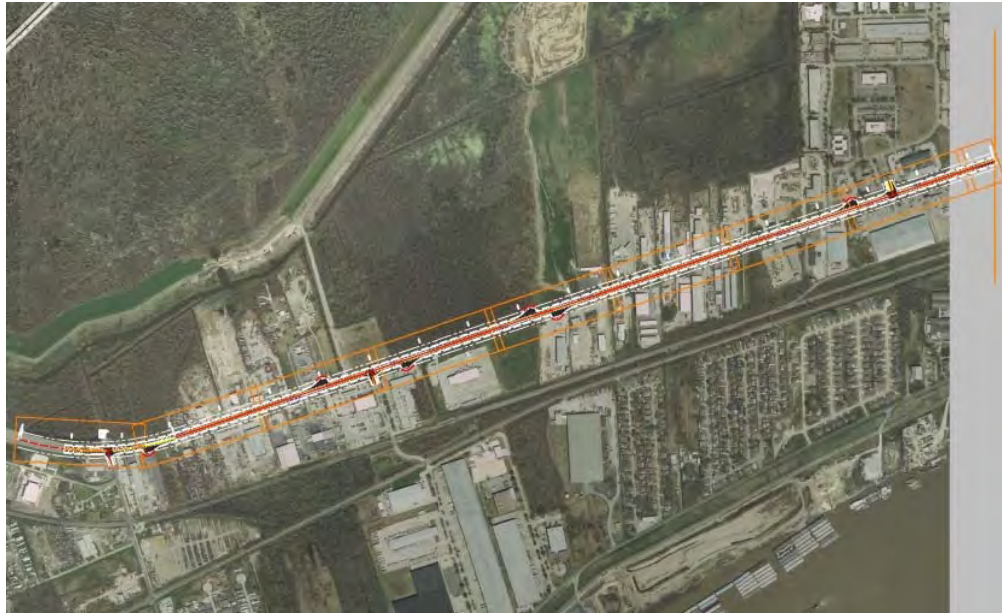


Stage 0 Report



US 61 Improvements
(LA 50 to Jefferson Parish Line)

RPC Task No.
A-6.14

BH Project No: 76981-00



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Regional Planning Commission



This document and the information contained herein is prepared solely for the purpose of identifying, evaluating and planning safety improvements on public roads which may be implemented utilizing federal aid highway funds; and is therefore exempt from discovery or admission into evidence pursuant to 23 U.S.C. 409.

July 2014

Executive Summary

A comprehensive Stage 0 Feasibility Study, in accordance with the Louisiana Department of Transportation and Development (LADOTD) Stage 0 Manual of Standard Practice, has been conducted for improvements along US Route 61 (US 61) between Louisiana Highway 50 (LA 50) and the Jefferson Parish Line. US 61 extends 1,400 miles from US 90 in New Orleans, LA to I-35 in Wyoming, Minnesota. It is a four-lane highway that begins in New Orleans and continues through Baton Rouge to the Mississippi state line. US 61 is also known as Airline Highway and is configured in an east-west direction due to the Mississippi River. The purpose of this study is to identify an alternative to address present safety and access management concerns in relation to the presence of a continuous, center turn lane along the US 61 corridor. This report will include a review and analysis of existing traffic conditions, adjacent driveway locations and land-uses, and crash history at the intersection.

According to the *St. Charles Parish 2030 Comprehensive Plan* adopted on June 20, 2011, the land use within the study area has been designated as light industrial properties. The industrial facilities located along US 61 within the study area include trucking, equipment, and timber companies. In addition to the industrial facilities, there are also commercial properties. Each commercial and industrial facility provides several access drives to and from the main arterial. In addition, there are existing local roads that provide additional access to commercial facilities, state highways, industrial facilities, and residential subdivisions outside of the study area.

The project needs were developed through an evaluation of existing data (traffic studies, traffic analyses, crash data, aerial photography, etc.) and coordination with the project team and other agencies. The needs should be further evaluated at the environmental documentation stage of the project. The preliminary need identified for the corridor is Safety.

Existing safety issues for this intersection were investigated by analyzing statistical data provided by LADOTD. This data provides detailed information regarding crashes within the project area. A traffic study was conducted by ITS Regional, LLC in May 2014 to obtain existing traffic volumes at the intersection. Data was collected between 7:00 AM to 9:00 AM and 3:00 PM to 6:00 PM. Traffic during these designated times represent the greatest combination of weekday traffic on the adjacent roadways. Additionally, 48 hour machine counts were also conducted as a part of this study at all four approaches to this intersection.

In accordance with the purpose and need of this study, the roadway improvements propose to improve safety and access management by constructing a raised median with intermittent J-turns. In an effort to reduce driver conflict and improve safety along US 61, drivers will be provided left turning movements via J-turns with associated bulb outs and signalized intersections. Due to heavy truck traffic, the WB-67 design vehicle was used for the bulb-out design. This alternative typical section of a four-lane divided roadway is being implemented along the US 61 corridor in the surrounding parishes of St. John the Baptist and Jefferson.

Information was received from LADOTD Dist. 02 of the construction of a median replacing the continuous center two-way left turn lane from the Jefferson Parish line to James Blvd. along Airline. This construction project was performed during the course of this project and began near the date of our project initiation meeting with RPC, St. Charles Parish President and Officials, and LADOTD Dist. 02. This improvement and newly constructed section is positioned within our project boundaries. Therefore, the continuation of this section was desired along the corridor and the concepts were narrowed and more defined. Through the life of this study, the conceptual design development stage eliminated the roundabout concept from this scope. This decision was made in order to more efficiently utilize limited public resources and advance the conceptual design of a cohesive corridor inclusive of an existing and adjacent project.

Capacity results for the year 2013 conditions with a 2.0% grow rate over a 20 year period were obtained for each alternative. Peak hour operations were also evaluated for the proposed alternatives.

A safety analysis was performed in order to better compare alternatives and improve safety along the project corridor. The Highway Safety Manual (HSM) uses a series of equations to predict the crash frequency for urban/suburban streets and intersections. Separate prediction models are used for homogenous highway segments and intersections. The equations are based on the type of roadway segment or intersection, the average annual daily traffic (AADT), and crash modification factors (CMFs).

The HSM analysis predicts a 55% increase in the average crash frequency in design year 2033 for the no-build alternative. The predicted average crash frequency results depict the proposed alternative (4D) to have approximately 50% less crashes than the no-built alternative in design year 2033. A summary of the results from the analyses can be seen in table below.

Predicted Average Crash Frequency			
Type of Roadway Segment	Year	AADT	Crashes/yr
5T (existing)	2013	19100	23.9
	2033	28382	37.1
4D (proposed)	2013	19100	11.5
	2033	28381	18.9

In comparison, the substansive (actual) safety performance of 46.0 crashes per year exceeds the predicted crash frequency of 23.9 crashes per year for 2013. The existing corridor is operating at approximately two times higher than the predicted crash frequency.

A preliminary cost estimate has been prepared for the alternative using average cost information in accordance with the LADOTD Project Delivery Manual. The costs include construction, right-of-way, relocations, engineering, and contingency as expressed in 2014

dollars. It should be noted that the intention of the preliminary cost estimate is to provide an initial review of the commitment required to construct the project. Also, any adjustment to the presented alternatives in more detailed studies and survey in future stages in the LADOTD project development process may result in changes to the cost estimate. The estimated cost of the proposed improvements is \$5,461,210.

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1.0 Introduction

1.1 Project Overview

A comprehensive Stage 0 Feasibility Study, in accordance with the Louisiana Department of Transportation and Development (LADOTD) Stage 0 Manual of Standard Practice, has been conducted for improvements along US Route 61 (US 61) between Louisiana Highway 50 (LA 50) and the Jefferson Parish Line. US 61 extends 1,400 miles from US 90 in New Orleans, LA to I-35 in Wyoming, Minnesota. It is a four-lane highway that begins in New Orleans and continues through Baton Rouge to the Mississippi state line. US 61 is also known as Airline Highway and is configured in an east-west direction due to the Mississippi River. Throughout this Stage 0 Report, the corridor will be referenced as eastbound and westbound.

1.2 Project Description

Information used for this study was collected by document and records review, meetings and coordination with the Regional Planning Commission (RPC), state and local officials, stakeholders, and site surveys. The concepts evaluated as part of this study were developed for the purpose of determining practical feasibility with respect to existing and projected traffic volumes, corridor cohesion between all proposed roadway improvements, and existing conditions within the project area. The concepts were developed to an appropriate level of detail as to provide a rational basis for the evaluation and comparison of the technical, environmental, and financial aspects of each concept.

Information was received from LADOTD Dist. 02 of the construction of a median replacing the continuous center two-way left turn lane from the Jefferson Parish line to James Blvd. along Airline. This construction project was performed during the course of this project and began near the date of our project initiation meeting with RPC, St. Charles Parish President and Officials, and LADOTD Dist. 02. This improvement and newly constructed section is positioned within our project boundaries. Therefore, the continuation of this section was desired along the corridor and the concepts were narrowed and more defined. Through the life of this study, the conceptual design development stage eliminated the roundabout concept from this scope. This decision was made in order to more efficiently utilize limited public resources and advance the conceptual design of a cohesive corridor inclusive of an existing and adjacent project. At more advanced stages of the project and with a topographic survey, concepts presented in this report should be further evaluated.

1.3 Project Objectives

The purpose of this study is to identify an alternative to address present safety and access management concerns in relation to the presence of a five-lane arterial including the two-

way left-turn lane (TWLTL) along the US 61 corridor. The conversion of the center lane to a raised median with intermittent J-turns and associated bulb outs accommodating truck traffic is studied in order to minimize impacts to the surrounding properties. This alternative typical section of a four-lane divided roadway is being implemented along the US 61 corridor in the surrounding parishes of St. John the Baptist and Jefferson.

2.0 Existing Conditions

2.1 Land Use

According to the *St. Charles Parish 2030 Comprehensive Plan* adopted on June 20, 2011, the land use within the study area has been designated as light industrial properties. The industrial facilities located along US 61 within the study area include trucking, equipment, and timber companies. In addition to the industrial facilities, there are also commercial properties. Each commercial and industrial facility provides several access drives to and from the main arterial. In addition, there are existing local roads that provide additional access to commercial facilities, state highways, industrial facilities, and residential subdivisions outside of the study area.

2.2 Geometric Layout

The existing US 61 corridor within the study area is an urban principal arterial roadway with a posted speed of 45 mph. The roadway is an undivided highway with 4-12' travel lanes, a continuous 15' center left turn lane, and paved shoulders. The roadway features open ditch drainage on either side. Continuous access is provided to state and local roadways and commercial and industrial facilities through the center left turn lane. Traffic signals are currently located at the intersections of US 61 with LA 50 (Almedia Road), Riverbend Drive, and James Boulevard.

The intersection of US 61 and LA 50 is a three-legged signalized intersection. The eastbound approach of US 61 features two receiving lanes and three approaching lanes – two through lanes and one exclusive left-turn lane with a storage length of 175'. Similarly, the westbound approach of US 61 features two receiving lanes and three approaching lanes – two through lanes and one continuous left-turn lane. The northbound approach of LA 50 features one receiving lane and two approaching lanes - one exclusive left-turn lane and one exclusive right-turn lane with a storage length of 275'. LA 50 has a posted speed of 35 mph.

The intersection of US 61 and Riverbend Drive is a three-legged signalized intersection. The eastbound approach of US 61 features two receiving lanes and two approaching, through lanes. The continuous left turn lane has been replaced with a striped median and separates the receiving and approaching lanes. The westbound approach of US 61 features two receiving lanes and three approaching lanes – two through lanes and one

continuous left-turn lane. The northbound approach of Riverbend Drive to the intersection of US 61 features two receiving lanes and two approach lanes – one exclusive left-turn lane and one exclusive right-turn lane.

The intersection of US 61 and James Boulevard is a four-legged signalized intersection. The eastbound approach of US 61 features two receiving lanes and three approaching lanes – two through lanes and one continuous left-turn lane. The westbound approach of US 61 features two receiving lanes and four approaching lanes – two through lanes, one continuous left-turn lane, and one exclusive right-turn lane with a storage length of 115'. The southbound approach of James Boulevard to the intersection of US 61 features two receiving lanes and two approaching lanes – one shared left-through-right lane and one exclusive left-turn lane. The northbound approach to James Boulevard to the intersection of US 61 features two receiving lanes and one approaching lane and is a commercial drive.

3.0 Preliminary Needs

The project needs were developed through an evaluation of existing data (traffic studies, traffic analyses, crash data, aerial photography, etc.) and coordination with RPC, LADOTD, multiple departments within St. Charles Parish Government, and the project team. The needs should be further evaluated at the environmental documentation stage of the project. The preliminary need identified for the corridor is Safety.

3.1 Safety

Existing safety issues for this intersection were investigated by analyzing statistical data provided by LADOTD. This data provides detailed information regarding crashes within the project area. The presence of a continuous left turn lane along US 61 contributes to greater crash frequency by allowing for more conflict points. Vehicles may currently enter or exit the roadway in either direction and at any point along the road.

In an effort to conduct a comprehensive investigation of traffic conditions, the LADOTD EDSM VI 1.1.5 recommends that crash history from 3 prior years be obtained. The limits of analysis are from control section 007-03 log-mile 0 (at the Jefferson Parish line) to control section 007-03 log-mile 1.7 (near LA 50). The crash data used in this analysis were based on records of crashes obtained from LADOTD.

Table 1: Summary of Crashes: US 61 from LA 50 to JP Line (2010-2012)

Type of Collision	Total # Crashes	Correctable?
Non-Collision	4	
Rear End	76	
Head On	2	Correctable
Right Angle	13	Correctable
Left-Turn Angle	0	Correctable
Left-Turn Opp Dir	4	Correctable
Left-Turn Same Dir	4	Correctable
Right-Turn Angle	2	
Right-Turn Opp Dir	0	
Side Swipe Same Dir	21	
Side Swipe Opp Dir	2	
Unknown	10	

After evaluating crash data between the years of 2010-2012, a total of 138 crashes were identified on US 61 from LA 50 to the Jefferson Parish Line that involved 57 injuries and 1 fatality. In addition, there were a total of 23 correctable crashes. LADOTD defines head-on, right angle, and left-turn crashes as correctable collisions. The most common types of collisions were rear end, side swipe (same direction), and right angle collisions.

The data in **Figure 1** represents a breakdown of crashes by type on US 61 (from LA 50 to the JP Line). **Figure 2** displays the locations of crashes by type. Rear end crashes make up the majority of crashes at 54.7% which is 17% higher than the statewide average (Source: LADOTD Highway Safety Manual). Side swipe crashes of vehicles traveling in the same direction are the second most prominent type of crashes at 15.1% which is still higher than the statewide average.

Figure 1: 2010-2012 US 61 Crashes vs Statewide (by type)

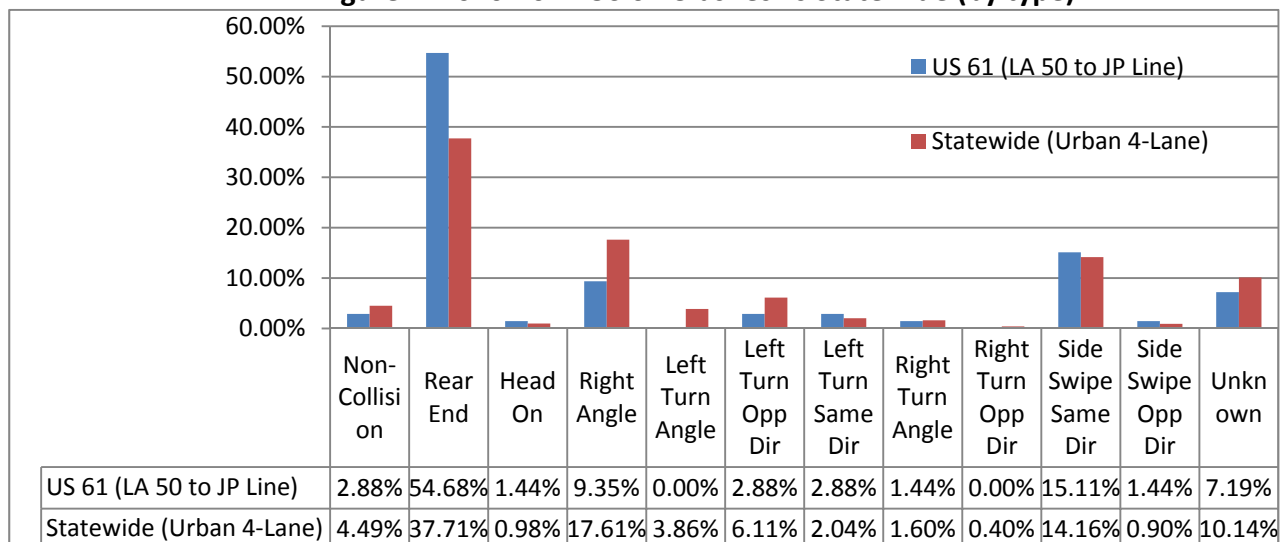


Figure 2: 2010-2012 US 61 Crash Locations (by type)



4.0 Proposed Corridor Improvements

4.1 Roadway Design Guidelines

The conceptual design of the roadway complies with the LADOTD UA-2 design guidelines and the LADOTD Road Design Manual. **Table 2** lists the design guidelines maintained for this intersection.

Table 2: Roadway Design Guidelines

ITEM NO.	DESIGN ITEM	URBAN
		UA-2
1	Design Speed (mph)	45
2	Level of Service ¹	C
3	Number of Travel Lanes (minimum)	2 (min) – 4(typ)
4	Width of Travel Lanes (ft)	11-12
5	Width of Shoulders (ft) ²	
	(A) Inside (On Multilane Facilities/ Ramps) N/A	N/A
	(B) Outside	8
6	Outside Shoulder Type	Paved
7	Parking Lane Width (ft)	10-12
8	Width of Median (ft)	
	(A) Depressed	N/A
	(B) Raised	6 ³ -30
	(C) Two Way Left Turn lane	11-14 typ. ⁴
Width of Sidewalk (min.) (where used) (ft) ⁵		
9	(a) When offset from curb	4
	(b) When adjacent to curb	6
10	Fore slope Ratio (vertical-horizontal)	1:3(min)-1:4(des)
11	Back slope Ratio (vertical-horizontal)	1:3
12	Pavement Cross Slope (%)	2.5
13	Minimum Stopping Sight Distance (ft)	360
14	Maximum Superelevation (ft per ft)	4
15	Min. Radius (With Full Super Elev.) (ft)	1000
16	Maximum Grade (%)	6
17	Minimum Vertical Clearance (ft) ⁶	16
18	Minimum Clear Zone (ft) from edge of travel lane	24 ⁷
19	Bridge Design Live Load ⁸	AASHTO
20	Width of Bridges (min) (face to face of bridge rail at gutter line) (ft)	
	(a) Curbed Facilities (without sidewalks)	Traveled way plus 8' ⁹
	(b) Shoulder Facilities	Roadway Width
21	Guardrail Required at Bridge Ends	⁹

Notes:

¹Level of service D allowable in developed urban areas.

²Curb may be used in place of shoulders on UA-1 and UA-2 facilities. If used on UA-3, UA-4, or UA-5 facilities, curb should be placed at the edge of shoulder. For design speeds greater than 45 mph, curb will not be placed in front guardrail.

³With Chief Engineer's approval, curb offsets may be eliminated and the minimum median width can be reduced to 4 feet. On principal arterials, particularly at intersections, the upper limit should be considered.

⁴Cannot be used on multilane roadways (with four or more through lanes) without the Chief Engineer's approval.

⁵Sidewalks must be separated from the shoulder and should be placed as near the right of way line as possible. On high speed facilities, they should preferably be placed outside the minimum clear zone.

⁶An additional 6 inches should be added for additional future surfacing.



4.2 Proposed Roadway Improvements

In accordance with the purpose and need of this study, the roadway improvements propose to improve safety and access management by constructing a raised median with intermittent J-turns. The proposed median comprises of a 13' wide raised grass median with 2' concrete curb and gutter on each side (total of 15') replacing the existing continuous left turn lane. The existing 4-12' travel lanes will remain intact, as well as the existing 10' paved shoulders on either side of US 61.

According to FHWA, Office of Safety, case studies have found some benefits to raised medians:

- 1) Reduce motor vehicle crashes by 15 percent
- 2) Decrease delays for motorists
- 3) Reduce vehicle speeds on the roadway
- 4) Deceleration/storage at designated locations (J-turns and intersections)
- 5) Provide space for signage and future lighting
- 6) Provide pedestrian refuge (although not pertinent to this corridor).

These parameters will aid in the improved safety of the corridor and have historically shown to reduce crashes along any corridor.

In an effort to reduce driver conflict and improve safety along US 61, drivers will be provided left turning movements via J-turns with associated bulb outs and signalized intersections. Due to heavy truck traffic, the WB-67 design vehicle was used for the bulb-out design. The locations of the proposed bulb outs are listed in **Table 3**.

Table 3: Proposed J-Turns and Bulb Outs

J-Turn Location	95%tile Queue (ft) 2033 volumes		Recommended Pocket Length (ft)	Approximate Location (Station)
	AM	PM		
WB U-Turn E/O Almedia Dr	21	18	100	372+00
EB U-Turn W/O Riverbend Dr	6	75	100	389+00
WB U-Turn E/O Riverbend Dr	68	42	100	398+00
EB U-Turn W/O James Blvd	31	469	500	437+00

Drivers accessing side streets, commercial driveways, or private property to and from US 61 will implement the right in/right out policy. This permits drivers to make right turns only to and from side streets where there is no signal.

See **Appendix A: Alternative Exhibits** showing the proposed improvements.

4.3 Drainage

Based on the April 2014 *Drainage Analysis for River Bend Drainage Improvements*, there are five proposed drainage structures to be added within the project limits (See **Table 4**). Three of these drainage structures are 115' sections of 60" Reinforced Concrete Pipe Arch crossing beneath US 61. The remaining two drainage structures are 115' sections of 4'x10' Concrete Box Culverts crossing beneath US 61. These drainage improvements are displayed on the line plan view in **Appendix A**.

Table 4: Proposed Drainage Improvements

Drainage Structures				
No.	Proposed Improvement	Location	Unit	Length
1	60" RCPA	US 61 at LA 50	LF	115
2	60" RCPA	US 61 in front of Parish Truck Sales	LF	115
3	60" RCPA	US 61 near Fox Lane	LF	115
4	4' x 10' CBC	US 61 at Walker Pump Station	LF	115
5	4' x 10' CBC	US 61 at JP Line	LF	115

4.4 Traffic

A traffic study was conducted by ITS Regional, LLC in September 2013 (See Appendix C). The classification counts and speed counts were conducted at the signalized intersections of US 61 within the project limits from 9/5/2013 to 9/12/2013, 24 hours per day. Data collection occurred between 7:00 AM to 9:00 AM and 3:00 PM to 6:00 PM on Wednesday, April 10, 2013 and Tuesday, October 3, 2013; Wednesday, October 4, 2013 and Thursday October 5, 2013. These time frames were selected because they represent the greatest combination of weekday traffic on the adjacent roadways. See **Table 5** for the results of the capacity analysis with the existing roadway geometry.

Table 5: Capacity Analysis Results (2013 Volumes with Existing Geometry)

INTERSECTION	YEAR 2013 LOS (Delay in sec)	
	AM	PM
US 61 and Almedia Rd	AM	PM
Northbound: Almedia Rd	D(35.5)	C(33.5)
Eastbound: US 61	B(12)	B(12.7)
Westbound: US 61	A(3.9)	A(9)
Overall Intersection	B(12.7)	B(13.4)
US 61 and Riverbend Dr	AM	PM
Northbound: Riverbend Dr	C(26.8)	D(36.7)
Eastbound: US 61	B(11.8)	A(7.1)
Westbound: US 61	A(4.1)	A(3.2)
Overall Intersection	A(9.3)	A(4.3)

US 61 and James Blvd	AM	PM
Northbound: James Blvd	A(0)	A(0)
Southbound: James Blvd	C(22.4)	C(31.2)
Eastbound: US 61	A(3.8)	A(4.2)
Westbound: US 61	A(8.2)	B(12)
Overall Intersection	A(7.3)	B(12.8)

Overall, the existing geometry of the corridor adequately meets the present day travel demand and capacity needs.

An average annual compounded growth rate of 2% was used to estimate future 2033 traffic volumes by applying this growth rate to 2013 AM and PM peak hour turning movement volumes. Daily peaking characteristics and the directional distribution of traffic volumes were assumed to remain consistent with the existing conditions. The percentage of heavy vehicles was also assumed to be constant. The AM and PM peak hour operations at the study intersection were analyzed using Synchro 8.0 with the existing roadway geometry and future Year 2033 traffic volumes. Capacity results of baseline 2033 conditions are contained in **Table 6**.

Table 6: Capacity Analysis Results (2033 Volumes with Existing Geometry)

INTERSECTION	YEAR 2033	
	LOS (Delay in sec)	
US 61 and Almedia Rd	AM	PM
Northbound: Almedia Rd	D(51.4)	D(48.1)
Eastbound: US 61	D(48)	C(24.4)
Westbound: US 61	A(6.6)	B(11.6)
Overall Intersection	D(40.2)	C(21.1)
US 61 and Riverbend Dr	AM	PM
Northbound: Riverbend Dr	C(22.6)	D(39.3)
Eastbound: US 61	B(15.5)	A(5)
Westbound: US 61	A(4.2)	A(4.4)
Overall Intersection	B(11.1)	A(4.7)
US 61 and James Blvd	AM	PM
Northbound: James Blvd	A(0)	A(0)
Southbound: James Blvd	C(26.8)	D(42.4)
Eastbound: US 61	A(3.1)	A(6)
Westbound: US 61	A(7.7)	D(38.9)
Overall Intersection	A(7)	D(32.7)

Based on the information in Table 6, the existing geometry performs adequately in the 2033 design year. See **Appendix C: 2014 Traffic Report** for further analyses.

4.5 HSM Analysis

As stated in **Section 3.1**, from January 1, 2010 to December 31, 2012 (3 years) there were 138 recorded crashes (average of 46 per year) on US 61 between LA 50 (Almedia Road) and the Jefferson Parish line. The Highway Safety Manual (HSM) uses a series of equations to predict the crash frequency for urban/suburban streets and intersections. Separate prediction models are used for homogenous highway segments and intersections. The equations are based on the type of roadway segment or intersection, the average annual daily traffic (AADT), and crash modification factors (CMFs).

The 1.7 mile stretch of US 61, between LA 50 (Almedia Road) and the Jefferson Parish line, is considered a homogenous stretch of highway with three major intersections. The three major intersections analyzed were LA 50 (Almedia Road), Riverbend Drive, and James Boulevard. A safety analysis was performed for current and future scenarios for the existing condition. Currently, US 61 is a five-lane arterial including a center TWLTL (5T) with an AADT of 19,100. The conditions considered for roadway segment CMFs include on-street parking, roadside fixed objects, median width, lighting, and automated speed enforcement. The conditions considered for intersection CMFs include left-turn lanes, left-turn signal phasing, right turn lanes, right turn on red, lighting, and red light camera photo enforcement. Base conditions are given a CMF equal to one.

A safety analysis was performed in order to better compare alternatives and improve safety along the project corridor. The proposed alternative will reduce US 61 to a four-lane divided arterial (including a raised or depressed median) (4D). The HSM analysis predicts a 55% increase in the average crash frequency in design year 2033 for the no-build alternative. The predicted average crash frequency results depict the proposed alternative (4D) to have approximately 50% less crashes than the no-built alternative in design year 2033. A summary of the results from the analyses can be seen in **Table 7** below.

Table 7: Predicted Average Crash Frequency

Type of Roadway Segment	Year	AADT	Crashes/yr
5T (existing)	2013	19100	23.9
	2033	28382	37.1
4D (proposed)	2013	19100	11.5
	2033	28381	18.9

In comparison, the substantive (actual) safety performance of 46.0 crashes per year exceeds the predicted crash frequency of 23.9 crashes per year for 2013. The existing corridor is operating at approximately two times higher than the predicted crash frequency. See **Appendix D: HSM Project Safety Performance Summary Reports**.

5.0 Impacts

The right-of-way and utility relocation impacts, along with potential impacts to the environment associated with the proposed alternative will be summarized below.

5.1 Right-of-Way Acquisition

Right-of-way acquisition will be required for the build alternative. The right-of-way was based on standards established by LADOTD. Because the proposed median and J-turns will be constructed within the existing continuous center left turn lane, minimal right of way acquisition will be necessary. The acquisition of right-of-way will occur at J-turn locations in order to build bulb outs on the shoulder that can accommodate the necessary turn radius for the design vehicle. In total, only 0.194 acres of right-of-way will need to be acquired. It should be noted that this value is only an estimate based from the apparent right-of-way and will require further evaluation in later stages.

5.2 Utility Impacts

Utility relocations will be required for the build alternative. Due to the level of development along the proposed corridor, moderate levels of utility impacts are expected. To identify specific locations and other details regarding all utilities, including subsurface utilities, a topographic and boundary survey should be conducted in subsequent stages of this study.

5.3 Environmental

The proposed improvements of the build alternative will require additional right-of-way acquisition. However, no extensive environmental impacts are anticipated within the project area. Additionally, the additional drainage structure to be constructed will benefit the area through better management of rainwater and greater watershed stability. A detailed summary of the potential environmental impacts for each build alternative has been summarized in **Appendix B: Stage 0 Checklists**.

6.0 Opinion of Probable Cost

6.1 Estimated Cost Methodology

A preliminary cost estimate has been prepared for the alternative using average cost information in accordance with the LADOTD Project Delivery Manual. The costs include construction, right-of-way, relocations, engineering, and contingency as expressed in 2014 dollars. It should be noted that the intention of the preliminary cost estimate is to provide an initial review of the commitment required to construct the project. Also, any adjustment to the presented alternatives in more detailed studies and survey in future



stages in the LADOTD project development process may result in changes to the cost estimate. See **Table 8** for Construction Cost Estimate.

Table 8: Preliminary Cost Estimate

US 61 IMPROVEMENTS STAGE 0 REPORT					
ST. CHARLES PARISH					
ITEM NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
201-01-00100	Clearing & Grubbing	LUMP	LUMP	\$ 25,000.00	\$ 25,000.00
202-02-06100	Removal of Concrete Walks and Drives	SY	273.0	\$ 10.00	\$ 2,730.00
202-02-06140	Removal of Curbs (Concrete)	LF	1510.0	\$ 5.00	\$ 7,550.00
202-02-02020	Removal of Asphalt Pavement	SY	7411.0	\$ 7.00	\$ 51,877.00
202-02-32140	Removal of Pipe (Storm Drain)	LF	678.0	\$ 15.00	\$ 10,170.00
203-01-00100	General Excavation	CY	2471	\$ 18.00	\$ 44,478.00
203-03-00100	Embankment	CY	5048	\$ 16.00	\$ 80,768.00
204-06-00100	Temporary Silt Fencing	LF	19104.0	\$ 2.00	\$ 38,208.00
204-02-00100	Temporary Hay or Straw Bales	EA	88.0	\$ 13.00	\$ 1,144.00
302-02-02000	Class II Base Course (6" Thick)	SY	4317.0	\$ 13.00	\$ 56,121.00
402-01-00100	Traffic Maintenance Aggregate (Vehicular Measurement)	CY	200.0	\$ 20.00	\$ 4,000.00
502-01-00100	Superpave Asphaltic Concrete	TON	8555.0	\$ 132.00	\$ 1,129,260.00
502-01-00200	Superpave Asphaltic Concrete, Drives, Turnouts	TON	1758.0	\$ 120.00	\$ 210,960.00
509-01-00100	Cold Planing Asphaltic Pavement	SY	80022.0	\$ 5.50	\$ 440,121.00
701-02-01120	Cross Drain Pipe Arch (60" Equiv. RCPA)	LF	348.0	\$ 480.00	\$ 167,040.00
706-02-00200	Concrete Drive (6")	SY	273.0	\$ 56.00	\$ 15,288.00
707-03-00100	Combination Concrete Curb and Gutter(Barrier)	LF	18421.0	\$ 60.00	\$ 1,105,260.00
707-01-00300	Concrete Curb (Mountable)	LF	295.0	\$ 25.00	\$ 7,375.00
708-01-00100	Right-of-Way Monument	EA	12.0	\$ 200.00	\$ 2,400.00
713-01-00100	Temporary Signs and Barricades	LUMP	LUMP	\$ 60,000.00	\$ 60,000.00
722-01-00100	Project Site Laboratory	EA	1.0	\$ 60,000.00	\$ 60,000.00
727-01-00100	Mobilization	LUMP	LUMP	\$200,000.00	\$ 200,000.00
731-02-00100	Reflectorized Pavement Markers	EA	455.0	\$ 10.00	\$ 4,550.00
732-0X-XXXX	Pavement Striping and Symbols	LUMP	1.0	\$137,824.00	\$ 137,824.00
739-01-00100	Hydro-Seeding	ACRE	15.3	\$ 2,000.00	\$ 30,500.00
740-01-00100	Construction Layout	LUMP	LUMP	\$100,000.00	\$ 100,000.00
NS-203-00006	Exploratory Excavation	CY	100.0	\$ 260.00	\$ 26,000.00
NS-500-00340	Saw Cutting Asphaltic Concrete Pavement (Full Depth)	IN-FT	94648.0	\$ 1.00	\$ 94,648.00
NS-600-00220	Saw Cutting Portland Cement Concrete Pavement	IN-FT	2216.0	\$ 1.00	\$ 2,216.00
NS-805-XXXXX	Reinforced Concrete Box Culvert (10' x 4')	LF	230.0	\$ 1,500.00	\$ 345,000.00
Construction Cost					\$4,460,488.00
Engineering Design (10%)					
					LS
					\$446,048.8
R/W Acquisition					
					ACRE
					0.194
					\$300,000.00
					\$58,200.00
Contingency (10%)					
					LS
					\$496,474
TOTAL PROJECT COST					\$5,461,210



6.2 Detours/Closures During Construction

The US 61 corridor is to remain open during construction. During the construction of the raised medians, the inner lanes may be closed, leaving the outer lanes open to traffic. However, if detours are necessary during construction, a possible detour route would be LA 48 via LA 49 and LA 50 (see **Figure 3**). This detour would increase travel time of drivers attempting to reach James Boulevard from the west by 15 minutes due to adding 6 miles.

Figure 3: LA 48 Detour Route via LA 49 and LA 50



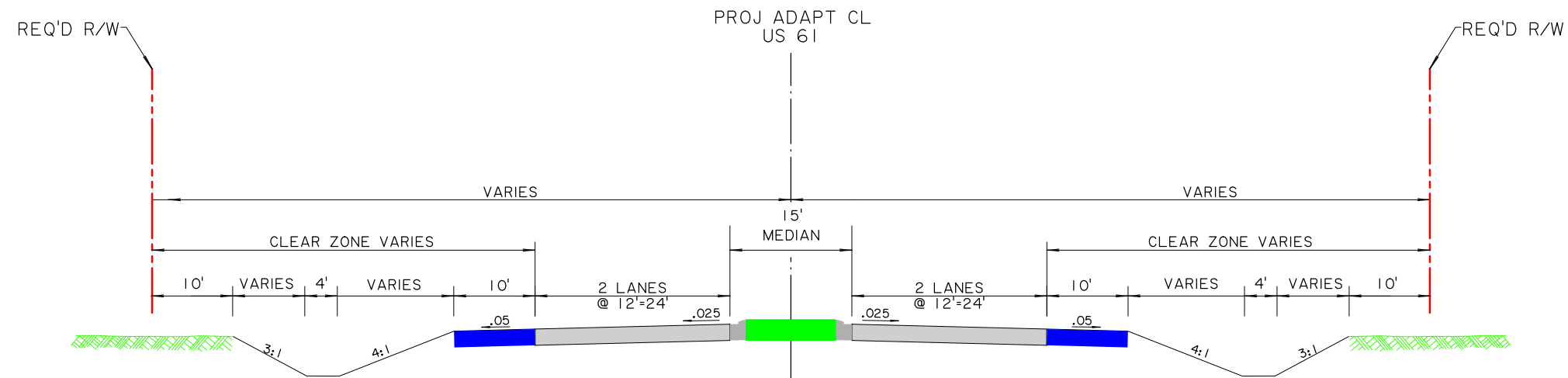
7.0 Comparison Summary

A preliminary comparison matrix has been prepared for the No-Build and Build Alternative. See **Table 9** for Comparison Matrix.

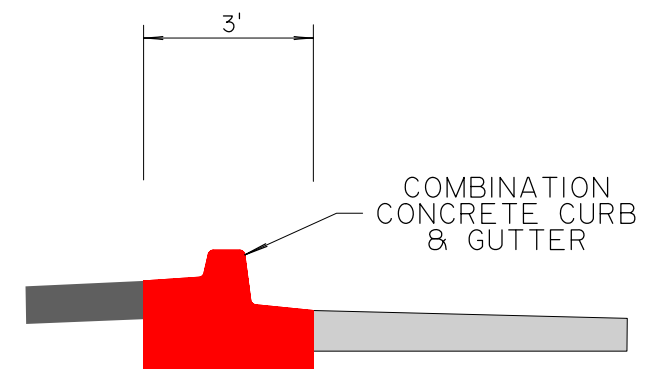
Table 9: Comparison Matrix

Evaluation Criteria	NO BUILD	Proposed Improvements
Raised Median with Turning Bays	No	Yes
Right-of-Way Acquisition (Acres)	0	0.19
Utility Relocations	No	Moderate
Conflict Point Reduction	No	Yes
Access Management	No	Yes
New Drainage Structures	N/A	5
Construction Cost	N/A	\$5,461,210

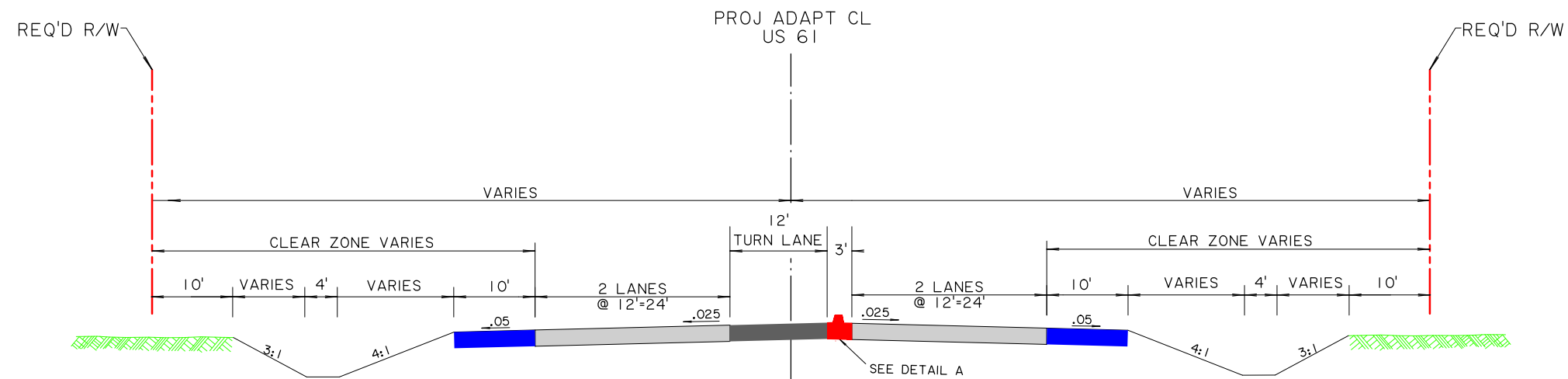
Appendix A: Alternative Exhibits



TYPICAL SECTION US 61 - UA2



DETAIL A
MEDIAN DETAIL



TYPICAL SECTION US 61 - UA2
(SHOWING MEDIAN TURN LANE)

LEGEND

- TRAVEL LANE
- SHOULDER
- CONCRETE BARRIER
- TURN LANE

PRELIMINARY -
PLANNING PURPOSES ONLY
NOT FOR CONSTRUCTION

SHEET NUMBER		PARISH	FEDERAL PROJECT	STATE PROJECT	DATE	BY
		ST. CHARLES		RPC TASK A-6.14		
DESIGNED	CHECKED	DESIGNED	CHECKED	DATE	REVISION DESCRIPTION	
TYPICAL SECTIONS US 61 IMPROVEMENTS (LA 50 TO JEFFERSON PARISH LINE) STAGE 0 FEASIBILITY STUDY						
BUCHART HORN, INC.						



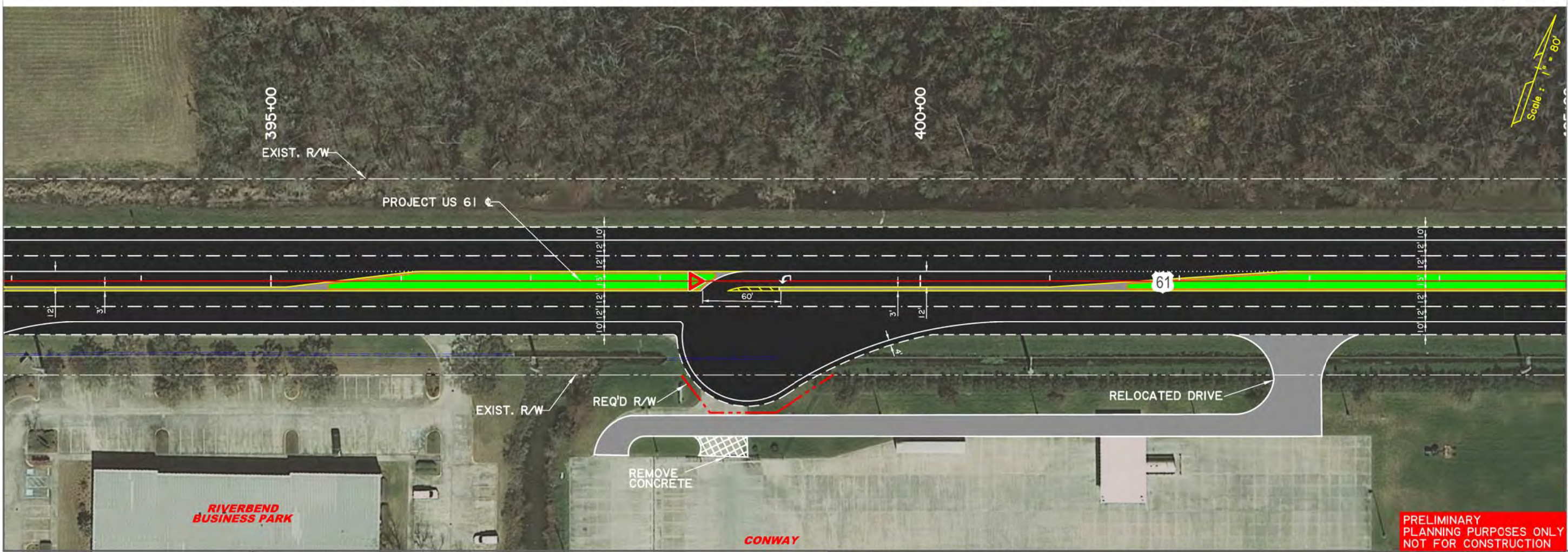
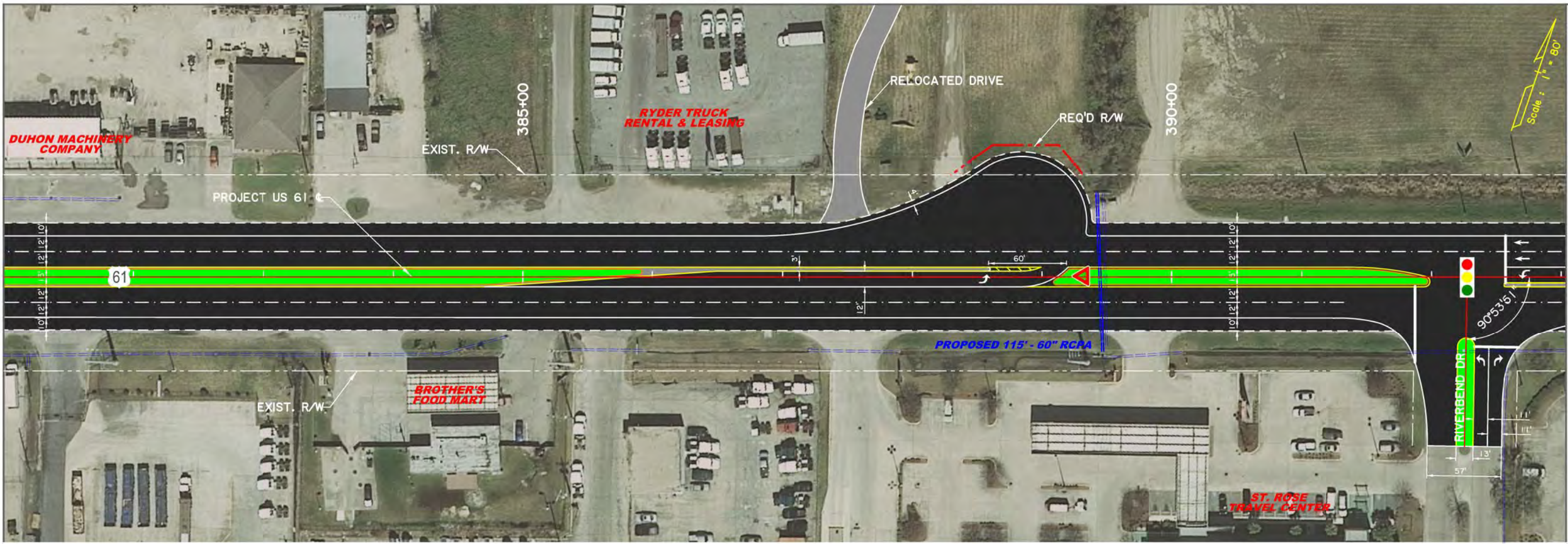
CURVE DATA 1
 PI STA. 365+43.48
 $\Delta = 35^{\circ}13'43''$
 $D = 2^{\circ}20'53''$
 $T = 774.69'$
 $L = 1500.25'$
 $R = 2440.00'$

LEGEND:

	EDGE OF PAVEMENT
	EDGE OF SHOULDER
	CURB & GUTTER
	REQ'D R/W
	EXIST. R/W



SHEET NUMBER	1
DESIGNED	ST. CHARLES
CHECKED	
DETAILED	
CHECKED	
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DATE	
PLAN SHEET US 61 IMPROVEMENTS	
PRELIMINARY PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION	



DESIGNED	ST. CHARLES
CHECKED	
DATE	
BY	
REVISION DESCRIPTION	
NO.	DATE

SHEET NUMBER: 2
 PARISH: ST. CHARLES
 FEDERAL PROJECT: RPC TASK A-6.14FY-14UPWP
 STATE PROJECT: RPC TASK A-6.14FY-14UPWP

PLAN SHEET
 US 61 IMPROVEMENTS

BUCHART-HORN, INC.
 BUCHART-HORN, INC.

PRELIMINARY
 PLANNING PURPOSES ONLY
 NOT FOR CONSTRUCTION



DESIGNED	ST. CHARLES
CHECKED	
DETAILED	
CHECKED	
DATE	
BY	
REVISION DESCRIPTION	
NO.	DATE

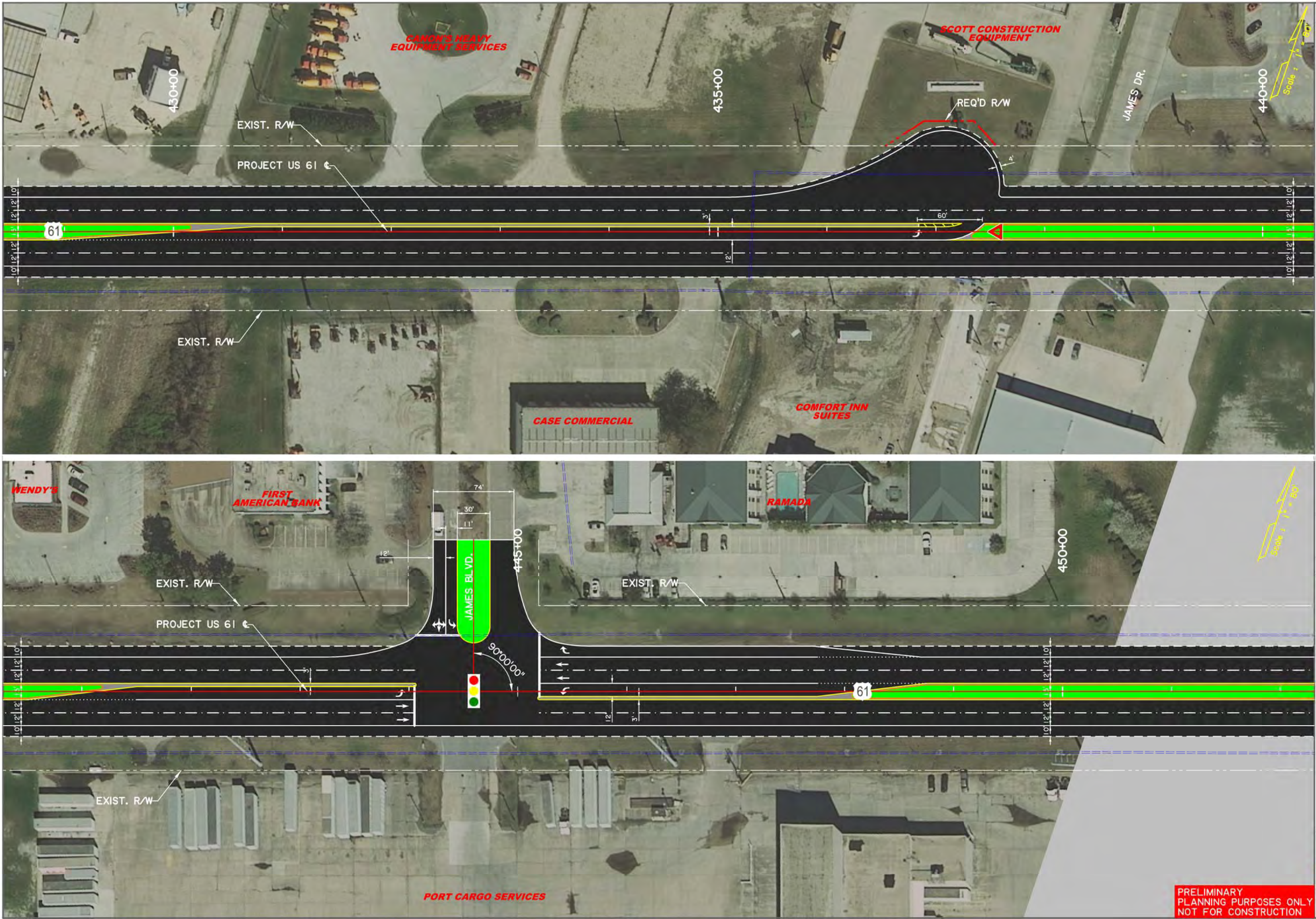
PLAN SHEET

US 61 IMPROVEMENTS

PRELIMINARY
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BUCHART-HORN, INC.

RPC TASK A-6.14FY-14UPWP



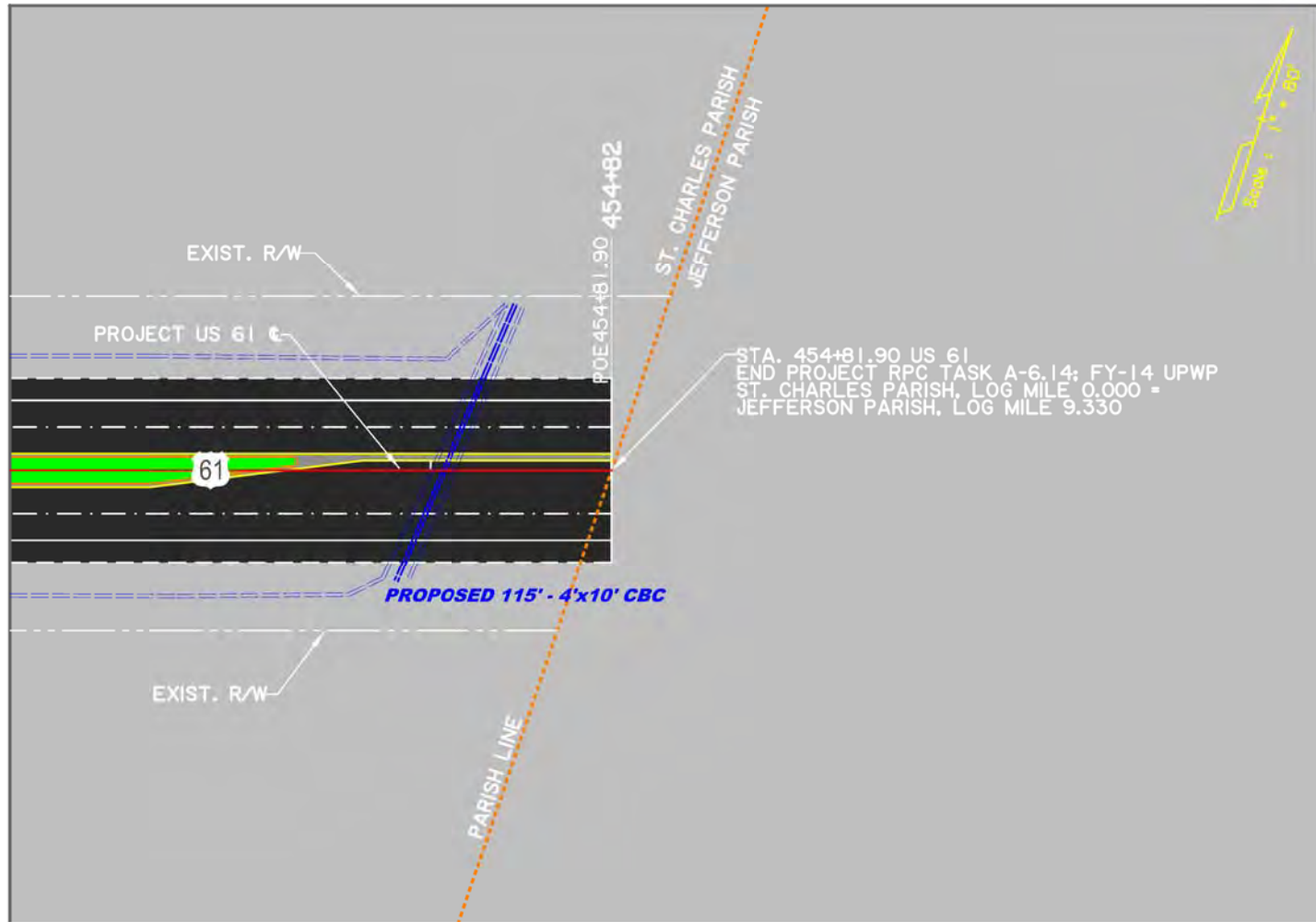
DESIGNED	ST. CHARLES	SHEET NUMBER	4
CHECKED		FEDERAL PROJECT	
DATE		STATE PROJECT	RPC TASK A-6.14FY-14UPWP
BY		REVISION DESCRIPTION	
NO.		DATE	



PLAN SHEET
US 61 IMPROVEMENTS



PRELIMINARY
PLANNING PURPOSES ONLY
NOT FOR CONSTRUCTION



PRELIMINARY
 PLANNING PURPOSES ONLY
 NOT FOR CONSTRUCTION

 REGIONAL PLANNING COMMISSION ST. CHARLES, LOUISIANA	SHEET NUMBER 01
	PARISH ST. CHARLES
	FEDERAL PROJECT RPC TASK A-6.14: FY-14UPWP
	STATE PROJECT RPC TASK A-6.14: FY-14UPWP
DESIGNED 	REVISION DESCRIPTION
CHECKED 	NO.
DETAILED 	DATE
CHECKED 	SHEET
DATE 	BY
BY 	



PLAN SHEET
 US 61 IMPROVEMENTS

Appendix B: Stage 0 Checklist

STAGE 0
Preliminary Scope and Budget Checklist

A. Project Background

District 02 Parish St. Charles

Route US 61 Control Section 007-03

Begin Log Mile 1.759 End Log Mile 0.000

Project Category (Safety, Capacity, etc.): Safety

Date Study Completed: June 2014

Describe the existing facility: Functional classification: UA-2 Number and width of lanes: 4-12' with 15' continuous center turn lane Shoulder width and type: Paved - 10' Mode: _____

Access control: None ADT: 19,100 Posted Speed: 45

Describe any existing pedestrian facilities (ADA compliance should be considered for all improvements that include pedestrian facilities): None

Describe the adjacent land use: Light Industrial

Who is the sponsor of the study? LADOTD

List study team members: Buchart Horn, ITS, DEI

Will this project be adding miles to the state highway system (new alignment, new facility)? If yes, has a transfer of ownership been initiated with the appropriate entity? No

Are there recent, current or near future planning studies or projects in the vicinity? Yes

If yes, please describe the relationship of this project to those studies/projects. East of the US 61 and James Blvd intersection, it is being proposed to convert the continuous center turn lane on US 61 to a median.

Provide a brief chronology of these planning study activities: Preliminary plans were submitted in January 2014

B. Purpose and Need

State the Purpose (reason for proposing the project) and Need (problem or issue)/Corridor Vision and a brief scope of the project. Also, identify any additional goals and objectives for the project.

Purpose & Need- To identify an alternative to address present safety and access management concerns in relation to the presence of a continuous, center turn lane along the US 61 corridor.

Scope - To evaluate two (2) design alternatives and develop the alternative(s) to appropriate level of detail should they meet the purpose and need of the project.

C. Agency Coordination

Provide a brief synopsis of coordination with federal, tribal, state and local environmental, regulatory and resource agencies.

Meetings have been conducted with LADOTD, local officials, and RPC to obtain input regarding the scope, alternatives, and needs of the project. At the draft stage of the report, LADOTD, local officials, and RPC will be asked for their input.

What transportation agencies were included in the agency coordination effort?

LADOTD and RPC

Describe the level of participation of other agencies and how the coordination effort was implemented.

LADOTD will provide guidance towards developing the most feasible alternatives in relation to the existing intersection configuration and other proposed improvements to be constructed on other sections of connecting roadway.

C. Agency Coordination (Continued)

What steps will need to be taken with each agency during NEPA scoping?

With the direction of LADOTD and RPC, a formal meeting amongst all involved agencies, public officials and stakeholders should be held to discuss all pertinent issues regarding the project.

D. Public Coordination

Provide a synopsis of the coordination effort with the public and stakeholders; include specific timelines, meeting details, agendas, sign-in sheets, etc. (if applicable).

No public meetings were held for this study. September 4, 2013 – kickoff meeting was held at St. Charles Parish President’s office. January 28, 2014 – coordination meeting was held at St. Charles Parish President’s office.

E. Range of Alternatives – Evaluation and Screening

Give a description of the project concept for each alternative studied.

What are the major design features of the proposed facility (attach aerial photo with concept layout, if applicable).

In accordance with the purpose and need of this study, the proposed roadway improvements propose to improve safety and access management by constructing a raised median with intermittent J-turns and associated bulb-outs. The proposed plan contains a 15’ wide raised grass median including a 2’ concrete curb on each side in place of the current continuous left turn lane. The existing 4-12’ travel lanes will remain intact, as well as the existing 10’ paved shoulders on either side of US 61.

Will design exceptions be required? No

What impact would this project have on freight movements? No

Does this project cross or is it near a railroad crossing? No

DOTD’s “Complete Streets” policy should be taken into consideration. Per the policy, any exception for not accommodating bicyclists, pedestrians and transit users will require the approval of the DOTD chief engineer. For exceptions on Federal-aid highway projects, concurrence from FHWA must also be obtained. In addition any exception in an urbanized area, concurrence from the MPO must also be obtained.

- Describe how the project will implement the policy or include a brief explanation of why implementing the policy would not be feasible. N/A

How are Context Sensitive Solutions being incorporated into the project? Every effort was taken to avoid conflicts with the bulb out locations.

Was the DOTD’s “Access Management” policy taken into consideration? If so, describe how. Yes. The project complies with the regulations specified under the LADOTD Access Connections Policy and other directives specified by the LADOTD Traffic Engineering Department. Medians were added to reduce the number of conflict points along the corridor. J-turns with associated bulb-outs were added for traffic wishing to make a U-turn.

Were any safety analyses performed? If so describe results. Data on the crash history at the intersection was obtained from DOTD. After evaluating the crash data between the years of 2010-2012, a total of 138 crashes were identified along the corridor.

Are there any abnormal crash locations or overrepresented crashes within the project limits? _

An overrepresentation of rear-end crashes is present along the corridor.

E. Range of Alternatives – Evaluation and Screening (Continued)

What future traffic analyses are anticipated? A traffic study was conducted on existing and future traffic conditions. No further analyses are anticipated.

Will fiber optics be required? If so, are there existing lines to tie into? Investigations on utilities should be conducted in further design stages when a survey is obtained.

Are there any future ITS/traffic considerations? Not at this time

What is the required Transportation Management Plan (TMP) level as defined by EDSM No. VI.1.1.8? _____
Please attach documentation required for Stage 0 for this level TMP.

Was Construction Transportation Management/Property Access taken into consideration? Yes but should be further investigated in design stages.

Were alternative construction methods considered to mitigate work zone impacts? Yes but should be further investigated in design stages.

Describe screening criteria used to compare alternatives and from what agency the criteria were defined.
RPC developed the scope for this study and no alternatives have been screened at this time.

Give an explanation for any alternative that was eliminated based on the screening criteria.
All alternatives will be evaluated.

Which alternatives should be brought forward into NEPA and why? All alternatives will be brought forward and none have been screened at this time.

Did the public, stakeholders and agencies have an opportunity to comment during the alternative screening process? All involved agencies and stakeholders had the opportunity to review and comment on the proposed alternatives, but not screening has occurred at this time.

Describe any unresolved issues with the public, stakeholders and/or agencies.
There are no unresolved issues at this time.

F. Planning Assumptions and Analytical Methods

What is the forecast year used in the study? 2033

What method was used for forecasting traffic volumes? Synchro

Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long range transportation plan? Yes

What future year policy and/or data assumptions were used in the transportation planning process as they are related to land use, economic development, transportation costs and network expansion? An average annual compounded growth rate of 2.0% was used to estimate future 2033 traffic volumes by applying this growth rate to 2014 AM and PM peak hour turning movement volumes. Daily peaking characteristics and the directional distribution of traffic volumes were assumed to remain consistent with the existing conditions. The percentage of heavy vehicles was also assumed to be constant. The AM and PM peak hour operations at the study intersection were analyzed using Synchro with the existing roadway geometry.

G. Potential Environmental Impacts

See the attached Stage 0 Environmental Checklist

H. Cost Estimate

Provide a cost estimate for each feasible alternative:

- See attached Stage 0 Report, **Section 6.0 for Opinion of Probable Cost** per alternative.
Yes but should be further investigated in design stages.

I. Expected Funding Source(s) (Highway Priority Program, CMAQ, Urban Systems, Fed/State earmarks, etc.) _____

ATTACH ANY ADDITIONAL DOCUMENTATION

Disposition (circle one): (1) Advance to Stage 1 (2) Hold for Reconsideration (3) Shelve

STAGE 0
Environmental Checklist

Route US Route 61- Airline Highway Parish: St. Charles

C.S. 007-02 Begin Log mile 1.759 End Log mile 0.000

ADJACENT LAND USE: Light Industrial

Any property owned by a Native American Tribe?

(Y or N or Unknown) If so, which Tribe? Unknown

Any property enrolled into the Wetland Reserve Program?

(Y or N or Unknown) If so, give the location N

Are there any other known wetlands in the area?

(Y or N) If so, give the location Y, to the north and south of the corridor there are areas of Freshwater Forested/Shrub Wetland (Pauline).

Community Elements: Is the project impacting or adjacent to any (if the answer is yes, list names and locations):

(Y or N) Cemeteries N

(Y or N) Churches N

(Y or N) Schools N

(Y or N) Public Facilities (i.e., fire station, library, etc.) N

(Y or N) Community water well/supply Y, 089-5714Z and 089-5715 (-90.3066667, 29.971944444) – both are New Orleans Aquifer System Superficial Confining Units for monitoring

Section 4(f) issue: Is the project impacting or adjacent to any (if the answer is yes, list names and locations):

(Y or N) Public recreation areas N

(Y or N) Public parks N

(Y or N) Wildlife Refuges N

(Y or N) Historic Sites N

Is the project impacting, or adjacent to, a property listed on the National Register of Historic Places?

(Y or N) **Is the project within a historic district or a national landmark district?** (Y or N) If the answer is yes to either question, list names and locations below:
N

Do you know of any threatened or endangered species in the area? (Y or N)

If so, list species and location. N

Does the project impact or adjacent to a stream protected by the Louisiana Scenic Rivers Act? (Y or N)

If yes, name the stream. N

Are there any Significant Trees as defined by EDSM I.1.1.21 within proposed ROW? (Y or N) If so, where? N

What year was the existing bridge built? N/A

Are any waterways impacted by the project considered navigable? (Y or N) If unknown, state so, list the waterways: N

Hazardous Material: Have you checked the following DEQ and EPA databases for potential problems? (If the answer is yes, list names and locations.)

(Y or N) **Leaking Underground Storage Tanks** N (Y or N) **CERCLIS** N

(Y or N) **ERNS** N (Y or N) **Enforcement and Compliance History** Y, BC Auto Wreckers (CWA Noncompliance), Doggett Machinery (CWA Noncompliance)

STAGE 0
Environmental Checklist

Underground Storage Tanks (UST): Are there any Gasoline Stations or other facilities that may have UST on or adjacent to the project? (Y or N) Y If so, give the name and location:

RaceTrac #482 – 521 Almedia Rd.

Riverbend Truckstops – 10326 Airline Hwy

St. Rose Travel Center – 10405 Airline Hwy

Any chemical plants, refineries or landfills adjacent to the project? (Y or N) **Any large manufacturing facilities adjacent to the project?** (Y or N) **Dry Cleaners?** (Y or N) If yes to any, give names and locations: Y, see plans and report

Oil/Gas wells: Have you checked DNR database for registered oil and gas wells? (Y or N) List the type and location of wells being impacted by the project. N

Are there any possible residential or commercial relocations/displacements? (Y or N)

How many? N

Do you know of any sensitive community or cultural issues related to the project? (Y or N)

If so, explain N

Is the project area population minority or low income? (Y or N) N

What type of detour/closures could be used on the job? No road closures or detours are expected

Did you notice anything of environmental concern during your site/windshield survey of the area? If so, explain below.

 N

Buchart Horn, Inc

Point of Contact

225-755-2120

Phone Number

02/25/14

Date

STAGE 0

Environmental Checklist

General Explanation:

To adequately consider projects in Stage 0, some consideration must be given to the human and natural environment which will be impacted by the project. The Environmental Checklist was designed knowing that some environmental issues may surface later in the process. This checklist was designed to obtain basic information, which is readily accessible by reviewing public databases and by visiting the site. It is recognized that some information may be more accessible than other information. Some items on the checklist may be more important than others depending on the type of project. It is recommended that the individual completing the checklist do their best to answer the questions accurately. Feel free to comment or write any explanatory comments at the end of the checklist.

The Databases:

To assist in gathering public information, the previous sheet includes web addresses for some of the databases that need to be consulted to complete the checklist. As of February 2011, these addresses were accurate.

Note that you will not have access to the location of any threatened or endangered (T&E) species. The web address lists only the threatened or endangered species in Louisiana by Parish. It will generally describe their habitat and other information. If you know of any species in the project area, please state so, but you will not be able to confirm it yourself. If you feel this may be an issue, please contact the Environmental Section. We have biologist on staff who can confirm the presence of a species.

Why is this information important?

Land Use? Indicator of biological issues such as T&E species or wetlands.

Tribal Land Ownership? Tells us whether coordination with tribal nations will be required.

WRP properties? Farmland that is converted back into wetlands. The Federal government has a permanent easement which cannot be expropriated by the State. Program is operated through the Natural Resources Conservation Service (formerly the Soil Conservation Service).

Community Elements? DOTD would like to limit adverse impacts to communities. Also, public facilities may be costly to relocate.

Section 4(f) issues? USDOT agencies are required by law to avoid certain properties, unless a prudent or feasible alternative is not available.

Historic Properties? Tells us if we have a Section 106 issue on the project. (Section 106 of the National Historic Preservation Act) See <http://www.achp.gov/work106.html> for more details.

Scenic Streams? Scenic streams require a permit and may require restricted construction activities.

Significant Trees? Need coordination and can be important to community.

Age of Bridge? Section 106 may apply. Bridges over 50 years old are evaluated to determine if they are eligible for the National Register of Historic Places.

Navigability? If navigable, will require an assessment of present and future navigation needs and US Coast Guard permit.

Hazardous Material? Don't want to purchase property if contaminated. Also, a safety issue for construction workers if right-of-way is contaminated.

Oil and Gas Wells? Expensive if project hits a well.

Relocations? Important to community. Real Estate costs can be substantial depending on location of project. Can result in organized opposition to a project.

Sensitive Issues? Identification of sensitive issues early greatly assists project team in designing public involvement plan.

Minority/Low Income Populations? Executive Order requires Federal Agencies to identify and address disproportionately high and adverse human health and environmental effects on minority or low income populations. (Often referred to as Environmental Justice)

Detours? The detour route may have as many or more impacts. Should be looked at with project. May be unacceptable to the public.

STAGE 0 Environmental Checklist

Louisiana Governor's Office of Indian Affairs:

<http://www.indianaffairs.com/tribes.htm>

Louisiana Wetlands Reserve Program:

<http://www.nrcs.usda.gov/programs/wrp/states/la.html>

Community Water Well/Supply

<http://sonris.com/default.htm>

Louisiana Department of Wildlife and Fisheries – Wildlife Refuges

<http://www.wlf.louisiana.gov/refuges>

<http://www.fws.gov/refuges/profiles/ByState.cfm?state=LA>

<http://www.fws.gov/refuges/refugelocatomaps/Louisiana.html>

U.S. Fish & Wildlife Service – National Wetlands Inventory:

<http://www.fws.gov/wetlands/>

Louisiana State Historic Sites:

<http://www.crt.state.la.us/parks/ihistoricsiteslisting.aspx>

National Register of Historic Places (Louisiana):

<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>

<http://www.nationalregisterofhistoricplaces.com/la/state.html>

National Historic Landmarks Program:

<http://www.nps.gov/history/nhl/>

Threatened and Endangered Species Databases:

<http://www.wlf.louisiana.gov/wildlife/louisiana-natural-heritage-program>

Louisiana Scenic Rivers:

<http://www.wlf.louisiana.gov/wildlife/scenic-rivers>

<http://media.wlf.state.la.us/experience/scenicrivers/louisiananaturalandscenicriversdescriptions/>

<http://www.legis.state.la.us/lss/lss.asp?doc=104995>

Significant Tree Policy (EDSM I.1.1.21)

<http://notes1/ppmemos.nsf>

(Live Oak, Red Oak, White Oak, Magnolia or Cypress, aesthetically important, 18" or greater in diameter at breast height and has form that separates it from surrounding or that which may be considered historic.)

CERCLIS (Superfund Sites):

<http://www.epa.gov/superfund/sites/cursites/>

http://www.epa.gov/enviro/html/cerclis/cerclis_query.html

ERNS - Emergency Response Notification System - Database of oil and hazardous substances spill reports: <http://www.epa.gov/region4/r4data/erns/index.htm>

Enforcement & Compliance History (ECHO)

<http://www.epa-echo.gov/echo/>

DEQ – Underground Storage Tank Program Information:

<http://www.deq.louisiana.gov/portal/tabid/2674/Default.aspx>

Leaking Underground Storage Tanks:

<http://www.deq.state.la.us/portal/tabid/79/Default.aspx>

STAGE 0
Environmental Checklist

SONRIS – Oil and Gas Well Information & Water Well Information
<http://sonris.com/default.htm>

Environmental Justice (minority & low income)
<http://www.fhwa.dot.gov/environment/ej2000.htm>

Demographics
<http://www.census.gov/>

FHWA’s Environmental Website
<http://www.fhwa.dot.gov/environment/index.htm>

Additional Databases Checked

Other Comments:
