment form on the back of this page and turn it in at Station #5 OR record a verbal comment on the voice recorder. You may also mail or email your comment form to the address provided.

WAFER ROAD EXTENSION

State Project No. 700-08-0132 Federal Project No. DE-0807(502)

Public Meeting Comment Form

Your participation is vital to ensuring that decisions made about this proposed project reflect the needs of the community and are based on good information. Please take a moment to document your comments or questions below. We will respond to your comments, questions, and concerns for the duration of this Environmental Study process.

Before you leave tonight, please turn in your comment form to Station #5. You may also email, fax or mail the comment form to the number or address below. Comments should be postmarked no later than July 27, 2010 to be included as part of the official record.

PLEASE PROVIDE YOUR COMMENTS ON THE FOLLOWING ITEMS:

What is your opinion of the three alternatives presented?

Name: _____

Project Purpose & Need: What are the key reasons for this project? Additional reasons?

Environmental, socioeconomic or other concerns: Any issues that need to be addressed?

Other Comments, questions, or concerns (enclose additional pages as necessary):

Address:	Would you like to receive future updates on the Wafer		NO	
Email:	Road Extension project?		JL	

Comments may be emailed to <u>sherrye@fenstermaker.com</u>, faxed to Sherry Eastin at 337.232.3299 or by US Mail to: C.H. Fenstermaker & Associates, Inc., 138 Regency Square, Lafayette, LA 70508.

JULY 13, 2010

Thank you for attending!



WAFER ROAD EXTENSION (Winfield Road to Bellevue Road)

ENVIRONMENTAL ASSESSMENT AND LINE & GRADE STUDY

> July 13, 2010 5:00PM to 8:00PM

Bossier Parish Courthouse 204 Burt Boulevard Benton Louisiana

PUBLIC MEETING



HOSTED BY:



Northwest Louisiana Council of Governments



Bossier Parish Police Jury DOTD BUILDS THE WAY

h LA Department of Transportation & Development



Federal Highway Administration

PRESENTED BY:



C.H. Fenstermaker & Associates, Inc.



IN ASSOCIATION WITH:



Urban Systems





WAFER ROAD EXTENSION PUBLIC MEETING

THE PROJECT

The proposed extension of Wafer Road will run in a general North-South direction from Winfield Road to Bellevue Road.

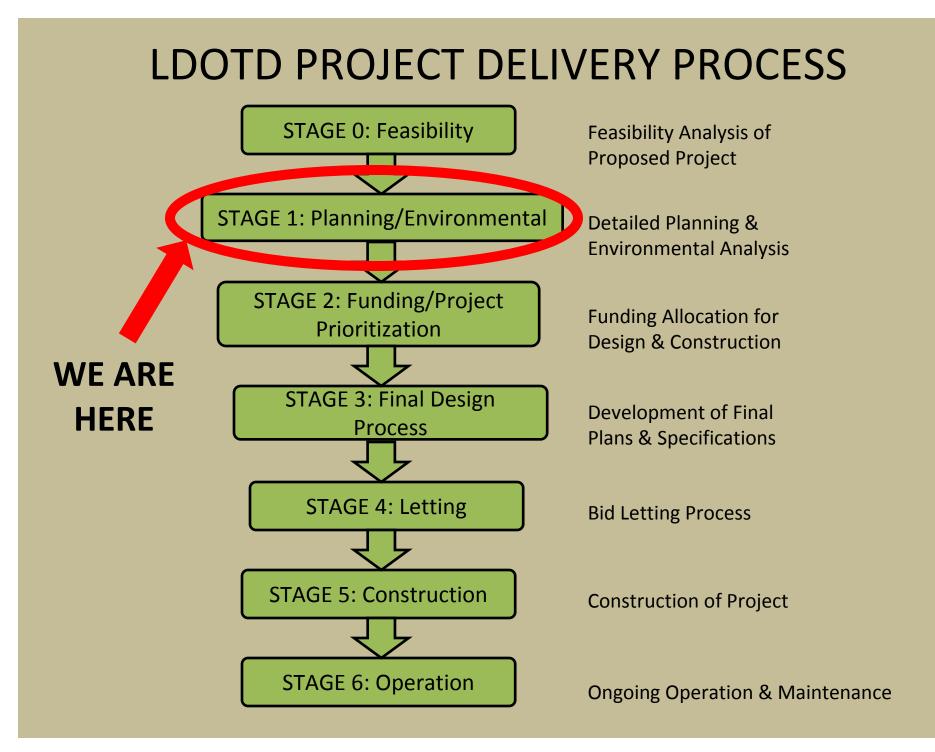
This project will:

- Help to increase vehicular mobility and safety,
- Attempt to alleviate traffic congestion at intersections in the area,
- Reduce travel delay along other existing north-south roadway facilities, and
- Shorten emergency response times within central areas of the parish.

WHAT IS THE PURPOSE OF THIS PUBLIC MEETING?

- Seek input on issues and concerns related to potential impacts.
- Allow the public time to review project exhibits and talk informally with representatives from the project team.
- This informal open-house style encourages attendees to visit each "station".
- Attendees can review the project study area, project concepts, and identify issues and concerns.

WAFER ROAD EXTENSION PUBLIC MEETING



WHAT IS THE NATIONAL ENVIRONMENTAL POLICY ACT?

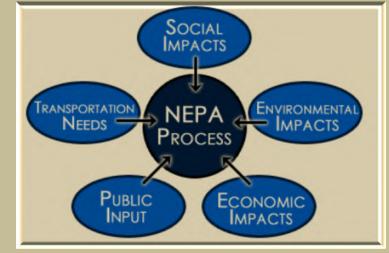
- The National Environmental Policy Act of 1969 (NEPA) requires the analysis of potential environmental effects associated with major federal actions.
- NEPA ensures that environmental factors are considered equally with the technical and economic components of a decision to be considered.
- NEPA also requires that potential environmental effects, and any adverse effects that cannot be avoided, be identified and alternatives to the proposed be considered.

WHAT IS AN ENVIRONMENTAL ASSESSMENT?

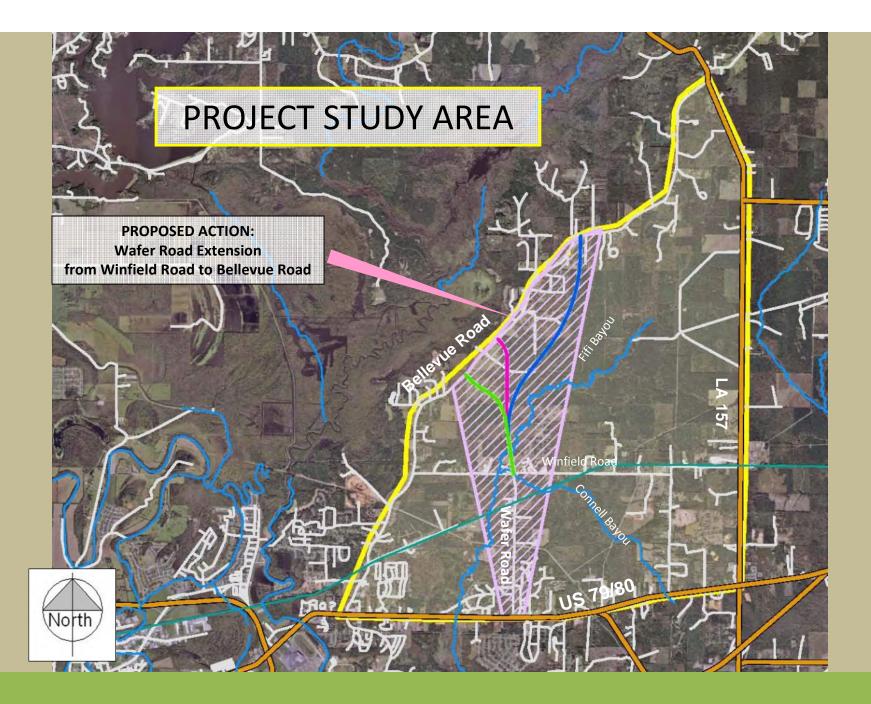
- An Environmental Assessment is a concise public document that a Federal agency prepares under the National Environmental Policy Act (NEPA) to provide sufficient evidence and analysis to determine whether a proposed agency action would require preparation of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).
- An Environmental Assessment includes a public involvement process..... Like the meeting you are attending this evening.

WHAT WILL AN ENVIRONMENTAL ASSESSMENT ANALYZE?

- Wetlands
- Air and water quality
- Noise
- **C** Floodplains
- Scenic streams
- Endangered and threatened species
- Historical and cultural resources
- Hazardous wastes
- **C** Land use impacts
- Prime farmland soils
- Social impacts
- Environmental justice
- Relocation impacts
- **C** Environmental / Economic impacts
- Roadway Geometry & Line and Grade



WAFER ROAD EXTENSION PUBLIC MEETING



WAFER ROAD EXTENSION PUBLIC MEETING

PURPOSE AND NEED

Purpose:

- Increase Vehicular Mobility and Safety by offering an additional north-south roadway;
- <u>Alleviate Traffic Congestion</u> at intersections in the Project Study Area;
- Reduce Travel Delay along other north-south roads, such as LA Highway 157
- Shorten Emergency Response Times within the central areas of the parish.

PURPOSE AND NEED

Need:

- Meet future transportation demands as both the City and Parish continue to develop.
- Ensure safe and efficient movement of people and goods throughout this area – improve area-wide mobility and safety, and
- Improve the economic condition of the Project Study Area by increased accessibility to developable lands.

WAFER ROAD EXTENSION PUBLIC MEETING

PROCESS FOR DEVELOPING PROJECT ALTERNATIVES

- Develop alternatives that would alleviate traffic congestion at intersections in the Project Study Area.
- Develop alternatives that meet project constraints and appropriate design criteria as required by LDOTD.
- Develop alternatives that will seek to minimize encroachment into the designated floodway.
- Develop alternatives that will facilitate accessibility to developable lands in the Project Study Area.

Criteria for Screening Alternatives

- Satisfies identified need.
- Considers local area socioeconomics, topography, future travel demand, and other infrastructure improvements.
- Fits its physical setting, and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.

SOLICITATION OF VIEWS RESPONSES

 A Solicitation of Views letter was mailed to potential cooperating and participating agencies on January 14, 2010.

The next two slides show a matrix of responses received within the comment period.

WAFER ROAD EXTENSION PUBLIC MEETING

Comments Received

As of February 16, 2010

Respondent	Comment
US Army Corps of Engineers	A Corps Permit may be needed prior to construction.
LA Dept Environmental Quality	Project may require water discharge permit and storm water construction permits.
LA Dept of Natural Resources	Numerous plugged and abandoned oil & gas wells exist within and adjacent to the project area. Additionally, several registered water wells are located in the area.
US EPA Sole Source Aquifer Program	The project does not lie within the boundaries of a designated sole source aquifer.
LA Dept. of Culture, Recreation and Tourism, Division of Archaeology	There are no recorded archaeological sites in the proposed study area, comments to be offered once a corridor for the extension has been selected.
Louisiana Office of State Parks	There does not appear to be any conflict regarding this proposed project with existing recreational facilities identified in the most recent (2009-2014) Statewide Comprehensive Outdoor Recreation Plan.
US Fish & Wildlife Service	The project is not likely to adversely impact Federal trust resources currently protected by the Endangered Species Act.

WAFER ROAD EXTENSION PUBLIC MEETING

Comments Received cont'd

As of February 16, 2010

Respondent	Comment
LA Dept. of Transportation and Development Floodplain Management	Project study area includes a special flood hazard area with a designated floodway. A permit shall are obtained from Floodplain Administrator once a technical analysis shows that the construction would have no adverse effect on the floodway.
Dept. of Homeland Security FEMA, Region VI Natural Hazards Program Specialist	Project must be reviewed by Floodplain Administrator to ensure compliance with the Flood Damage Prevention Ordinance. Part of project study area contains not only floodplains but also floodways. Federal regulations must be strictly enforced when encroachments into a floodway are anticipated.
NRCS	As project moves forward and federal funds are utilized, a Farmland Conversion Impact Rating may be necessary.
LA Wildlife & Fisheries Natural Heritage Program	No impacts to rare, threatened or endangered species or critical habitats anticipated. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site.
Bossier City Engineer	No adverse economic, social or environmental effects or concerns with the project.
Bossier Parish School Board	Suggested the need for a traffic study to evaluate specifically the traffic impact of Highway 80 at Platt Elementary School and T.L. Rhodes Elementary School.

PLAN FOR PUBLIC OUTREACH

LOCAL OFFICIALS/ AGENCY SCOPING MTG – FEBRUARY 18, 2010

□ PUBLIC MEETING – *TONIGHT (JULY 13, 2010)*

□ DRAFT ENVIRONMENTAL ASSESSMENT (EA) REPORT

□ PUBLIC HEARING, IF REQUESTED – OCTOBER 2010

□ PROJECT ENDS – *MAY*, 2011

WAFER ROAD EXTENSION PUBLIC MEETING

NEXT STEPS/SCHEDULE

Complete environmental inventory

- Identify preferred alternative (AUGUST 2010)
- Prepare DRAFT Environmental Assessment (EA) Report
- Distribute DRAFT EA Report for public comments (SEPTEMBER 2010)

NEXT STEPS/SCHEDULE (cont'd)

Hold Public Hearing, if requested – (OCTOBER 2010)

□ Identify selected alternative

□ Prepare FINAL EA Report – (EARLY 2011)

Secure Environmental Closure – (SPRING 2011)

STATIONS STATION #1 – PLEASE SIGN IN **M** STATION #2 – PRESENTATION **STATION #3 – PROPOSED ALTERNATIVES STATION #4 – VERIFY YOUR INFO STATION #5 – PROVIDE YOUR COMMENTS**

WAFER ROAD EXTENSION PUBLIC MEETING

PLEASE WALK AROUND AND VISIT EACH STATION. VIEW THE EXHIBITS ON DISPLAY..... AND SPEAK TO ANY OF THE PROJECT TEAM MEMBERS.

THANK YOU FOR ATTENDING!

WAFER ROAD EXTENSION PUBLIC MEETING



PUBLIC MEETING



WAFER ROAD EXTENSION (Winfield Road to Bellevue Road)

ENVIRONMENTAL ASSESSMENT AND LINE & GRADE STUDY

> July 13, 2010 5:00PM to 8:00PM

Bossier Parish Courthouse 204 Burt Boulevard Benton Louisiana

APPENDIX D

PUBLIC HEARING SUMMARY

PUBLIC HEARING SUMMARY

PUBLIC HEARING

JANUARY 10, 2012, 5:00PM TO 8:30PM BOSSIER PARISH COURTHOUSE 204 BURT BLVD., BENTON, LA

WAFER ROAD EXTENSION (WINNFIELD ROAD TO BELLEVUE ROAD) ENVIRONMENTAL ASSESSMENT AND LINE AND GRADE STUDY BOSSIER PARISH, LOUISIANA

> FOR: STATE PROJECT NO. 700-08-0132 FEDERAL PROJECT NO. DE-0807 (502)

SUBMITTED BY: C.H. FENSTERMAKER & ASSOCIATES, INC.

PREPARED FOR: NORTHWEST LOUISIANA COUNCIL OF GOVERNMENTS



PUBLIC HEARING SUMMARY

A public hearing was held on Tuesday, January 10, 2012 for the Wafer Road proposed extension Environmental Assessment (EA) and Line and Grade study as part of the National Environmental Policy Act (NEPA) process. The hearing was held as an informal open house following Louisiana Department of Transportation and Development (LA DOTD) guidelines with a station format including a short presentation on the project, and project exhibits. The hearing was held at Bossier Parish Courthouse, 204 Burt Boulevard, Benton, LA from 5:00PM to 8:30PM.

HEARING OBJECTIVES

The objective of the public hearing was to seek input from individuals and community organizations on issues and concerns related to the Draft EA and potential impacts associated with the proposed Wafer Road Extension.

HEARING ADVERTISEMENT

The public hearing was advertised in several ways:

- Legal ads were placed in Bossier Press Tribune and Shreveport Times on December 7, 2011.
- A Legal ad and display ad were placed in Bossier Press Tribune on January 4 and 6, 2012.
- An email press release was sent to local media on December 7, 2011 and January 9, 2012. As a result of the press release, the Public Hearing was reported by KTBS, the Shreveport Times online, Bossier Press Tribune online, and announced on the radio station 710 KEEL as well as posted to their website.
- A Public Hearing Notice letter was mailed to property owners on December 12, 2011.
- A Public Hearing Flier was posted at the Bossier Parish Courthouse, and hearing details were posted on the Bossier Parish Police Jury website.

Copies of each form of advertisement are included in the Attachments.

HEARING FORMAT

The public hearing followed an informal style open house format per LA DOTD guidelines. Project exhibits were available for the public to view, and team members were circulating to answer questions.

- STATION #1 Welcome and Sign-In Station. Hearing attendees were asked to provide their contact information. They also received a project brochure describing the project and NEPA process, a station checklist, and a comment form. Copies of the meeting handouts are included in the Appendix.
- STATION #2 Hearing attendees were able to watch a 15-minute presentation to familiarize themselves about the NEPA process and project information. The presentation played on a loop. A copy of the presentation is included in the Appendix.
- STATION #3 Hearing attendees were able to visit with project team members to ask questions and to view the proposed typical sections and proposed alternatives.
- STATION #4 Hearing attendees were able to drop off their completed comment forms and had the opportunity to provide verbal comments with a court reporter.

HEARING SUMMARY

The public hearing was attended by approximately 17 citizens, six (6) state and local elected officials, one (1) agency representative and seven (7) project team members.

Public Comments

Comment forms were handed out to each attendee when signing in. During the public hearing, attendees were able to turn in a completed written form or provide verbal comments with a court reporter. Attendees were also able to turn in comment forms via email, fax, or mail. The comment form was made available on the Bossier Parish Police Jury website. Comments were received through January 20, 2012.

Comment Summary

A total of 13 comments were received regarding the Wafer Road Extension project during the 45-day public comment period. At the hearing, 4 written comment forms were turned in and 3 oral comments were taken by the court reporter. There were also 5 comments emailed from agency representatives and 1 comment emailed from the public within the comment period. A complete summary of comments is included as an attachment.

A brief summary of the types of comments received include the following:

- Three landowners indicated a preference for Alternative 3.
- One landowner expressed no preference, but would like to receive information as it becomes available.
- One landowner expressed concern regarding an increase in flooding of Fifi Bayou due to the addition of the road.
- The school board is concerned with traffic impacts to their facilities with the addition of the road and would like to receive reports and plans as they become available.
- There are concerns from EPA that Alternative 3 is not the least environmentally damaging alternative.

Submitted: FENSTERMAKER & ASSOCIATES Name: Krista Goodin, AICP, Deputy Project Manager Title: Director of Planning

LIST OF ATTACHMENTS

Notice of Availability	Attachment A
Display Ad	Attachment B
Flier	Attachment C
Press Release	Attachment D
Press Coverage	Attachment E
Property Owner Letter	Attachment F
Public Hearing Sign-In Sheets	Attachment G
Public Hearing Handout	Attachment H
Station Checklist/Comment Form Insert	Attachment I
Public Hearing PowerPoint Presentation (PDF)	Attachment J
Public Comments	Attachment K

ATTACHMENT A NOTICE OF AVAILABILITY

The newspapers of **Louisiana** make public notices from their printed pages available electronically in a single database for the benefit of the public. This enhances the legislative intent of public notice - keeping a free and independent public informed about activities of their government and business activities that may affect them. Importantly, Public Notices now are in one place on the web (<u>www.PublicNoticeAds.com</u>), not scattered among thousands of government web pages.

County: Bossier Printed In: Bossier Press-Tribune Printed On: 2012/01/04

OPEN HOUSE PUBLIC HEARING NOTICE State Project No. 700-08-0132 F.A.P. No. DE-0807 (502) Wafer Road Extension (Winfield Road to Bellevue Road) Bossier Parish, Louisiana

The Northwest Louisiana Council of Governments (NLCOG) in conjunction with Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA) will hold an Open House Public Hearing at the following time and place:

Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006

LA DOTD, in conjunction with the Federal Highway Administration is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish.

Detailed information on the Draft Environmental Assessment (EA) will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing is to receive comments on the proposed project. Representatives of NLCOG and LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. In addition to comments received during the public hearing, LA DOTD will accept written comments on the Draft EA through Jan. 20, 2012. Comments on the project should be directed to: Dax Douet, Project Manager, Attn: Wafer Road, at either 135 Regency Square, Lafayette, LA 70508 or emailed to dax@fenstermaker.com.

Copies of the Draft EA are available for review during normal business hours at LA DOTD District 04 Office, 3339 Industrial Drive, Bossier City, LA; FHWA Division Office, 5304 Flanders Drive, Suite A, Baton Rouge, LA; LA DOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA; Louisiana State Library, 701 N. 4th Street, Baton Rouge, LA; Noel Memorial Library, LSU-S, One University Place, Shreveport, LA; Bossier Central Library, 2206 Beckett Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 116 West McKinley, Haughton, LA; Koran Library, 5413 Hwy 527, Haughton, LA; and Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the Hearing.

January 04, 2012 Bossier Press-Tribune

Public Notice ID: 17760228

The newspapers of **Louisiana** make public notices from their printed pages available electronically in a single database for the benefit of the public. This enhances the legislative intent of public notice - keeping a free and independent public informed about activities of their government and business activities that may affect them. Importantly, Public Notices now are in one place on the web (<u>www.PublicNoticeAds.com</u>), not scattered among thousands of government web pages.

County: Bossier Printed In: Bossier Press-Tribune Printed On: 2011/12/07

NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT OPEN HOUSE PUBLIC HEARING NOTICE

State Project No. 700-08-0132 F.A.P. No. DE-0807 (502)

Wafer Road Extension (Winfield Road to Bellevue Road) Bossier Parish, Louisiana

The Northwest Louisiana Council of Governments (NLCOG) in conjunction with Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA) will hold an Open House Public Hearing at the following time and place:

Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006

LA DOTD, in conjunction with the Federal Highway Administration is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish.

Detailed information relative to the project is available in the Draft Environmental Assessment (EA). This document is available for review and/or purchase at the Department's District 04 office, located at 3339 Industrial Drive, Bossier City, LA. The Draft EA is available for review at the Federal Highway Administration Division Office at 5304 Flanders Drive, Suite A, Baton Rouge, LA and at the LADOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA. The Draft EA is also available for review at the following: Bossier Central Library, 2206 Beckett Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 5413 Hwy 527, Haughton, LA; an Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at the LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

Detailed information on the EA will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing will be to receive comments on the proposed project. Representatives of LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. The Public Hearing format will be an n open house with looping presentation and handout. Oral comments will be received at the Hearing. Written comments may also be submitted at the Hearing, or may be mailed to the following address, postmarked within ten days following the Hearing date (by January 20, 2012): Dax Douet Fenstermaker & Associates, Inc. Attn: Wafer Road

135 Regency Square Lafayette, LA 70508

Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five

(5) working days prior to the Hearing.

December 7, 2011 January 4, 2012 Bossier Press-Tribune

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Public Notice ID: 17636268

The newspapers of **Louisiana** make public notices from their printed pages available electronically in a single database for the benefit of the public. This enhances the legislative intent of public notice - keeping a free and independent public informed about activities of their government and business activities that may affect them. Importantly, Public Notices now are in one place on the web (<u>www.PublicNoticeAds.com</u>), not scattered among thousands of government web pages.

County: Caddo Printed In: The Times Printed On: 2011/12/07

NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT OPEN HOUSE PUBLIC HEARING NOTICE State Project No. 700-08-0132 F.A.P. No. DE-0807 (502) Wafer Road Extension (Winfield Road to Bellevue Road) Bossier Parish, Louisiana The Northwest Louisiana Council of Governments (NLCOG) in conjunction with Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA) will hold an Open House Public Hearing at the following time and place: Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006 LA DOTD, in conjunction with the Federal Highway Administration is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish. Detailed information relative to the project is available in the Draft Environmental Assessment (EA). This document is available for review and/or purchase at the Department's District 04 office, located at 3339 Industrial Drive, Bossier City, LA. The Draft EA is available for review at the Federal Highway Administration Division Office at 5304 Flanders Drive, Suite A, Baton Rouge, LA and at the LADOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA. The Draft EA is also available for review at the following: Bossier Central Library, 2206 Beckett Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 116 West McKinley, Haughton, LA; History Center, 2206 Beckett Street, Bossier City, LA; Koran Library, 5413 Hwy 527, Haughton, LA; an Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at the LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading. Detailed information on the EA will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing will be to receive comments on the proposed project. Representatives of LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. The Public Hearing format will be an n open house with looping presentation and handout. Oral comments will be received at the Hearing. Written comments may also be submitted at the Hearing, or may be mailed to the following address, postmarked within ten days following the Hearing date (by January 20, 2012): Dax Douet Fenstermaker & Associates, Inc. Attn: Wafer Road 135 Regency Square Lafayette, LA 70508 Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the Hearing. The Times: December 7, 2011

Public Notice ID: 17621915

ATTACHMENT B DISPLAY AD

LA DOTD to Hold Public Hearing

Louisiana Department of Transportation and Development (LA DOTD), in conjunction with the Federal Highway Administration (FHWA) is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish. The Northwest Louisiana Council of Governments (NLCOG) in conjunction with LA DOTD and FHWA will hold an Open House Public Hearing for the proposed Wafer Road Extension.

Public Hearing details are:

- When:
 Tuesday, January 10, 2012

 5:00PM to 8:00PM
- Where: Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006



Detailed information on the Draft Environmental Assessment (EA) will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing is to receive comments on the proposed project. Representatives of NLCOG and LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. In addition to comments received during the public hearing, LA DOTD will accept written comments on the Draft EA through Jan. 20, 2012. Comments on the project should be directed to: Dax Douet, Project Manager, Attn: Wafer Road, at either 135 Regency Square, Lafayette, LA 70508 or emailed to dax@fenstermaker.com.

Copies of the Draft EA are available for review during normal business hours at **LA DOTD District 04 Office**, 3339 Industrial Drive, Bossier City, LA; **FHWA Division Office**, 5304 Flanders Drive, Suite A, Baton Rouge, LA ; **LA DOTD Environmental Section Office**, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA; **Louisiana State Library**, 701 N. 4th Street, Baton Rouge, LA; **Noel Memorial Library**, **LSU-S**, One University Place, Shreveport, LA; **Bossier Central Library**, 2206 Beckett Street, Bossier City, LA; **Aulds Library**, 3950 Wayne Avenue, Bossier City, LA; **Benton Library**, 115 Courthouse Drive, Benton, LA; **East 80 Library**, 1050 Bellevue Road, Haughton, LA; **Haughton Library**, 106 West McKinley, Haughton, LA; **Koran Library**, 5413 Hwy 527, Haughton, LA; and **Plain Dealing Library**, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

For more information contact Dax Douet at 337-237-2200 or dax@fenstermaker.com

ATTACHMENT C

Wafer Road Extension Public Hearing

STATE PROJECT NO. 700-08-0132









F.A.P. NO. DE-0807 (502)

Louisiana Department of Transportation and Development (LA DOTD), in conjunction with the Federal Highway Administration (FHWA) is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish. The Northwest Louisiana Council of Governments (NLCOG) in conjunction with LA DOTD and FHWA will hold an Open House Public Hearing for the proposed Wafer Road Extension.

Public Hearing details are:

When: Tuesday, January 10, 2012 5:00PM to 8:00PM

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ATTACHMENT D PRESS RELEASE

NEWS RELEASE

For Immediate Release: January 9, 2012

Contact: Dax Douet (337) 237-2200 Dax@fenstermaker.com

OPEN HOUSE PUBLIC HEARING NOTICE State Project No. 700-08-0132 F.A.P. No. DE-0807 (502) Wafer Road Extension (Winfield Road to Bellevue Road) Bossier Parish, Louisiana

The Northwest Louisiana Council of Governments (NLCOG) in conjunction with Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA) will hold an Open House Public Hearing at the following time and place:

Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006

LA DOTD, in conjunction with the Federal Highway Administration is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish.

Detailed information on the Draft Environmental Assessment (EA) will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing is to receive comments on the proposed project. Representatives of NLCOG and LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. In addition to comments received during the public hearing, LA DOTD will accept written comments on the Draft EA through Jan. 20, 2012. Comments on the project should be directed to: Dax Douet, Project Manager, Attn: Wafer Road, at either 135 Regency Square, Lafayette, LA 70508 or emailed to dax@fenstermaker.com.

Copies of the Draft EA are available for review during normal business hours at LA DOTD District 04 Office, 3339 Industrial Drive, Bossier City, LA; FHWA Division Office, 5304 Flanders Drive, Suite A, Baton Rouge, LA; LA DOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA; Louisiana State Library, 701 N. 4th Street, Baton Rouge, LA; Noel Memorial Library, LSU-S, One University Place, Shreveport, LA; Bossier Central Library, 2206 Beckett Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 116 West McKinley, Haughton, LA; Koran Library, 5413 Hwy 527, Haughton, LA; and Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the Hearing.



ATTACHMENT E PRESS COVERAGE



Calendar of Events

News

Police Jurors

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Employment

CVEU Permits

Parish Home

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Bossier Parish Police Jury

Police Jury News

Wafer Road Extension Project - Public Comments (01/11/2012)

Public comments on the Wafer Road Extension Project must be received by January 20, 2012, and should be addressed to Mr. Dax Douet, 135 Regency Square, Lafayette, LA 70508 Comments may also be sent via email to dax@fenstermaker.com, or faxed to (337) 232-3299. Please see the attached comment form.

Bossier Parish Purchases Red Chute Utilities (12/22/2011)

Bossier Parish's Consolidated Waterworks/Sewerage District No. 1, finalized its purchase of Red Chute Utilities on Wednesday, December 21, 2011. Red Chute Utilities provides water and sewer service to the citizens of Dogwood Subdivision. This is a tremendous step and is vital to the continued growth and development of Bossier Parish. Existing customers of Red Chute Utilities may call 742-9748 for additional information.

Wafer Road Extension - Notice of Availability of Draft Environmental Assessment, Open House Public Hearing Notice (12/11/2011) News release attached.

ROAD CLOSURE (11/15/2011)

The Bellevue Road will be closed beginning December 1, 2011, for railroad crossing repair, and will remain closed until further notice.

FEMA 90-Day Appeal Period; Proposed Base Flood

Elevations (09/13/2011)

Preliminary Flood Insurance Study and Flood Insurance Rate Map, Community #220031, Bossier Parish.

Lawson Bo Brandon Sports Complex Photos (09/12/2011)

Photos of the earth work provided by the 921st Engineer Company of the 528th Engineer Battalion (Monroe) for the construction of additional baseball fields at the Lawson Bo Brandon Sports Complex (formerly known as the Princeton Sports Complex) in Haughton.

Recycling Drop-Off Site at Bossier Parish Courthouse (08/29/2011)

Parish residents may drop off items for recycling at the north parking lot of the Bossier Parish Courthouse.

North Bossier Shared Use Trail (08/14/2011)

Upon approval from the Department of Transportation & Development in approximately 6-8 weeks, contract will be signed and job awarded. It will take approximately 90 days to construct.



Rick / Presi



Calendar



Upcoming



Police Procee



Bossier Code of O



Bossier Parish Police Jury

Parish News

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Police Jury Home	
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Wafer Road Extension Project - Public Comments 01/11/2012 Public comments on the Wafer Road Extension Project must be received by January 20, 2012, and should be addressed to Mr. Dax Douet, 135 Regency Square, Lafayette, LA 70508 Comments may also be sent via email to dax@fenstermaker.com, or faxed to (337) 232-3299. Please see the attached comments form. all news .»

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Rick / Presi



Calendar







Police Procee



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Public Hearing to Discuss Wafer Road Extension



A public hearing takes place tomorrow (Jan. 10th) — to discuss extension of a local road. It's being held from 5 to 8 p.m. at the Bossier Parish Courthouse in Benton. The Louisiana Department of Transportation and Development and the Federal Highway Administration are proposing to extend Wafer Road in Bossier Parish 3.6 miles from Winfield Road to Bellevue Road. Detailed information on the Draft Environmental Assessment will be presented at the open house public hearing. That includes project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. You can find more information on the plan on the state DOTD's website. www.dotd.la.gov/planning/environ/

Filed Under: Bossier Parish, DOTD, public meeting, Wafer road extension Category: Shreveport/Bossier City

Public hearing on Wafer Road extension

TUESDAY 10 JANUARY 2012 10 24 PRESS TRIBUNE STAFF NEWS - LOCAL NEWS

Like I Be the first of your friends to like this.

The Northwest Louisiana Council of Governments (NLCOG) in conjunction with Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA) will hold an Open House Public Hearing at the following time and place:

Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006

LA DOTD, in conjunction with the Federal Highway Administration is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish.

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Copies of the Draft EA are available for review during normal business hours at LA DOTD District 04 Office, 3339 Industrial Drive, Bossier City, LA; FHWA Division Office, 5304 Flanders Drive, Suite A, Baton Rouge, LA; LA DOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA; Louisiana State Library, 701 N. 4th Street, Baton Rouge, LA; Noel Memorial Library, LSU-S, One University Place, Shreveport, LA; Bossier Central Library, 2206 Beckett Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 116 West McKinley, Haughton, LA; Koran Library, 5413 Hwy 527, Haughton, LA; and Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at LA DOTD's website at: http://www.dotd.la.gov/planning/environ/. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

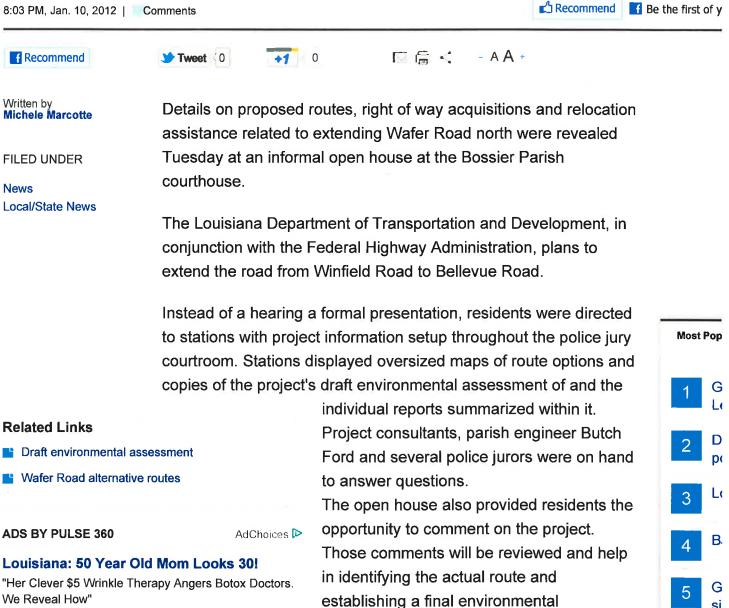
Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the Hearing.

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UPDATED: New details revealed on Wafer Road pro



We Reveal How" consumerlifestyletrends.com/

Filing For Bankruptcy

Thinking About Filing Bankruptcy? Free Evaluation With A Lawyer. www.Chapter7.com

Mortgage Rates Hit 2.75% (3.1% APR)

If you owe under \$729k, you probably qualify for the Govt Refi Program. www.MortgageRatesExperts.com assessment, said Sherry Eastin, a representative for the Lafayette firm consulting on the project. The firm will continue to accept comments through Jan. 20. They can be e-mailed to dax@fenstermaker.com, faxed to 337-232-3299 or mailed to Fenstermaker & Associates, ATTN: Wafer Road, 135

Regency Square, Lafayette, LA 70508.

Check back here and in tomorrow's edition for more in this story.

View Comments | Share your thoughts »

TOP VIDEO PICKS selected by Taboola



Red River Refuge Jan 10, 2012



Toyota unveils NS4 plugin hybrid concept Jan 10, 2012



Dance at the Detroit auto show Jan 10, 2012

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Greenwood man arrested over alleged land swindles (Shreveport Times)

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The 40 Worst Pro Coaches in Sports History (Bleacher Report)

[?]





LSU playe Dec. 19, 201

PHOTO GA



Jan. 6-10 Bookings







READEF

KTBS.com

Proposed Bossier Roadway Extension Requires Public Comment

POSTED: 10:10 pm CST January 10, 2012 UPDATED: 11:22 pm CST January 10, 2012



Bossier Parish's population is growing fast and mostly northward toward the Benton area.

Of course, a booming population means more crowded roadways.

New roadways are needed to help with the growing pain, and a planned extension of Wafer Road is a good start.

The proposed extension will stretch between Winfield and Bellevue Roads.

"There is a need for more north to south connectivity, and this is one of the projects." Engineering Director of C.H. Fenstermaker Dax Douet said at a meeting in the Bossier Parish Courthouse.

That meeting was to present the public with three alternatives for the road. Those alternatives were developed during a federally funded study of the extension project. The study was done over the past year to ensure the new road creates no serious problems to people in the area or the environment.

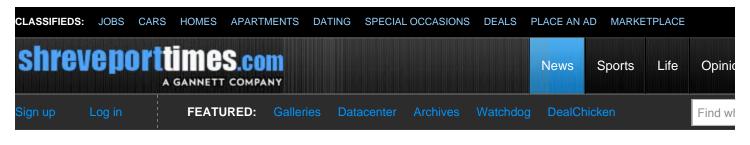
The third alternative is the preferred option of the parish. This alternative stretches the extension the furthest north, nearly bisecting Bellevue Road. It is also better suited for development in the area. The public has ten days to approve or disapprove alternative three or the others.

"Depending on the public comment tonight (Tuesday), if there's not much outcry on alternative three I foresee this alternative going forward." Douet said.

Going forward means getting final approval from the Federal Highway Commission.

However, even if the Commission approves the Wafer Road extension, there is no money to build it. Bossier Parish still needs to find the funds.

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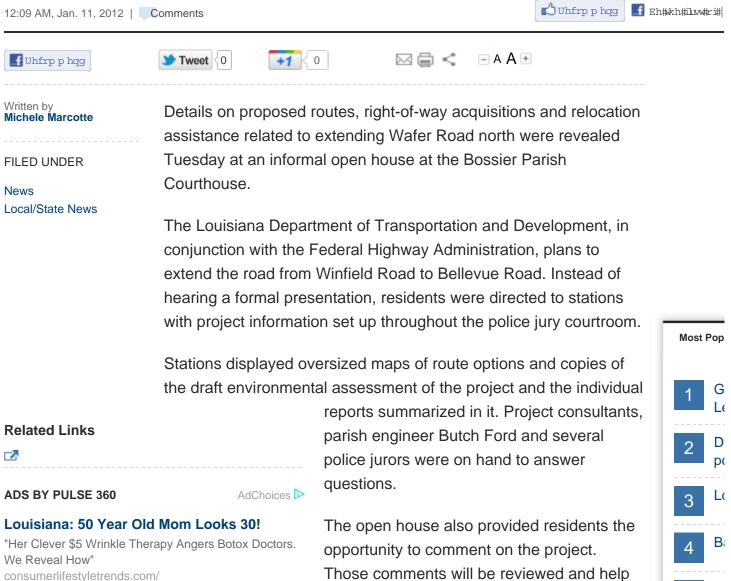
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Bossier residents learn more details on Wafer Roa



Filing For Bankruptcy

Those comments will be reviewed and help in identifying the actual route and

Thinking About Filing Bankruptcy? Free Evaluation With A Lawyer. www.Chapter7.com

Mortgage Rates Hit 2.75% (3.1% APR)

If you owe under \$729k, you probably qualify for the Govt Refi Program. www.MortgageRatesExperts.com establishing a final environmental assessment, said Sherry Eastin, a representative for the Lafayette firm consulting on the project.

The firm will continue to accept comments through Jan. 20. They can be emailed to

dax@fenstermaker.com, faxed to (337) 232-3299 or mailed to Fenstermaker & Associates, ATTN: Wafer Road, 135 Regency Square, Lafayette, LA 70508.

Three potential routes were displayed Tuesday, each with different ending points on Bellevue Road. The first is the shortest at 1.9 miles and ends just south of Pease Meadow Lane. The second is 2.2 miles and ends near Pease Chapel. The third and preferred route in the environmental assessment makes a gradual curve northeast to the east side of the Parker Road intersection. It is about four miles.

Bossier Parish Juror Glenn Benton, who answered resident questions on the routes, said the first route did not open up as much land for future development as the third route did.

He said the project will help relieve traffic congestion and provide area residents an easier way to get to Haughton than traveling down to U.S. Highway 80.

"Right now, there is only one way in and one way out," said Lisa Winfield, who lives on Winfield Road, just east of Wafer Road. "We need another north-south road."

She said she liked the route and was eager to see the project move forward.

Likewise, Minnie Marshall Morris, who owns property off Wafer Road, said she wants the project to come to fruition.

"This is going to be great for us," she said.

Eastin said once all the comments have been reviewed, a final environmental assessment will be produced.

Most Vie



Shrevepo finances Jan. 04, 201

PHOTO GA



Jan. 6-10 Bookings

State and federal agencies involved in the project will then review its findings, and if they agree with them, engineering work can begin when funding becomes available.

View Comments | Share your thoughts »

TOP VIDEO PICKS selected by Taboola



Dance at the Detroit auto show Jan 10, 2012



Talkin' Football: Bossier Edition Oct 27, 2011

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New Orleans welcomes BCS Championship Jan 9, 2012



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ATTACHMENT F PROPERTY OWNER LETTER



Engineers · Surveyors Environmental Consultants

December 12, 2011



RE: Public Hearing for Wafer Road Extension (Winfield Road to Bellevue Road) State Project No. 700-08-0132 Bossier Parish, Louisiana

Dear

Louisiana Department of Transportation and Development (LA DOTD), in conjunction with the Federal Highway Administration (FHWA) is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road. The project is located in Bossier Parish. The Northwest Louisiana Council of Governments (NLCOG) in conjunction with LA DOTD and FHWA will hold an Open House Public Hearing for the proposed Wafer Road Extension at the following time and place:

Tuesday, January 10, 2012 5:00PM to 8:00PM Bossier Parish Courthouse 204 Burt Boulevard Benton, LA 71006

Detailed information on the EA will be presented at the Public Hearing, including project alternatives and information on wetlands, right-of-way acquisition and relocation assistance. The purpose of the Public Hearing is to receive comments on the proposed project. Representatives of NLCOG and LA DOTD will be present to answer questions related to the project. All interested persons are invited to attend. The Public Hearing format will be an open house with looping presentation and handout. Oral comments will be received at the Hearing. Written comments may also be submitted at the Hearing, or may be mailed to the following address, postmarked within ten days following the Hearing date (by January 20, 2012):

> Dax Douet Fenstermaker & Associates, Inc. Attn: Wafer Road 135 Regency Square Lafayette, LA 70508

Detailed information relative to the project is available in the Draft Environmental Assessment (EA). This document is available for review and/or purchase at the Department's District 04 office, located at 3339 Industrial Drive, Bossier City, LA. The Draft EA is available for review at the Federal Highway Administration Division Office at 5304 Flanders Drive, Suite A, Baton Rouge, LA and at the LADOTD Environmental Section Office, 1201 Capitol Access Road, Room 504D, Baton Rouge, LA. The Draft EA is also available for review at the following: Bossier Central Library, 2206 Beckett

Street, Bossier City, LA; Aulds Library, 3950 Wayne Avenue, Bossier City, LA; Benton Library, 115 Courthouse Drive, Benton, LA; East 80 Library, 1050 Bellevue Road, Haughton, LA; Haughton Library, 116 West McKinley, Haughton, LA; History Center, 2206 Beckett Street, Bossier City, LA; Koran Library, 5413 Hwy 527, Haughton, LA; an Plain Dealing Library, 208 East Mary Lee Avenue, Plain Dealing, LA. The Draft EA can also be accessed online at LA DOTD's website at: <u>http://www.dotd.la.gov/planning/environ/</u>. Click on the "Wafer Road Environmental Assessment" Folder under the "Environmental Documents" heading.

Should you require special assistance due to a disability in order to participate in this Public Hearing, please contact Dax Douet at Fenstermaker & Associates, Inc. by telephone at (337) 237-2200 at least five (5) working days prior to the Hearing.

Regards,

Krista Goodin, AICP C.H. Fenstermaker & Associates, Inc.



445 North Blvd · Suite 601 · Baton Rouge, LA 70802 · 225.344.6701 phone · 337.232.3299 fax · www.fenstermaker.com

ATTACHMENT G PUBLIC HEARING SIGN-IN SHEETS



WAFER ROAD PUBLIC HEARING TUESDAY, JANUARY 10, 2012 @ 5:00PM TO 8:00PM

NAME	AGENCY	EMAIL	TELEPHONE
DAX DOVET	FENSTERMAKER	DAXC FENSTERMAKER	OM 337-237-220
SHEERY EXSTIN	U.	SHERRYECFENSTERMINE	
PRA GOODIN		MUSIAC FENSIELMANE	
MIKELA NAGURA	11	MIKELACTENSTERMAKER	
Bob Taylor	Lo DOTD DOHN SANDERS	beb, taylor@ La, gov	318-549-8456
MICHA DUFFY	COYLE ENGR Mic	b coyle engineering -bossier.co	m (312) 746-8987
JAMES EDERWINE	RC Goodwins + Assoc	jeberwise @ Regood win con	504 837 1940
Donald R. Thomas	_		
monie L. Gresp	R/W- BPPJ	mgrappeo mon.com	(318)453-086
Wardy Bennet	BPPJ		
BUTCH FORD			
GLENN BENTON			
EICK ANDRY			
MAC RUNIMER			
Charle Coyle	Coyle Engineering		
5 Kat Rogers	Coyle Engineering NLCOS		
J			



WAFER ROAD PUBLIC HEARING TUESDAY, JANUARY 10, 2012 @ 5:00PM TO 8:00PM

NAME	ADDRESS	EMAIL	TELEPHONE
Hans 1. Dyck	1202 EVANGELING BOSSIER OG LA	Lydelig & bell walt net	
MILLE THORNTON	21 STELLING RANCH RD HAUGHTON LA 71037	ANO HAMC O NOL. COM	390 8367
* Minnie morries			
Arri Pease	169 E Peace Rd Nauchton La 7/037	Tpease 006@ yahow , com	318 453-3435
BandyPen	10 10 11	(v. 1. 4	3/8465-1071
Donald R. HIOMAN	341 Pease Rd HAaghter, La 71037	don thomas @ Souldow Link Maily in	949-3958
Anor marin	2701 Balloul Pl	\sim	ALA 1841
T2 Dement	1573 Dement Rd Douling La 71023		745-3389
Patinia Devent	1573 Doment Rd. Douglas 2071023		-4
Lisa Werfund	1042 Marfuel Ro		949-6763
Jam 7. Mr. Willion	305 Biller Rd		949-321
Bille for Smith	114 Lawrence d		949 2100
* minnie morrisstad 2			
MEDIA OCH KSLA	B3? (Check online for stories)		

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State Project No. 700-08-0132 Federal Project No. DE-0807 (502)

WAFER ROAD PUBLIC HEARING TUESDAY, JANUARY 10, 2012 @ 5:00PM TO 8:00PM

ADDRESS	EMAIL	TELEPHONE
2765 Bellevue Rd		401-5597
134 Chinneyed	burnshe Legis. State. 1 a. US	949-2463
		225-933-125
	ADDRESS 2765 Bellevue Kd 13464, marey W	2765 Bellevue Rd

ATTACHMENT H PUBLIC HEARING HANDOUT

What Is an Environmental Assessment?

An Environmental Assessment (EA) is a concise public document that a Federal agency prepares under the National Environmental Policy Act (NEPA) to provide sufficient evidence and analysis to determine whether a proposed agency action would require preparation of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). It also includes a public involvement process.

Why is an EA being prepared?

This EA is being prepared to assess potential impacts associated with the proposed Wafer Road Extension project. The purpose of this roadway extension project is to increase vehicular mobility by offering an additional north-south roadway within Bossier Parish that will attempt to alleviate traffic congestion at intersections within the Project Study Area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within central areas of the parish.

The EA analyzes the following major issues and/or impacts to: wetlands, air and water quality, noise, floodplains, scenic streams, endangered and threatened species, historical and cultural resources, hazardous wastes (Phase I environmental site assessment), land use impacts, prime farmland soils, social impacts, environmental justice, relocation impacts, and economic impacts. The EA also evaluates a range of alternatives to the proposed action, including the no action alternative. Information obtained following the public hearing will be considered in finalizing the preferred alternative in the Final EA.

What Is the National Environmental Policy Act?

The National Environmental Policy Act of 1969 (NEPA) requires the analysis of potential environmental effects associated with major federal actions. NEPA ensures that environmental factors are considered equally with the technical and economic components of a decision to be considered. NEPA also requires that potential environmental effects, and any adverse effects that cannot be avoided, be identified and alternatives to the proposed be considered. NEPA requires consultation with all relevant federal agencies to determine these impacts.

NEPA is a full disclosure law with provisions for public access to and full participation in the federal decision-making process. The act's intent is to protect, restore, or enhance the environment through well-informed federal decisions.

There will be two major NEPA compliance documents associated with this action, to include: An Environmental Assessment (EA) which analyzes environmental and socio-economic impacts of the proposed action;

Finding of No Significant Impacts (FONSI) is a document that briefly presents the reasons why a proposed action, not otherwise excluded, will not have a significant effect on the human environment and for which, therefore, an Environmental Impact Statement will not be prepared.

NEXT STEPS

- Public Comments Due Jan. 20, 2012
- Address Comments
- Identify Preferred Alternative
- Prepare Final EA
- Secure Environmental Closure

For more information on NEPA, A Citizens Guide to NEPA can be downloaded from the internet at: http://ceq.hss.doe.gov/nepa/Citizens Guide Dec07.pdf

For more information, please contact:

Dax Douet, Project Manager, C.H. Fenstermaker & Assoc., (337) 237-2200, Dax@Fenstermaker.com

The Louisiana Department of Transportation and Development (LA DOTD), in conjunction with the Federal Highway Administration (FHWA) is proposing to extend Wafer Road approximately 3.6 miles from Winfield Road to Bellevue Road in Bossier Parish, Louisiana.



WHAT IS THE PROPOSED ACTION?

The Proposed Action is the implementation of a new north-south roadway corridor that extends Wafer Road from Winfield Road to Bellevue Road. There are currently three (3) proposed roadway alternatives being presented.

WHAT IS THE PURPOSE OF THIS PUBLIC HEARING?

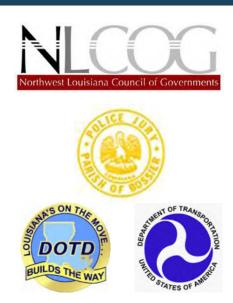
The purpose of this public hearing is to seek input from individuals and community organizations on issues and concerns related to the potential impacts associated with the proposed extension of Wafer Road from Winfield Road to Bellevue Road.

This hearing is an informal open-house format, which includes a station to view a project presentation, a station to view the project study area and alternatives, and a station to provide public comment. This open forum will allow the public time to review project exhibits and to speak with project representatives.

A comment form is included with this brochure and additional forms are located at Station No. 5. These comment forms can be mailed or e-mailed to the appropriate contact information shown on the comment form, or can be filled out and left at the comment form collection boxes. There will also be an opportunity to leave an oral comment with a court reporter at the same station.

PUBLIC HEARING

State Project No. 700-08-0132 FAP No. DE-0807 (502) Bossier Parish, Louisiana



ENVIRONMENTAL ASSESSMENT AND LINE AND GRADE STUDY

WAFER ROAD

Winfield Road to **Bellevue Road**

January 10, 2012 5:00 pm to 8:00 pm

Bossier Parish Courthouse 204 Burt Blvd. Benton, LA 71006

WHAT IS THE PURPOSE AND NEED FOR THIS PROJECT?

PURPOSE

The purpose of this project is to increase vehicular mobility and transportation linkage by offering an additional north-south roadway within the central portion of Bossier Parish that will attempt to enhance mobility of area, improve transportation linkage, stimulate economic growth by providing access to developable lands, help to minimize congestion along existing roadways within the project study area, reduce travel delay along other existing north-south roadway facilities (i.e., Louisiana Highway 157), and shorten emergency response times within this area of the parish.

NEED

Over the past several years, the most significant residential development in the parish has occurred beyond the city limits of Bossier City, and growth within the areas north of Bossier City is projected to continue. According to officials of Bossier Parish, existing subdivisions along with several planned large scale subdivisions will continue to hinder the efficiency of the existing parish transportation infrastructure. Planning in advance for thoroughfare development is important to:

- Meet future transportation demands as both the City and Parish continue to develop,
- Improve safe and efficient movement of people and goods throughout this area,
- Improve the economic condition of the Project Study Area by increased accessibility to developable lands; and
- Improve area-wide mobility.

SUPPORTING INFORMATION

The following items support the need for the proposed project improvements. These items have been identified as regional transportation based needs:

Minimize Congestion

According to the U.S. Census Bureau, Bossier City and Bossier Parish have grown at a faster pace than the State of Louisiana as a whole in each of the last three censuses. Population growth is projected to continue in the Parish. This project is an identified need in the 2002 "Bossier Comprehensive Land Use and Development Master Plan (Bossier Plan)" Thoroughfare Plan Update as a principal arterial. The proposed improvements would alleviate congestion by providing an additional connector to Bellevue Road.

Optimize Use of Existing Transportation

The Proposed Action is in line with the Parish's long-term development plan for the upgrading and extending of the transportation network in an orderly and timely fashion to accommodate the mobility of the public. The Proposed Action is consistent with the Bossier Parish's plans to enhance Wafer Road and extend it south to US 79/80.



Image provided by Fenstermake

Relate Transportation to Economic Growth

The Proposed Action will help meet future travel demands in the Study Area as both the City and Parish continue to experience population growth by extending the transportation network in the Parish. This Proposed Action will aid in the improvement of the economic condition of the Project Study Area by increasing accessibility to developable lands, and address the need to create north/ south expressways throughout the parish.

In preparation for accommodating future growth, the parish has been planning and integrating a wastewater treatment plant and collection system. A project corridor has been developed consisting of four phases with phase one being a new sewer system along the Highway 79/80 corridor. Phase two is a new treatment plant on the Red River. Phases three and four will include new sewer lines in north Bossier. This new sewer district will attract new development to available lands within the project study area, as proposals for new subdivisions have been turned down due to lack of sewer service. Currently, Bossier Parish is in the process of obtaining funding as it becomes available to purchase existing local utility systems throughout the parish in hopes of linking them together for the purpose of creating a parish-wide water and sewer district.

DESCRIPTION OF PROJECT ALTERNATIVES

ALTERNATIVE NO. 1

From the common corridor, Alternative No. 1 diverges northwesterly to a termination point on Bellevue Road approximately 0.4 miles south of Pease Meadow Lane. Alternative No. 1 is approximately 1.9 miles in length and is considered the shortest route of all three alternatives. The land use along this alternative is mostly undeveloped properties with commercial timber tracts and some low density residential tracts of land. Alternative No. 1 is classified as an urban collector roadway throughout its length. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes and eight foot wide paved shoulders with open drainage ditches on both sides of the roadway.

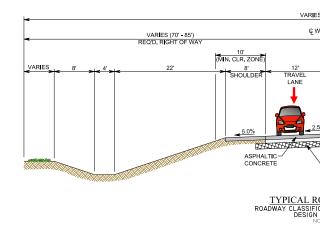
ALTERNATIVE NO. 2

From the common corridor, Alternative No. 2 continues in a northerly direction until it curves to the northwest just before intersecting with Bellevue Road, approximately 0.3 miles north of Pease Meadow Lane. Alternative No. 2 is approximately 2.2 miles in length. Large commercial timber tracts of land and low density residential land use represent the majority of the mostly undeveloped land along this alternative. Alternative No. 2 is classified as an urban collector roadway throughout its length. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes with eight foot wide paved shoulders and open drainage ditches on both sides of the roadway.

ALTERNATIVE NO. 3

From the common corridor, Alternative No. 3 makes a gradual curve to the northeast before straightening out to the north. This alternative intersects with Bellevue Road (midway between Parker Road and Keri Lane) approximately 3.3 miles south of the intersection of Bellevue Road and LA 157 and 4.5 miles north of the intersection of Bellevue Road and Winfield Road.

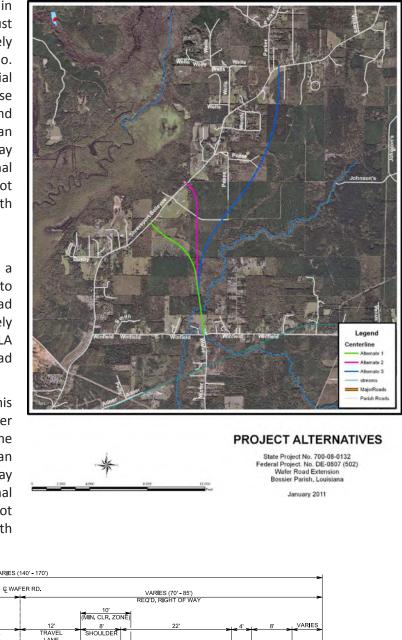
Alternative No. 3 is approximately 4.0 miles in length. This alternative traverses many of the same commercial timber tracts and low density residential tracts of lands as the other alternatives. Alternative No. 3 is classified as an urban collector roadway throughout its length. The roadway typical section will consist of a two lane bi-directional asphaltic roadway with 12-foot travel lanes with eight foot wide paved shoulders and open drainage ditches on both sides of the roadway.



NO BUILD ALTERNATIVE

The "no-build" alternative provides a baseline condition for comparing the impacts of the study alternatives, and is the projected future condition that would exist if the proposed project were not constructed. To analyze the "no-build" alternative, traffic volume projections for estimated implementation year 2013 and design year 2033 within the project study area were developed based on existing traffic, knowledge of planned projects, and engineering judgment. A projected annual growth rate of 1% was provided by the LDOTD Office of Planning and Programming to develop "no-build" traffic volumes.

As a result of anticipated congestion problems to the surrounding transportation infrastructure, the "no- build" alternative is inconsistent with the transportation goals outlined in the Purpose and Need and the Bossier Master Plan. It would also be inconsistent with the requests of officials with NLCOG and Bossier Parish and the police juror who represents the district in which the project study area encompasses.



ATTACHMENT I STATION CHECKLIST/COMMENT FORM INSERT

PUBLIC HEARING STATION CHECKLIST

The format of this public hearing is an open-house style where attendees can visit each "station" to learn about the project, visit with the project team members and provide comments. Please use this form to track your visit to each station.



STATION #1 - PLEASE SIGN IN

Welcome and please sign in. Please pick up your hearing handouts and comment form.



STATION #2 – PRESENTATION

A 15-minute presentation to familiarize yourself with the NEPA process and proposed project.



STATION #3 – EXHIBITS

Visit with team members and view the project exhibits.



STATION #4 – COMMENTS

Please take a moment to let us know your thoughts. Either fill out the comment form on the back of this page and turn it in at Station #5 OR state your verbal comment to the Court Reporter. You may also email, fax or mail your comment form to the address provided.

Thank you for attending!

Your participation is vital to ensuring that decisions made about this proposed project reflect the needs of the community and are based on good information. Please take a moment to document your comments or questions below. We will respond to your comments, questions, and concerns for the duration of this Environmental Study process.

Before you leave tonight, please turn in your comment form to Station # 4 OR state your verbal comment to the court reporter. You may also email, fax or mail the comment form to the number or address below. Comments should be postmarked no later than January 20, 2012 to be included as part of the official record.

PLEASE PROVIDE YOUR COMMENTS, QUESTIONS AND CONCERNS FOR THIS PROJECT:

Name:	
	Would you like to receive
Address:	future updates on the <i>Wafer</i> YES NO
Email:	Road (Winfield Rd to Bellevue Rd) project?
	· / /· · J · · ·

Comments may be emailed to dax@fenstermaker.com, faxed to Dax Douet at 337.232.3299 or sent by US Mail to: Fenstermaker & Associates, ATTN: Wafer Road, 135 Regency Square, Lafayette, LA 70508.

ATTACHMENT J PUBLIC HEARING POWERPOINT PRESENTATION



PUBLIC HEARING



WAFER ROAD EXTENSION (Winfield Road to Bellevue Road)

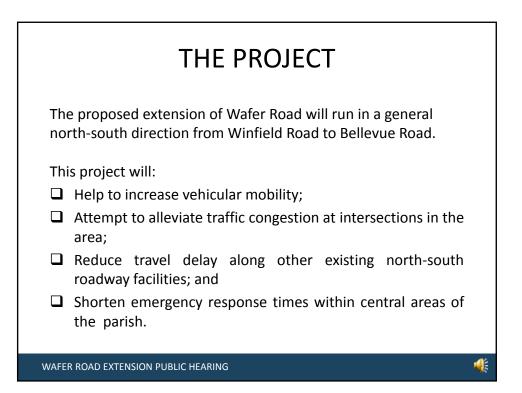
ENVIRONMENTAL ASSESSMENT AND LINE & GRADE STUDY

> January 10, 2012 5:00PM to 8:00PM

Bossier Parish Courthouse 204 Burt Boulevard Benton Louisiana

4

HOSTED BY: DOTD DS THE WAY Northwest Louisiana Council of **Bossier Parish** LA Department of Federal Highway Transportation & Governments Police Jury Administration Development **COYLE ENGINEERING PRESENTED BY:** FENSTERMAKER CO. INC.= C.H. Fenstermaker & Associates, Inc. IN ASSOCIATION WITH: GOODWIN **Urban Systems** 4 WAFER ROAD EXTENSION PUBLIC HEARING

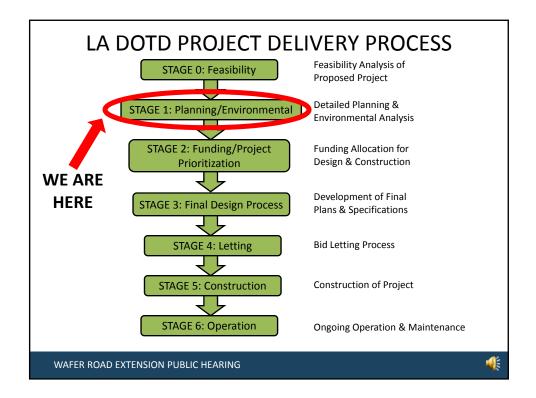


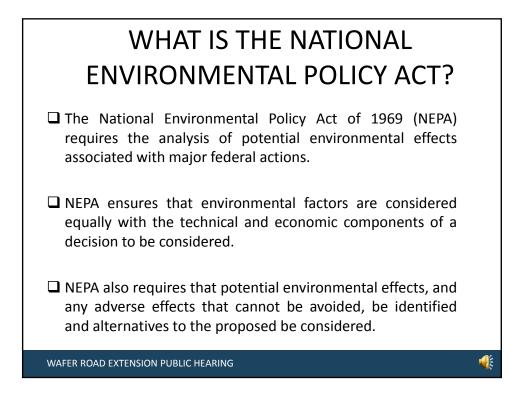
WHAT IS THE PURPOSE OF THIS PUBLIC HEARING?

- Seek input on issues and concerns related to potential impacts;
- Allow the public time to review project exhibits and talk informally with representatives from the project team; and
- □ Allow attendees to review the project study area, project concepts, and identify issues and concerns.

WAFER ROAD EXTENSION PUBLIC HEARING

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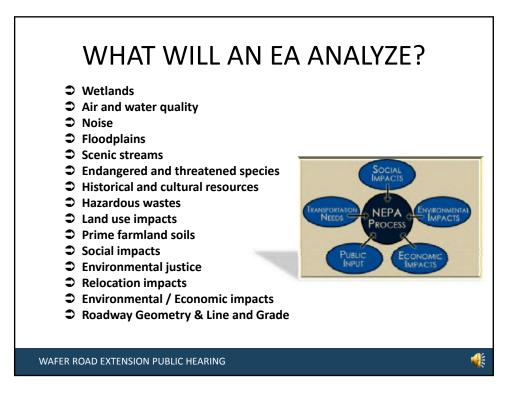


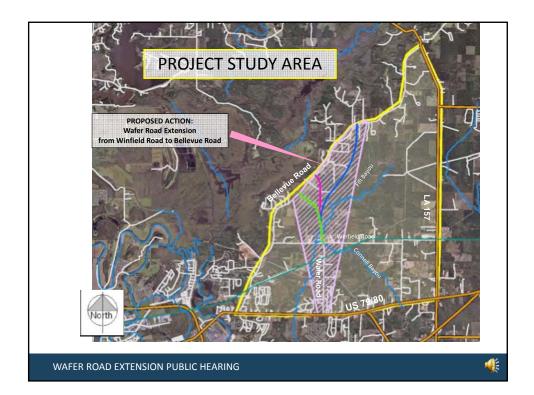
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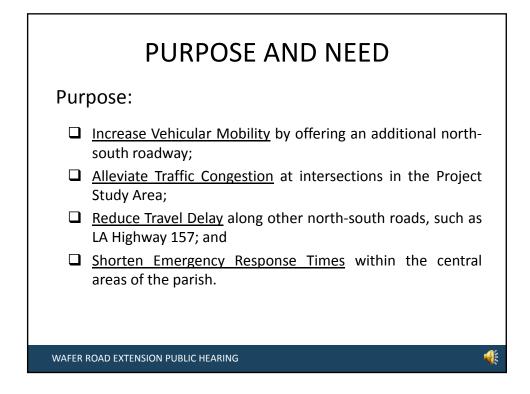
WHAT IS AN ENVIRONMENTAL ASSESSMENT?

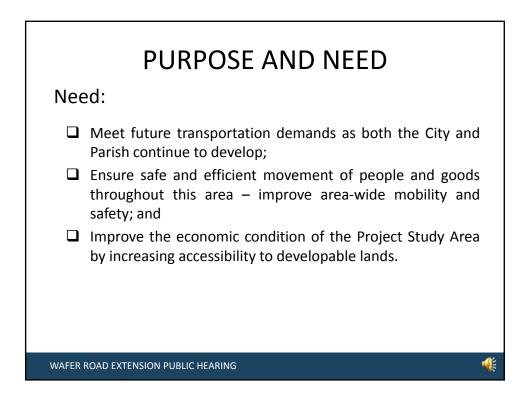
- An Environmental Assessment (EA) is a concise public document that a Federal agency prepares under the National Environmental Policy Act (NEPA) to provide sufficient evidence and analysis to determine whether a proposed agency action would require preparation of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).
- □ An *Environmental Assessment* includes a public involvement process... Like the hearing you are attending this evening.

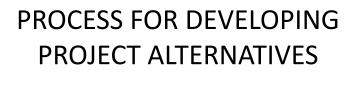
WAFER ROAD EXTENSION PUBLIC HEARING











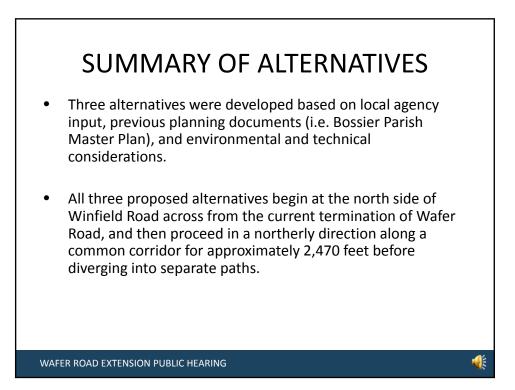
- Develop alternatives that would alleviate traffic congestion at intersections in the Project Study Area.
- Develop alternatives that meet project constraints and appropriate design criteria as required by LA DOTD.
- Develop alternatives that will seek to minimize encroachment into the designated floodway.
- Develop alternatives that will facilitate accessibility to developable lands in the Project Study Area.

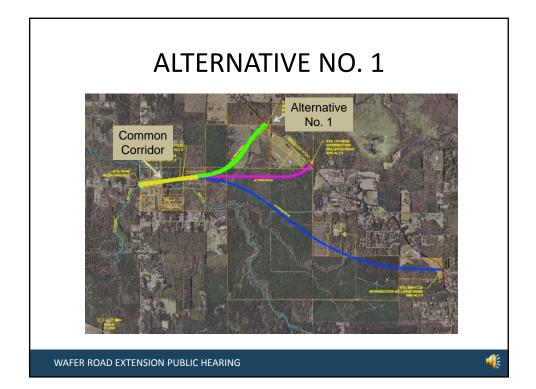
WAFER ROAD EXTENSION PUBLIC HEARING

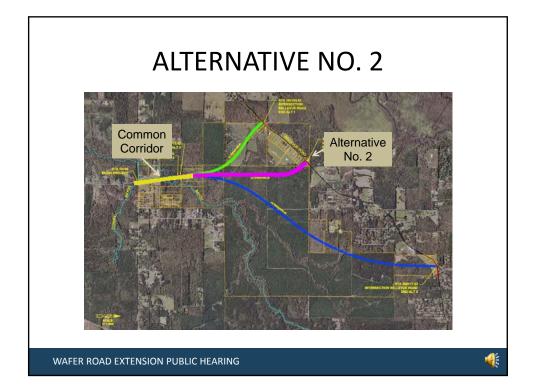


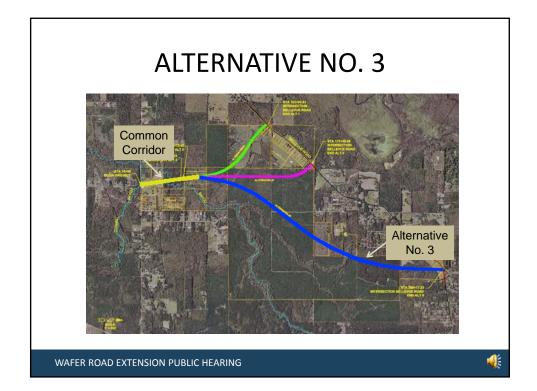
- □ Considers local area socioeconomics, topography, future travel demand, and other infrastructure improvements.
- □ Fits its physical setting, and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.

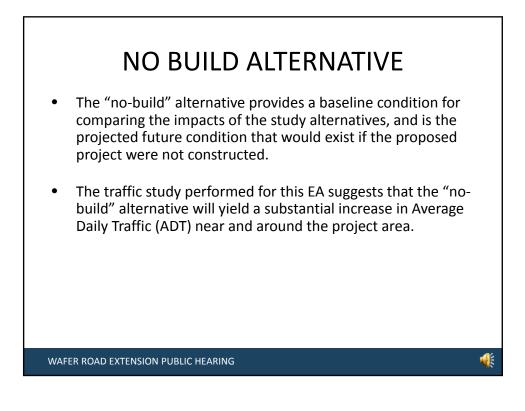
WAFER ROAD EXTENSION PUBLIC HEARING











NO BUILD ALTERNATIVE

- A result of a "no-build" alternative will be the continued use of existing roadways by local commuters to travel from regions north of US 79/80 to areas near or around the urbanized areas of Bossier City.
- This continued use will cause these roadways to become more congested in the future with no reductions in travel time, thereby causing impacts to emergency response times, transporting of commodities, means of egress and ingress into the central portions of Bossier Parish, and a continued stress to the transportation infrastructure of the rural areas of Bossier Parish.

WAFER ROAD EXTENSION PUBLIC HEARING

Consideration	Alternative No. 1	Alternative No. 2	Alternative No. 3	No-Build
ncrease Capacity	Yes	Yes	Yes	No
Ability to Provide Mobility Along Wafer Road	Yes	Yes	Yes	No
Enhancement of Safety	Yes	Yes	Yes	No
Relocations	No	No	No	No
mpacts to Existing Residences	2	2	1	No
mpacts to Existing Businesses	No	No	No	No
loodplains Direct Impacts	11.25 ac	13.91 ac	15.59 ac	No
Wetland Impacts (See Note)	0.37 ac.*	0.37 ac.*	3.588 ac.	No
mpacts to Other Waters	0.16 ac.	0.46 ac.	0.23 ac.	No
Prime Farmland	0.9 acres	9.0 acres	28.0 acres	No
Consistent with Local Plans for Development	No	No	Yes	No
Cultural Impacts	No	No	No	No
ength	9,104 feet	10,749 feet	19,918 feet	-
ROW Acquisition Acreage	30.3 ac	35.1 ac	69.24 ac	-
ROW Costs	\$181,800	\$210,600	\$415,440	-
Construction cost (with contingencies)	\$3,224,065.94	\$3,783,428.30	\$8,000,059.76	-

WAFER ROAD EXTENSION PUBLIC HEARING

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SELECTION OF PREFERRED ALTERNATIVE

- Alternative No. 3 provides for a longer route that traverses through lands that are more favorable to spurring development than Alternatives No. 1 and No. 2;
- The terminus of Alternative No. 3 along Bellevue Road is proposed to be located within the more populated areas of the study area as compared to both Alternatives No. 1 and No. 2 which will give areas north of Bellevue Road the ability to develop more rapidly;

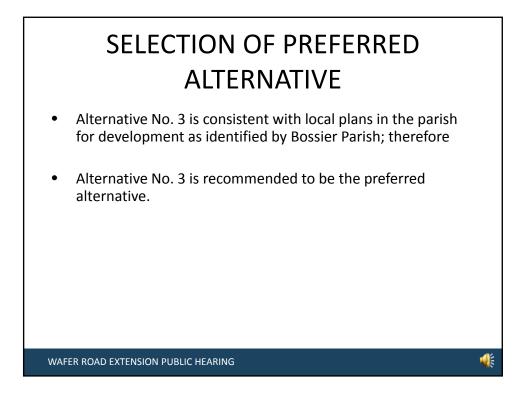
WAFER ROAD EXTENSION PUBLIC HEARING

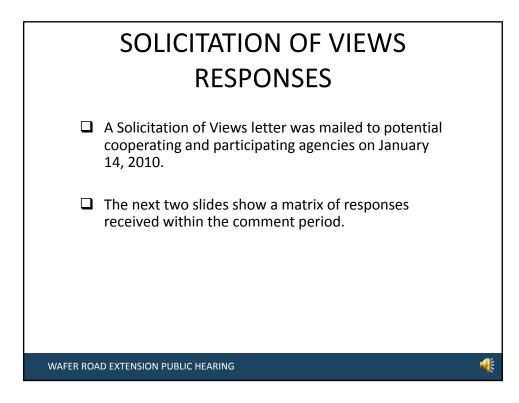
SELECTION OF PREFERRED ALTERNATIVE

- The terminus of both Alternatives No. 1 and No. 2 along Bellevue Road is not anticipated to spur development north of Bellevue Road primarily because these lands north of Bellevue Road are predominantly floodplain areas that could deter development in those areas;
- Alternative No. 3 has fewer impacts to existing residences as compared to Alternatives No. 1 and No. 2.;

WAFER ROAD EXTENSION PUBLIC HEARING

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As of February 16, 2010

Respondent	Comment	
US Army Corps of Engineers	A Corps Permit may be needed prior to construction.	
LA Dept Environmental Quality	Project may require water discharge permit and storm water construction permits.	
LA Dept of Natural Resources	Numerous plugged and abandoned oil & gas wells exist within and adjacent to the project area. Additionally, several registered water wells are located in the area.	
US EPA Sole Source Aquifer Program	The project does not lie within the boundaries of a designated sole source aquifer.	
LA Dept. of Culture, Recreation and Tourism, Division of Archaeology	There are no recorded archaeological sites in the proposed study area, comments to be offered once a corridor for the extension has been selected.	
Louisiana Office of State Parks	There does not appear to be any conflict regarding this proposed project with existing recreational facilities identified in the most recent (2009-2014) Statewide Comprehensive Outdoor Recreation Plan.	
US Fish & Wildlife Service	The project is not likely to adversely impact Federal trust resources currently protected by the Endangered Species Act.	

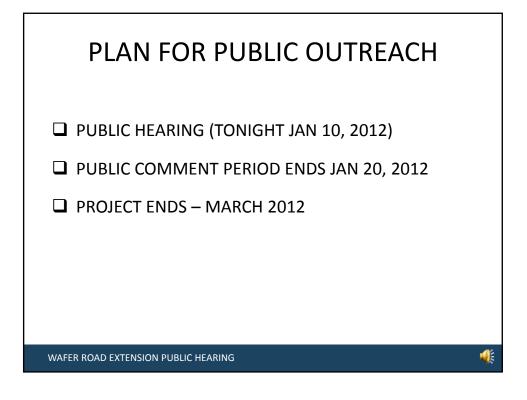
WAFER ROAD EXTENSION PUBLIC HEARING

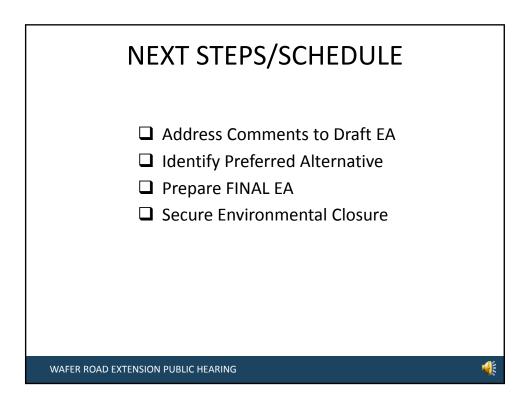
	As of February 16, 2010	
Respondent Comment		
LA Dept. of Transportation and Development Floodplain Management	Project study area includes a special flood hazard area with a designated floodway. A permit shall are obtained from Floodplain Administrator once a technical analysis shows that the construction would have no adverse effect on the floodway.	
Dept. of Homeland Security FEMA, Region VI Natural Hazards Program Specialist	Project must be reviewed by Floodplain Administrator to ensure compliance with the Flood Damage Prevention Ordinance. Part of project study area contains not only floodplains but also floodways. Federal regulations must be strictly enforced when encroachments into a floodway are anticipated.	
NRCS	As project moves forward and federal funds are utilized, a Farmland Conversion Impact Rating may be necessary.	
LA Wildlife & Fisheries Natural Heritage Program	No impacts to rare, threatened or endangered species or critical habitats anticipated. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site.	
Bossier City Engineer	No adverse economic, social or environmental effects or concerns with the project.	
Bossier Parish School Board	Suggested the need for a traffic study to evaluate specifically the traffic impa of Highway 80 at Platt Elementary School and T.L. Rhodes Elementary School	

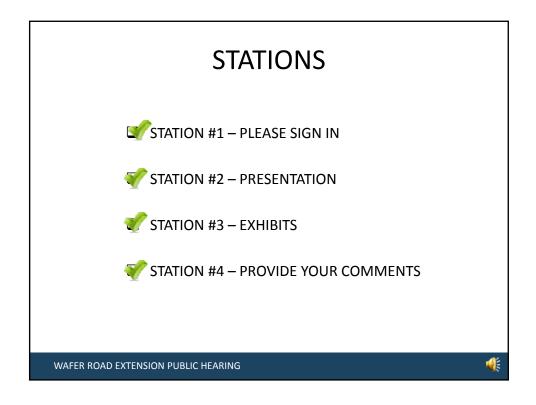
WAFER ROAD EXTENSION PUBLIC HEARING

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PUBLIC HEARING



WAFER ROAD EXTENSION (Winfield Road to Bellevue

Road)

ENVIRONMENTAL ASSESSMENT AND LINE & GRADE STUDY

January 10, 2012 5:00PM to 8:00PM

Bossier Parish Courthouse 204 Burt Boulevard Benton Louisiana

ATTACHMENT K PUBLIC COMMENTS

COMMENT RESPONSE MATRIX Environmental Assessment for Wafer Road Extension (Bellevue Road to Winfield Road)

The table below documents the comments received on the draft Environmental Assessment during the Public Hearing on January 10, 2012 and public comment period ending January 20, 2012.

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
1	Beth Altazan-Dixon, EPS III Performance Management LDEQ, Office of the Secretary Business and Community Outreach and Incentives Division	 The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project. After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640. Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project. If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary. If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater. All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-3181 to determine if your proposed project requires a permit. If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than June 1, 2011. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 3181. If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permi	Comments noted. The "Summary of Permits, Mitigation Measures and Commitments" section of the Environmental Assessment (EA) will be expanded to include bulleted items not already addressed.		

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
		 All precautions should be observed to protect the groundwater of the region. Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary. Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions. If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents. 			
		Currently, Bossier Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.			
2	Keith E. Norwood, PE, Supervisor BPSB Planning and Construction Department	The letter is in response to your notice of December 1, 2011 with a copy of the above referenced study enclosed. Section 4.2.4 addresses schools. First, thank you for the report. Table 4-1 page 4-5 incorrectly lists Princeton Middle School as an active school. It was located at the current Princeton Elementary site, 1895 Winfield Road. In 1999 it was moved to 395 South Elm, Haughton, LA 71037 and is known as Haughton Middle School. We are currently planning an additional school site near the 700 block of Highway 3227, Haughton, LA 71037. Your assessment stated that the improvement would alleviate traffic congestion in the study area during at peak hours. This is probably true, as well as decreasing travel time for some and providing an alternative route should other local roads be compromised at any time. What I would like to bring to your attention is that we have two elementary schools with hundreds of commuter cars daily near the location that the Wafer Road connects to Highway 80 south of the proposed improvement. A Google Earth aerial screenshot is attached, showing the outlet for Wafer Road just west of Platt and TL Rodes Elementary Schools, located at 4680 and 4670 Highway 80 East, Haughton, LA 71037. Their combined enrollment is currently about 1285 students. A large number of these students (hundreds) are brought to school daily by parents within a short period of time in the morning and picked-up in the afternoon. This is in addition to dozens of school buses entering and exiting. We have	Comment noted. [<i>Response sent.</i>] Revised Table 4-1, removed Princeton Middle		

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
		improved our internal traffic drives in recent years to contain our daily traffic on-site but there are times when the traffic is very congested on Highway 80 east and west bound in the vicinity of our drive (Labeled "Wrangler") and this includes the Wafer Road.			
		As Forest Hills and other subdivisions in the immediate vicinity grow, traffic will continue to increase, and this too will affect this corridor of Highway 80.			
		The Parish Engineer has arranged meetings with the School Board, Developers and others to discuss the traffic problems around Platt and Rodes schools but to date no public road improvements have been provided. How will the connecting road to Bellevue impact traffic patterns and loads at Highway 80?			
		We would like to be notified of the measures taken to assure no negative impact on our existing facilities and receive reports and plans as they become available.			
3	Hans J. Dyck 1202 Evangeline Circle	My land is next to the first 40 acres on Winfield Road. The proposed road will go through the middle of my 40 acres. I maintained my land by planting and maintaining pine trees. I need to know about when this project is going to start so I can get timber harvested. I do not foresee any problem as long as I get information as things will come along.	Comment noted. [Response sent.]		
4	Donald R. Thomas 341 Pease Road	Alternate #3 appears to be best choice that alleve a lot more traffic and an advancement for future development.	Comment noted. [Response sent.]		
5	D. Morgan 2701 Bellevue Road	Prefer Route #3 best for all concerned	Comment noted.		
6	Henry Burns, Dist 9 954 Hwy 80 E. Haughton, LA 71037	I appreciate the time provided by the public hearing team. Many of my questions and concerns were answered. Alternative No. 3 appears to provide long term infrastructure needs for Bossier Parish citizens. This alternative provides for both access and future residential development potential. Considerations for drainage is a key factor. There is a plan in place that insures appropriate coordination. This in turn provides an enhanced effort on behalf of current and future residents and landowners and their safety and property values.	Comment noted. [Response sent.]		
7	Richard E. Friday 1851 Wafer Road Haughton, LA 71037	I reside at 1851 Wafer Rd., North of Winfield Rd, Haughton, La 71037. I have resided here since 1986 and my home has flooded three times. The flood takes place when Fifi Bayou, just South of my home, overfills and the water backs up. At considerable expense and consent of engineer Ford, I have built a levee and this has lessened the likehood of flooding, My concern is what impact will the extension project have on Fifi Bayou - will its capacity be diminished or increased? Is anything going to be done to keep the Bayou from flooding over Wafer and Winfield roads as happens every time we get heavy rain?	Comment noted. [<i>Response sent:</i>] The engineering design phase will study this issue.		

Comment #	Commenter	Comment	Response
9	Raul Gutierrez, Ph.D. Wetlands Section Water Quality Protection Division E.P.A. Region 6 1445 Ross Ave. Suite 1200 Dallas, TX 75202- 2733	The Environmental Protection Agency (EPA) has reviewed the draft Environmental Assessment for the Wafer Road Extension in Bossier Parish, Louisiana. The comments that follow are being provided relative to the EPA's 404 (b) (1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230). <u>3.8 Traffic Projections</u> Traffic projections presented in this section of the environmental analysis fail to adequately address the need for an extension of Wafer Road. The existing two-lane roadways in the study area currently operate at Levels of Service D and E (Tables 3-2, 3-3), and are projected to operate at those levels in 2033 regardless of the alternative that is selected, including the "no build" alternative (Tables 3-2, 3-3). Additionally, it is stated that traffic volumes will remain well below the capacity of the roads to handle traffic, further failing to support the need for an extension of Wafer Road.	<u>3.8 Traffic Projections</u> The Traffic Study is predicting slight improvement in the 2033 design year levels of service. It should also be noted that traffic congestion relief is only part of the purpose and need of this project.
		 <u>4.3.5.2 Wetlands</u> As presented in the environmental analysis, Alternative 3, the "preferred" alternative, is not the least environmentally damaging practicable alternative (LEDPA), as required by the EPA's 404 (b)(1) Guidelines (40 CFR Part 230). This is assuming that impacts to Alternatives 1 and 2 are accurate and no other unknown waters of the U.S. are present in these reaches. To verify that "suspected" waters are present in Alternatives 1 and 2, and to verify the absence of additional waters of the U.S. in these alternatives, the EPA recommends that the applicant and the Corps perform delineations in these alignments. A significant reduction in impacts to wetlands would occur if the alignment for Alternative 3 were modified to follow the southern portion of the route for Alternative 2 so that the 3.021 acres of bottomland hardwood could be avoided. <u>4.3.5.3 Mitigation of Wetlands</u> Mitigation for unavoidable impacts to waters of the U.S., including wetlands, should also be developed in accordance with Compensatory Mitigation for Losses of Aquatic 	 <u>4.3.5.2 Wetlands</u> Due to the small estimated impacts, a full delineation will be carried out in coordination with the Corps of Engineers through a permit application for the preferred alternative. Revisions to the alignment corridor of alternative 3 will be made such that impacts to wetlands will be further reduced. The adjusted alignment will be identified as Alternative 3A. Letters will be sent to those property owners where the alignment is modified. <u>4.3.5.3 Mitigation of Wetlands</u> Mitigation will occur during the permitting process. Please refer to Section 4.7.2.2
		Resources; Final Rue (73 FR 19594, et seq.). Thank you for the opportunity to review and comment on the Environmental Assessment for the Wafer Road Extension. If you have any questions, please feel free to contact me at 214-665-6697 or <u>Gutierrez.raul@epa.gov</u> .	"Wetlands", and Item no. 1 of the "Summary o Permits, Mitigation Measures and Commitments" in the EA.

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
10	Rhonda Smith Chief, Office of Planning and Coordination E.P.A. Region 6 1445 Ross Ave. Suite 1200 Dallas, TX 75202- 2733	In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Assessment () for Wafer Road Extension, Bossier Parish, Louisiana. Detailed comments are listed below which more clearly identify our concerns and the informational needs requested for incorporation into the Final EA. <u>General Comments</u> The Council on Environmental Quality's Regulations for Implementing NEPA (40 CFR part 1502.15 – Affected Environment), state the environmental document "shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration." In general, the DEA contains very little characterization of baseline information for each environmental resource. A more thorough characterization of baseline information should be included in the Final EA. 1.0 <u>Description of Proposed Action</u> Section 1.3 states "Environmental issues relating to the Proposed Action have been treated with a broad scope and evaluated as one project" Please elaborate on the meaning of this statement. An EA should do the opposite; it should take a "close" look at the impacts to the human and natural environment from the proposed project.	1.0 Description of Proposed Action The last paragraph, last sentence of Section 1.3 of the EA will be revised to read "Environmental issues relating to the proposed study area outside of the proposed Federal Action Area (See Figure 1-1) have been treated with a broad scope and evaluated as one project to ensure that the proposed action functions properly without requiring additional improvements elsewhere, thereby not restricting consideration of alternatives for other reasonably foreseeable transportation improvements."		
		2.2 <u>Project Need</u> The DEA lists several needs, one of which is to "improve the economic condition of the Project Study Area by increased accessibility to developable lands." This is in contrast to the need to alleviate traffic congestion due to increased population growth in Bossier Parish. Is the proposed project needed to alleviate congestion due to considerable growth in population or to act as a catalyst for secondary development?	2.2 <u>Project Need</u> Section 2.2, bullet No. 3 of the EA will be revised to state "Create opportunity for new commercial and residential development within the project study area."		

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
		Another stated need is to improve the economic condition of the Project Study Area; however, no evidence is cited that the area is economically stifled or depressed. Thus, the need to improve the economic condition of the study area must be substantiated. The project needs should be reevaluated so as to come to a consensus as to purpose and need of the roadway.			
		3.0 <u>Alternatives Analysis</u> If Alternative 3 is the preferred alternative, it should be identified as such.	3.0 <u>Alternatives Analysis</u> A statement will be made in Section 3.1 of the EA stating "Refer to Section 4.6.2 for preferred alternative analysis."		
		The alternatives analysis that occurs near the end of Chapter 4 should be moved to Chapter 3. The screening of the alternatives usually occurs in the Alternatives section.	The report will remain "as is" in which Chapter 3 focuses on the description of all alternatives (i.e. roadway typical section, traffic projections, project cost, travel time, etc.), and Chapter 4 focuses on the impacts of all alternatives as well as the determination of the preferred alternative.		
		Section 3.10 identifies the travel time savings for each alternative, and includes the no build as a baseline. According to Table 3-5, a travel time savings for Alternatives A, B, and C is 2.2 minutes, 2.7 minutes, and 3.0 minutes, respectively. These values are insignificant and do not represent a significant travel time savings.	3.10 Travel Time The travel time estimated time savings speak for themselves in that their values are relative to various situations (i.e. emergency response time savings, one-way travel, representative of only one vehicle and not a summation of all vehicles utilizing the corridor, etc.)		
		4.0 <u>Impacts</u> In general, this section should better characterize and quantify the resources within each category. As the three alternatives diverge into different routes, all three alternatives (as opposed to just a "build alternative") should be carried through the impacts evaluation.			
		4.2.1 Land Use This section should quantify, by land use, the acres to be converted to transportation uses	4.2.1 Land Use Acreage required for the transportation		

Comment #	Commenter	Comment	Response		
		and the impacts from that conversion.	corridor will be broken out by land use type via a new table inserted into this section of the EA. There will be conversion of land adjacent to the roadway corridor to commercial and residential usage at a time yet to be determined.		
		4.2.5 <u>Socioeconomic/Environmental Justice</u> EPA recommends the Final EA include census data that characterizes the study area population. This data should be provided on a census block group level. Executive Order 12898- Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations directs federal agencies to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high adverse human health or environmental effects of its activities on minority and low- income populations. The DEA contains no substantive analysis of project impacts to minority or low-income populations. There is no data to support the conclusion that "there is no known disproportionately high or adverse human health or environmental affects borne by minority and/or low income populations." EPA recommends a thorough analysis of environmental justice concerns before concluding that no disproportionate adverse impacts will take place.	 4.2.5 <u>Socioeconomic/Environmental Justice</u> This is a predominantly an undeveloped area in which businesses and homesites have been avoided. Refer to Section 4.2.2 and figure 4-1 to validate avoidance of existing businesses and homesites. A new table containing minority population and average income data within the project study area will be added to further validate that implementation of Alternatives 1,2, and 3 will not create any socioeconomic or environmental justice issues. 		
		Figure 4-2 should also show residences or create an additional map delineating residences.	Figure 4-1 shows existing residences along with exhibits B-1, B-2, B-3, and B-4. Figure 4-1 will be revised to depict the perimeter of residences shown insets A, B, and C.		
		4.2.6. <u>Cultural Resources/Tribal Issues</u> There are potentially several tribes that may be interested or have historical connections to the area. The State of Louisiana recognizes Tribes that the Federal Government does not. While consultation with these tribes is not required due to the non-Federal Recognition status of these Tribes, it would seem logical that the State of Louisiana (who does recognize these Tribes) would have mentioned consultation meetings and potential cultural sites associated with these Tribes. At a minimum, these Tribes should have the opportunity to provide input on this proposed project. Notification of the proposed	4.2.6 <u>Cultural Resources/Tribal Issues</u> A listing of tribes obtained from LADOTD within Bossier Parish was used for the Solicitation of Views for this project. The following entities were sent Solicitation of Views: CADDO NATION, BRENDA SHEMAYME EDWARDS, CHAIRPERSON P.O. BOX 487 BINGER, OK 73009		

TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD					
Comment #	Commenter	Comment	Response			
		project should be sent to the following Tribes so they can provide comments and input: Alabama-Coushatta Tribe of Texas, Bayou Lafourche Band of Biloxi-Chitimacha., Caddo Nation, Chickasaw Nation, Chitimacha Tribe of Louisiana, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Grand Cailou/Dulac Band of Biloxi-Chitimacha, Isle de Jean Charles Band of Biloxi-Chitimacha, Jena Band of Choctaw Indians, Point au Chien Indian Tribe, Quapaw Tribe of Oklahoma, Tunica-Biloxi Indians of Louisiana, and United Houma Nation.	CADDO TRIBE CHIEF RUFUS DAVIS, 4850 HWY 485, ROBELINE, LA 71469 OFFICE OF INDIAN AFFAIRS, MARK FORD, DIRECTOR 365 N FOURTH ST PO BOX 94004 BATON ROUGE, LA 70804-9004 ALTON LEBLANC, CHAIRMAN CHITIMACHA TRIBE OF LA, PO BOX 661, CHARENTON, LA 70523 INTER-TRIBAL COUNCIL OF LA, INC. KEVIN BILLIOT, DIRECTOR 8281 GOODWOOD BLVD, SUITE I-2 BATON ROUGE, LA 70806 No responses were received, nor were any recommendations of any further contacts made by the inter-tribal council or office of Indian			
		4.2.8 <u>Noise</u> This section should include a table which includes the noise activity category, the criteria levels (dBA), and a description of the category. It should also contain data on the existing and predicted noise levels for receivers and if those levels are exceeded for each identified receiver. This data should support the conclusion made in the DEA that no noise impacts are expected.	 affairs. LADOTD is in the process of researching and expanding their list of tribes for issuance of Solicitation of Views for future projects. 4.2.8 Noise Table 1-2, Louisiana Noise Abatement Criteria, from the Noise & Air Quality Supplemental Assessment Report (Prepared by Trinity Consultants) will be inserted into Sec. 4.2.8 of the EA. This table will include noise activity categories, criteria levels, and a description of the category. A statement will be inserted into Section 4.2.8 which will make reference to the Noise & Air Quality Supplemental Assessment Report 			

Comment #	Commenter	Comment	Response
			(Prepared by Trinity Consultants), Table 4-2. This reference table depicts both existing and predicted noise levels for receivers used in this study.
		4.3.1 <u>Water Quality</u> This section should define in more detail the impacts to local water quality from roadway construction, including bridges and culverts. This section should also include details of how the project will adhere to the Clean Water Act Section 401 Certification guidelines. This section should identify any 303 (d) impaired waters in the project area and what the impact are to those impaired waters.	4.3.1 <u>Water Quality</u> Refer to the "Summary of Permits, Mitigation Measures and Commitments" section of the EA Items No. 2, 3, 4, & 8.
		4.3.2 <u>Groundwater</u> This section should state if the project area overlies an aquifer, and if so, any potential impacts to that aquifer.	4.3.2 <u>Groundwater</u> Refer to letter by EPA dated Jan. 25, 2010, found in Appendix B of the EA document which states that "the project does not lie within the boundaries of a designated sole source aquifer"
			In addition, a statement will be made in Section 4.3.2 that Best Management Construction practices should be implemented to minimize contamination of any and all ground aquifers.
			A statement will be made in Section 4.3.2 that the closest aquifer to the project study area is the Red River Alluvial Aquifer.
		4.3.3 <u>Plant Communities</u> The DEA should disclose the areal extent by species/vegetation type within the study area and what impacts are associated with vegetation removal.	4.3.3 <u>Plant Communities</u> A listing of all plants identified during the wetland investigations has been added to Section 4.3.3.1. A discussion of impacts was added.

TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD

Comment #	Commenter	Comment	Response
#		4.3.4 <u>Threatened and Endangered Species</u> A more thorough description and evaluation of impacts to threatened and endangered species is needed. This section should include a list of parish-wide Federally and State listed threatened and endangered species, preferred habitat, if the project area contains the preferred habitat, and potential impacts from the proposed project.	4.3.4 <u>Threatened and Endangered Species</u> Reference is be made to a letter dated Jan. 21, 2010 in the back of the EA Document from LA Dept of Wildlife and Fisheries through The Louisiana Natural Heritage Program stating that there are no anticipated impacts to significant plant and animal species, plant communities, and other natural features within the project study area.
			4.3.4 <u>Threatened and Endangered Species</u> Table 4-6 (Now 4-7) was inadvertently excluded from the EA. This figure will be added.
		4.3.5 <u>Wetlands</u> Under the Section 404(b) (1) guidelines, the U.S. Army Corps of Engineers may only permit discharges of dredged or fill material into waters of the United States that represent the least damaging practicable alternative, so long as the alternative does not have other significant adverse environmental consequences. The Preferred Alternative, Alternative 3, would cause the greatest impacts (>3 acres) of the three build alternatives. The selection of Alternative 3 as the Preferred Alternative would not meet Section 404(b) (1) guidelines described above. EPA recommends reevaluating the selection of Alternative 3 or better justify its selection.	4.3.5 <u>Wetlands</u> Based upon the alignment of Alternative 3 being slightly modified to further minimize impacts to wetlands, revised wetland impact acreages should be reduced, therefore Alternative 3A is the applicant's preferred alternative.
		Table 4-5 (A and B) should clarify if the Acres column refers to the total area of the water delineated or surveyed or to the actual impact. Impacts for all three alternatives should be included in the table.	Table 4-5(now 4-9 A ,B, and C) of the EA will be modified to better reflect wetland acreages that were both field delineated and non-field delineated (i.e. desktop analysis).
		The U.S. Army Corps of Engineers' (USACE) Jurisdictional Determination should be made available in the Final EA.	A Final Jurisdictional Determination by the COE will be made during the permit application process at a later date as stipulated by the COE.
		4.3.11 <u>Air Quality</u> Carbon monoxide is noted as a contaminant related to on-road vehicle emissions, and the Environmental Determination Checklist item 9(b) uses project air quality levels exceeding	4.3.11 <u>Air Quality</u> The following text will be added to Section 4.3.11: Any demolition, construction,

TABLE 1 0. COMMENTS RECEIVED DURING DRAFT FA COMMENT DERIOD

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD				
Comment #	Commenter	Comment	Response		
		the NAAQS for carbon monoxide as criteria for determining the need for an air quality study. Please explain the DEA's focus on carbon monoxide analysis, while there is not similar focus/discussion regarding ozone (nitrogen oxides and volatile organic compounds) and particulate matter.	rehabilitation, repair, dredging or filling activities have the potential to emit air pollutants and it is recommended that best management practices be implemented to minimize the impact of any air pollutants. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations.		
		 Section 4.3.11 includes the statement "EPA has designated Bossier Parish as being in ozone attainment with limited maintenance plan requirements." Is this statement indicating Bossier Parish is currently under a limited maintenance plan for ozone? Please clarify. Any demolition, construction, rehabilitation, repair, dredging or filling activities have the potential to emit air pollutants and we recommend best management practices be implemented to minimize the impact of any air pollutants. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations. 	As per LDEQ in Comment No. 1 of this matrix document, "Currently, Bossier Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations."		
		EPA encourages the use of clean, lower-emissions equipment and technologies to reduce pollution. EPA's final Highway Diesel and Nonroad Diesel Rules mandate the use of lower-sulfur fuels in nonroad and marine diesel engines beginning in 2007.	Comment Noted		
		4.5.2 <u>Cumulative Impacts</u> Cumulative impacts are those impacts "on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions." EPA suggests the Final EA include a thorough analysis of cumulative impacts by setting spatial and temporal boundaries for each resource and including a list and description of past, present, and reasonably foreseeable future projects and their cumulative effects on the natural and human environment.	4.5.2 <u>Cumulative Impacts</u> Added information about other highway projects within the area.		
		4.6 <u>Selection of Preferred Alternative</u> Table 4-8 clearly outlines that Alternative 3 is the most environmentally damaging alternative. According to Section 4.6.2, Alternative 3 is selected as the preferred	4.6 <u>Selection of Preferred Alternative</u> As a result of bullet No. 3 of Section 2.2 being modified as previously stated and the alignment		

	TABLE 1.0: COMMENTS RECEIVED DURING DRAFT EA COMMENT PERIOD					
Comment #	Commenter	Comment	Response			
		alternative because it is "more favorable to spurring development," makes "new development more favorable," "provides greater connectivity," and will "give areas north of Bellevue Road the ability to develop more rapidly." It appears that the environmental impact of Alternative 3 is discounted for the need to influence additional growth in the area. EPA recommends the Purpose and Need statements be re-evaluated and thoroughly defined, justified, and documented so as to justify why the impacts (especially wetlands) from Alternative 3 are acceptable. Alternatives 1 and 2 may not have the ability to spur as much development as Alternative 3, but do have fewer impacts. We appreciate the opportunity to provide comments for the DEA. Thank you for your coordination and don't hesitate to contact John MacFarlane, of my staff, at 214-665-7491 or macfarlane.john@epa.gov should you have any questions or concerns regarding this letter.	substantiate the selection of the preferred alternative in the EA.			
11	Randy and Terry Pease 169 East Pease Road	Alternative 3. The longer route, Alternative 3, I think would be the best. Address is 169 East Pease Road.	Comment noted.			
12	Patricia Dement	My property is on, I think, it's Alternative 1. I think that's the correct number, I don't want to give you the wrong thing. And I'm going to support that as a choice. Now, I'm one of several family members, but that's what I'm putting in as my vote.	Comment noted.			
13	Ken Dement	I'm liking the idea of Section 1. I have no access now really but a few feet on Bellevue Road, and that would be good access for me for future on my property. Don't plan on having any building going on, on there in the future so it would be easier on traffic going through there because there wouldn't be a lot of houses and stuff like that, for school buses that have to stop at. That's about a mile.	Comment noted.			

APPENDIX E

FARMLAND CONVERSION RATING FORM



Natural Resources Conservation Service 3737 Government Street Alexandria, LA 71302

(318) 473-7787 Fax: (318) 473-7603

October 8, 2010

Sherry Eastin C.H. Fenstermaker & Associates, Inc. 135 Regency Square Lafayette, Louisiana 70508

RE: Wafer Road Extension, State Project No. 700-08-0132 F.A.P. No. DE-0807(502) Bossier Parish, Louisiana

Dear Ms. Eastin:

As per your request, we have reviewed the soils information for the project site as it pertains to prime farmlands. The soils which are prime farmland in Alternative #1 are the WrA-Wrightsville silt loam, 0 to 1 percent slopes, and the KoC-Kolin silt loam, 1 to 5 percent slopes with a relative value of 60. The prime farmland soil in Alternative #2 is the WrA-Wrightsville silt loam, 0 to 1 percent slopes, with a relative value of 54. Alternative #3 has the prime farmland soils BkA-Bodcau silt loam, 0 to 1 percent slopes and WrA-Wrightsville silt loam, 0 to 1 percent slopes, with a relative value of 63. Please find the attached Prime and other Important Farmlands legend for Bossier Parish and the NRCS-CPA-106 Farmland Conversion Impact Rating for Corridor type Projects form with our agencies information completed in parts II, IV, and V. The soils map you provided indicating the location of the different alternatives/corridors was very helpful.

Please contact Charles Guillory if additional information is needed. He can be reached at (318) 473-7789 by phone or <u>charles.guillory@la.usda.gov</u> by email.

Sincerely,

and Hymather ACTING FOR

Kevin D. Norton State Conservationist

Enclosure

cc: Jerry Daigle, State Soil Scientist, Alexandria, Louisiana Rick Adams, District Conservationist, NRCS, Benton Field Office Marc Bordelon, MLRA Soil Survey Leader, Ringgold SS Office

U.S. DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency)	Date of L	Date of Land Evaluation Request 4. Sheet 1 of						
1. Name of Project Wafer Road Extension	5.	Federal /	ral Agency Involved deral Highway Administration					
2. Type of Project Highway construction	6.		inty and State Bossier Parish, Louisiana					
PART II (To be completed by NRCS)		Date Reg	e Request Received by NRCS 2. Person Completing Form					
 Does the corridor contain prime, unique statewide or local im (if no, the FPPA does not apply - Do not complete additional 	39532				rigated Average	Farm Size 3 Ac.		
5. Major Crop(s) Soybeans, Cotton, Com	Governme 877	nt Jurisdiction 67%			of Farmland As D 363, 157	efined in FPPA		
8. Name Of Land Evaluation System Used Bossier Parish LESH	9. Name of Local Site	Assessm			10/8	and Evaluation Re	iturned by NRCS	
PART III (To be completed by Federal Agency)		-	Alternati Corridor A	ve Corric		ogment Corridor C	Corridor D	
A. Total Acres To Be Converted Directly			25	30		55		
B. Total Acres To Be Converted Indirectly, Or To Receive S	ervices		25					
C. Total Acres In Corridor	CI VICES		25	30		55	0	
PART IV (To be completed by NRCS) Land Evaluation	on Information	Marg St.	2.5	100			States of the second	
A. Total Acres Prime And Unique Farmland		1.244 N	0.9	9.0		28	States -	
B. Total Acres Statewide And Local Important Farmland				1000		-	•	
C. Percentage Of Farmland in County Or Local Govt. Unit	To Be Converted		.007	.008		.02		
D. Percentage Of Farmland in Govt. Jurisdiction With Same	Or Higher Relative Va	alue	47	75		25	The state of the	
PART V (To be completed by NRCS) Land Evaluation Infor- value of Farmland to Be Serviced or Converted (Scale of		itive	60	54		63		
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 C	Maxir						-	
1. Area in Nonurban Use	15		10	9		9		
2. Perimeter in Nonurban Use	10		9	9		10		
3. Percent Of Corridor Being Farmed	20		0	12		11		
4. Protection Provided By State And Local Government	20		0	0		0		
5. Size of Present Farm Unit Compared To Average	10		0	10		10		
6. Creation Of Nonfarmable Farmland	25		0	0	-	0		
7. Availability Of Farm Support Services	5		0	0		0		
8. On-Farm Investments	20		0	0		0		
9. Effects Of Conversion On Farm Support Services	25		0			0		
10. Compatibility With Existing Agricultural Use	10		2	2		2		
TOTAL CORRIDOR ASSESSMENT POINTS	160			xo 42		1 42	0	
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)	100	0	60	54	4	63		
Total Corridor Assessment (From Part VI above or a local assessment)	site 16	r o	a 21	18 4		xa 42	0	
TOTAL POINTS (Total of above 2 lines)	26	10	1 81	1 96	5	n 105	0	
1. Corridor Selected: 2. Total Acres of Farmi Converted by Project	0.000	te Of Sele	ection:	4. Was /	A Local Site	Assessment Use	d?	

5. Reason For Selection:

Signature of Person Completing this Part:

DATE

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

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

NRCS-CPA-106 (Reverse)

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.

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

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

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

Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs (4) to protect farmland? Site is protected - 20 points

Site is not protected - 0 points

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

If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of (6) 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

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

Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees (8) 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

Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support (9) 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

Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to (10)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

Prime and other Important Farmlands

Bossier Parish, Louisiana

Map symbol	Map unit name	Farmland classification		
ArA	Armistead clay, 0 to 1 percent slopes	All areas are prime farmland		
BcB	Besner very fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland		
BhC	Bistineau very fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
BkA	Bodcau silt loam, 0 to 1 percent slopes	All areas are prime farmland		
BoC	Bowie fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
BuA	Buxin clay, 0 to 1 percent slopes	All areas are prime farmland		
CaB	Cahaba fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland		
CdA	Caplis very fine sandy loam, 0 to 1 percent slopes	All areas are prime farmland		
CeA	Caplis-Urban land complex	All areas are prime farmland		
CmA	Caspiana silt loam, 0 to 1 percent slopes	All areas are prime farmland		
СрА	Caspiana silty clay loam, 0 to 1 percent slopes	All areas are prime farmland		
CsA	Coushatta silt loam, 0 to 1 percent slopes	All areas are prime farmland		
CtA	Coushatta silty clay loam, 0 to 1 percent slopes	All areas are prime farmland		
DaC	Darley gravelly fine sandy loarn, 1 to 5 percent slopes	All areas are prime farmland		
DuC	Dubach fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
GaA	Gallion silt loam, 0 to 1 percent slopes	All areas are prime farmland		
GIA	Gallion silty clay loam, 0 to 1 percent slopes	All areas are prime farmland		
GnA	Gallion-Urban land complex, 0 to 1 percent slopes	All areas are prime farmland		
GrB	Gurdon very fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland		
KeB	Keithville very fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland		
KoC	Kolin silt loam, 1 to 5 percent slopes	All areas are prime farmland		
LaA	Latanier clay, 0 to 1 percent slopes	All areas are prime farmland		
MaC	Mahan fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
MeB	Metcalf silt loam, 0 to 2 percent slopes	All areas are prime farmland		
MmA	Moreland silt loam, 0 to 1 percent slopes	All areas are prime farmland		
MnA	Moreland silty clay loam, 0 to 1 percent slopes	All areas are prime farmland		
MoA	Moreland clay, 0 to 1 percent slopes	All areas are prime farmland		
SaC	Sacul fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
SeC	Sailes fine sandy loam, 1 to 5 percent slopes	All areas are prime farmland		
SgA	Severn silt loam, 0 to 1 percent slopes	All areas are prime farmland		
SgB	Severn silt loam, gently undulating, rarely flooded	All areas are prime farmland		
SoB	Sonnier clay, 1 to 3 percent slopes	All areas are prime farmland		
WrA	Wrightsville silt loam, 0 to 1 percent slopes	Prime farmland if drained		

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APPENDIX F

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REFERENCES

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