

JOINT PUBLIC NOTICE

November 11, 2013

United States Army
Corps of Engineers
New Orleans District
Regulatory Branch
Post Office Box 60267
New Orleans, Louisiana 70160-0267

State of Louisiana
Department of Environmental Quality
Water Quality Certification Section
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

(504) 862-2675
Project Manager
Jamie Crowe
Jamie.M.Crowe@usace.army.mil
Permit Application Number
MVN 2011-3205 CO

(225) 219-3225
Project Manager
Jamie Phillippe
WQC Application Number
WQC 120517-01

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to:
[] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [X] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

Application has also been made to the Louisiana Department of Environmental Quality, Office of Environmental Services, for a Water Quality Certification (WQC) in accordance with statutory authority contained in LRS30:2047 A(3), and provisions of Section 401 of the Clean Water Act (P.L.95-17).

MODIFICATION TO INCLUDE ADDITIONAL PIPELINES TO SERVE AN EXISTING TANK FARM IN EAST FELICIANA PARISH

NAME OF APPLICANT: Colonial Pipeline Company, c/o ENVIRON International Corporation, 4714 Earhart Boulevard, Suite B, New Orleans, Louisiana 70125.

LOCATION OF WORK: Within the Mississippi River Basin, in the Bayou Sara – Thompson Creek hydrologic unit (HUC 08070201), Sections 51, 52, 53, Township 4 south, Range 2 west, at 1476 Highway 61, Jackson, Louisiana, in East Feliciana Parish, as shown in the attached drawings.

CHARACTER OF WORK: The applicant has a valid permit authorizing impacts to jurisdictional waters to allow for the expansion of an existing tank farm. In this authorization, three butane lines were to exit the manifold/butane sphere and extend underground to an off-site loading facility north of the property. The off-site loading facility has chosen to locate their facility at a site east of the tank farm rather than the site to the north. Thus, the applicant has requested to modify this permit to install three 6-inch pipelines extending eastward from the manifold/butane sphere to the loading

facility. The proposed pipelines will parallel two existing 36-inch pipelines installed within a 70-foot right-of-way. This right-of-way will be expanded to 120 feet to accommodate the additional pipelines. Approximately 2,400 feet of pipelines will be installed via trenching, while 2,146 feet will be installed beneath Sandy Creek and Highway 61 via Horizontal Directional Drill.

Wetland impacts authorized by the original authorization have been mitigated for. The pipeline route was chosen to avoid wetland impacts to the maximum extent practicable. No additional wetlands will be impacted by pipeline installation. However, 0.1 acre of forested wetland will be cleared and incorporated into the maintained right-of-way to allow for aerial inspection of the pipelines. As compensation for unavoidable wetland impacts the applicant proposes to purchase wetland credits from a Corps approved mitigation bank located in the watershed.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be mailed, so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction. Individuals or parties may request an extension of time in which to comment on the proposed work by writing or e-mailing the Corps of Engineers Project Manager listed above. Any request must be specific and substantively supportive of the requested extension, and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days. Letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the

cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Issuance of this public notice solicits input from the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of **N/A acres** of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, Office of Environmental Services, before a permit is issued.

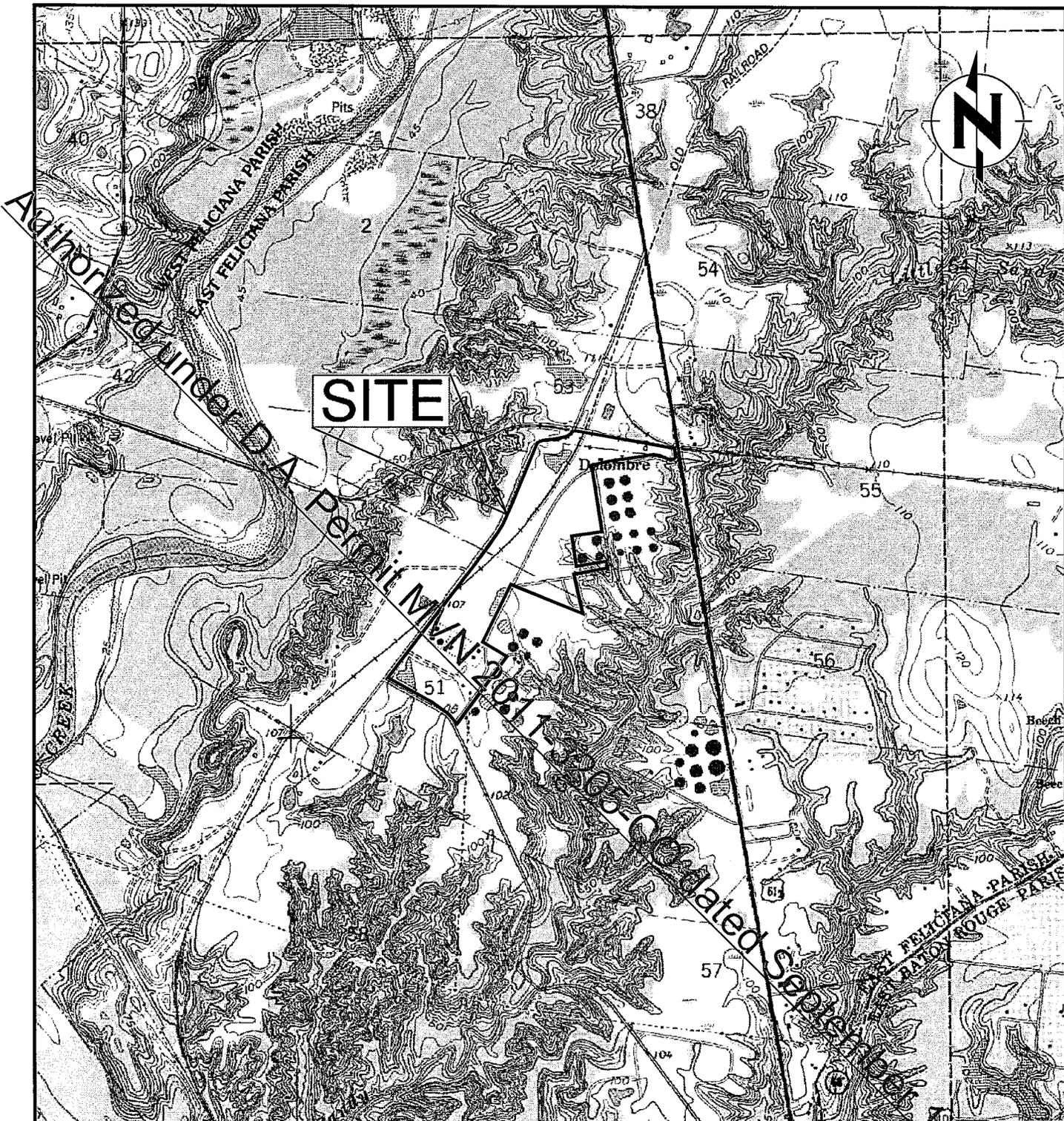
Any person may request, in writing, within the comment period specified in this

notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

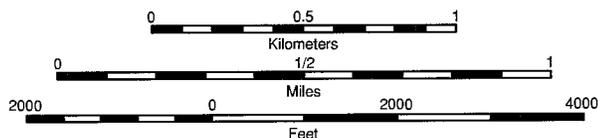
You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

John M. Herman
Chief, Central Evaluation Section
Regulatory Branch

Enclosure



SCALE 1:24000



Source: U.S. Geological Survey 7.5 minute (topographic) quadrangle; Port Hudson, Louisiana.

14.2012

C:\PROJECTS\26-27173C\SUM PORT HUDSON LA3.DWG

ENVIRON

Site Location Map
 Colonial Pipeline Facility
 East Feliciana Parish, Louisiana

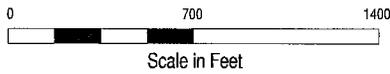
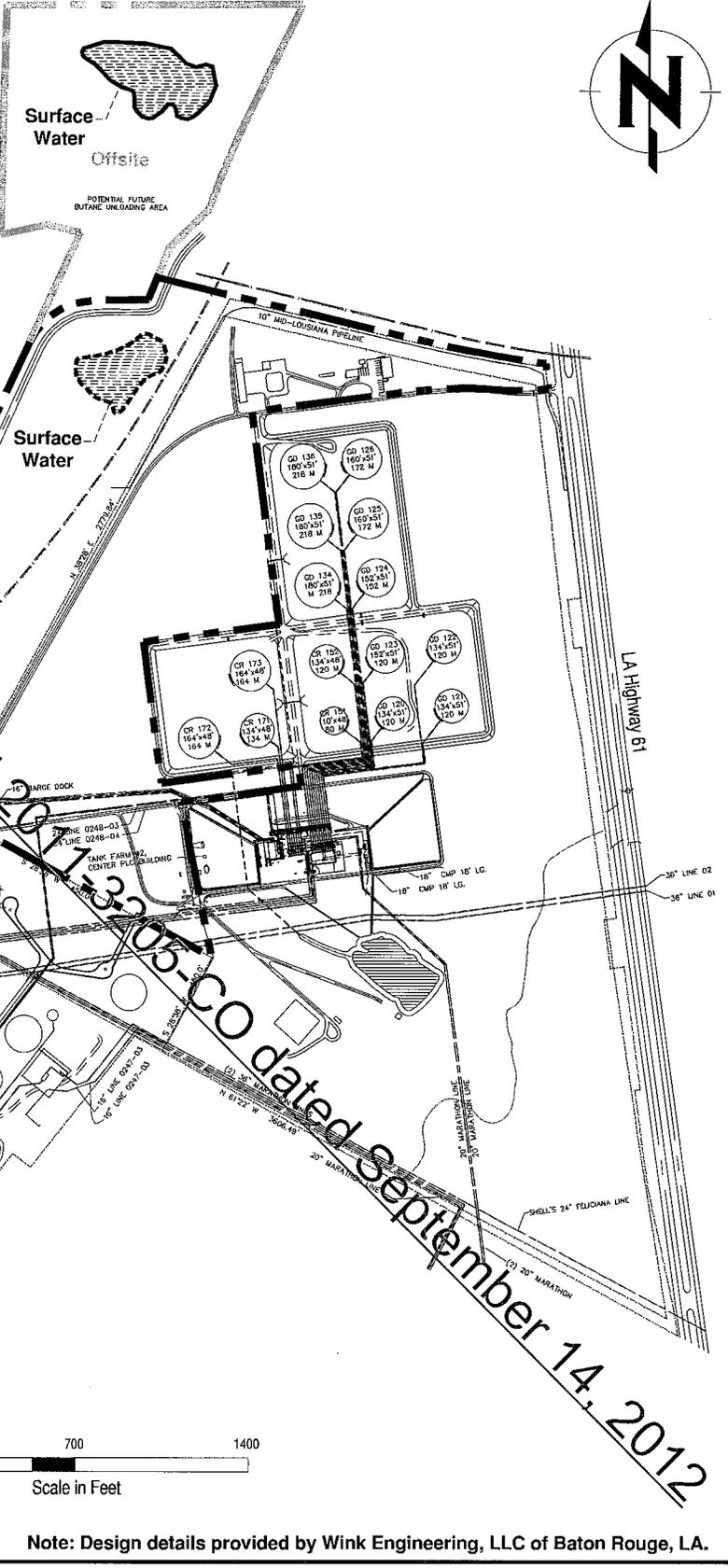
Figure
1

DRAFTED BY: \GMILES

DATE: 2/10/2012



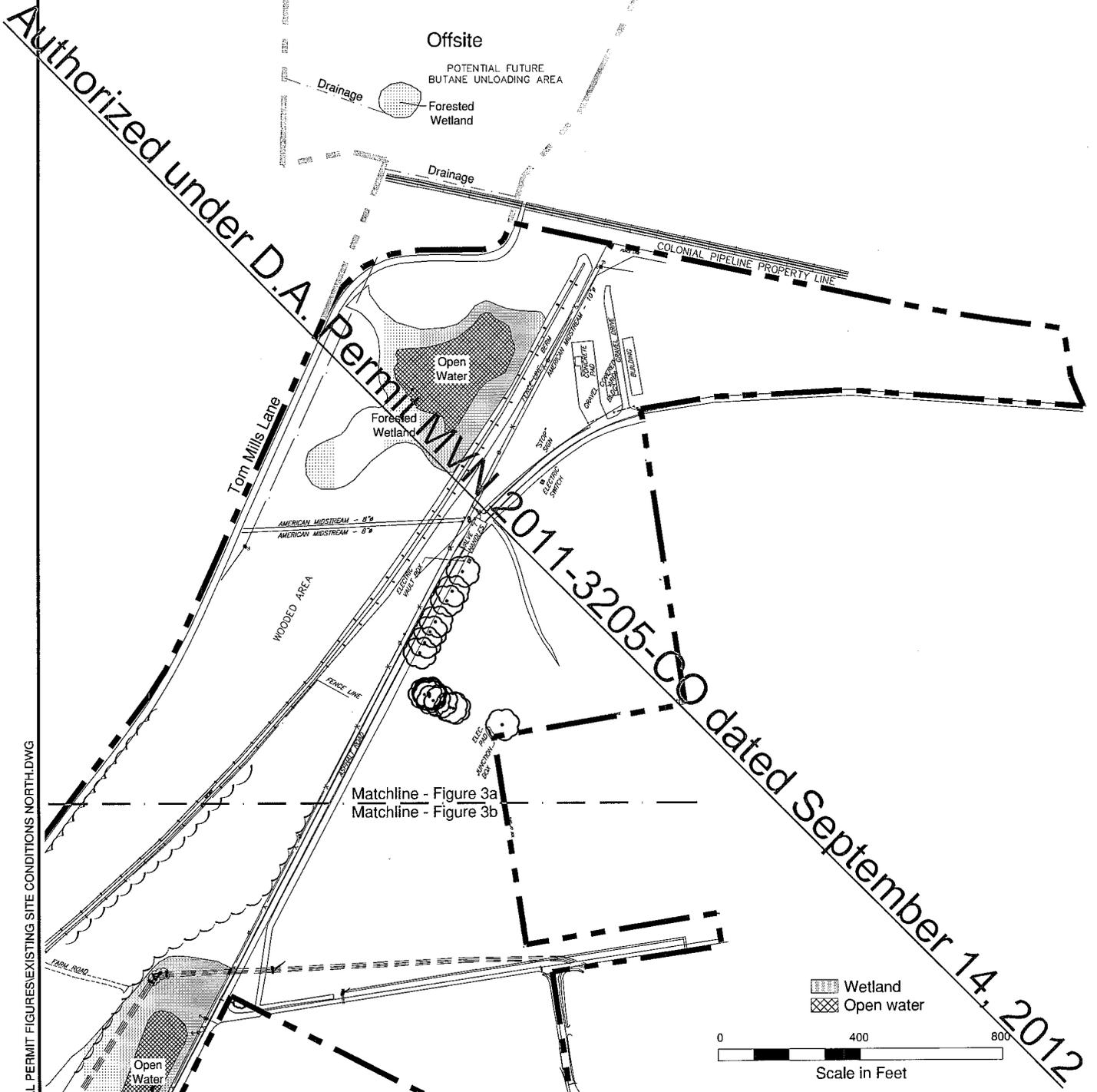
Authorized under D.A. Permit MVN 1017-3205-CO dated September 14, 2012



Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

C:\PROJECTS\126-27730\COLONIAL_PERMIT_FIGURES\EXISTING DEVELOPMENT MAP.DWG

<p style="text-align: center; font-size: 2em; font-weight: bold;">ENVIRON</p> <p>DRAFTED BY: \GMILES DATE: 2/15/2012</p>	<p style="font-size: 1.5em; font-weight: bold;">Existing Development Map</p>	<p>Figure 2</p>
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Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

C:\PROJECTS\26-271730\COLONIAL PERMIT FIGURES\EXISTING SITE CONDITIONS NORTH.DWG

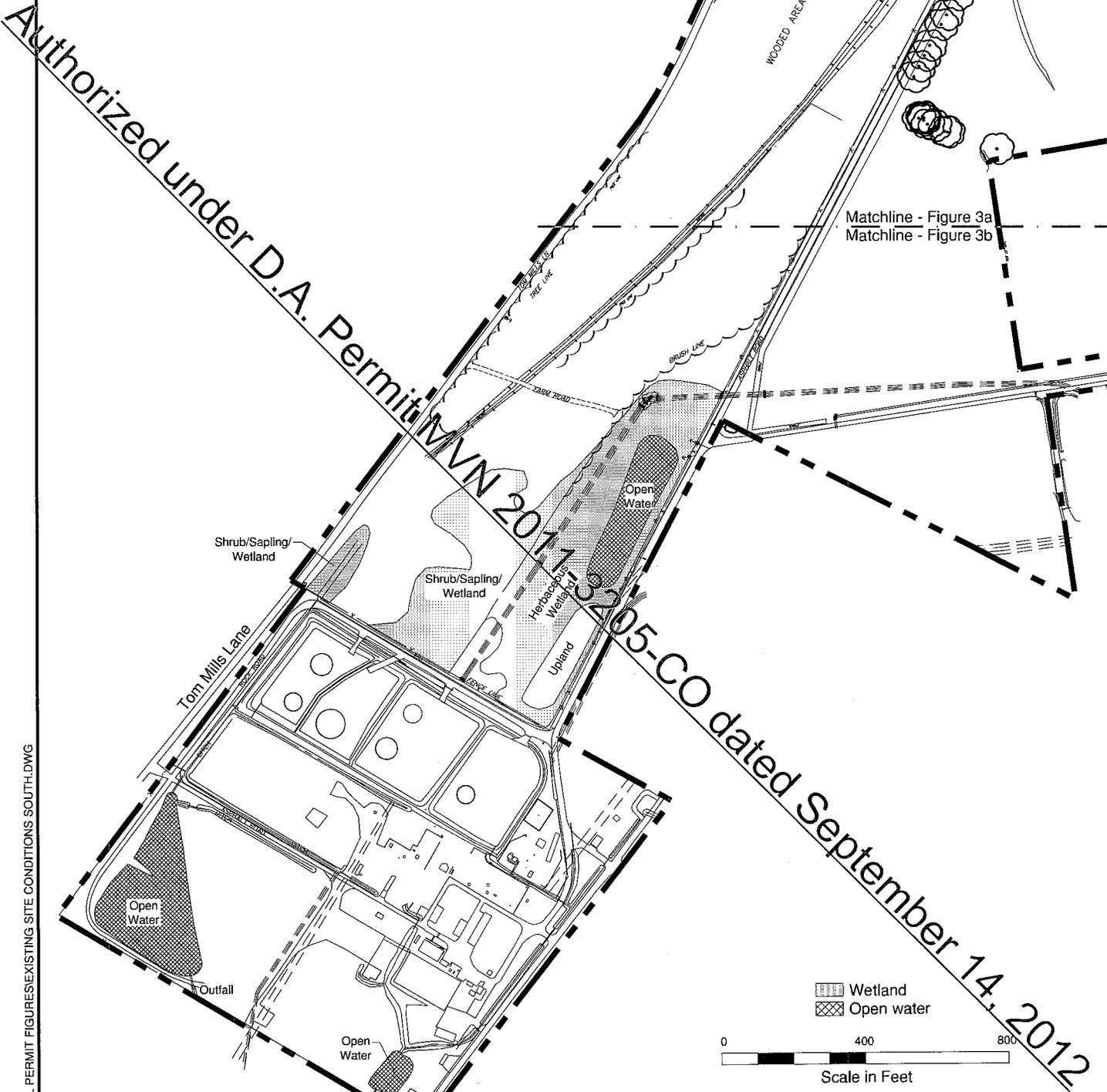
ENVIRON

**Existing Site Conditions
Northern Portion of Site**

Figure
3a

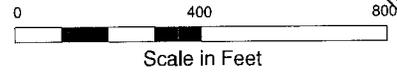
DRAFTED BY: \GMILES

DATE: 3/1/2012



Matchline - Figure 3a
Matchline - Figure 3b

Wetland
Open water



Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

Authorized under D.A. Permit MVN 2011-03205-CO dated September 14, 2012

C:\PROJECTS\26-27173C\COLONIAL PERMIT FIGURES\EXISTING SITE CONDITIONS SOUTH.DWG

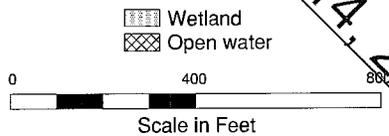
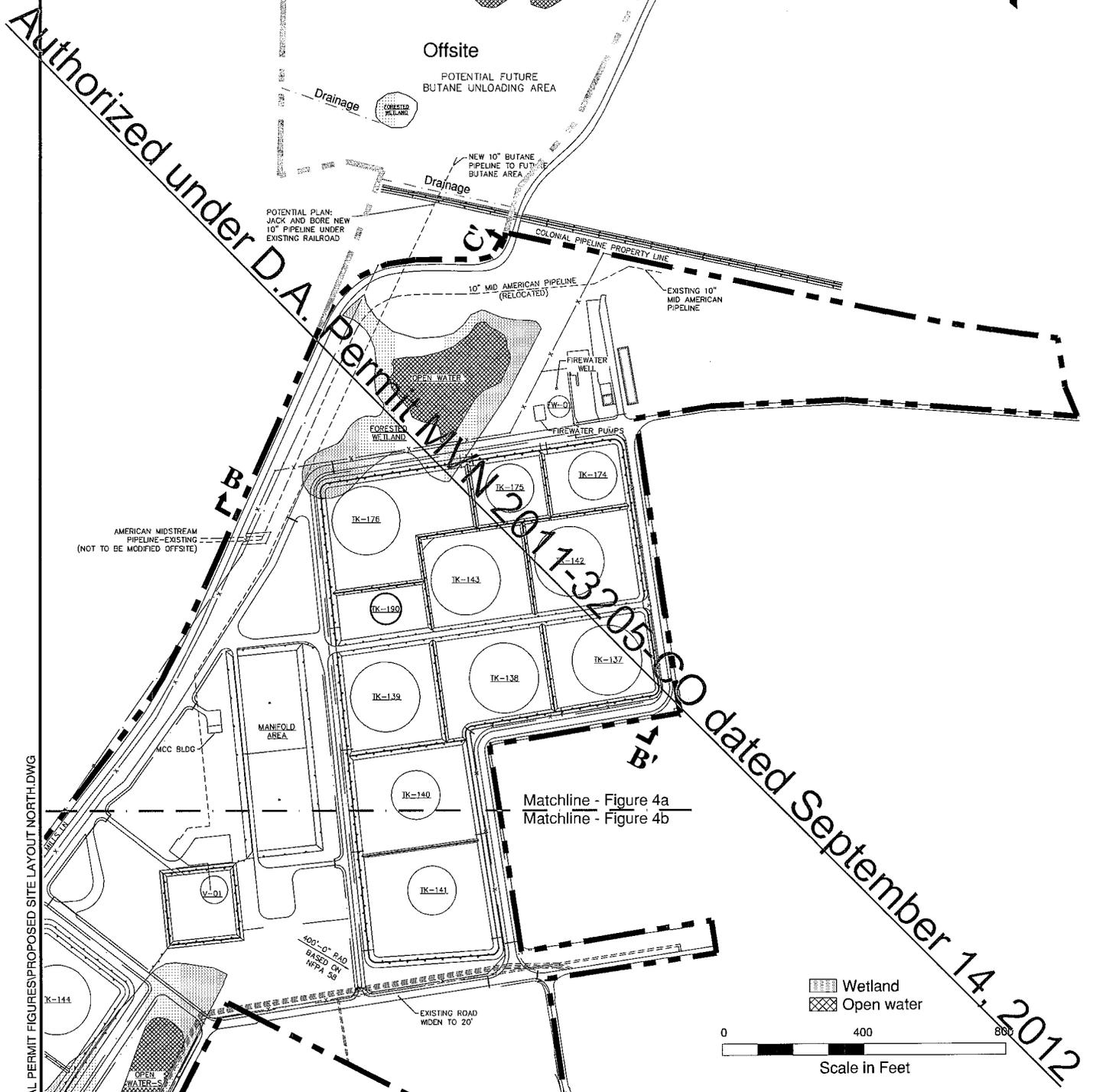
ENVIRON

**Existing Site Conditions
Southern Portion of Site**

**Figure
3b**

DRAFTED BY: \GMILES

DATE: 3/1/2012

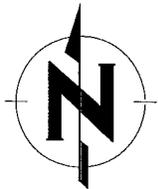


Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

Authorized under D.A. Permit No. 2017-3205-30 dated September 14, 2012

C:\PROJECTS\26-271730\COLONIAL PERMIT FIGURES\PROPOSED SITE LAYOUT NORTH.DWG

<h1 style="margin: 0;">E N V I R O N</h1>	<h2 style="margin: 0;">Proposed Site Layout Northern Portion of Site</h2>	<h2 style="margin: 0;">Figure 4a</h2>
DRAFTED BY: \GMILES	DATE: 3/1/2012	



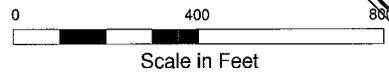
Authorized under D.A. Permit MVN 2017 13205-CO dated September 14, 2012

Matchline - Figure 4a
Matchline - Figure 4b

Existing Culvert to be Removed and Replaced

At the time of pipeline excavation and relocation, the work area will have since been filled and graded as part of site preparation actions. Therefore, stockpiling of material adjacent the immediate work area will occur within areas since filled and not possessing a wetland condition.

- Wetland
- Open water



Scale in Feet

Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

C:\PROJECTS\26-27173\COLONIAL PERMIT FIGURES\PROPOSED SITE LAYOUT SOUTH.DWG

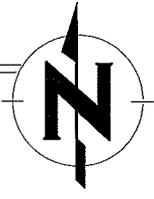
ENVIRON

**Proposed Site Layout
Southern Portion of Site**

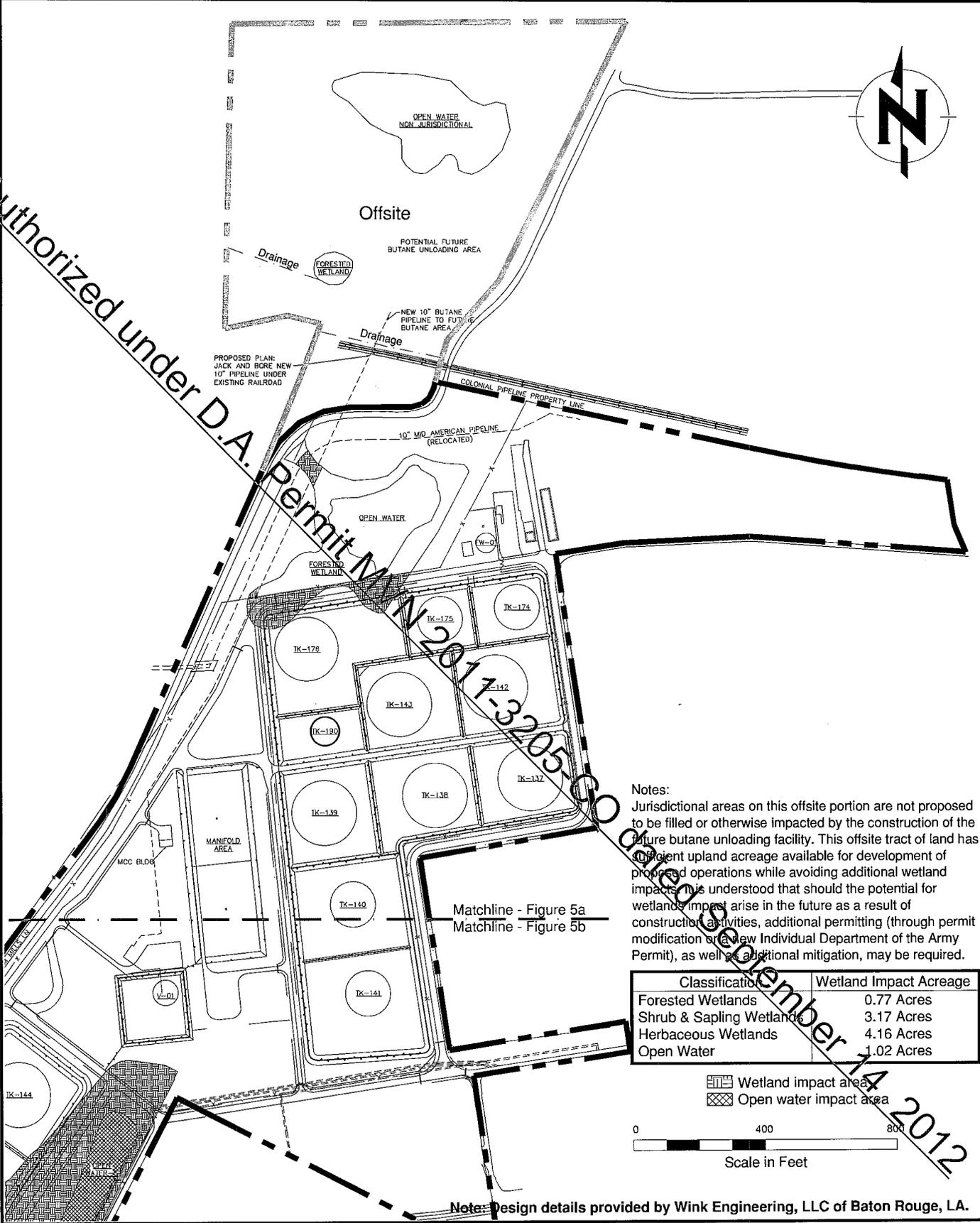
**Figure
4b**

DRAFTED BY: \GMILES

DATE: 3/19/2012



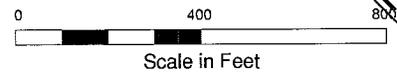
Authorized under D.A. Permit No. 2017-3205-00



Notes:
 Jurisdictional areas on this offsite portion are not proposed to be filled or otherwise impacted by the construction of the future butane unloading facility. This offsite tract of land has sufficient upland acreage available for development of proposed operations while avoiding additional wetland impacts. It is understood that should the potential for wetlands impact arise in the future as a result of construction activities, additional permitting (through permit modification or a new Individual Department of the Army Permit), as well as additional mitigation, may be required.

Classification	Wetland Impact Acreage
Forested Wetlands	0.77 Acres
Shrub & Sapling Wetlands	3.17 Acres
Herbaceous Wetlands	4.16 Acres
Open Water	1.02 Acres

- Wetland impact area
- Open water impact area



Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

C:\PROJECTS\26-27179C\COLONIAL PERMIT FIGURES\WETLAND IMPACT MAP NORTH.DWG

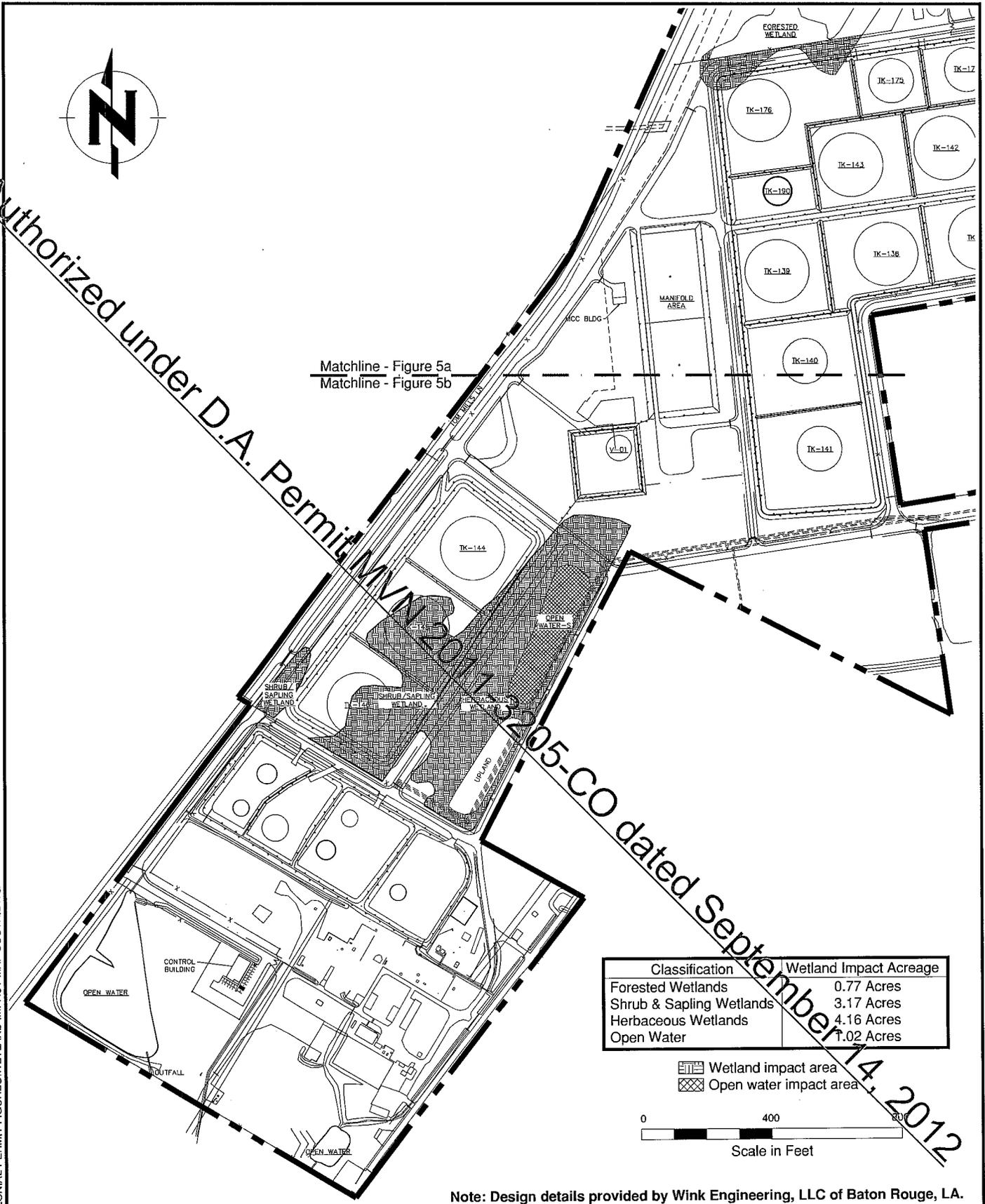
E N V I R O N	Wetland Impact Map Northern Portion of Site	Figure 5a
DRAFTED BY: \GMILES	DATE: 3/1/2012	



Authorized under D.A. Permit MVN 2011-13

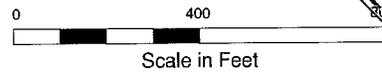
Matchline - Figure 5a
Matchline - Figure 5b

C:\PROJECTS\26-271730\COLONIAL PERMIT FIGURES\WETLAND IMPACT MAP SOUTH.DWG



Classification	Wetland Impact Acreage
Forested Wetlands	0.77 Acres
Shrub & Sapling Wetlands	3.17 Acres
Herbaceous Wetlands	4.16 Acres
Open Water	1.02 Acres

- Wetland impact area
- Open water impact area



Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

ENVIRON

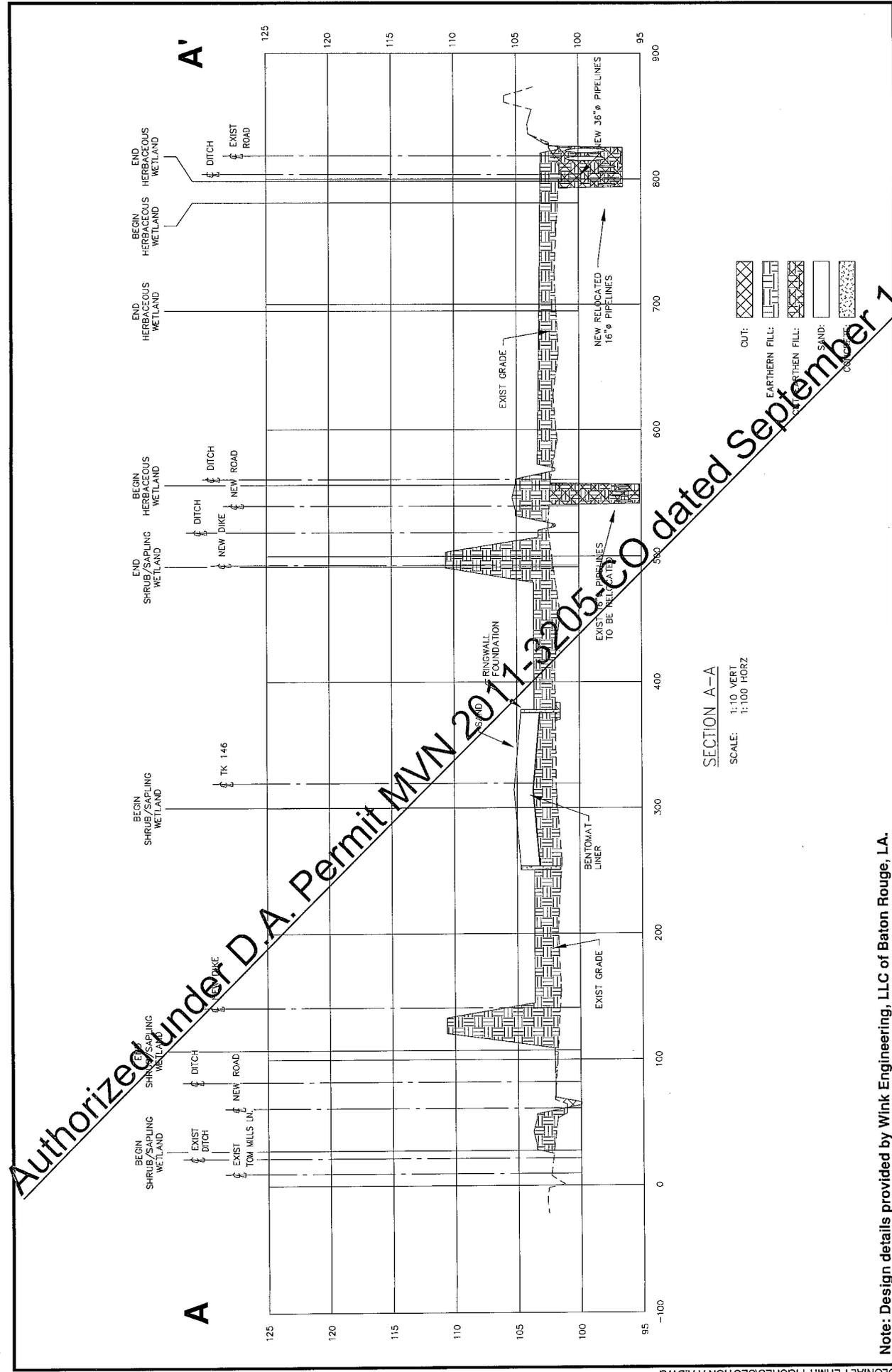
**Wetland Impact Map
Southern Portion of Site**

**Figure
5b**

DRAFTED BY: \GMLIES

DATE: 3/15/2012

205-CO dated September 14, 2012



SECTION A-A
 SCALE: 1:10 VERT
 1:100 HORIZ

- CUT: [diagonal hatching]
- EARTHEN FILL: [horizontal hatching]
- ARTHEN FILL: [vertical hatching]
- SAND: [stippled pattern]
- CONCRETE: [cross-hatching]

Authorized under D.A. Permit MVN 2017-02-05-CO dated September 14, 2012

Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

ENVIRON

Section A-A'

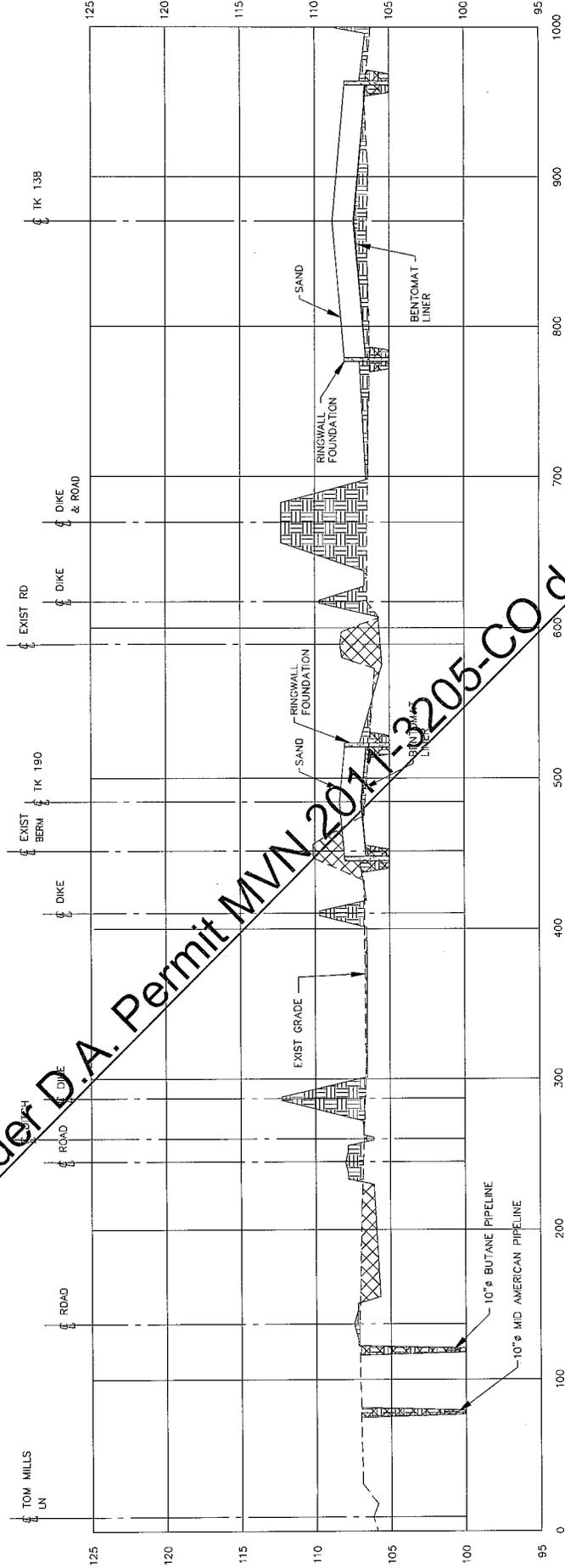
Figure 6

DRAFTED BY: \GMILES

DATE: 2/15/2012

Authorized under D.A. Permit MVN 2017-3205-CO dated September 14, 2012

B **B'**



SECTION B-B
 SCALE: 1:10 VERT
 1:100 HORIZ

- CUT:
- EARTHEN FILL:
- EARTHEN CUT/FILL:
- SAND:
- CONCRETE:

Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

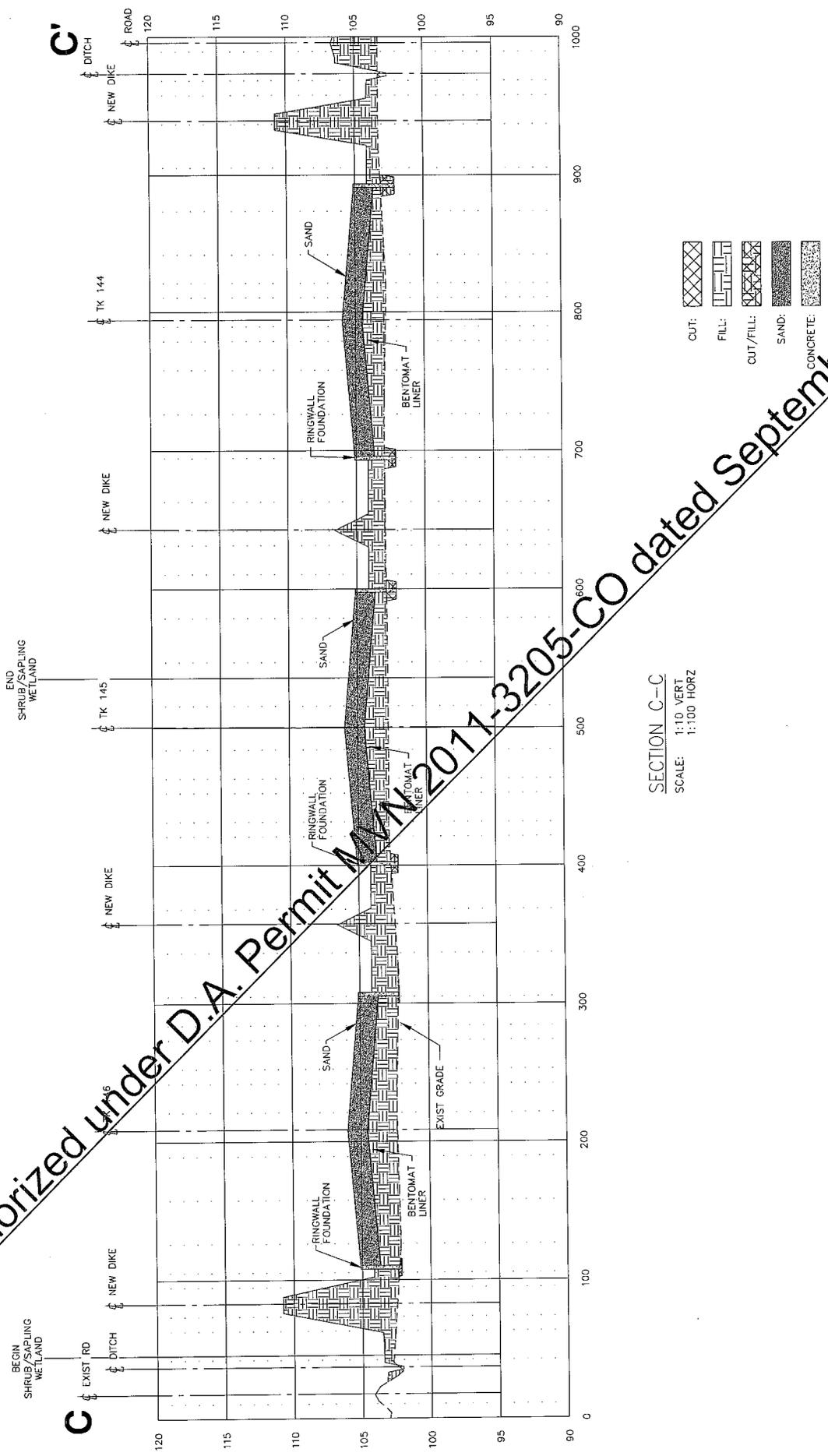
ENVIRON

DRAFTED BY: \GMILES DATE: 2/15/2012

Figure
7a

Section B-B'

Authorized under D.A. Permit M/VN 2017-3205-CO dated September 14, 2012



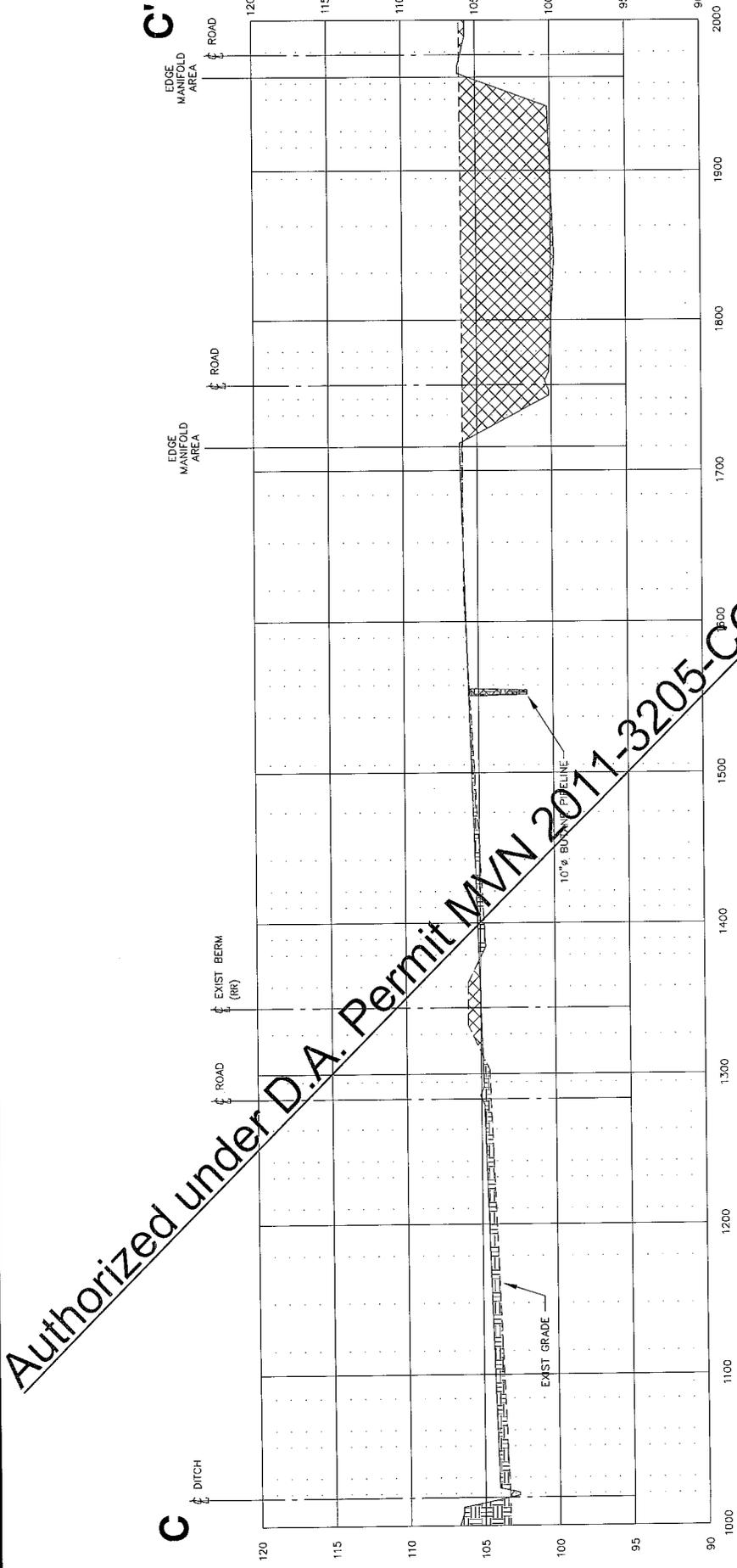
Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

Figure
8a

Section C-C'

ENVIRON

DRAFTED BY: JGMILES DATE: 2/10/2012



SECTION C-C
 SCALE: 1:10 VERT
 1:100 HORIZ

CUT:
 EASTERN FILL:
 EASTERN CUT/FILL:

Authorized under D.A. Permit MVN 2017-3205-CO dated September 14, 2012

Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

Figure 8b

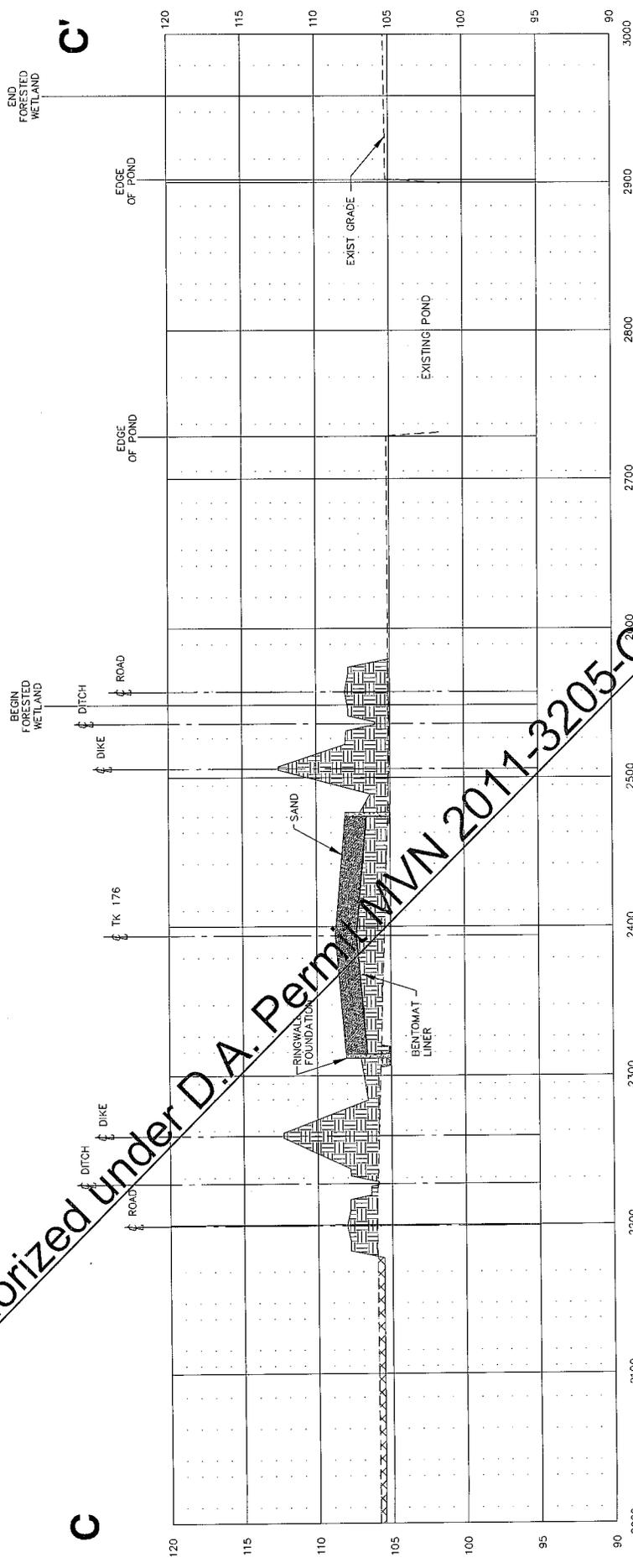
Section C-C'

E N V I R O N

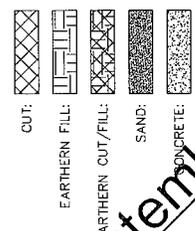
DRAFTED BY: \GMILES

DATE: 2/10/2012

Authorized under D.A. Permit MVN 2017-3205-CO dated September 14, 2012



SECTION C-C
 SCALE: 1":10 VERT
 1":100 HORIZ



Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

ENVIRON

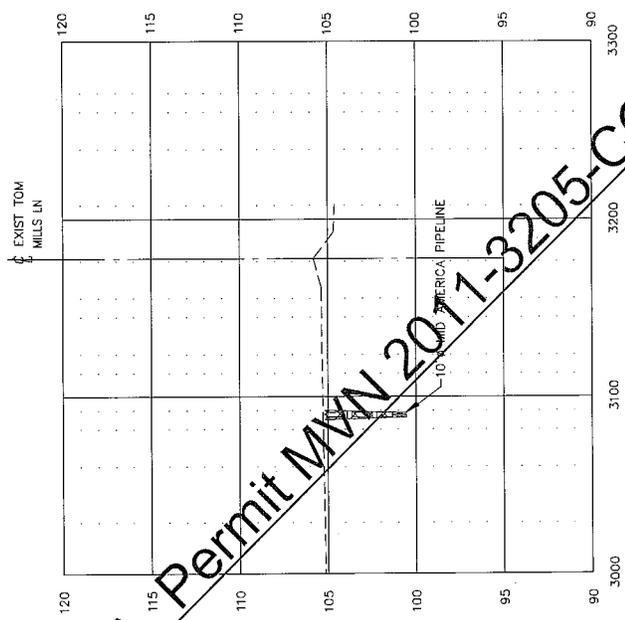
DRAFTED BY: JGMILES DATE: 2/10/2012

Section C-C'

Figure 8C

Authorized under D.A. Permit MW 2017-3205-CO dated September 14, 2012

C C'



SECTION C-C
 SCALE: 1:10 VERT
 1:100 HORZ

EARTHEN CUT/FILL:

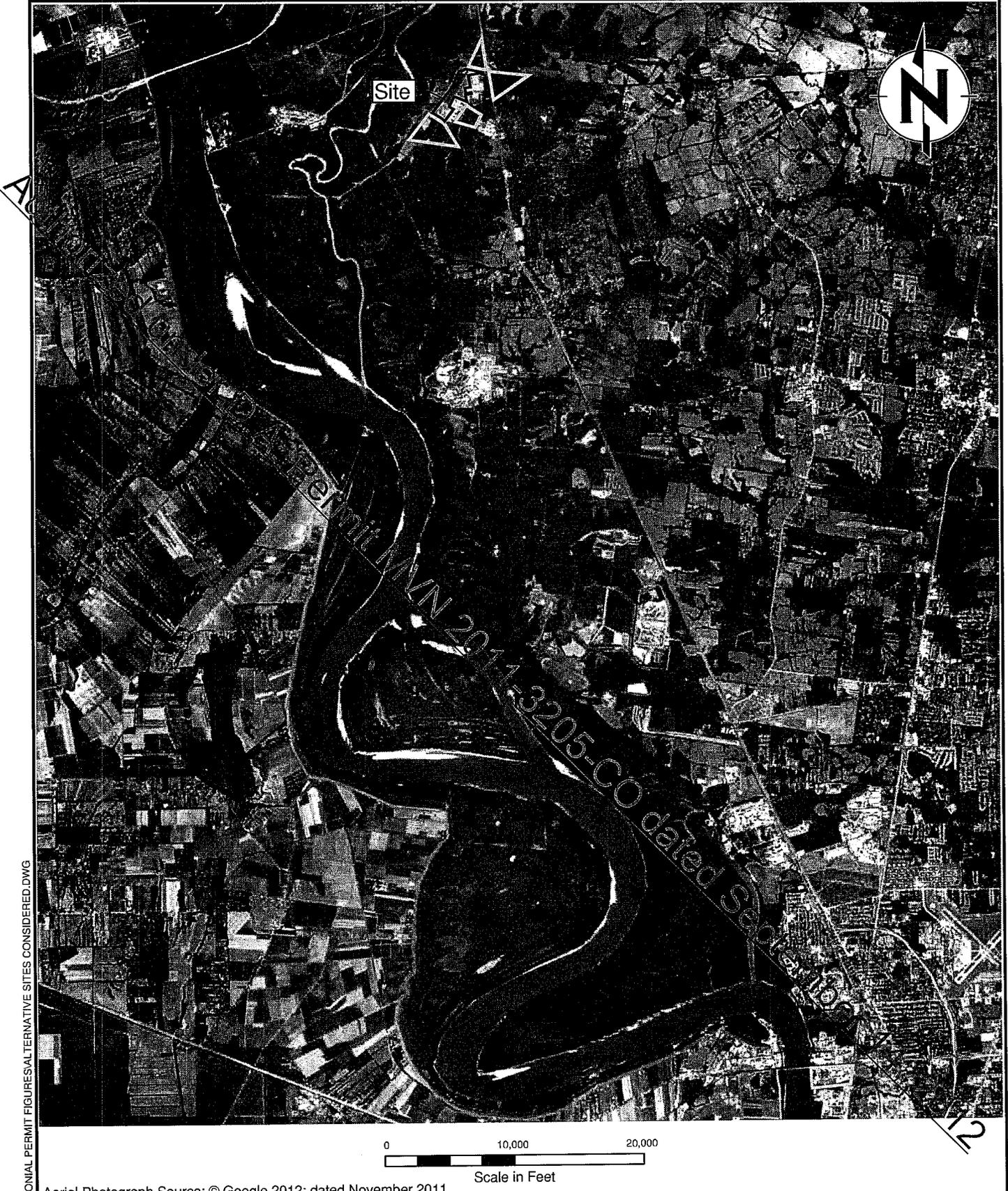
Note: Design details provided by Wink Engineering, LLC of Baton Rouge, LA.

ENVIRON

DRAFTED BY: \GMILES DATE: 2/10/2012

Section C-C'

Figure
 8d



C:\PROJECTS\26-27173C\COLONIAL PERMIT FIGURES\ALTERNATIVE SITES CONSIDERED.DWG

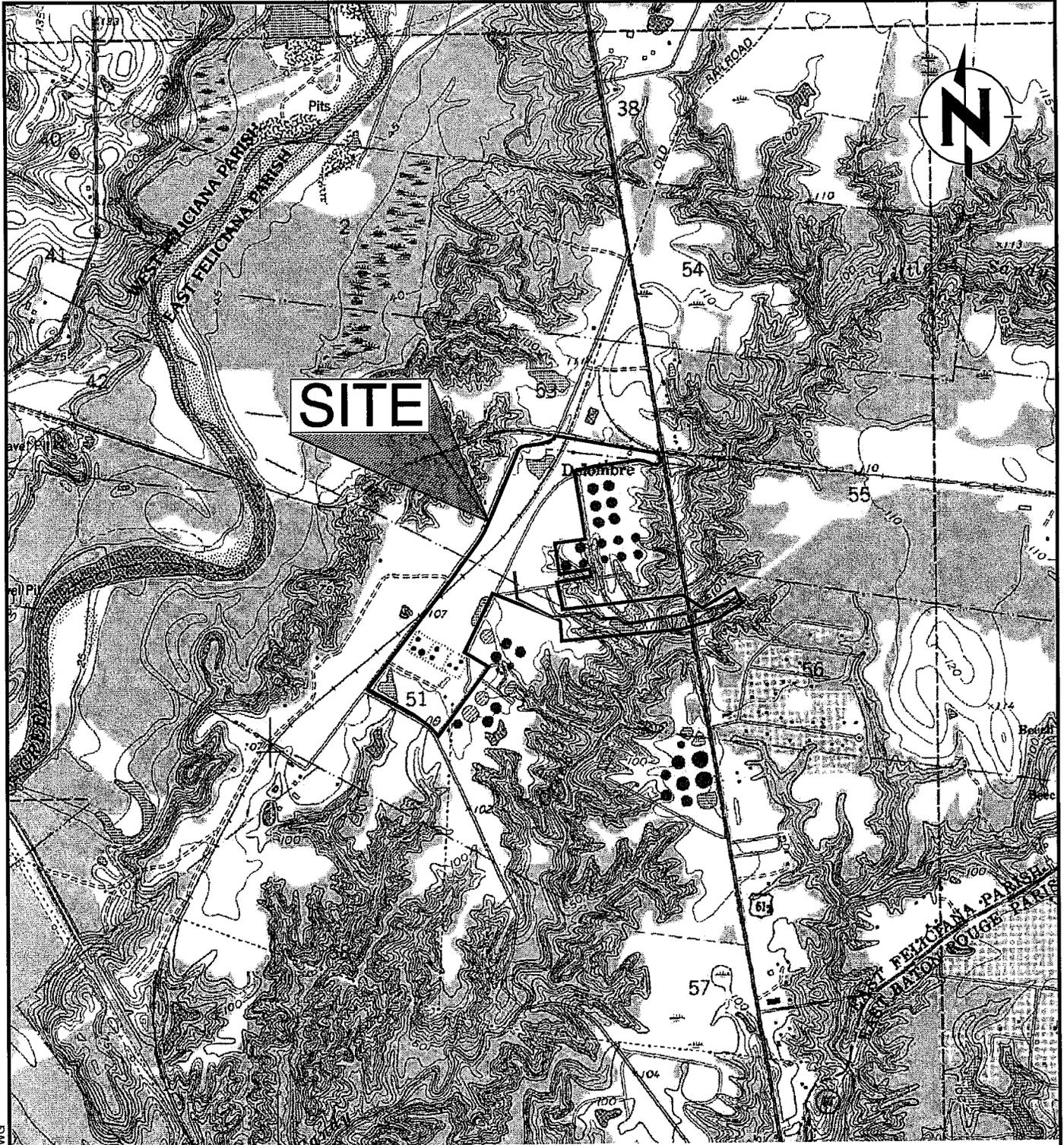
E N V I R O N

Alternative Sites Considered

Figure
9

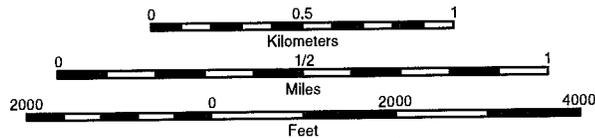
DRAFTED BY: \GMILES

DATE: 3/27/2012



SCALE 1:24000

- EXPLANATION**
- Site boundary
 - Subgrade pipeline



Source: U.S. Geological Survey 7.5 minute (topographic) quadrangle; Port Hudson, Louisiana.

C:\PROJECTS\26-27173\FIGURE UPDATES\FIGURE 10.DWG

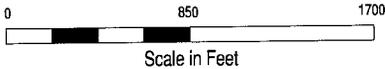
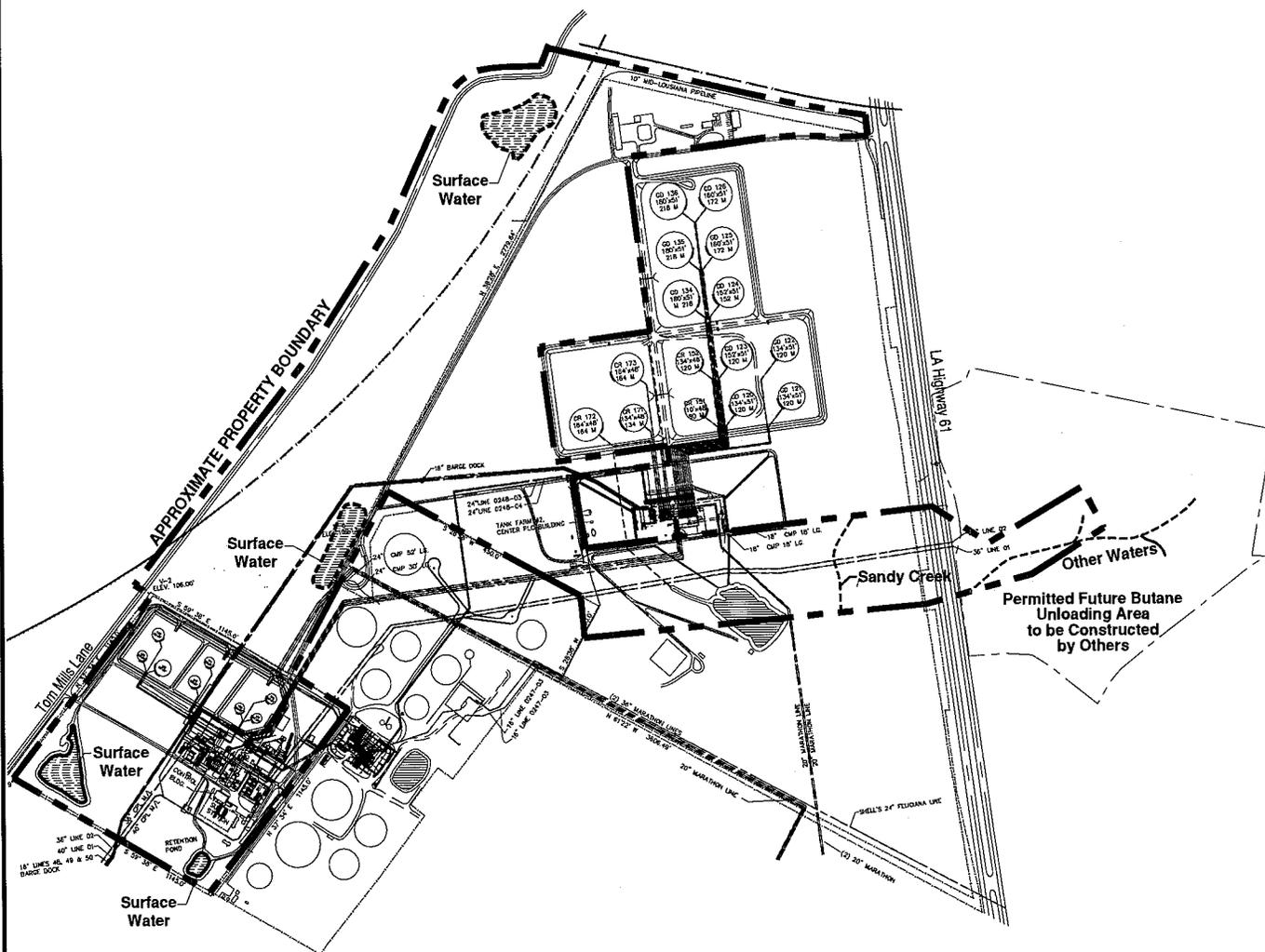


Site Location Map
 Colonial Pipeline Facility
 East Feliciana Parish, Louisiana

Figure
10

DRAFTED BY: VGMILES

DATE: 10/4/2013



Note: Design details provided by Wink Engineering, LLC / Willbros Engineering of Baton Rouge, Louisiana.

C:\PROJECTS\126-2773\1\Figure Updates\Figure 11.DWG

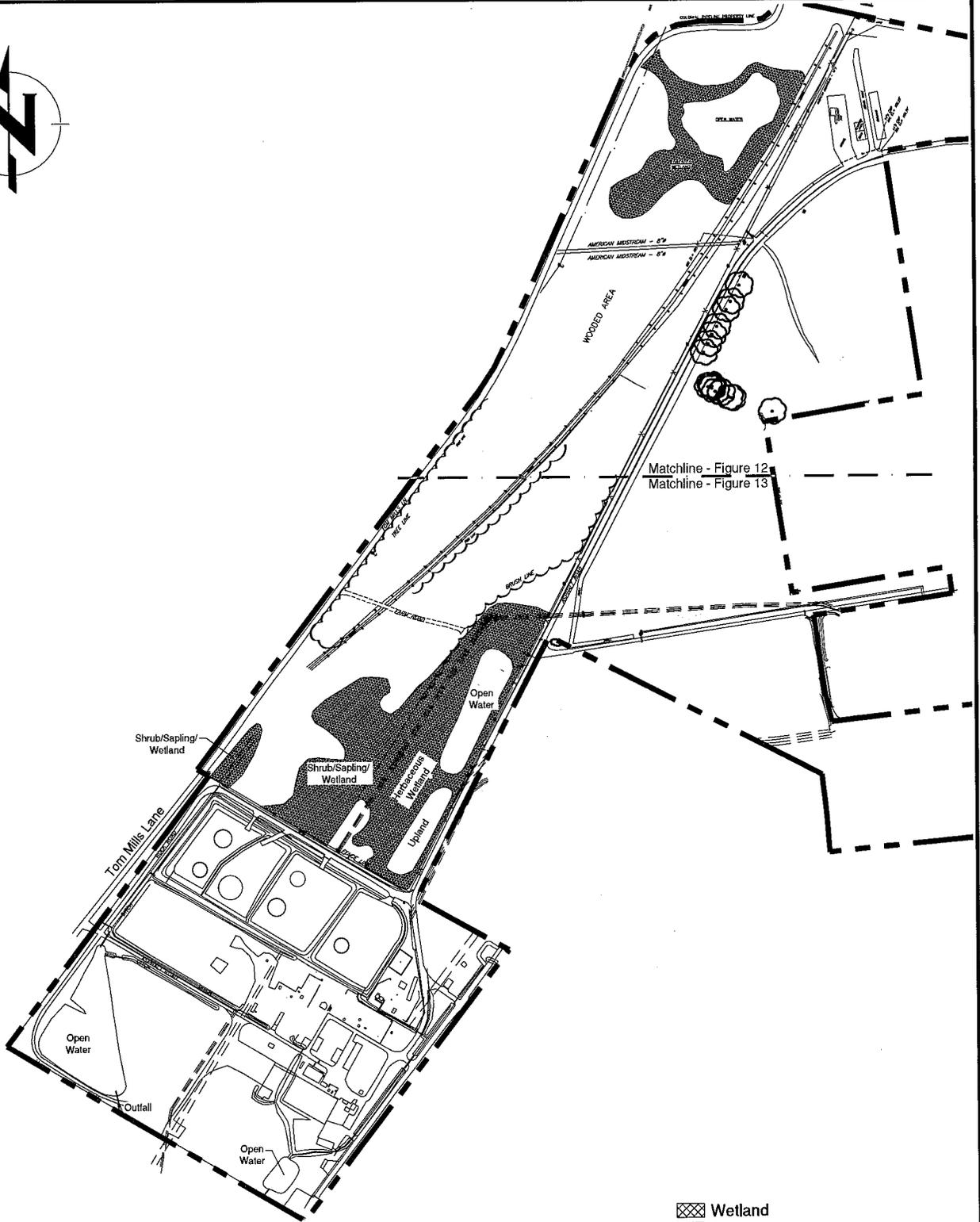


Existing Development Map

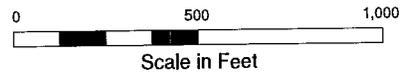
Figure
11

DRAFTED BY: \GMILES

DATE: 10/4/2013



 Wetland
 Open water



Note: Design details provided by Wink Engineering, LLC / Willbros Engineering of Baton Rouge, Louisiana.

C:\PROJECTS\26-27173\FIGURE UPDATES\FIGURE 13.DWG

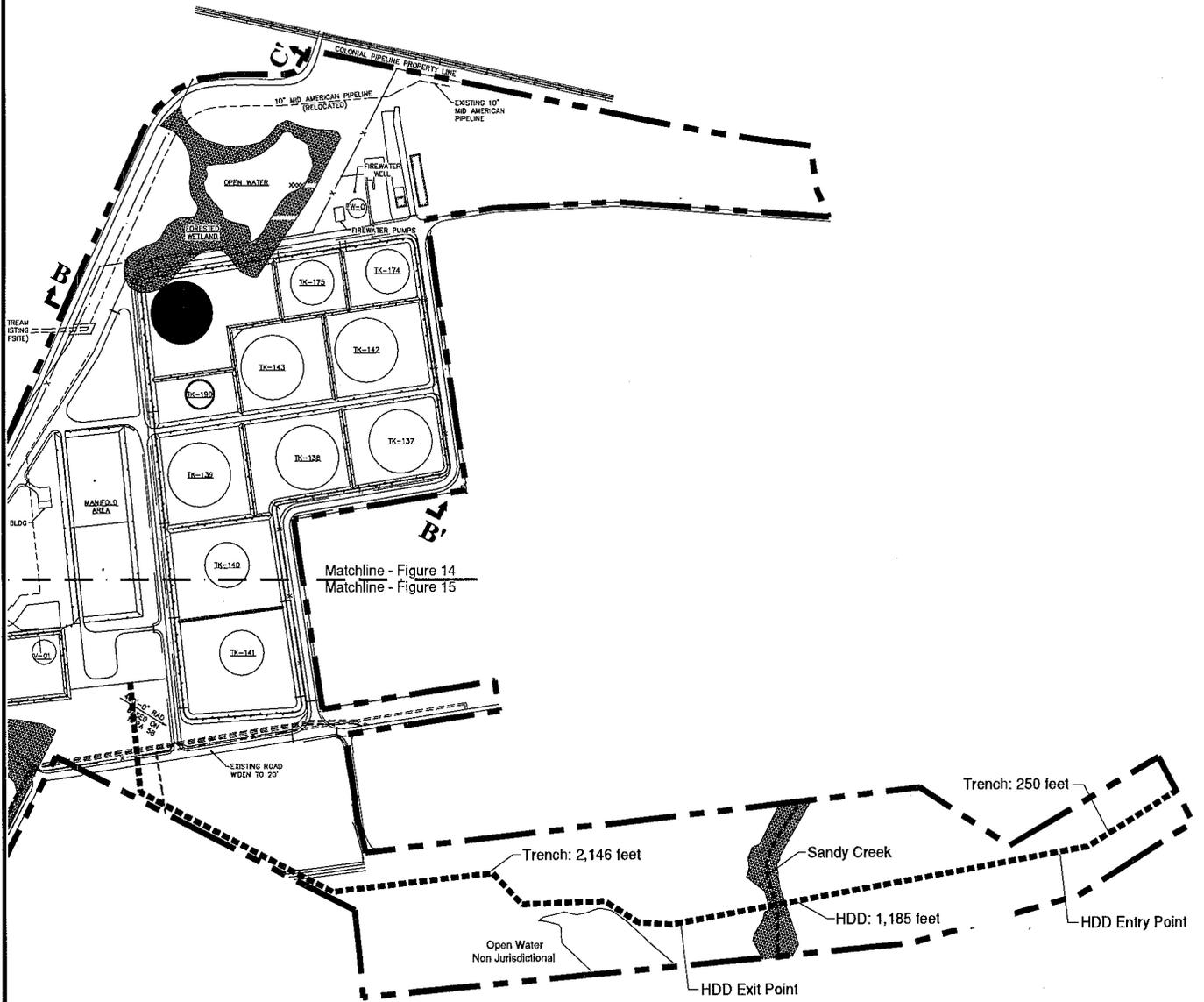


Existing Site Conditions Southwestern Portion of Site

Figure
13

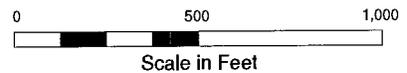
DRAFTED BY: \GMILES

DATE: 10/8/2013



Matchline - Figure 14
Matchline - Figure 15

- Proposed subgrade pipeline route
- ▨ Wetland
- Open water



Note: Design details provided by Wink Engineering, LLC / Willbros Engineering of Baton Rouge, Louisiana.

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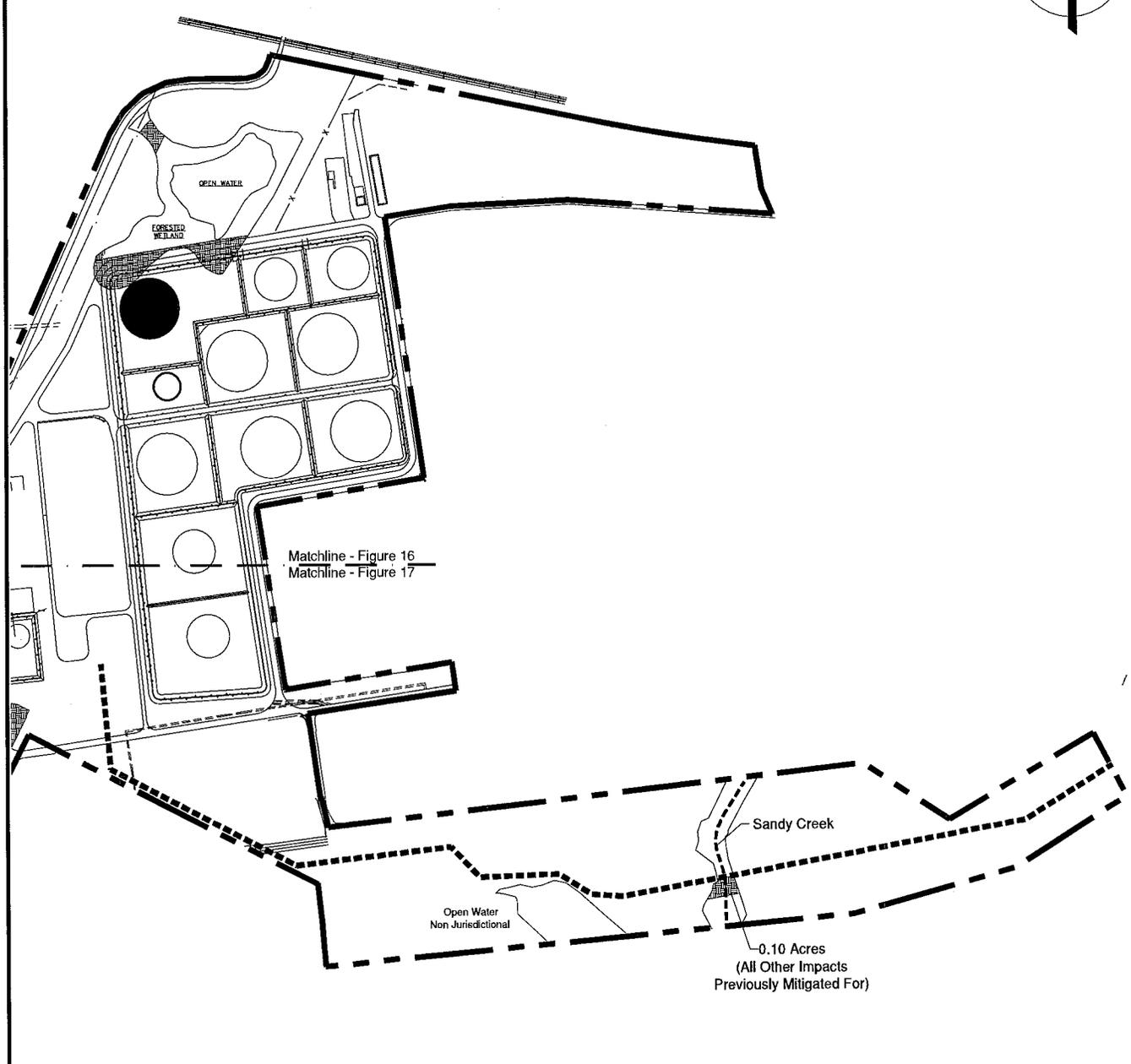


Proposed Site Layout Northeastern Portion of Site

Figure
14

DRAFTED BY: VGMILES

DATE: 10/4/2013



Classification	Wetland Impact Acreage
Forested Wetlands	0.77 Acres
Shrub & Sapling Wetlands	3.17 Acres
Herbaceous Wetlands	4.16 Acres
Open Water	1.02 Acres
Sandy Creek Wetlands	0.10 Acres

Previously Mitigated for

- Proposed subgrade pipeline route
- ▨ Wetland impact area
- Open water



Note: Design details provided by Wink Engineering, LLC / Willbros Engineering of Baton Rouge, Louisiana.

C:\PROJECTS\26-27\73\FIGURE UPDATES\FIGURE 16.DWG

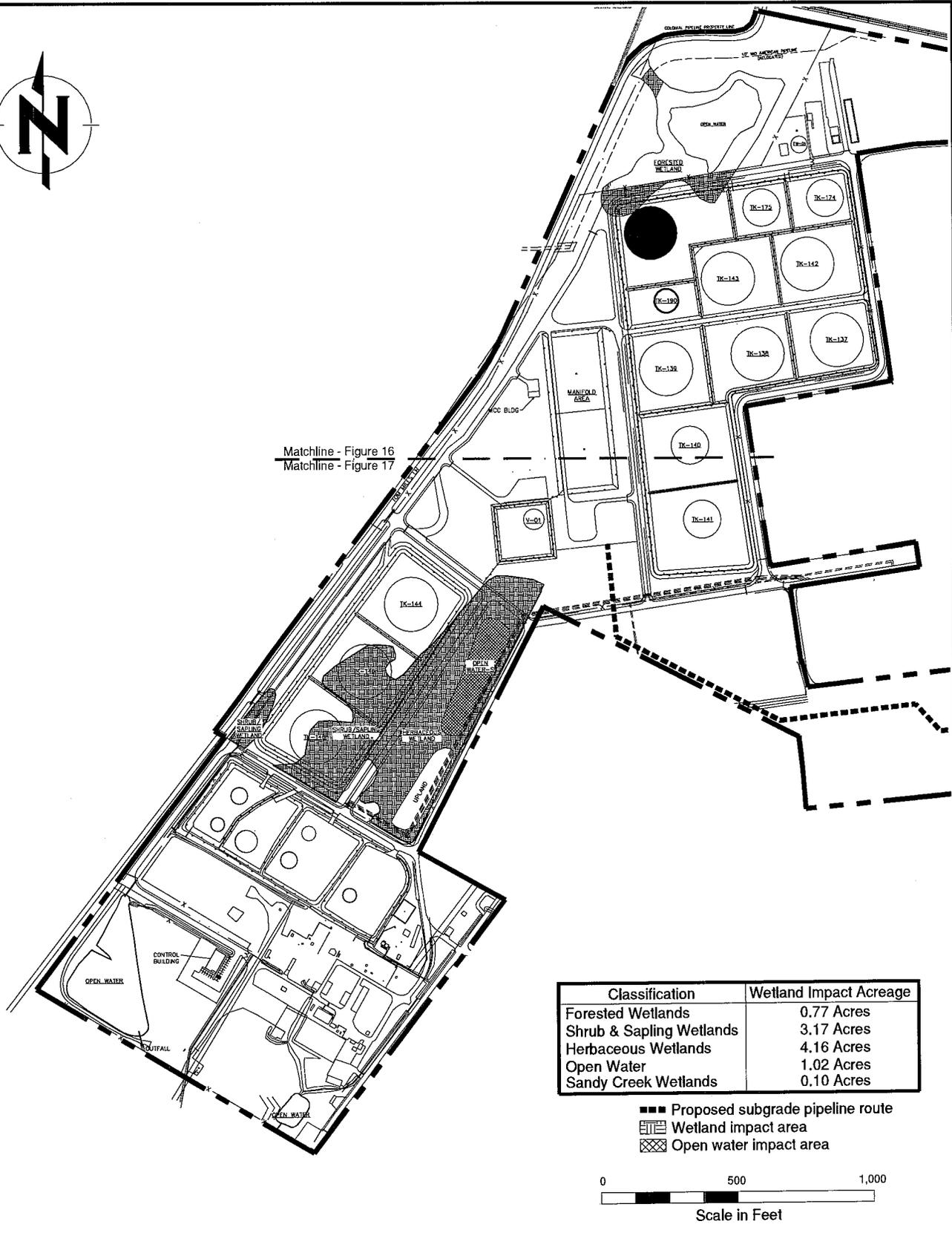


Wetland Impact Map Northeastern Portion of Site

Figure
16

DRAFTED BY: \GMILES

DATE: 10/8/2013



Matchline - Figure 16
Matchline - Figure 17

Classification	Wetland Impact Acreage
Forested Wetlands	0.77 Acres
Shrub & Sapling Wetlands	3.17 Acres
Herbaceous Wetlands	4.16 Acres
Open Water	1.02 Acres
Sandy Creek Wetlands	0.10 Acres

- Proposed subgrade pipeline route
- ▨ Wetland impact area
- ▩ Open water impact area



Note: Design details provided by Wink Engineering, LLC / Willbros Engineering of Baton Rouge, Louisiana.

C:\PROJECTS\26-27173\FIGURE UPDATES\FIGURE 17.DWG

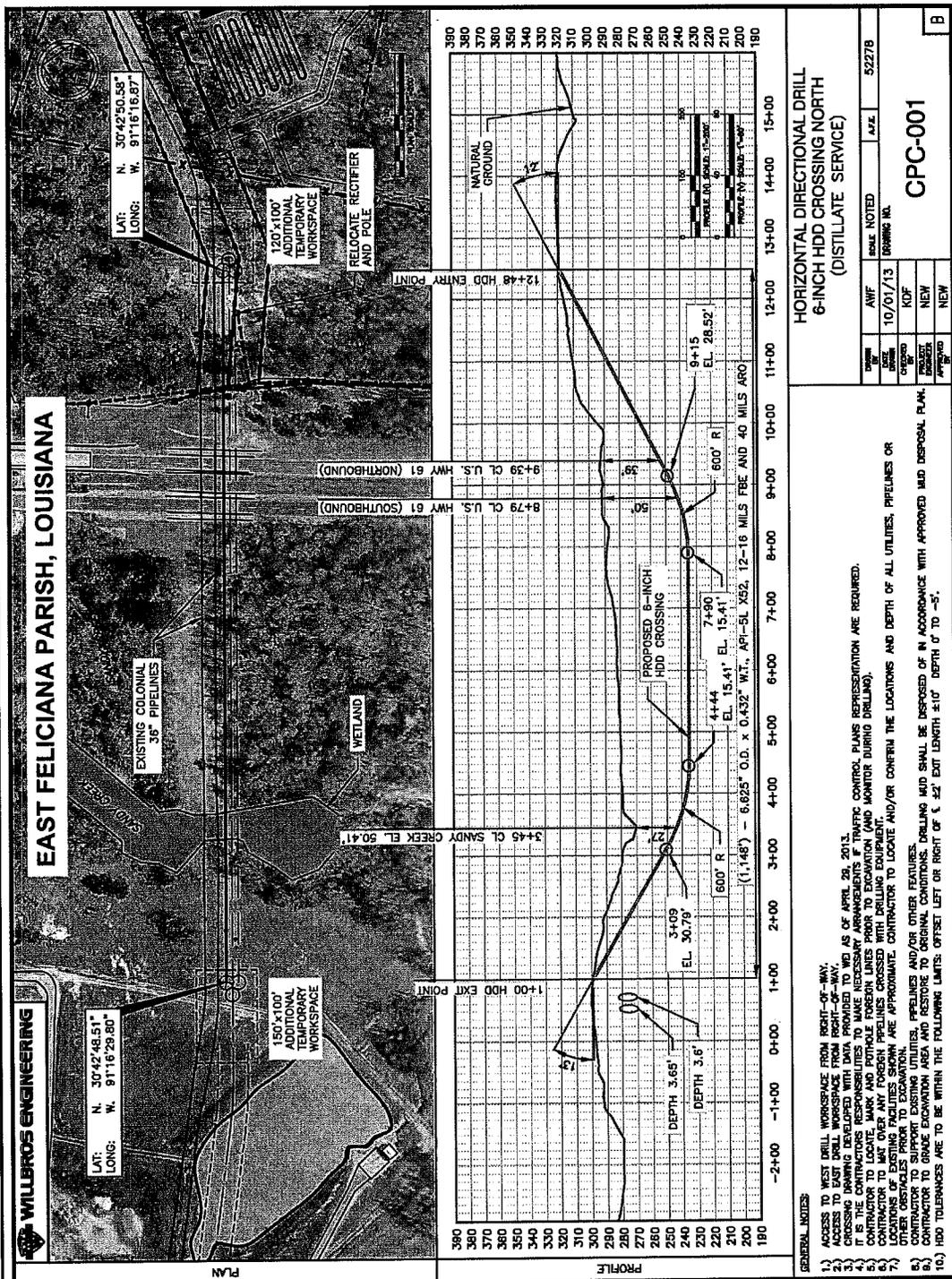


Wetland Impact Map Southwestern Portion of Site

Figure
17

DRAFTED BY: \GMILES

DATE: 10/4/2013



GENERAL NOTES:

- 1.) ACCESS TO WEST DRILL WORKSPACE FROM RIGHT-OF-WAY.
- 2.) ACCESS TO EAST DRILL WORKSPACE FROM RIGHT-OF-WAY.
- 3.) CROSSING DRAWING DEVELOPED WITH DATA PROVIDED TO WED AS OF APRIL 30, 2013.
- 4.) CROSSING DRAWING DEVELOPED WITH DATA PROVIDED TO MAKE NECESSARY ARRANGEMENTS IF TRAFFIC CONTROL PLANS REPRESENTATION ARE REQUIRED.
- 5.) CONTRACTOR TO LOCATE, MARK AND FORTHOLE FOREIGN UTILITIES PRIOR TO DRILLING AND TO LOCATE AND MARK ALL UTILITIES TO BE EXCAVATED.
- 6.) CONTRACTOR TO LOCATE AND FORTHOLE FOREIGN UTILITIES PRIOR TO DRILLING AND TO LOCATE AND MARK ALL UTILITIES TO BE EXCAVATED.
- 7.) LOCATIONS OF EXISTING FACILITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE AND/OR CONFIRM THE LOCATIONS AND DEPTH OF ALL UTILITIES, PRELIMES OR OTHER OBSTACLES PRIOR TO EXCAVATION.
- 8.) CONTRACTOR TO SUPPORT EXISTING UTILITIES, PRELIMES AND/OR OTHER FEATURES. DRILLING MUD SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED MUD DISPOSAL PLAN.
- 9.) CONTRACTOR TO GRADE EXCAVATION AREA AND RESTORE TO ORIGINAL CONDITION.
- 10.) HDD TOLERANCES ARE TO BE WITHIN THE FOLLOWING LIMITS: OFFSET LEFT OR RIGHT OF $\pm .2'$; EXIT LENGTH $\pm 10'$; DEPTH $0'$ TO $-5'$.

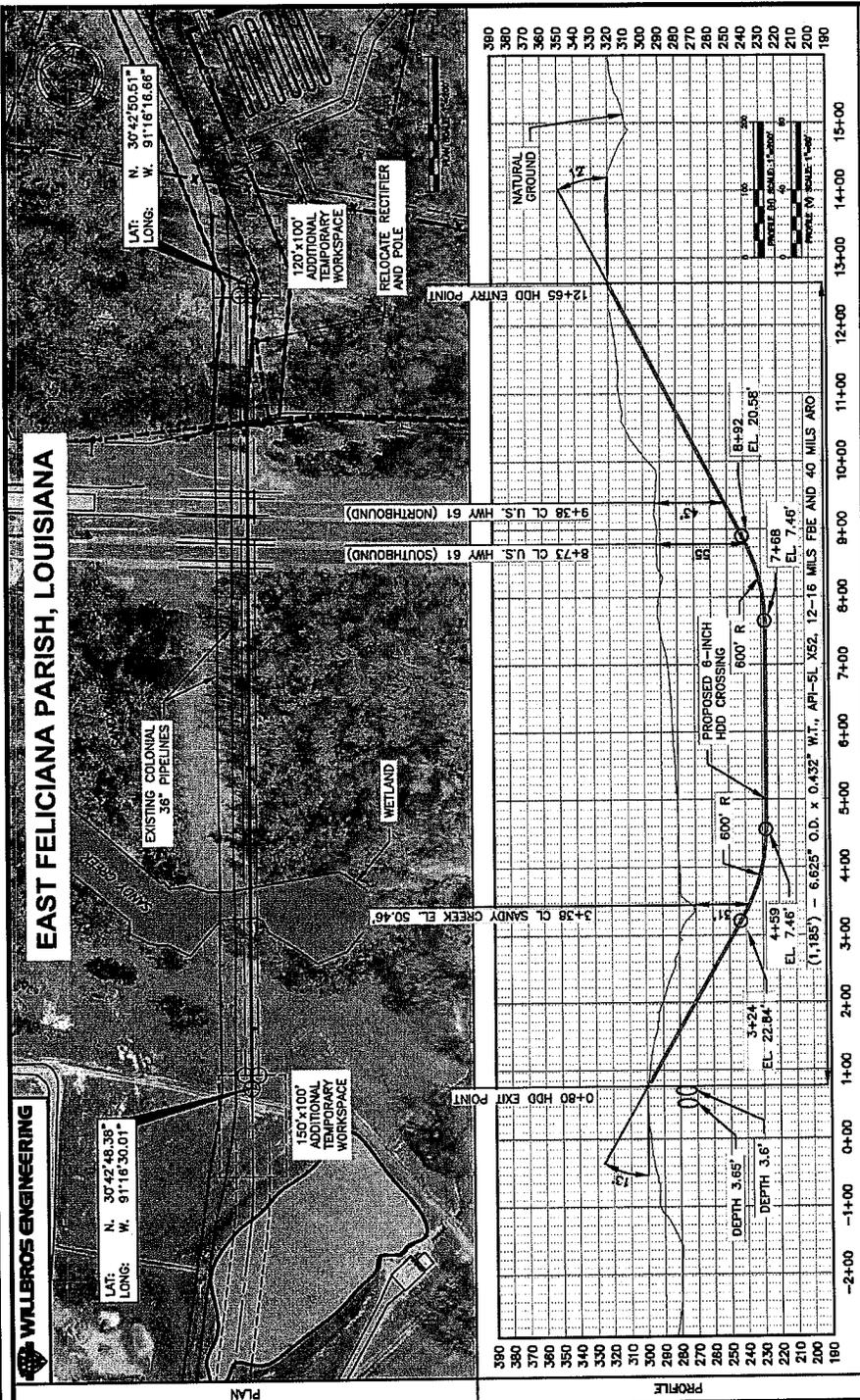
DRAWN BY		AWF	SCALE NOTED	A.S.Z.	52278
DATE		10/01/13	DRAWING NO.		
CHECKED		KOF	CPC-001		
DESIGNED		NEW	October 01, 2013 - 3:46pm		
APPROVED		NEW	B		

Horizontal Directional Drill (1 of 3)
6-Inch HDD Crossing North
(Distillate Service)



DRAFTED BY: GMI/ELS DATE: 10/02/13

Source: WILBROS ENGINEERING; drawing "CPC-001", dated October 1, 2013.



GENERAL NOTES

- 1.) ACCESS TO WEST DRILL WORKSPACE FROM RIGHT-OF-WAY.
- 2.) ACCESS TO EAST DRILL WORKSPACE FROM RIGHT-OF-WAY.
- 3.) CROSSING DRAWING DEVELOPED WITH DATA AS OF APRIL 29, 2013.
- 4.) CONTRACTOR TO VERIFY ALL UTILITIES AND MAKE NECESSARY ARRANGEMENTS FOR TRAFFIC CONTROL PLANS REPRESENTATION ARE REQUIRED.
- 5.) CONTRACTOR TO MARK AND POT-HOLE FOREIGN LINES PRIOR TO EXCAVATION (AND MONITOR DURING DRILLING).
- 6.) CONTRACTOR TO MARK AND POT-HOLE FOREIGN LINES CROSSED WITH DRILLING EQUIPMENT.
- 7.) LOCATIONS OF EXISTING FACILITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE AND/OR CONFIRM THE LOCATIONS AND DEPTH OF ALL UTILITIES, PRELINES OR OTHER OBSTACLES SUPPORTING EXISTING UTILITIES, PRELINES AND/OR OTHER FEATURES.
- 8.) CONTRACTOR TO VERIFY ALL EXISTING UTILITIES, PRELINES AND/OR OTHER FEATURES.
- 9.) CONTRACTOR TO GRADE EXCAVATION AREA AND RESTORE TO ORIGINAL CONDITIONS. DRILLING MUD SHALL BE DISPOSED OF IN ACCORDANCE WITH APPROVED MUD DISPOSAL PLAN.
- 10.) HDD TOLERANCES ARE TO BE WITHIN THE FOLLOWING LIMITS: OFFSET LEFT OR RIGHT OF 1/2" ±2' EXIT LENGTH ±10' DEPTH 0' TO -5'.
- 10.) HDD TOLERANCES ARE TO BE WITHIN THE FOLLOWING LIMITS: OFFSET LEFT OR RIGHT OF 1/2" ±2' EXIT LENGTH ±10' DEPTH 0' TO -5'.

DATE	BY	SCALE	NOTED	NO.
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	KDF			
	NEW			
	NEW			
	NEW			

CPC-002

**HORIZONTAL DIRECTIONAL DRILL
6-INCH HDD CROSSING MIDDLE
(LIQUID BUTANE SERVICE)**

October 01, 2013 - 5.01pm

Horizontal Directional Drill (2 of 3)
6-Inch HDD Crossing Middle
(Liquid Butane Service)

ENVIRON

DRAWN BY: GMIILES DATE: 10/02/13

Figure 19

DRAWN BY: GMALES

DATE: 10/01/13

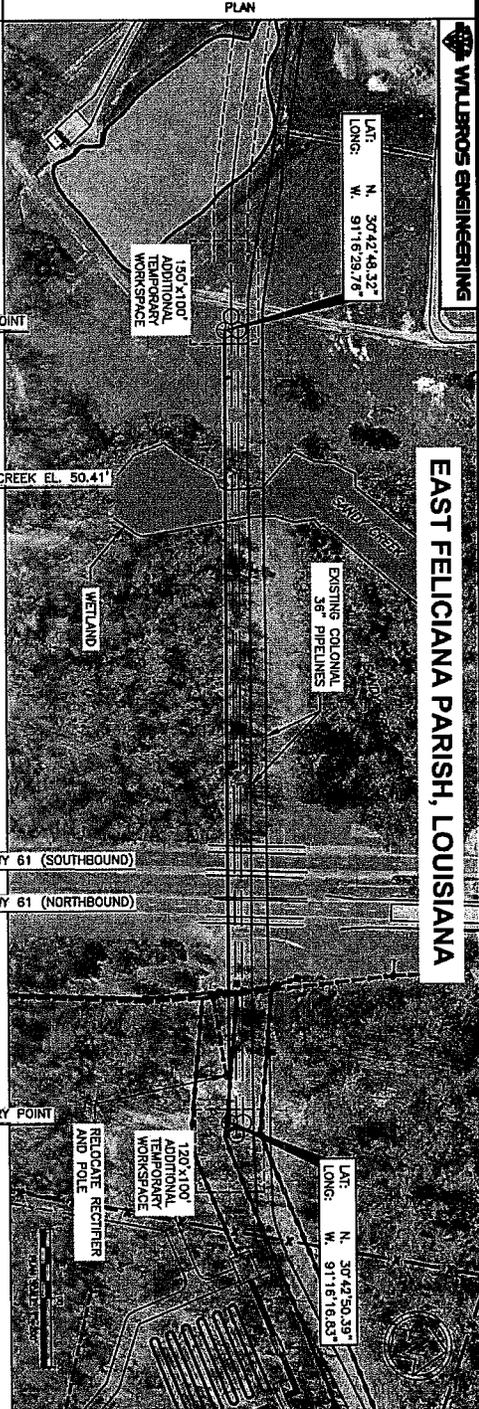
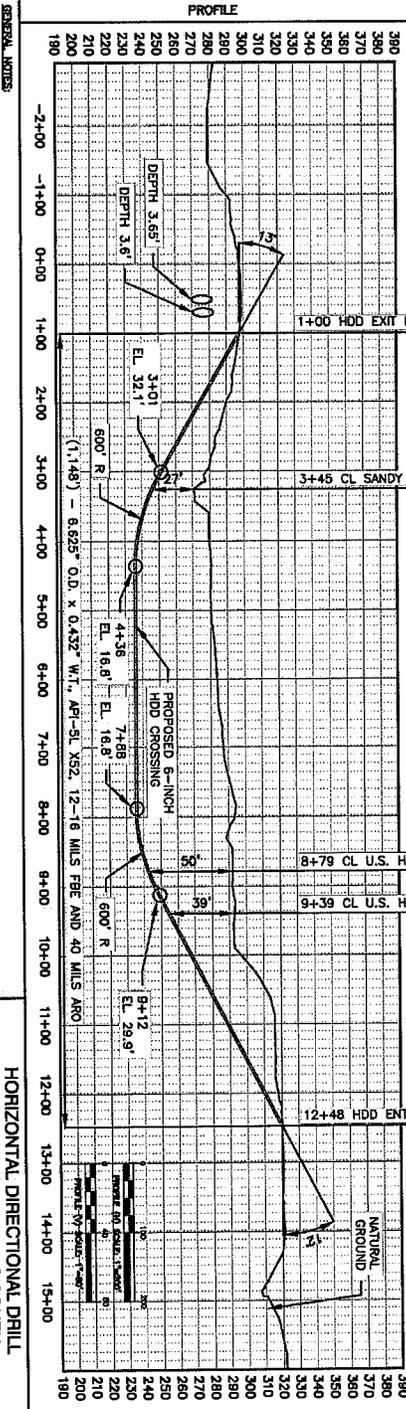


Horizontal Directional Drill (3 of 3)

6-inch HDD Crossing South
(Naphtha Service)

Source: WILLBROS ENGINEERING, drawing "CPC-003", dated October 1, 2013.

- GENERAL NOTES:**
- 1) ACCESS TO WEST DRILL WORKSPACE FROM RIGHT-OF-WAY.
 - 2) ACCESS TO EAST DRILL WORKSPACE FROM RIGHT-OF-WAY.
 - 3) CROSSING DRAWING DEVELOPED WITH DATA PROVIDED TO WEST AS OF APRIL 29, 2013.
 - 4) R IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN NECESSARY PERMITS AND APPROVALS FOR THIS PROJECT.
 - 5) CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR THIS PROJECT.
 - 6) CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR THIS PROJECT.
 - 7) LOCATIONS OF EXISTING FACILITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE AND/OR CONFIRM THE LOCATIONS AND DEPTH OF ALL UTILITIES, PIPELINES OR OTHER OBSTACLES PRIOR TO EXCAVATION.
 - 8) CONTRACTOR TO SUPPORT EXISTING UTILITIES, PIPELINES AND/OR OTHER FACILITIES.
 - 9) CONTRACTOR TO PROVIDE SUFFICIENT DRILLING AND SHALL BE DEPOSED OF IN ACCORDANCE WITH APPROVED HAZARDOUS WASTE DISPOSAL PLAN.
 - 10) HDD TOLERANCES ARE TO BE WITHIN THE FOLLOWING LIMITS: GROUND LEFT OR RIGHT OF C ±2' EXT LENGTH ±10' DEPTH 0' TO ±5'.

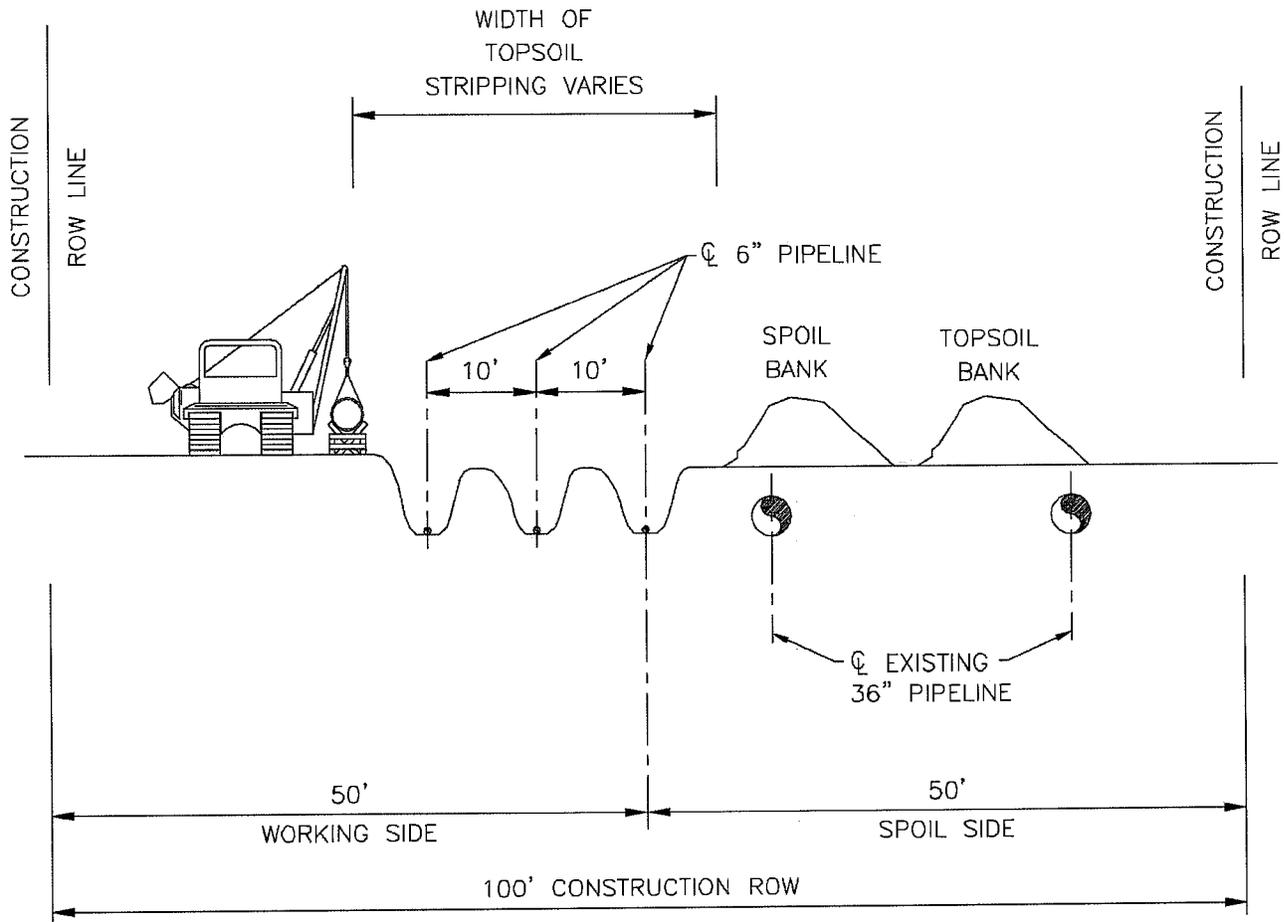


**HORIZONTAL DIRECTIONAL DRILL
6-INCH HDD CROSSING SOUTH
(NAPHTHA SERVICE)**

Drawn	AMP	Scale	Noted
10/01/13		AS SHOWN	
Checked	KOF		
Revised	NEW		
Approved	NEW		

CPC-003

October 01, 2013 - 3.07pm



NTS

NOTES:

1. CONFIGURATION IS FOR CONSTRUCTION WHERE THE NORTHERNMOST PIPELINE IS CENTERED IN THE CONSTRUCTION RIGHT-OF-WAY.
2. CONFIGURATION DOES NOT INCLUDE ADDITIONAL TEMPORARY WORKSPACE AT CROSSINGS.
3. THIS DETAIL IS LOOKING WEST.

Source: WILLBROS ENGINEERING; drawing "43711-QSK-03", dated September 30, 2013.

C:\PROJECTS\26-2773\FIGURE UPDATES\FIGURE 21.DWG

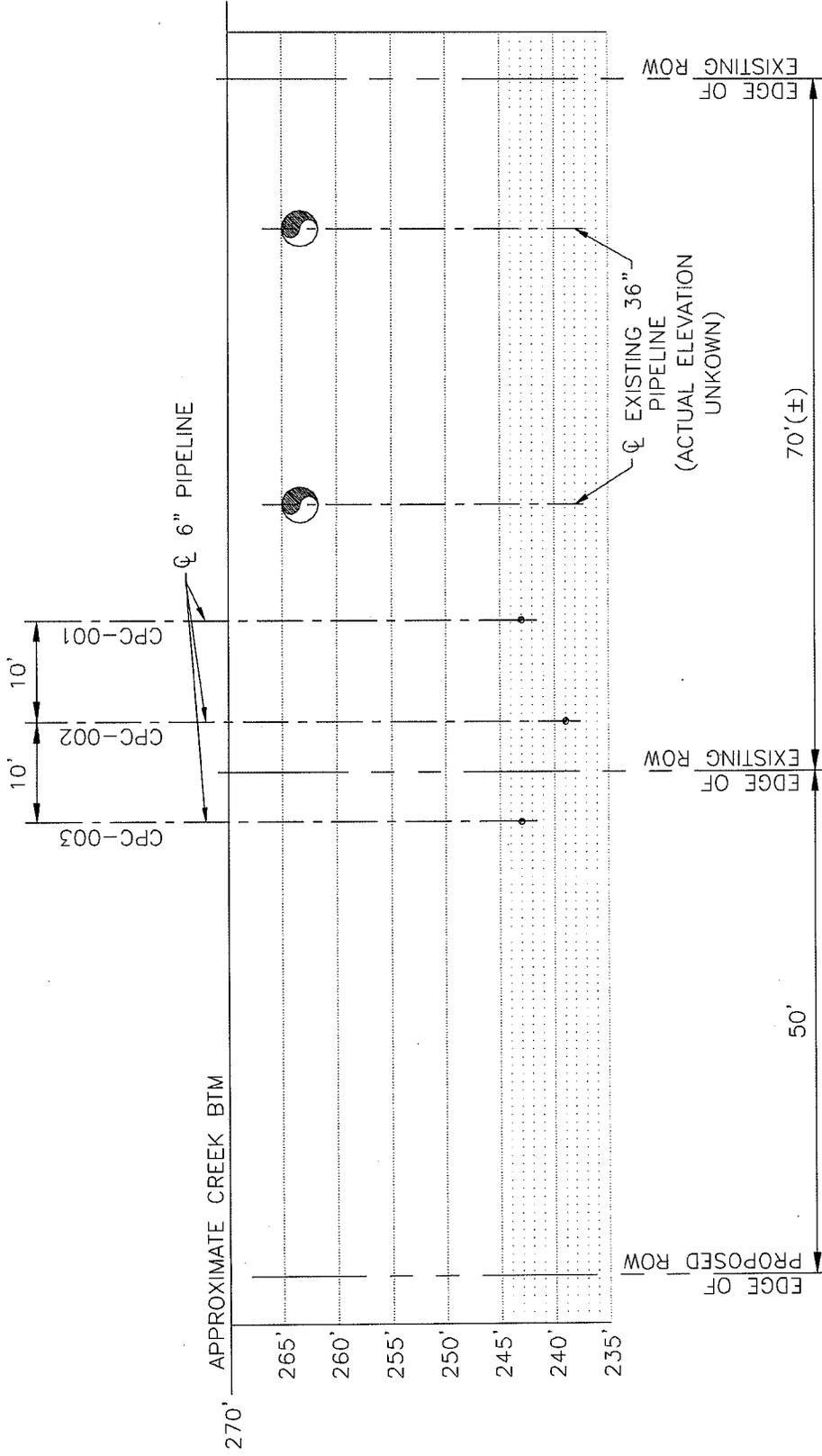


Typical Pipeline Trenching Detail

Figure
21

DRAFTED BY: \GMILES

DATE: 10/4/2013



NOTE: Cross-section orientation is looking from the east to the west.
 Source: WILLBROS ENGINEERING; drawing "43711-QSK-04", dated September 30, 2013.



DRAFTED BY: 1GMILES

DATE: 10/8/2013

Sandy Creek Cross-Section

Figure 22