Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
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Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

May 1, 2015

STATE PROJECT NO. H.003003
FEDERAL AID PROJECT NO. H003003
NAME: I-10: E. JCT. I-49 TO LA 328
ROUTE: I-10
PARISHES: LAFAYETTE AND ST. MARTIN

APPROVED
Carl M. Highsmith
CARL M. HIGHSMITH
PROJECT DELIVERY TEAM LEADER
FEDERAL HIGHWAY ADMINISTRATION
DATE 5-29-15

Wes Bolinger
Division Administrator
Federal Highway Administration
5304 Flanders Drive, Suite A
Baton Rouge, Louisiana 70808

SUBJECT: Categorical Exclusion

* Special Commitments Apply *
See Revised Sheet iii & iv.

ATTN: Ms. Lismary Gavillan
Mr. Bob Mahoney

Dear Mr. Bolinger:

Attached is the Environmental Checklist with a copy of the application for the captioned project. Based on the information contained herein, we feel this project meets the requirements for classification as a Categorical Exclusion.

Per the Wetland Finding (Appendix C), there are approximately **0.13 acre of potentially jurisdictional wetlands** and approximately **4.819 acre of other waters of the U.S. within the project right-of-way.** The Department of the Army, New Orleans District, Corps of Engineers, will determine whether the identified areas are jurisdictional and the impact acreage that must be permitted with a Department of the Army, Clean Water Act permit prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the U.S.

In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations. Per request, **the project manager will include this stipulation on the construction plans to insure contractors are aware of the commitment.**

Additionally, a NPDES stormwater permit and a U.S. Coast Guard, Navigational Lights determination will be required for this project. If you have any questions or comments please contact Maria Bernard Reid at (225) 242-4506.

REVIEWED AND RECOMMENDED FOR APPROVAL
Lismary Gavillan
DATE 5/29/15

RECEIVED
BY: .....

Sincerely,

Noel Ardoin
Environmental Engineer Administrator

Maria Bernard Reid
Maria Bernard Reid
Environmental Impact Manager

NA/MBR/mbr
attachments

cc: Nicholas Olivier

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

AND

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CATEGORICAL EXCLUSION

FOR

STATE PROJECT NO. H.003003
F.A.P. NO. H003003
I-10: E. JCT. I-49 TO LA 328
ROUTE: I-10
LAFAYETTE AND ST. MARTIN PARISHES

APRIL 2015

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Appendix F: Preliminary Plans

SUMMARY OF MITIGATION, PERMITS, AND ENVIRONMENTAL COMMITMENTS

Mitigation

The Louisiana Department of Transportation and Development (DOTD) will implement the following mitigation measures to ensure that adverse environmental impacts associated with the project are avoided or minimized to the extent practicable.

- The contractor will be required to adhere to the provisions established by the *Louisiana Standard Specifications for Roads and Bridges*, 2006 edition concerning erosion control, as well as other federal, state, and local permits that may be required.

- There are approximately **0.13 acre of jurisdictional wetlands** and approximately **4.819 acre of other waters of the U.S. within the project right-of-way.** This finding is pursuant to the *Army Corps of Engineers' 1987 Manual* (or *2010 Regional Supplement*) with subsequent clarification memoranda and pursuant to confirmation by the Army Corps of Engineers. The Department of the Army, New Orleans District, Corps of Engineers, will determine whether the identified areas are jurisdictional and the impact acreage that must be permitted with a Department of the Army, Clean Water Act permit prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the U.S.

Permits

It is anticipated that DOTD would acquire the following permits prior to commencement of construction activities:

- Louisiana Pollutant Discharge Elimination System (LPDES), Stormwater Permit
- Department of the Army, Clean Water Act, Nationwide Permit 23
- U.S. Coast Guard, Navigational Lights determination

Commitments

In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations. Per request, **the project manager will include this stipulation on the construction plans to insure contractors are aware of the commitment.**

The noise analysis determined that a 2,261-foot long noise abatement barrier would be feasible and reasonable for the impacted areas within the project corridor at Moss Street South. Consideration of Viewpoints as defined in the DOTD *Highway Traffic Noise Policy* (July 2011) will be conducted to consider public input regarding the abatement barrier.

The Louisiana Department of Environmental Quality (LDEQ) stated that all precautions should be observed to control nonpoint source pollution from construction activities.

Currently one crossover, which is authorized by the Federal Highway Administration (FHWA) exists within the limits of this project and is located near the existing weigh stations. It is expected

that this crossover location will be fully restricted by the proposed median barrier; thus eliminating the use of this crossover. Additionally, a safety analysis will be performed by DOTD and included in the project's Traffic Management Plan.

The parallel acceleration lanes for the westbound and eastbound on-ramps at the weigh stations within the project area have a length (L, not including taper) of 895 feet and 820 feet respectively. Per AASHTO Table 10-3, this is adequate for an initial speed at the gore (Va') of 40 miles per hour (mph). However, it may be difficult for the trucks to reach 40 mph in the 475-foot distance measured from the parking area of the weigh station to the gore. Table 10-3 notes an acceleration length of 1620 feet from a stopped condition. DOTD will lengthen the existing acceleration lanes to provide 1620 feet from the parking area (i.e., add 250 feet and 303 feet to the westbound and eastbound on-ramps) in Final Plans.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
ENVIRONMENTAL DETERMINATION CHECKLIST

STATE PROJECT NO.: H.003003
NAME: I-10: E. JCT. I-49 TO LA 328
ROUTE: I-10
PARISHES: LAFAYETTE AND ST. MARTIN

1. General Information

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

2. Class of Action

☐ Environmental Impact Statement (E.I.S.) ☐ State Funded Only (EE/EF/ER)
☐ Environmental Assessment (E.A.)
☒ Categorical Exclusion (CE)
☐ Programmatic CE (as defined in FHWA letter of agreement dated 03/15/95)

3. Project Description

The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitations with additional travel lanes along Interstate 10 (I-10) from the east junction of I-49 continuing eastward to LA 328 in Lafayette and St. Martin Parishes, Louisiana. The project corridor is approximately 6 miles long and covers approximately 260.5 acres. DOTD does not anticipate the need for additional right-of-way. Refer to the Project Description Section (page 1) of the CE for additional project information.

4. Public Involvement

☒ Views were solicited. **August 4, 2014 (See Appendix A of CE)**
☐ Views were not solicited.
☒ Public Involvement events held. (List events and dates in Section 11.) [1]
☐ A public hearing/opportunity for requesting a public hearing required. (List dates in Section 11.)
☐ A public hearing/opportunity for requesting a public hearing not required.

5. Real Estate

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

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

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

7. Cultural Section 106

		NO	YES	N/A
a.	Are any **known historic properties** adjacent or impacted by the project? (If so, list below)……..	☒	☐	☐[2]
b.	Are any **known archaeological sites** adjacent or impacted by the project? (If so, list site # below) ……..	☒	☐	☐[2]
c.	Would the project affect property owned by or held in trust for a federally recognized **tribal government**?	☒	☐	☐

8. Natural & Physical Environment

		NO	YES	N/A
a.	Are **wetlands** affected? …….....	☐	☒	☐[3]
b.	Are **other waters** of the U.S. affected? …….....	☐	☒	☐[3]
c.	Are **Endangered/Threatened Species**/Habitat affected? ……	☒	☐	☐
d.	Is project within 100-Year **Floodplain**? ….....	☐	☒	☐[4]
e.	Is project in **Coastal Zone** Management Area? ….....	☒	☐	☐
f.	Is project in a **Coastal Barrier Resources** area? ……..	☒	☐	☐
g.	Is project on a **Sole Source Aquifer**? ……..……..	☐	☒	☐[5]
h.	Is project impacting a **navigable waterway**? ….....	☒	☐	☐
i.	Are any State or Federal **Scenic Rivers/Streams** impacted? ……	☒	☐	☐
j.	Is a **noise** analysis warranted (Type I project) ……..……	☐	☒	☐
k.	Is an **air** quality study warranted?	☒	☐	☐
l.	Is project in a **non-attainment** area? …….....	☒	☐	☐
m.	Is project in an approved Transportation Plan, Transportation Improvement Program (TIP) and State Transportation Improvement Program (**STIP**)?	☐	☒	☐
n.	Are **construction** air, noise, & water impacts major? ……..	☒	☐	☐
o.	Will the project affect or be affected by a **hazardous waste site**, leaking underground storage tank, oil/gas well, or other potentially contaminated site?	☒	☐	☐

9. Social Impacts

		NO	YES	N/A
a.	Will project change **land use** in the area? ……	☒	☐	☐
b.	Are any **churches and schools** impacted by or adjacent to the project? …... (If so, list below)	☐	☒	☐[6]
c.	Has **Title VI** been considered? ……	☐	☒	☐
d.	Will any **specific groups** be adversely affected? (i.e., *minorities, low-income, elderly, disabled,* etc.) ……	☒	☐	☐
e.	Are any **hospitals, medical facilities, fire police** facilities impacted by or adjacent to the project? (If so, list below)……	☒	☐	☐
f.	Will **Transportation patterns** change? ……..	☒	☐	☐
g.	Is **Community cohesion** affected by the project? ……	☒	☐	☐
h.	Are **short-term social/economic** impacts due to construction considered major?	☒	☐	☐
i.	Do conditions warrant **special construction times?** (i.e., *school in session, congestion, tourist season, harvest*) ……	☒	☐	☐
j.	Were **Context Sensitive Solutions** considered? (If so explain below)……	☒	☐	☐
k.	Were **bike and pedestrian** accommodations considered? (explain below)…..	☒	☐	☐
l.	Will the **roadway/bridge be closed?** (If yes, answer questions below)……	☒	☐	☐
	Will a **detour bridge** be provided?	☒	☐	☐
	Will a **detour road** be provided?	☒	☐	☐
	Will a **detour route** be signed?	☒	☐	☐

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

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

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

[1]**Section 4** – A Public Meeting was held for this project on January 6, 2015 at the Lafayette Parish Public Library, North Regional Branch. A transcript of the Public Meeting is included as Appendix B of the CE.

[2]**Section 7(a,b)** – **Refer to Cultural Resources Section (page 2) and Appendices A and C of CE.**

[3]**Section 8(a,b)** – **Refer to Wetlands Section (page 4) and Appendix D of CE.**

[4]**Section 8(d)** – **Refer to Floodplains Section (page 5) and Appendix A of CE.**

[5]**Section 8(g)** – **Refer to Sole-Source Aquifer Section (page 5) and Appendix C of CE.**

[6]**Section 9(b)** – Sts. Leo-Seton Catholic School (502 St. Leo Street, Lafayette, LA 70501) is adjacent to the project area; however, no adverse impacts to the school are expected. Access to the school will remain open at all times.

Preparer: Maria Bernard Reid
Title: Environmental Impact Manager
DOTD Environmental Section
Date: April 30, 2015

Attachments

☒ S.O.V. and Responses (August 4, 2014)
☒ Wetlands Finding
☐ Project Description Sheet
☐ Conceptual Stage Relocation Plan
☒ Noise Analysis
☐ Air Analysis
☐ Exhibits and/or Maps
☐ 4(f) Evaluation
☐ Form AD 1006 (Farmlands)
☒ 106 Documentation
☐ Other:

PROJECT DESCRIPTION

The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitations with additional travel lanes along Interstate 10 (I-10) from the east junction of I-49 continuing eastward to LA 328 in Lafayette and St. Martin Parishes, Louisiana using federal funding. The project areas is located in Township 8 South, Range 5 East, Sections 8, 9, 38, 43, 51, 52, 54, 55, 56, 57, and 64 or beginning at 30.26174, -92.0101 and ending at 30.295219, -91.915224.

The project would include full-depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges. I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed. Drainage improvements would include cross drain extensions and median drains via catch basin where necessary.

Two lanes in each direction would remain open to traffic during construction as much as practicable. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will determine whether the 12 bridges and overpasses within the project corridor would be widened or replaced.

Estimated future Average Daily Traffic values for I-10 at I-49 are 74,591 vehicles per day in 2015 and 110,839 vehicles per day in 2035. The project corridor is approximately 6 miles long and covers approximately 260.5 acres.

PURPOSE AND NEED

The purpose of and need for this project is to rehabilitate the existing pavement and increase capacity over the length of the corridor.

ALTERNATIVES

There are two alternatives for this project—the proposed Build Alternative and the No-Build Alternative. The Build Alternative would include a full-depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges. I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed. The No-Build Alternative would not change the existing I-10 pavement or four-lane divided highway.

IMPACTS

Right-of-Way

The project area is approximately 260.5 acres. No additional right-of-way is required for this project. There will be no displacements as a result of this project.

Wetland Reserve Program
This project is not located within a wetland reserve program area.

Prime Farmland
The Natural Resources Conservation Service (NRCS), through its solicitation of views (SOV) response dated August 22, 2014, stated that the proposed construction areas are within existing rights-of-way and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act, Subtitle I of Title XV, Section 1539-1549.

Section 4(f)/Section 6(f) Properties

Section 4(f) Properties
Section 4(f) of the Department of Transportation Act (49 U.S.C. 303) requires the Department of Transportation to avoid public parks, recreation areas, wildlife and waterfowl refuges, and historic sites unless there is no prudent and feasible alternative to such use and all practical measures to minimize harm to the area have been included in the project.

Section 6(f) Properties
Section 6(f) refers to parks that receive funding through the Land and Water Conservation Fund Act (916 U.S.C. 4601-4 to 4601-11). Properties acquired or developed under this act cannot be converted to uses other than public outdoor recreation areas without the approval of the Secretary of the Interior.

The Department of Culture, Recreation & Tourism, Office of State Parks, through its SOV response dated August 18, 2014, stated that there are no parks, sites, or other recreational areas located near the project and has no objections or concerns. No 4(f) or 6(f) properties would be impacted by the proposed project.

Section 106 and Cultural Resources

Cultural Resources
The Areas of Potential Effect (APE) are the limits of construction within the existing rights-of-way.

The Department of Culture, Recreation, & Tourism, Office of Cultural Development through its SOV response dated September 2, 2014, indicated that no known historic properties would be affected by this undertaking.

DOTD staff consulted the GIS databases maintained by the Louisiana Divisions of Historic Preservation and Archaeology on December 18, 2014 to determine if any historic properties, including archaeological sites or standing structures eligible for or listed on the National Register of Historic Places (NRHP) were located within or adjacent to the APE. There were no previously recorded historic properties, historic districts, or archaeological sites within the APE or adjacent to the proposed project corridor. The LA 354 Bridge (Str. No. 035045006000001), built in 1970, crosses over I-10. However, this structure has been determined ineligible for the NRHP according to the Mead and Hunt study (October 2014).

Four (4) archaeological surveys have been conducted within the APE. Three (3) surveys cross the Interstate (Survey: 22-1882, 22-0119, and 22-0105). No historic properties were identified within the APE as a result of these surveys. A Phase 1A archaeological survey (22-2327), conducted by Earth Search, Inc. in 2000, for a proposed fiber optic route, covered the majority of the APE. The survey consisted of a background/literature search, an inspection of the corridor, a site file check and a sensitivity assessment as well as site monitoring. As a result of this survey the Louisiana Division of Archaeology (LADOA) recommended no further field investigations since the proposed fiber optic route runs through existing I-10 right-of-way.

The Interstate System is over 50 years of age, however the Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption regarding effects to the Interstate Highway System on March 10, 2005. Although the Interstate is exempt, the proposed undertaking effect on other historic properties must be taken into consideration. All bridges and culverts within the APE (Table 1) on the Interstate are considered exempt.

Table 1: Interstate Bridges.

Structure No.	Year Constructed	Bridge Type	Crossing
03284500510301 03284500510302	1970	Concrete Pre-stressed Girders	LA 728
03284500510871 03284500510872	1970 2003	Concrete Slab	Francois Coulee Coulee
03284500511171 03284500511172	2003	Concrete Pre-stressed Girder w/ Cast in Place Deck	Louisiana Avenue
03284500511811 03284500511812	1970	Concrete Pre-stressed Girders	Vermilion River

On December 22, 2014, Louisiana State Historic Preservation Office (SHPO) concurred that this project would not affect historic properties (see Appendix B).

The Alabama-Coushatta Tribe of Texas indicated in their SOV response dated August 26, 2014, that no immediately known impacts to cultural assets of the Tribe are anticipated. However, it is the Tribe's objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations. In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate

authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations.

Natural Environment

Wetlands and Other Waters of the U.S.
The Department of the Army, New Orleans District, Corps of Engineers, through its SOV response dated December 17, 2014, stated that there are no anticipated adverse impacts to any Corps of Engineers projects resultant of this project. Based on review of recent maps, aerial photography, and soils data, the New Orleans District determined that the project area is indicative of the occurrence waters of the U.S., including wetlands. A Department of the Army permit under Section 404 of the Clean Water Act will be required for the deposition or redistribution of dredged or fill material on this site. Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may also be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

DOTD contracted Fenstermaker and Associates, LLC (Fenstermaker) to conduct a field survey for the project area. Fenstermaker biologists conducted surveys on January 6, 7, 12, and 14, 2015. Fenstermaker's delineation found that there are **approximately 4.819 acre of potentially jurisdictional Other Waters of the U.S. and 0.13 acre of potentially jurisdictional herbaceous wetlands** within the project right-of-way. The Wetland Finding Report can be found in Appendix D.

This recommendation will be sent to the New Orleans District, Corps of Engineers, which will determine the acreage of jurisdictional wetlands and other waters of the U.S. within the project area subject to regulation pursuant to Section 404 of the Clean Water Act. A Department of the Army Section 404 (Nationwide) permit will be required prior to beginning work.

Threatened/Endangered Species
On December 10, 2014, the USFWS, through its on-line Endangered Species Act and Migratory Bird Treaty Act Project Review tool indicated that the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within this Parish. Therefore, a "no effect" conclusion is appropriate.

The Louisiana Department of Wildlife and Fisheries (LDWF), Habitat Section of the Coastal & Nongame Resources Division, through its SOV response dated September 12, 2014, stated that 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 project site.

Floodplain
The DOTD Office of Public Works and Water Resources, Floodplain Management program, through its SOV response dated August 25, 2014, indicated that portions of the proposed project are within designated floodplains. In order to assure compliance with the National Flood Insurance Program and to ensure that appropriate permits are obtained,

DOTD Floodplain Management Program requested that the project proponents should also coordinate with the Lafayette Parish Floodplain Administrator, Mr. Kerwin Woodard, the St. Martin Parish Floodplain Administrator, Ms. Shanny Dodge, and the municipal coordinator Breaux Bridge, Ms. Becky Blanchard.

In addition, during the improvements and 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 be given to the responsibility for cleaning debris and keeping the surrounding area clear so as not to interfere with its function.

The Lafayette Parish Floodplain Administrator (Mr. Kerwin Woodard), through his SOV response and subsequent coordination, indicated that the Floodplain Office has no objection to the proposed project based on DOTD's data and certification that all development associated with the project qualifies for no adverse impact and is a "no rise" project. The St. Martin Parish Floodplain Administrator (Ms. Shanny Dodge) had no objection to the project. The Breaux Bridge Floodplain Administrator (Ms. Becky Blanchard) and City Engineer, reviewed the project and indicated that they do not foresee any drainage or flooding issues.

Coastal Zone Management Area
The project is located outside of the Louisiana Coastal Zone Management Area.

Coastal Barrier Resources Area
The project is not located within a Coastal Barrier Resources Area.

Sole Source Aquifer
The U.S. Environmental Protection Agency, through its SOV response dated August 28, 2014, concluded that the project is located on the Chicot aquifer system which has been designated a sole source aquifer. Based on the project information provided in the SOV, the U.S. Environmental Protection Agency has determined that the project should not have an adverse effect on the quality of the ground water underlying the project site.

Navigability
The bridges along the project corridor cross Francois Coulee, Vermilion River, and Bayou Teche. The U.S. Coast Guard through correspondence dated December 11, 2014, determined that the crossings are exempt from permitting for Coast Guard Bridge Administration purposes under the Surface Transportation Authorization Act. The bridges should all be provide for navigational clearances to accommodate any recreational boating that may exist at high water and should be at an appropriate elevation to pass floodwaters. However, the U.S. Coast Guard has also stated that the bridges are not exempt from the required lights and other signals. The Coast Guard required that DOTD requests the lighting exemptions and provide the reason, the only exemption being Title 22 CFR 118.40(b). The statement of the reason for this exemption must fulfill the requirements of this section. Specifically, if it is determined that no significant nighttime navigation occurs at these bridge sites, a statement to this effect is required before a decision can be made. This determination shall be made and provided to the U.S. Coast Guard prior to the start of construction.

Scenic Streams
There are no scenic streams located within the proposed project area.

Physical Environment

Noise
The current Louisiana Highway Traffic Noise Policy requires a noise analysis be conducted for a Type I project that involves the addition of through-traffic lanes (additional capacity) or the physical alteration of an existing highway where there is a substantial horizontal or vertical alteration. A project that reduces the distance between the traffic noise source and the closest receptor by half (50 percent) when compared to the existing condition would be a substantial horizontal alteration. The proposed project would add capacity through the addition of two through-traffic lanes.

A noise analysis was conducted by DOTD. Noise levels were modeled for existing conditions, future levels without the project or a No Build alternative, and future levels with the implementation of the proposed project. The models showed 29 of 50 sensitive receivers are impacted currently with the existing conditions; 34 of 50 sensitive receivers were impacted in the future No Build alternative; and 80 of 111 sensitive receivers were impacted with the implementation of the proposed project. The noise analysis also determined if noise abatement barriers would be feasible and reasonable for the impacted areas within the project corridor. A 2,261-foot long barrier at Moss Street South would be both feasible and reasonable to reduce impacts from noise. A summary of the findings are provided in Appendix E.

Air
Transportation conformity is a process required of Metropolitan Planning Organizations (MPOs) pursuant to the Clean Air Act Amendments of (CAAA) of 1990. CAAA require that transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved by the FHWA be in conformity with the State Implementation Plan, which represents the State's plan to either achieve or maintain the National Ambient Air Quality Standards (NAAQS) for a particular pollutant. The proposed project is not located in a nonattainment or maintenance area, so conformity does not apply to this project.

The Louisiana Department of Environmental Quality (LDEQ), through its SOV response dated September 11, 2014, stated that they have no objections based on the information provided. Lafayette and St. Martin parishes are classified as in attainment with the NAAQS and have no general conformity determination obligations.

Oil, Gas, and Water Wells
The Louisiana Department of Natural Resources (LDNR), Strategic Online Natural Resources Information System (SONRIS) indicates that no oil, gas or injection wells are located within 2 miles of the project area.

LDNR SONRIS identified 71 domestic and commercial water wells within 0.5 mile of the project area. The proposed project would not impact the quality or quantity of groundwater available within the southeastern Louisiana aquifer.

Water
LDEQ, through its SOV response dated August 18, 2014, stated that 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 1 acre. The project area is larger than 1 acre; therefore, a stormwater permit will be required.

Phase I Environmental Site Assessment
A Phase I Environmental Site Assessment was not conducted for this project, because there is no requirement for right-of-way acquisition.

Construction Impacts
Short-term impacts, such as construction noise, possible traffic delays, and temporary increase in air pollution are expected. However, pursuant to Section 107.14 of the *Louisiana Standard Specifications for Roads and Bridges* entitled "Environmental Protection," the contractor shall comply with federal, state, and local laws and regulations controlling pollution of the environment, including air, water, and noise.

Socio-Economic

Executive Order 12898 directs Federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of Federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The immediate area surrounding the project site is not densely populated. The area is mostly rural with some commercial and light industrial development. Generally, homesites are not associated with planned neighborhood developments.

U.S. Census population estimate for Lafayette Parish is 29.6 percent minority and 16.7 percent of the populous lives below the poverty level and for St. Martin Parish, 33.3 percent of the population are minorities and 18.2 percent of the populous lives below the poverty level. The proposed project would cause temporary increases in noise and fugitive dust emissions for residence near the project corridor during construction; however, normal ambient noise levels and air quality would return following the completion of construction. Generalized adverse impacts such as potential traffic delays during construction would be shared equally among all residents who travel the I-10 corridor. All residents would also equally enjoy the benefits of the projected improvements.

There is no information to suggest that any person's civil rights will be violated, as set forth in the U.S. Department of Transportation regulations relating to Title V of the Civil Rights Act of 1964. Access opportunities for handicapped or non-literate individuals are not expected to be adversely impacted due to the proposed project. For pedestrians and persons who do not drive in the area, the proposed project does not decrease access opportunities.

As demonstrated above, no minority or low-income populations have been identified that would be adversely impacted by the proposed project. Therefore, no further environmental justice analysis is required.

COMMENTS AND COORDINATION

Early in the planning stage, SOV data were sent to all appropriate federal, state, and local agencies and officials on August 4, 2014 in order to identify possible adverse social, economic, or environmental effects of the proposed highway location and/or design. No adverse or negative comments were received. Copies of the SOV letter, description, map, mailing list, and all responses are included in Appendix A.

Appendix A

Solicitation of Views

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

August 4, 2014

STATE PROJECT NOS.: H.003003, H.010601, & H.003014
FEDERAL AID PROJECT NOS.: H003003, H010601, & H003014
NAME: I-10: E. JCT. I-49 to ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISHES: LAFAYETTE AND ST. MARTIN

SUBJECT: SOLICITATION OF VIEWS

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 (DOTD) in conjunction with the Federal Highway Administration (FHWA) with the early identification of possible adverse economic, social, or environmental efforts or concerns. Your assistance in this regard will be appreciated.

We have attached a map showing the general location of the proposed 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 **September 8, 2014**. Replies should be addressed to DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply.

If you have any questions or require additional information, please contact Maria Bernard Reid at (225) 242-4511.

Sincerely,

T. Afell

for Noel Ardoin
Environmental Engineer Administrator

enclosure

NA/mbr

cc: Project Manager
District Administrator
District Traffic Operations Engineer

PRELIMINARY PROJECT DESCRIPTION

STATE PROJECT NOS: H.003003: I-10 E. JCT. I-49 to LA 328
H.010601: LA 328 to LA 347
H.003014: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE
FEDERAL AID PROJECT NOS.: H003003, H010601, AND H003014
ROUTE: I-10
LAFAYETTE AND ST. MARTIN PARISHES

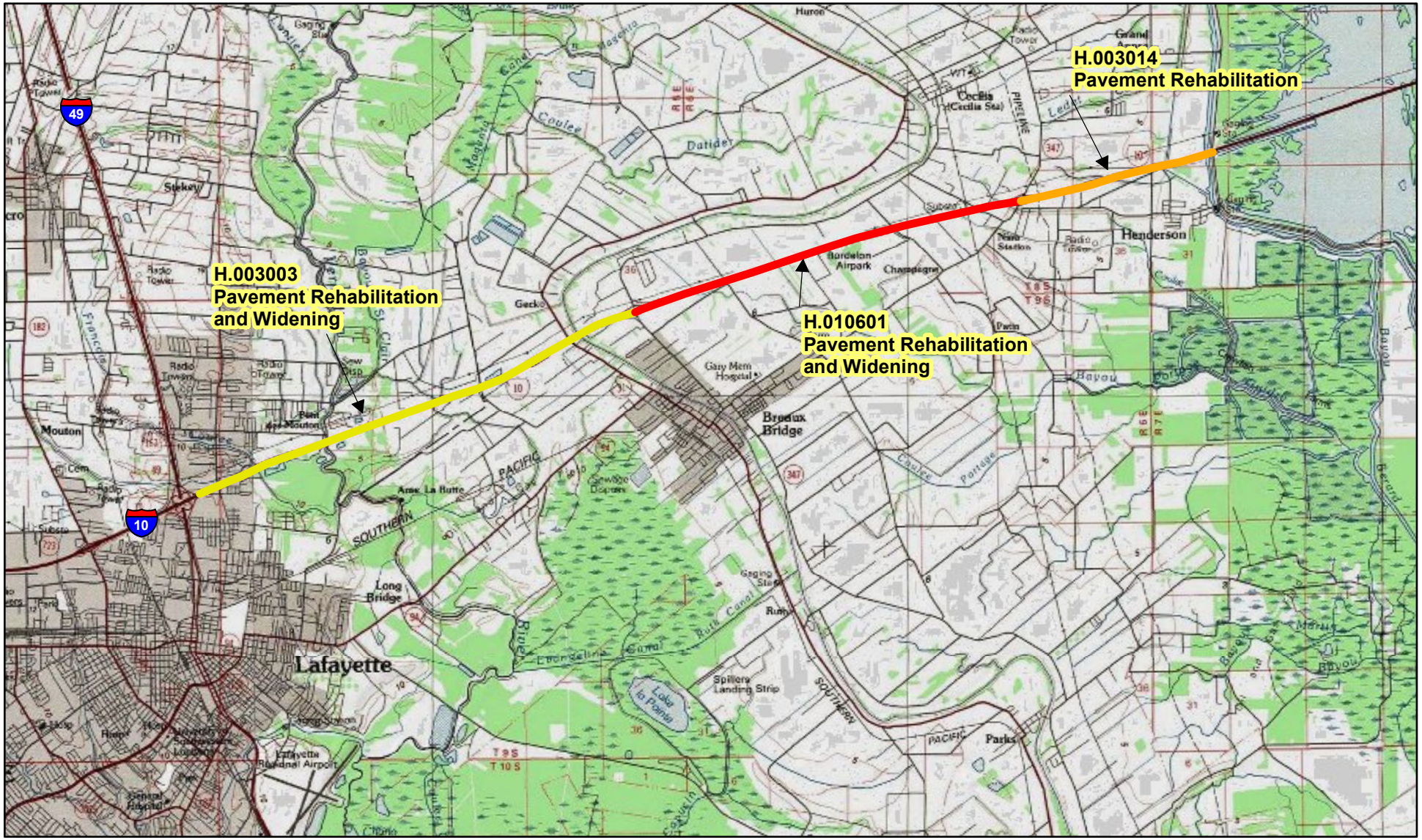
The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitations with additional travel lanes along Interstate 10 (I-10) from the east junction of I-49 continuing eastward to the Atchafalaya Floodway Bridge in Lafayette and St. Martin Parishes, Louisiana using federal funding.

The project would include full depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges. Two lanes in each direction would remain open to traffic during construction as much as practicable. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor.

From the east junction of I-49 east to LA 347 (H.003003 and H.010601), I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed. Drainage improvements would include cross drain extensions and median drains via catch basin where necessary. As part of project development, DOTD will determine whether the 15 bridges and overpasses within the project corridor would be widened or replaced and how lane closures and traffic at the bridges would be managed.

Estimated future Average Daily Traffic values for I-10 at I-49 are 74,591 vehicles per day in 2015 and 110,839 vehicles per day in 2035. The project corridor is approximately 13.74 miles long and covers approximately 550 acres. DOTD does not anticipate the need for additional right-of-way. Impacts on wetlands and other waters of the U.S. are expected.

It is anticipated that this project would be environmentally processed as a Categorical Exclusion.



PROJECT LOCATION MAP

SOURCE: USGS 1:100,000 TOPOGRAPHIC MAP
- CROWLEY AND BATON ROUGE QUADRANGLES

STATE PROJECT NOS. H.003003, H.010601, & H.003014
F.A.P. NOS. H003003, H010601, & H003014
I-10: E. JCT I-49 TO ATCHAFALAYA FLOODWAY BRIDGE
LAFAYETTE AND ST. MARTIN PARISHES

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

U.S. House of Representatives
(District 1)
Honorable Steve Scalise
110 Veterans Blvd, Ste. 500
Metairie, LA 70005

U.S. House of Representatives
(District 2)
Honorable Cedric Richmond
2021 Lakeshore Dr. Suite 309
New Orleans, LA 70122

U.S. House of Representatives
(District 3)
Honorable Charles Boustany, Jr., MD
800 Lafayette St., Ste. 1400
Lafayette, LA 70501

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

U.S. House of Representatives
(District 5)
Honorable Vance McAllister
1900 Stubbs Ave, Ste. B
Monroe, LA 71201

U.S. House of Representatives
(District 6)
Honorable Bill Cassidy, MD
5555 Hilton Ave Suite 100
Baton Rouge, LA 70808

United States Senate
Senator David Vitter
2800 Veterans Memorial Blvd Suite 201
Metairie, LA 70002

United States Senate
Senator Mary Landrieu
Hale Boggs Federal Building
500 Poydras St. Rm. 1005
New Orleans, LA 70130

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

Department of Agriculture and Forestry
Office of Forestry
P.O. Box 1628
Baton Rouge, LA 70821

Coalition to Restore Coastal Louisiana
Steven Peyronnin, Executive Director
6160 Perkins Rd. Suite 225
Baton Rouge, LA 70808

8th Coast Guard District
District Commander
Hale Boggs Federal Building
500 Poydras St.
New Orleans, LA 70130

Department of Culture Recreation & Tourism
Division of Archaeology
P.O. Box 44247
Capitol Annex 3rd
Baton Rouge, LA 70804

Department of Culture Recreation & Tourism
Office of State Parks
P.O. Box 44426
Baton Rouge, LA 70804

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

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

Department of Economic Development
Office of Business Development
P.O. Box 94185
Baton Rouge, LA 70804

Environmental Protection Agency
Source Water Protection (6WQ-S)
1445 Ross Ave
Dallas, TX 75202-2733

USEPA
Region 6 (6 EN-XP)
1445 Ross Ave., Suite 1200
Dallas, TX 75202-2733

Federal Transit Administration Region 6
819 Taylor St. Rm. 8A36
Fort Worth, TX 76102

FEMA Region VI
800 North Loop 288
Denton, TX 76209

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

Louisiana Forestry Association
Executive Director
P.O. Box 5067
Alexandria, LA 71301

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

Department of Health and Hospitals
Tenney Sibley, Chief Sanitarian
628 N. 4th St.
Baton Rouge, LA 70802

Department of Health and Hospitals
Division of Environmental Health
ATTN: Steven Davis, P.E.
P.O. Box 4489
Baton Rouge, LA 70821

Ms. Karen Oberlies
Dept Of The Army – Tech Support
P O Box 60267
New Orleans La 70538

Inter-Tribal Council of Louisiana, INC
Director
991 Grand Cailou Rd
Houma, LA 70363

Coushatta Tribe of Louisiana
P.O. Box 818
Elton, LA 70532

Jena Band of Choctaw Indians
P.O. Box 14
Jena, LA 71342

Mississippi Band of Choctaw Indians
~~101 Industrial Rd~~
~~Choctaw, MS 39350~~
kcarleton@choctaw.org

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

FHWA Recreational Trails
1051 N. 3rd /Street
Room 307
Baton Rouge, LA 70802-5239

Tunica-Biloxi Tribe of Louisiana
P.O. Box 1589
Marksville, LA 71351

Floodplain Management Program
DOTD
Susan Veillon, Section 64
P.O. Box 94245
Baton Rouge, LA 70804-9245

Louisiana Byway Administrator
P.O. Box 94291
Baton Rouge, LA 70802

U.S. Geological Survey
3535 S. Sherwood Forest Suite 120
Baton Rouge, LA 70806

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

Online USFWS SOV
Email: DEQ at Linda.Hardy@la.gov
Email Seminole at harjo.n@sno-nsn.gov

U.S. National Park Service
Southeast Region
100 Alabama St., SW
1924 Building
Atlanta, GA 30303

AARP
301 Main Street
Suite 1012
Baton Rouge, LA 70825

Chitimacha Tribe
155 Chitimacha Loop Road
Charenton, LA 70523

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

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

Program Manager
Acadiana Regional Development District
PO Box 90070
Lafayette, LA 70509-0070

Lafayette Parish School Board
PO Box 2158
Lafayette, LA 70502-2158

Louisiana State Police
Troop I
121 E Pont Des Mouton Rd
Lafayette, LA 70507-5507

The State Senate (District 17)
Senator Rick Ward III
3741 Hwy 1
Port Allen, LA 70767

FLOODPLAIN ADMINISTRATOR
CHARLENE PICARD
705 WEST UNIVERSITY AVE
LAFAYETTE LA 70506

CHAIRMAN
LAFAYETTE AIRPORT COMMISSION
222 TOWER DR
LAFAYETTE LA 70508

HON. ELBERT L. GUILLORY
LOUISIANA STATE SENATE
(DISTRICT 24)
633 EAST LANDRY ST
OPELOUSAS LA 70570

St Martin Iberia Lafayette
Smile Community Action Agcy
Po Box 3343
Lafayette La 70502

CITY OF LAFAYETTE
TRANSIT AUTHORITY
P O BOX 4017-C
LAFAYETTE LA 70502

HON. FRED H. MILLS JR.
LOUISIANA STATE SENATE
(DISTRICT 22)
1010 MARTIN ST
PARKS LA 70582

HON. JACK MONTOUCET
LA HOUSE OF REPRESENTATIVES
(DISTRICT 42)
112 E. HUTCHINSON AVE.
CROWLEY LA 70526

HON. JOEL C ROBIDEAUX
LA HOUSE OF REPRESENTATIVES
(DISTRICT 45)
102 WOODVALE AVE, STE B
LAFAYETTE LA 70503

Chitimacha Tribe
155 Chitimacha Loop Road
Charenton, La 70523

Alabama Coushatta Tribe Of Tx
571 State Park St. 65
Livingston, Tx 77351

HON. JOEY DUREL
LAFAYETTE CITY-PARISH PRESIDENT
P O BOX 4017-C
LAFAYETTE LA 70502

HON. JONATHAN PERRY
LOUISIANA STATE SENATE
(DISTRICT 26)
P.O. BOX 100
KAPLAN LA 70548

HON. NANCY LANDRY
LA HOUSE OF REPRESENTATIVES
(DISTRICT 31)
109 SOUTH COLLEGE RD
LAFAYETTE LA 70503

HON. PATRICK PAGE CORTEZ
LOUISIANA STATE SENATE
(DISTRICT 23)
101 W. FARRELL RD., BLDG. 5, STE. 100
LAFAYETTE LA 70508

HON. STEPHEN J. ORTEGO
LA HOUSE OF REPRESENTATIVES
(DISTRICT 39)
P. O. BOX 625
CARENCRO LA 70520

HON. STUART J. BISHOP
LA HOUSE OF REPRESENTATIVES
(DISTRICT 43)
P. O. BOX 80993
LAFAYETTE LA 70508

HON. TAYLOR BARRAS
LA HOUSE OF REPRESENTATIVES
(DISTRICT 48)
800 S. LEWIS ST., STE.206 2ND FLOOR
NEW IBERIA, LA 70560

HON. TERRY LANDRY SR.
LA HOUSE OF REPRESENTATIVES
(DISTRICT 96)
800 S. LEWIS ST., STE 201-B
NEW IBERIA LA 70560

HON. VINCENT J. PIERRE
LA HOUSE OF REPRESENTATIVES
(DISTRICT 44)
800 W. CONGRESS ST., STE. A
LAFAYETTE LA 70501

LAFAYETTE CHAMBER OF COMMERCE
MR. JASON KOUBI
804 EAST SAINT MARY BLVD
LAFAYETTE LA 70503

LAFAYETTE CITY-PARISH COUNCIL
P O BOX 4017-C
LAFAYETTE LA 70502

LAFAYETTE CONSOLIDATED GOVNT
METROPOLITAN PLANNING ORG
705 W UNIVERSITY AVE
LAFAYETTE LA 70506

LAFAYETTE CONVENTION & VISITORS
COMMISSION
P O BOX 52066
LAFAYETTE LA 70505

LAFAYETTE PARISH
CIVIL DEFENSE DIRECTOR
P O BOX 3286
LAFAYETTE LA 70502

LAFAYETTE PARISH
SCHOOL BOARD
P O DRAWER 2158
LAFAYETTE LA 70502

LAFAYETTE PARISH
SHERIFF
916 LAFAYETTE ST
LAFAYETTE LA 70501

LAFAYETTE SOIL & WATER
CONSERVATION DIST OF LA
905 JEFFERSON BLVD, STE 310
WHITNEY NATIONAL BANK BLDG
LAFAYETTE LA 70505

MR DAVID CREED, EXEC DIRECTOR
NORTH DELTA REGIONAL
PLANNING & DEVELOPMENT DIST
1913 STUBBS AVE
MONROE LA 71201

MR GREGG GOTHREAUX
LEDA
211 DEVALCOURT ST
LAFAYETTE LA 70506

MR MIKE MITCHELL
TRANSIT MANAGER
LAFAYETTE TRANSIT SYSTEM
P O BOX 4017-C
LAFAYETTE LA 70502

MR. KEVIN BELANGER, DIRECTOR
ACADIANA REGIONAL DEV DISTRICT
P O BOX 568
CARENCRO LA 70520

OPELOUSAS-ST LANDRY
CHAMBER OF COMMERCE
109 W VINE ST
OPELOUSAS LA 70570

USDA
United States Department of Agriculture

8/22/2014

Noel Ardoin
Department of Transportation and Development
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: I-10 E. JCT. I-49 to Atchafalaya Floodway Bridge – State Project Nos. – H.003003, H.010601, H.003014

Dear Mr. Ardoin,

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

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

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

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

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

Respectfully,

ACTING FOR

Kevin D. Norton
State Conservationist

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (318) 473-7682
An Equal Opportunity Provider and Employer

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

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

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 8/4/14	4. Sheet 1 of _____
1. Name of Project I-10E JCT I-49 to Atchafalaya Fldwy Bridge	5. Federal Agency Involved FHWA	
2. Type of Project Road Widening	6. County and State Lafayette and St. Martin Parish, Louisiana	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 8/15/14	2. Person Completing Form M. Mouton
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☑		4. Acres Irrigated / Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS 8/22/14

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area in Nonurban Use	15				
2. Perimeter in Nonurban Use	10				
3. Percent Of Corridor Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Size of Present Farm Unit Compared To Average	10				
6. Creation Of Nonfarmable Farmland	25				
7. Availablility Of Farm Support Services	5				
8. On-Farm Investments	20				
9. Effects Of Conversion On Farm Support Services	25				
10. Compatibility With Existing Agricultural Use	10				
TOTAL CORRIDOR ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

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

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

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

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

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

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

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

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

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

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

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

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

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

JAY DARDENNE
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF STATE PARKS

CHARLES R. DAVIS
DEPUTY SECRETARY

STUART JOHNSON, PH.D.
ASSISTANT SECRETARY

August 18, 2014

LA DOTD
P.O. Box 94245
Baton Rouge, La 70804

Re: State Project Nos. H.003003, H.010601, H.003014

Dear Noel Ardoin:

The Office of State Parks has reviewed your proposed projects for pavement rehabilitations and widening portions of I-10 from E. JCT. I-49 to Atchafalaya Floodway Bridge in Lafayette and St. Martin Parishes.

We have no parks, sites or other recreational areas located near these projects and have no objections or concerns.

Best regards,

Britt Evans
Natural Resources Manager

BE: be

P.O. BOX 44426 • BATON ROUGE, LOUISIANA 70804-4426 • PHONE (225) 342-8111 • FAX (225) 342-8107 • WWW.CRT.STATE.LA.US
AN EQUAL OPPORTUNITY EMPLOYER

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

August 4, 2014

STATE PROJECT NOS.: H.003003, H.010601, & H.003014
FEDERAL AID PROJECT NOS.: H003003, H010601, & H003014
NAME: I-10: E. JCT. I-49 to ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISHES: LAFAYETTE AND ST. MARTIN

SUBJECT: SOLICITATION OF VIEWS

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 (DOTD) in conjunction with the Federal Highway Administration (FHWA) with the early identification of possible adverse economic, social, or environmental efforts or concerns. Your assistance in this regard will be appreciated.

We have attached a map showing the general location of the proposed 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 **September 8, 2014**. Replies should be addressed to DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply.

If you have any questions or require additional information, please contact Maria Bernard Reid at (225) 242-4511.

Sincerely,

RECEIVED

AUG 18 2014

ARCHAEOLOGY

T. Afee

for Noel Ardoin
Environmental Engineer Administrator

enclosure

NA/mbr

cc: Project Manager
District Administrator
District Traffic Operations Engineer

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

Pam Breaux 9-2-14
Pam Breaux
State Historic Preservation Officer
Date

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

DEC 17 2014

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

Ms. Noel Ardoin
LA DOTD
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Dear Ms. Ardoin:

This is in response to your Solicitation of Views request dated August 4, 2014, concerning the I-10 East Junction I-49 to Atchafalaya Floodway Bridge, in Lafayette and St. Martin Parishes, Louisiana (State Project Numbers H.003003, H.010601, & H.003014).

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

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

Information and signatures obtained from recent maps, aerial photography, information provided with your request, and local soil surveys concerning this site are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional wetlands or waters. If an approved delineation is needed, please furnish us with the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional wetlands or waters occurring on this property. Additionally, waters that may be subject to Corps' of Engineers jurisdiction under Section 10 of the Rivers and Harbors Act (RHA) are located in the project area. A DA permit will be required prior to any work in waters subject to Corps' of Engineers jurisdiction under Section 10 of the RHA.

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

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

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Darrell Barbara by telephone at (504) 862-2260 or by email at Darrell.Barbara@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2014-02321-SQ. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

We apologize for missing the target date of September 8, 2014, listed in your request. Thank you for your patience in this matter.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: Louisiana DOTD

Point of Contact: Maria Bernard Reid

Address: P.O. Box 94245

City: Baton Rouge **State:** Louisiana **Zip Code:** 70804-9245

Phone Number 1: 225-242-4506 **Phone Number 2:** 225-242-4502

Email Address: maria.reid@la.gov

Proposed Project Information

Project Reference ID: 4028

Project Latitude: 30.433584 **Project Longitude:** -90.041437

Project Parish(es): Lafayette, Saint Martin

Project Description: The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitations with additional travel lanes along Interstate 10 (I-10) from the east junction of I-49 continuing eastward to LA 328 in Lafayette and St. Martin Parishes, Louisiana using federal funding. The project areas is located in Township 7 South, Range 11 East, Section 13, or 30.433584, -90.041437.

The project would include full-depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges. I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed. Drainage improvements would include cross drain extensions and median drains via catch basin where necessary.

Two lanes in each direction would remain open to traffic during construction as much as practicable. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will determine whether the 15 bridges and overpasses within the

project corridor would be widened or replaced and how lane closures and traffic at the bridges would be managed.

Estimated future Average Daily Traffic values for I-10 at I-49 are 74,591 vehicles per day in 2015 and 110,839 vehicles per day in 2035. The project corridor is approximately 6 miles long and covers approximately 260.5 acres.

Based on the information provided, the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within this Parish.

Therefore, a "no effect" conclusion is appropriate. No further ESA coordination with the Service is necessary for the proposed action, unless there are changes in the scope or location of the proposed project or the project has not been initiated one year from the date of this letter.

If the proposed project has not been initiated within one year, follow-up coordination via this website should be accomplished prior to making expenditures because our threatened and endangered species information is updated annually. If the scope or location of the proposed project is changed, coordination via this website should occur as soon as such changes are made.

This finding completes project review by the Service for effects to Federal trust resources under our jurisdiction and currently protected by the ESA.

Please keep a copy of this pre-development coordination for your records. Do not send it to the Lafayette ES Office.

If you have additional questions, please contact Louisiana ES Office Biological Science Technician at 337/291-3100 for further assistance.

Louisiana Ecological Services Office

ESA Technical Assistance Form

Project Type: Other

Does the project propose to obtain, remodel, refurbish, or rehabilitate existing structures in such a way that does not significantly alter the present capacity or use, and does not alter surrounding land areas that were previously undisturbed? **No**

Does the project propose to reconstruct, resurface, or enhance infrastructure and/or cityscape (e.g. streets, sewers, sidewalks, etc.) within the current footprint of the infrastructure and in a manner that does not disturb previously undisturbed ground? **No**

Is the construction project located entirely within the footprint of an established urban/suburban area (incorporated villages, towns, or cities)? **Yes**

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date	September 12, 2014
Name	Noel Ardoin
Company	LA DOTD
Street Address	P.O. Box 94245
City, State, Zip	Baton Rouge, La 70804
Project	State Project NOS.: H.003003, H010601 & H.003014 I-10: E. JCT. I-49 to Atchafalaya Floodway Bridge
Project ID	2152014
Invoice Number	14091201

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

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

Sincerely,

for Carolyn Michna

Amity Bass, Coordinator
Natural Heritage Program

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-379-3005 | fx: 225-379-3002

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

August 25, 2014

STATE PROJECT NO: H.003003 H.010601 H.003014
FEDERAL AID PROJECT NO: H003003 H010601 H003014
NAME: I-10 E. JCT. I-49 TO ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISHES: LAFAYETTE AND ST. MARTIN

Noel Ardoin
Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804

Subject: Solicitation of Views

Dear Noel:

Enclosed is a copy of Lafayette and St. Martin Parish Flood Insurance Rate Maps (FIRM) indicating the proposed project.

During the improvements and 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 be given to the responsibility for cleaning debris and keeping the surrounding area clear so as not to interfere with its function.

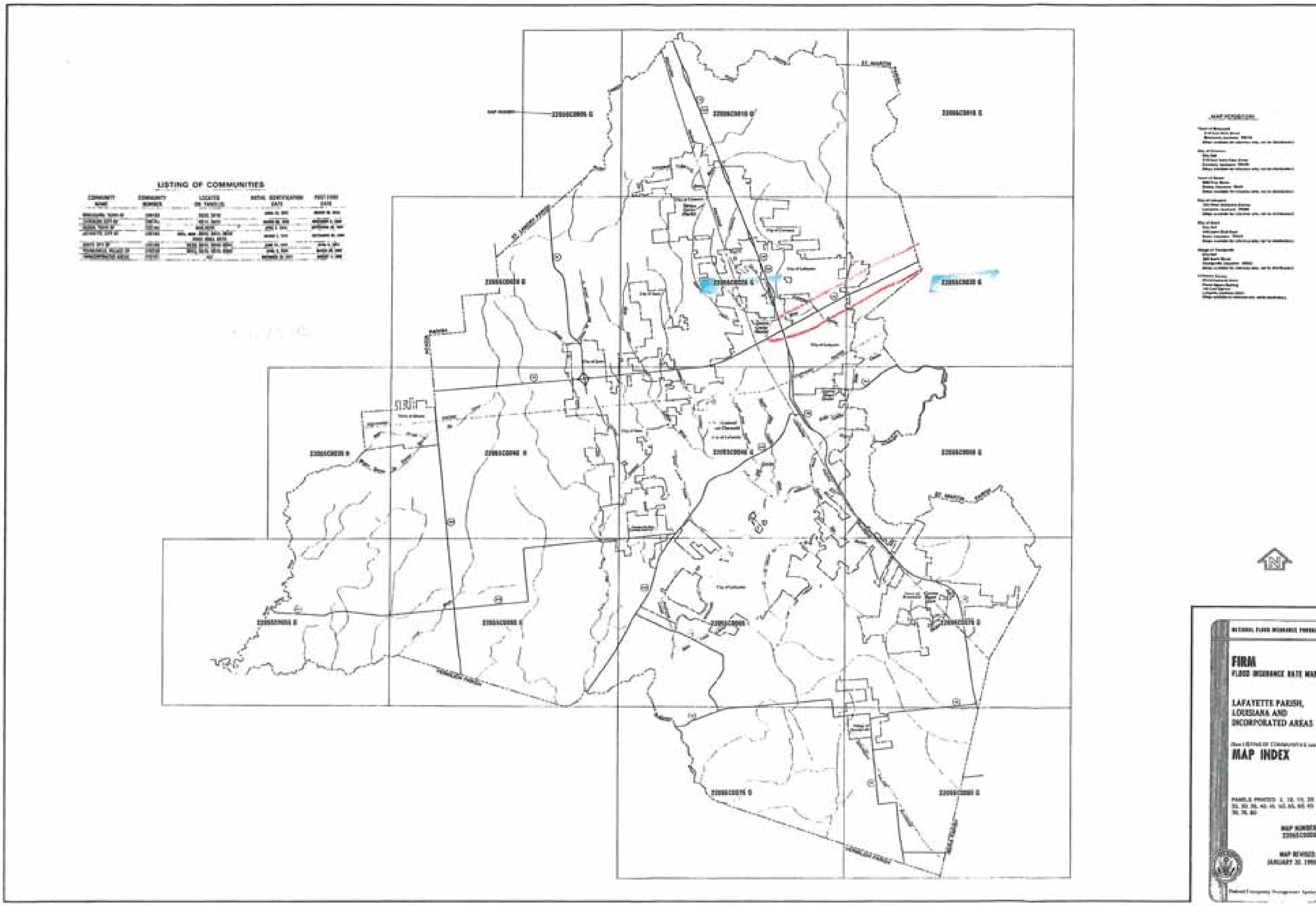
In order to assure compliance with Lafayette and St. Martin Parishes' requirements for the National Flood Insurance Program (NFIP), and ensure that appropriate permits are obtained, please contact the floodplain administrators for the Parishes. The contact person for Lafayette Parish and the City of Lafayette is Mr. Kerwin Woodard, 220 W. Willow St., Bldg. B, Lafayette, LA 70502, and telephone number (337) 291-8476. The contact person for St. Martin Parish is Shanny Dodge, 303 W. Port Street, St. Martinville, LA 70582, and telephone number (337) 394-4252. Because the project is within the city limits of Lafayette, Breaux Bridge, and Henderson, you must also contact the floodplain administrators for the cities. The contact person for Breaux Bridge is Becky Blanchard, 101 Berard Street, Breaux Bridge, LA, 70517, and telephone number (337) 3332-6023. The contact person for Henderson is Sue Dupuis, P.O. Box 595, Henderson, LA 70517, and telephone number (337) 228-7115.

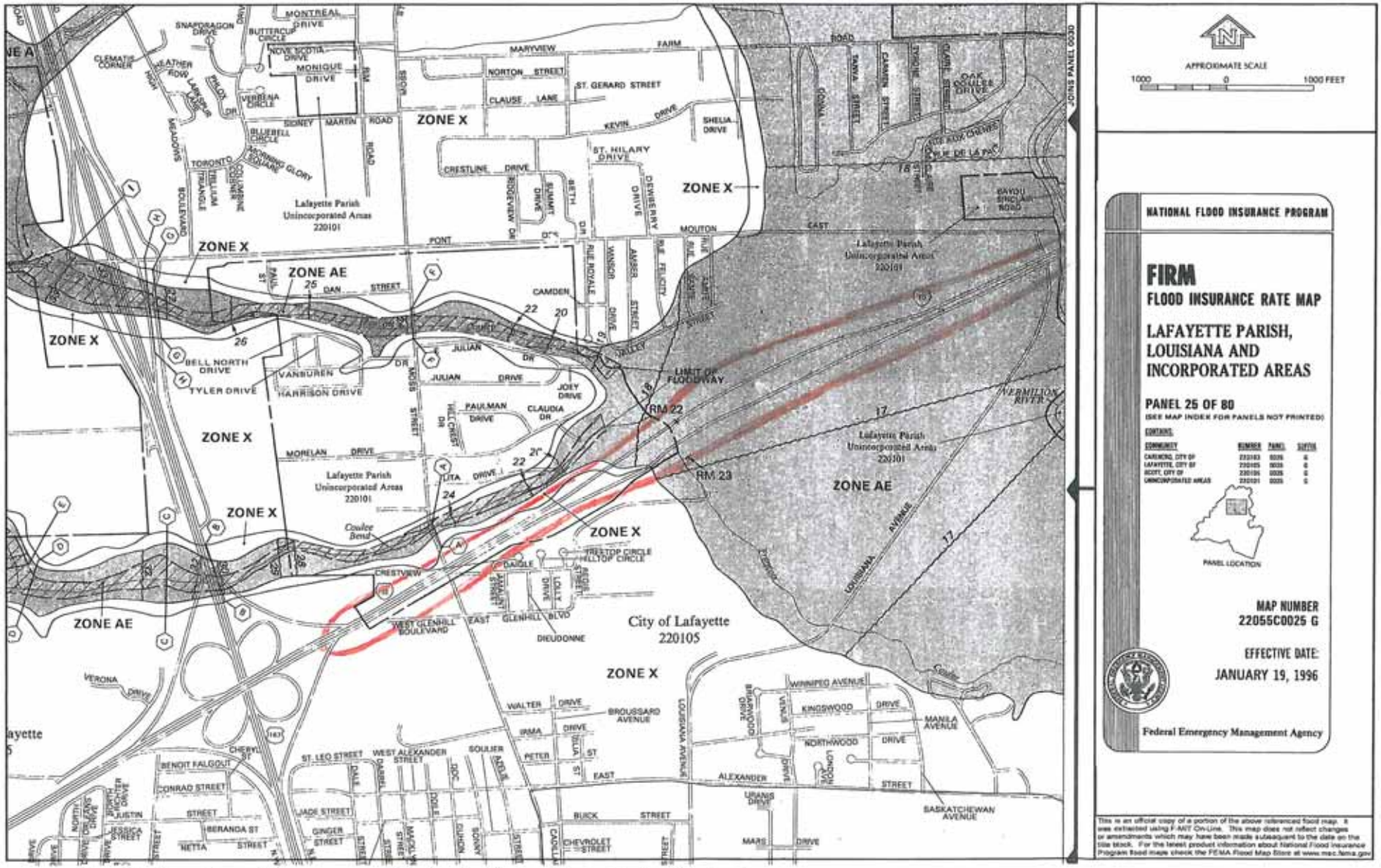
We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225)379-3005.

Sincerely,

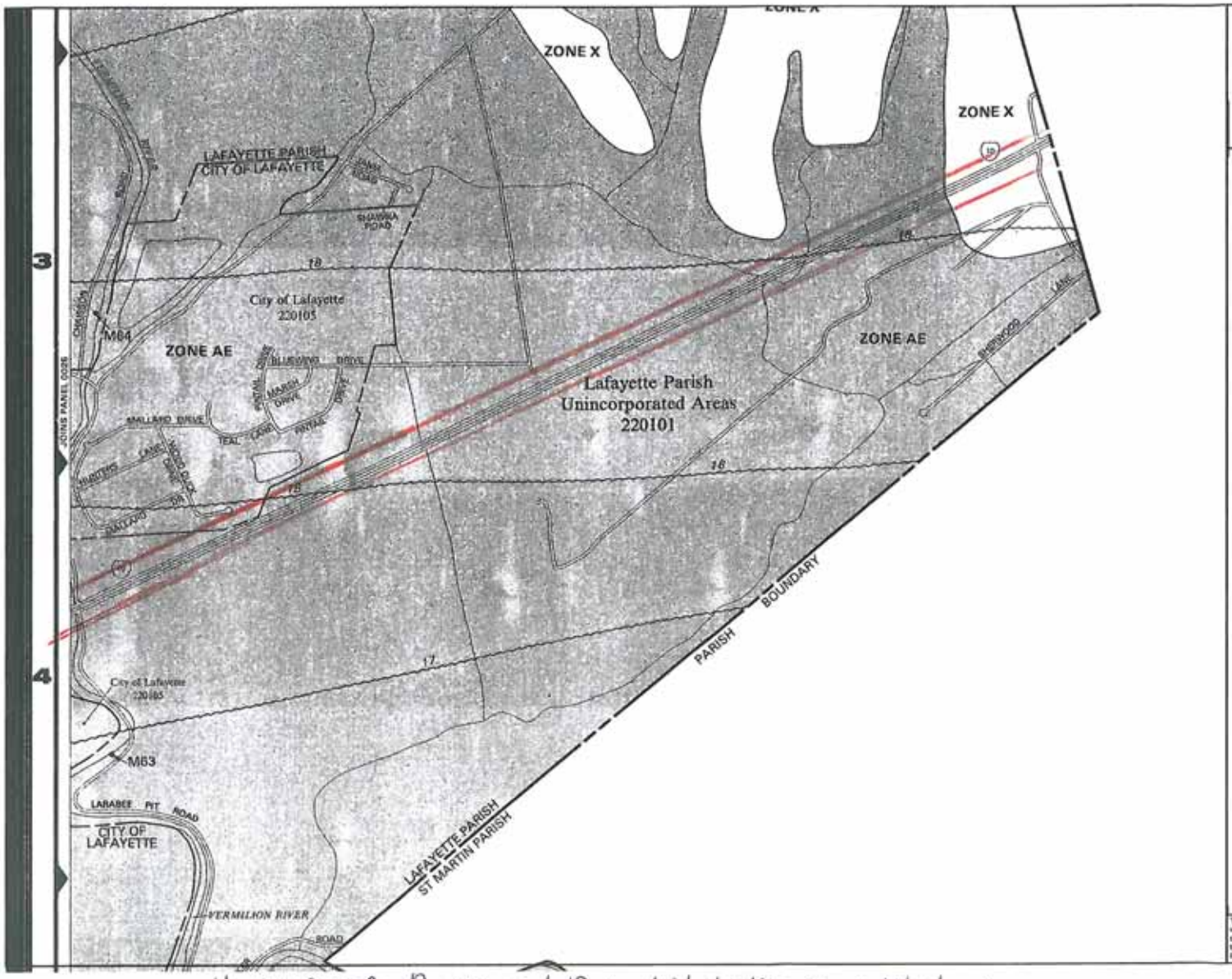
Jennifer Deglandon
Floodplain Management Program Coordinator

Enclosure
pc: Kerwin Woodard
Shanny Dodge
Becky Blanchard
Sue Dupuis


LISTING OF COMMUNITIES
ST. MARTIN PARISH
VERMILION PARISH
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
LAFAYETTE PARISH,
LOUISIANA AND
INCORPORATED AREAS
MAP INDEX
PANELS PRINTED: 5, 10, 15, 20
25, 30, 35, 40, 45, 50, 55, 60, 65
70, 75, 80
MAP NUMBER
MAP REVISED:
JANUARY 30, 1995
Federal Emergency Management Agency



H. 003003: Pavement Rehabilitation and Widening



APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

LAFAYETTE PARISH, LOUISIANA AND INCORPORATED AREAS

PANEL 30 OF 80

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LAFAYETTE, CITY OF	220105	0030	G
UNINCORPORATED AREAS	220101	0030	G

PANEL LOCATION

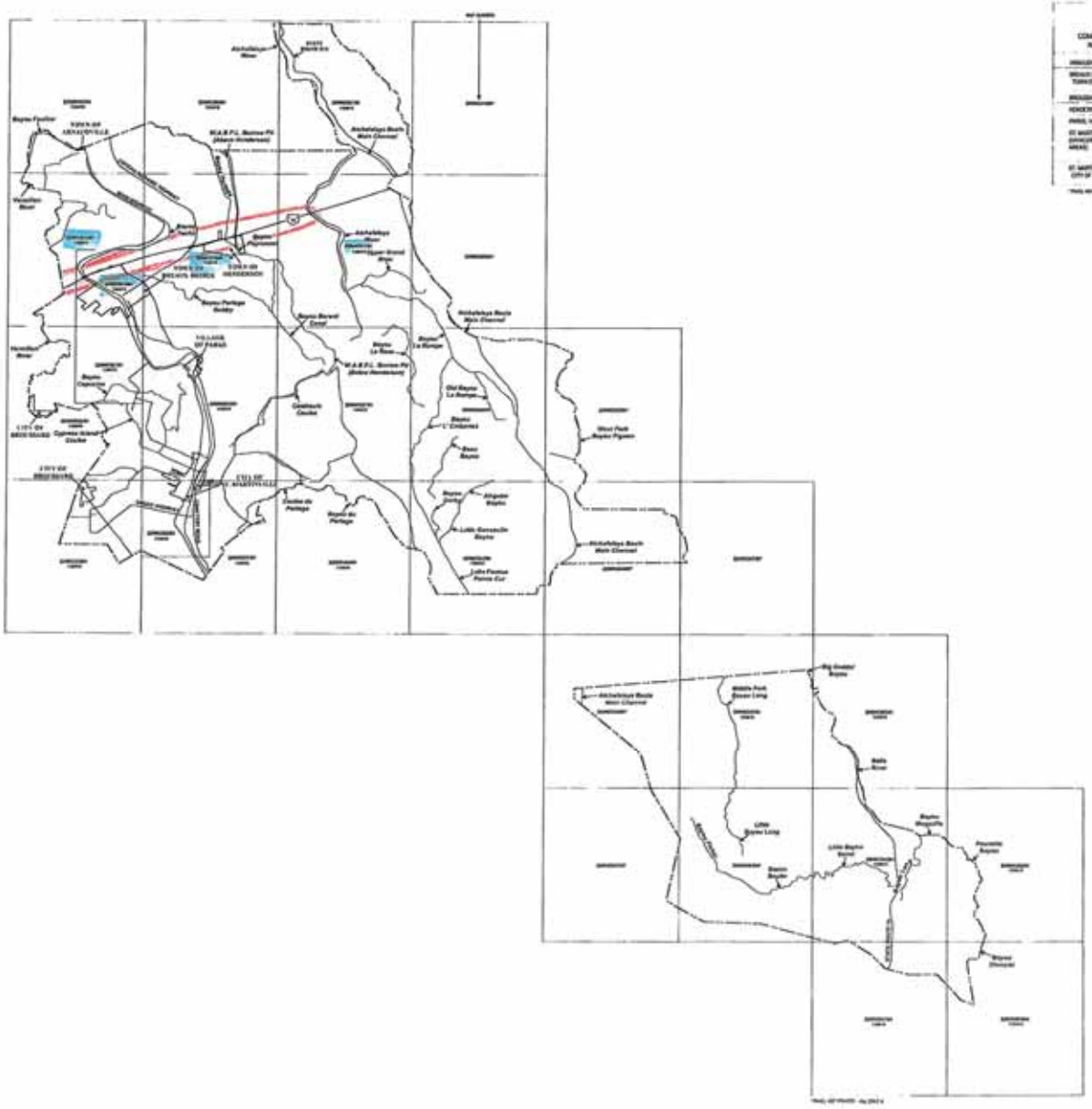
MAP NUMBER
22055C0030 G

EFFECTIVE DATE:
JANUARY 19, 1996

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

H.003003 Pavement Rehabilitation and Widening



LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM/PANEL DATE
ARNAUDVILLE, TOWN OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BREAUX BRIDGE, TOWN OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BROUSSARD, CITY OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HENDERSON, TOWN OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PARKS, VILLAGE OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ST. MARTIN PARISH (UNINCORPORATED AREAS)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ST. MARTINVILLE, CITY OF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Entry not applicable

MAP SCALE

[illegible]

DATE TO CHECK

[illegible]

MAP REPOSITORIES

[illegible]

ARNAUDVILLE, TOWN OF
[illegible]

BREAUX BRIDGE, TOWN OF
[illegible]

BROUSSARD, CITY OF
[illegible]

HENDERSON, TOWN OF
[illegible]

PARKS, VILLAGE OF
[illegible]

ST. MARTIN PARISH
(UNINCORPORATED AREAS)
[illegible]

ST. MARTINVILLE, CITY OF
[illegible]

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

ST. MARTIN PARISH, LOUISIANA

AND INCORPORATED AREAS

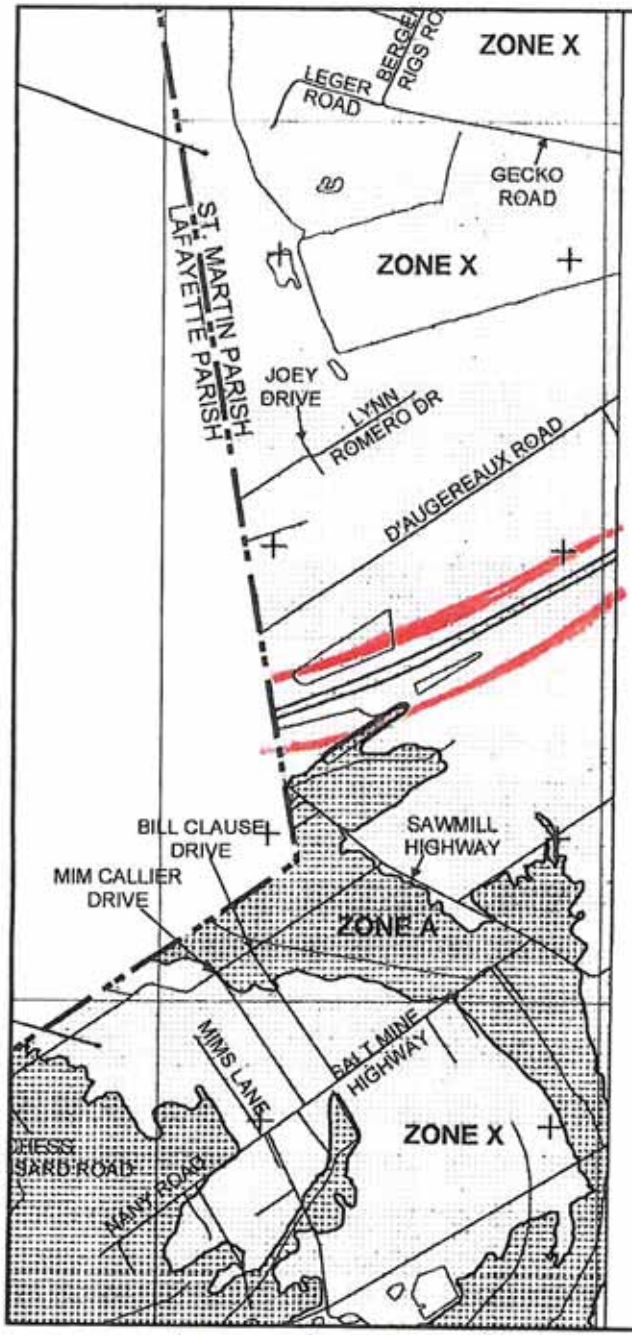
(SEE LISTING OF COMMUNITIES TABLE)

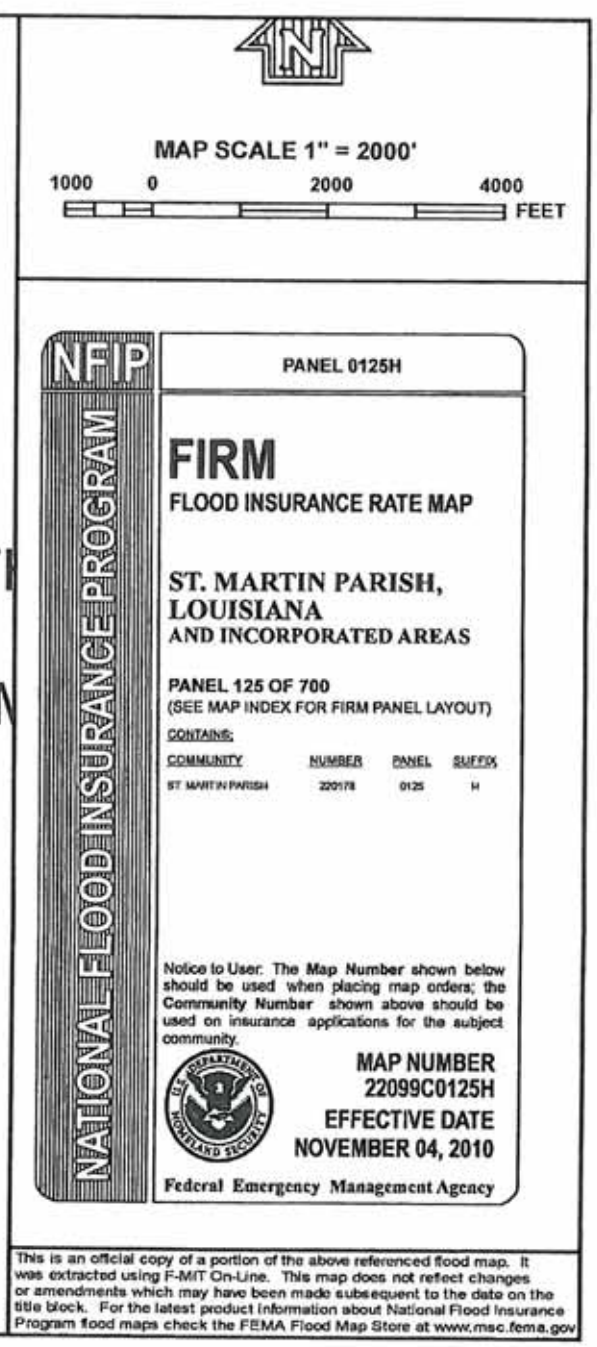
MAP INDEX

PANELS PRINTED: [illegible]

MAP NUMBER
22099C0000A
EFFECTIVE DATE
NOVEMBER 04, 2010

Federal Emergency Management Agency





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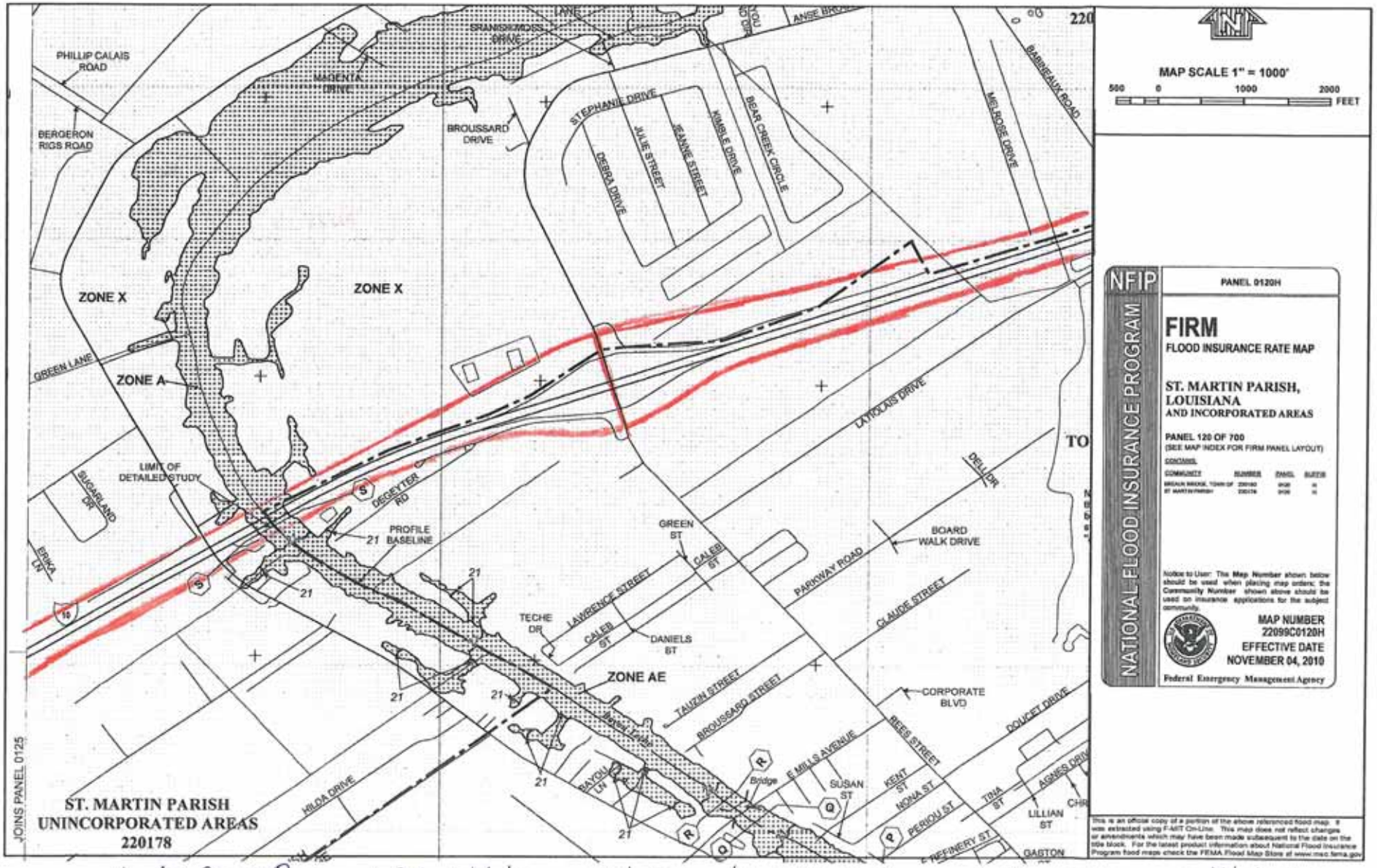
H.003003 Pavement Rehabilitation and Widening



H. 003003 Pavement Rehabilitation and Widening / H. 010601 Pavement Rehabilitation and Widening

Maria Reid

From: Kerwin Woodard <kwoodard@LafayetteLA.gov>
Sent: Thursday, December 18, 2014 9:10 AM
To: Maria Reid
Cc: Larry Broussard
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Good morning Ms. Reid,

Thank you for the opportunity to comment on this project. This portion of I-10 passes through the eastern part of Lafayette Parish, which has a significant designation of Special Flood Hazard Area including a floodway associated with our largest drainage feature in the parish, the Vermilion River. The Lafayette Consolidated Government would expect any development done in this area to use a "no adverse impact" approach and maintain 100 year storm water surface elevations both upstream and downstream of this location. We would respectfully request a no-rise certification and the supporting technical data for our files associated with this development. If you have further questions or comments please contact me.

Kerwin Woodard, CFM | *Floodplain Administrator*

220 W. Willow St, Bld B / Lafayette, LA 70501
p: 337.291.8468 / f: 337.291.8476 / kwoodard@lafayettela.gov

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, December 15, 2014 2:14 PM
To: Kerwin Woodard
Subject: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Mr. Woodard,

DOTD Environmental solicited views for the I-10 widening project in August. The Solicitation of Views response from FEMA requested additional coordination with your office. Please review the proposed project description in the attached SOV packet, if you have any questions or comments, please contact me at your earliest convenience.

Thank you,
Maria

Maria Bernard Reid
Environmental Impact Manager 1

Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245
225-242-4506

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Maria Reid

From: Kerwin Woodard <kwoodard@LafayetteLA.gov>
Sent: Tuesday, February 24, 2015 3:47 PM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Good afternoon Maria,

We have no objection to the project based on your data and certification that all development associated with this plan qualifies for no adverse impact and is a no rise project.

Kerwin Woodard, CFM | *Floodplain Administrator*

220 W. Willow St, Bld B / Lafayette, LA 70501
p: 337.291.8468 / f: 337.291.8476 / kwoodard@lafayettela.gov

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Tuesday, February 24, 2015 10:17 AM
To: Kerwin Woodard
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Mr. Woodard,

I'm sorry for the delay getting back to you on this project. However, do we need any type of official concurrence on the no rise certification from your office? Or do you have no objection to the project?

Thank you,
Maria

Maria Bernard Reid
225-242-4506

From: Kerwin Woodard [mailto:kwoodard@LafayetteLA.gov]
Sent: Tuesday, December 23, 2014 2:31 PM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Thank you for the response.

Kerwin Woodard, CFM | *Floodplain Administrator*

220 W. Willow St, Bld B / Lafayette, LA 70501
p: 337.291.8468 / f: 337.291.8476 / kwoodard@lafayettela.gov

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Tuesday, December 23, 2014 2:21 PM
To: Kerwin Woodard
Subject: FW: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Mr. Woodard,
Please find attached the updated information regarding the Vermilion River crossing.

Maria

Maria Bernard Reid
225-242-4506

From: Susan Zhao
Sent: Tuesday, December 23, 2014 1:22 PM
To: Maria Reid; Andrew Windmann
Cc: Paul Vaught III (DOTD); Nicholas Olivier
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

All,

To comply with FEMA's latest revision, we revised hydraulic analysis for I-10 Vermilion River Bridges. The design discharges are obtained from FEMA Flood Insurance Study for Lafayette Parish, Louisiana. Revised Preliminary, December 19, 2014.

The proposed widening bridge is exactly the same length and same F.G. Elevation as those of the existing bridge. The revised 100-year Water Surface Elevation is 19.06 ft and the Backwater for 100-year flood is still Negligible. The project will still qualify for no adverse impact, and it is still a no-rise project. Please see the attached Summary of Discharge Table and Revised Bridge Hydraulic Data Form for details. If you have any questions or need more information, please let me know. Thanks,

Susan Zhao
Hydraulics
3-1483

From: Maria Reid
Sent: Monday, December 22, 2014 12:27 PM
To: Susan Zhao; Andrew Windmann
Cc: Paul Vaught III (DOTD); Nicholas Olivier
Subject: FW: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

All:

Mr. Woodard is concerned with the preliminary flood map (dated 9/06/2011) as shown in the attached snippet and at the address below.

http://maps.lsuagcenter.com/floodmaps/?FIPS=22055

According to these maps, the Base Flood Elevation at the Vermilion River crossing is 19. Does the project still qualify for no adverse impact?

Maria Bernard Reid
225-242-4506

From: Kerwin Woodard [mailto:kwoodard@LafayetteLA.gov]
Sent: Monday, December 22, 2014 11:52 AM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Thanks for the information. Our concern was that the latest revision to the preliminary flood map for this area increased the BFE at this location to 19.0 and the impact of any fill associated with this development to the model.

Kerwin Woodard, CFM | *Floodplain Administrator*

220 W. Willow St, Bld B / Lafayette, LA 70501
p: 337.291.8468 / f: 337.291.8476 / kwoodard@lafayettela.gov

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, December 22, 2014 7:40 AM
To: Kerwin Woodard
Subject: FW: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Mr. Woodard,
Please find below the response to your question from Bridge Design and Hydraulics (Susan Zhao). If you require any additional information, please contact me at your earliest convenience.

Thanks,
Maria

Maria Bernard Reid
225-242-4506

From: Susan Zhao
Sent: Friday, December 19, 2014 11:16 AM
To: Andrew Windmann
Cc: Paul Vaught III (DOTD); Nicholas Olivier; Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Andrew,

Base on FEMA Flood Map No. 22055C0030 G, the Structure Nos. 03284500511811 & 03284500511812 are located between FEMA 100-year Flood Water Elevations 17 ft and 18 ft. The F.G. Elevation of 36.0 ft for the structures is 18 ft above FEMA's 100-year Flood Water Elevation. From the Bridge Hydraulic Data Table, the Design Water Surface Elevation is 17.34 ft in between 17 ft and 18 ft. The Backwater is negligible for 100-year Flood. This means that the

changes of 100 year storm water surface elevations both upstream and downstream of the bridges are negligible before and after the bridge construction.

This I-10 Vermilion River Bridge project has no adverse impact in this area and is a no-rise project. Please see the attached FEMA Map and the Bridge Hydraulic Data Table for details. If you have any questions or need more information, please let me know.

Susan Zhao
Hydraulics
3-1483

From: Andrew Windmann
Sent: Thursday, December 18, 2014 9:48 AM
To: Susan Zhao
Cc: Paul Vaught III (DOTD); Nicholas Olivier; Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Susan,

Can you help Maria with her question regarding the "no-rise" certification for the Vermillion River floodway? The bridge site for this project contains dual existing 380ft long x 52ft wide Type III P.P.C. girder bridges that will be widened to the inside as part of this project. I have attached the Bridge General Plan, Typical Section (showing final widened condition), and the survey files for your use. The Vermillion River site should be the 4th structure from the left in the survey .dgn.

Please let me know if you have any questions.

Thanks,

Andrew Windmann, P.E.
Engineer – Bridge Design
Louisiana Department of Transportation & Development
Office: (225) 379-1074
Fax: (225) 379-1786
andrew.windmann@la.gov

From: Nicholas Olivier
Sent: Thursday, December 18, 2014 9:34 AM
To: Andrew Windmann
Cc: Paul Vaught III (DOTD); Maria Reid
Subject: FW: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Andrew,

Can you help Maria with her question regarding the Vermilion River?

Thanks,

Nicholas J. Olivier, P.E.
Senior Project Manager

This correspondence 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.

From: Maria Reid
Sent: Thursday, December 18, 2014 9:23 AM
To: Nicholas Olivier
Subject: FW: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Nick,
Do we have a no-rise certification for the portion of H.003003 within the Vermilion River floodway?

Maria Bernard Reid
225-242-4506

From: Kerwin Woodard [mailto:kwoodard@LafayetteLA.gov]
Sent: Thursday, December 18, 2014 9:10 AM
To: Maria Reid
Cc: Larry Broussard
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Good morning Ms. Reid,

Thank you for the opportunity to comment on this project. This portion of I-10 passes through the eastern part of Lafayette Parish, which has a significant designation of Special Flood Hazard Area including a floodway associated with our largest drainage feature in the parish, the Vermilion River. The Lafayette Consolidated Government would expect any development done in this area to use a "no adverse impact" approach and maintain 100 year storm water surface elevations both upstream and downstream of this location. We would respectfully request a no-rise certification and the supporting technical data for our files associated with this development. If you have further questions or comments please contact me.

Kerwin Woodard, CFM | *Floodplain Administrator*

220 W. Willow St, Bld B / Lafayette, LA 70501
p: 337.291.8468 / f: 337.291.8476 / kwoodard@lafayettela.gov

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, December 15, 2014 2:14 PM
To: Kerwin Woodard
Subject: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Mr. Woodard,

DOTD Environmental solicited views for the I-10 widening project in August. The Solicitation of Views response from FEMA requested additional coordination with your office. Please review the proposed project description in the attached SOV packet, if you have any questions or comments, please contact me at your earliest convenience.

Thank you,

Maria

Maria Bernard Reid
Environmental Impact Manager 1

Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245
225-242-4506

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Maria Reid

From: Shani Peltier <speltier@stmartinparish.net>
Sent: Monday, January 12, 2015 3:36 PM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Ms. Maria,

We have no objections to the I-10 widening project.

Thanks

Shani Dodge
Building Permits Technician
303 West Port St.
St. Martinville, La 70582
Phone# 337-394-9816
Fax# 337-394-4252

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, January 12, 2015 8:23 AM
To: Shani Peltier
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

No problem. I can forward your comment about the water lines to Stacie Palmer. She processed the LA 31 and 92 intersection project.

Maria Bernard Reid
225-242-4506

From: Shani Peltier [mailto:speltier@stmartinparish.net]
Sent: Monday, January 12, 2015 8:16 AM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Maria,

I am sorry, I got this project confused with the another. I was thinking you were asking for input on the roundabout at the intersection of Highway 31 and Highway 92. I don't think we will have any issues with the I-10 widening. I will check with my supervisor and public works and will get back with you hopefully today. Again, I am very sorry about that!

Shani Dodge
Building Permits Technician
303 West Port St.
St. Martinville, La 70582

Phone# 337-394-9816
Fax# 337-394-4252

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, January 12, 2015 7:22 AM
To: Shani Peltier
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Thanks Shani. The widening is proposed into the median of the interstate, so the water lines should not be impacted.

Maria

Maria Bernard Reid
225-242-4506

From: Shani Peltier [mailto:speltier@stmartinparish.net]
Sent: Friday, January 09, 2015 3:45 PM
To: Maria Reid
Subject: RE: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Ms. Maria,

As for as flood zones are concerned, this intersection is not in a flood zone. I spoke with Nanette Theriot, Public Works Technician, the only concern that we would have is the water lines that run along the highway. I hope this helps you.

Shani Dodge
Building Permits Technician
303 West Port St.
St. Martinville, La 70582
Phone# 337-394-9816
Fax# 337-394-4252

From: Maria Reid [mailto:Maria.Reid@la.gov]
Sent: Monday, December 15, 2014 2:19 PM
To: speltier@stmartinparish.net
Subject: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Ms. Dodge,

DOTD Environmental solicited views for the I-10 widening project in August. The Solicitation of Views response from FEMA requested additional coordination with your office. Please review the proposed project description in the attached SOV packet, if you have any questions or comments, please contact me at your earliest convenience.

Thanks in advance for your help,
Maria

Maria Bernard Reid
Environmental Impact Manager 1

Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245
225-242-4506

Maria Reid

From: BECKY BLANCHARD <bb_pz_05@yahoo.com>
Sent: Tuesday, December 16, 2014 11:59 AM
To: Maria Reid
Subject: Re: I-10 widening project (I-49 to Atchafalaya Floodway Bridge)

Ms. Reid,

Both City Engineer and I have reviewed the proposed project. We do not foresee any drainage or flooding issues.

Sincerely,

Becky Blanchard
City Of Breaux Bridge
Planning & Zoning Dept.
Codes Enforcement Office
Flood Zone Manager
911 Address System
337-332-8303 fax 337-332-8321
e-mail bb_pz_05@yahoo.com

On Monday, December 15, 2014 2:21 PM, Maria Reid <Maria.Reid@la.gov> wrote:

Ms. Blanchard,

DOTD Environmental solicited views for the I-10 widening project in August. The Solicitation of Views response from FEMA requested additional coordination with your office. Please review the proposed project description in the attached SOV packet, if you have any questions or comments, please contact me at your earliest convenience.

Thanks in advance for your help,
Maria

Maria Bernard Reid
Environmental Impact Manager 1

Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245
225-242-4506

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

August 28, 2014

Ms. Noel A. Ardoin
Environmental Engineer Administrator
LA DOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Dear Ms. Ardoin:

We have received your August 4, 2014, letter requesting our evaluation of the potential environmental impacts which might result from the following project:

Pavement Reconstruction &
Construct Additional Travel Lanes
I-10 from E. Jct. 1-49 to Atchafalaya Floodway Bridge
STP No. H.003003, H.010601 & H.003014
FAP No. H009143, H010601 & H003014
Lafayette & St. Martin Parishes, Louisiana

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

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

If you did not include the parish, project description, project location or the federal funding agency, please do so in future SSA correspondence.

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

Sincerely yours,

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

cc: Jesse Means, LDEQ

U.S. Department of Homeland Security

United States Coast Guard

Commander
United States Coast Guard
Hale Federal Building

500 Poydras Street, Room 1313
New Orleans, LA 70130-3310
Staff Symbol: dpb
Phone: (504) 671-2128
Fax: (504) 671-2133
D8DPBALL@uscg.mil

16591A
September 17, 2014

Louisiana Department of Transportation and Development
Attn: Ms. Noel Ardoin
P. O. Box 94245
Baton Rouge, LA 70804-9245

State Project Nos.: H.003003: I-10 E. JCT. I-49 to LA 328
H.010601: LA 328 to LA 347
H.003014: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE
F.A.P. No.: H003003, H010601 & H003014
Route: I-10
Lafayette & St. Martin Parishes, Louisiana

Dear Ms. Ardoin:

We received your Solicitation of Views dated August 4, 2014 the proposed pavement rehabilitations with additional travel lanes along Interstate 10 (I-10) from the east junction of I-49 continuing eastward to the Atchafalaya Floodway Bridge over Francois Coulee, Vermillion River, Bayou Teche, unnamed Drainage Canal and Bayou Portage, in Lafayette and St. Martin Parishes, Louisiana.

Construction of any bridge replacement or bridge modification may necessitate the Coast Guard's involvement in the permitting process. However, prior to the Coast Guard's involvement on these projects, under 23 CFR §650.805, the Federal Highway Administration (FHWA) has the responsibility under the Surface Transportation Assistance (STA) Act of 1978 to determine whether or not a USCG permit is required for the bridge construction.

Section 144(c) of Title 23 U.S. Code was enacted in 1978 to reduce paperwork and related costs in the execution of the Coast Guard's bridge permit programs. This section has been amended by the Act of April 2, 1987 (Public Law 100-17), to further reduce paperwork and related costs in the permitting of bridges funded by this Act. By reason of this provision, certain bridges --which are constructed, reconstructed, rehabilitated, or replaced with federal assistance imposed under Title 23 U.S. Code -- are no longer subject to the permitting requirements imposed under 33 U.S.C. 401 and 525(b). The bridges that fall into this excluded category are those that cross waterways:

(1) which are not used and are not susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce; and

(2) which are nontidal, or if tidal, used by vessels less than 21 feet in length.

Since FHWA has the responsibility for the STA Act, the Coast Guard will accept a determination by the FHWA Administrator that these bridge projects receiving federal assistance under Title 23 U.S. Code meets the stated criteria and are exempted for Coast Guard Bridge Administration purposes. This letter does not imply that these projects meet the criteria above and does not constitute concurrence as meeting the criteria. Coordination between FHWA and the Coast Guard is required prior to FHWA reaching a determination that the bridge or bridges are eligible under the applicable statutes.

16591A
September 17, 2014

It must be noted that the subject Act which amended Title 23 U.S. Code to include 23 U.S.C. 144(c), did not exclude that category of bridges from the application of 14 U.S.C.85. The later statute requires the establishment, maintenance, and operation of Coast Guard required lights and signals on fixed structures, including bridges. Approval of lights and other signals required under the provisions of 33 CFR 118 should be obtained, prior to the commencement of construction, from this office. Approval of lights and other signals required under the provisions of 33 CFR 118 should be obtained, prior to the commencement of construction, from this office. If it is determined that federal funds will not be utilized, additional information may be required to determine whether a Coast Guard permit will be required.

If we can be of further assistance, please contact this office.

Sincerely,

DAVID M. FRANK
Chief Bridge Administration Branch
U.S. Coast Guard
By direction

Copy: LDOTD, Ms. Traci Johnson
FHWA, Mr. Carl M. Highsmith

Maria Reid

From: Noel Ardoin
Sent: Friday, September 12, 2014 7:09 AM
To: Maria Reid
Subject: FW: DEQ SOV 140811/1030 I-10E JCT I-49 to Atchafalaya Floodway Bridge

---

From: Linda (Brown) Hardy
Sent: Thursday, September 11, 2014 3:51 PM
To: Noel Ardoin
Cc: Yasoob Zia
Subject: DEQ SOV 140811/1030 I-10E JCT I-49 to Atchafalaya Floodway Bridge

September 11, 2014

Noel Ardoin, Environmental Engineering Administrator
LA DOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245
Noel.Ardoin@la.gov

RE: 140811/1030 I-10E JCT I-49 to Atchafalaya Floodway Bridge
DOTD Funding
Lafayette and St. Martin Parishes

Dear Ms. Ardoin:

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) 219-9371 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 January 1, 2014. 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- 9371.
- 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 permitting issues. 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, Lafayette and St. Martin Parishes are classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3954 or by email at linda.hardy@la.gov.

Sincerely,

Linda M. Hardy

Technical Assistant to the Deputy Secretary
Louisiana Department of Environmental Quality
Office of the Secretary
P.O. Box 4301
Baton Rouge, LA 70821-4301
Ph: (225) 219-3954
Fax: (225) 219-3971
Email: linda.hardy@la.gov

ACADIANA REGIONAL DEVELOPMENT DISTRICT

Serving the eight parishes of Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, St. Mary & Vermilion

Post Office Box 568
Carencro, Louisiana 70520

208 W. Gloria Switch Road
Lafayette, Louisiana 70507

Phone: (337) 886-7782
Fax: (337) 886-7081
Website: www.ardd.org

PARISH REPRESENTATIVES

A. J. Credeur, Acadia Parish
Bob Manuel, Evangeline Parish
Paul Naquin, St. Mary Parish

REPRESENTATIVES AT-LARGE

Frank Fink
St. Mary Parish Government

Mike Huval
LA State Representative

William Jeanmard
Former Mayor of Ville Platte

Greg Jones
Mayor of Crowley

Kenneth Mouton
Belle Terre Properties

Raymond "Mac" Wade
Port of Morgan City

August 19, 2014

Mr. Noel Ardoin
LADOTD
Environmental Engineer Administrator
P. O. Box 94245
Baton Rouge, LA 70804-9245

RE: ***State Project No.: H.003003, H.010601, & H.003014***
F.A.P. No.: H003003, H010601 & H003014
Name: I-10 E. JCT. I-49 to Atchafalaya Floodway Bridge
Route: I-10
Parishes: Lafayette and St. Martin

Dear Mr. Ardoin:

Enclosed please find Acadiana Regional Clearinghouse's Comment form on the above referenced project.

If you should have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

Diane S. Kidder

Diane S. Kidder
Administrative Assistant

/dsk

Enclosure (1)

Kenneth Mouton
President

Bob Manuel
Vice President

Paul Naquin
Treasurer

Equal Opportunity Employer/Programs
"Auxiliary aids and services available upon request to individuals with disabilities"

COMMENT

ACADIANA REGIONAL CLEARINGHOUSE

601 Loire Avenue, Suite C Lafayette, Louisiana 70507 (337) 886-7782

Applicant:		SAI:
Louisiana Department of Transportation and Development		
Contact Person:	Phone:	ARC:
Noel Ardoin	225-242-4511	14-008

Description of Project:
State Project Nos.: H.003003, H.010601, & H.003014; Federal Aid Project Nos.: H003003, H010601 & H003014; I-10 E. Jct. I-49 to Atchafalaya Floodway Bridge; Route I-10; Parishes of Lafayette and St. Martin

Grantor Agency / Program Name and Number:
State Project Nos.: H.003003: I-10 E. Jct. I-49 to LA 328; H.010601: LA 328 to LA 347; H.003014: LA 347 to Atchafalaya Floodway Bridge; Federal Aid Project Nos.: H003003, H010601 and H003014; Route: I-10; Lafayette and St. Martin Parishes

Dear Applicant:

The ARC has received the standard form 424 and narrative of your project with supporting documents. Although the State Clearinghouse is no longer in operation, the ARC will review projects that affect Sub-state Planning District IV.

YOU, THE APPLICANT, ARE RESPONSIBLE FOR FORWARDING THESE COMMENTS TO YOUR FUNDING AGENCY.

The ARC has completed the review of your request for federal assistance. The findings of this review are listed below:

1.	X	No negative aspects have been found with this proposal.
2.		No negative aspects have been found with this proposal, however, we wish to comment on the following, which is listed below in the Comment section.
3.		The project has received a negative comment for the reasons listed below in the Comment section.
4.		We wish to participate in a conference with the applicant.

Comment:

Action:	Date:
No. 1	8/19/2014
Secretariat:	Attachment:
Evangeline Economic and Planning District	

Administrator Name:	Signature:
Kevin Belanger, Acting Executive Director	Kevin Belanger

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

August 26, 2014

LADOTD
Environmental Engineer Administrator
PO Box 94245
Baton Rouge, LA 70804-9245

Dear Administrator:

On behalf of Mikko Colabe III Clem Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding H003003, H010601, and H003014: IH-10 widening and resurfacing project in Lafayette and St. Martin Parishes.

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

Upon review of your August 4, 2014 submission, no immediately known impacts to cultural assets of the Alabama-Coushatta Tribe of Texas are anticipated in conjunction with this proposal. In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including our Office, notified without delay for additional consultations.

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

Sincerely,

Bryant J. Celestine
Historic Preservation Officer

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

Maria Reid

From: Michelle Hanks
Sent: Tuesday, February 10, 2015 1:58 PM
To: Maria Reid
Subject: FW: H.003003, I-10 E. JCT. - LA 328 ROUTE I-10, PARISHES: LAFAYETTE & ST. MARTIN

FYI

From: Alina Shively [mailto:ashively@jenachoctaw.org]
Sent: Tuesday, February 10, 2015 1:25 PM
To: Michelle Hanks
Subject: RE: H.003003, I-10 E. JCT. - LA 328 ROUTE I-10, PARISHES: LAFAYETTE & ST. MARTIN

Dear Michelle,

Regarding the above-mentioned project, after review of the Section 106 documentation you've provided, the Jena Band of Choctaw Indians' THPO hereby concurs with the determination of No Properties. Should any inadvertent discoveries occur, please contact our office immediately via the information below. Thank you.

Sincerely,

Alina J. Shively
Jena Band of Choctaw Indians
Deputy THPO
P.O. Box 14
Jena, LA 71342
(318) 992-1205
ashively@jenachoctaw.org

From: Michelle Hanks [mailto:Michelle.Hanks@LA.GOV]
Sent: Tuesday, February 10, 2015 10:37 AM
To: Alina Shively
Cc: Maria Reid
Subject: H.003003, I-10 E. JCT. - LA 328 ROUTE I-10, PARISHES: LAFAYETTE & ST. MARTIN

Dear Ms. Masters,

Per the request from your SOV response dated December 30, 2014 via email, attached is the Section 106 documentation regarding the above-captioned project.

Based on the previous research conducted within the APE and the amount of disturbance from the construction of the Interstate, LDOTD, in conjunction with the Federal Highway Administration, believes that no historic properties will be affected by the above captioned project. If you have any questions or comments regarding this project, please contact Michelle Hanks at michelle.hanks@la.gov.

Respectfully,

Michelle

Michelle Whipp Hanks, B.A., M.A.
Environmental Impact Specialist
Louisiana Department of Transportation and Development
1201 Capitol Access Road, Room 502D
Baton Rouge, Louisiana 70802
Tel: (225) 242-4514
Fax: (225) 242-4500
Email: Michelle.Hanks@la.gov

LAFAYETTE AIRPORT COMMISSION
LAFAYETTE REGIONAL AIRPORT

222 Tower Drive
Lafayette, LA 70508-2124
(P) 337-266-4401
(F) 337-266-4410
(E) airport@lftairport.com

September 4, 2014

DOTD
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

Re: Solicitation of Views
State Project NOS.: H.003003, H.010601, & H.003014

Dear Mr. Ardoin,

After review of the information provided to us, we do not have any comments to provide at this time. Thank you.

Sincerely,

Michael Burrows, C.M.
Interim Director of Aviation
Lafayette Regional Airport

P.O. Box 4017-C
Lafayette, Louisiana 70502
Tel: (337) 291-8016
Fax: (337-291-8458

Lafayette Metropolitan Planning Organization

August 25, 2014
4020/14 MPO-10

Ms. Noel Ardion
Environmental Engineer Administrator
Louisiana Department of Transportation and Development
P.O. Box 9425
Baton Rouge, La. 70804

Re: Solicitation of Views

State Project Nos. H.003003, H.010601, H.003014
F.A.P. Nos. H003003, H010601, H003014
Name: I-10:E. Jct. I-49 to Atchafalaya Floodway Bridge
Route: I-10
Lafayette and St. Martin Parish, Louisiana

Dear Ms. Ardoin:

We are in receipt of a Solicitation of Views letter, Project Description and Project Location Map on the above referenced project.

The project is located within the Lafayette Urbanized Area of the 2010 Census and within the transportation planning area of the Lafayette Metropolitan Planning.

The proposed project does not conflict with any Lafayette MPO plans.

If you have any questions, please feel free to contact Melanie Bordelon (337-291-8120; mbordelon@lafayettela.gov) at your earliest convenience.

Sincerely,

Michael Hollier

Mike Hollier, AICP
Lafayette Metropolitan Planning Organization

X:\26000_MPO\039_Response_to_Solcit_of_Views\T_Baker_Smith_Lajaunie_Road_at_Bayou_St_Clair\Hollier_to_T_Baker_Smith_SOV.doc

LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY
MIKE STRAIN DVM
COMMISSIONER

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

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

Animal Health & Food Safety
P.O. Box 1951
Baton Rouge,
LA 70821
(225) 925-3962
Fax: 925-4103

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

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

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

August 20, 2014

DOTD
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views

STATE PROJECT NOS.: H.003003, H.010601, & H.003014
FEDERAL AID PROJECT NOS.: H003003, H010601, & H003014
NAME: I-10: E. JCT. I-49 TO ATCHAFALAYA FLOODWAY BRIDGE
PARISHES: LAFAYETTE AND ST. MARTIN

To whom it may concern,

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

Sincerely,

Brad Spicer KH

Bradley E. Spicer
Assistant Commissioner

BES:kh

United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Attn: Noel Ardoin
Environmental Section, DOTD
P.O. Box 94245
Baton rouge, La. 70804-9245

August 22, 2014

RE: I-10: E Juct. I-49 Atchafalaya Floodway Bridge
State Project No: H003003, H010601, H003014

Dear: Noel Ardoin

The U.S. Geological Survey is not a regulatory agency and cannot approve or disapprove any project. However, we understand the proposed road and bridge improvement State Project No. H003003, H010601, H003014, and the U.S. Geological Survey finds No Objection to the work.

Sincerely

Paul Ensminger
Surface Water Specialist, LA Water Science Center
U.S. Geological Survey

Appendix B

Public Meeting Transcript

Open House Public Meeting Transcript

for

State Project No. H.003003

F.A.P. No. H003003

I-10: E JCT I-49 – LA 328

Lafayette and St. Martin Parishes

January 06, 2015

U.S. Department of Transportation

Federal Highway Administration

and

Louisiana Department of Transportation and Development

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Open House Public Meeting Notice

OPEN HOUSE PUBLIC MEETING

STATE AND FEDERAL AID PROJECT NO. H003003
I-10: E. JCT I-49 – LA 328
LAFAYETTE AND ST. MARTIN PARISHES

The Louisiana Department of Transportation and Development (DOTD) is conducting an open house public meeting for the proposed I-10 widening project from the east junction of I-10 with I-49 to LA 328 (Breaux Bridge Exit). The proposed project would include full depth replacement of the pavement within the existing the lanes. I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed.

The purpose of the meeting is to provide information about the project and to obtain input from interested parties. There will be a continuous multi-media presentation about the project. Additional project information will be available. Representatives from DOTD will be available at the open house to answer questions and discuss issues related to the project. Verbal and written comments on the project can be submitted at the meeting. Comments can also be mailed to the DOTD address shown below, postmarked by January 17, 2015. The public meeting has been scheduled as follows:

Tuesday, January 6, 2015
4:00 – 7:00 p.m.
Lafayette Parish Public Library – North Regional Branch
5101 North University Avenue
Carencro, LA 70520

Should you require special assistance, due to a disability, to participate in this public meeting, please contact DOTD by mail at the address shown below, or by telephone at 225.242.4506, at least five working days prior to the meeting.

Louisiana Department of Transportation and Development
Environmental Engineer Administrator, Section 28
P.O. Box 94245
Baton Rouge, LA 70804-9245

Open House Attendance Record

OPEN HOUSE PUBLIC MEETING
I-10: E. JCT I-49 – LA 328
H.003003
LAFAYETTE AND ST. MARTIN PARISHES
JANUARY 6, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): MIKE & Michelle McFAUL
Mailing Address: 326 REES St.
BREAUX BRIDGE, LA. 70517

Name (Please Print): David Agmond
Mailing Address: 316 Brasseaux Rd
Carencro La 70520

Name (Please Print): AUBIN BUQUET
Mailing Address: 315 TIMBERWOOD CIRCLE
LAFAYETTE, LA 70508

Name (Please Print): Jennifer Buquet
Mailing Address: 315 Timberwood CR
Lafayette, LA 70508

Name (Please Print): David Mann I-49 South Location
Mailing Address: PO Box 90209
LAF LA 70509

Name (Please Print): Barbara D. & Charles Dubon
Mailing Address: P.O. Box 80188
Lafayetty, LA 70598

OPEN HOUSE PUBLIC MEETING
I-10: E. JCT I-49 – LA 328
H.003003
LAFAYETTE AND ST. MARTIN PARISHES
JANUARY 6, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): [illegible]
Mailing Address: 5646 Cameron Street
Scott, LA 70583

Name (Please Print): John Barkin
Mailing Address: 80 D Lawson Bldg
Crowley, LA 70527

Name (Please Print): Robert Leonard
Mailing Address: 2000 Crestline Dr
Lafayette 70507

Name (Please Print): Tony Trahel
Mailing Address: 112 Dawna Dr.
Carencro, LA 70520

Name (Please Print): Christine D Myers
Mailing Address: 6827 N University Ave
Carencro, LA 70520

Name (Please Print): Shane Spallino
Mailing Address: 2280 Rees St. Ext
Breaux Bridge LA 70517

OPEN HOUSE PUBLIC MEETING
I-10: E. JCT I-49 – LA 328
H.003003
LAFAYETTE AND ST. MARTIN PARISHES
JANUARY 6, 2015

ELECTED OFFICIALS

(If representing an elected official, please write both your name and the name of the official you are representing.)

NAME	ELECTIVE OFFICE
Floyd Knott	School Board Dist 9 - St Martin Parish
Phyllis A. Roy / Rep. Stephen Ortego	STATE Rep District 39
[illegible]	STATE Rep Dist 96

OPEN HOUSE PUBLIC MEETING
I-10: E. JCT I-49 – LA 328
H.003003
LAFAYETTE AND ST. MARTIN PARISHES
JANUARY 6, 2015

MEDIA

NAME	STATION / PAPER
Hope Ford	KLFY TV-10
Jeff Johnston	KLFY TV-10
Jonathan Monte	KATC TV-3
Jessica Goff	The DAILY Advertiser

OPEN HOUSE PUBLIC MEETING
I-10: E. JCT I-49 – LA 328
H.003003
LAFAYETTE AND ST. MARTIN PARISHES
JANUARY 6, 2015

DOTD, FHWA, and OTHER AGENCY PERSONNEL

(Federal, State, Parish, and Local)

NAME	AGENCY
Nina McDaniel	DOTD
Stacie Palmer	LADOTD
Al Blanchard	St Martin School Board
Nicholas Olivier	DOTD
MARIA BERNARD REID	DOTD
Fabiola Campoblanco	Sigma Consulting Group
ROBERT LEAR	SIGMA CONSULTING GROUP
ANDREW WENDMANN	DOTD
PAUL VAUGHT	DOTD
BRENT WAGUESPACK	DOTD
Ronald Bertinot	DOTD
BRETT MELLINGTON	MPO-TPC (LEDA)
STEVE R DRAUGHON	DOTD
BOB MAHONEY	FHWA
Kimberly Foreman	LA DOTD R/W
Deldra Dupuillet	DOTD
Melanie Bordelon	Lafayette MPO
Ashley Moran	Lafayett MPO
Amos Watt	Lafayette MPO
~~Tony Tramel~~	~~Tony Tramel Consulting, LLC~~
Michelle Hanks	DOTD

Open House Public Meeting Handout

I-10: E. JCT I-49 – LA 328
OPEN HOUSE PUBLIC MEETING

STATE PROJECT NO. H.003003
FEDERAL AID PROJECT H003003
I-10: E. JCT I-49 – LA 328
LAFAYETTE AND ST. MARTIN PARISHES, LOUISIANA

Lafayette Parish Public Library, North Regional Branch
5101 North UniversityAvenue
Carencro, LA 70520
January 6, 2015
4:00 – 7:00 p.m.

Thank you for attending this Open House Public Meeting for the proposed Interstate 10 (I-10) pavement rehabilitation and widening project. In this handout you will find information about the proposed project, including a preliminary project description, a location map, and typical sections. Also included is a comment form.

Project team members are stationed throughout the room to discuss the project and answer your questions. These individuals are easily identified by their name tags. Please take this opportunity to discuss the project with team members. **There will be no formal presentation.**

As you enter the room, you will see four stations:

Station 1: Sign-in Table

At this station, there are sign-in sheets for General Public, Elected and Other Officials, Agency Personnel, and News Media. Please sign in on the appropriate sheet.

Station 2: Exhibits

This station will consist of a series of maps that illustrate the potential limits of construction super-imposed over aerial photographs and several graphics of the typical design section that is proposed. The exhibit displays the entire proposed project in one large layout.

Station 3: Continuous PowerPoint Presentation

This short presentation will explain the environmental process and provide an overview of the proposed I-10 widening project. The presentation lasts approximately 10 minutes and will re-start automatically after a one-minute intermission. **The PowerPoint presentation and the exhibits shown tonight are available on the DOTD website at:**

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/default.aspx

Station 4: Comment Table

At this station, comments can be made verbally or in writing. A tape recorder is available at this table for verbal comments. The last page of this handout is a comment form that you may use. Comments can be turned in during this meeting or mailed to the address on the back of the form. Additional comment forms are also available to be taken with you. **Please note that comments mailed after this meeting must be postmarked no later than January 17, 2015 to be included as part of the meeting transcript.**

We hope you will take advantage of this opportunity to provide input on the proposed I-10 widening project. Thank you for attending this meeting and for providing input.

PROJECT DESCRIPTION

LADOTD proposes pavement rehabilitation with additional travel lanes along I-10 from the east junction of I-49 in Lafayette Parish continuing eastward to LA 328 in St. Martin Parish, Louisiana using federal funding.

The project would include full-depth replacement of the existing pavement for the entire length of the project corridor with exception of the overpasses and bridges. I-10 would also be widened by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two lanes would occur at night or on weekends.

Estimated future Average Daily Traffic values for I-10 at I-49 are 74,591 vehicles per day in 2015 and 110,839 vehicles per day in 2035. The project corridor is approximately 6 miles long and covers approximately 260.5 acres.

PURPOSE AND NEED

The purpose of and need for this project is to rehabilitate the existing pavement and increase capacity over the length of the corridor.

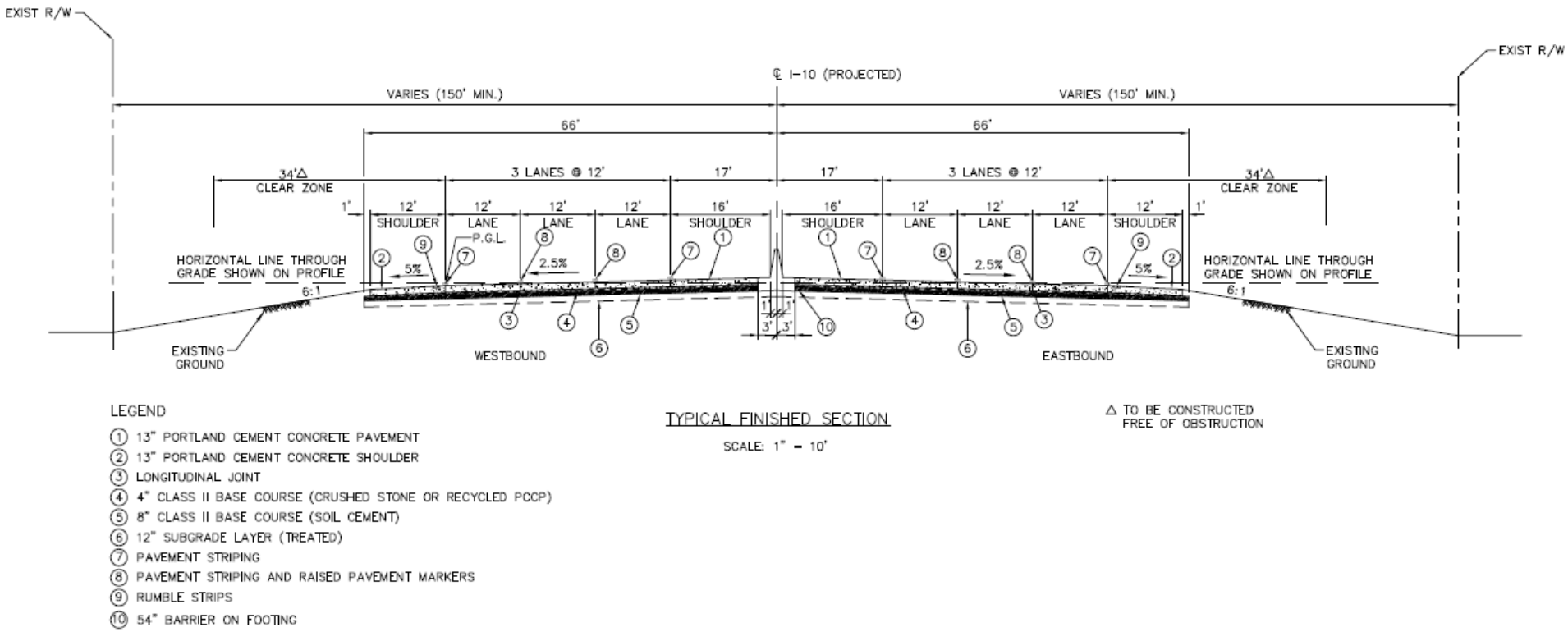
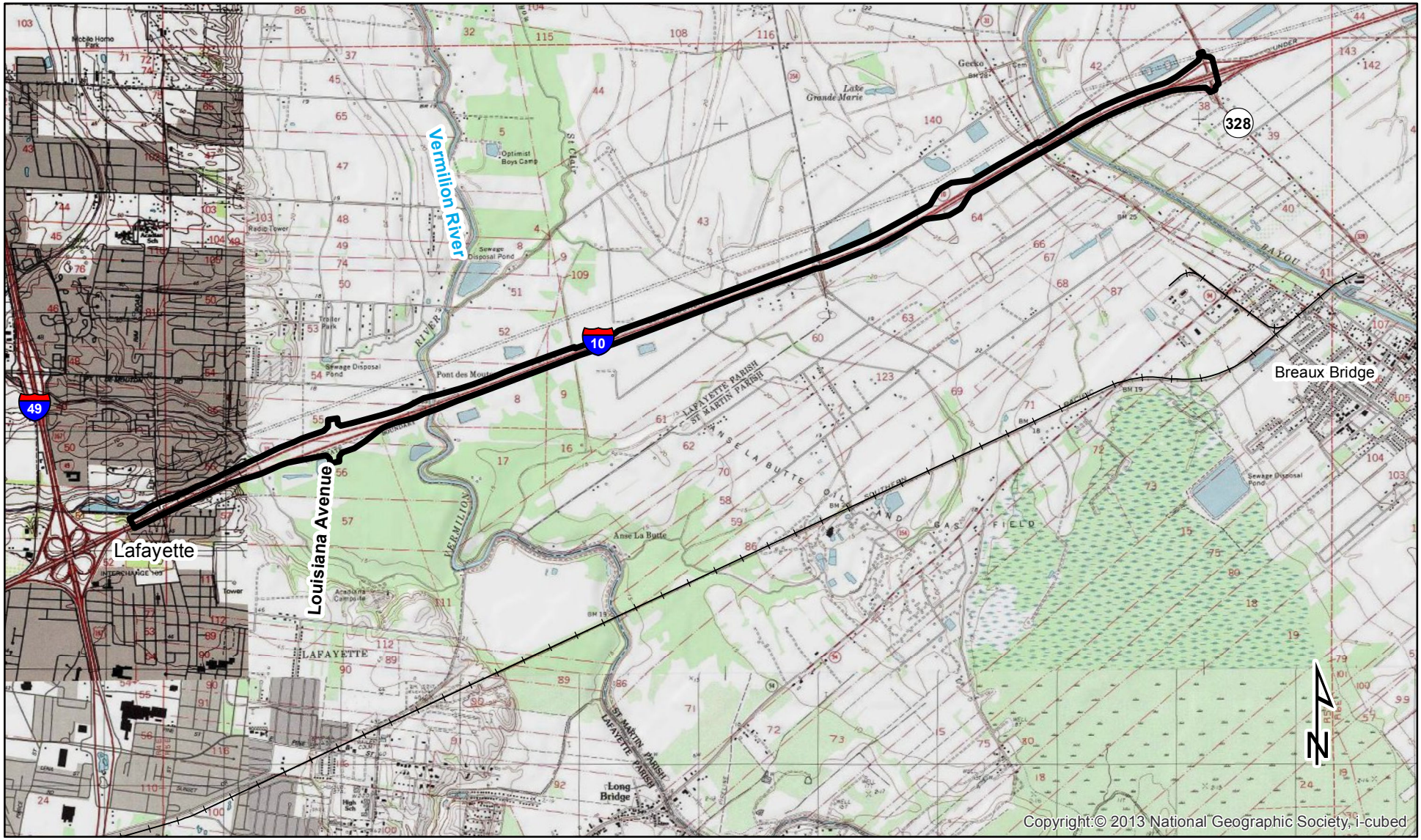
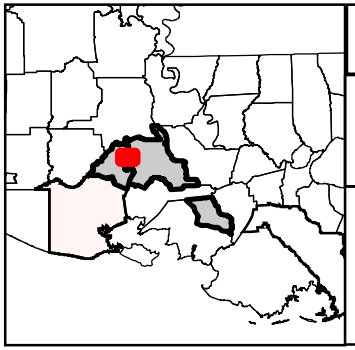


Figure 1: Cross Section Drawing of Proposed Project.





Project Area

1 0.5 0 1 Miles

PROJECT LOCATION MAP

SOURCE: USGS 1:100,000 TOPOGRAPHIC MAP - BATON ROUGE AND CROWLEY QUADRANGLES

STATE PROJECT NO. H.003003
F.A.P. NO. H003003
I-10: E. JCT I-49 TO LA 328
LAFAYETTE AND ST. MARTIN PARISHES

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

I-10: E. JCT I-49 – LA 328
OPEN HOUSE PUBLIC MEETING
January 6, 2015

STATE PROJECT NO. H.003003
FEDERAL AID PROJECT H003003
I-10: E. JCT I-49 - LA 328
LAFAYETTE AND ST. MARTIN PARISHES, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 – Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **January 17, 2015** will become part of the transcript of this meeting.

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NAME: _____

ADDRESS: _____

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FOLD
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PLACE
STAMP
HERE

Louisiana Department of Transportation and Development
Environmental Engineering Administrator, Sec. 28
P.O. Box 94245
Baton Rouge, LA 70804-9245

Power Point Presentation Shown at Meeting

OPEN HOUSE PUBLIC MEETING
FOR
I-10: E JCT I-49 – LA 328
LAFAYETTE & ST. MARTIN PARISHES
State Project No. H.003003
Federal Aid Project No. H003003

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Project Description

- DOTD and FHWA propose full-depth replacement of the existing pavement for the entire length of the project with exception of the overpasses and bridges
- I-10 would also be widened by constructing one additional lane in each direction within the existing median, and a concrete median barrier would be installed

Project Purpose and Need

The purpose of and need for this project is to rehabilitate the existing pavement and increase capacity over the length of the corridor.

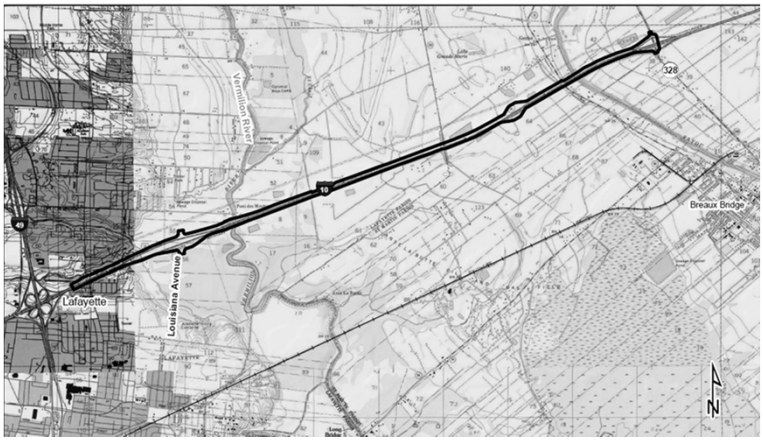
Meeting Agenda

In addition to this presentation, the following stations are available:

- A Sign-in and Handout Station;
- An Exhibit Station to review layouts of the proposed project and to ask questions to project staff; and
- A Comment Station for giving written and/or verbal comments (Written comments postmarked within 10 calendar days of meeting will also be included in the transcript).

Project team members are available to assist you and receive your comments.

Project Location



Proposed Action

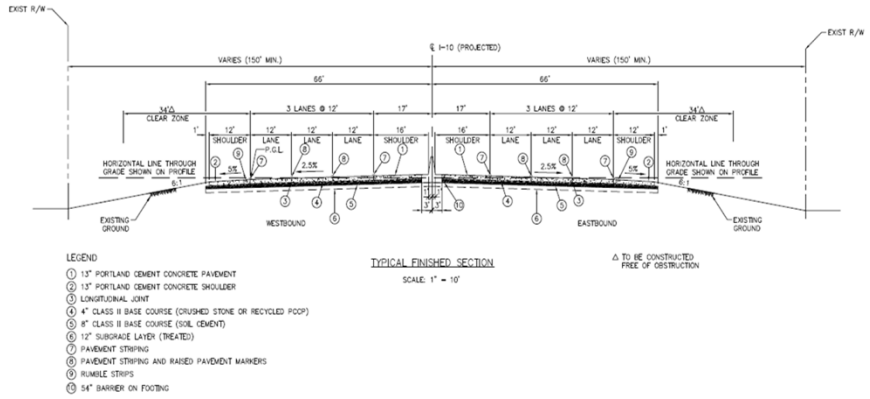
The project would include:

- Full-depth replacement of the pavement within the existing the lanes (except for the overpasses and bridges).
- Widening by constructing one additional lane in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed.

Proposed Action

- Two lanes in each direction would remain open to traffic during construction.
- Any lane closures limiting traffic to less than two open lanes would be limited to nighttime or during weekends.

I-10 Proposed Cross Section



How Can You Help?

1. Sign-in tonight and review all materials.
2. Speak with a team member about your concerns.
3. Provide us with your written or recorded comment.

This is the end of the Presentation.

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

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The presentation will begin shortly.

Transcript of Oral Comments

No oral comments were received.

Written Comments

U.S. Department of Transportation Federal Highway Administration

I-10: E. JCT I-49 – LA 328
OPEN HOUSE PUBLIC MEETING
January 6, 2015

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE PROJECT NO. H.003003
FEDERAL AID PROJECT H003003
I-10: E. JCT I-49 - LA 328
LAFAYETTE AND ST. MARTIN PARISHES, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 -- Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **January 17, 2015** will become part of the transcript of this meeting.

The increase in number of lane from 2 to 3 lanes each direction combined with a "New Jersey" type median will enhance safety and provide additional capacity. The following issues should be consider in the final design documents:

- A review of CRASHES in this roadway segment should be used to help identify locations where "authorized" vehicles may cross from one direction to the other direction
- Extending the acceleration/on ramp from the "Weigh Station" ± 1,500' to 2,000' should be incorporated to enhance traffic safety. Truck attempting to accerate from the weigh station have inadequate lengths to get to the speed necessary to safely merge into the mainlane traffic flow.
- Consideration should be given to regulate trucks to right lane in this roadway segment.

NAME: Tony Tramel, PE, PTOE
ADDRESS: Tony Tramel Consulting, LLC
112 DAYNA DR
CARENCRO, LA 70520

Comments Addressed by LADOTD Project Manager

Project Manager's Response to Comments made by Mr. Tony Tramel:

The Design Team has considered these issues and the issues will be addressed in the final design process.

- Currently one FHWA authorized crossover exist within the limits of this project and is located near the existing weigh stations. It is expected that this crossover location will be fully restricted by the proposed median barrier; thus eliminating the use of this crossover. Additionally, a safety analysis will be performed by DOTD and included in the project's Traffic Management Plan.
- Currently, the parallel acceleration lanes for the westbound and eastbound on-ramps have a length (L, not including taper) of 895' and 820' respectively. Per AASHTO Table 10-3, this is adequate for an initial speed at the gore (Va') of 40 mph. However, it may be difficult for the trucks to reach 40 mph in the 475' distance we've measured from the parking area of the weight station to the gore. Table 10-3 notes an acceleration length of 1620' from a stopped condition. We will lengthen the existing acceleration lanes to provide 1620' from the parking area (i.e., add 250' and 303' to the westbound and eastbound on-ramps) in Final Plans.
- Portions of the roadway in advance of the weigh stations will require all trucks to utilize the outside lane only as part of the Weigh-In-Motion and PrePass systems. Additional warrants will be considered by DOTD as the safety analysis is performed.

Appendix C

Additional Agency Coordination:

Cultural Resources

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
Phone: 225-242-4502 | fax: 225.242.4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

December 18, 2014

STATE PROJECT NOS.: H.003003
FAP NOS.: H003003
NAMES: I-10 E. JCT. I-49 TO LA 328
ROUTE: I-10
PARISH: LAFAYETTE, ST. MARTIN

Ms. Pam Breaux
State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

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

Pam Breaux 12-22-14
Pam Breaux Date
State Historic Preservation Officer

SUBJECT: No Historic Properties Affected

Dear Ms. Breaux:

The Louisiana Department of Transportation and Development (LADOTD) in conjunction with the Federal Highway Administration (FHWA), proposes pavement rehabilitations and widening along Interstate 10 (I-10) from the east junction of I-49 to the junction with LA 328 in Lafayette and St. Martin Parishes (See figure 1). The proposed construction would begin at Control Section (450-05) Log Mile (CSLM) 10.10 and proceed eastward to CSLM 450-06 2.3, a distance of approximately 6.48 miles. The project would include full depth replacement of the pavement within the existing lanes for the entire length of the project corridor with exception of the overpasses and bridges. I-10 would also be widened by constructing one additional lane and shoulder in each direction. The additional lanes would be constructed within the existing median, and a concrete median barrier would be installed. Drainage improvements would include cross drain extensions and median drains via catch basin where necessary. As part of project development, DOTD will determine how lane closures and traffic at the bridges would be managed. Eight (8) bridges (see Table 1) along the interstate would also be widened, with new pilings and footings in the median. A concrete median barrier would be installed where no vegetation exists. When completed, the eastbound and westbound lanes will consist of three 12' travel lanes, a 10' outside shoulder, a 12' inside shoulder, and a variable width median. No additional right-of-way is required. The Area of Potential Effects (APE) for the proposed undertaking is considered limits of construction within the existing right-of-way (ROW) which is approximately 258 acres (Figure 1).

LADOTD staff consulted the GIS database maintained by the Louisiana Divisions of Historic Preservation and Archaeology to determine if any historic properties, including archaeological sites or standing structures eligible for or listed on the National Register of Historic Places (NRHP) are located

RECEIVED
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ARCHAEOLOGY

within or adjacent to the project APE. There were no previously recorded historic properties, historic districts or archaeological sites within the APE or adjacent to the proposed project corridor. The LA 354 Bridge (Str. No.03504500600001), built in 1970, crosses over the Interstate. However, this structure has been determined ineligible for the NRHP according to the Mead & Hunt study concurred by your office October 17, 2014 (See Attachment).

No historic properties were identified within the APE as a result of these surveys. Four (4) archaeological surveys have been conducted within the APE. Three (3) surveys cross the Interstate (Survey: 22-1882, 22-0119, and 22-0105) (Figure 2). No historic properties were identified within the APE as a result of these surveys. A Phase 1A archaeological survey (22-2327), conducted by Earth Search, Inc. in 2000 (figure 2), for a proposed fiber optic route, covered the majority of the APE. The survey consisted of a background/literature search, an inspection of the corridor, a site file check and a sensitivity assessment as well as site monitoring. As a result of this survey the Louisiana Division of Archaeology (LADOA) recommended no further field investigations since the proposed fiber optic route runs through existing Interstate right-of-way.

The Interstate System is over 50 years of age, however the Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption regarding effects to the Interstate Highway System on March 10, 2005. Although the interstate is exempt, the proposed undertaking effect on other historic properties must be taken into consideration. All bridges and culverts within the APE (see Table 1) on the Interstate are considered exempt.

Table 1: Interstate Bridges.

Structure No.	Year Constructed	Bridge Type	Crossing
03284500510301 03284500510302	1970	Concrete Pre-stressed Girders	LA 728
03284500510871 03284500510872	1970 2003	Concrete Slab	Francois Coulee Coulee
03284500511171 03284500511172	2003	Concrete Pre-stressed Girder w/ Cast in Place Deck	Louisiana Avenue
03284500511811 03284500511812	1970	Concrete Pre-stressed Girders	Vermilion River

Given the results of our records search, the results and LADOA recommendations for survey 22-2329, LADOTD in conjunction with FHWA, believes that no historic properties will be affected by the proposed project. We request your concurrence. If you have any questions or comments, please contact Michelle Hanks at 225-242-4514 or michelle.hanks@la.gov.

Sincerely,

Stacie Palmer for

Noel Ardoin
Environmental Engineer Administrator

NA/mwh
cc: FHWA
SHPO File

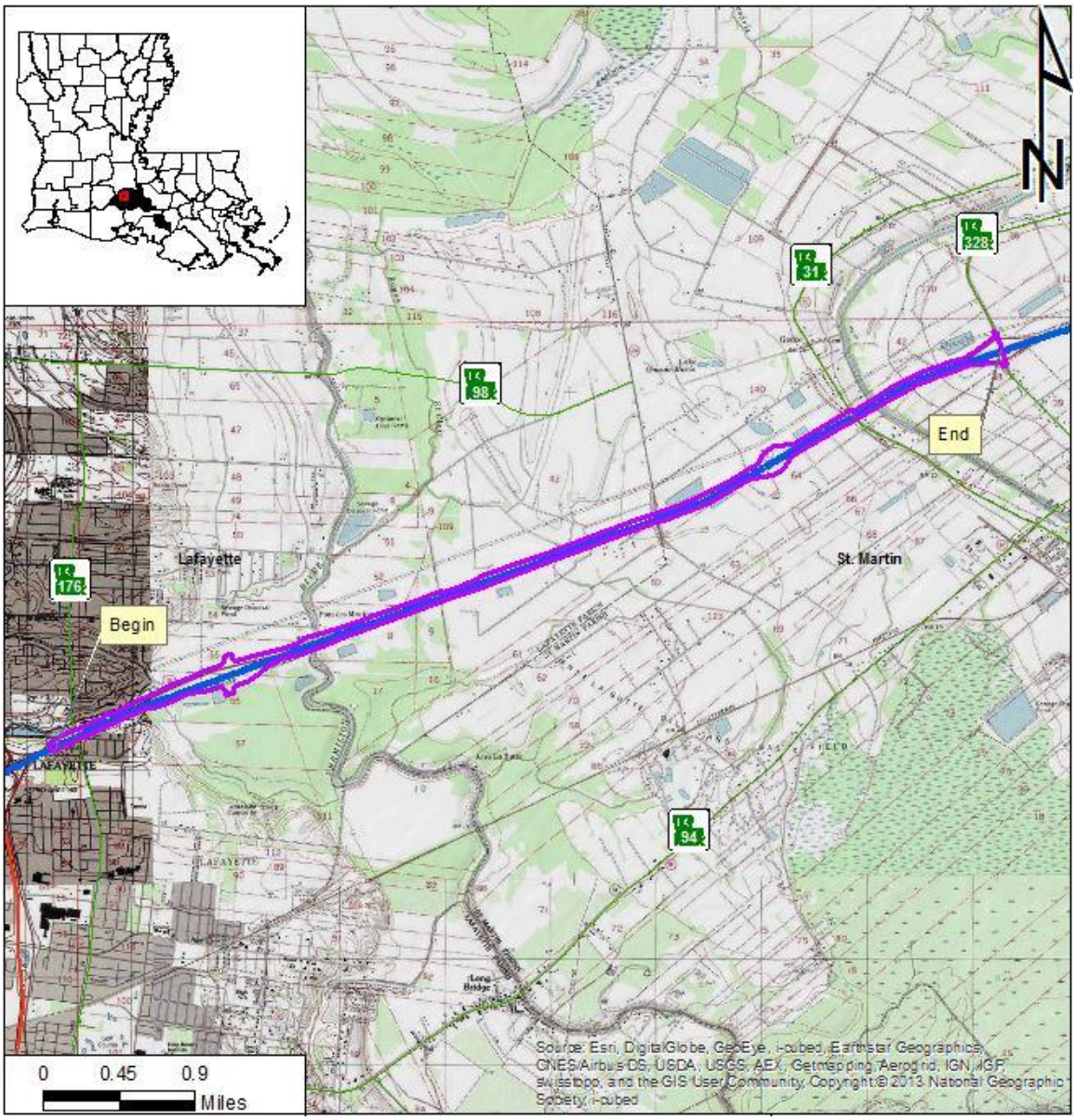

Figure 1: Project Area showing APE (Map Reference: USGS 7.5' Breaux Bridge and Carencro).

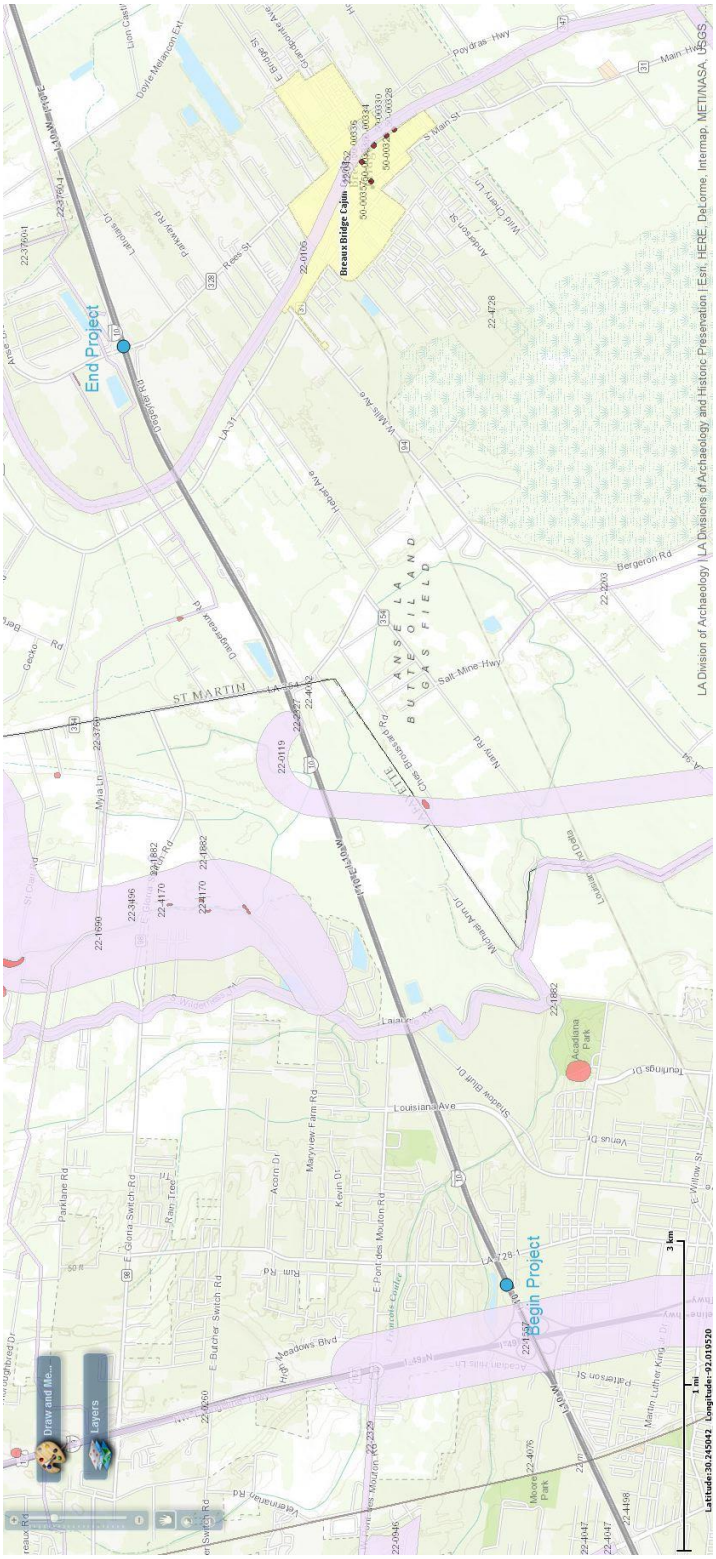

Figure 2: Cultural Resources Map of Project Area from Louisiana Division of Archaeology. APE is the existing ROW of the I-10 Corridor.

*Appendix E - Not Eligible Pre-1971 Bridges**

St. Martin Parish

Recall No.**	Facility Carried	Feature Crossed	Structure Type	Year Built	Owner	Within/Adjacent to Known Historic District
008720	LA0345	CREEK	Concrete Slab	1962	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008730	LA0345	COULEE DU PORTAGE	Concrete Slab	1962	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008760	LA0353	CYPRESS ISLAND BAYOU	Concrete Slab	1962	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008770	US0090	CREEK	Concrete Box Culvert	1963	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008780	LOCAL ROAD	CREEK	Treated Timber Trestles	1951	Parish Highway Agency	N/A
No evidence was found during research or data collection activities to indicate that this bridge is an important example of bridge design, engineering, or construction or that it possesses a direct and important association with historical events or trends. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008782	LA0354	LA 354 OVER I-10	Concrete Prestressed Girders	1970	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						
008810	LA0686	SOUTH RELIEF CANL	Concrete Slab	1959	State of Lousiana	N/A
No evidence was found during research or data collection activities to indicate that this post-1945 concrete or steel beam, girder or culvert bridge exhibits exceptional design, engineering, or construction or that it possesses a direct and important association with historical events or trends of exceptional importance. This bridge does not possess significance under the National Register Criteria for Evaluation and is not eligible for listing under Criteria A and C.						

*The not eligible determination is for the bridge only. Consideration of the bridge as part a potential historic district and impacts to archeological properties still need to be addressed as part of Section 106 review. Bridges located within a previously determined eligible or listed historic district are identified to assist with project planning.
**Structure number is shown for federally-owned bridges without a LADOTD recall number; off-system bridges not maintained by LADOTD are assigned a number beginning with "XXXX."

Appendix D

Wetland Delineation Report

FINAL:
WETLAND DELINEATION REPORT

State Project No. H.003003
Federal Project No. H003003
Interstate 10: E. Jct I-49 to LA 328
Lafayette Parish & St. Martin Parish, Louisiana

Prepared for:

Prepared by:
C. H. Fenstermaker & Associates, LLC
135 Regency Square
Lafayette, LA 70508

February 20, 2015

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1.0 INTRODUCTION

C.H. Fenstermaker & Associates, LLC (Fenstermaker) conducted a routine wetland delineation on January 6th, 7th, 12th, and 14th of 2015. The delineation was conducted for the Louisiana Department of Transportation and Development (DOTD). The proposed project will require pavement rehabilitations and additional travel lanes along Interstate 10, from the east junction of I-49 continuing eastward to the Atchafalaya Floodway Bridge. This project is located in Lafayette and St. Martin Parish, Louisiana. The delineation was limited to the existing road right-of-way (ROW). Enclosed is a topographic map illustrating the approximate layout of the delineated ROW (**Figure 1**). In this report, the I-10: East Junction I-49 to LA 328 and existing ROW shall be referred to collectively as the "Site."

The Site is located in Sections 52 & 51; T09S–R04E and Sections 8, 9, 38, 43, 55, 56, 57, 64, and 140; T09S–R05E in Lafayette and St. Martin Parish, Louisiana. The Site can be found on the Carencro SE and Breaux Bridge SW & SE, Louisiana quadrangle maps.

The approximate point-of-beginning (POB) is located in Lafayette, Louisiana, Latitude 30.2594 and Longitude -92.0156 (I-10: E and I-49 junction), and traverses approximately 6.5 miles eastward to the point-of-ending (POE) located in Breaux Bridge, Louisiana, Latitude 30.2951 and Longitude -91.9158 **(Figure 1).**

2.0 METHODOLOGY

Fenstermaker conducted the delineation in accordance with the 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0, November 2010). The purpose of the wetland delineation was to determine the presence/absence of wetlands using the three technical criteria: vegetation, hydrology, and soils. It is necessary that all three criteria be present in order to be a jurisdictional wetland. The absence of any one of these criteria could exclude an area from being a wetland under the jurisdiction of the Corps of Engineers.

2.1 Vegetation

In order for the vegetation to be considered hydrophytic (wet), the prevalent vegetation must consist of macrophytes that are typically adapted to areas having hydrologic and soil conditions unique to wetlands. By definition, 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. Macrophytes are any plant material that can be seen without the aid of magnification.

As part of the vegetation criteria, species dominance was evaluated using the "50/20 rule" which ranks plant species that immediately exceed 50 percent of the total dominance measure for a vegetation stratum, plus any additional species comprising 20 percent or more of the total dominance measure for that stratum. If the recorded plant species did not exceed 50 percent of the total dominance, then the prevalence index was used. The prevalence index is a wetland indicator which takes into account all plant species and calculates a weighted average by assigning each indicator status category a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). Plant species are also weighted by their abundance. The prevalence index ranges from 1 to 5, and a prevalence index of 3.0 or less indicates that

hydrophytic vegetation is present.

2.2 Hydrology

As defined by the 1987 COE Manual, the term "wetland hydrology" encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. While they may not provide an abundance of information about long-term wetness conditions on a given site, wetland hydrology indicators provide evidence that the Site currently has a wetland hydrologic regime. This information, coupled with the presence of hydrophytic vegetation and hydric soils, provides evidence of long-term as well as short-term wetland conditions.

In order to meet the hydrology criteria of a wetland, a sample location must meet one primary indicator or two secondary indicators **(Table 1).**

Table 1: Wetland Hydrology Indicators

Primary indicators		Secondary indicators
Surface water (A1)	Water-stained leaves (B9)	Surface soil cracks (B6)
High water table (A2)	Aquatic fauna (B13)	Sparsely vegetated concave surface (B8)
Saturation (A3)	Marl deposits (B15)	Drainage patterns (B10)
Water marks (B1)	Hydrogen sulfide odor (C1)	Moss trim lines (B16)
Sediment deposits (B2)	Oxidized rhizosopheres along living roots (C3)	Dry season water table (C2)
Drift deposits (B3)	Presence of reduced iron (C4)	Crayfish burrows (C8)
Algal mat or crust (B4)	Recent iron reduction in tilled soils (C6)	Saturation visible on aerial imagery (C9)
Iron deposits	Thin muck surface (C7)	Geomorphic position (D2)
Inundation visible on aerial imagery (B7)		Shallow aquitard (D3)
		Fac-neutral test (D5)

Source: COE Wetland Delineation Manual, 1987.

2.3 Soils

Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, July 13, 1994). Almost all hydric soils exhibit characteristic morphologies that are a result of repeated periods of saturation and/or inundation for more than a few days at a time. When combined with anaerobic microbial activity in the soil, saturation and inundation causes a depletion of oxygen in the soil. This anaerobiosis process results in characteristic morphologies such as the reduction, translocation, and/or the accumulation of iron, which persists in the soil whether it is wet or dry. This process forms features in the soil that are called redoximorphic features. These characteristic morphologies are particularly useful for identifying hydric soils.

The soil investigation criterion requires the use of a soil probe or a pit excavated to a 20-inch depth in

order to investigate for hydric indicators. These indicators typically include, but are not limited to:

- gleyed or low-chroma colors (redox depletions)
- redox concentrations
- listed on the local hydric soils list
- listed on the national hydric soils list

3.0 Results and Discussion

3.1 Site Description

The Site is located in Sections 52 & 51; T09S– R03E and Sections 8, 9, 38, 43, 55, 56, 57, 64, and 140; T09S–R05E in Lafayette and St. Martin Parish, Louisiana. The site can be found on the Carencro SE and Breaux Bridge SW & SE, Louisiana quadrangle maps.

The general conditions of the Site can be described as undulating, with 0 to 12 percent slopes. The vegetation habitats can be characterized as maintained herbaceous ROW's for Interstate 10 **(Figures 2 & 3)**.

Thirty-four sample locations (Plots 1, 3-8, 10-20, and 22-37) were taken within the Site. Plot locations were selected based on visual observations of changes in vegetation and topography. Recorded data forms and photographs are presented in **Appendix A**. The photographs illustrate typical conditions that were observed at each Plot, obvious jurisdictional wetlands, other waters, and at various points along the ROW.

3.2 Vegetation

The herbaceous communities can be characterized as maintained herbaceous ROW's for I-10. Dominant and sub-dominant species of vegetation associated with the project area can be referenced in the corresponding data sheets in **Appendix A**.

Only Plots 7 and 16 were dominated by hydrophytes and met the hydrophytic vegetation criteria of a wetland. A complete list of vegetation associated with each plot can be found in the corresponding data sheets located in **Appendix A**. The location of each plot, relative to the existing ROW, is illustrated in (**Figures 2, 3, and 4**).

3.3 Hydrology

The topography of the proposed ROW can be described as undulating with 0 to 12 percent slopes illustrated in the attached quadrangle map **(Figure 1)**.

Figures 2 & 3 are 1998 and 2004 aerial and soil images of the Site where dark blue areas represent surface hydrology. The image was utilized to observe hydric soils along with numerous drainage features (Other Waters) within the Site. The aerial photos revealed Other Waters and hydric soils within the delineation boundary.

Only Plot 16 met the hydrology criteria of a wetland. Wetland hydrology indicators associated with each plot can be referenced in the corresponding data sheets of **Appendix A**.

The Site intersects five Other Waters and one Wetland. Wetland #1 is located in the ROW median at Louisiana Avenue. All Other Waters will likely be jurisdictional due to their connection to Section 10 Waters. Vermilion River and Bayou Teche are named waterways/streams on the United States Geological Survey (USGS) quadrangle maps. The tables illustrate the total acres of wetlands and total linear feet of Other Waters located in the ROW and are presented in Section 4.0 Findings and Conclusions of this report.

3.4 Soils

According to the Lafayette Parish Soil Survey, the Site has eight soils types including: MbA- Memphis silt loam, 0-1 percent slopes; MhD- Memphis silt loam, 5 to 8 percent slopes; BaA- Baldwin silty clay loam; MbC – Memphis silt loam, 1 to 5 percent slopes; IbA – Iberia silty clay; BaB –Baldwin silty clay loam; AcA– Acy silt loam; CoA- Coteau silt loam, 0 to 1 percent slopes. According to St. Martin Parish Soil Survey, the site has seven soil types: Cu- Coteau silt loam; Te- Tensas silty clay loam, 0 to 1 percent slopes; Lo- Loreauville silt loam; Gp- Gallion- Perry complex, gently undulating; Dd- Dundee silt loam; Ca- Calhoun silt loam; Sh- Sh- Sharkey clay, 0 to 1 percent slopes, rarely flooded south. According to the Web Soil Survey, National Cooperative Survey, and the Natural Resources Conservation Service (NRCS) hydric soils list, only the Lo soil type is listed as a hydric (wetland) soil. Plot locations relative to the map unit can be referenced on **Figures 2 and 3** and in the corresponding data sheets in **Appendix A**.

The wetland delineation revealed that Plots 3, 16, 17, 19, 22, 24, 25, and 29 contained hydric soil indicators, thus meeting the hydric soils criteria of a wetland. Soil characteristics associated with the plots can be found in the corresponding data sheets located in **Appendix A**.

4.0 FINDINGS AND CONCLUSION

In conclusion, one data point (Plot 16) that was collected for the wetland delineation contained all three technical criteria of a wetland and could be considered jurisdictional by the U.S. Army Corps of Engineers. **Table 1** lists the plots and the wetland criteria determination. It is Fenstermaker's opinion that the proposed pavement rehabilitations and additional travel lanes along Interstate 10 from the east junction of I-49 continuing eastward to LA 328 will impact one herbaceous wetland (Wetland #1). Wetland #1 is located in the existing road right-of-way (ROW) and the approximate size is 0.13 acres. Wetland #1 can be found on **Figure 4.2.**

The proposed pavement rehabilitation and additional travel lanes along Interstate 10 from the east junction of I-49 continuing eastward to LA 328 intersects five Other Waters (Other Waters #1 through #5). These Other Waters include the Vermilion River (Other Water #3), the Bayou Teche (Other Water #5), and Francois Coulee (Other Water #1) as illustrated in the maps **(Figures 2, 3, and 4)**. It is Fenstermaker's opinion, that Other Water #1 through #5 will likely be considered jurisdictional by the Corps of Engineers. It is Fenstermaker's opinion, that Wetland #1 has significant nexus due to its connection with Other Waters #1 (Francois Coulee). All other waters and wetlands have direct and indirect connectivity to Section 10 Waters and will likely be jurisdictional. See Wetland Details (**Figures 4.1 through 4.9)**, for wetland and other water locations. **Tables 2 and 3** list the Other Waters, the linear feet and acreage located within the Site, its classification (Section 10 or 404), and its map location. It is Fenstermaker's opinion that a Department of the Army Permit will be required prior any mechanized land clearing activities or the deposition or redistribution of fill material in other waters and wetlands that are jurisdictional under Section 404 of the Clean Water Act. Furthermore, a Department of the

Army Permit should be acquired prior to any dredging or fill activities in Other Waters that are jurisdictional under Section 10 of the Rivers and Harbors Act.

Table 1: Wetland Criteria

Sample Plot	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland Determination
1	N	N	N	N
3	N	Y	N	N
4	N	N	N	N
5	N	N	N	N
6	N	N	N	N
7	Y	N	N	N
8	N	N	N	N
10	N	N	N	N
11	N	N	N	N
12	N	N	N	N
13	N	N	N	N
14	N	N	N	N
15	N	N	N	N
16	Y	Y	Y	Y
17	N	Y	N	N
18	N	N	N	N
19	N	Y	N	N
20	N	N	N	N
22	N	Y	N	N
23	N	N	N	N
24	N	Y	N	N
25	N	Y	N	N
26	N	N	N	N
27	N	N	N	N
28	N	N	N	N
29	N	Y	N	N
30	N	N	N	N
31	N	N	N	N
32	N	N	N	N
33	N	N	N	N
34	N	N	N	N
35	N	N	N	N
36	N	N	N	N
37	N	N	N	N

Table 2: Other Waters (Section 10)

Other Waters (Section 10)	Linear Feet	Acreage	Lat / Long	HUC Code	Map Location
Other Waters # 1 (Francois Coulee)	± 435	0.937	30.266169 -91.998950	08080103	Figure 4.2
Other Waters # 3 (Vermilion River)	± 406	1.249	30.270678 -91.983897	08080103	Figure 4.3
Other Waters # 5 (Bayou Teche)	± 334	2.429	30.290769 -91.228503	08080102	Figure 4.8

Table 3: Other Waters (Section 404)

Section 404 Waters	Linear Feet	Acreage	Lat / Long	HUC Code	Map Location
Other Waters # 2	± 695	0.160	30.267154 -91.994309	08080103	Figure 4.2
Other Waters # 4	± 75	0.044	30.277572 -91.960097	08080103	Figure 4.5

A jurisdictional wetland determination can only be made by the Corps of Engineers (COE). Consultants such as Fenstermaker can perform field investigations (delineations), collect data in a prescribed manner, and submit it to the COE along with recommendations; however, it is the COE that makes the final determination.

6.0 Mitigation

The DOTD will mitigate the wetlands being impacted by construction activities for this project by minimizing impacts as listed in the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, and mitigate for lost wetland habitats by reseeding with the appropriate plants and seedlings. In addition, the Department will coordinate appropriate mitigation planned with the Corps of Engineers.

In an effort to minimize impacts resulting from the proposed action, the Department's Standard Specifications require that the contractor take certain measures toward reducing environmental (wetland) impacts. These measures are described in, but not limited to, the following sections:

1. Scope of Work - Section 104
2. Control of Work - Section 105
3. Legal Relations and Responsibility to Public - Section 107
4. Clearing and Grubbing -Section 201
5. Removal or Relocation of Structures and Obstructions - Section 202
6. Excavation and Embankment - Section 203
7. Temporary Erosion Control - Section 204

It has been determined that there is no practicable alternative to the proposed construction involving

impacts to wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from this project.

7.0 REFERENCES

U.S. Army Corps of Engineers. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS.

U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0*. U.S. Army Engineer Research and Development Center, Vicksburg, MS. November 2010.

U.S. Department of Agriculture, Natural Resources Conservation Service. 1995. *Soil Mapping Units and Hydric Soils Designations, Louisiana, Third Edition*. May 1995.

U.S. Department of Agriculture, Natural Resources Conservation Service. 1998. *Field Indicators of Hydric Soils in the United States, Version 6.0*. G.W. Hurt, Whited, P.M., and Pringle, R.F. (eds.). USDA, NRCS, Fort Worth, TX.

U.S. Army Corps of Engineers. 2012. *Atlantic and Gulf Coastal Plain Region-National Wetlands Plant List, Final Draft Ratings.* Prepared by U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory (CRREL), Hanover, NH, and BONAP, Chapel Hill, NC.

FIGURE 1: VICINITY MAP

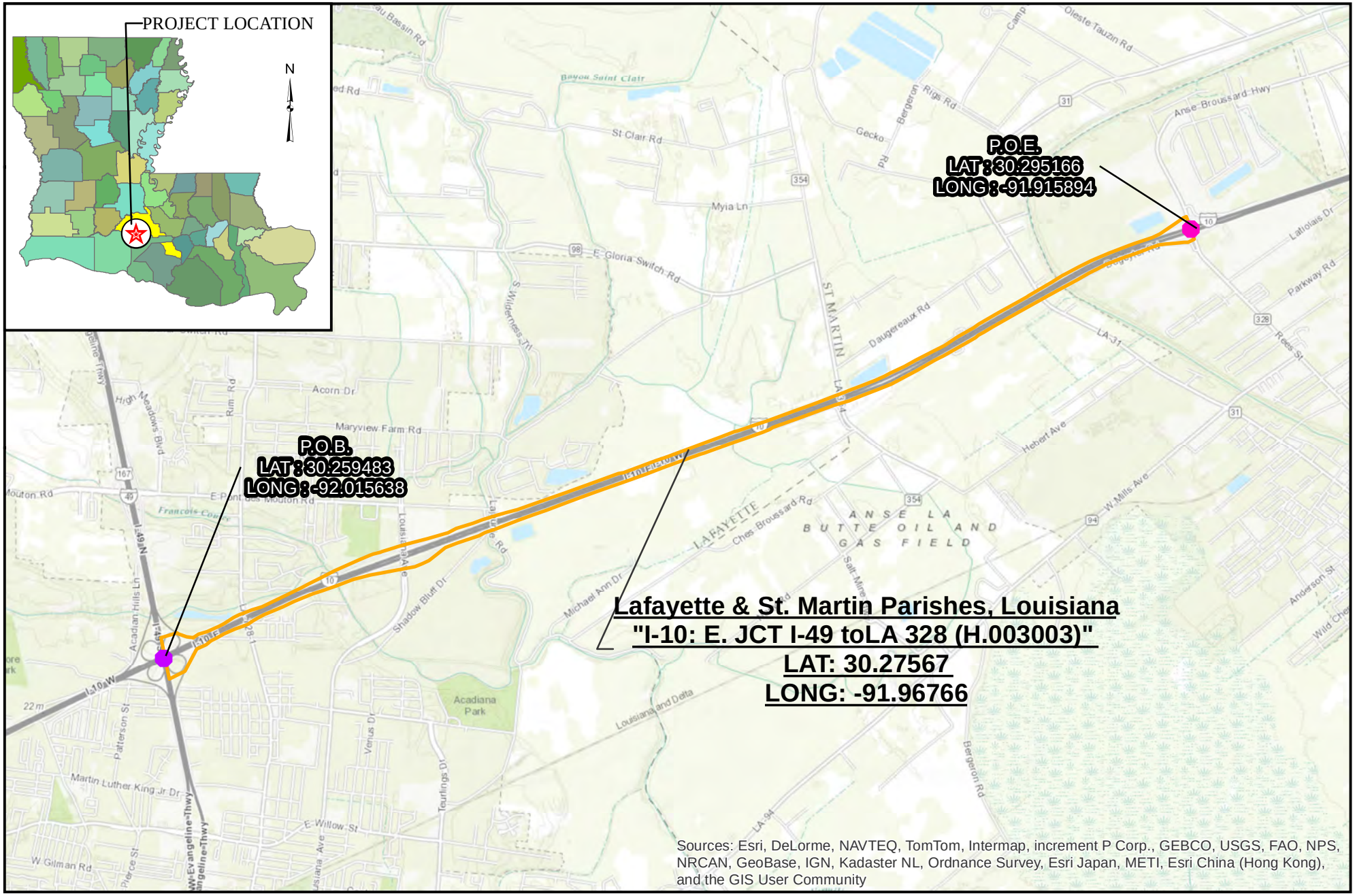

FIGURE 1 : VICINITY MAP

(NGS USA TOPOGRAPHIC MAP)

FENSTERMAKER

N W E S

2,000 1,000 0 2,000 4,000 6,000 8,000 10,000 Feet

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SECTION 85 & 88: T14S - R 03E
Lafayette & St. Martin Parishes, Louisiana
01/16/2015

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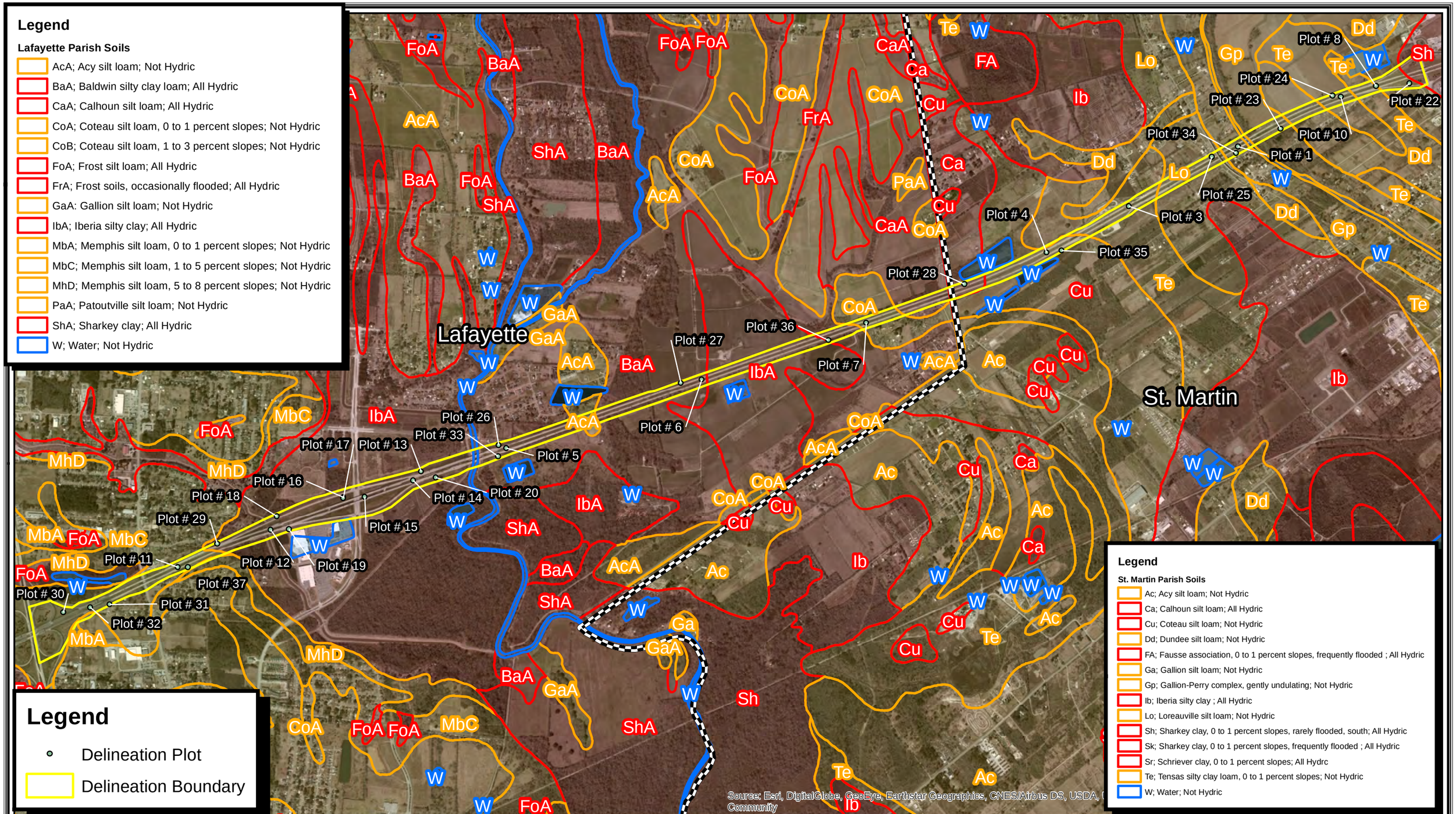
FIGURE 2: 1998 AERIAL AND SOIL SURVEY MAPS



FENSTERMAKER

N W E S

Feet
2,000 1,000 0 2,000 4,000 6,000

FIGURE 2 : AERIAL & SOILS MAP
(1998 DOQQ)

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SECTION 85 & 88: T14S - R 03E
Lafayette & St. Martin Parishes, Louisiana
01/19/2015

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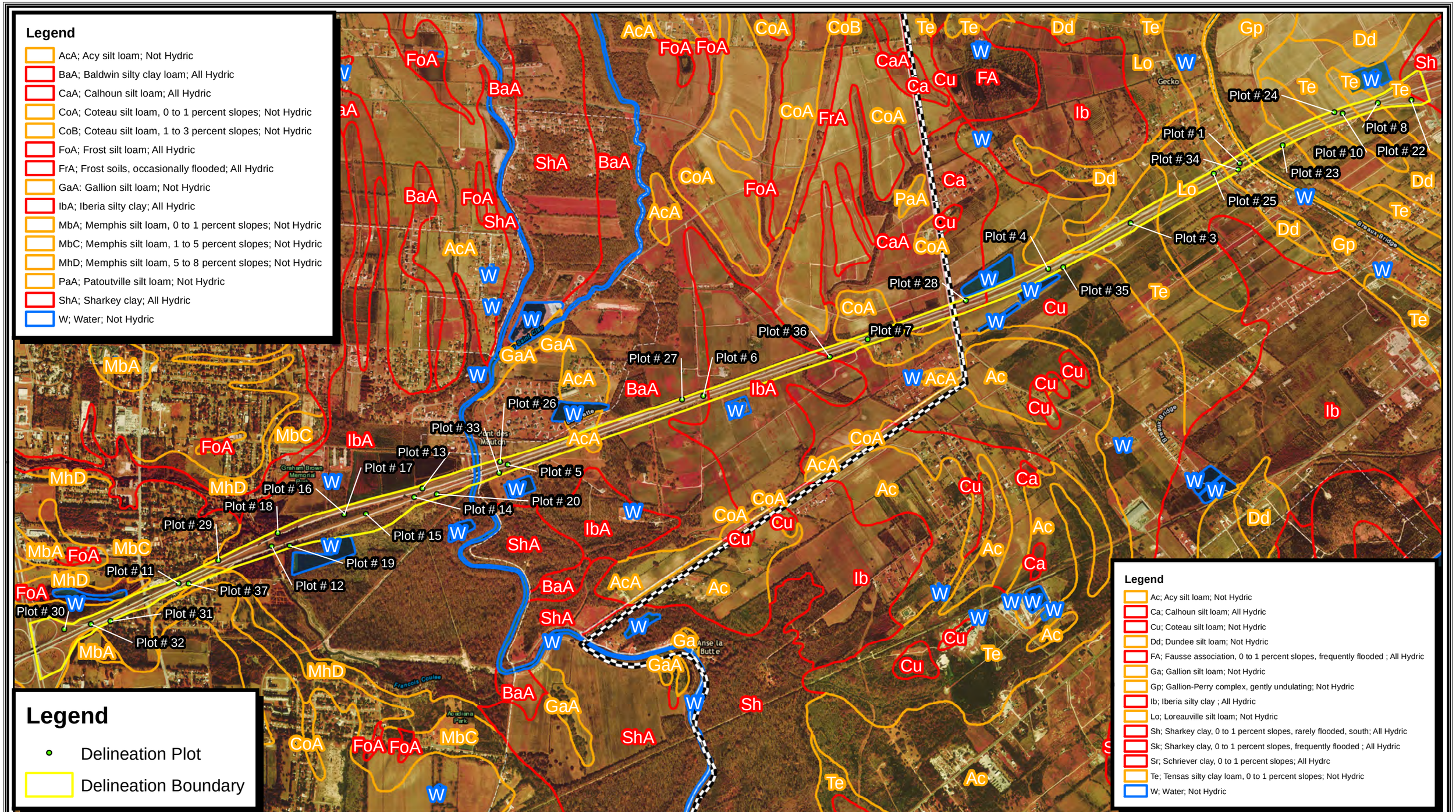
FIGURE 3: 2004 AERIAL AND SOIL SURVEY MAPS



FENSTERMAKER

N W E S

2,000 1,000 0 2,000 4,000 6,000 8,000 Feet

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FIGURE 3 : AERIAL & SOILS MAP
(2004 DOQQ)

LA Department of Transportation & Development
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SECTION 85 & 88: T14S - R 03E
Lafayette & St. Martin Parishes, Louisiana
01/19/2015

FIGURE 4: WETLAND DETAIL MAPS

Figure 4.9

Figure 4.8

Figure 4.7

Figure 4.6

Figure 4.5

Figure 4.4

Figure 4.3

Figure 4.2

Figure 4.1

Lafayette
St Martin

Acadian Hills
Country Club

Acadiana
Park

Copyright:© 2012 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geog
Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

Delineation Boundary

Figure

FENSTERMAKER

N
W E
S

2,500 1,250 0 2,500 5,000 7,500 10,000 Feet

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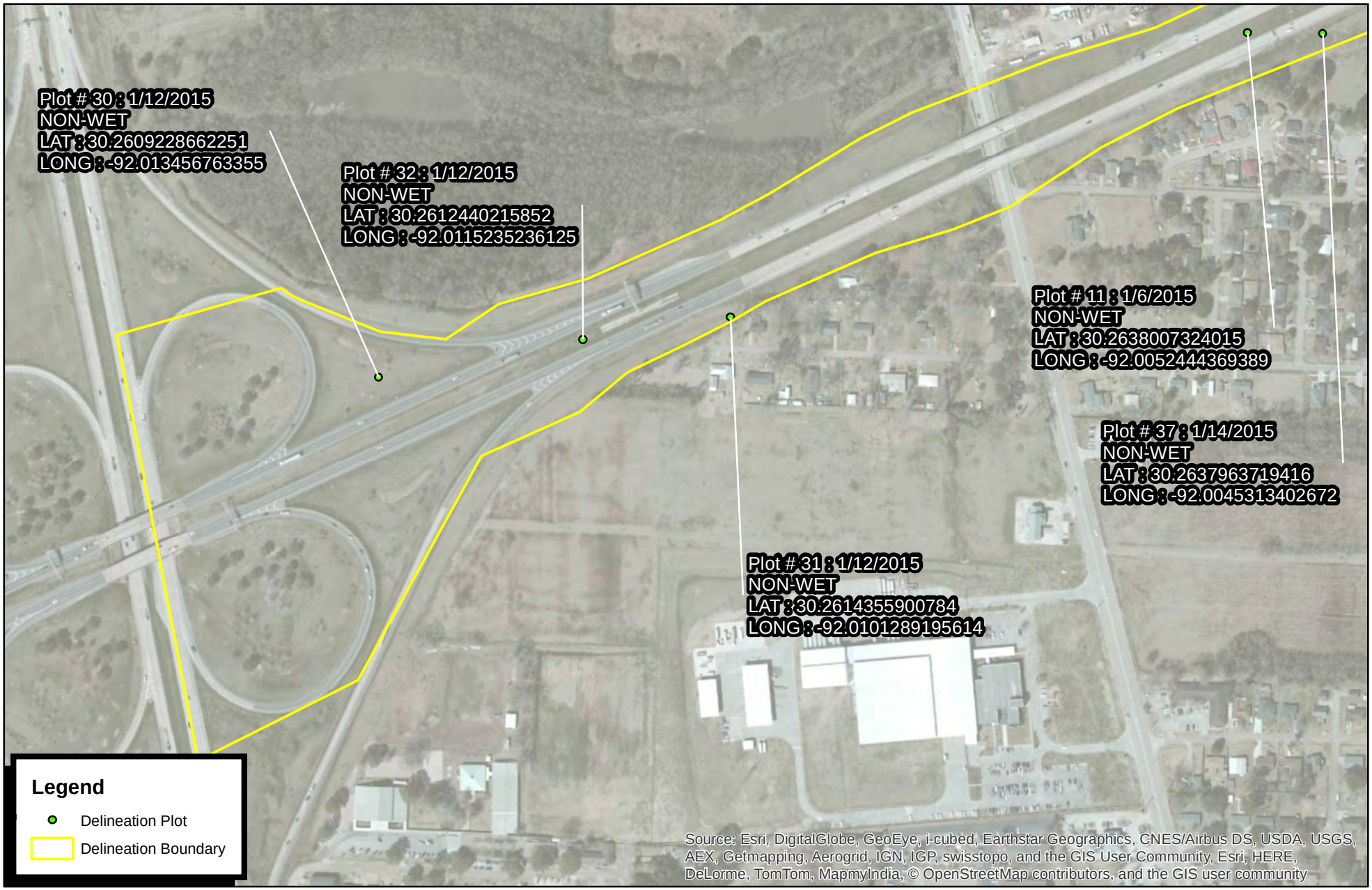
FIGURE 4 : Map Index
(BING HTBRID)

LA Department of Transportation & Development
I-10: E. JCT I-49 to AtchafalayaFloodway (H.003003)
SECTION 85 & 88: T14S - R 03E
Lafayette & St. Martin Parishes, Louisiana
01/16/2015



FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.1: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA. 328 (H.003003)
SEC: 51 & 52: T 09S - R 04E; SEC: 111 & 57: T 09S - R 05E
Lafayette Parish, Louisiana
01/16/2015

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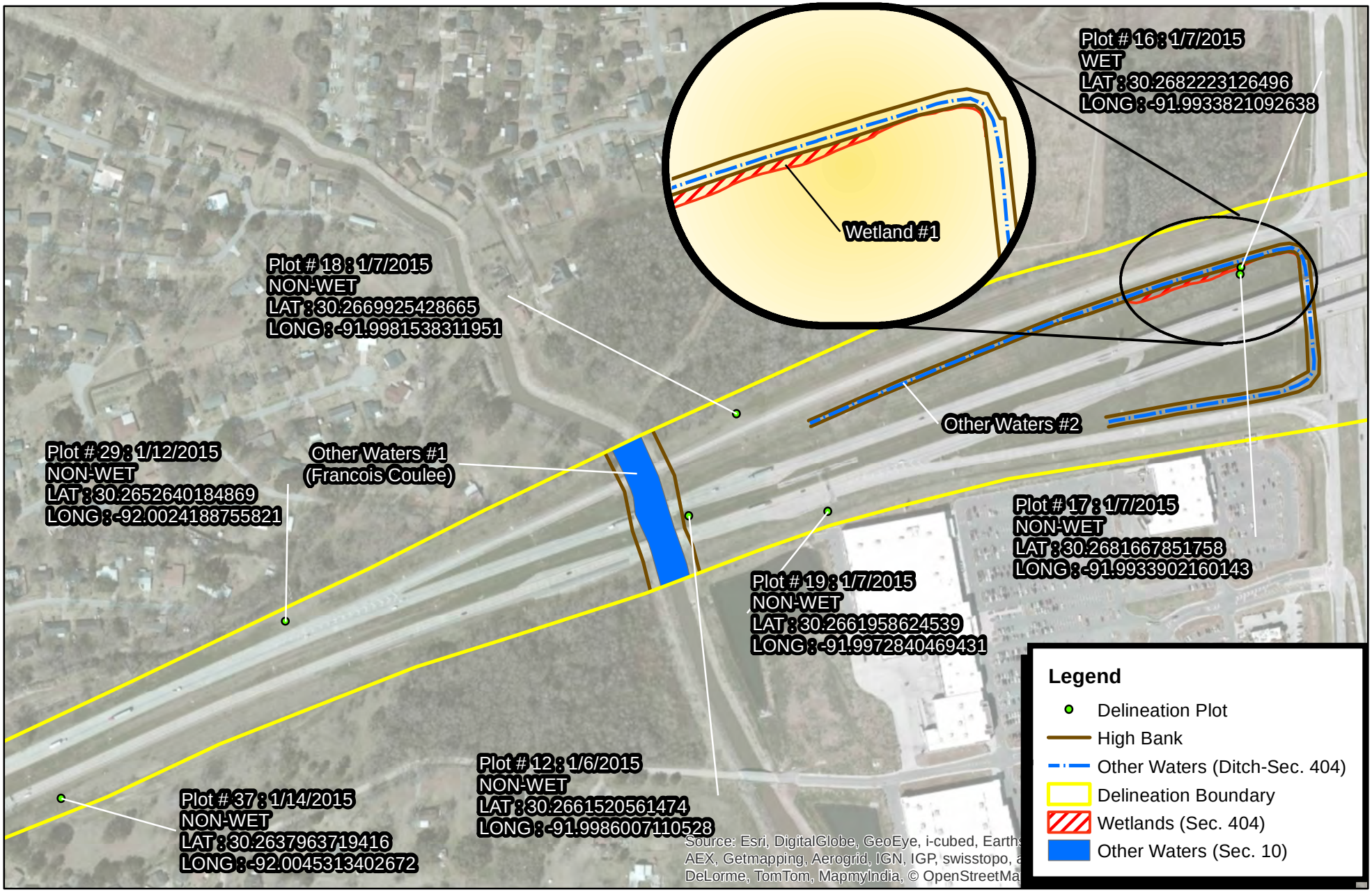

FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.2: Wetland *(BING HTBRID)* **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 85 & 88: T14S - R 03E
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01/16/2015

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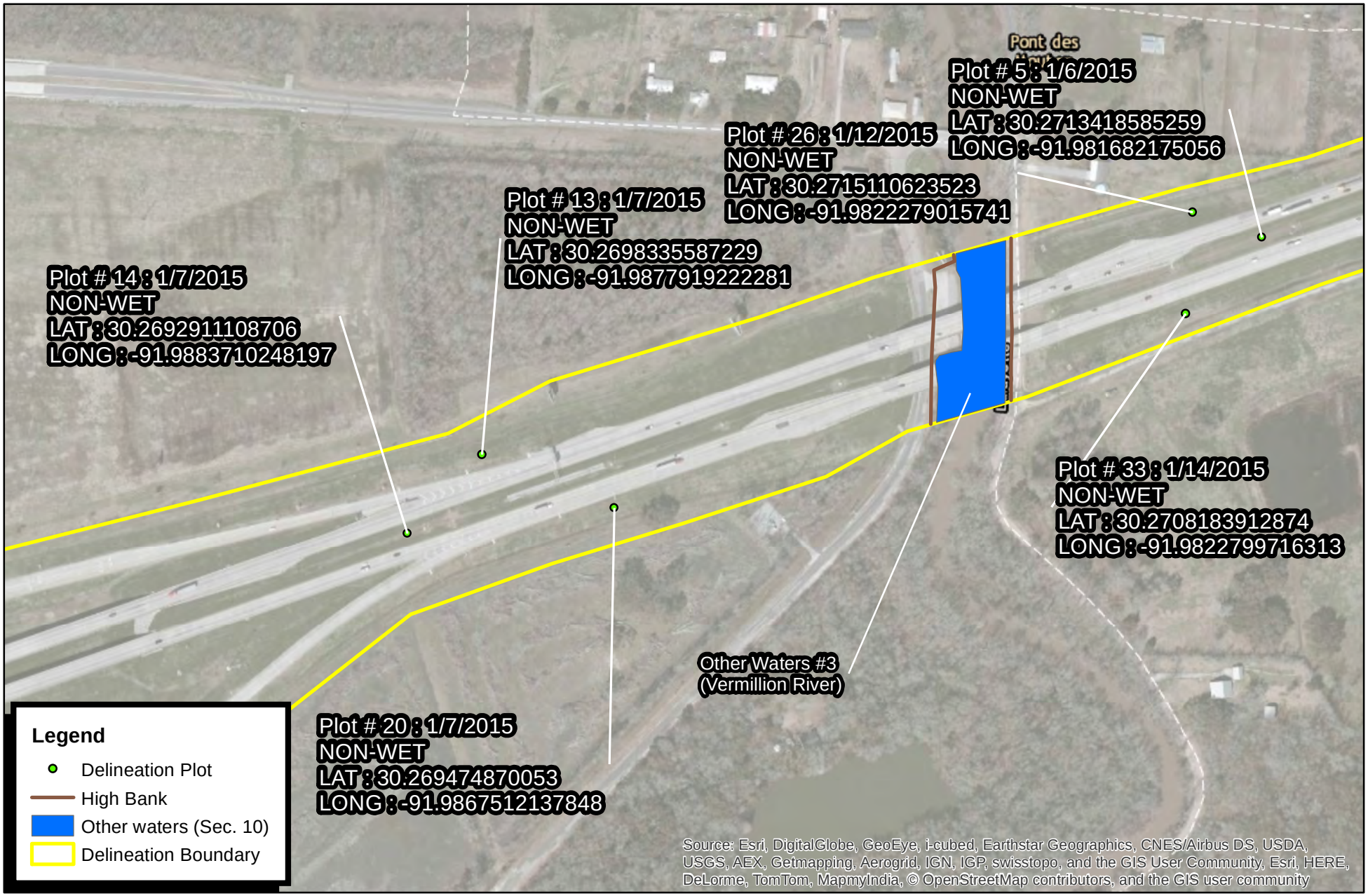

FENSTERMAKER

N W E S

0 200 400 800 Feet

FIGURE 4.3: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 8, 54, 55 & 56: T 09S - R 05E
Lafayette Parish, Louisiana
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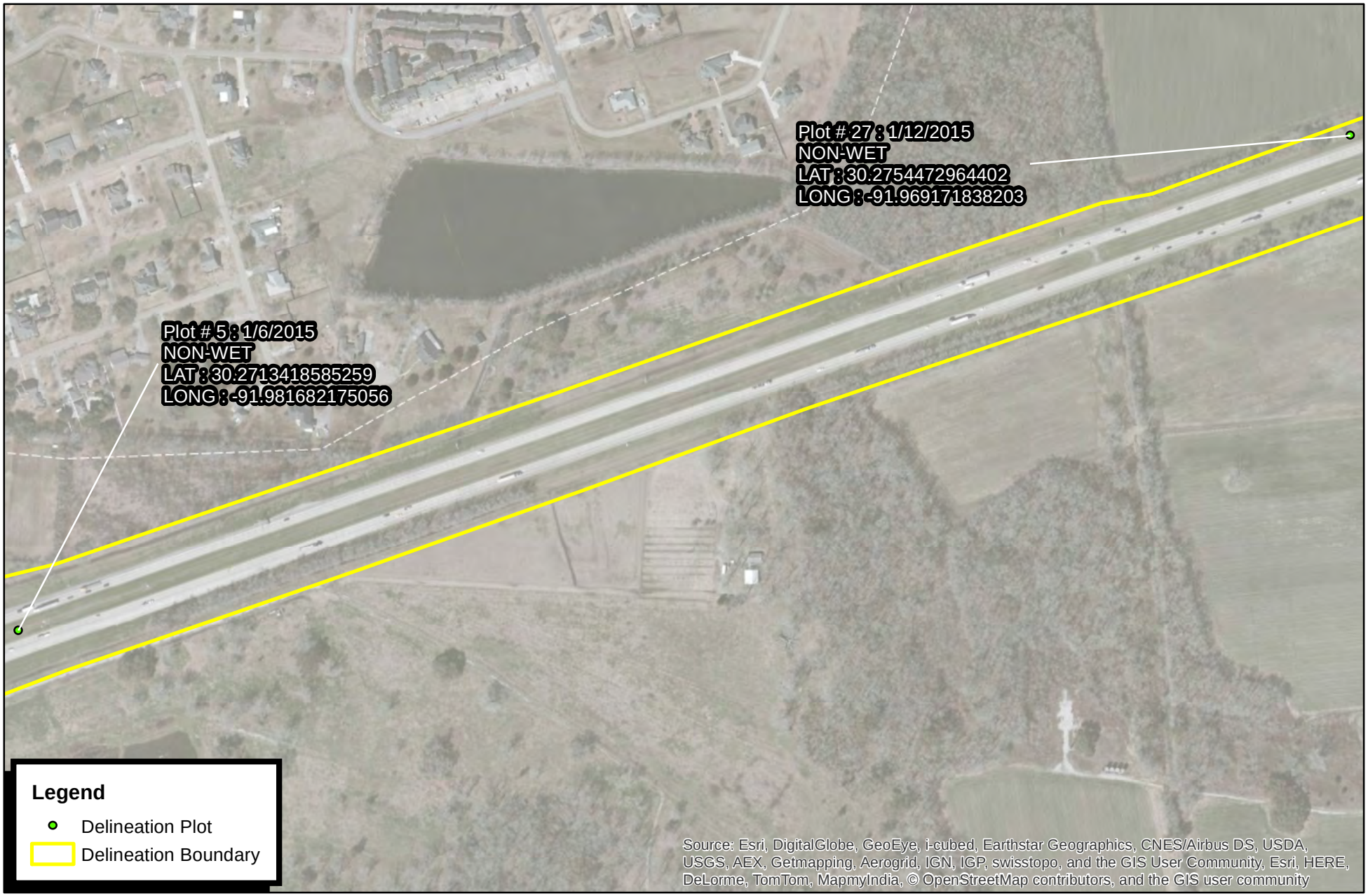

FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.4: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 8, 9 & 43: T 09S - R 05E
Lafayette Parish, Louisiana
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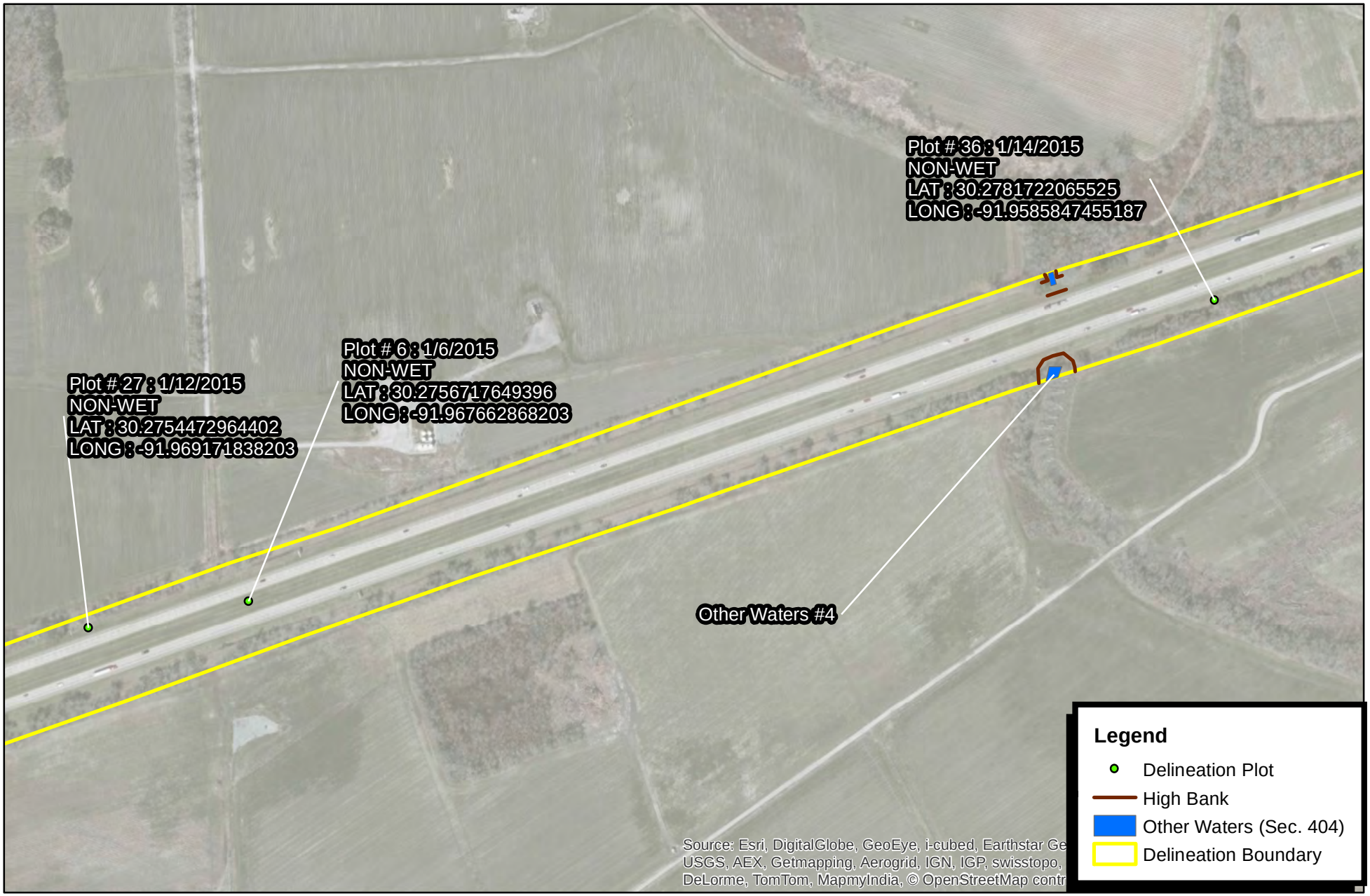

FENSTERMAKER

N
W E
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0 200 400 800 1,200 Feet

FIGURE 4.5: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 43 & 60: T 09S - R 05E
Lafayette Parish, Louisiana
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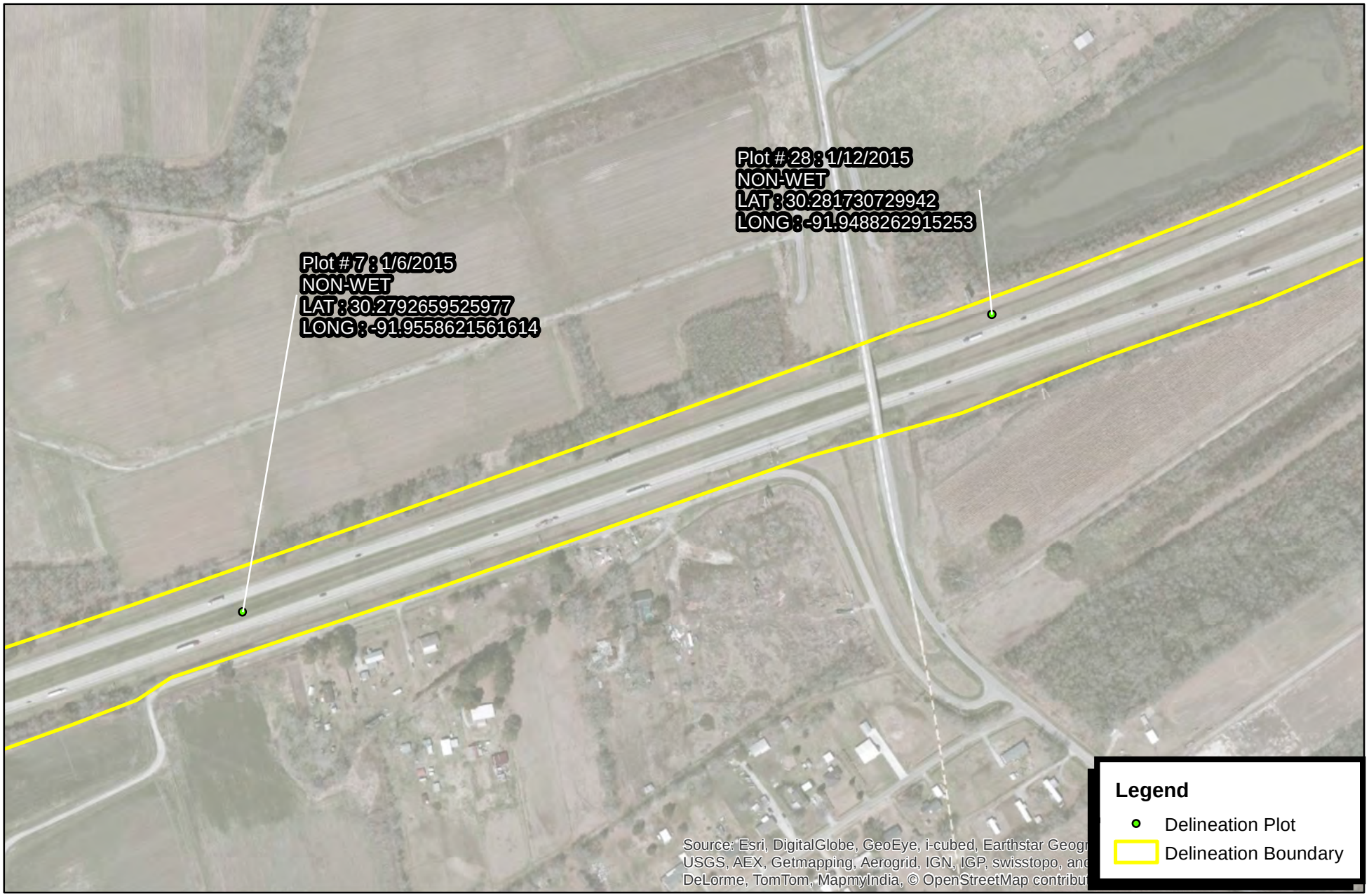

FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.6: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 43 & 140: T 09S - R 05E
Lafayette & St. Martin Parishes, Louisiana
01/16/2015

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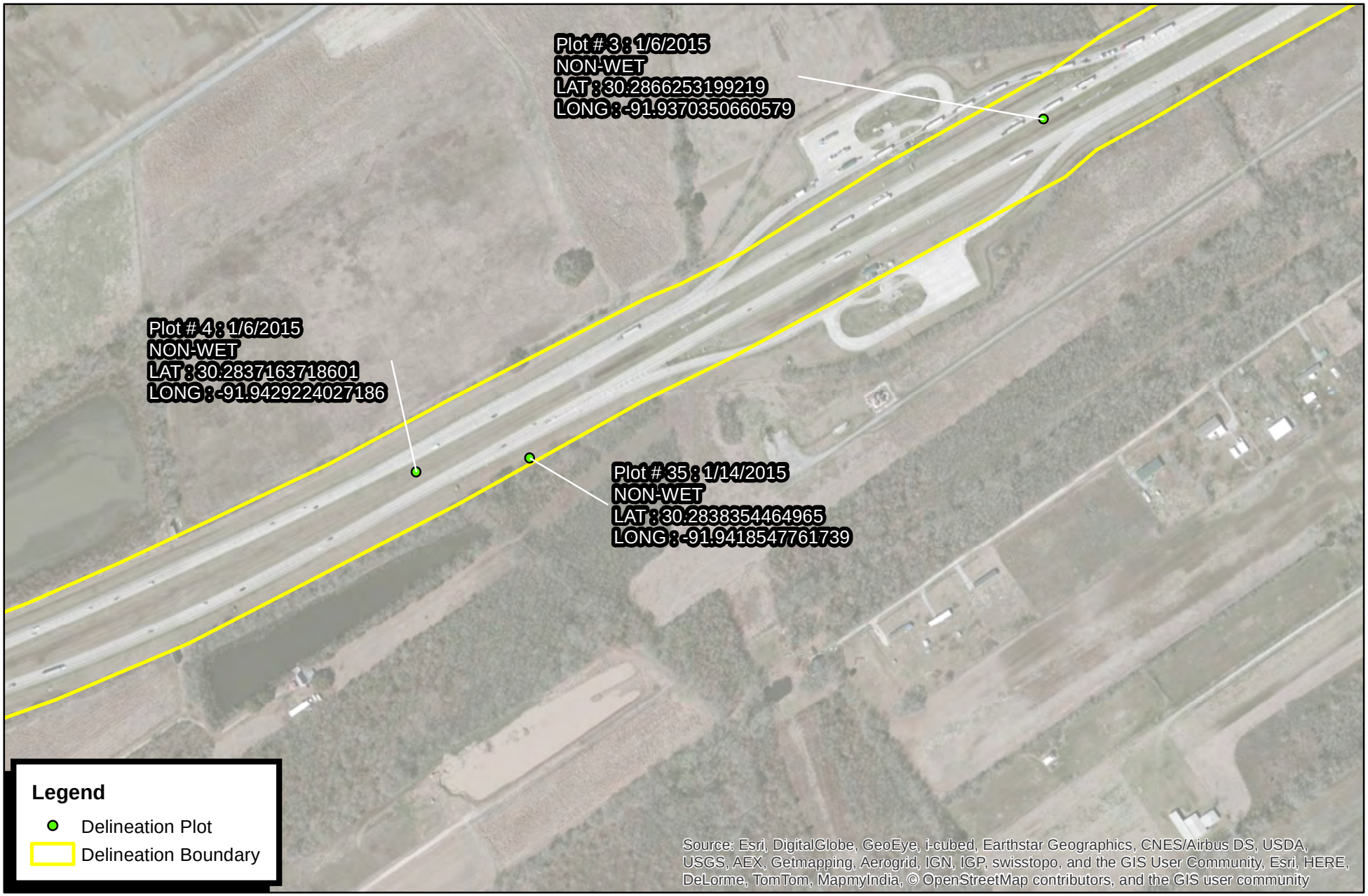

FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.7: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 64 & 140: T 09S - R 05E
St. Martin Parishe, Louisiana
01/16/2015

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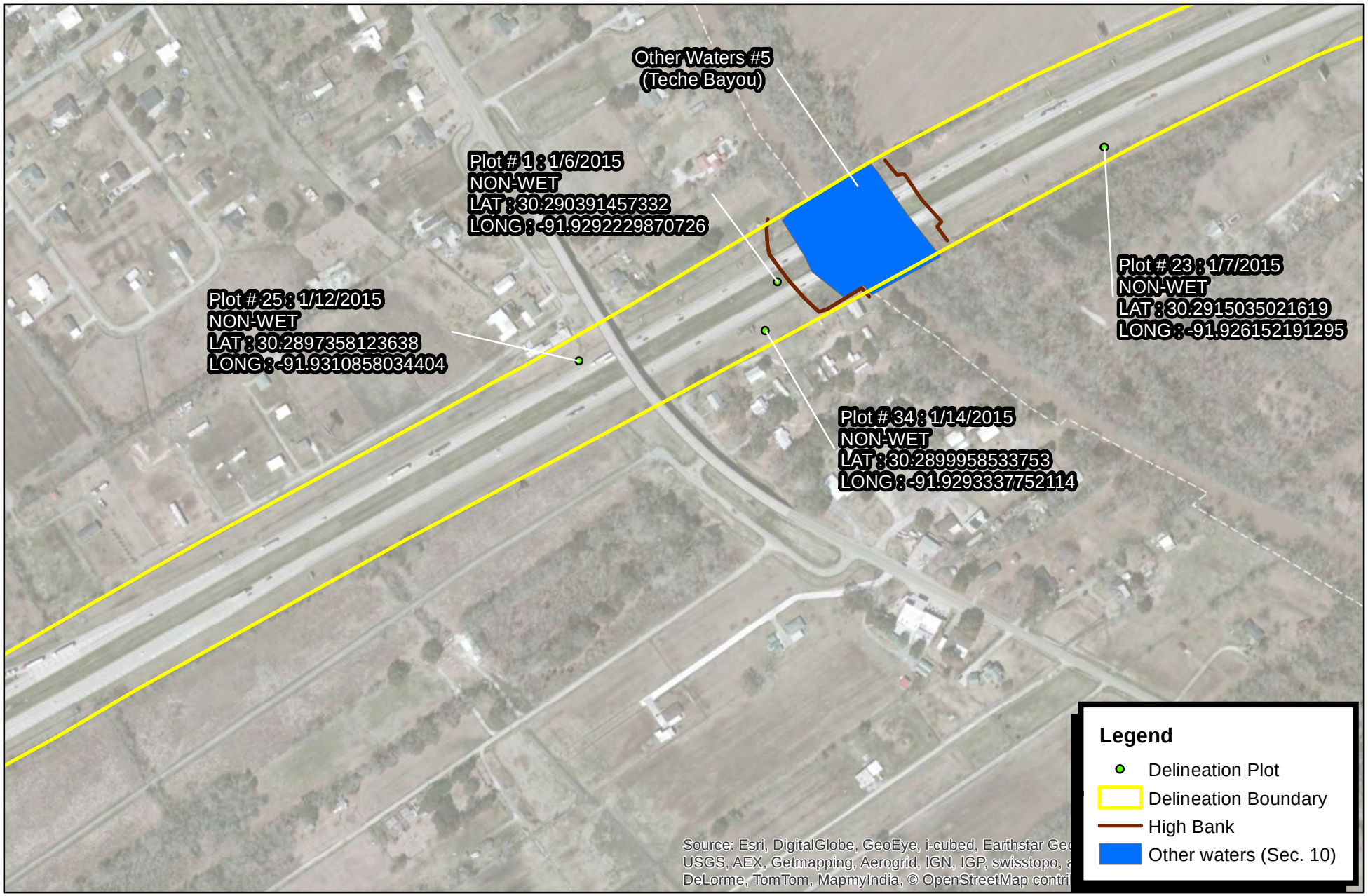

FENSTERMAKER

N W E S

0 200 400 800 1,200 Feet

FIGURE 4.8: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 38, 42, 64 & 140: T 09S - R 05E
St. Martin Parish, Louisiana
01/16/2015

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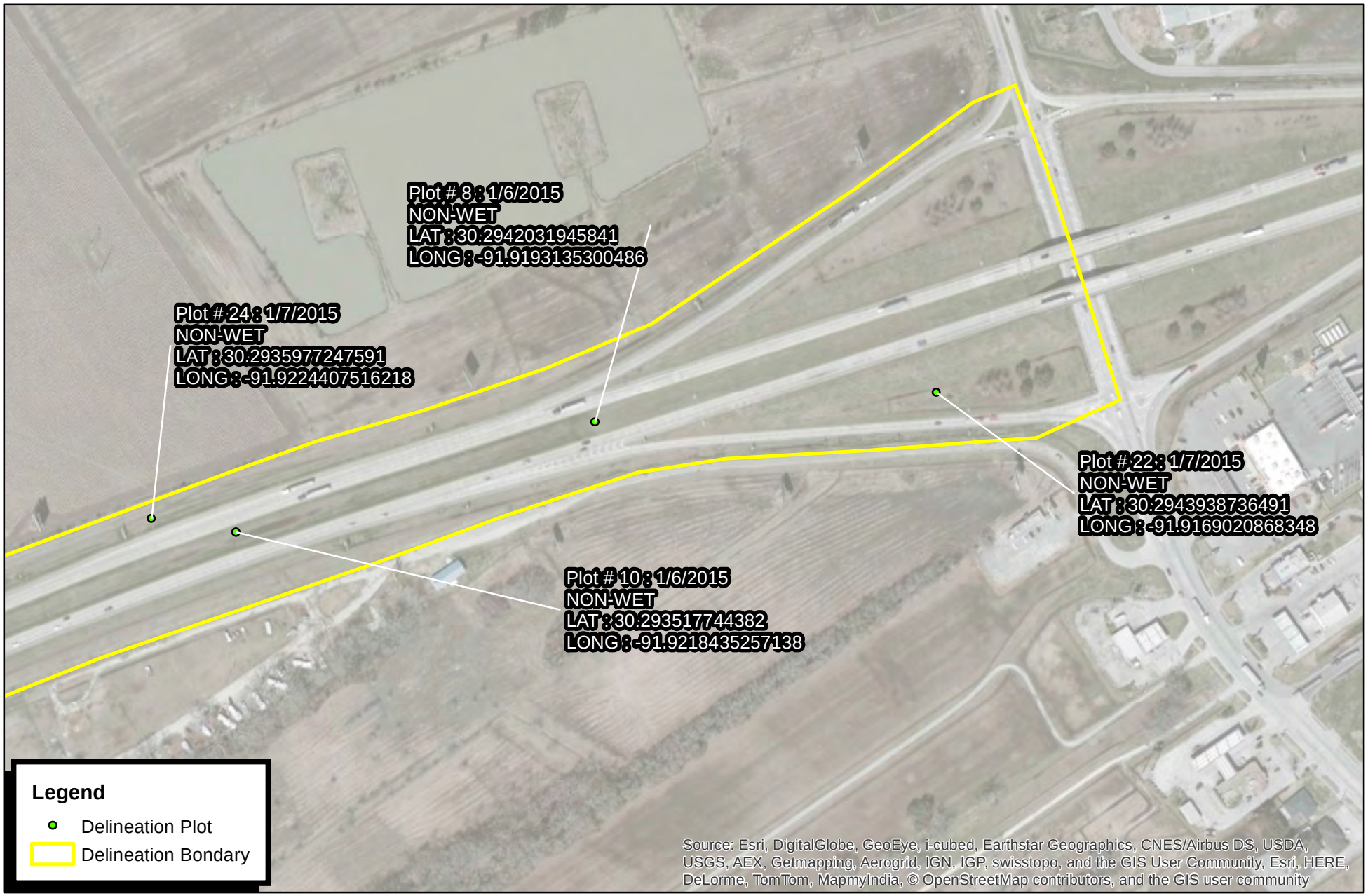

FENSTERMAKER

N W E S

0 200 400 800 Feet

FIGURE 4.9: Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
I-10: E. JCT I-49 to LA 328 (H.003003)
SEC: 38: T 09S - R 05E
St. Martin Parish, Louisiana
01/16/2015

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APPENDIX A: DATA FORMS & PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 1

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 64 T 09S R 05E

Landform (hillslope, terrace, etc.): Ridgetop **Local relief (concave, convex, none):** convex **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2903 **Long.:** -91.9292 **Datum:** WGS84

Soil Map Unit Name: Gp- Gallion-Perry complex, gently undulating **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	55	☑	44.0%	FACU
2. Medicago polymorpha	35	☑	28.0%	FACU
3. Rubus trivialis	15	☐	12.0%	FACU
4. Plantago major	10	☐	8.0%	FAC
5. Vicia ludoviciana	5	☐	4.0%	FACU
6. Geranium carolinianum	5	☐	4.0%	UPL
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 62.5	20% of Total Cover: 25	125	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	10	x 3 =	30	
FACU species	110	x 4 =	440	
UPL species	5	x 5 =	25	
Column Totals:	125	(A)	495	(B)

Prevalence Index = B/A = 3.960

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR	3/2	95	10YR	5/6	5	C	M	Clay Loam	
2-8	10YR	6/3	75	10YR	3/2	10	D	M	Clay Loam	
				7.5YR	5/4	10	C	M	Clay Loam	
				5Y	6/2	5	D	M	Clay Loam	
8-20	10YR	6/3	80	7.5YR	5/4	20	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 1: Plot #1, Soil Sample

Photo 2: Plot #1, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 3

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 140 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 4.0 % / 2.3 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2866 **Long.:** -91.9370 **Datum:** WGS84

Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0		0 = Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0		0 = Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0		0 = Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	55	☑	52.4%	FACU
2. Digitaria ciliaris	20	☐	19.0%	FACU
3. Vicia ludoviciana	15	☐	14.3%	FACU
4. Plantago major	15	☐	14.3%	FAC
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 52.5	20% of Total Cover: 21		105 = Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0		0 = Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	15	x 3 =	45	
FACU species	90	x 4 =	360	
UPL species	0	x 5 =	0	
Column Totals:	105	(A)	405	(B)

Prevalence Index = B/A = 3.857

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	3/2	95	10YR	6/3	5	C	M	Clay Loam	
5-15	10YR	6/4	80	10YR	3/2	15	D	M	Clay Loam	
				10YR	5/4	3	C	M	Clay Loam	
				10YR	6/2	2	D	M	Clay Loam	
15-20	10YR	6/6	50	10YR	3/2	40	D	M	Clay Loam	
				10YR	5/2	10	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 3: Plot #3, Soil Sample

Photo 4: Plot #3, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 4

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 140 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2837 **Long.:** -91.9429 **Datum:** WGS84

Soil Map Unit Name: Cu- Coteau silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	60	☑	60.0%	FACU
2. Plantago major	15	☐	15.0%	FAC
3. Nothoscordum bivalve	10	☐	10.0%	FACU
4. Geranium carolinianum	5	☐	5.0%	UPL
5. Vicia ludoviciana	5	☐	5.0%	FACU
6. Rumex crispus	5	☐	5.0%	FAC
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 50 20% of Total Cover: 20	100	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	75	x 4 =	300
UPL species	5	x 5 =	25
Column Totals:	100 (A)		385 (B)

Prevalence Index = B/A = 3.850

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR	2/2	100						Clay Loam	
4-20	10YR	4/3	30	10YR	2/2	20	D	M	Silt Loam	
				10YR	5/4	10	C	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 5: Plot #4, Soil Sample

Photo 6: Plot #4, Vegetation facing north

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 5

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 8 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** convex **Slope:** 4.0 % / 2.3 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2713 **Long.:** -91.9816 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	75	☑	75.0%	FACU
2. Paspalum dilatatum	15	☐	15.0%	FAC
3. Vicia ludoviciana	5	☐	5.0%	FACU
4. Geranium carolinianum	5	☐	5.0%	UPL
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 50	20% of Total Cover: 20	100	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	15	x 3 =	45	
FACU species	80	x 4 =	320	
UPL species	5	x 5 =	25	
Column Totals:	100	(A)	390	(B)

Prevalence Index = B/A = 3.900

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	2/2	100						Clay Loam	
5-8	10YR	6/4	80	10YR	4/1	15	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	
8-20	10YR	6/4	80	10YR	4/1	10	D	M	Clay Loam	
				10YR	5/8	10	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 7: Plot #5, Soil Sample

Photo 8: Plot #5, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 6

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2756 **Long.:** -91.9676 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 6

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	35	☑	33.3%	FACU
2. Cynodon dactylon	30	☑	28.6%	FACU
3. Artemisia vulgaris	15	☐	14.3%	UPL
4. Geranium carolinianum	10	☐	9.5%	UPL
5. Plantago major	5	☐	4.8%	FAC
6. Panicum virgatum	5	☐	4.8%	FAC
7. Vicia ludoviciana	5	☐	4.8%	FACU
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 52.5 20% of Total Cover: 21	105	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	10	x 3 =	30	
FACU species	70	x 4 =	280	
UPL species	25	x 5 =	125	
Column Totals:	105	(A)	435	(B)

Prevalence Index = B/A = 4.143

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR	2/1	100						Clay Loam	highly organic
1-6	10YR	3/6	95	10YR	2/1	5	D	M	Clay Loam	
6-11	10YR	5/6	80	10YR	2/2	10	D	M	Clay Loam	
				10YR	6/8	10	C	M	Clay Loam	
11-20	10YR	5/6	58	10YR	5/1	2	D	M	Clay Loam	
				10YR	3/6	40	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 9: Plot #6, Soil Sample

Photo 10: Plot #6, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 7

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2792 **Long.:** -91.9558 **Datum:** WGS84

Soil Map Unit Name: CoA- Coteau silt loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 7

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Plantago major	30	☑	31.6%	FAC
2. Panicum virgatum	20	☑	21.1%	FAC
3. Sporobolus domingensis	20	☑	21.1%	FACU
4. Paspalum dilatatum	15	☐	15.8%	FAC
5. Geranium carolinianum	5	☐	5.3%	UPL
6. Vicia ludoviciana	5	☐	5.3%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 47.5 20% of Total Cover: 19	95	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	65	x 3 =	195	
FACU species	25	x 4 =	100	
UPL species	5	x 5 =	25	
Column Totals:	95	(A)	320	(B)

Prevalence Index = B/A = 3.368

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR	2/1	100						Clay Loam	
4-7	10YR	6/4	60	10YR	3/1	20	D	M	Clay Loam	
				10YR	5/8	20	C	M	Clay Loam	
7-20	10YR	4/1	75	10YR	3/4	10	C	M	Clay Loam	
				10YR	5/8	10	C	M	Clay Loam	
				10YR	6/3	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 11: Plot #7, Soil Sample

Photo 12: Plot #7, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 8

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 38 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2942 **Long.:** -91.9193 **Datum:** WGS84

Soil Map Unit Name: Dd- Dundee silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 8

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	35	☑	33.3%	FACU
2. Paspalum dilatatum	20	☑	19.0%	FAC
3. Cynodon dactylon	15	☐	14.3%	FACU
4. Stenotaphrum secundatum	10	☐	9.5%	FAC
5. Plantago major	10	☐	9.5%	FAC
6. Vicia ludoviciana	5	☐	4.8%	FACU
7. Geranium carolinianum	5	☐	4.8%	UPL
8. Medicago polymorpha	5	☐	4.8%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 52.5	20% of Total Cover: 21	105	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	40	x 3 =	120	
FACU species	60	x 4 =	240	
UPL species	5	x 5 =	25	
Column Totals:	105	(A)	385	(B)

Prevalence Index = B/A = 3.667

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	5/3	95	10YR	4/8	5	C	M	Silt Loam	
5-20	10YR	5/2	95	10YR	4/8	5	C	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 13: Plot #8, Soil Sample

Photo 14: Plot #8, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 10

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 38 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2935 **Long.:** -91.9218 **Datum:** WGS84

Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 10

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	45	☑	51.7%	FACU
2. Paspalum dilatatum	30	☑	34.5%	FAC
3. Rubus trivialis	5	☐	5.7%	FACU
4. Cynodon dactylon	5	☐	5.7%	FACU
5. Vicia ludoviciana	1	☐	1.1%	FACU
6. Geranium carolinianum	1	☐	1.1%	UPL
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 43.5	20% of Total Cover: 17.4	87	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	30	x 3 =	90	
FACU species	56	x 4 =	224	
UPL species	1	x 5 =	5	
Column Totals:	87	(A)	319	(B)

Prevalence Index = B/A = 3.667

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR	2/1	100						Clay Loam	
1-12	10YR	4/3	90	10YR	4/1	10	D	M	Clay Loam	
12-20	10YR	4/3	75	10YR	4/1	20	D	M	Clay Loam	
				10YR	4/6	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 15: Plot #10, Soil Sample

Photo 16: Plot #10, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 11

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 57 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2638 **Long.:** -92.0052 **Datum:** WGS84

Soil Map Unit Name: MbC- Mephis silt loam, 1 to 5 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 11

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	40	☑	50.0%	FACU
2. Cynodon dactylon	25	☑	31.3%	FACU
3. Plantago major	5	☐	6.3%	FAC
4. Euphorbia hirta	5	☐	6.3%	UPL
5. Nothoscordum bivalve	2	☐	2.5%	FACU
6. Geranium carolinianum	2	☐	2.5%	UPL
7. Cirsium horridulum	1	☐	1.3%	FAC
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 40	20% of Total Cover: 16	80	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	6	x 3 =	18	
FACU species	67	x 4 =	268	
UPL species	7	x 5 =	35	
Column Totals:	80	(A)	321	(B)

Prevalence Index = B/A = 4.012

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100						Clay Loam	
3-12	10YR	5/4	92	10YR	6/1	5	D	M	Silt Loam	
				10YR	6/8	3	C	M	Silt Loam	
12-19	10YR	6/3	90	10YR	5/8	5	C	M	Silt Loam	
				10YR	6/1	5	D	M	Silt Loam	
19-20	10YR	6/2	85	10YR	5/8	15	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 17: Plot #11, Soil Sample

Photo 18: Plot #11, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 06-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 12

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 56 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2661 **Long.:** -91.9986 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 12

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Setaria viridis	15	☑	22.7%	UPL
2. Cynodon dactylon	15	☑	22.7%	FACU
3. Plantago major	10	☑	15.2%	FAC
4. Sporobolus domingensis	10	☑	15.2%	FACU
5. Euphorbia hirta	5	☐	7.6%	UPL
6. Medicago polymorpha	5	☐	7.6%	FACU
7. Vernonia gigantea	3	☐	4.5%	FAC
8. Lathyrus hirsutus	3	☐	4.5%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 33 20% of Total Cover: 13.2	66	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	25.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:		
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	16	x 3 =	48	
FACU species	30	x 4 =	120	
UPL species	20	x 5 =	100	
Column Totals:	66	(A)	268	(B)

Prevalence Index = B/A = 4.061

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR	2/2	100						Clay Loam	
1-5	10YR	4/2	88	10YR	3/2	5	D	c	Clay Loam	
				10YR	5/6	5	C	M	Clay Loam	
				10YR	6/1	2	D	M	Clay Loam	
5-9	10YR	4/1	75	10YR	8/1	15	D	M	Clay Loam	
				10YR	6/8	10	C	M	Clay Loam	
9-20	10YR	6/2	60	10YR	5/8	15	C	M	Clay	
				10YR	3/1	25	D	M	Clay	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 19: Plot #12, Soil Sample

Photo 20: Plot #12, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 13

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 5.0 % / 2.9 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2698 **Long.:** -91.9877 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** PEM1Ch

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 13

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Trifolium repens	40	☑	37.4%	FACU
2. Cynodon dactylon	20	☑	18.7%	FACU
3. Sporobolus domingensis	15	☐	14.0%	FACU
4. Setaria viridis	10	☐	9.3%	UPL
5. Vernonia gigantea	10	☐	9.3%	FAC
6. Plantago major	5	☐	4.7%	FAC
7. Lamium amplexicaule	3	☐	2.8%	UPL
8. Rubus trivialis	2	☐	1.9%	FACU
9. Vicia ludoviciana	2	☐	1.9%	FACU
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 53.5 20% of Total Cover: 21.4	107	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	15	x 3 =	45	
FACU species	79	x 4 =	316	
UPL species	13	x 5 =	65	
Column Totals:	107	(A)	426	(B)

Prevalence Index = B/A = 3.981

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	2/2	100						Clay Loam	
3-9	10YR	4/3	77	10YR	2/2	5	D	M	Clay Loam	
				10YR	5/8	15	C	M	Clay Loam	
				10YR	5/5	3	C	M	Clay Loam	
9-17	10YR	5/3	68	10YR	6/8	10	C	M	Clay Loam	
				10YR	2/2	2	D	M	Clay Loam	
				10YR	4/1	20	D	M	Clay Loam	
17-20	10YR	6/3	50	10YR	2/2	15	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

High amount of limestone in soil profile. 5Y8/1 15 D M Clay Loam/ 10YR6/6 20 C M Clay Loam

Photo 21: Plot #13, Soil Sample

Photo 22: Plot #13, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 14

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2692 **Long.:** -91.9883 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 14

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Cynodon dactylon	35	☑	34.3%	FACU
2. Sporobolus domingensis	20	☑	19.6%	FACU
3. Trifolium repens	15	☐	14.7%	FACU
4. Euphorbia hirta	15	☐	14.7%	UPL
5. Plantago major	5	☐	4.9%	FAC
6. Lolium perenne	5	☐	4.9%	FACU
7. Setaria viridis	5	☐	4.9%	UPL
8. Vernonia gigantea	2	☐	2.0%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 51	20% of Total Cover: 20.4	102	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	7	x 3 =	21	
FACU species	75	x 4 =	300	
UPL species	20	x 5 =	100	
Column Totals:	102	(A)	421	(B)

Prevalence Index = B/A = 4.127

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR	2/2	100						Clay Loam	
2-6	10YR	6/3	95	10YR	2/2	2	D	M	Clay Loam	
				10YR	5/8	3	C	M	Clay Loam	
6-16	10YR	5/3	73	10YR	5/1	15	D	M	Clay Loam	
				10YR	4/1	2	D	M	Clay Loam	
				10YR	7/8	10	C	M	Clay Loam	
16-20	10YR	5/3	70	10YR	5/1	20	D	M	Clay Loam	
				10YR	4/1	5	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

10YR7/8 5 C M Clay Loam

Photo 23: Plot #14, Soil Sample

Photo 24: Plot #14, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 15

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** none **Slope:** 1.0 % / 0.6 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2682 **Long.:** -91.9918 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 15

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Galium aparine	40	☑	43.0%	FACU
2. Euphorbia hirta	15	☑	16.1%	UPL
3. Carex blanda	10	☐	10.8%	FAC
4. Lathyrus hirsutus	5	☐	5.4%	FAC
5. Vicia ludoviciana	5	☐	5.4%	FACU
6. Medicago arabica	5	☐	5.4%	UPL
7. Plantago major	3	☐	3.2%	FAC
8. Lolium perenne	3	☐	3.2%	FACU
9. Geranium carolinianum	3	☐	3.2%	UPL
10. Ambrosia trifida	2	☐	2.2%	FAC
11. Setaria viridis	2	☐	2.2%	UPL
12.	0	☐	0.0%	
50% of Total Cover: 46.5	20% of Total Cover: 18.6	93	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	20	x 3 =	60	
FACU species	48	x 4 =	192	
UPL species	25	x 5 =	125	
Column Totals:	93	(A)	377	(B)

Prevalence Index = B/A = 4.054

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	5/3	83	10YR	2/1	5	D	M	Clay Loam	
				10YR	7/8	10	C	M	Clay Loam	
				5Y	6/1	2	D	M	Clay Loam	
3-13	10YR	5/4	80	10YR	5/1	15	D	M	Clay Loam	
				10YR	2/1	10	D	M	Clay Loam	
				10YR	6/8	5	C	M	Clay Loam	
13-20	10YR	5/4	55	10YR	5/8	15	C	M	Clay Loam	
				10YR	3/1	10	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

10YR5/1 20 D M Clay loam

Photo 25: Plot #15, Soil Sample

Photo 26: Plot #15, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 16

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2682 **Long.:** -91.9933 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉	No ○
Hydric Soil Present?	Yes ◉	No ○
Wetland Hydrology Present?	Yes ◉	No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ◉	No ○	Depth (inches): 2
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 16

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Eleocharis palustris	90	☑	93.8%	OBL
2. Digitaria ciliaris	3	☐	3.1%	FACU
3. Eleocharis parvula	3	☐	3.1%	OBL
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 48 20% of Total Cover: 19.2	96	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	93	x 1 =	93	
FACW species	0	x 2 =	0	
FAC species	0	x 3 =	0	
FACU species	3	x 4 =	12	
UPL species	0	x 5 =	0	
Column Totals:	96	(A)	105	(B)

Prevalence Index = B/A = 1.094

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	2/1	80	10YR	5/8	15	C	M	Clay	
				10YR	7/1	5	D	M	Clay	
5-14	10YR	2/1	97	10YR	6/1	3	D	M	Clay	
14-20	10YR	2/1	70	10YR	8/6	5	C	M	Clay	
				10YR	6/1	25	D	M	Clay	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 27: Plot #16, Soil Sample

Photo 28: Plot #16, Vegetation facing north

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 17

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2681 **Long.:** -91.9933 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 17

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Cynodon dactylon	80	☑	78.4%	FACU
2. Trifolium repens	10	☐	9.8%	FACU
3. Geranium carolinianum	5	☐	4.9%	UPL
4. Cirsium horridulum	3	☐	2.9%	FAC
5. Artemisia vulgaris	2	☐	2.0%	UPL
6. Nothoscordum bivalve	2	☐	2.0%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 51	20% of Total Cover: 20.4	102	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	3	x 3 =	9	
FACU species	92	x 4 =	368	
UPL species	7	x 5 =	35	
Column Totals:	102	(A)	412	(B)

Prevalence Index = B/A = 4.039

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR	3/2	85	10YR	6/4	10	C	M	Clay Loam	
				10YR	6/1	5	D	M	Clay Loam	
6-15	10YR	3/4	70	10YR	3/1	20	D	M	Clay Loam	
				10YR	5/1	5	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	
15-20	10YR	2/1	100						Clay	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 29: Plot #17, Soil Sample

Photo 30: Plot #17, Vegetation facing south

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 18

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 56 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 10.0 % / 5.7 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2669 **Long.:** -91.9981 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 18

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	75	☑	66.4%	FACU
2. Medicago arabica	15	☐	13.3%	UPL
3. Euphorbia hirta	5	☐	4.4%	UPL
4. Vicia ludoviciana	5	☐	4.4%	FACU
5. Geranium carolinianum	5	☐	4.4%	UPL
6. Trifolium repens	5	☐	4.4%	FACU
7. Lamium amplexicaule	3	☐	2.7%	UPL
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 56.5	20% of Total Cover: 22.6	113	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	0	x 3 =	0	
FACU species	85	x 4 =	340	
UPL species	28	x 5 =	140	
Column Totals:	113	(A)	480	(B)

Prevalence Index = B/A = 4.248

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR	4/2	70	10YR	2/1	15	D	M	Clay Loam	
				10YR	5/6	15	C	M	Clay Loam	
8-20	10YR	5/2	55	10YR	2/1	40	D	M	Clay Loam	
				10YR	5/6	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 31: Plot #18, Soil Sample

Photo 32: Plot #18, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 19

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 56 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 8.0 % / 4.6 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2661 **Long.:** -91.9972 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 19

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Stenotaphrum secundatum	45	☑	43.7%	FAC
2. Cynodon dactylon	35	☑	34.0%	FACU
3. Trifolium repens	15	☐	14.6%	FACU
4. Medicago polymorpha	5	☐	4.9%	FACU
5. Plantago major	3	☐	2.9%	FAC
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 51.5 20% of Total Cover: 20.6	103	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	48	x 3 =	144	
FACU species	55	x 4 =	220	
UPL species	0	x 5 =	0	
Column Totals:	103	(A)	364	(B)

Prevalence Index = B/A = 3.534

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR	3/2	88	10YR	7/8	5	C	M	Clay Loam	
				10YR	5/8	2	C	M	Clay Loam	
				10YR	6/1	5	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 33: Plot #19, Soil Sample

Photo 34: Plot #19, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 20

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 55 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 10.0 % / 5.7 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2694 **Long.:** -91.9867 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 20

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Stenotaphrum secundatum	45	☑	42.5%	FAC
2. Medicago arabica	20	☑	18.9%	UPL
3. Medicago polymorpha	15	☐	14.2%	FACU
4. Cirsium horridulum	10	☐	9.4%	FAC
5. Plantago major	5	☐	4.7%	FAC
6. Vicia ludoviciana	5	☐	4.7%	FACU
7. Nothoscordum bivalve	3	☐	2.8%	FACU
8. Rumex crispus	3	☐	2.8%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 53 20% of Total Cover: 21.2	106	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	63	x 3 =	189
FACU species	23	x 4 =	92
UPL species	20	x 5 =	100
Column Totals:	106	(A)	381 (B)

Prevalence Index = B/A = 3.594

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	55	10YR	6/8	5	C	M	Silt Loam	
				10YR	3/3	40	C	M	Silt Loam	
3-15	10YR	5/3	48	10YR	6/1	40	D	M	Silt Loam	
				10YR	5/8	10	C	M	Silt Loam	
				10YR	2/2	2	D	M	Silt Loam	
15-20	10YR	5/3	55	10YR	3/3	15	C	M	Sandy Loam	
				10YR	5/1	10	D	M	Sandy Loam	
				7.5YR	4/6	20	C	M	Sandy Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 35: Plot #20, Soil Sample

Photo 36: Plot #20, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 22

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 38 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2943 **Long.:** -91.9169 **Datum:** WGS84

Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 22

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Cynodon dactylon	55	☑	50.5%	FACU
2. Stenotaphrum secundatum	35	☑	32.1%	FAC
3. Trifolium repens	10	☐	9.2%	FACU
4. Geranium carolinianum	5	☐	4.6%	UPL
5. Lamium amplexicaule	2	☐	1.8%	UPL
6. Nothoscordum bivalve	1	☐	0.9%	FACU
7. Rumex crispus	1	☐	0.9%	FAC
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 54.5 20% of Total Cover: 21.8	109	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	36	x 3 =	108	
FACU species	66	x 4 =	264	
UPL species	7	x 5 =	35	
Column Totals:	109	(A)	407	(B)

Prevalence Index = B/A = 3.734

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR	3/1	95	10YR	6/4	5	C	M	Clay Loam	
8-15	10YR	3/1	90	10YR	5/8	10	C	M	Clay Loam	
15-18	10YR	3/1	65	10YR	5/4	25	C	M	Clay Loam	
				10YR	5/8	10	C	M	Clay Loam	
18-20	10YR	2/1	95	7.5YR	5/8	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 37: Plot #22, Soil Sample

Photo 38: Plot #22, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 23

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 38 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2915 **Long.:** -91.9261 **Datum:** WGS84

Soil Map Unit Name: Gp- Gallion-Perry complex, gently undulating **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 23

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	45	☑	46.4%	FACU
2. Stenotaphrum secundatum	30	☑	30.9%	FAC
3. Vicia ludoviciana	10	☐	10.3%	FACU
4. Galium aparine	5	☐	5.2%	FACU
5. Plantago major	5	☐	5.2%	FAC
6. Nothoscordum bivalve	2	☐	2.1%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 48.5 20% of Total Cover: 19.4	97	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	35	x 3 =	105	
FACU species	62	x 4 =	248	
UPL species	0	x 5 =	0	
Column Totals:	97	(A)	353	(B)

Prevalence Index = B/A = 3.639

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100						Silt Loam	
3-11	10YR	5/3	95	10YR	5/8	5	C	M	Silt Loam	
11-20	7.5YR	4/6	88	10YR	5/3	10	C	M	Clay Loam	
				10YR	2/1	2	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 39: Plot #23, Soil Sample

Photo 40: Plot #23, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 07-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 24

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 38 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 7.0 % / 4.0 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2935 **Long.:** -91.9224 **Datum:** WGS84

Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 24

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Stenotaphrum secundatum	60	☑	47.2%	FAC
2. Geranium carolinianum	25	☑	19.7%	UPL
3. Vicia ludoviciana	15	☐	11.8%	FACU
4. Sporobolus domingensis	10	☐	7.9%	FACU
5. Plantago major	5	☐	3.9%	FAC
6. Artemisia vulgaris	5	☐	3.9%	UPL
7. Galium aparine	5	☐	3.9%	FACU
8. Lamium amplexicaule	2	☐	1.6%	UPL
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 63.5	20% of Total Cover: 25.4	127	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	65	x 3 =	195	
FACU species	30	x 4 =	120	
UPL species	32	x 5 =	160	
Column Totals:	127	(A)	475	(B)

Prevalence Index = B/A = 3.740

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR	3/2	98	10YR	6/8	1	C	M	Clay Loam	
				10YR	5/1	1	D	M	Clay Loam	
9-13	10YR	5/1	95	10YR	6/6	5	C	M	Clay Loam	
13-20	10YR	5/1	60	10YR	6/8	35	C	M	Clay Loam	
				10YR	2/1	5	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 41: Plot #24, Soil Sample

Photo 42: Plot #24, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 25

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 64 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2897 **Long.:** -91.9310 **Datum:** WGS84

Soil Map Unit Name: Lo- Loreauville silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 25

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Stenotaphrum secundatum	65	☑	53.3%	FAC
2. Cynodon dactylon	30	☑	24.6%	FACU
3. Trifolium repens	15	☐	12.3%	FACU
4. Geranium carolinianum	5	☐	4.1%	UPL
5. Vicia ludoviciana	5	☐	4.1%	FACU
6. Nothoscordum bivalve	2	☐	1.6%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 61	20% of Total Cover: 24.4	122	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	65	x 3 =	195	
FACU species	52	x 4 =	208	
UPL species	5	x 5 =	25	
Column Totals:	122	(A)	428	(B)

Prevalence Index = B/A = 3.508

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	2/1	100						Clay Loam	
3-10	10YR	2/2	80	10YR	5/3	15	C	M	Clay Loam	
				10YR	2/1	5	D	M	Clay Loam	
10-20	10YR	5/3	65	10YR	4/3	10	C	M	Silt Loam	
				10YR	6/1	25	D	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☑ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 43: Plot #25, Soil Sample

Photo 44: Plot #25, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 26

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 08 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 12.0 % / 6.8 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2715 **Long.:** -91.9822 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 26

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Lolium perenne	40	☑	30.8%	FACU
2. Trifolium repens	30	☑	23.1%	FACU
3. Medicago arabica	25	☐	19.2%	UPL
4. Plantago major	15	☐	11.5%	FAC
5. Vicia ludoviciana	10	☐	7.7%	FACU
6. Geranium carolinianum	5	☐	3.8%	UPL
7. Galium aparine	3	☐	2.3%	FACU
8. Cirsium horridulum	2	☐	1.5%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 65 20% of Total Cover: 26	130	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	17	x 3 =	51	
FACU species	83	x 4 =	332	
UPL species	30	x 5 =	150	
Column Totals:	130	(A)	533	(B)

Prevalence Index = B/A = 4.100

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR	3/1	95	10YR	6/4	5	C	M	Clay Loam	
2-7	10YR	4/1	60	10YR	5/3	35	C	M	Clay Loam	
				10YR	6/8	5	C	M	Clay Loam	
7-10	10YR	3/1	95	10YR	7/8	5	C	M	Clay Loam	
10-19	10YR	4/4	80	10YR	6/8	10	C	M	Silt Loam	
				10YR	6/1	10	D	M	Silt Loam	
19-20	10YR	5/3	55	10YR	3/1	20	D	M	Silt Loam	
				10YR	5/8	10	C	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

10YR 6/6 15 C M Silt Loam

Photo 45: Plot #26, Soil Sample

Photo 46: Plot #26, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 27

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 4.0 % / 2.3 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2754 **Long.:** -91.9691 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 27

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Lolium perenne	45	☑	30.6%	FACU
2. Sporobolus domingensis	35	☑	23.8%	FACU
3. Geranium carolinianum	20	☐	13.6%	UPL
4. Plantago major	15	☐	10.2%	FAC
5. Lathyrus hirsutus	15	☐	10.2%	FAC
6. Vicia ludoviciana	10	☐	6.8%	FACU
7. Artemisia vulgaris	5	☐	3.4%	UPL
8. Rumex crispus	2	☐	1.4%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 73.5 20% of Total Cover: 29.4	147	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	32	x 3 =	96	
FACU species	90	x 4 =	360	
UPL species	25	x 5 =	125	
Column Totals:	147	(A)	581	(B)

Prevalence Index = B/A = 3.952

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	2/2	100						Clay	
3-20	10YR	5/4	60	10YR	3/1	5	D	M	Silt Loam	
				10YR	5/8	10	C	M	Silt Loam	
				10YR	5/1	20	D	M	Silt Loam	
				10YR	2/1	5	D	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 47: Plot #27, Soil Sample

Photo 48: Plot #27, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 28

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 140 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2817 **Long.:** -91.9488 **Datum:** WGS84

Soil Map Unit Name: Ca- Calhoun silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 28

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	65	☑	44.8%	FACU
2. Stenotaphrum secundatum	35	☑	24.1%	FAC
3. Cynodon dactylon	20	☐	13.8%	FACU
4. Vicia ludoviciana	10	☐	6.9%	FACU
5. Artemisia vulgaris	5	☐	3.4%	UPL
6. Geranium carolinianum	5	☐	3.4%	UPL
7. Nothoscordum bivalve	3	☐	2.1%	FACU
8. Plantago major	2	☐	1.4%	FAC
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 72.5	20% of Total Cover: 29	145	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	37	x 3 =	111	
FACU species	98	x 4 =	392	
UPL species	10	x 5 =	50	
Column Totals:	145	(A)	553	(B)

Prevalence Index = B/A = 3.814

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR	3/2	100						Silt Loam	
4-8	10YR	5/3	96	10YR	5/8	1	C	M	Silt Loam	
				10YR	3/1	3	D	M	Silt Loam	
8-17	10YR	4/3	70	10YR	5/8	20	C	PL	Silt Loam	
				10YR	2/2	5	D	M	Silt Loam	
				10YR	5/1	5	D	M	Silt Loam	
17-20	10YR	4/3	49	10YR	5/8	25	C	PL	Silt Loam	
				10YR	2/2	1	D	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

10YR 5/1 25 D M Silt Loam

Photo 49: Plot #28, Soil Sample

Photo 50: Plot #28, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 29

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 56 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2652 **Long.:** -92.0024 **Datum:** WGS84

Soil Map Unit Name: IbA- Iberia silty clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 29

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Trifolium repens	50	☑	37.0%	FACU
2. Sporobolus domingensis	35	☑	25.9%	FACU
3. Stenotaphrum secundatum	20	☐	14.8%	FAC
4. Taraxacum officinale	10	☐	7.4%	FACU
5. Plantago major	5	☐	3.7%	FAC
6. Artemisia vulgaris	5	☐	3.7%	UPL
7. Rumex crispus	5	☐	3.7%	FAC
8. Galium aparine	5	☐	3.7%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 67.5 20% of Total Cover: 27	135	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	30	x 3 =	90	
FACU species	100	x 4 =	400	
UPL species	5	x 5 =	25	
Column Totals:	135	(A)	515	(B)

Prevalence Index = B/A = 3.815

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	4/1	100						Clay Loam	
3-9	10YR	3/1	70	10YR	5/8	10	C	M	Clay Loam	
				10YR	6/1	20	D	M	Clay Loam	
9-20	10YR	3/1	50	10YR	5/8	5	C	M	Clay Loam	
				10YR	6/1	40	D	M	Clay Loam	
				10YR	2/1	5	D	M	Clay Loam	concretion

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photo 51: Plot #29, Soil Sample

Photo 52: Plot #29, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 30

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 51 T 09S R 04E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2609 **Long.:** -92.0134 **Datum:** WGS84

Soil Map Unit Name: MbC- Mephis silt loam, 1 to 5 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 30

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Paspalum notatum	75	☑	58.6%	FACU
2. Stenotaphrum secundatum	35	☑	27.3%	FAC
3. Vicia ludoviciana	10	☐	7.8%	FACU
4. Geranium carolinianum	5	☐	3.9%	UPL
5. Artemisia vulgaris	3	☐	2.3%	UPL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 64	20% of Total Cover: 25.6	128	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	35	x 3 =	105	
FACU species	85	x 4 =	340	
UPL species	8	x 5 =	40	
Column Totals:	128	(A)	485	(B)

Prevalence Index = B/A = 3.789

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR	3/3	58	10YR	3/4	40	C	M	Silt Loam	
				10YR	3/2	2	D	M	Silt Loam	
5-16	10YR	3/6	95	10YR	2/1	5	D	M	Silt Loam	
16-20	10YR	4/6	90	10YR	8/1	10	D	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 53: Plot #30, Soil Sample

Photo 54: Plot #30, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 31

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 51 T 09S R 04E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2614 **Long.:** -92.0101 **Datum:** WGS84

Soil Map Unit Name: MbC- Mephis silt loam, 1 to 5 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 31

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Stenotaphrum secundatum	60	☑	44.1%	FAC
2. Paspalum notatum	20	☑	14.7%	FACU
3. Geranium carolinianum	15	☐	11.0%	UPL
4. Artemisia vulgaris	10	☐	7.4%	UPL
5. Medicago arabica	10	☐	7.4%	UPL
6. Galium aparine	10	☐	7.4%	FACU
7. Cirsium horridulum	5	☐	3.7%	FAC
8. Vicia ludoviciana	3	☐	2.2%	FACU
9. Trifolium repens	3	☐	2.2%	FACU
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 68 20% of Total Cover: 27.2	136	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	65	x 3 =	195
FACU species	36	x 4 =	144
UPL species	35	x 5 =	175
Column Totals:	136	(A)	514 (B)

Prevalence Index = B/A = 3.779

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR	3/2	100						Clay Loam	
4-14	10YR	3/4	95	10YR	4/6	5	C	M	Clay Loam	
14-20	10YR	3/4	60	10YR	3/3	40	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 55: Plot #31, Soil Sample

Photo 56: Plot #31, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 12-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 32

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 51 T 09S R 04E

Landform (hillslope, terrace, etc.): Toeslope **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2612 **Long.:** -92.0115 **Datum:** WGS84

Soil Map Unit Name: MbC- Mephis silt loam, 1 to 5 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 32

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Paspalum notatum	55	☑	52.4%	FACU
2. Plantago major	20	☐	19.0%	FAC
3. Digitaria ciliaris	10	☐	9.5%	FACU
4. Vicia ludoviciana	10	☐	9.5%	FACU
5. Medicago arabica	10	☐	9.5%	UPL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 52.5	20% of Total Cover: 21	105	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	20	x 3 =	60	
FACU species	75	x 4 =	300	
UPL species	10	x 5 =	50	
Column Totals:	105	(A)	410	(B)

Prevalence Index = B/A = 3.905

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR	4/4	100						Clay Loam	
2-3	10YR	2/1	100						Clay Loam	
3-17	10YR	3/3	90	10YR	5/8	5	C	M	Clay Loam	
				10YR	2/1	3	D	M	Clay Loam	
				10YR	6/1	2	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Only 17" profile could be taken due to cement obstruction.

Photo 57: Plot #32, Soil Sample

Photo 58: Plot #32, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 14-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 33

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 08 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 12.0 % / 6.8 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2708 **Long.:** -91.9822 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 33

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Geranium carolinianum	55	☑	32.4%	UPL
2. Artemisia vulgaris	35	☑	20.6%	UPL
3. Stenotaphrum secundatum	25	☐	14.7%	FAC
4. Cirsium horridulum	15	☐	8.8%	FAC
5. Lathyrus hirsutus	10	☐	5.9%	FAC
6. Plantago major	5	☐	2.9%	FAC
7. Rumex crispus	5	☐	2.9%	FAC
8. Nothoscordum bivalve	5	☐	2.9%	FACU
9. Medicago arabica	5	☐	2.9%	UPL
10. Taraxacum officinale	5	☐	2.9%	FACU
11. Vicia ludoviciana	3	☐	1.8%	FACU
12. Lamium amplexicaule	2	☐	0.0%	UPL
50% of Total Cover: 85	20% of Total Cover: 34	170	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	60	x 3 =	180	
FACU species	13	x 4 =	52	
UPL species	97	x 5 =	485	
Column Totals:	170	(A)	717	(B)

Prevalence Index = B/A = 4.218

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		Matrix %	Redox Features Color (moist)		Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100						Clay Loam	
3-11	10YR	2/2	70	10YR	5/4	30	C	M	Clay Loam	
11-20	10YR	6/4	60	10YR	3/1	40	D	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 59: Plot #33, Soil Sample

Photo 60: Plot #33, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 14-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 34

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 64 T 09S R 05E

Landform (hillslope, terrace, etc.): Toeslope **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2899 **Long.:** -91.9293 **Datum:** WGS84

Soil Map Unit Name: Gp- Gallion-Perry complex, gently undulating **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 34

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	65	☑	56.5%	FACU
2. Stenotaphrum secundatum	35	☑	30.4%	FAC
3. Vicia ludoviciana	15	☐	13.0%	FACU
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 57.5	20% of Total Cover: 23	115	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	35	x 3 =	105	
FACU species	80	x 4 =	320	
UPL species	0	x 5 =	0	
Column Totals:	115	(A)	425	(B)

Prevalence Index = B/A = 3.696

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR	3/2	100						Clay Loam	
2-6	10YR	5/3	70	10YR	3/1	30	D	M	Clay Loam	
6-11	10YR	5/3	95	10YR	3/2	5	D	M	Clay Loam	
11-18	10YR	5/4	75	10YR	2/1	25	D	M	Clay Loam	
18-20	10YR	2/1	93	2.5YR	5/8	2	C	M	Clay Loam	
				10YR	5/6	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 61: Plot #34, Soil Sample

Photo 62: Plot #34, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** St. Martin Parish **Sampling Date:** 14-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 35

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 140 T 09S R 05E

Landform (hillslope, terrace, etc.): Toeslope **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR O **Lat.:** 30.2838 **Long.:** -91.9418 **Datum:** WGS84

Soil Map Unit Name: Cu- Coteau silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 35

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	45	☑	40.2%	FACU
2. Stenotaphrum secundatum	35	☑	31.3%	FAC
3. Vicia ludoviciana	15	☐	13.4%	FACU
4. Nothoscordum bivalve	10	☐	8.9%	FACU
5. Geranium carolinianum	5	☐	4.5%	UPL
6. Plantago major	2	☐	1.8%	FAC
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 56 20% of Total Cover: 22.4	112	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	37	x 3 =	111
FACU species	70	x 4 =	280
UPL species	5	x 5 =	25
Column Totals:	112	(A)	416 (B)

Prevalence Index = B/A = 3.714

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	2/2	100						Silt Loam	
3-8	10YR	4/3	65	10YR	3/3	25	C	M	Silt Loam	
				10YR	4/6	10	C	M	Silt Loam	
8-16	10YR	3/2	80	10YR	5/4	15	C	M	Silt Loam	
				10YR	2/2	5	D	M	Silt Loam	concretion
16-20	10YR	4/2	95	10YR	2/2	5	D	M	Silt Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 63: Plot #35, Soil Sample

Photo 64: Plot #35, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 14-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 36

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 09S R 05E

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 4.0 % / 2.3 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2781 **Long.:** -91.9585 **Datum:** WGS84

Soil Map Unit Name: BaA- Baldwin silty clay loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 36

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	35	☑	34.0%	FACU
2. Artemisia vulgaris	25	☑	24.3%	UPL
3. Stenotaphrum secundatum	20	☐	19.4%	FAC
4. Taraxacum officinale	15	☐	14.6%	FACU
5. Vicia ludoviciana	5	☐	4.9%	FACU
6. Cirsium horridulum	3	☐	2.9%	FAC
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 51.5	20% of Total Cover: 20.6	103	= Total Cover	

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	23	x 3 =	69	
FACU species	55	x 4 =	220	
UPL species	25	x 5 =	125	
Column Totals:	103	(A)	414	(B)

Prevalence Index = B/A = 4.019

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100						Clay Loam	
3-7	10YR	5/4	65	10YR	5/8	25	C	M	Clay Loam	
				10YR	4/1	10	D	M	Clay Loam	
7-12	10YR	2/1	95	10YR	5/4	5	C	M	Clay	
12-20	10YR	2/1	90	10YR	6/6	10	C	M	Clay	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 65: Plot #36, Soil Sample

Photo 66: Plot #36, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H. 003003: I-10 E. JCT I-49 to LA 328 **City/County:** Lafayette Parish **Sampling Date:** 14-Jan-15

Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 37

Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 57 T 09S R 05E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

Subregion (LRR or MLRA): LRR P **Lat.:** 30.2637 **Long.:** -92.0045 **Datum:** WGS84

Soil Map Unit Name: MbC- Mephis silt loam, 1 to 5 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: 37

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Sapling or Sapling/Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Shrub Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Herb Stratum (Plot size: 30')				
1. Sporobolus domingensis	40	☑	57.1%	FACU
2. Medicago arabica	15	☑	21.4%	UPL
3. Taraxacum officinale	5	☐	7.1%	FACU
4. Plantago major	5	☐	7.1%	FAC
5. Nothoscordum bivalve	3	☐	4.3%	FACU
6. Lamium amplexicaule	2	☐	2.9%	UPL
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
50% of Total Cover: 35 20% of Total Cover: 14	70	= Total Cover		

Woody Vine Stratum (Plot size: 30')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	5	x 3 =	15	
FACU species	48	x 4 =	192	
UPL species	17	x 5 =	85	
Column Totals:	70	(A)	292	(B)

Prevalence Index = B/A = 4.171

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR	3/2	100						Clay Loam	
4-10	10YR	3/2	65	10YR	5/4	30	C	M	Clay Loam	
				10YR	4/1	5	D	M	Clay Loam	
10-20	10YR	5/4	50	10YR	3/2	30	D	M	Clay Loam	
				10YR	4/4	15	C	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Photo 67: Plot #37, Soil Sample

Photo 68: Plot #37, Vegetation facing west

Photo 69: Other Waters #1; (Francois Coulee) facing north

Photo 70: Other Waters #1; (Francois Coulee) facing south

Photo 71: Other Waters #2; facing north

Photo 72: Other Waters #3 (Vermillion River); facing north

Photo 73: Other Waters #4; facing east

Photo 74: Other Waters #5 (Bayou Teche); facing south

Appendix E

Noise Analysis Report

Louisiana Department of Transportation and Development

Traffic Noise Impact and Abatement Study

I-10 Widening: I-49 – LA 328
SP# H.003003.2
Route: I-10
Lafayette and St. Martin Parishes

April 2015

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Appendix C-8: Feasibility and Reasonableness Worksheets

TRAFFIC NOISE ANALYSIS
STATE PROJECT NO.: H.003003.2
I-10 Widening: I-49 – LA 328
ROUTE: I-10
PARISH: Lafayette and St. Martin

INTRODUCTION

The planned improvements to both directions of I-10 from its junction with I-49 to LA 328 includes the addition of one lane and new shoulder to be added within existing right of way, within the median.

The proposed project is classified as a Type I Project since additional capacity will be added. Since it is anticipated that federal funding will be used for construction of this project, a traffic noise analysis is mandated by the regulations in the Federal Register under 23 CFR 772. This analysis will be provided to the Federal Highway Administration (FHWA) for approval prior to receiving funding.

This report analyzes noise impacts due to the implementation of the captioned project as well as the projected normal traffic growth. Topics discussed include field measurement, computer modeling and methodology, noise impacts, and abatement methods. Projected noise impacts, based on the data for the existing and proposed conditions, will be discussed. Noise abatement measures are evaluated for areas where impacts are anticipated. Traffic noise impacts are defined by Louisiana Department of Transportation and Development (LADOTD) as noise impacts which occur when the predicted traffic noise levels equal or exceed the LADOTD Noise Abatement Criteria (NAC), or when the predicted traffic noise levels exceed the existing noise levels by 10 dBA. The NAC are presented below in Table 1. If it is determined that there are noise impacts in the project area, then noise abatement methods will be analyzed for reasonability and feasibility. The LADOTD noise abatement policy is provided in Appendix C-1.

Figure 1: Overhead aerial of project area with labeled roadways.

PURPOSE & SCOPE

The purpose of the project is to improve traffic flow on I-10 within the project area. Work spans from I-49 to LA 328. This is to be completed by widening I-10 from 4 to 6 lanes, expanded inward in the median, and constructing a concrete median barrier.

The purpose of this noise analysis is to examine the noise impacts associated with the addition of a lane to each direction of I-10 and to examine the reasonability and feasibility of noise abatement methods.

DESCRIPTION OF LAND USAGE

Current Use

Land usage along the project area consists of a mix of commercial, residential, and unused properties. There are housing communities on either side of the interstate in addition to stand alone dwellings, a variety of businesses, and unused plots. All units were included in the study. Activity categories for this project are B, C, and E.

Future Use

Future use of the surrounding area will continue to be mixed commercial and residential establishments. All activity categories are expected to remain the same; B, C, and E.

Figure 2: Receiver locations

= Receiver locations

Table 1: FHWA's Noise Abatement Criteria

Activity Category	Activity Leq(H)	Evaluation Location	Activity Description	In LA, impact occurs when noise level is equal to or greater than the values below
A	57	Exterior	Lands where serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose	56
B	67	Exterior	Residential (includes undeveloped lands permitted for residential)	66
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings. (includes undeveloped lands permitted for these activities)	66
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	51
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (includes undeveloped lands permitted for these activities).	71
F	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	N/A
G	--	--	Undeveloped lands that are not permitted	N/A

The units for the noise levels are hourly A-weighted sound levels (dBA)

TRAFFIC NOISE MODEL

Modeling Procedures

FHWA Traffic Noise Model 2.5 (TNM) was used to analyze the noise impacts following the *FHWA Highway Traffic Noise: Analysis and Abatement Guide* (FHWA 2011) and the *FHWA Traffic Noise Model User's Guide (Version 2.5 Addendum)* (FHWA 2004). Traffic volume and axle distribution were obtained from the Traffic and Planning Section of LADOTD. Traffic was assumed to increase 3% annually. Traffic speed was modeled at 70 mph for automobiles, trucks, motorcycles, and buses along I-10 in both directions.

The TNM model combines traffic flow data with a digital representation of the project corridor to predict noise levels. The Average Daily Traffic counts were provided by the LADOTD's Planning and Programming Section. The data included a vehicle classification breakdown for 2015, and for the future year 2035. Peak traffic was predicted to be ten percent of the Average Daily Traffic. I-10 was modeled as four 12' roadways for the existing condition, and six 12' roadways for the build condition.

There are multiple developments along the length of the project where the increased capacity may present a concern. Multiple barrier analyses were run to determine reasonability and feasibility.

For the TNM model to predict impacts at a certain location there must be a receiver in the area that is exposed to the noise. 111 receivers were modeled adjacent to the project area. A list of receivers, current noise levels, levels predicted by TNM, and a map of the receiver sites are provided in Appendix C-2

Model Validation

The existing noise levels were measured using an Integrating Sound Level Meter (Model 820, by Larson*Davis). This is a Type I sound level meter. The sound level meter was calibrated at the beginning of the trip and rechecked before each measurement. Measurements were taken in fifteen minute intervals and the traffic was manually counted by LADOTD personnel during each interval. The noise measurements were used to represent the hourly Leq and the traffic that was counted during the fifteen minute interval was multiplied by a factor of four to represent hourly traffic volume.

The model was validated by measuring the noise at two locations along the project corridor and comparing the actual measured noise levels to the noise levels predicted by the TNM model. If the measured noise level was within three decibels of the predicted noise level, then the model results will be considered valid. Two measurement locations were used for validating the TNM model. The first being located near Moss St, south of I-10, 20ft from the roadway. The second location was taken near the fence on the right of way line on I-10 near the truck weighing station, 20 ft from the roadway.

These locations are shown in Figure 1 within Appendix C-3. Table 2 shows a summary of the validation results and the details of the model validation can be found in Appendix C-3

Table 2: TNM Validation Results.

Site	Time	Measured Leq (dBA)	Predicted Leq (dBA)	Difference (dBA)
Moss St	10:30 am	79	81	2
North of I 10	1:00 pm	74	76	2

Existing Noise Levels

This simulation predicts which receivers are currently impacted based on the NAC. For a receiver to be impacted it must meet or exceed the NAC criteria. The TNM Model predicted that currently 29 out of 50 possible receptors are impacted. The noise levels range from 66 dBA to 74 dBA. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. Appendix C-4 contains the simulation results for the existing noise levels.

Future No-Build Noise Level

This simulation predicts which receivers will be impacted if the future predicted traffic is forced to travel on the existing road with no improvements. For this simulation, 34 of the 50 dwelling units are impacted for the no-build scenario. These noise levels range from 66 dBA to 75 dBA. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. The results of the future no-build simulation can be found in Appendix C-5.

Future Build Noise Level

This simulation predicts which receivers will be impacted if the future traffic is allowed to travel using the proposed improvements. Multiple barrier simulations were modeled in an effort to gage feasibility and reasonability in construction and abatement. The barrier south of I-10 near Moss St is predicted to be both feasible and reasonable for construction during this project. All other barrier locations are neither feasible nor reasonable. 80 of the 111 of the receivers are impacted, with noise levels ranging from 66 dBA to 77 dBA. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. The results of the future build simulation can be found in Appendix C-6.

Table 3: Impacted Receptors.

Design Scenario	# of Receivers	Receivers impacted	66 dB Contour from center of roadway	71 dB Contour from center of roadway
Existing Condition	50	29	415 ‘	220 ‘
Future No Build	50	34	415 ‘	220 ‘
Future Build	111	80	545 ‘	310 ‘

ANALYSIS OF THE NOISE ABATEMENT

METHODS Traffic Management Measures

Traffic management measures include using traffic control devices, reducing speed limit, restricting vehicle type or time, and assigning a lane for trucks. For a high-speed interstate environment, these measures are inappropriate for consideration.

Alteration of Horizontal and Vertical Alignments

The scope of the project is to widen the existing roadway. Altering the current alignments would most likely result in additional impacts to the surrounding properties. This measure is not considered to be feasible or reasonable.

Construction of Noise Barriers

According to the noise abatement criteria set in the LADOTD Highway Traffic Noise Policy, a noise barrier must be both feasible and reasonable before it can be proposed. The criteria for meeting each requirement is below:

Feasibility includes concerns such as engineering, maintenance, safety, drainage issues and 75% of the first row of receptors achieving at least a 5 dBA reduction in highway traffic noise.

Reasonableness includes achieving the noise reduction design goal, cost effectiveness, and concurrence of benefited receptors. In order to meet the noise reduction goal, at least one receptor must receive an 8 dBA reduction.

Multiple barrier simulations were modeled in order to determine effectiveness of installing a noise wall. Costs were generated using DOTD noise barrier cost estimates, located in Appendix C-2. The Moss Street South met criteria for both feasibility and reasonableness but no other barriers did, therefore The Moss Street South Barrier should be built for this project.

Table 4: Barrier Cost.

Barrier	Barrier Length (FT)	Barrier Height (FT)	Total Area	# of Benefitted Receptors (≥ 5 dBA)	# of Benefitted Receptors (≥ 8 dBA)	Cost/Square foot($) (2011 Noise guide)	Total Estimated Cost ($)	Cost Per Benefitted Receiver ($)
Moss St South	2261	12	27132	31	14	39	1,058,148	34,134
Moss St North	2275	12	27300	12	1	39	1,064,700	88,725
Woodduck Dr	1558	12	18696	1	0	44	822,624	822,624
LA 31 South	620	12	7440	2	1	53	394,320	197,160
LA 31 North	2598	12	31176	5	1	39	1,215,864	243,173
Deygeter St	1481	12	17772	7	0	79	1,403,988	200,570

Barrier	Barrier Length (FT)	Barrier Height (FT)	Total Area	# of Benefitted Receptors (≥ 5 dBA)	# of Benefitted Receptors (≥ 8 dBA)	Cost/Square foot($) (2011 Noise guide)	Total Estimated Cost ($)	Cost Per Benefitted Receiver ($)
Moss St South	2261	20	45220	40	26	72	3,255,840	81,396
Moss St North	2472	20	49440	26	11	72	3,559,680	136,911
Woodduck Dr	1558	20	31160	4	1	79	2,461,640	615,410
LA 31 South	620	20	12400	2	1	94	1,165,600	582,800
LA 31 North	2598	20	51960	5	5	68	3,533,280	706,656
Deygeter St	1481	20	29620	10	6	83	2,458,460	245,846

Noise Insulation of Public Use or Nonprofit Institutional Structures

No public use or nonprofit institutional structures are located adjacent to the project area; therefore, none were modeled in this analysis.

ANALYSIS OF CONSTRUCTION NOISE

Construction noise is expected to have temporary impacts upon all of the receptors in the area. The particular receivers of concern are the ones located within 500' of the project centerline. It is recommended that all construction operations be restricted to working hours whenever possible.

Abatement measures should be employed whenever possible. All construction equipment such as pumps, compressors, generators, bulldozers, cranes, trucks, etc., should be properly muffled and all motor panels should be closed to reduce the noise impacts. Section 107.14 of the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, and the FHWA Highway Construction Noise Handbook (FHWA-HEP-06-015, August 2006) can be referenced for further details on the sources and abatement of construction noise.

CONCLUSIONS AND RECOMMENDATIONS

There are commercial and residential receivers located adjacent to the project area that will be impacted by noise due to this project. Barrier analysis were performed as part of this noise study, and the Moss Street South Barrier qualified for a noise reduction. Therefore, a noise wall is recommended to be built at this location.

Construction noise generated as a result of the proposed project will cause temporary impacts to the sensitive receivers. The construction contractor will minimize noise impacts by adhering to the abatement measures stated in Section 107.14 (Environmental Protection) of the Louisiana Standard Specification for Roads and Bridges, 2006 edition.

Appendix C-1

LADOTD Noise Abatement Policy

STATE OF LOUISIANA

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

HIGHWAY TRAFFIC NOISE POLICY

July 2011

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INTRODUCTI
ON

This document contains the Louisiana Department of Transportation and Development's (DOTD) policy on highway traffic noise. This policy describes the implementation of the requirements of the Federal Highway Administration (FHWA) noise regulations for Federal-aid projects found in 23 Code of Federal Regulations Part 772 (23 CFR Part 772).[1] DOTD developed this policy in accordance with FHWA regulations and guidance, and FHWA reviewed and approved this policy for implementation.

In the 1972 Federal-aid Highway Act, Congress required FHWA to develop a noise standard for new Federal-aid highway projects. In accordance with 23 United States Code section 109(i) (23 USC 109(i)), FHWA promulgated noise regulations which applied to Federal-aid projects. In June 1995, FHWA mandated that state transportation agencies adopt a written Highway Traffic Noise Policy consistent with the regulations and their June 1995 guidance. DOTD complied, with its first written policy approved by FHWA in August 1996. Since its initial approval, the DOTD highway traffic noise policy has been revised three times, in 1997, 2004 and 2009. Each revision required FHWA review and approval prior to implementation. On July 13, 2010, FHWA published their new noise regulations in the Federal Register[2] and mandated that state transportation agencies rewrite their noise policies to be consistent with the new regulations. The states were given until January 2011 to submit proposed policies for FHWA review. To assist states in rewriting their policies, FHWA published guidance dated June 2010 and revised January 2011 which can be found on FHWA's web site.[3] The effective date of the new regulations is July
13,
2011.

The policy herein contains information on how highway traffic noise impacts are defined, how noise abatement is evaluated, and how noise abatement decisions are made in Louisiana. **This policy as written assumes that the noise analyst is familiar with the provisions of the Federal regulation on which this policy is based.** If you need further information regarding the policy, contact the DOTD Environmental Section at (225) 242-4502.

PURPO
SE

The purpose of this written policy is to outline DOTD's policy and procedures for compliance with the FHWA Noise regulations found at 23 CFR
772.

[1] Access CFR regulations from http://www.gpoaccess.gov/cfr/retrieve.html
[2] Access Federal Register, Vol. 75, page 39820 from FR Main page at http://www.gpoaccess.gov/fr/index.html
[3] Access FHWA noise guidance, regulations, and related material from http://www.fhwa.dot.gov/environment/noise/

DEFINITIO
NS

Reference is made to the definitions contained in the regulations (23 CFR 772.5). Defined below are some of the terms specifically referenced in the policy or which require additional refinement.

Benefited Receptor - a recipient of an abatement measure, whether impacted or not, receiving 5 dBA or more reduction in the noise level as a result of the proposed abatement.

Common Noise Environment – a group of receptors within the same Activity Category in Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features.

Date of Public Knowledge - the date of approval of the Record of Decision, Finding of No Significant Impact, or Categorical Exclusion. The date of public knowledge is the date at which the DOTD will no longer be responsible for providing noise abatement for new development which occurs adjacent to the proposed project. Provision of such abatement measures becomes the responsibility of the local communities or private developers.

Design Year – the future year used to estimate the probable traffic volume for which a highway is designed. The design year will normally be 20 years from the projected start of project construction.

Existing Noise Levels – the worst noise hour, resulting from the natural and mechanical sources and human activity, usually present in a particular area.

Leq – the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period.

Leq(h) – the hourly value of
Leq.

Multifamily Dwelling – A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted and benefited receptors.

Noise Reduction Design Goal – the optimum desired noise reduction determined from calculating the difference between future build noise levels with abatement to future build noise levels without abatement. The noise reduction design goal in Louisiana is 8 dBA.

Permitted – A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property Owner – an individual or group of individuals that hold a title, deed, or other legal documentation of ownership of a property or a residence.

Receptor – A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 1.

Residence – a dwelling unit. Either a single family residence or each dwelling unit in a multifamily dwelling.

Statement of Likelihood – A statement provided in an environmental document based on the feasibility and reasonableness analysis at the time the document is being approved.

Traffic Noise Impacts – design year build condition noise levels that *approach* or exceed the FHWA Noise Abatement Criteria for the future build condition, or design year build condition noise levels that exceed the existing noise levels by 10 dBA. (*Approach* is defined as 1 dBA less than the FHWA Noise Abatement Criteria.)

Type I Project –
(1) The construction of a highway on new location; or
(2) The physical alteration of an existing highway where there is either:
(a) Substantial Horizontal Alteration (a project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition), or
(b) Substantial Vertical Alteration (a project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source by altering the vertical alignment of the highway or by altering the topography); or
(3) The addition of a through-traffic lane. This includes the addition of a through-traffic lane that functions as a HOV, HOT, bus, or truck climbing lane; or
(4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or
(5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or
(6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
(7) The addition of a new or substantial alteration of a weight station, rest stop, ride-share lot or toll plaza.
*Note that if a project is determined to be a Type I project, then the entire project area as defined in the
environmental document is a Type I project.

Type II Project – a proposed project to provide noise abatement on an existing highway. DOTD does not have a Type II program.

Type III Project – a proposed project that does not meet the classification of a Type I or Type II project. Type III projects do not require a noise analysis.

APPLICABILITY

This policy applies to all Federal highway projects in the State of Louisiana; that is, any projects that receive Federal-aid funds or are otherwise subject to FHWA approval.

This policy also applies to the construction of <u>new</u> control of access highways that are funded through
DOTD with no FHWA involvement.

Type II programs to provide noise abatement along existing highways are voluntary. DOTD does not have a Type II program; therefore, DOTD will not consider Type II projects.

DOTD will consider and construct barriers when sufficient funds (Federal or State) are appropriated by either State or Federal legislature specific to the construction of a barrier. These legislative mandated barriers may or may not be part of a Type I project. These barriers will be designed in accordance with the legislation as to location, height, and other parameters. If the design parameters are not specified in the legislation, the barrier will be designed to achieve a reasonable noise reduction in accordance with this policy.

This policy shall not prohibit the application of visual screens or security fences. Visual screens and security fences are not eligible for Federal-aid funding as noise abatement.

TRAFFIC NOISE ANALYSIS

The traffic noise analysis will include the steps listed below for each alternative under detailed study. Note that if any segment or component of an alternative meets the definition of a Type I project, then the entire alternative is considered to be Type I and is subject to the noise analysis requirements below.

1. **Identification of Existing Land Uses Affected by Noise:** The following types of activities and land uses affected by noise from the highway will be identified for analysis:
   a. Category A: Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose;
   b. Category B: residential;
   c. Category C: active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings;
   d. Category D: auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios;
   e. Category E: hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F;
   f. Category F: agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing; and
   g. Category G: undeveloped lands that are not permitted.

   Justification for the designation of lands as Category A must be submitted to FHWA on a case-by-case basis for concurrence. Justifications will be submitted through the FHWA Division Office to FHWA Headquarters.

2. **Determination of Existing Noise Levels:** The determination of existing noise levels will be made

utilizing field measurements of actual noise levels. A log will be kept noting the time of day, meteorological conditions, calibration results, and any unusual ambient noise sources experienced during each measurement.

Noise measurements will be taken utilizing ANSI Type 1 or Type 2 Sound Level Meters used in accordance with the manufacturer's operations manual. Meters are to be calibrated before and after each measurement. Meters should have valid factory calibration certification. Measurements should be done in accordance with the FHWA publication entitled, "Measurement of Highway – Related Noise," dated May 1996.[4]

Noise measurements will be taken in time intervals no shorter than 15 minutes and no longer than one hour unless alternate intervals are given prior approval by DOTD.

Actual traffic counts will be made during each field measurement. These traffic counts will be categorized according to the following vehicle classes:

Automobiles (A) – all vehicles with two axles and four wheels designed primarily for transportation of nine or less passengers or transportation of cargo.

Medium Trucks (MT) – all vehicles with two axles and six wheels designed for the transportation of cargo.

Heavy Trucks (HT) – all vehicles having three or more axles designed for the transportation of cargo.

Buses (B) – all vehicles designed to carry more than nine passengers.

Motorcycles (M) – all vehicles with two or three wheels and an open-air driver/passenger compartment.

Sites selected for field measurements will receive prior approval of DOTD. These sites will represent noise sensitive receptors in each Activity Category which are likely to be affected by the project. Sites outside of the immediate vicinity of the project may also be chosen to determine the ambient noise levels unaffected by the roadway. For proposed highways on new alignments where no highway currently exists, measurements must be taken at representative receptor locations. Unless specifically approved by DOTD, field measurements will be taken to represent exterior activities only.

Field measurements will be taken at approved sites at peak and off-peak times. Peak hour noise levels will be the hour with the highest noise levels, not necessarily the hour with the highest traffic volumes.

Upon the consent of the Environmental Engineer Administrator, existing noise levels may be determined by utilizing other methodology, including computer models consistent with the current FHWA highway traffic noise prediction model. Traffic characteristics, data, selection of receptor locations, and other input parameters utilized will be at the discretion of DOTD.

Noise measurements will be taken utilizing ANSI Type 1 or Type 2 Sound Level Meters used in

[4] Located on web at http://www.fhwa.dot.gov/environment/noise/measurement/measure.cfm

3. **<u>Prediction of Traffic Noise Levels:</u>** Any traffic noise prediction methodology is approved for use in any traffic noise analysis required by this policy if the methodology used at the time the noise study is consistent with the requirements of 23 CFR 772.9.[5]

   Report predicted noise levels in the noise report and related documents in the same format as reported by the model used.[6]

   To validate model results, it is necessary to compare the noise levels measured in the field to the noise levels predicted by the model using the roadway parameters and traffic data collected in the field. If the modeled results are within 3 dBA of the measured noise levels, no further action is required, and the model can be used to determine future noise levels. If the modeled results are not within 3 dBA of the measured noise levels, then further investigation is warranted into the reason(s) for the discrepancy prior to using the model to determine future noise levels.

   In predicting noise levels and assessing noise impacts, traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the design year will be used. The period with the highest sound levels may not be at the peak traffic hour but instead, during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher.

   Future noise levels will be based on modeling results utilizing data for the design year. This data, including traffic volumes, composition and speed, other reasonably foreseeable development, and the implementation of other transportation projects, will be based on accepted engineering practice and local planning assumptions.

4. **<u>Determination of Traffic Noise Impacts</u>:** Traffic noise impacts occur when the future (predicted, design year, build condition) noise levels *approach or exceed* the FHWA Noise Abatement Criteria, or when the future (predicted, design year, build condition) noise levels exceed the existing noise levels at any sensitive receptor by 10 dBA. FHWA requires that the States define *approach* as at least 1 dBA below their Noise Abatement Criteria.

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[5] The approved model in effect on July 13, 2011, the effective date of the regulations, is FHWA TNM version 2.5. When running the TNM 2.5 model, average pavement type must be used for prediction of future noise levels unless FHWA approves use of another type.

[6] The current approved model, TNM, reports results in tenths, a decimal format (##.#).

FHWA Noise Abatement Criteria
Hourly A-weighted Sound Level decibels (dBA)

ACTIVITY CATEGORY	ACTIVITY LEQ (H)	EVALUATION LOCATION	ACTIVITY DESCRIPTION	IN LOUISIANA, IMPACT OCCURS WHEN NOISE LEVEL ***IS EQUAL TO OR GREATER THAN*** THE VALUES BELOW*
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	**56**
B	67	Exterior	Residential (includes undeveloped lands permitted for residential).	**66**
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. (Includes undeveloped lands permitted for these activities).	**66**
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	**51**
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (Includes undeveloped lands permitted for these activities).	**71**
F	------	------	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	**n/a**
G	------	------	Undeveloped lands that are not permitted.	**n/a**

*These values are consistent with the FHWA's requirement for consideration of traffic noise impacts 1 dBA below their noise abatement criteria.

The noise analysis must include analysis for each type of receptor present in the study area. Noise contour lines shall not be used to determine noise impacts, but noise contour lines can be used for project alternative screening or for land use planning purposes.

In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas of frequent human use. Examples of possible receptor locations for residential receivers are patios, courtyards, front or back yard, pool areas, etc. Generally, the receptor location which lies between the noise source and the receiver is chosen as the location to model. If the circumstances of a particular receiver are atypical, contact the DOTD Environmental Section Coordinator for guidance.

In determining the number of receptors impacted/benefited, the number will include all dwelling units (i.e., owner-occupied, rental units, mobile homes, etc.). Each unit in a multifamily building is counted as one receptor.

For hotels, motels, offices, and other developed lands, receptor locations will be sited at outdoor areas of frequent human use such as patios, courtyards, pool areas, locations of outdoor seating, etc.

For parks and recreational areas, model each designated use area as a receptor location. For example, the park may have ball fields, basketball courts, playground equipment, tennis courts, picnic area, pool, etc. Each of these specific activity areas would be modeled to determine noise impact at each of these locations.

In those situations where there are no exterior activities to be affected by the traffic noise, or where exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion, Activity Category D, shall be used as the basis of determining noise impacts. An indoor analysis shall only be done after exhausting all outdoor analysis options. Interior noise level predictions may be estimated by using the information in Table 6 of FHWA's guidance document entitled, "Highway Traffic Noise: Analysis and Abatement Guidance," dated June 2010 and revised January 2011.[7]

When applying the interior criterion, consideration is given to the impact and abatement of interior rooms facing the roadway that are occupied frequently with a use that would benefit from a reduction in noise. For example, a classroom, prayer room, or meeting room would benefit from a reduction in noise, but a storage room or boiler room would not. When determining the cost for reasonableness, one building is one receptor, although multiple rooms may be insulated or provided noise reduction windows.

For Category F, no highway noise analysis is required under 23 CFR 772.

For Category G, if the undeveloped land is not permitted for development by the date of public knowledge, the noise levels are determined in accordance with 23 CFR 772.17(a) and results are documented in the environmental document.

[7] On-line guidance available at FHWA website, http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidanc

5. **<u>Evaluation of Noise Abatement</u>:** When traffic noise impacts are identified, noise abatement shall be considered and evaluated for *feasibility* and *reasonableness*. Traffic noise impacts will be determined and alternative noise abatement measures analyzed by giving weight to the benefits and cost of abatement, and to the overall social, economic and environmental impacts.

In abating traffic noise impacts, primary consideration is given to exterior areas where frequent human use occurs and a lowered noise level would be of benefit.

The noise abatement measures listed below may be incorporated into Type I Federal or Federal- aid projects to reduce traffic noise impacts.

(1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise barrier;

(2) Traffic management measures (e.g., traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits and exclusive lane designations);

(3) Alteration of horizontal and vertical alignments;

(4) Acquisition of property rights (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise;

(5) Noise insulation of Activity Category D land use facilities listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

Feasibility:

For a noise barrier to be considered acoustically feasible, 75% of the first row of impacted receptors adjacent to the barrier must achieve at least a 5 dBA reduction in highway traffic noise.

Other feasibility factors that will be considered are safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, and access to adjacent properties.

DOTD will not build noise barriers that it considers unsafe to the traveling public or adjacent properties. Topography and drainage may impact the design of the barrier or make the barrier unfeasible to construct. Utilities may render a barrier unfeasible when a conflict between the utility and barrier exists and the utility cannot be moved or cannot be moved without creating other insurmountable problems. (Note that the cost to relocate a utility will be added to the cost of the barrier when the relocation is necessary for the construction of the barrier. If this relocation cost is large, the barrier, although feasible, may become unreasonable due to cost.) DOTD must be able to access the barrier for maintenance purposes. If access cannot be obtained, the barrier is unfeasible. When access to adjacent properties must be maintained, a barrier may be unfeasible if it cannot be designed to provide the needed access. Noise barriers

that block existing driveways are considered unfeasible; however, there may be situations whereby the property owners agree in writing to forfeit their access eliminating this concern. Situations may arise whereby access is needed for seasonal activities such as maintenance or management of adjacent properties. These situations will be considered on case by case basis.

Noise barriers on bridges are limited to a maximum height of 14 feet, measured from top of noise barrier to bridge slab. Costs associated with mounting the barrier to the bridge, including the cost to modify the bridge structure to support the barrier, will be added to the cost of the barrier for determining reasonableness.

Reasonableness:

For abatement measure to be considered reasonable all of the following three criteria must be met: (a) achievement of the noise reduction design goal, (b) cost effectiveness, and (c) concurrence of benefited receptors.

(a) Noise Reduction Design Goal: When noise abatement measures are being considered, every effort will be made to obtain a substantial noise reduction of at least 8 dBA. At a minimum, at least one receptor must receive an 8 dBA reduction for the noise abatement system to be reasonable. For noise barriers meeting the abovementioned criteria, the height and length of the barrier will be optimized using the cost/benefited receptor ratio.

(b) Cost Effectiveness: The cost estimate of the noise abatement measure (including but not limited to the costs of real estate acquisition, construction servitude or utility relocation) should be equal to or less than $35,000 per benefited receptor. The unit cost used to estimate the cost of likely barriers will be updated regularly (at least every five years) and published on DOTD's web site. *The final analysis regarding cost effectiveness will occur during design when more detail information is available regarding the cost of the barrier system*, and

(c) Consideration of Viewpoints: As part of the NEPA public involvement process, viewpoints from the community, including benefited receptors, will be solicited for all aspects of the project, including noise impacts and abatement. Public Involvement will be tailored to the project. If no relevant objections to the proposed noise abatement are made at this level of public involvement, this criterion is deemed met and abatement considered reasonable from the viewpoint of benefited receptors. If relevant objections are identified, a follow-up solicitation will occur with property owners and residents of the benefited receptors. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive. *Follow-up coordination with benefited receptors may occur during the design stage when more detail information is available regarding barrier design*.

<u>Follow-up Coordination with Benefited Receptors during Final Design</u>

For noise barriers, the most common type of abatement, the Department will contact benefited receptors when the barrier design changes substantially from what was

presented in the NEPA document. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive.

To ascertain desires, property owners and residents may be invited to attend a meeting specifically to discuss the proposed barrier, or they may be asked to complete a survey (paper, electronic, phone, etc.). Contact may be made through a variety of means such as in person, letters, flyers left at the receptor site, public notices, web sites, phone calls, emails or other reliable means or combination of means. Names and/or addresses may be obtained from the tax assessor's roll, clerk of court records, neighborhood associations, local government databases, reliable internet sources, or other reliable sources or combination of sources. Those who do not respond as requested will be deemed as not interested in the barrier. DOTD will give more weight to the desire of the property owner than to the desire of the lessee. (When conflicting responses are received, DOTD will consider the property owner's response over that of the lessee's.)

The criteria above must be met collectively for a noise abatement measure to be deemed reasonable. Failure to achieve all criteria collectively will result in the noise abatement measure being deemed not reasonable. **During stage 1 of project development (NEPA stage), the analysis will identify noise abatement measures that are likely to be incorporated into the project's design. The final determination of any proposed noise abatement measure will be made during the design stage.** During the design stage, only abatement measures identified in stage 1 as likely will be reevaluated for reasonableness. If the decision to provide an abatement measure changes during final design, the Department will inform the public.

The following optional factors are considered when determining justification for additional cost allowances to an already determined reasonable barrier:

- date of development (implementation requires public outreach),
  Favorable consideration will be given to residential developments that existed prior to the initial construction of the highway. (This factor applies to projects along existing highways and not to new alignments.)

Residential development existed prior to the original construction of the highway	Added to Reasonableness Criteria (b)
No	$0
Yes	$2,000

- changes between existing and future build-conditions,
  Favorable consideration will be given to impacted receptors that experience future build noise levels that are 30 dBA more than future no-build noise levels.

Incremental Increase in Noise Level Between the Future No-build and the Future Build Noise Levels Before Noise Abatement	Added to Reasonableness Criteria (b)
Less than 30 dBA	$0
30 dBA or greater	$2,000

- exposure to higher absolute highway traffic noise levels,
  Favorable consideration will be given to impacted receptors that have predicted future
  noise levels above 76 dBA

Predicted Future Build Noise Level Before Noise Abatement	Added to Reasonableness Criteria (b)
66-75 dBA	$0
76-79 dBA	$1,000
80 dBA or greater	$2,000

and

- use of noise compatible planning concepts by the local government,
  Favorable consideration will be given to areas that have noise compatible (relevant to highway noise) zoning requirements in place that include the project area.

Noise compatible zoning in place for study area	Added to Reasonableness Criteria (b)
No	$0
Yes, in place for 1 to 2 years	$1,000
Yes, in place for 2 or more years	$1,500

DOCUMENTATI
ON

The noise study report will document the results of the noise study. This report may be a standalone document incorporated into the NEPA document by reference, or it may be included in the appendix of the NEPA document.

Before adoption of a Final Environmental Impact Statement, Finding of No Significant Impact,

or
Categorical Exclusion, for Federal-aid projects, the DOTD will identify noise abatement measures which

are both reasonable and feasible and likely to be incorporated in the project. The statement of likelihood included in the environmental document will give the locations and physical description of the noise abatement measures as well as explain that the final recommendation will be determined during final design with input from benefited receptors. The DOTD will also identify noise impacts for which no apparent solution is available.

MISCELLANEOUS PROVISIONS

Third party funding is not allowed if the funding is required to make the abatement measure feasible or reasonable. Third party funding is acceptable to make functional enhancements such as absorptive treatment, access doors, or aesthetic enhancements to a noise abatement measure already determined to be both reasonable and feasible.

DOTD allows the use of either absorptive or reflective barriers. DOTD generally assumes reflective barriers in its noise analyses. This does not preclude the use of absorptive barriers or absorptive treatments. For example, a contractor may be given the option of using any barrier system on the Qualified Products List (QPL)[8] for construction. The QPL includes both reflective and absorptive systems. Therefore, the contract may choose either an absorptive or a reflective system as long as the system is on the QPL. Using an absorptive barrier when a reflective barrier was assumed for modeling purposes is not considered a substantial change in design for the purposes of soliciting viewpoints of benefited receptors. Note that decorative features often requested for visual enhancements may preclude use of absorptive treatments or some QPL barrier systems. If separate absorptive treatments are requested, the cost for the treatment will be added to the cost of the barrier system to determine reasonableness. If the additional absorptive treatment increases the cost above the maximum cost/benefited receptor value, it will not be considered for implementation unless the optional reasonableness factors apply. Use of absorptive barriers or treatments on a project is discretionary.

Cost averaging is used when a common noise environment exists. Common noise environments occur when the traffic mix and speeds are the same. For instance, a common noise environment could occur along a road segment between interchanges on a controlled access highway if the traffic speed is constant. Application requires that no single common noise environment exceeds $70,000/benefited receptor and that collectively all common noise environments being averaged do not exceed $35,000/benefited
receptor.

Information for Local Officials: In an effort to prevent future traffic noise impacts on currently undeveloped lands, DOTD will inform local officials, within whose jurisdiction the highway project is located, of the best estimation of future noise levels for both developed and undeveloped lands or properties in the immediate vicinity of the project and information that may be useful to local communities to limit future land development to that which will be compatible with anticipated highway noise levels.

A copy of the environmental document (with included noise study) and/or noise study report (if one is prepared) will be provided to local officials upon approval of the environmental document. Local

[8] QPL 69, Noise Reduction Systems (Noise Barriers), can be found at http://www.dotd.la.gov/highways/construction/lab/qpl/tableofcontents.shtml

officials or agencies, which may have jurisdiction, include the Mayor's office, city/town/parish council, parish police jury, and metropolitan planning organization, as applicable.

Construction Noise: The following general steps are to be performed for all Type I projects:

a. Identify land uses or activities that may be affected by noise from the construction of the project. The identification is to be performed during the project development studies.

b. Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community including alternate designs to keep noise levels to a minimum (e.g. the use of drilled shafts vs. driven piles in noise sensitive areas).[9] This determination will include a weighing of benefits achieved and the overall adverse social, economic, and environmental effects and costs of abatement measures.

c. Incorporate the needed abatement measures in the plans and specifications, as appropriate.

When practicable, DOTD will construct any permanent noise abatement measures as the first phase of a highway construction project to abate construction noise impacts of subsequent phases of the same project.

Revision: DOTD may revise this policy as necessary to keep current with the state-of-the-art technology, legislation, regulation, and guidance, as well as construction cost indices in the fields of highway traffic noise prediction, impact, and abatement.

The unit cost used in the noise analysis for determining reasonableness of noise abatement measures will be updated regularly at least every five years. It is the responsibility of the analyst to ensure that they are using the correct unit cost. Contact the DOTD Environmental Coordinator for more information.

Revisions to this policy affecting Federal or Federal-aid projects must be concurred with by the FHWA prior to adoption.

DOTD and FHWA are not responsible for notification of revisions to this policy. Inquiries as to the latest revision that may be applicable should be made in writing to:

Environmental Engineer Administrator
Louisiana Department of Transportation and Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Implementation Plan: This policy will become effective July 13, 2011. It will apply to all projects started on or after the above effective date, and to all projects currently being evaluated pursuant to NEPA that do not have a completed noise study. A noise study is deemed completed if it was reviewed and commented on by DOTD and/or FHWA and considered final.

[9] The FHWA Roadway Construction Noise Model (FHWA RCNM) may be used to model construction noise at a

sensitive receptor. For highly complex and controversial projects in urban areas, the “Highway Construction Noise: Measurement, Prediction and Mitigation” (HICNOM) method may be used, but requires specific input.

For noise studies performed under past policies: If, during later stages of project development, changes occur that affect only a portion of the project requiring a reevaluation of the noise study for that portion, the policy in effect at the time of the original study will be applicable. When these situations arise, DOTD will consult with FHWA Division office on the project specific issues to ensure that FHWA is in agreement.

Appendix C-2

TNM Inputs

H.0003003 I 10 (I-49 to LA 328)

Year	ADT (vpd)	Peak Flow (+10%)	Flow in Each Direction (Peak Flow / 2)	TNM Input Flow (vph)
2013	74,591	82050	41025	1709
2033	110,839	121923	60961	2540

Vehicles per Hour

YEAR	2013	2033
Automobiles	1444	2146
Medium Trucks	116	173
Heavy Trucks	137	203
Buses	9	13
Motorcycles	3	5
TOTAL	1709	2540

Vehicle Type	Percent
1	0.20%
2	59.00%
3	25.50%
4	0.50%
5	4.30%
6	0.80%
7	0.10%
8	2.20%
9	6.30%
10	0.70%
11	0.20%
12	0.10%
13	0.10%
TOTAL	100.00%

Model Validation Traffic Information

6/19/2014	eastbound (15 mins)	**eastbound (hourly)**	westbound (15 mins)	**westbound (hourly)**	noise meter reading
Site 1					74.0
Passenger Cars	249	**996**	339	**1356**	
Bus	1	**4**	1	**4**	
Medium Truck	10	**40**	15	**60**	
Heavy Truck	102	**408**	70	**280**	
Motorcycles	1	**4**	0	**0**	
Site 2					
Passenger Cars	423	**1692**	350	**1400**	79.9
Bus	0	**0**	2	**8**	
Medium Truck	17	**68**	20	**80**	
Heavy Truck	90	**360**	79	**316**	
Motorcycles	0	**0**		**0**	

Appendix C-3

Model Validation Results

LA DOTD
Joseph Brown

13 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003.2
RUN: I-10 Widening: I-49 - LA 328
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Receiver2	2	1	0.0	74.2	66	74.2	10	Snd Lvl	74.2	0.0	8	-8.0
Receiver3	3	1	0.0	71.2	66	71.2	10	Snd Lvl	71.2	0.0	8	-8.0
Receiver4	4	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Receiver5	5	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
Receiver6	6	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
Receiver7	7	1	0.0	74.5	66	74.5	10	Snd Lvl	74.5	0.0	8	-8.0
Receiver8	8	1	0.0	74.7	66	74.7	10	Snd Lvl	74.7	0.0	8	-8.0
Receiver9	9	1	0.0	72.8	66	72.8	10	Snd Lvl	72.8	0.0	8	-8.0
Receiver10	10	1	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Receiver11	11	1	0.0	73.7	66	73.7	10	Snd Lvl	73.7	0.0	8	-8.0
Receiver12	12	1	0.0	73.4	66	73.4	10	Snd Lvl	73.4	0.0	8	-8.0
Receiver13	13	1	0.0	72.5	66	72.5	10	Snd Lvl	72.5	0.0	8	-8.0
Receiver14	14	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Receiver15	15	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Receiver16	16	1	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	8	-8.0
Receiver17	17	1	0.0	71.2	66	71.2	10	Snd Lvl	71.2	0.0	8	-8.0
Receiver18	18	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
Receiver19	19	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
Receiver20	20	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
Receiver21	21	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
Receiver22	22	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
Receiver23	23	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0

RESULTS: SOUND LEVELS

H.003003.2

Receiver24	24	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
Receiver25	25	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
Receiver26	26	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
Receiver27	27	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Receiver28	28	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
Receiver29	29	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
Receiver30	30	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Receiver31	31	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
Receiver32	32	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0
Receiver33	33	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Receiver34	34	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Receiver35	35	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Receiver36	36	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Receiver37	37	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Receiver38	38	1	0.0	72.9	66	72.9	10	Snd Lvl	72.9	0.0	8	-8.0
Receiver39	39	1	0.0	73.2	66	73.2	10	Snd Lvl	73.2	0.0	8	-8.0
Receiver41	41	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
Receiver42	42	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
Receiver43	43	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Receiver44	44	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
Receiver45	45	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Receiver46	46	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver47	47	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
Receiver48	48	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
Receiver49	49	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
Receiver50	50	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
Validation2	57	1	0.0	81.3	66	81.3	10	Snd Lvl	81.3	0.0	8	-8.0
Validation1	58	1	0.0	76.5	66	76.5	10	Snd Lvl	76.5	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	51	0.0	0.0	0.0
All Impacted	41	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix C-4

Existing Condition Model Results

LA DOTD
Joseph Brown

13 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I-10 Widening: I-49 - LA 328
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Receiver2	2	1	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0
Receiver3	3	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
Receiver4	4	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
Receiver5	5	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Receiver6	6	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver7	7	1	0.0	72.7	66	72.7	10	Snd Lvl	72.7	0.0	8	-8.0
Receiver8	8	1	0.0	72.9	66	72.9	10	Snd Lvl	72.9	0.0	8	-8.0
Receiver9	9	1	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
Receiver10	10	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
Receiver11	11	1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	8	-8.0
Receiver12	12	1	0.0	71.5	66	71.5	10	Snd Lvl	71.5	0.0	8	-8.0
Receiver13	13	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Receiver14	14	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
Receiver15	15	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Receiver16	16	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
Receiver17	17	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
Receiver18	18	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
Receiver19	19	1	0.0	60.2	66	60.2	10	----	60.2	0.0	8	-8.0
Receiver20	20	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
Receiver21	21	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
Receiver22	22	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Receiver23	23	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0

Receiver24	24	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
Receiver25	25	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
Receiver26	26	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
Receiver27	27	1	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
Receiver28	28	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
Receiver29	29	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
Receiver30	30	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Receiver31	31	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
Receiver32	32	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
Receiver33	33	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Receiver34	34	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Receiver35	35	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
Receiver36	36	1	0.0	68.8	66	68.8	10	Snd Lvl	68.8	0.0	8	-8.0
Receiver37	37	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
Receiver38	38	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
Receiver39	39	1	0.0	71.3	66	71.3	10	Snd Lvl	71.3	0.0	8	-8.0
Receiver41	41	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
Receiver42	42	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0
Receiver43	43	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
Receiver44	44	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
Receiver45	45	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
Receiver46	46	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
Receiver47	47	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
Receiver48	48	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
Receiver49	49	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
Receiver50	50	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
Validation 1	52	1	0.0	81.3	66	81.3	10	Snd Lvl	81.3	0.0	8	-8.0
Validation 2	54	1	0.0	79.4	66	79.4	10	Snd Lvl	79.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	51	0.0	0.0	0.0
All Impacted	30	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix C-5

Future No Build Model Results

DOTD
Joseph Brown

13 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
Receiver2	2	1	0.0	74.5	66	74.5	10	Snd Lvl	74.5	0.0	8	-8.0
Receiver3	3	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Receiver4	4	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
Receiver5	5	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
Receiver6	6	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
Receiver7	7	1	0.0	74.9	66	74.9	10	Snd Lvl	74.9	0.0	8	-8.0
Receiver8	8	1	0.0	75.1	66	75.1	10	Snd Lvl	75.1	0.0	8	-8.0
Receiver9	9	1	0.0	72.9	66	72.9	10	Snd Lvl	72.9	0.0	8	-8.0
Receiver10	10	1	0.0	72.1	66	72.1	10	Snd Lvl	72.1	0.0	8	-8.0
Receiver11	11	1	0.0	73.9	66	73.9	10	Snd Lvl	73.9	0.0	8	-8.0
Receiver12	12	1	0.0	73.6	66	73.6	10	Snd Lvl	73.6	0.0	8	-8.0
Receiver13	13	1	0.0	72.6	66	72.6	10	Snd Lvl	72.6	0.0	8	-8.0
Receiver14	14	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Receiver15	15	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
Receiver16	16	1	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	8	-8.0
Receiver17	17	1	0.0	71.0	66	71.0	10	Snd Lvl	71.0	0.0	8	-8.0
Receiver18	18	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Receiver19	19	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0
Receiver20	20	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
Receiver21	21	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Receiver22	22	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver23	23	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0

RESULTS: SOUND LEVELS **H.003003**

Receiver24	24	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
Receiver25	25	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
Receiver26	26	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
Receiver27	27	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
Receiver28	28	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Receiver29	29	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Receiver30	30	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Receiver31	31	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0
Receiver32	32	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
Receiver33	33	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Receiver34	34	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
Receiver35	35	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
Receiver36	36	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
Receiver37	37	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0
Receiver38	38	1	0.0	72.7	66	72.7	10	Snd Lvl	72.7	0.0	8	-8.0
Receiver39	39	1	0.0	73.0	66	73.0	10	Snd Lvl	73.0	0.0	8	-8.0
Receiver41	41	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
Receiver42	42	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
Receiver43	43	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
Receiver44	44	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
Receiver45	45	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Receiver46	46	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
Receiver47	47	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
Receiver48	48	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
Receiver49	49	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
Receiver50	50	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
Validation2	57	1	0.0	82.3	66	82.3	10	Snd Lvl	82.3	0.0	8	-8.0
Validation1	58	1	0.0	76.7	66	76.7	10	Snd Lvl	76.7	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	51	0.0	0.0	0.0
All Impacted	35	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix C-6

Future Build Model Results

DOTD
Joseph Brown

13 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	71.0	66	71.0	10	Snd Lvl	63.7	7.3	5	2.3
Receiver2	2	1	0.0	76.1	66	76.1	10	Snd Lvl	62.1	14.0	5	9.0
Receiver3	3	1	0.0	73.4	66	73.4	10	Snd Lvl	62.2	11.2	5	6.2
Receiver4	4	1	0.0	70.4	66	70.4	10	Snd Lvl	61.3	9.1	5	4.1
Receiver5	5	1	0.0	68.5	66	68.5	10	Snd Lvl	60.5	8.0	5	3.0
Receiver6	6	1	0.0	65.9	66	65.9	10	----	59.2	6.7	5	1.7
Receiver7	7	1	0.0	76.2	66	76.2	10	Snd Lvl	61.7	14.5	5	9.5
Receiver8	8	1	0.0	76.3	66	76.3	10	Snd Lvl	60.6	15.7	5	10.7
Receiver9	9	1	0.0	75.0	66	75.0	10	Snd Lvl	61.5	13.5	5	8.5
Receiver10	10	1	0.0	74.4	66	74.4	10	Snd Lvl	61.5	12.9	5	7.9
Receiver11	11	1	0.0	75.7	66	75.7	10	Snd Lvl	61.6	14.1	5	9.1
Receiver12	12	1	0.0	75.5	66	75.5	10	Snd Lvl	61.7	13.8	5	8.8
Receiver13	13	1	0.0	74.9	66	74.9	10	Snd Lvl	61.6	13.3	5	8.3
Receiver14	14	1	0.0	74.2	66	74.2	10	Snd Lvl	61.7	12.5	5	7.5
Receiver15	15	1	0.0	73.2	66	73.2	10	Snd Lvl	61.6	11.6	5	6.6
Receiver16	16	1	0.0	74.6	66	74.6	10	Snd Lvl	61.8	12.8	5	7.8
Receiver17	17	1	0.0	73.3	66	73.3	10	Snd Lvl	61.8	11.5	5	6.5
Receiver18	18	1	0.0	71.6	66	71.6	10	Snd Lvl	61.6	10.0	5	5.0
Receiver19	19	1	0.0	62.9	66	62.9	10	----	59.8	3.1	5	-1.9
Receiver20	20	1	0.0	67.3	66	67.3	10	Snd Lvl	59.7	7.6	5	2.6
Receiver21	21	1	0.0	66.5	66	66.5	10	Snd Lvl	59.4	7.1	5	2.1
Receiver22	22	1	0.0	67.5	66	67.5	10	Snd Lvl	59.9	7.6	5	2.6
Receiver23	23	1	0.0	69.3	66	69.3	10	Snd Lvl	60.5	8.8	5	3.8

Receiver24	24	1	0.0	71.3	66	71.3	10	Snd Lvl	61.1	10.2	5	5.2
Receiver25	25	1	0.0	67.2	66	67.2	10	Snd Lvl	60.4	6.8	5	1.8
Receiver26	26	1	0.0	69.6	66	69.6	10	Snd Lvl	69.5	0.1	5	-4.9
Receiver27	27	1	0.0	64.7	66	64.7	10	----	59.1	5.6	5	0.6
Receiver28	28	1	0.0	67.4	66	67.4	10	Snd Lvl	60.4	7.0	5	2.0
Receiver29	29	1	0.0	65.4	66	65.4	10	----	60.0	5.4	5	0.4
Receiver30	30	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	5	-5.0
Receiver31	31	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	5	-5.0
Receiver32	32	1	0.0	70.0	66	70.0	10	Snd Lvl	61.1	8.9	5	3.9
Receiver33	33	1	0.0	70.9	66	70.9	10	Snd Lvl	61.2	9.7	5	4.7
Receiver34	34	1	0.0	70.9	66	70.9	10	Snd Lvl	61.2	9.7	5	4.7
Receiver35	35	1	0.0	70.1	66	70.1	10	Snd Lvl	61.6	8.5	5	3.5
Receiver36	36	1	0.0	72.7	66	72.7	10	Snd Lvl	63.3	9.4	5	4.4
Receiver37	37	1	0.0	72.9	66	72.9	10	Snd Lvl	66.7	6.2	5	1.2
Receiver38	38	1	0.0	75.0	66	75.0	10	Snd Lvl	63.4	11.6	5	6.6
Receiver39	39	1	0.0	75.2	66	75.2	10	Snd Lvl	68.3	6.9	5	1.9
Receiver41	41	1	0.0	64.8	66	64.8	10	----	59.3	5.5	5	0.5
Receiver42	42	1	0.0	64.7	66	64.7	10	----	59.0	5.7	5	0.7
Receiver43	43	1	0.0	65.3	66	65.3	10	----	59.1	6.2	5	1.2
Receiver44	44	1	0.0	65.8	66	65.8	10	----	59.1	6.7	5	1.7
Receiver45	45	1	0.0	66.4	66	66.4	10	Snd Lvl	59.3	7.1	5	2.1
Receiver46	46	1	0.0	66.5	66	66.5	10	Snd Lvl	59.3	7.2	5	2.2
Receiver47	47	1	0.0	66.8	66	66.8	10	Snd Lvl	59.4	7.4	5	2.4
Receiver48	48	1	0.0	67.1	66	67.1	10	Snd Lvl	59.6	7.5	5	2.5
Receiver49	49	1	0.0	67.7	66	67.7	10	Snd Lvl	59.9	7.8	5	2.8
Receiver50	50	1	0.0	68.8	66	68.8	10	Snd Lvl	60.4	8.4	5	3.4
Validation2	57	1	0.0	83.6	66	83.6	10	Snd Lvl	83.6	0.0	5	-5.0
Validation1	58	1	0.0	77.3	66	77.3	10	Snd Lvl	77.3	0.0	5	-5.0
Receiver60	60	1	0.0	68.7	66	68.7	10	Snd Lvl	61.8	6.9	5	1.9
Receiver61	61	1	0.0	67.0	66	67.0	10	Snd Lvl	60.4	6.6	5	1.6
Receiver62	62	1	0.0	64.7	66	64.7	10	----	58.9	5.8	5	0.8
Receiver63	63	1	0.0	62.9	66	62.9	10	----	57.6	5.3	5	0.3
Receiver65	65	1	0.0	69.6	66	69.6	10	Snd Lvl	60.4	9.2	5	4.2
Receiver66	66	1	0.0	69.7	66	69.7	10	Snd Lvl	60.7	9.0	5	4.0
Receiver67	67	1	0.0	68.9	66	68.9	10	Snd Lvl	60.5	8.4	5	3.4
Receiver68	68	1	0.0	67.8	66	67.8	10	Snd Lvl	60.2	7.6	5	2.6
Receiver69	69	1	0.0	67.3	66	67.3	10	Snd Lvl	60.2	7.1	5	2.1
Receiver70	70	1	0.0	67.1	66	67.1	10	Snd Lvl	60.2	6.9	5	1.9
Receiver71	71	1	0.0	68.2	66	68.2	10	Snd Lvl	60.7	7.5	5	2.5
Receiver72	72	1	0.0	69.6	66	69.6	10	Snd Lvl	61.1	8.5	5	3.5

Receiver73	73	1	0.0	68.9	66	68.9	10	Snd Lvl	61.2	7.7	5	2.7
Receiver74	74	1	0.0	67.2	66	67.2	10	Snd Lvl	60.5	6.7	5	1.7
Receiver75	75	1	0.0	65.6	66	65.6	10	----	59.8	5.8	5	0.8
Receiver76	76	1	0.0	64.5	66	64.5	10	----	59.2	5.3	5	0.3
Receiver77	77	1	0.0	67.5	66	67.5	10	Snd Lvl	61.2	6.3	5	1.3
Receiver78	78	1	0.0	65.9	66	65.9	10	----	60.5	5.4	5	0.4
Receiver79	79	1	0.0	64.3	66	64.3	10	----	59.7	4.6	5	-0.4
Receiver80	80	1	0.0	62.9	66	62.9	10	----	58.8	4.1	5	-0.9
Receiver81	81	1	0.0	61.5	66	61.5	10	----	58.3	3.2	5	-1.8
Receiver82	82	1	0.0	62.7	66	62.7	10	----	59.2	3.5	5	-1.5
Receiver83	83	1	0.0	64.4	66	64.4	10	----	60.2	4.2	5	-0.8
Receiver84	84	1	0.0	66.1	66	66.1	10	Snd Lvl	61.2	4.9	5	-0.1
Receiver85	85	1	0.0	67.3	66	67.3	10	Snd Lvl	62.0	5.3	5	0.3
Receiver86	86	1	0.0	67.2	66	67.2	10	Snd Lvl	62.6	4.6	5	-0.4
Receiver87	87	1	0.0	66.4	66	66.4	10	Snd Lvl	62.8	3.6	5	-1.4
Receiver88	88	1	0.0	64.5	66	64.5	10	----	61.6	2.9	5	-2.1
Receiver89	89	1	0.0	62.6	66	62.6	10	----	60.0	2.6	5	-2.4
Receiver90	90	1	0.0	61.0	66	61.0	10	----	58.7	2.3	5	-2.7
Receiver91	91	1	0.0	62.7	66	62.7	10	----	61.1	1.6	5	-3.4
Receiver92	92	1	0.0	60.9	66	60.9	10	----	59.4	1.5	5	-3.5
Receiver94	94	1	0.0	67.5	66	67.5	10	Snd Lvl	59.8	7.7	5	2.7
Receiver95	95	1	0.0	66.7	66	66.7	10	Snd Lvl	59.6	7.1	5	2.1
Receiver96	96	1	0.0	64.9	66	64.9	10	----	58.8	6.1	5	1.1
Receiver97	97	1	0.0	63.3	66	63.3	10	----	58.1	5.2	5	0.2
Receiver98	98	1	0.0	62.2	66	62.2	10	----	57.5	4.7	5	-0.3
Receiver99	99	1	0.0	59.8	66	59.8	10	----	55.9	3.9	5	-1.1
Receiver100	100	1	0.0	61.1	66	61.1	10	----	56.6	4.5	5	-0.5
Receiver101	101	1	0.0	62.5	66	62.5	10	----	57.5	5.0	5	0.0
Receiver102	102	1	0.0	58.7	66	58.7	10	----	55.3	3.4	5	-1.6
Receiver103	103	1	0.0	63.3	66	63.3	10	----	57.8	5.5	5	0.5
Receiver104	104	1	0.0	63.8	66	63.8	10	----	58.1	5.7	5	0.7
Receiver105	105	1	0.0	64.0	66	64.0	10	----	58.2	5.8	5	0.8
Receiver106	106	1	0.0	64.2	66	64.2	10	----	58.4	5.8	5	0.8
Receiver107	107	1	0.0	64.8	66	64.8	10	----	58.7	6.1	5	1.1
Receiver108	108	1	0.0	65.4	66	65.4	10	----	59.0	6.4	5	1.4
Receiver109	109	1	0.0	66.6	66	66.6	10	Snd Lvl	59.5	7.1	5	2.1
Receiver110	110	1	0.0	67.7	66	67.7	10	Snd Lvl	60.0	7.7	5	2.7
Receiver111	111	1	0.0	68.8	66	68.8	10	Snd Lvl	60.4	8.4	5	3.4
Receiver113	113	1	0.0	62.2	66	62.2	10	----	57.4	4.8	5	-0.2
Receiver114	114	1	0.0	63.6	66	63.6	10	----	58.3	5.3	5	0.3

RESULTS: SOUND LEVELS **H.003003**

Receiver115	115	1	0.0	66.4	66	66.4	10	Snd Lvl	59.8	6.6	5	1.6
Receiver116	116	1	0.0	62.7	66	62.7	10	----	58.0	4.7	5	-0.3
Receiver117	117	1	0.0	60.2	66	60.2	10	----	56.3	3.9	5	-1.1
Receiver119	119	1	0.0	61.7	66	61.7	10	----	57.4	4.3	5	-0.7
Receiver120	120	1	0.0	59.6	66	59.6	10	----	56.1	3.5	5	-1.5
Receiver121	121	1	0.0	59.8	66	59.8	10	----	56.7	3.1	5	-1.9
Receiver122	122	1	0.0	59.7	66	59.7	10	----	57.2	2.5	5	-2.5
Receiver124	124	1	0.0	67.4	66	67.4	10	Snd Lvl	64.0	3.4	5	-1.6

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	111	0.0	6.7	15.7
All Impacted	67	0.0	8.1	15.7
All that meet NR Goal	80	5.0	8.1	15.7

Appendix C-7

Barrier Analysis

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	71.0	66	71.0	10	Snd Lvl	63.7	7.3	5	2.3
Receiver2	2	1	0.0	76.1	66	76.1	10	Snd Lvl	62.1	14.0	5	9.0
Receiver3	3	1	0.0	73.4	66	73.4	10	Snd Lvl	62.2	11.2	5	6.2
Receiver4	4	1	0.0	70.4	66	70.4	10	Snd Lvl	61.3	9.1	5	4.1
Receiver5	5	1	0.0	68.5	66	68.5	10	Snd Lvl	60.5	8.0	5	3.0
Receiver6	6	1	0.0	65.9	66	65.9	10	----	59.2	6.7	5	1.7
Receiver7	7	1	0.0	76.2	66	76.2	10	Snd Lvl	61.7	14.5	5	9.5
Receiver8	8	1	0.0	76.3	66	76.3	10	Snd Lvl	60.6	15.7	5	10.7
Receiver9	9	1	0.0	75.0	66	75.0	10	Snd Lvl	61.5	13.5	5	8.5
Receiver10	10	1	0.0	74.4	66	74.4	10	Snd Lvl	61.5	12.9	5	7.9
Receiver11	11	1	0.0	75.7	66	75.7	10	Snd Lvl	61.6	14.1	5	9.1
Receiver12	12	1	0.0	75.5	66	75.5	10	Snd Lvl	61.7	13.8	5	8.8
Receiver13	13	1	0.0	74.9	66	74.9	10	Snd Lvl	61.6	13.3	5	8.3
Receiver14	14	1	0.0	74.2	66	74.2	10	Snd Lvl	61.7	12.5	5	7.5
Receiver15	15	1	0.0	73.2	66	73.2	10	Snd Lvl	61.6	11.6	5	6.6
Receiver16	16	1	0.0	74.6	66	74.6	10	Snd Lvl	61.8	12.8	5	7.8
Receiver17	17	1	0.0	73.3	66	73.3	10	Snd Lvl	61.8	11.5	5	6.5
Receiver18	18	1	0.0	71.6	66	71.6	10	Snd Lvl	61.6	10.0	5	5.0
Receiver19	19	1	0.0	62.9	66	62.9	10	----	59.8	3.1	5	-1.9
Receiver20	20	1	0.0	67.3	66	67.3	10	Snd Lvl	59.7	7.6	5	2.6
Receiver21	21	1	0.0	66.5	66	66.5	10	Snd Lvl	59.4	7.1	5	2.1
Receiver22	22	1	0.0	67.5	66	67.5	10	Snd Lvl	59.9	7.6	5	2.6
Receiver23	23	1	0.0	69.3	66	69.3	10	Snd Lvl	60.5	8.8	5	3.8

Receiver24	24	1	0.0	71.3	66	71.3	10	Snd Lvl	61.1	10.2	5	5.2
Receiver25	25	1	0.0	67.2	66	67.2	10	Snd Lvl	60.4	6.8	5	1.8
Receiver26	26	1	0.0	69.6	66	69.6	10	Snd Lvl	69.5	0.1	5	-4.9
Receiver27	27	1	0.0	64.7	66	64.7	10	----	59.1	5.6	5	0.6
Receiver28	28	1	0.0	67.4	66	67.4	10	Snd Lvl	60.4	7.0	5	2.0
Receiver29	29	1	0.0	65.4	66	65.4	10	----	60.0	5.4	5	0.4
Receiver30	30	1	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	5	-5.0
Receiver31	31	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	5	-5.0
Receiver32	32	1	0.0	70.0	66	70.0	10	Snd Lvl	61.1	8.9	5	3.9
Receiver33	33	1	0.0	70.9	66	70.9	10	Snd Lvl	61.2	9.7	5	4.7
Receiver34	34	1	0.0	70.9	66	70.9	10	Snd Lvl	61.2	9.7	5	4.7
Receiver35	35	1	0.0	70.1	66	70.1	10	Snd Lvl	61.6	8.5	5	3.5
Receiver36	36	1	0.0	72.7	66	72.7	10	Snd Lvl	63.3	9.4	5	4.4
Receiver37	37	1	0.0	72.9	66	72.9	10	Snd Lvl	66.7	6.2	5	1.2
Receiver38	38	1	0.0	75.0	66	75.0	10	Snd Lvl	63.4	11.6	5	6.6
Receiver39	39	1	0.0	75.2	66	75.2	10	Snd Lvl	68.3	6.9	5	1.9
Receiver41	41	1	0.0	64.8	66	64.8	10	----	59.3	5.5	5	0.5
Receiver42	42	1	0.0	64.7	66	64.7	10	----	59.0	5.7	5	0.7
Receiver43	43	1	0.0	65.3	66	65.3	10	----	59.1	6.2	5	1.2
Receiver44	44	1	0.0	65.8	66	65.8	10	----	59.1	6.7	5	1.7
Receiver45	45	1	0.0	66.4	66	66.4	10	Snd Lvl	59.3	7.1	5	2.1
Receiver46	46	1	0.0	66.5	66	66.5	10	Snd Lvl	59.3	7.2	5	2.2
Receiver47	47	1	0.0	66.8	66	66.8	10	Snd Lvl	59.4	7.4	5	2.4
Receiver48	48	1	0.0	67.1	66	67.1	10	Snd Lvl	59.6	7.5	5	2.5
Receiver49	49	1	0.0	67.7	66	67.7	10	Snd Lvl	59.9	7.8	5	2.8
Receiver50	50	1	0.0	68.8	66	68.8	10	Snd Lvl	60.4	8.4	5	3.4
Validation2	57	1	0.0	83.6	66	83.6	10	Snd Lvl	83.6	0.0	5	-5.0
Validation1	58	1	0.0	77.3	66	77.3	10	Snd Lvl	77.3	0.0	5	-5.0
Receiver60	60	1	0.0	68.7	66	68.7	10	Snd Lvl	61.8	6.9	5	1.9
Receiver61	61	1	0.0	67.0	66	67.0	10	Snd Lvl	60.4	6.6	5	1.6
Receiver62	62	1	0.0	64.7	66	64.7	10	----	58.9	5.8	5	0.8
Receiver63	63	1	0.0	62.9	66	62.9	10	----	57.6	5.3	5	0.3
Receiver65	65	1	0.0	69.6	66	69.6	10	Snd Lvl	60.4	9.2	5	4.2
Receiver66	66	1	0.0	69.7	66	69.7	10	Snd Lvl	60.7	9.0	5	4.0
Receiver67	67	1	0.0	68.9	66	68.9	10	Snd Lvl	60.5	8.4	5	3.4
Receiver68	68	1	0.0	67.8	66	67.8	10	Snd Lvl	60.2	7.6	5	2.6
Receiver69	69	1	0.0	67.3	66	67.3	10	Snd Lvl	60.2	7.1	5	2.1
Receiver70	70	1	0.0	67.1	66	67.1	10	Snd Lvl	60.2	6.9	5	1.9
Receiver71	71	1	0.0	68.2	66	68.2	10	Snd Lvl	60.7	7.5	5	2.5
Receiver72	72	1	0.0	69.6	66	69.6	10	Snd Lvl	61.1	8.5	5	3.5

Receiver73	73	1	0.0	68.9	66	68.9	10	Snd Lvl	61.2	7.7	5	2.7
Receiver74	74	1	0.0	67.2	66	67.2	10	Snd Lvl	60.5	6.7	5	1.7
Receiver75	75	1	0.0	65.6	66	65.6	10	----	59.8	5.8	5	0.8
Receiver76	76	1	0.0	64.5	66	64.5	10	----	59.2	5.3	5	0.3
Receiver77	77	1	0.0	67.5	66	67.5	10	Snd Lvl	61.2	6.3	5	1.3
Receiver78	78	1	0.0	65.9	66	65.9	10	----	60.5	5.4	5	0.4
Receiver79	79	1	0.0	64.3	66	64.3	10	----	59.7	4.6	5	-0.4
Receiver80	80	1	0.0	62.9	66	62.9	10	----	58.8	4.1	5	-0.9
Receiver81	81	1	0.0	61.5	66	61.5	10	----	58.3	3.2	5	-1.8
Receiver82	82	1	0.0	62.7	66	62.7	10	----	59.2	3.5	5	-1.5
Receiver83	83	1	0.0	64.4	66	64.4	10	----	60.2	4.2	5	-0.8
Receiver84	84	1	0.0	66.1	66	66.1	10	Snd Lvl	61.2	4.9	5	-0.1
Receiver85	85	1	0.0	67.3	66	67.3	10	Snd Lvl	62.0	5.3	5	0.3
Receiver86	86	1	0.0	67.2	66	67.2	10	Snd Lvl	62.6	4.6	5	-0.4
Receiver87	87	1	0.0	66.4	66	66.4	10	Snd Lvl	62.8	3.6	5	-1.4
Receiver88	88	1	0.0	64.5	66	64.5	10	----	61.6	2.9	5	-2.1
Receiver89	89	1	0.0	62.6	66	62.6	10	----	60.0	2.6	5	-2.4
Receiver90	90	1	0.0	61.0	66	61.0	10	----	58.7	2.3	5	-2.7
Receiver91	91	1	0.0	62.7	66	62.7	10	----	61.1	1.6	5	-3.4
Receiver92	92	1	0.0	60.9	66	60.9	10	----	59.4	1.5	5	-3.5
Receiver94	94	1	0.0	67.5	66	67.5	10	Snd Lvl	59.8	7.7	5	2.7
Receiver95	95	1	0.0	66.7	66	66.7	10	Snd Lvl	59.6	7.1	5	2.1
Receiver96	96	1	0.0	64.9	66	64.9	10	----	58.8	6.1	5	1.1
Receiver97	97	1	0.0	63.3	66	63.3	10	----	58.1	5.2	5	0.2
Receiver98	98	1	0.0	62.2	66	62.2	10	----	57.5	4.7	5	-0.3
Receiver99	99	1	0.0	59.8	66	59.8	10	----	55.9	3.9	5	-1.1
Receiver100	100	1	0.0	61.1	66	61.1	10	----	56.6	4.5	5	-0.5
Receiver101	101	1	0.0	62.5	66	62.5	10	----	57.5	5.0	5	0.0
Receiver102	102	1	0.0	58.7	66	58.7	10	----	55.3	3.4	5	-1.6
Receiver103	103	1	0.0	63.3	66	63.3	10	----	57.8	5.5	5	0.5
Receiver104	104	1	0.0	63.8	66	63.8	10	----	58.1	5.7	5	0.7
Receiver105	105	1	0.0	64.0	66	64.0	10	----	58.2	5.8	5	0.8
Receiver106	106	1	0.0	64.2	66	64.2	10	----	58.4	5.8	5	0.8
Receiver107	107	1	0.0	64.8	66	64.8	10	----	58.7	6.1	5	1.1
Receiver108	108	1	0.0	65.4	66	65.4	10	----	59.0	6.4	5	1.4
Receiver109	109	1	0.0	66.6	66	66.6	10	Snd Lvl	59.5	7.1	5	2.1
Receiver110	110	1	0.0	67.7	66	67.7	10	Snd Lvl	60.0	7.7	5	2.7
Receiver111	111	1	0.0	68.8	66	68.8	10	Snd Lvl	60.4	8.4	5	3.4
Receiver113	113	1	0.0	62.2	66	62.2	10	----	57.4	4.8	5	-0.2
Receiver114	114	1	0.0	63.6	66	63.6	10	----	58.3	5.3	5	0.3

RESULTS: SOUND LEVELS

H.003003

Receiver115	115	1	0.0	66.4	66	66.4	10	Snd Lvl	59.8	6.6	5	1.6
Receiver116	116	1	0.0	62.7	66	62.7	10	----	58.0	4.7	5	-0.3
Receiver117	117	1	0.0	60.2	66	60.2	10	----	56.3	3.9	5	-1.1
Receiver119	119	1	0.0	61.7	66	61.7	10	----	57.4	4.3	5	-0.7
Receiver120	120	1	0.0	59.6	66	59.6	10	----	56.1	3.5	5	-1.5
Receiver121	121	1	0.0	59.8	66	59.8	10	----	56.7	3.1	5	-1.9
Receiver122	122	1	0.0	59.7	66	59.7	10	----	57.2	2.5	5	-2.5
Receiver124	124	1	0.0	67.4	66	67.4	10	Snd Lvl	64.0	3.4	5	-1.6

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min dB	**Avg dB**	**Max dB**
All Selected	111	0.0	6.7	15.7
All Impacted	67	0.0	8.1	15.7
All that meet NR Goal	80	5.0	8.1	15.7

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Moss St South - 12 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	71.0	66	71.0	10	Snd Lvl	64.7	6.3	5	1.3
Receiver2	2	1	0.0	76.1	66	76.1	10	Snd Lvl	64.1	12.0	5	7.0
Receiver60	60	1	0.0	68.7	66	68.7	10	Snd Lvl	63.1	5.6	5	0.6
Receiver3	3	1	0.0	73.4	66	73.4	10	Snd Lvl	63.9	9.5	5	4.5
Receiver61	61	1	0.0	67.0	66	67.0	10	Snd Lvl	61.8	5.2	5	0.2
Receiver4	4	1	0.0	70.4	66	70.4	10	Snd Lvl	63.0	7.4	5	2.4
Receiver7	7	1	0.0	76.2	66	76.2	10	Snd Lvl	63.9	12.3	5	7.3
Receiver62	62	1	0.0	64.7	66	64.7	10	----	60.3	4.4	5	-0.6
Receiver5	5	1	0.0	68.5	66	68.5	10	Snd Lvl	62.2	6.3	5	1.3
Receiver6	6	1	0.0	65.9	66	65.9	10	----	60.8	5.1	5	0.1
Receiver63	63	1	0.0	62.9	66	62.9	10	----	58.9	4.0	5	-1.0
Receiver8	8	1	0.0	76.3	66	76.3	10	Snd Lvl	62.9	13.4	5	8.4
Receiver9	9	1	0.0	75.0	66	75.0	10	Snd Lvl	63.6	11.4	5	6.4
Receiver10	10	1	0.0	74.4	66	74.4	10	Snd Lvl	63.5	10.9	5	5.9
Receiver65	65	1	0.0	69.6	66	69.6	10	Snd Lvl	62.3	7.3	5	2.3
Receiver11	11	1	0.0	75.7	66	75.7	10	Snd Lvl	63.7	12.0	5	7.0
Receiver12	12	1	0.0	75.5	66	75.5	10	Snd Lvl	63.7	11.8	5	6.8
Receiver13	13	1	0.0	74.9	66	74.9	10	Snd Lvl	63.7	11.2	5	6.2
Receiver14	14	1	0.0	74.2	66	74.2	10	Snd Lvl	63.7	10.5	5	5.5
Receiver15	15	1	0.0	73.2	66	73.2	10	Snd Lvl	63.5	9.7	5	4.7
Receiver16	16	1	0.0	74.6	66	74.6	10	Snd Lvl	63.8	10.8	5	5.8
Receiver17	17	1	0.0	73.3	66	73.3	10	Snd Lvl	63.6	9.7	5	4.7
Receiver18	18	1	0.0	71.6	66	71.6	10	Snd Lvl	63.3	8.3	5	3.3

Receiver66	66	1	0.0	69.7	66	69.7	10	Snd Lvl	62.5	7.2	5	2.2
Receiver67	67	1	0.0	68.9	66	68.9	10	Snd Lvl	62.3	6.6	5	1.6
Receiver68	68	1	0.0	67.8	66	67.8	10	Snd Lvl	61.9	5.9	5	0.9
Receiver69	69	1	0.0	67.3	66	67.3	10	Snd Lvl	61.8	5.5	5	0.5
Receiver70	70	1	0.0	67.1	66	67.1	10	Snd Lvl	61.8	5.3	5	0.3
Receiver71	71	1	0.0	68.2	66	68.2	10	Snd Lvl	62.3	5.9	5	0.9
Receiver72	72	1	0.0	69.6	66	69.6	10	Snd Lvl	62.8	6.8	5	1.8
Receiver73	73	1	0.0	68.9	66	68.9	10	Snd Lvl	62.7	6.2	5	1.2
Receiver74	74	1	0.0	67.2	66	67.2	10	Snd Lvl	62.0	5.2	5	0.2
Receiver75	75	1	0.0	65.6	66	65.6	10	----	61.1	4.5	5	-0.5
Receiver76	76	1	0.0	64.5	66	64.5	10	----	60.5	4.0	5	-1.0
Receiver77	77	1	0.0	67.5	66	67.5	10	Snd Lvl	62.5	5.0	5	0.0
Receiver78	78	1	0.0	65.9	66	65.9	10	----	61.7	4.2	5	-0.8
Receiver79	79	1	0.0	64.3	66	64.3	10	----	60.7	3.6	5	-1.4
Receiver80	80	1	0.0	62.9	66	62.9	10	----	59.7	3.2	5	-1.8
Receiver81	81	1	0.0	61.5	66	61.5	10	----	59.0	2.5	5	-2.5
Receiver82	82	1	0.0	62.7	66	62.7	10	----	60.0	2.7	5	-2.3
Receiver83	83	1	0.0	64.4	66	64.4	10	----	61.1	3.3	5	-1.7
Receiver84	84	1	0.0	66.1	66	66.1	10	Snd Lvl	62.2	3.9	5	-1.1
Receiver85	85	1	0.0	67.3	66	67.3	10	Snd Lvl	63.0	4.3	5	-0.7
Receiver86	86	1	0.0	67.2	66	67.2	10	Snd Lvl	63.4	3.8	5	-1.2
Receiver87	87	1	0.0	66.4	66	66.4	10	Snd Lvl	63.4	3.0	5	-2.0
Receiver88	88	1	0.0	64.5	66	64.5	10	----	62.1	2.4	5	-2.6
Receiver89	89	1	0.0	62.6	66	62.6	10	----	60.6	2.0	5	-3.0
Receiver90	90	1	0.0	61.0	66	61.0	10	----	59.2	1.8	5	-3.2
Receiver91	91	1	0.0	62.7	66	62.7	10	----	61.4	1.3	5	-3.7
Receiver92	92	1	0.0	60.9	66	60.9	10	----	59.7	1.2	5	-3.8

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	50	1.2	6.3	13.4
All Impacted	34	3.0	7.8	13.4
All that meet NR Goal	31	5.0	8.3	13.4

RESULTS: SOUND LEVELS

H.003003

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Moss St South - 20 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	71.0	66	71.0	10	Snd Lvl	64.7	6.3	5	1.3
Receiver2	2	1	0.0	76.1	66	76.1	10	Snd Lvl	64.1	12.0	5	7.0
Receiver60	60	1	0.0	68.7	66	68.7	10	Snd Lvl	63.1	5.6	5	0.6
Receiver3	3	1	0.0	73.4	66	73.4	10	Snd Lvl	63.9	9.5	5	4.5
Receiver61	61	1	0.0	67.0	66	67.0	10	Snd Lvl	61.8	5.2	5	0.2
Receiver4	4	1	0.0	70.4	66	70.4	10	Snd Lvl	63.0	7.4	5	2.4
Receiver7	7	1	0.0	76.2	66	76.2	10	Snd Lvl	63.9	12.3	5	7.3
Receiver62	62	1	0.0	64.7	66	64.7	10	----	60.3	4.4	5	-0.6
Receiver5	5	1	0.0	68.5	66	68.5	10	Snd Lvl	62.2	6.3	5	1.3
Receiver6	6	1	0.0	65.9	66	65.9	10	----	60.8	5.1	5	0.1
Receiver63	63	1	0.0	62.9	66	62.9	10	----	58.9	4.0	5	-1.0
Receiver8	8	1	0.0	76.3	66	76.3	10	Snd Lvl	62.9	13.4	5	8.4
Receiver9	9	1	0.0	75.0	66	75.0	10	Snd Lvl	63.6	11.4	5	6.4
Receiver10	10	1	0.0	74.4	66	74.4	10	Snd Lvl	63.5	10.9	5	5.9
Receiver65	65	1	0.0	69.6	66	69.6	10	Snd Lvl	62.3	7.3	5	2.3
Receiver11	11	1	0.0	75.7	66	75.7	10	Snd Lvl	63.7	12.0	5	7.0
Receiver12	12	1	0.0	75.5	66	75.5	10	Snd Lvl	63.7	11.8	5	6.8
Receiver13	13	1	0.0	74.9	66	74.9	10	Snd Lvl	63.7	11.2	5	6.2
Receiver14	14	1	0.0	74.2	66	74.2	10	Snd Lvl	63.7	10.5	5	5.5
Receiver15	15	1	0.0	73.2	66	73.2	10	Snd Lvl	63.5	9.7	5	4.7
Receiver16	16	1	0.0	74.6	66	74.6	10	Snd Lvl	63.8	10.8	5	5.8
Receiver17	17	1	0.0	73.3	66	73.3	10	Snd Lvl	63.6	9.7	5	4.7
Receiver18	18	1	0.0	71.6	66	71.6	10	Snd Lvl	63.3	8.3	5	3.3

Receiver66	66	1	0.0	69.7	66	69.7	10	Snd Lvl	62.5	7.2	5	2.2
Receiver67	67	1	0.0	68.9	66	68.9	10	Snd Lvl	62.3	6.6	5	1.6
Receiver68	68	1	0.0	67.8	66	67.8	10	Snd Lvl	61.9	5.9	5	0.9
Receiver69	69	1	0.0	67.3	66	67.3	10	Snd Lvl	61.8	5.5	5	0.5
Receiver70	70	1	0.0	67.1	66	67.1	10	Snd Lvl	61.8	5.3	5	0.3
Receiver71	71	1	0.0	68.2	66	68.2	10	Snd Lvl	62.3	5.9	5	0.9
Receiver72	72	1	0.0	69.6	66	69.6	10	Snd Lvl	62.8	6.8	5	1.8
Receiver73	73	1	0.0	68.9	66	68.9	10	Snd Lvl	62.7	6.2	5	1.2
Receiver74	74	1	0.0	67.2	66	67.2	10	Snd Lvl	62.0	5.2	5	0.2
Receiver75	75	1	0.0	65.6	66	65.6	10	----	61.1	4.5	5	-0.5
Receiver76	76	1	0.0	64.5	66	64.5	10	----	60.5	4.0	5	-1.0
Receiver77	77	1	0.0	67.5	66	67.5	10	Snd Lvl	62.5	5.0	5	0.0
Receiver78	78	1	0.0	65.9	66	65.9	10	----	61.7	4.2	5	-0.8
Receiver79	79	1	0.0	64.3	66	64.3	10	----	60.7	3.6	5	-1.4
Receiver80	80	1	0.0	62.9	66	62.9	10	----	59.7	3.2	5	-1.8
Receiver81	81	1	0.0	61.5	66	61.5	10	----	59.0	2.5	5	-2.5
Receiver82	82	1	0.0	62.7	66	62.7	10	----	60.0	2.7	5	-2.3
Receiver83	83	1	0.0	64.4	66	64.4	10	----	61.1	3.3	5	-1.7
Receiver84	84	1	0.0	66.1	66	66.1	10	Snd Lvl	62.2	3.9	5	-1.1
Receiver85	85	1	0.0	67.3	66	67.3	10	Snd Lvl	63.0	4.3	5	-0.7
Receiver86	86	1	0.0	67.2	66	67.2	10	Snd Lvl	63.4	3.8	5	-1.2
Receiver87	87	1	0.0	66.4	66	66.4	10	Snd Lvl	63.4	3.0	5	-2.0
Receiver88	88	1	0.0	64.5	66	64.5	10	----	62.1	2.4	5	-2.6
Receiver89	89	1	0.0	62.6	66	62.6	10	----	60.6	2.0	5	-3.0
Receiver90	90	1	0.0	61.0	66	61.0	10	----	59.2	1.8	5	-3.2
Receiver91	91	1	0.0	62.7	66	62.7	10	----	61.4	1.3	5	-3.7
Receiver92	92	1	0.0	60.9	66	60.9	10	----	59.7	1.2	5	-3.8

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	50	1.2	6.3	13.4
All Impacted	34	3.0	7.8	13.4
All that meet NR Goal	31	5.0	8.3	13.4

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Moss St North - 12 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver117	117	1	0.0	60.2	66	60.2	10	----	55.5	4.7	5	-0.3
Receiver116	116	1	0.0	62.7	66	62.7	10	----	57.0	5.7	5	0.7
Receiver25	25	1	0.0	67.2	66	67.2	10	Snd Lvl	59.2	8.0	5	3.0
Receiver115	115	1	0.0	66.4	66	66.4	10	Snd Lvl	58.5	7.9	5	2.9
Receiver114	114	1	0.0	63.6	66	63.6	10	----	57.2	6.4	5	1.4
Receiver113	113	1	0.0	62.2	66	62.2	10	----	56.4	5.8	5	0.8
Receiver111	111	1	0.0	68.8	66	68.8	10	Snd Lvl	58.9	9.9	5	4.9
Receiver110	110	1	0.0	67.7	66	67.7	10	Snd Lvl	58.6	9.1	5	4.1
Receiver24	24	1	0.0	71.3	66	71.3	10	Snd Lvl	59.6	11.7	5	6.7
Receiver109	109	1	0.0	66.6	66	66.6	10	Snd Lvl	58.2	8.4	5	3.4
Receiver107	107	1	0.0	64.8	66	64.8	10	----	57.5	7.3	5	2.3
Receiver108	108	1	0.0	65.4	66	65.4	10	----	57.7	7.7	5	2.7
Receiver23	23	1	0.0	69.3	66	69.3	10	Snd Lvl	59.0	10.3	5	5.3
Receiver22	22	1	0.0	67.5	66	67.5	10	Snd Lvl	58.5	9.0	5	4.0
Receiver106	106	1	0.0	64.2	66	64.2	10	----	57.2	7.0	5	2.0
Receiver21	21	1	0.0	66.5	66	66.5	10	Snd Lvl	58.1	8.4	5	3.4
Receiver105	105	1	0.0	64.0	66	64.0	10	----	57.1	6.9	5	1.9
Receiver104	104	1	0.0	63.8	66	63.8	10	----	57.0	6.8	5	1.8
Receiver20	20	1	0.0	67.3	66	67.3	10	Snd Lvl	58.4	8.9	5	3.9
Receiver103	103	1	0.0	63.3	66	63.3	10	----	56.8	6.5	5	1.5
Receiver94	94	1	0.0	67.5	66	67.5	10	Snd Lvl	58.5	9.0	5	4.0
Receiver95	95	1	0.0	66.7	66	66.7	10	Snd Lvl	58.3	8.4	5	3.4
Receiver96	96	1	0.0	64.9	66	64.9	10	----	57.7	7.2	5	2.2

RESULTS: SOUND LEVELS

H.003003

Receiver101	101	1	0.0	62.5	66	62.5	10	----	56.4	6.1	5	1.1
Receiver100	100	1	0.0	61.1	66	61.1	10	----	55.8	5.3	5	0.3
Receiver97	97	1	0.0	63.3	66	63.3	10	----	57.1	6.2	5	1.2
Receiver98	98	1	0.0	62.2	66	62.2	10	----	56.6	5.6	5	0.6
Receiver99	99	1	0.0	59.8	66	59.8	10	----	55.2	4.6	5	-0.4
Receiver102	102	1	0.0	58.7	66	58.7	10	----	54.7	4.0	5	-1.0
Receiver19	19	1	0.0	62.9	66	62.9	10	----	59.4	3.5	5	-1.5

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	30	3.5	7.2	11.7
All Impacted	12	7.9	9.1	11.7
All that meet NR Goal	26	5.3	7.7	11.7

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Moss St North - 20 ft

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver117	117	1	0.0	60.2	66	60.2	10	----	55.5	4.7	5	-0.3
Receiver116	116	1	0.0	62.7	66	62.7	10	----	57.0	5.7	5	0.7
Receiver25	25	1	0.0	67.2	66	67.2	10	Snd Lvl	59.2	8.0	5	3.0
Receiver115	115	1	0.0	66.4	66	66.4	10	Snd Lvl	58.5	7.9	5	2.9
Receiver114	114	1	0.0	63.6	66	63.6	10	----	57.2	6.4	5	1.4
Receiver113	113	1	0.0	62.2	66	62.2	10	----	56.4	5.8	5	0.8
Receiver111	111	1	0.0	68.8	66	68.8	10	Snd Lvl	58.9	9.9	5	4.9
Receiver110	110	1	0.0	67.7	66	67.7	10	Snd Lvl	58.6	9.1	5	4.1
Receiver24	24	1	0.0	71.3	66	71.3	10	Snd Lvl	59.6	11.7	5	6.7
Receiver109	109	1	0.0	66.6	66	66.6	10	Snd Lvl	58.2	8.4	5	3.4
Receiver107	107	1	0.0	64.8	66	64.8	10	----	57.5	7.3	5	2.3
Receiver108	108	1	0.0	65.4	66	65.4	10	----	57.7	7.7	5	2.7
Receiver23	23	1	0.0	69.3	66	69.3	10	Snd Lvl	59.0	10.3	5	5.3
Receiver22	22	1	0.0	67.5	66	67.5	10	Snd Lvl	58.5	9.0	5	4.0
Receiver106	106	1	0.0	64.2	66	64.2	10	----	57.2	7.0	5	2.0
Receiver21	21	1	0.0	66.5	66	66.5	10	Snd Lvl	58.1	8.4	5	3.4
Receiver105	105	1	0.0	64.0	66	64.0	10	----	57.1	6.9	5	1.9
Receiver104	104	1	0.0	63.8	66	63.8	10	----	57.0	6.8	5	1.8
Receiver20	20	1	0.0	67.3	66	67.3	10	Snd Lvl	58.4	8.9	5	3.9
Receiver103	103	1	0.0	63.3	66	63.3	10	----	56.8	6.5	5	1.5
Receiver94	94	1	0.0	67.5	66	67.5	10	Snd Lvl	58.5	9.0	5	4.0
Receiver95	95	1	0.0	66.7	66	66.7	10	Snd Lvl	58.3	8.4	5	3.4
Receiver96	96	1	0.0	64.9	66	64.9	10	----	57.7	7.2	5	2.2

RESULTS: SOUND LEVELS **H.003003**

Receiver101	101	1	0.0	62.5	66	62.5	10	----	56.4	6.1	5	1.1
Receiver100	100	1	0.0	61.1	66	61.1	10	----	55.8	5.3	5	0.3
Receiver97	97	1	0.0	63.3	66	63.3	10	----	57.1	6.2	5	1.2
Receiver98	98	1	0.0	62.2	66	62.2	10	----	56.6	5.6	5	0.6
Receiver99	99	1	0.0	59.8	66	59.8	10	----	55.2	4.6	5	-0.4
Receiver102	102	1	0.0	58.7	66	58.7	10	----	54.7	4.0	5	-1.0
Receiver19	19	1	0.0	62.9	66	62.9	10	----	59.4	3.5	5	-1.5

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min dB	**Avg dB**	**Max dB**
All Selected	30	3.5	7.2	11.7
All Impacted	12	7.9	9.1	11.7
All that meet NR Goal	26	5.3	7.7	11.7

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Woodduck Dr - 12 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver26	26	1	0.0	69.6	66	69.6	10	Snd Lvl	69.5	0.1	5	-4.9
Receiver122	122	1	0.0	59.7	66	59.7	10	----	56.9	2.8	5	-2.2
Receiver121	121	1	0.0	59.8	66	59.8	10	----	56.3	3.5	5	-1.5
Receiver120	120	1	0.0	59.6	66	59.6	10	----	55.6	4.0	5	-1.0
Receiver27	27	1	0.0	64.7	66	64.7	10	----	58.2	6.5	5	1.5
Receiver28	28	1	0.0	67.4	66	67.4	10	Snd Lvl	59.3	8.1	5	3.1
Receiver119	119	1	0.0	61.7	66	61.7	10	----	56.7	5.0	5	0.0
Receiver29	29	1	0.0	65.4	66	65.4	10	----	59.2	6.2	5	1.2

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	8	0.1	4.5	8.1
All Impacted	2	0.1	4.1	8.1
All that meet NR Goal	4	5.0	6.4	8.1

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Woodduck Dr - 20 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver26	26	1	0.0	69.6	66	69.6	10	Snd Lvl	69.5	0.1	5	-4.9
Receiver122	122	1	0.0	59.7	66	59.7	10	----	56.9	2.8	5	-2.2
Receiver121	121	1	0.0	59.8	66	59.8	10	----	56.3	3.5	5	-1.5
Receiver120	120	1	0.0	59.6	66	59.6	10	----	55.6	4.0	5	-1.0
Receiver27	27	1	0.0	64.7	66	64.7	10	----	58.2	6.5	5	1.5
Receiver28	28	1	0.0	67.4	66	67.4	10	Snd Lvl	59.3	8.1	5	3.1
Receiver119	119	1	0.0	61.7	66	61.7	10	----	56.7	5.0	5	0.0
Receiver29	29	1	0.0	65.4	66	65.4	10	----	59.2	6.2	5	1.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	8	0.1	4.5	8.1
All Impacted	2	0.1	4.1	8.1
All that meet NR Goal	4	5.0	6.4	8.1

RESULTS: SOUND LEVELS

H.003003

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: LA 31 South - 12 ft

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver124	124	1	0.0	67.4	66	67.4	10	Snd Lvl	63.7	3.7	5	-1.3
Receiver38	38	1	0.0	75.0	66	75.0	10	Snd Lvl	62.5	12.5	5	7.5
Receiver39	39	1	0.0	75.2	66	75.2	10	Snd Lvl	68.1	7.1	5	2.1

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	3	3.7	7.8	12.5
All Impacted	3	3.7	7.8	12.5
All that meet NR Goal	2	7.1	9.8	12.5

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: LA 31 South - 20 ft

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver124	124	1	0.0	67.4	66	67.4	10	Snd Lvl	63.7	3.7	5	-1.3
Receiver38	38	1	0.0	75.0	66	75.0	10	Snd Lvl	62.5	12.5	5	7.5
Receiver39	39	1	0.0	75.2	66	75.2	10	Snd Lvl	68.1	7.1	5	2.1

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	3	3.7	7.8	12.5
All Impacted	3	3.7	7.8	12.5
All that meet NR Goal	2	7.1	9.8	12.5

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: LA 31 North - 12 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver36	36	1	0.0	72.7	66	72.7	10	Snd Lvl	62.5	10.2	5	5.2
Receiver35	35	1	0.0	70.1	66	70.1	10	Snd Lvl	60.5	9.6	5	4.6
Receiver34	34	1	0.0	70.9	66	70.9	10	Snd Lvl	59.8	11.1	5	6.1
Receiver33	33	1	0.0	70.9	66	70.9	10	Snd Lvl	59.8	11.1	5	6.1
Receiver32	32	1	0.0	70.0	66	70.0	10	Snd Lvl	59.8	10.2	5	5.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	9.6	10.4	11.1
All Impacted	5	9.6	10.4	11.1
All that meet NR Goal	5	9.6	10.4	11.1

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: LA 31 North - 20 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver36	36	1	0.0	72.7	66	72.7	10	Snd Lvl	62.5	10.2	5	5.2
Receiver35	35	1	0.0	70.1	66	70.1	10	Snd Lvl	60.5	9.6	5	4.6
Receiver34	34	1	0.0	70.9	66	70.9	10	Snd Lvl	59.8	11.1	5	6.1
Receiver33	33	1	0.0	70.9	66	70.9	10	Snd Lvl	59.8	11.1	5	6.1
Receiver32	32	1	0.0	70.0	66	70.0	10	Snd Lvl	59.8	10.2	5	5.2

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	5	9.6	10.4	11.1
All Impacted	5	9.6	10.4	11.1
All that meet NR Goal	5	9.6	10.4	11.1

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Deygeter St - 12 ft

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver41	41	1	0.0	64.8	66	64.8	10	----	58.7	6.1	5	1.1
Receiver42	42	1	0.0	64.7	66	64.7	10	----	58.3	6.4	5	1.4
Receiver43	43	1	0.0	65.3	66	65.3	10	----	58.3	7.0	5	2.0
Receiver44	44	1	0.0	65.8	66	65.8	10	----	58.2	7.6	5	2.6
Receiver45	45	1	0.0	66.4	66	66.4	10	Snd Lvl	58.3	8.1	5	3.1
Receiver46	46	1	0.0	66.5	66	66.5	10	Snd Lvl	58.3	8.2	5	3.2
Receiver47	47	1	0.0	66.8	66	66.8	10	Snd Lvl	58.4	8.4	5	3.4
Receiver48	48	1	0.0	67.1	66	67.1	10	Snd Lvl	58.5	8.6	5	3.6
Receiver49	49	1	0.0	67.7	66	67.7	10	Snd Lvl	58.9	8.8	5	3.8
Receiver50	50	1	0.0	68.8	66	68.8	10	Snd Lvl	59.4	9.4	5	4.4

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	10	6.1	7.9	9.4
All Impacted	6	8.1	8.6	9.4
All that meet NR Goal	10	6.1	7.9	9.4

DOTD
Joseph Brown

20 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: H.003003
RUN: I 10 Widening: I -49 - LA 328 Future Build
BARRIER DESIGN: Deygeter St - 20 ft

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver41	41	1	0.0	64.8	66	64.8	10	----	58.7	6.1	5	1.1
Receiver42	42	1	0.0	64.7	66	64.7	10	----	58.3	6.4	5	1.4
Receiver43	43	1	0.0	65.3	66	65.3	10	----	58.3	7.0	5	2.0
Receiver44	44	1	0.0	65.8	66	65.8	10	----	58.2	7.6	5	2.6
Receiver45	45	1	0.0	66.4	66	66.4	10	Snd Lvl	58.3	8.1	5	3.1
Receiver46	46	1	0.0	66.5	66	66.5	10	Snd Lvl	58.3	8.2	5	3.2
Receiver47	47	1	0.0	66.8	66	66.8	10	Snd Lvl	58.4	8.4	5	3.4
Receiver48	48	1	0.0	67.1	66	67.1	10	Snd Lvl	58.5	8.6	5	3.6
Receiver49	49	1	0.0	67.7	66	67.7	10	Snd Lvl	58.9	8.8	5	3.8
Receiver50	50	1	0.0	68.8	66	68.8	10	Snd Lvl	59.4	9.4	5	4.4

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	10	6.1	7.9	9.4
All Impacted	6	8.1	8.6	9.4
All that meet NR Goal	10	6.1	7.9	9.4

Appendix C-8

Feasibility and Reasonableness Worksheets

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	Moss St South	2261	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
16	16		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	Moss St North	2765	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
13	13		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	Woodduck Dr	1558	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	LA 31 South	620	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
2	2		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	LA 31 North	2598	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
5	5		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Feasibility Worksheet

Project	ID number	Route Location	
	H.003003	I 10	
Barrier	Location	Length (feet)	Height (feet)
	Deygeter St	1481	20
Number of first row receptors (receptors adjacent to barrier):	Number of *first row* receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
10	10		100%
Are there any additional feasibility issues to consider?	*Explain:*		
Based on the above, is the barrier feasible?	Circle Yes or No		

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2261 ft	12 ft	Near Moss St South of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
27132	$39	$1,058,148	31	$34,134

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
	Notes:		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	Yes	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2261 ft	14 ft	Near Moss St South of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
31654	$37	$1,234,506	33	$37,409

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
	Notes:		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2261 ft	16 ft	Near Moss St South of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
36176	$76	$2,749,376	37	$74,309

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2261 ft	18 ft	Near Moss St South of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
40698	$72	$2,749,376	39	$75,135

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
	Notes:		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2261 ft	20 ft	Near Moss St South of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
45220	$72	$3,255,840	40	$81,396

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*
Queried benefited receptors?	*Notes:*

	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?
Query Results:			

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2725 ft	12 ft	Near Moss St North of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
27300	$39	$1,064,700	12	$59,150

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2725 ft	14 ft	Near Moss St North of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
31850	$37	$1,178,450	18	$65,469

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
	Notes:		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/31/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2725 ft	16 ft	Near Moss St North of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
36,400	$76	$2,766,400	22	$125,745

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
Queried benefited receptors?	*Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/31/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2725 ft	18 ft	Near Moss St North of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
40,950	$72	$2,948,400	25	$134,018

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*
Queried benefited receptors?	*Notes:*

Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/31/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2725 ft	20 ft	Near Moss St North of I 10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
40,950	$72	$3,276,000	26	$126,000

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
Queried benefited receptors?	*Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/31/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	1558 ft	12 ft	Near Woodduck Dr

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
18696	$44	$822,624	1	$822,624

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	No		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	1558 ft	20 ft	Near Woodduck Dr

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
31160	$79	$2,461,640	4	$615,410

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*
Queried benefited receptors?	*Notes:*

Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	620 ft	12 ft	Near LA 31 south of I-10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
620	$53	$766,320	2	$383,160

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	620 ft	20 ft	Near LA 31 south of I-10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
620	$103	$1,277,200	2	$638,600

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2598 ft	12 ft	Near LA 31 north of I-10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
2598	$39	$1,215,864	5	$243,173

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

At least an 8dBA reduction at 1 receptor?	Circle: Yes or No *(If no, explain below)*

Criterion 3: Desires of Benefited Receptors

Queried benefited receptors?	Circle: Yes or No *(If no, explain below & skip to bottom question)* *Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	2598 ft	20 ft	Near LA 31 north of I-10

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
2598	$68	$3,533,280	5	$706,656

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*
Queried benefited receptors?	*Notes:*

	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?
Query Results:			

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	1481 ft	12 ft	Near Deygeter St

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
1481	$44	$1,403,988	7	$200,570

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*
Queried benefited receptors?	*Notes:*

	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?
Query Results:			

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Reasonableness Worksheet DURING DESIGN

	ID number	Route	Parish/City
Project	H.009266	I 10	Ascension
	Length	Height	Location
Barrier	1481 ft	20 ft	Near Deygeter St

Criterion 1: Cost

Total Square Feet of Barrier	Cost/Sq. ft.	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
1481	$79	$2,339,980	10	$233,998

If optional factors apply, what is the added amount?

Is Cost per Benefited Receptor less than $35,000 + Added Amount? No

Criterion 2: Design Goal

	Circle: Yes or No *(If no, explain below)*
At least an 8dBA reduction at 1 receptor?	

Criterion 3: Desires of Benefited Receptors

	Circle: Yes or No *(If no, explain below & skip to bottom question)*		
Queried benefited receptors?	*Notes:*		
Query Results:	Total number of responses	% of responses *for* a barrier	Is % *for* ≥ 50?

	Criterion 1 (yes or no)	Criterion 2 (yes or no)	Criterion 3 (yes or no)	Date
Reasonableness criteria met?	No	Yes		3/26/2015

Appendix F

Preliminary Plans

OCTOBER 2014

60% PRELIMINARY PLANS

F:\02020\130311\01800\ROADWAY PLANS\130311_TITLE.DGN 10/20/2014 5:01 PM

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PLANS OF PROPOSED STATE HIGHWAY

F.A.P. NO. H003003
STATE PROJECT NO. H.003003

EAST JCT. I-49 TO LA 328

ROUTE: I-10

LAFAYETTE & ST. MARTIN PARISHES

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND LAYOUT MAP
2, 2a-2f	TYPICAL SECTIONS
4-31	PLAN & PROFILE SHEETS
32-38	SURVEY CONTROL LAYOUT
39-47	GEOMETRIC DETAILS
301-370	CROSS SECTIONS

SHEET NO.	STANDARD PLANS	REVISION DATE

TOTAL SHEETS 126
TOTAL SHEETS WITHOUT CROSS SECTIONS 55

BRIDGE SITE 1:
STA. 1152+42.16
STA. 1154+07.16
LENGTH: 165'

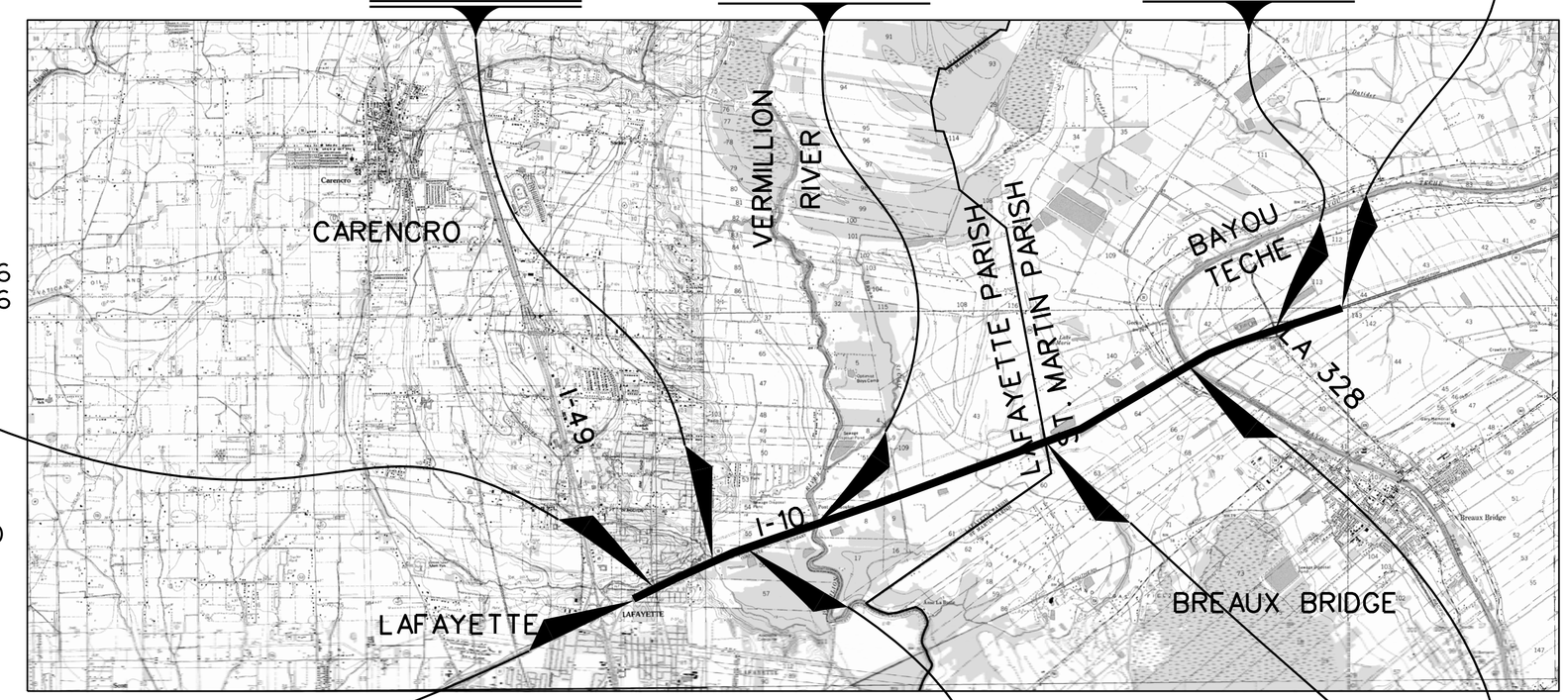
BEGIN PROJECT
C.S. 450-05
LOG MILE 10.10
STA. 114+50.00

BRIDGE SITE 2:
STA. 1182+69.44
STA. 1184+09.44
LENGTH: 140'

BRIDGE SITE 4:
STA. 1231+18.68
STA. 1234+98.68
LENGTH: 380'

BRIDGE SITE 6:
STA. 1465+73.85
STA. 1468+68.85
LENGTH: 295'

END PROJECT
C.S. 450-06
LOG MILE 2.74
STA. 1492+00.00



BRIDGE SITE 3:
STA. 1198+17.12
STA. 1211+79.69
LENGTH: 1362.57'

C.S. 450-05/450-06
LOG MILE 14.00/0.00
STA. 1347+30.00

BRIDGE SITE 5:
STA. 1421+69.03
STA. 1426+14.82
LENGTH: 445.79'

LOCATION OF WORK

CONTROL SECTION	LOG MILE	
	BEGIN	END
450-05	10.10	14.00
450-06	0.00	2.74

MILES B. WILLIAMS
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 23094
LICENSE NO.

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PREPARED BY: _____
SIGMA CONSULTING GROUP, INC.
DATE _____

APPROVED _____
DOTD CHIEF ENGINEER
DATE _____

APPROVED _____
FEDERAL HIGHWAY ADMINISTRATION
DATE _____

TRAFFIC DATA

2015 A.D.T.	=	74,591
2035 A.D.T.	=	110,839
D	=	55.3%
K	=	10.6%
T	=	14.7%

DESIGN SPEED = 70 M.P.H.
ROADWAY CLASS F3

SCHEDULE OF REVISIONS

DATE	REVISION	DATE	RECOMMENDED	DATE	APPROVED

TYPE OF CONSTRUCTION:

DRAINAGE, GRADING, BRIDGES, BASE COURSE & PORTLAND CEMENT CONCRETE PAVING

PRELIMINARY EARTHWORK
CUT= 179,660 C.Y.
FILL= 65,430 C.Y.

DATUM USED : HORZ. NAD 83
VERT. NAVD 88

MAGNETIC VAR : N/A
BEARINGS ARE : GRID

TRANSIT BOOKS : 200-963, 200-964, 200-965, 200-966 & 200-967

LEVEL BOOKS : 201-411

SCALES:
PLAN - 1" = 50'
PROFILE VERT. - 1" = 5'

LAYOUT MAP

SCALE: 1 INCH = 5000 FEET

5000 0 5000 10,000 15,000

NOTE:
THE 2006 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT.

LENGTH OF PROJECT

DESCRIPTION	ALGEBRAIC SUM OF ALL EQUATIONS	GROSS LENGTH	EXCEPTION	BRIDGE LENGTH		ROADWAY LENGTH	
STATION TO STATION	FEET	FEET	FEET	FEET	MILES	FEET	MILES
1141+50 - 1347+30		20,580		2,060	0.390	18,520	3.508
1347+30 - 1492+00		14,470		633	0.120	13,837	2.621
TOTAL LENGTH OF BRIDGES				2,693	0.510		
TOTAL LENGTH OF ROADWAY						32,357	6.129
TOTAL MILES				6.639			

SHEET NUMBER 1
PARISH LAFAYETTE/ST. MARTIN
FEDERAL PROJECT H003003
STATE PROJECT H.003003
DESIGNED WILLIAMS
CHECKED
DETAILED YARBROUGH
CHECKED
DATE OCT. 2014
SHEET 1 OF 1

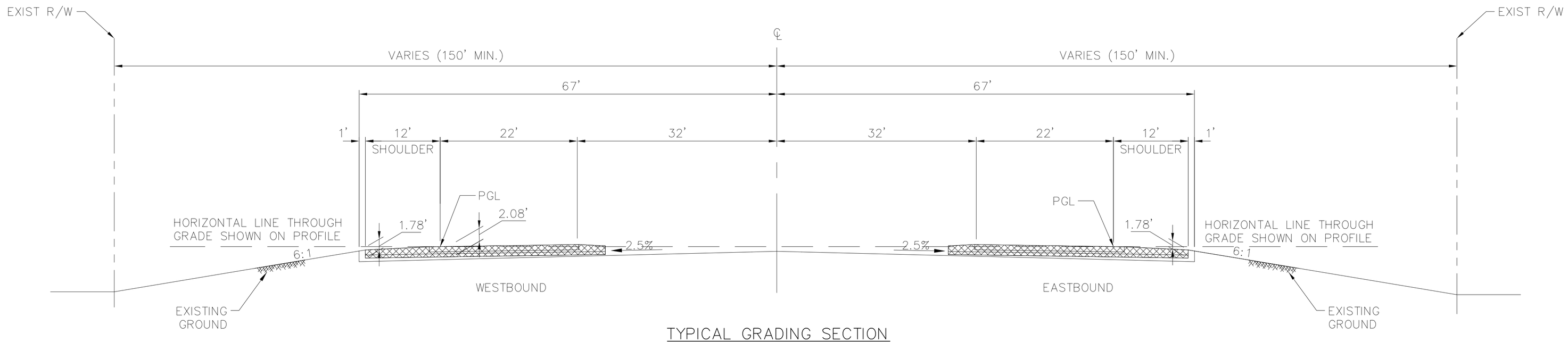
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TITLE SHEET AND LAYOUT MAP
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

OCTOBER 2014

60% PRELIMINARY PLANS



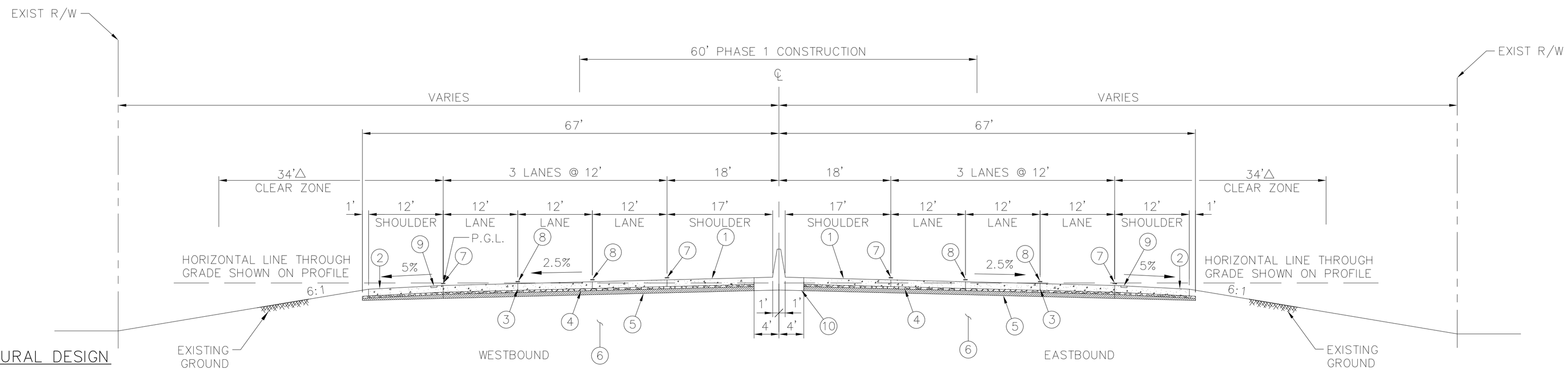
TYPICAL GRADING SECTION

SCALE: 1" =10'

STA. 1141+50.00 TO STA. 1160+10.00

STA. 1223+00.00 TO STA. 1348+70.25

STA. 1378+12.28 TO STA. 1492+00.00



RIGID STRUCTURAL DESIGN

ROADWAY CLASS	=	F-3
DESIGN SPEED	=	70 MPH
2015 CURRENT ADT	=	74,591
MEDIAN ADT	=	92,715
2035 DESIGN ADT	=	110,839
PERFORMANCE PERIOD (YEARS)	=	20
18 KIP ESALS	=	64,944,733
PCC MODULUS OF RUPTURE (PSI)	=	600
k VALUES (PSI/IN)	=	525
CALCULATED THICKNESS (INCHES)	=	12.99
THICKNESS PROVIDED (INCHES)	=	13.00

TYPICAL FINISHED SECTION

SCALE: 1" = 10'

STA. 1141+50.00 TO STA. 1160+10.00

STA. 1223+00.00 TO STA. 1348+70.25

STA. 1378+12.28 TO STA. 1492+00.00

△ TO BE CONSTRUCTED FREE OF OBSTRUCTION

LEGEND

1. 13" PORTLAND CEMENT CONCRETE PAVEMENT
2. 13" PORTLAND CEMENT CONCRETE SHOULDER
3. LONGITUDINAL JOINT
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

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SHEET NUMBER 2

PARISH: LAFAYETTE / ST. MARTIN

CONTROL SECTION

STATE PROJECT: H.003003

DESIGNED: SEPEDA
CHECKED
DETAILED: LEMONS
CHECKED
SERIES NUMBER: OCT 2014 | OF 3

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION
P.C. CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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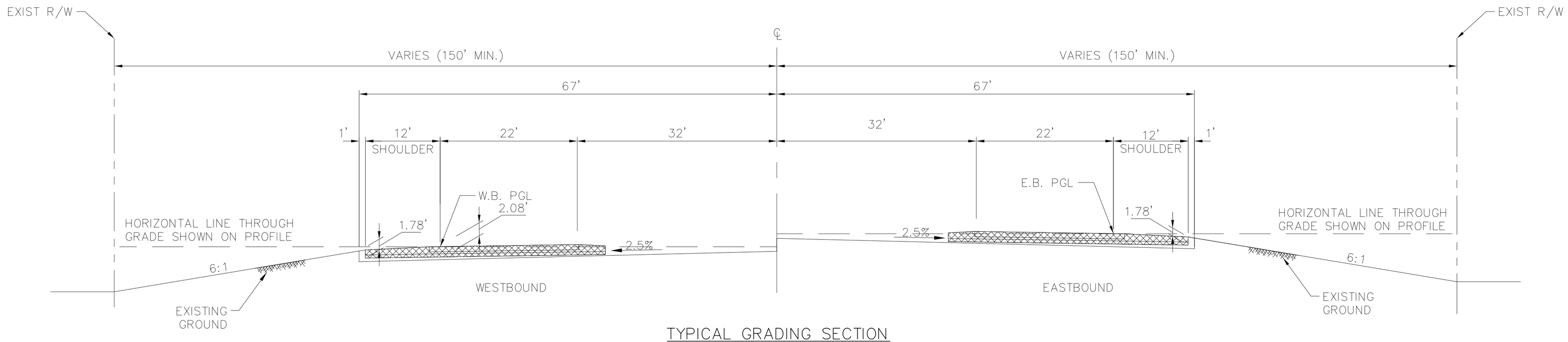
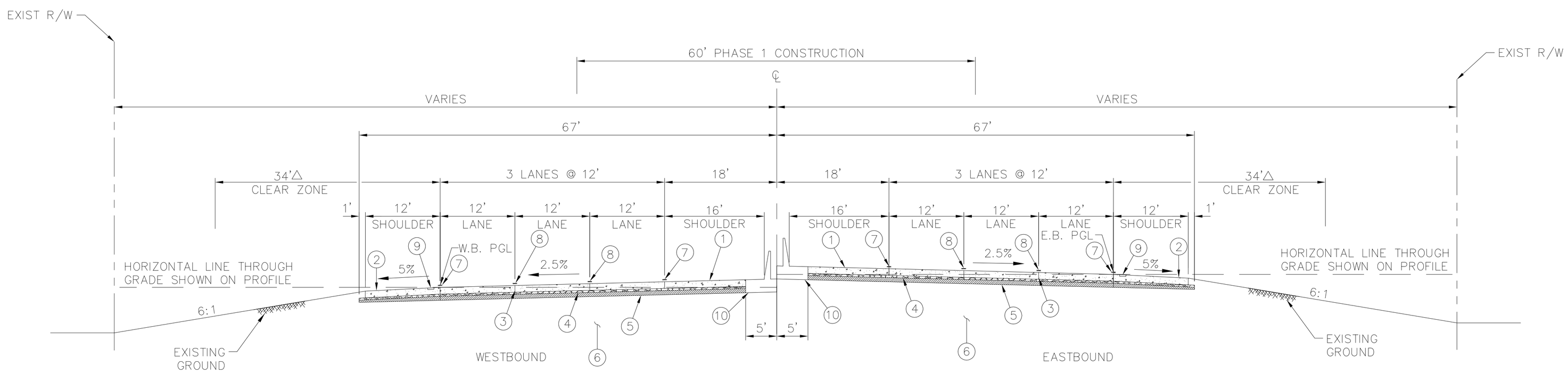
OCTOBER 2014

60% PRELIMINARY PLANS



TYPICAL GRADING SECTION

SCALE: 1" =10'
STA. 1160+10.00 TO STA. 1223+00.00



TYPICAL FINISHED SECTION

SCALE: 1" = 10'
STA. 1160+10.00 TO STA. 1223+00.00

△ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

LEGEND

1. 13" PORTLAND CEMENT CONCRETE PAVEMENT
2. 13" PORTLAND CEMENT CONCRETE SHOULDER
3. LONGITUDINAL JOINT
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

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SHEET NUMBER 2a

PARISH: LAFAYETTE / ST. MARTIN

CONTROL SECTION

STATE PROJECT: H.003003

DESIGNED: SEPEDA
CHECKED
DETAILED: LEMONS
CHECKED
SERIES NUMBER: OCT 2014 2 OF 3

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION
P.C. CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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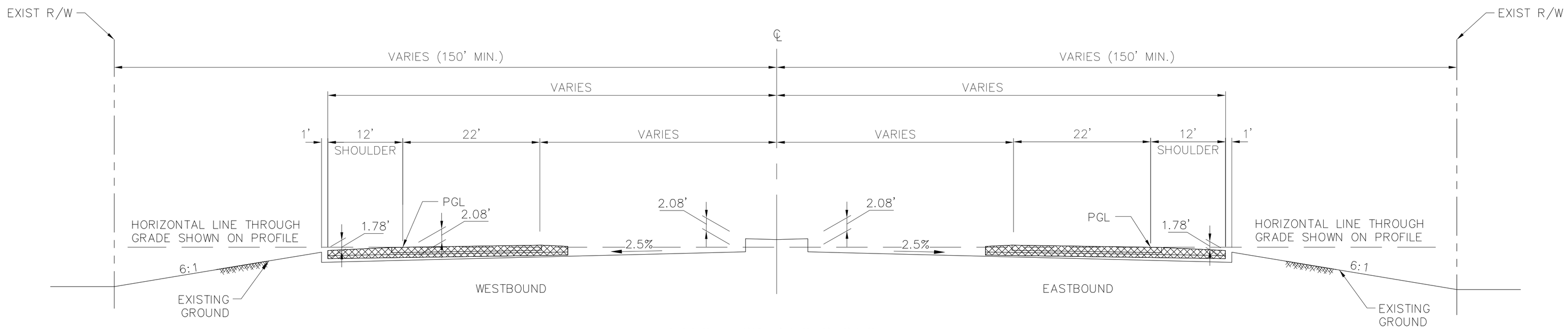
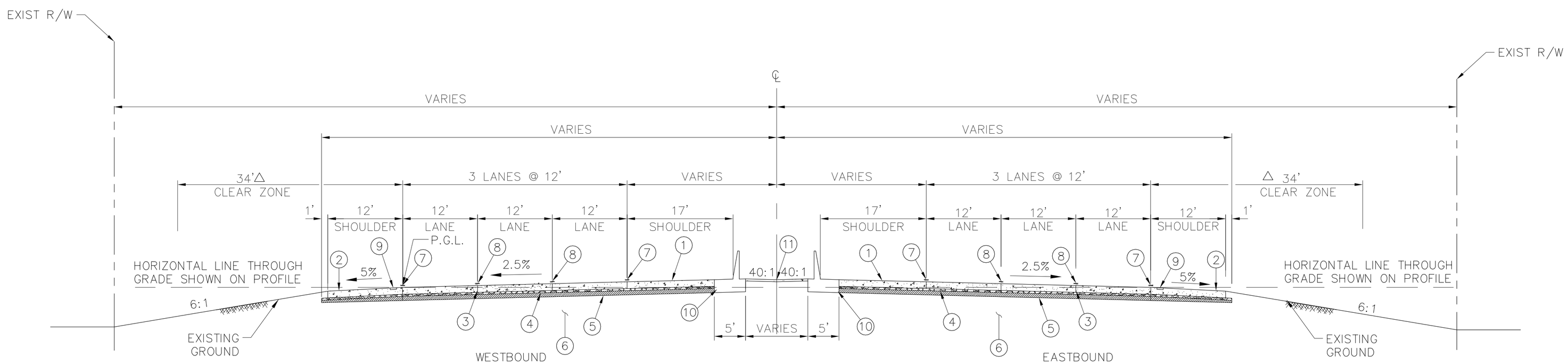
OCTOBER 2014

60% PRELIMINARY PLANS



TYPICAL GRADING SECTION

SCALE: 1" =10'
STA. 1348+70.25 TO STA. 1378+12.28



TYPICAL FINISHED SECTION

SCALE: 1" = 10'
STA. 1348+70.25 TO STA. 1378+12.28

△ TO BE CONSTRUCTED FREE OF OBSTRUCTION

LEGEND

1. 13" PORTLAND CEMENT CONCRETE PAVEMENT
2. 13" PORTLAND CEMENT CONCRETE SHOULDER
3. LONGITUDINAL JOINT
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING
11. INCIDENTAL PAVING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT

SHEET NUMBER 2b

PARISH: ST. MARTIN
CONTROL SECTION:
STATE PROJECT: H.003003

DESIGNED/CHECKED: SEPEDA
DETAILED/CHECKED: LEMONS
SERIES NUMBER: OCT 2014 3 OF 3

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

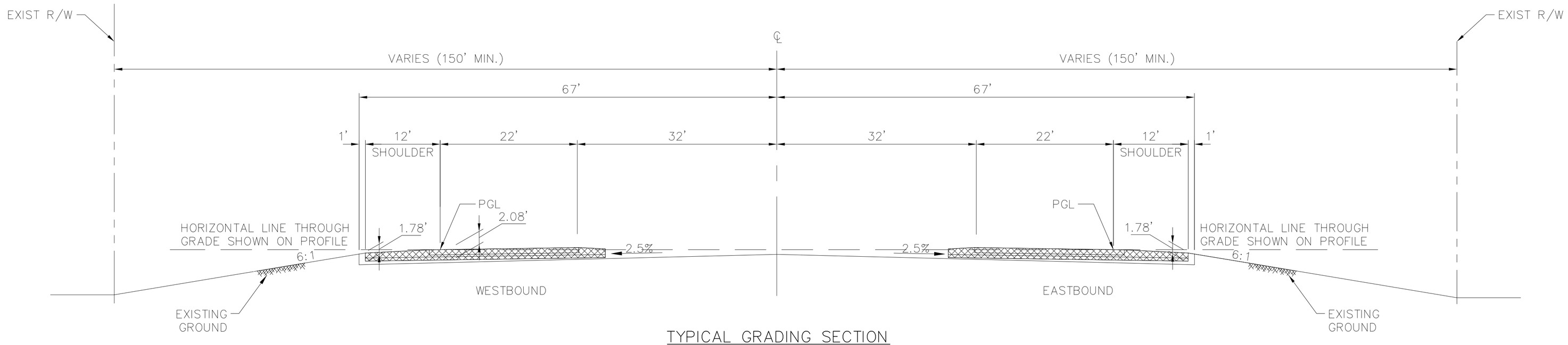
TYPICAL SECTION
P.C. CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

F:\02020130311018001\Typical Section Dwgs\H003003_TS04.dwg [TS04] Oct 20, 2014 - 9:51am

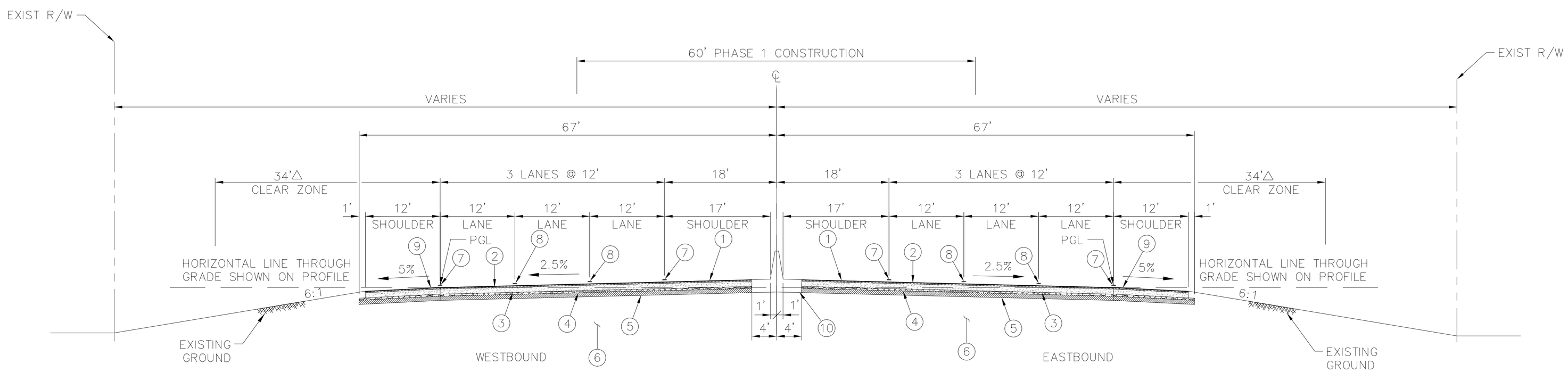
OCTOBER 2014

60% PRELIMINARY PLANS



TYPICAL GRADING SECTION

SCALE: 1" =10'
STA. 1141+50.00 TO STA. 1160+10.00
STA. 1223+00.00 TO STA. 1348+70.25
STA. 1378+12.28 TO STA. 1492+00.00



FLEXIBLE STRUCTURAL DESIGN

ROADWAY CLASS	=	F-3
DESIGN SPEED	=	70 MPH
2015 CURRENT ADT	=	74,591
MEDIAN ADT	=	92,715
2035 DESIGN ADT	=	110,839
PERFORMANCE PERIOD (YEARS)	=	20
18 KIP ESALS	=	43,423,673
SOIL RESILIENT MODULUS (PSI)	=	7,500
STRUCTURAL NUMBER REQUIRED (INCHES)	=	6.90
STRUCTURAL NUMBER PROVIDED (INCHES/LAYER)		
1. THIN ASPHALT CONCRETE (OGFC)	=	0.15
2. SUPERPAVE AC WC, LEVEL 2	=	0.88
3. SUPERPAVE AC BC, LEVEL 2	=	4.40
4. CLASS II BASE COURSE (STONE)	=	0.50
5. CLASS II BASE COURSE (SOIL CEMENT)	=	1.01
STRUCTURAL NUMBER PROVIDED (TOTAL INCHES)	=	6.94

TYPICAL FINISHED SECTION

SCALE: 1" = 10'
STA. 1141+50.00 TO STA. 1160+10.00
STA. 1223+00.00 TO STA. 1348+70.25
STA. 1378+12.28 TO STA. 1492+00.00

△ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

EXCEPTION: 300' AT W.I.M. SCALES
MUST BE PCC PAVEMENT (SEE SHT. 2)

LEGEND

1. 1" THIN ASPHALTIC CONCRETE (OGFC)
2. 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
3. 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

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F:\02020\30311\01800\Typical Section Dwgs\H003003_TS01.dwg [TS02] Oct 20, 2014 - 2:21pm

SHEET NUMBER	2c
PARISH	LAFAYETTE / ST. MARTIN
CONTROL SECTION	
STATE PROJECT	H.003003
DESIGNED/CHECKED	SEPEDA
DETAILED/CHECKED	LEMONS
SERIES NUMBER	OCT 2014 1 OF 3

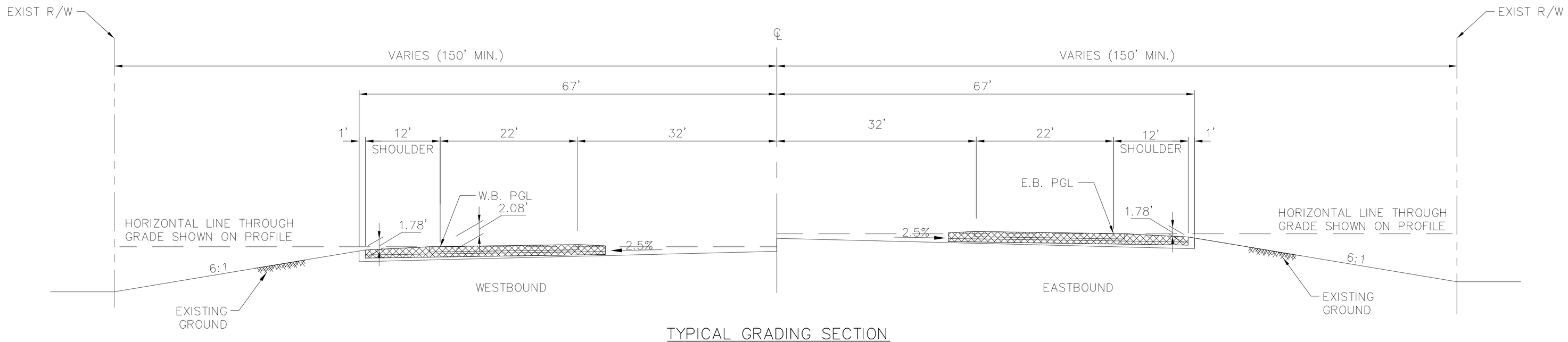
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION
ASPHALT CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

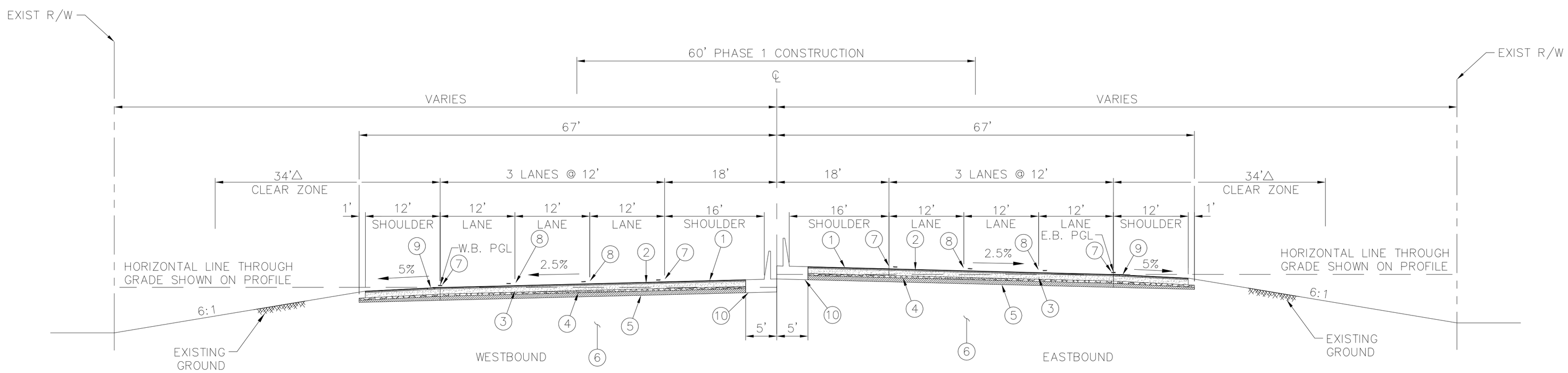
OCTOBER 2014

60% PRELIMINARY PLANS



TYPICAL GRADING SECTION

SCALE: 1" =10'
STA. 1160+10.00 TO STA. 1223+00.00



TYPICAL FINISHED SECTION

SCALE: 1" = 10'
STA. 1160+10.00 TO STA. 1223+00.00

△ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

LEGEND

1. 1" THIN ASPHALTIC CONCRETE (OGFC)
2. 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
3. 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT

F:\02020103031101800\Typical Section Dwgs\H003003_TS03.dwg [TS03 (2)] Oct 20, 2014 - 3:27pm

SHEET NUMBER	2d
PARISH	LAFAYETTE / ST. MARTIN
CONTROL SECTION	
STATE PROJECT	H.003003
DESIGNED/CHECKED	SEPEDA
DETAILED/CHECKED	LEMONS
SERIES NUMBER	OCT 2014 2 OF 3

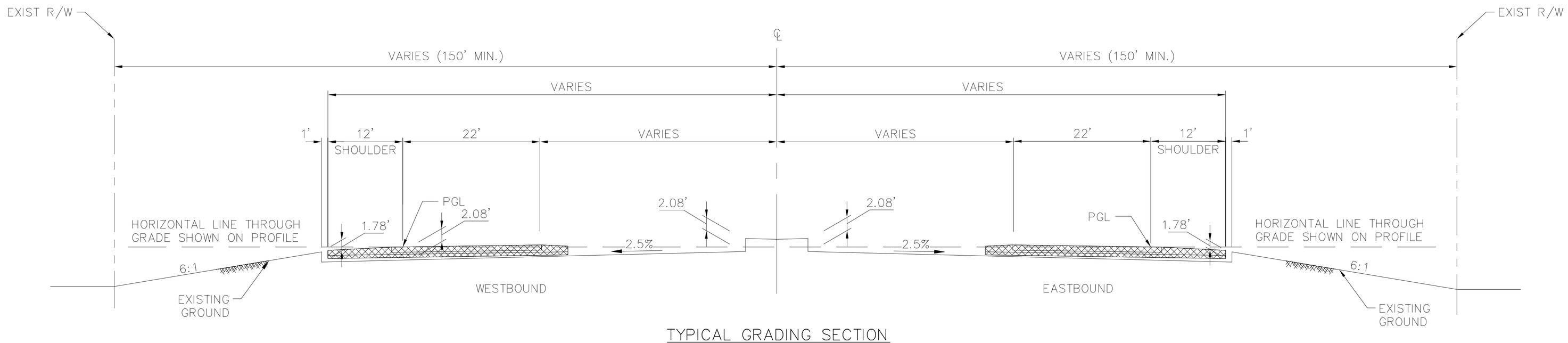
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION
ASPHALT CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

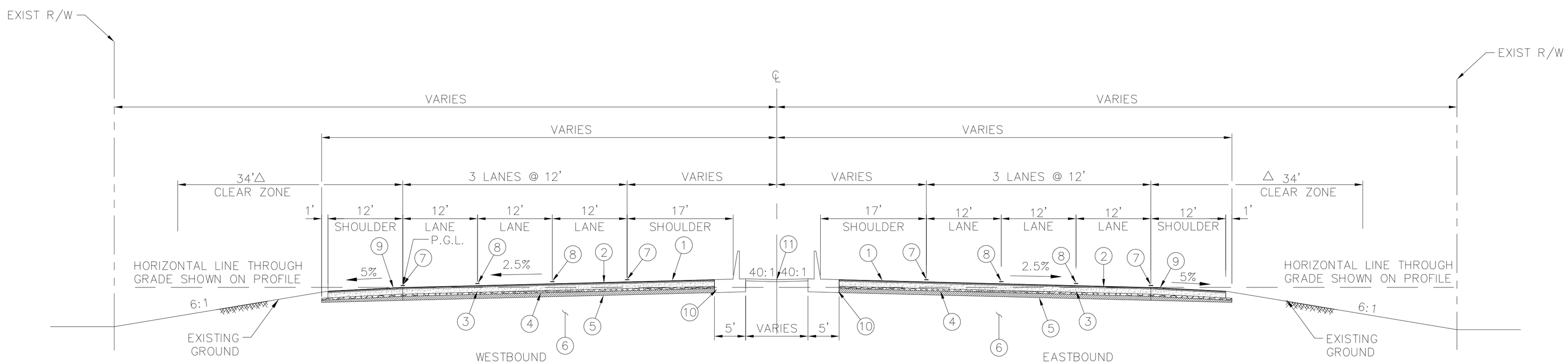
OCTOBER 2014

60% PRELIMINARY PLANS



TYPICAL GRADING SECTION

SCALE: 1" =10'
STA. 1348+70.25 TO STA. 1378+12.28



TYPICAL FINISHED SECTION

SCALE: 1" = 10'
STA. 1348+70.25 TO STA. 1378+12.28

△ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

LEGEND

1. 1" THIN ASPHALTIC CONCRETE (OGFC)
2. 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
3. 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
4. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
5. 8" CLASS II BASE COURSE (SOIL CEMENT)
6. 12" SUBGRADE LAYER (TREATED)
7. PAVEMENT STRIPING
8. PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
9. RUMBLE STRIPS
10. 54" BARRIER ON FOOTING
11. INCIDENTAL PAVING

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

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SHEET NUMBER 2e

PARISH: ST. MARTIN
CONTROL SECTION:
STATE PROJECT: H.003003

DESIGNED/CHECKED: SEPEDA
DETAILED/CHECKED: LEMONS
SERIES NUMBER: OCT 2014
3 OF 3

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION
ASPHALT CONCRETE ALTERNATE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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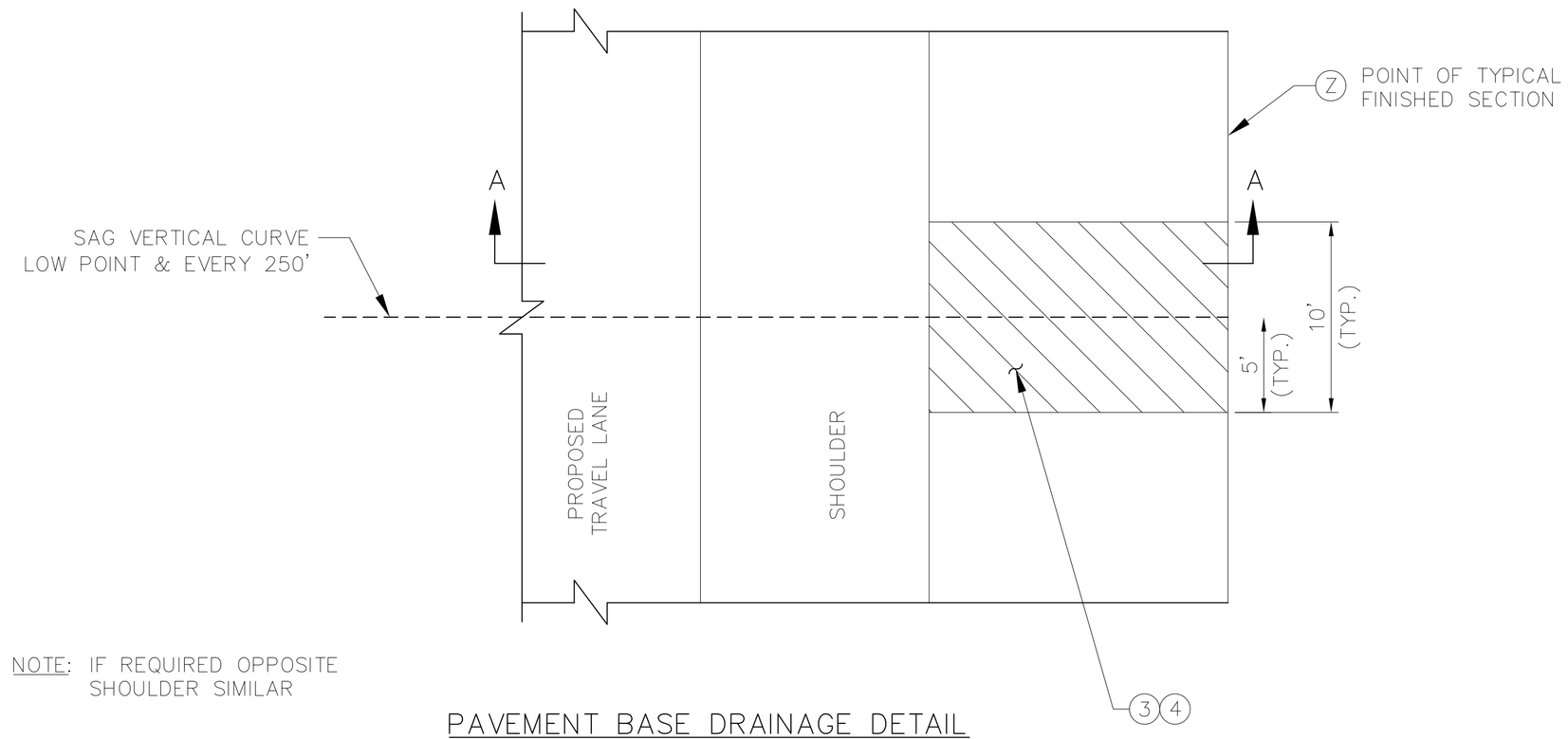
OCTOBER 2014

60% PRELIMINARY PLANS

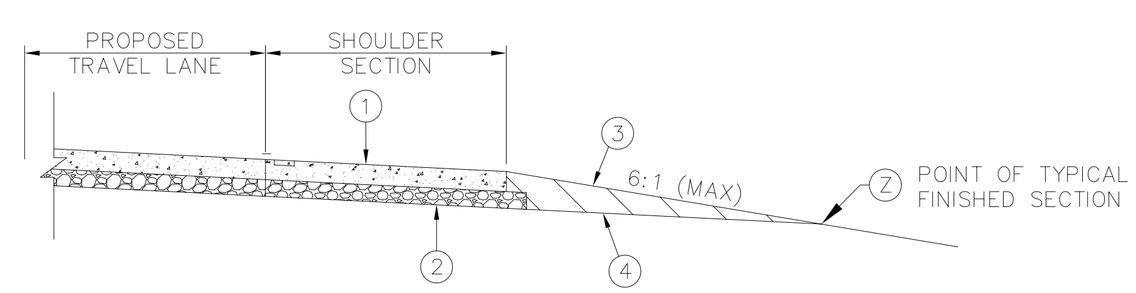


NOTE: IF REQUIRED OPPOSITE SHOULDER SIMILAR

PAVEMENT BASE DRAINAGE DETAIL
EXTENSION OF GEOTEXTILE FABRIC & EMBANKMENT
N.T.S.

NOTES:

1. NON-PLASTIC EMBANKMENT SHALL BE PLACED IN THE SHOULDER, EXTENDED TO THE BOTTOM OF THE CLASS II BASE COURSE (STONE), AND DAYLIGHTED TO THE FORESLOPE.
2. SHALL BE APPLIED IN SAG VERTICAL CURVES AND EVERY 250' FOR A DISTANCE OF APPROXIMATELY 10' ALONG THE LENGTH OF THE JOB AT EACH SITE (GENERALLY, THE OUTSIDE SHOULDER BUT POSSIBLY THE INSIDE SHOULDER IN AREAS OF SUPER ELEVATION).
3. ITEMS CONSIDERED INCIDENTAL TO AND INCLUDED IN THE PAYMENT OF THE CLASS II BASE COURSE.



SECTION "A-A"
N.T.S.

LEGEND

1. 13' PORTLAND CEMENT CONCRETE OR ASHPALTIC CONCRETE SHOULDER
2. 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
3. NON-PLASTIC EMBANKMENT (STONE), THICKNESS VARIES
4. CLASS D GEOTEXTILE FABRIC

NOTE: IF REQUIRED OPPOSITE SHOULDER SIMILAR

GREGORY P. SEPEDA
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 26669
LICENSE NO.

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SHEET NUMBER 2f

PARISH: LAFAYETTE / ST. MARTIN
CONTROL SECTION
STATE PROJECT: H.003003

DESIGNED: SEPEDA
CHECKED
DETAILED: LEMONS
CHECKED
SERIES NUMBER: OCT 2014

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

TYPICAL SECTION
BASE DRAINAGE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

F:\02020113031101\800\Typical Section Dwgs\H003003_TS02.dwg [TS2a] Oct 20, 2014 - 3:03pm

OCT. 2014

60% PRELIMINARY PLANS

LEGEND - EXISTING TOPOGRAPHY

CONTROL POINT
TEMPORARY BENCH MARK
PHOTO TARGET
PAVEMENT EDGE
SHOULDER EDGE
SLOPE TOE
GUARDRAIL TOP
HIGH BANK
WATER'S EDGE
HIGH WATER MARK
BOX CULVERT
PIPE CULVERT
CATCH BASIN TOP (ROUND)
DROP INLET TOP (ROUND)
DRAINAGE MANHOLE TOP
LEVEE TOP
DITCH CENTERLINE
TREE
WOODS EDGE
MARSH LINE
SWAMP LINE
TREE CLUSTER
HEDGE
BUSH
TREE LINE
FENCE LINE
GATE
CATTLE GUARD
PROPERTY CORNER
RIGHT OF WAY MONUMENT
SECTION CORNER
FENCE CORNER
TELEPHONE FIBER OPTIC
TELEVISION CABLE
TELEVISION PEDESTAL
POWER POLE
DEADMAN
POWER LINE
POWER JUNCTION BOX
POWER VAULT
TRANSFORMER
COMBINATION POLE
POWER DROP
PIPELINE
PIPELINE VENT
PIPELINE REGULATOR
GAS WELL
HAY BALES
SILT FENCE
INLET SILT TRAP

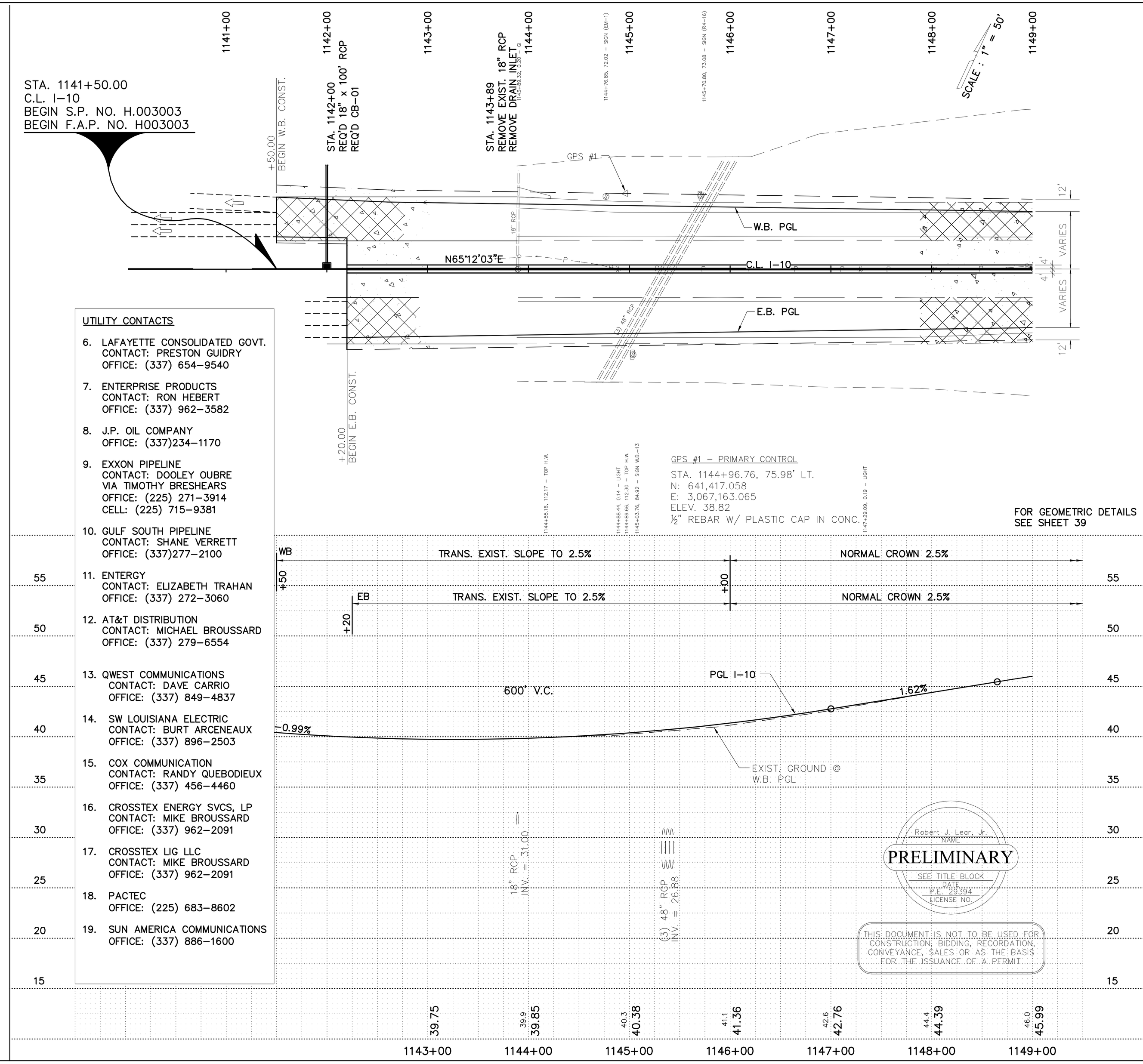
GAS LINE
GAS METER
GAS SERVICE (NO METER)
GAS REGULATOR
GAS RISER
GAS TEST BOX
GAS VALVE
GAS LINE/CASING
GAS VENT
RAILROAD MILEPOST
RAILROAD SIGNAL
RAILROAD SWITCH
RAILROAD TRACK
RR TRAFFIC SIGNAL BOX
SEWER LINE
SEWER MANHOLE TOP
SEWER BLOWOUT VALVE
SEWER CLEANOUT
SEPTIC TANK
SEWER PUMP (PRIVATE)
SEWER TREATMENT (INDIVIDUAL)
FEDERAL AID MARKER
TRAFFIC CONTROLLER BOX
TRAFFIC COUNTER
TRAFFIC SIGNAL
TRAFFIC SIGNAL SUPPORT POLE
LIGHT POLE
LIGHT PEDESTAL
LIGHT POWER VAULT
TRAFFIC SIGN
PARKING METER
TELEPHONE POLE
TELEPHONE LINE
TELEPHONE BOOTH
TELE CROSS CONNECT BOX
TELEPHONE PEDESTAL
TELEPHONE PRESSURE BOX
WATER LINE
WATER LINE/CASING
WATER CLEANOUT
WATER METER
WATER VALVE
WATER VALVE VAULT
WATER WELL
FIRE HYDRANT
BILLBOARD
FUEL PUMP
POST
SIGN POST
STORAGE TANK (ROUND)
GRAVE
MAILBOX
ORNAMENTAL LIGHT
FLAG POLE
GRAVE
DMS SIGN
SIGN POST

GENERAL NOTES:

UTILITIES LOCATIONS SHOWN ON ANY SHEET ARE APPROXIMATE AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. OTHER UTILITIES MAY EXIST IN THE AREA. CONTRACTOR IS REQUIRED TO REACH LOUISIANA ONE CALL IN ACCORDANCE WITH SUBSECTION 105.06 OF THE SPECIFICATIONS. CONTRACTOR SHALL CONTACT CITY, PARISH, AND OTHER LOCAL AUTHORITIES FOR ASSISTANCE IN LOCATING EXISTING UTILITIES PRIOR TO DOING ANY EXCAVATION. CONTRACTOR SHALL CONTACT LADOTD TO LOCATE BURIED TRFC. SIGNAL CABLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF UTILITY LINES. IF NECESSARY, BURIED UTILITY LINES SHALL BE EXPOSED BY THE CONTRACTOR. THE COST OF EXPOSING UTILITY LINES IS INCLUDED IN PAY ITEM 740-01-00100.

UTILITY CONTACTS

1. LEVEL 3 COMMUNICATIONS
   CONTACT: AUTOMATED SERVICE
   EMAIL: level3.networkrelocations@level3.com
2. BOARDWALK LOUISIANA MIDSTREAM
   CONTACT: BOBBY BAILEY
   OFFICE: (337) 384-2740
3. ATMOS ENERGY
   CONTACT: JODY ZIMMERMANN
   EMAIL: jody.zimmermann@atmosenergy.com
   ALT. CONTACT: KERRY MIGUES
   OFFICE: (337) 268-4412
4. CECILIA WATER CORP
   CONTACT: DEBBIE GUIDRY
   OFFICE: (337) 667-6358
   EMAIL: cen30572@centurytel.net
5. CENTURY LINK
   CONTACT: DALE ATKINSON
   OFFICE: (337)849-6703
   EMAIL: dale.atkinson@centurylink.com



UTILITY CONTACTS

6. LAFAYETTE CONSOLIDATED GOVT.
   CONTACT: PRESTON GUIDRY
   OFFICE: (337) 654-9540
7. ENTERPRISE PRODUCTS
   CONTACT: RON HEBERT
   OFFICE: (337) 962-3582
8. J.P. OIL COMPANY
   OFFICE: (337)234-1170
9. EXXON PIPELINE
   CONTACT: DOOLEY OUBRE
   VIA TIMOTHY BRESHEARS
   OFFICE: (225) 271-3914
   CELL: (225) 715-9381
10. GULF SOUTH PIPELINE
    CONTACT: SHANE VERRETT
    OFFICE: (337)277-2100
11. ENTERGY
    CONTACT: ELIZABETH TRAHAN
    OFFICE: (337) 272-3060
12. AT&T DISTRIBUTION
    CONTACT: MICHAEL BROUSSARD
    OFFICE: (337) 279-6554
13. QWEST COMMUNICATIONS
    CONTACT: DAVE CARRIO
    OFFICE: (337) 849-4837
14. SW LOUISIANA ELECTRIC
    CONTACT: BURT ARCENEAUX
    OFFICE: (337) 896-2503
15. COX COMMUNICATION
    CONTACT: RANDY QUEBODIEUX
    OFFICE: (337) 456-4460
16. CROSSTEX ENERGY SVCS, LP
    CONTACT: MIKE BROUSSARD
    OFFICE: (337) 962-2091
17. CROSSTEX LIG LLC
    CONTACT: MIKE BROUSSARD
    OFFICE: (337) 962-2091
18. PACTEC
    OFFICE: (225) 683-8602
19. SUN AMERICA COMMUNICATIONS
    OFFICE: (337) 886-1600

Robert J. Lear, Jr.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

SHEET NUMBER	4
PARISH	LAFAYETTE
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 1 OF 28

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

PLAN AND PROFILE

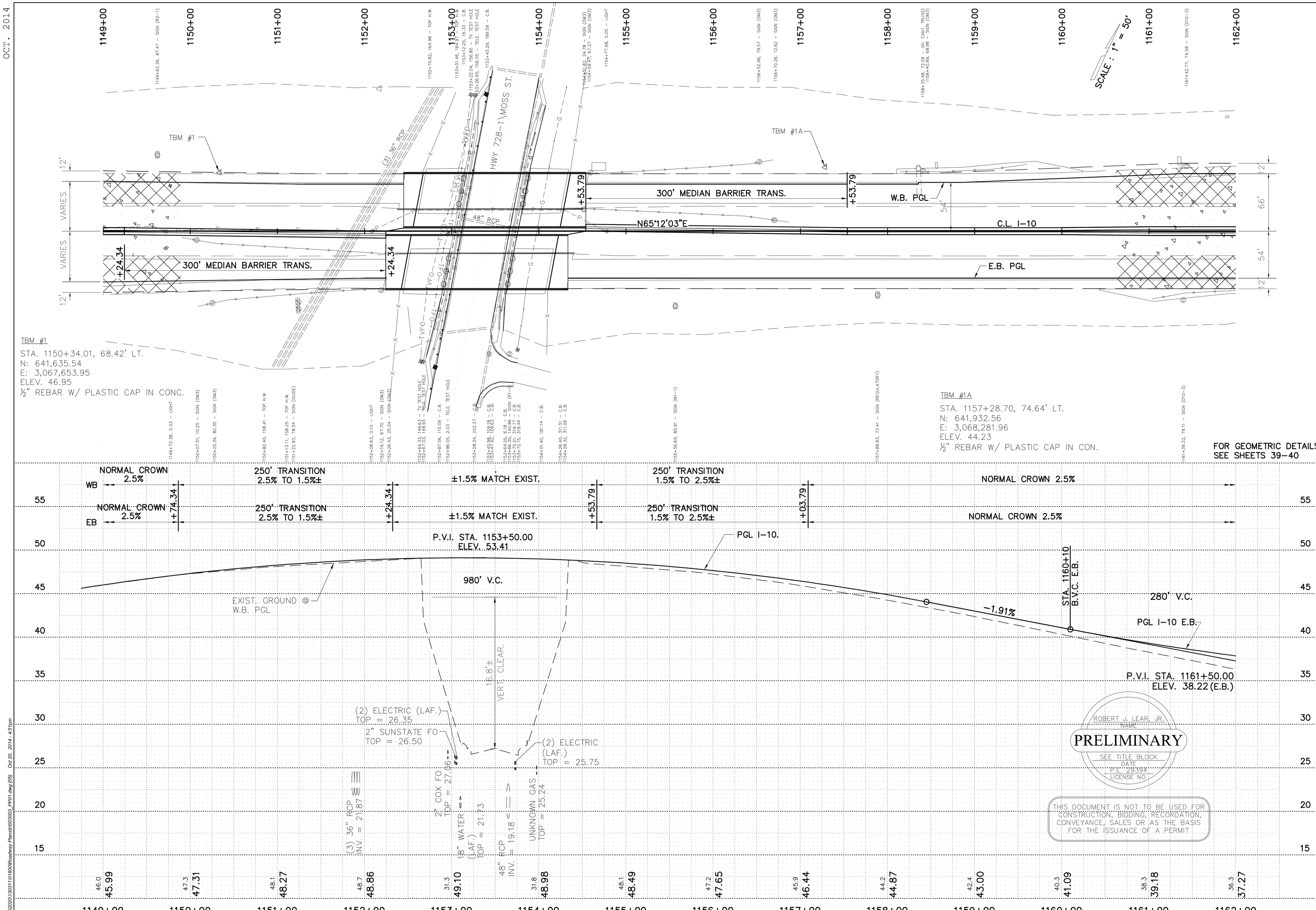
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

F:\02020\13031\01\800\Roadway Plans\H003003_PP01.dwg [04] Oct 20, 2014 - 4:51pm

OCT. 2014

60% PRELIMINARY PLANS



PRELIMINARY

ROBERT J. LEAR, JR.
NAME
SEE TITLE BLOCK
DATE
P.E. 29994
LICENSE NO.

THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

SHEET NUMBER	5
PARISH	LAFAYETTE
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 2 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE

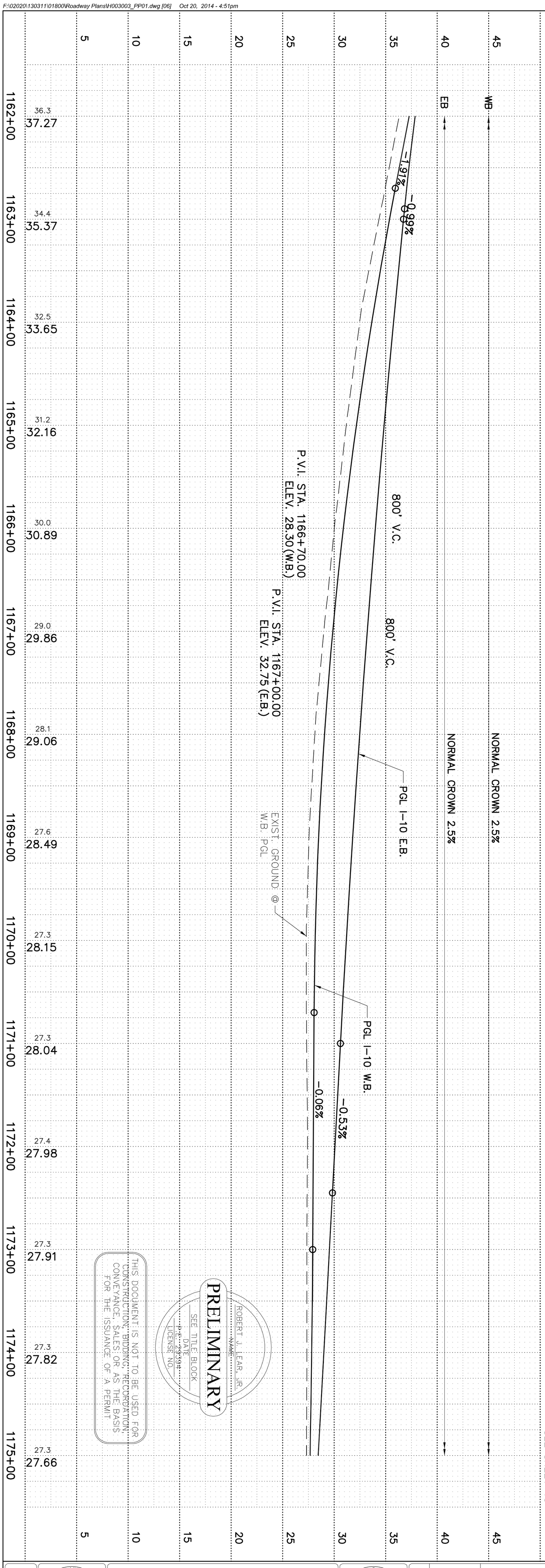
I-10: EAST JCT. I-49 TO LA 328

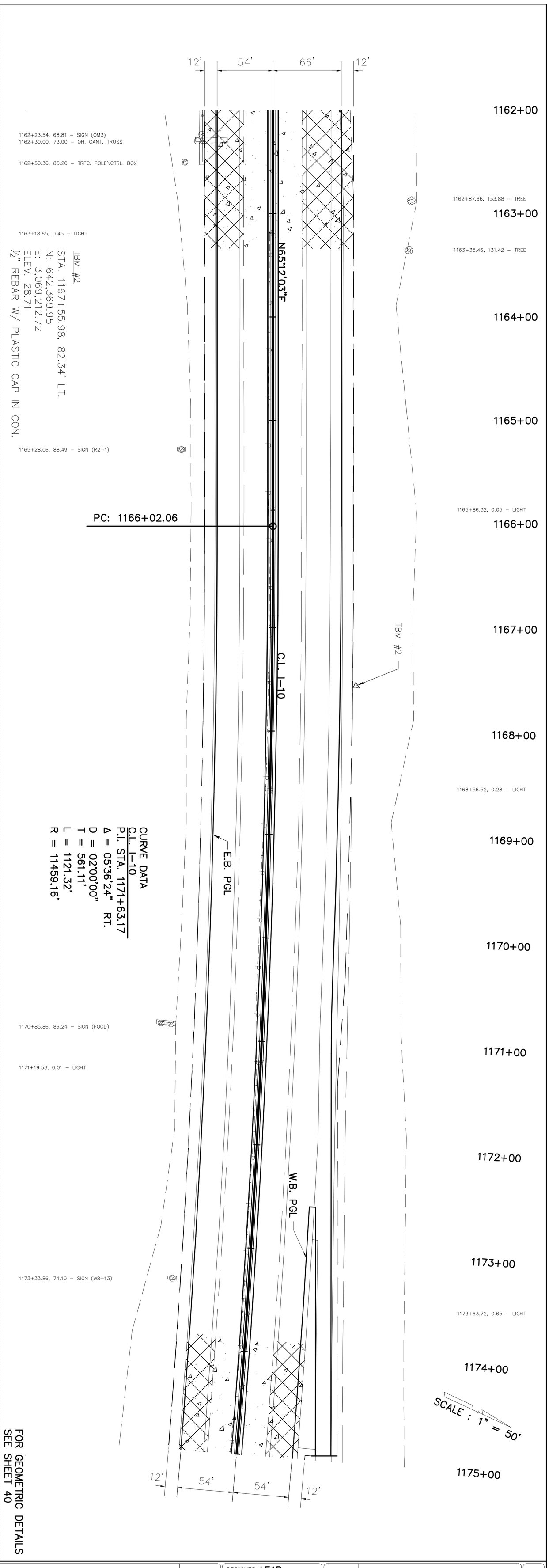
STATE OF LOUISIANA

DOTD DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SIGMA CONSULTING GROUP, INC.

F:\022201\30311\01\800\Roadway Plans\H003003_PP01.dwg [05] Oct 20, 2014 - 4:51pm





FOR GEOMETRIC DETAILS SEE SHEET 40

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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

SEE TITLE BLOCK
DATE
P.E. 29391
LICENSE NO.

SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

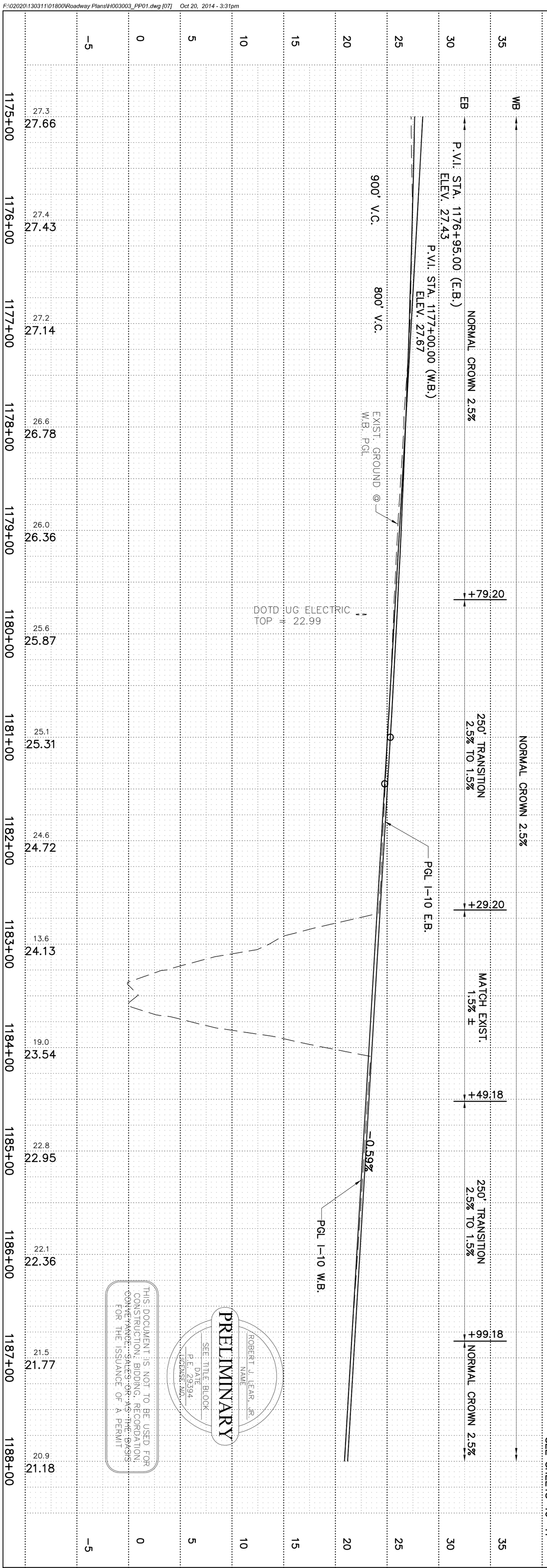
I-10: EAST JCT. I-49 TO LA 328

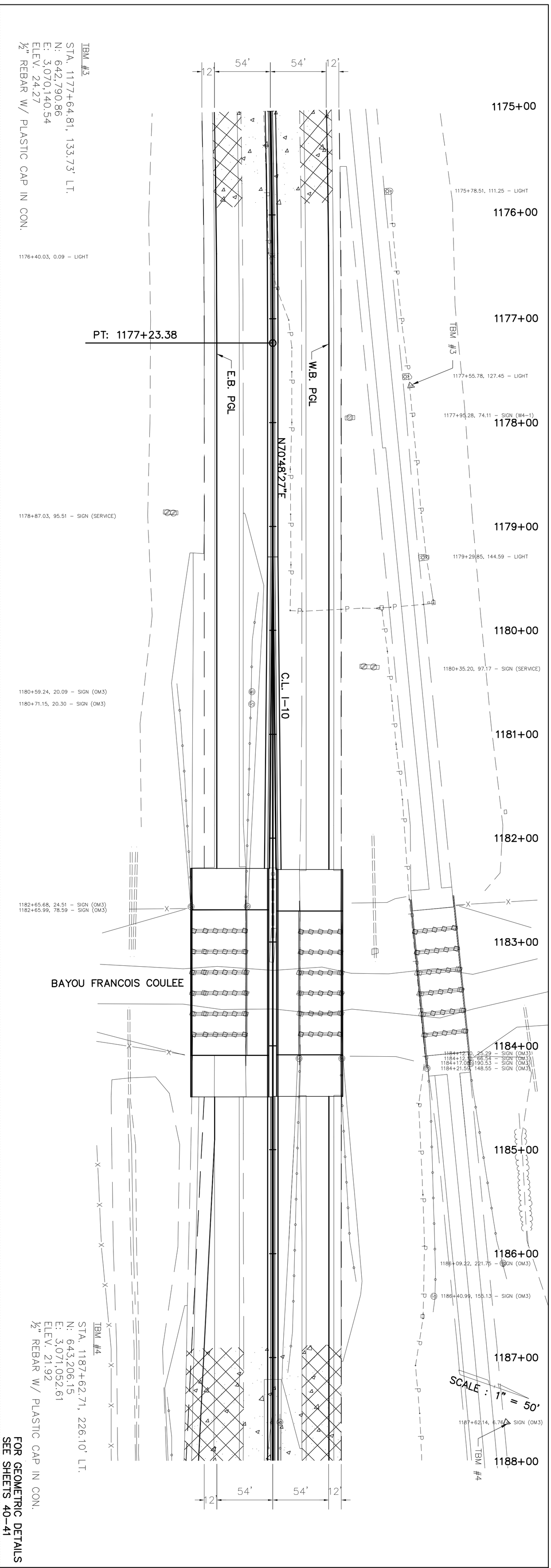
STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 3 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 6





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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

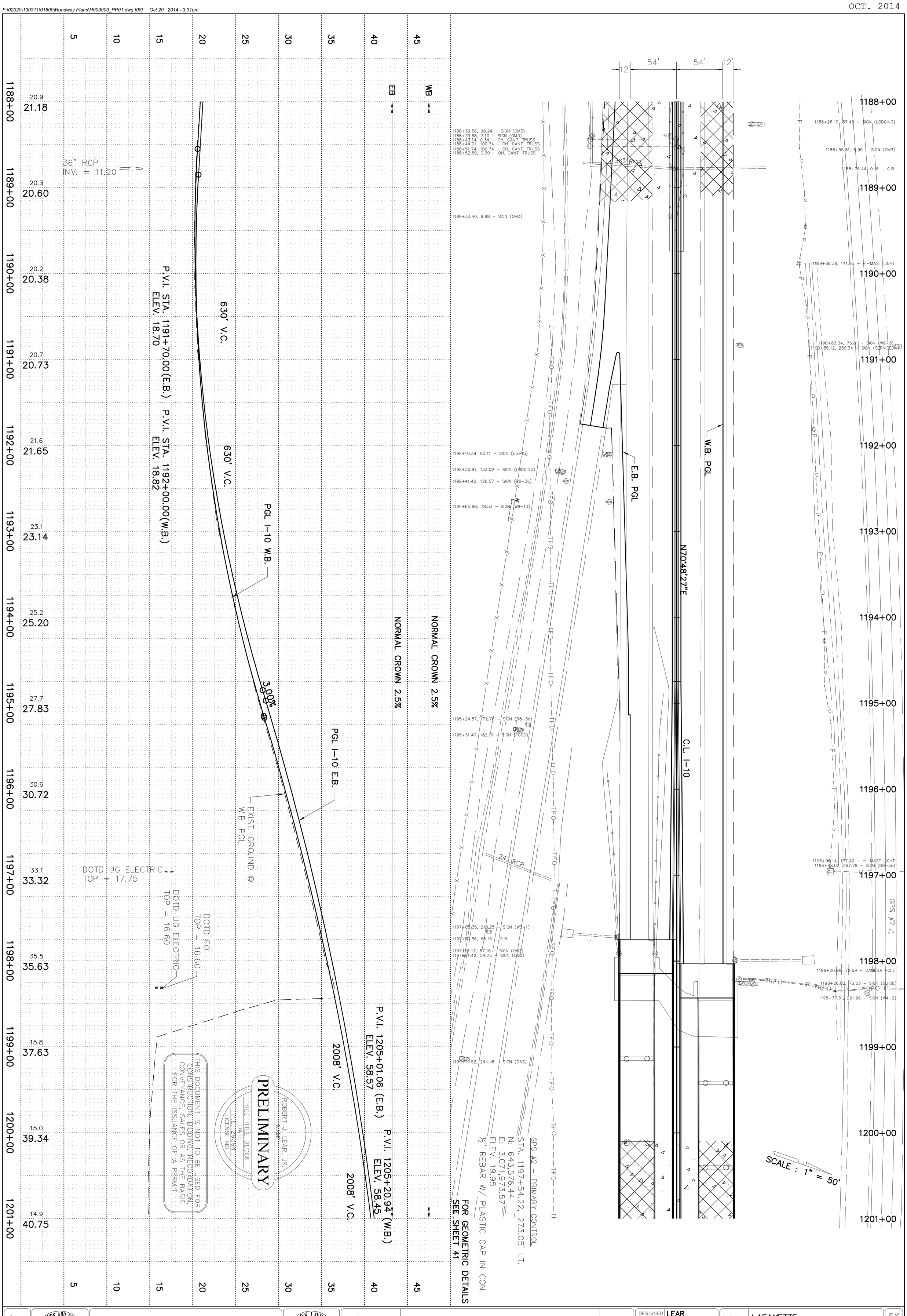
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 4 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 7

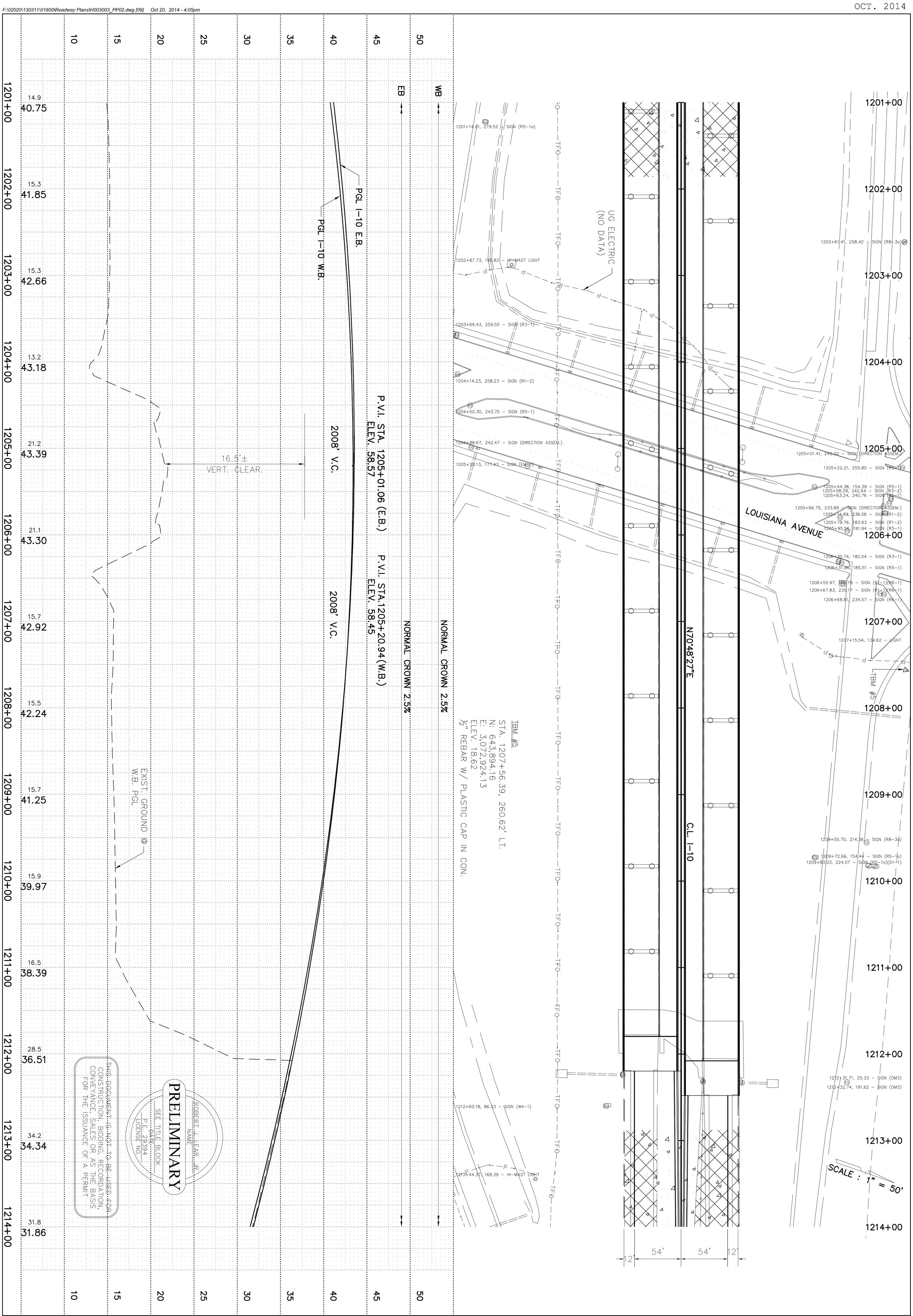


PLAN AND PROFILE			
I-10: EAST JCT. I-49 TO LA 328			

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

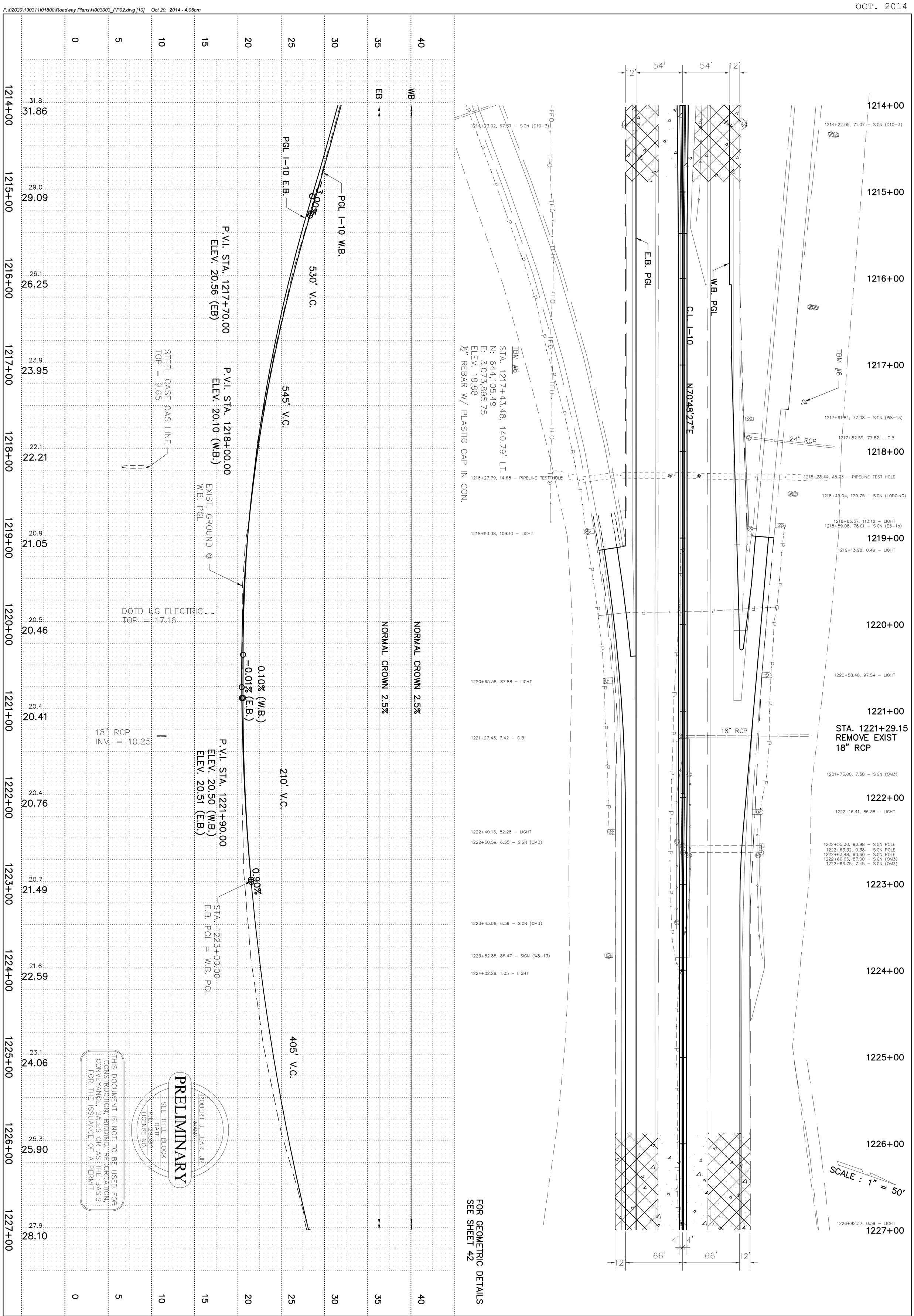
DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 5 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 8



SIGMA GROUP, INC.	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD	PLAN AND PROFILE	STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE		DESIGNED LEAR	PARISH LAFAYETTE	SHEET NUMBER 9
		I-10: EAST JCT. I-49 TO LA 328			CHECKED		
					DETAILED AMEDEE	CONTROL SECTION 450-05	
					CHECKED		
					SERIES NUMBER OCT. 2014 6 OF 28	STATE PROJECT H.003003	

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY



SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

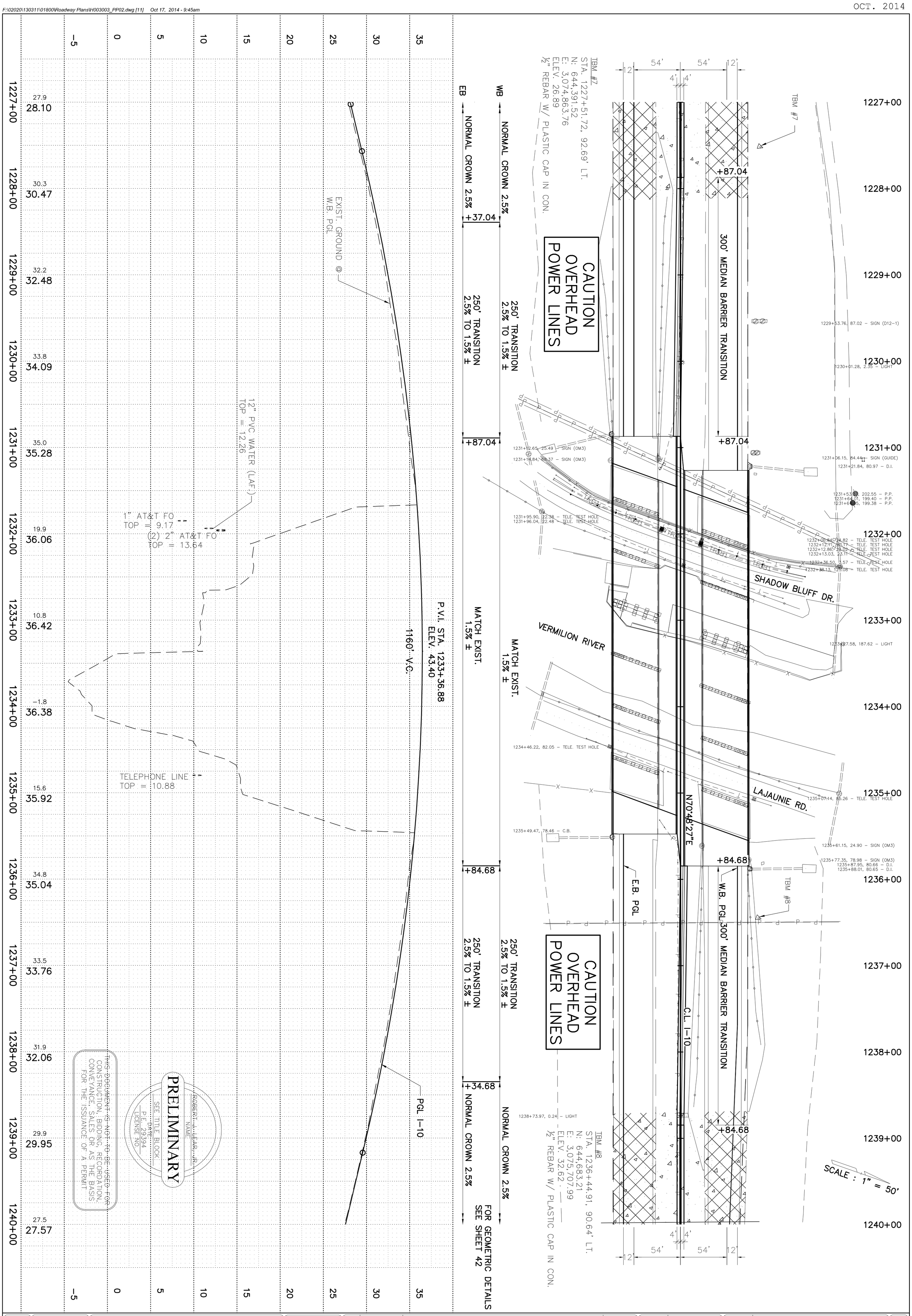
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 7 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 10



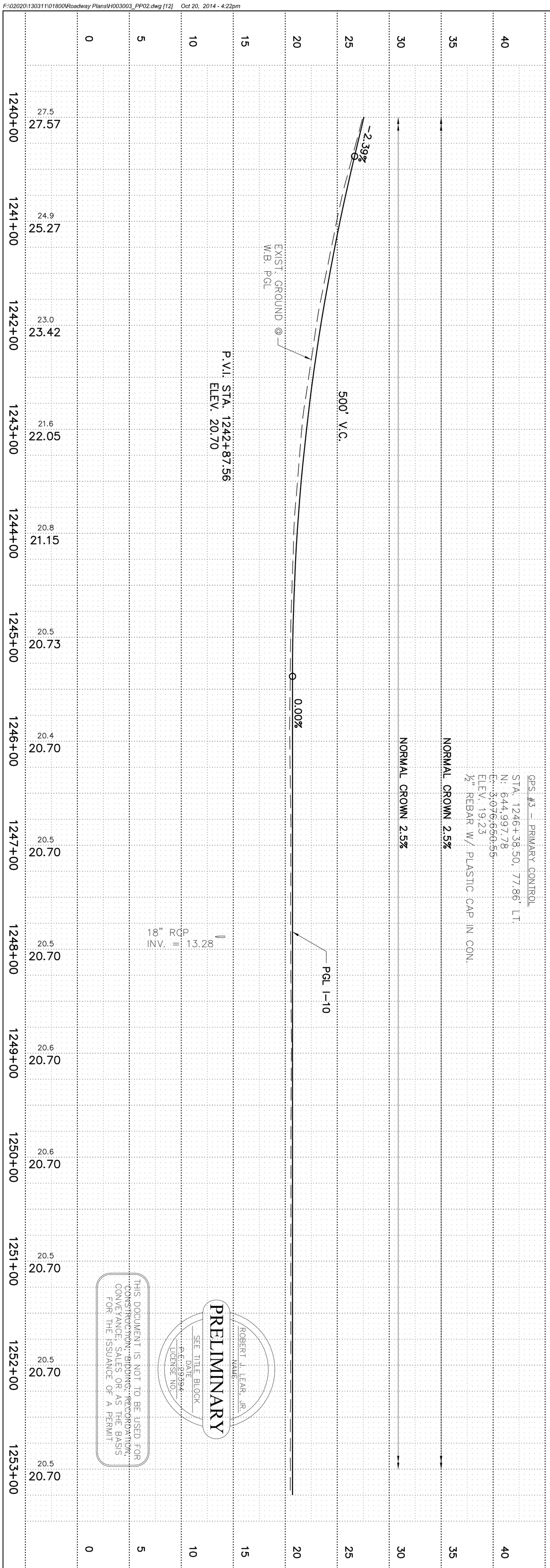
PLAN AND PROFILE

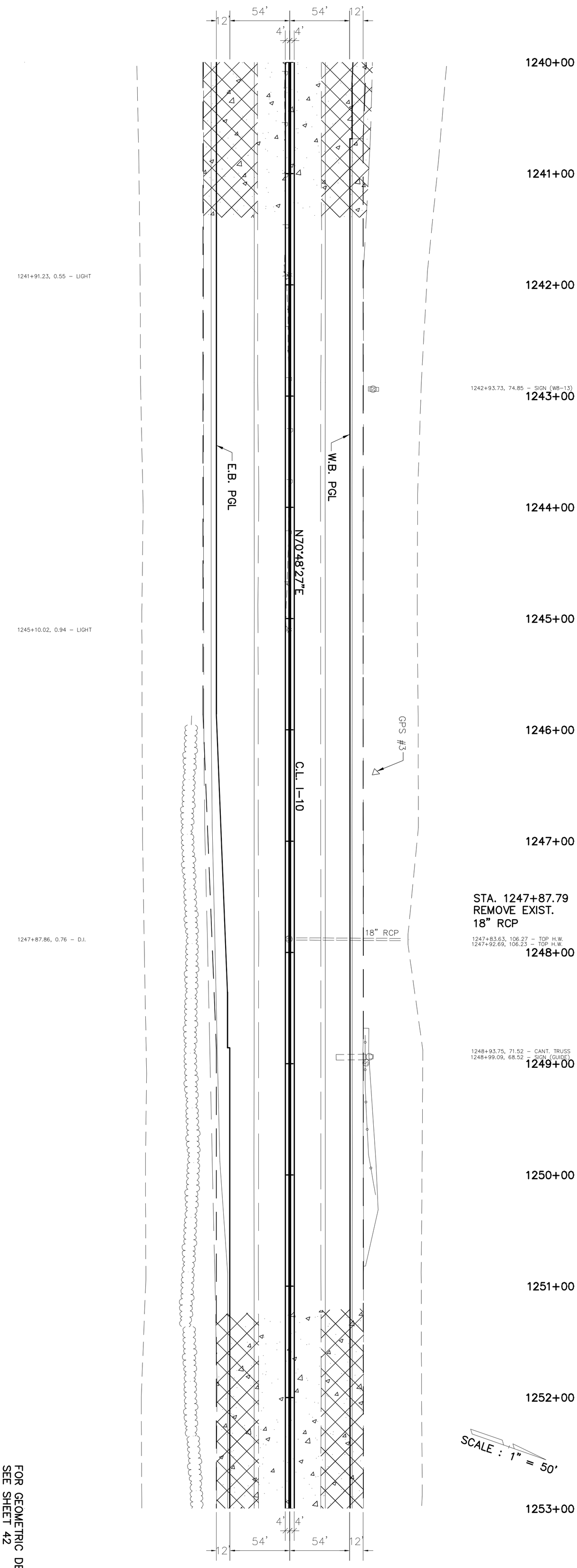
I-10: EAST JCT. I-49 TO LA 328

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED	LEAR	PARISH	LAFAYETTE
CHECKED			
DETAILED	AMEDEE	CONTROL SECTION	450-05
CHECKED			
SERIES NUMBER	OCT. 2014 8 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 11





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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

SEE TITLE BLOCK
DATE

P.E. 29394
LICENSE NO.

SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

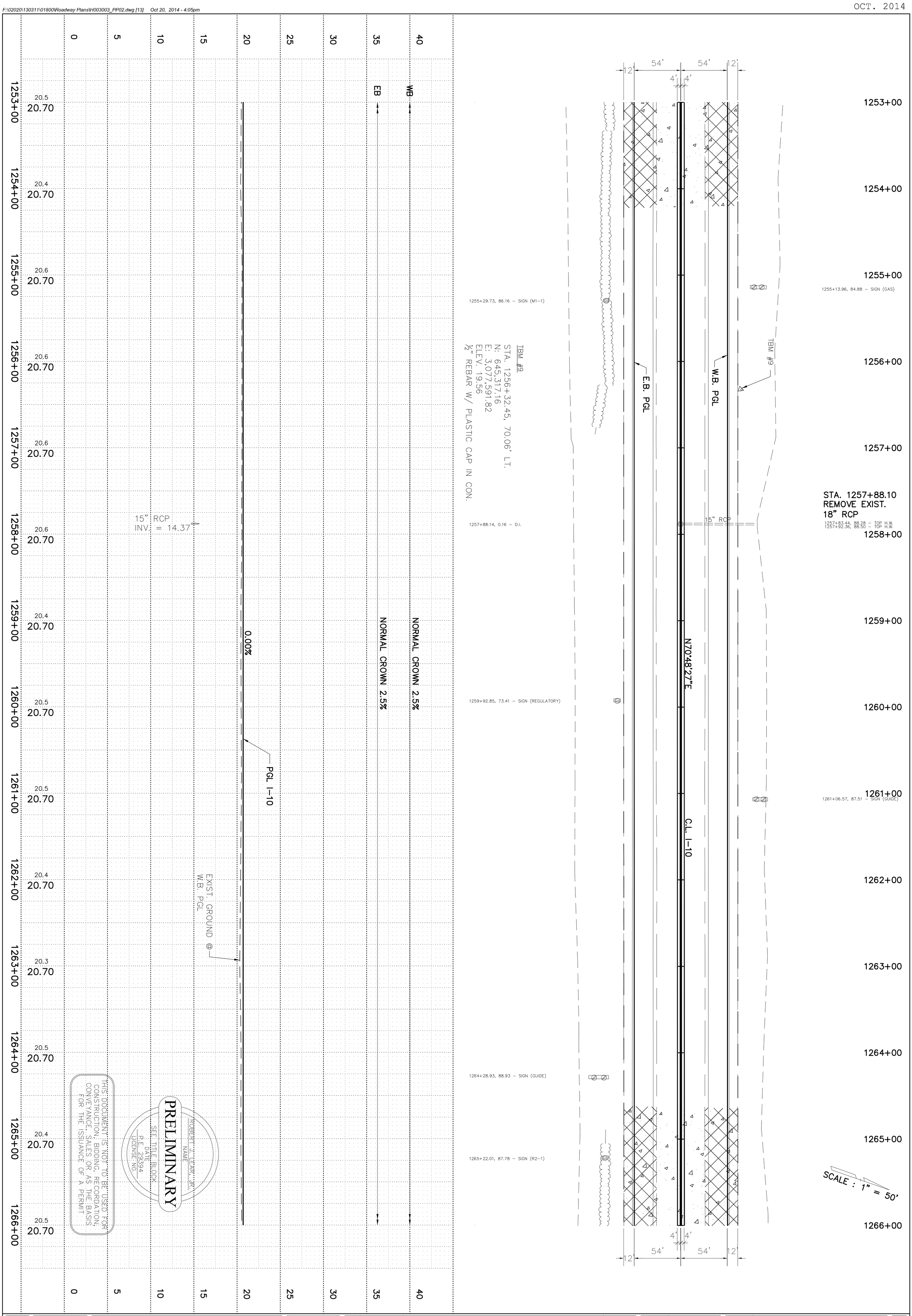
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 9 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 12



SIGMA ENGINEERING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

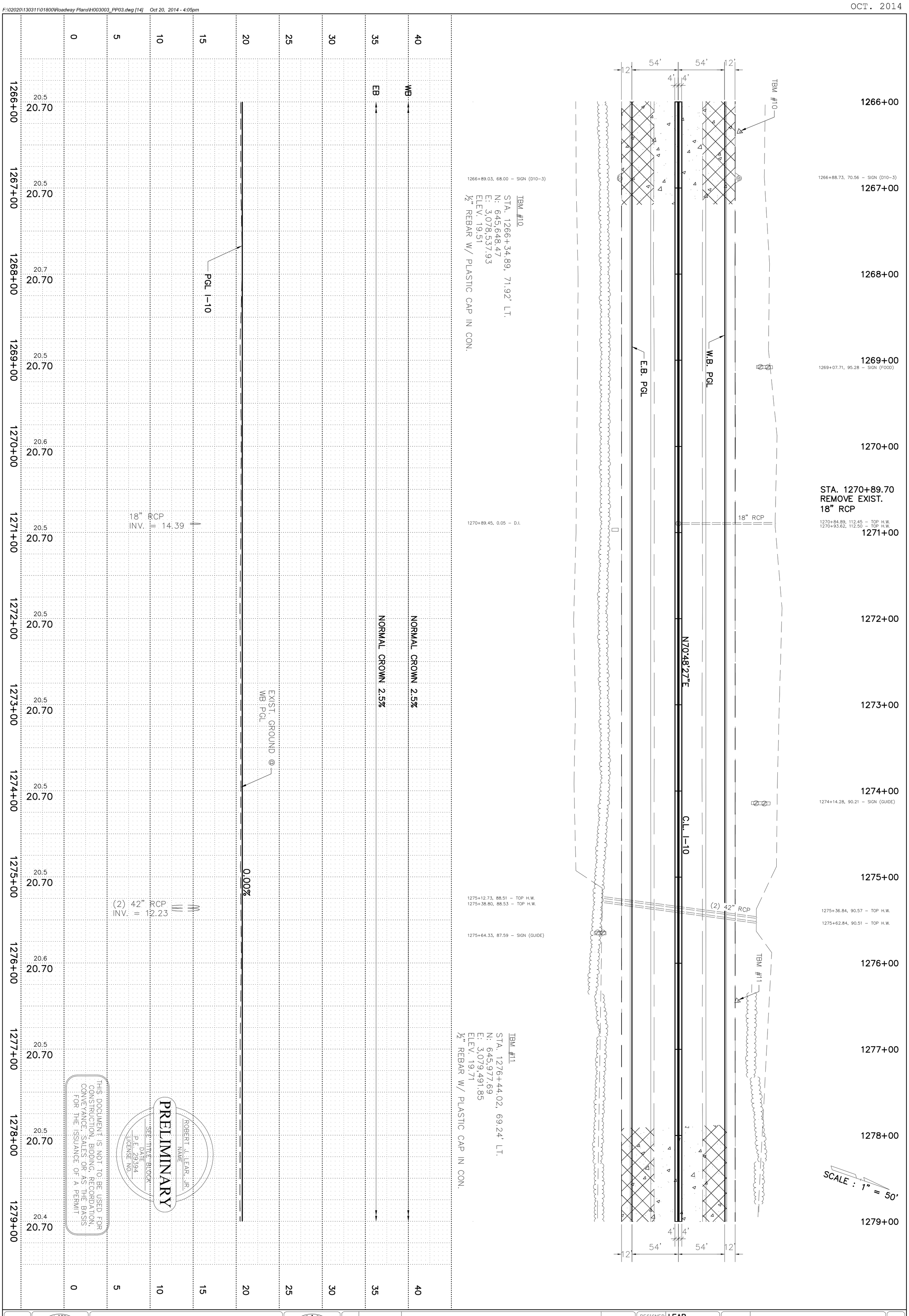
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 10 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 13



SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

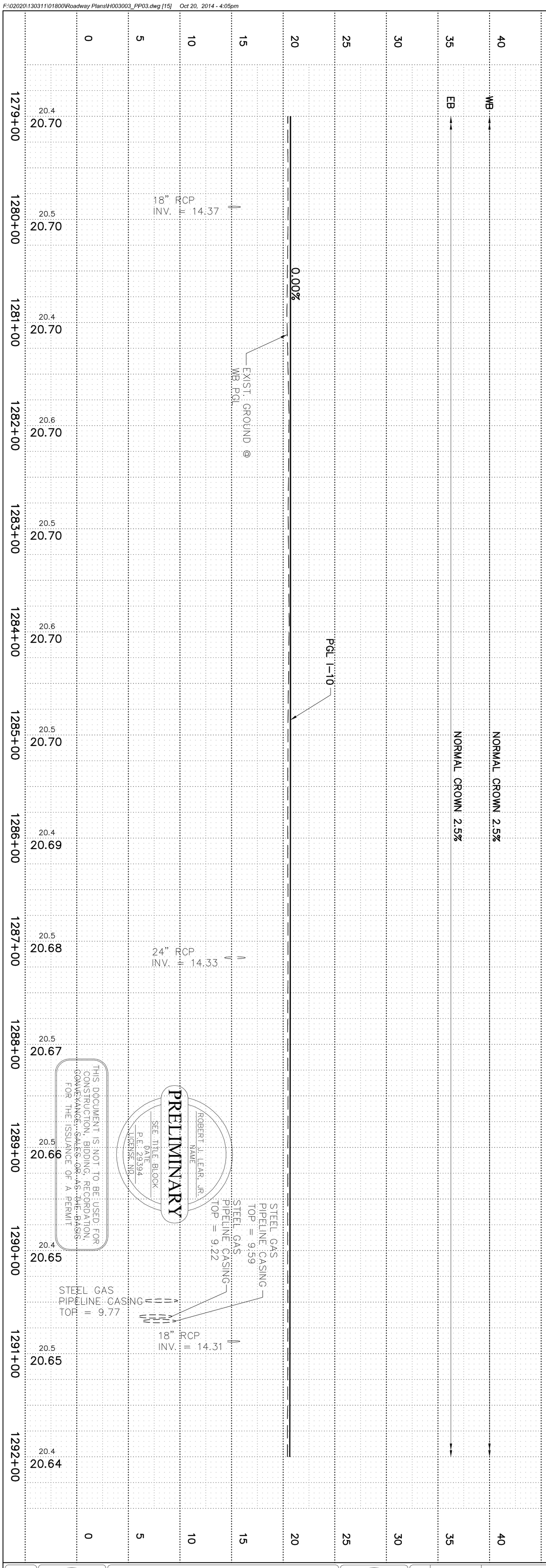
I–10: EAST JCT. I–49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450–05
SERIES NUMBER	OCT. 2014 11 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 14



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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

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DATE

P.E. 29394
LICENSE NO.

1279+87.65, 0.39 – D.I.

1286+85.51, 85.92 – TOP H.W.
1286+98.62, 85.90 – TOP H.W.

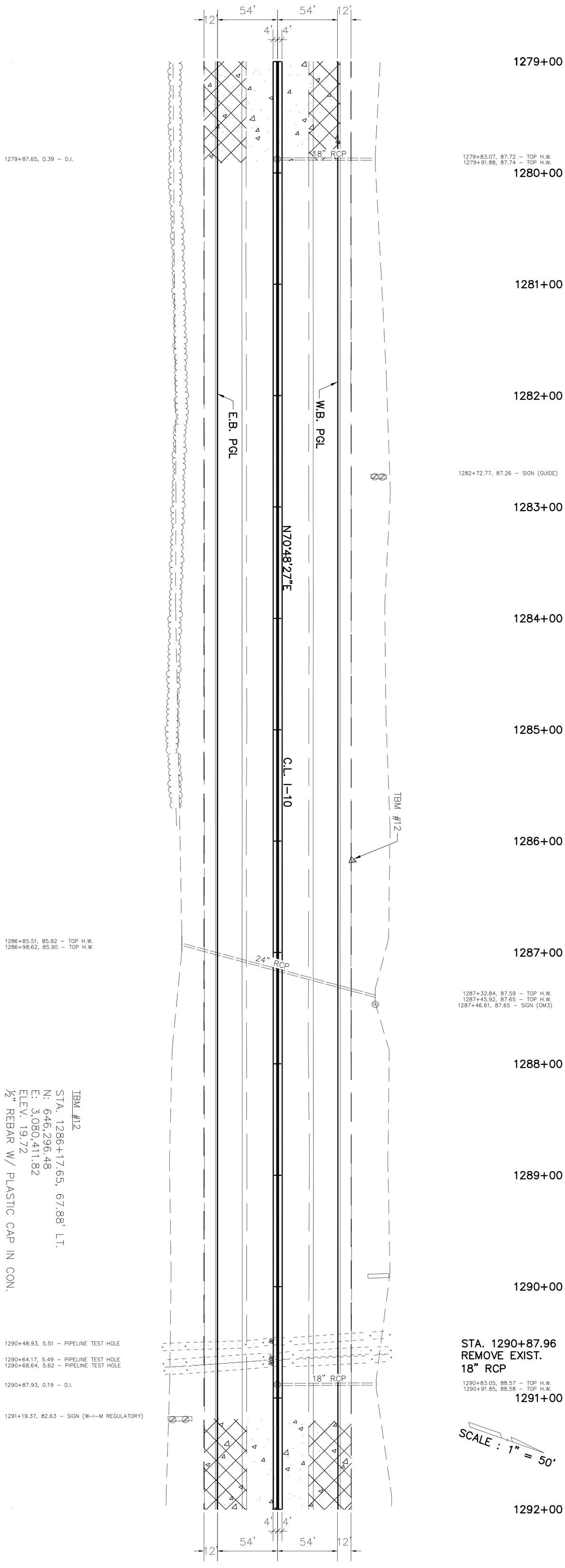
TBM #12
STA. 1286+17.65, 67.88' LT.
N: 646,296.48
E: 3,080,411.82
ELEV. 19.72
½" REBAR W/ PLASTIC CAP IN CON.

1290+48.93, 5.51 – PIPELINE TEST HOLE

1290+64.17, 5.49 – PIPELINE TEST HOLE
1290+68.64, 5.62 – PIPELINE TEST HOLE

1290+87.93, 0.19 – D.I.

1291+19.37, 82.63 – SIGN (W-I-M REGULATORY)



SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

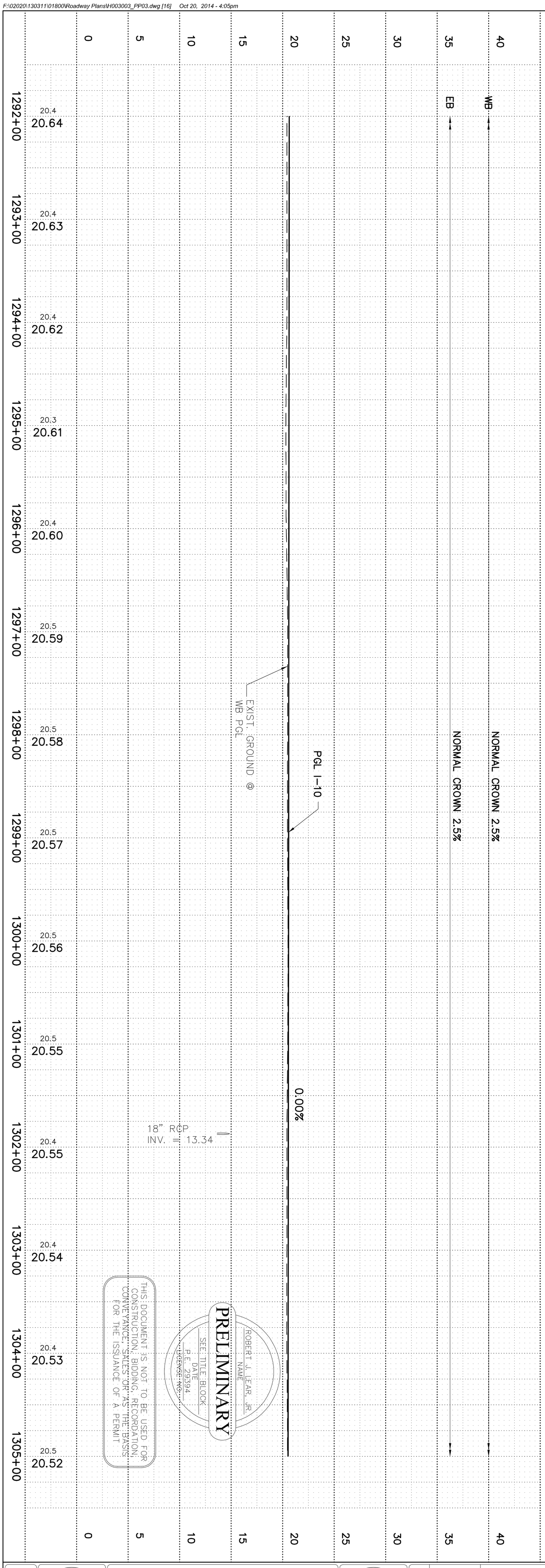
I-10: EAST JCT. I-49 TO LA 328

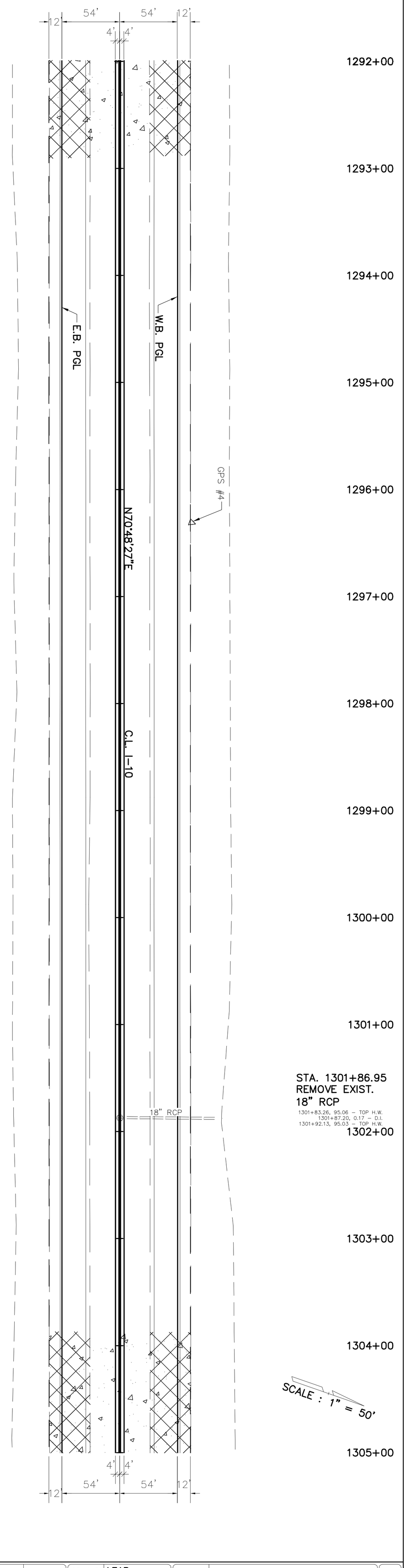
STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 12 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 15





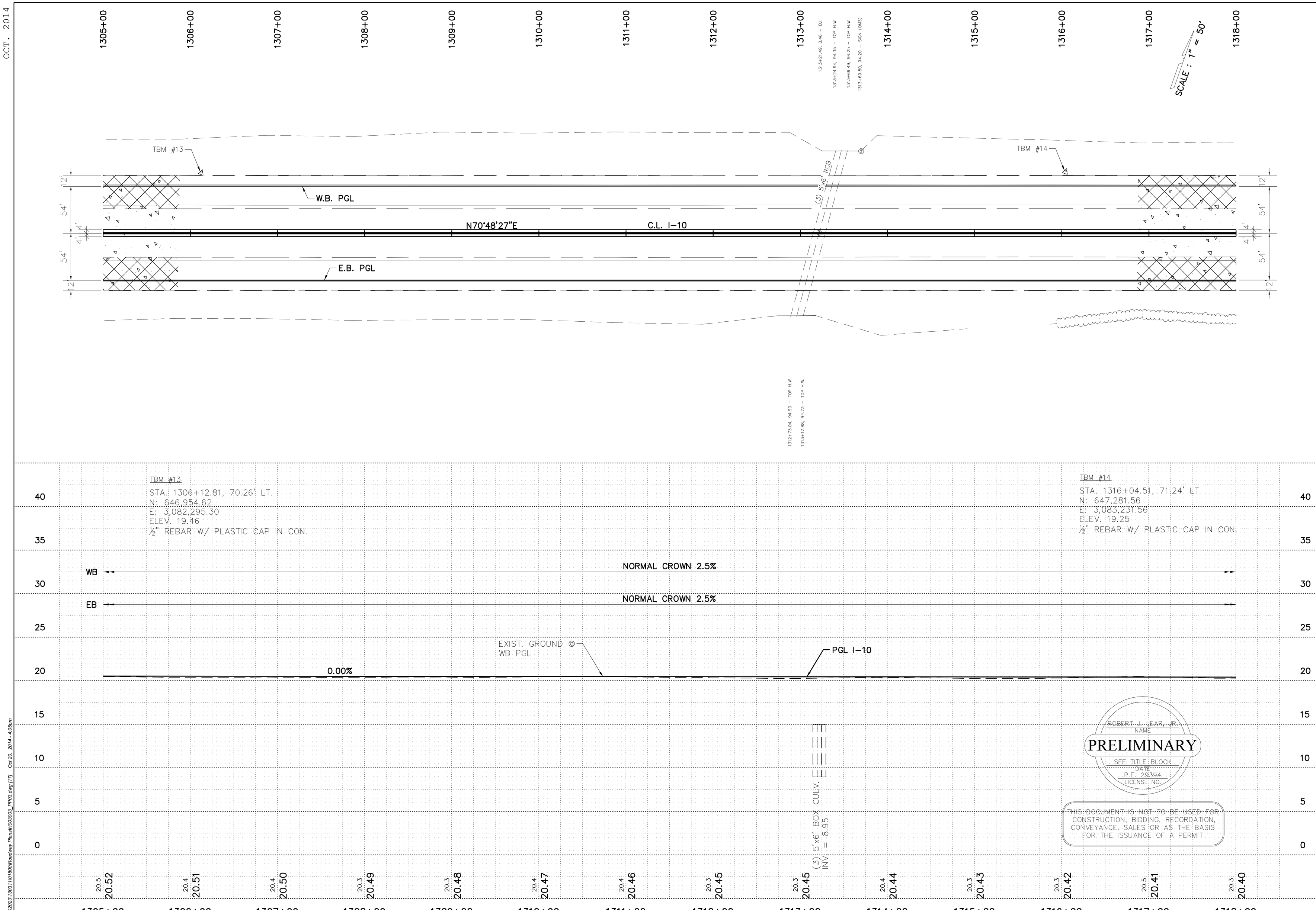
SIGMA CONSULTING GROUP, INC.	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD	PLAN AND PROFILE	STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE	DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
				DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
		I-10: EAST JCT. I-49 TO LA 328		SERIES NUMBER	OCT. 2014 13 OF 28	STATE PROJECT	H.003003

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

SHEET NUMBER 16

OCT. 2014

60% PRELIMINARY PLANS



ROBERT J. LEAR, JR.
NAME
PRELIMINARY
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DATE
P.E. 29394
LICENSE NO.

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F:\022201\30311\01\800\Roadway Plans\H003003_PP03.dwg [17] Oct 20, 2014 - 4:05pm

SHEET NUMBER	17
PARISH	LAFAYETTE
CONTROL SECTION	450–05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 14 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA

PLAN AND PROFILE

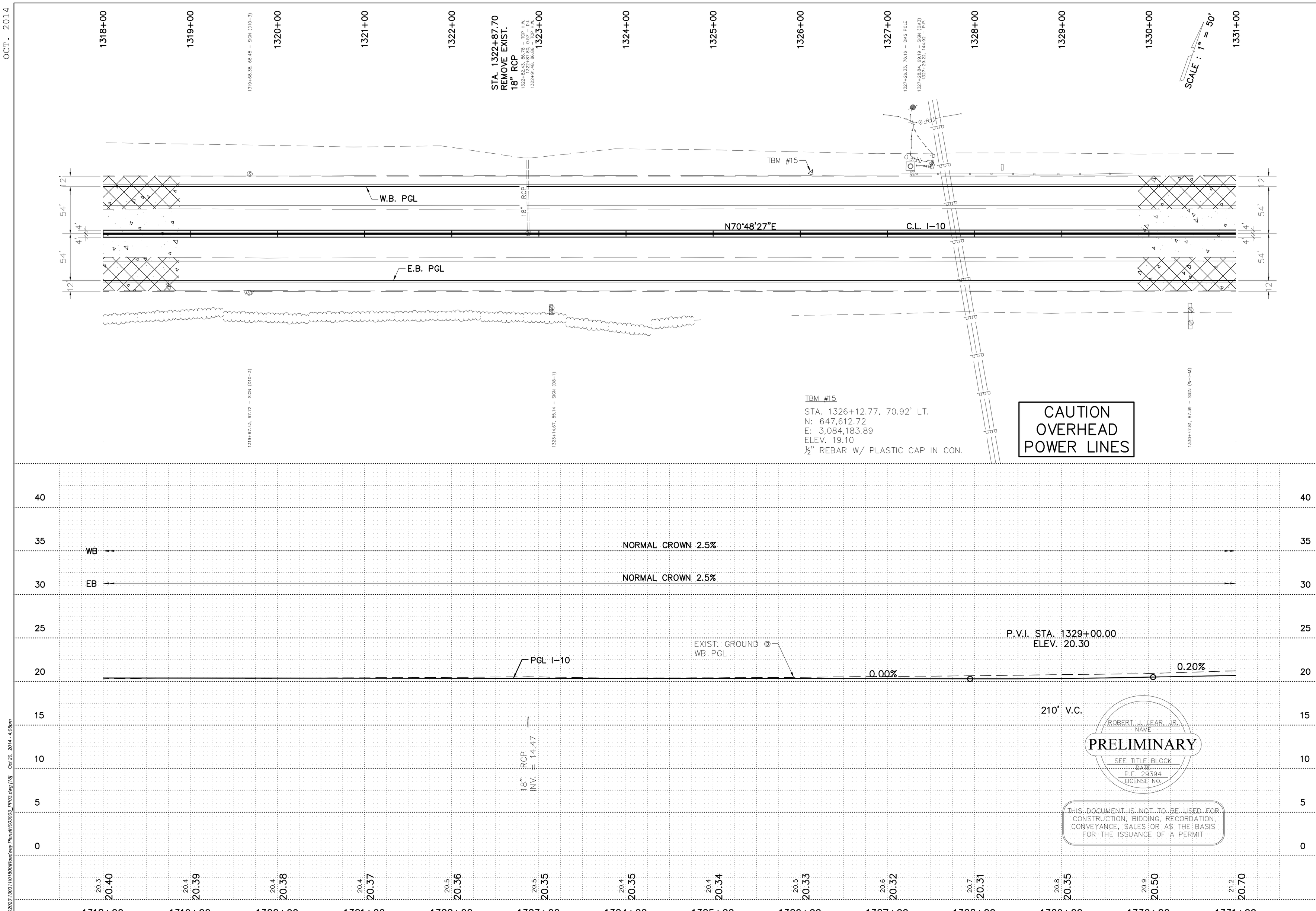
I–10: EAST JCT. I–49 TO LA 328

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SIGMA CONSULTING GROUP, INC.

OCT. 2014

60% PRELIMINARY PLANS



ROBERT J. LEAR, JR.
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SHEET NUMBER	18
PARISH	LAFAYETTE
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 15 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA

PLAN AND PROFILE

I-10: EAST JCT. I-49 TO LA 328

DOTD

SIGMA CONSULTING GROUP, INC.

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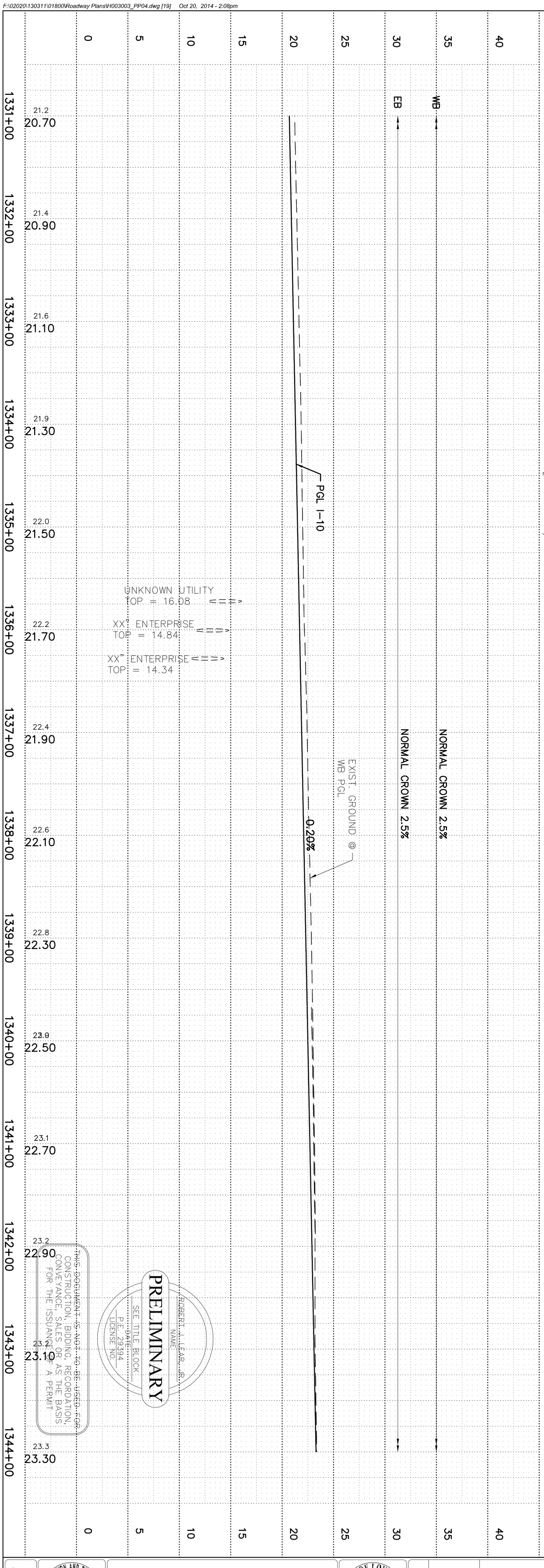

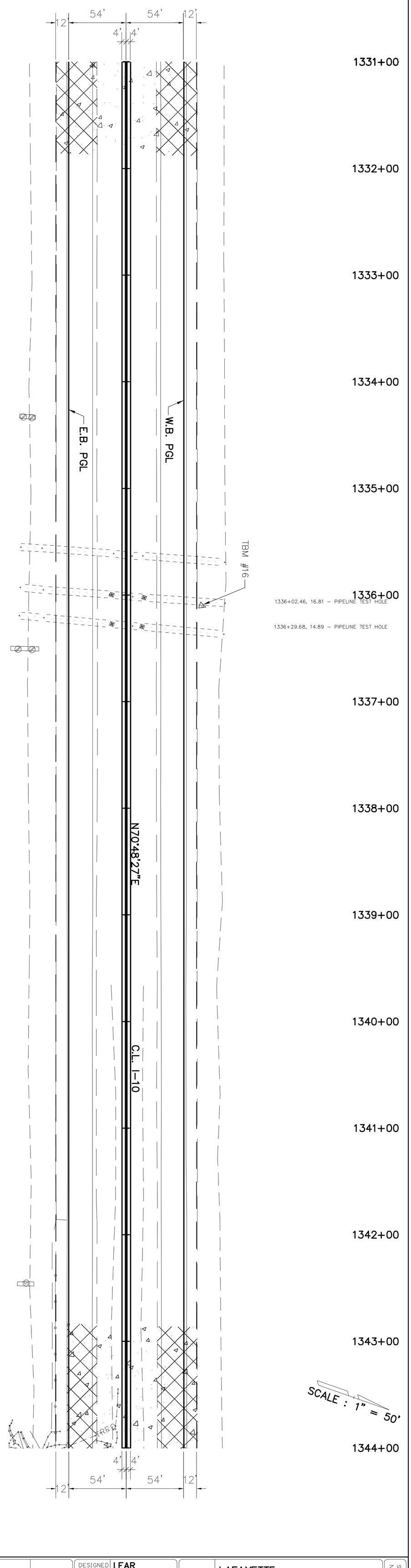

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ROBERT J. LEAR, JR.
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DATE

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LICENSE NO.

SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 16 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 19

OCT. 2014

60% PRELIMINARY PLANS

CAUTION OVERHEAD POWER LINES

SCALE : 1" = 50'

CURVE DATA
B.L. WB LANE
P.I. STA. 1363+08.56
Δ = 09°58'59" LT.
D = 00°20'02"
T = 1499.34'
L = 2991.10'
R = 17166.75'

CURVE DATA
C.L. I-10
P.I. STA. 1363+31.28
Δ = 09°58'59" LT.
D = 02°00'00"
T = 1000.84'
L = 1996.62'
R = 11459.16'

STA. 1348+09.22, 54.00' LT.
C.L. I-10 =
PC: STA. 1348+09.22
BEGIN B.L. WB LANE

PC: 1353+12.44

STA. 1353+12.44, 54.00' RT.
C.L. I-10 =
POT: STA. 1353+12.44
BEGIN B.L. EB LANE

STA. 1355+37.15
REMOVE EXIST.
18" RCP
REMOVE D.I.

SAWMILL RD.

GPS #5

TBM #17

B..L. WB LANE

C.L. I-10

B..L. EB LANE N70°48'27"E

N70°48'27"E

130' MEDIAN BARRIER TRANSITION

+81.77 +11.77 +40.25 +70.25

54' 12' 4' 4' 54' 12' 53' 53' 12'

LAFAYETTE PARISH
ST. MARTIN PARISH

CAUTION OVERHEAD POWER LINES

GPS #5 PRIMARY CONTROL
STA. 1346+12.88, 72.68' LT.
N: 648,271.91
E: 3,086,072.25
ELEV. 22.02
½" REBAR W/ PLASTIC CAP IN CON.

TBM #17
STA. 1356+37.17, 85.53' LT.
N: 648,624.27
E: 3,087,031.54
ELEV. 22.41
½" REBAR W/ PLASTIC CAP IN CON.

FOR GEOMETRIC DETAILS SEE SHEET 43

1344+00 1345+00 1346+00 1347+00 1348+00 1349+00 1350+00 1351+00 1352+00 1353+00 1354+00 1355+00 1356+00 1357+00

SAWMILL RD.

16.53' CLEARANCE

WB NORMAL CROWN 2.5%

EB NORMAL CROWN 2.5%

EXIST. GROUND @ WB PGL

PGL I-10

0.20% −0.04%

(2) 36" RCP INV = 15.38

18" RCP INV = 16.96

40 35 30 25 20 15 10 5 0

23.30 23.50 23.70 23.84 23.86 23.83 23.79 23.75 23.72 23.68 23.65 23.61 23.57 23.54

ROBERT J. LEAR, JR.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

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SHEET NUMBER	20
PARISH	LAFAYETTE/ST. MARTIN
CONTROL-SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 17 OF 28

NO. DATE REVISION OR CHANGE ORDER DESCRIPTION BY

PLAN AND PROFILE

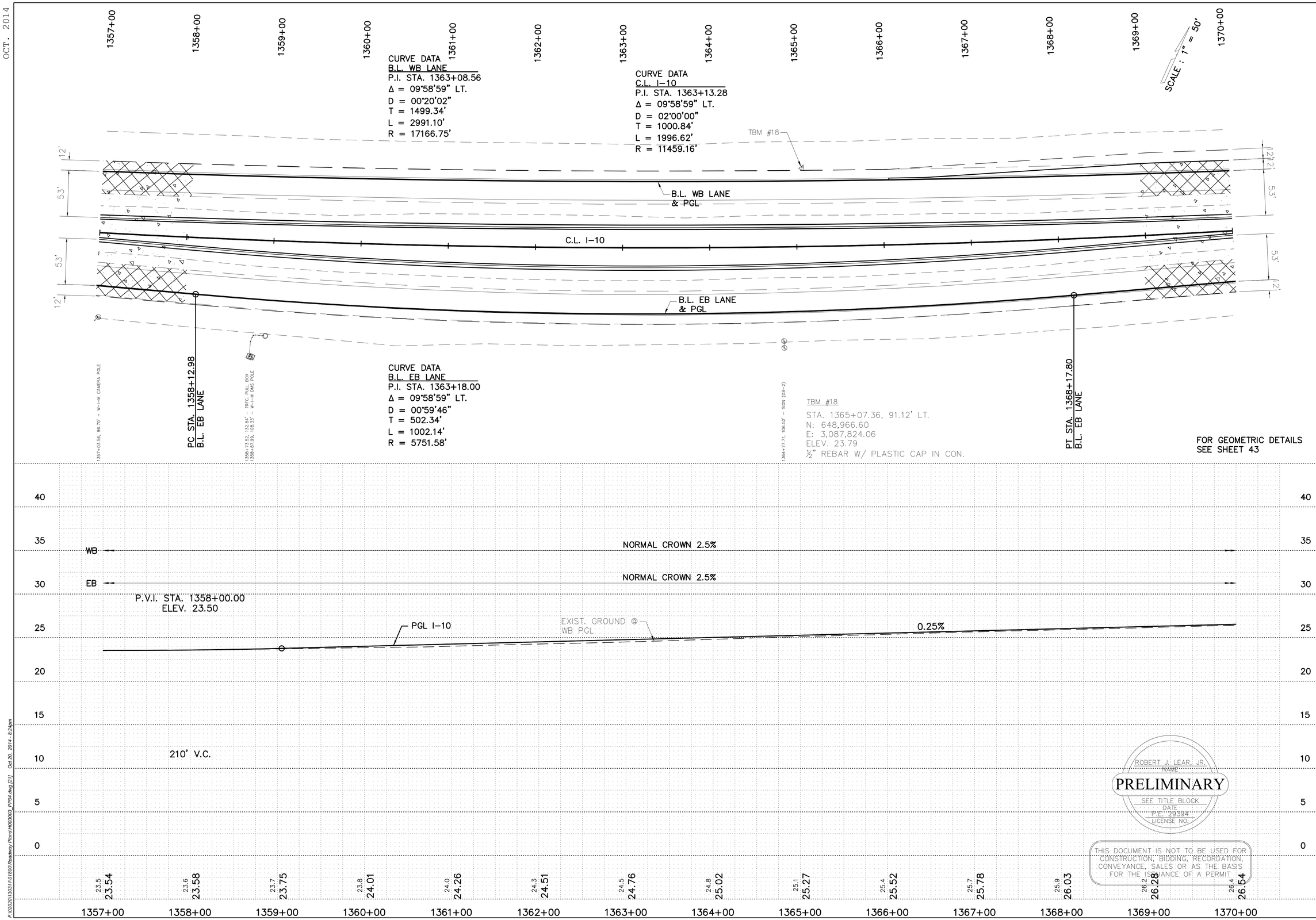
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SIGMA CONSULTING GROUP, INC.

OCT. 2014

60% PRELIMINARY PLANS



ROBERT J. LEAR, JR.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

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SHEET NUMBER	21
PARISH	ST. MARTIN
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 18 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA
ROBERT J. LEAR, JR.
29394
REGISTERED PROFESSIONAL ENGINEER

PLAN AND PROFILE

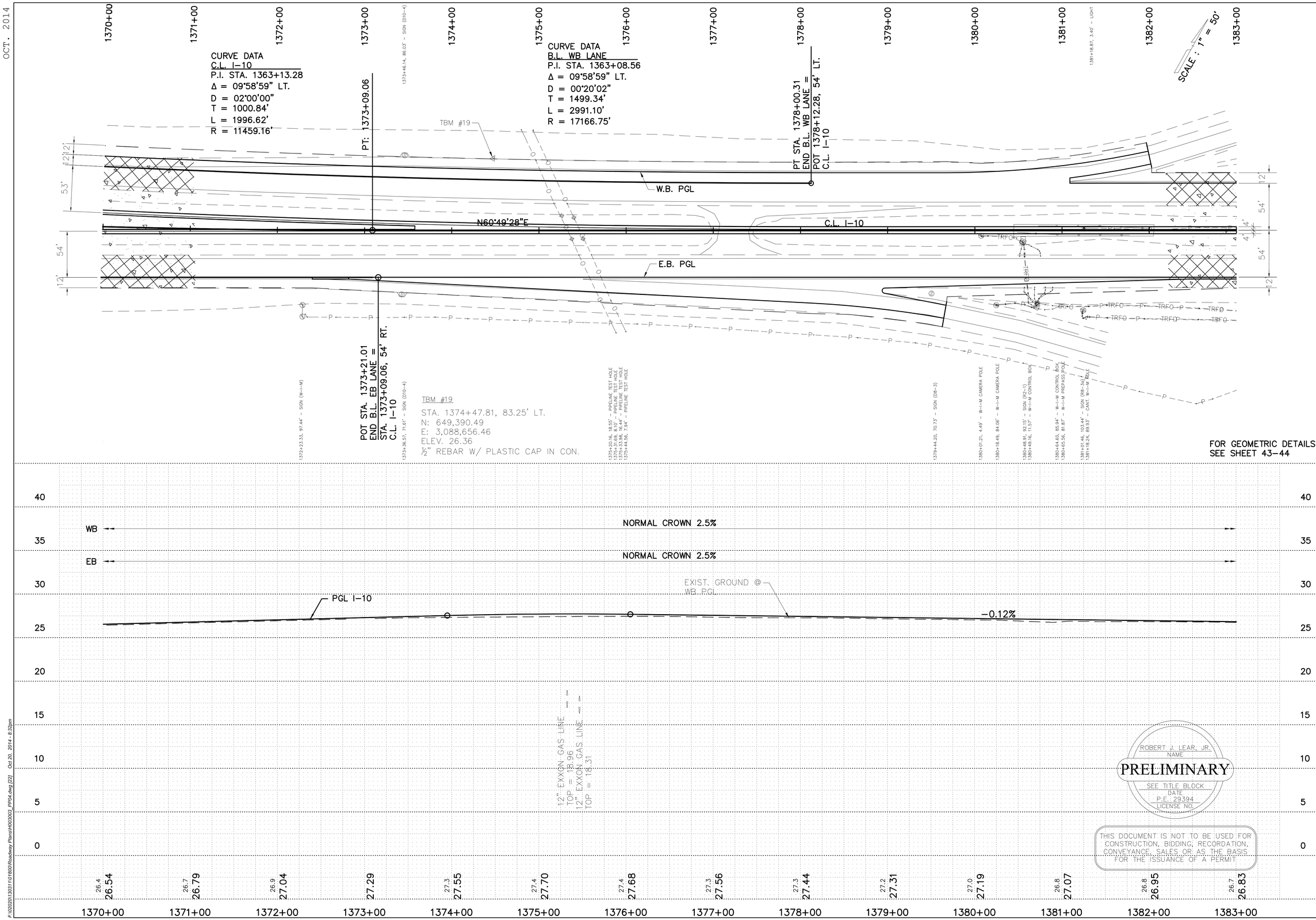
I-10: EAST JCT. I-49 TO LA 328

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DOTD

SIGMA CONSULTING GROUP, INC.

OCT. 2014

60% PRELIMINARY PLANS



ROBERT J. LEAR, JR.
NAME
PRELIMINARY
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LICENSE NO.

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SHEET NUMBER	22
PARISH	ST. MARTIN
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 19 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE

I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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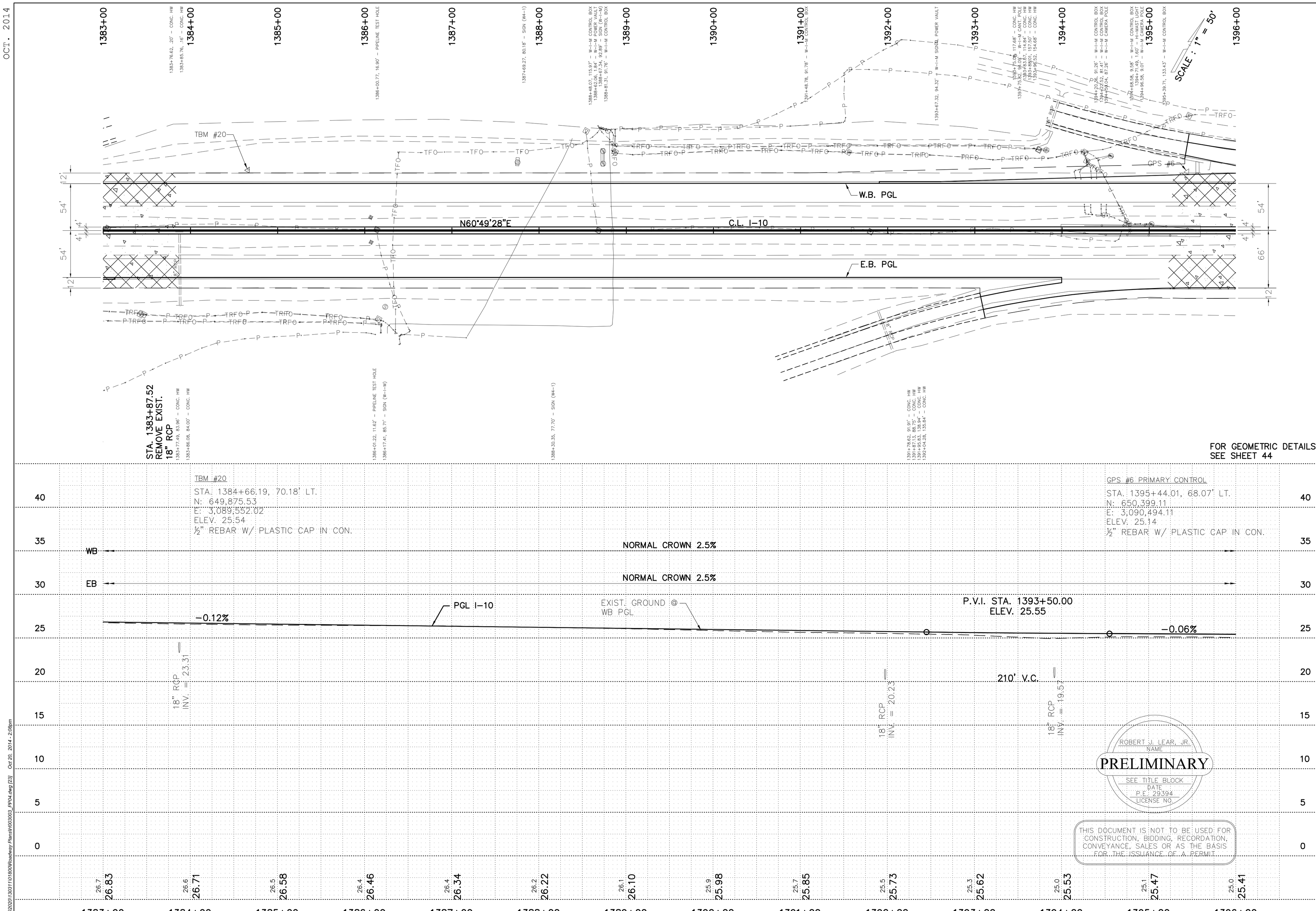
OCT. 2014

60% PRELIMINARY PLANS



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SHEET NUMBER	23
PARISH	ST. MARTIN
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 20 OF 28

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE

I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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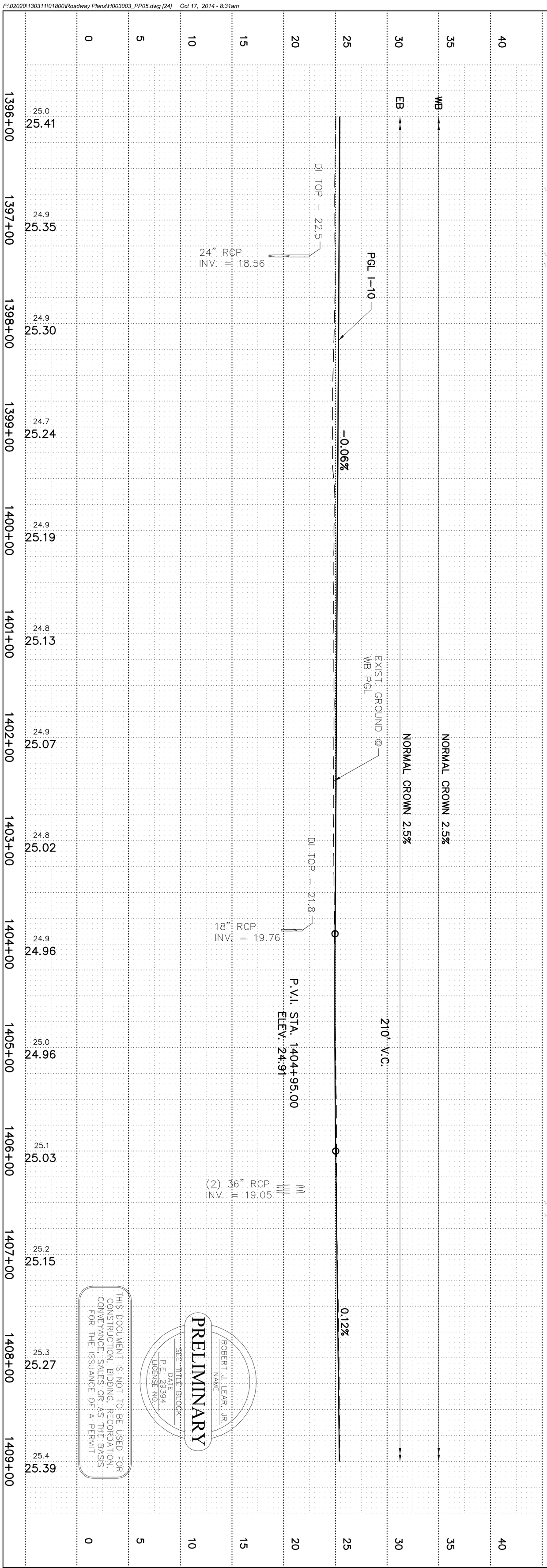

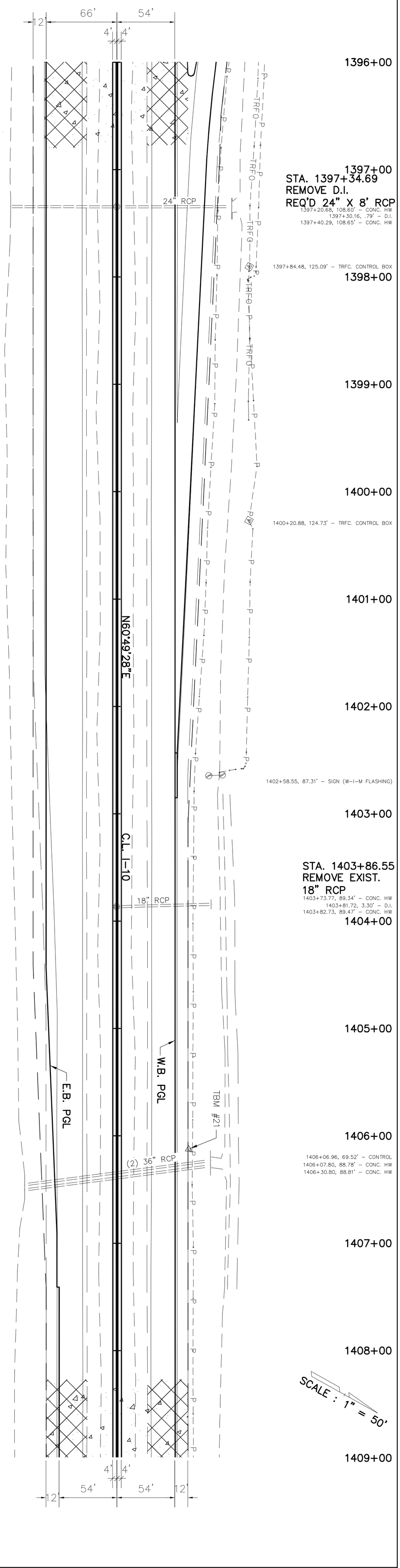

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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

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DATE
P.E. 29394
LICENSE NO.

SIGMA COMMUNICATIONS GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

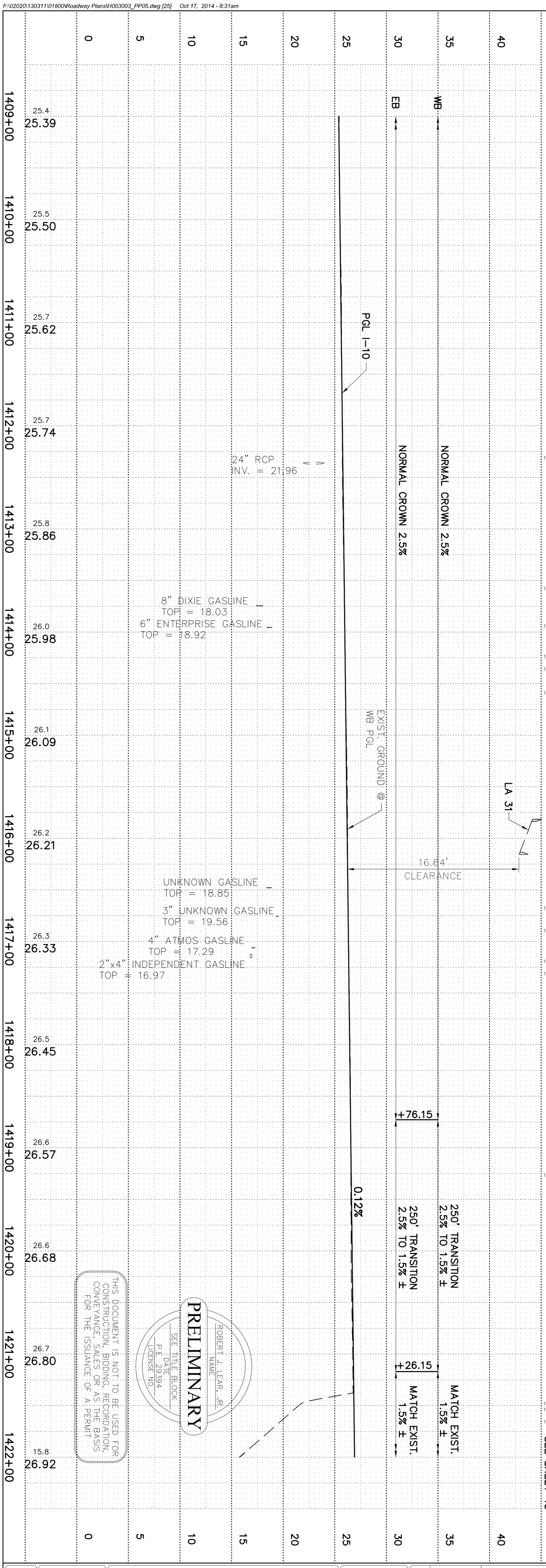
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 21 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 24



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LICENSE NO.

SIGMA COMMUNICATIONS GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

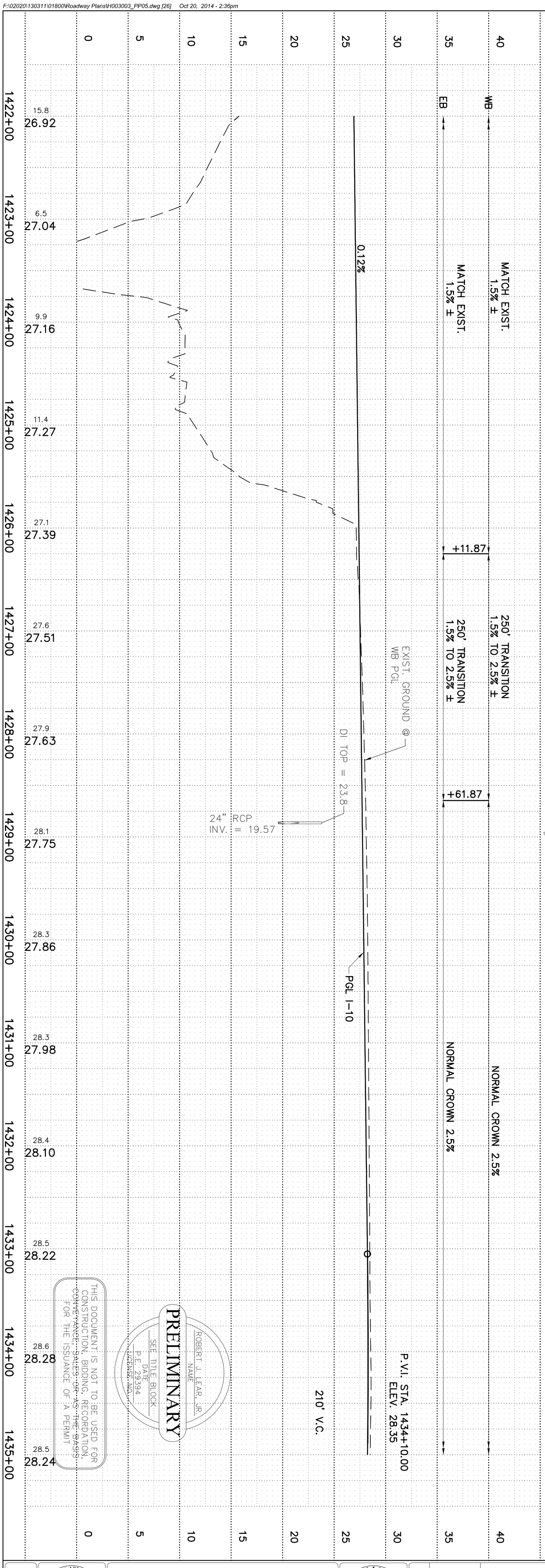
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED	LEAR	PARISH	ST. MARTIN
CHECKED			
DETAILED	AMEDEE	CONTROL SECTION	450-06
CHECKED			
SERIES NUMBER	OCT. 2014 22 OF 28	STATE PROJECT	H.003003

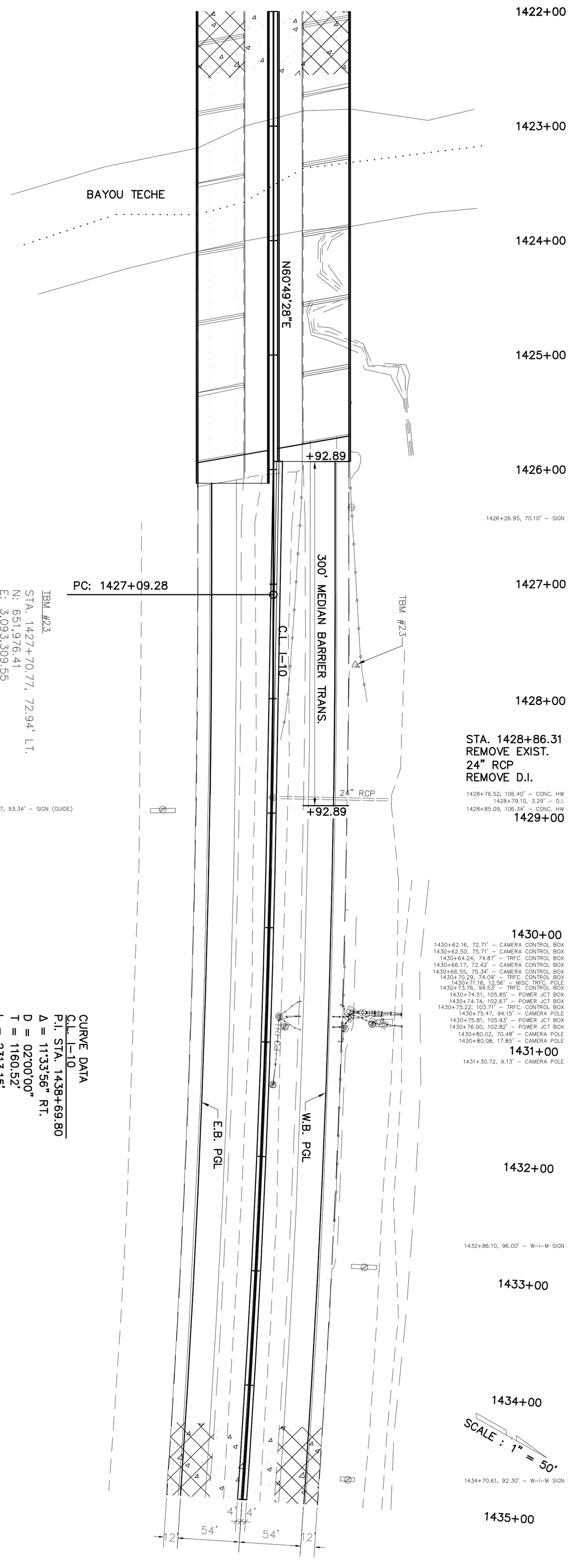
SHEET NUMBER 25



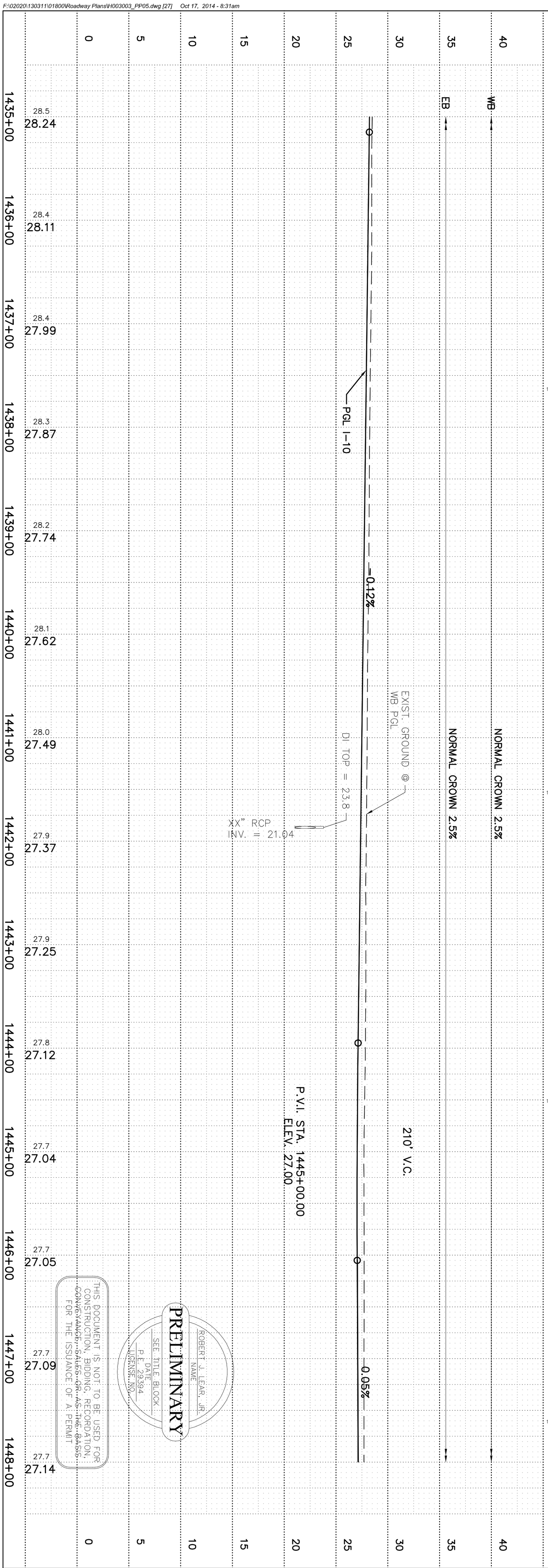
TBM #23
STA. 1427+70.77, 72.94' LT.
N: 651,976.41
E: 3,093,309.55
ELEV. 26.90
½" REBAR W/ PLASTIC CAP IN CON.

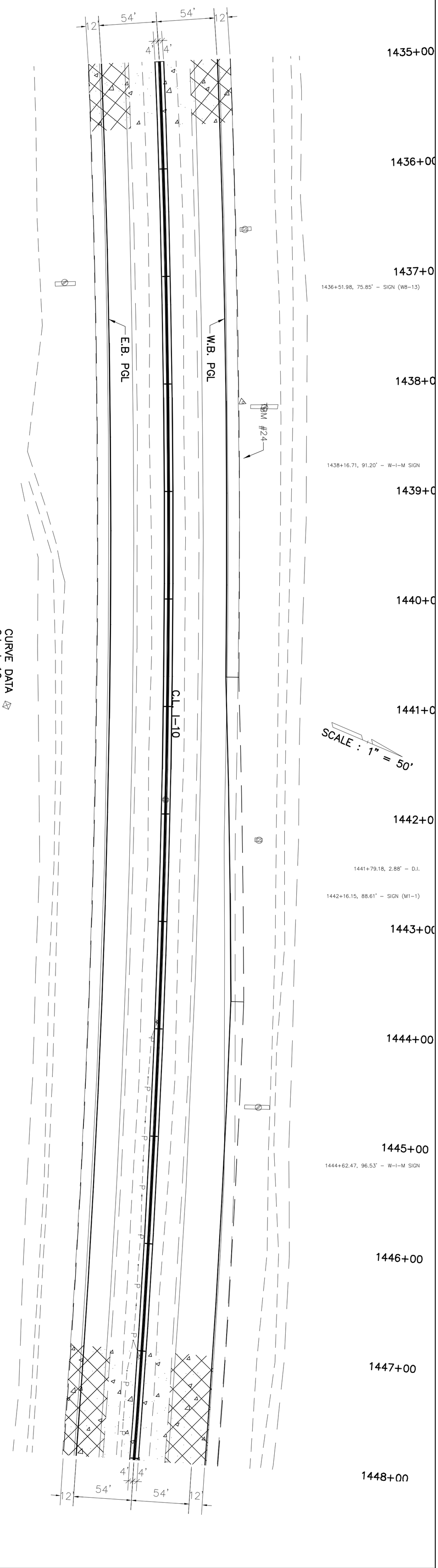
1428+92.37, 93.34' – SIGN (GUIDE)

CURVE DATA
C.L. I-10
P.I. STA. 1438+69.80
Δ = 11°33'56" RT.
D = 02°00'00"
T = 1160.52'
L = 2313.15'
R = 11459.16'



SIGMA CONSULTING GROUP, INC.	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD	PLAN AND PROFILE	I-10: EAST JCT. I-49 TO LA 328
STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE	NO. / DATE / REVISION OR CHANGE ORDER DESCRIPTION / BY	DESIGNED / CHECKED: LEAR	PARISH: ST. MARTIN
		DETAILED / CHECKED: AMEDEE	CONTROL SECTION: 450-06
		SERIES NUMBER: OCT. 2014 23 OF 28	STATE PROJECT: H.003003
			SHEET NUMBER: 26





SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 24 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 27

OCT. 2014

60% PRELIMINARY PLANS

1448+00 1449+00 1450+00 1451+00 1452+00 1453+00 1454+00 1455+00 1456+00 1457+00 1458+00 1459+00 1460+00 1461+00

SCALE : 1" = 50'

1453+04.98, .04' – LIGHT STANDARD

1456+04.69, .29' – LIGHT STANDARD

GPS #7 PRIMARY CONTROL
STA. 1448+81.33, 80.77' LT.
N: 652,832.71
E: 3,095,250.80
ELEV. 27.14
½" REBAR W/ PLASTIC CAP IN CON.

TBM #25
STA. 1459+19.90, 184.71' LT.
N: 653,247.11
E: 3,096,209.94
ELEV. 24.68
½" REBAR W/ PLASTIC CAP IN CON.

GPS #7

W.B. PGL

N72°23'24"E

C.L. I–10

E.B. PGL

54' 4' 4' 54' 12

18" RCP

PT: 1450+22.43

CURVE DATA
C.L. I–10
P.I. STA. 1438+69.80
Δ = 11°33'56" RT.
D = 02°00'00"
T = 1160.52'
L = 2313.15'
R = 11459.16'

1449+22.42, 95.93' – SIGN (GUIDE)
STA. 1449+87.12
REMOVE EXIST.
18" RCP
REMOVE CONC. H.W.
1449+76.28, 2.17' – CONC. HW
1449+84.82, 2.17' – CONC. HW
1449+85.07, 2.08' – CONC. HW
1450+04.88, .34' – LIGHT STANDARD

1451+47.40, 82.91' – LIGHT STANDARD

1453+64.88, 92.70' – LIGHT STANDARD

1455+75.56, 100.33' – LIGHT STANDARD

1457+03.15, 127.57' – (FOOD)

1457+62.83, 134.09' – SIGN (WA–3)
1457+62.82, 134.09' – SIGN (WM–11)
1457+63.15, 13.45' – SIGN (WB–13)
1457+81.12, 137.77' – LIGHT STANDARD

1458+50.89, 161.43' – SIGN (SERVICE)

1459+21.43, 195.88' – LIGHT STANDARD

1459+98.47, 110.92' – LIGHT STANDARD
1460+06.61, 198.64' – SIGN (FOOD)

1460+82.64, 209.97' – LIGHT STANDARD

FOR GEOMETRIC DETAILS
SEE SHEET 46

WB — NORMAL CROWN 2.5%
EB — NORMAL CROWN 2.5%

40 35 30 25 20 15 10 5 0

PGL I–10

EXIST. GROUND @ WB PGL

450' V.C.

0.05%

2.04%

P.V.I. STA. 1456+00.00
ELEV. 27.50

18" RCP
INV. = 22.80

27.7 27.14 | 27.7 27.18 | 27.5 27.23 | 27.3 27.27 | 27.1 27.32 | 27.0 27.36 | 27.0 27.42 | 27.4 27.80 | 28.1 28.62 | 29.4 29.88 | 31.2 31.59 | 33.6 33.61 | 36.1 35.65 | 38.3 37.69

1448+00 1449+00 1450+00 1451+00 1452+00 1453+00 1454+00 1455+00 1456+00 1457+00 1458+00 1459+00 1460+00 1461+00

ROBERT J. LEAR, JR.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

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F:\022201\30311\01\800\Roadway Plans\H003003_PP05.dwg [28] Oct 17, 2014 - 8:31am

SHEET NUMBER	28
PARISH	LAFAYETTE
CONTROL SECTION	450–06
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	AMEDEE
CHECKED	
SERIES NUMBER	OCT. 2014 25 OF 28

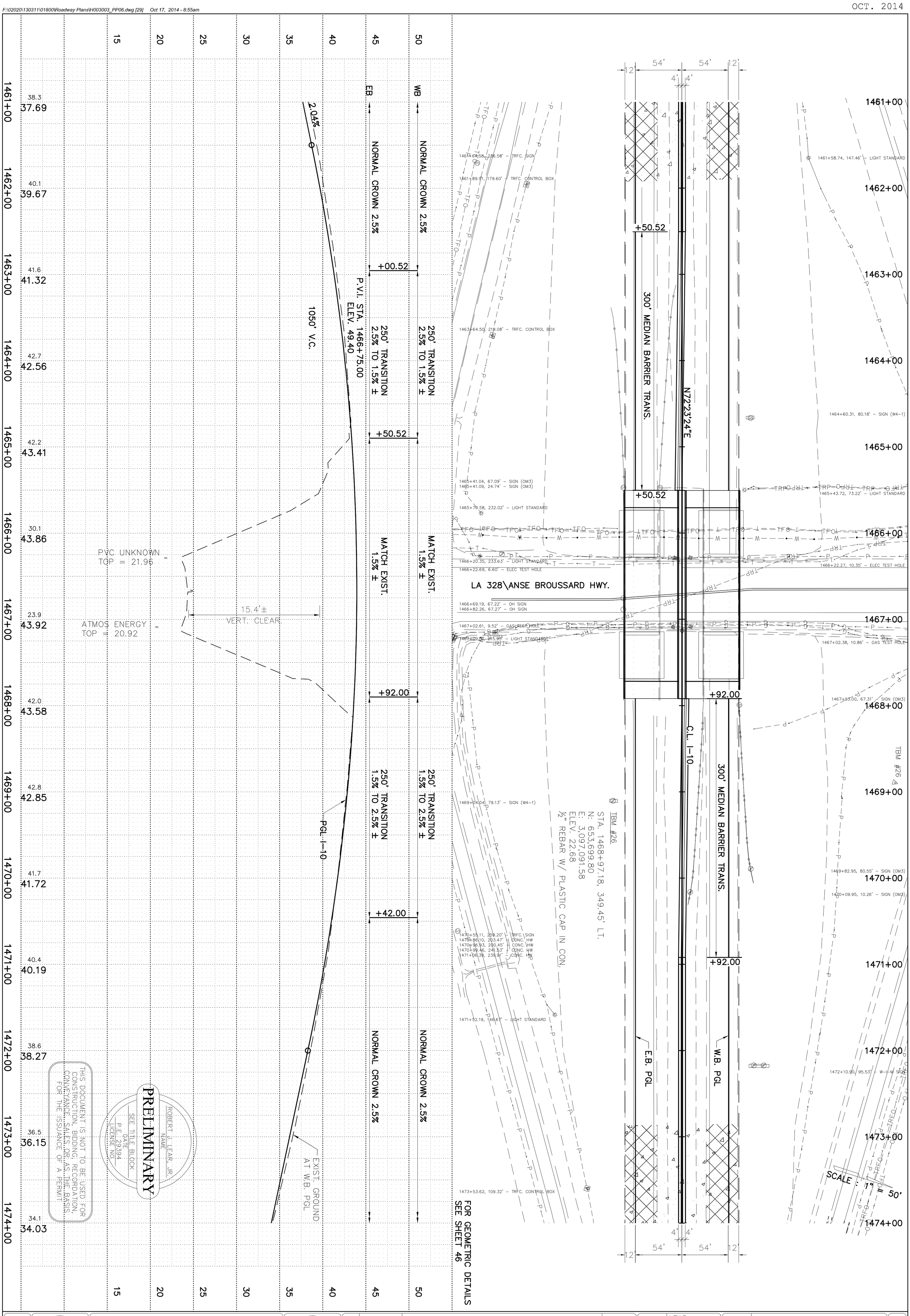
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PLAN AND PROFILE

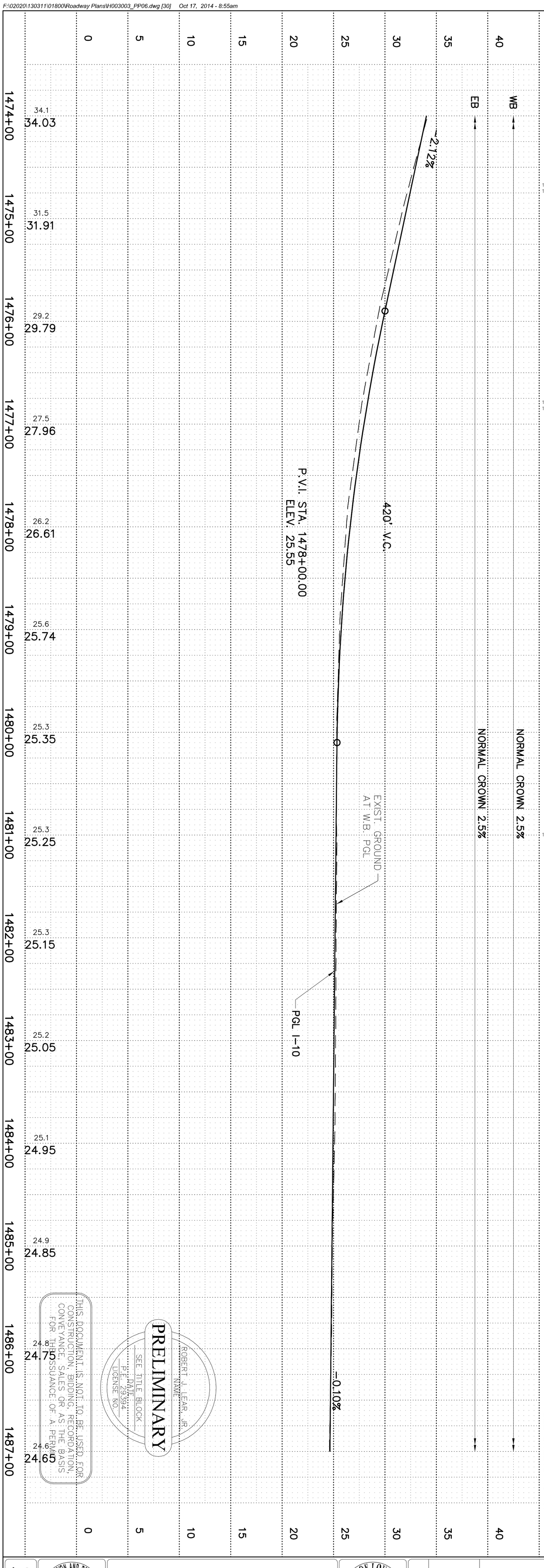
I–10: EAST JCT. I–49 TO LA 328

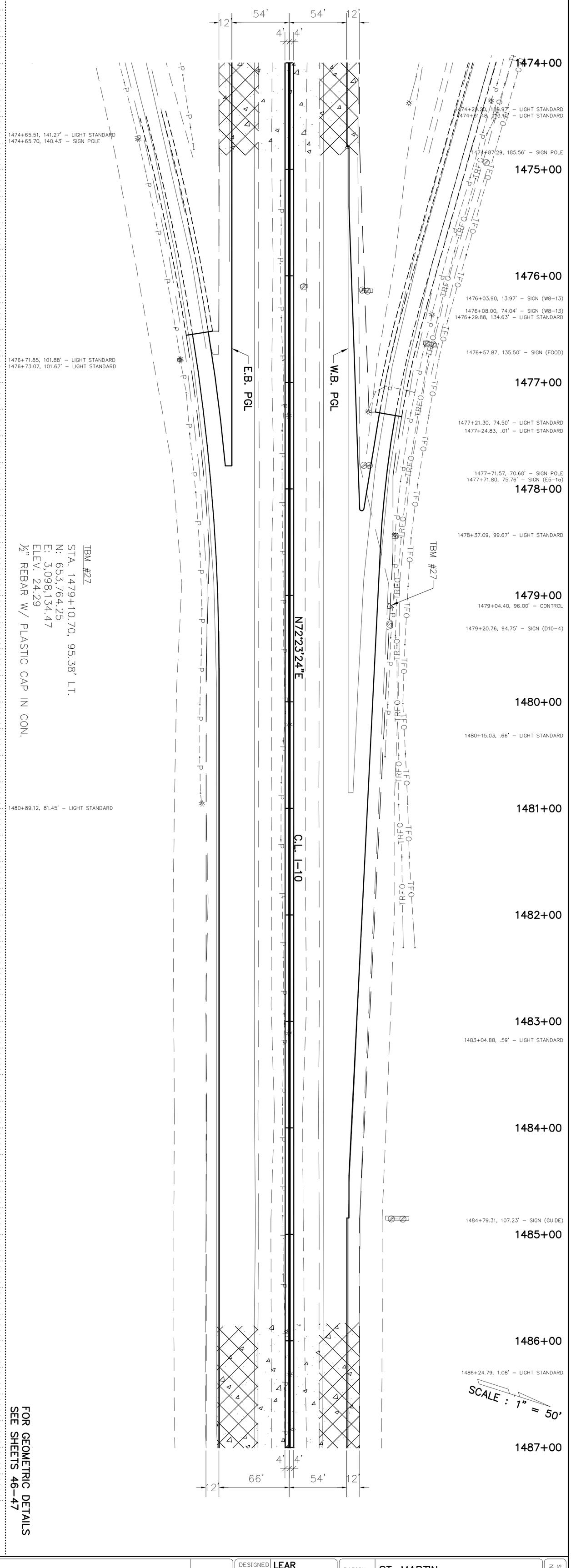
SIGMA CONSULTING GROUP, INC.



PLAN AND PROFILE	DESIGNED / CHECKED	LEAR	PARISH: ST. MARTIN
I-10: EAST JCT. I-49 TO LA 328	DETAILED / CHECKED	AMEDEE	CONTROL SECTION: 450-06
	SERIES NUMBER	OCT. 2014 26 OF 28	STATE PROJECT: H.003003
			SHEET NUMBER: 29

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

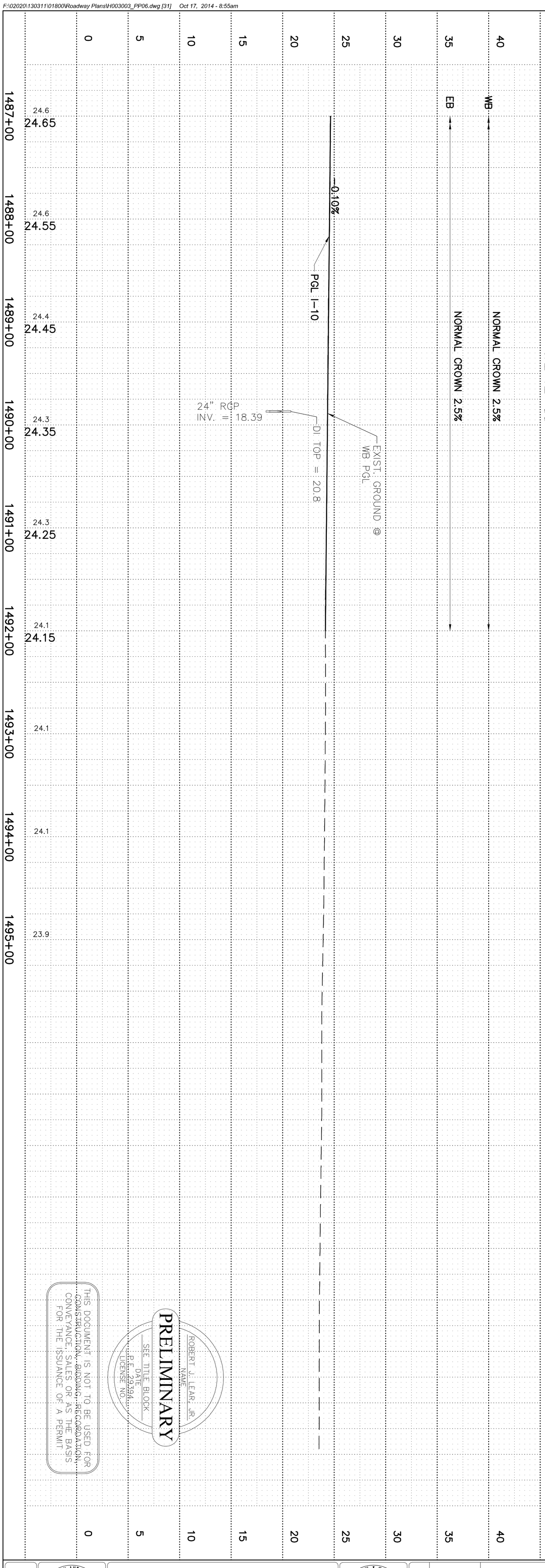


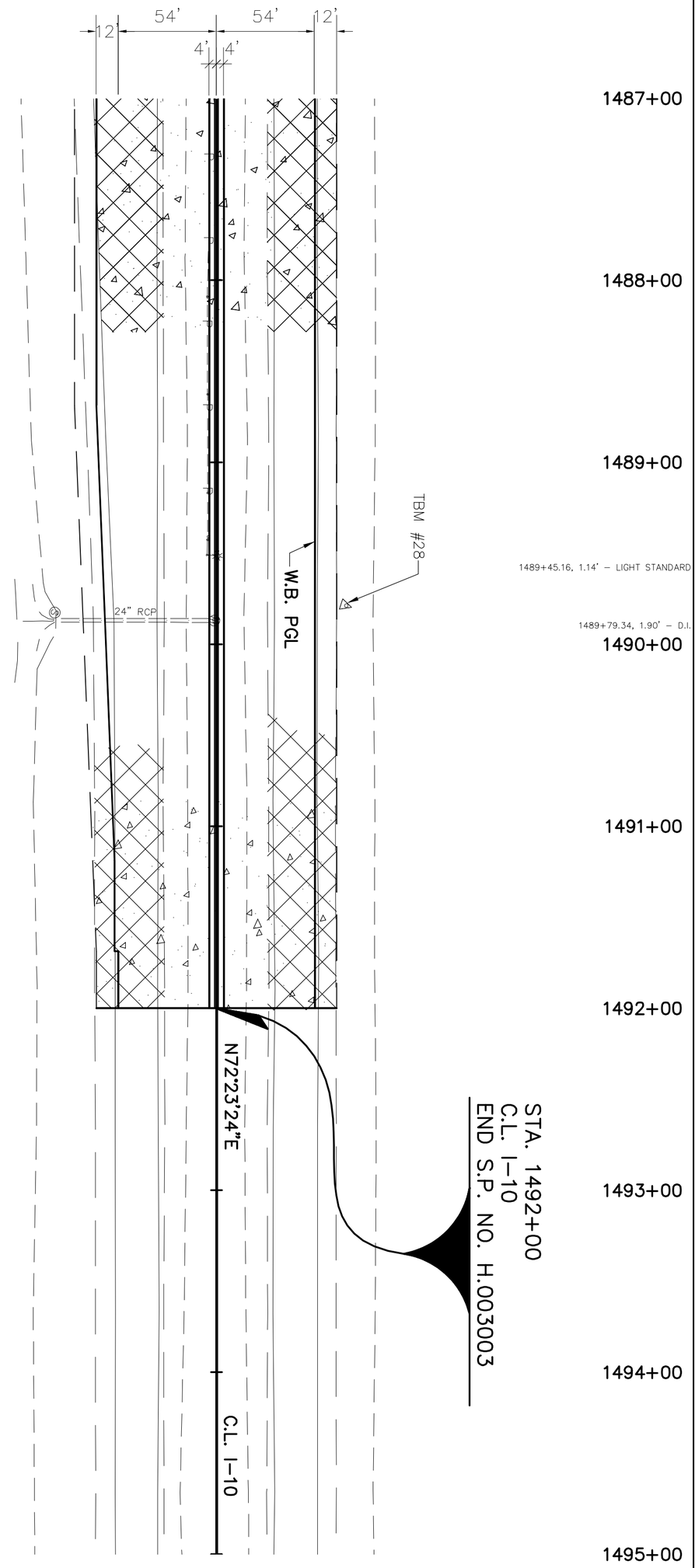


SIGMA COMMUNICATIONS GROUP, INC.	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD	PLAN AND PROFILE	STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE	DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
				DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-06
		I-10: EAST JCT. I-49 TO LA 328		SERIES NUMBER	OCT. 2014 27 OF 28	STATE PROJECT	H.003003

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

SHEET NUMBER 30





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PRELIMINARY

ROBERT J. LEAR, JR.
NAME

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LICENSE NO.

SIGMA COMMUNICATIONS GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

PLAN AND PROFILE

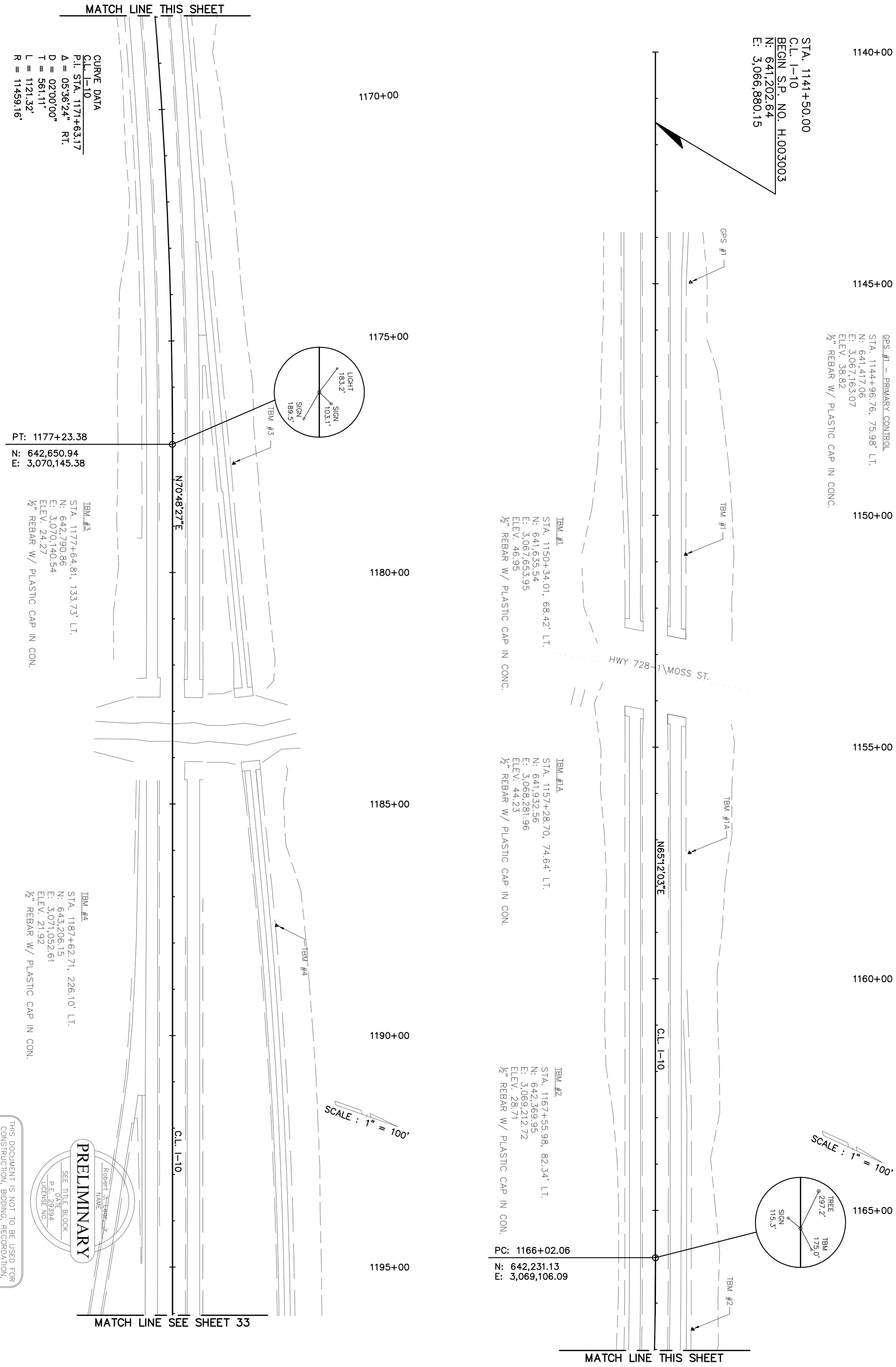
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	AMEDEE	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 28 OF 28	STATE PROJECT	H.003003

SHEET NUMBER 31



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Robert J. Lear, Jr.
NAME

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SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SURVEY CONTROL LAYOUT

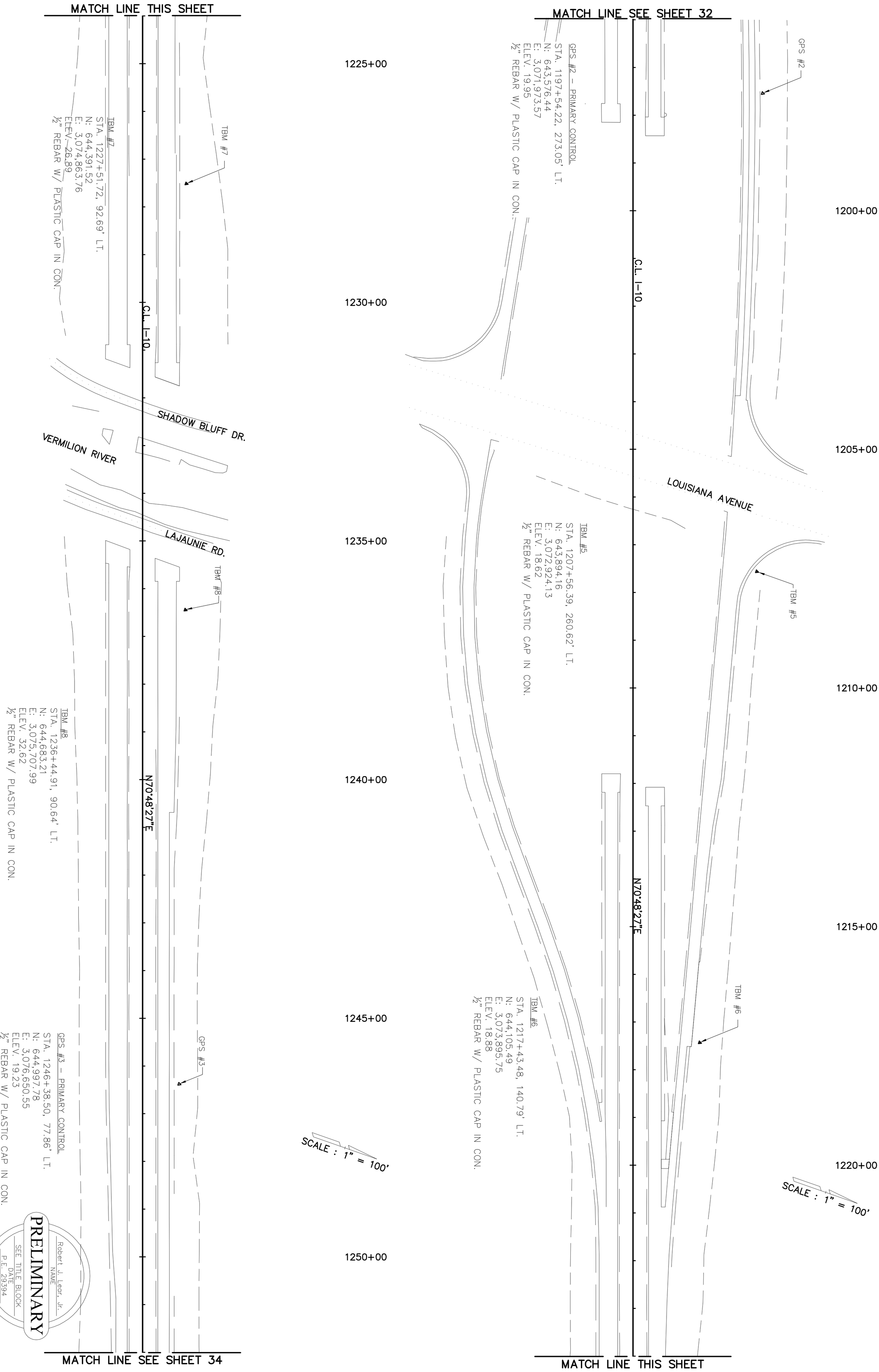
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 1 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 32



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DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

SURVEY CONTROL LAYOUT

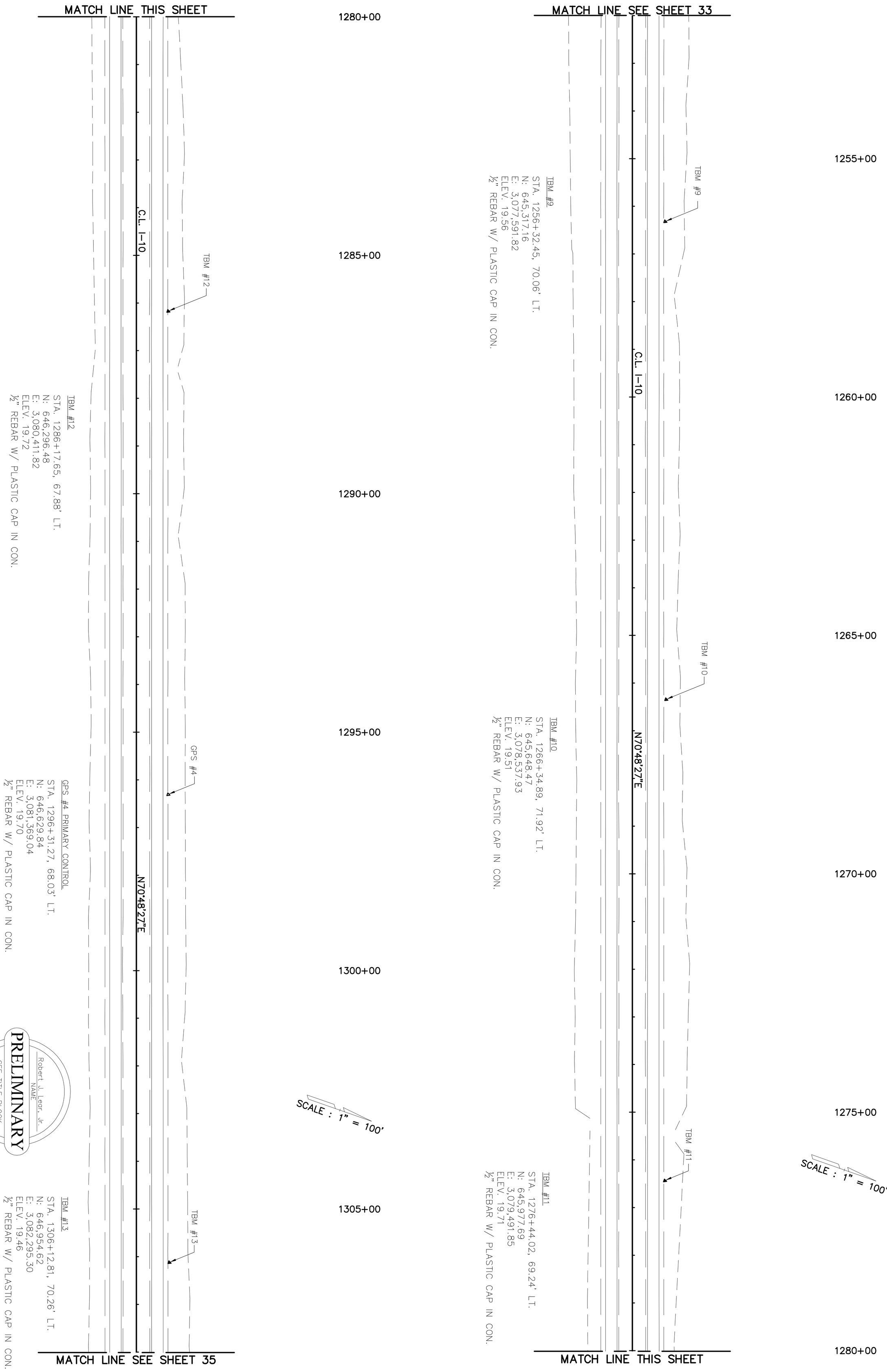
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 2 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 33



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SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SURVEY CONTROL LAYOUT

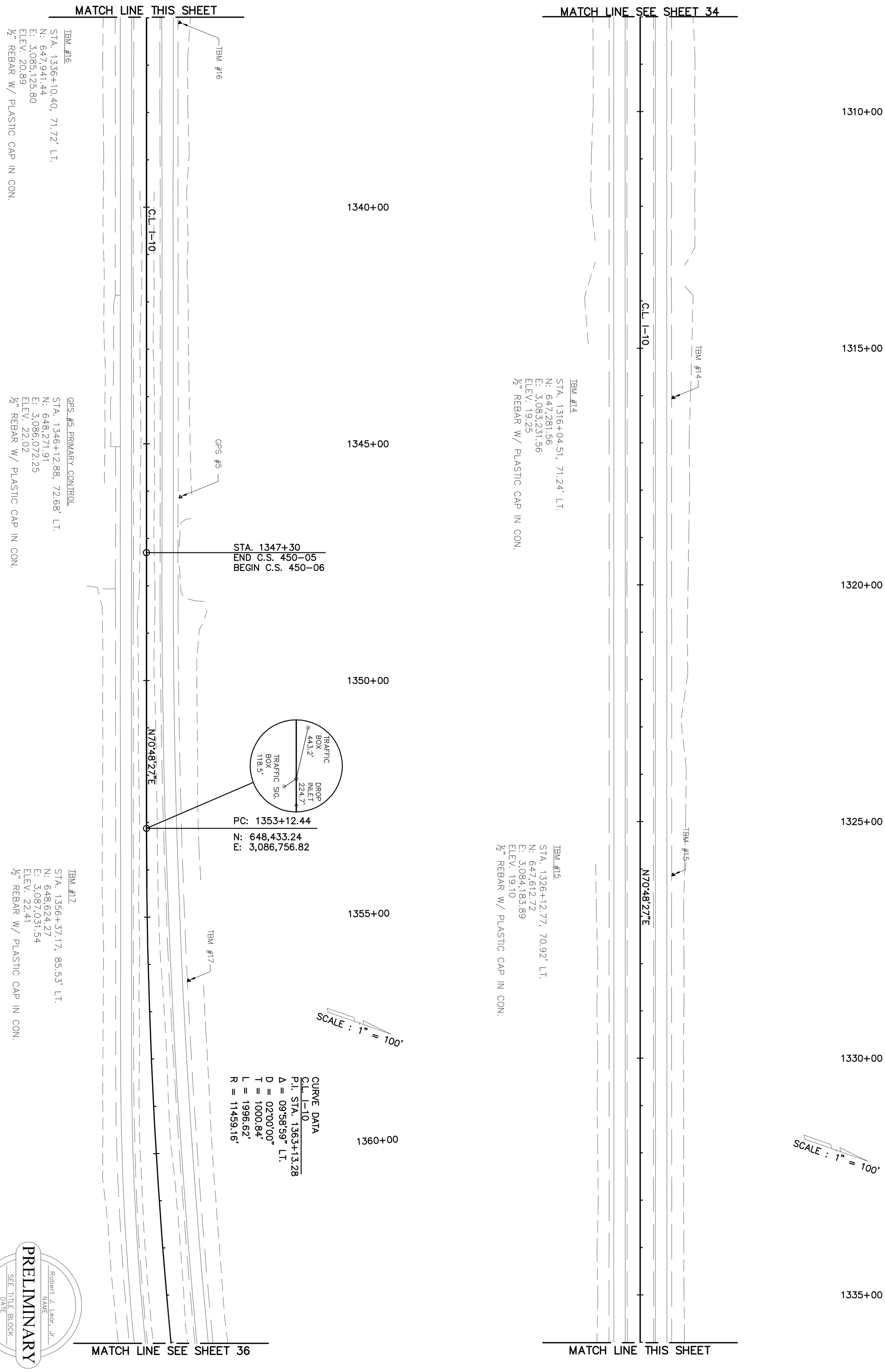
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-05
SERIES NUMBER	OCT. 2014 3 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 34



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SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

SURVEY CONTROL LAYOUT

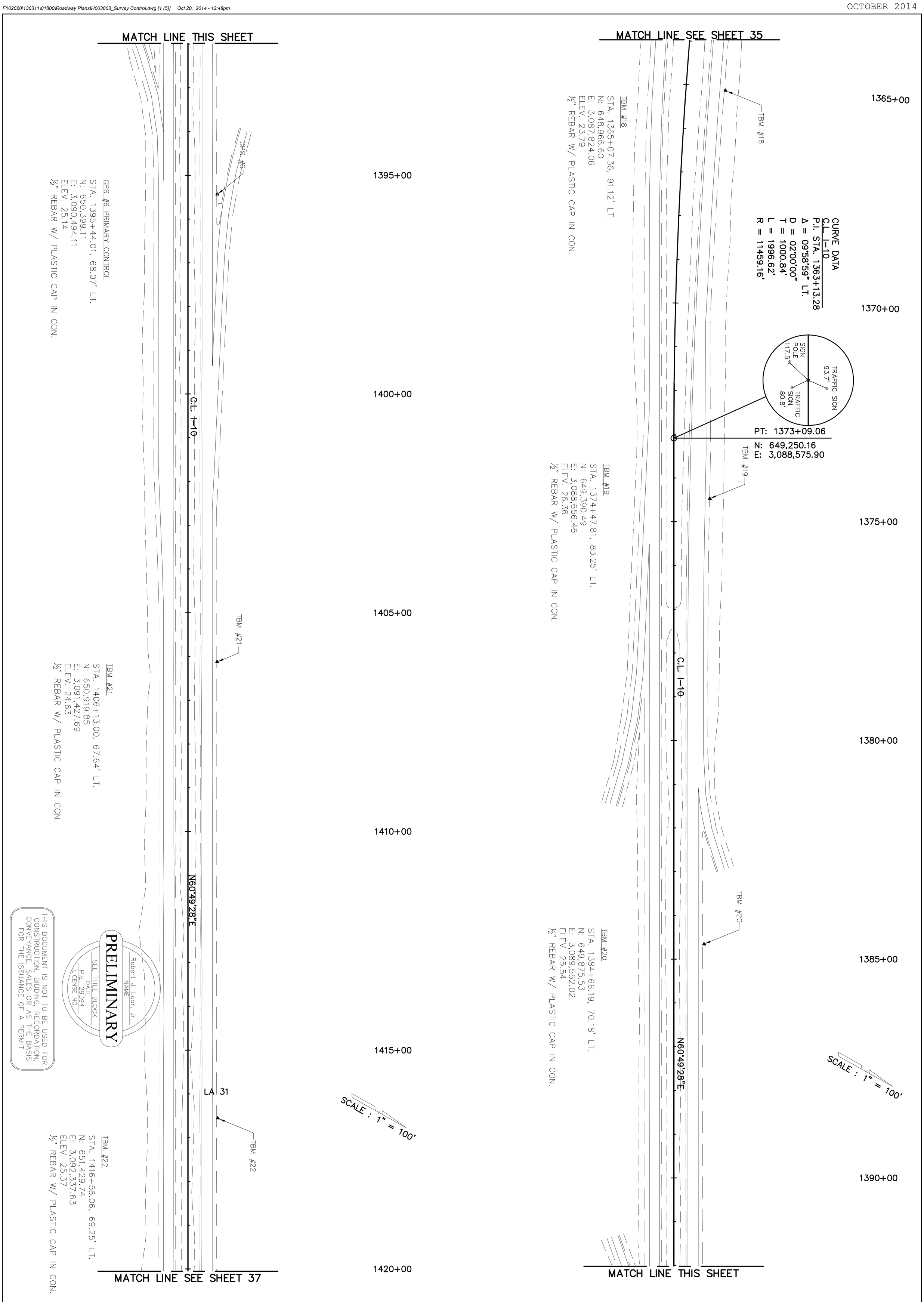
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	LAFAYETTE/ST. MARTIN
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-05/450-06
SERIES NUMBER	OCT. 2014 4 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 35



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SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT — DOTD

SURVEY CONTROL LAYOUT

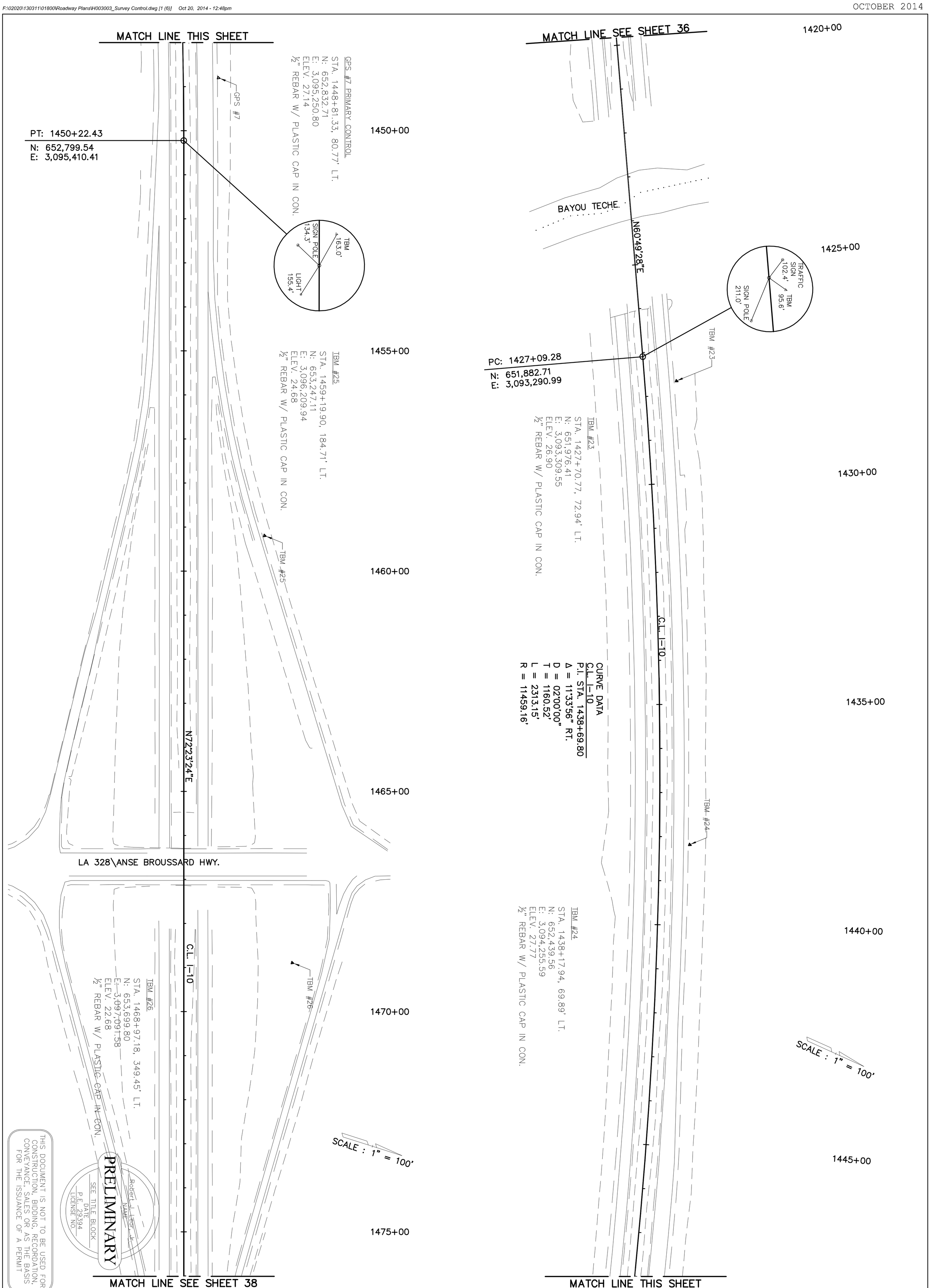
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA — UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 5 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 36



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LICENSE NO.
Robert J. Lear, Jr.
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SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SURVEY CONTROL LAYOUT

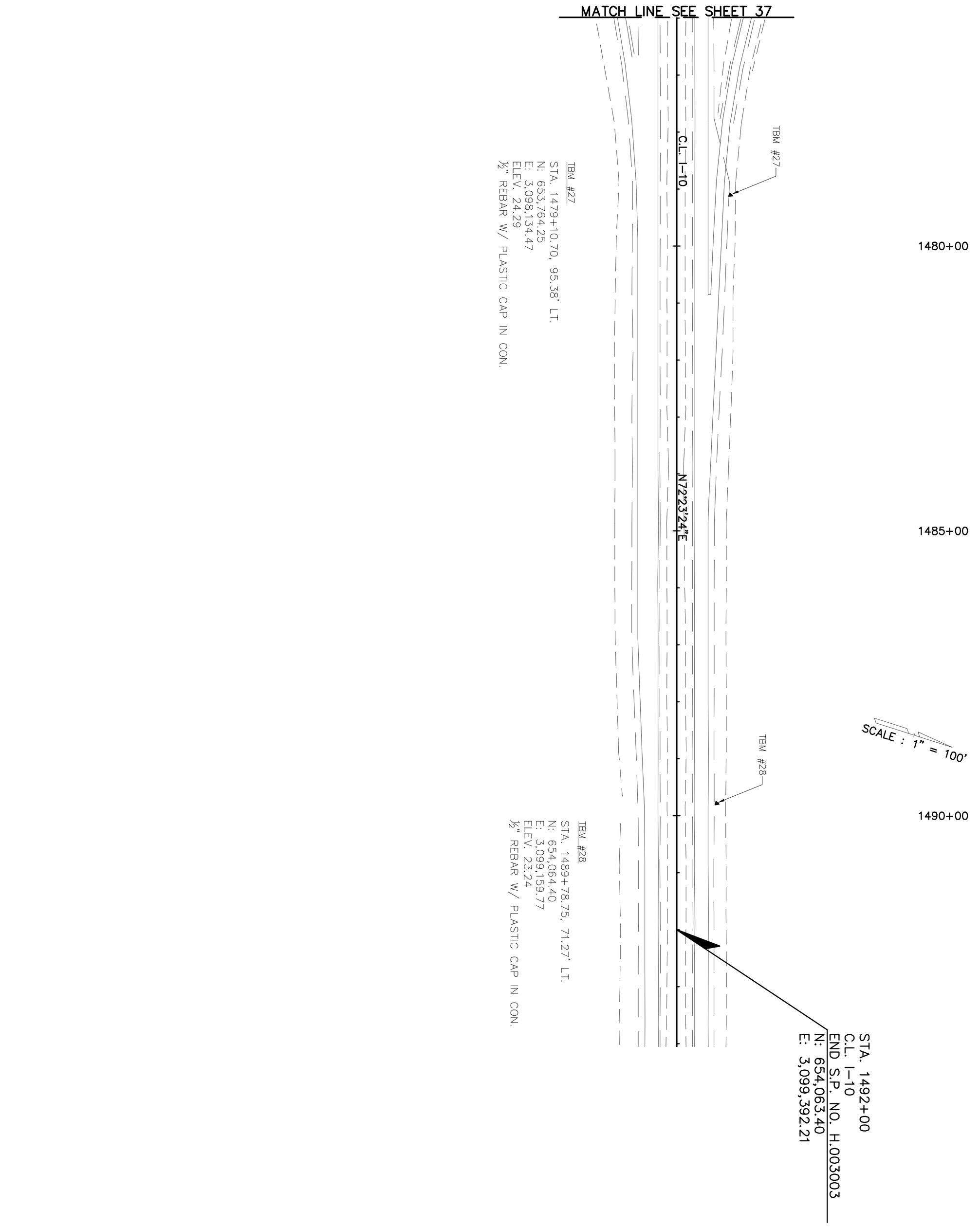
I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 6 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 37



TBM #27
STA. 1479+10.70, 95.38' LT.
N: 653,764.25
E: 3,098,134.47
ELEV. 24.29
½" REBAR W/ PLASTIC CAP IN CON.

TBM #28
STA. 1489+78.75, 71.27' LT.
N: 654,064.40
E: 3,099,159.77
ELEV. 23.24
½" REBAR W/ PLASTIC CAP IN CON.

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Robert J. Lear, Jr.
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DATE

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LICENSE NO.

SIGMA CONSULTING GROUP, INC.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SURVEY CONTROL LAYOUT

I-10: EAST JCT. I-49 TO LA 328

STATE OF LOUISIANA UNION · JUSTICE · CONFIDENCE

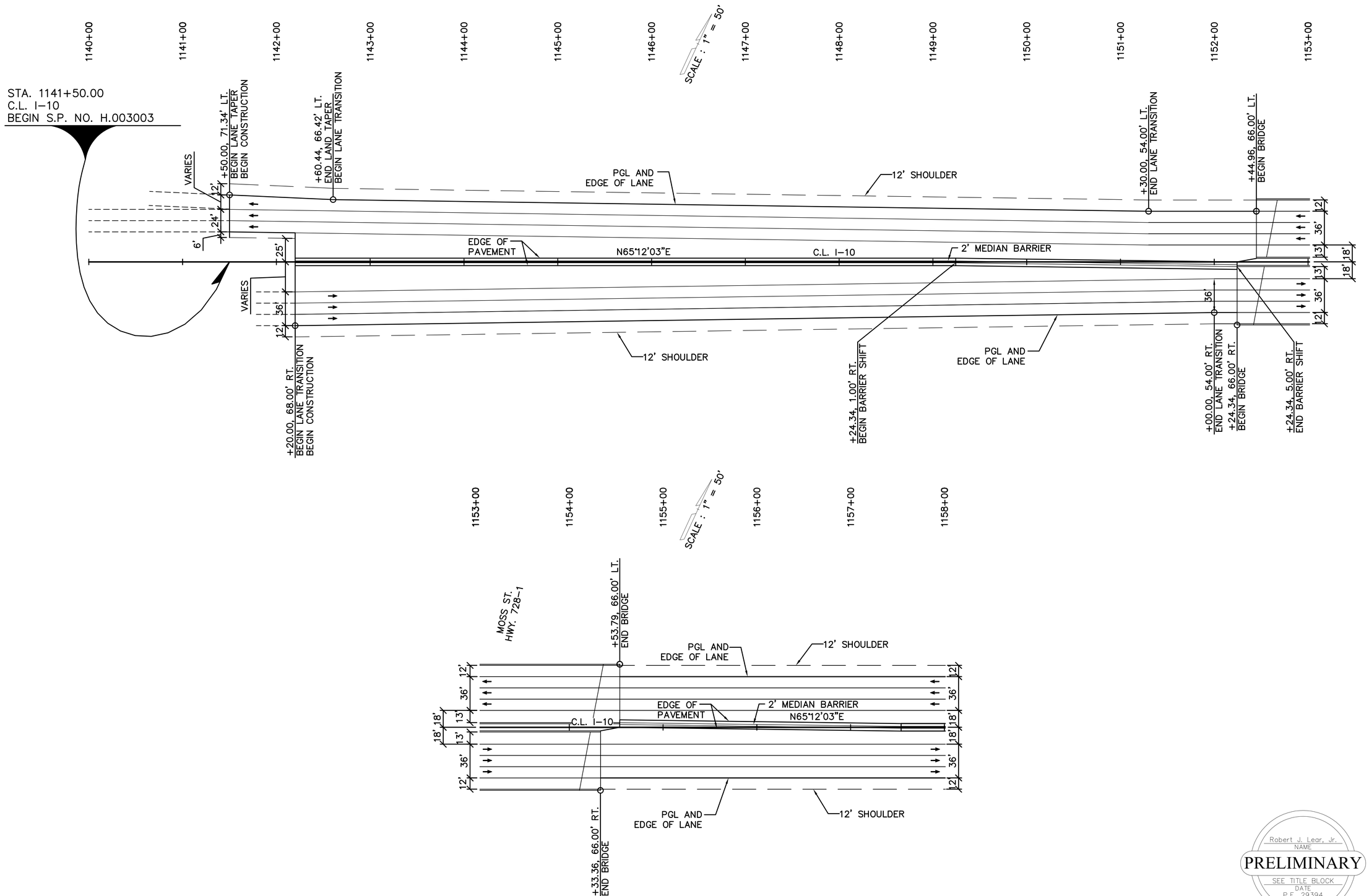
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

DESIGNED / CHECKED	LEAR	PARISH	ST. MARTIN
DETAILED / CHECKED	LEMONS	CONTROL SECTION	450-06
SERIES NUMBER	OCT. 2014 7 OF 7	STATE PROJECT	H.003003

SHEET NUMBER 38

OCTOBER 2014

60% PRELIMINARY PLANS



Robert J. Lear, Jr.
NAME
PRELIMINARY
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DATE
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LICENSE NO.

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SHEET NUMBER	39
PARISH	LAFAYETTE
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED / CHECKED	LEAR
DETAILED / CHECKED	THYMES
SERIES NUMBER	OCT. 2014 1 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

GEOMETRIC DETAILS
BEGIN PROJECT – MOSS ST. OVERPASS
I-10: EAST JCT. I-49 TO LA 328

DOTD
SIGMA CONSULTING GROUP, INC.

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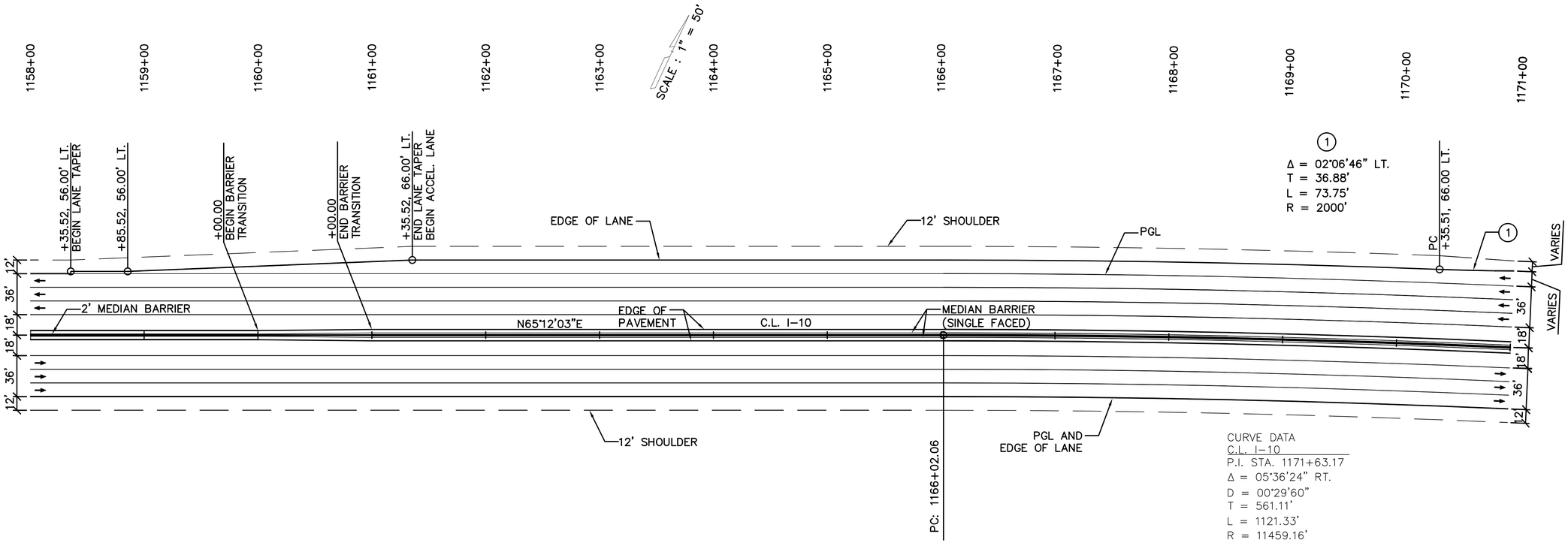
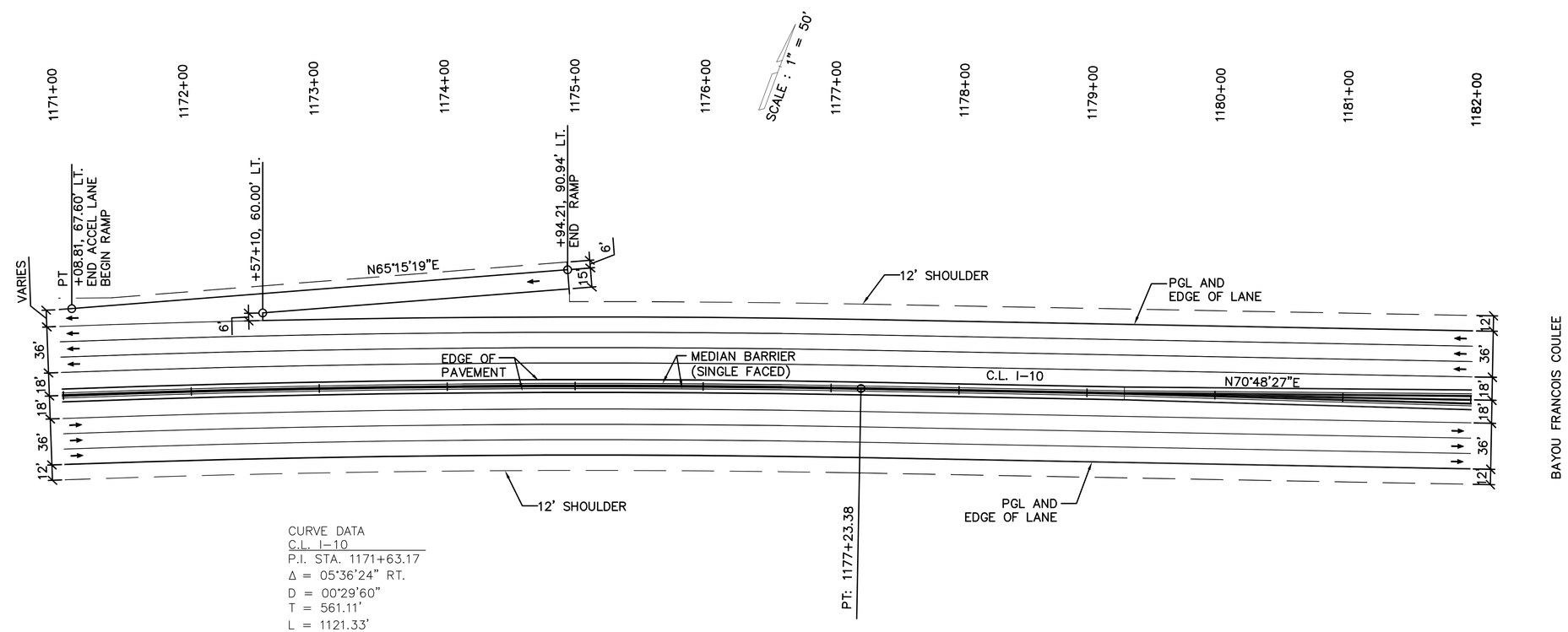
OCTOBER 2014

60% PRELIMINARY PLANS





Robert J. Lear, Jr.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

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LOUISIANA AVENUE

SHEET NUMBER	40
PARISH	LAFAYETTE
CONTROL-SECTION	450-05
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	THYMES
CHECKED	
SERIES NUMBER	OCT. 2014 2 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

GEOMETRIC DETAILS

MOSS ST – BAYOU FRANCOIS COULEE

I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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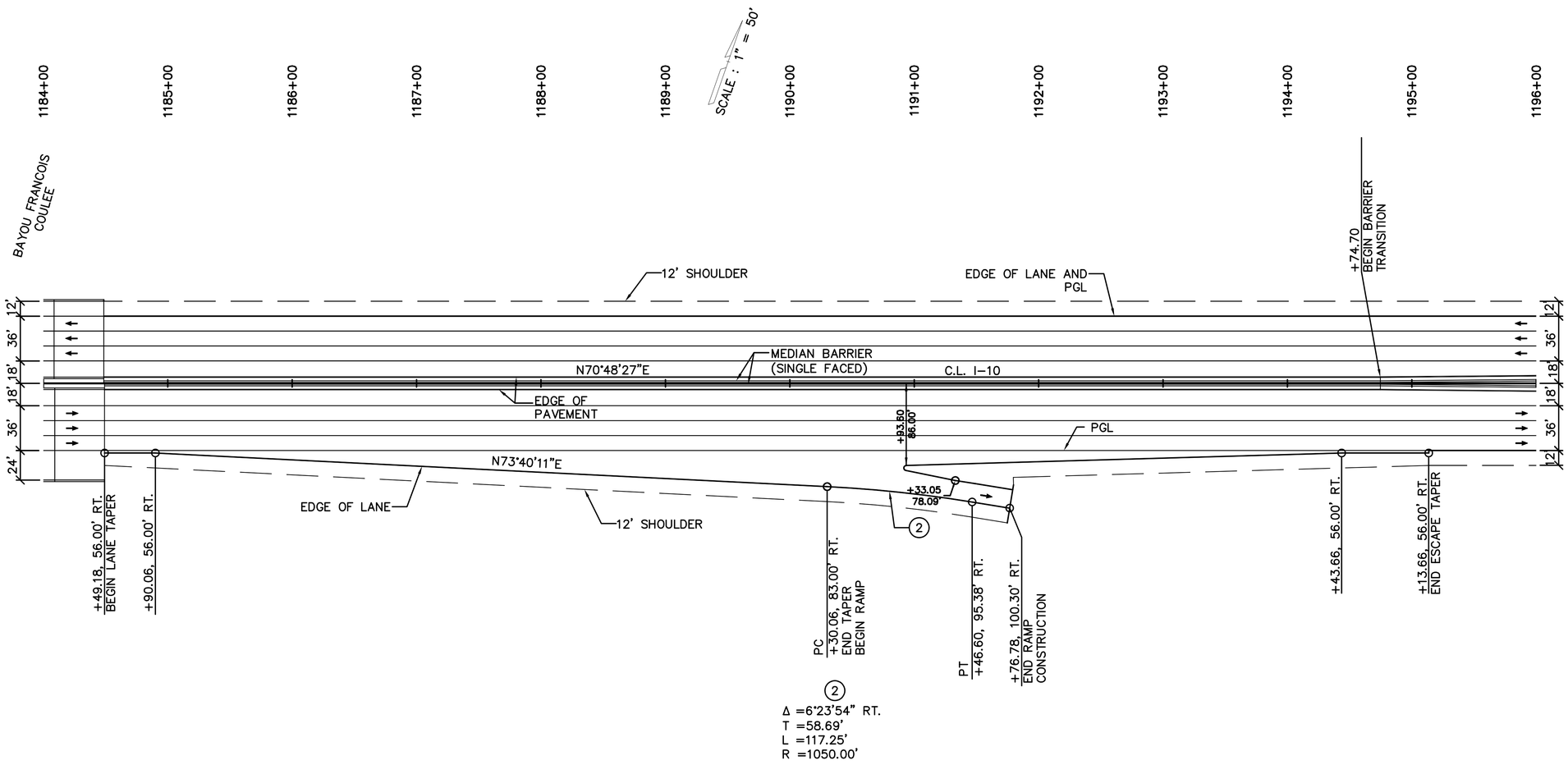
OCTOBER 2014

60% PRELIMINARY PLANS



Robert J. Lear, Jr.
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 29394
LICENSE NO.

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DESIGNED LEAR	PARISH LAFAYETTE		SHEET NUMBER 41
CHECKED			
DETAILED THYMES	CONTROL-SECTION 450-05		
CHECKED			
SERIES NUMBER OCT. 2014 3 OF 9	STATE PROJECT H.003003		

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

GEOMETRIC DETAILS
BAYOU FRANCOIS COULEE – LA AVE EB EXIT
I-10: EAST JCT. I-49 TO LA 328

DOTD

SIGMA CONSULTING GROUP, INC.

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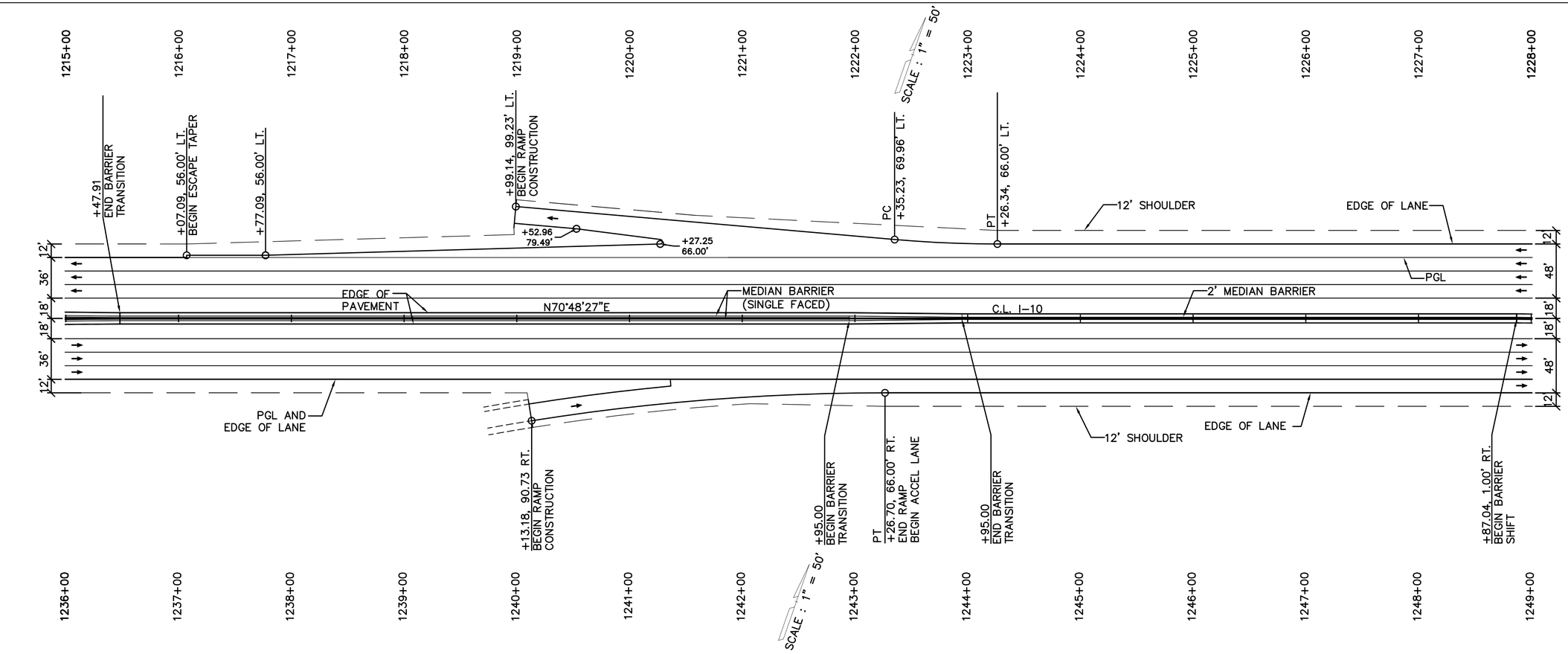
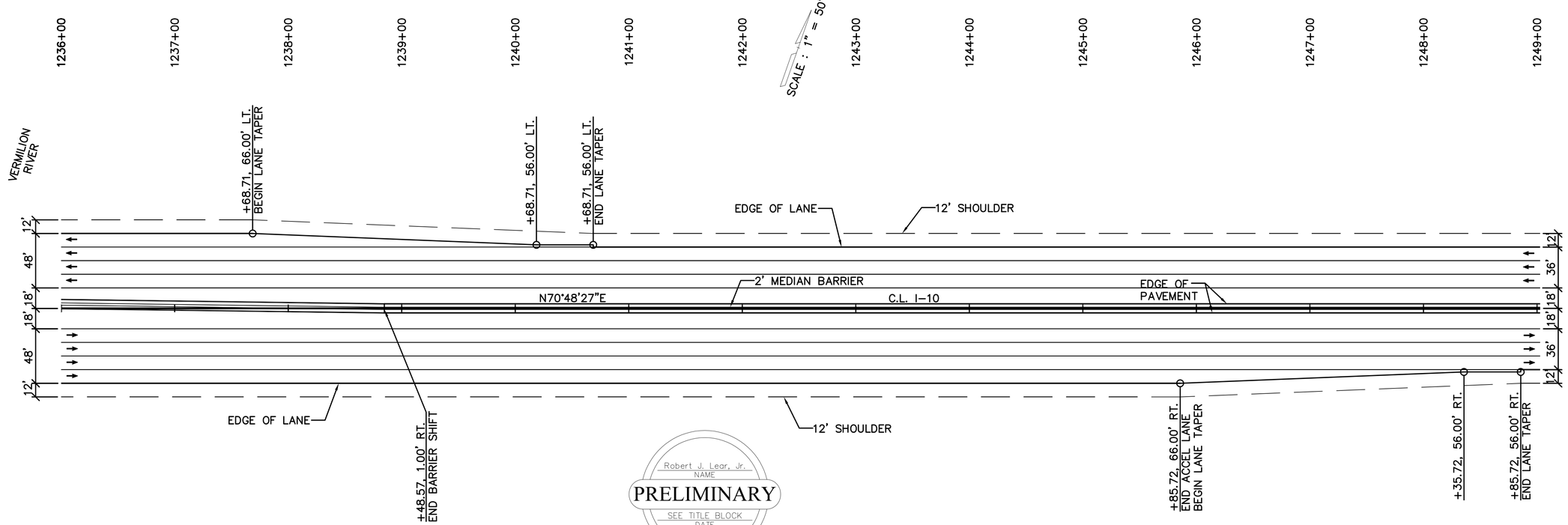
OCTOBER 2014

60% PRELIMINARY PLANS





Robert J. Lear, Jr.
NAME
PRELIMINARY
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F:\02020130311101600\Geometric Dwgs\H003003_GD01.dwg [GD01] Oct 20, 2014 - 4:11pm

SHEET NUMBER	42
PARISH	LAFAYETTE
CONTROL SECTION	450-05
STATE PROJECT	H.003003
DESIGNED / CHECKED	LEAR
DETAILED / CHECKED	THYMES
SERIES NUMBER	OCT. 2014 4 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

GEOMETRIC DETAILS

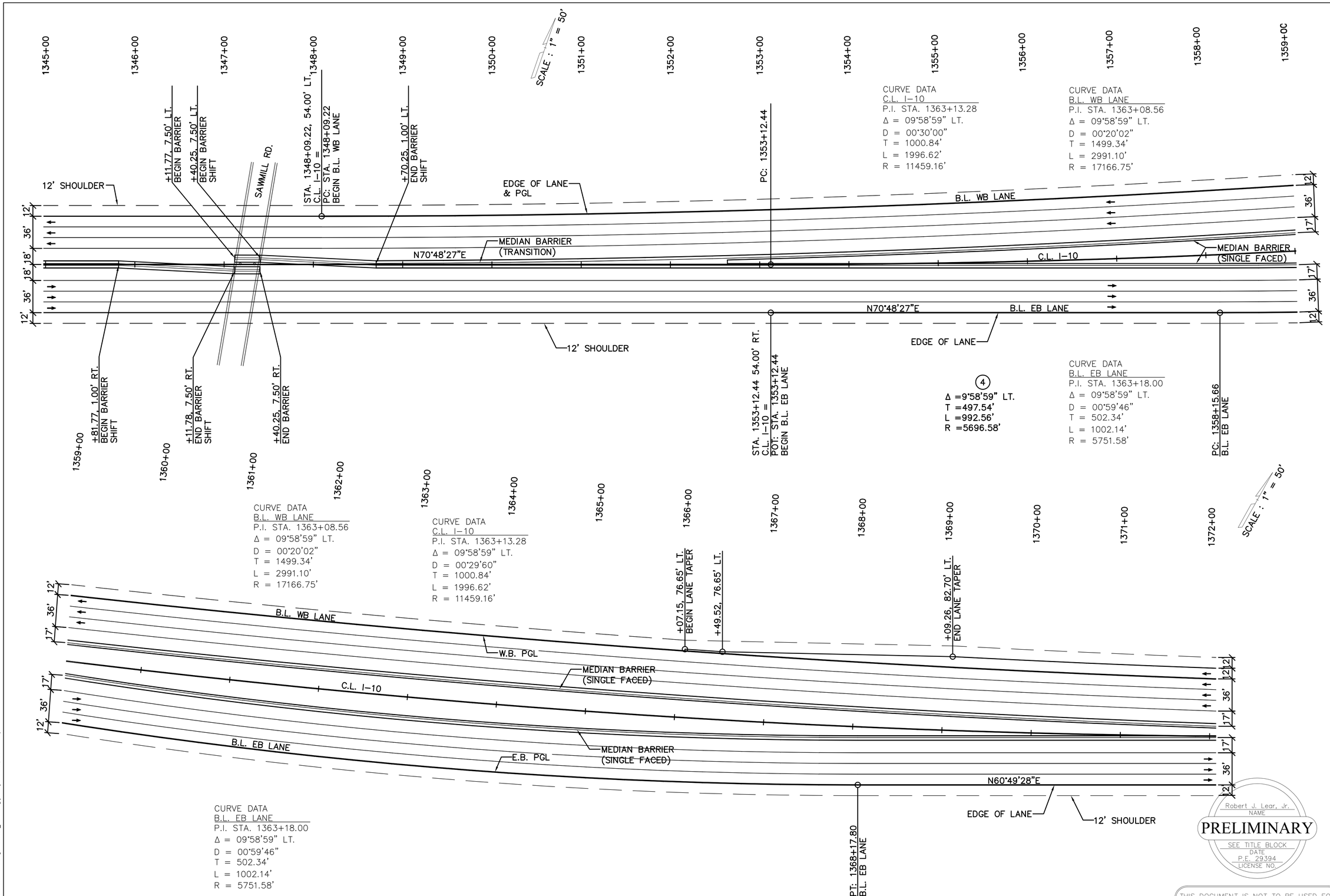
LA AVE. (EAST) & VERMILION RIVER EAST

I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

OCTOBER 2014

60% PRELIMINARY PLANS



Robert J. Lear, Jr.
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LICENSE NO.

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SHEET NUMBER 43

PARISH: LAFAYETTE / ST. MARTIN
CONTROL-SECTION: 450-05 / 450-06
STATE PROJECT: H.003003

DESIGNED: LEAR
CHECKED:
DETAILED: THYMES
CHECKED:
SERIES NUMBER: OCT. 2014 5 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SIGMA CONSULTING GROUP, INC.

GEOMETRIC DETAILS

SAWMILL RD. TO WEIGH STATION

I-10: EAST JCT. I-49 TO LA 328

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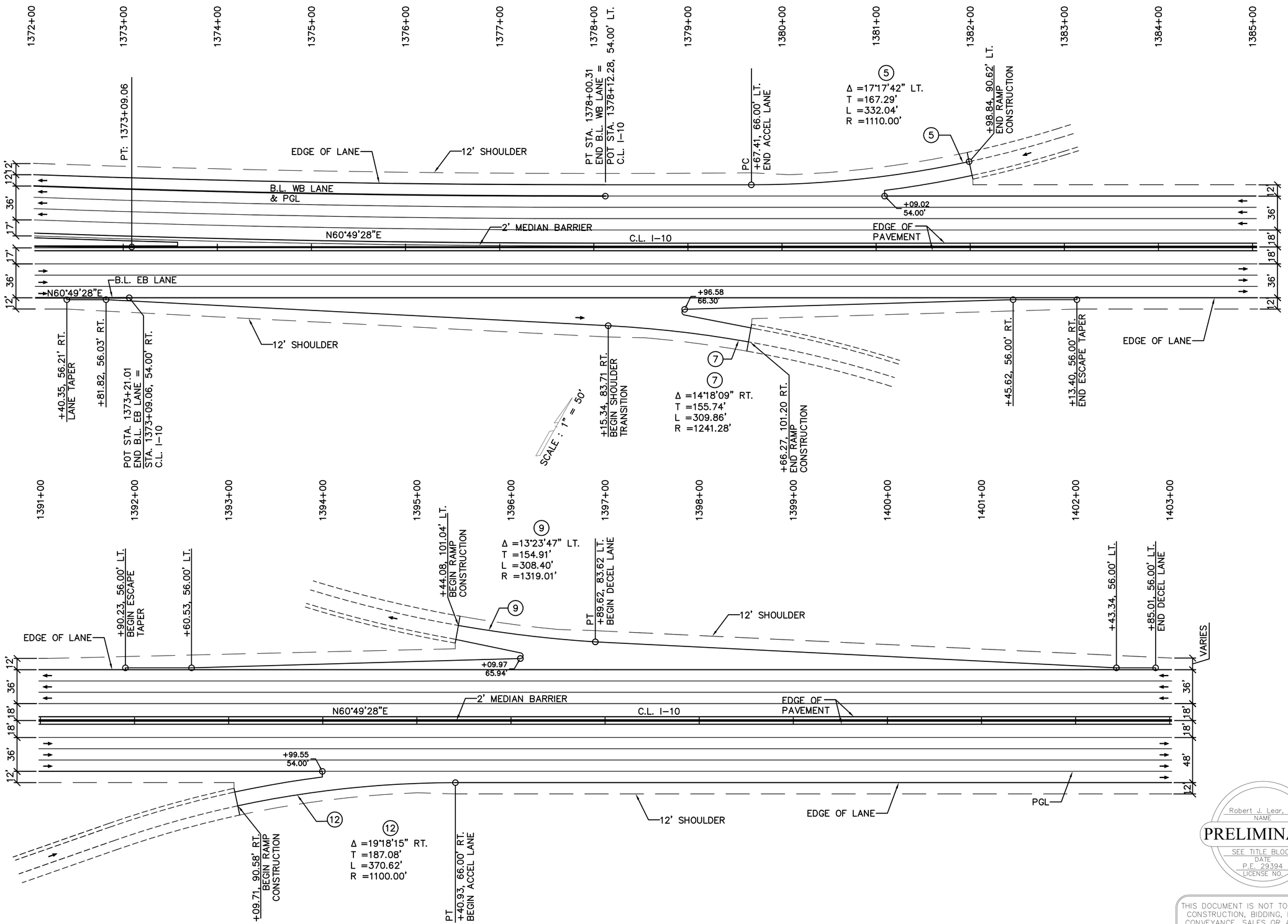
OCTOBER 2014

60% PRELIMINARY PLANS



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SHEET NUMBER	44
PARISH	ST. MARTIN
CONTROL-SECTION	450-06
STATE PROJECT	H.003003
DESIGNED / CHECKED	LEAR
DETAILED / CHECKED	THYMES
SERIES NUMBER	OCT. 2014 6 OF 9

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

GEOMETRIC DETAILS
WEIGH STATION
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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OCTOBER 2014

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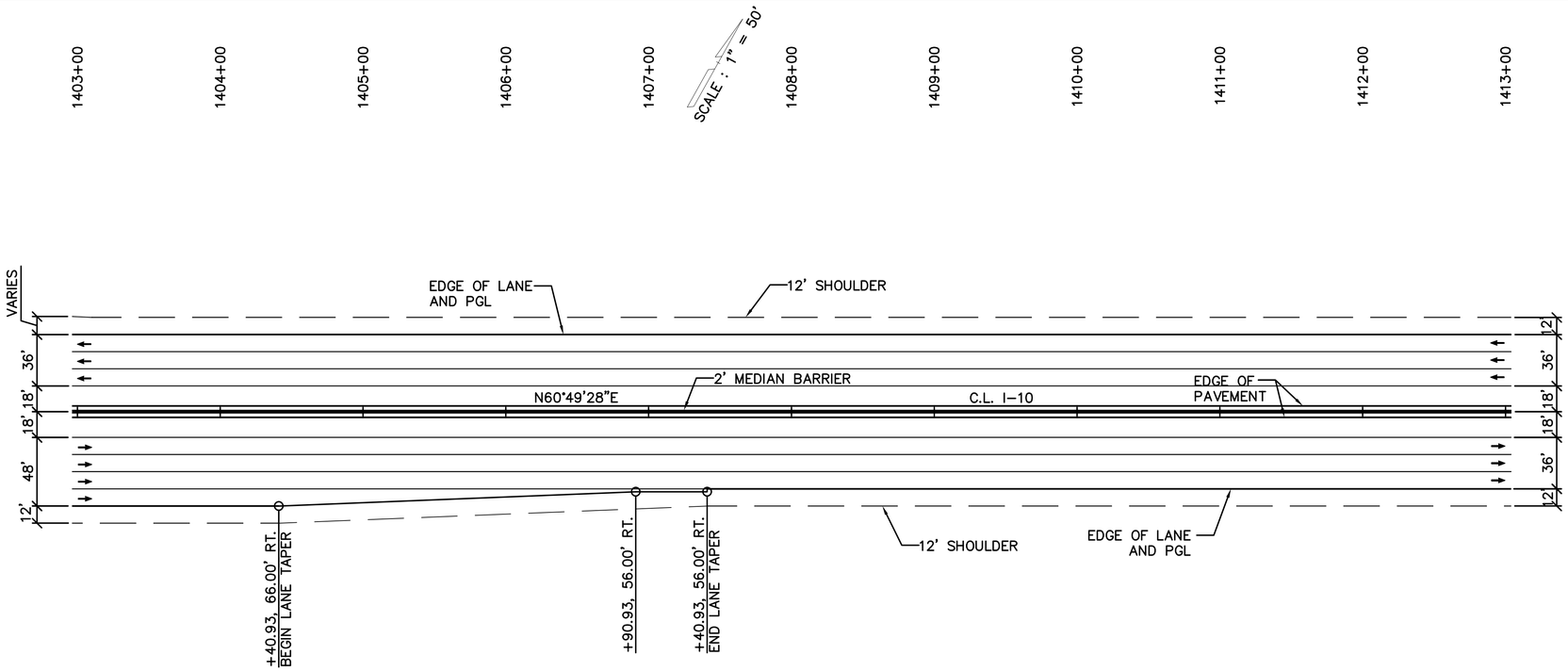

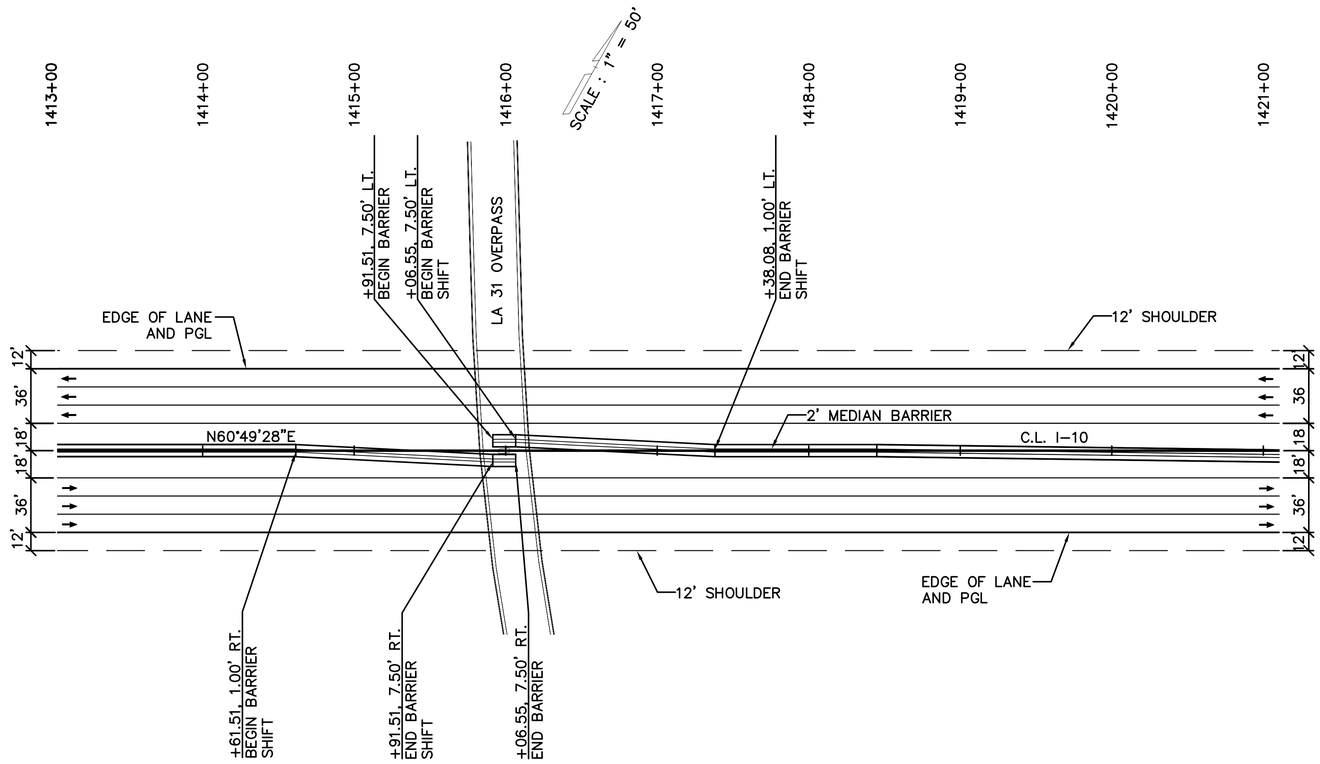

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SIGMA CONSULTING GROUP, INC.

SHEET NUMBER	45
PARISH	ST. MARTIN
CONTROL-SECTION	450-06
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	THYMES
CHECKED	
SERIES NUMBER	OCT. 2014 7 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

GEOMETRIC DETAILS
WEIGH STATION / LA 31 OVERPASS
I-10: EAST JCT. I-49 TO LA 328

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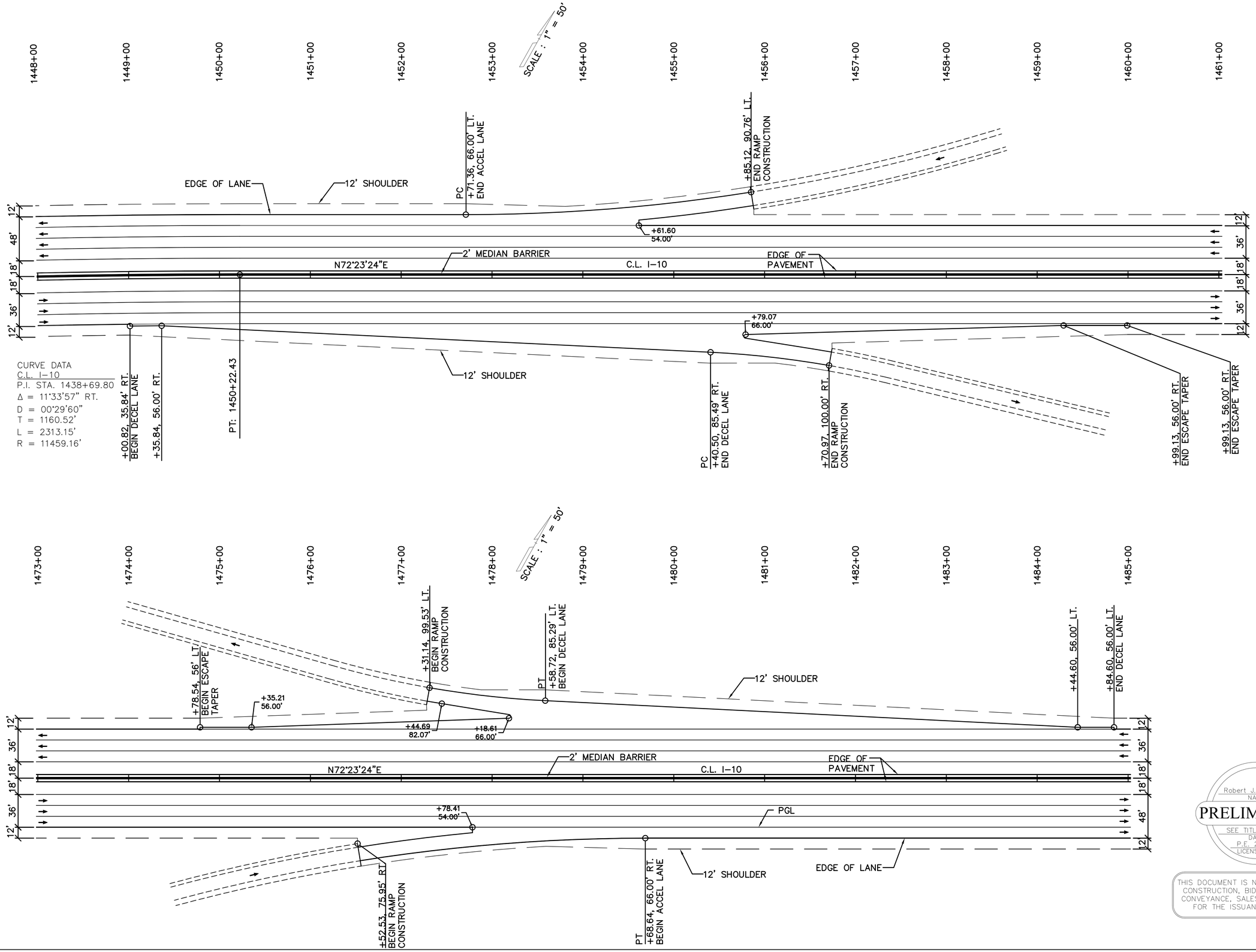
OCTOBER 2014

60% PRELIMINARY PLANS



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DATE
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LICENSE NO.

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SHEET NUMBER	46
PARISH	ST. MARTIN
CONTROL SECTION	450-06
STATE PROJECT	H.003003
DESIGNED	LEAR
CHECKED	
DETAILED	THYMES
CHECKED	
SERIES NUMBER	OCT. 2014 8 OF 9

NO. DATE REVISION OR CHANGE ORDER DESCRIPTION BY

GEOMETRIC DETAILS
LA 328 INTERCHANGE
I-10: EAST JCT. I-49 TO LA 328

SIGMA CONSULTING GROUP, INC.

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OCTOBER 2014

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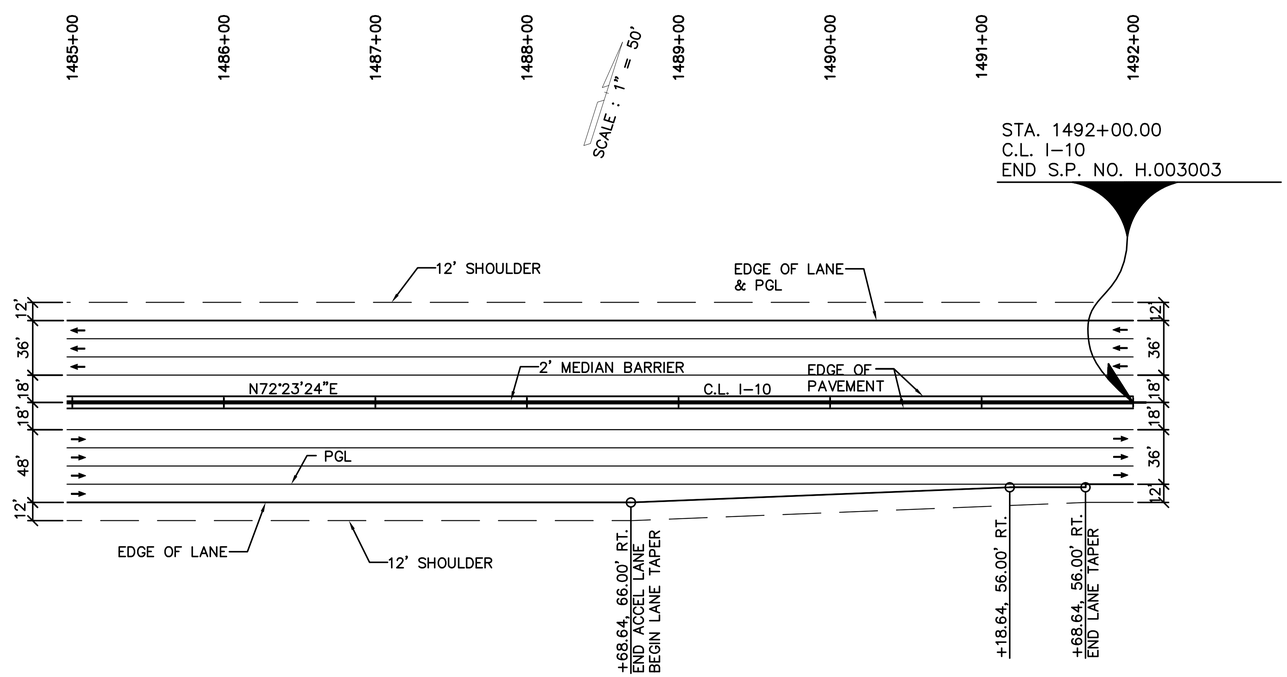

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SHEET NUMBER 47

PARISH: ST. MARTIN
CONTROL-SECTION: 450-06
STATE PROJECT: H.003003

DESIGNED: LEAR
CHECKED:
DETAILED: THYMES
CHECKED:
SERIES NUMBER: OCT. 2014 9 OF 9

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA

GEOMETRIC DETAILS
END OF PROJECT
I-10: EAST JCT. I-49 TO LA 328

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

SIGMA CONSULTING GROUP, INC.

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