

# JOINT PUBLIC NOTICE

June 8, 2015

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

(504) 862-1301  
Project Manager  
Neil T. Gauthier  
[Neil.T.Gauthier@usace.army.mil](mailto:Neil.T.Gauthier@usace.army.mil)  
MVN 2014-02121-CM

State of Louisiana  
Department of Environmental Quality  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

(225) 219-3225  
Project Manager  
Elizabeth Hill  
WQC Application Number  
150423-01

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the US Army Corps of Engineers pursuant to: [X] 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 LRS 30:2074 A(3) and provisions of Section 401 of the Clean Water Act.

## **PROPOSED PIPELINES IN ASCENSION, ST. JAMES, ST. JOHN THE BAPTIST, AND ST. CHARLES PARISHES**

**NAME OF APPLICANT:** Maurepas Pipeline, LLC, c/o QPS Engineering, LLC, Attn: Dennis A. McAfee Jr., 25227 Grogans Mill Road, Suite 110, The Woodlands, Texas 77380.

**LOCATION OF WORK:** Beginning at the Norco, Louisiana running northerly through the Bonnet Carre Spillway under I-10 then turning west and crossing I-10 again through the Maurepas Wildlife Management Area. At the intersection with Airline Hwy (US Hwy 61), the pipelines will split direction and two of the pipelines will continue west to Burnside, Louisiana and one pipeline will continue southeast into St. James, Louisiana after crossing under the Mississippi River. The project will span Ascension, St. James, St. John the Baptist, and St. Charles Parishes within the Eastern Louisiana Coastal (08090203), Lake Maurepas (08070204), Lower Mississippi-Baton Rouge (08070100), and East Central Louisiana Coastal (08090301) hydrologic units, as shown on the attached drawings.

**CHARACTER OF WORK:** The applicant has requested Department of the Army authorization to clear, grade, excavate, deposit fill, and directionally drill for the installation of three pipelines and three pump stations to transport crude oil, intermediates and products. The 24", 16", and 6" pipelines will be collocated for the first 24 miles then the 24" pipeline will detour southeast for an additional 10 miles. The 16" and 6" pipeline will

continue east for an additional 11 miles. Collectively the three pipelines will go through the Bonnet Carre Spillway and the Maurepas Wildlife Management Area, cross under the I-10 and Airline Hwy (US 61) twice, and cross under LA Hwy 641, 3125, 18, 44, and 70. Additionally the pipelines will collectively cross under the Blind River, Mississippi River, Mississippi Bayou, Reserve Relief Canal, St. James Parish Canal, and the St. James Parish relief Canal. Approximately 60,084 cubic yards of material will be excavated and re-deposited and 339 cubic yards of crushed stone will be deposited for stabilization. Temporary work spaces and access roads will be cleared for gravel or timber mat to complete construction. The proposed project will temporarily impact approximately 284 acres of jurisdictional forested, scrub shrub, and emergent wetlands by way of clearing that will be replanted post construction and permanently convert approximately 223 acres of jurisdictional forested and scrub shrub wetlands to herbaceous wetlands.

The applicant has designed the project to avoid and minimize direct and secondary adverse impacts to the maximum extent practicable by utilizing an existing right of way and running all three pipelines at the same time and utilizing directional bore methods. As compensation for unavoidable wetland impacts, the applicant proposes to use a combination of restoring cleared areas themselves, mitigation bank credits within the watersheds of impact, and permittee-responsible mitigation in the form of land purchased and donated to the Maurepas Wildlife Management Area.

The comment period for the Department of Army will close in **30 days** from the date of this 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 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**. Similar 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.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

### **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 US 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 US 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.

No properties listed on the National Register of Historic Places are near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, pre-historical, historical sites, or data. Copies of this notice are being sent to the State Archeologist and the State Historic Preservation Officer.

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 up to 0 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 water quality standards will be required from the Department of Environmental Quality, Office of Environmental Services before a permit is issued.

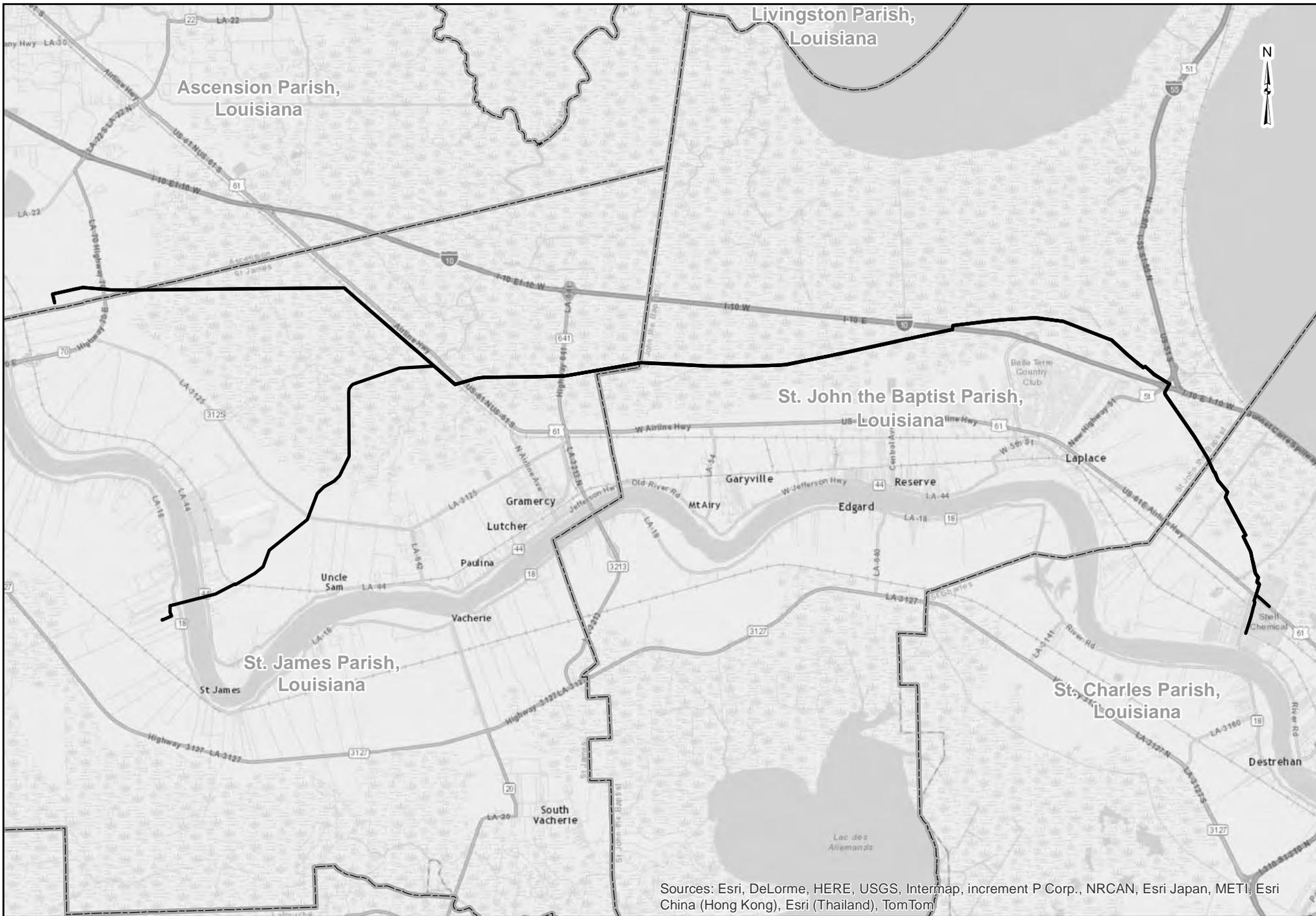
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. You are requested to communicate the information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

The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless

the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

JOHN M. HERMAN  
Chief, Central Evaluation Section  
Regulatory Branch

Enclosures



Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom



0 0.5 1 2 3  
Miles

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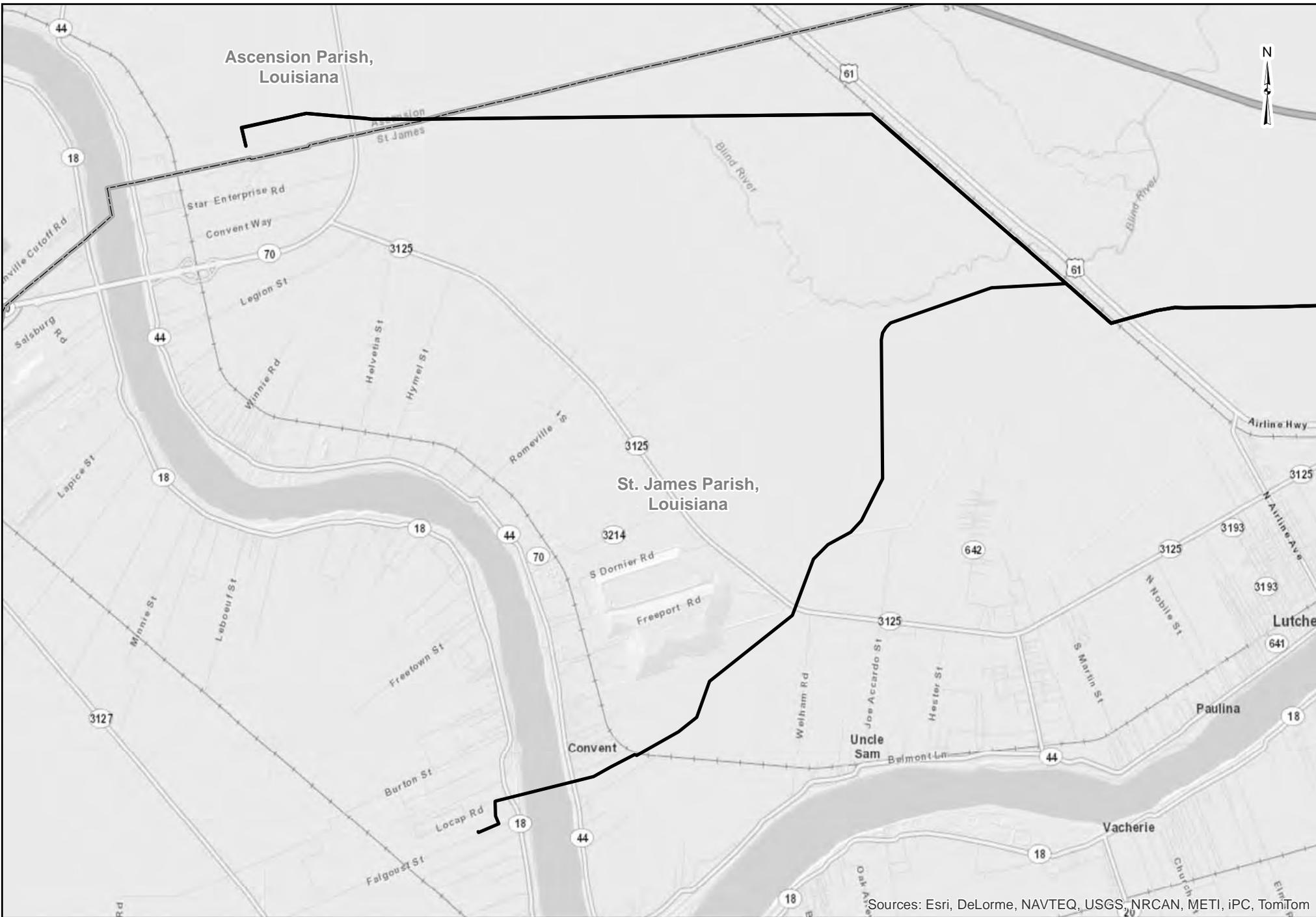
**LEGEND:**  
 Proposed Pipelines  
 Parish Boundary

REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	06/03/14	ISSUED FOR CORPS PERMIT	JPA	JMA	KFD
B	06/26/14	ISSUED FOR CORPS PERMIT	JOB	B.D	KFD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	DL

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLANDS  
 DELINEATION MAPS  
 OVERVIEW MAP**

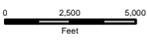
JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 1**



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom



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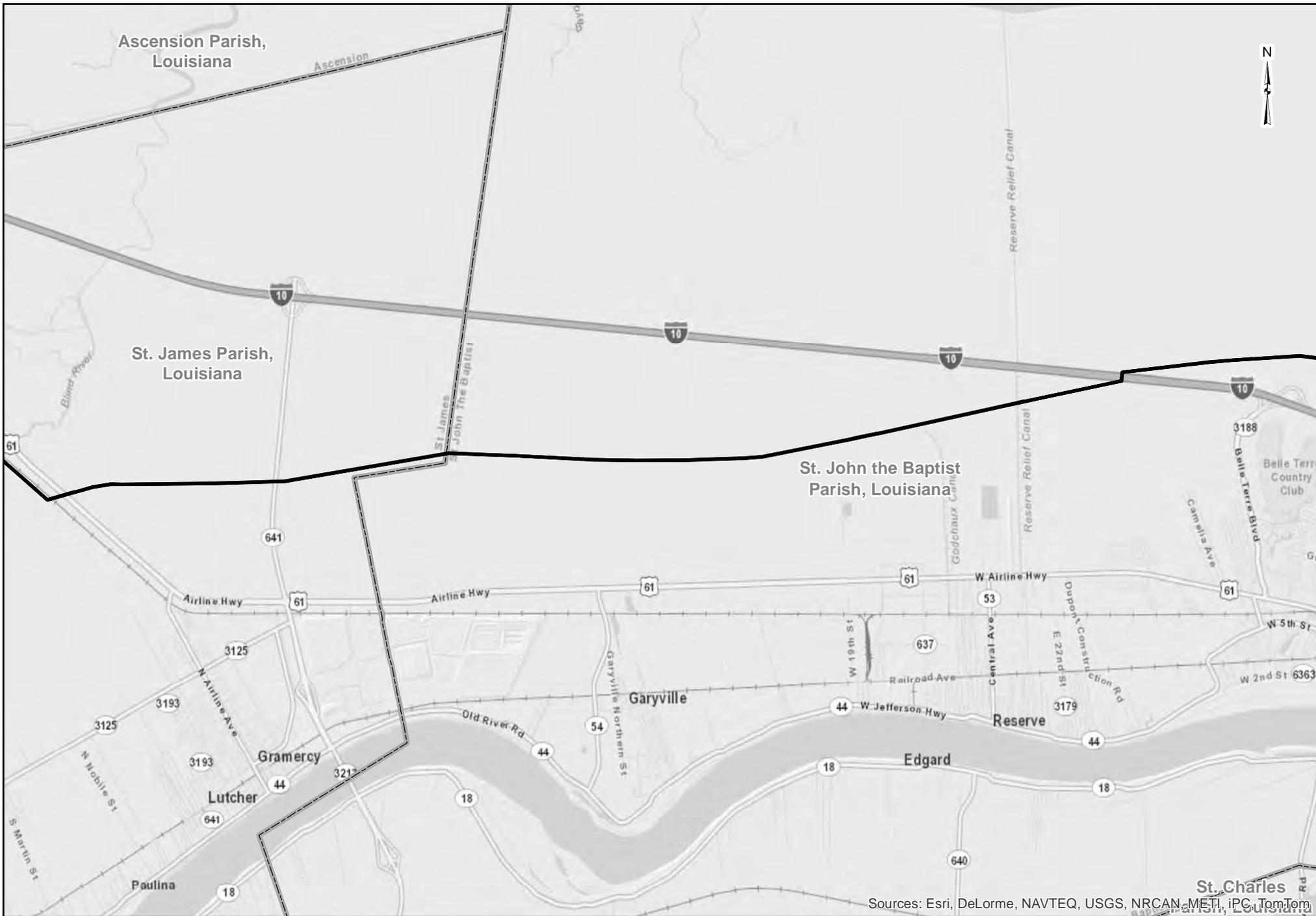
**LEGEND:**  
 Proposed Pipelines  
 Parish Boundary

REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	06/20/14	ISSUED FOR CORPS PERMIT	B.S	JMA	KFD
B	06/26/14	ISSUED FOR CORPS PERMIT	JPS	B.S	KFD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.S	JMA	SL

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLANDS  
 DELINEATION MAPS  
 OVERVIEW PANEL MAPS**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 2-1**



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, IPC, TomTom



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**LEGEND:**

-  Proposed Pipelines
-  Parish Boundary

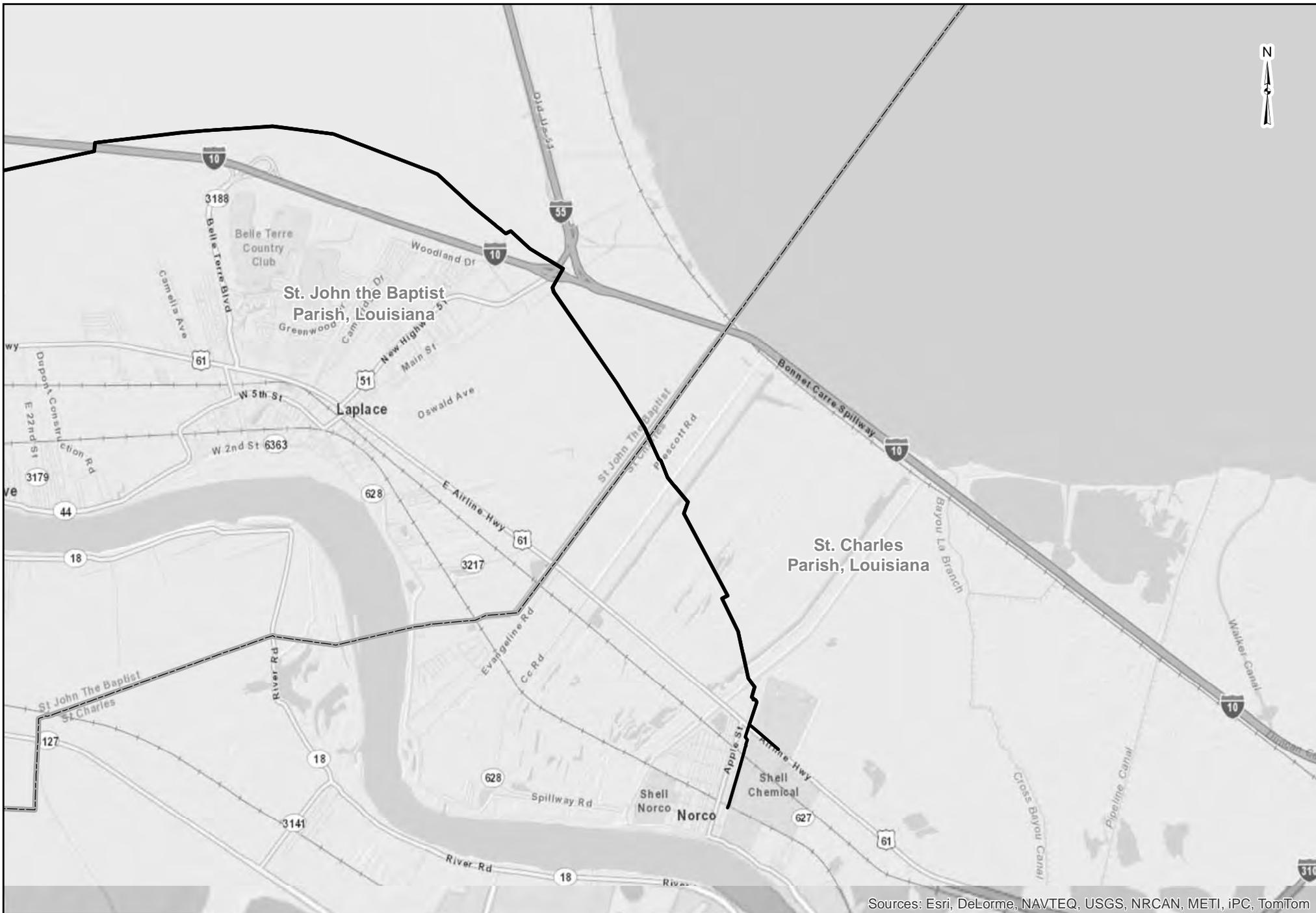
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
A	06/03/14	ISSUED FOR CORPS PERMIT	B.O	JMA	KFD
B	06/26/14	ISSUED FOR CORPS PERMIT	JOS	B.O	KFD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.O	JMA	SL

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 WATERS OF THE US, INCLUDING WETLANDS  
 DELINEATION MAPS  
 OVERVIEW PANEL MAPS**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 2-2**

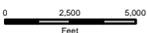


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**LEGEND:**  
 Proposed Pipelines  
 Parish Boundary



REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	06/20/14	ISSUED FOR CORPS PERMIT	B.D	JMA	KFD
B	06/26/14	ISSUED FOR CORPS PERMIT	JDS	B.D	KFD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	SL

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 WATERS OF THE US, INCLUDING WETLANDS  
 DELINEATION MAPS  
 OVERVIEW PANEL MAPS**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 2-3**



Milepost	Permanent Easement	Maurepas Wildlife Management Area
1/10th mile	Temporary Easement	Freshwater Emergent Wetland
Environmental Data Points	Additional Temp Workspace	Freshwater Forested/Shrub Wetland
Parish Boundary	Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	Bridge	BORE
Proposed Pipelines	Existing Access Roads	HDD
	New Access Roads	MLV
	Ditch or Stream	

ATWS 1      ATWS 2      ATWS 3      ATWS 4

S2      S1      MP 0.2      MP 0.3      MP 0.4      S3      S4      MP 0.5      S5      MP 0.6      MP 0.7

**Ascension Parish,  
Louisiana**

**BEGIN PIPELINES**  
30° 07' 12.85" N  
90° 53' 22.52" W

30° 07' 13.08" N  
90° 53' 21.28" W

30° 07' 9.90" N  
90° 53' 20.45" W

30° 07' 11.63" N  
90° 53' 28.61" W

30° 07' 8.46" N  
90° 53' 27.78" W

Pig Trap Valve @ Convent

Convent

New AR 1

Existing AR 1

**St. James Parish,  
Louisiana**

SHEET 1A



0      175      350  
Feet

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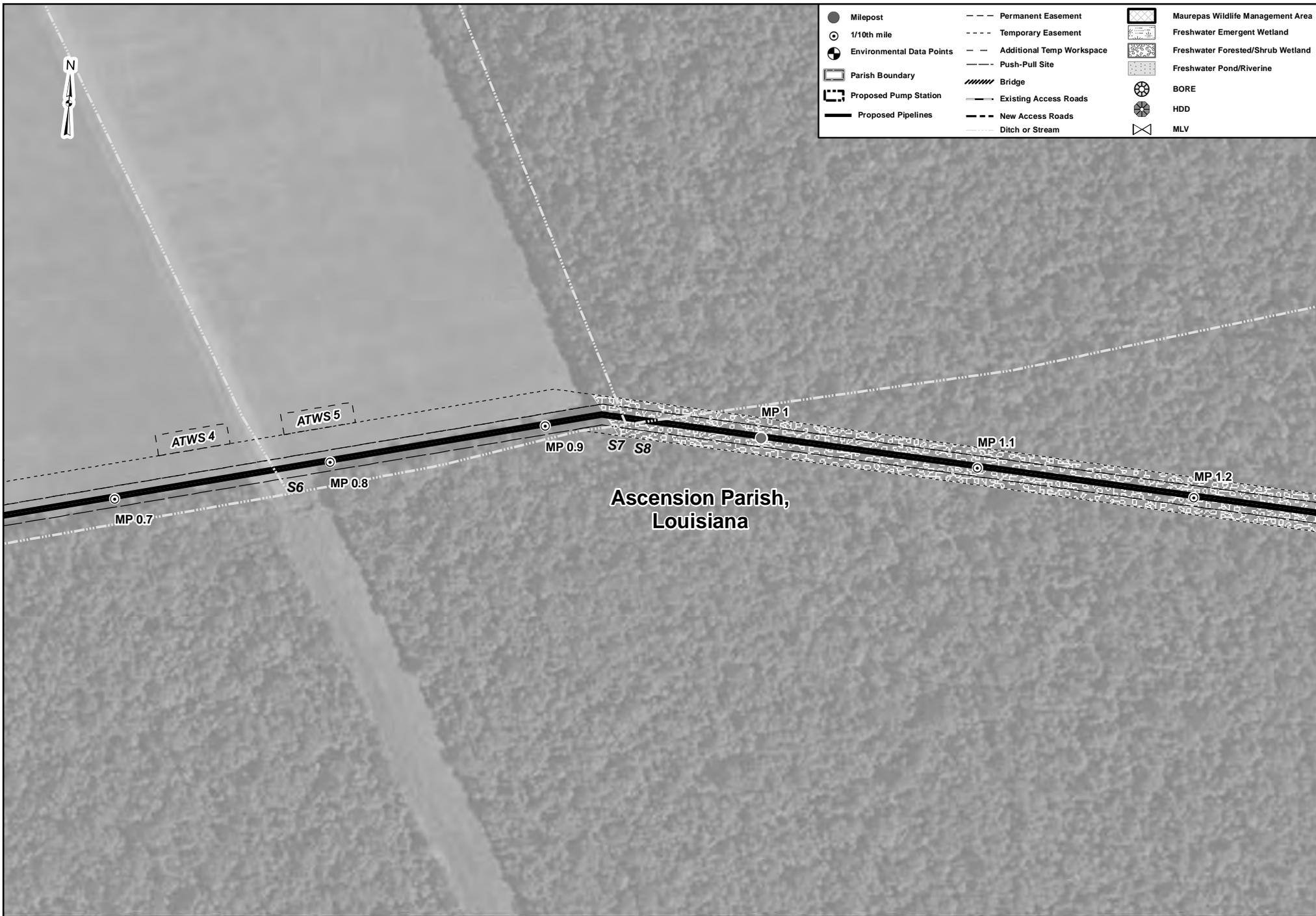
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REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	09/28/14	ISSUED FOR CORPS PERMIT	B.D	JMA	WPD
B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	SL
C	11/26/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	SL
D	01/09/15	REVISED LEGEND, REVISED WORKSPACE, REVISED ACCESS ROADS	B.D	JMA	SL
E	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	WPD
F	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 1 of 93**



Ascension Parish,  
Louisiana

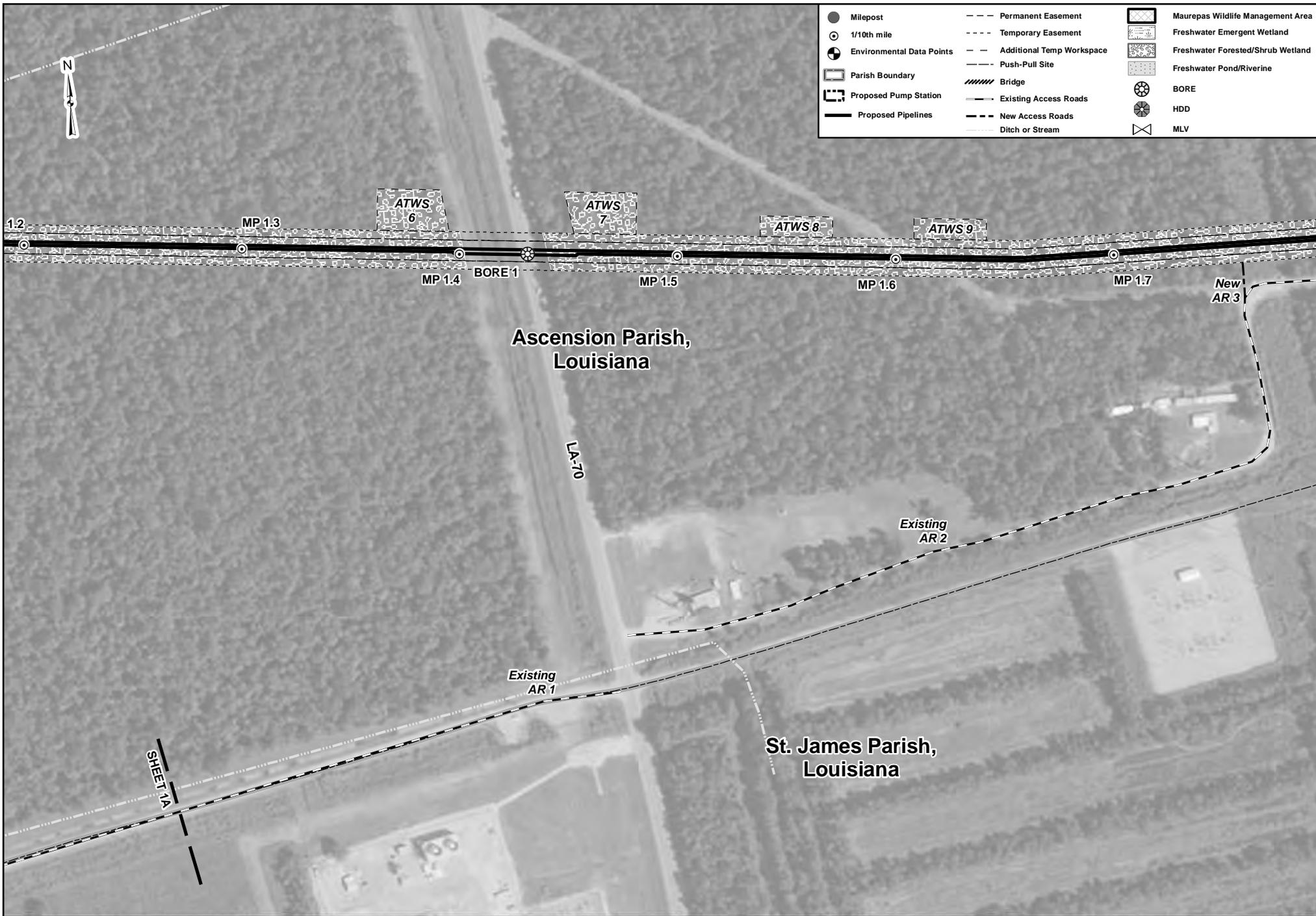
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A	09/28/14	ISSUED FOR CORPUS PERMIT	B.D	J.M	K.P
B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	J.M	S.
C	01/08/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.D	J.M	S.
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	J.M	K.P
E	06/13/15	ADDED ROAD/CANAL LABELS	J.M	J.P	D.M

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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 2 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Ascension Parish,  
Louisiana

St. James Parish,  
Louisiana

SHEET 1A



0 150 300  
Feet

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C	01/08/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	BJD	JMA	SL
D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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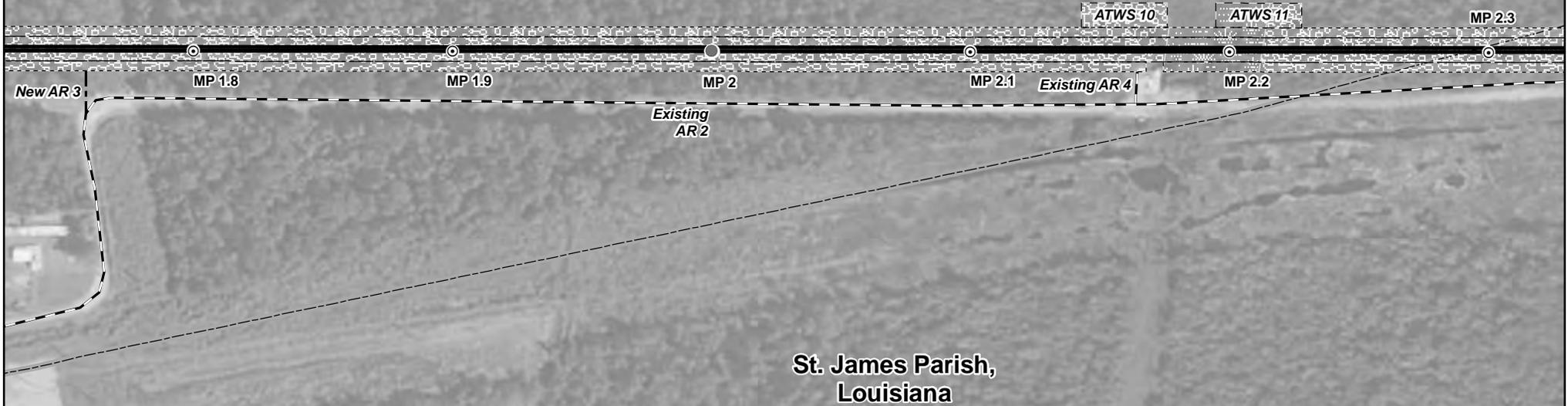
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 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 3 of 93**



Milepost	Permanent Easement	Maurepas Wildlife Management Area
1/10th mile	Temporary Easement	Freshwater Emergent Wetland
Environmental Data Points	Additional Temp Workspace	Freshwater Forested/Shrub Wetland
Parish Boundary	Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	Bridge	BORE
Proposed Pipelines	Existing Access Roads	HDD
	New Access Roads	MLV
	Ditch or Stream	

## Ascension Parish, Louisiana



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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>Figure 3A - Sheet 4 of 93</b>
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Ascension Parish,  
Louisiana

- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
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- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

MP 2.3

MP 2.4

MP 2.5

ATWS  
12

ATWS  
13

MP 2.7

MP 2.8

MP 2.6

Existing  
AR 2

Maurepas Wildlife  
Management Area

St. James Parish,  
Louisiana

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C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.D	JMA	SL
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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WATERS OF THE US, INCLUDING WETLAND  
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JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 5 of 93**

0 150 300  
Feet

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# Ascension Parish, Louisiana

## Maurepas Wildlife Management Area

# St. James Parish, Louisiana

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- 1/10th mile
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- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



MP 2.9

MP 3

MP 3.1

MP 3.2

MP 3.3

MP 3.4



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 6 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

**Maurepas Wildlife Management Area**

MP 3.4

MP 3.5

MP 3.6

MP 3.7

MP 3.8

MP 3.9

**St. James Parish, Louisiana**



0 150 300  
Feet

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JOB NUMBER: **80095**  
 DRAWING NUMBER: **Figure 3A - Sheet 7 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

St. James Parish,  
Louisiana

MP 4

MP 4.1

MP 4.2

MP 4.3

MP 4.4

Maurepas Wildlife  
Management Area



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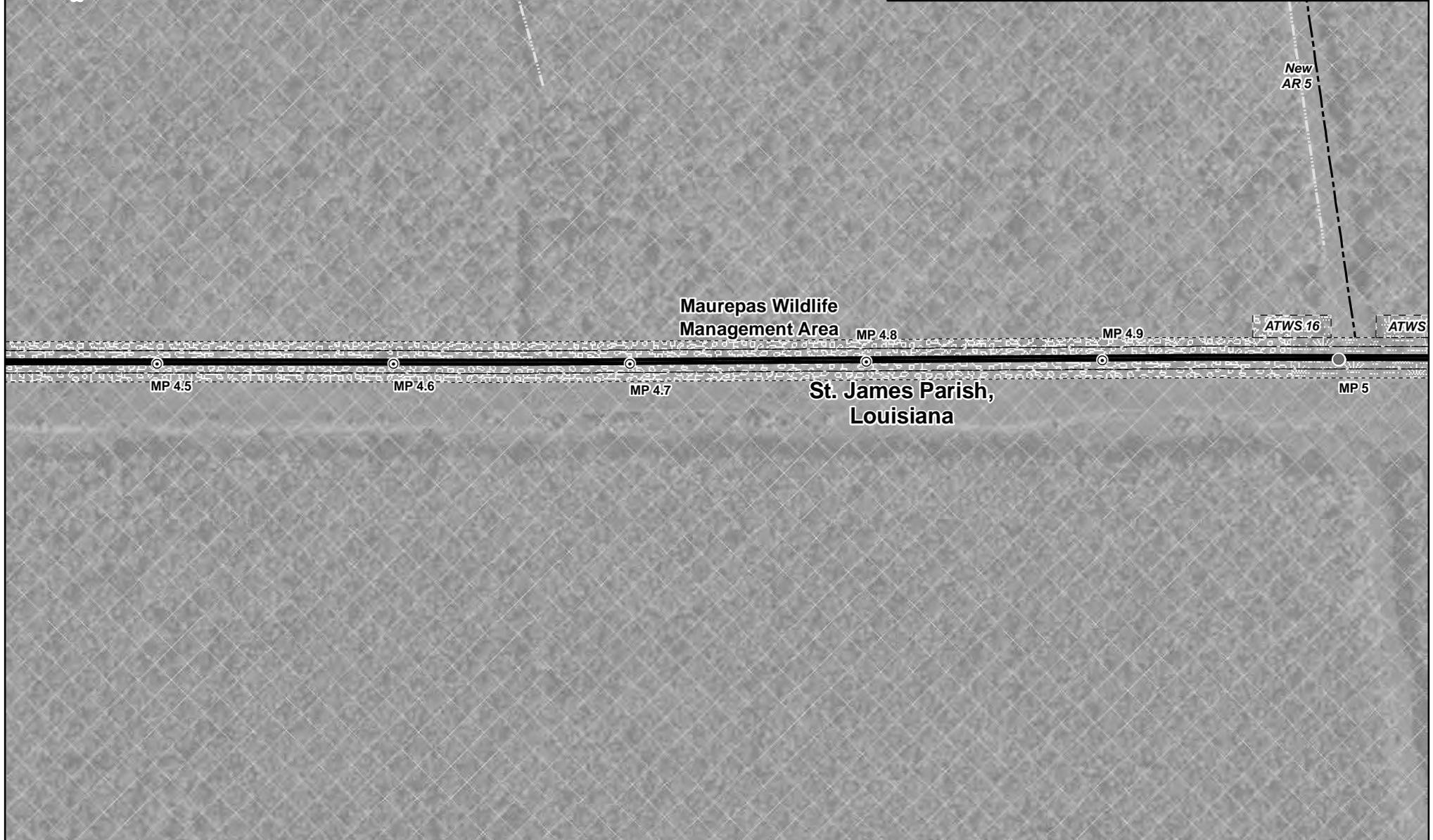
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 8 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	--- New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		



Maurepas Wildlife Management Area

St. James Parish, Louisiana

MP 4.5

MP 4.6

MP 4.7

MP 4.8

MP 4.9

MP 5

ATWS 16

ATWS

New AR 5

0 150 300  
Feet

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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 9 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ==== Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▭ Maurepas Wildlife Management Area
- ▭ Freshwater Emergent Wetland
- ▭ Freshwater Forested/Shrub Wetland
- ▭ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area



0 150 300  
Feet

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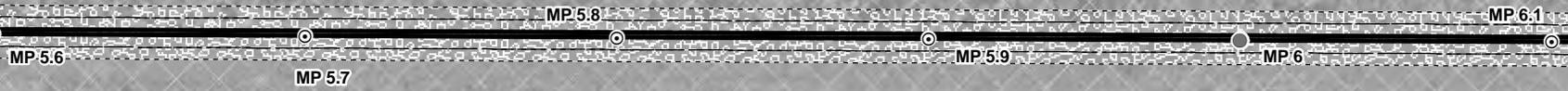
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 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 10 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
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	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

St. James Parish,  
Louisiana



Maurepas Wildlife  
Management Area

0 150 300  
Feet

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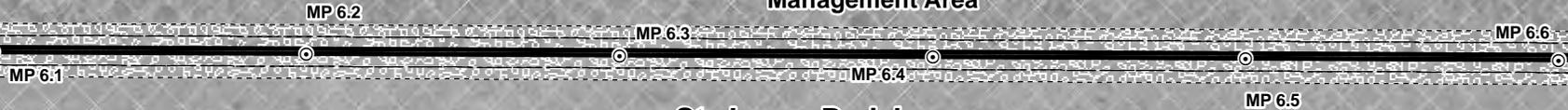
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	Milepost		Permanent Easement		Maurepas Wildlife Management Area
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	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

Maurepas Wildlife Management Area

St. James Parish, Louisiana




0 150 300  
Feet

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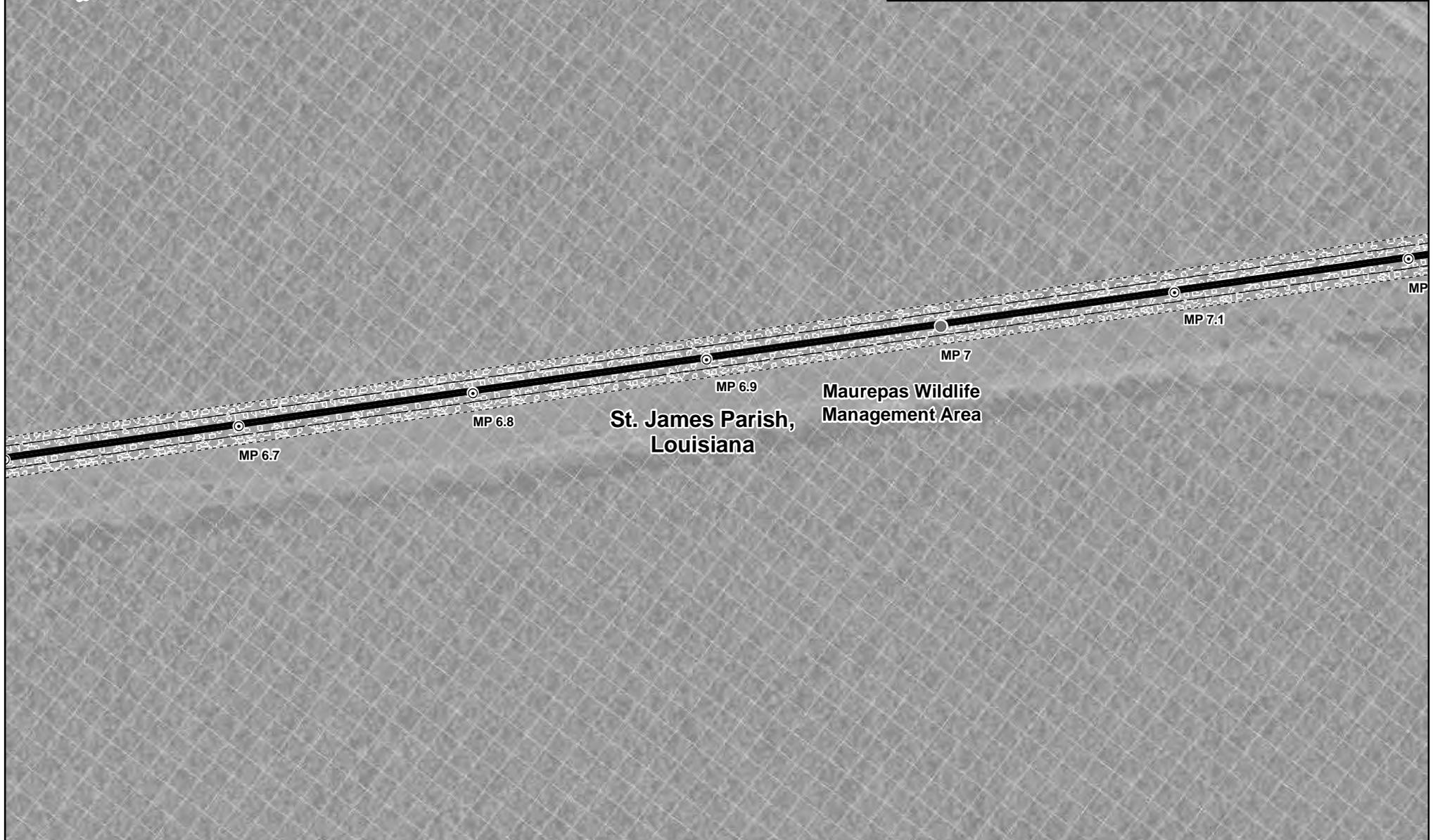
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**PROPOSED PIPELINES PROJECT  
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 12 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		




0 150 300  
Feet

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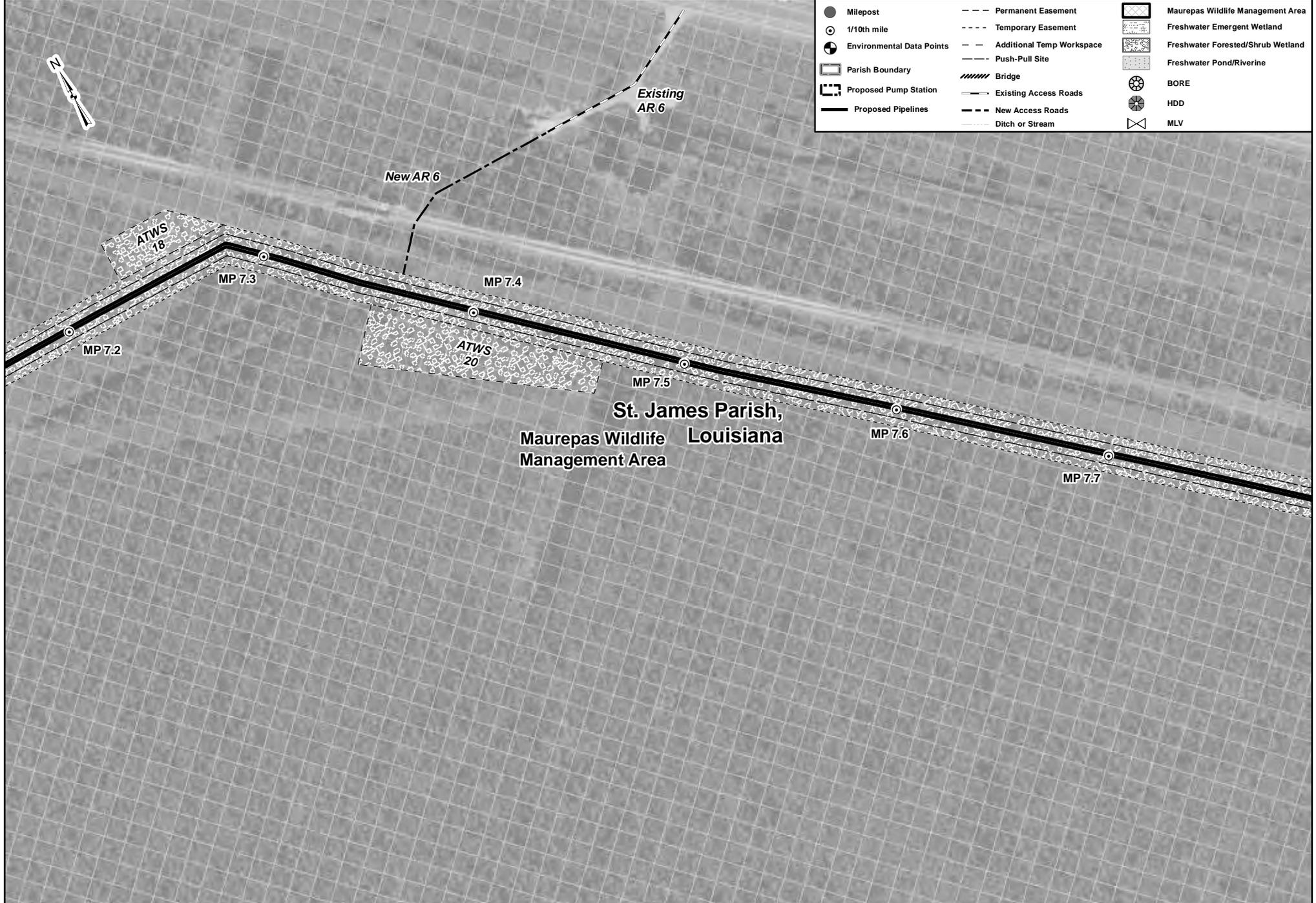
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 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 13 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
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0 150 300  
Feet

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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 14 of 93**



US-61

● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	--- New Access Roads		MLV
	--- Ditch or Stream		

St. James Parish,  
Louisiana

MP 7.8

MP 7.9

MP 8

MP 8.1

ATWS 21

ATWS 22

MP 8.2

MP 8.3

Maurepas Wildlife  
Management Area



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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: 80095

DRAWING NUMBER: Figure 3A - Sheet 15 of 93



US-61

St. James Parish,  
Louisiana

MP 8.3

MP 8.4

MP 8.5

MP 8.6  
Maurepas Wildlife  
Management Area

MP 8.7

MP 8.8

● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	--- New Access Roads		MLV
	--- Ditch or Stream		



0 150 300  
Feet

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 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 16 of 93**



US-61

St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area

● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
⊠ Proposed Pump Station	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	--- New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		

MP 8.9

MP 9

MP 9.1

MP 9.2

MP 9.3

MP 9.4

New  
AR 7A

MLV:1

S9

ATWS 23

0 150 300  
Feet

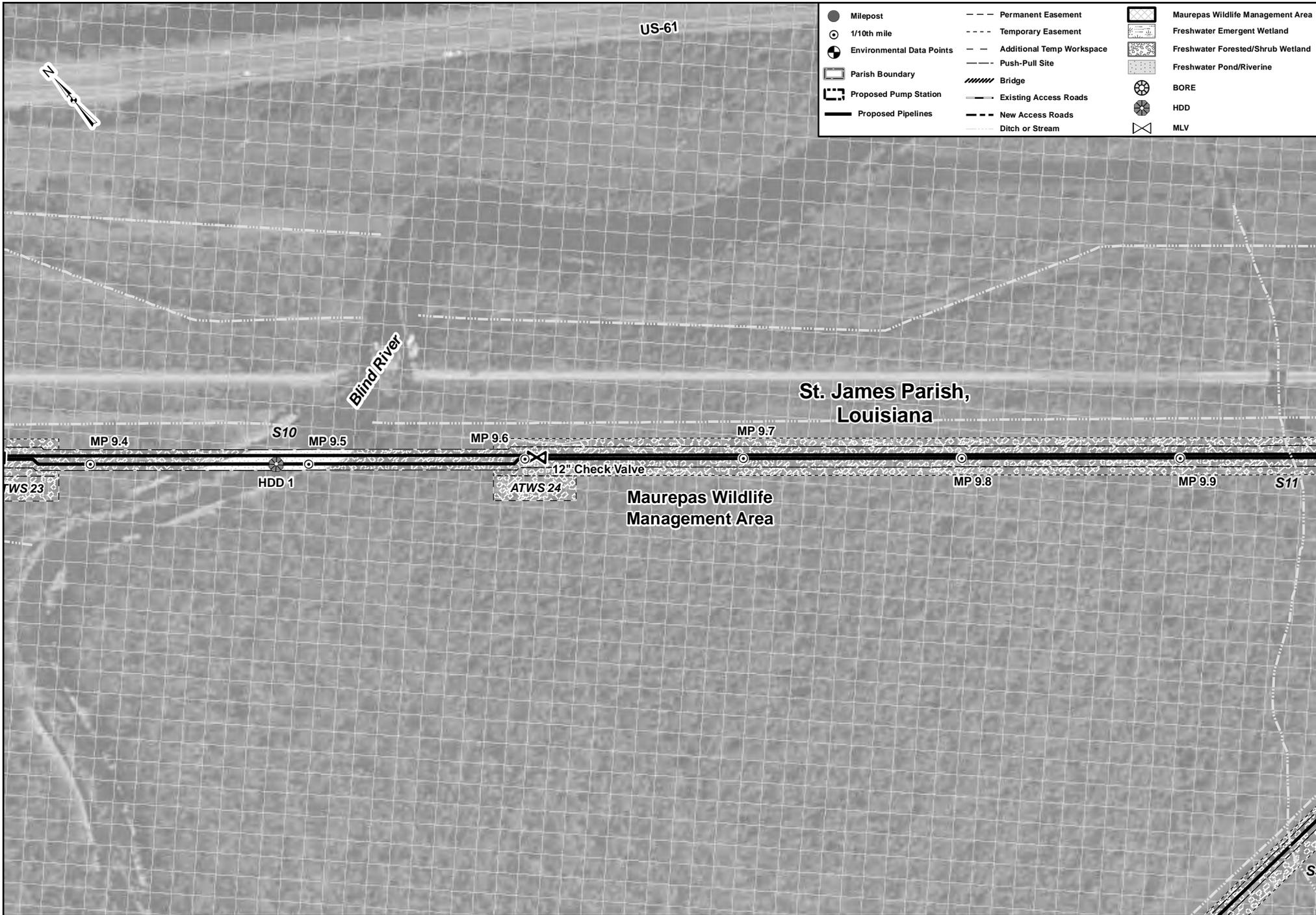
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RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**  
DRAWING NUMBER: **Figure 3A - Sheet 17 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- ▬ Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▬ Bridge
- ▬ Existing Access Roads
- ▬ New Access Roads
- Ditch or Stream
- ▭ Maurepas Wildlife Management Area
- ▭ Freshwater Emergent Wetland
- ▭ Freshwater Forested/Shrub Wetland
- ▭ Freshwater Pond/Riverine
- ⊕ BORE
- ⊕ HDD
- ⊕ MLV

US-61



St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area



0 150 300  
Feet

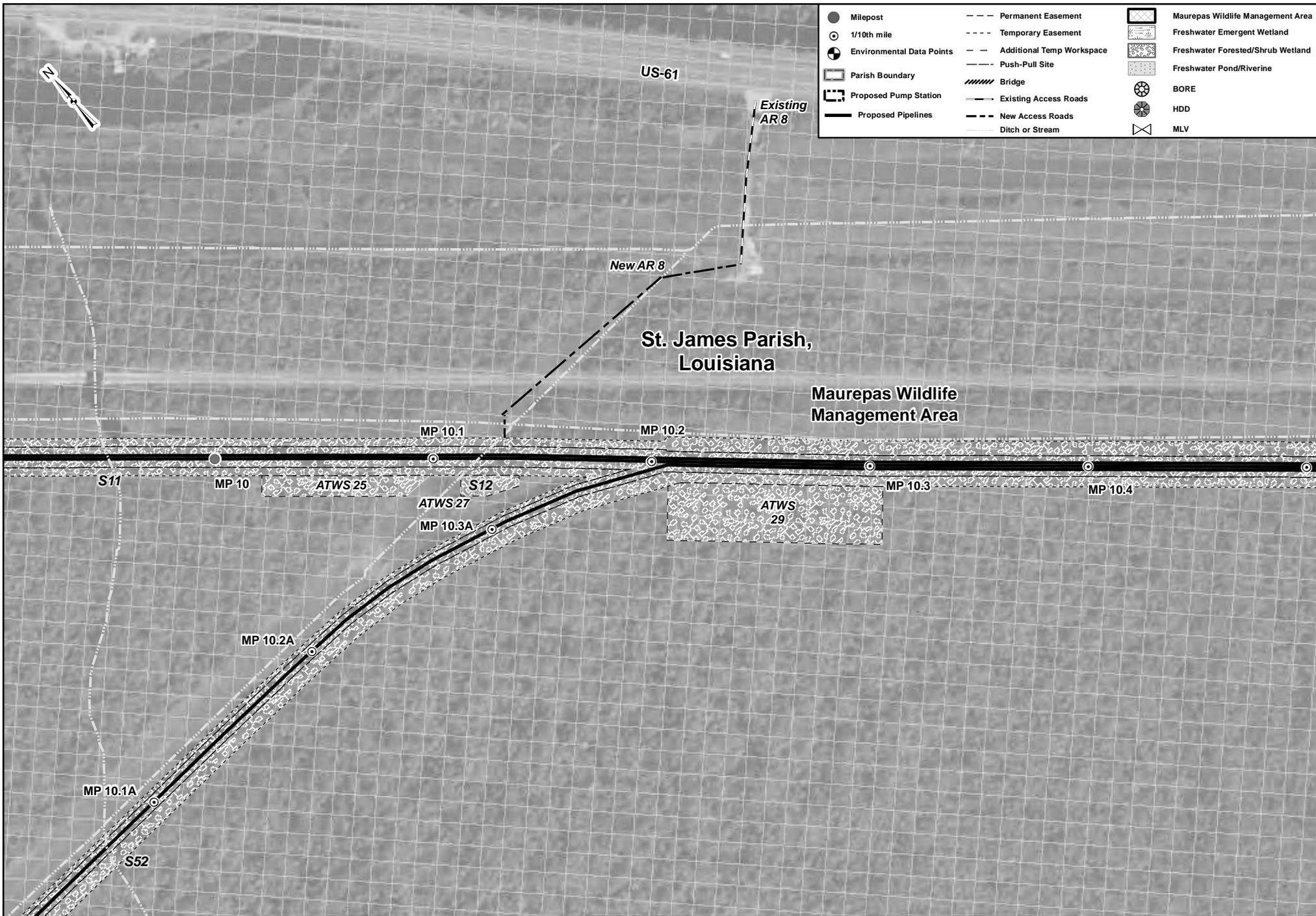
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B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	SL
C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	BJD	JMA	SL
D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 18 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
⊠ Proposed Pump Station	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	--- New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		

0 150 300  
Feet

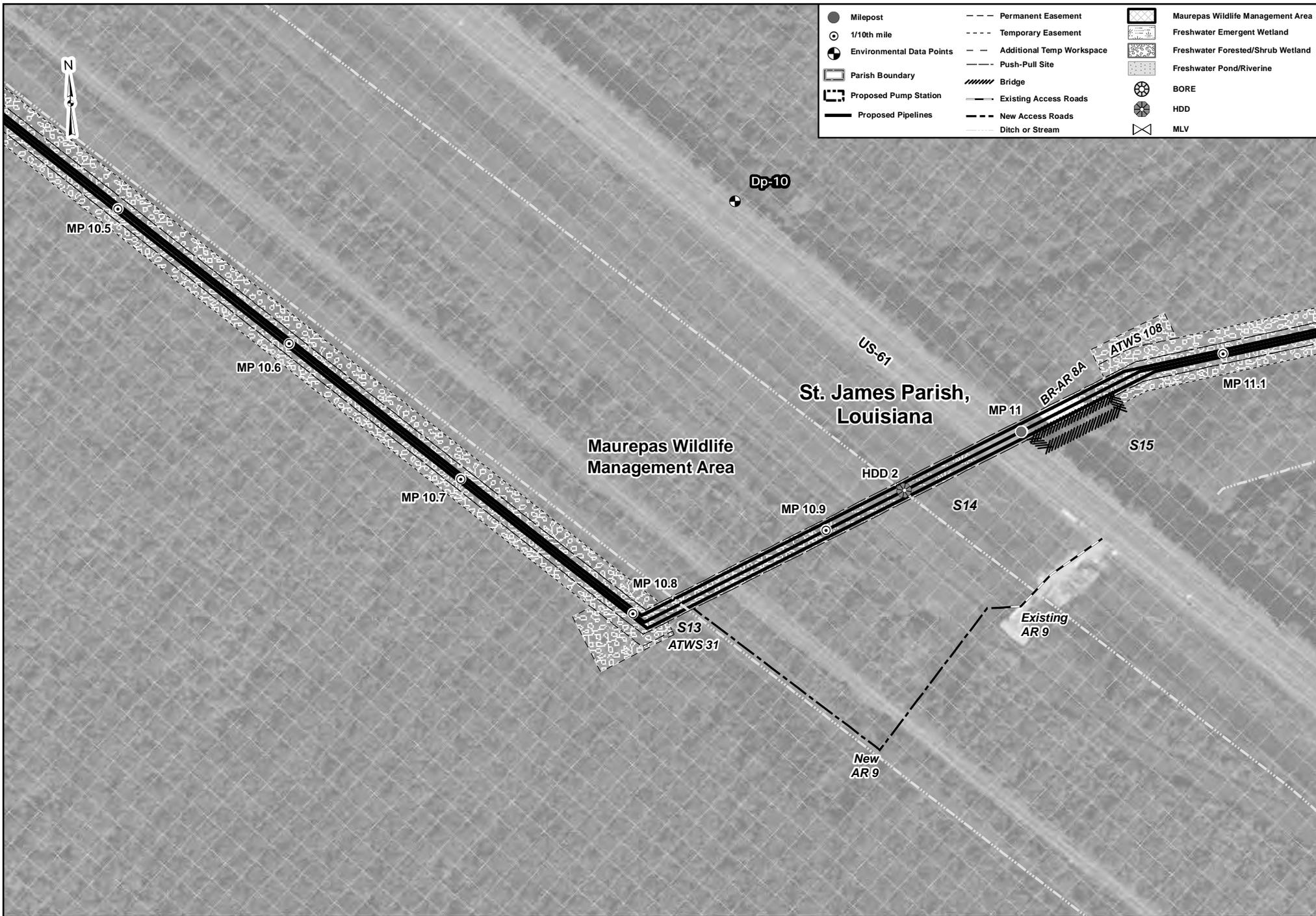
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D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 19 of 93**




0 150 300  
Feet

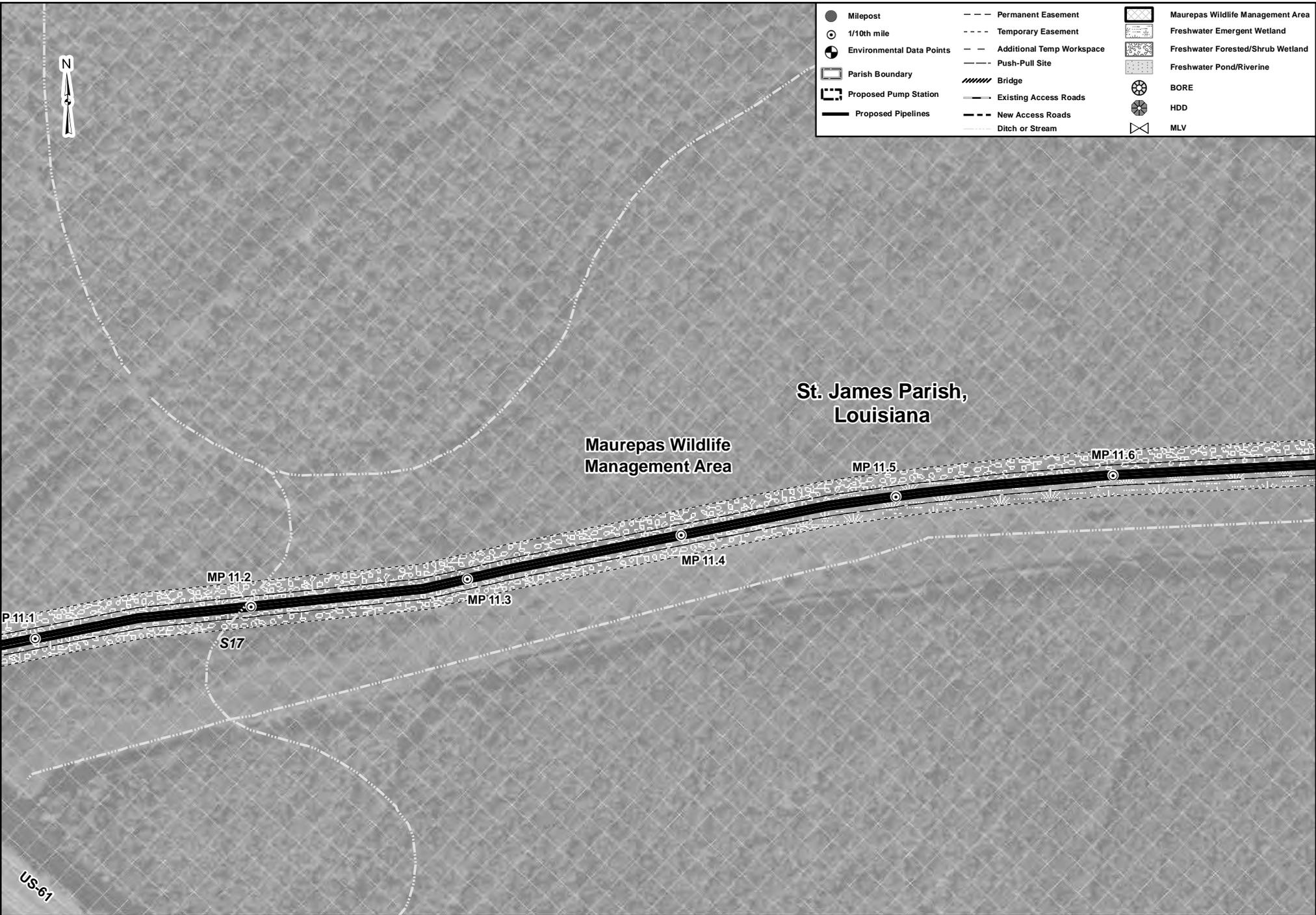
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B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	SL
C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.D	JMA	SL
D	01/08/15	REVISED LEGEND, REVISED WORKSPACE, REVISED ACCESS ROADS	B.D	JMA	SL
E	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	WPD
F	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
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JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 20 of 93**



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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 21 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area

MP 11.7

MP 11.8

S19

MP 11.9

MP 12

MP 12.1

MP 12.2



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 22 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

St. James Parish,  
Louisiana

MP 12.2

MP 12.3

MP 12.4

Maurepas Wildlife  
Management Area

MP 12.5

MP 12.6

MP 12.7



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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER:  
**Figure 3A - Sheet 23 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

St. James Parish,  
Louisiana

MP 12.8

MP 12.9

MP 13

MP 13.1

MP 13.2

Maurepas Wildlife  
Management Area



0 150 300  
Feet

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D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

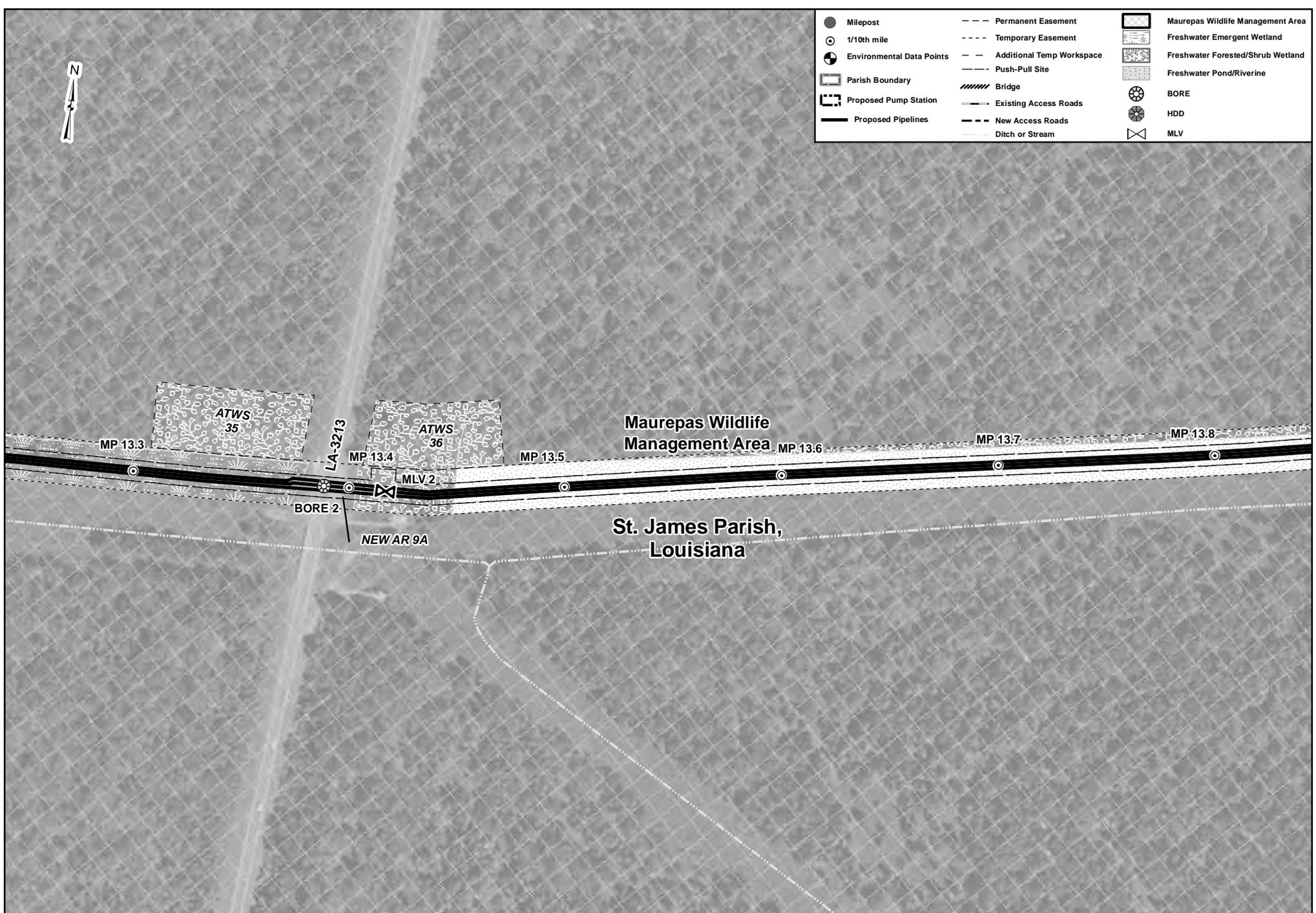
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 24 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV




0 150 300  
Feet

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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 25 of 93**



● Milepost	--- Permanent Easement	Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement	Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace	Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	//// Bridge	⊗ BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD
	--- New Access Roads	⊗ MLV
	--- Ditch or Stream	

St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area

MP 13.8      MP 13.9      MP 14      MP 14.1      MP 14.2      MP 14.3

St. John the Baptist  
Parish, Louisiana



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D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 26 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Maurepas Wildlife  
Management Area

St. James Parish,  
Louisiana

MP 14.4

MP 14.5

MP 14.6

MP 14.7

MP 14.8

MP 14.9

St. John the Baptist  
Parish, Louisiana



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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPC
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 27 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

St. James Parish,  
Louisiana

Maurepas Wildlife  
Management Area

ATWS  
38

MP 15.3

MP 15.4

MP 14.9

MP 15

MP 15.1

MP 15.2

St. John the Baptist  
Parish, Louisiana



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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 28 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

## St. John the Baptist Parish, Louisiana

MP 15.5      MP 15.6      MP 15.7      MP 15.8      MP 15.9

## Maurepas Wildlife Management Area



0      150      300  
Feet

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JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 29 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	— New Access Roads		MLV
	--- Ditch or Stream		

Maurepas Wildlife Management Area

St. John the Baptist Parish, Louisiana

MP 16

MP 16.1

MP 16.2

MP 16.3

MP 16.4

MP 16.5



0 150 300  
Feet

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D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 30 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		




0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 31 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

Maurepas Wildlife Management Area

St. John the Baptist Parish, Louisiana

MP 17.1

MP 17.2

MP 17.3

MP 17.4

MP 17.5

MP 17.6



0 150 300  
Feet

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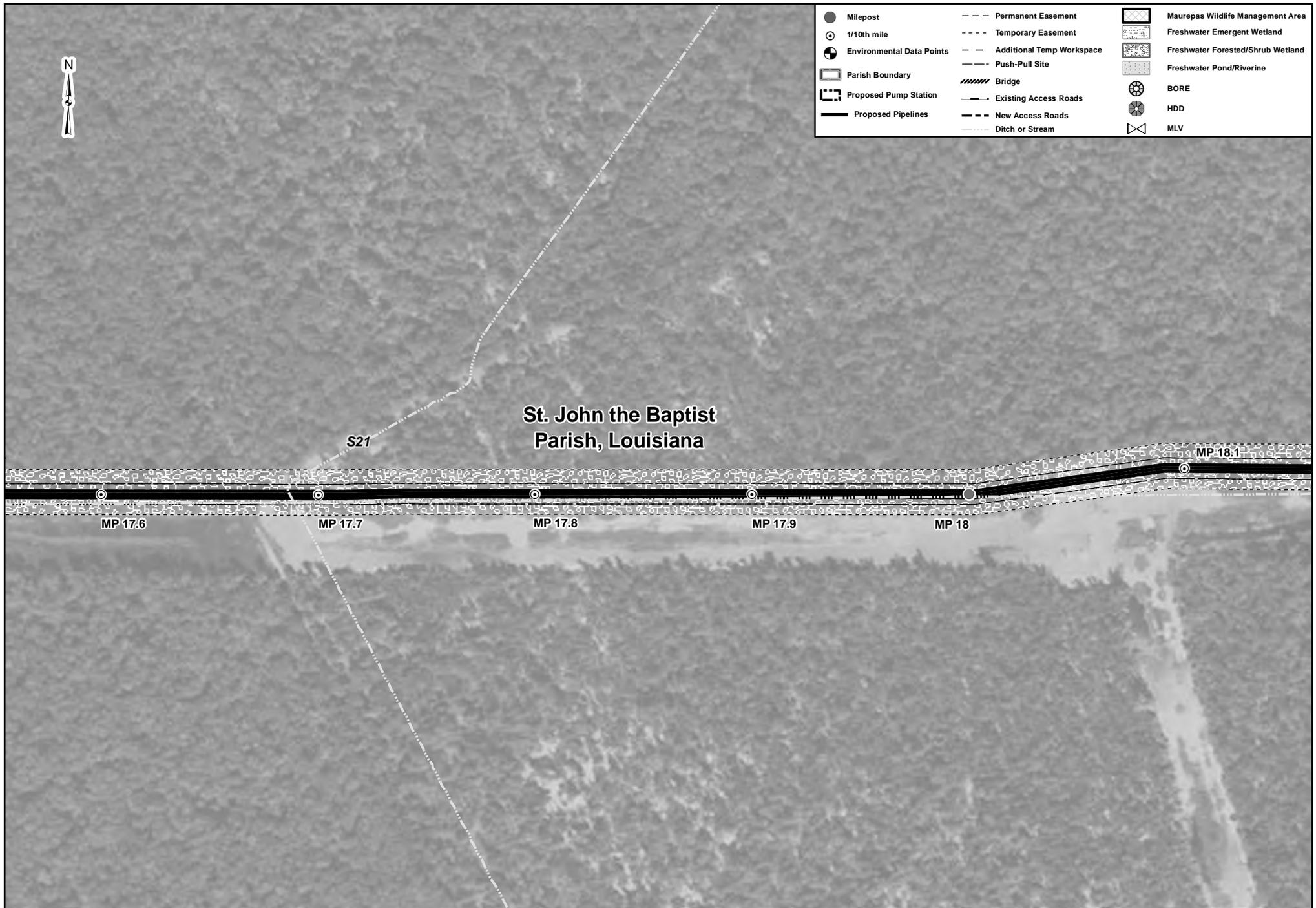
**PROPOSED PIPELINES PROJECT  
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 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 32 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
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	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

## St. John the Baptist Parish, Louisiana



0 150 300  
Feet

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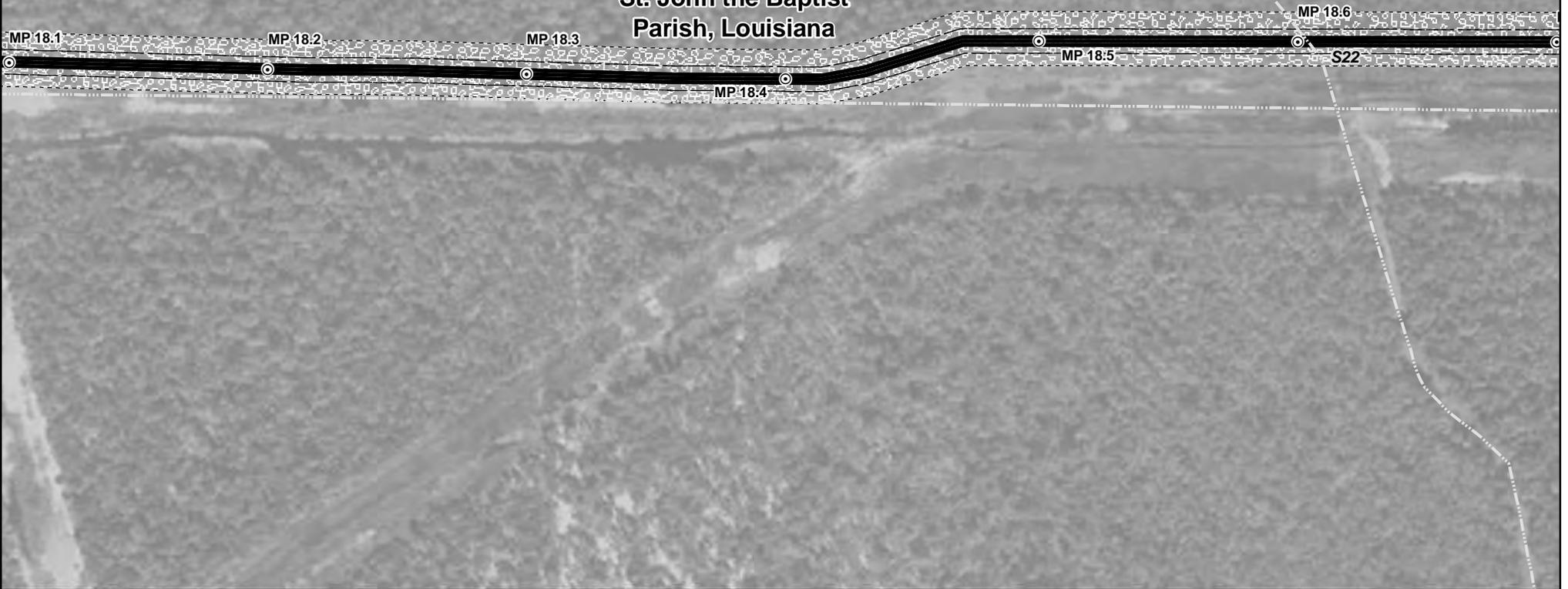
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RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 33 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
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	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

## St. John the Baptist Parish, Louisiana




0 150 300  
Feet

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 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 34 of 93**



Milepost	Permanent Easement	Maurepas Wildlife Management Area
1/10th mile	Temporary Easement	Freshwater Emergent Wetland
Environmental Data Points	Additional Temp Workspace	Freshwater Forested/Shrub Wetland
Parish Boundary	Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	Bridge	BORE
Proposed Pipelines	Existing Access Roads	HDD
	New Access Roads	MLV
	Ditch or Stream	

## St. John the Baptist Parish, Louisiana




0 150 300  
Feet

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REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	06/23/14	ISSUED FOR CORPUS PERMIT	B.LD	JMA	KPD
B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.LD	JMA	SL
C	01/08/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.LD	JMA	SL
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.LD	JMA	KPD
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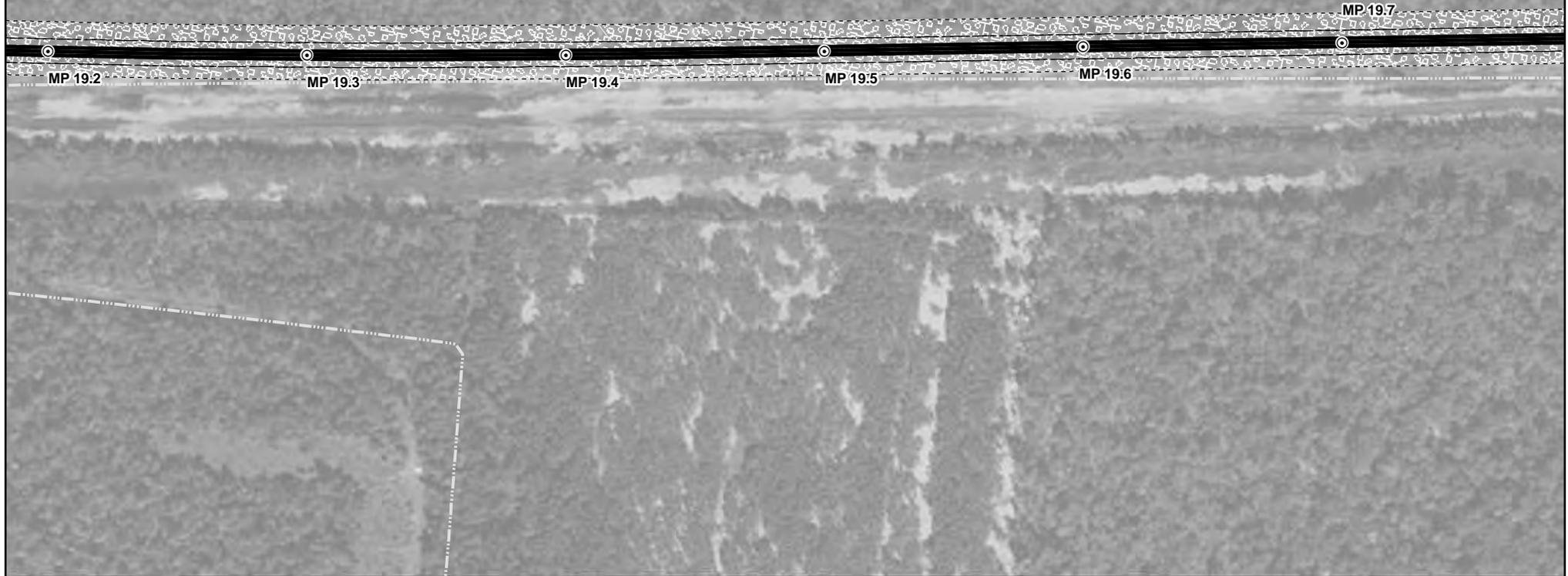
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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>Figure 3A - Sheet 35 of 93</b>
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	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Push-Pull Site		Bridge		Freshwater Pond/Riverine
	Parish Boundary		Existing Access Roads		BORE
	Proposed Pump Station		New Access Roads		HDD
	Proposed Pipelines		Ditch or Stream		MLV

## St. John the Baptist Parish, Louisiana



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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

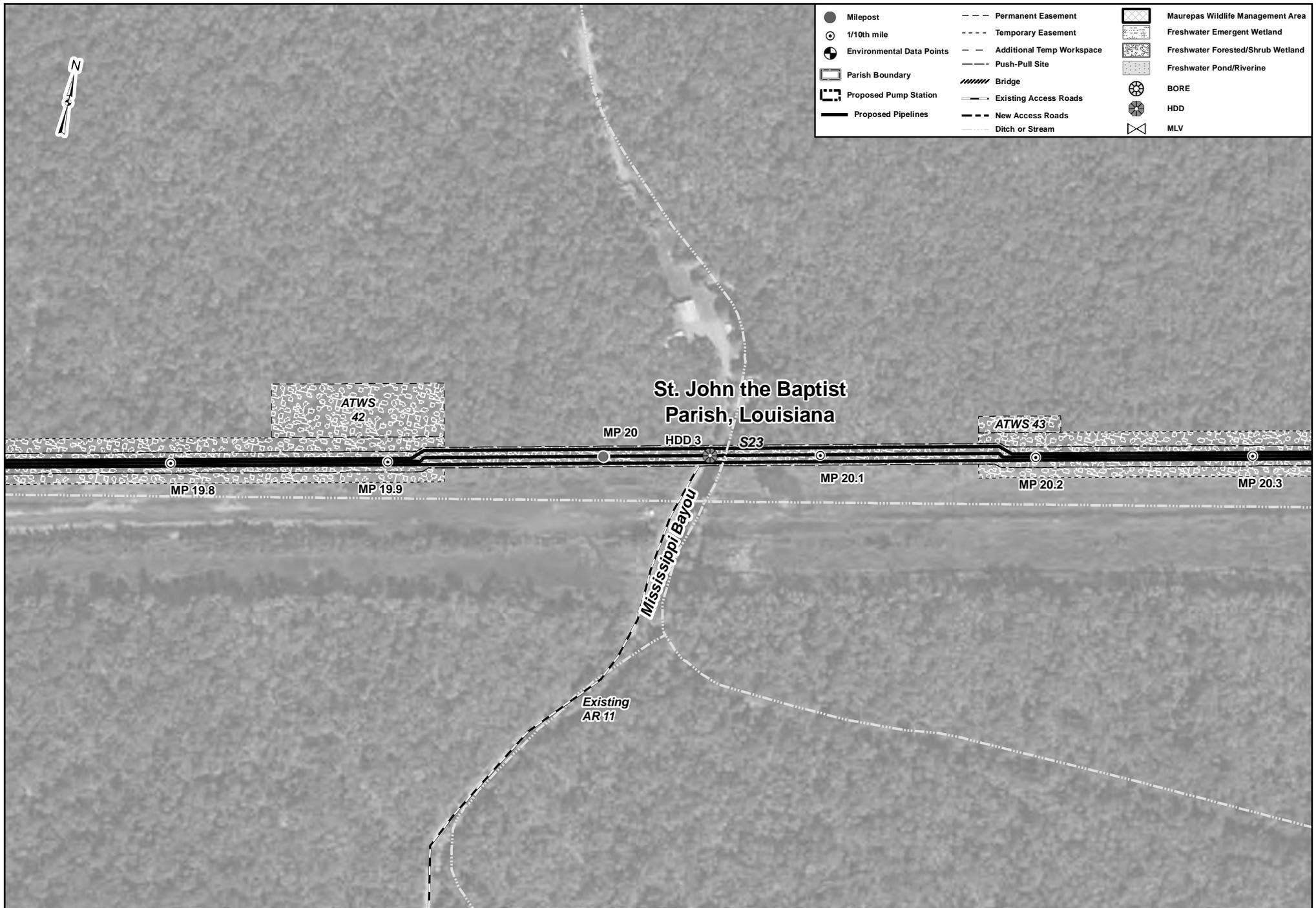
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>Figure 3A - Sheet 36 of 93</b>
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● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		



**St. John the Baptist  
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REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
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C	01/08/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	BJD	JMA	SL
D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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 RIGHT-OF-WAY CORRIDOR IMPACT**

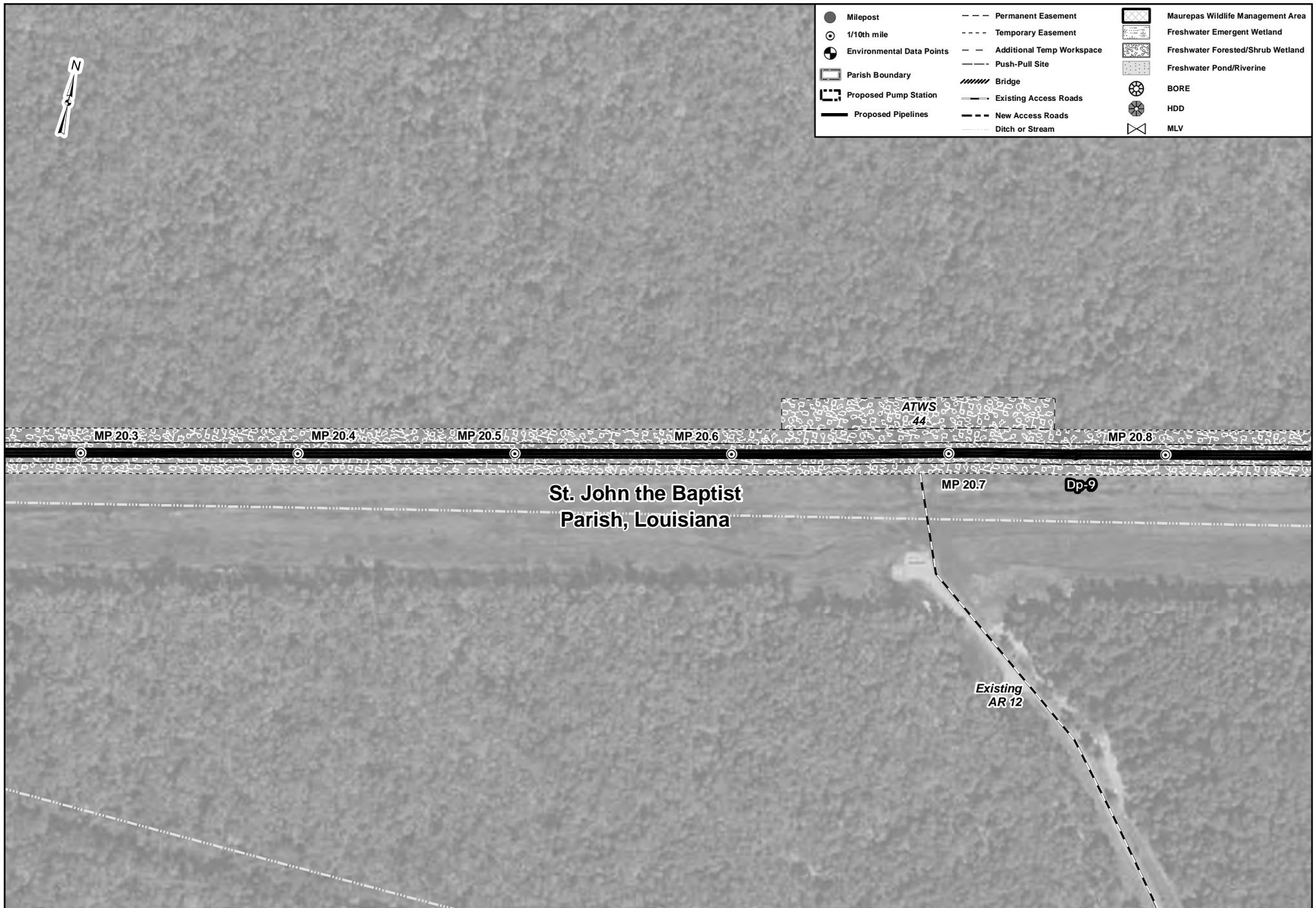
JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 37 of 93**

0      150      300  
 Feet

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● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		




0 150 300  
Feet

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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 38 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
⊠ Proposed Pump Station	//// Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		

MP 20.9

MP 21

MP 21.1

MP 21.2

MP 21.3

MP 21.4

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Parish, Louisiana**



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 39 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



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0 150 300  
Feet

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C	01/08/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.L.D	J.M.A	S.L
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.L.D	J.M.A	K.P.D
E	06/13/15	ADDED ROAD/CANAL LABELS	J.M.A	J.P.V	D.M

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JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 40 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
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	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
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	Proposed Pipelines		Existing Access Roads		HDD
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0 150 300  
Feet

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▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		



0 150 300  
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 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 42 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		



**St. John the Baptist  
Parish, Louisiana**

0 150 300  
Feet

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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.L.D	J.M.A	K.P.F
E	06/13/15	ADDED ROAD/CANAL LABELS	J.M.A	J.P.V	D.M

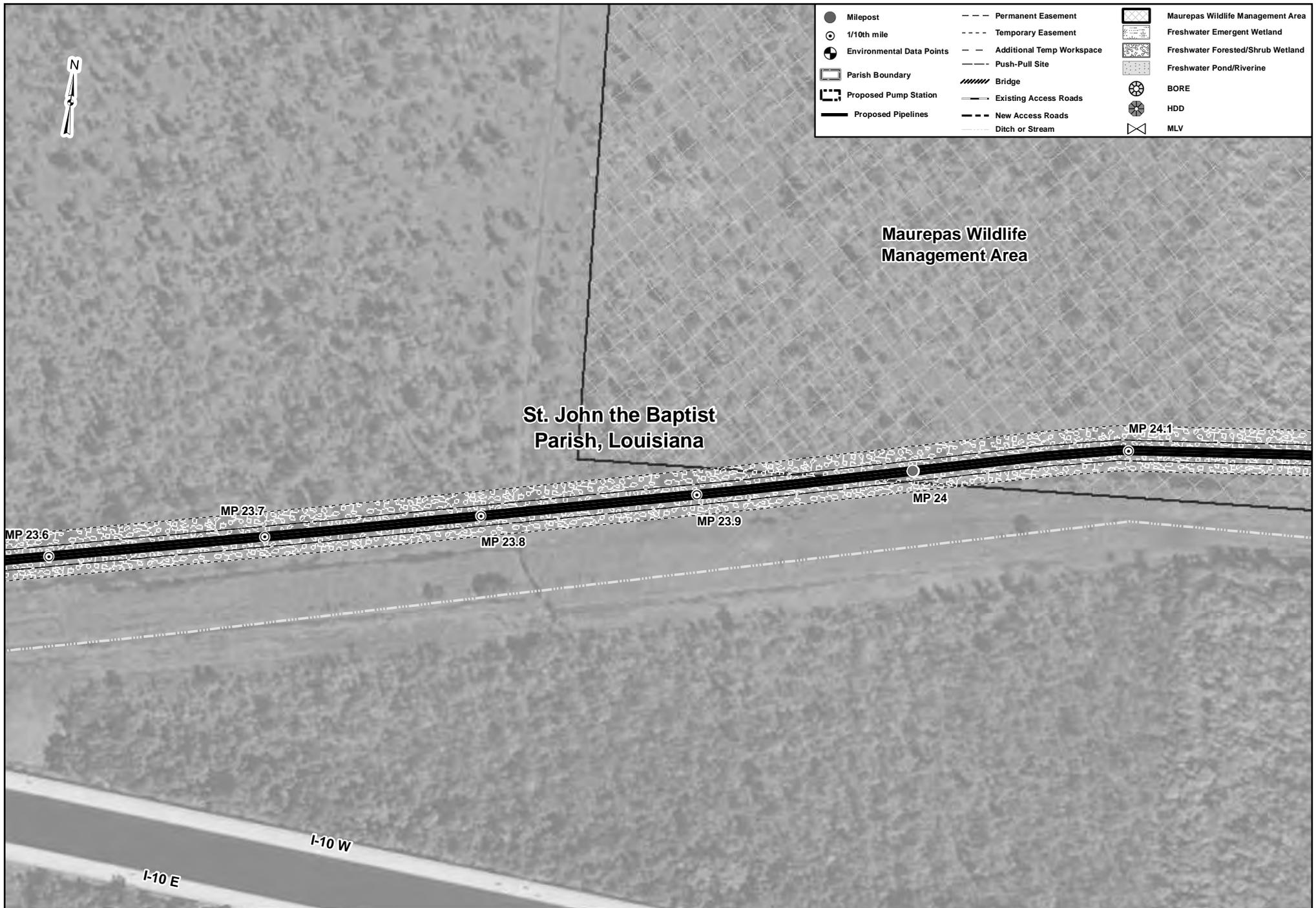
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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 43 of 93**



Milepost	Permanent Easement	Maurepas Wildlife Management Area
1/10th mile	Temporary Easement	Freshwater Emergent Wetland
Environmental Data Points	Additional Temp Workspace	Freshwater Forested/Shrub Wetland
Parish Boundary	Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	Bridge	BORE
Proposed Pipelines	Existing Access Roads	HDD
	New Access Roads	MLV
	Ditch or Stream	



0 150 300  
Feet

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 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095** DRAWING NUMBER: **Figure 3A - Sheet 44 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	--- New Access Roads		MLV
	--- Ditch or Stream		

Maurepas Wildlife Management Area

MP 24.2

MP 24.3

MP 24.4

MP 24.5

MP 24.6

MP 24.7

St. John the Baptist Parish, Louisiana



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 45 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊞ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Maurepas Wildlife Management Area

St. John the Baptist Parish, Louisiana

MP 24:7

MP 24:8

MP 24:9

MP 25

MP 25:1

MP 25:2



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 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 46 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Maurepas Wildlife Management Area

St. John the Baptist Parish, Louisiana

ATWS  
55

MP 25.3

S25

MP 25.5

S26

MP 25.6

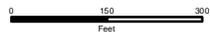
Dp-8

MP 25.7

MP 25.4

Existing  
AR 13

SHEET 47A



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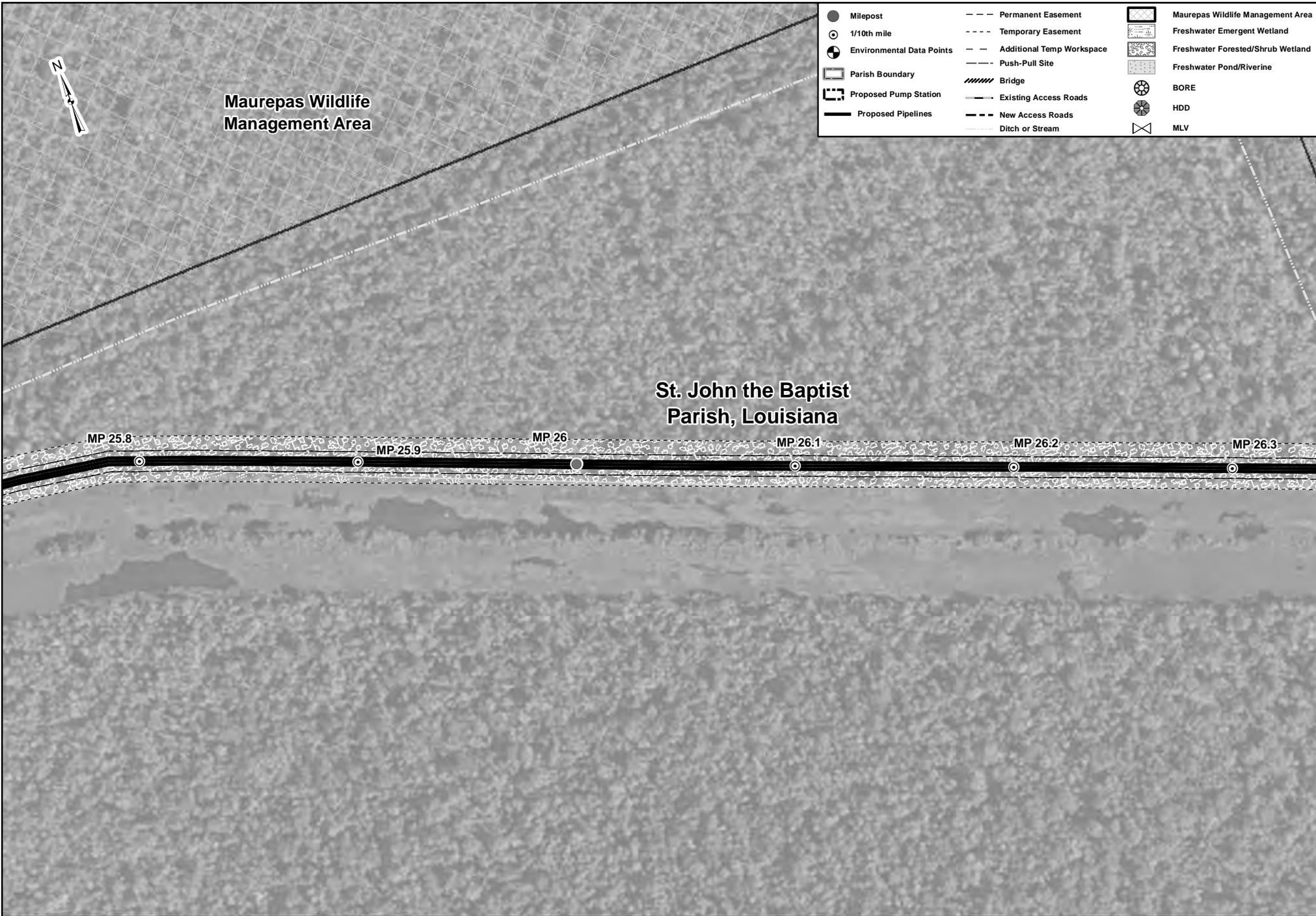
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**PROPOSED PIPELINES PROJECT  
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: 80095

DRAWING NUMBER: Figure 3A - Sheet 47 of 93



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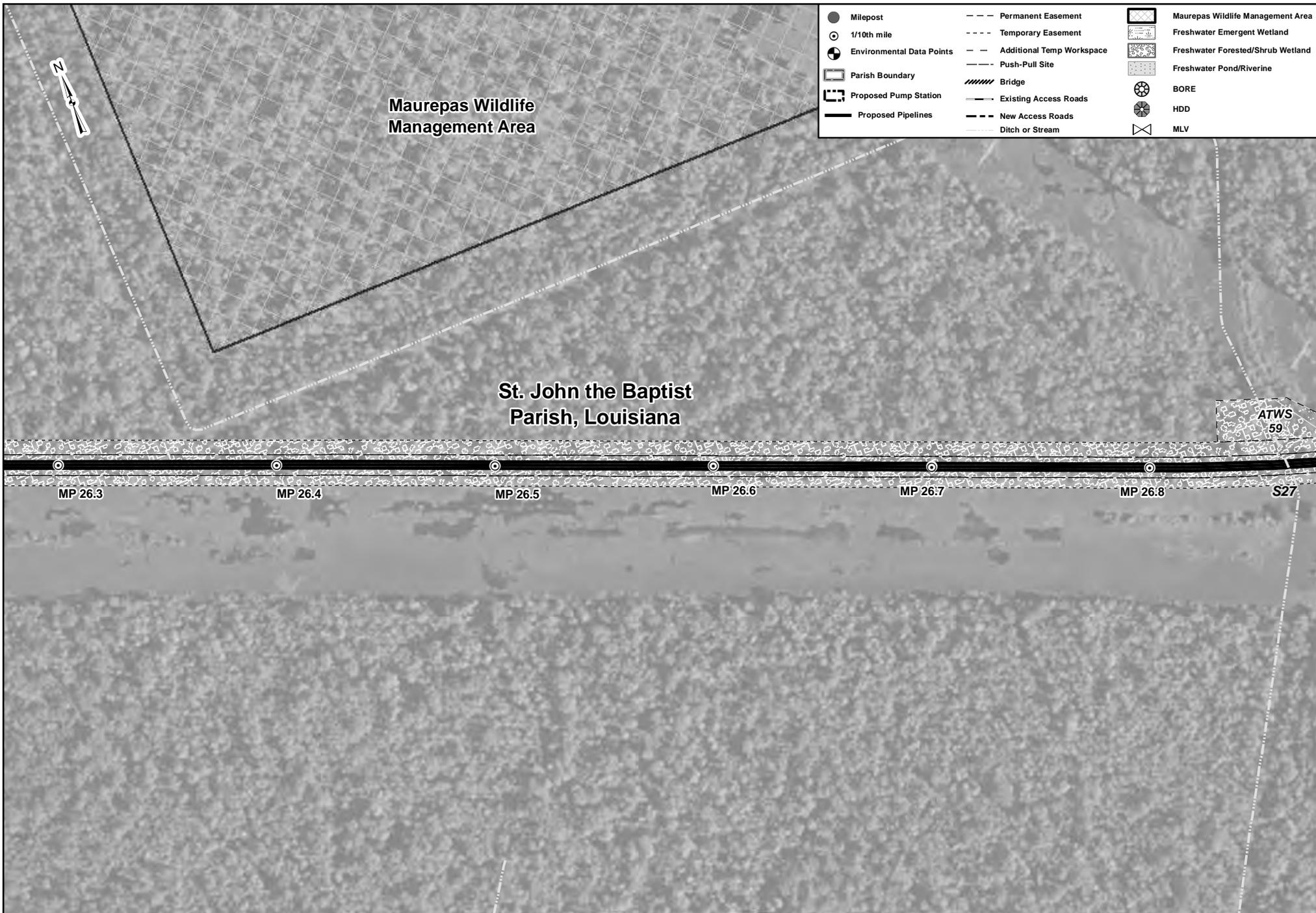
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 48 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

MP 26.3

MP 26.4

MP 26.5

MP 26.6

MP 26.7

MP 26.8

S27

ATWS  
59



0 150 300  
Feet

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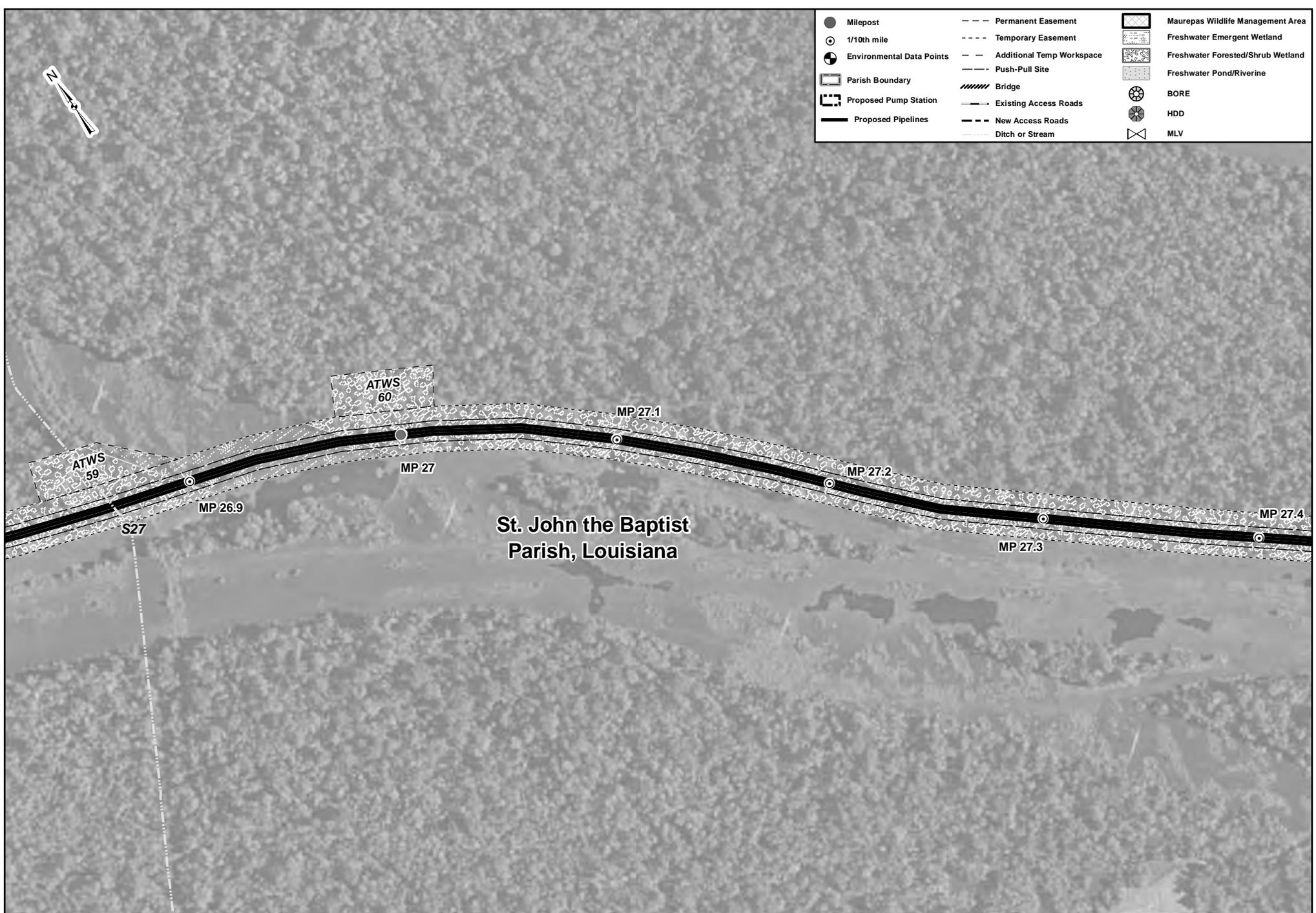
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 49 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



**St. John the Baptist  
Parish, Louisiana**



0 150 300  
Feet

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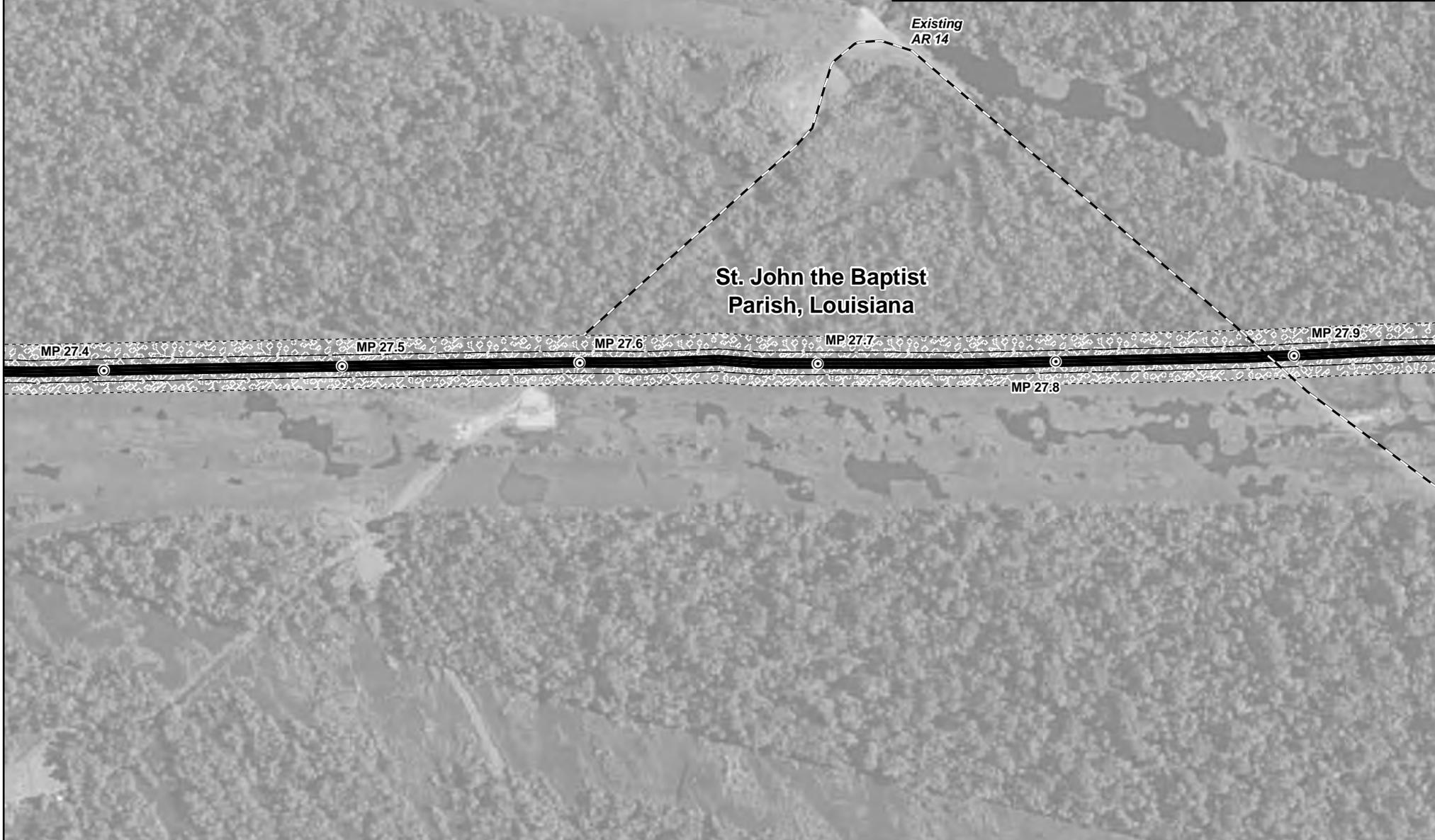
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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 50 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	— New Access Roads		MLV
	--- Ditch or Stream		



0 150 300  
Feet

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JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 51 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



St. John the Baptist  
Parish, Louisiana



0 150 300  
Feet

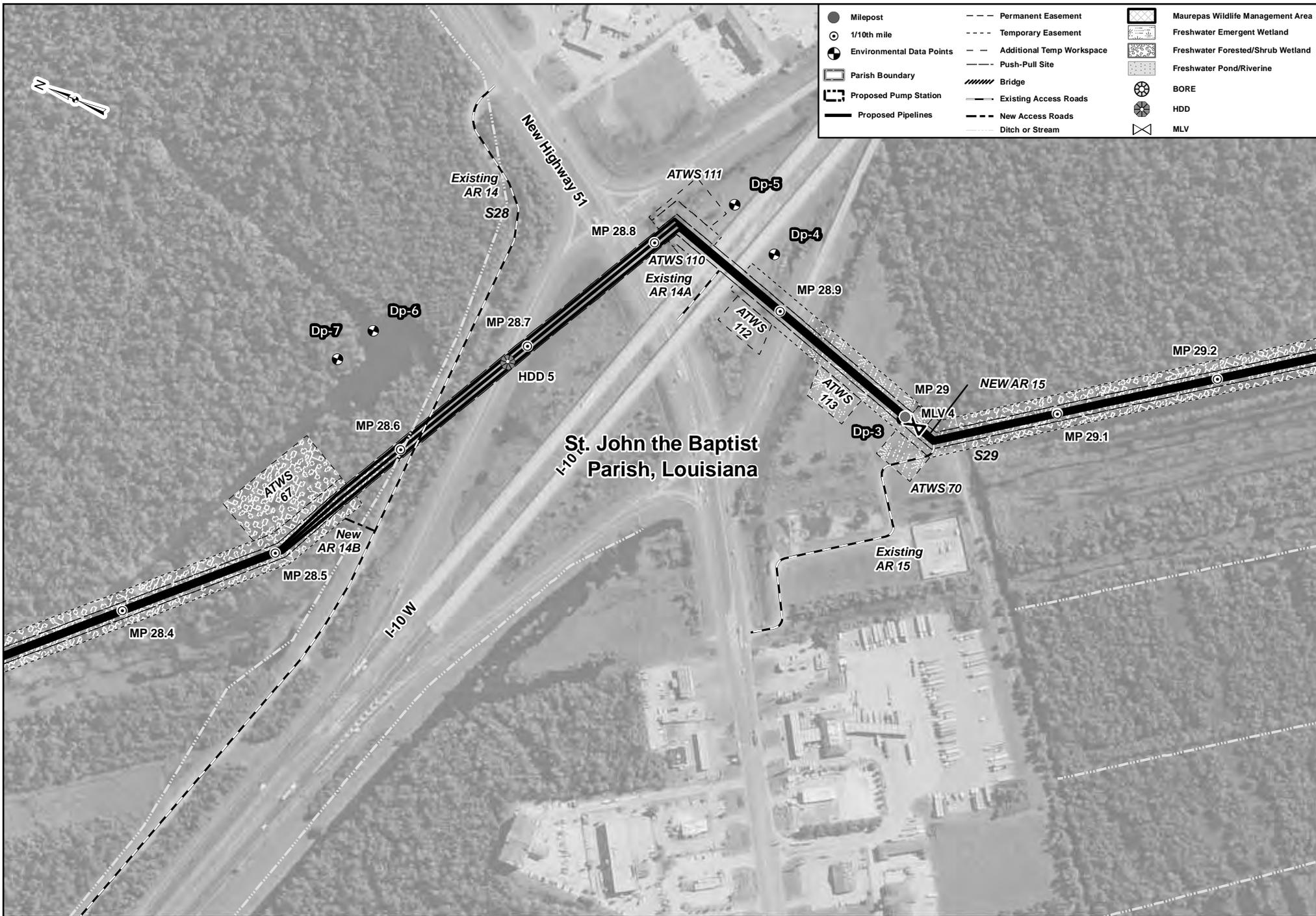
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**  
 DRAWING NUMBER: **Figure 3A - Sheet 53 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		



**St. John the Baptist  
Parish, Louisiana**

**Maurepas Wildlife  
Management Area**

Oswald Ave

0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER:  
**Figure 3A - Sheet 54 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

**Maurepas Wildlife Management Area**

MP 30.2

MP 29.7

MP 29.8

MP 29.9

MP 30

MP 30.1

**St. John the Baptist Parish, Louisiana**



0 150 300  
Feet

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B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	SL
C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	BJD	JMA	SL
D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 55 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ==== Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

**Maurepas Wildlife Management Area**



**St. John the Baptist Parish, Louisiana**

0 150 300  
Feet

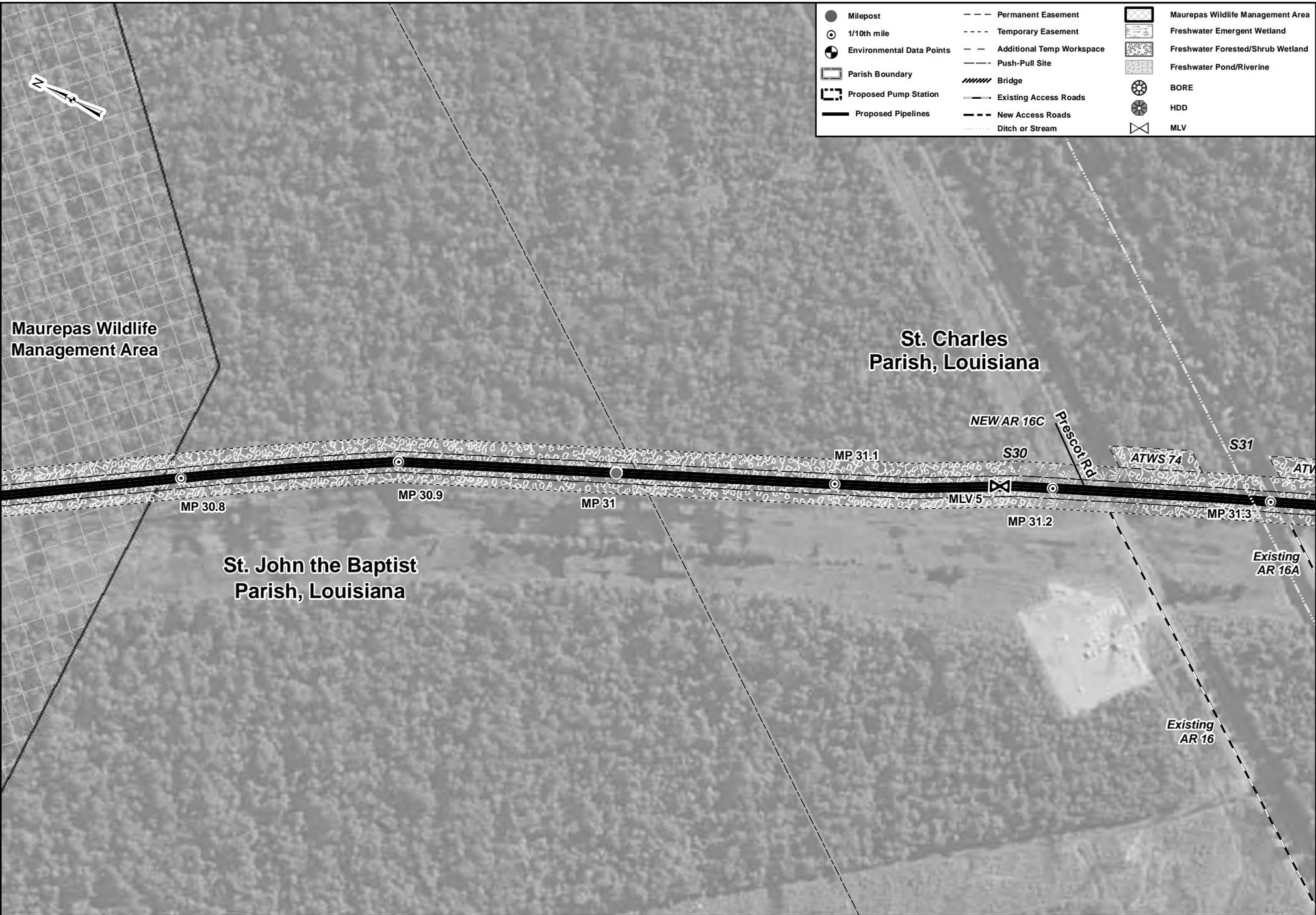
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 56 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Maurepas Wildlife Management Area

St. Charles Parish, Louisiana

St. John the Baptist Parish, Louisiana

MP 30.8

MP 30.9

MP 31

MP 31.1

NEW AR 16C

S30

Prescot Rd

ATWS 74

S31

ATWS

MP 31.2

MP 31.3

Existing AR 16A

Existing AR 16



0 150 300  
Feet

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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 57 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



0 150 300  
Feet

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D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	J.M	K.P
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 58 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		




0 150 300  
Feet

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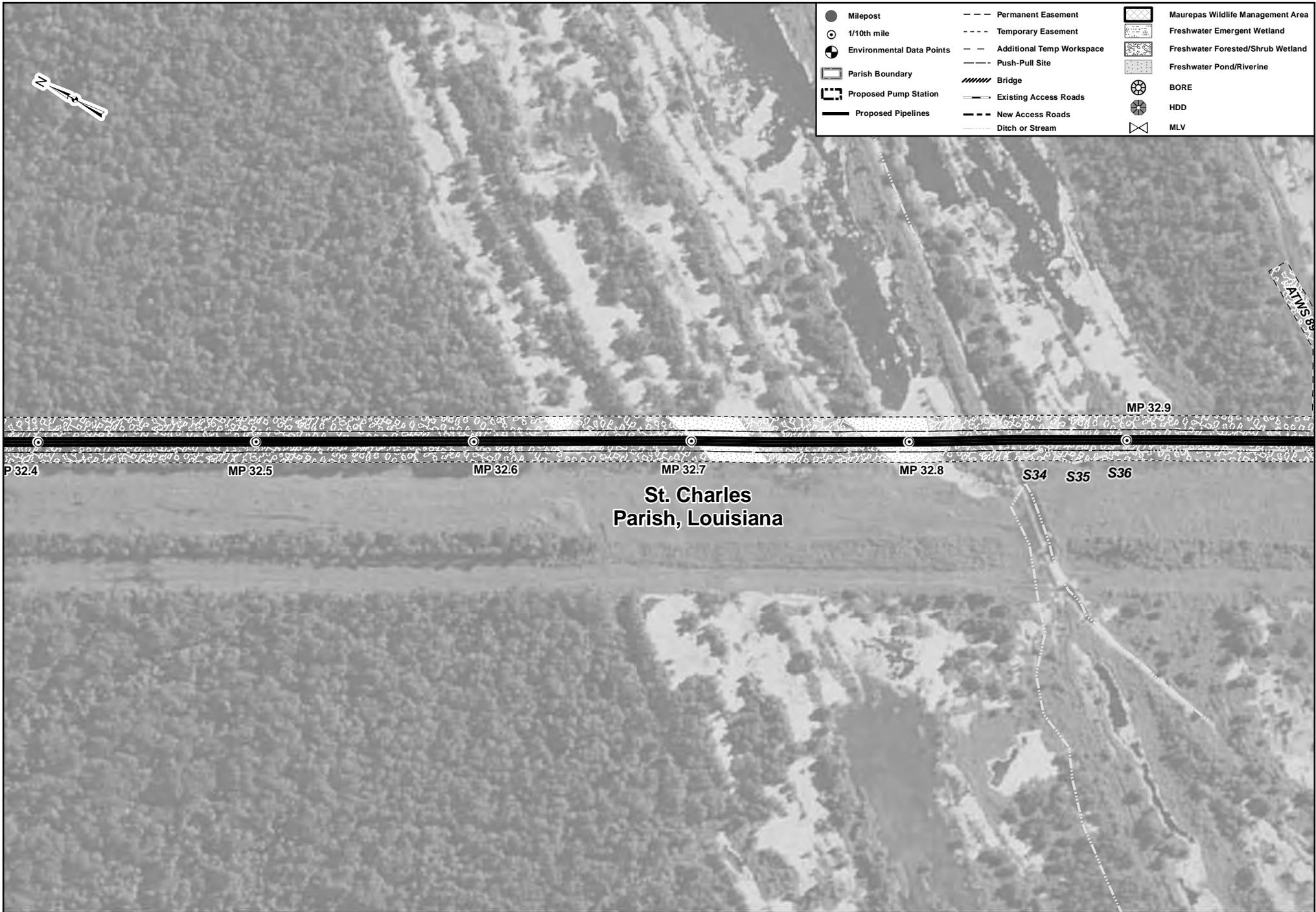
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>Figure 3A - Sheet 59 of 93</b>
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0 150 300  
Feet

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RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: 80095  
DRAWING NUMBER: Figure 3A - Sheet 60 of 93



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. Charles  
Parish, Louisiana



0 150 300  
Feet

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RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 61 of 93**



St. Charles Parish, Louisiana



0 150 300  
Feet

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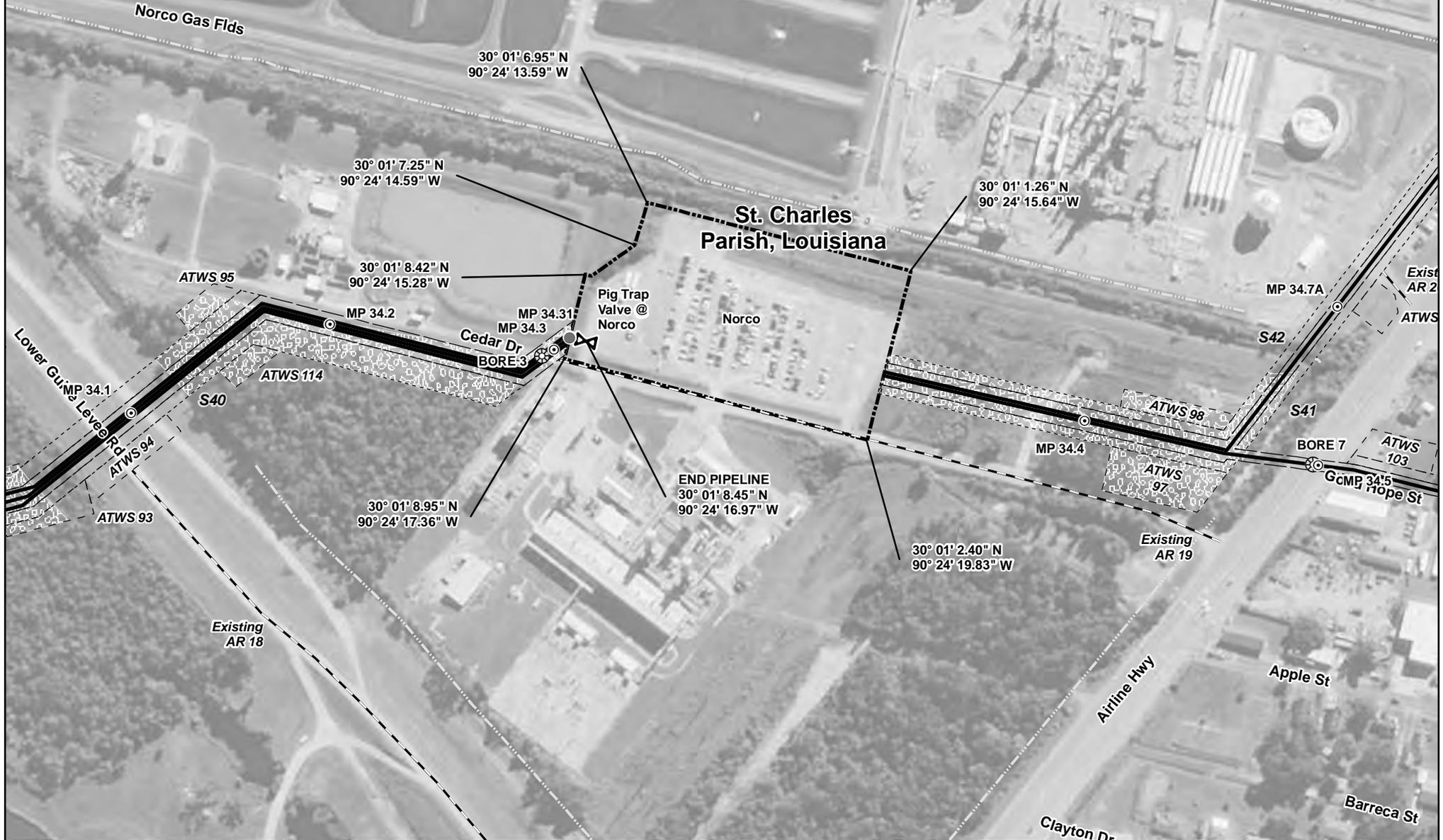
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 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095** DRAWING NUMBER: **Figure 3A - Sheet 62 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		



0 150 300  
Feet

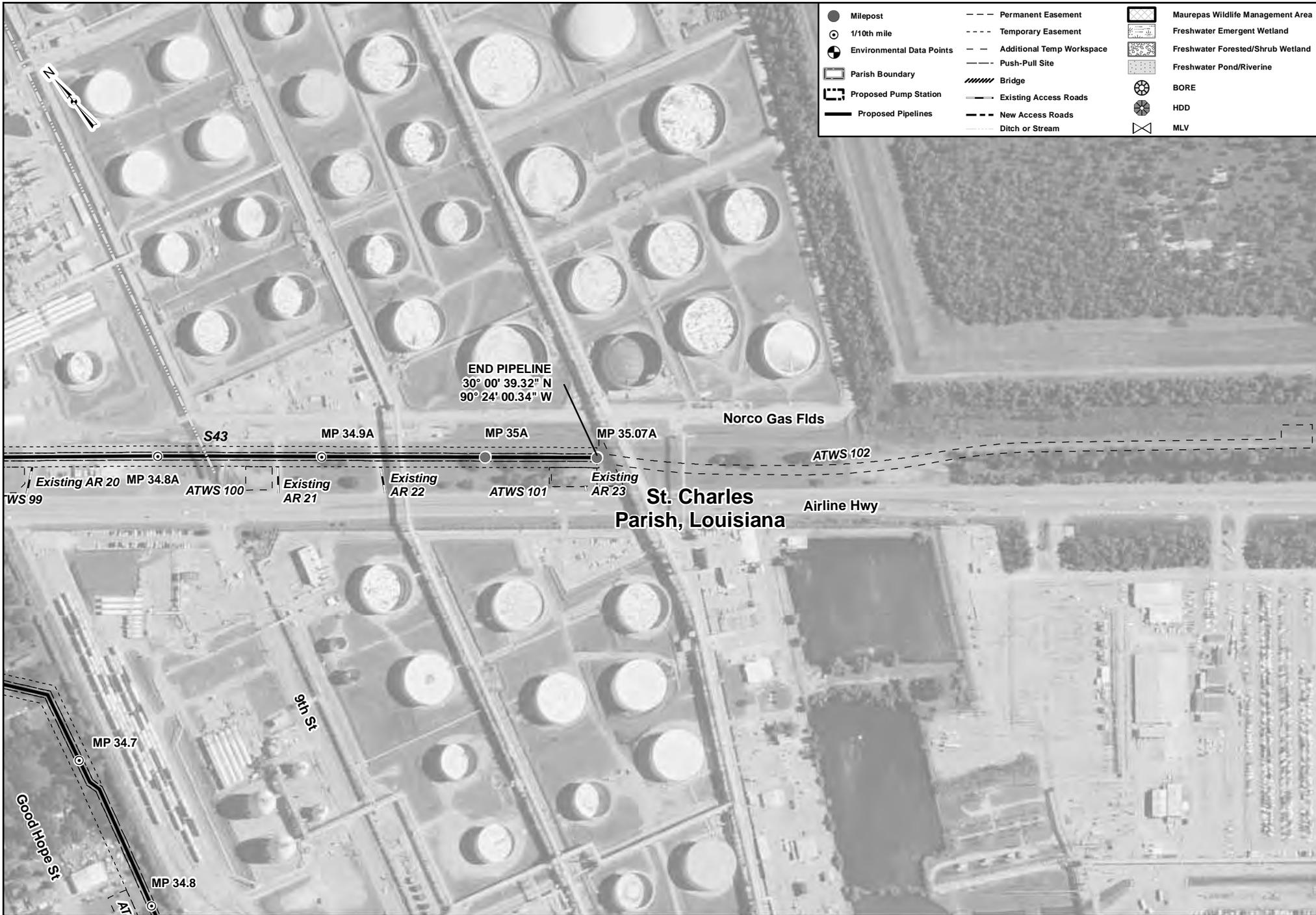
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RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**  
DRAWING NUMBER: **Figure 3A - Sheet 63 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- ▬ Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▬ Bridge
- ▬ Existing Access Roads
- ▬ New Access Roads
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- ▭ Freshwater Emergent Wetland
- ▭ Freshwater Forested/Shrub Wetland
- ▭ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

END PIPELINE  
 30° 00' 39.32" N  
 90° 24' 00.34" W

Norco Gas Flds

St. Charles  
 Parish, Louisiana

Airline Hwy

9th St

Good Hope St



0 200 400  
 Feet

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JOB NUMBER: **80095**

DRAWING NUMBER:  
**Figure 3A - Sheet 64 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- ▬ Proposed Pipelines
- Permanent Easement
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0 150 300  
Feet

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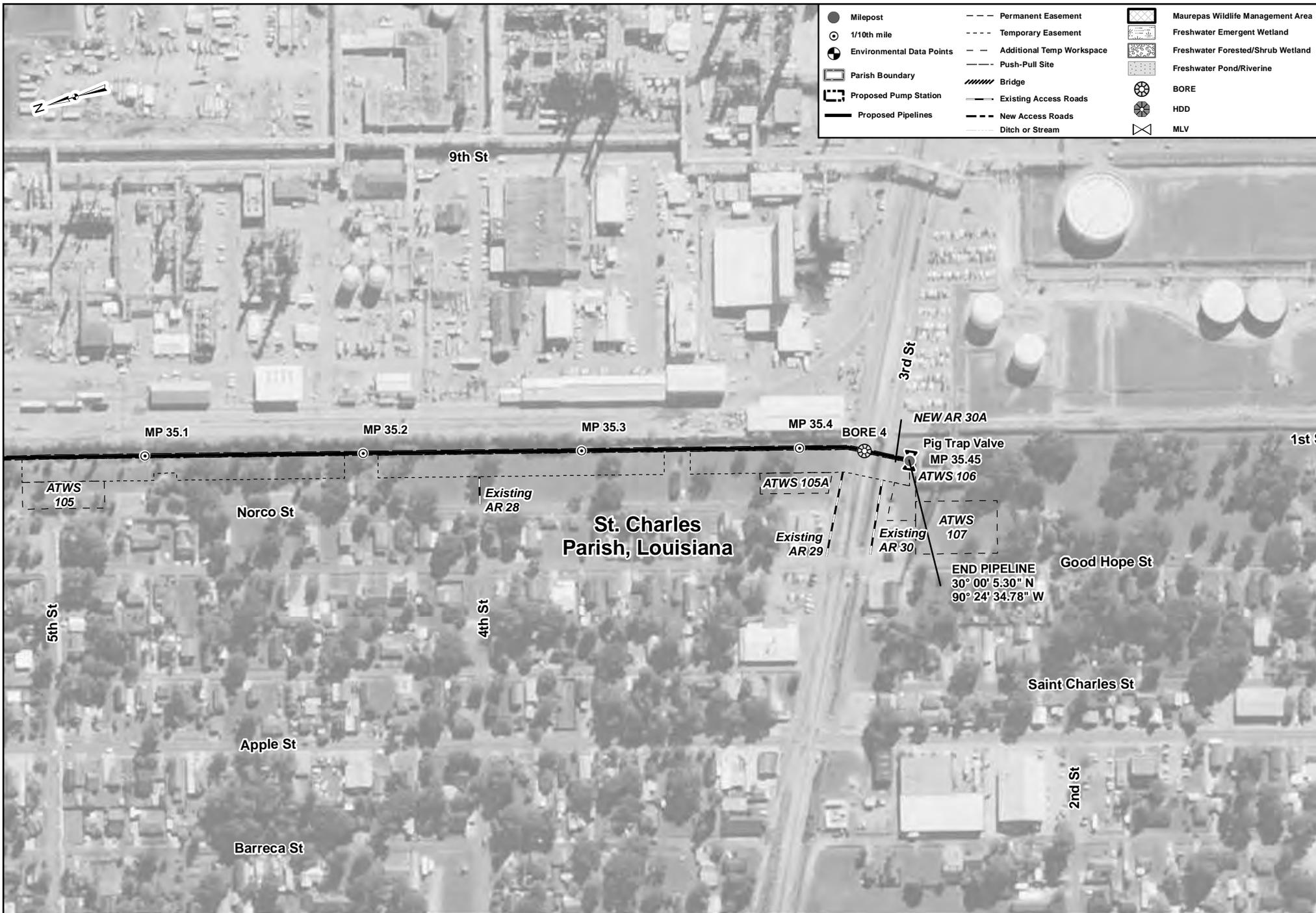
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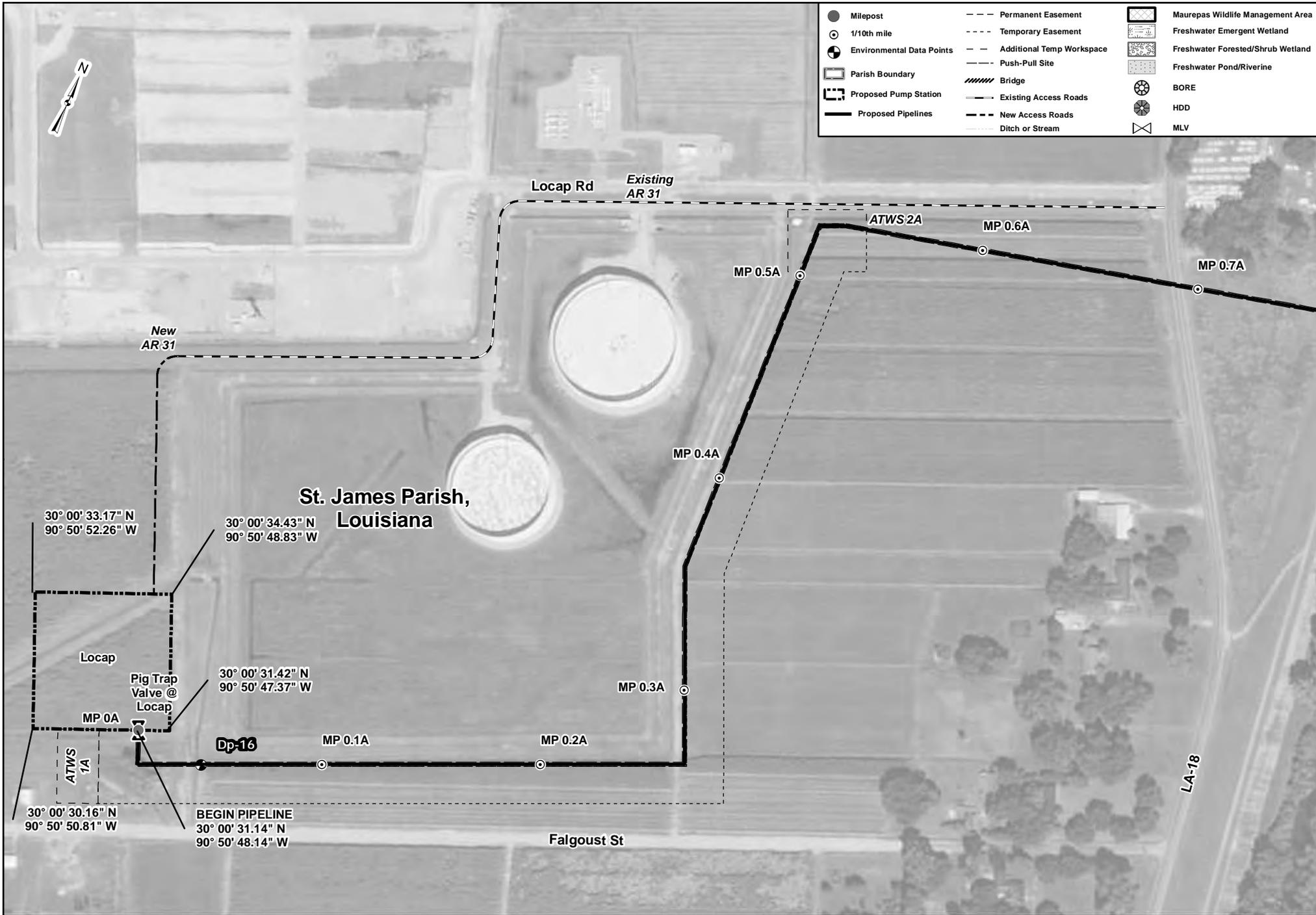
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**PROPOSED PIPELINES PROJECT**
  
**WATERS OF THE US, INCLUDING WETLAND**
  
**DELINEATION MAPS**
  
**RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**
  
 DRAWING NUMBER: **Figure 3A - Sheet 66 of 93**



St. James Parish,  
Louisiana

- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

30° 00' 33.17" N  
90° 50' 52.26" W

30° 00' 34.43" N  
90° 50' 48.83" W

30° 00' 31.42" N  
90° 50' 47.37" W

30° 00' 30.16" N  
90° 50' 50.81" W

30° 00' 31.14" N  
90° 50' 48.14" W

Locap

Pig Trap Valve @ Locap

MP 0A

ATWS 1A

Dp-16

BEGIN PIPELINE

MP 0.3A

MP 0.2A

MP 0.1A

MP 0.4A

MP 0.5A

MP 0.6A

MP 0.7A

Locap Rd

Existing AR 31

ATWS 2A

MP 0.6A

Falgoust St

LA-18



0 150 300  
Feet

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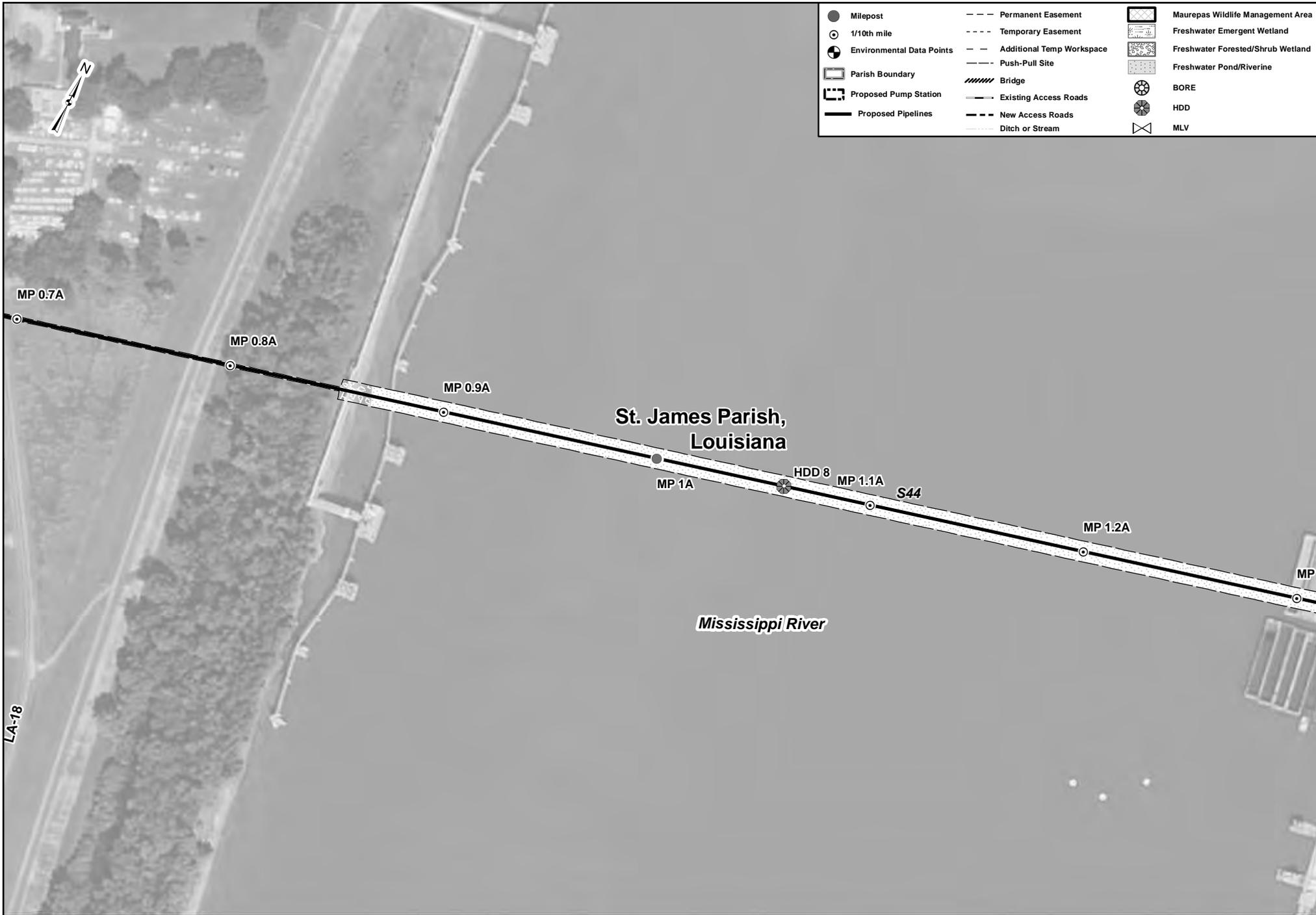
REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
A	09/28/14	ISSUED FOR CORPUS PERMIT	B.D.	JMA	WPD
B	11/26/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D.	JMA	SL
C	11/26/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D.	JMA	SL
D	01/09/15	REVISED LEGEND, REVISED WORKSPACE, REVISED ACCESS ROADS	B.D.	JMA	SL
E	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D.	JMA	WPD
F	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 67 of 93**




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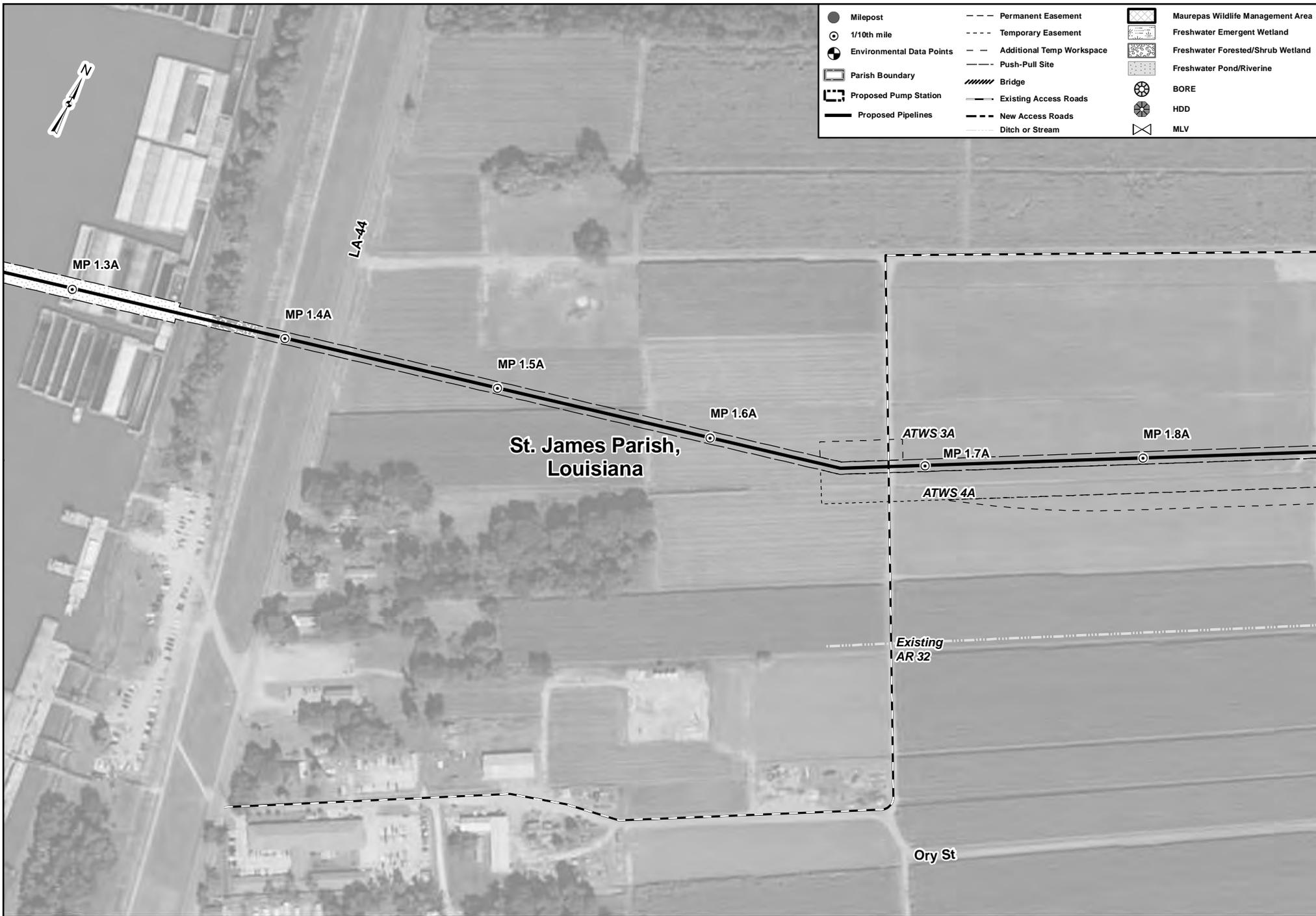
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D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
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 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 68 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. James Parish,  
Louisiana

Ory St



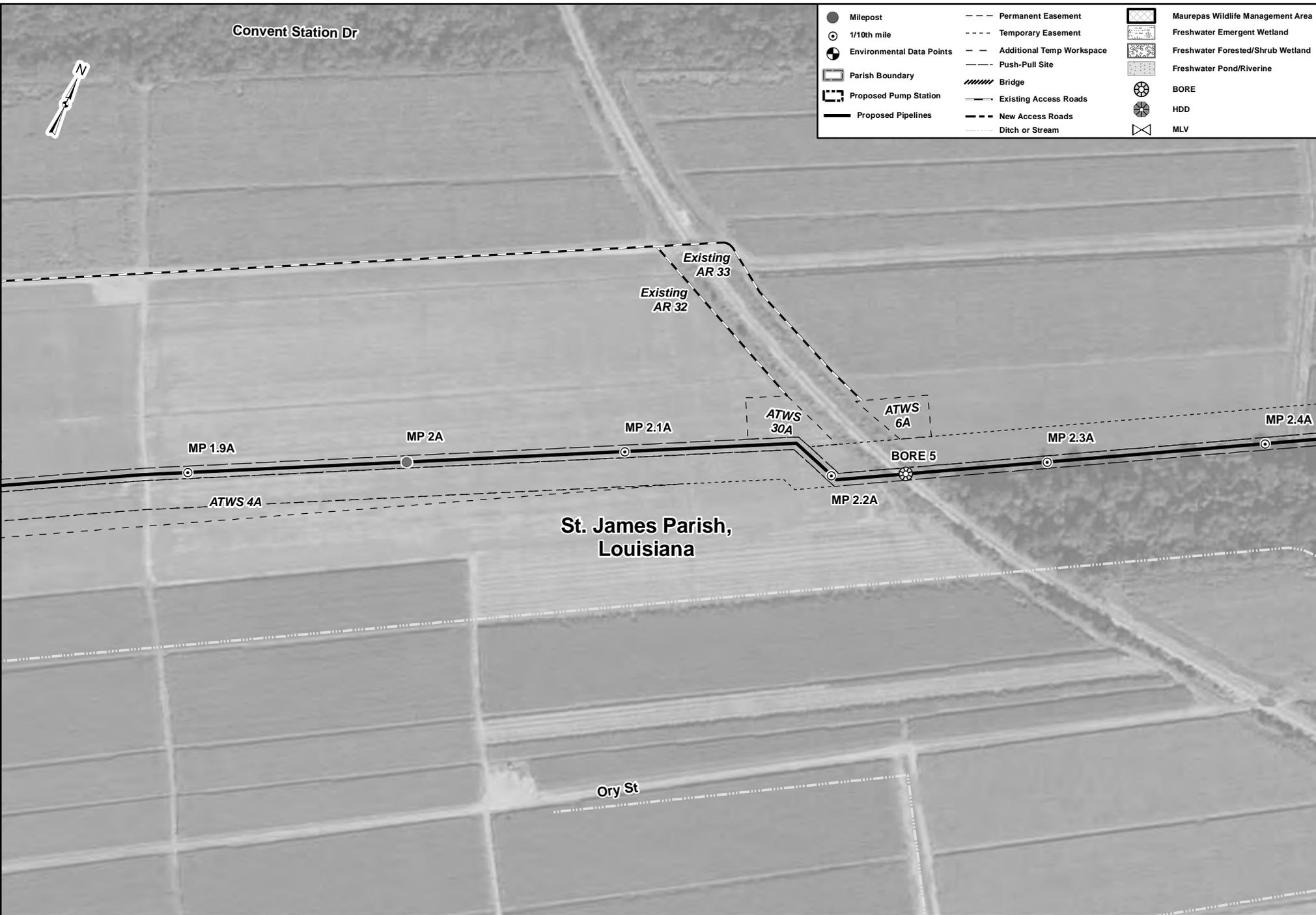
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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 69 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
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- Ditch or Stream
- ▭ Maurepas Wildlife Management Area
- ▭ Freshwater Emergent Wetland
- ▭ Freshwater Forested/Shrub Wetland
- ▭ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. James Parish,  
Louisiana



0 150 300  
Feet

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REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
A	09/29/14	ISSUED FOR CORPUS PERMIT	B.L.D	J.M.A	K.P.D
B	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.L.D	J.M.A	S.L
C	01/09/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.L.D	J.M.A	S.L
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.L.D	J.M.A	K.P.D
E	06/13/15	ADDED ROAD/CANAL LABELS	J.M.A	J.P.V	D.M.

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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 70 of 93**



● Milepost	- - - Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	- - - Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	- - - Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	- - - Push-Pull Site		Freshwater Pond/Riverine
⊠ Proposed Pump Station	▨ Bridge	⊗ BORE	BORE
▬ Proposed Pipelines	▬ Existing Access Roads	⊗ HDD	HDD
	▬ New Access Roads	⊗ MLV	MLV
	- - - Ditch or Stream		



St. James Parish,  
Louisiana

0 150 300  
Feet

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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 71 of 93**



- Milepost
- 1/10th mile
- ⊙ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊙ BORE
- ⊙ HDD
- ⊙ MLV



0 150 300  
Feet

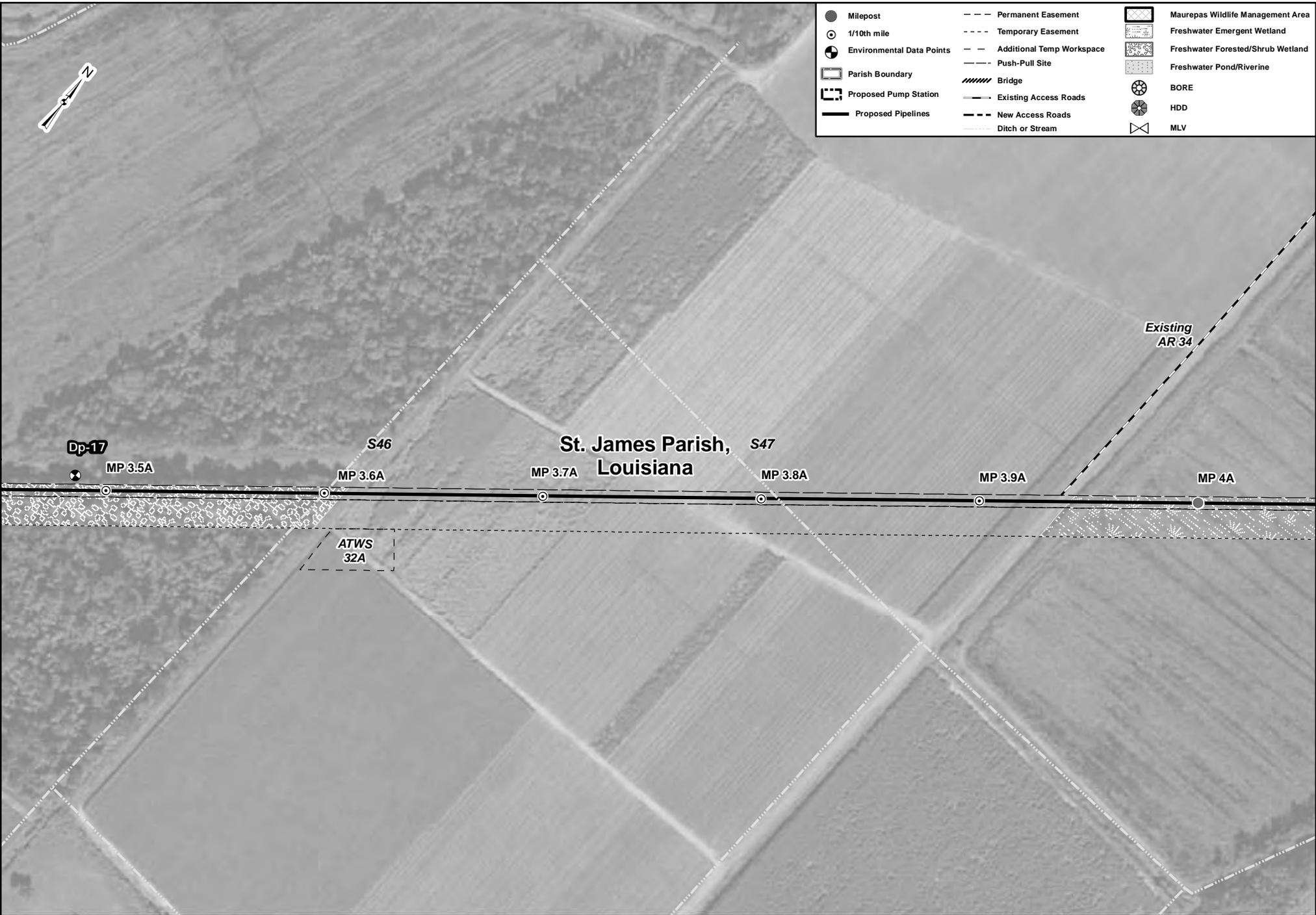
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 72 of 93**



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 73 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊞ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

Existing  
AR 34

St. James Parish,  
Louisiana

MP 4A      MP 4.1A      MP 4.2A      MP 4.3A      MP 4.4A      MP 4.5A



0      150      300  
Feet

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WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 74 of 93**



- Milepost
- 1/10th mile
- ⊙ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
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- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊙ BORE
- ⊙ HDD
- ⊙ MLV

St. James Parish,  
Louisiana

**OPS**  
Engineering, LLC

0 150 300  
Feet

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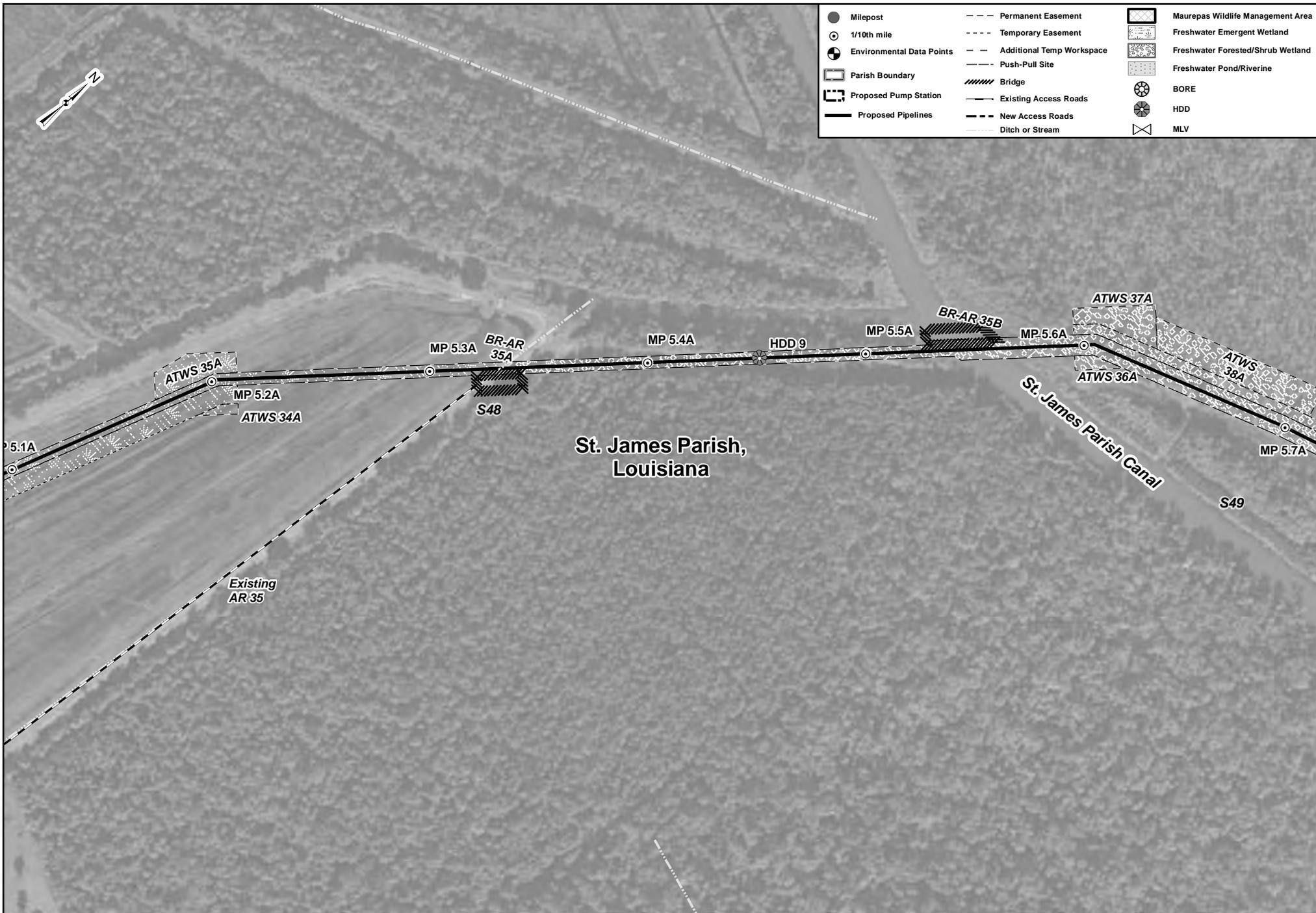
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 75 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
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- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

St. James Parish,  
Louisiana

St. James Parish Canal

Existing  
AR 35



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 76 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		



**St. James Parish,  
Louisiana**



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
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DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>Figure 3A - Sheet 77 of 93</b>
-----------------------------	--



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
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0 150 300  
Feet

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C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	B.D	JMA	SL
D	03/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	B.D	JMA	KPD
E	06/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 78 of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	//// Bridge		BORE
— Proposed Pipelines	— Existing Access Roads		HDD
	--- New Access Roads		MLV
	--- Ditch or Stream		

## St. James Parish, Louisiana

MP 6.8A

MP 6.9A

MP 7A

MP 7.1A

MP 7.2A

MP 7.3A

### Maurepas Wildlife Management Area



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A	06/25/14	ISSUED FOR CORPUS PERMIT	BJD	JMA	KPD
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C	01/07/15	ADDED WMA BOUNDARY, REVISED WORKSPACE, REVISED LEGEND	BJD	JMA	SL
D	02/25/15	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJD	JMA	KPD
E	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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### PROPOSED PIPELINES PROJECT WATERS OF THE US, INCLUDING WETLAND DELINEATION MAPS RIGHT-OF-WAY CORRIDOR IMPACT

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 3A - Sheet 79 of 93**



● Milepost	--- Permanent Easement	Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement	Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace	Freshwater Forested/Shrub Wetland
Parish Boundary	--- Push-Pull Site	Freshwater Pond/Riverine
Proposed Pump Station	//// Bridge	BORE
— Proposed Pipelines	— Existing Access Roads	HDD
	--- New Access Roads	MLV
	--- Ditch or Stream	

St. James Parish,  
Louisiana

MP 7.3A      MP 7.4A      MP 7.5A      MP 7.6A      MP 7.7A      MP 7.8A

Maurepas Wildlife  
Management Area



0      150      300  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 80 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ▭ Proposed Pump Station
- ▬ Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▬ Bridge
- ▬ Existing Access Roads
- ▬ New Access Roads
- ▬ Ditch or Stream
- ▭ Maurepas Wildlife Management Area
- ▭ Freshwater Emergent Wetland
- ▭ Freshwater Forested/Shrub Wetland
- ▭ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



**St. James Parish,  
Louisiana**  
**Maurepas Wildlife  
Management Area**



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 81 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

**Maurepas Wildlife Management Area**  
**St. James Parish, Louisiana**

**St. James Parish Relief Canal**



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT**  
**WATERS OF THE US, INCLUDING WETLAND**  
**DELINEATION MAPS**  
**RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 82 of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV

## St. James Parish, Louisiana

## Maurepas Wildlife Management Area

MP 9A

MP 9.1A

MP 9.2A

MP 9.3A

MP 9.4A

MP 9.5A



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**PROPOSED PIPELINES PROJECT  
WATERS OF THE US, INCLUDING WETLAND  
DELINEATION MAPS  
RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 83 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

## St. James Parish, Louisiana

MP 9.6A

MP 9.7A

MP 9.8A

MP 9.9A

MP 10A

MP 10.1A

## Maurepas Wildlife Management Area

S52



0 150 300  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 RIGHT-OF-WAY CORRIDOR IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 84 of 93**



	Milepost		Permanent Easement		Maurepas Wildlife Management Area
	1/10th mile		Temporary Easement		Freshwater Emergent Wetland
	Environmental Data Points		Additional Temp Workspace		Freshwater Forested/Shrub Wetland
	Parish Boundary		Push-Pull Site		Freshwater Pond/Riverine
	Proposed Pump Station		Bridge		BORE
	Proposed Pipelines		Existing Access Roads		HDD
			New Access Roads		MLV
			Ditch or Stream		

Ascension Parish,  
Louisiana

Existing  
AR 1

St. James Parish,  
Louisiana

SHEET 1

SHEET 3



0 175 350  
Feet

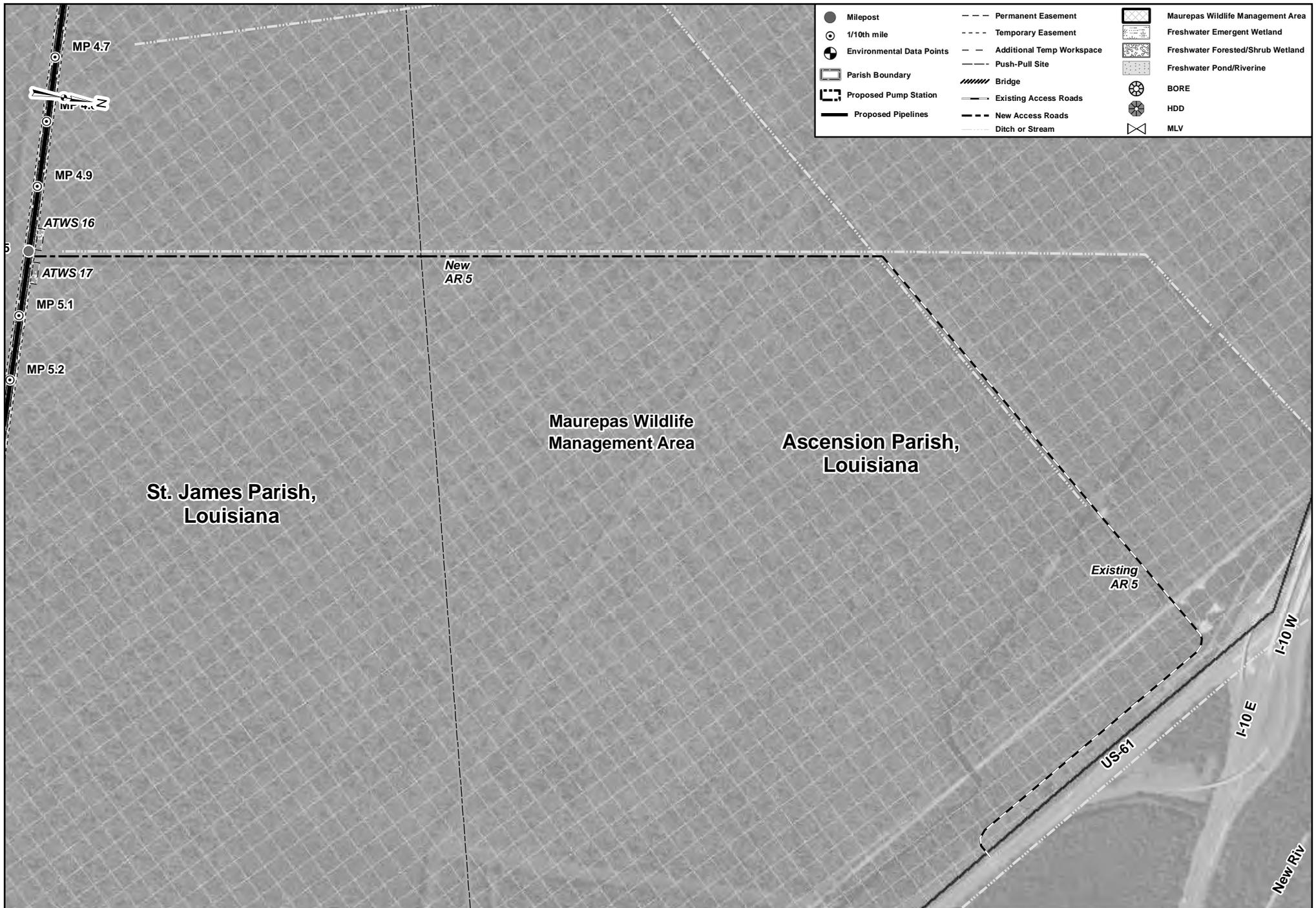
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A	03/25/15	ISSUED FOR PERMIT	BLD	JMA	NPD
B	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPY	DMM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 1 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 1A (85) of 93**




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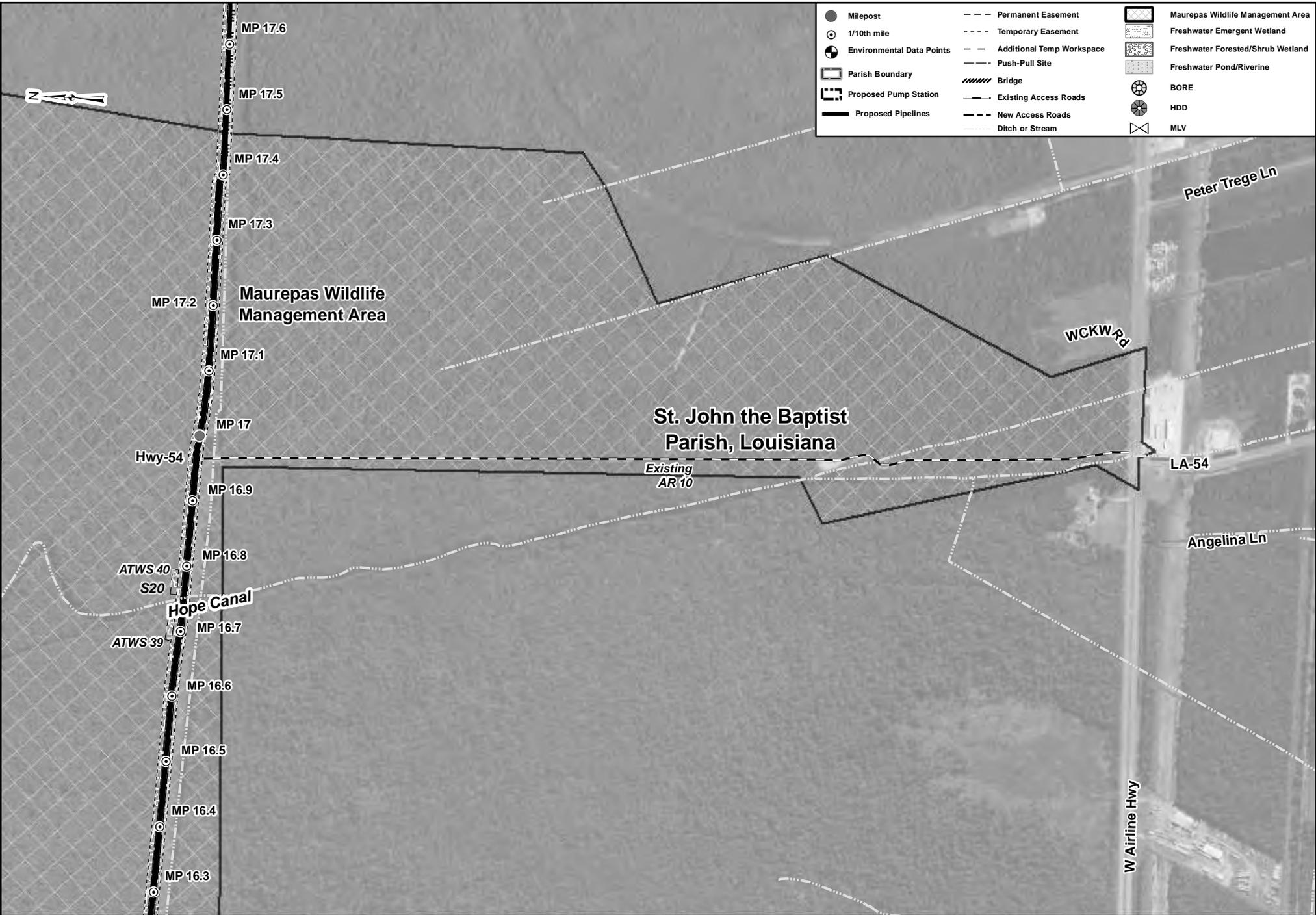
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REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 5 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 9A (86) of 93**



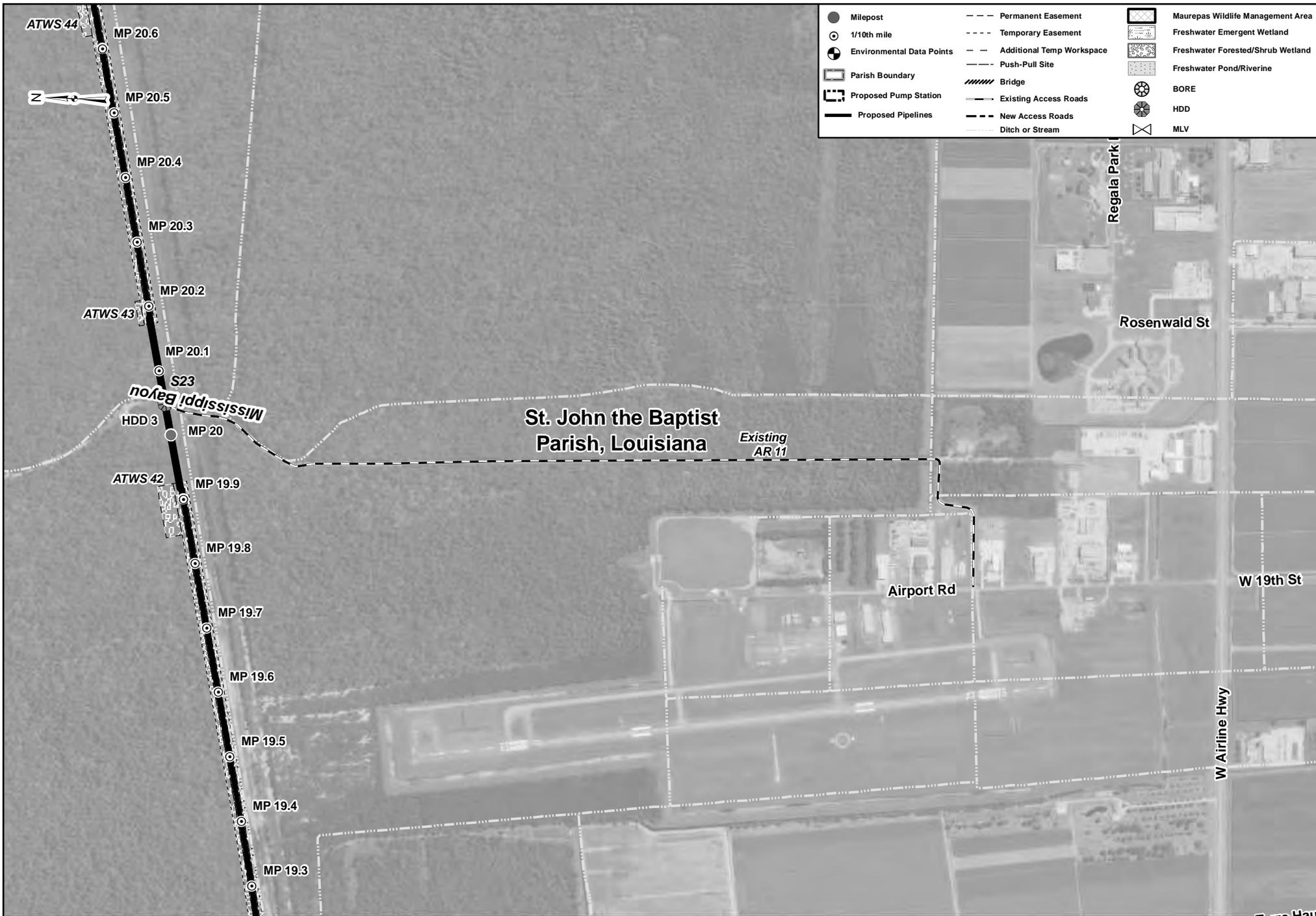
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 10 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 31A (87) of 93**



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
⊠ Proposed Pump Station	▨ Bridge	⊗ BORE	BORE
▬ Proposed Pipelines	▬ Existing Access Roads	⊗ HDD	HDD
	▬ New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		



0 500 1,000  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 11 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 37A (88) of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊕ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ==== Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊕ BORE
- ⊕ HDD
- ⊕ MLV




0 500 1,000  
Feet

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 12 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 38A (89) of 93**



**St. John the Baptist Parish, Louisiana**

Existing AR 12A

Bardwell Dr

Big Lou Ave

Za Rd

Goshen Ln



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 DELINEATION MAPS  
 ACCESS ROAD 12A IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 40A (90) of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- //// Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



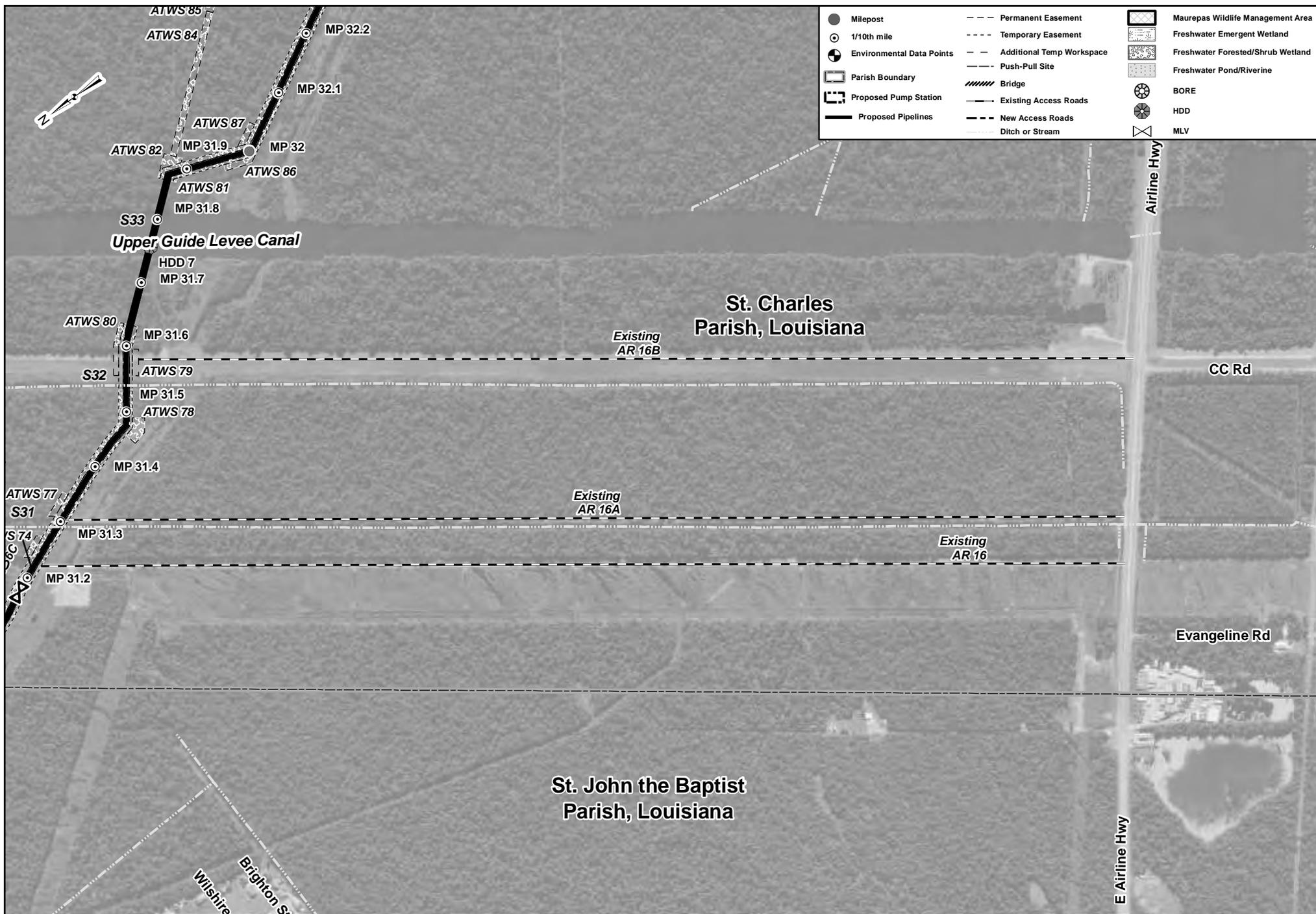
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 13 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 47A (91) of 93**



- Milepost
- 1/10th mile
- ⊕ Environmental Data Points
- ▭ Parish Boundary
- ⊠ Proposed Pump Station
- Proposed Pipelines
- Permanent Easement
- Temporary Easement
- Additional Temp Workspace
- Push-Pull Site
- ▨ Bridge
- Existing Access Roads
- New Access Roads
- Ditch or Stream
- ▨ Maurepas Wildlife Management Area
- ▨ Freshwater Emergent Wetland
- ▨ Freshwater Forested/Shrub Wetland
- ▨ Freshwater Pond/Riverine
- ⊗ BORE
- ⊗ HDD
- ⊗ MLV



0 500 1,000  
Feet

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B	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPY	DAM

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROADS 16, 16A & 16B IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 58A (92) of 93**

MP 33.2



● Milepost	--- Permanent Easement		Maurepas Wildlife Management Area
○ 1/10th mile	--- Temporary Easement		Freshwater Emergent Wetland
⊕ Environmental Data Points	--- Additional Temp Workspace		Freshwater Forested/Shrub Wetland
▭ Parish Boundary	--- Push-Pull Site		Freshwater Pond/Riverine
	▨ Bridge	⊗ BORE	BORE
— Proposed Pipelines	— Existing Access Roads	⊗ HDD	HDD
	— New Access Roads	⊗ MLV	MLV
	--- Ditch or Stream		

St. Charles Parish, Louisiana

Existing AR 17

Airline Hwy

Existing AR 18

0 305 610  
Feet

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A	03/25/15	ISSUED FOR PERMIT	BLD	JMA	NPD
B	05/13/15	ADDED ROAD/CANAL LABELS	JMA	JPV	DAM

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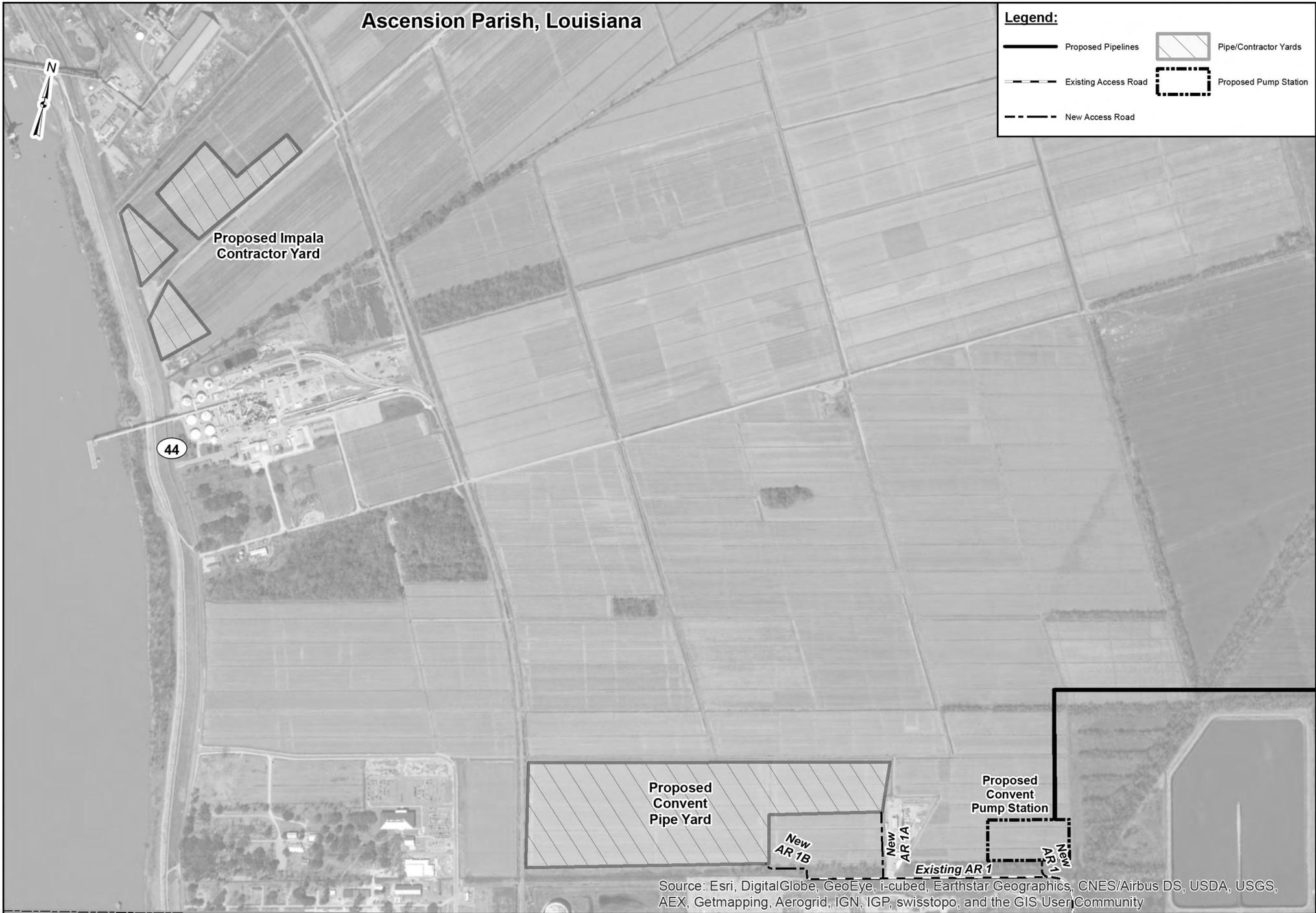
**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLAND  
 DELINEATION MAPS  
 ACCESS ROAD 17 & 18 IMPACT**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3A - Sheet 61A (93) of 93**

# Ascension Parish, Louisiana

**Legend:**

-  Proposed Pipelines
-  Existing Access Road
-  New Access Road
-  Pipe/Contractor Yards
-  Proposed Pump Station



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



0 500 1,000  
Feet

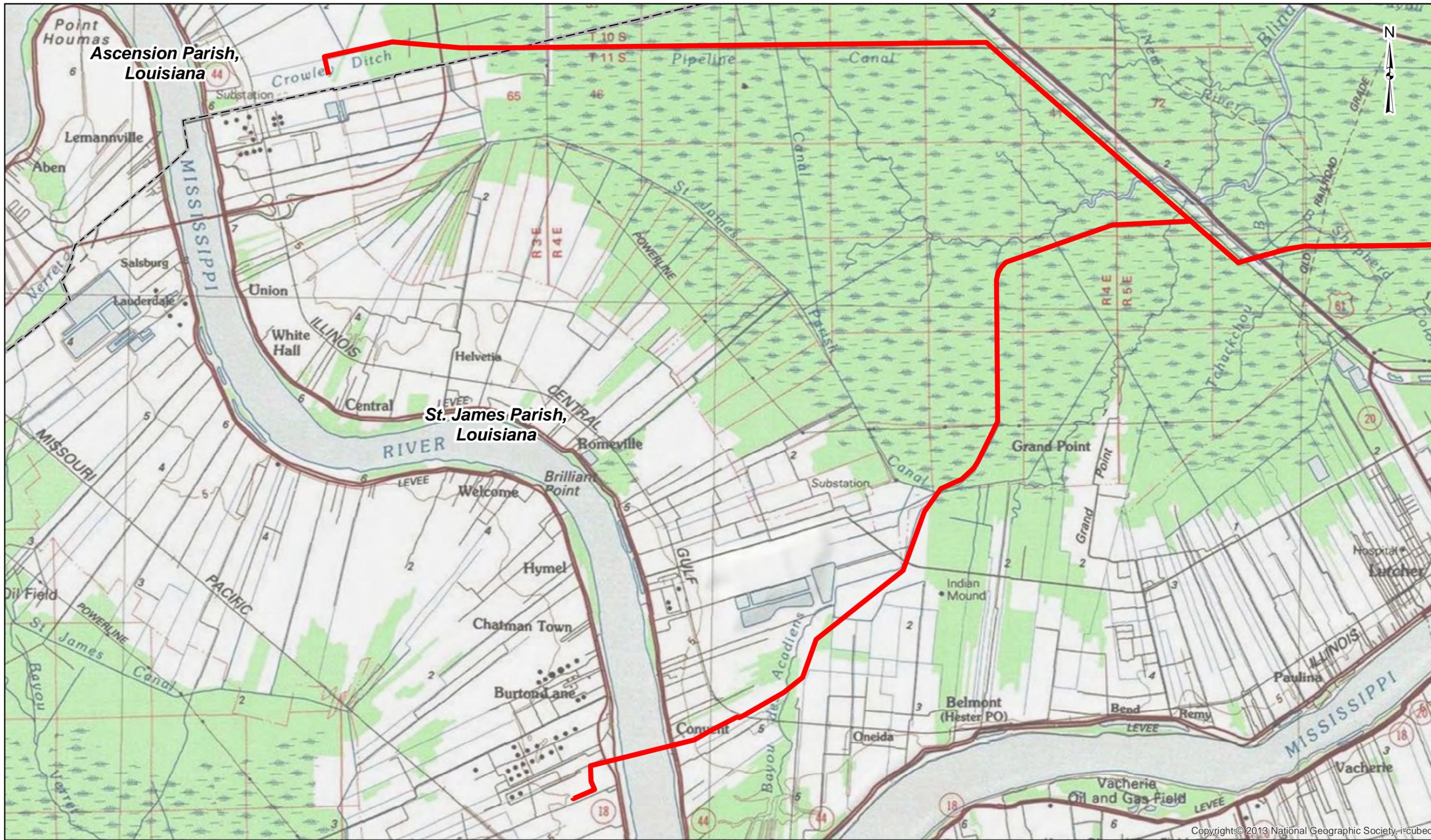
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A	5/10/2015	ISSUED FOR CORPS PERMIT	BLO	JMA	SL

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**PROPOSED PIPELINES PROJECT  
PIPE YARD OVERVIEW MAP**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 3B**

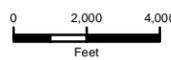


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**Legend:**

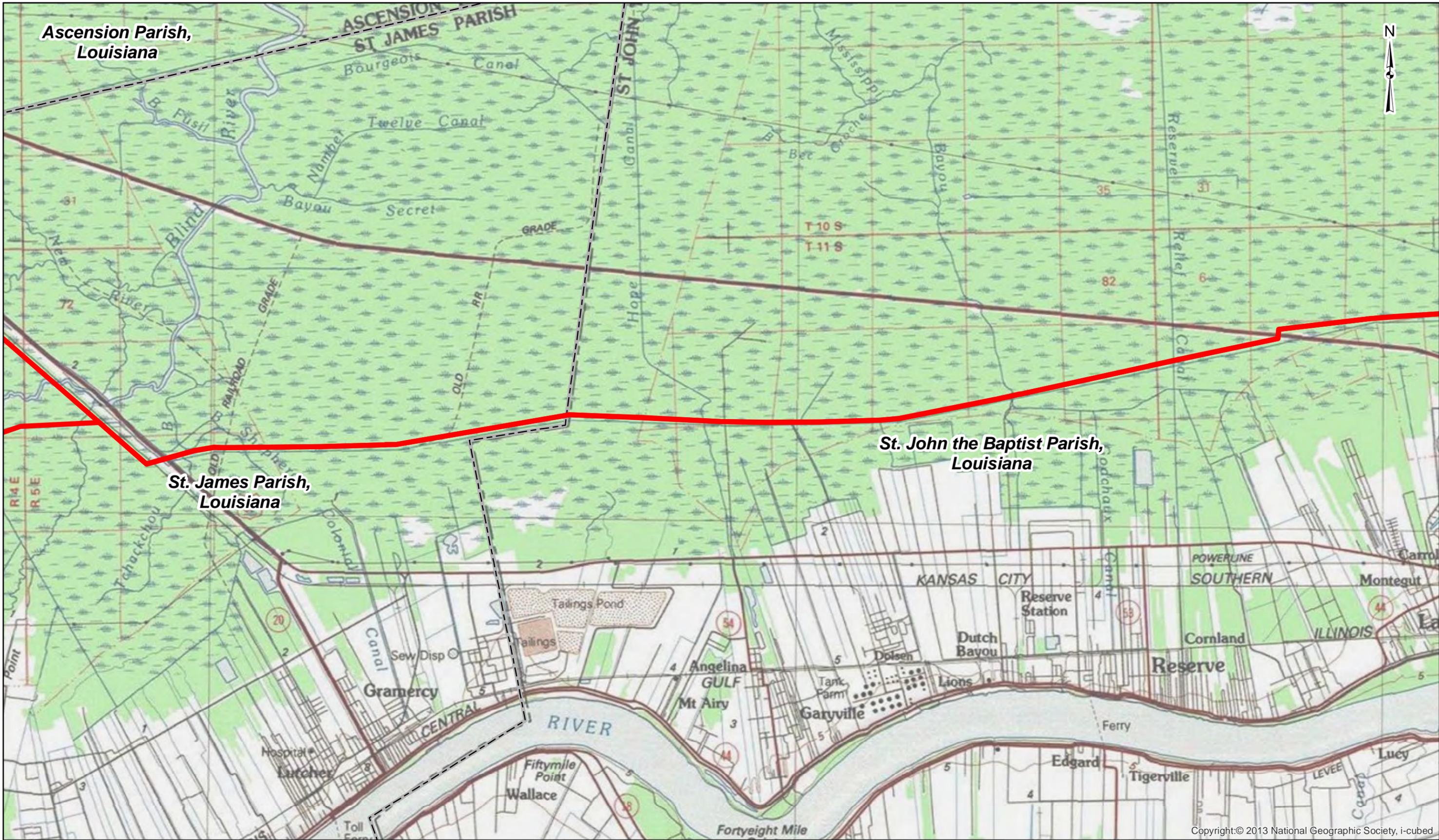
-  Proposed Pipelines
-  Parish Boundary

REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
A	9/3/14	ISSUED FOR CORPS PERMIT	JMA	BJO	KPD
B	9/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJO	JMA	SL
D	01/09/15	REVISED ROUTE	BJO	JMA	SL

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLANDS  
 TOPOGRAPHIC OVERVIEW MAP**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 4-1**



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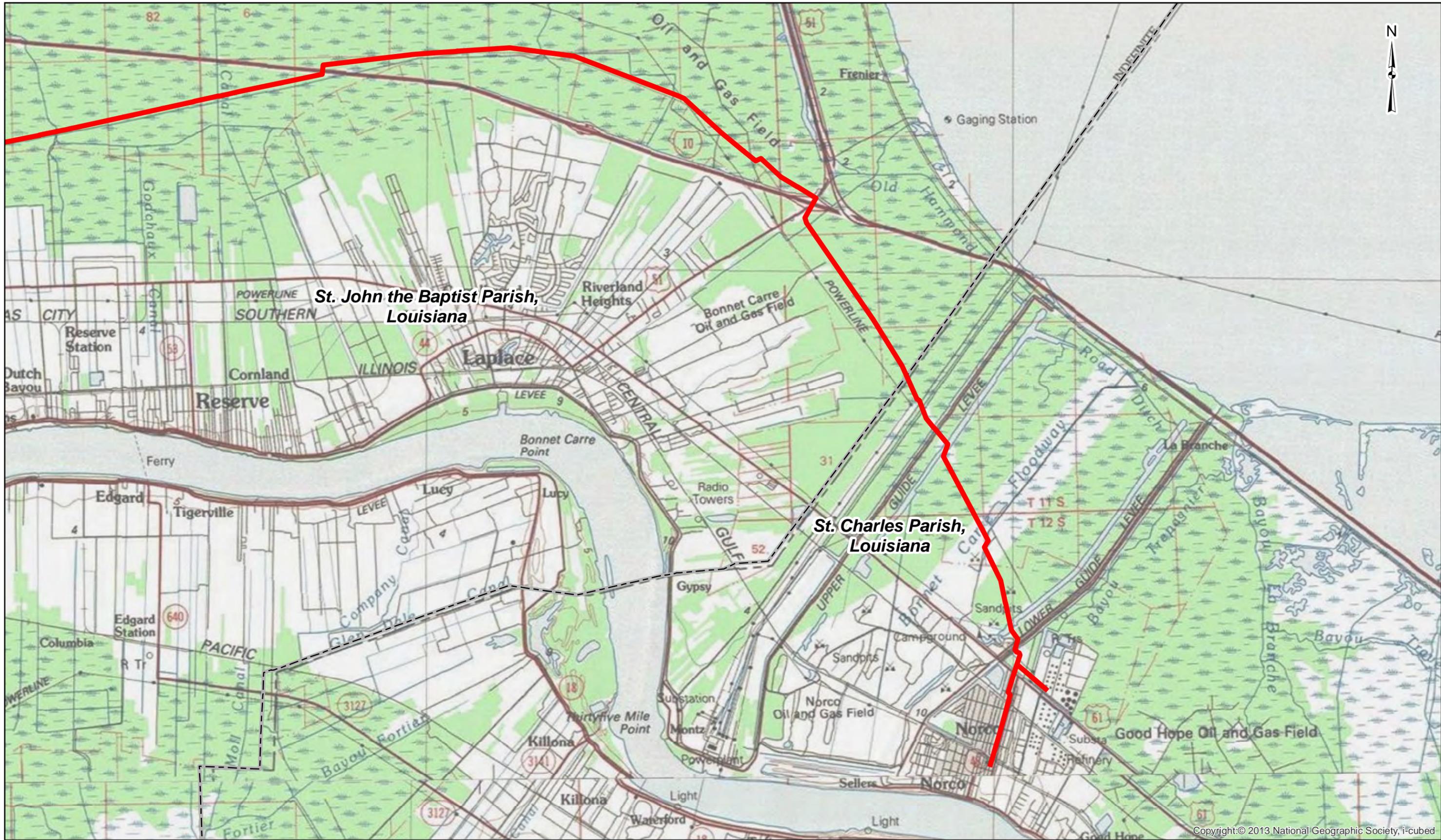
- Proposed Pipelines
- Parish Boundary

REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
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B	9/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD
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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLANDS  
 TOPOGRAPHIC OVERVIEW MAP**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 4-2**

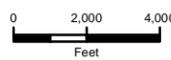


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**Legend:**

- Proposed Pipelines
- Parish Boundary

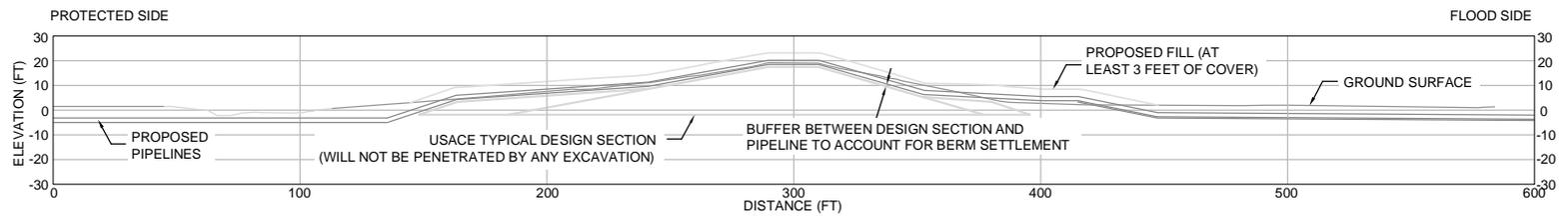
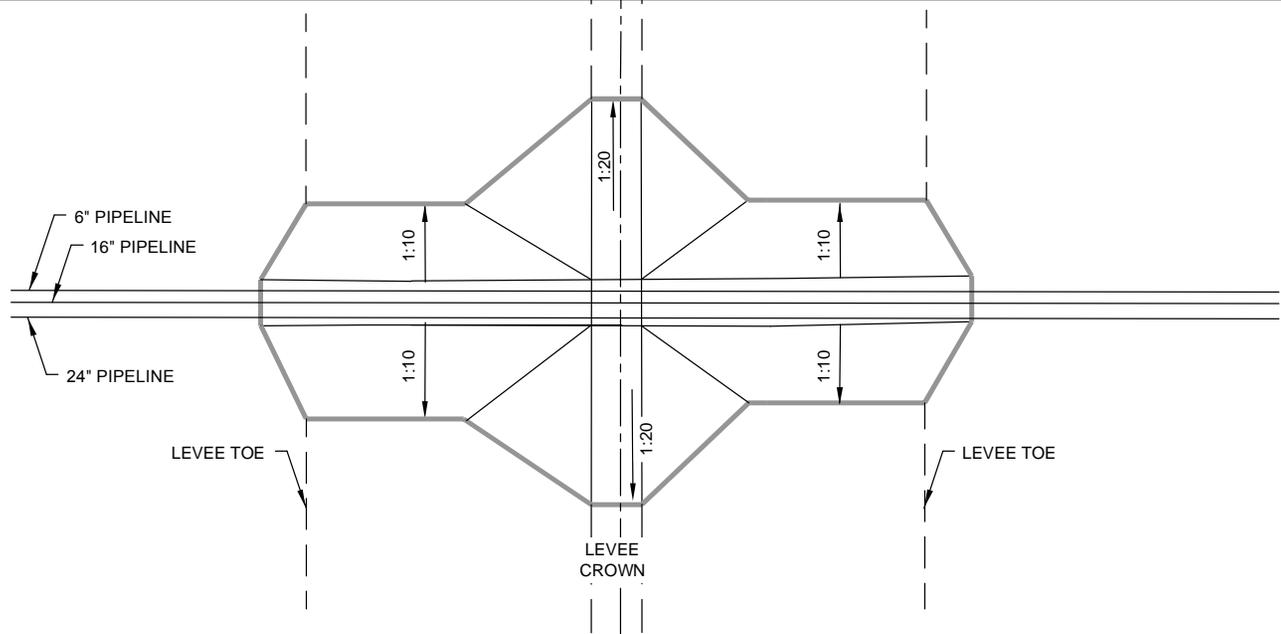
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B	9/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD
C	11/20/14	REVISED PER OFFICE OF COASTAL MANAGEMENT COMMENTS	BJO	JMA	SL
D	01/09/15	REVISED ROUTE	BJO	JMA	SL

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**PROPOSED PIPELINES PROJECT  
 WATERS OF THE US, INCLUDING WETLANDS  
 TOPOGRAPHIC OVERVIEW MAP**

JOB NUMBER: **80095**      DRAWING NUMBER: **Figure 4-3**

DPS : KMC



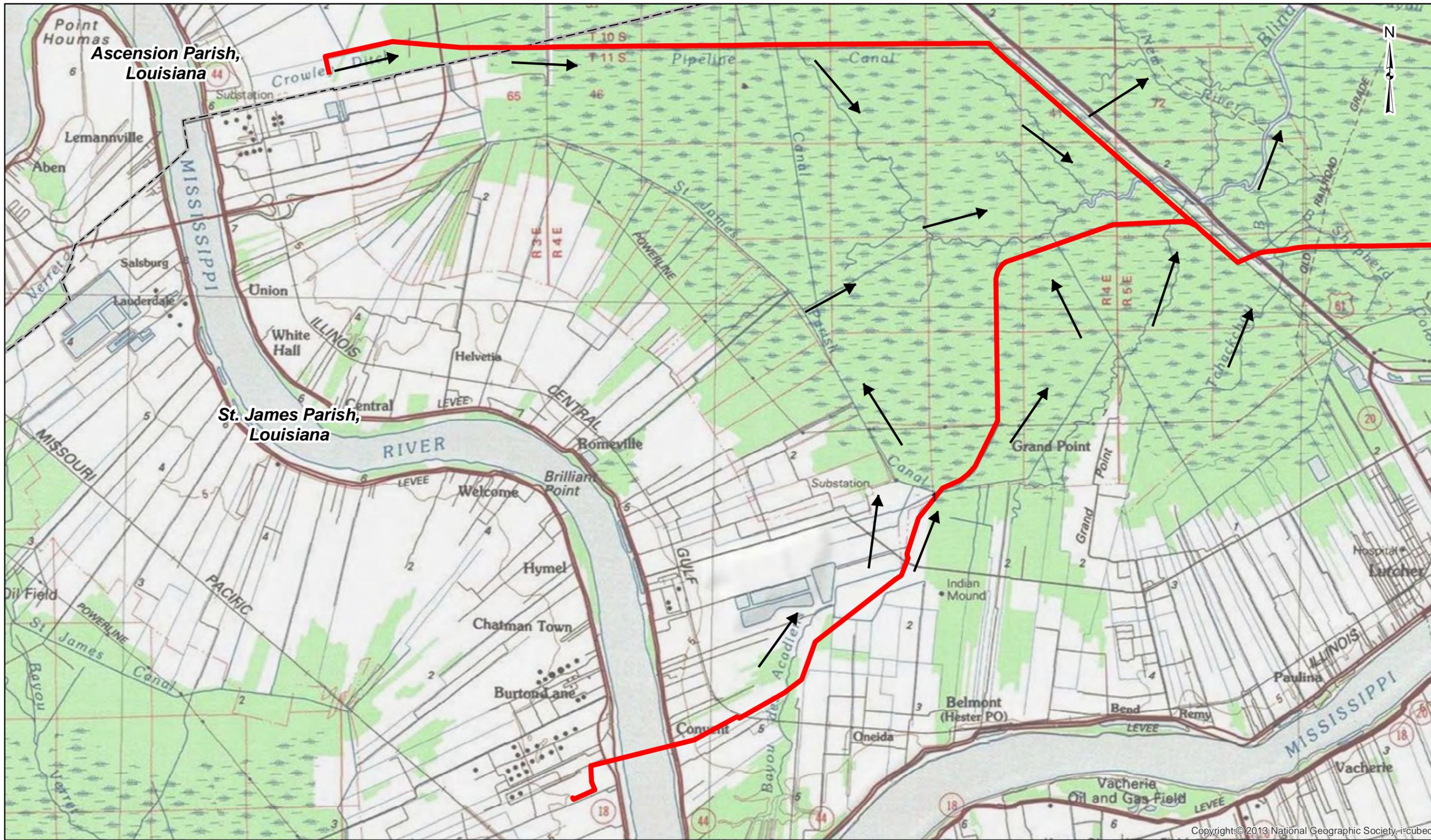
Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

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<b>TYPICAL OVER-THE-TOP LEVEE CROSSING</b>	
Proposed Pipeline Project	
<b>GEOENGINEERS</b> 	Figure 5

P:\212\1610001\000CAD\DT\typical Over the top Levee.dwg\T\ABL\Layout1 (7) modified on Aug 27, 2014 - 2:00pm

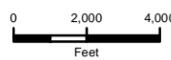


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**Legend:**

- Proposed Pipelines
- Parish Boundary
- Water Flow Direction

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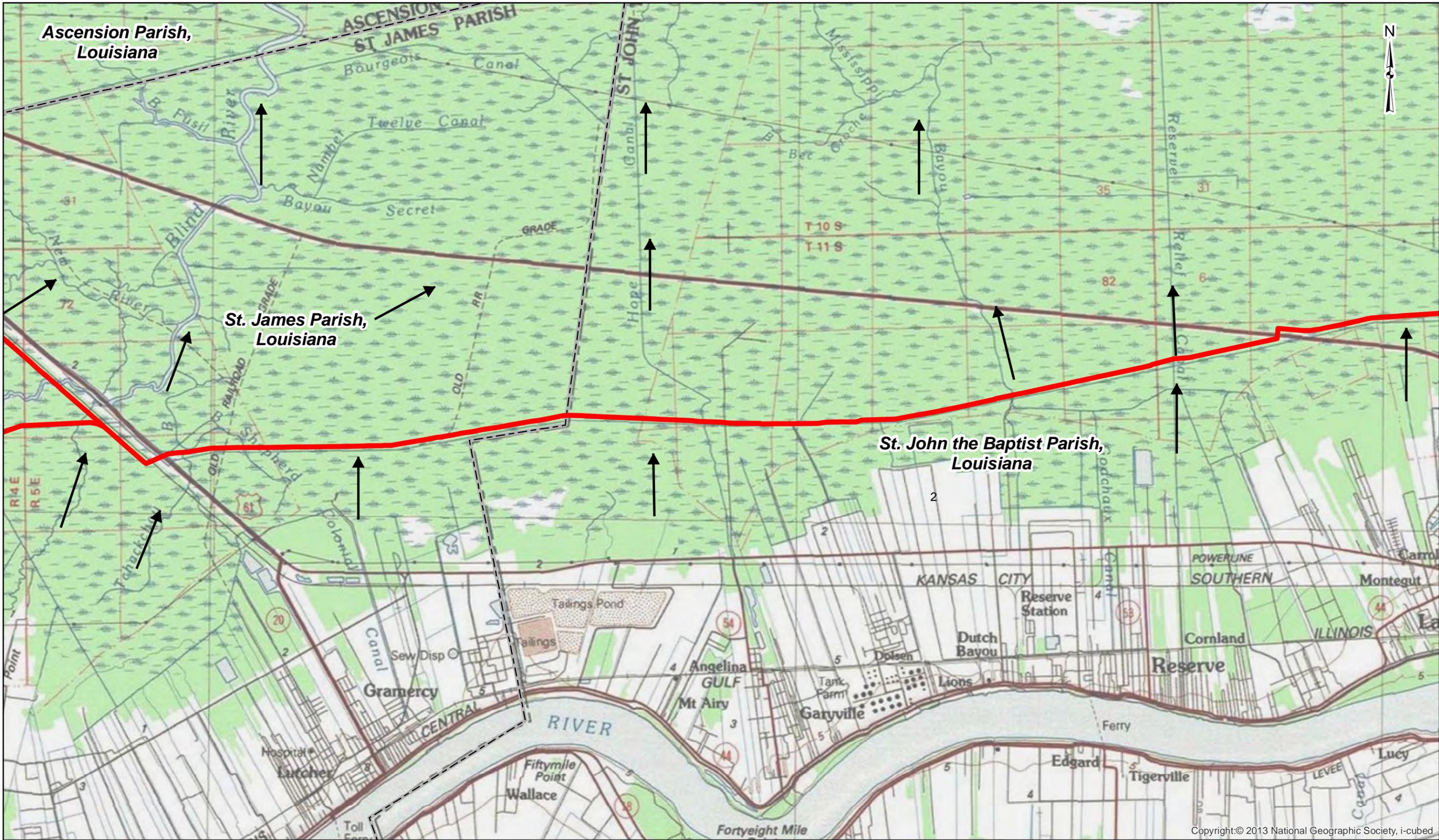
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**MAUREPAS PIPELINES PROJECT  
WATER FLOW PATTERNS**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 6-1**

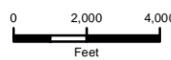


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**Legend:**

- Proposed Pipelines
- Parish Boundary
- ➔ Water Flow Direction

REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
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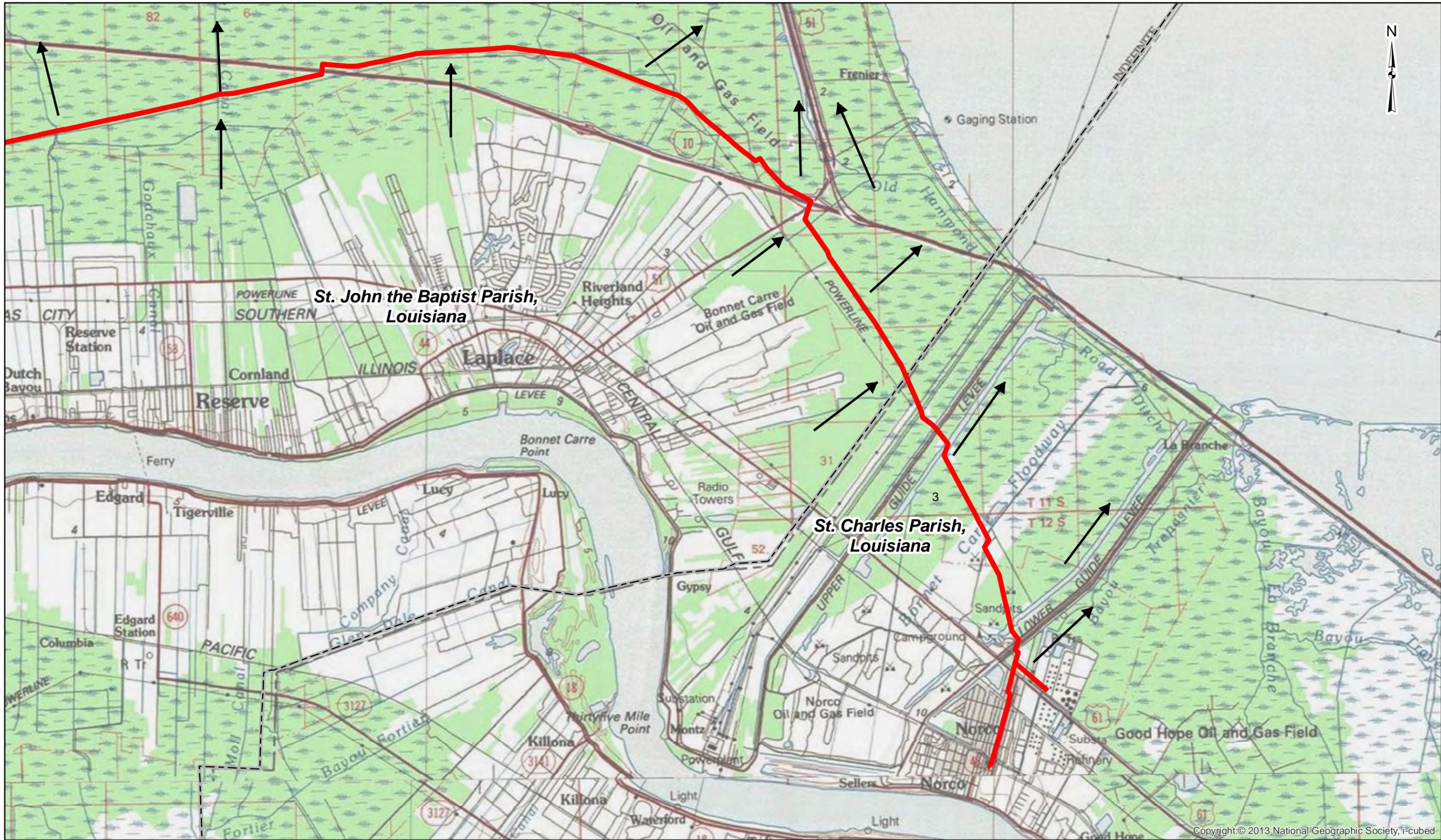
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**MAUREPAS PIPELINES PROJECT  
WATER FLOW PATTERNS**

JOB NUMBER: **80095**

DRAWING NUMBER: **Figure 6-2**



**St. John the Baptist Parish,  
Louisiana**

**St. Charles Parish,  
Louisiana**

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**Legend:**

- Proposed Pipelines
- Parish Boundary
- Water Flow Direction

REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
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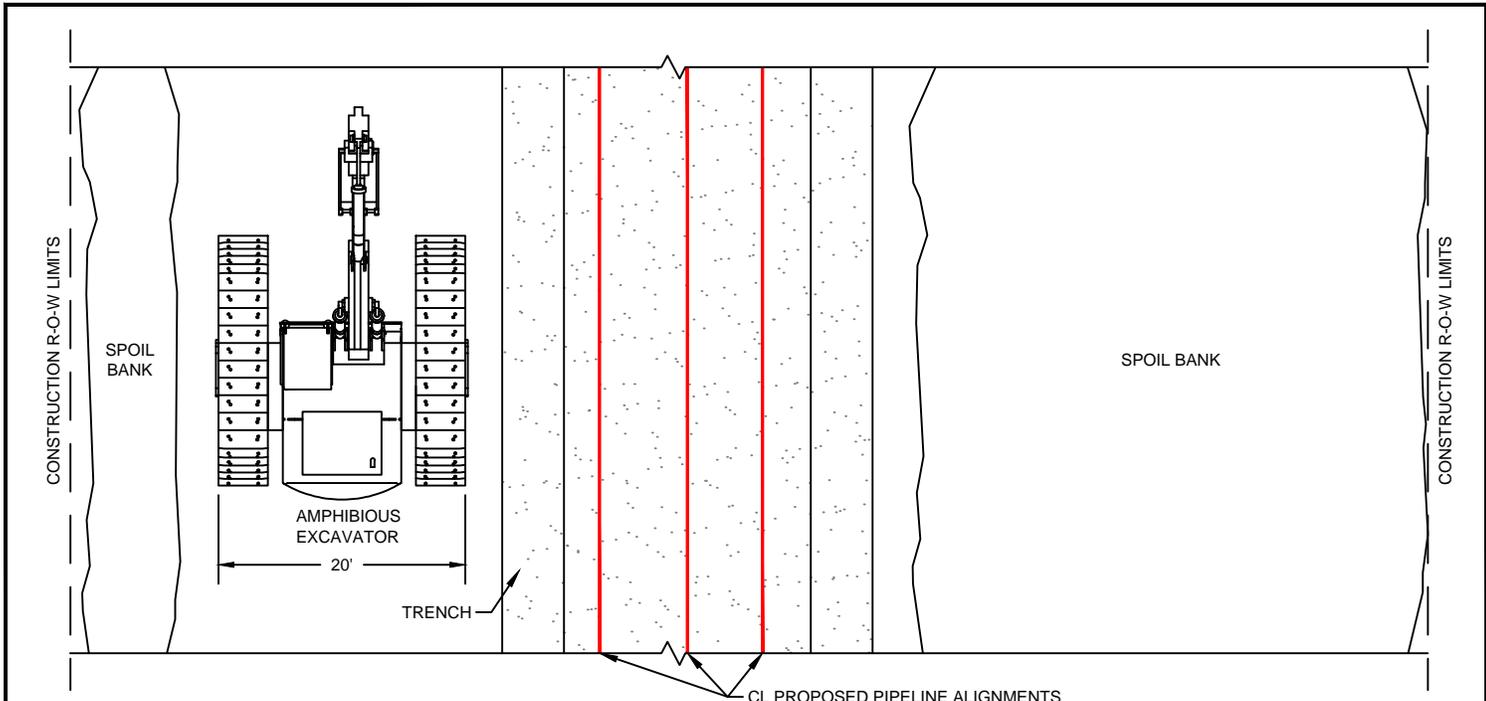
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WATER FLOW PATTERNS**

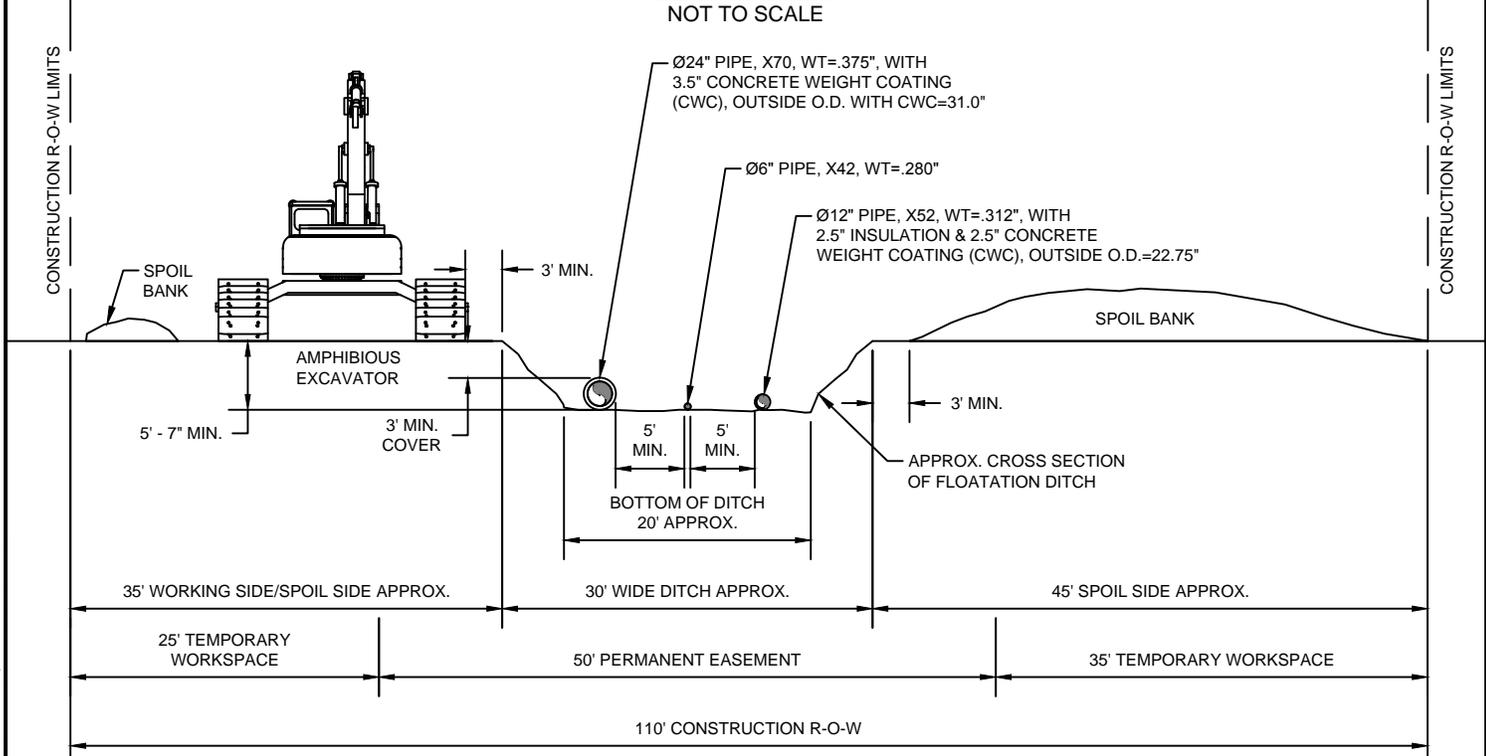
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DRAWING NUMBER: **Figure 6-3**



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**PROFILE VIEW**

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F	04/28/15	REVISED PER OCM COMMENTS	MSB	JMA	KPD
E	03/30/15	ISSUED FOR REVIEW	LJW	JMA	KPD
D	02/12/15	ISSUED FOR PERMIT	MLS	BJO	KPD
C	11/25/14	ADDED NOTE	BJO	JMA	SL
B	11/20/14	REVISED TO 12" PIPE DIAMETER	LJW	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD

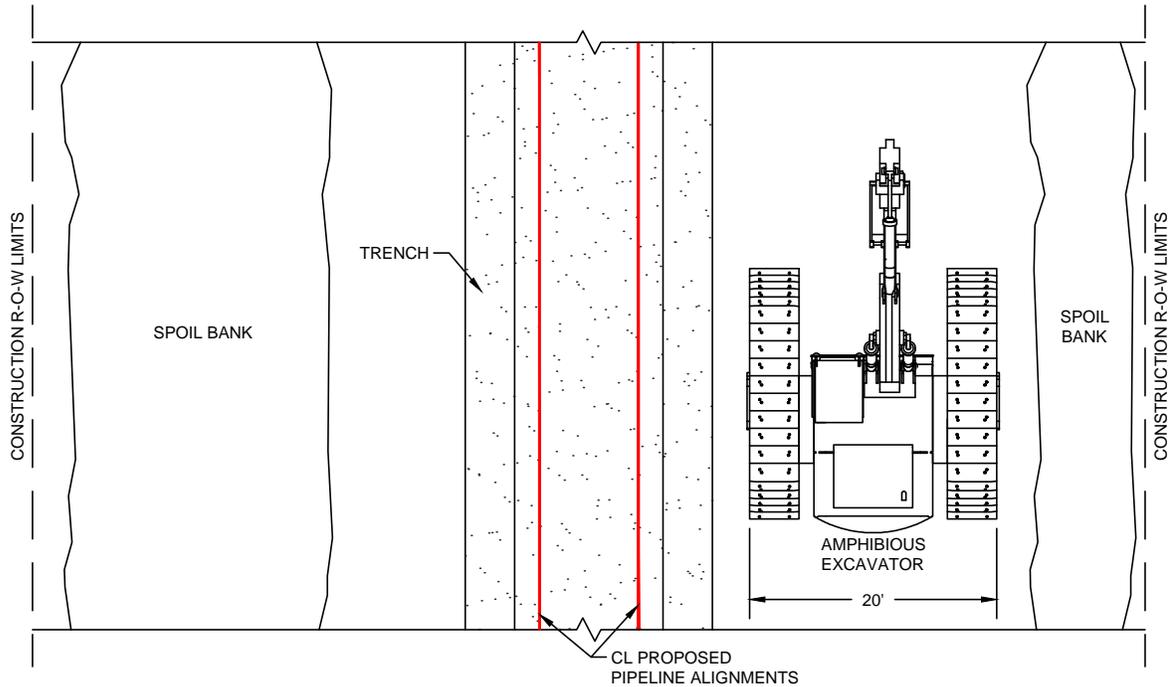
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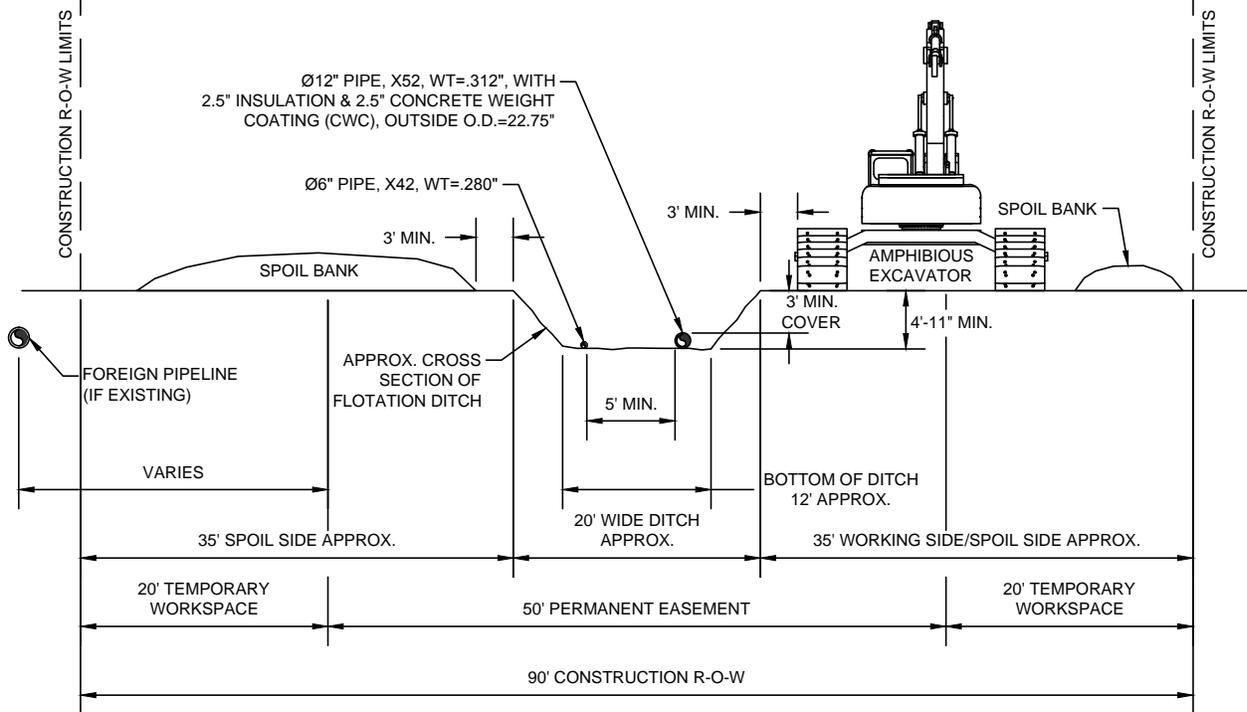
**MAUREPAS PIPELINES PROJECT**  
**TYPICAL 6", 12" & 24" FLOATING DITCH**  
**SWAMP R-O-W CONFIGURATION**

JOB NUMBER: 80095      DRAWING NUMBER: 900-A-P2200

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B	11/20/14	REVISED TO 12" PIPE DIAMETER	LJW	JMA	KPD
A	9/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD

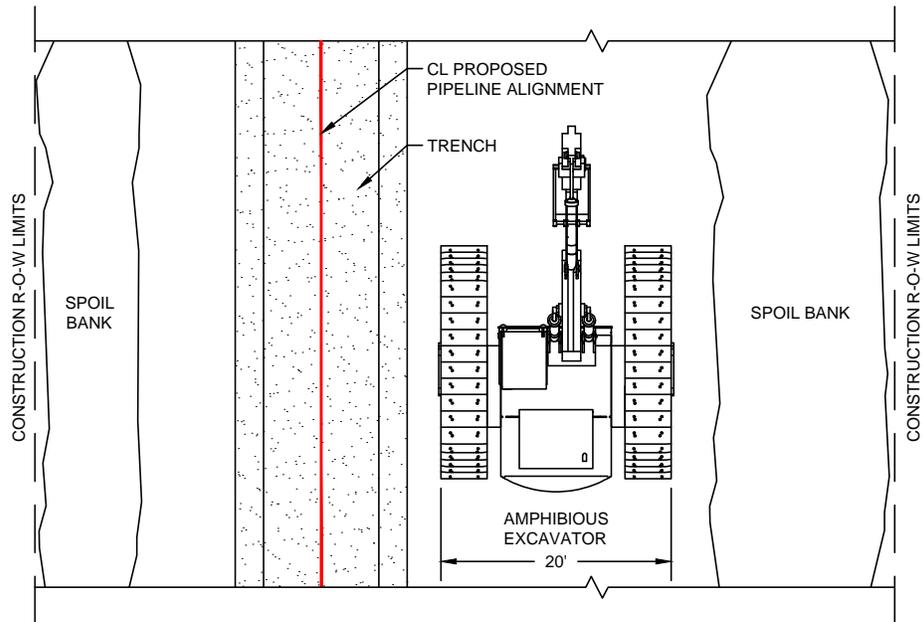
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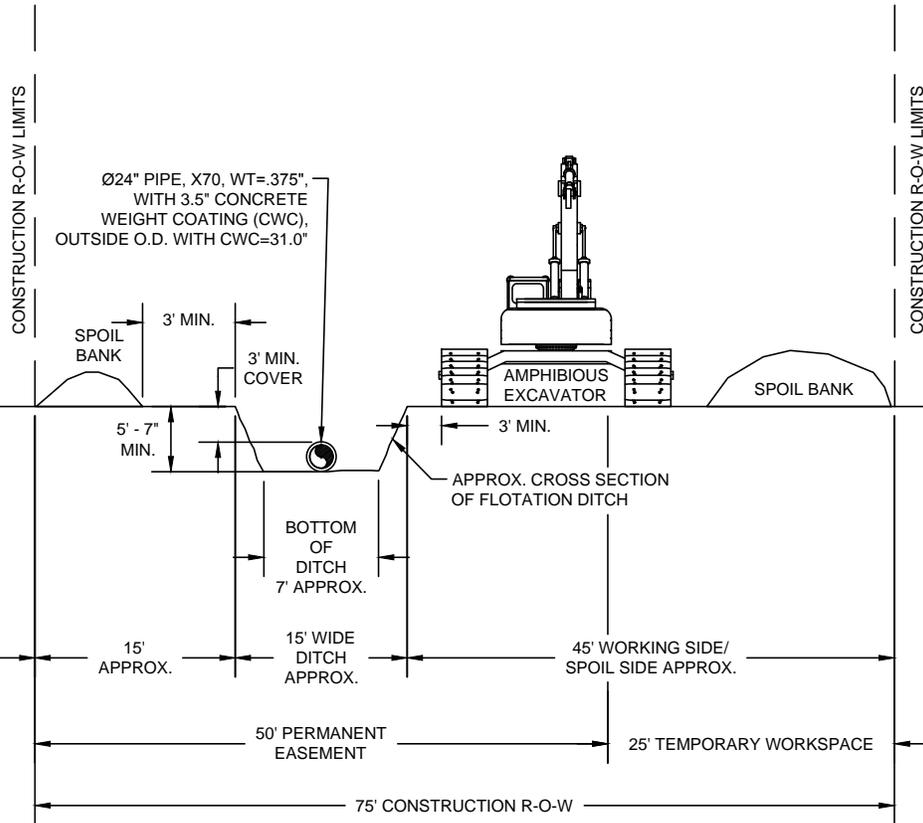
**MAUREPAS PIPELINES PROJECT  
TYPICAL 6" & 12" FLOATING DITCH  
SWAMP R-O-W CONFIGURATION**

JOB NUMBER:  
80095

DRAWING NUMBER:  
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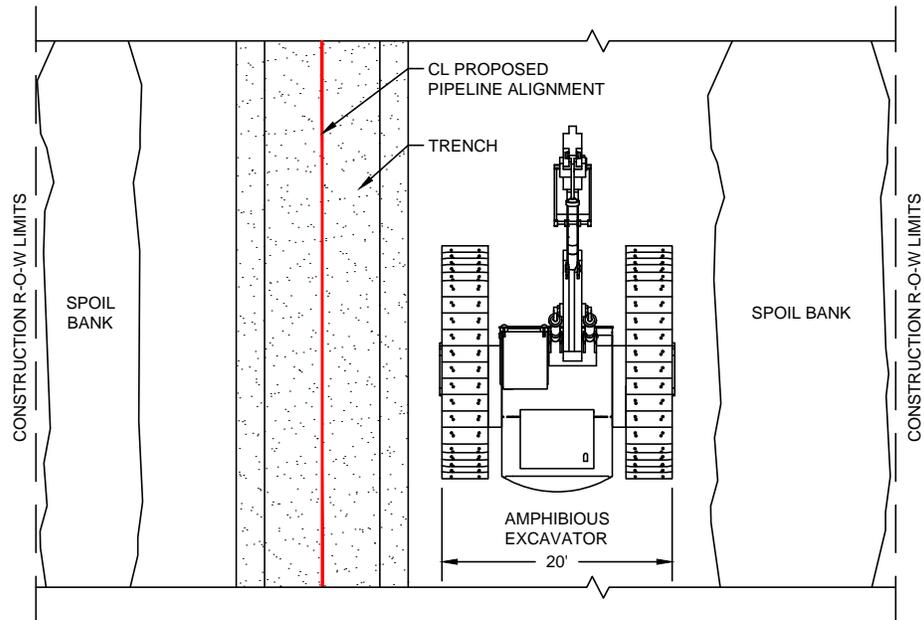
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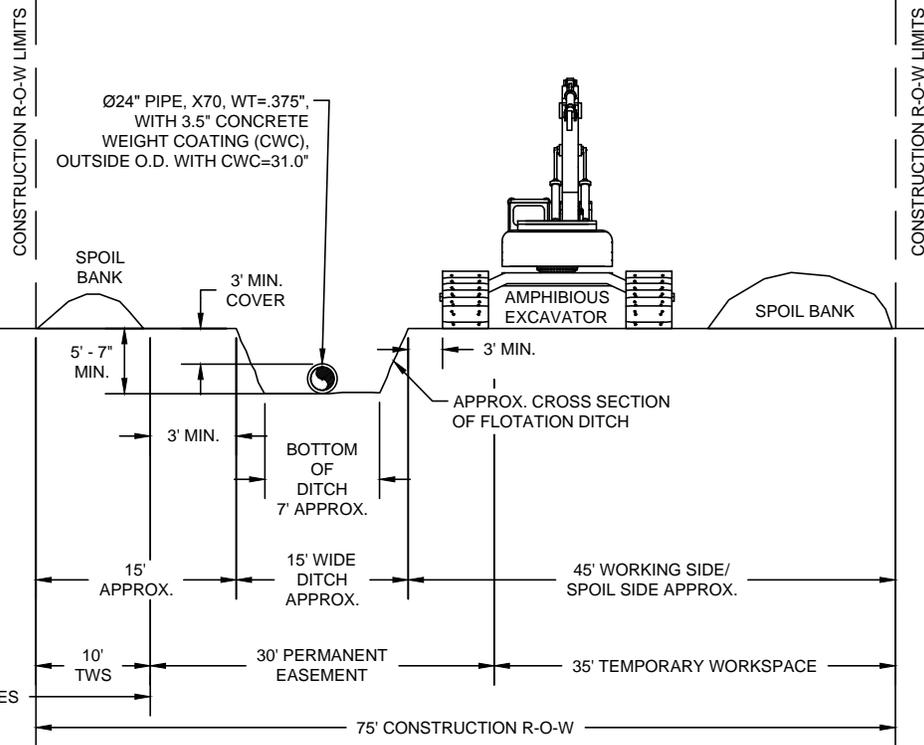
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**MAUREPAS PIPELINES PROJECT  
 TYPICAL 24" FLOATING DITCH  
 SWAMP R-O-W CONFIGURATION**

JOB NUMBER: 80095      DRAWING NUMBER: 900-A-P2202



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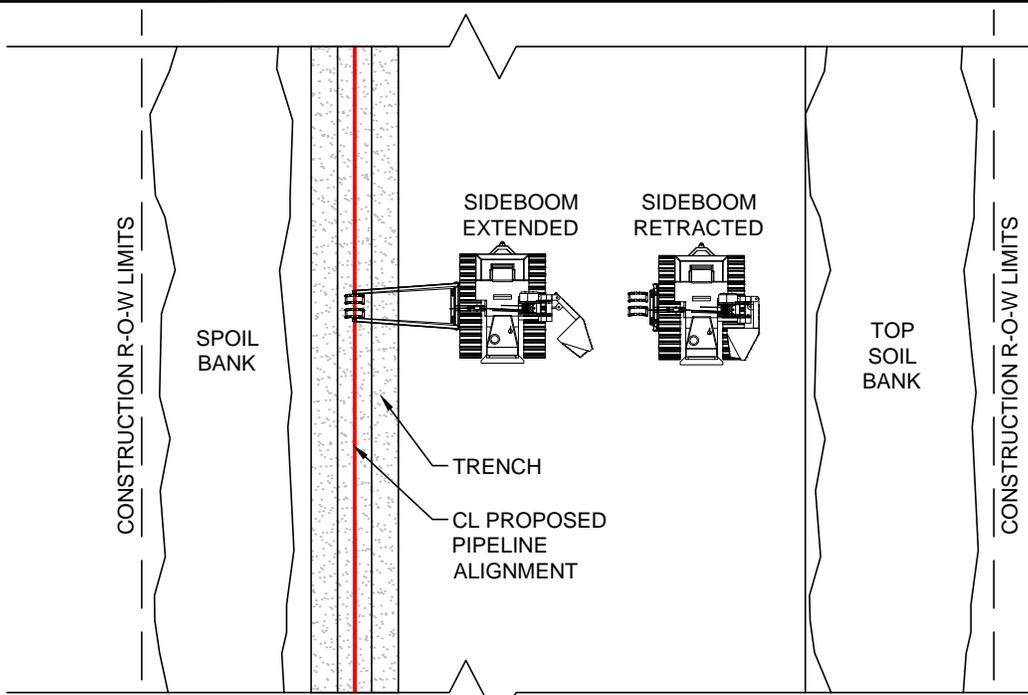
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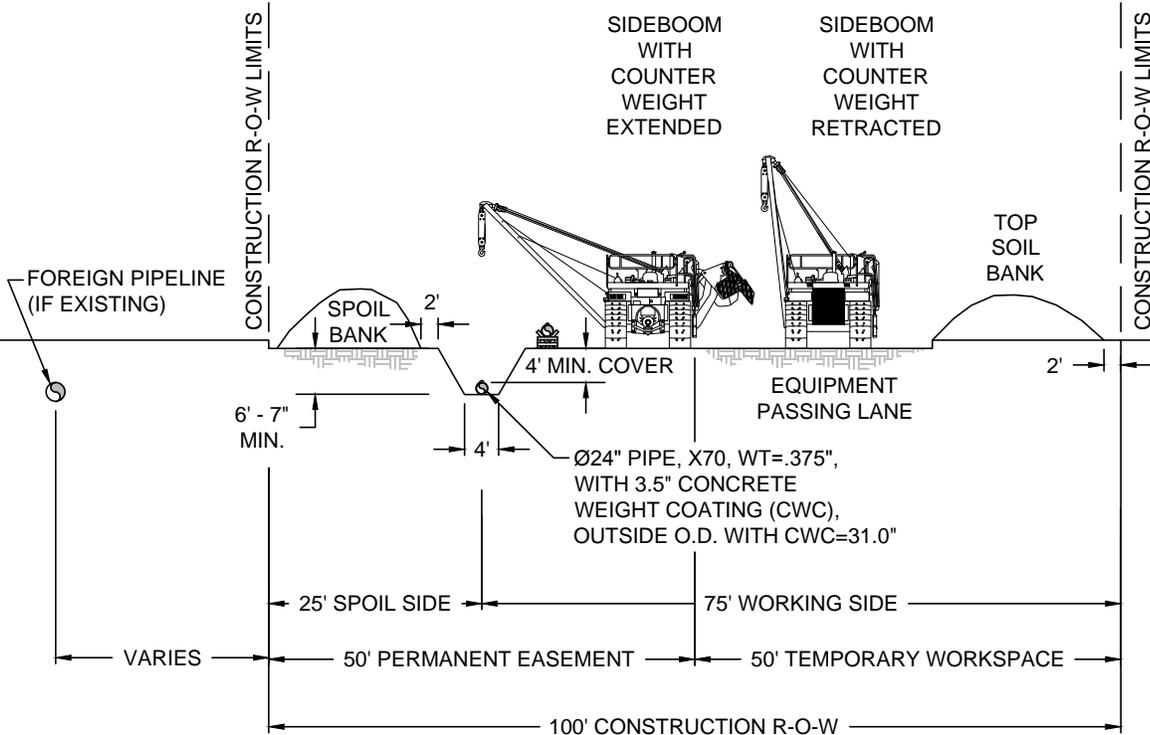
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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL 24" FLOATING DITCH**  
**SWAMP R-O-W CONFIGURATION IN WMA**

JOB NUMBER: 80095  
 DRAWING NUMBER: 900-A-P2202A



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**PROFILE VIEW**  
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NOTE: CONFIGURATION DOES NOT INCLUDE ADDITIONAL TEMPORARY WORKSPACE AT CROSSINGS.

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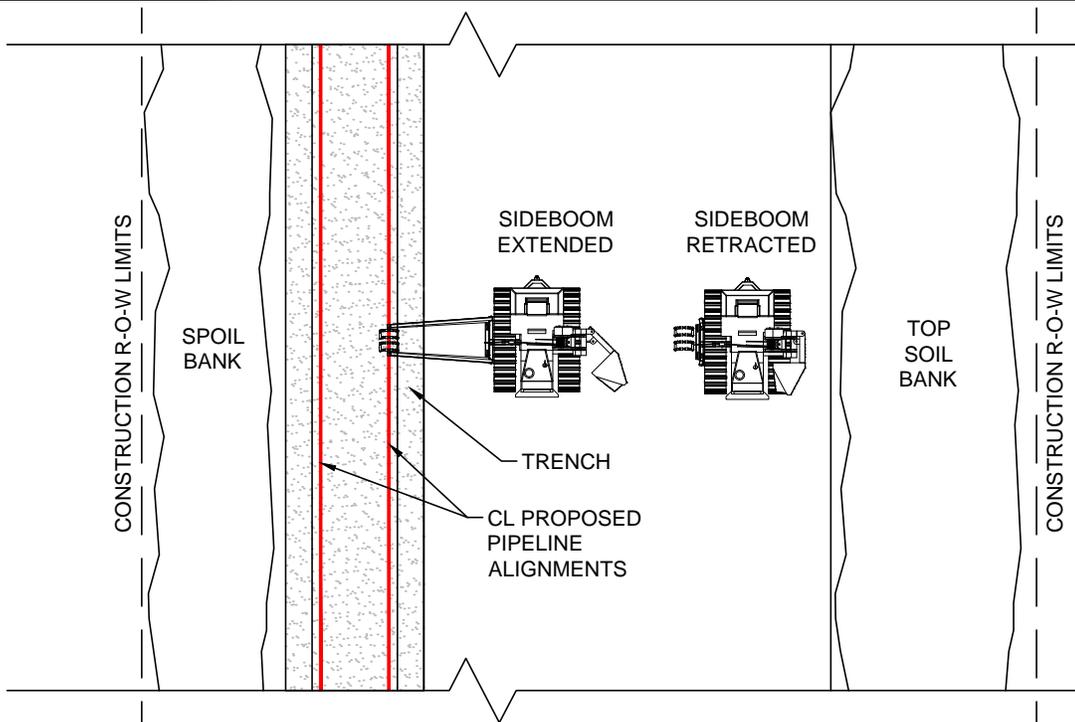
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B	03/30/15	ISSUED FOR REVIEW	LJW	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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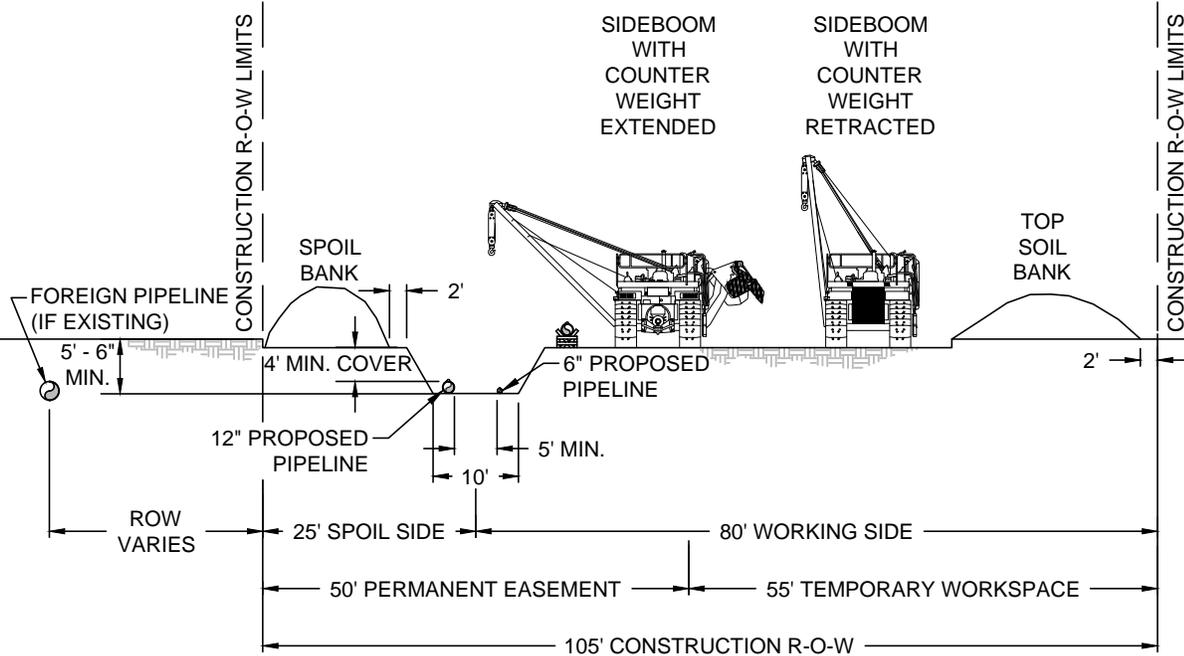
**MAUREPAS PIPELINES PROJECT  
 TYPICAL 100' PIPELINE CONSTRUCTION  
 IN AGRICULTURAL AREAS**

JOB NUMBER: 80095      DRAWING NUMBER: 900-A-P2203



**PLAN VIEW**

NOT TO SCALE



**PROFILE VIEW**

NOT TO SCALE

NOTE: CONFIGURATION DOES NOT INCLUDE ADDITIONAL TEMPORARY WORKSPACE AT CROSSINGS.

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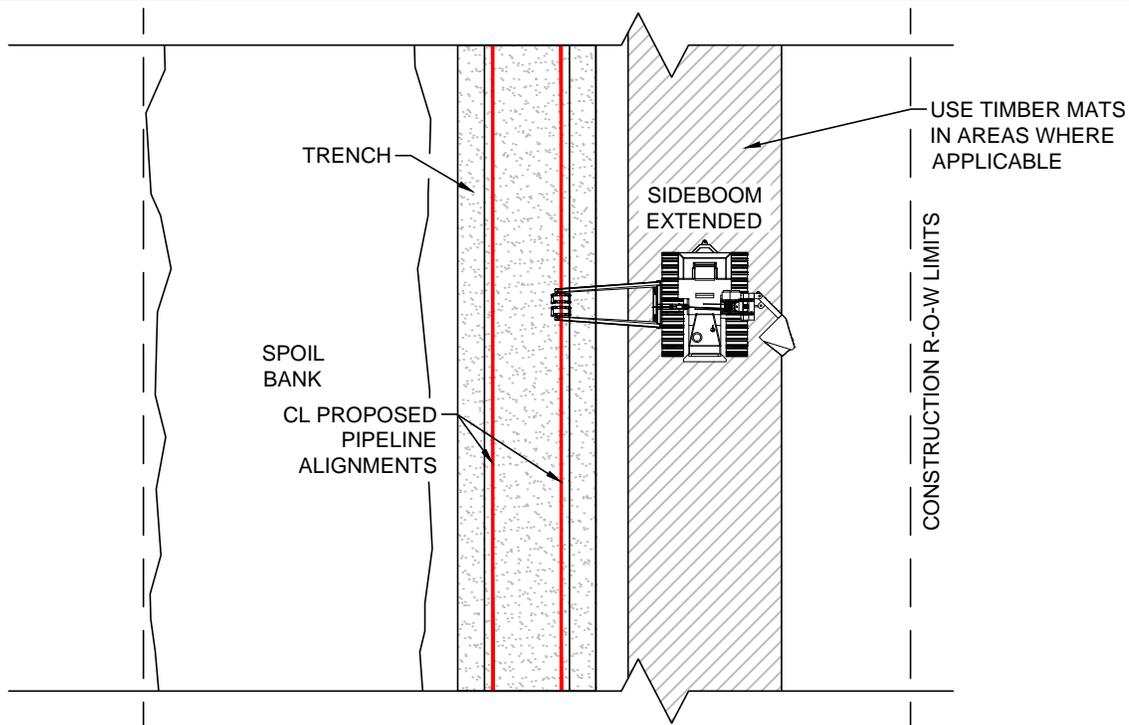
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D	03/30/15	ISSUED FOR REVIEW	LJW	JMA	KPD
C	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
B	10/06/14	REVISED MIN. COVER DIMENSION	BJO	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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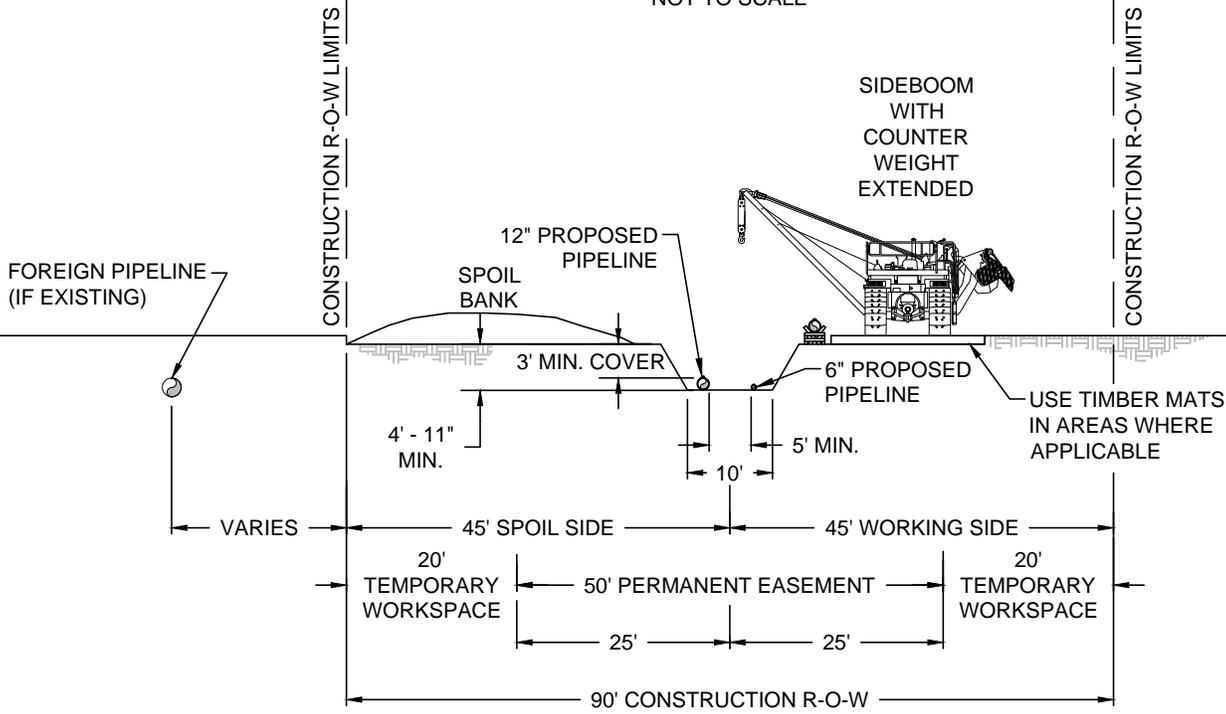
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**MAUREPAS PIPELINES PROJECT  
 TYPICAL 105' PIPELINE CONSTRUCTION  
 IN AGRICULTURAL AREAS**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>900-A-P2204</b>
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**PLAN VIEW**  
NOT TO SCALE



**PROFILE VIEW**  
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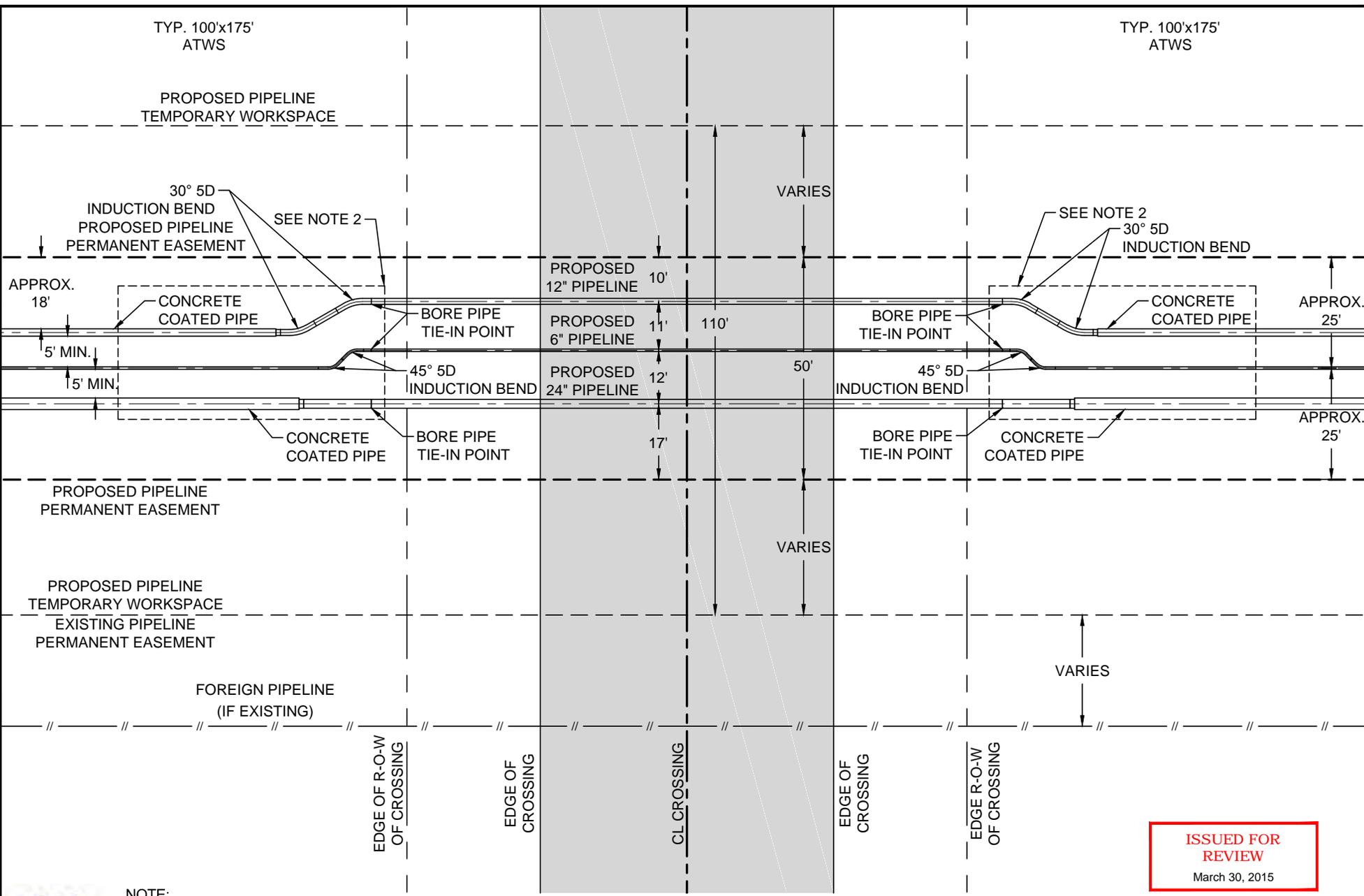
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C	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
B	10/06/14	REVISED MIN. COVER DIMENSION	BJO	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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**MAUREPAS PIPELINES PROJECT  
 TYPICAL 90' PIPELINE CONSTRUCTION  
 R-O-W IN WETLAND AREAS**

JOB NUMBER: 80095      DRAWING NUMBER: 900-A-P2205

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- NOTE:**
1. SEE DWG. #900-A-P2209 FOR CROSSING PROFILE.
  2. BORE PIT DIMENSIONS WILL BE 60'x30'.



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D	03/30/15	ISSUED FOR REVIEW	MLS	JMA	KPD
C	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
B	11/20/14	REVISED TO 12" PIPE DIAMETER	LJW	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

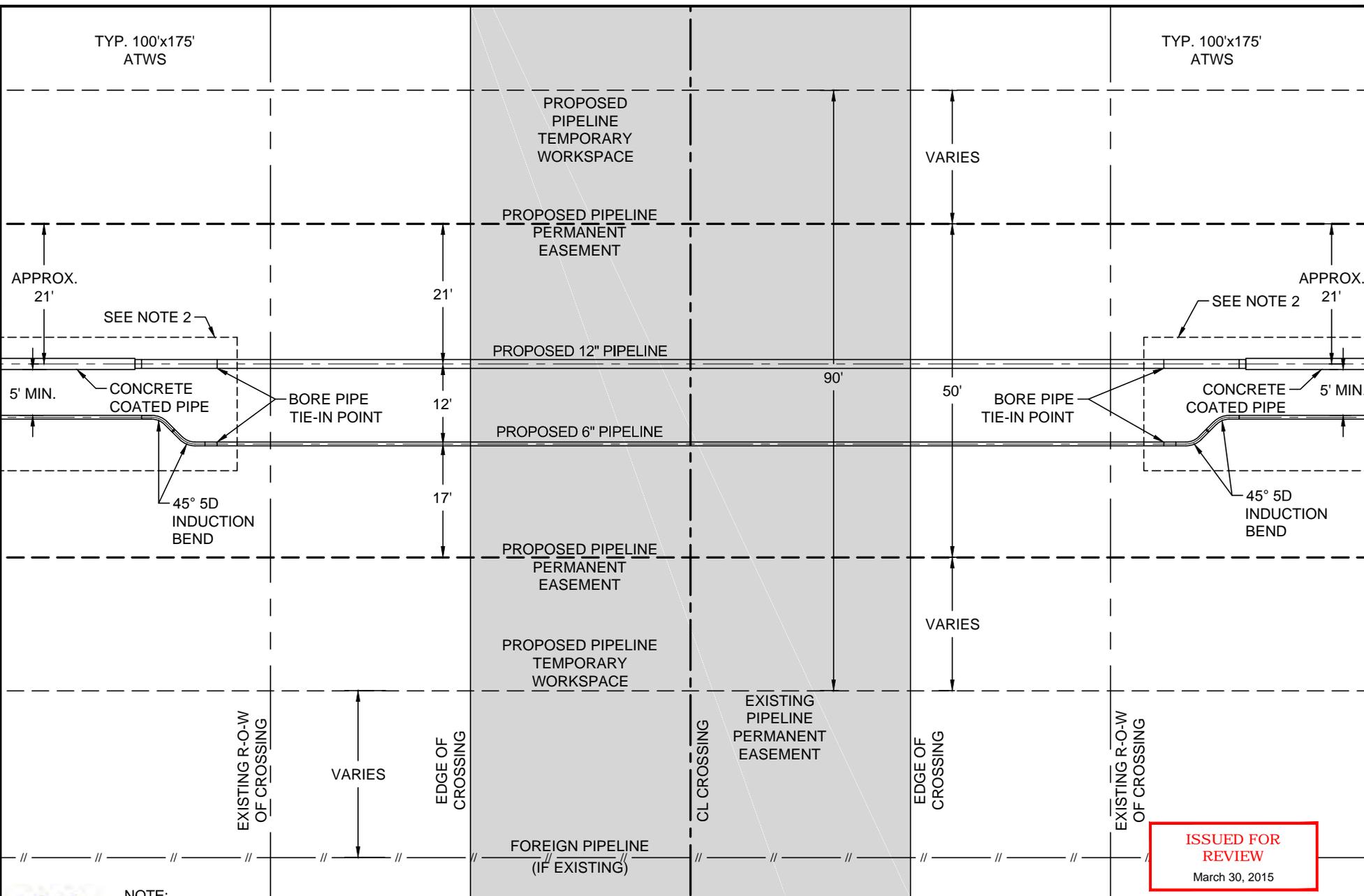
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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL 6", 12" & 24" BORE**  
**MULTIPLE PIPELINE CONFIGURATION**

JOB NUMBER: 80095	DRAWING NUMBER: 900-A-P2206
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**NOTE:**  
1. SEE DWG. #900-A-P2209 FOR CROSSING PROFILE.

2. BORE PIT DIMENSIONS WILL BE 60'x20'.



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D	03/30/15	ISSUED FOR REVIEW	MLS	JMA	KPD
C	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
B	11/20/14	REVISED TO 12" PIPE DIAMETER	LJW	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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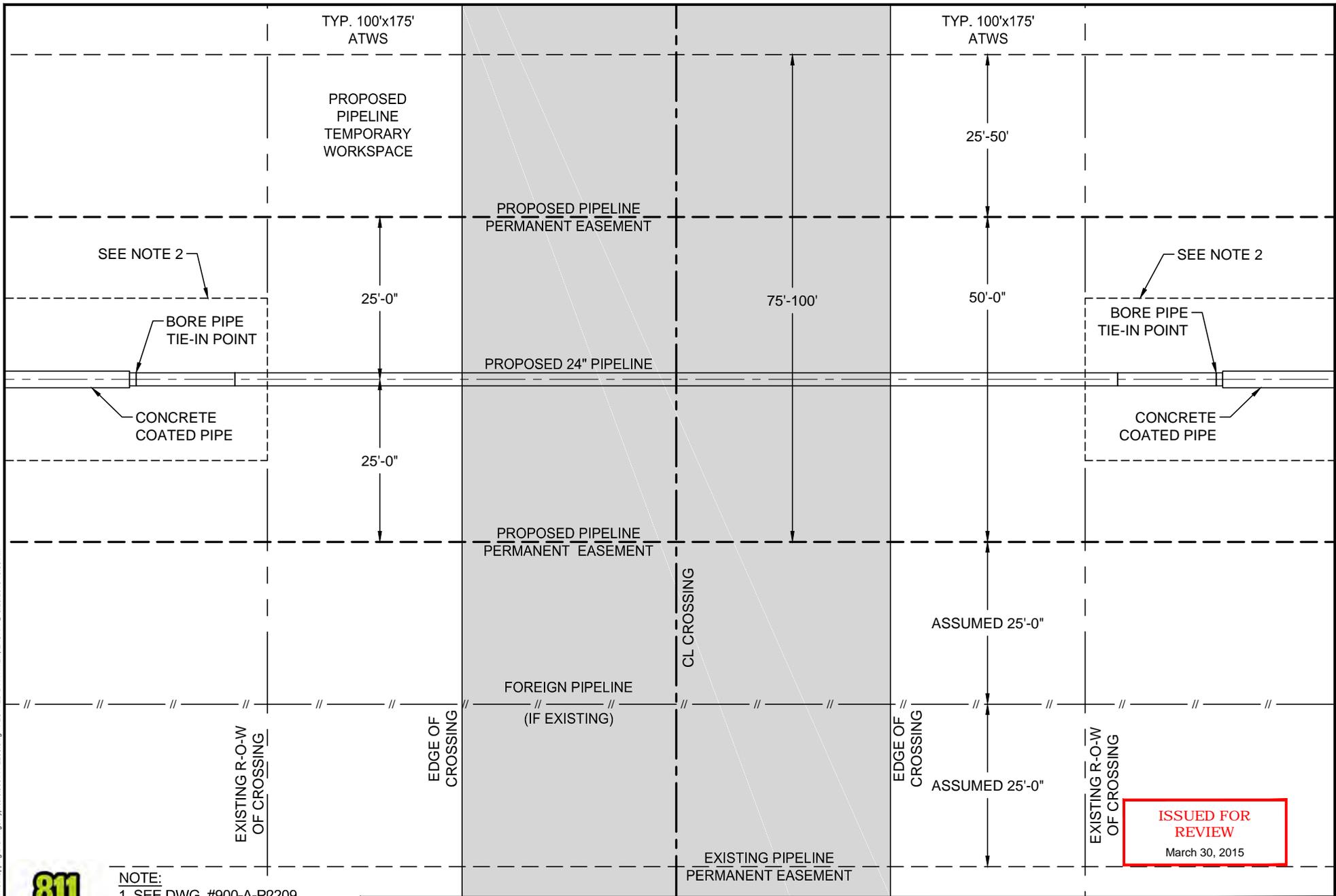
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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL 6" & 12" BORE**  
**MULTIPLE PIPELINE CONFIGURATION**

JOB NUMBER: 80095

DRAWING NUMBER: 900-A-P2207

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- NOTE:**
1. SEE DWG. #900-A-P2209 FOR CROSSING PROFILE.
  2. BORE PIT DIMENSIONS SHALL BE 20'x60'.

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A	09/19/14	ISSUED FOR CORPS PERMIT	JMA	BJO	KPD

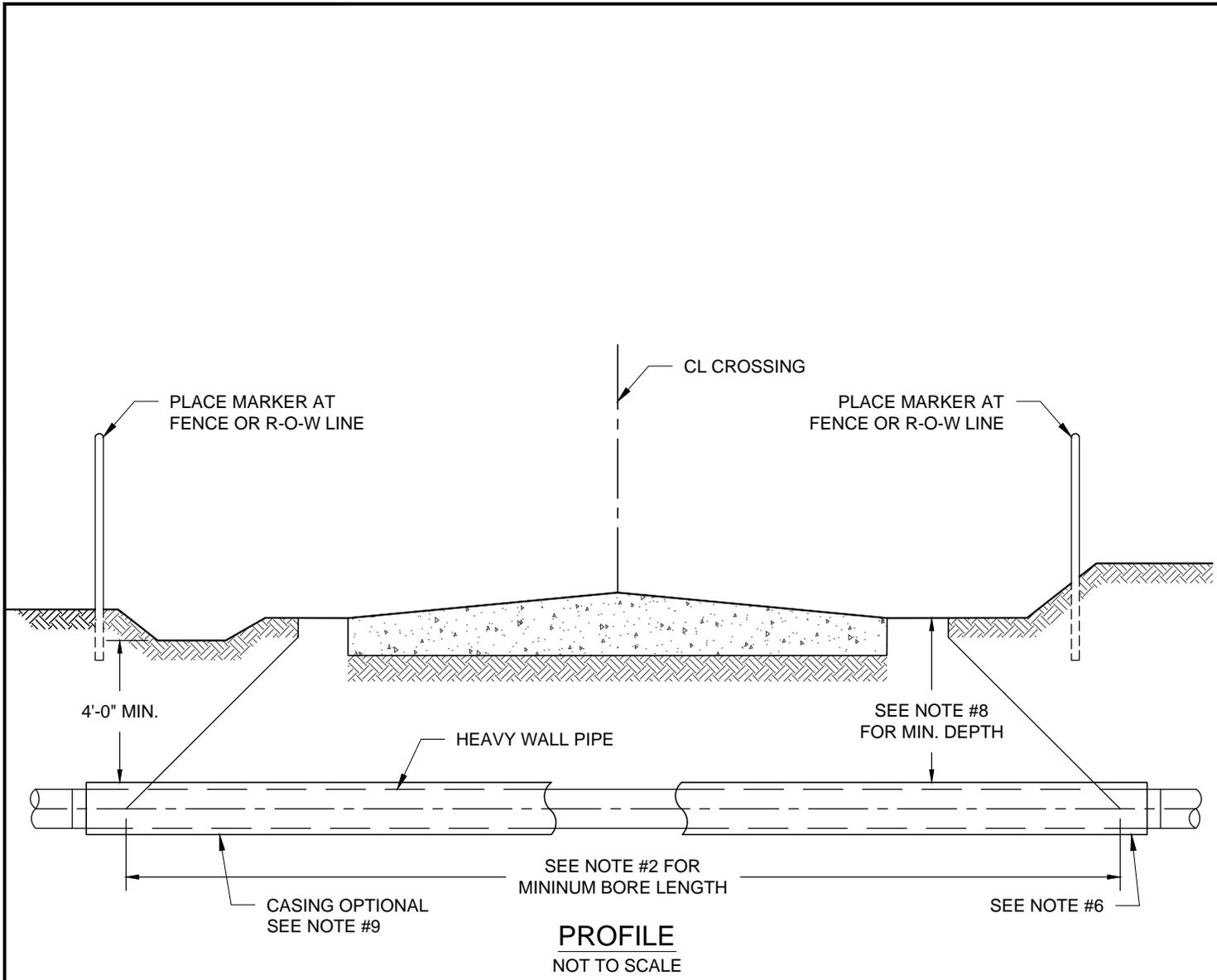
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**MAUREPAS PIPELINES PROJECT  
 TYPICAL 24" BORED CROSSING**

JOB NUMBER:  
 80095

DRAWING NUMBER:  
 900-A-P2208



**PROFILE**  
NOT TO SCALE

**NOTES:**

1. WHERE CONFLICTS MAY EXIST, PERMIT SPECIFICATIONS SHALL ALWAYS GOVERN THIS DRAWING.
2. THE MINIMUM BORE LENGTH SHOULD BE IN ACCORDANCE WITH THE PERMIT SPECIFICATIONS.
3. HEAVY-WALL PIPE SHALL EXTEND A MINIMUM OF 3 FEET OUTSIDE THE R-O-W LIMITS ON EITHER SIDE OF ROADS/RAILROADS.
4. ANY EXCAVATION WITHIN THE LIMITS OF THE R-O-W SHALL BE REPLACED AND COMPACTED IN 6" LAYERS AT 95% PROCTOR, OR IN ACCORDANCE WITH SPECIFIC PERMIT REQUIREMENTS.
5. MARKERS SHALL BE PLACED AT CROSSING.
6. PIPE WILL BE A.R.O. FACTORY COATED WHEN INSTALLED WITHOUT CASING.
7. IN ADDITION TO THE MINIMUM CLEARANCE SPECIFIED, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AT LEAST 12" MINIMUM CLEARANCE BETWEEN ANY FOREIGN LINES OR UTILITIES BEING CROSSED
8. 4' MINIMUM DEPTH UNDER ROAD DITCH, 10' MINIMUM DEPTH UNDER TOE OF BALLAST OR PER RAILROAD REQUIREMENTS.
9. NO CASING AT ROADS. CASING MAY BE USED AT RAILROADS IF REQUIRED.

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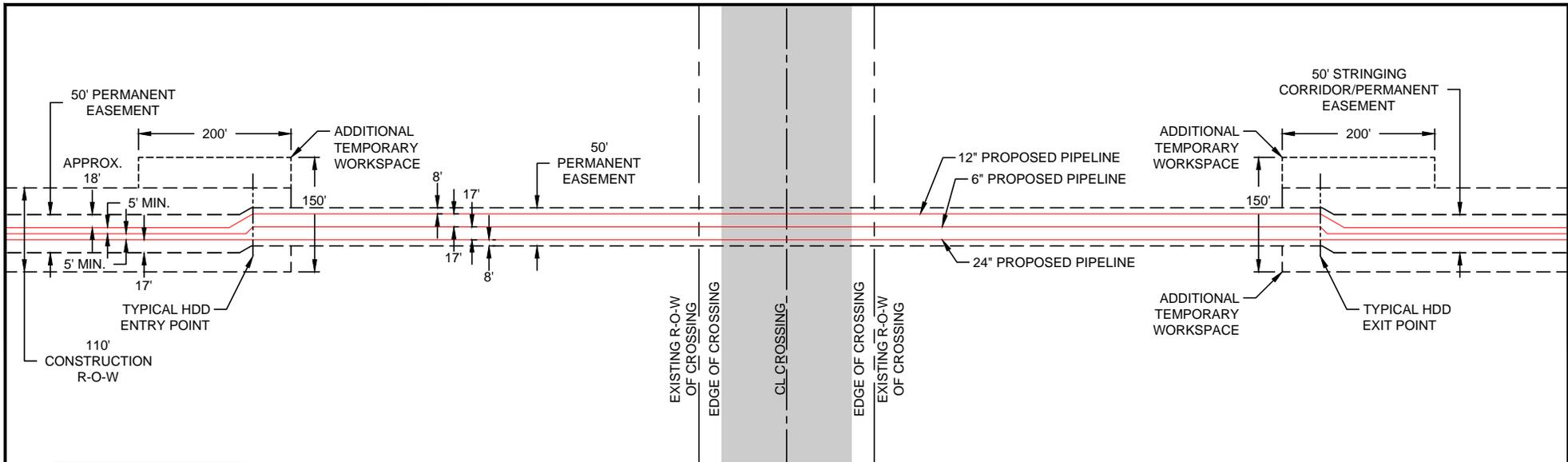
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B	10/06/14	REVISED MIN. COVER DIMENSION	BJO	JMA	KPD
A	9/19/14	ISSUED FOR CORPS PERMIT	LJW	JMA	KPD

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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL BORED CROSSING PROFILE**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>900-A-P2209</b>
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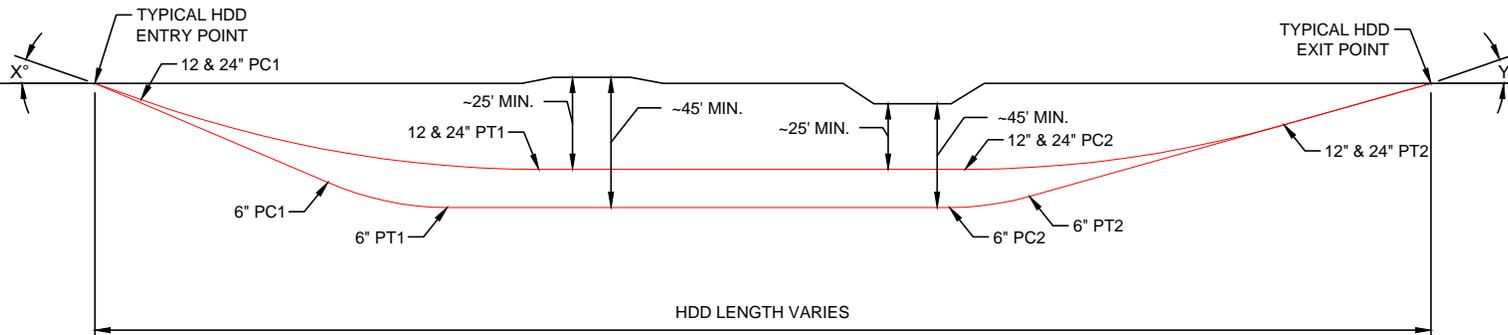


LINE SIZE	RADIUS
6"	600'
12"	2400'
24"	2400'

PLAN  
NOT TO SCALE

NOTES

- 1.) THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE. FINAL DESIGN IS PENDING SURVEY RESULTS.
- 2.) THE LENGTH OF THE STRINGING CORRIDOR WILL BE EQUAL TO THE HDD LENGTH.
- 3.) ENTRY POINT ANGLE (X) AND EXIT POINT ANGLE (Y) WILL VARY BY CROSSING. THESE ANGLES WILL BE DETERMINED AS PART OF THE FINAL DESIGN PENDING SURVEY RESULTS.



PROFILE  
NOT TO SCALE

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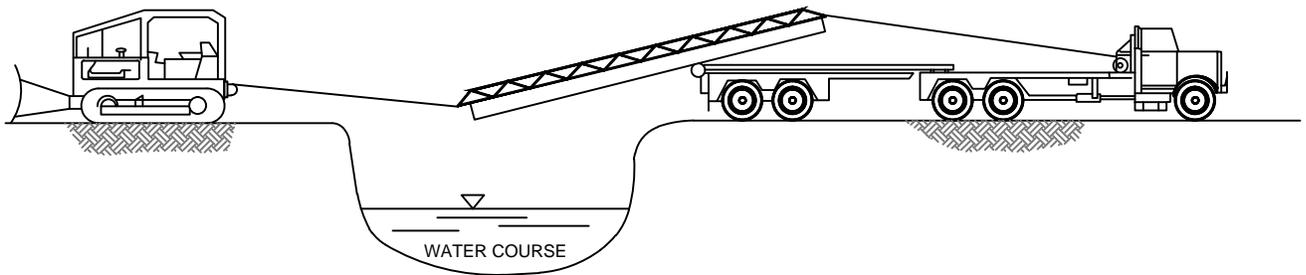
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C	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
B	11/20/14	REVISED TO 12" PIPE DIAMETER	LJW	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	BJO	JMA	KPD

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**MAUREPAS PIPELINES PROJECT  
 TYPICAL 6", 12" & 24"  
 HORIZONTAL DIRECTIONAL DRILL**

JOB NUMBER: 80095	DRAWING NUMBER: 900-A-P2210
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**PROFILE VIEW**  
NOT TO SCALE

**NOTES:**

1. INSTALL A PORTABLE BRIDGE AT DRAINAGES IF WATER IS PRESENT.
2. DEPENDING ON LENGTH OF SPAN, BRIDGE MAY BE RAILROAD FLATCAR, TIMBER MAT, OR OTHER SUITABLE BRIDGE AS APPROVED BY THE DESIGNATED COMPANY REPRESENTATIVE.
3. UTILIZE APPROACH FILLS OF CLEAN GRANULAR MATERIAL, SWAMP MATS, SKIDS OR OTHER SUITABLE MATERIALS TO AVOID CUTTING THE BANKS WHEREVER FEASIBLE. DO NOT CONSTRICT FLOW. ENSURE ADEQUATE FREEBOARD. AS REQUIRED, ENSURE THAT FILL MATERIAL DOES NOT SPILL INTO THE WATERCOURSE.
4. STRUCTURE SHALL BE REMOVED IF THERE IS MORE THAN ONE MONTH BETWEEN FINAL GRADING/CLEAN UP AND STABILIZE BED AND BANKS TO APPROXIMATE PRE-CONSTRUCTION CONDITION.

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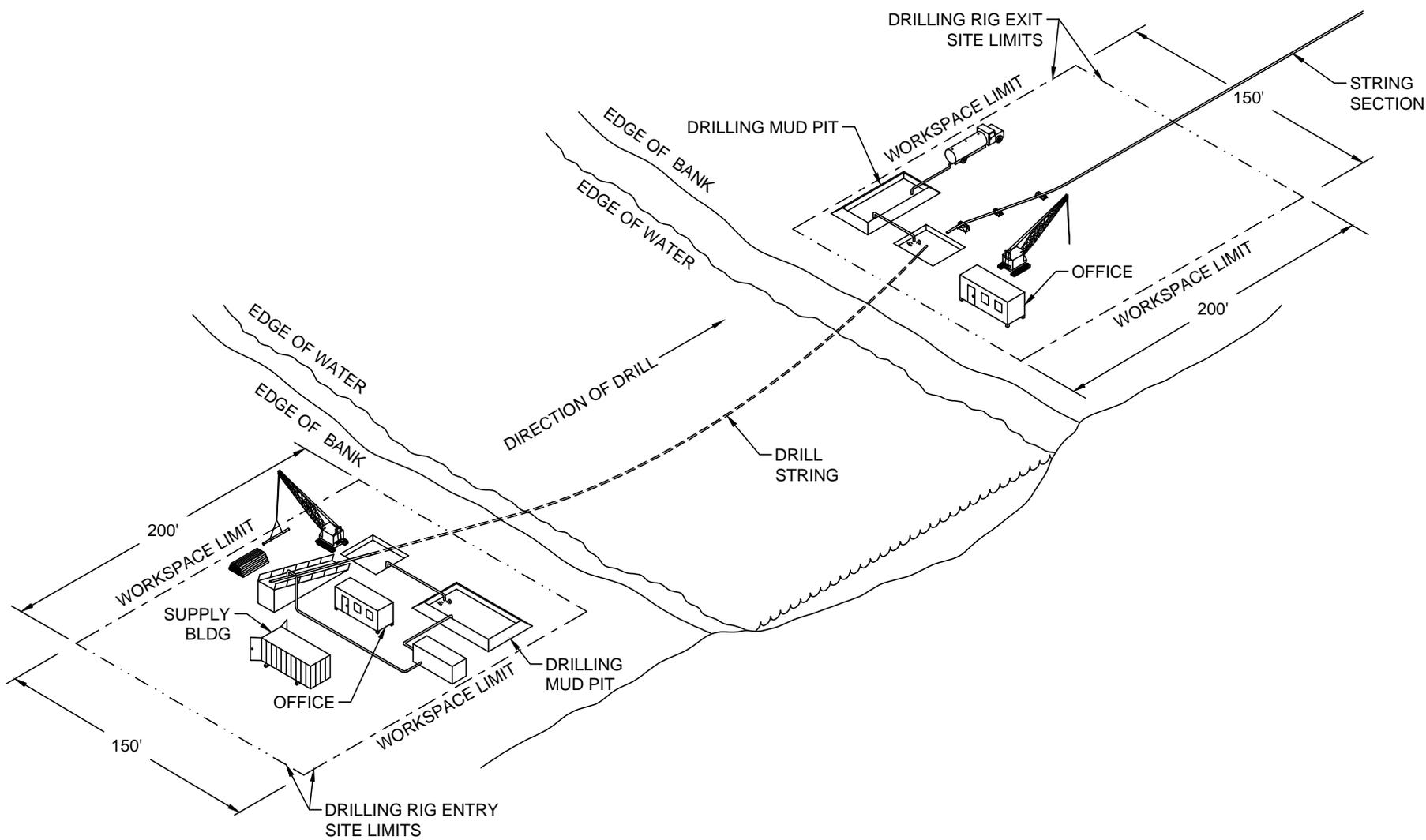
**MAUREPAS PIPELINES PROJECT  
TYPICAL PORTABLE BRIDGE  
CROSSING**

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JOB NUMBER: 80095

DRAWING NUMBER: 900-A-P2211

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B	12/02/14	ISSUED FOR REVIEW	BJO	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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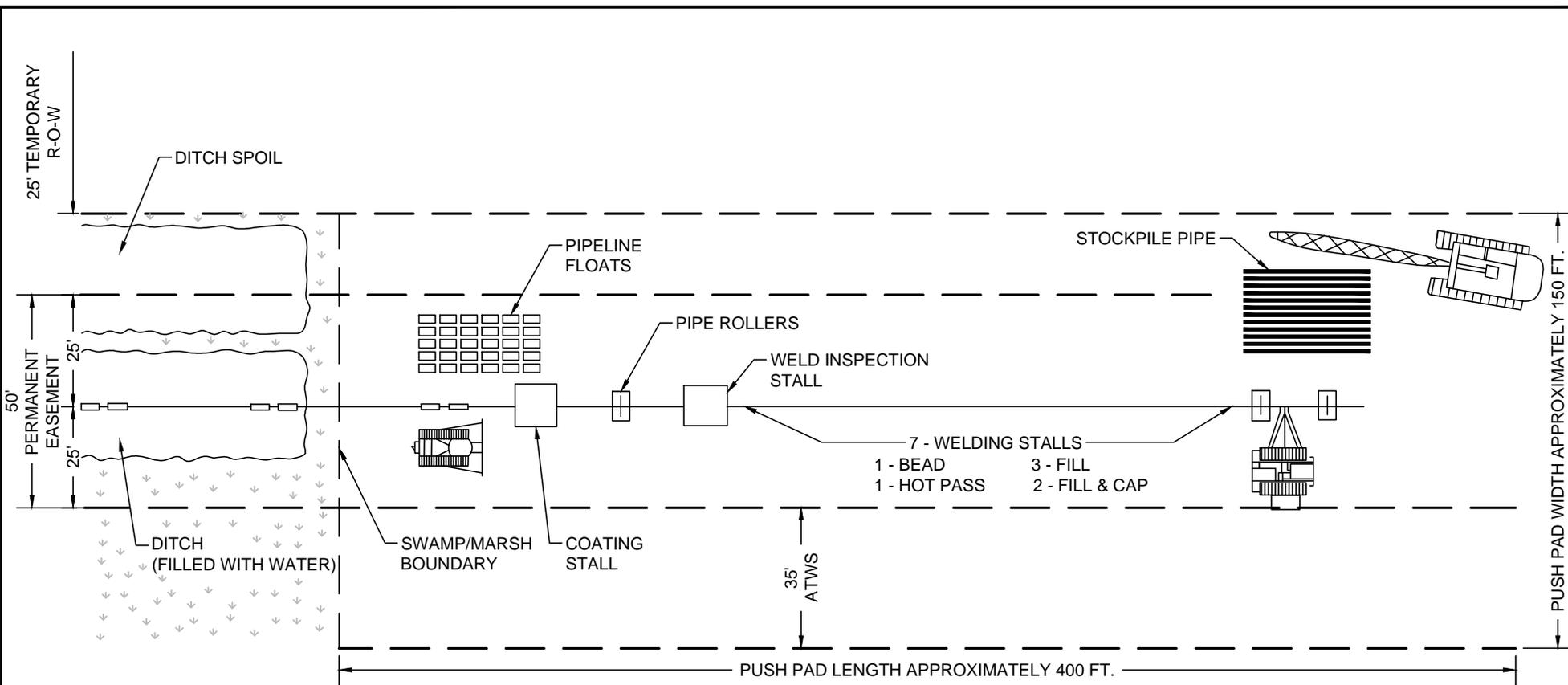
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**MAUREPAS PIPELINES PROJECT  
 TYPICAL DIRECTIONAL DRILLING**

JOB NUMBER: 80095

DRAWING NUMBER: 900-A-P2212

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**PLAN**  
NOT TO SCALE

**NOTES:**

1. WORKSPACE REQUIREMENTS MAY VARY DEPENDING UPON PIPE DIAMETER AND SOIL CONDITIONS. WORKSPACE SHOWN IS TYPICAL FOR MARSH-TYPE CONSTRUCTION.
2. DEPENDING UPON PIPE DIAMETER AND LENGTH OF CROSSING, AS MANY AS 8 WELDING STALLS MAY BE USED.
3. AS THE PIPE IS WELDED, THE BULL DOZER PULLS THE STRING INTO THE DITCH.
4. TIMBER MATS ARE REQUIRED.

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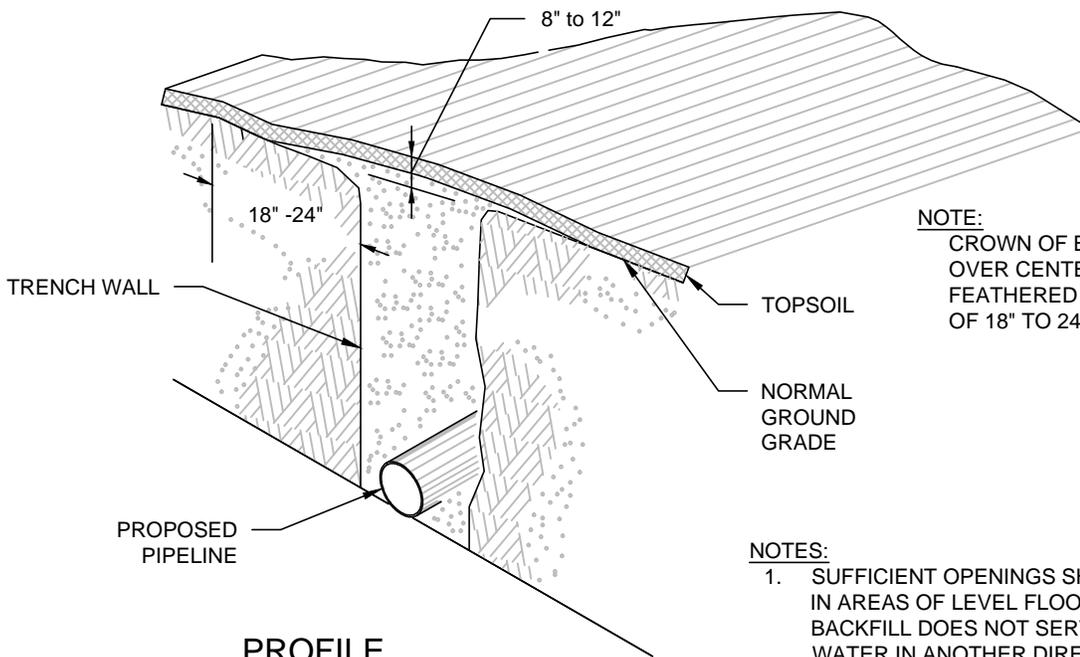
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**MAUREPAS PIPELINES PROJECT  
TYPICAL PUSH-PULL SITE PLAN**

JOB NUMBER:  
**80095**

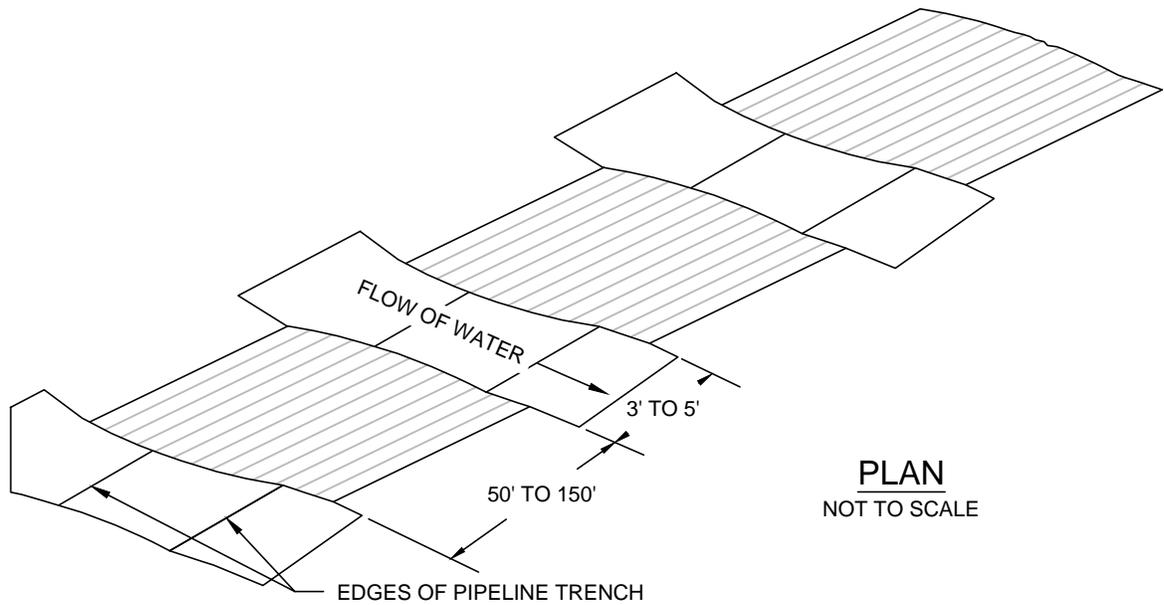
DRAWING NUMBER:  
**900-A-P2213**



**PROFILE**  
NOT TO SCALE

**NOTE:**  
CROWN OF BACKFILL TO BE 8" TO 12" HIGH OVER CENTER LINE OF TRENCH AND FEATHERED OUT TO GRADE AT A DISTANCE OF 18" TO 24" FROM TRENCH WALL.

- NOTES:**
1. SUFFICIENT OPENINGS SHOULD BE LEFT IN THE BACKFILL IN AREAS OF LEVEL FLOOD PLAINS, SO THAT THE BACKFILL DOES NOT SERVE AS A BREAKER TO TURN THE WATER IN ANOTHER DIRECTION.
  2. THE ABOVE ALSO APPLIES TO BED FURROWS AND SHALLOW DRAINAGE DITCHES; OFTEN ENCOUNTERED IN FLAT LEVEL COUNTRY. THEY SHOULD ALWAYS BE LEFT WITH NO CROWN.
  3. MINOR BERMING OR CROWN WILL BE CONSIDERED IN WETLANDS AREAS.



**PLAN**  
NOT TO SCALE

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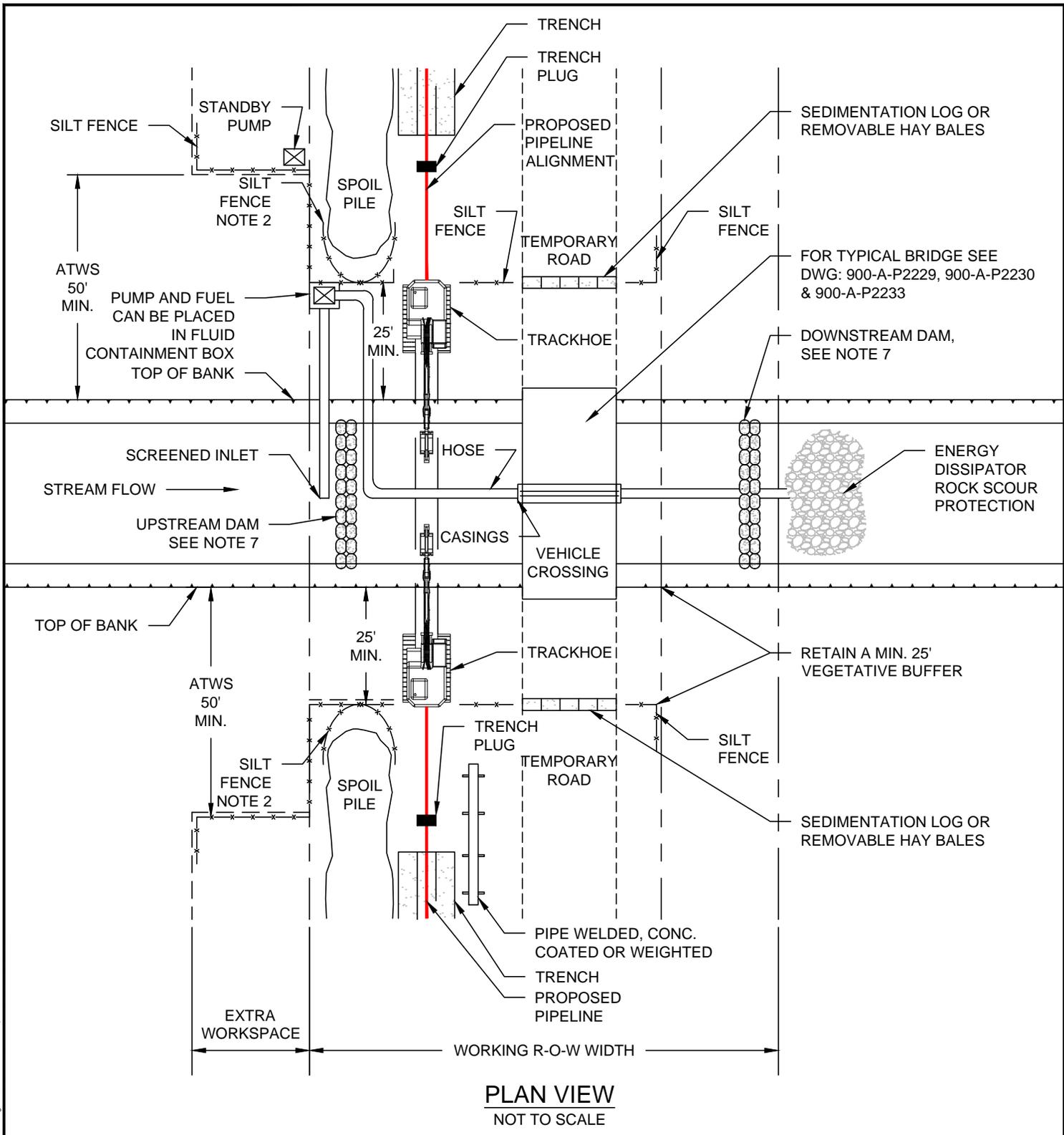


REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
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A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	BJO	KPD

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**MAUREPAS PIPELINES PROJECT**  
**BEST MANAGEMENT PRACTICES FOR CROWNING R-O-W WITHIN AGRICULTURAL LANDS**

JOB NUMBER: 80095	DRAWING NUMBER: 900-A-P2214
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**PLAN VIEW**  
NOT TO SCALE

SEE 900-A-P2215.2 FOR NOTES

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A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	JMA	KPD

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**MAUREPAS PIPELINES PROJECT  
TYPICAL DAM AND PUMP  
"DRY" STREAM CROSSING**

JOB NUMBER: 80095      DRAWING NUMBER: 900-A-P2215.1

DAM AND PUMP "DRY" STREAM CROSSING NOTES:

1. THE REQUIRED SET BACK FOR ATWS IS 50' FROM THE TOP OF BANK.
2. THE MINIMUM REQUIRED SET BACK FOR SPOIL PILE IS 25' FROM THE TOP OF BANK. THIS MATERIAL MUST BE CONTAINED AND SURROUNDED BY SILT FENCE PROTECTION TO PREVENT SATURATED SOIL FROM FLOWING BACK INTO THE WATERCOURSE.
3. STAKED STRAW BALES MAY BE USED IN LIEU OF SILT FENCE.
4. SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD TO THE MAXIMUM EXTENT POSSIBLE.
5. ENSURE THAT THE DAM AND VEHICLE CROSSING ARE LOCATED FAR ENOUGH APART FROM EACH OTHER TO ALLOW FOR AN EXCAVATION.
6. SET UP PUMP AND HOSE AS SHOWN, OR USE OTHER PRACTICAL ALTERNATIVES. PUMP SHOULD HAVE TWICE THE PUMPING CAPACITY OF ANTICIPATED FLOW. HAVE STANDBY PUMP ON SITE.
7. INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS OR CLEAN GRAVEL WITH PLASTIC LINER. INSTALL DOWNSTREAM DAM IF REQUIRED TO KEEP STREAM BED DRY. ACCEPTABLE ALTERNATIVES INCLUDE STEEL PLATE AND ROCKFILL. DURING INSTALLATION, INSTALL AN IMPERVIOUS MEMBRANE AS NECESSARY, TO LIMIT LEAKAGE. DAM MAY NEED KEYING INTO THE BANK AND STREAMBED.
8. EXCAVATE TRENCH THROUGH PLUGS AND UNDER HOSE FROM BOTH SIDES. WORK IS TO BE COMPLETED AS QUICKLY AS POSSIBLE.
  - A. LOWER IN PIPE BY PASSING UNDER HOSE AND BACKFILL IMMEDIATELY WITH SPOIL MATERIAL.
  - B. IF THE SPOIL MATERIAL IS NOT SUITABLE, USE IMPORTED CLEAN GRANULAR MATERIAL.
  - C. IF BLASTING IS REQUIRED, USE CONTROLLED BLASTING TECHNIQUES TO PREVENT DAMAGE TO THE FLOW CONVEYANCE SYSTEM. ALTERNATIVELY, BLASTING MAY BE ACCOMPLISHED PRIOR TO CONSTRUCTING THE CROSSING.
9. DISMANTLE DOWNSTREAM DAM, THEN UPSTREAM DAM. KEEP PUMP RUNNING TO MAINTAIN FLOW.
10. MONITOR DAM AND PUMP FOR PROPER OPERATION THROUGHOUT THE CROSSING INSTALLATION.

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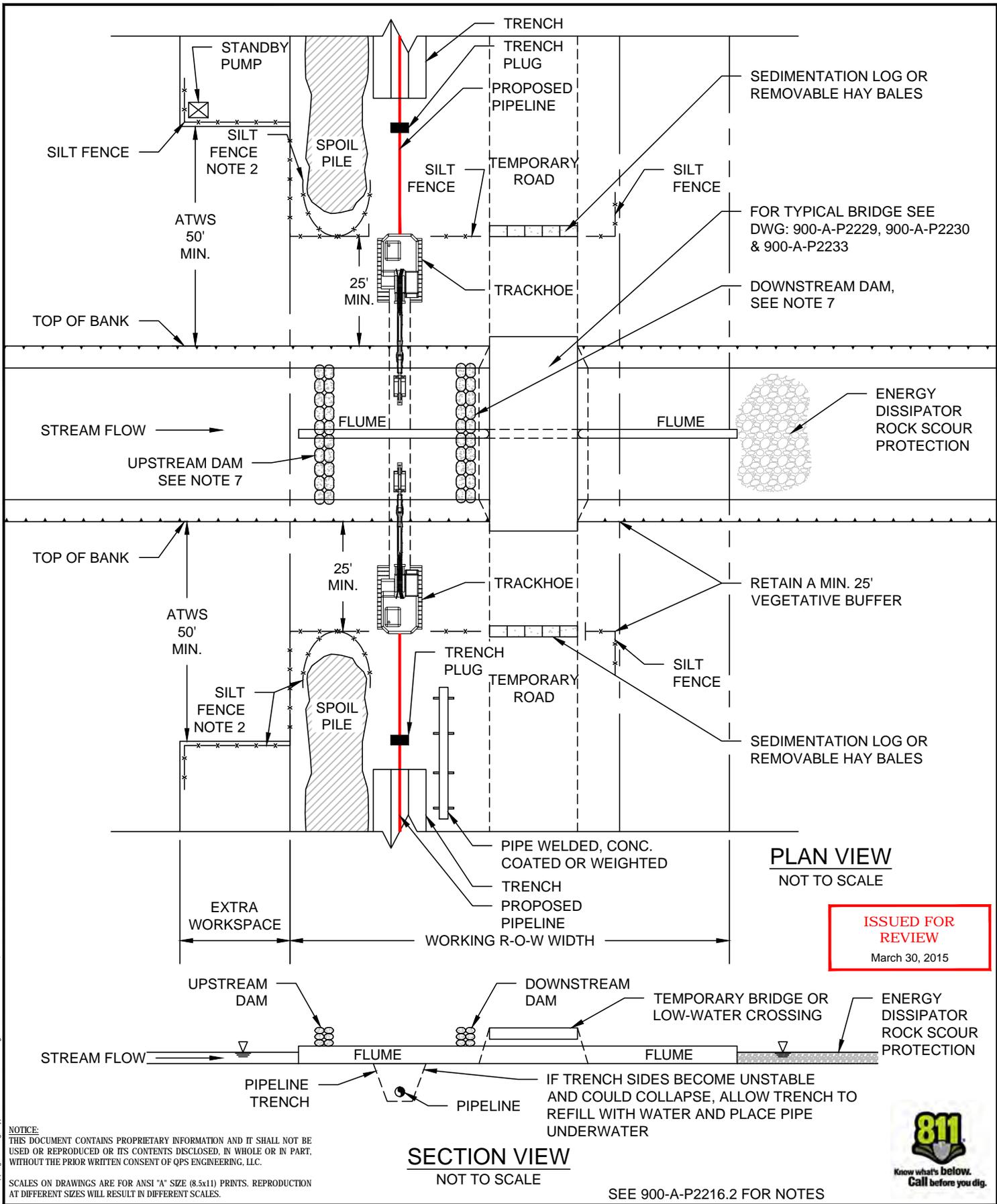
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**MAUREPAS PIPELINES PROJECT  
TYPICAL DAM AND PUMP  
"DRY" STREAM CROSSING NOTES**

<b>JOB NUMBER:</b> 80095	<b>DRAWING NUMBER:</b> 900-A-P2215.2
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REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
B	03/30/15	ISSUED FOR REVIEW	BJO	JMA	KPD
A	09/19/14	ISSUED FOR CORPS PERMIT	LJW	JMA	KPD

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**SECTION VIEW**  
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SEE 900-A-P2216.2 FOR NOTES

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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL DRY FLUME CROSSING**

JOB NUMBER: 80095  
 DRAWING NUMBER: 900-A-P2216.1

DRY FLUME CROSSINGS NOTES:

1. THE REQUIRED SET BACK FOR ATWS IS 50' FROM THE TOP OF BANK.
2. THE MINIMUM REQUIRED SET BACK FOR SPOIL PILE IS 25' FROM THE TOP OF BANK. THIS MATERIAL MUST BE CONTAINED AND SURROUNDED BY SILT FENCE PROTECTION TO PREVENT SATURATED SOIL FROM FLOWING BACK INTO THE WATERCOURSE.
3. STAKED STRAW BALES MAY BE USED IN LIEU OF SILT FENCE.
4. SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD TO THE MAXIMUM EXTENT POSSIBLE.
5. FLUME CAPACITY DURING DRY CROSSING SHALL BE SUFFICIENT TO ACCOMMODATE 1.5 TIMES THE FLOW MEASURED AT THE TIME OF CONSTRUCTION PROVIDED THAT THE FLUMES WILL BE IN PLACE NOT MORE THAN 72 HOURS AND NO PRECIPITATION IS FORECASTED.
6. ENSURE THAT THE DAM AND VEHICLE-CROSSING ARE LOCATED FAR ENOUGH APART FROM EACH OTHER TO ALLOW FOR AN EXCAVATION.
7. INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS OR CLEAN GRAVEL WITH PLASTIC LINER. INSTALL DOWNSTREAM DAM IF REQUIRED TO KEEP STREAM BED DRY. ACCEPTABLE ALTERNATIVES INCLUDE STEEL PLATE AND ROCKFILL. DURING INSTALLATION, INSTALL AN IMPERVIOUS MEMBRANE AS NECESSARY, TO LIMIT LEAKAGE. DAM MAY NEED KEYING INTO THE BANK AND STREAMBED.
8. EXCAVATE TRENCH THROUGH PLUGS AND UNDER FLUME FROM BOTH SIDES. WORK IS TO BE COMPLETED AS QUICKLY AS POSSIBLE.
  - A. LOWER IN PIPE BY PASSING UNDER FLUME AND BACKFILL IMMEDIATELY WITH SPOIL MATERIAL.
  - B. IF THE SPOIL MATERIAL IS NOT SUITABLE, USE IMPORTED CLEAN GRANULAR MATERIAL.
  - C. IF BLASTING IS REQUIRED, USE CONTROLLED BLASTING TECHNIQUES TO PREVENT DAMAGE TO THE FLOW CONVEYANCE SYSTEM. ALTERNATIVELY, BLASTING MAY BE ACCOMPLISHED PRIOR TO CONSTRUCTING THE CROSSING.
9. MONITOR FLUME FOR PROPER OPERATION THROUGHOUT THE CROSSING INSTALLATION.

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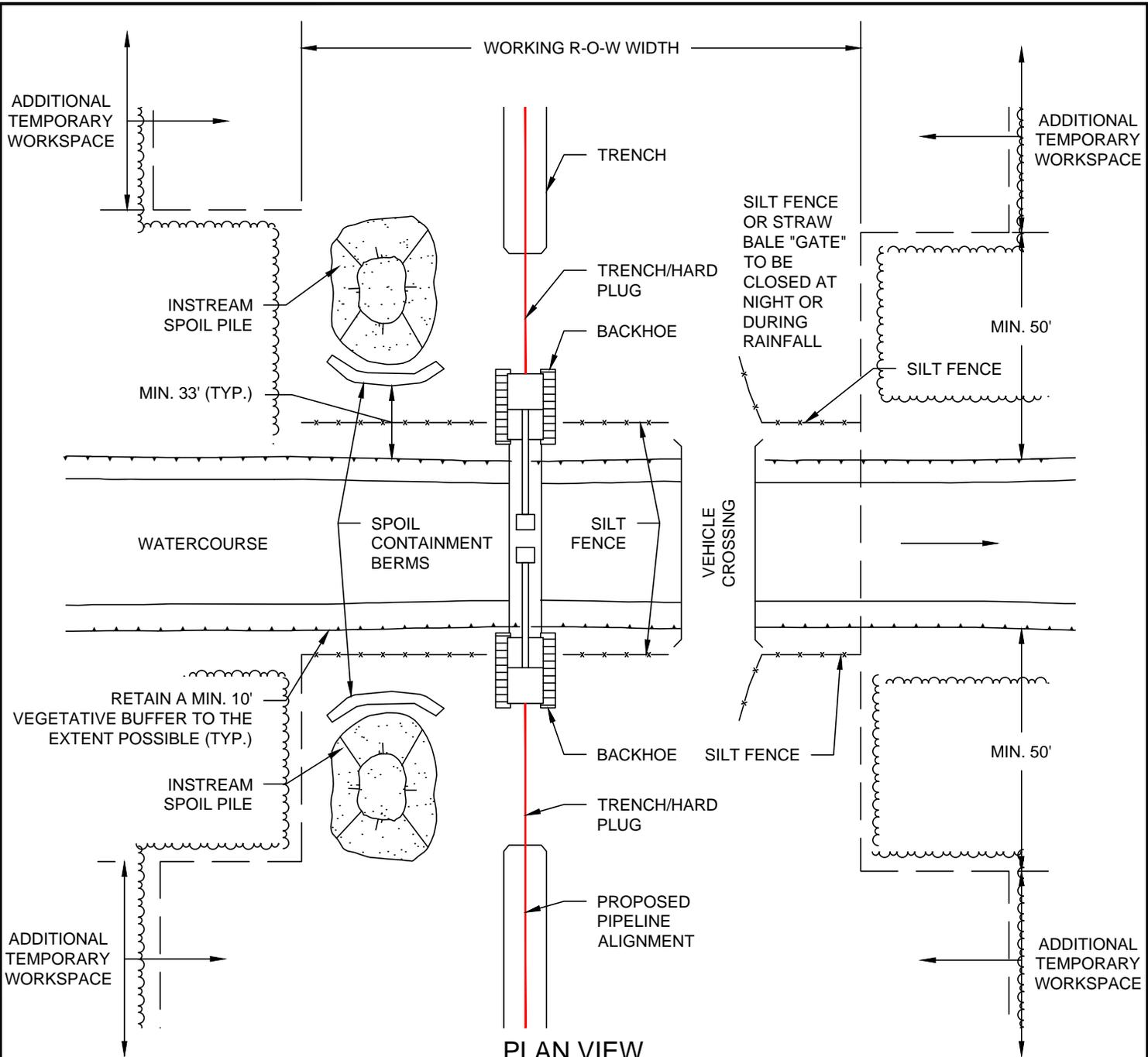
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**MAUREPAS PIPELINES PROJECT  
TYPICAL DRY FLUME CROSSING NOTES**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>900-A-P2216.2</b>
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**PLAN VIEW**  
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**SEQUENCE OF ACTIVITIES:**

- STEP 1. CLEAR AND GRADE.
- STEP 2. IMPLEMENT THE TEMPORARY EROSION AND SEDIMENT CONTROLS.
- STEP 3. FABRICATE PIPE.
- STEP 4. EXCAVATE TRENCH AND INSTALL PIPE.
- STEP 5. BACKFILL AND RESTORE STREAM BANKS.
- STEP 6. IMPLEMENT THE PERMANENT EROSION AND SEDIMENT CONTROLS.

SEE 900-A-P2217.2 FOR NOTES

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**MAUREPAS PIPELINES PROJECT  
TYPICAL PIPELINE OPEN CUT  
WET CROSSING SHEET 1 OF 2**

JOB NUMBER:  
80095

DRAWING NUMBER:  
900-A-P2217.1

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**NOTES:**

**1. WORK SPACE:**

MINIMUM LIMITS ARE DEPICTED. ATWS MUST BE LOCATED A MINIMUM OF 50 FEET FROM WATERBODY

**2. CLEARING:**

MARK CLEARING LIMITS AND MINIMIZE CLEARING OF RIPARIAN VEGETATION. WOODY VEGETATION SHALL BE CUT AT GROUND LEVEL AND THE STUMPS/ROOTS LEFT IN PLACE TO THE EXTENT POSSIBLE.

**3. TOPSOIL STRIPPING:**

TOPSOIL SHALL BE STRIPPED FROM ALL WETLAND AREAS OVER THE DITCH LINE AND SPOIL AREAS.

**4. SPILL PREVENTION:**

CONTRACTOR SHALL INSTALL SIGNS 100 FEET MINIMUM FROM EACH STREAM BANK AND WETLAND TO IDENTIFY THE HAZARDOUS MATERIALS EXCLUSION AREA.

**5. EROSION & SEDIMENT CONTROL:**

A. CONTRACTOR SHALL SUPPLY, INSTALL, AND MAINTAIN SEDIMENT CONTROL STRUCTURES, AS DEPICTED OR ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS STREAM OR WETLAND.

B. NO HEAVILY SILT LADEN WATER SHALL BE DISCHARGED DIRECTLY OR INDIRECTLY INTO THE STREAM. ALL EROSION AND SEDIMENT CONTROL STRUCTURE LOCATIONS AS DEPICTED ARE APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED BY THE COMPANY INSPECTOR TO SUIT ACTUAL SITE CONDITIONS. SILT FENCE OR STRAW BALE INSTALLATIONS SHALL INCLUDE REMOVABLE SECTIONS TO FACILITATE ACCESS DURING CONSTRUCTION.

C. SEDIMENT LADEN WATER FROM TRENCH DEWATERING SHALL BE DISCHARGED TO A WELL VEGETATED UPLAND AREA, INTO A STRAW BALE DEWATERING STRUCTURE OR GEOTEXTILE FILTER BAG. SEDIMENT CONTROL STRUCTURES MUST BE IN PLACE AT ALL TIMES ACROSS THE DISTURBED CONSTRUCTION RIGHT-OF-WAY EXCEPT DURING EXCAVATION/INSTALLATION OF THE CROSSING PIPE.

D. SOFT DITCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE MAINLINE DITCH FROM THE RIVER CROSSING UNTIL THE RIVER CROSSING IS INSTALLED AND BACKFILLED.

E. TRENCH BREAKERS ARE TO BE INSTALLED AT THE SAME SPACING AND IMMEDIATELY UPSLOPE OF PERMANENT SLOPE BREAKERS, OR AS DIRECTED BY THE COMPANY.

**6. INSTALLATION:**

CONTRACTOR SHALL MAINTAIN HARD PLUGS IN THE DITCH AT THE RIVER EDGE UNTIL JUST PRIOR TO PIPE INSTALLATION. CONTRACTOR SHALL EXCAVATE TRENCH AND INSTALL PIPE AS EXPEDIENTLY AS PRACTICAL TO REDUCE THE DURATION OF WORK ACTIVITIES IN THE STREAM BED.

**7. SPOIL PLACEMENT:**

CONTRACTOR SHALL PLACE TRENCH SPOIL ONLY IN CERTIFICATED WORK SPACE AND A MINIMUM OF 10 FEET FROM THE STREAM BANKS TO PREVENT ENTRY OF SPOIL INTO THE STREAM FLOW. SPOIL SHALL BE CONTAINED AS NECESSARY USING EITHER A STRAW BALE BARRIER OR AN EARTH/ROCK BERM.

**8. CLEANUP BANK STABILIZATION RESTORATION:**

CONTRACTOR SHALL RESTORE THE STREAM BED AND BANKS TO APPROXIMATE PRECONSTRUCTION CONTOURS, UNLESS OTHERWISE APPROVED BY THE COMPANY. CONTRACTOR SHALL INSTALL PERMANENT EROSION AND SEDIMENT CONTROL STRUCTURES AS INDICATED. ANY MATERIALS PLACED IN THE STREAM TO FACILITATE CONSTRUCTION SHALL BE REMOVED DURING RESTORATION. BANKS SHALL BE STABILIZED AND TEMPORARY SEDIMENT BARRIERS INSTALLED AS SOON AS POSSIBLE AFTER CROSSING, BUT WITHIN 24 HOURS OF COMPLETING THE CROSSING. MAINTAIN A SILT FENCE OR STRAW BALE BARRIER ALONG THE WATERCOURSE AND WETLAND BOUNDARIES UNTIL VEGETATION IS ESTABLISHED IN ADJACENT DISTURBED AREAS.

**9. TEMPORARY VEHICLE CROSSING:**

VEHICLE CROSSING CAN BE CONSTRUCTED USING EITHER A FLUME CROSSING OR A TEMPORARY BRIDGE.

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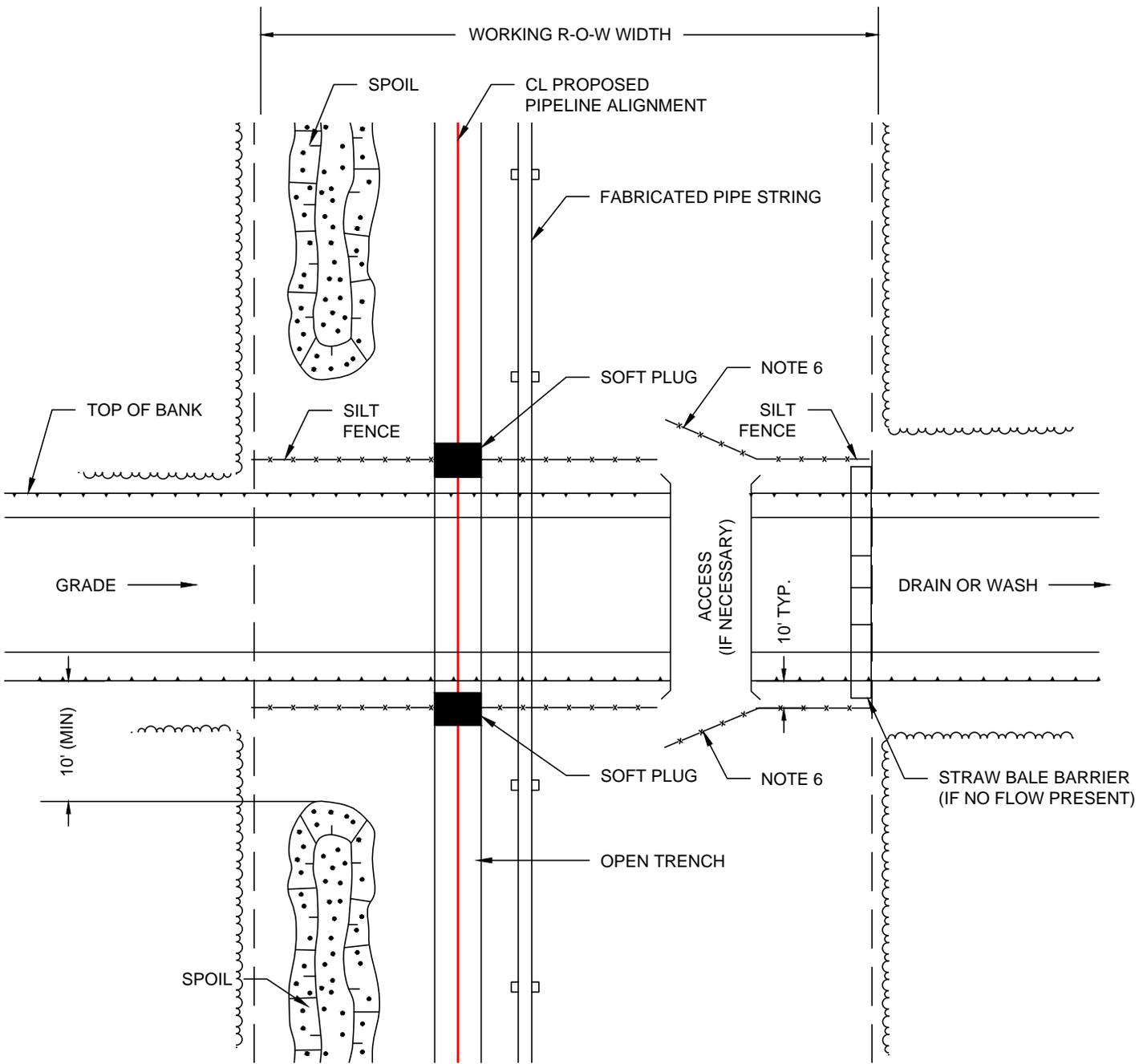
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**MAUREPAS PIPELINES PROJECT  
TYPICAL PIPELINE OPEN CUT  
WET CROSSING SHEET 2 OF 2**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>900-A-P2217.2</b>
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**PLAN VIEW**  
NOT TO SCALE

**NOTES:**

1. APPLICABLE TO MINOR (<10') WATERBODIES THAT ARE NOT FLOWING AT THE TIME OF CONSTRUCTION, OR DO NOT SUPPORT A SIGNIFICANT FISHERY.
2. VEHICLE ACCESS IS ONLY REQUIRED WHERE NECESSARY TO FACILITATE EQUIPMENT MOVEMENT AND MAY CONSIST OF TIMBER MATS, TEMPORARY BRIDGES, RAIL FLATCARS OR FLUME CROSSINGS.
3. INSTALL SOFT PLUGS FOLLOWING EXCAVATION OF MAINLINE DITCH THROUGH CROSSING.
4. INSTALL SEDIMENT BARRIERS AS INDICATED. PROTECT ACCESS WITH SILT FENCE GATES OR STRAW BALE BARRIERS.
5. MAINLINE PIPE SECTION MAY SPAN CROSSING IN PREPARATION FOR LOWERING IN PIPE.
6. SILT FENCE OR STRAW BALE "GATE" TO BE CLOSED AT NIGHT OR DURING RAINFALL.
7. ADDITIONAL TWS MUST BE SET BACK A MINIMUM 50' FROM THE TOP OF BANK.

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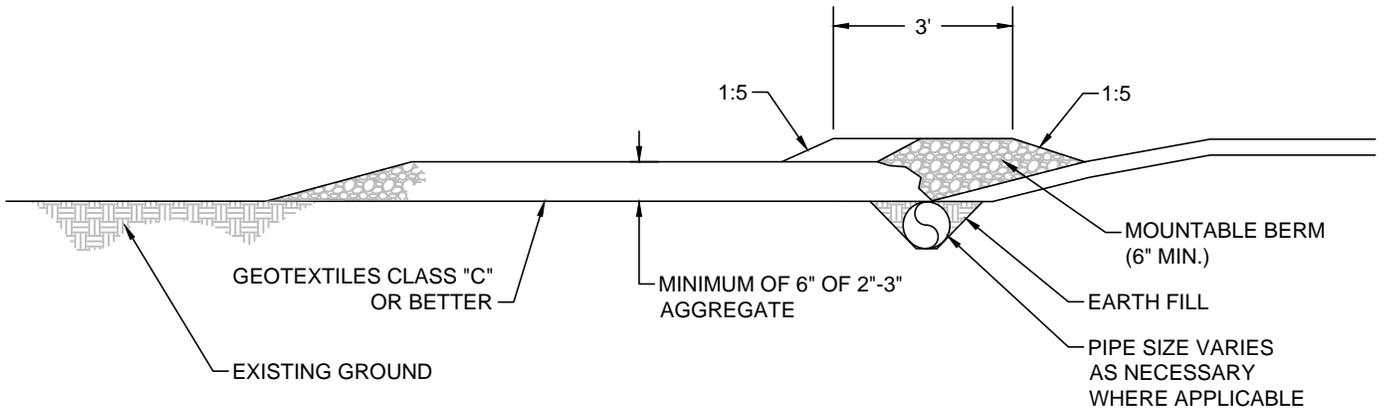
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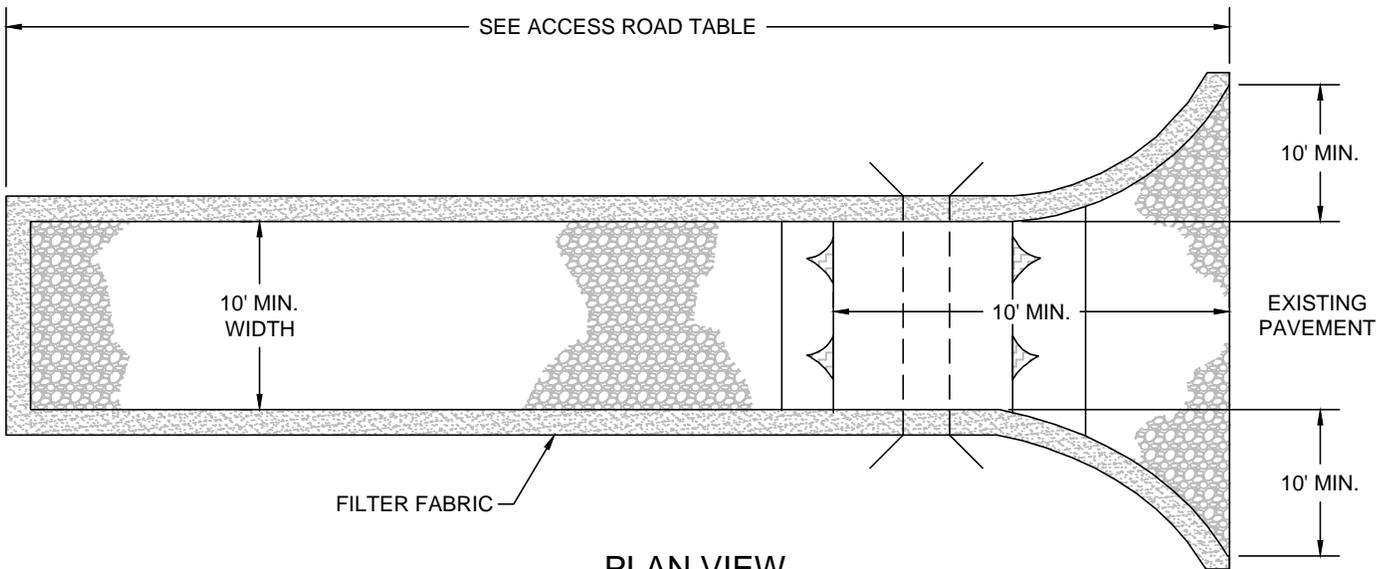
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**MAUREPAS PIPELINES PROJECT**  
**TYPICAL NON-FLOWING INTERMITTENT/**  
**AGRICULTURAL OPEN CUT CROSSING**

JOB NUMBER: 80095	DRAWING NUMBER: 900-A-P2218
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**PROFILE VIEW**  
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**PLAN VIEW**  
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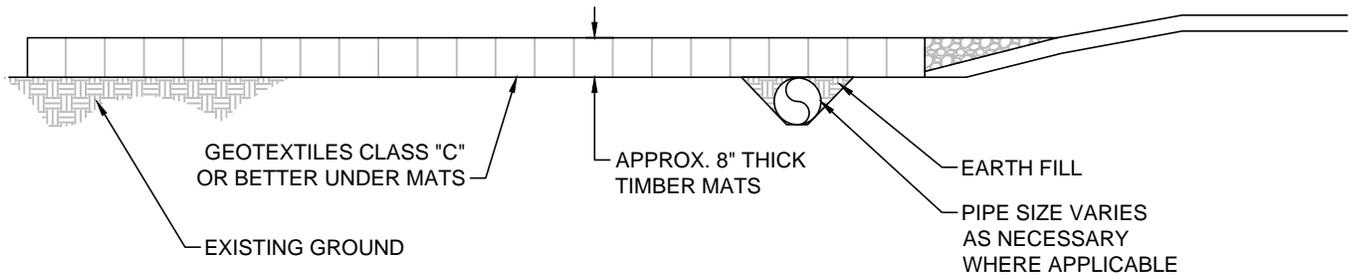


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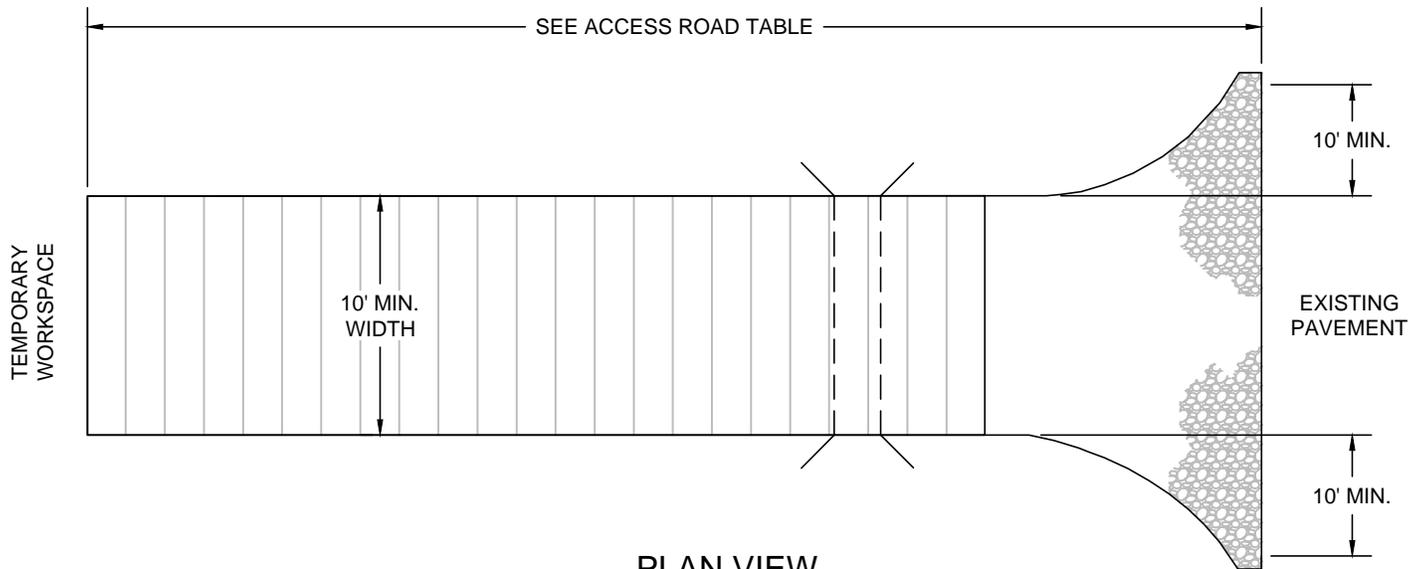
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**MAUREPAS PIPELINES PROJECT  
TYPICAL ROCK  
CONSTRUCTION ENTRANCE**

JOB NUMBER: 80095	DRAWING NUMBER: 900-A-P2228
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**PLAN VIEW**  
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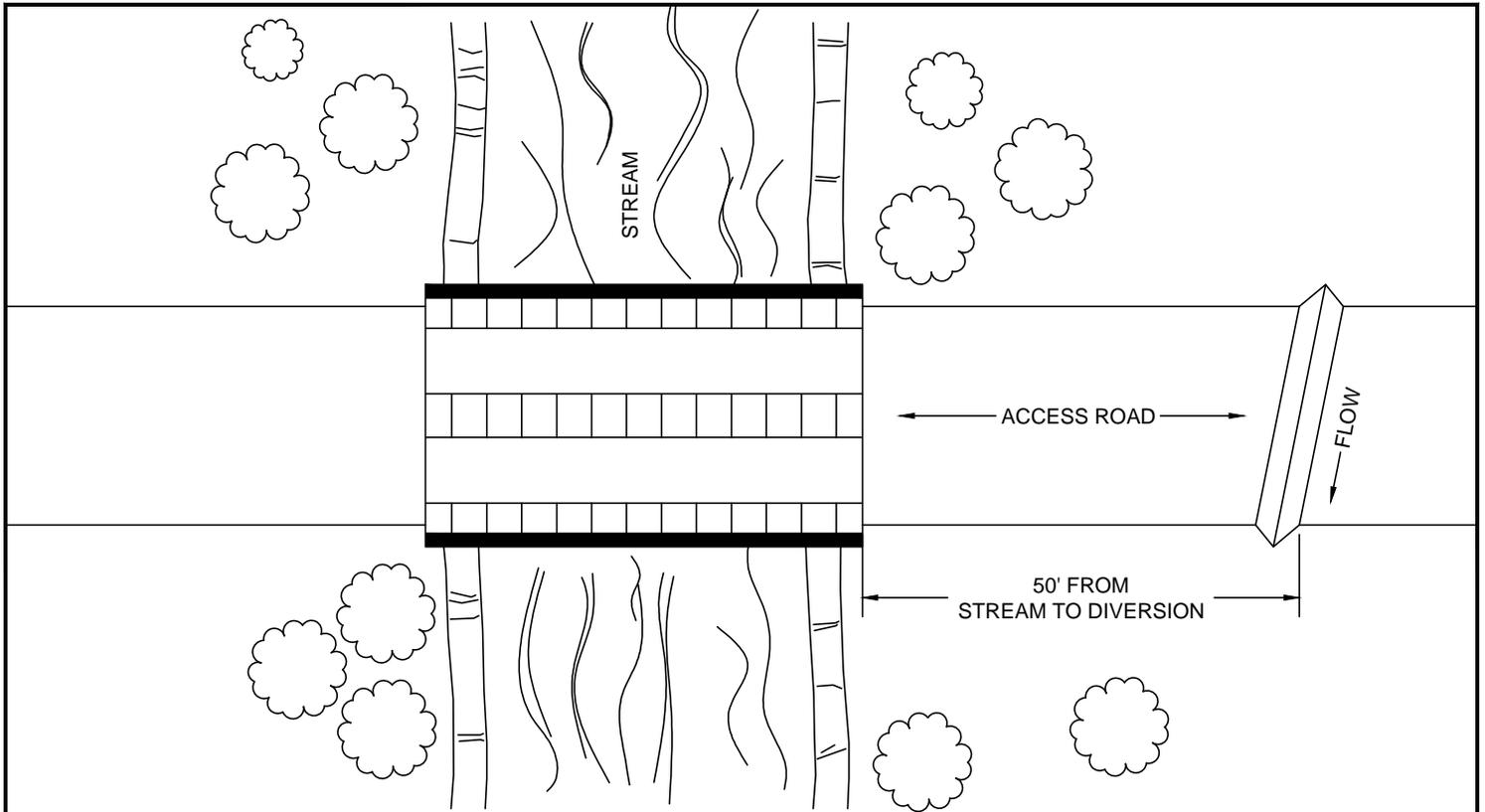


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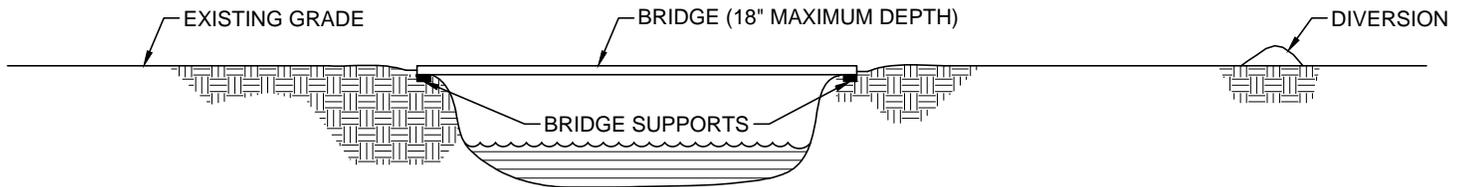
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**MAUREPAS PIPELINES PROJECT  
TYPICAL TIMBER MAT  
CONSTRUCTION ENTRANCE**

JOB NUMBER: <b>80095</b>	DRAWING NUMBER: <b>900-A-P2228A</b>
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**PLAN VIEW**  
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**SECTION VIEW**  
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**NOTES:**

1. A PRE-FABRICATED BRIDGE OR FLATBED RAILCAR CROSSING MAY BE SUBSTITUTED FOR THE TEMPORARY BRIDGE.
2. INSTALL THE BRIDGE IN A MANNER THAT WILL MINIMIZE SEDIMENT ENTERING THE WATER. STRINGERS MUST BE DESIGNED TO SUPPORT THE LOADS EXPECTED ON THE BRIDGE. CURBS AT LEAST 6" HIGH MUST BE INSTALLED ALONG THE EDGE OF THE DECK TO CONTAIN SEDIMENT AND DEBRIS ON THE BRIDGE. FASTENERS CONNECTING COMPONENTS MUST BE STRONG ENOUGH TO HOLD THEM IN POSITION DURING THE LIFE OF THE BRIDGE.
3. ROAD APPROACHES LEADING TO THE BRIDGE MUST BE LEVEL AND STABLE SO EQUIPMENT LOADS ARE SUPPORTED A SUFFICIENT DISTANCE BACK FROM THE WATER TO REDUCE SEDIMENT AND DEBRIS ENTERING THE STREAM FROM EQUIPMENT TRACKS. DO NOT USE SOIL TO CONSTRUCT OR STABILIZE EQUIPMENT BRIDGES. NO FILL MATERIAL SHALL BE USED TO TRANSITION FROM ACCESS ROAD TO BRIDGE DECK. IF CUTS ARE NEEDED TO OBTAIN A SATISFACTORY GRADE, THEY ARE TO BE DUG WITH SIDE DITCHES AND STABLE SLOPES. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED TO KEEP SEDIMENT ON LAND (E.G., SILT FENCING, FILTER CLOTH, RIP-RAP, SEED AND MULCH, ETC.)
4. PERIODICALLY CHECK BRIDGE INSTALLATION AND REMOVE ANY BUILD-UP OF SEDIMENT OR DEBRIS ON THE BRIDGE.

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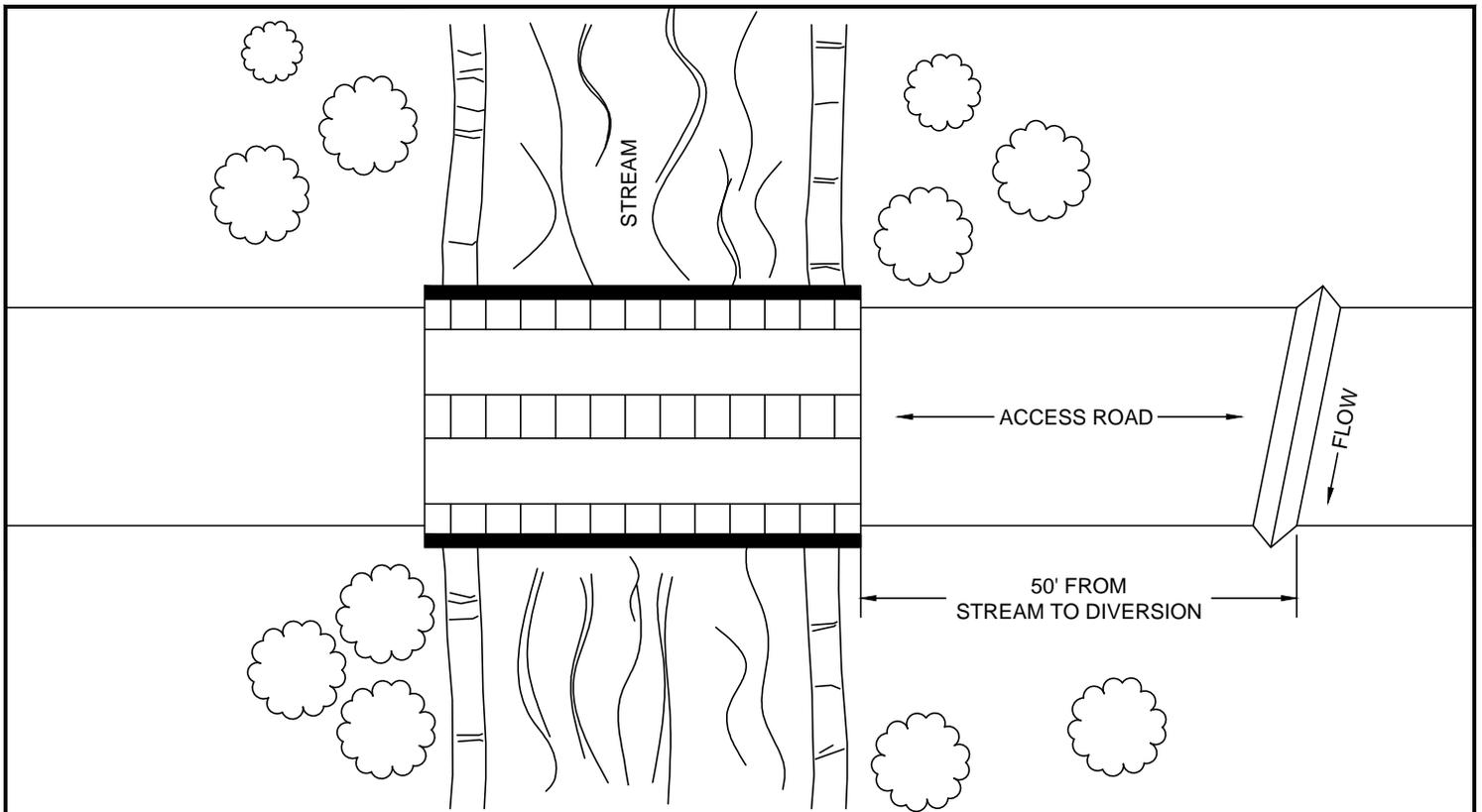
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**MAUREPAS PIPELINES PROJECT  
TYPICAL TEMPORARY BRIDGE AT  
FLOODPLAIN CROSSINGS**

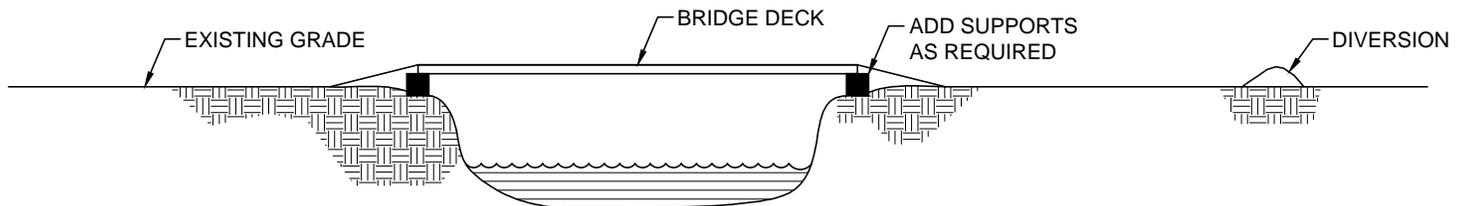
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**SECTION VIEW**  
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**NOTES:**

1. A PRE-FABRICATED BRIDGE OR FLATBED RAILCAR CROSSING MAY BE SUBSTITUTED FOR THE TEMPORARY BRIDGE.
2. INSTALL THE BRIDGE IN A MANNER THAT WILL MINIMIZE SEDIMENT ENTERING THE WATER. STRINGERS MUST BE DESIGNED TO SUPPORT THE LOADS EXPECTED ON THE BRIDGE. CURBS AT LEAST 6" HIGH MUST BE INSTALLED ALONG THE EDGE OF THE DECK TO CONTAIN SEDIMENT AND DEBRIS ON THE BRIDGE. FASTENERS CONNECTING COMPONENTS MUST BE STRONG ENOUGH TO HOLD THEM IN POSITION DURING THE LIFE OF THE BRIDGE.
3. ROAD APPROACHES LEADING TO THE BRIDGE MUST BE LEVEL AND STABLE SO EQUIPMENT LOADS ARE SUPPORTED A SUFFICIENT DISTANCE BACK FROM THE WATER TO REDUCE SEDIMENT AND DEBRIS ENTERING THE STREAM FROM EQUIPMENT TRACKS. SOIL MAY BE USED TO SUPPORT OR STABILIZE EQUIPMENT BRIDGES. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED TO KEEP SEDIMENT ON LAND (E.G., SILT FENCING, FILTER CLOTH, RIP-RAP, SEED AND MULCH, ETC.)
4. PERIODICALLY CHECK BRIDGE INSTALLATION AND REMOVE ANY BUILD-UP OF SEDIMENT OR DEBRIS ON THE BRIDGE.

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SCALES ON DRAWINGS ARE FOR ANSI "A" SIZE (8.5x11) PRINTS. REPRODUCTION AT DIFFERENT SIZES WILL RESULT IN DIFFERENT SCALES.

**ISSUED FOR REVIEW**  
March 30, 2015



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**MAUREPAS PIPELINES PROJECT  
TYPICAL TEMPORARY BRIDGE AT  
NON-FLOODPLAIN CROSSINGS**

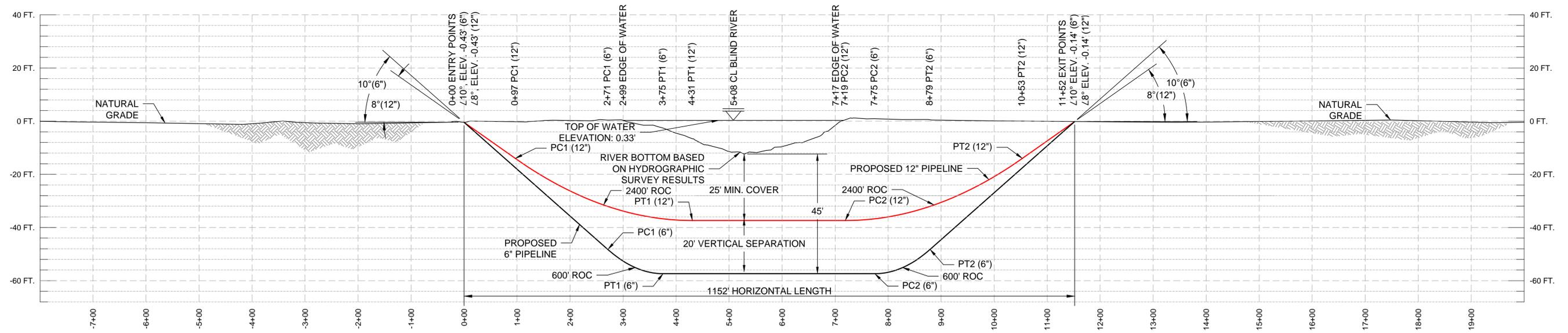
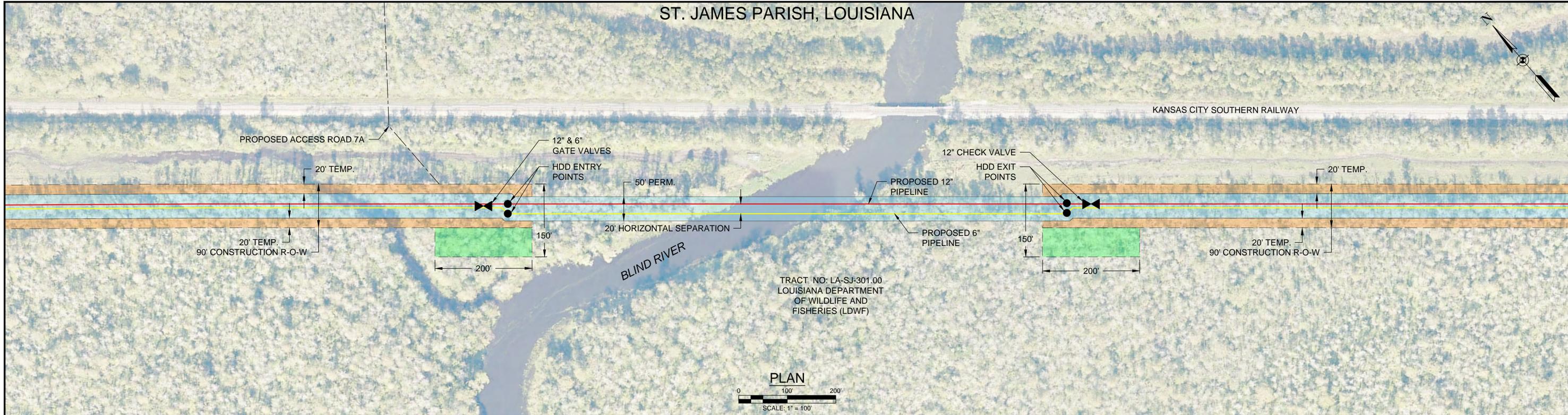
REV	DATE	REVISION DESCRIPTION	BY	CKD	APP
B	03/30/15	ISSUED FOR REVIEW	BJO	JMA	KPD
A	12/02/14	ISSUED FOR REVIEW	LJW	BJO	KPD

JOB NUMBER: 80095

DRAWING NUMBER: 900-A-P2230

P:\CADD\PROJECTS\80095 - Maurepas Pipeline Mapping\Drawings\Typicals\900-A-P2230.dwg PLOTTED BY: WIMMER, LAURA @ 3/26/2015 8:45 AM

ST. JAMES PARISH, LOUISIANA



HORIZONTAL DIRECTIONAL DRILL DATA (6")		
DESCRIPTION	STATION	ELEVATION
ENTRY @ 10°	0+00	-0.43'
POINT OF CURVATURE 1 (600' RADIUS)	2+71	-48'
POINT OF TANGENT 1 (BEGIN HORIZONTAL SECTION)	3+75	-57'
POINT OF CURVATURE 2 (600' RADIUS)	7+75	-57'
POINT OF TANGENT 2	8+79	-48'
EXIT @ 10°	11+52	-0.14'

**T.B.M.:**  
TBD

**GEOTECHNICAL DATA:**  
GEOTECHNICAL SURVEY HAS NOT BEEN CONDUCTED.

**CARRIER PIPE:**  
6", 0.280" W.T., API 5L X-42, 16 MILS FBE + 32 MILS ARO COATED

**COORDINATE SYSTEM:**  
STATE PLANE, LOUISIANA SOUTH, NAD83, US FEET

**DESIGN DATA:**  
CROSSING PIPE LENGTH: 1152'  
HORIZONTAL LENGTH: 1152'  
DESIGN FACTOR: 0.5  
MOP: 1480 PSIG

- NOTES:**
- HDD DESIGN IS PRELIMINARY AND IS SUBJECT TO CHANGE BASED ON CIVIL SURVEY AND GEOTECHNICAL SURVEY DATA.
  - CONTRACTOR TO SUPPORT EXISTING UTILITIES/CABLES.
  - CONTRACTOR TO GRADE EXCAVATION AREA AND RESTORE TO ORIGINAL CONDITION.
  - CONTRACTOR TO LOCATE AND MARK (OR POTHOLE WHERE NECESSARY) FOREIGN LINES PRIOR TO EXCAVATION (AND MONITOR DURING DRILLING).
  - CONTRACTOR TO LOCATE AND MAT OVER EXISTING LINES WHERE NECESSARY, INCLUDING ACCESS TO AND FROM THE WORK SITE FROM THE ACCESS ROAD.
  - CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND SIGNAGE IN ACCORDANCE WITH LOCAL REQUIREMENTS.
  - UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND DEPTH UNKNOWN.
  - SITE ACCESS TO BE DETERMINED.

HORIZONTAL DIRECTIONAL DRILL DATA (12")		
DESCRIPTION	STATION	ELEVATION
ENTRY @ 8°	0+00	-0.43'
POINT OF CURVATURE 1 (2400' RADIUS)	0+97	-14'
POINT OF TANGENT 1 (BEGIN HORIZONTAL SECTION)	4+31	-37'
POINT OF CURVATURE 2 (2400' RADIUS)	7+19	-37'
POINT OF TANGENT 2	10+53	-14'
EXIT @ 8°	11+52	-0.14'

**T.B.M.:**  
TBD

**GEOTECHNICAL DATA:**  
GEOTECHNICAL SURVEY HAS NOT BEEN CONDUCTED.

**CARRIER PIPE:**  
12", 0.375" W.T., API 5L X-65, 16 MILS FBE + 2.5" INSULATION

**CASING PIPE:**  
24" HDPE PIPE

**COORDINATE SYSTEM:**  
STATE PLANE, LOUISIANA SOUTH, NAD83, US FEET

**DESIGN DATA:**  
CROSSING PIPE LENGTH: 1156'  
HORIZONTAL LENGTH: 1152'  
DESIGN FACTOR: 0.5  
MOP: 1832 PSIG

**LEGEND:**

- 6" PIPELINE
- 12" PIPELINE
- 24" PIPELINE
- PERMANENT SERVITUDE
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE
- FOREIGN PIPELINE
- PROPERTY BOUNDARY
- TOP OF BANK
- TOE OF SLOPE
- CL DITCH
- FENCE
- TREELINE

REV	DATE	REVISION DESCRIPTION	BY	CHKD	APP
C	03/09/15	ISSUED FOR PERMIT	BJO	JMA	KPD
B	11/20/14	REVISED TO 12" DIAMETER (2000' ROC)	MLS	JMA	KPD
A	11/13/14	PRELIMINARY DRAFT ISSUE	MLS	JMA	KPD

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**MAUREPAS PIPELINES PROJECT  
BLIND RIVER  
HORIZONTAL DIRECTIONAL DRILL**

JOB NUMBER: 80095  
DRAWING NUMBER: 900-D-P1501

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