

STATIONING

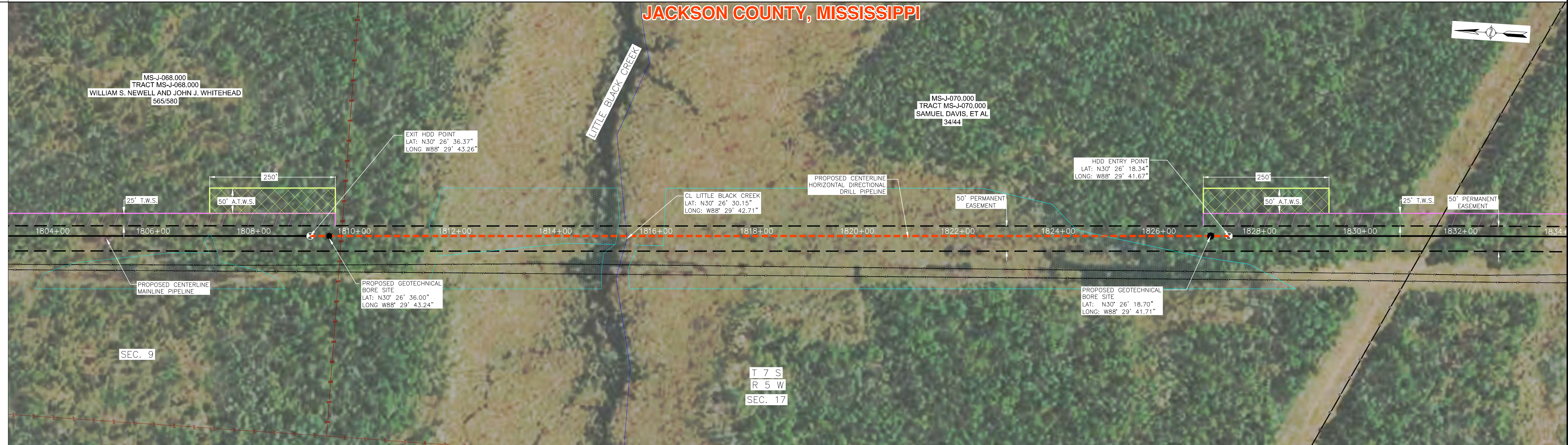
STA. 1809+10 EXIT HDD
STA. 1809+39 HDD TIE-IN
STA. 1809+75 SEC. LINE

STA. 1815+42 LITTLE BLACK CRK.

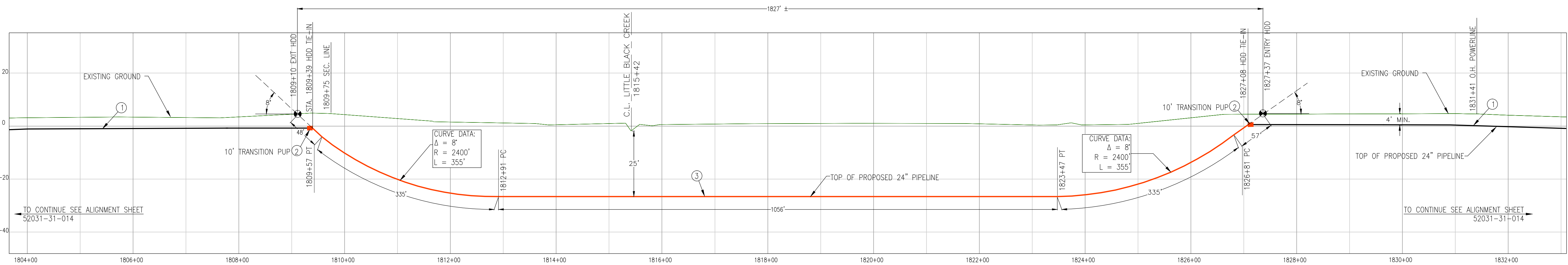
STA. 1827+08 HDD TIE-IN
STA. 1827+37 ENTRY HDD

STA. 1831+41 O.H. POWERLINE

ALIGNMENT



PROFILE

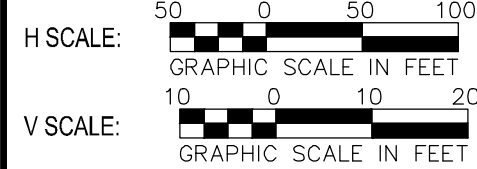


NOTE: THIS DRAWING IS INTENDED TO BE PRINTED AS 22"x34". PLEASE REFER TO GRAPHIC SCALE, AS DRAWING MAY HAVE BEEN REDUCED OR ENLARGED.

ISSUED FOR REVIEW



1-800-245-4545
www.onecalltexas.com
TEXAS ONE CALL SYSTEM



PIPE MATERIAL LIST			MATERIAL LIST		
ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DESCRIPTION	QTY
1	24.000" O.D. x 0.375" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE	N/A			
2	24.000" O.D. x 0.438" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE 30 MILS ARO DRL	20			
3	24.000" O.D. x 0.500" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE 30 MILS ARO DRL	18.31			

GENERAL NOTES

LEGEND

○ MILEPOST MARKER	— PIPELINE	— W — WATER LINE
○ POINT OF INFLECTION	— NATURAL GROUND PROFILE	— PARCELS
○ HOOBORE ENTRY POINT	— RAILROAD	— WETLANDS
○ PIPELINE MARKER	— FENCE	— PERMANENT EASEMENT
○ CATHODIC TEST STATION	— FOREIGN PIPELINE	— TEMPORARY WORKSPACE
○ INDUCTION BEND	— POWER LINE	— ADDITIONAL TEMP. WORKSPACE
○ AERIAL MARKER	— FIBER OPTIC	— COUNTY PARISH BOUNDARY
○ VALVE	— TELEPHONE LINE	— FABRICATION
○ BUOYANCY CONTROL	— CENTERLINE ROAD	
	— PROPERTY LINE	

REVISIONS		DRCH
NO.	DATE	REVISION
B	8/08/12	ISSUED FOR REVIEW DLM/BO
A	7/09/12	ISSUED FOR REVIEW DLM/BO
DISCLAIMER		

WILLBROS MAKES NO WARRANTY (EXPRESS, IMPLIED OR OTHERWISE) THAT THE INFORMATION CONTAINED HEREIN IS ACCURATE OR COMPLETE AS TO ANY AND ALL SUBSURFACE CONDITIONS AND CONFORMATION. ANY RELIANCE THE CONTRACTOR PLACES ON INFORMATION CONTAINED HEREIN AS TO SUCH CONDITIONS IS DONE AT ITS OWN RISK AND EXPENSE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE 'ONE CALL' SYSTEM PRIOR TO ANY EXCAVATION.

WILLBROS
400 Inverness Pkwy, Ste 400
Denver, CO 80112
303-790-1200

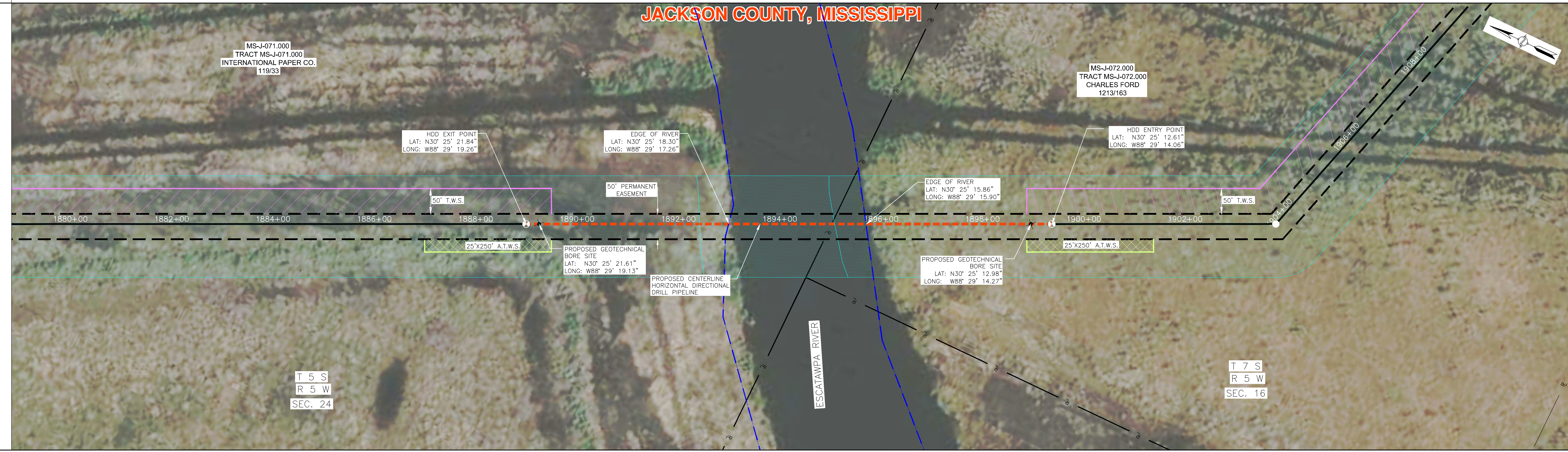
**PLAINS AA PROPOSED 24" PIPELINE
LITTLE BLACK CREEK
HORIZONTAL DIRECTIONAL DRILL
PLAN AND PROFILE
JACKSON COUNTY, MISSISSIPPI**

SCALE: AS SHOWN	DRAWN: DLM	CHECKED BY: BJO	DATE: 07/06/12
JOB NO. 52031	DRAWING: 52031-33-034	REV. B	

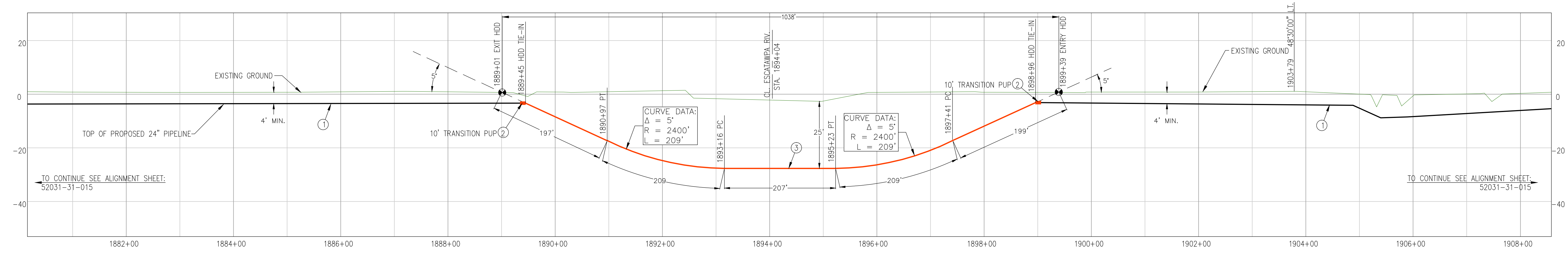
STATIONING

STA. 1889+01 EXIT HDD
 STA. 1889+45 HDD TIE-IN
 STA. 1894+04 ESCATAWPA RIV.
 STA. 1898+96 HDD TIE-IN
 STA. 1899+39 ENTRY HDD
 STA. 1903+79 48330'00" L.L.

ALIGNMENT



PROFILE



NOTE: THIS DRAWING IS INTENDED TO BE PRINTED AS 22"x34". PLEASE REFER TO GRAPHIC SCALE, AS DRAWING MAY HAVE BEEN REDUCED OR ENLARGED.

1-800-245-4545
 www.onecalltexas.com
 TEXAS ONE CALL SYSTEM

H SCALE: 1" = 50'
 GRAPHIC SCALE IN FEET

V SCALE: 1" = 10'
 GRAPHIC SCALE IN FEET

PIPE MATERIAL LIST				MATERIAL LIST			
ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DESCRIPTION	QTY		
1	24.000" O.D. x 0.375" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE	N/A					
2	24.000" O.D. x 0.438" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE 30 MILS ARO DRL	20					
3	24.000" O.D. x 0.500" W.T. API PSL 2 X-65 ERW DRL BBE 14-16 MILS FBE 30 MILS ARO DRL	1021					

GENERAL NOTES

1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND EASEMENTS.

3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND UTILITIES.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY AND TRAFFIC CONTROL THROUGHOUT THE PROJECT.

LEGEND

○	MILEPOST MARKER	—	PIPELINE	—W—	WATER LINE
●	POINT OF INFLECTION	—	NATURAL GROUND PROFILE	▭	PARCELS
⊙	HOBBORE ENTRY/EXIT	+	RAILROAD	▨	WETLANDS
⊙	PIPELINE MARKER	—X—	FENCE	▭	PERMANENT EASEMENT
⊙	CATHODIC TEST STATION	—//—	FOREIGN PIPELINE	▭	TEMPORARY WORKSPACE
⊙	INDUCTION BEND	—P—	POWER LINE	▭	ADDITIONAL TEMP. WORKSPACE
⊙	AERIAL MARKER	—FO—	FIBER OPTIC	▭	COUNTY/PARISH BOUNDARY
⊙	VALVE	—T—	TELEPHONE LINE	▭	FABRICATION
⊙	BUOYANCY CONTROL	—C—	CENTERLINE ROAD	▭	
		—?	PROPERTY LINE		

REVISIONS			
NO.	DATE	REVISION	DR/CH
B	8/07/12	ISSUED FOR REVIEW	DLM/BO
A	7/09/12	ISSUED FOR REVIEW	DLM/BO
DISCLAIMER			

WILLBROS MAKES NO WARRANTY (EXPRESS, IMPLIED OR OTHERWISE) THAT THE INFORMATION CONTAINED HEREIN IS ACCURATE OR COMPLETE AS TO ANY AND ALL SUBSURFACE CONDITIONS AND CONFORMATION. ANY RELIANCE THE CONTRACTOR PLACES ON INFORMATION CONTAINED HEREIN AS TO SUCH CONDITIONS IS DONE AT ITS OWN RISK AND EXPENSE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE 'ONE CALL' SYSTEM PRIOR TO ANY EXCAVATION.

400 Inverness Pkwy, Ste 400
 Denver, CO 80112
 303-790-1200

PLAINS AA PROPOSED 24" PIPELINE SOUTH ESCATAWPA RIVER HORIZONTAL DIRECTIONAL DRILL PLAN AND PROFILE JACKSON COUNTY, MISSISSIPPI

SCALE: AS SHOWN	DRAWN: DLM	CHECKED BY: BJO	DATE: 06/07/12
JOB NO. 52031	DRAWING: 52031-33-035	REV. B	

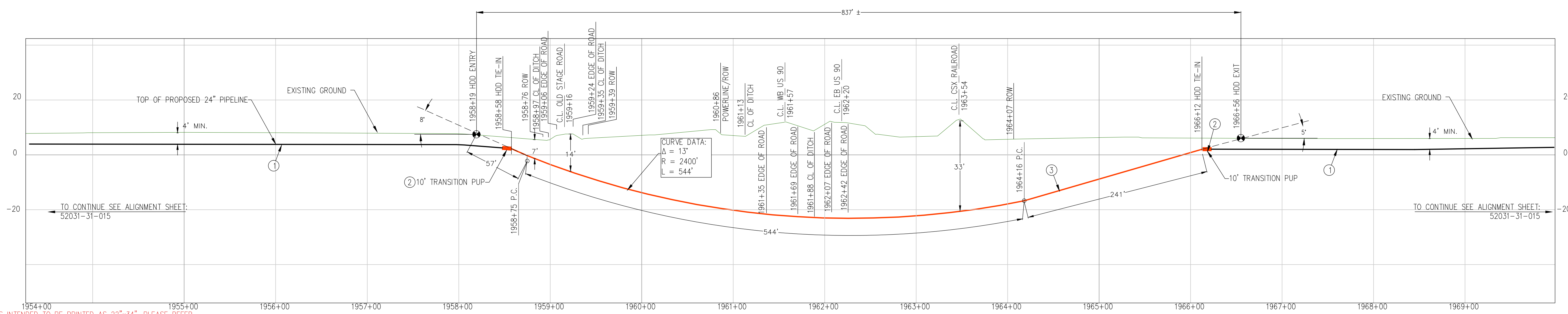
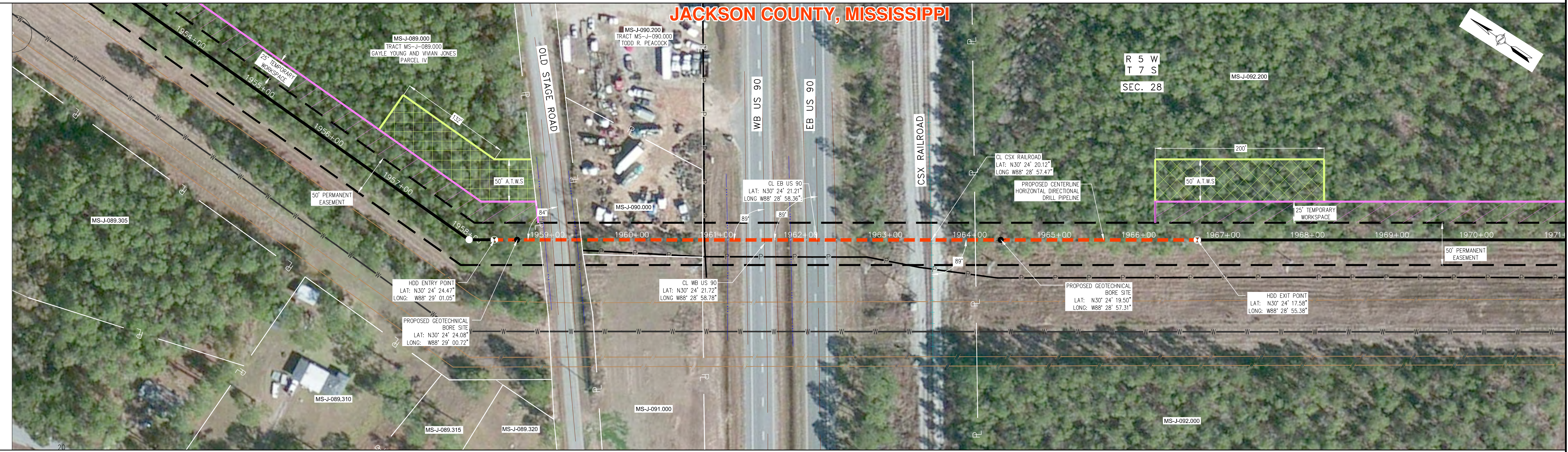
STATIONING

ALIGNMENT

PROFILE

JACKSON COUNTY, MISSISSIPPI

R 5 W
T 7 S
SEC. 28



NOTE: THIS DRAWING IS INTENDED TO BE PRINTED AS 22"x34". PLEASE REFER TO GRAPHIC SCALE, AS DRAWING MAY HAVE BEEN REDUCED OR ENLARGED.

ISSUED FOR REVIEW

1-800-345-4545
www.onecalltexas.com
TEXAS ONE CALL SYSTEM

H SCALE: 30 0 30 60
GRAPHIC SCALE IN FEET

V SCALE: 10 0 10 20
GRAPHIC SCALE IN FEET

PIPE MATERIAL LIST				MATERIAL LIST			
ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DESCRIPTION	QTY		
1	24.000" O.D. x 0.344" W.T. API 5L X-60 14-16MILS FBE	N/A					
2	24.000" O.D. x 0.438" W.T. API 5L X-52 1416 MILS FBE 30 MILS ARO DRL	20					
3	24.000" O.D. x 0.500" W.T. API 5L X-52 1416 MILS FBE 30 MILS ARO DRL	842					

GENERAL NOTES

1. MILEPOST MARKER

2. POINT OF INFLECTION

3. HOBBORNE ENTRY POINT

4. PIPELINE MARKER

5. CATHODIC TEST STATION

6. INDUCTION BEND

7. AERIAL MARKER

8. VALVE

9. BUOYANCY CONTROL

10. PIPELINE

11. NATURAL GROUND PROFILE

12. PARCELS

13. WETLANDS

14. FENCE

15. FOREIGN PIPELINE

16. POWER LINE

17. FIBER OPTIC

18. TELEPHONE LINE

19. CENTERLINE ROAD

20. PROPERTY LINE

21. WATER LINE

22. WETLANDS

23. PERMANENT EASEMENT

24. TEMPORARY WORKSPACE

25. ADDITIONAL TEMP. WORKSPACE

26. COUNTY/PARISH BOUNDARY

27. FABRICATION

NO.	DATE	REVISION	DR/CH
B	6/27/12	ISSUED FOR REVIEW	DLM
C	7/09/12	ISSUED FOR REVIEW	DLM
D	8/03/12	ISSUED FOR REVIEW	DLM

DISCLAIMER

WILLBROS MAKES NO WARRANTY (EXPRESS, IMPLIED OR OTHERWISE) THAT THE INFORMATION CONTAINED HEREIN IS ACCURATE OR COMPLETE AS TO ANY AND ALL SUBSURFACE CONDITIONS AND CONFORMATION. ANY RELIANCE THE CONTRACTOR PLACES ON INFORMATION CONTAINED HEREIN AS TO SUCH CONDITIONS IS DONE AT ITS OWN RISK AND EXPENSE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE 'ONE CALL' SYSTEM PRIOR TO ANY EXCAVATION.

400 Inverness Pkwy, Ste 400
Denver, CO 80112
303-790-1200

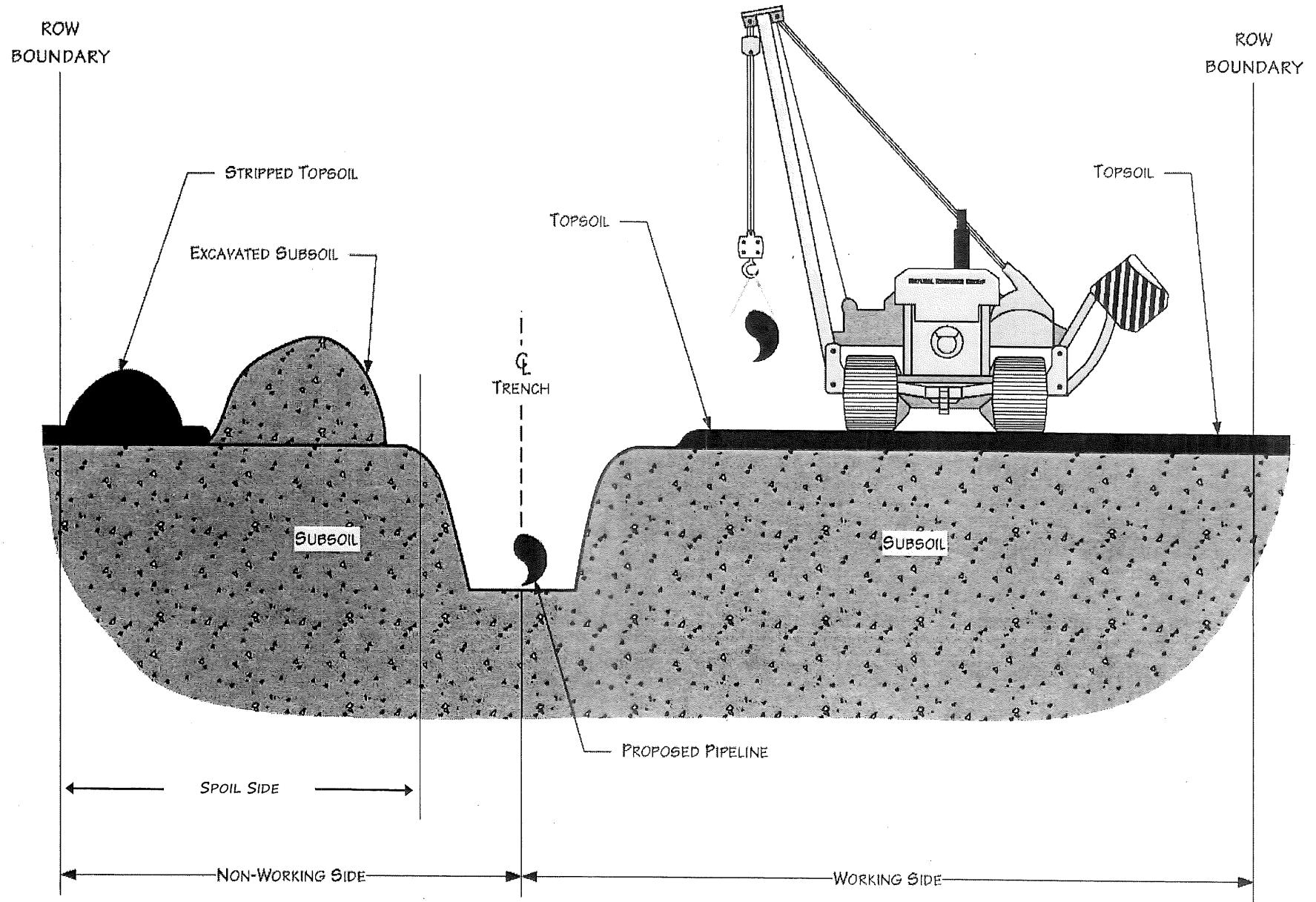
SCALE: AS SHOWN
JOB NO. 52031

DRAWN: DLM
CHECKED BY: BJO
DATE: 06/19/12
REV. D

PLAINS AA PROPOSED 24" PIPELINE
CSX RAILROAD & US 90
HORIZONTAL DIRECTIONAL DRILL
PLAN AND PROFILE
JACKSON COUNTY, MISSISSIPPI

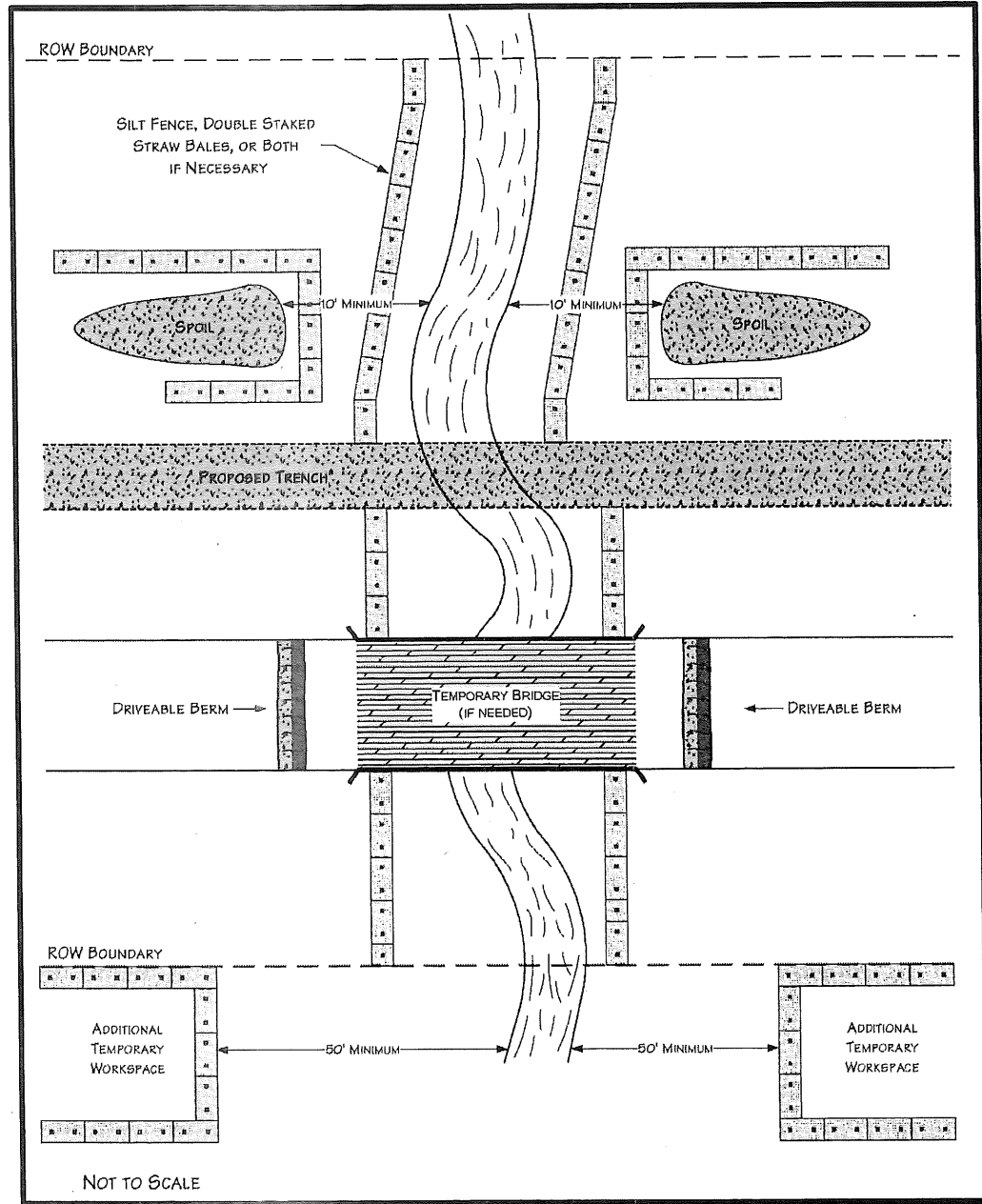
SCALE: AS SHOWN
JOB NO. 52031

DRAWN: DLM
CHECKED BY: BJO
DATE: 06/19/12
REV. D

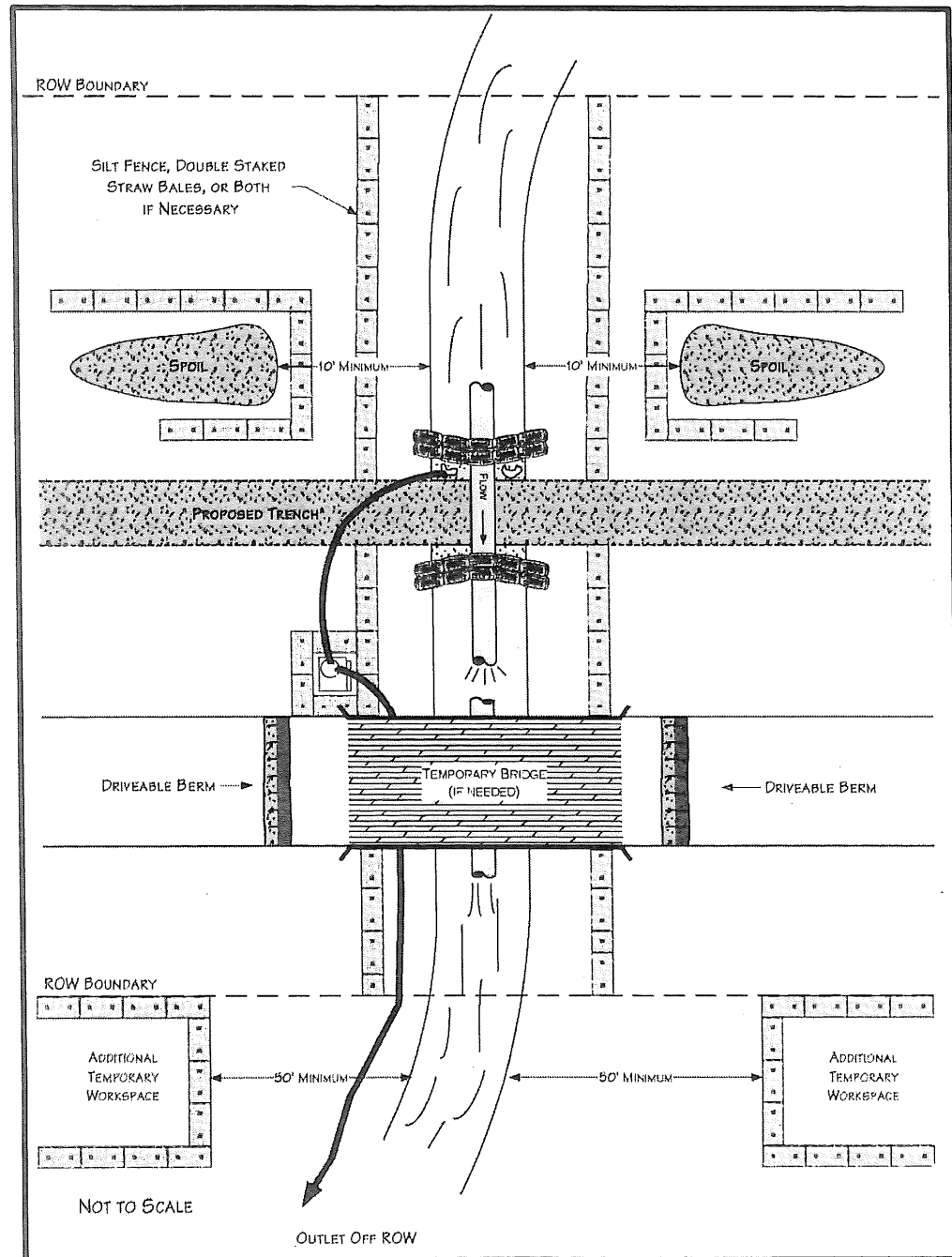


NOT TO SCALE **Trench and Spoil Side Method**

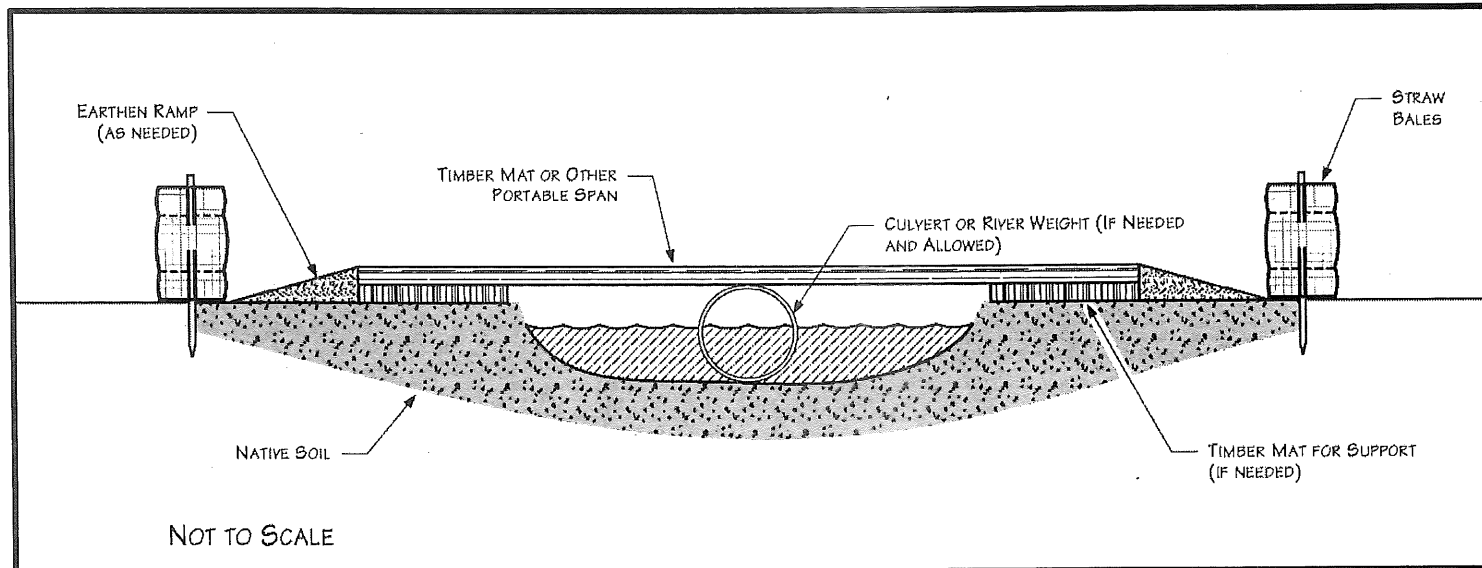
Open-Cut Waterbody Crossing Method



Flumed Waterbody Crossing Method



Equipment Bridge



Performance Criteria

- Design, construct, and maintain to
 - Provide unrestricted flow
 - Withstand and pass highest expected flows
 - Prevent soil from entering waterbody
- Align culverts to prevent bank erosion or streambed scour
- Install energy-dissipating devices downstream of culverts, if necessary

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Plains Southcap LLC - MS	File Number: SAM-2012-01165-MBM	Date: 1Feb. 2013
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input checked="" type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Mr. MICHAEL MOXEY
CESAM-RD-I-S
U.S. ARMY CORPS OF ENGINEERS
POST OFFICE BOX 2288
MOBILE, ALABAMA 36601-2228
(251) 694-3771

If you only have questions regarding the appeal process you may also contact:

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

AS REQUIRED BY THE FREEDOM OF INFORMATION ACT (FOIA) THIS FILE IS BEING MADE AVAILABLE
ONLINE BECAUSE THE MOBILE DISTRICT FOIA OFFICE HAS RECEIVED MORE THAN THREE (3) REQUESTS
FOR SAME. ANY QUESTIONS ABOUT THE FOIA PROCESS MUST BE DIRECTED TO OUR FOIA OFFICES.
FOIA-SAM@usace.army.mil



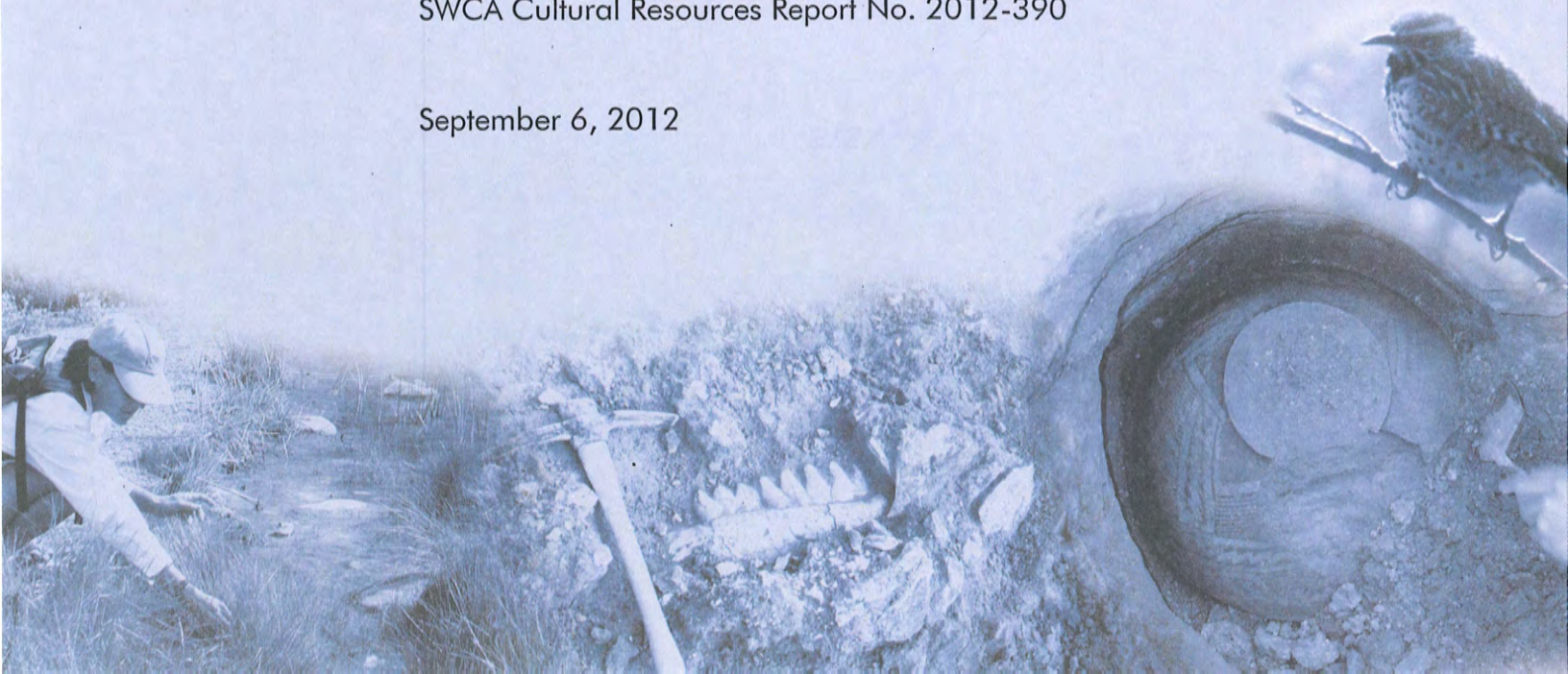
**PHASE I CULTURAL RESOURCES SURVEY OF THE
PROPOSED TEN-MILE FACILITY TO PASCAGOULA 41-
MILE CRUDE OIL PIPELINE, MOBILE COUNTY, ALABAMA
AND JACKSON COUNTY, MISSISSIPPI**

Prepared for
Plains Southcap, LLC

Prepared by
Todd L. Butler and Brian Huttick

SWCA Cultural Resources Report No. 2012-390

September 6, 2012



AS REQUIRED BY THE FREEDOM OF INFORMATION ACT (FOIA) THIS FILE IS BEING MADE AVAILABLE
ONLINE BECAUSE THE MOBILE DISTRICT FOIA OFFICE HAS RECEIVED MORE THAN THREE (3) REQUESTS
FOR SAME. ANY QUESTIONS ABOUT THE FOIA PROCESS MUST BE DIRECTED TO OUR FOIA OFFICES.
FOIA-SAM@usace.army.mil

Pages 366 through 483 redacted for the following reasons:

(b) 3 (16 U.S.C. § 470hh)



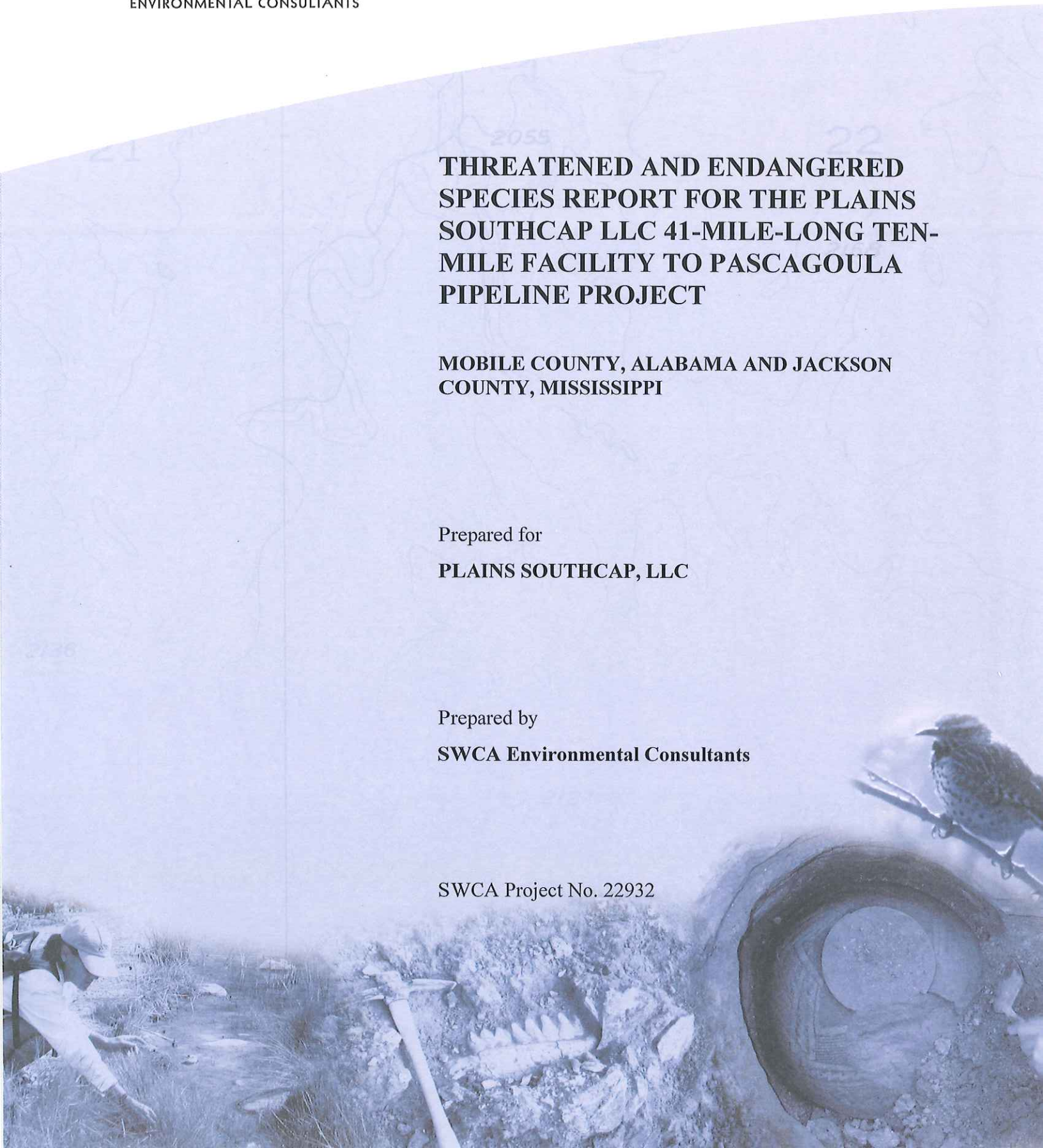
**THREATENED AND ENDANGERED
SPECIES REPORT FOR THE PLAINS
SOUTHCAP LLC 41-MILE-LONG TEN-
MILE FACILITY TO PASCAGOULA
PIPELINE PROJECT**

**MOBILE COUNTY, ALABAMA AND JACKSON
COUNTY, MISSISSIPPI**

Prepared for
PLAINS SOUTHCAP, LLC

Prepared by
SWCA Environmental Consultants

SWCA Project No. 22932



**THREATENED AND ENDANGERED SPECIES REPORT FOR THE
PLAINS SOUTHCAP LLC 41-MILE-LONG TEN-MILE FACILITY TO
PASCAGOULA REFINMERY PIPELINE PROJECT**

MOBILE COUNTY, ALABAMA AND JACKSON COUNTY, MISSISSIPPI

Prepared for

Plains Southcap, LLC
333 Clay Street, Suite 1600 (77002)
Houston, TX 77210-4648
Attn: Dean Gore

Prepared by



7255 Langtry, Suite 100
Houston, TX 77040
(713) 934-9900
www.swca.com

Eric Munscher
Herpetologist (Scientist)
Houston Natural Resources

Tom Sankey
Senior Project Manager
Houston Natural Resources

SWCA Project No. 22932

September 9, 2012

EXECUTIVE SUMMARY

SWCA Environmental Consultants (SWCA) has prepared this threatened and endangered species report for the proposed approximately 41-mile-long Plains Southcap, LLC (Plains) Ten-Mile Facility to Chevron Pascagoula Refinery Pipeline Project (proposed project) in Mobile County, Alabama and Jackson County, Mississippi (Figure 1). The work was conducted at the request of Plains Southcap, LLC in order to facilitate compliance with the Endangered Species Act of 1973 (ESA), as amended.

SWCA performed a threatened and endangered species review to determine which federally listed species would have the potential to occur within the proposed project area (Figure 1). Based upon field observations and habitat descriptions and requirements of listed species, SWCA determined that the proposed project may affect the gopher tortoise, eastern indigo snake, gopher frog, and bald eagle. SWCA recommends avoiding gopher tortoise burrows which will, in turn, minimize potential impacts to the eastern indigo snake and gopher frog. SWCA also recommends performing a second eagle survey before the construction phase of the project to verify that the documented nests are not active during the 2012-2013 breeding season.

Within the limitations of schedule, budget, and scope of work, SWCA warrants that this study was conducted in accordance with accepted environmental science practices, including the technical guidelines, evaluation criteria, and species' listing status in effect at the time this evaluation was performed.

The results and conclusions of this report represent the best professional judgment of SWCA scientists. No other warranty, expressed or implied, is made.

Please be aware that only the U.S. Fish and Wildlife Service and/or lead federal agency can determine compliance with the Endangered Species Act.

Table of Contents

Executive Summary	i
1.0 Introduction.....	1
1.1 Project Purpose	1
1.2 Project Location	1
1.3 Project Description.....	1
2.0 Methods.....	3
2.1 Species Identification	3
2.2 Species Evaluation	3
3.0 Results	4
3.1 Ecological Overview	4
3.2 Vegetation.....	4
3.2.1 Herbaceous Upland	4
3.2.2 Scrub-Shrub Upland.....	4
3.2.3 Forested Upland	5
3.2.4 Palustrine Emergent Wetland	5
3.2.5 Palustrine Scrub-shrub Wetland	5
3.2.6 Palustrine Forested Wetland.....	6
3.3 Alabama and Mississippi Natural Diversity Database Records.....	6
3.4 Species Evaluation	6
3.4.1 Bald Eagle	9
3.4.2 Red-Cockaded Woodpecker	11
3.4.3 Wood Stork.....	11
3.4.4 Flatwoods Salamander.....	12
3.4.5 Gopher Frog	12
3.4.6 Gopher Tortoise.....	13
3.4.7 Alabama Red-Bellied Turtle.....	15
3.4.8 Yellow-Blotched Map Turtle.....	15
3.4.9 Eastern Indigo Snake.....	16
3.4.10 Black Pine Snake	17
3.4.11 Gulf Sturgeon	17
3.4.12 Iron Colored Shiner	18
3.4.13 Louisiana quillwort.....	18
4.0 Limitations and Warranty	19
5.0 Literature Cited	20

List of Figures

Figure 1: Project Location Map	2
--------------------------------------	---

List of Tables

Table 1: Federally Listed Species Potentially Occurring in Jackson County Mississippi and Mobile County Alabama7

List of Attachments

- Appendix A: USFWS and Alabama and Mississippi Threatened and Endangered Species List and Occurrence Map.
- Appendix B: Gopher Tortoise Survey Map Book
- Appendix C: Bald Eagle Survey Map
- Appendix D: Gopher Tortoise Survey Photographic Log

1.0 INTRODUCTION

SWCA Environmental Consultants (SWCA) has prepared this threatened and endangered species report for the proposed 41-mile-long Ten-Mile to Pascagoula Crude Oil Pipeline Project (proposed project) in Mobile County Alabama and Jackson County Mississippi (Figure 1). The work was conducted at the request of Plains Southcap, LLC in order to facilitate compliance with the Endangered Species Act of 1973 (ESA), as amended.

The scope of work for this threatened and endangered species report included:

- review of the U.S. Fish and Wildlife Service (USFWS) threatened and endangered species lists for Mobile County Alabama and Jackson County Mississippi (**Appendix A**);
- review of the Alabama and Mississippi Natural Diversity Databases (NDD) occurrence records for threatened and endangered species near the project location;
- field reconnaissance survey of a 200-foot-wide corridor centered on the proposed pipeline centerline (project area); and
- evaluation of the potential for the species listed in this report to occur in the project area.

1.1 PROJECT PURPOSE

The proposed project will be constructed to transport crude oil from the Plains Southcap, LLC Ten-Mile facility northwest of Mobile Alabama, to the Chevron Refinery in Pascagoula, Mississippi.

1.2 PROJECT LOCATION

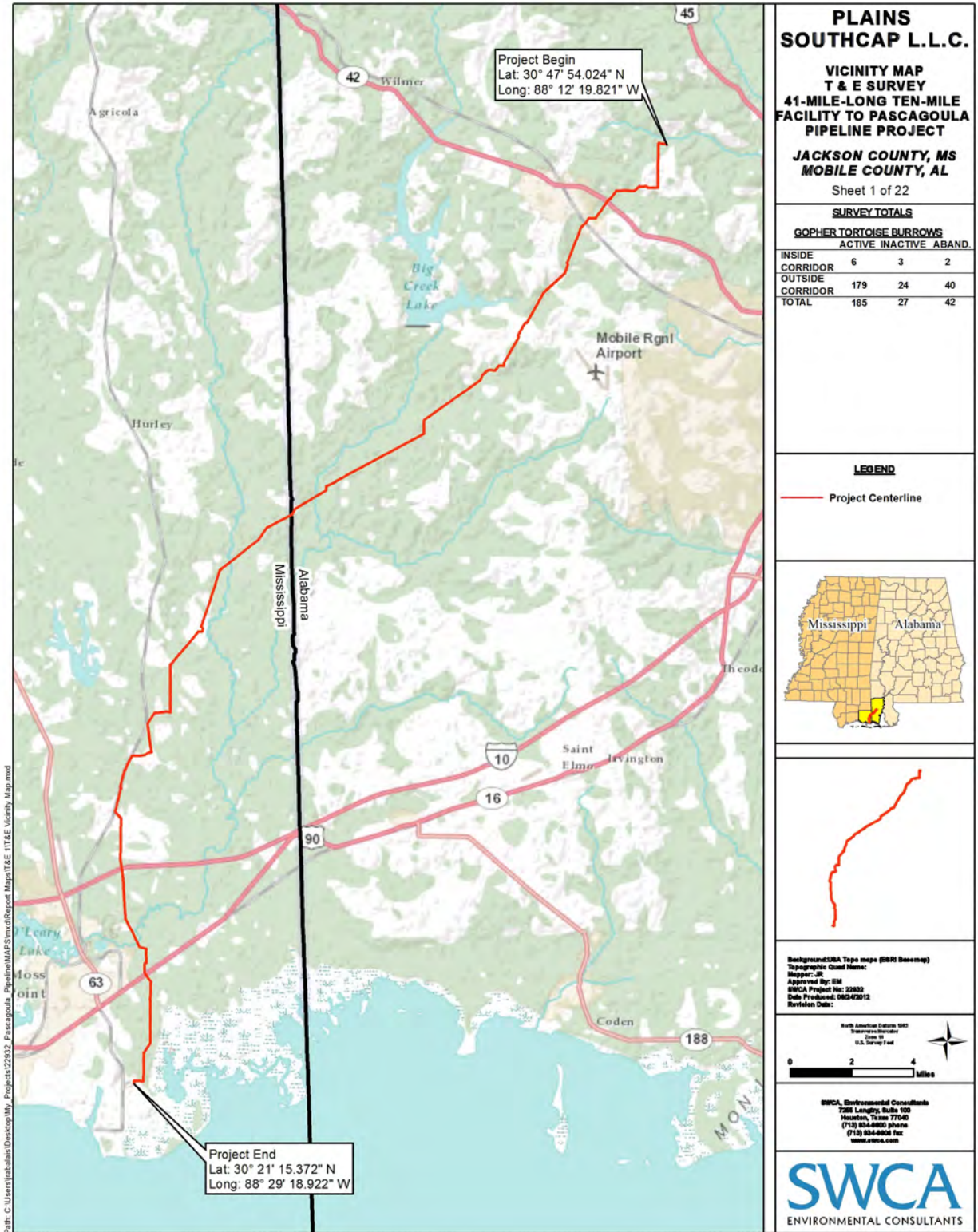
The proposed project will originate at the Plains Southcap, LLC Ten-Mile crude oil facility approximately 0.5 mile north off of County Road 217 on Whigham Rd. The proposed project will extend southwest through Mobile County, Alabama and Jackson County, Mississippi for approximately 41 miles and terminate at the Chevron Pascagoula Refinery, Mississippi. Above-ground facility locations are not yet defined, but once identified will be constructed in upland locations within or immediately adjacent to the pipeline right-of-way (ROW) and will include pig launching stations, pig receiving stations, and valve sites.

1.3 PROJECT DESCRIPTION

Construction of the proposed project is slated to begin in March 2013 and end before September 2013. No fill material will be placed within waters or wetlands for more than three months.

The proposed project will consist of the construction and placement of approximately 41 miles of 24-inch diameter crude oil pipeline. Construction of the pipeline will be within a 50-foot-wide ROW and will consist of clearing vegetation, excavating a trench, laying the pipe, replacing the soil, adjusting the topography to match pre-construction contours, and re-establishing vegetation. Please refer to the attached map book (**Appendix B**) for an illustration of the survey corridor and 50' permanent ROW within the project area.

Figure 1: Project Location Map



2.0 METHODS

SWCA performed a threatened and endangered species review to determine which federally and state listed threatened, endangered, and candidate species would have the potential to occur within the project area. The first step was to review the U.S. Fish and Wildlife Service (USFWS) County records for each state as well as the Alabama Department of Conservation and Natural Resources and the Mississippi Department of Wildlife, Fisheries, and Parks annotated county lists of rare species for Mobile County, Alabama and Jackson County, Mississippi, respectively (**Appendix A**). The next step was to determine which listed species may occur in the project area based on species biology and habitat requirements. A Natural Diversity Database review for both Alabama and Mississippi was also completed to acknowledge and note occurrences of rare, threatened, or endangered species within the project area. Finally, the biology and life history requirements for each species were discussed and the project's potential effect on each species was evaluated.

2.1 SPECIES IDENTIFICATION

The threatened and endangered species evaluated in this report were based on lists of federally listed species for Mobile County, Alabama and Jackson County, Mississippi, available at the USFWS (2011) website as well as NDD documentation from both state (Alabama and Mississippi) wildlife departments (see **Appendix A**). SWCA also accessed the NDD databases for both states, which provides known occurrence records for listed species. The potential for occurrence within the project area of the species addressed in this report was based on 1) documented occurrences, 2) existing information on distribution, and 3) qualitative comparisons of the habitat requirements of each species with vegetation communities or landscape features in the project area. Possible impacts to these species were evaluated based on reasonably foreseeable project-related activities.

2.2 SPECIES EVALUATION

The potential for occurrence of each species was summarized according to the categories listed below. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided. Potential for occurrence categories are as follows:

- *Known to occur*—the species has been documented in the project area by a reliable observer.
- *May occur*—the project area is within the species' currently known range, and vegetation communities, soils, etc., resemble those known to be used by the species.
- *Unlikely to occur*—the project area is within the species' currently known range, but vegetation communities, soils, etc., do not resemble those known to be used by the species, or the project area is clearly outside the species' currently known range.

Those species listed by the USFWS were assigned to one of three categories of possible effect, following USFWS recommendations. The effects determinations recommended by USFWS include:

- *May affect, is likely to adversely affect*—adverse effects to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial.