

#### **DEPARTMENT OF THE ARMY**

U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT 7400 LEAKE AVE NEW ORLEANS, LA 70118-3651

August 14, 2023

Regulatory Division
Western Evaluation Branch

Project Manager: Amy Oestringer (504) 862-2236

Email: Comments-MVN-2021-00560-WQQ-VentureGlobal@usace.army.mil

Application #: MVN-2021-00560-WQQ

## **PUBLIC NOTICE**

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [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), and/or [X] Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 408).

# PROPOSED CP2 LIQUEFIED NATURAL GAS FACILITY AND CP EXPRESS PIPELINE IN CALCASIEU AND CAMERON PARISHES

**NAME OF APPLICANT:** Venture Global CP2 LNG, LLC and Venture Global CP Express, LLC c/o: Environmental Resources Management, Attn: Alissa Ingham, 222 South 9th Street, Suite 2900, Minneapolis, MN 55402.

LOCATION OF WORK: The proposed facility and pipeline are located within the New Orleans and Galveston Districts, with the facility located on the east bank of the Calcasieu Ship Channel, in Cameron Parish, Louisiana, and the proposed 85.4 miles of pipeline to be located in Texas and Louisiana. Approximately 58.1 miles of the CP Express pipeline will be located in Calcasieu and Cameron Parishes, as shown on the attached drawings (located in the Calcasieu and Sabine Watersheds).

<u>CHARACTER OF WORK:</u> To construct and operate (1) natural gas liquefaction, storage, and export facilities at a Liquefied natural gas (LNG) terminal (Terminal Facilities) near the mouth of the Calcasieu Ship Channel in Cameron Parish, Louisiana; and (2) associated pipeline facilities connecting the Terminal Facilities to the existing natural gas pipeline grid in east Texas and southwest Louisiana (Pipeline System). The

Terminal Facilities consist of the mainland Terminal Site east of the ship channel and the Marine Facilities on Monkey Island. LNG transfer and utility lines will run underground between the Terminal Site and the Marine Facilities. The attached tables summarize the impacts on wetlands and other waters of the U.S. associated with the proposed Terminal Facilities and Pipeline System, and as further described below.

### **CP2 LNG Terminal Facilities**

The Terminal Facilities will be constructed on 785.5 acres. Five existing storage yards (including four marine yards on Calcasieu Pass) close to the Terminal Facilities will support construction. These yards comprise an additional 38.3 acres.

The Terminal Site will affect 631.7 acres and will include pretreatment, liquefaction, power generation, storage, and support facilities. The Marine Facilities will occupy 122.2 acres on the southwest shoreline of Monkey Island, which is located between the Calcasieu Ship Channel and Calcasieu Pass. The Marine Facilities will include two LNG carrier loading docks, an excavated/dredged berthing area, and land-based support facilities. Three 1.0-mile-long, 42-inch outside diameter LNG transfer pipelines, a boil-off gas pipeline, and associated utilities will run underground within a 31.6-acre temporary construction corridor between the Terminal Site and Marine Facilities.

At the Terminal Site, approximately 327.9 acres of wetlands will be impacted, including 286.3 acres of palustrine emergent (PEM) wetland, 32.1 acres of palustrine scrub-shrub (PSS) wetland, 1.7 acres of palustrine forested (PFO) wetland, and 7.8 acres of estuarine intertidal emergent (E2EM) wetland (also categorized as essential fish habitat [EFH]). Of the 327.9 impacted wetland acres, 314.8 acres will be permanently impacted, 0.7 acre will be subject to extended temporary impacts (lasting for the full duration of Project construction), and 12.4 acres will be subject to short-term temporary impacts. Approximately 4.2 acres of open waters will be permanently impacted and 1.0 acre will be temporarily impacted.

At the Marine Facilities on Monkey Island, approximately 41.2 acres of wetlands will be permanently impacted, including 13.8 acres of PEM wetland, 12.6 acres of PSS wetland, 0.6 acre of PFO wetland, and 14.2 acres of E2EM wetland. Of the 14.2 acres of E2EM wetland, 12.5 shoreline acres within the dredge prism will be converted to open water and 1.7 acres will be permanently filled for onshore facility construction. The E2EM wetland is categorized as EFH, along with 19.4 acres of tidal waters within the dredge prism, the 0.3 acre of land-based open waters that will be permanently removed, and the 0.2 acre of land-based open waters that will be converted to deep water.

During construction, a temporary 6.8-mile-long pipeline will transport dredged material from the Marine Facilities to a marsh creation/restoration site located at Cameron Prairie National Wildlife Refuge (CPNWR). The pipeline will temporarily impact approximately 15.0 acres of PEM wetlands and 0.1 acre of PSS wetlands.

### Pipeline System

CP Express will construct approximately 85.4 miles of 48-inch-diameter underground natural gas pipeline (CP Express Pipeline), 6.0 miles of 24-inch-diameter underground lateral pipeline (Enable Gulf Run Lateral), and associated aboveground facilities, all in Texas and Louisiana. Facilities located within the USACE-New Orleans District will be constructed on approximately 1,339.4 acres of land and include 58.5 miles of the CP Express Pipeline, most of the 6.0-mile-long Enable Gulf Run Lateral, one compressor station (Moss Lake Compressor Station), two standalone mainline valves, three standalone meter stations, and permanent access roads. Construction of the Pipeline System will be supported by four temporary storage yards, all in Calcasieu Parish, and temporary access roads.

The Pipeline System will impact approximately 741.8 acres of wetlands, including 388.8 acres of PEM wetland, 28.7 acres of PSS wetlands, 22.5 acres of PFO wetlands, 299.9 acres of E2EM wetlands, 0.4 acre of estuarine intertidal scrub-shrub (E2SS) wetlands, and 1.5 acres of palustrine aquatic bed (PAB) wetlands. Approximately 33.0 acres of wetlands will be permanently lost (32.5 acres of PEM wetlands, 0.1 acre of PFO wetlands, and 0.4 acre of E2EM wetlands). In addition, 22.4 acres of PFO wetlands will be converted to another wetland type. Most wetlands on the Pipeline System will be only temporarily impacted, including 356.3 acres of PEM wetland, 28.7 acres of PSS wetland, 299.5 acres of E2EM wetland, 0.4 acre of E2SS wetland, and 1.5 acres of PAB wetland. Horizontal directional drilling will avoid 16.9 acres of wetland impacts.

If a Department of the Army permit would be issued, the applicant has proposed a combination of purchasing mitigation bank credits from acceptable mitigation banks within the N.O. District, and a marsh creation/restoration project to mitigate unavoidable wetlands impacts.

The Federal Energy Regulatory Commission (FERC) has prepared an Environmental Impact Statement (EIS) for the proposed LNG terminal and pipeline. The terminal facilities are located in Cameron Parish, Louisiana. The proposed pipeline originates in Jasper County, Texas, and terminates at the terminal site in Cameron Parish, Louisiana. The FERC published a Final EIS in July of 2023, under Docket numbers CP22-21-000 and CP22-22-000. Information regarding the FERC review can be found on their website at: <a href="www.ferc.gov/news-events/news/final-eis-cp2-lng-and-cp-express-project-cp22-21000-cp22-22-000">www.ferc.gov/news-events/news/final-eis-cp2-lng-and-cp-express-project-cp22-21000-cp22-22-000</a>. The FERC has been identified as the lead federal agency and will be responsible for complying with Section 7 of the Endangered Species Act, National Historic Preservation Act, and Magnuson-Stevens Fishery Conservation and Management Act for areas under their jurisdiction.

The Corps has acted as a cooperating agency on the preparation of the EIS with FERC. The New Orleans District is evaluating the proposed facility and terminal site located in Cameron Parish, and the pipeline segment that extends to the terminal site to their District Boundary with the Galveston District Corps in Calcasieu Parish.

The Galveston District Corps is evaluating the proposed pipeline segment extending from Calcasieu Parish, at their District Boundary, into Newton and Jasper Counties, in Texas. The Galveston District file number is SWG-2021-00499. Once issued, their public notice would be found at: Galveston District > Media > Public Notices (army.mil)

The comment period on the requested Department of the Army Permit will close **20 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 request, and must be submitted so as to be received before or by the last day of the comment period. Letters and/or comments concerning the subject permit application must reference the Applicant's Name and the Permit Application Number and can be <u>preferably</u> emailed to the Corps of Engineer's email address:

Comments-MVN-2021-00560-WQQ-VentureGlobal@usace.army.mil or forwarded to the Corps of Engineers at the physical mailing address above, <a href="Matter:ATTENTION:">ATTENTION:</a>
<a href="Matter:REGULATORY DIVISION">REGW, Amy Oestringer</a>. Individuals or parties may also request an extension of time in which to comment on the proposed work by mail or preferably by emailing the specified project manager listed above. Any request for an extension of time to comment must be specific and substantively supportive of the requested extension and received by this office prior to the end of the initial comment period. The Branch Chief will review the request and the requester will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous and inclusive of the initial comment period and will not exceed a total of 30 calendar days. This public notice is also available for review online at: <a href="https://www.mvn.usace.army.mil/Missions/Regulatory/Public-Notices/">https://www.mvn.usace.army.mil/Missions/Regulatory/Public-Notices/</a>

#### **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.

This request will also be reviewed pursuant to Section 408 and USACE Engineering Circular (EC) 1165-2-220, which provides policy and procedural guidance for processing requests to alter USACE civil works projects. The decision whether to grant permission for the requested alteration will be based on several factors. The benefits that reasonably may be expected to accrue from the proposal will be balanced against its

reasonably foreseeable detriments. Review of the requests for modification will be reviewed by a USACE technical review team considering the following factors:

- 1) Potential to Impair the Usefulness of the Project. Proposed alterations will be reviewed to determine whether the alteration would limit the ability of the USACE project to function as authorized, or would compromise or change any authorized project conditions, purposes, or outputs. If USACE determines that the usefulness of the authorized project would be impaired, the request will be denied.
- 2) Potential to be Injurious to the Public Interest. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. This evaluation will consider information received from the interested parties, including tribes, agencies, and the public. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest.

The Section 408 review will consider the potential impact to the usefulness of the Federal project and whether the proposed alteration would be injurious to the public interest. Policy and legal compliance will also be considered.

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

The New Orleans District is presently unaware of properties listed on the National Register of Historic Places at or near the proposed work but is pending further review in accordance with the National Historic Preservation Act. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. As deemed necessary, copies of this public notice will be sent to the State Archeologist, State Historic Preservation Officer, and federally listed tribes regarding potential impacts to cultural resources.

FERC has entered into an informal consultation with the USFWS and the proposed plans are in review. This notice also initiates a request for review and concurrence of our findings for areas not covered under FERC jurisdiction. Based on the Information Planning and Consultation (IPaC) tool for Endangered Species in Louisiana, as signed on January 27, 2020, between the U.S. Army Corps of Engineers, New Orleans and the U.S. Fish and Wildlife Service, it has been determined that the project is located in areas known to be utilized by the West Indian Manatee (*Trichechus manatus*), Eastern Black Rail (*Laterallus jamaicensis ssp. Jamaicensis*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), and the Redcockaded Woodpecker (*Picoides borealis*). CEMVN will coordinate the effect determination with USFWS for areas under Corps jurisdiction.

Our initial finding is that the proposed work may affect species listed as endangered by the U.S. Department of Commerce, and/or habitat designated as critical to the survival and recovery of any such species. FERC has entered into informal consultation with National Marine Fisheries Service (NMFS) for areas in their jurisdiction. This notice also initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act for areas outside of FERC jurisdiction. The applicant's overall proposal may result in the destruction, alteration, and/or disturbance of approximately **2,500 acres** that can be considered essential fish habitat (EFH) for red drum, reef fish, coastal migratory pelagics, and shrimp, due to tidal hydrologic connectivity with mapped EFH areas (NMFS, 2021). Our initial determination is that the proposed action would not have a substantial adverse effect on EFH or federally managed fisheries in the Gulf of Mexico and would have a net beneficial effect. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

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

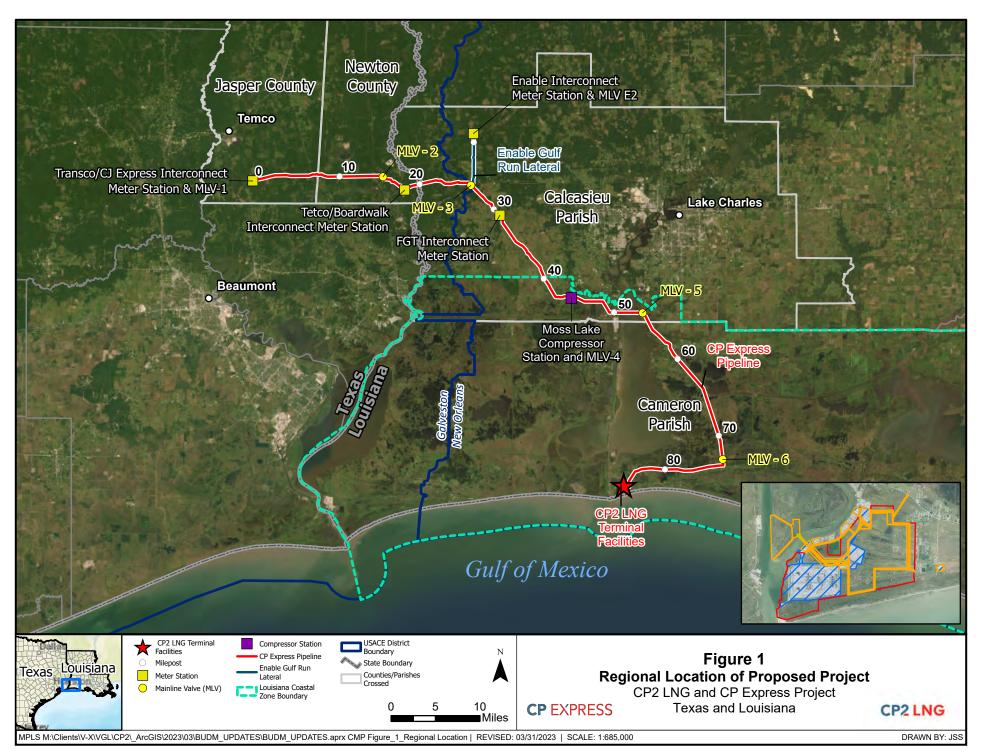
Any person may request within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing, and can be <u>preferably</u> emailed to the USACE email address listed above or mailed to the address listed above.

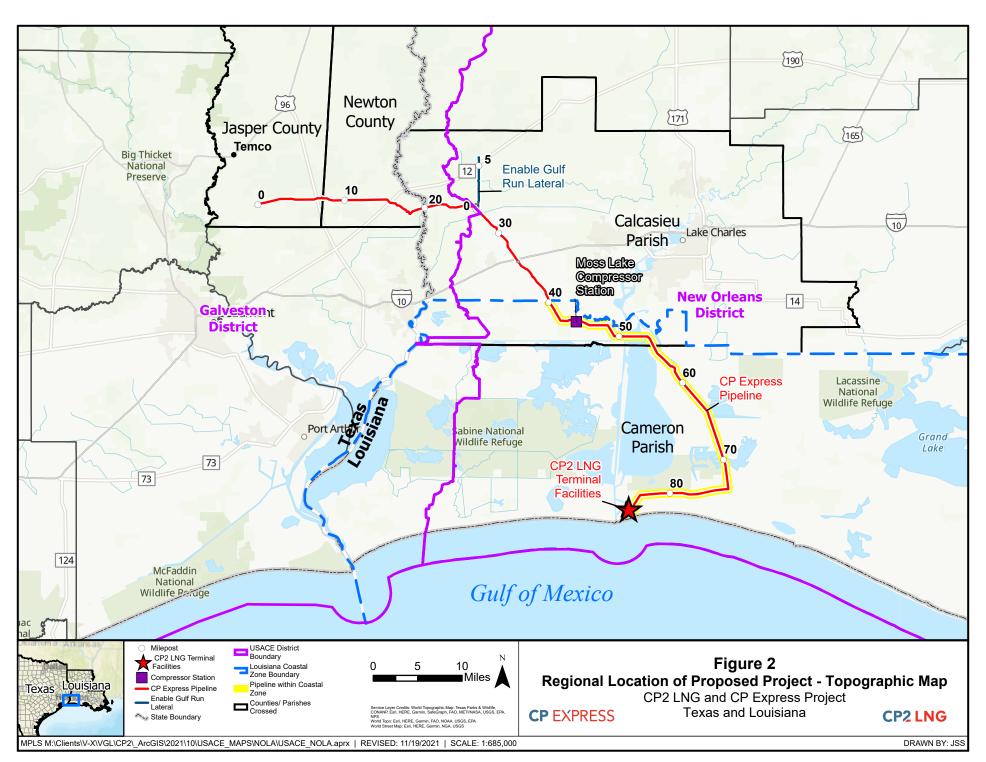
The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Department of Natural Resource's Coastal Resources Program (Application # P20211131 & P20211132). The Department of the Army permit will not be issued unless the applicant receives approval or a waiver of the Coastal Use Permit by the Louisiana Department of Natural Resources.

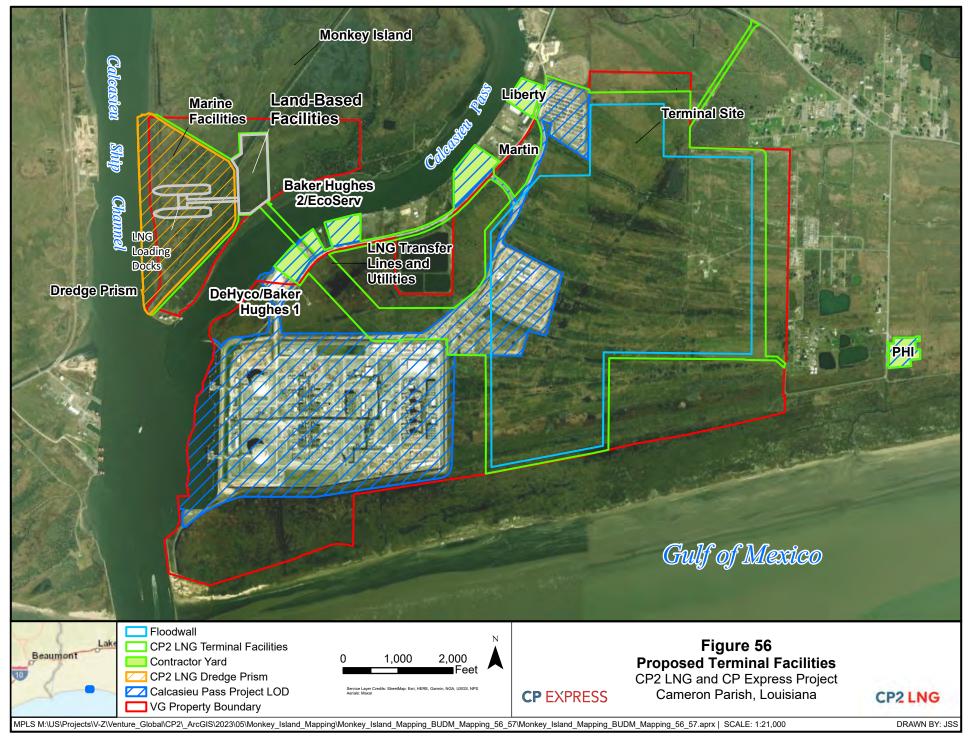
You are invited to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

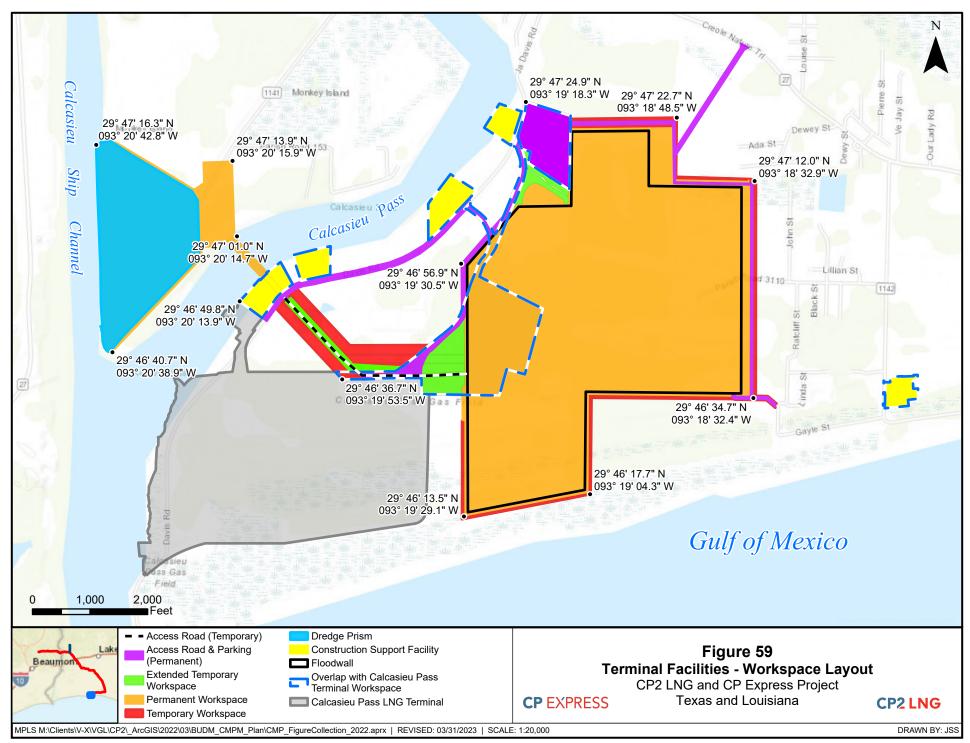
Darrell S. Barbara Chief, Western Evaluation Branch Regulatory Division

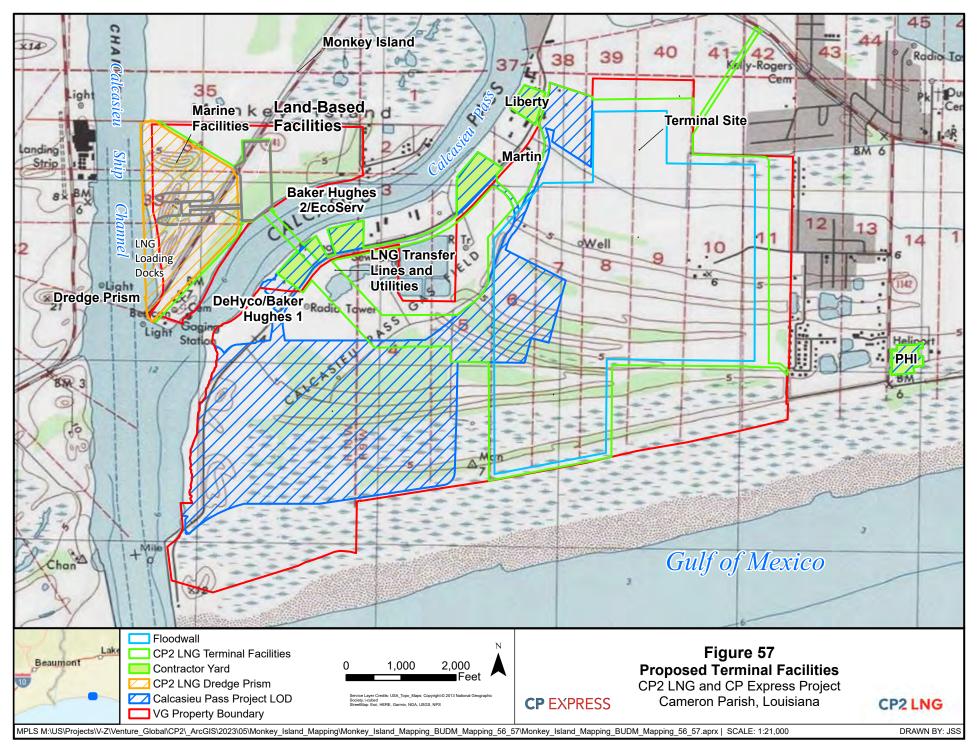
Enclosures



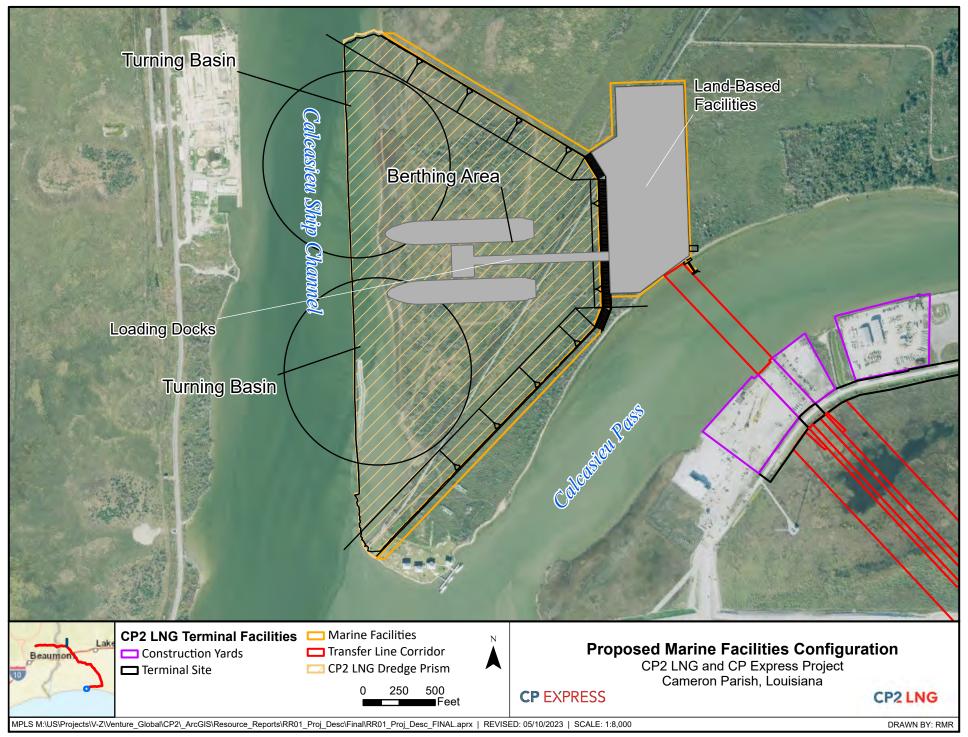


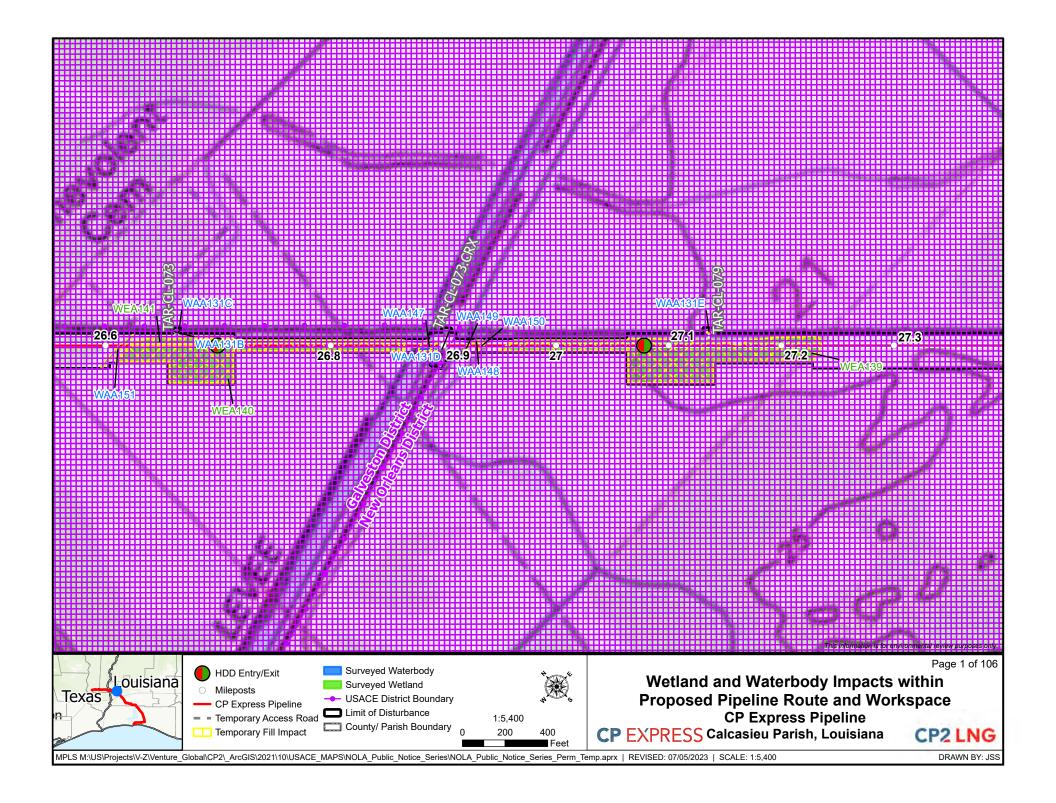


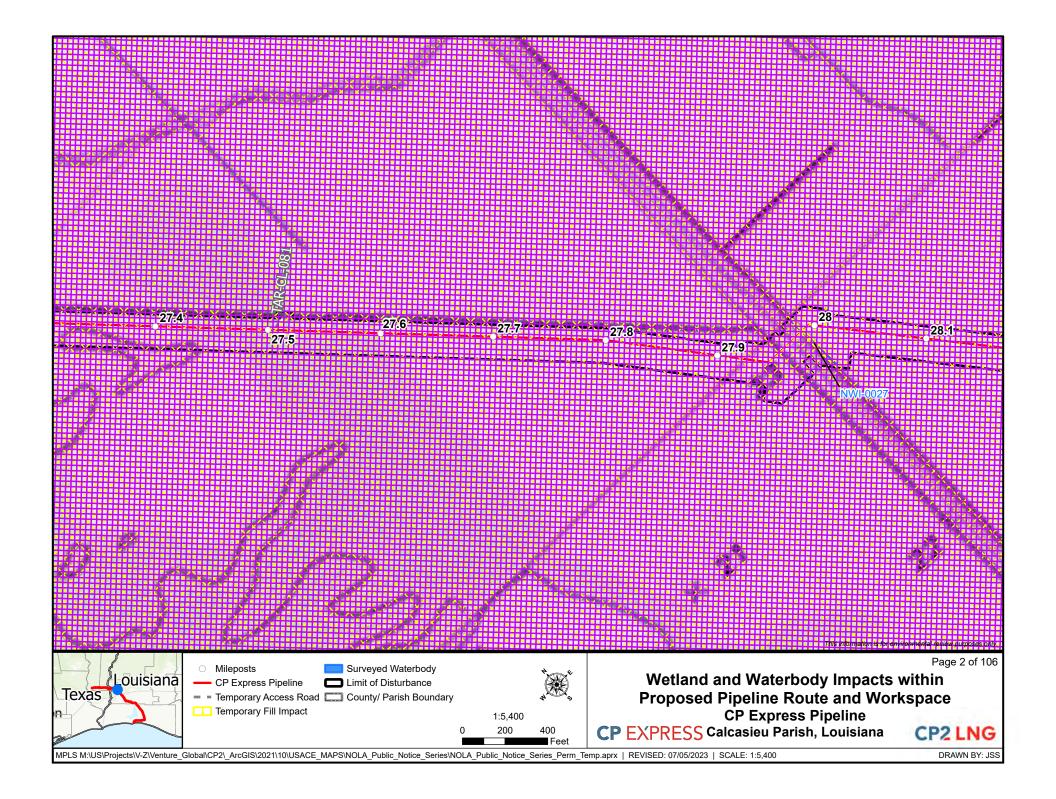


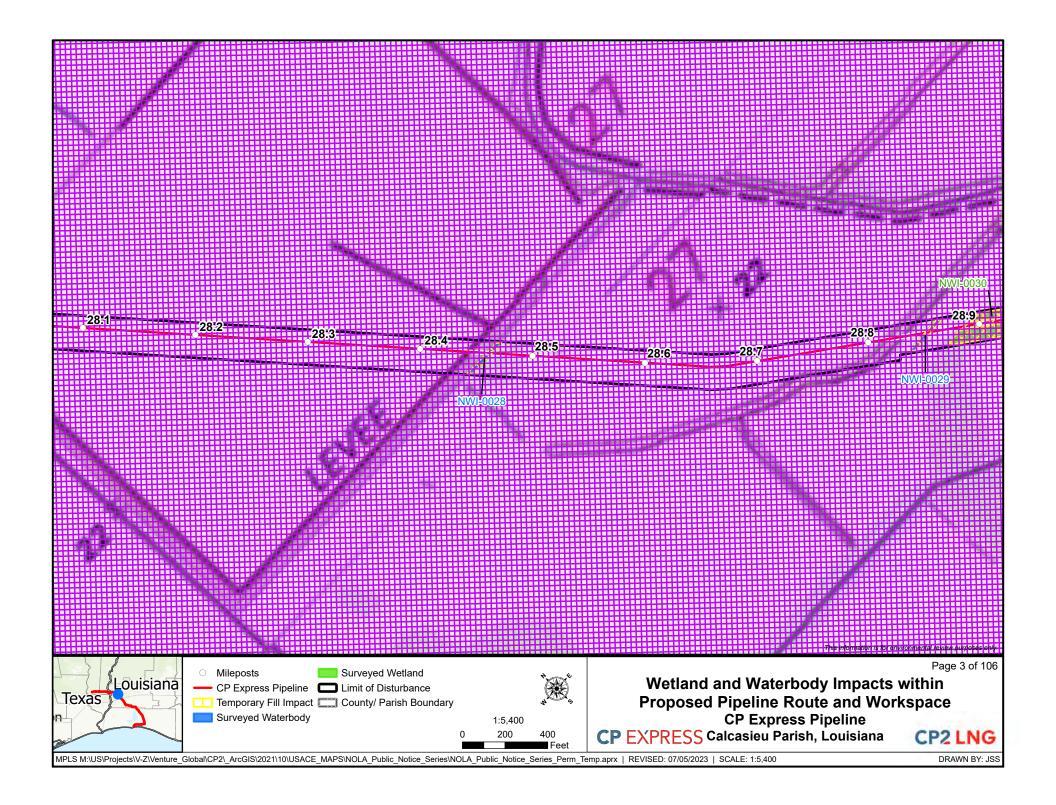


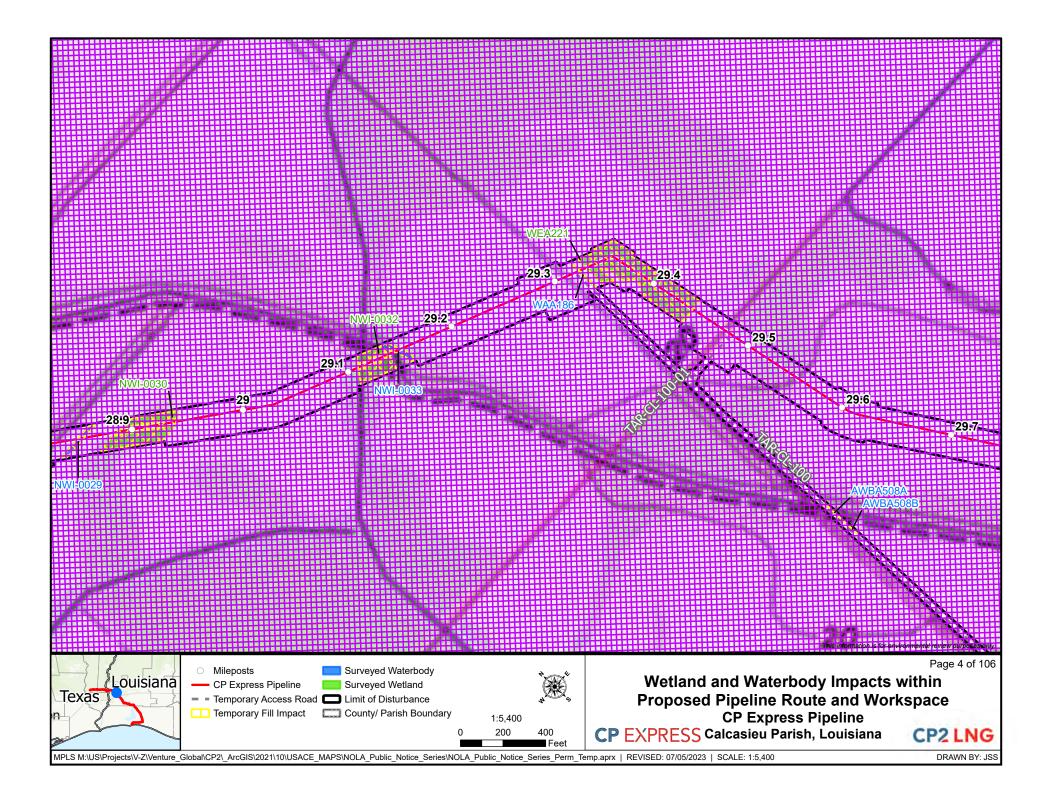


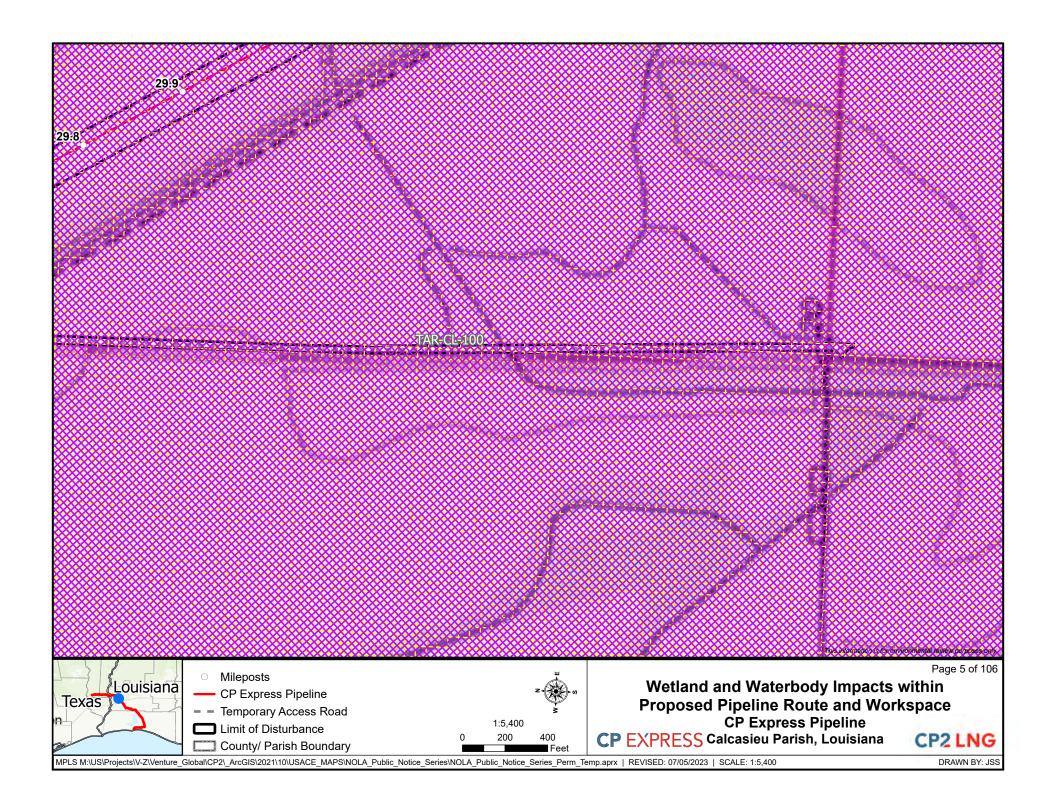


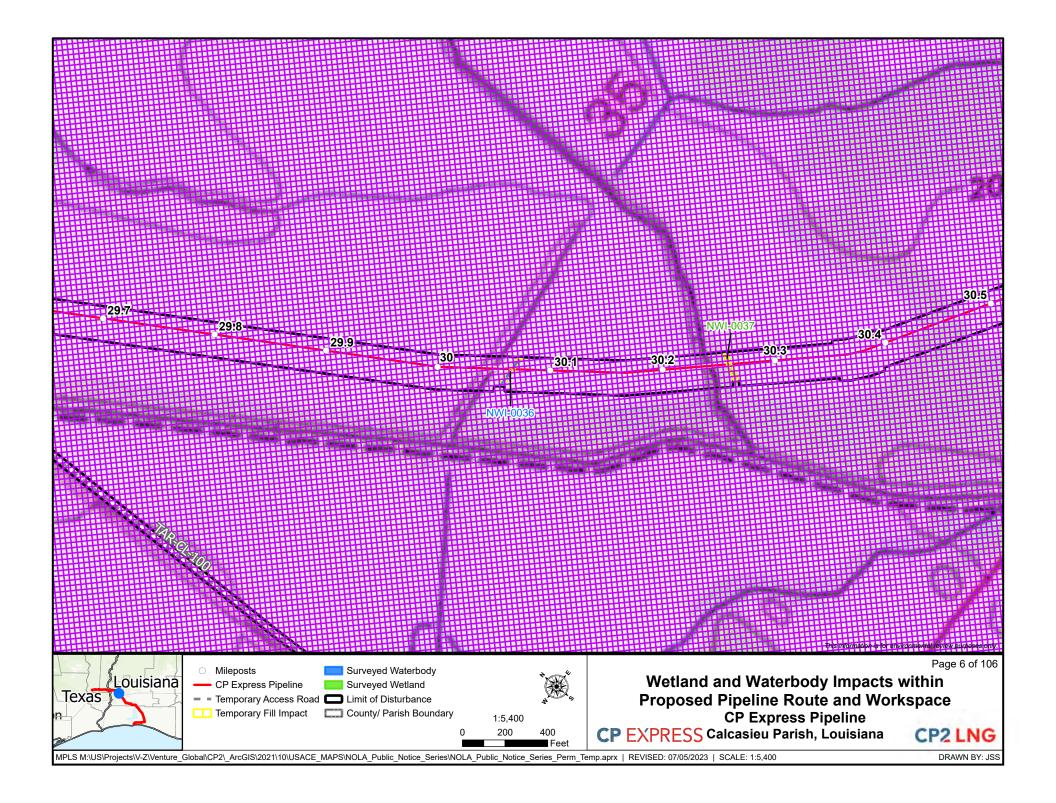


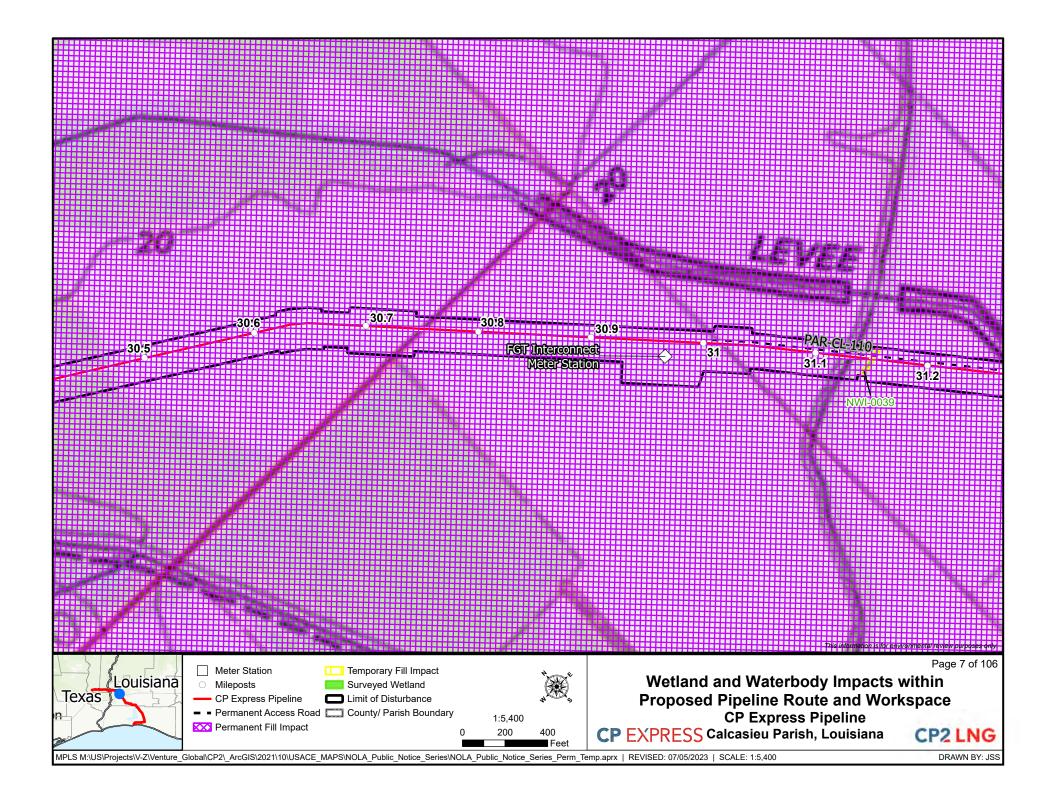


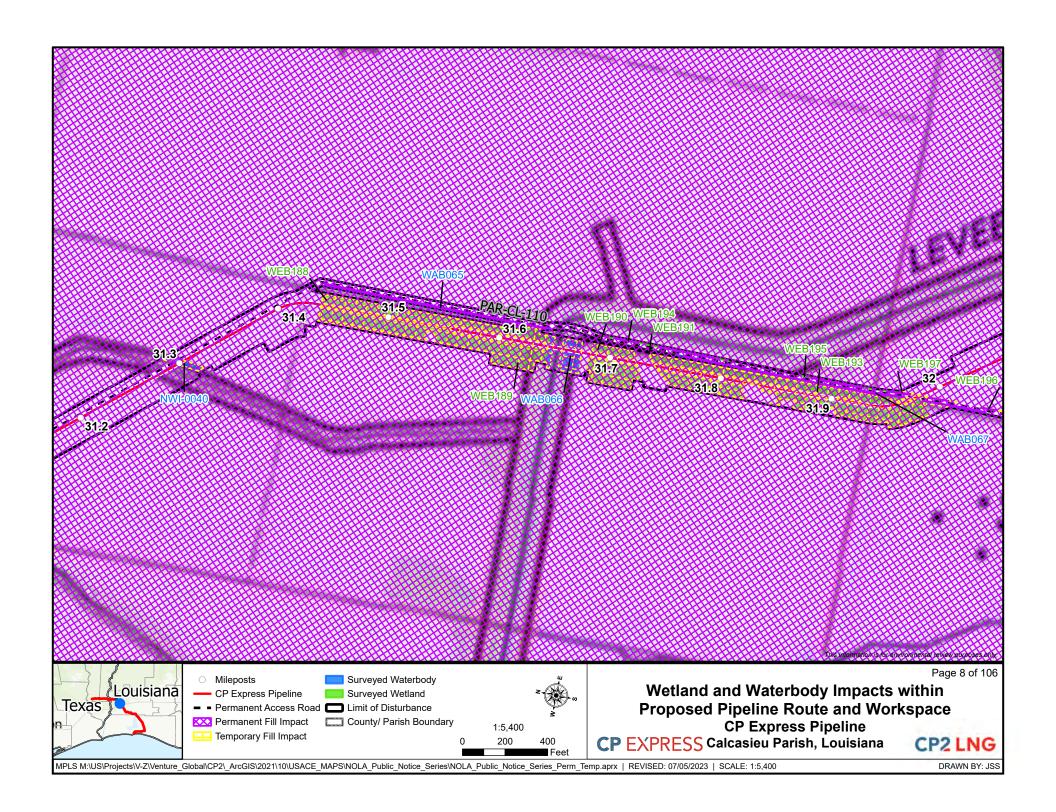


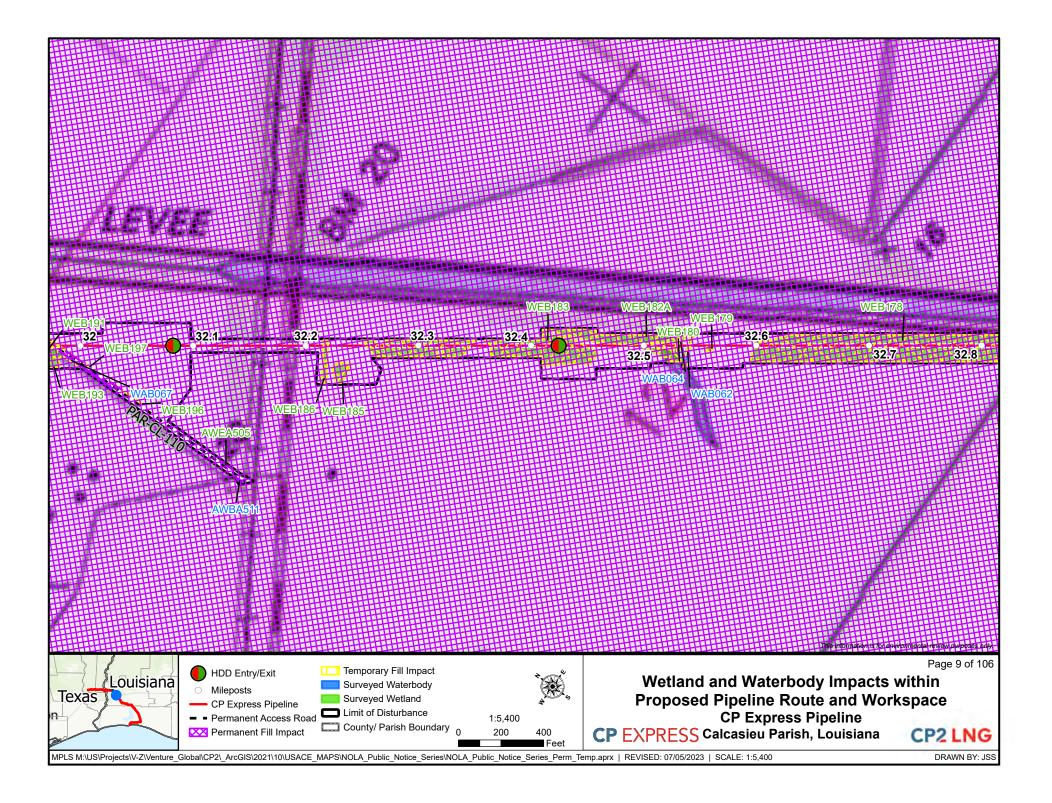


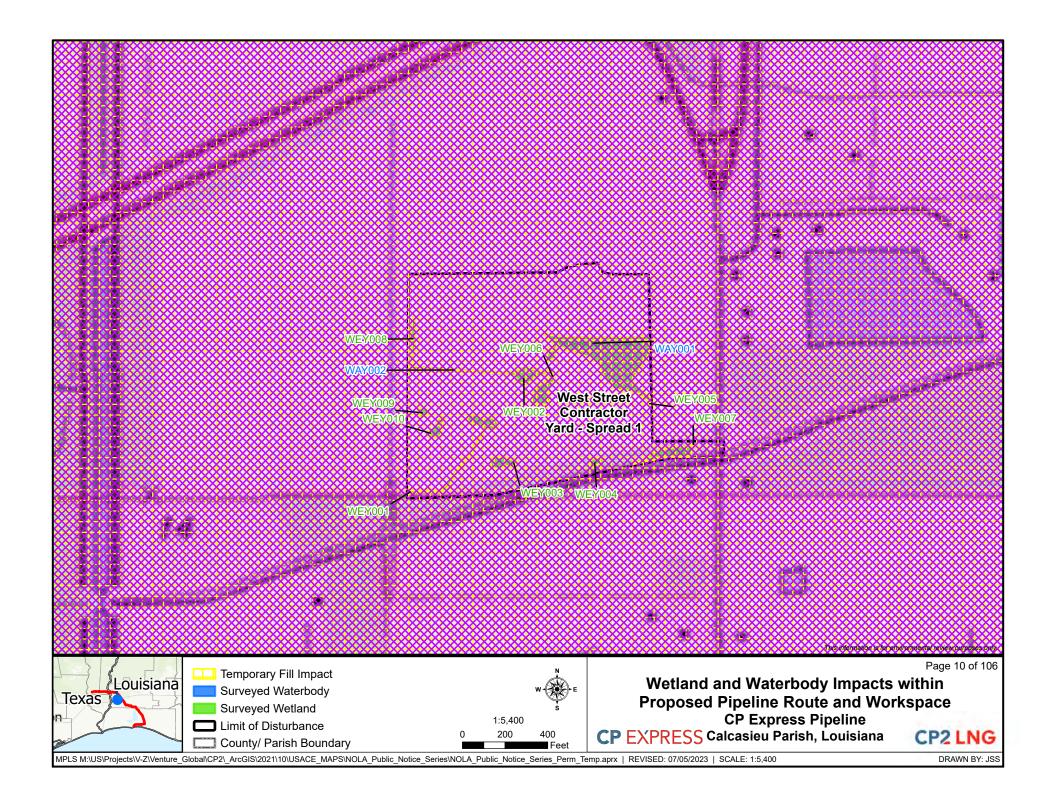


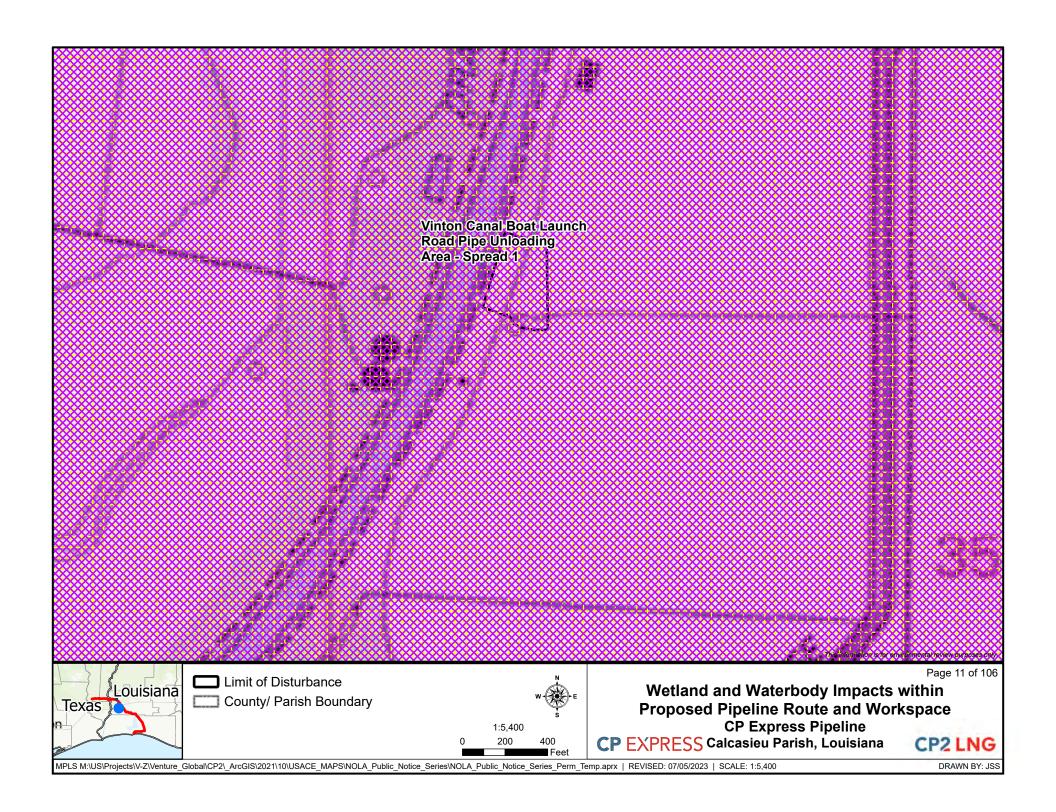


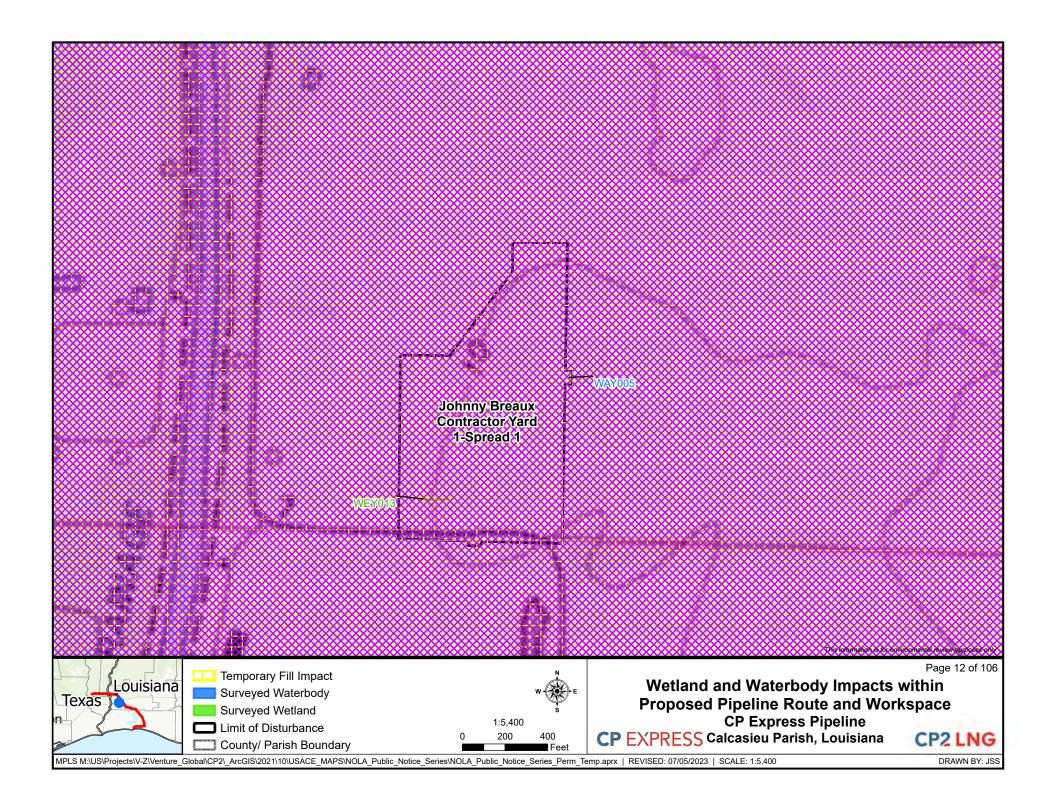


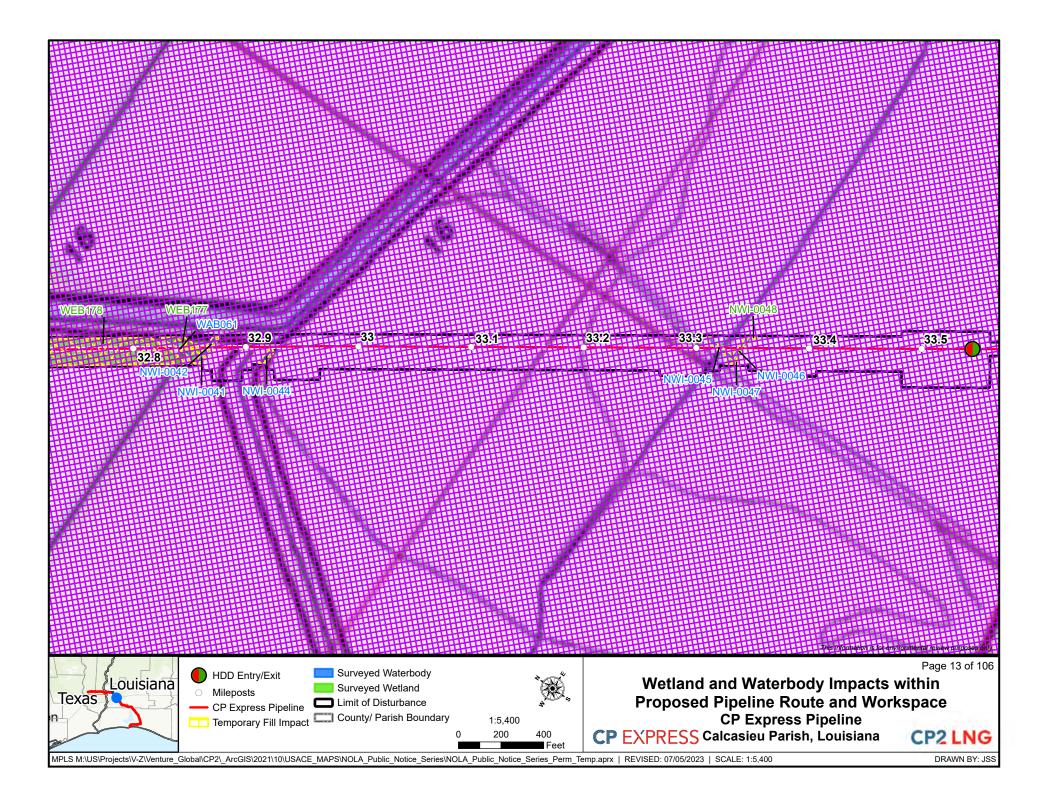


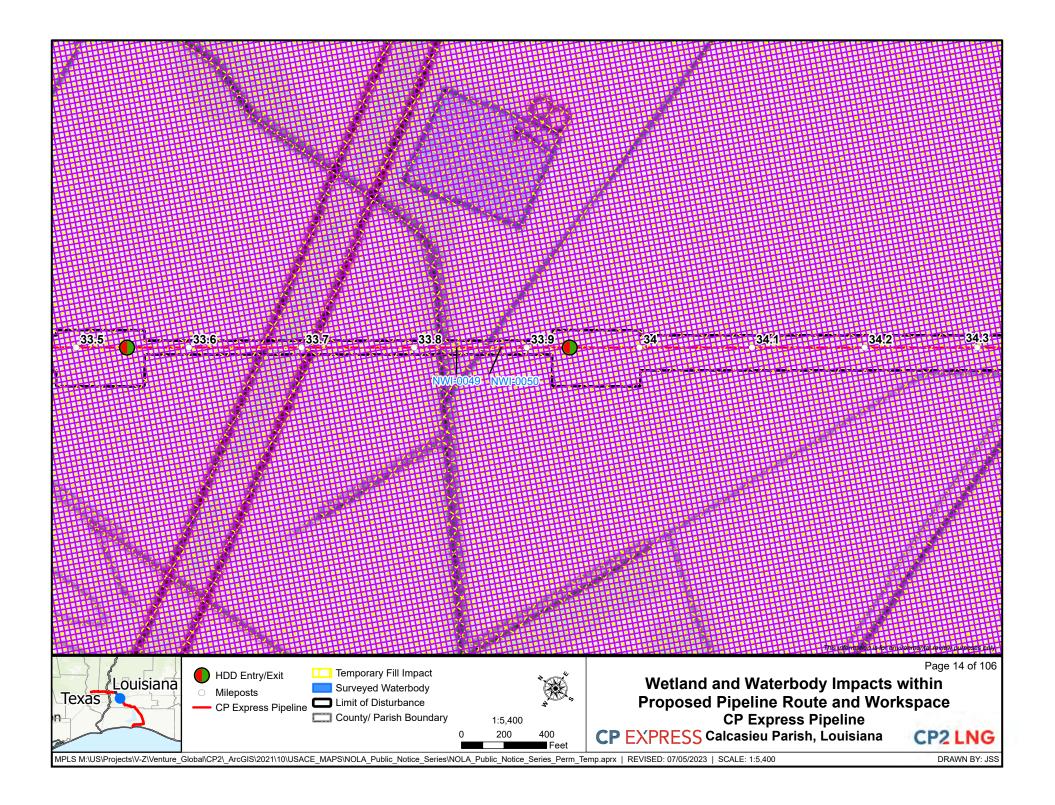


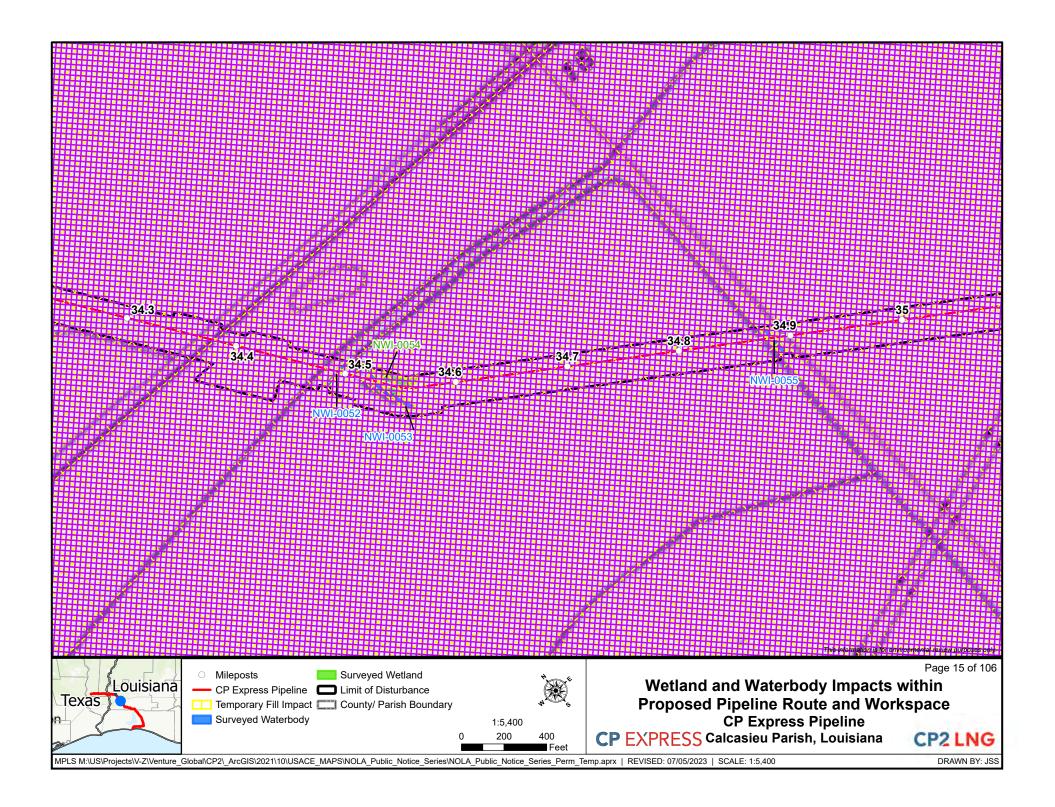


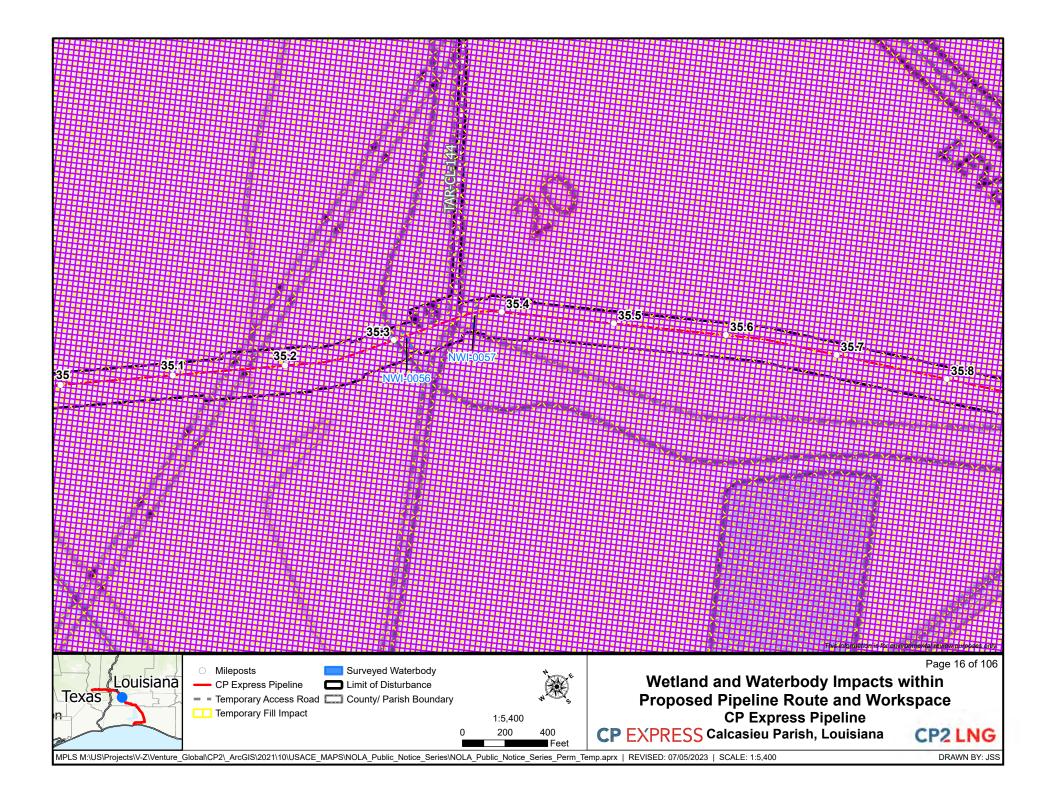


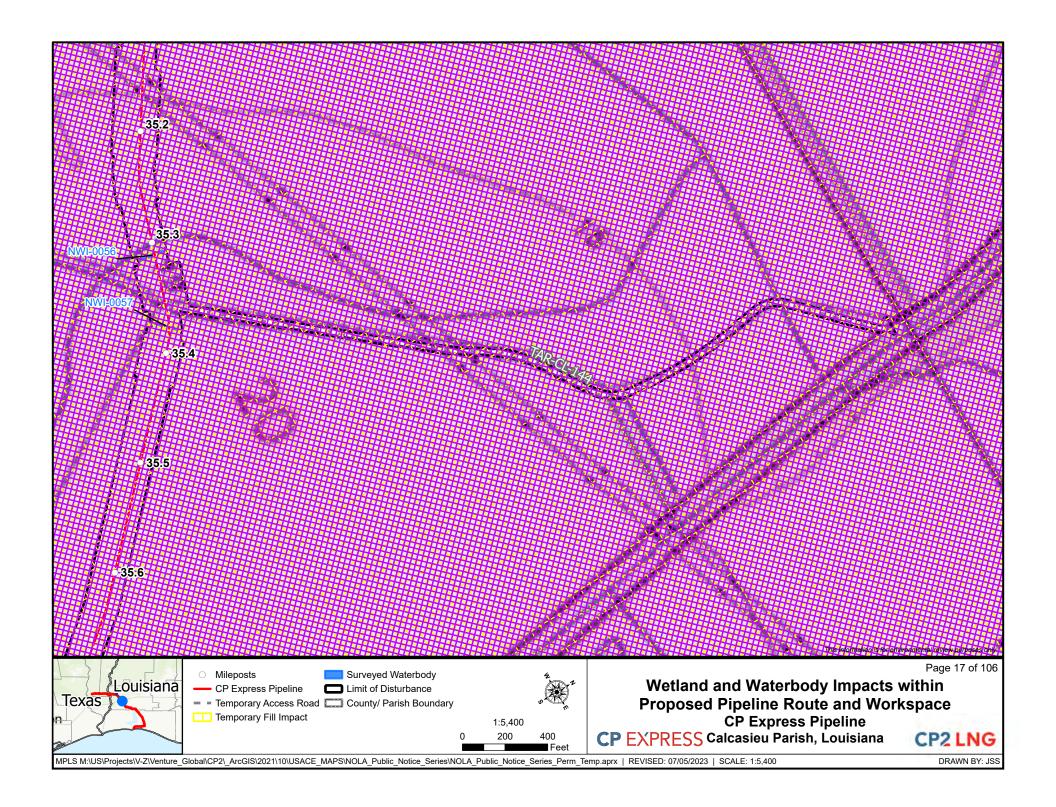


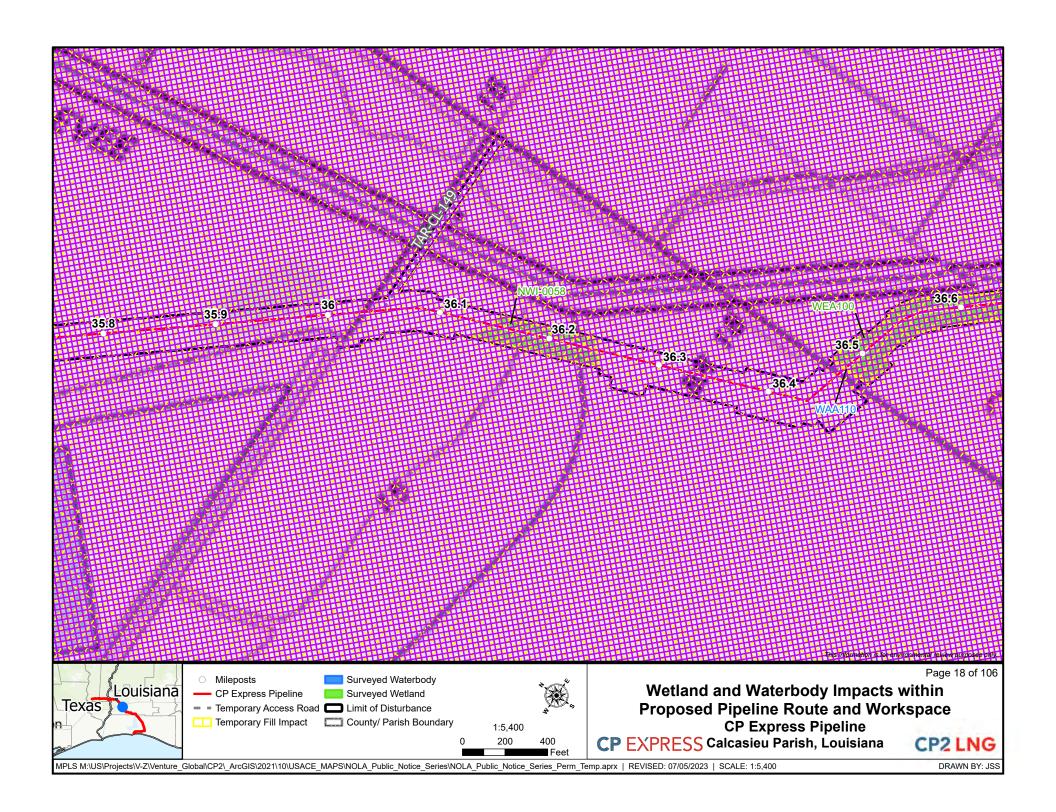


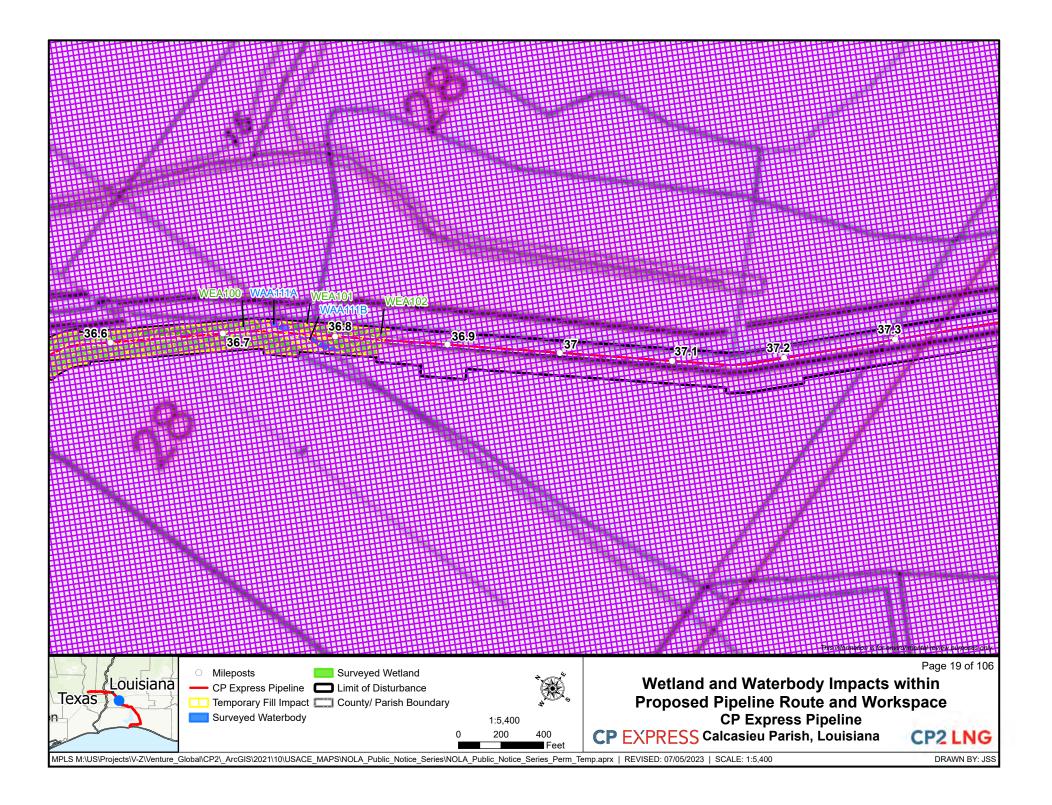


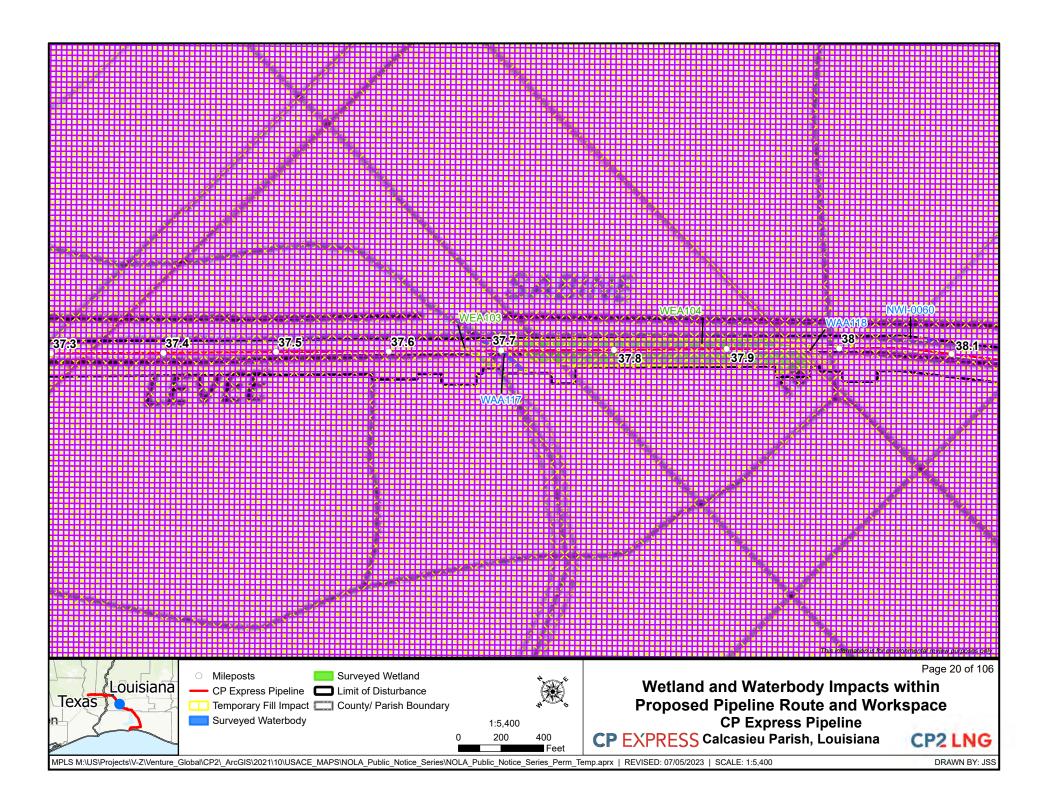


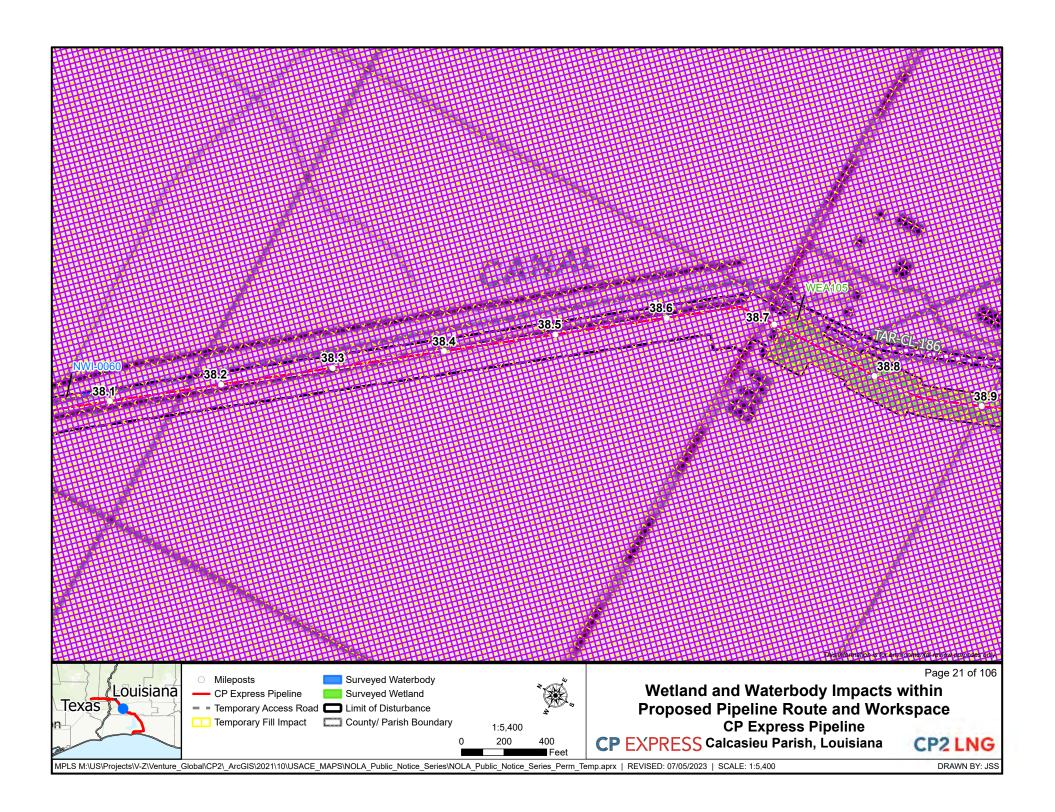


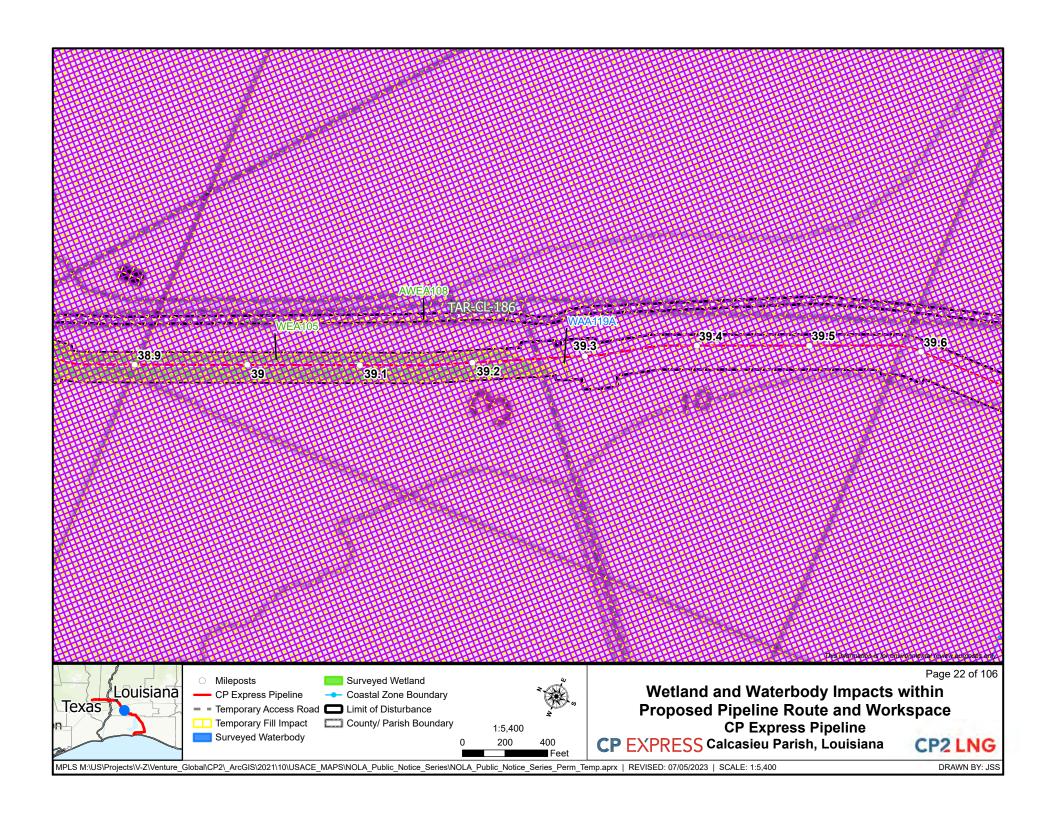


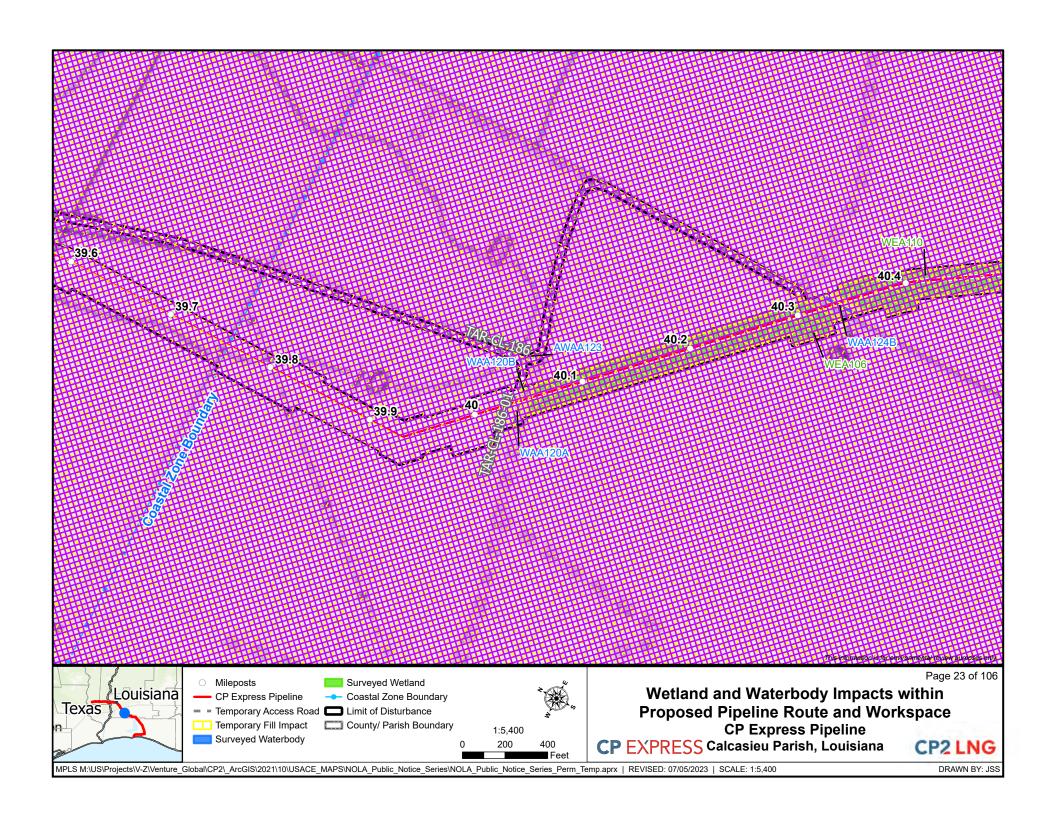


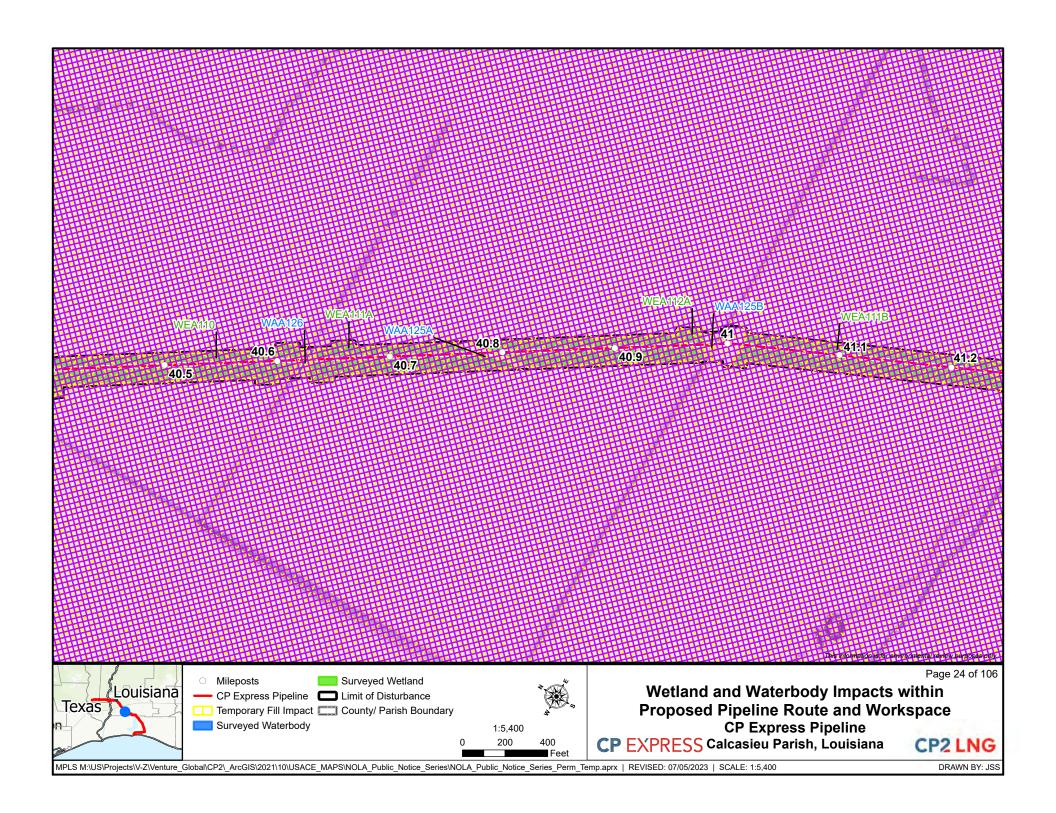


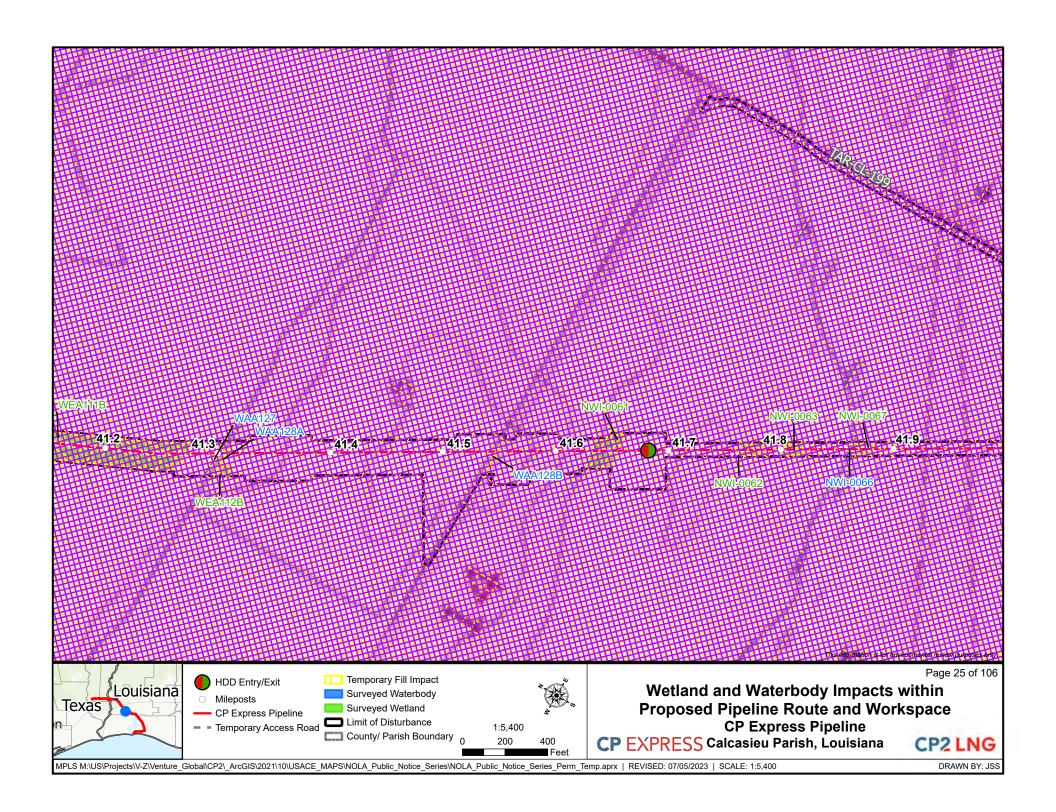


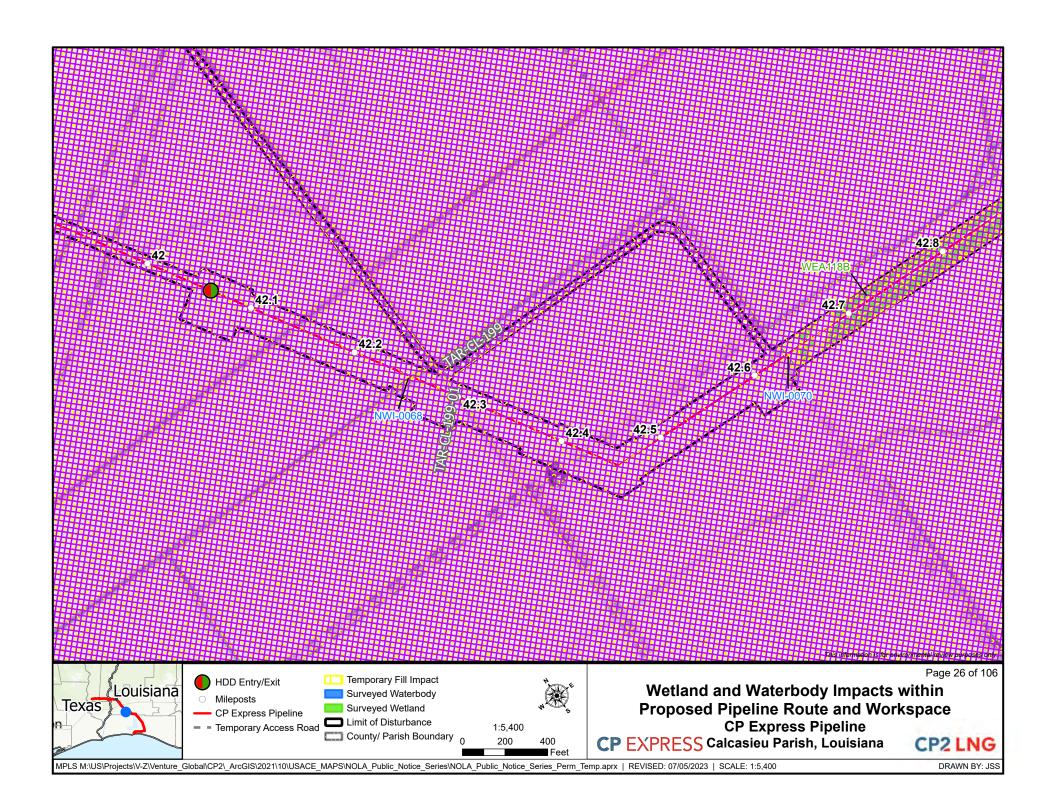


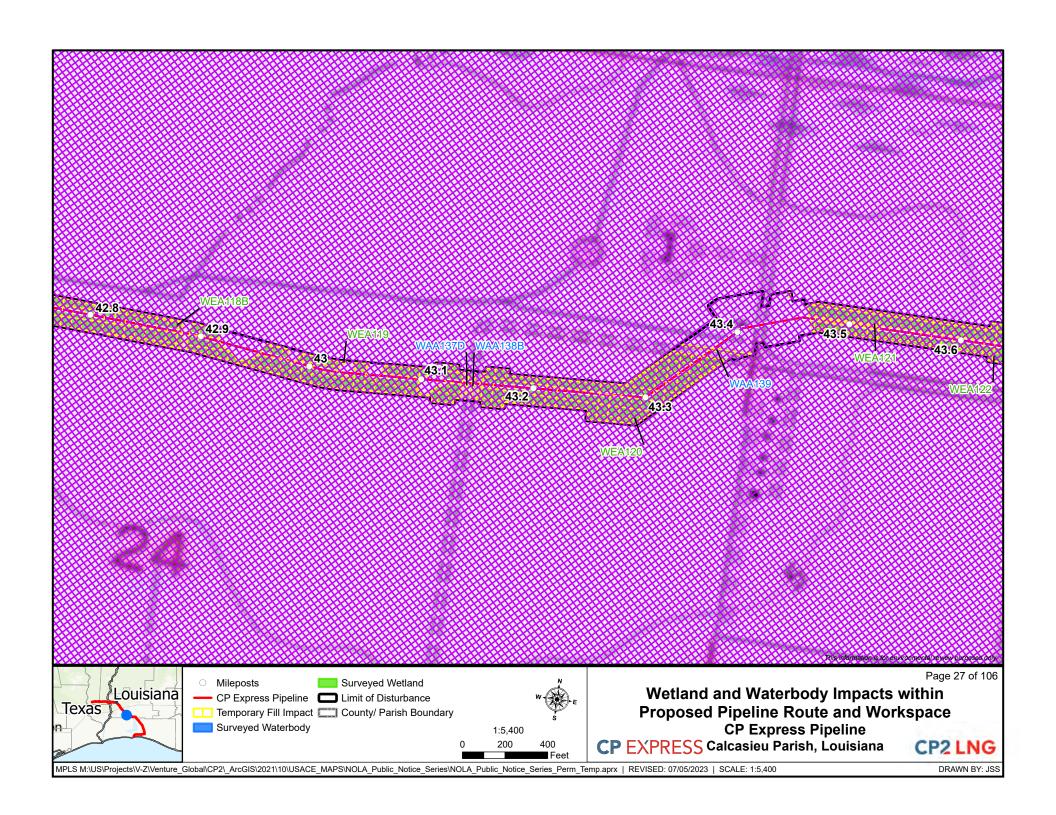


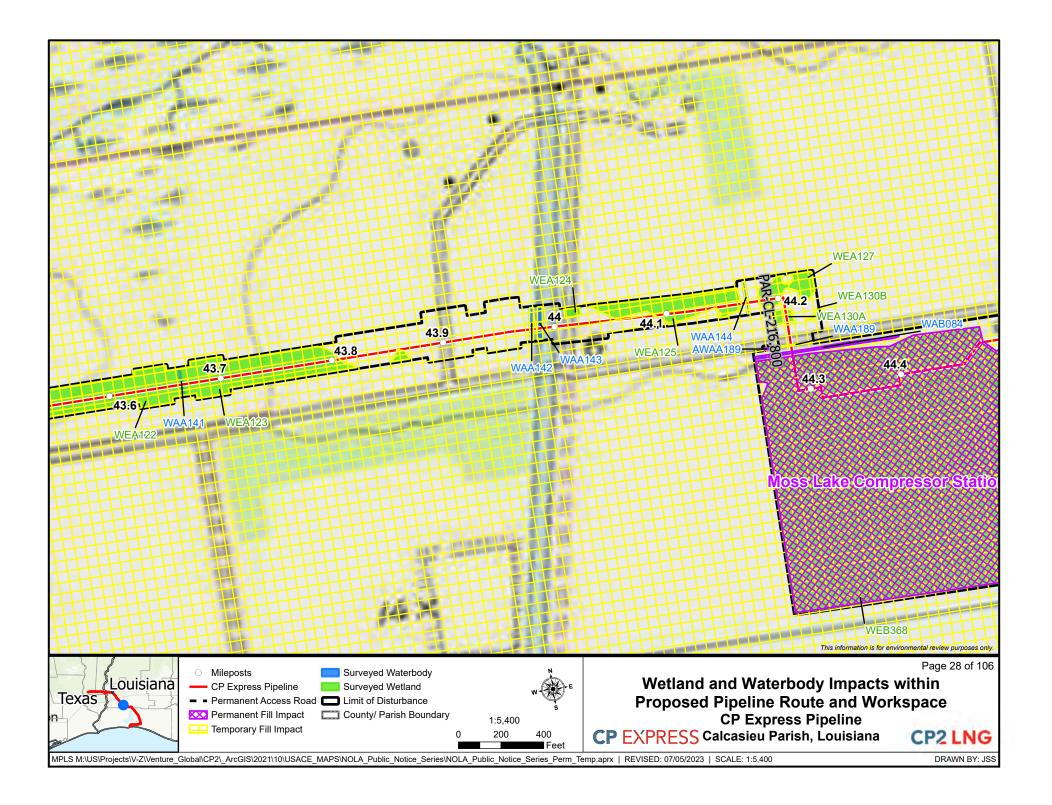


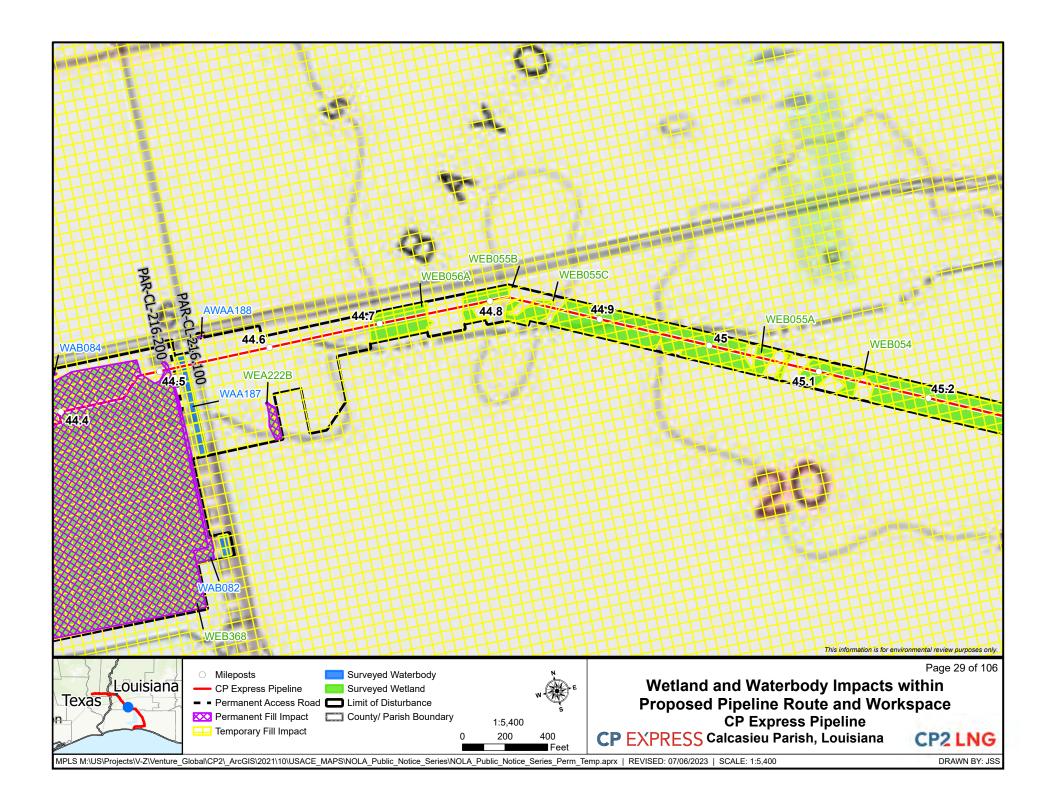


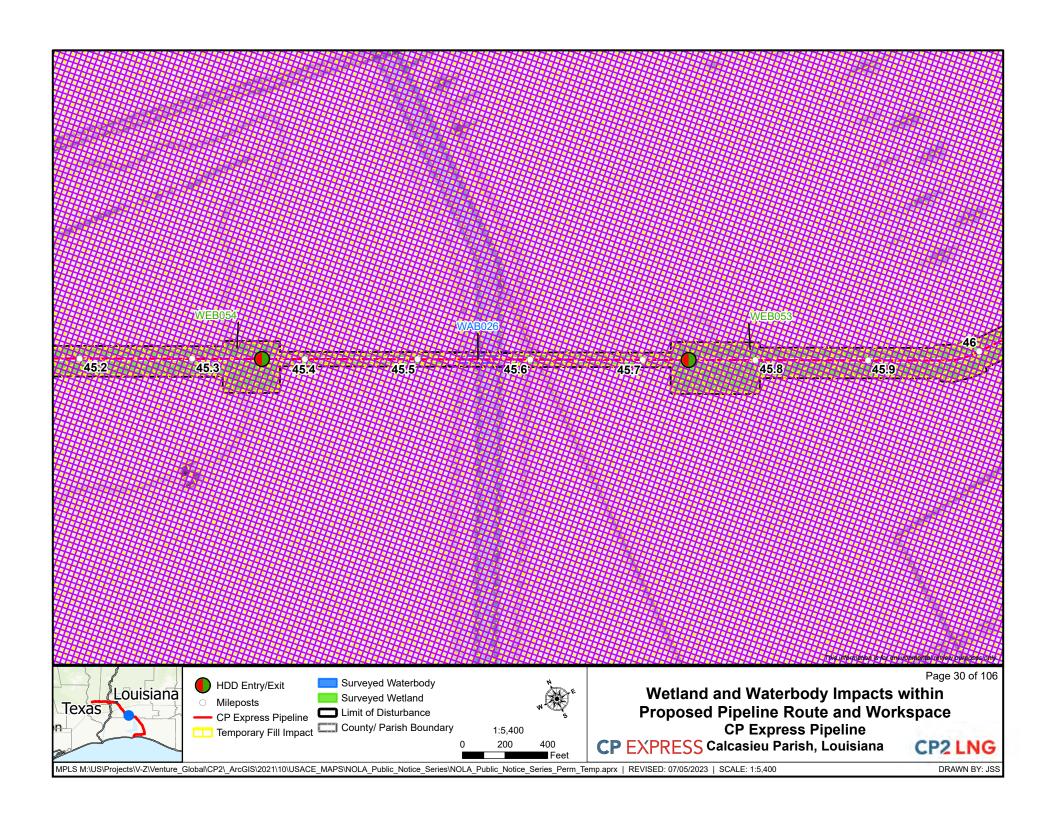


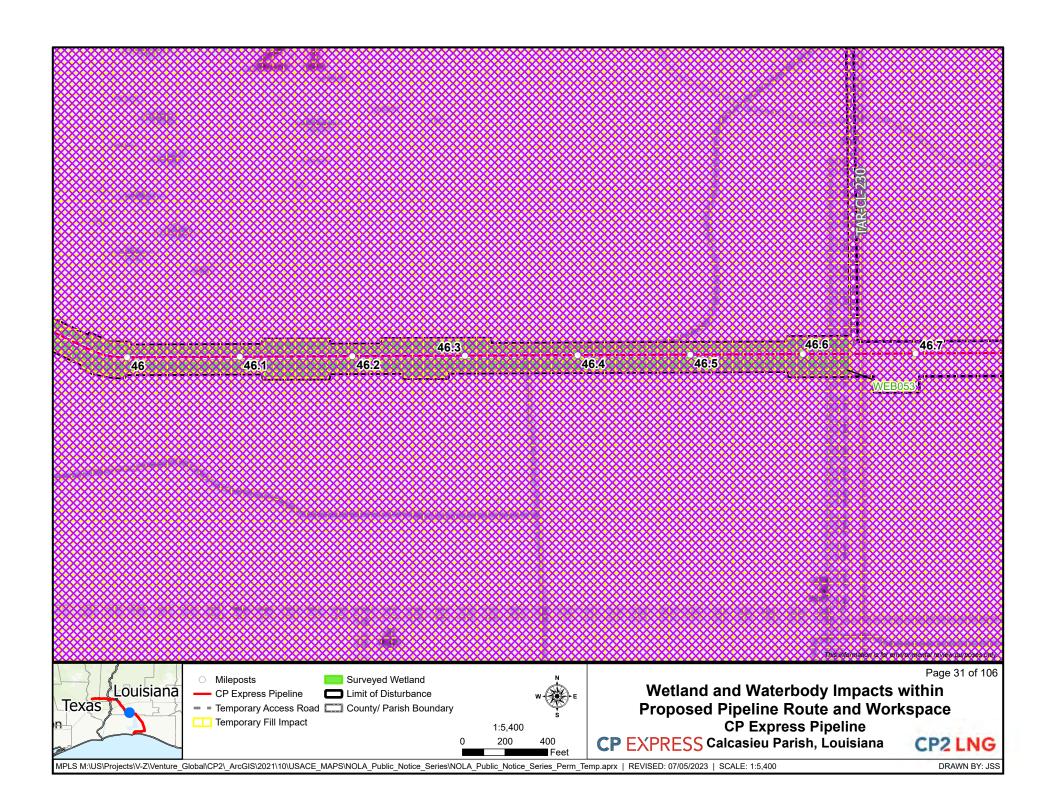


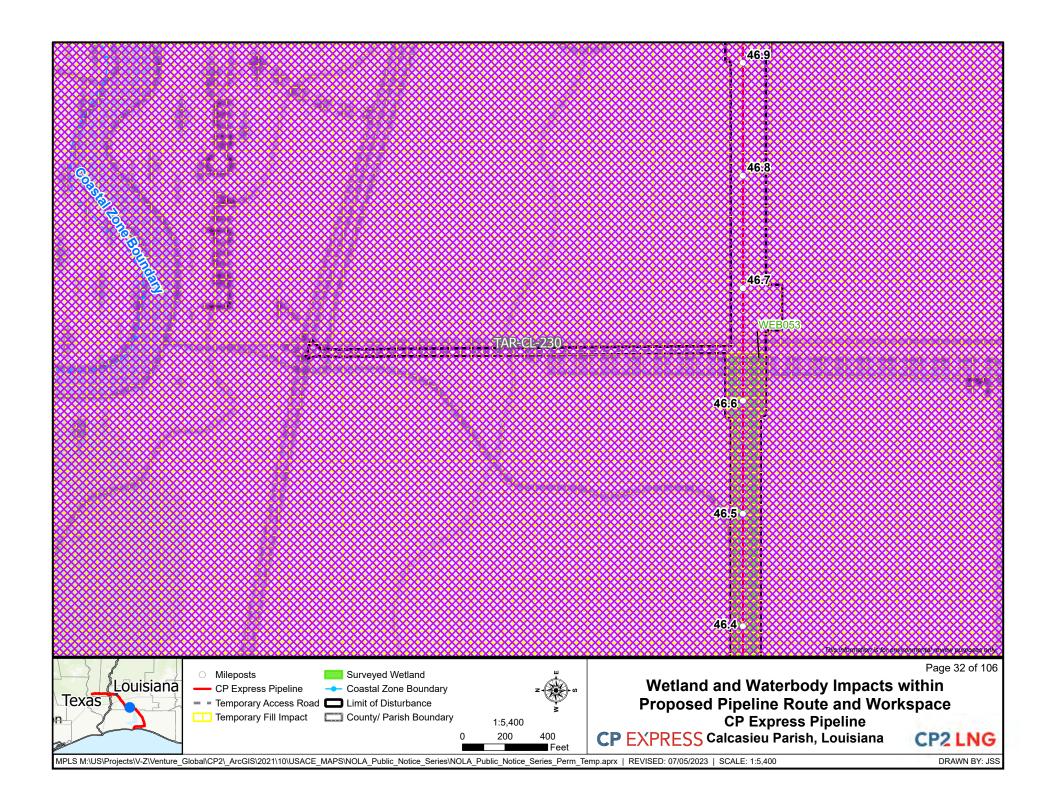


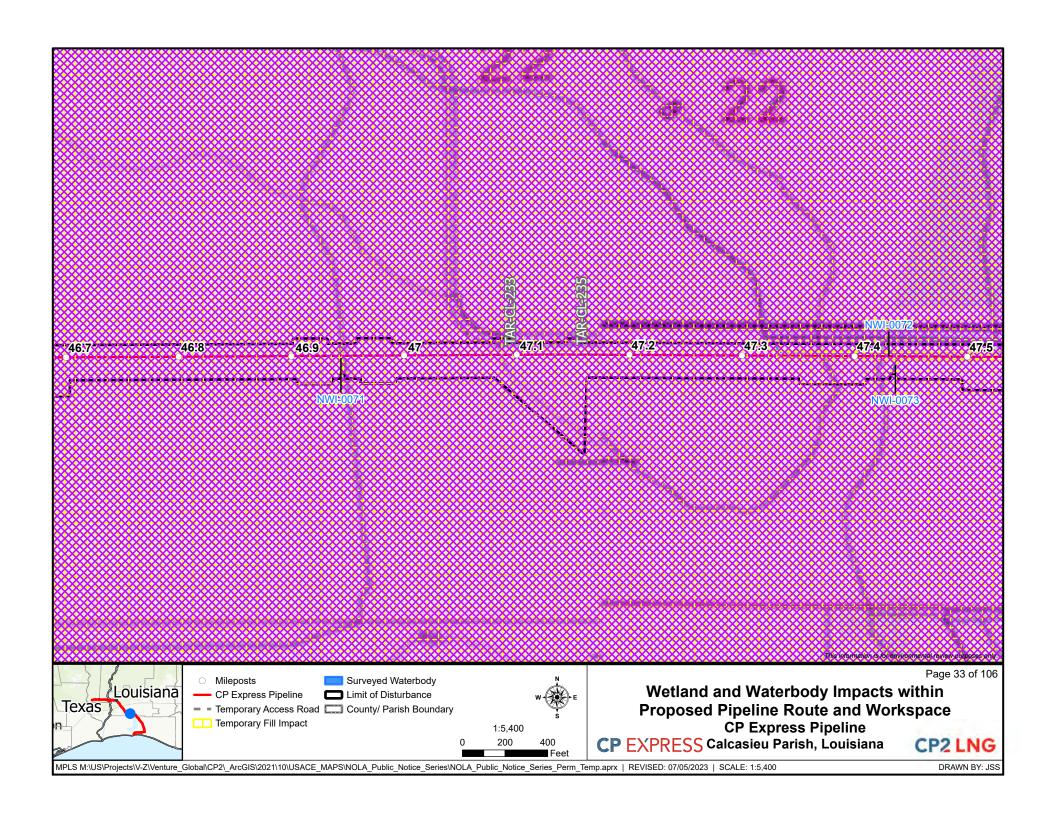


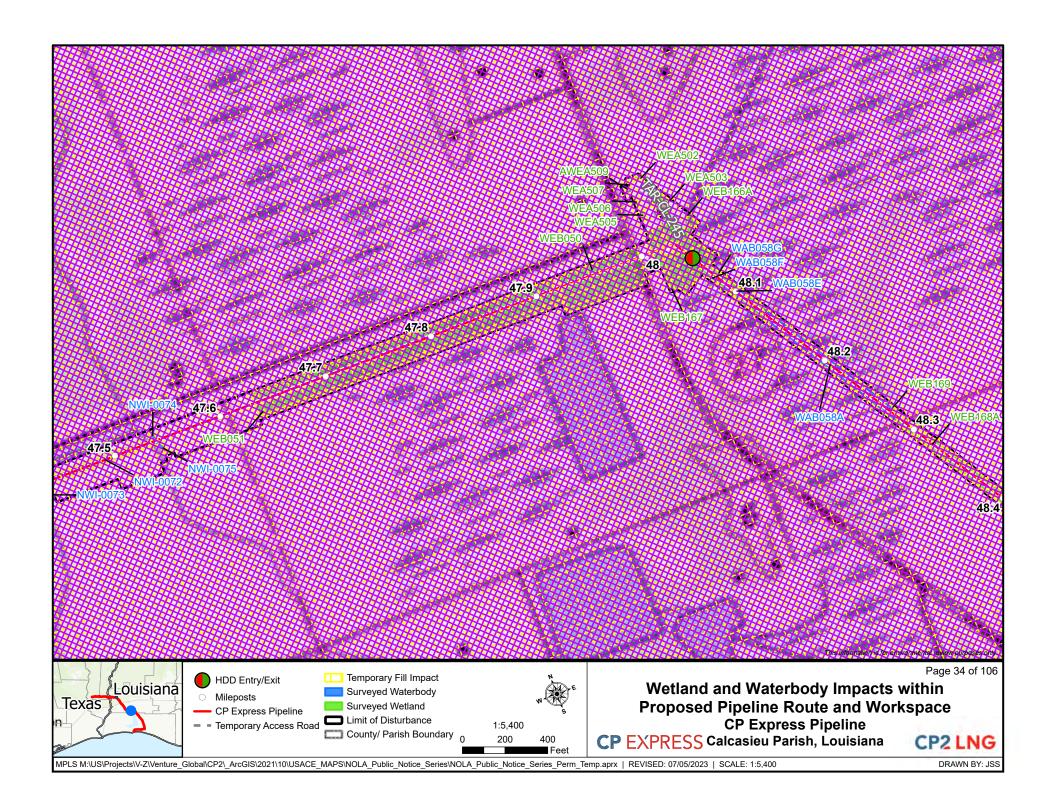


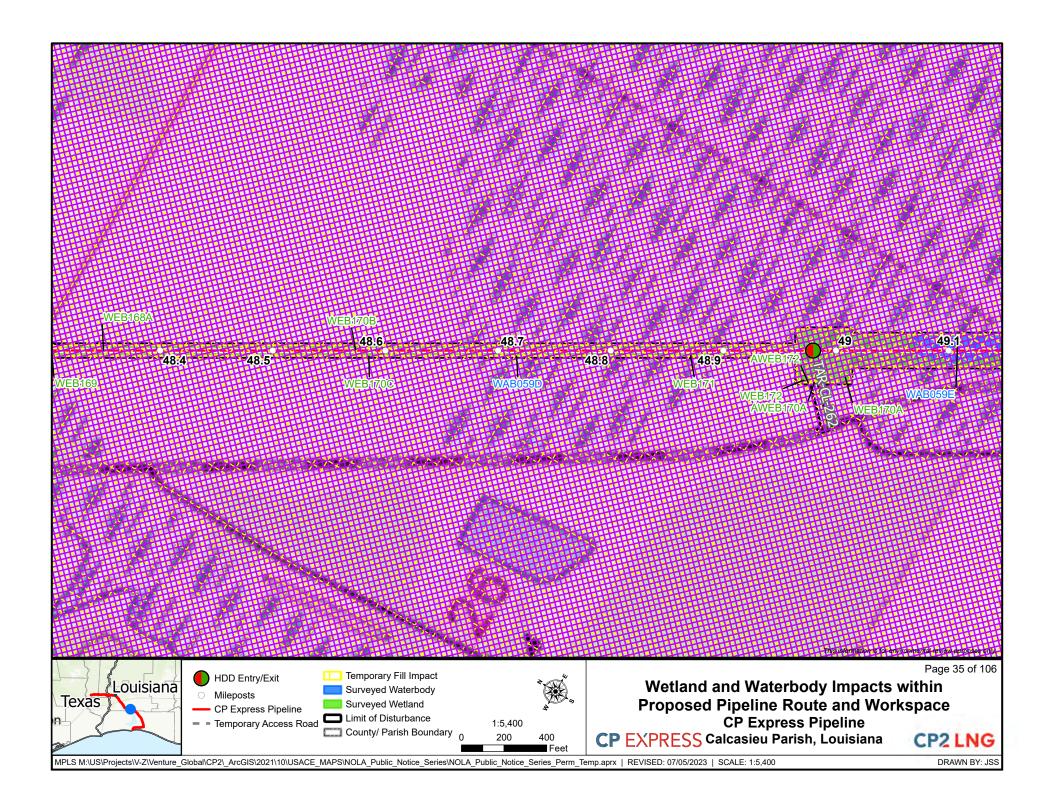


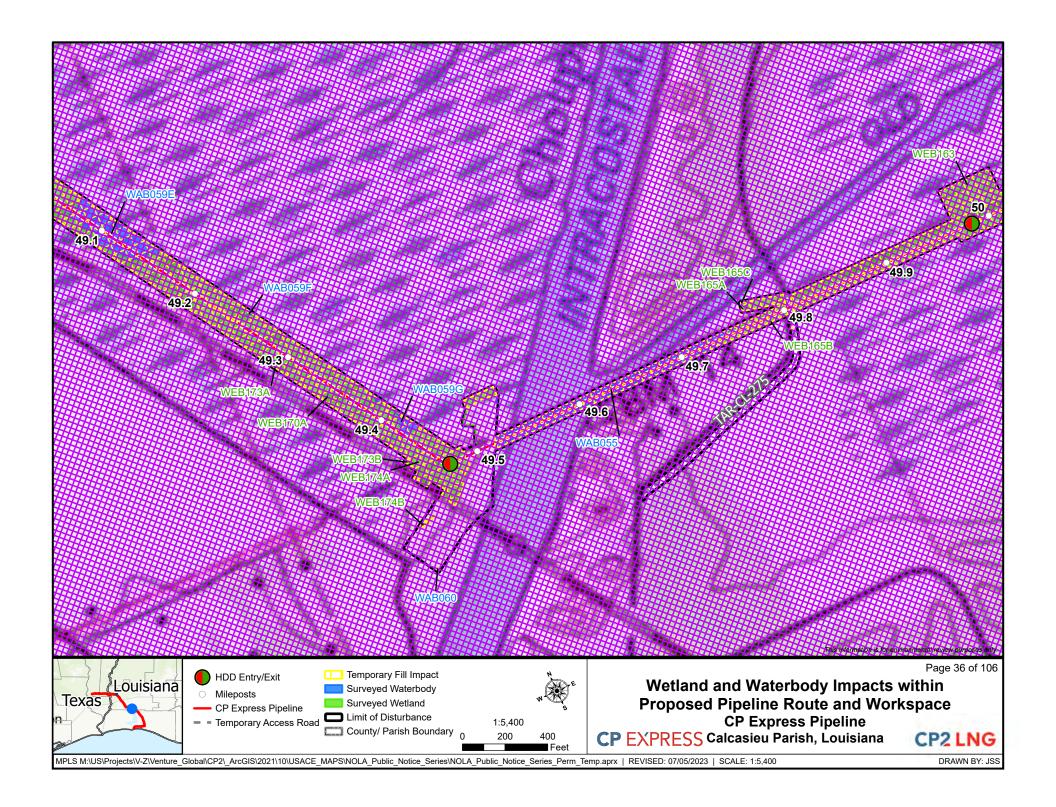


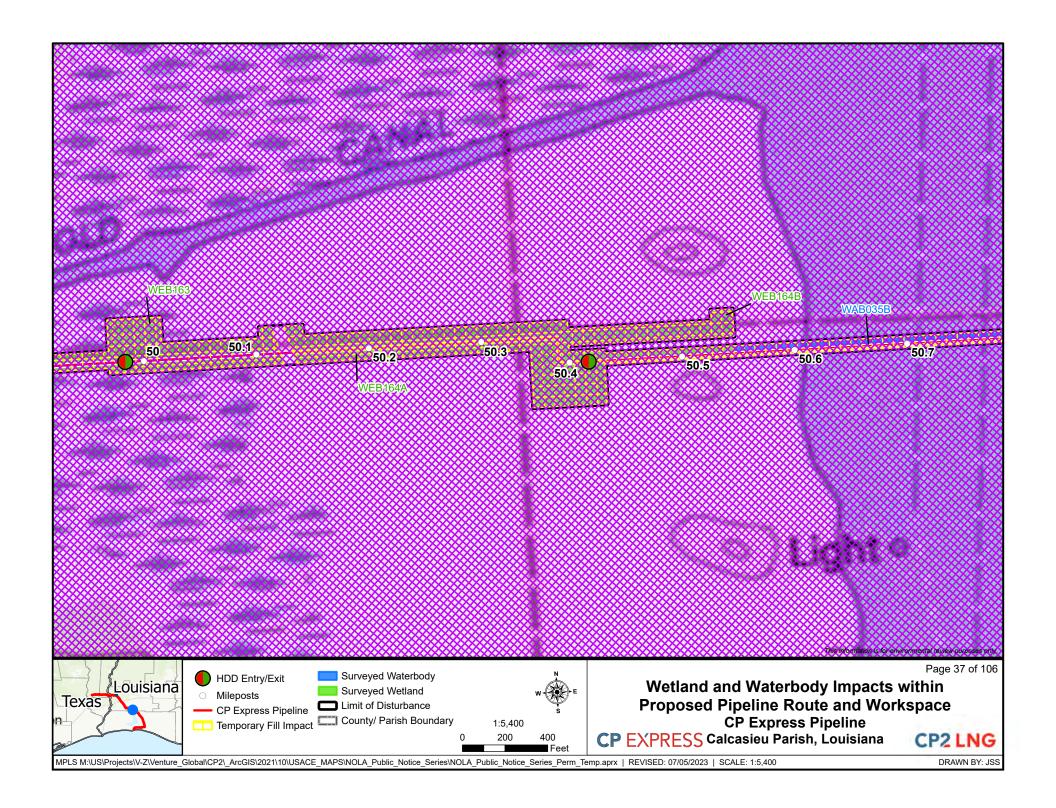


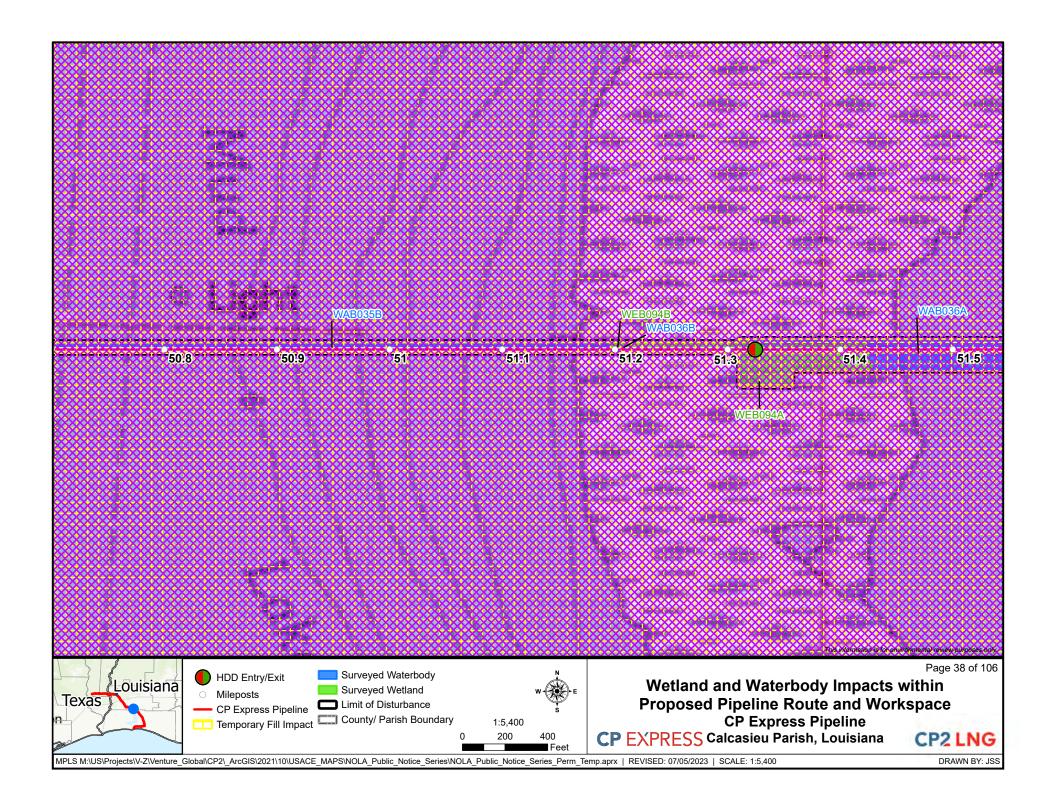


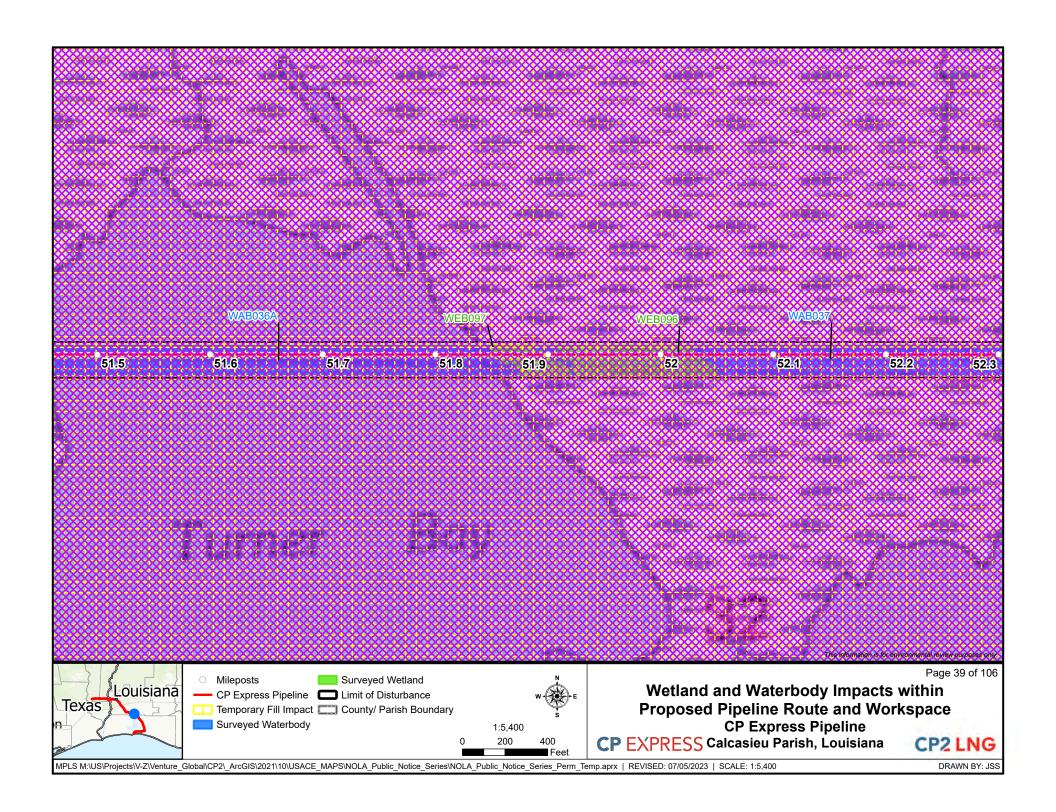


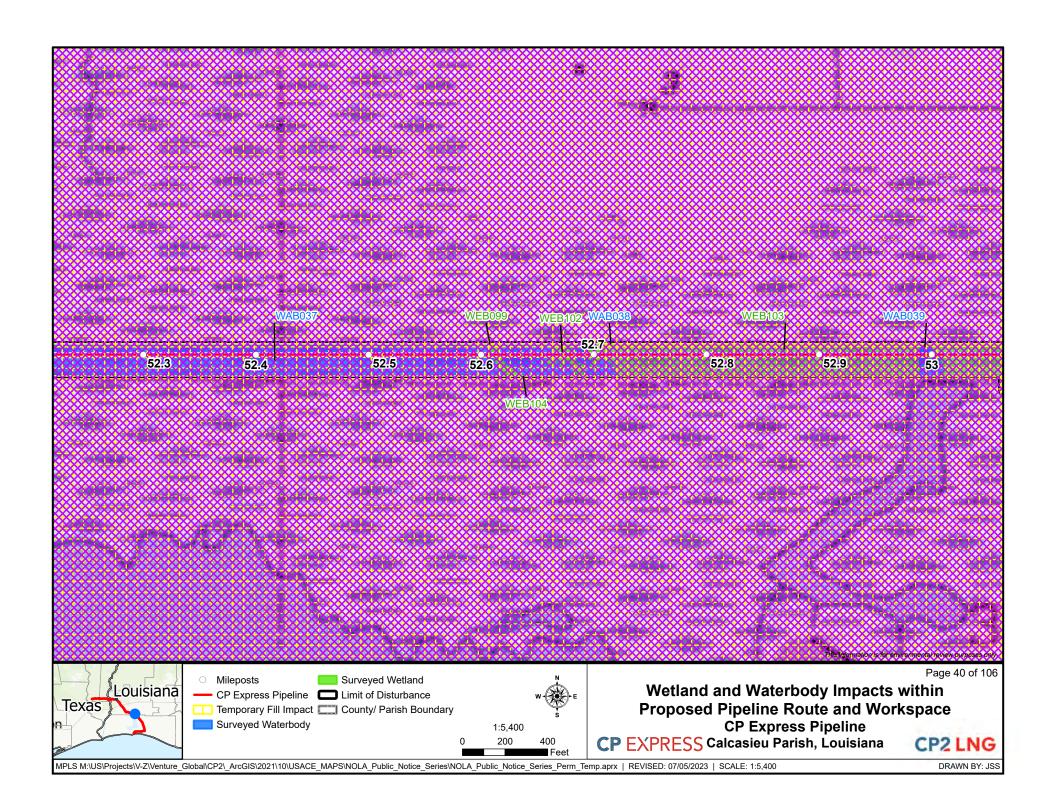


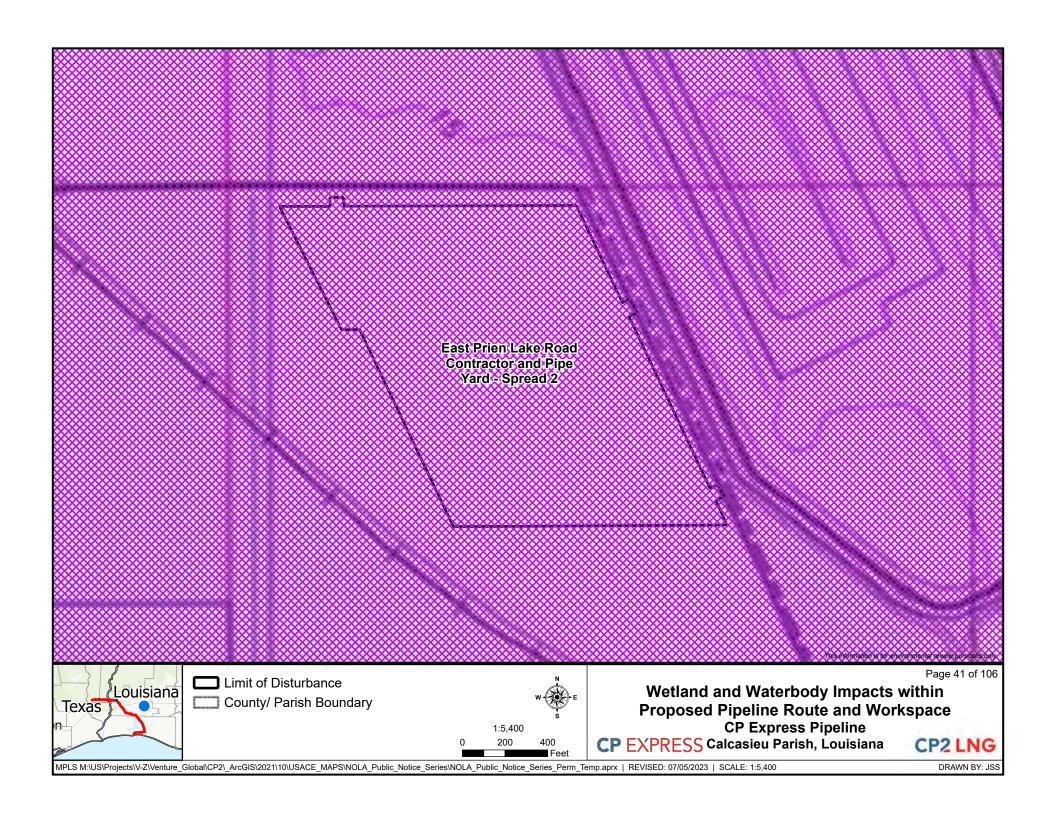


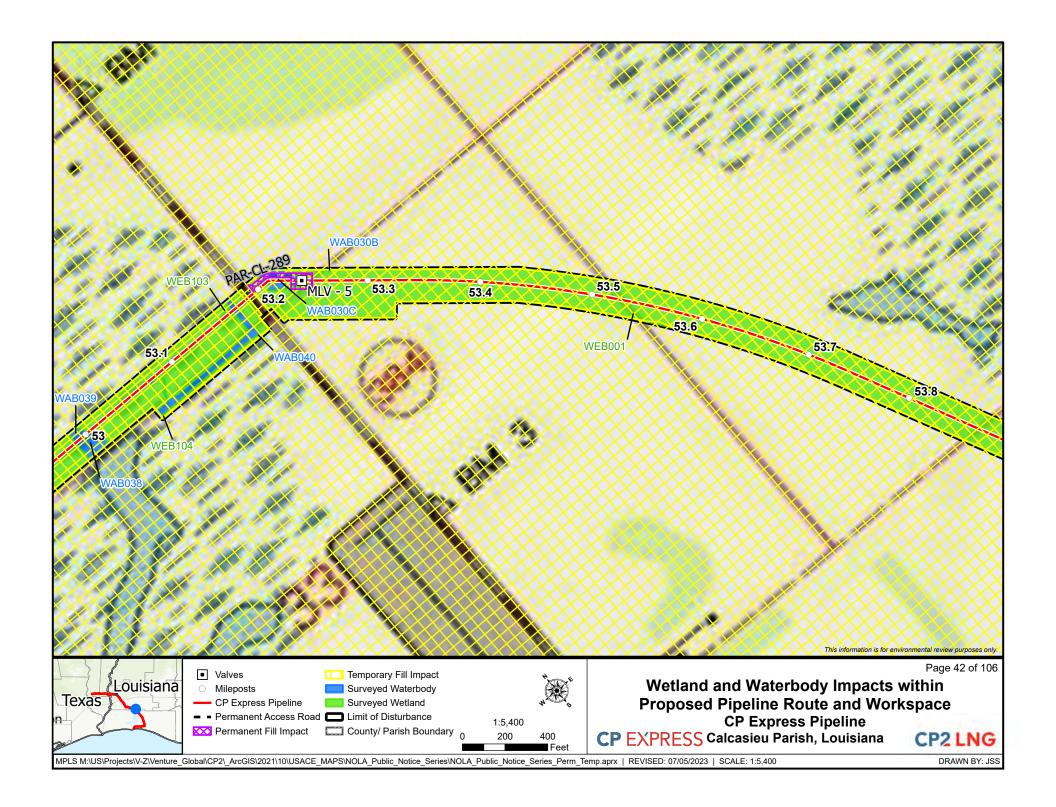


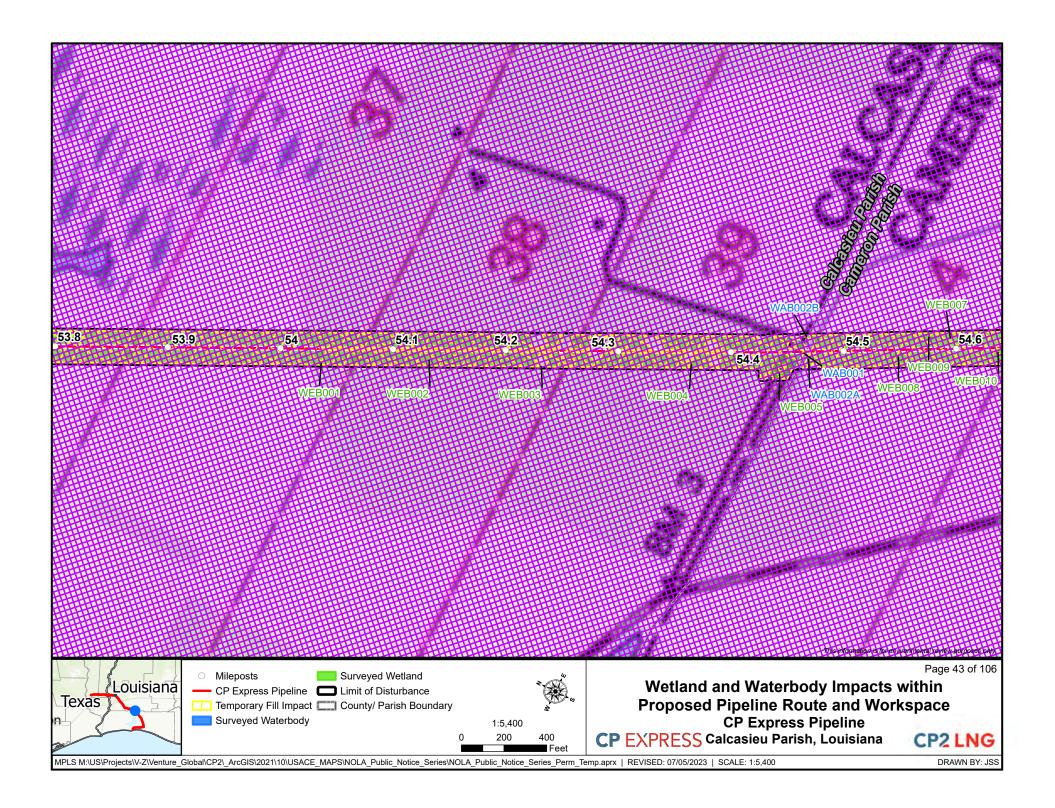


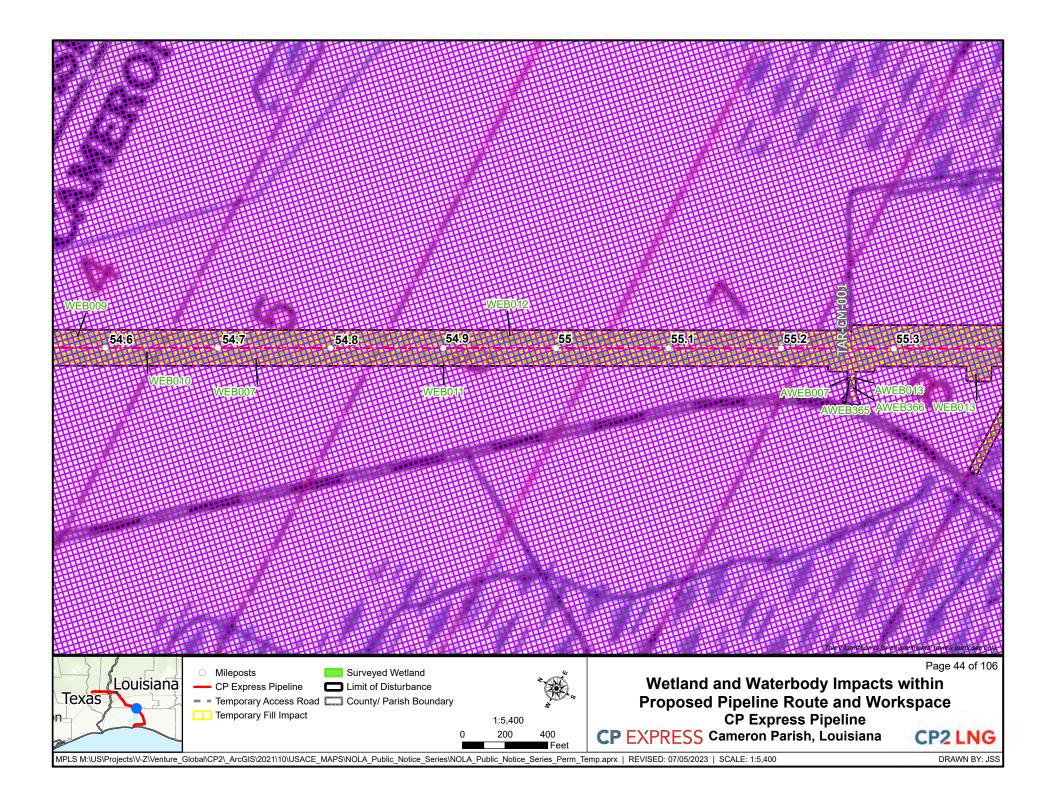


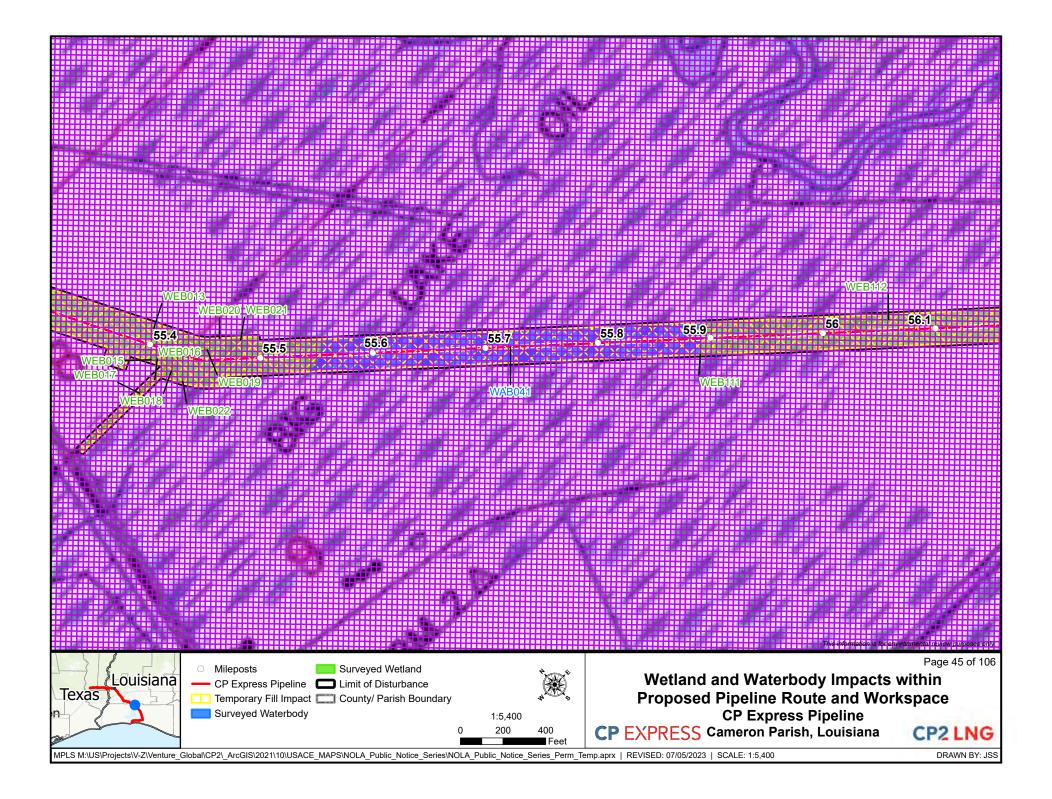


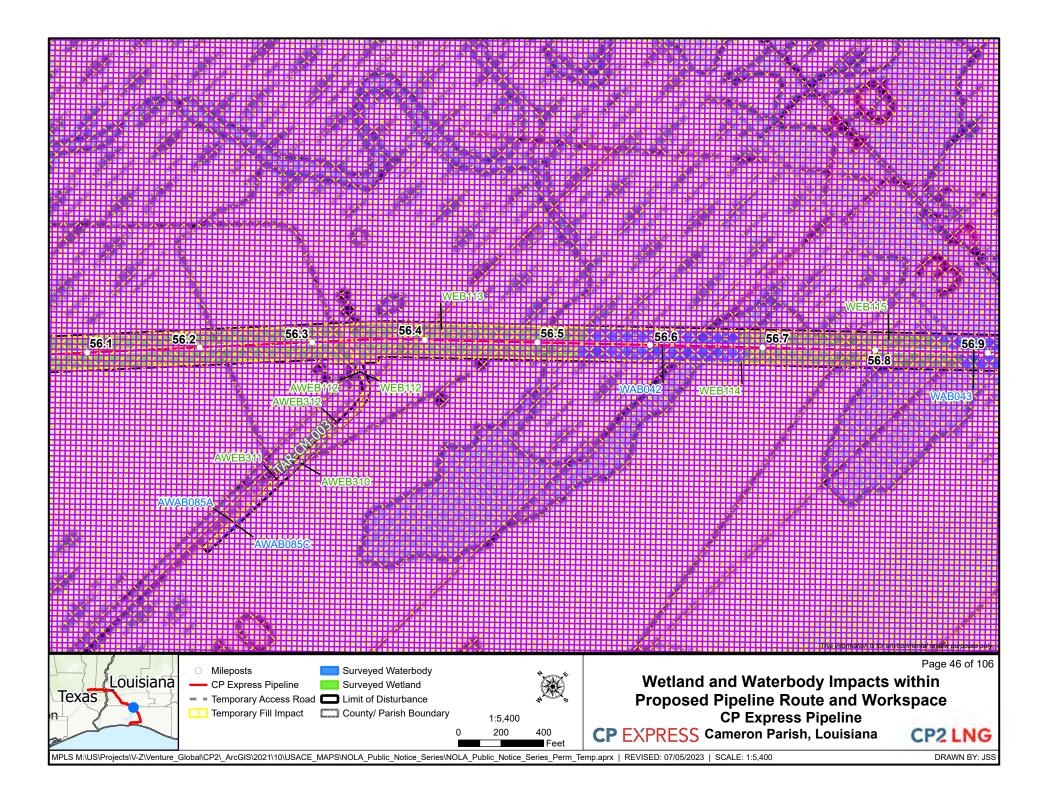


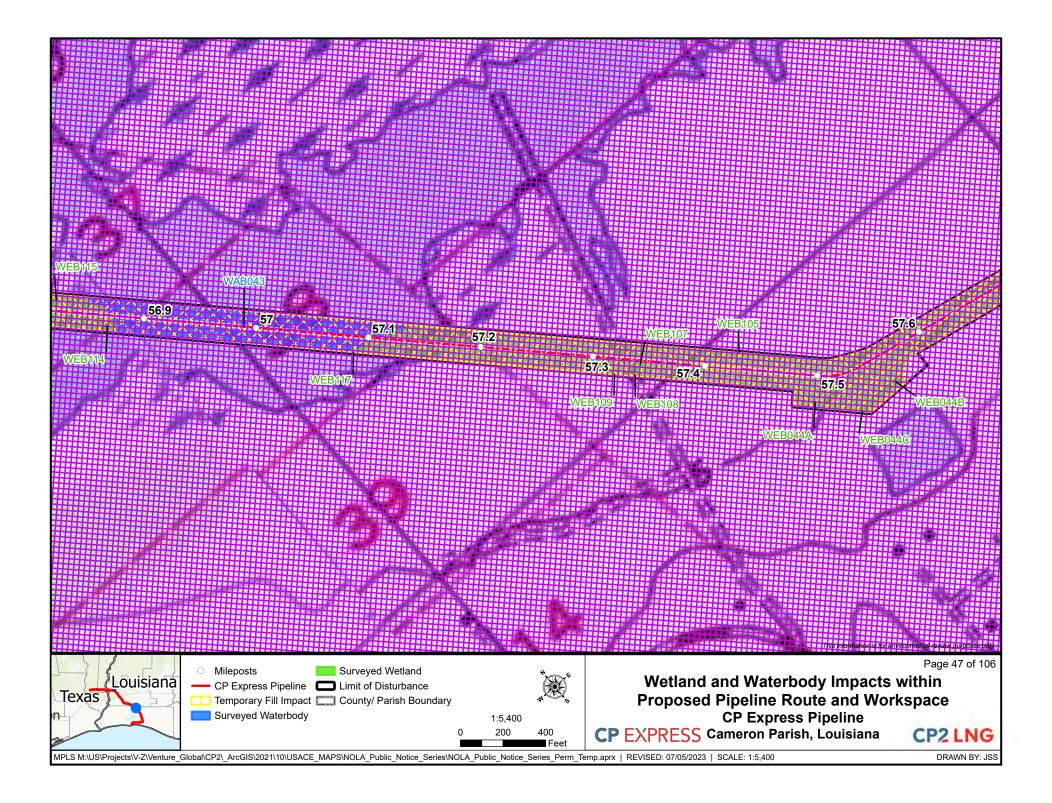


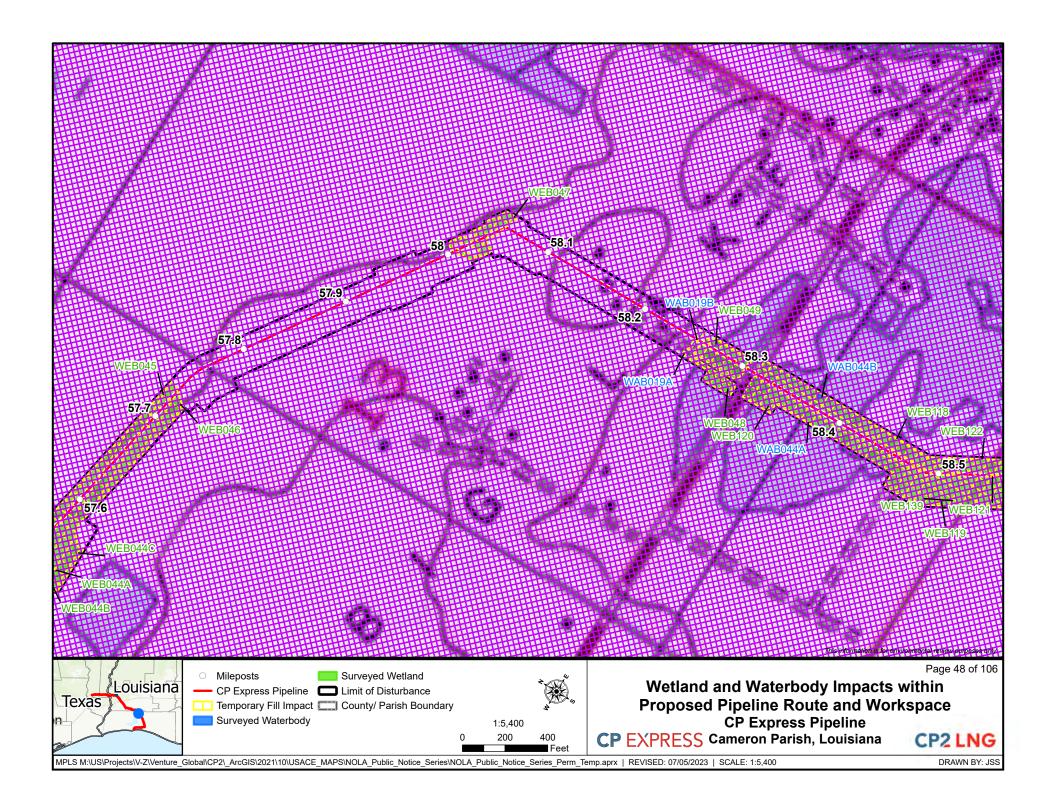


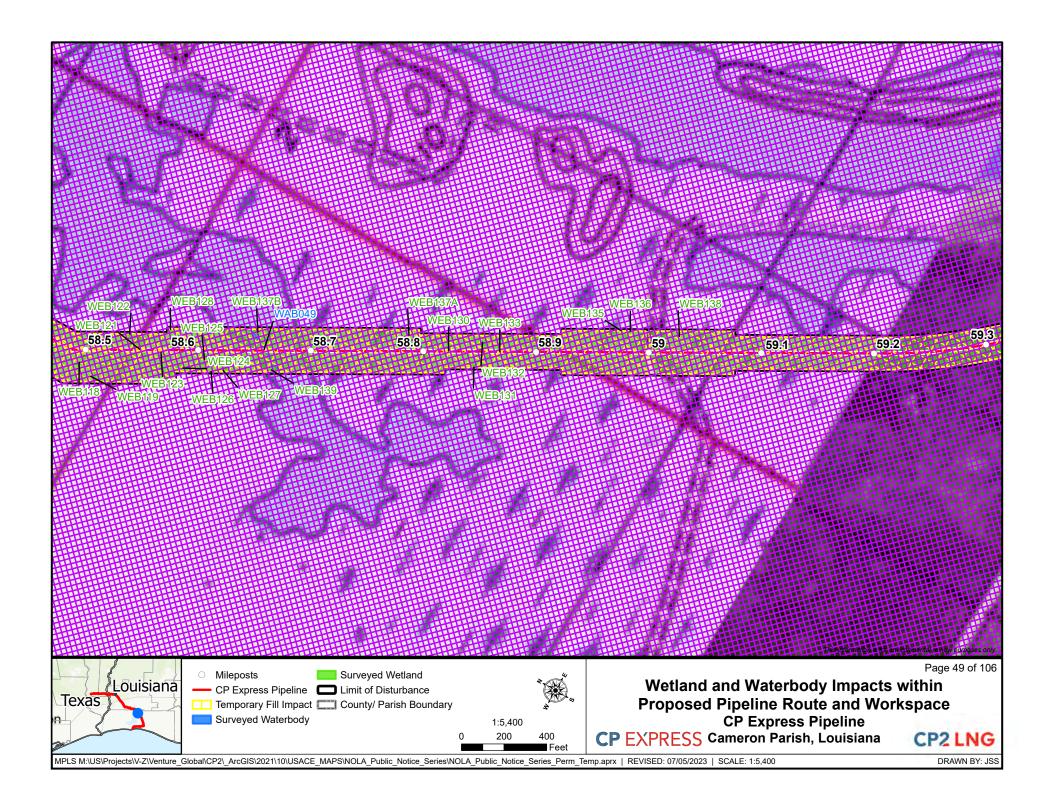


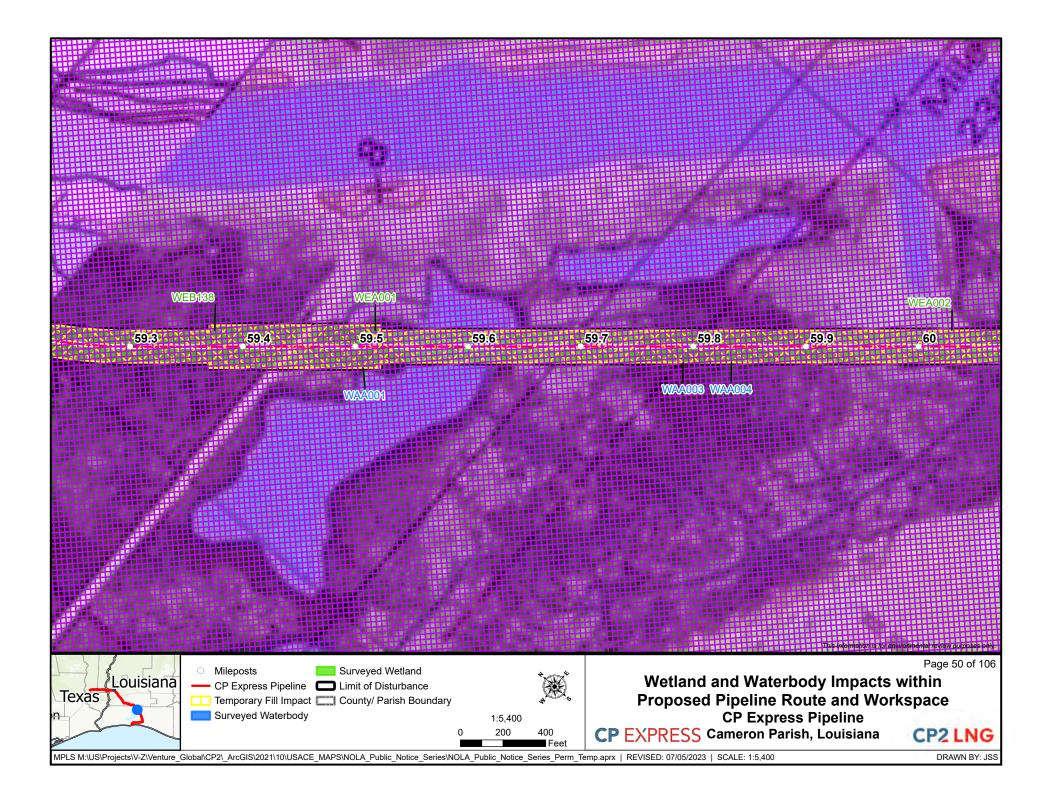


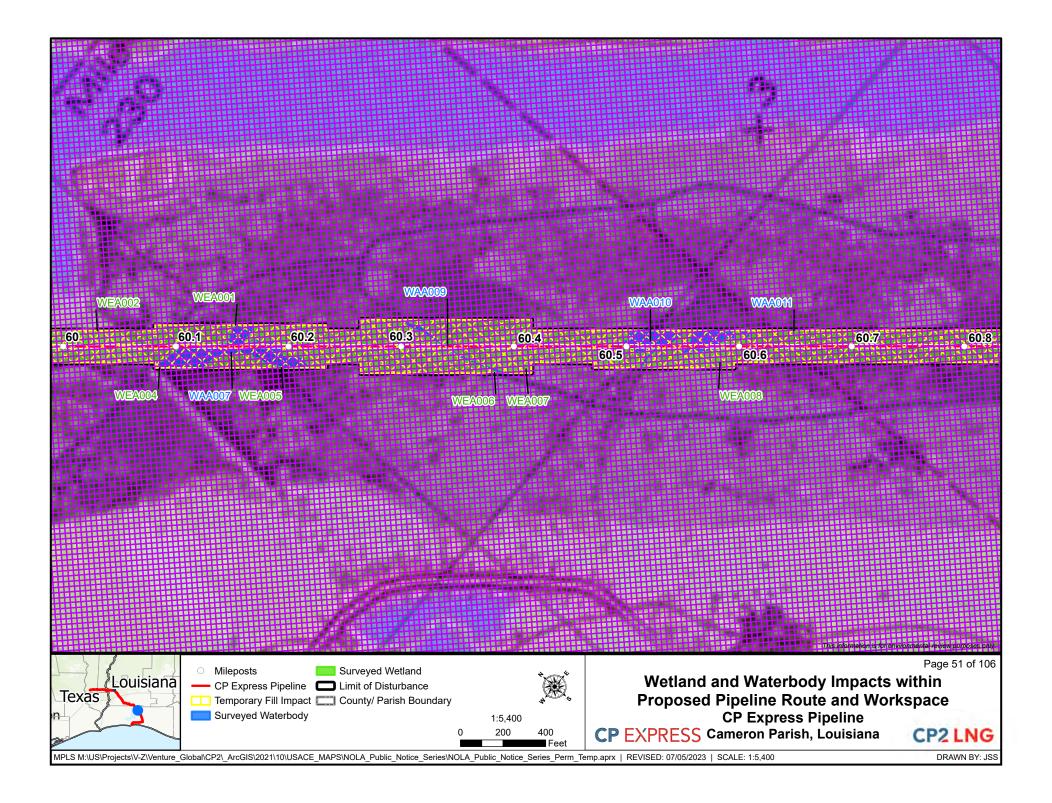


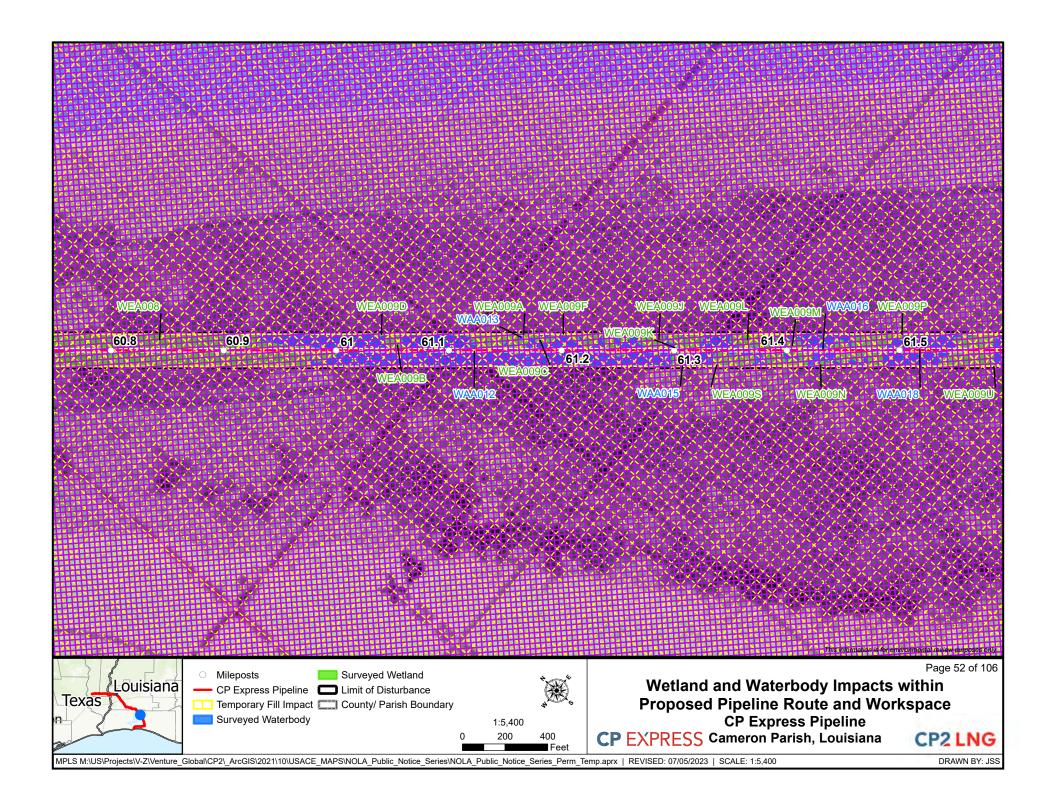


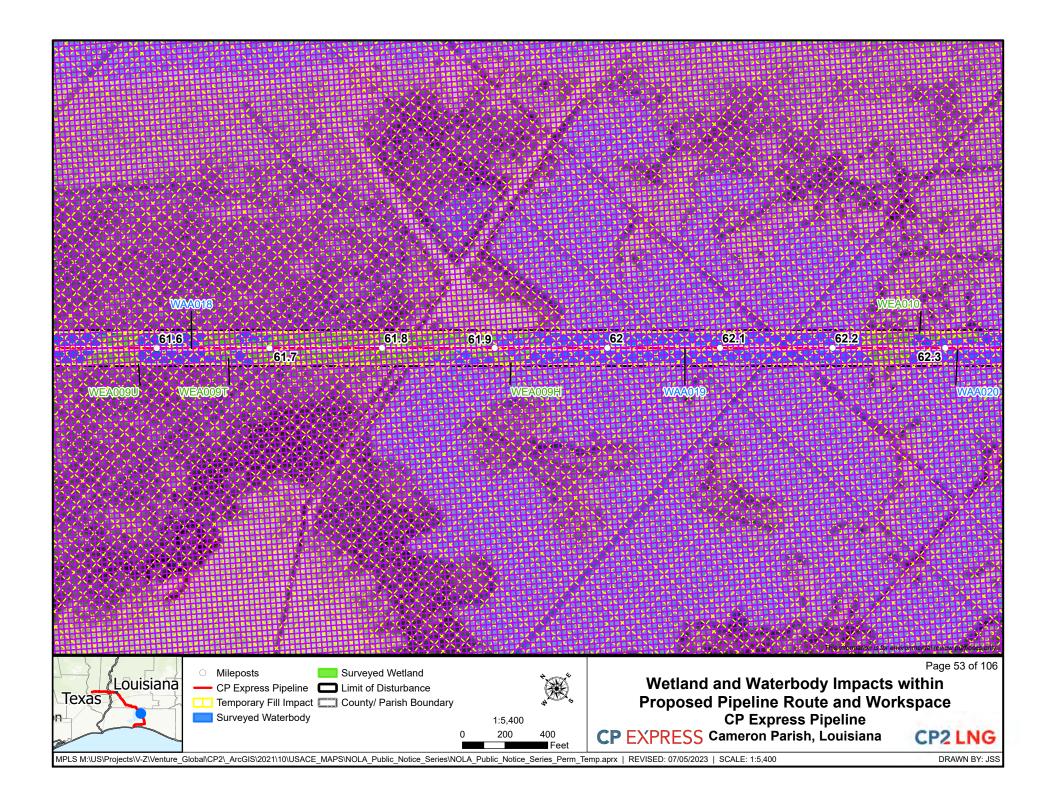


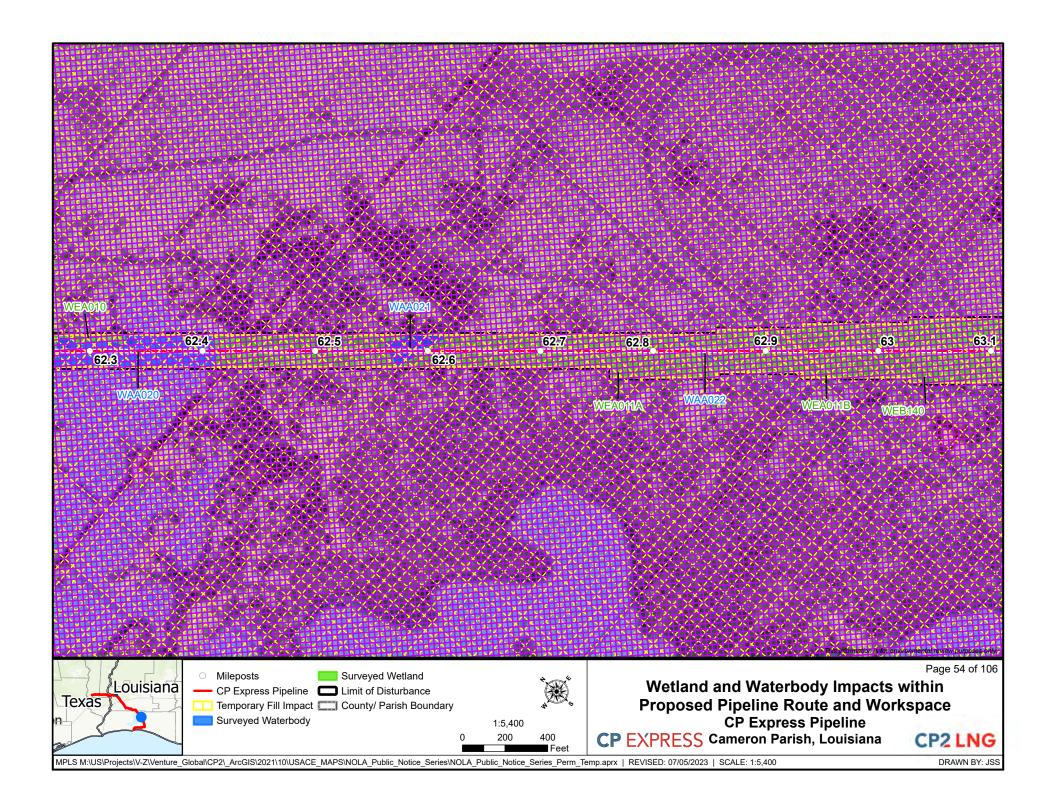


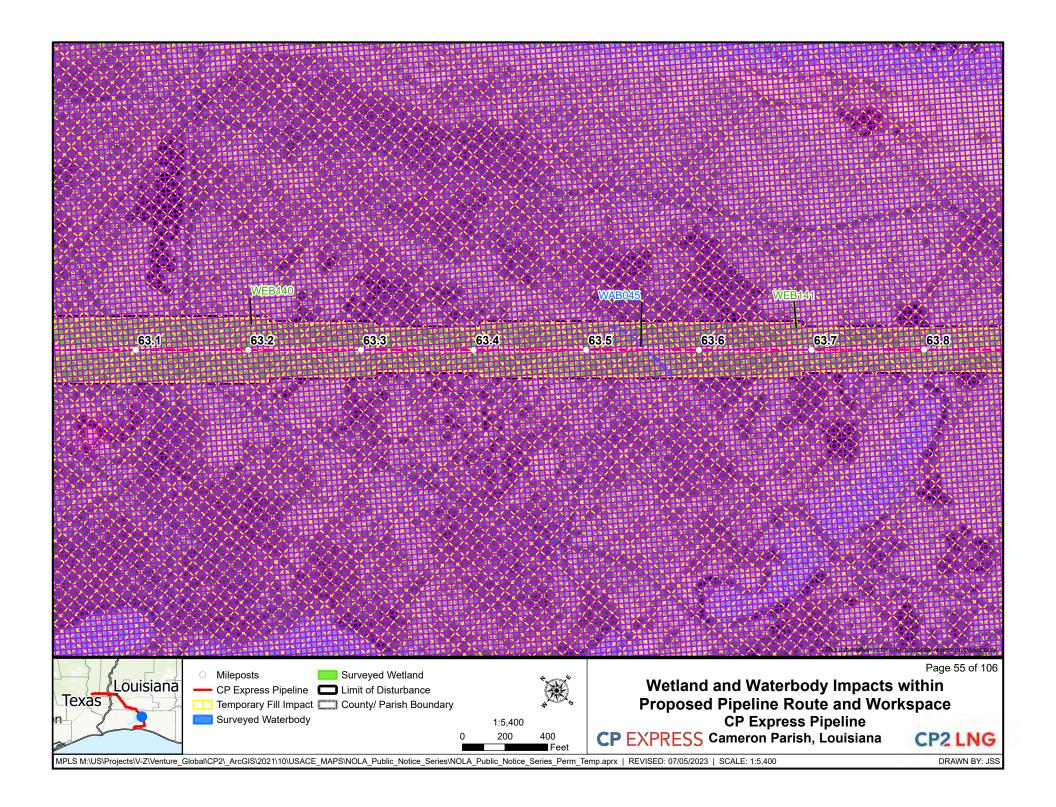


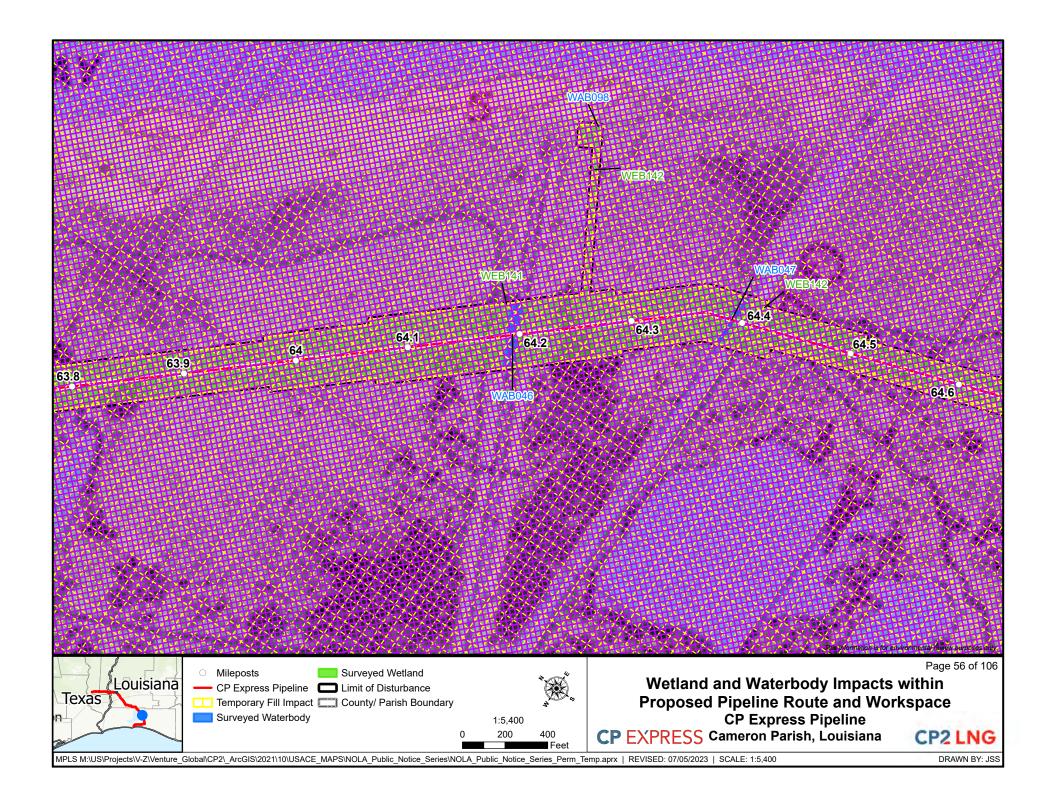


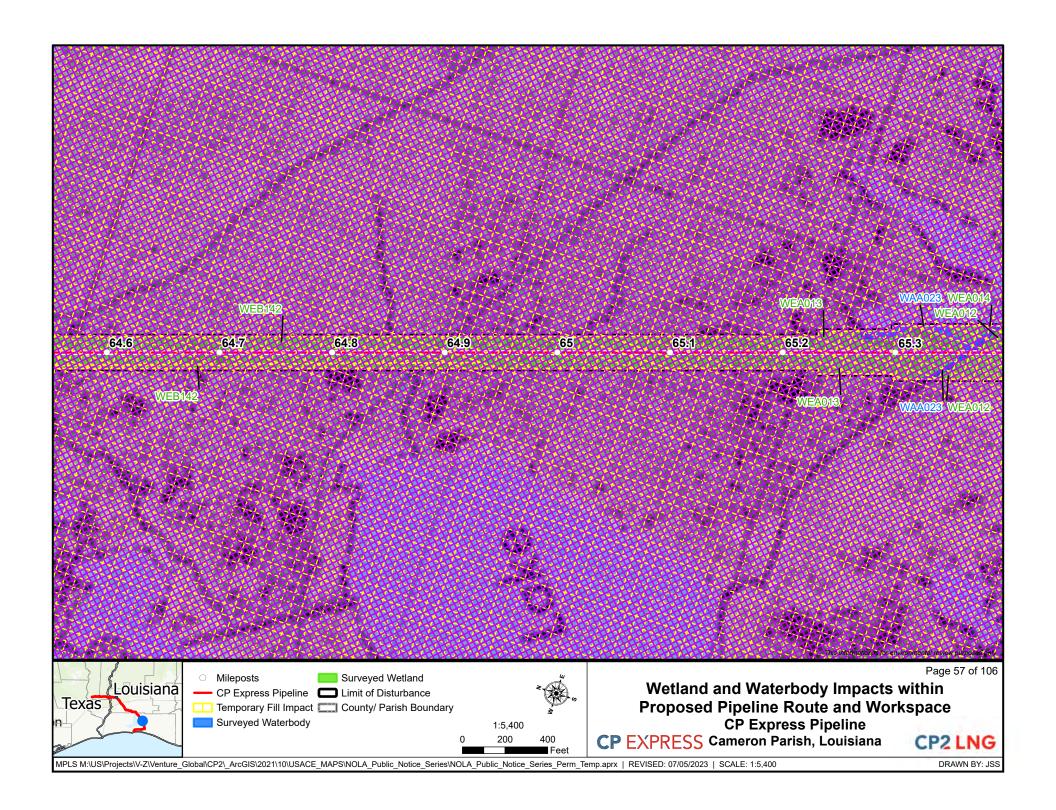


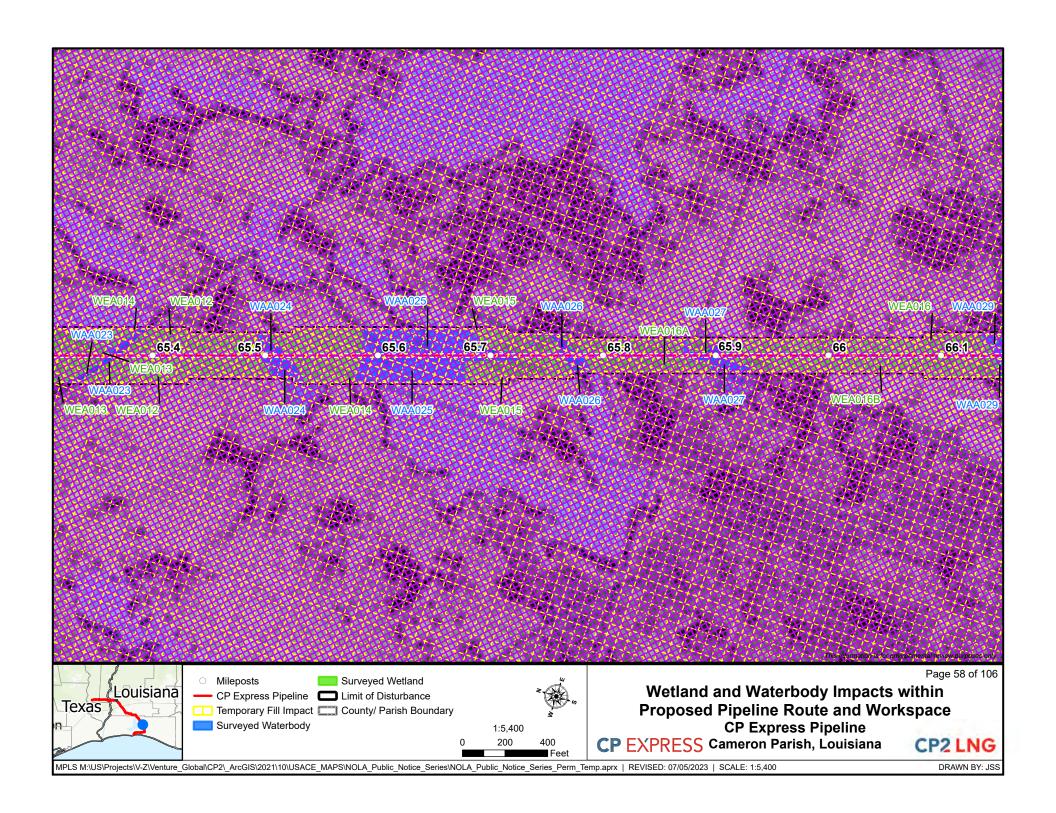


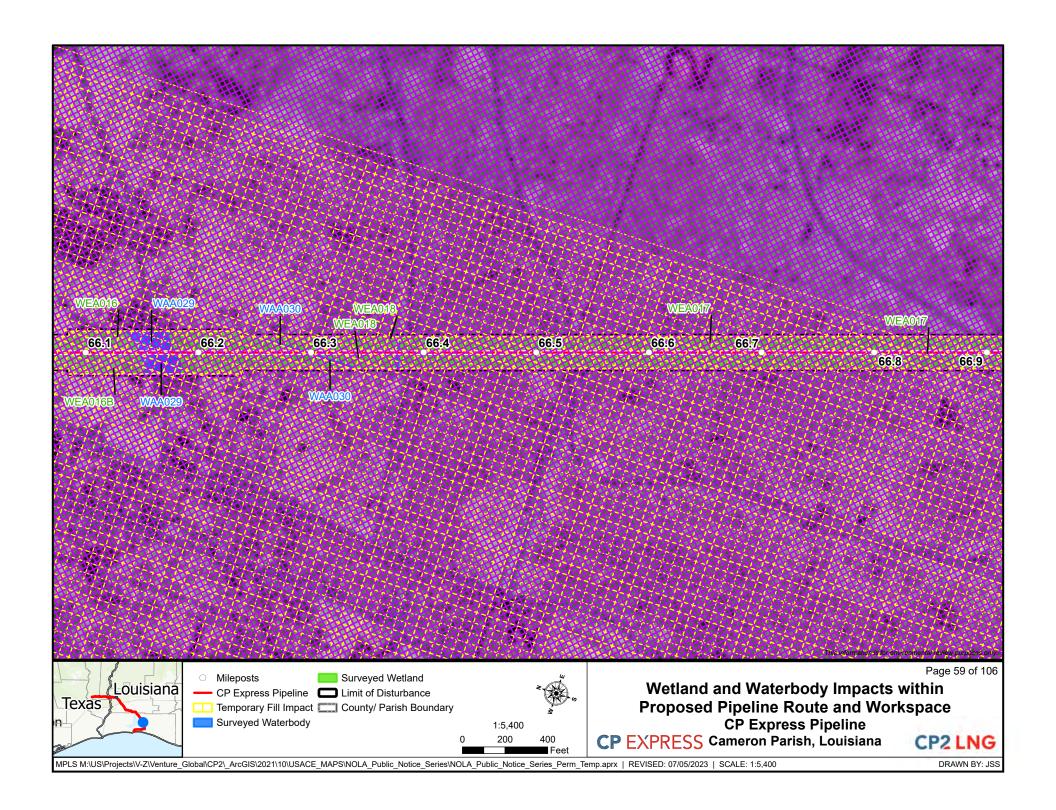


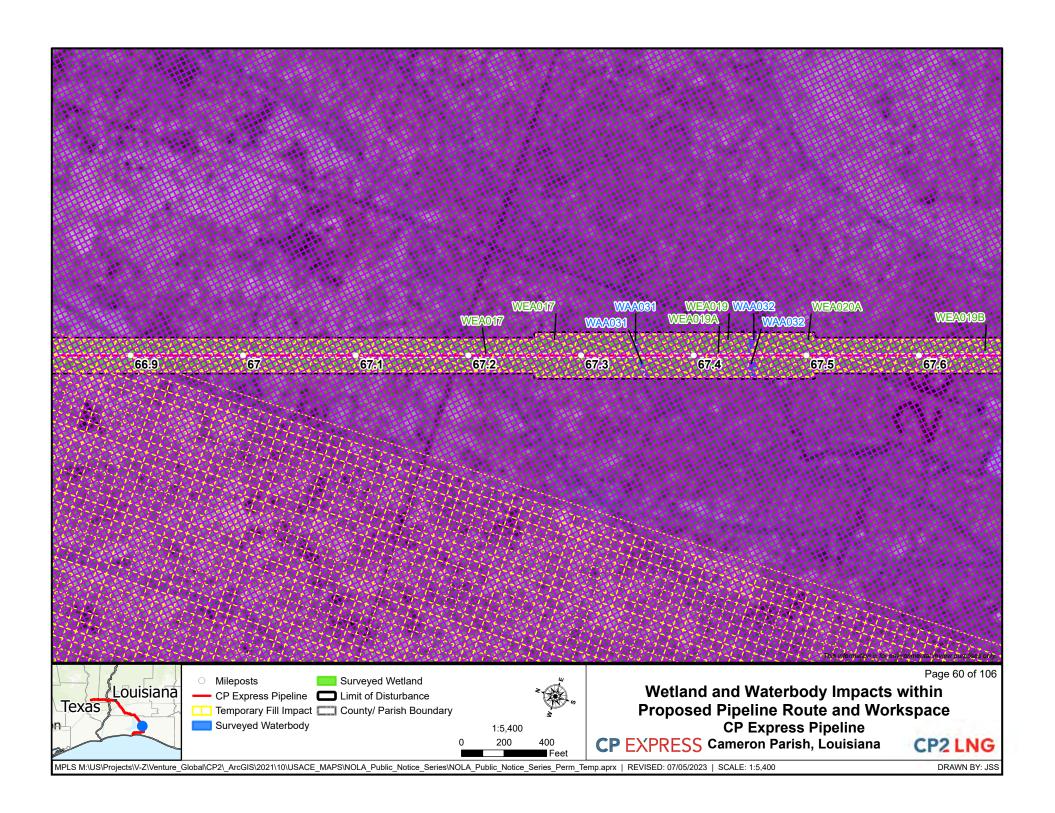


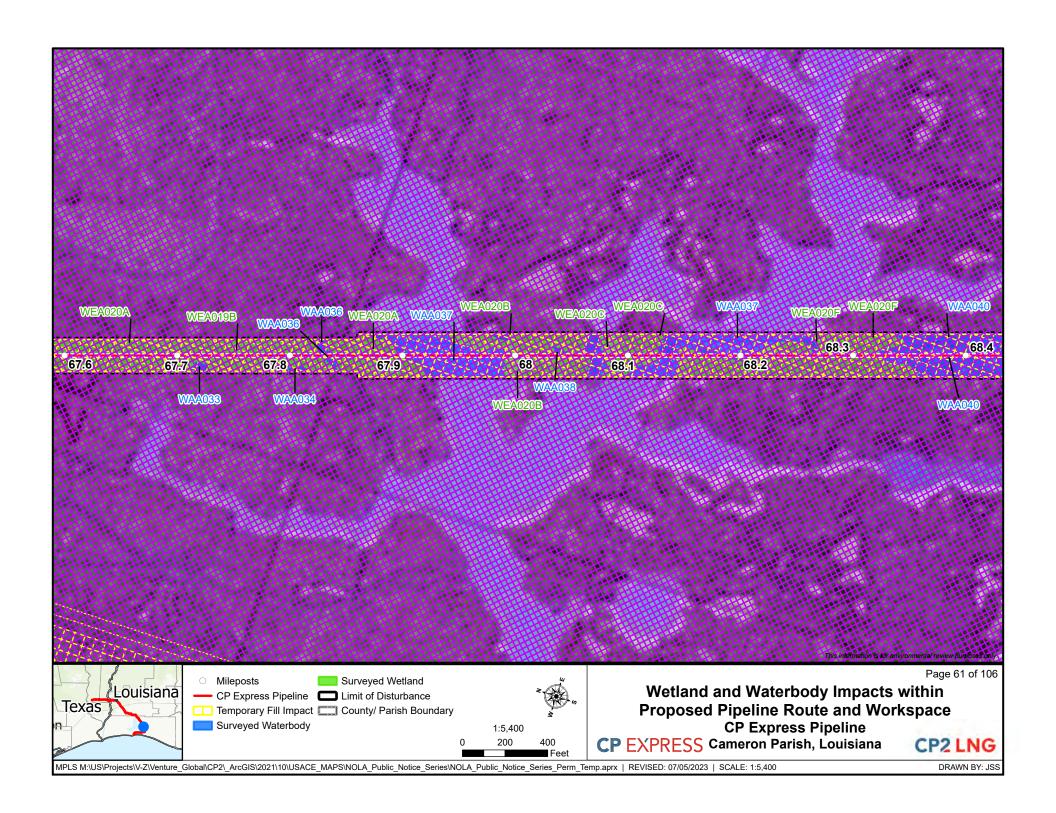


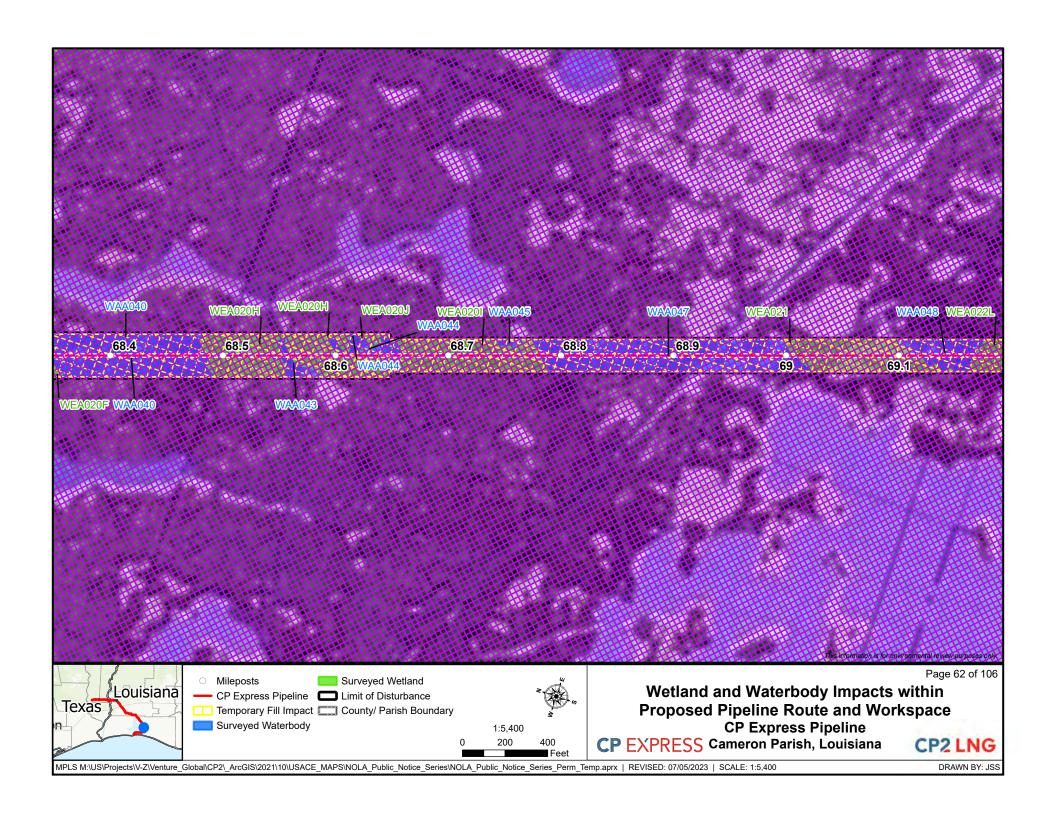


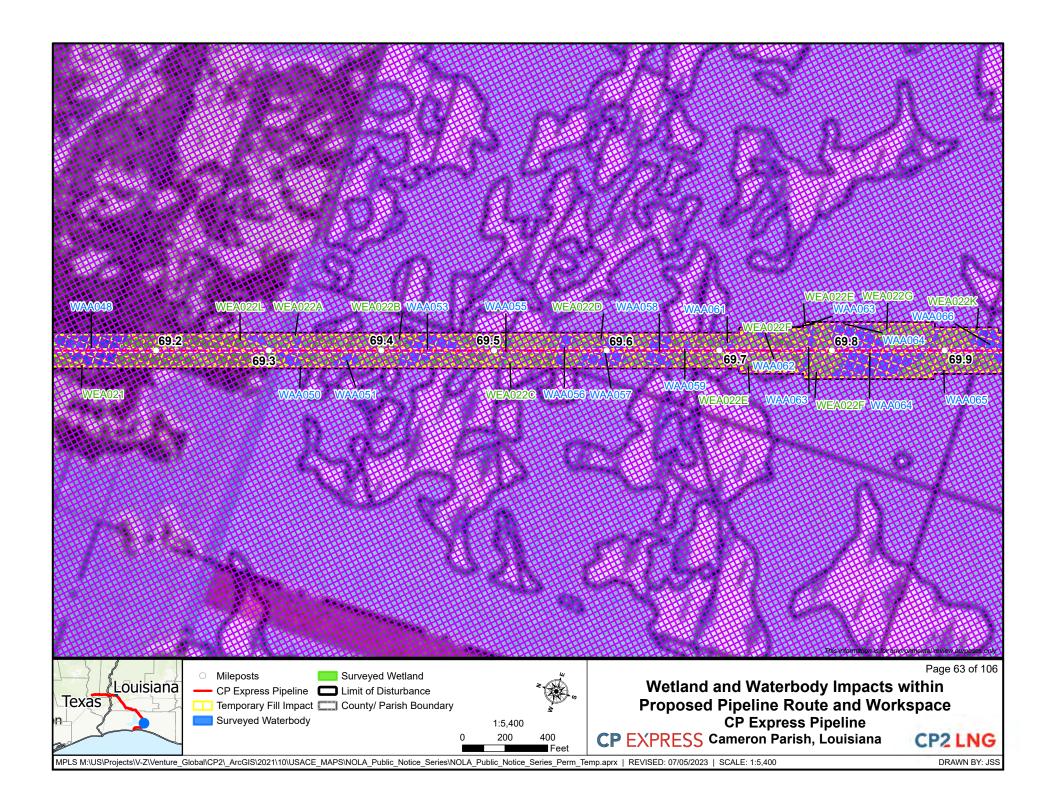


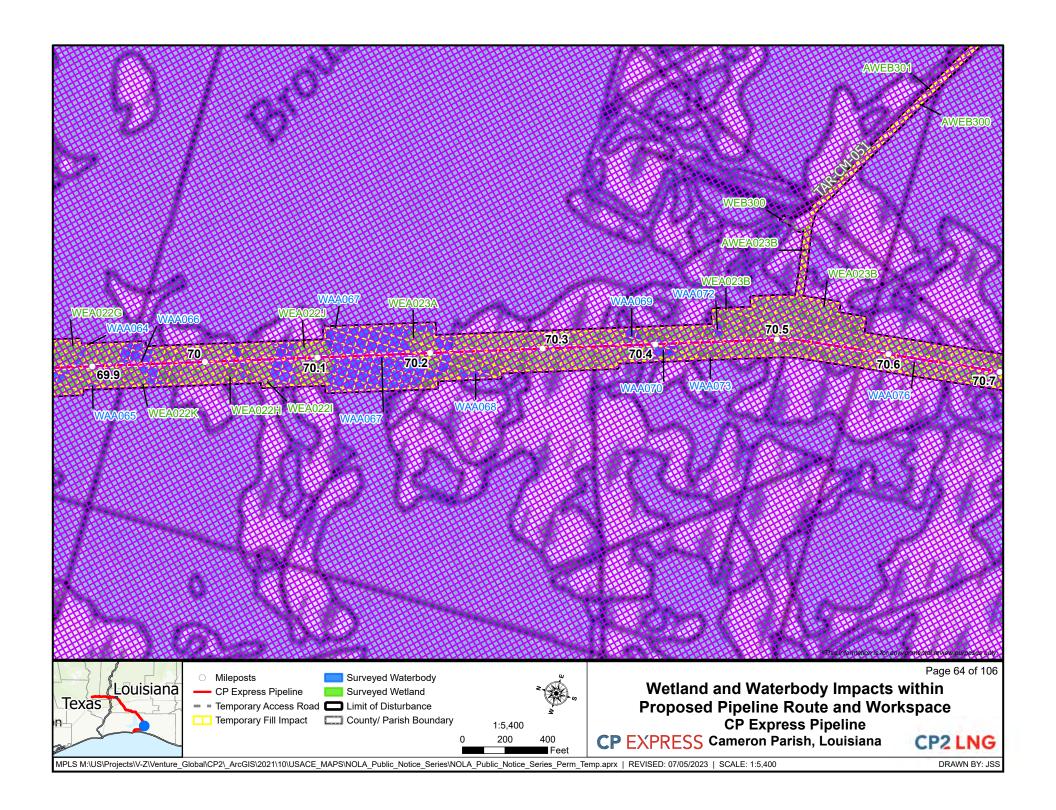


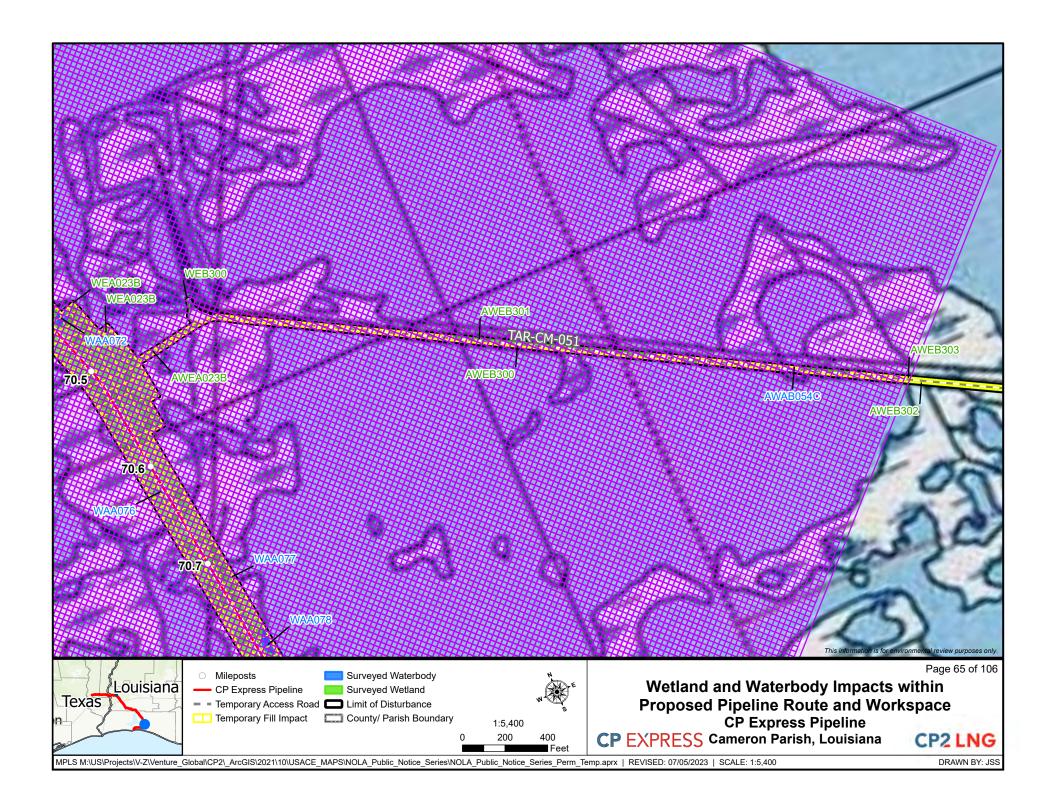


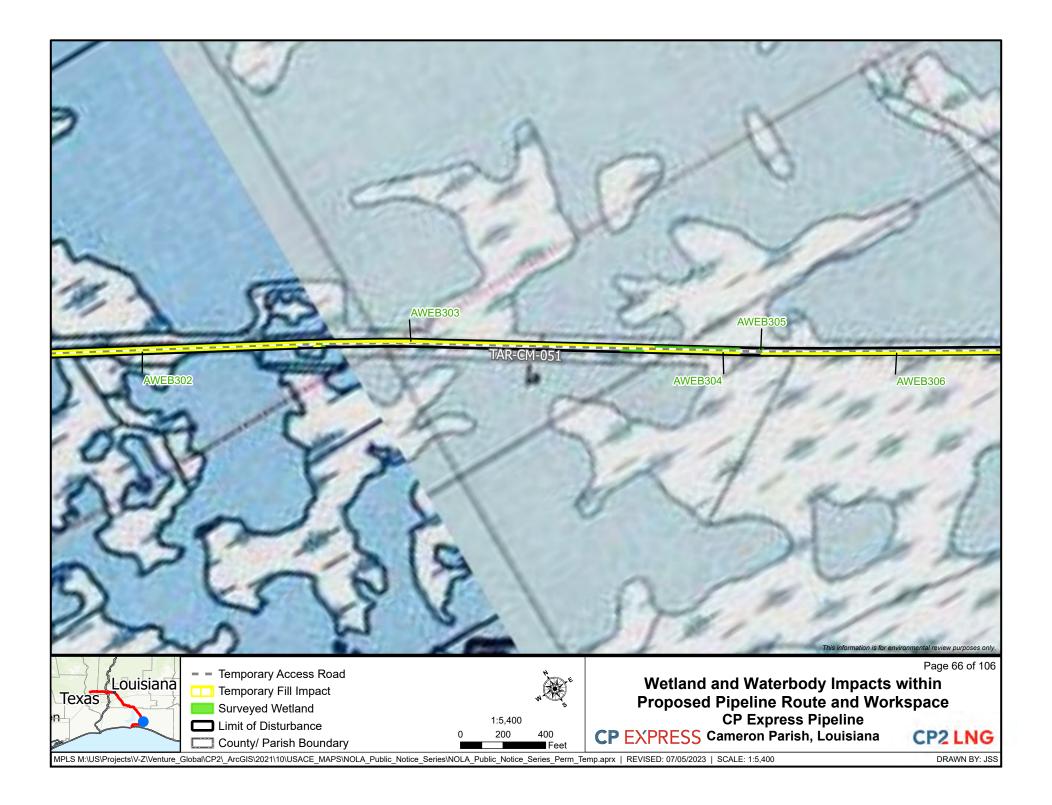




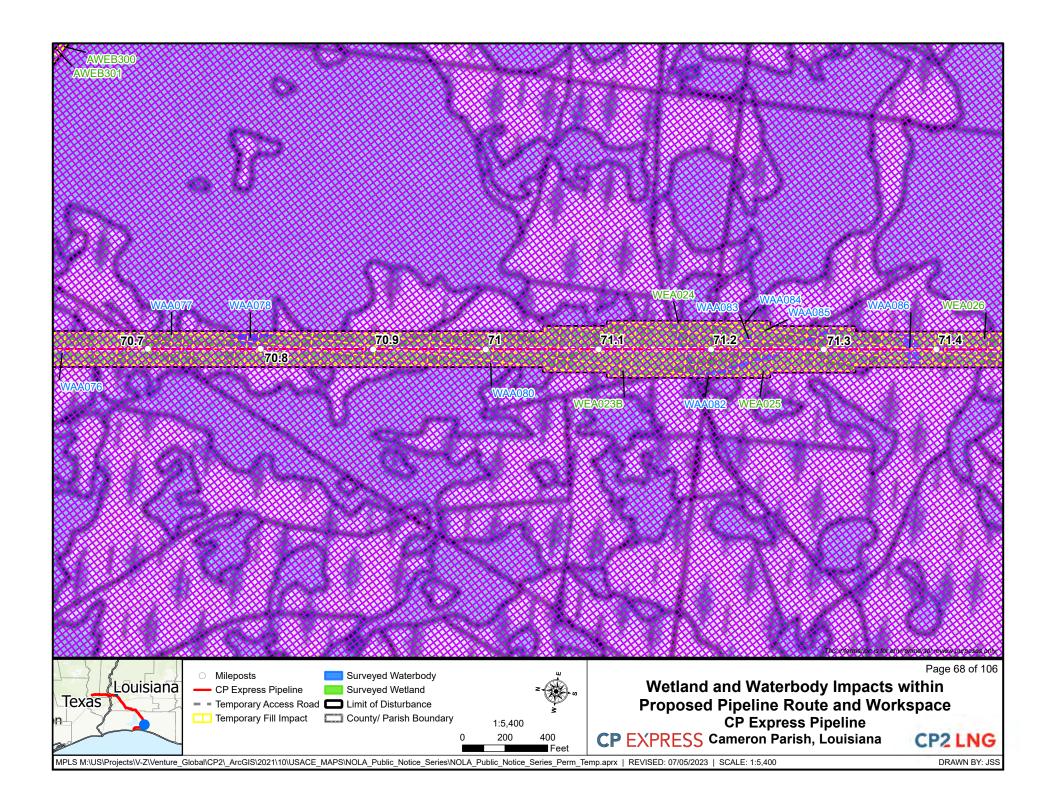


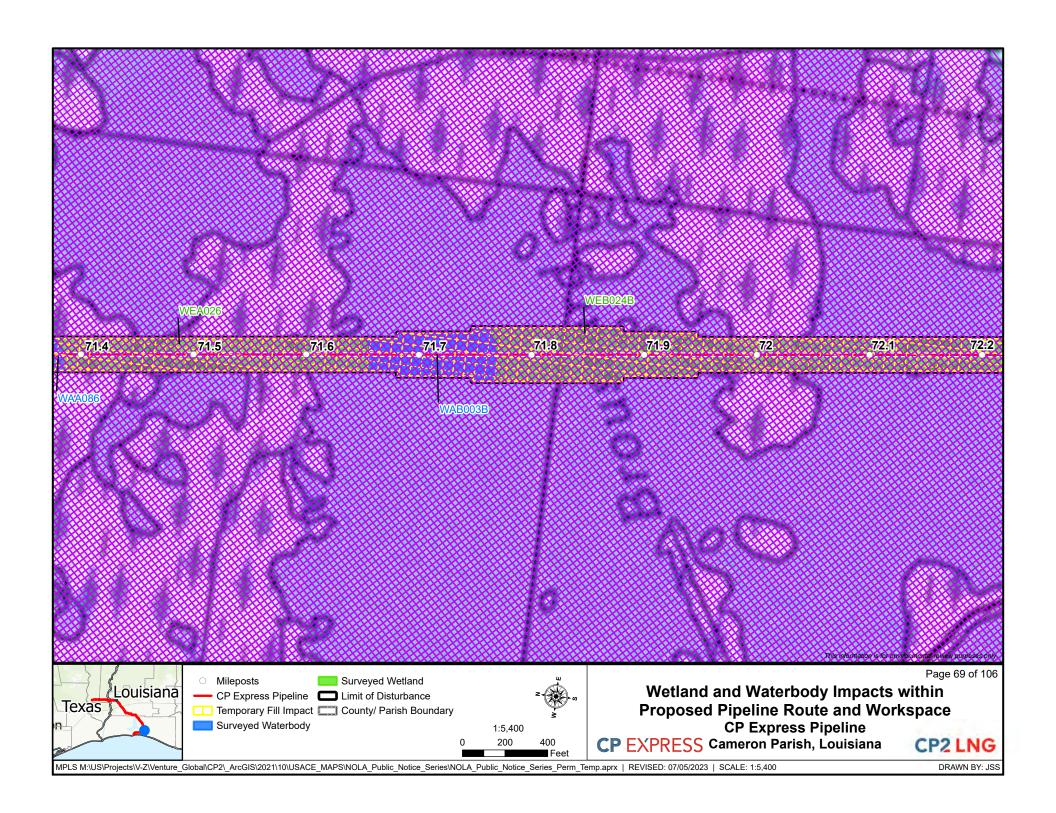


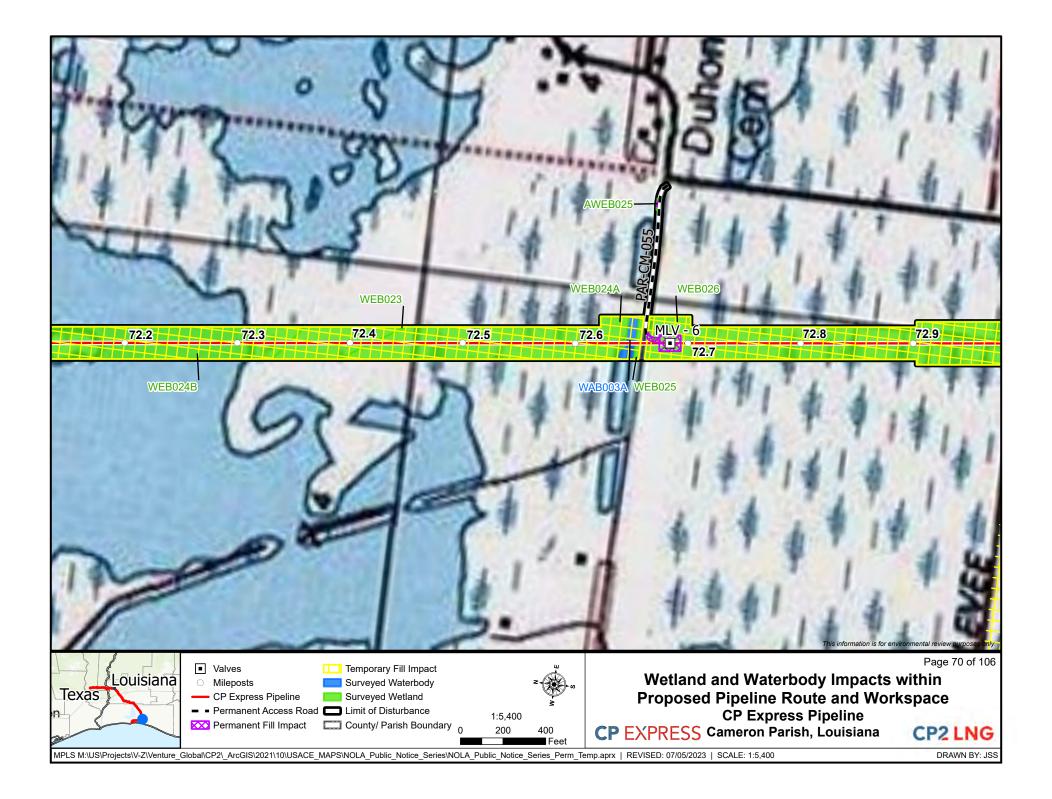




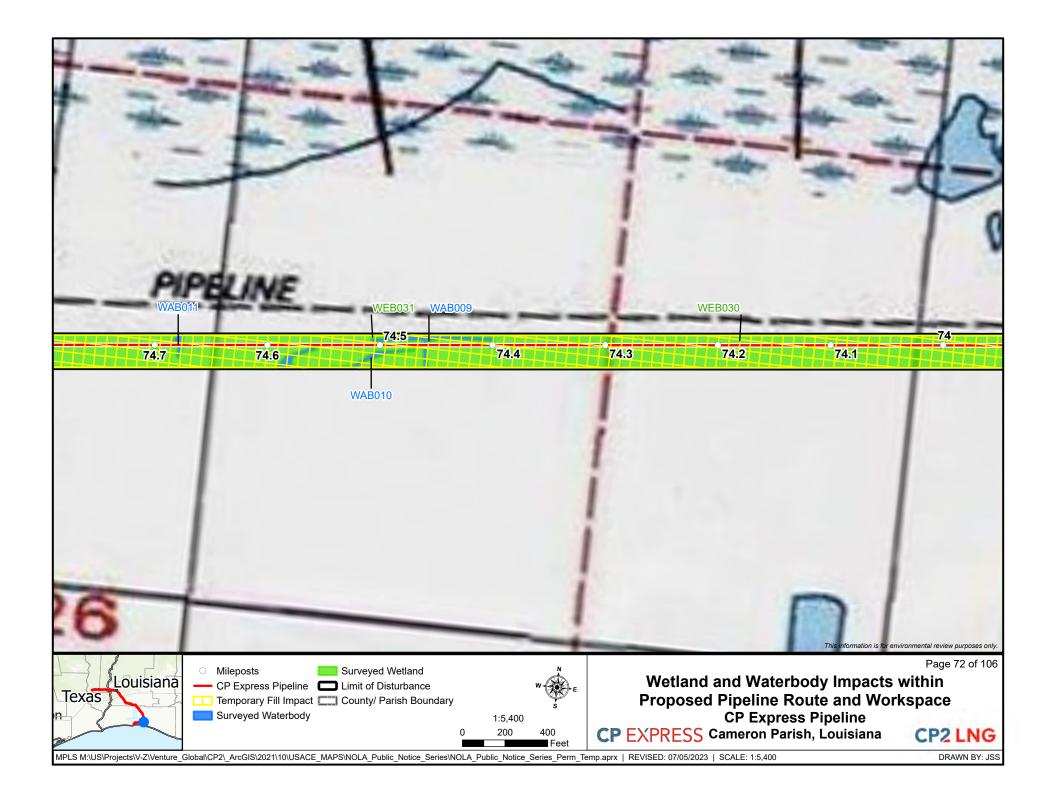


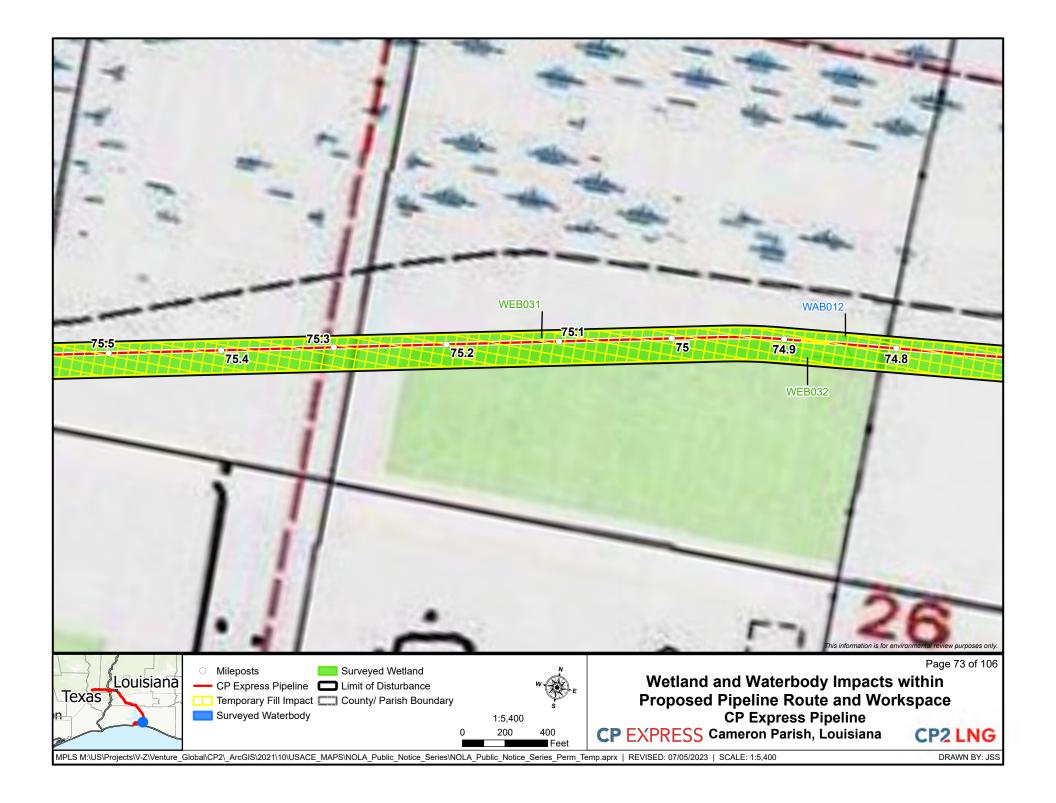


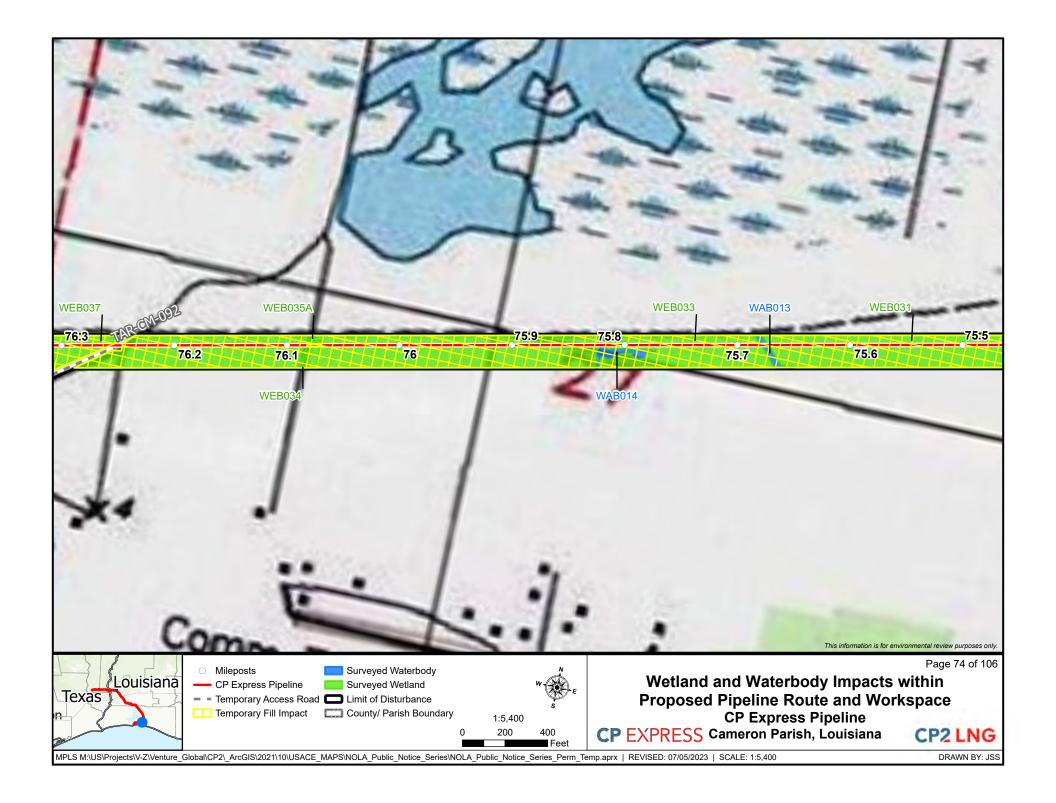




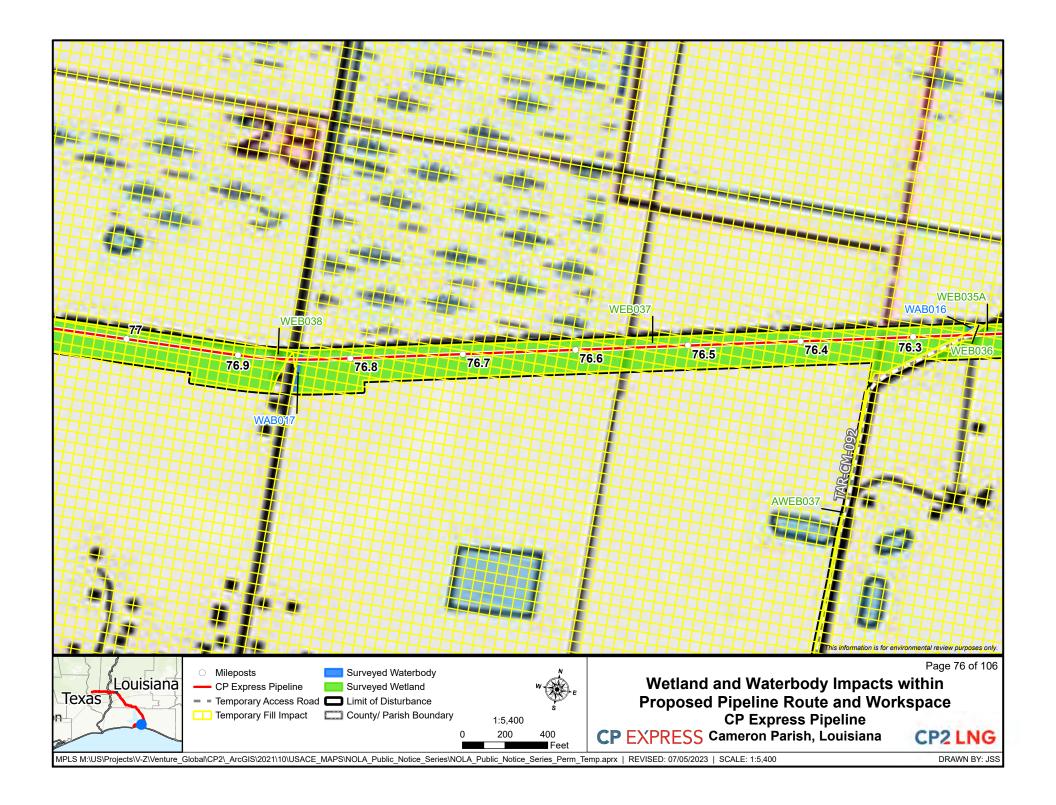


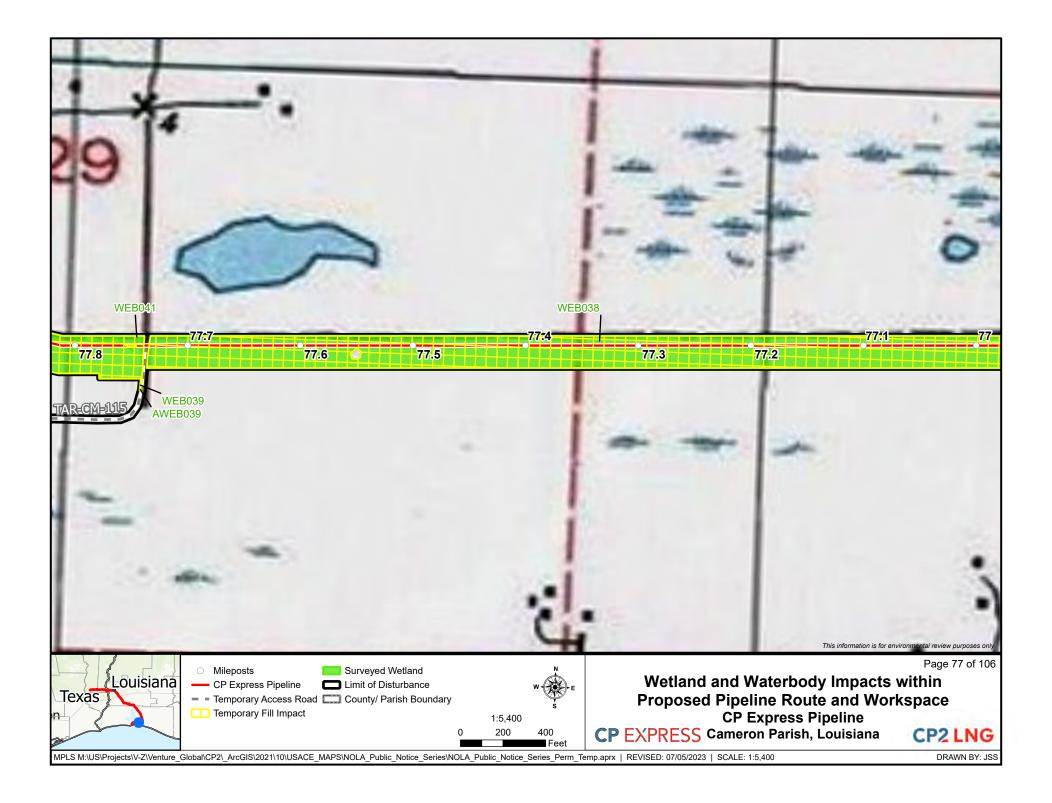


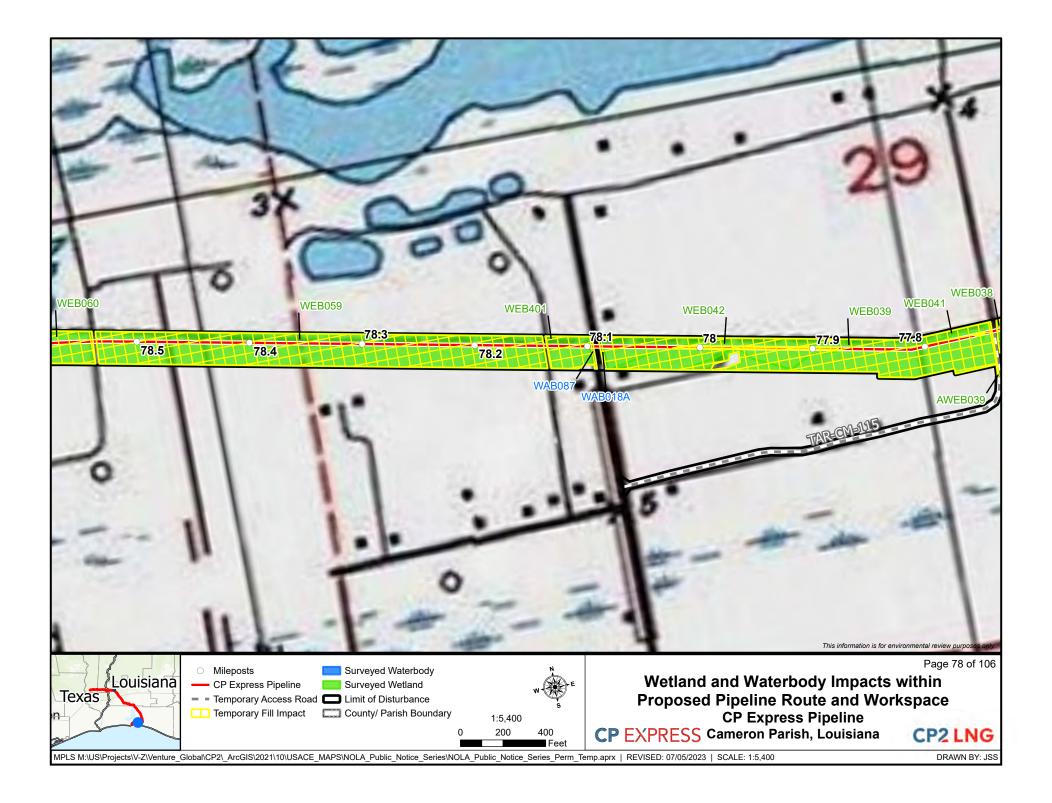


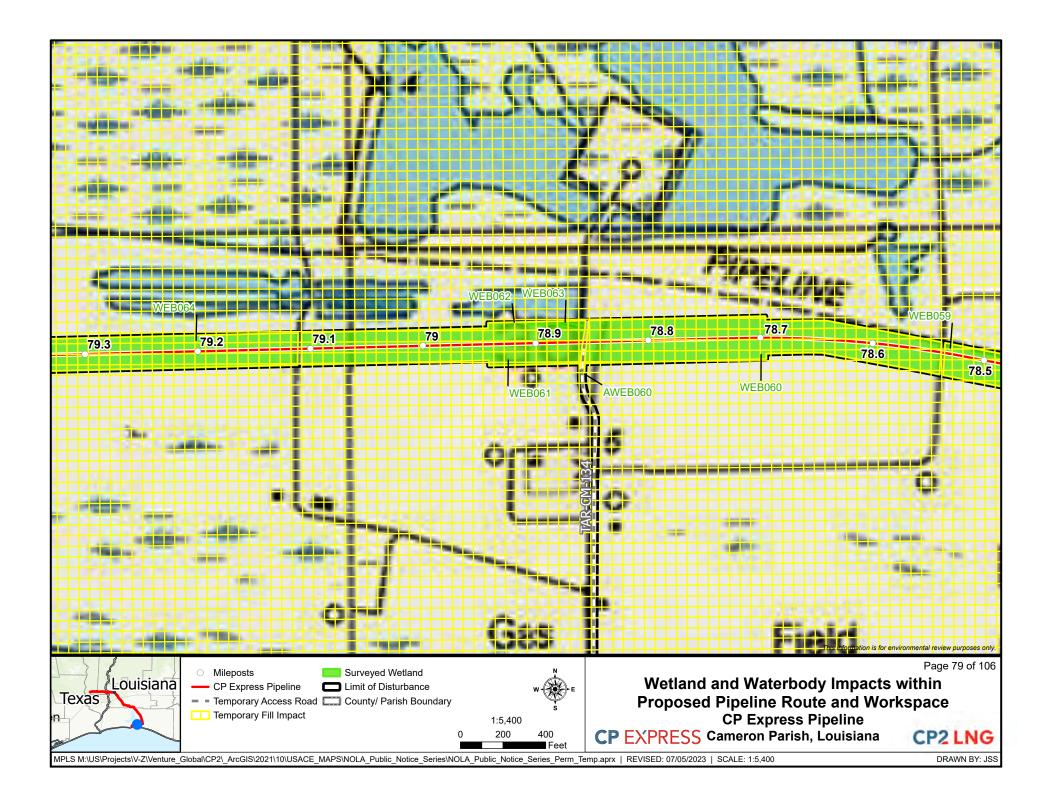


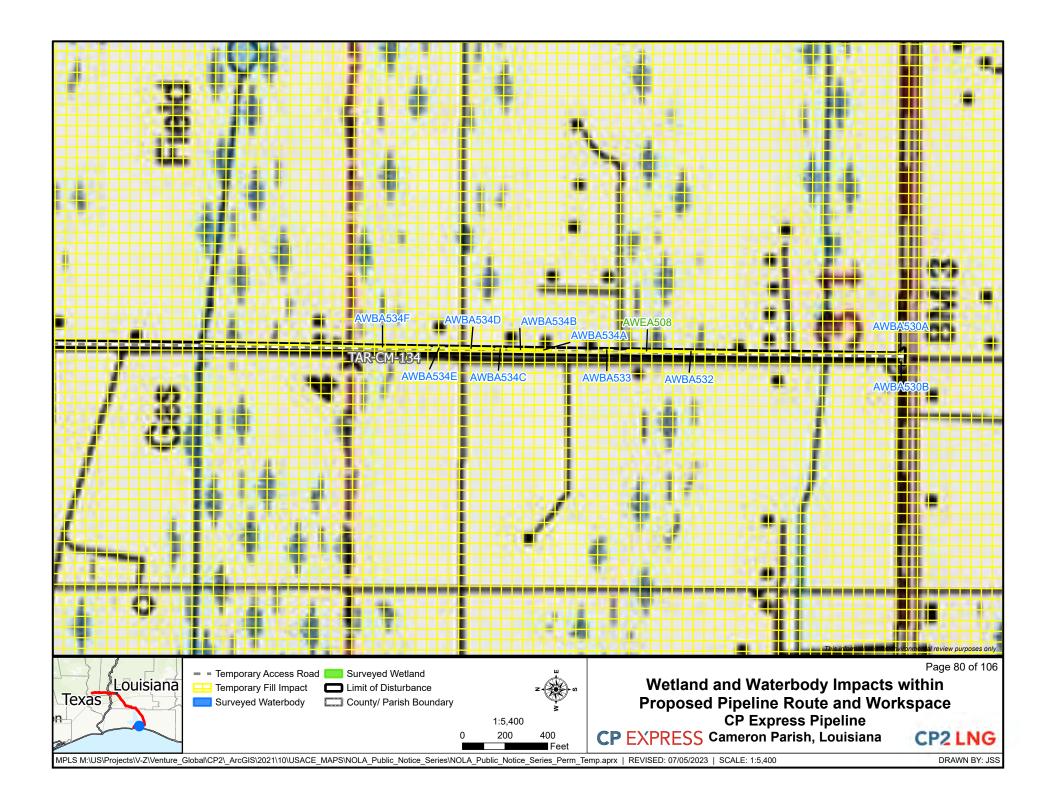


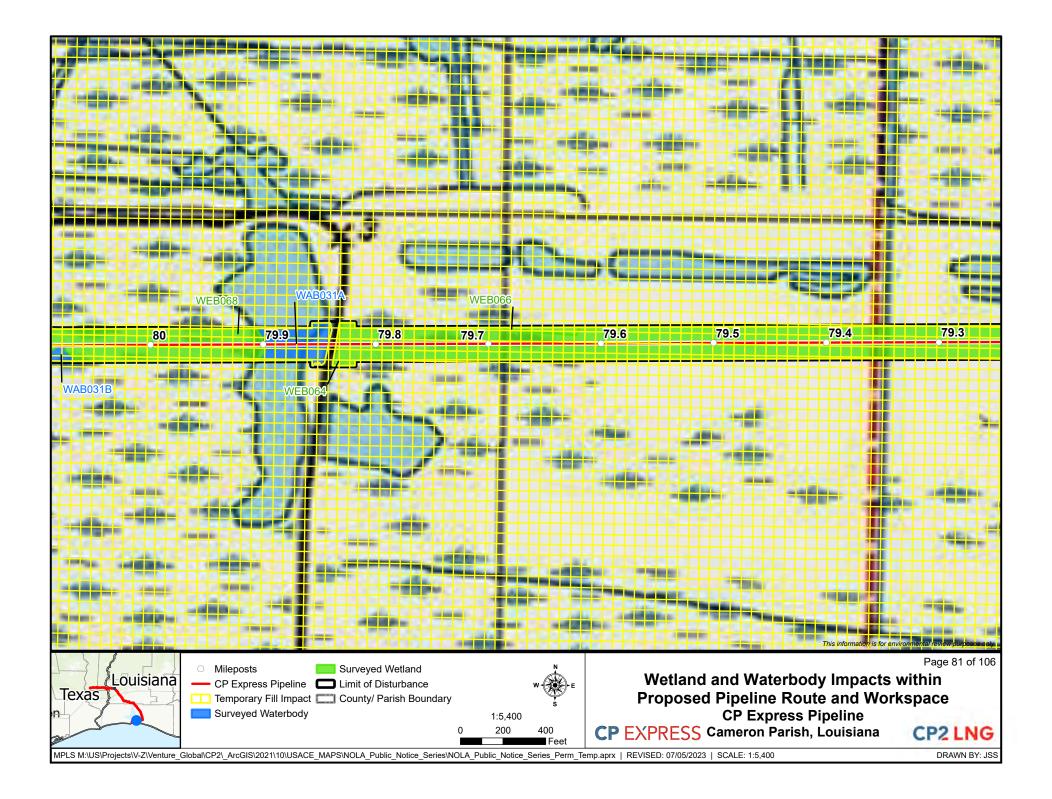


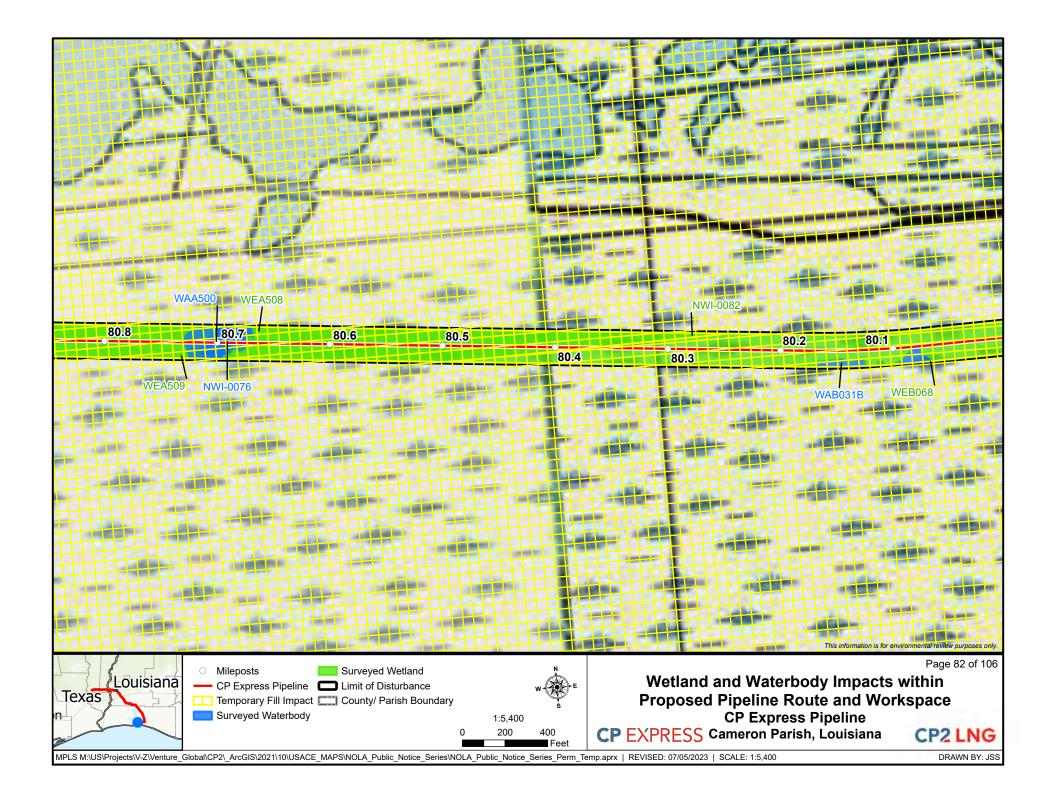


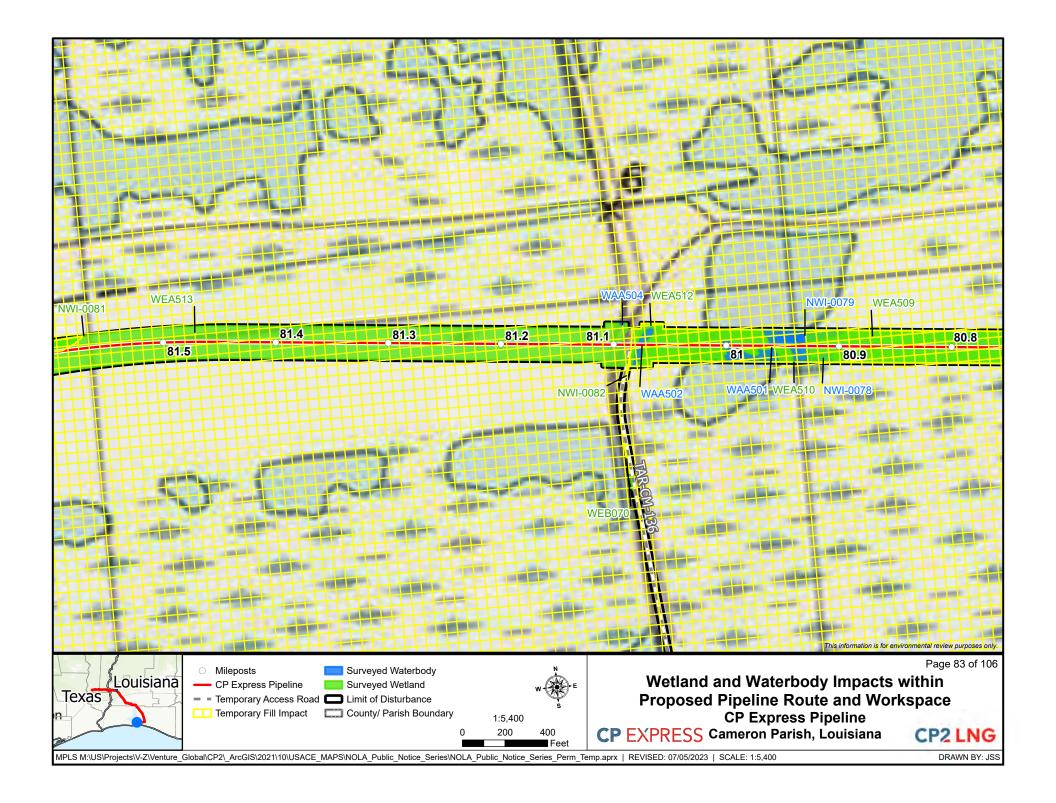


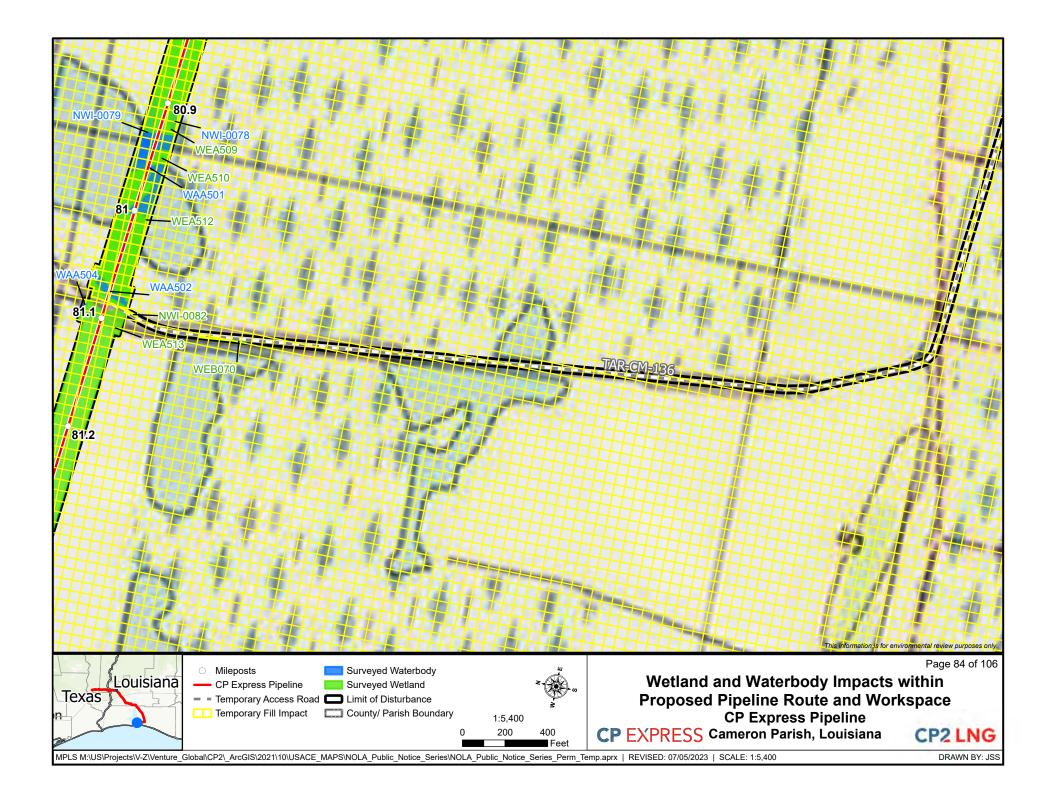


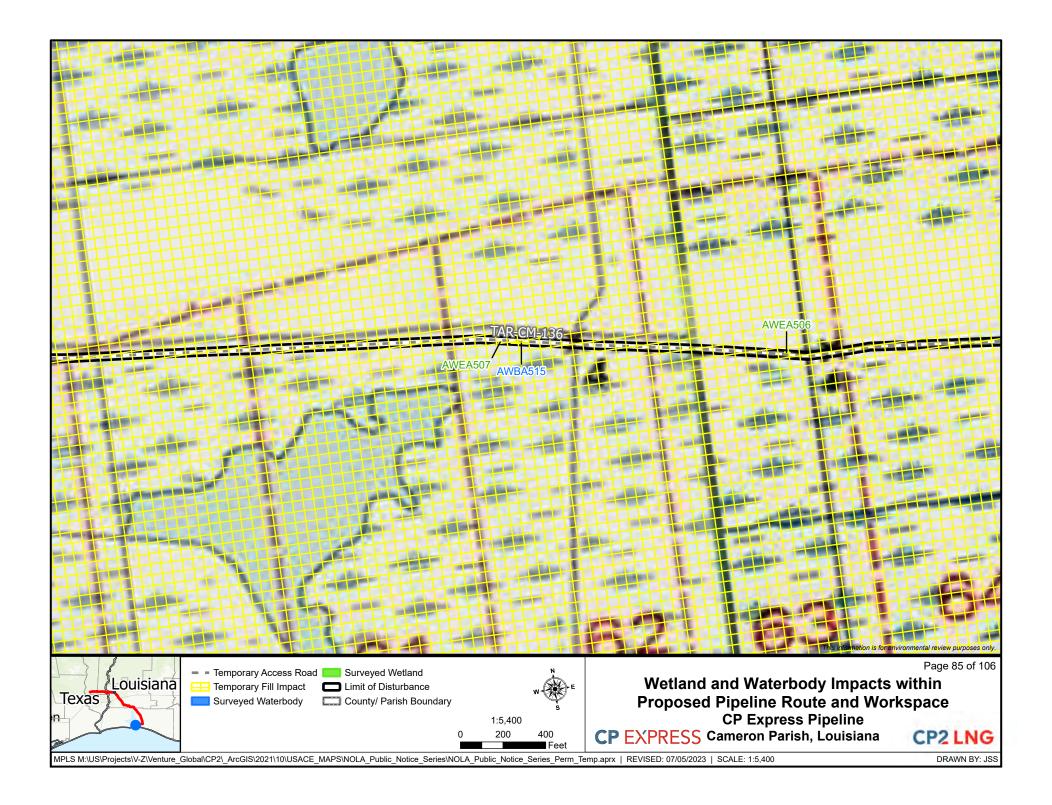


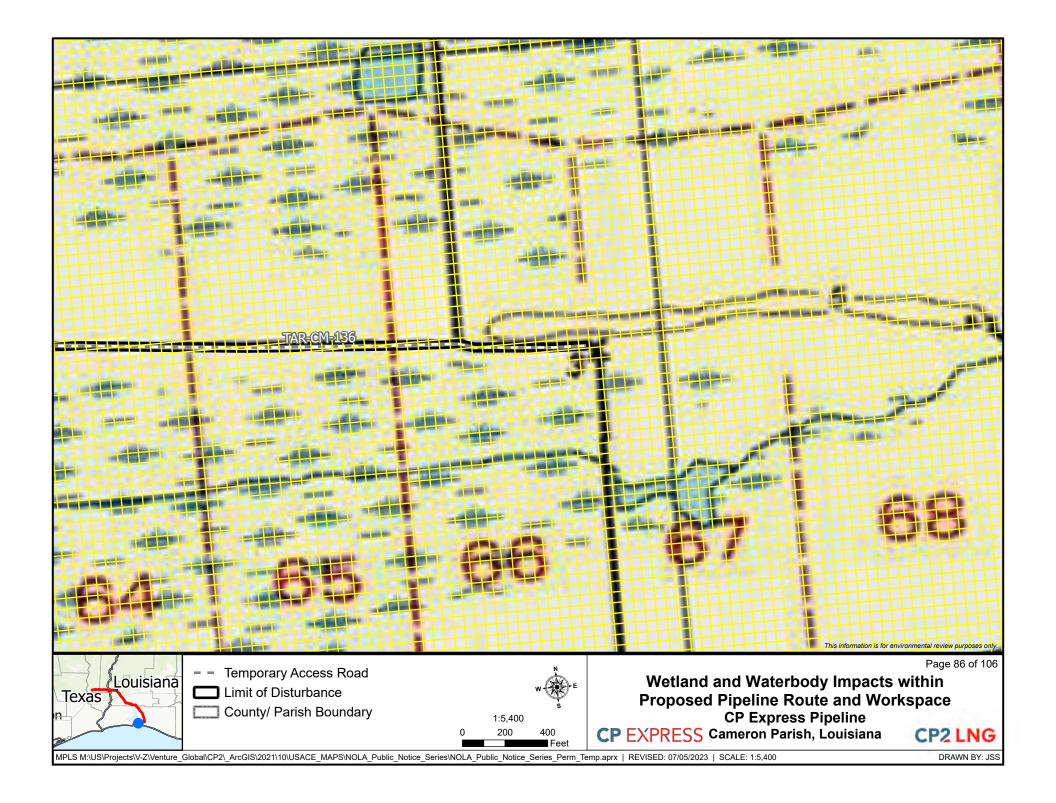


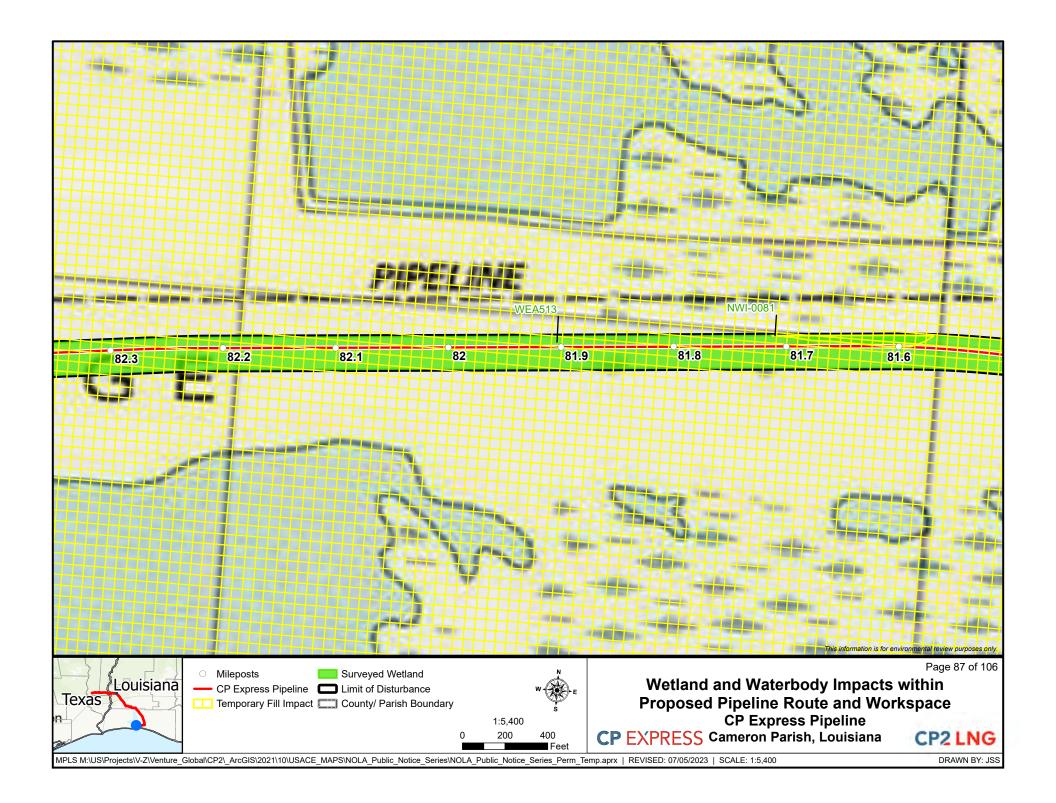


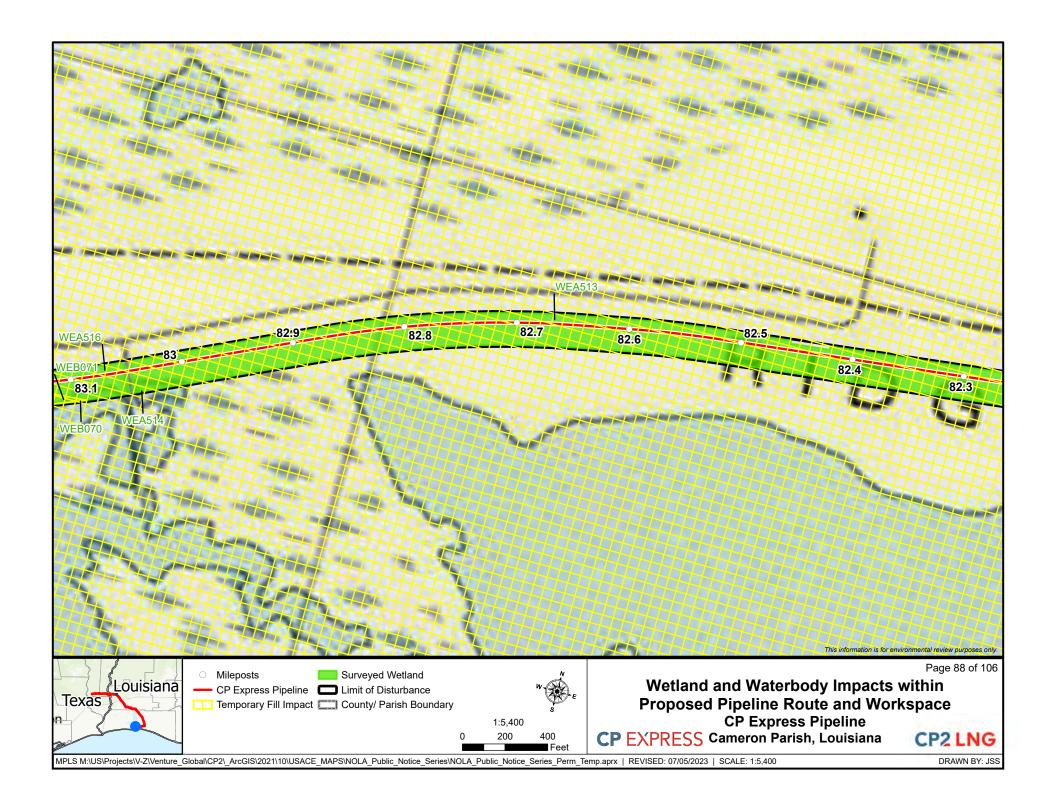


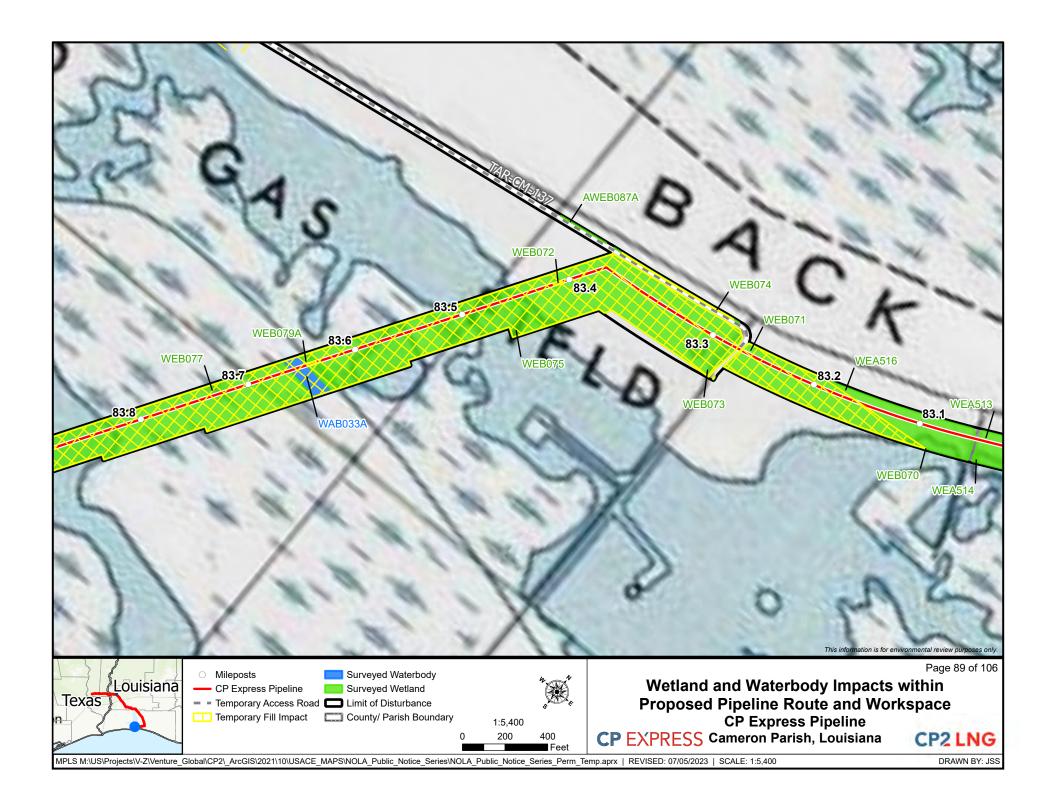


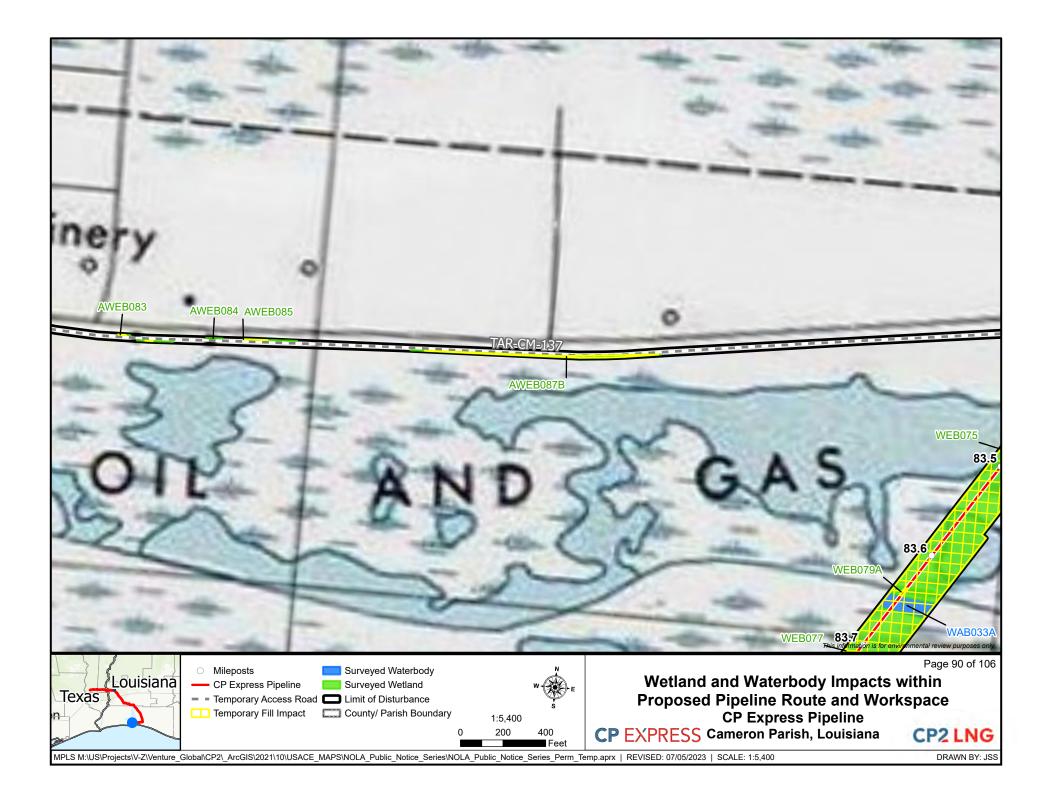


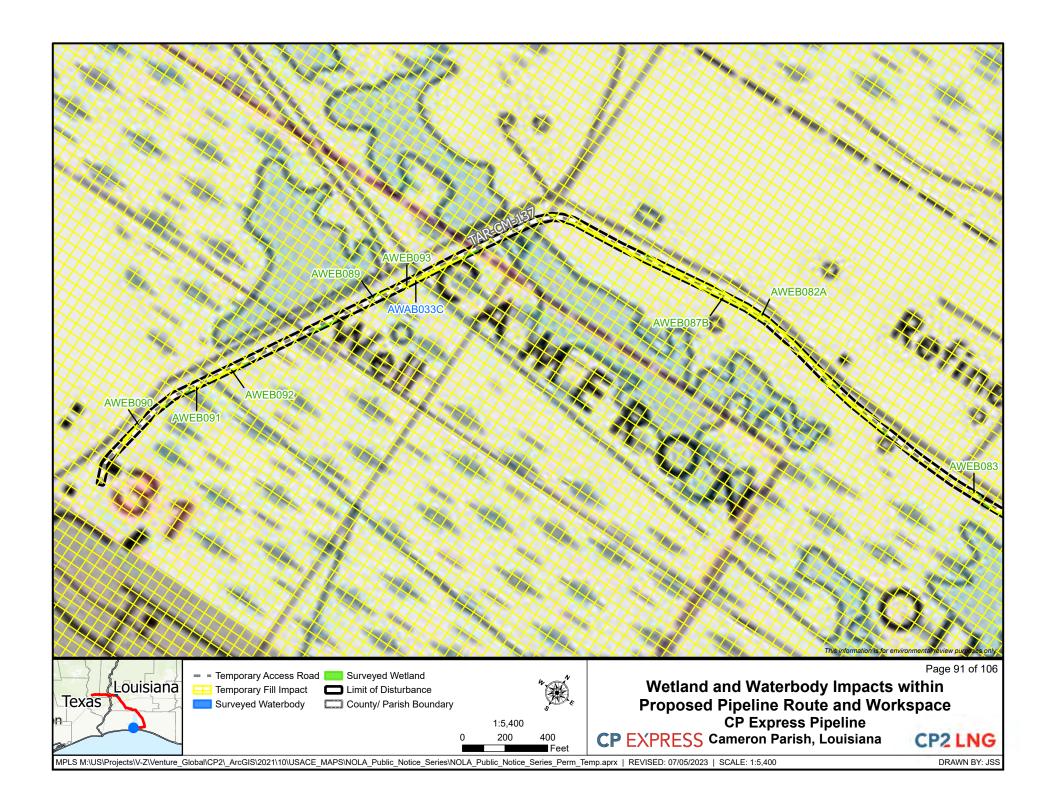


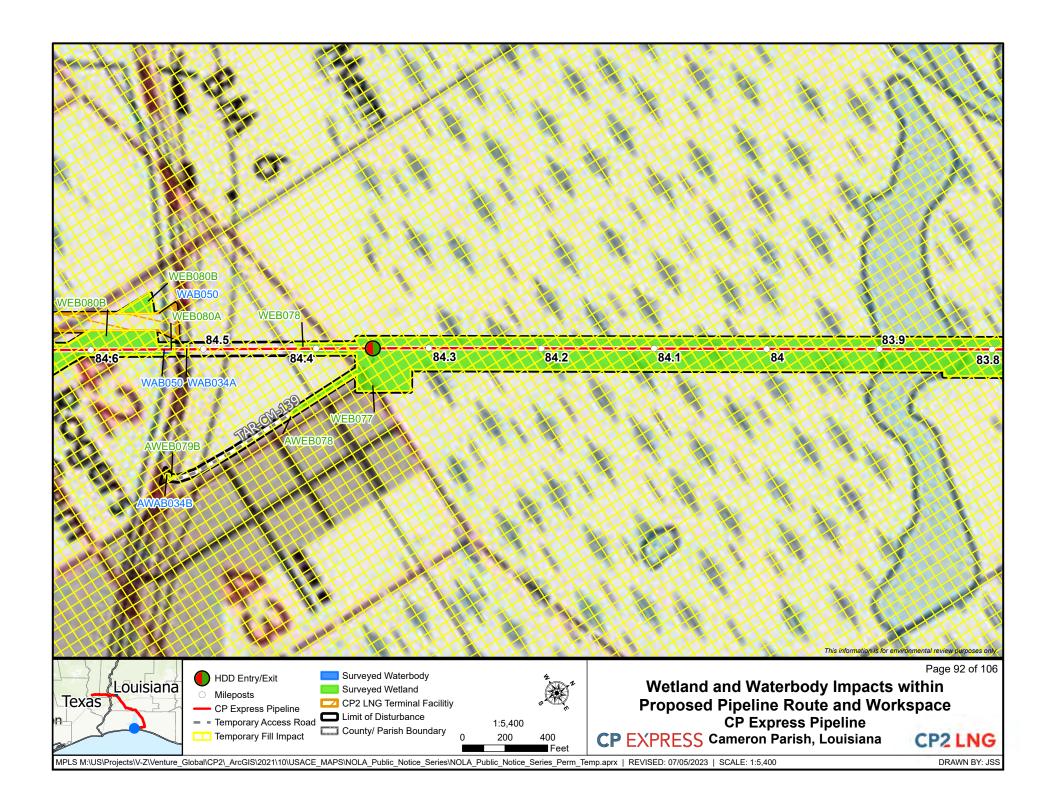


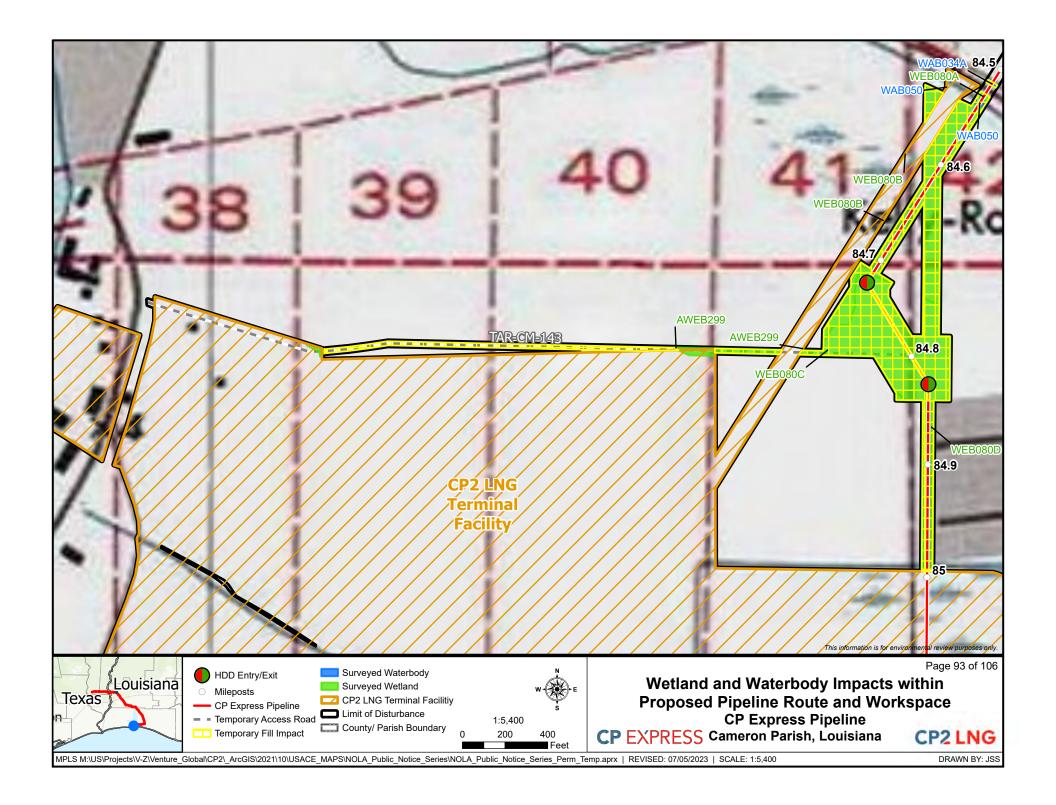


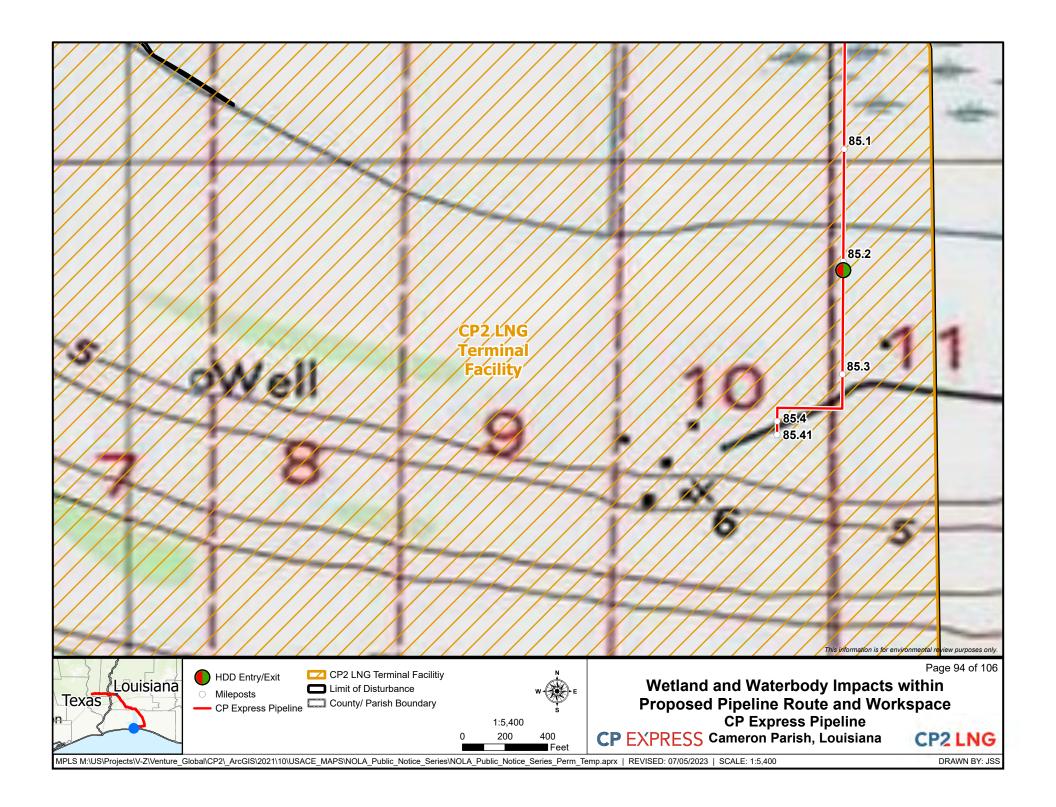


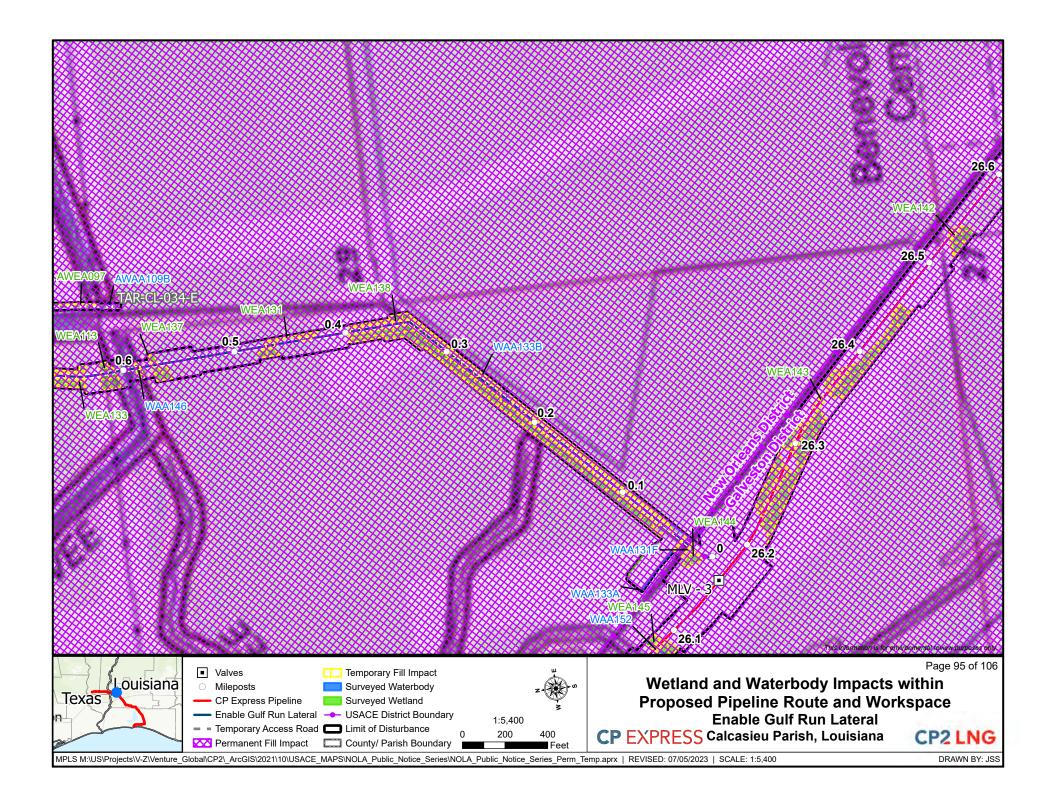


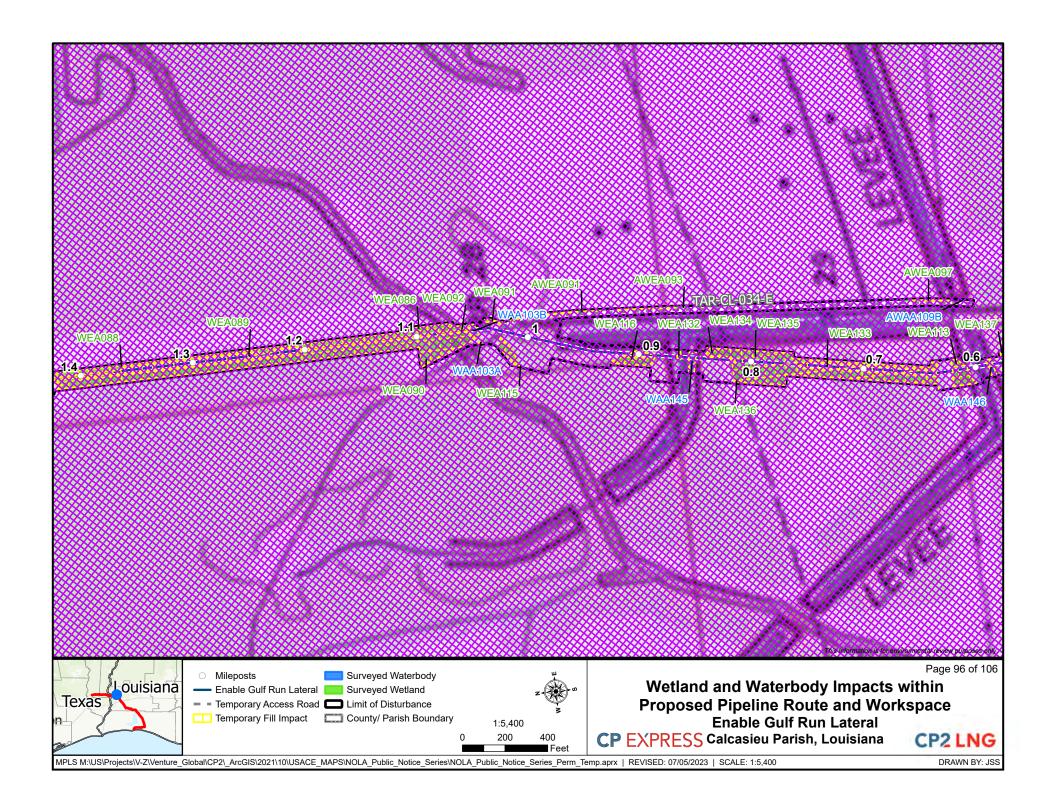


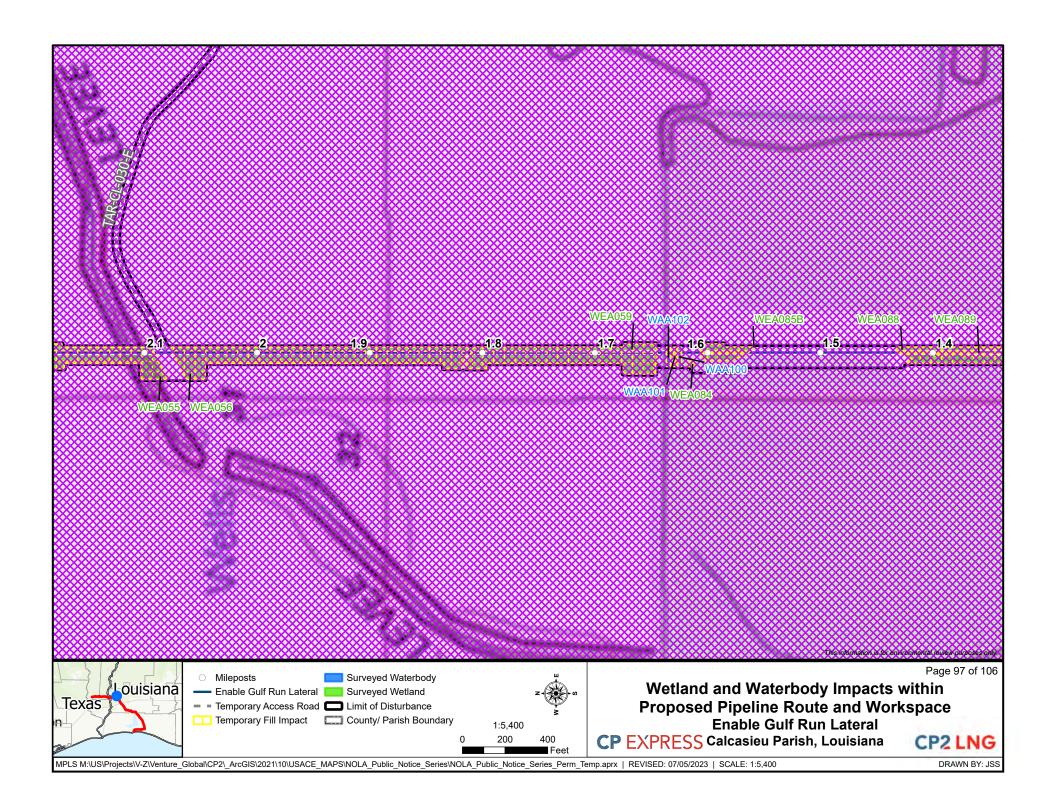


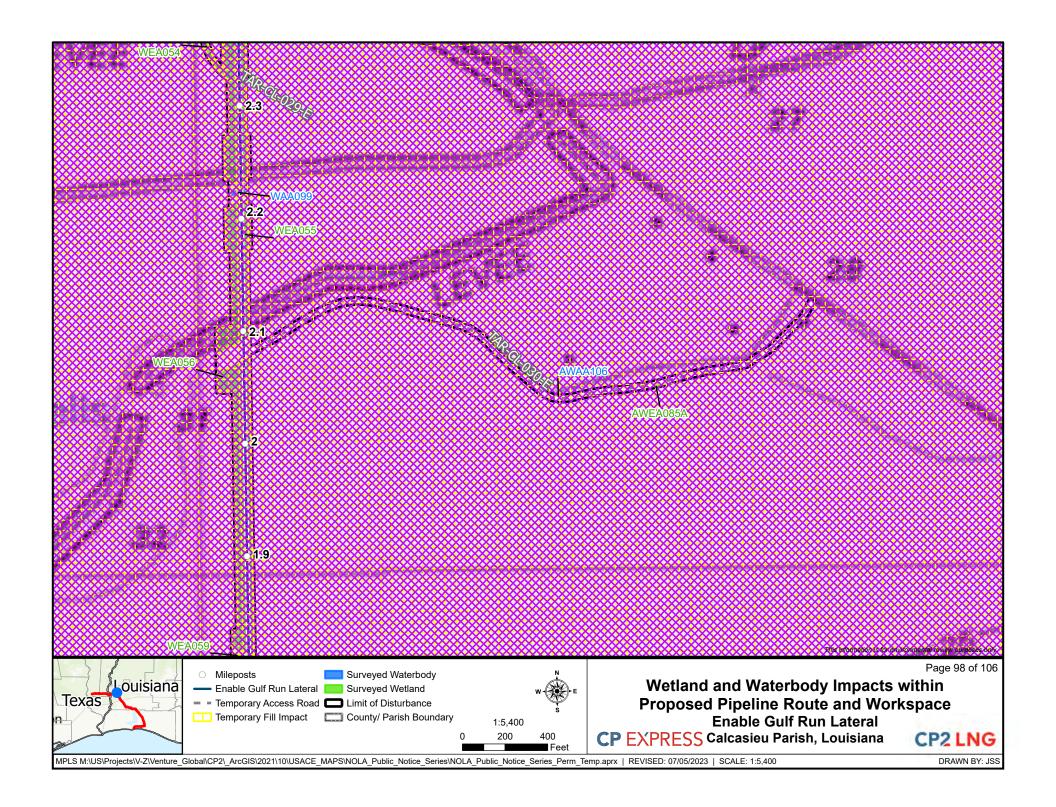


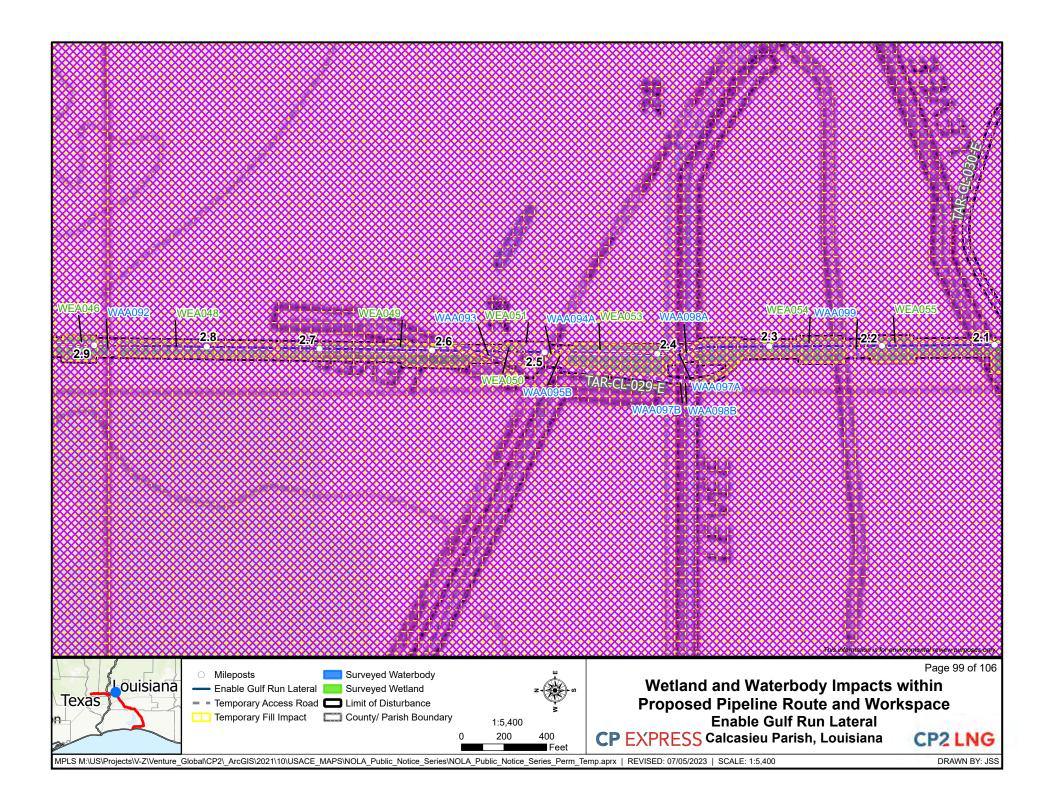


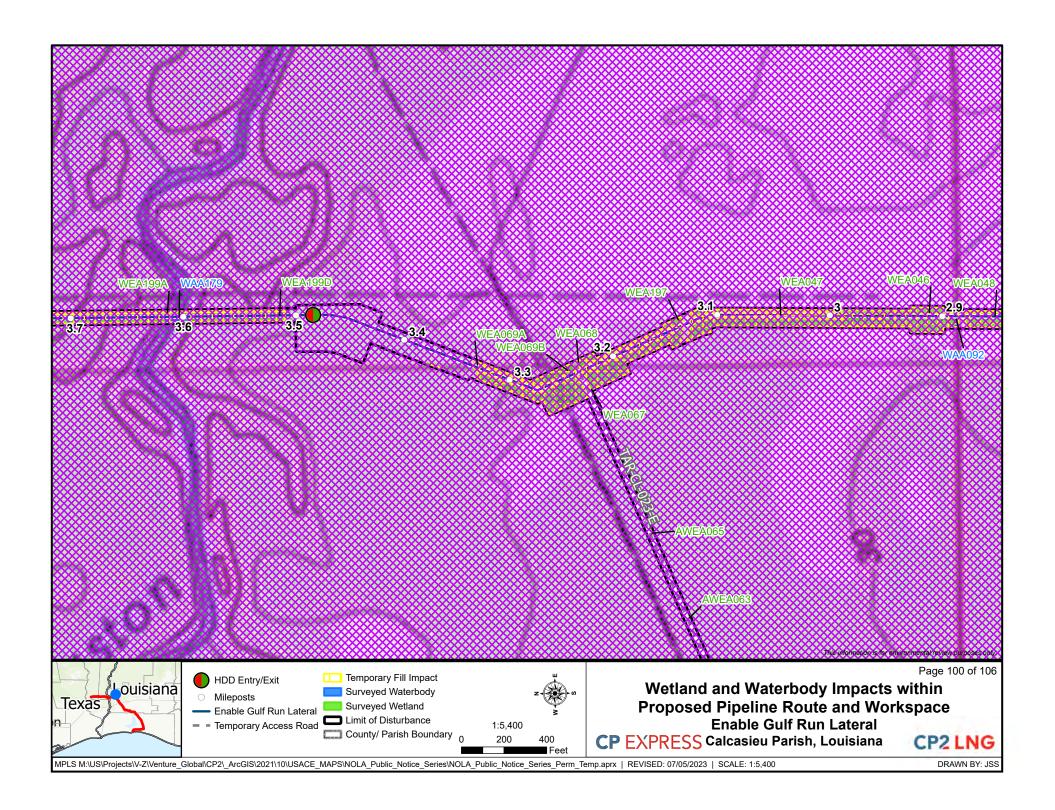


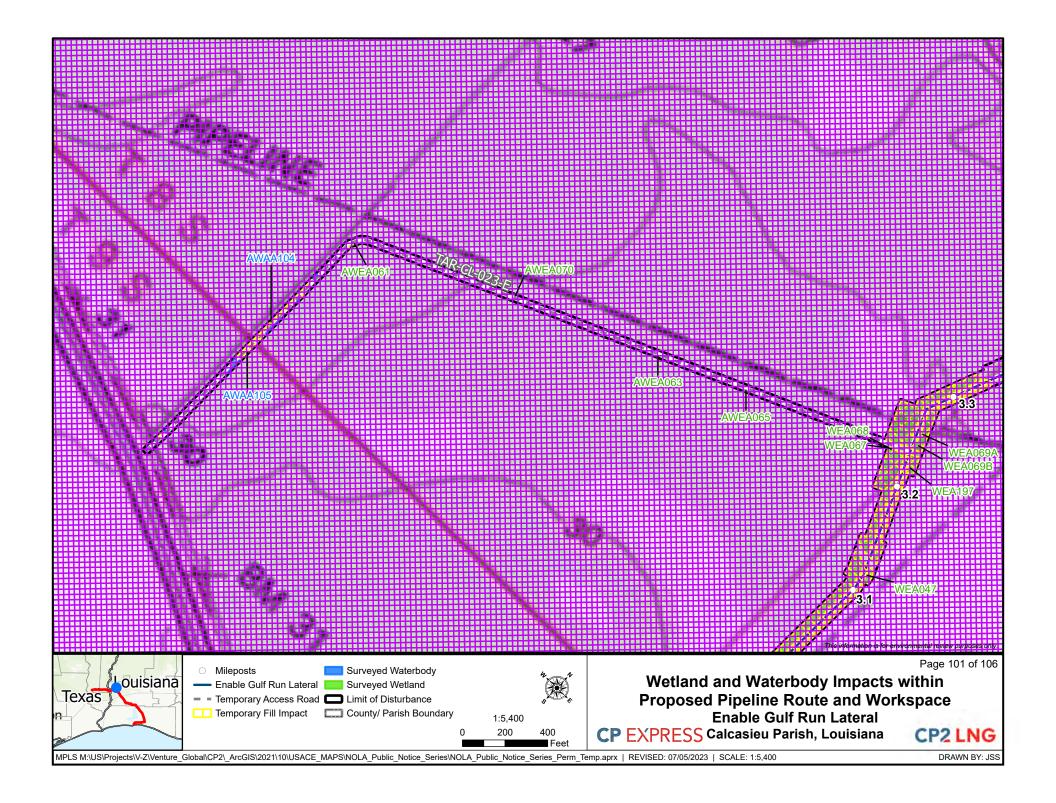


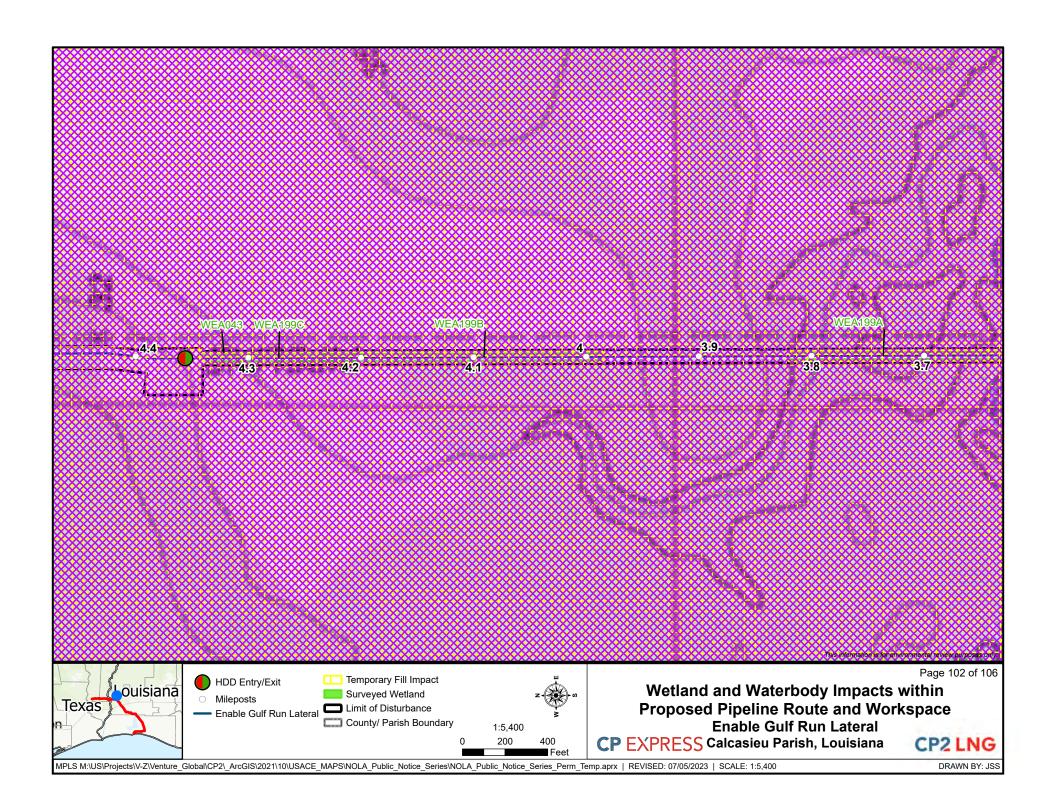


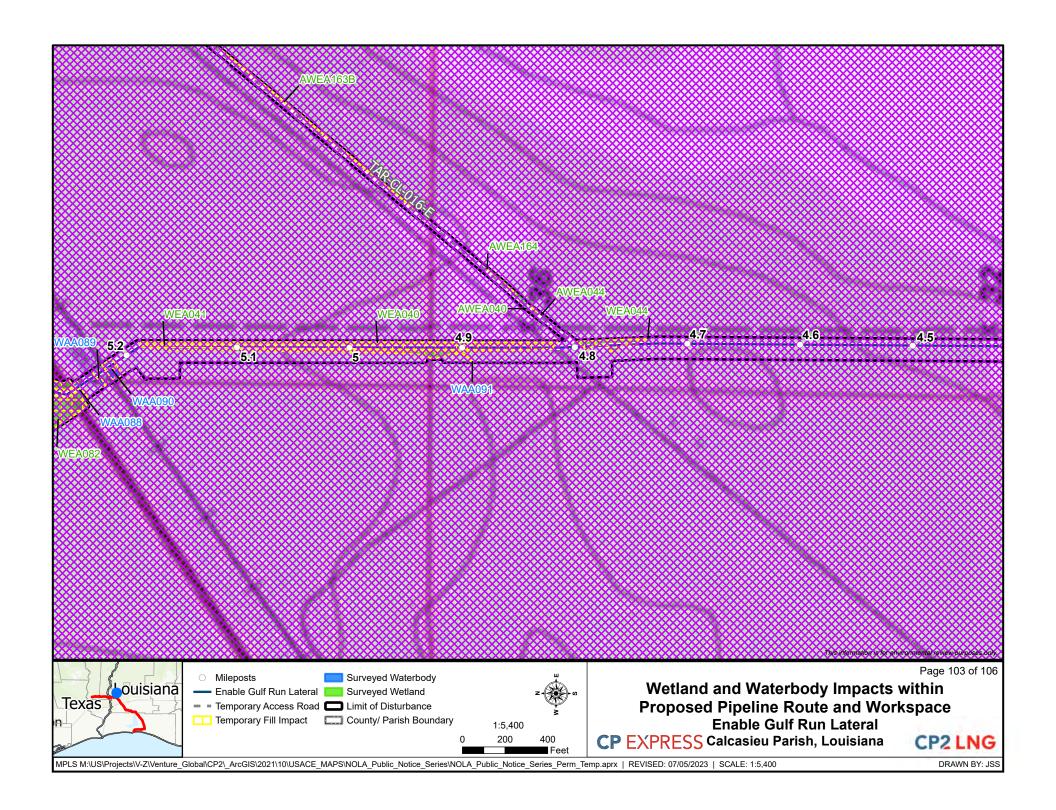


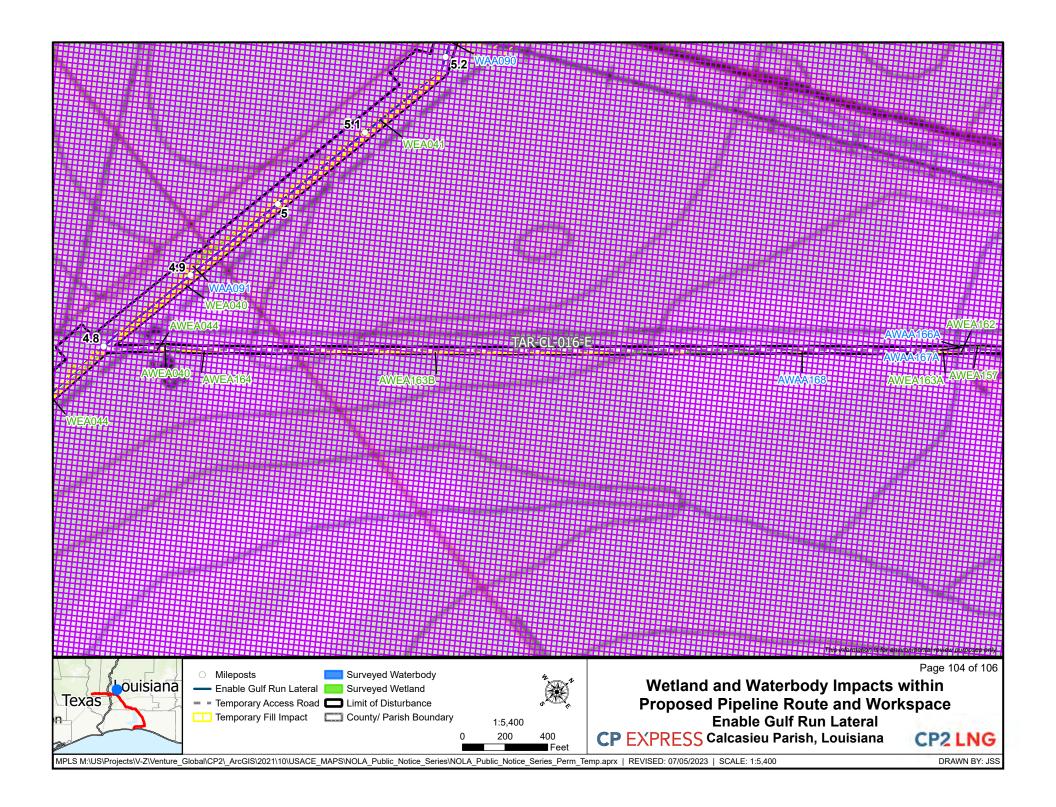


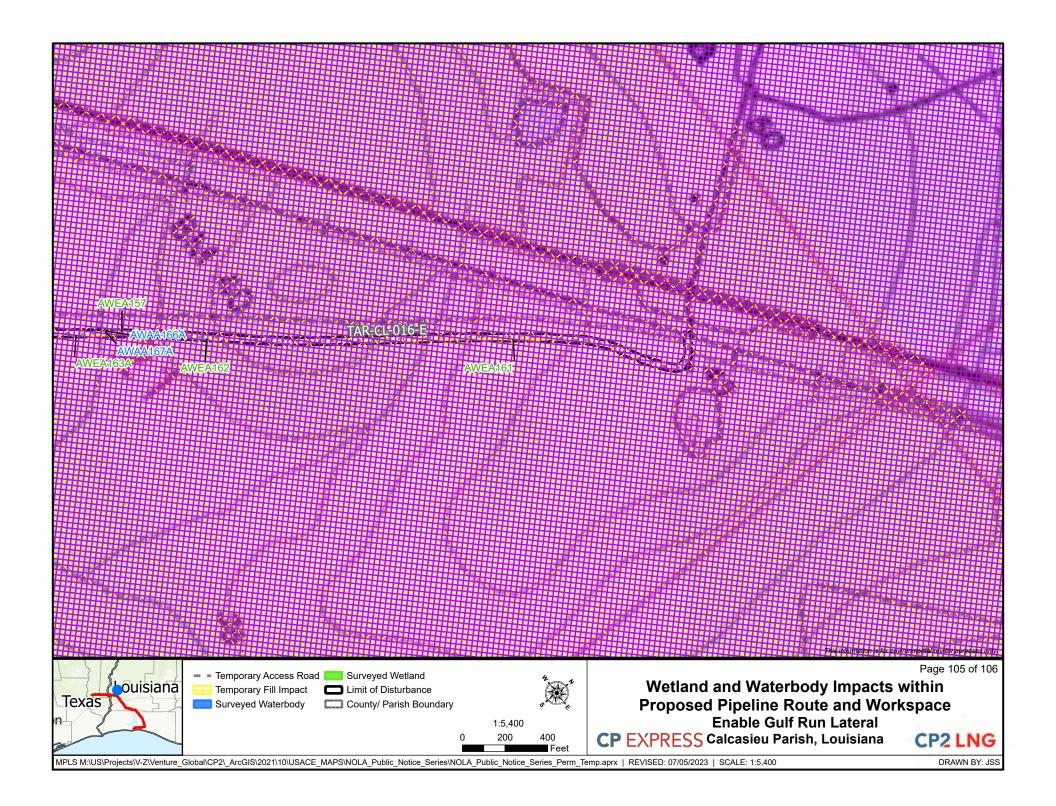


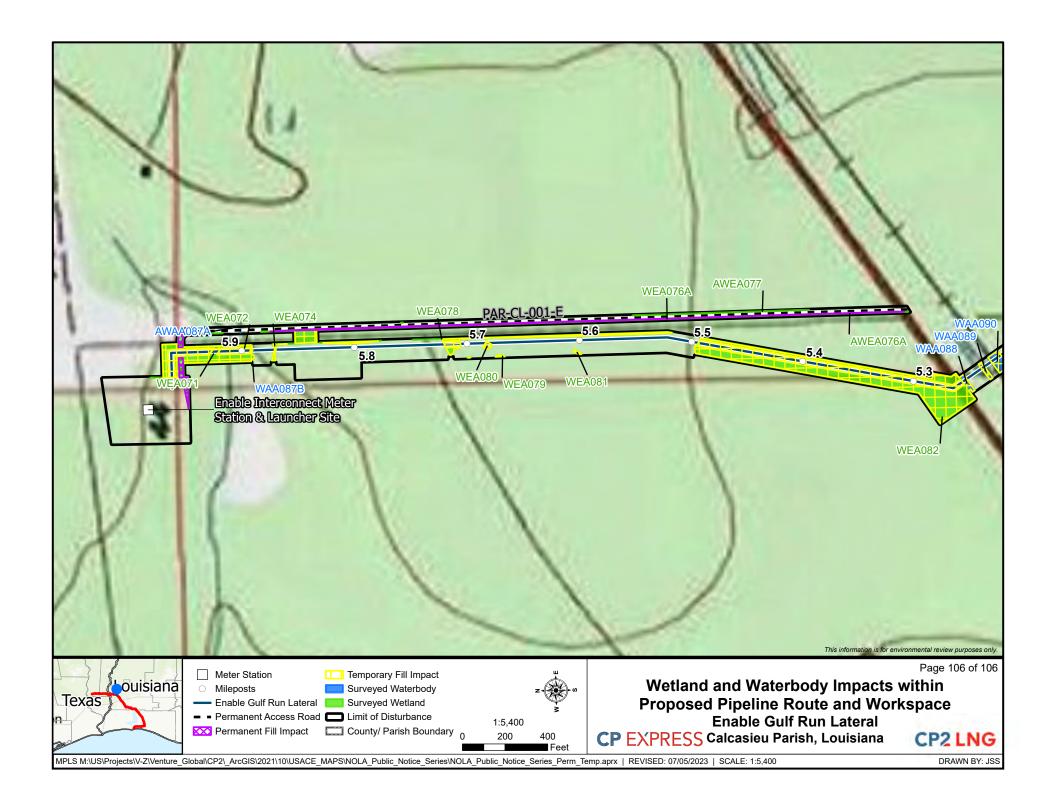


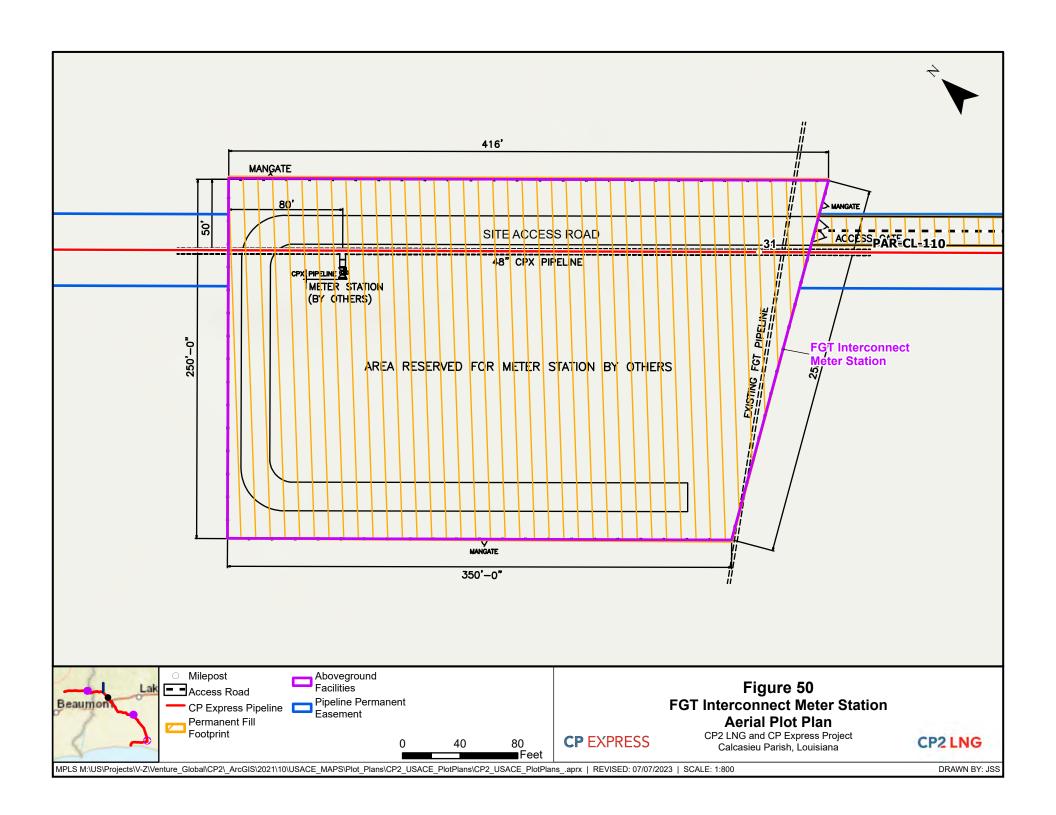


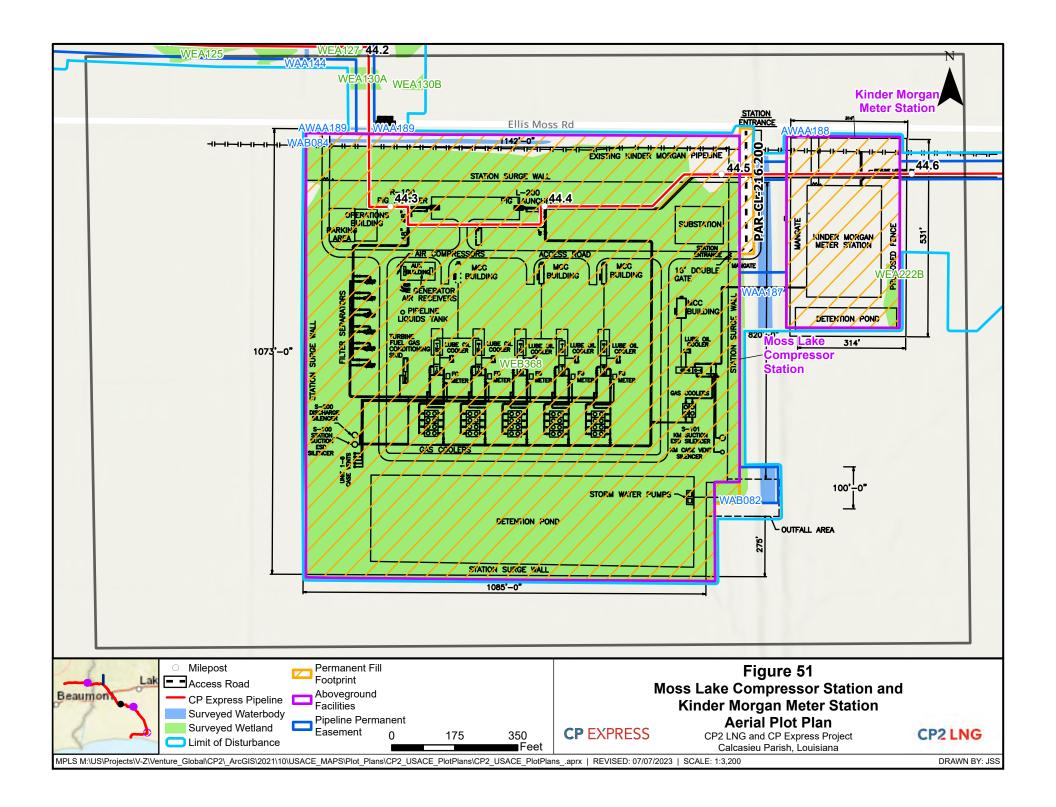


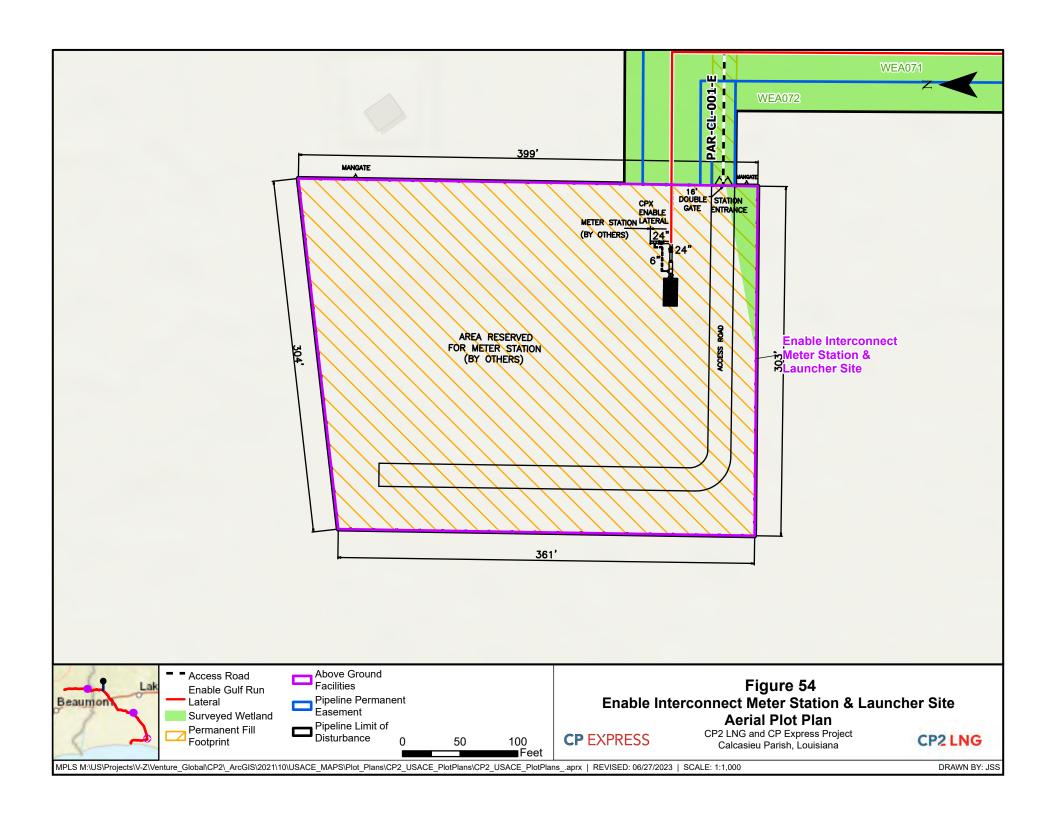


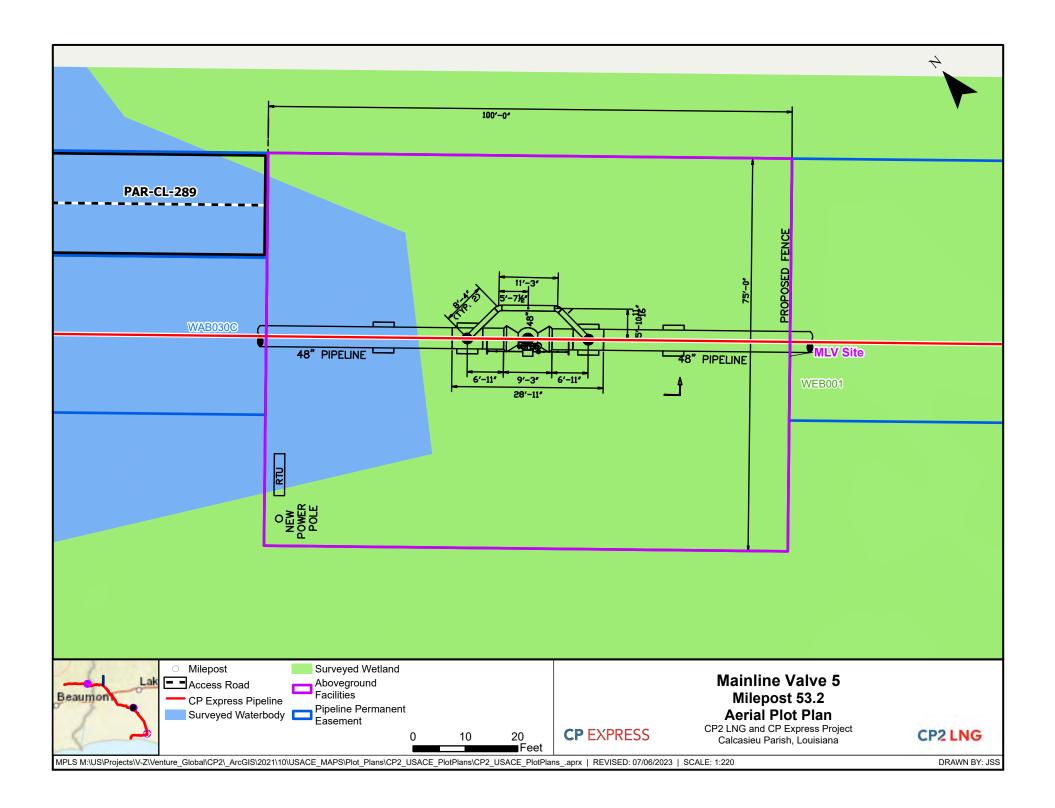


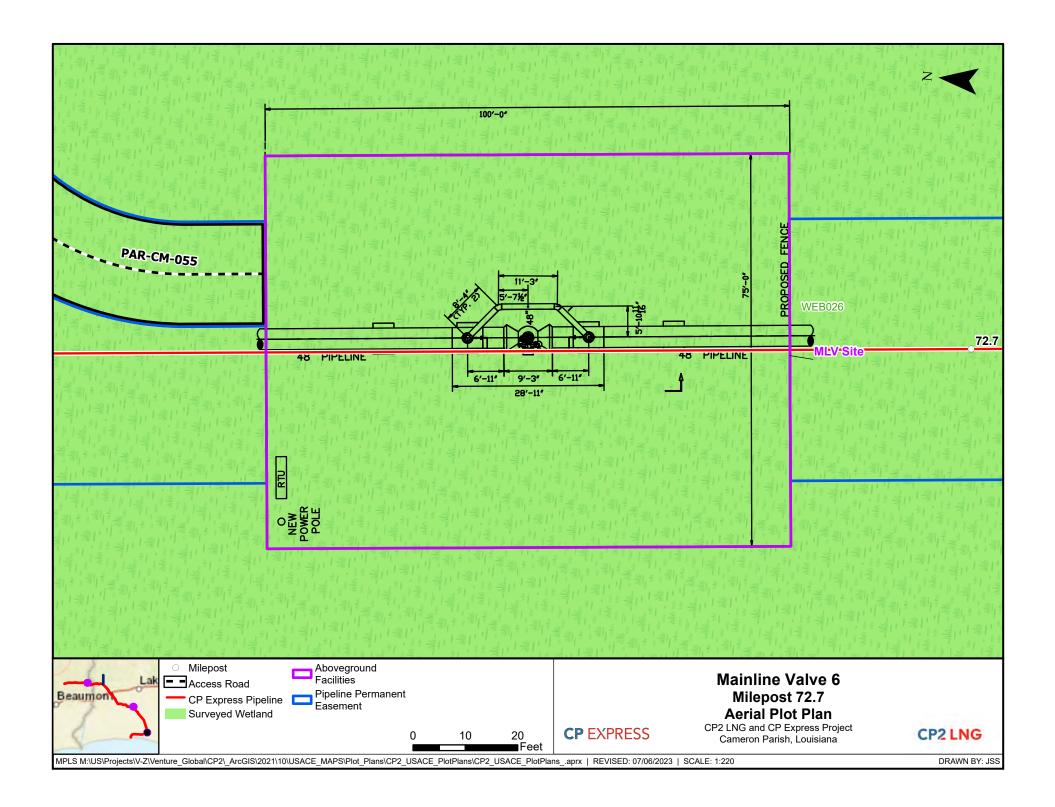


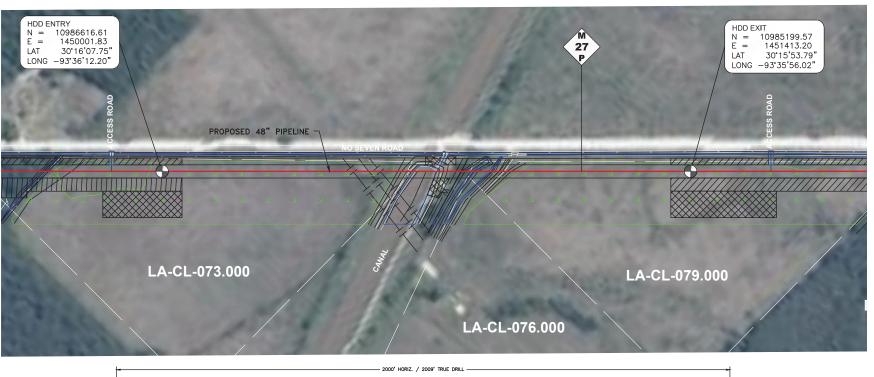












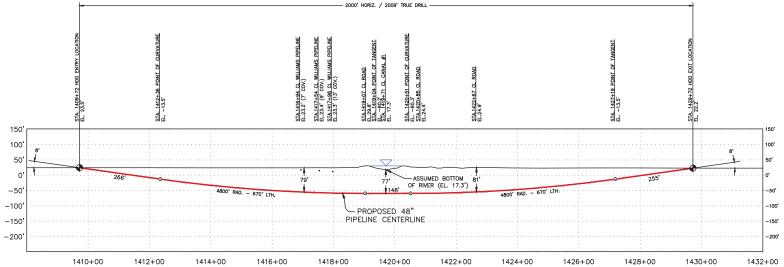


Figure 1: Sheet 7a-i

- 1. CROSSING HORIZONTAL LENGTH: 2000'
- 2.DIRECTIONAL DRILL LENGTH: 2009'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
  - b.UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

### **GENERAL**

- 1.CALL LOUISIANA ONE-CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THOSE PRIOR TO CONSTRUCTION.
- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.
- 5.PROFILE BASED ON CIVIL SURVEY AND PUBLICLY AVAILABLE DATA.
- 6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS. NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.
- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

### DRILL NOTES

- 1.CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.

### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.





DRAWN BY	RD	09	9/16/2021	l
CHK BY	JB	09	9/16/2021	1
APPR BY	JC/MR	09	9/16/2021	1
SCALE	1"=200'	YEAR	2021	1
JOB NO.	1901			T

CP EXPRESS
PROPOSED 48" PIPELINE
CANAL #1 HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-002

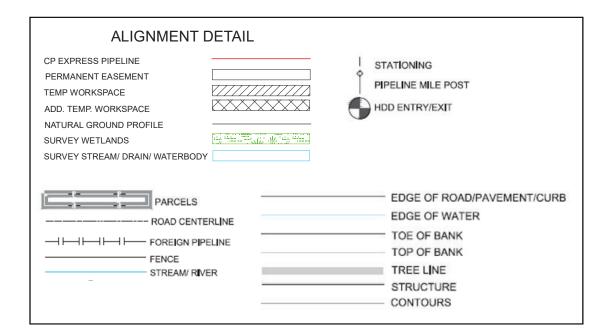


Figure 1: Sheet 7a-ii



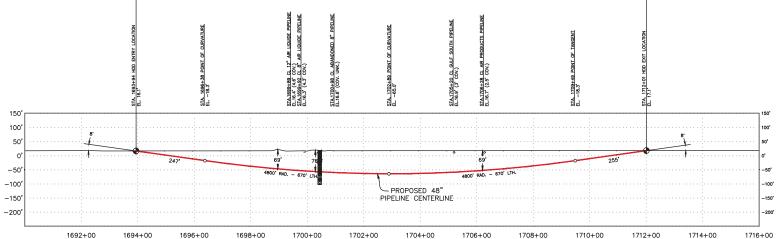


Figure 2: Sheet 7b-i

Project No.: 0686016-321 Client: Venture Global LNG Graphics: VGL-23ERM-001:3 www.erm.com

1. CROSSING HORIZONTAL LENGTH: 1807'

2.DIRECTIONAL DRILL LENGTH: 1842'

3.DESIGN RADIUS: 4800 FT

4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:

a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR

b.UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

### **GENERAL**

1.CALL LOUISIANA ONE-CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THOSE PRIOR TO CONSTRUCTION.

2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.

3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.

5.PROFILE BASED ON CIVIL SURVEY AND PUBLICLY AVAILABLE DATA.

6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS. NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.

7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT,

8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

#### DRILL NOTES

- 1.CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED. LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.

### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.





DRAWN BY	RD	09	9/16/2021	Г
CHK BY	JB	0:	3/08/2023	1
APPR BY	JC/MR	03/08/2023		1
SCALE	1"=200'	YEAR	2023	1
JOB NO.	1971			Т

**CP EXPRESS** PROPOSED 48" PIPELINE HIGHWAY 90 / RAILROAD HDD SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-003

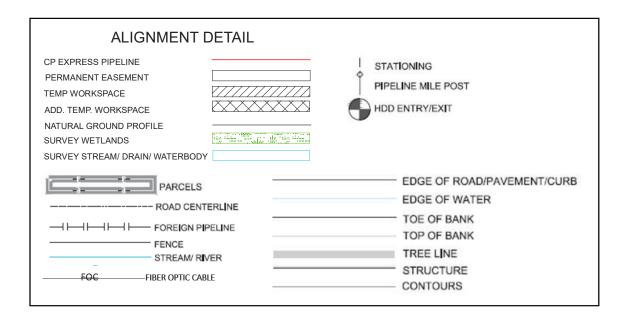


Figure 2: Sheet 7b-ii

Project No.: 0686016-321 Client: Venture Global LNG Graphics: VGL-23ERM-001:4 www.erm.com



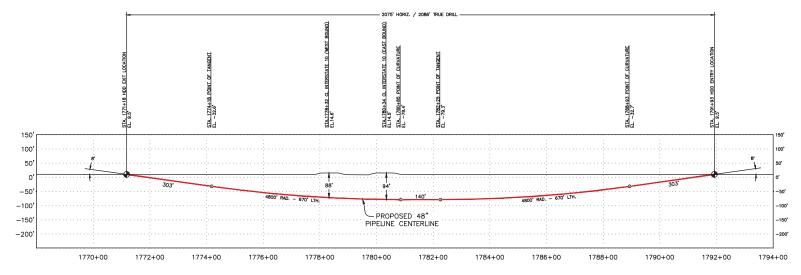


Figure 3: Sheet 7c-i

- 1. CROSSING HORIZONTAL LENGTH: 2075'
- 2.DIRECTIONAL DRILL LENGTH: 2086'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
  - b.UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

#### GENERAL

- 1.CALL LOUISIANA ONE—CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THOSE PRIOR TO CONSTRUCTION.
- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.
- 5.PROFILE BASED ON CIVIL SURVEY AND PUBLICLY AVAILABLE DATA.
- 6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS. NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.
- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

#### DRILL NOTES

- 1.CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.

### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.





 DRAWN BY
 RD
 09/16/2021

 CHK BY
 JB
 09/16/2021

 APPR BY
 JC/MR
 09/16/2021

 SCALE
 1"=200'
 YEAR
 2021

 JOB NO.
 1901

PROPOSED 48" PIPELINE
INTERSTATE 10 HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

CP EXPRESS

DWG NO. 1901-100-PL-DWG-7002-004

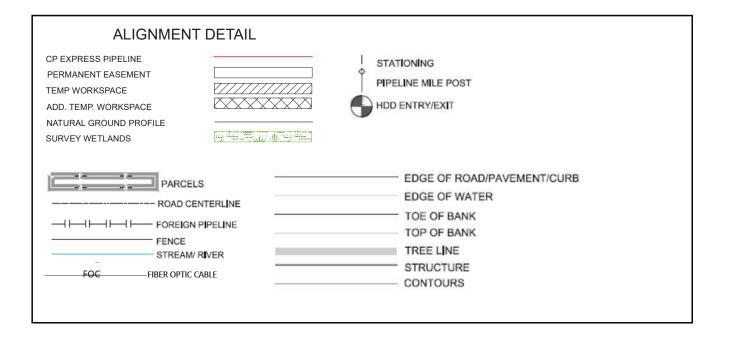
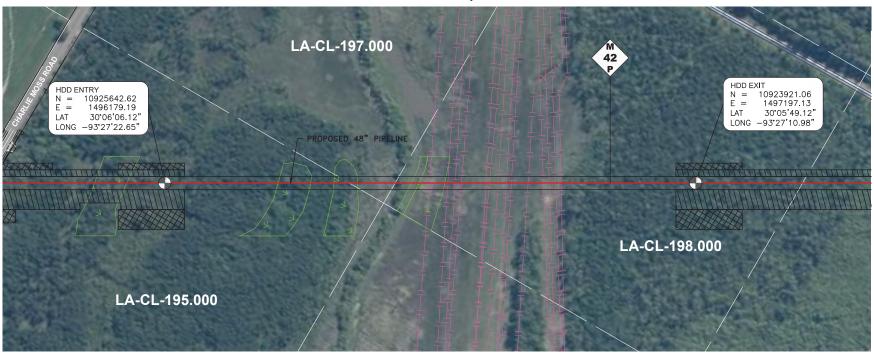


Figure 3: Sheet 7c-ii



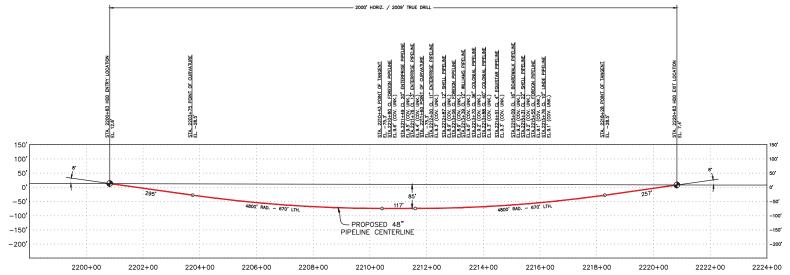


Figure 4: Sheet 7d-i

- 1. CROSSING HORIZONTAL LENGTH: 2000'
- 2.DIRECTIONAL DRILL LENGTH: 2009'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
  - b.UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

#### **GENERAL**

- 1.CALL LOUISIANA ONE—CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIEY THOSE PRIOR TO CONSTRUCTION.
- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.
- 5.PROFILE BASED ON CIVIL SURVEY AND PUBLICLY AVAILABLE DATA.
- 6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS. NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.
- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

### DRILL NOTES

- 1. CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.

### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2. ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.





DRAWN BY	RD	09	9/16/2021	Γ
СНК ВҮ	JB	09	9/16/2021	
APPR BY	JC/MR	09/16/2021		1
SCALE	1"=200'	YEAR	2021	1
JOB NO.	1901			D'

CP EXPRESS
PROPOSED 48" PIPELINE
ENERGY CORRIDOR HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-005

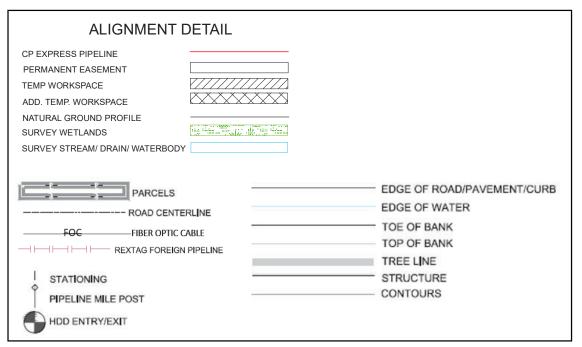


Figure 4: Sheet 7d-ii



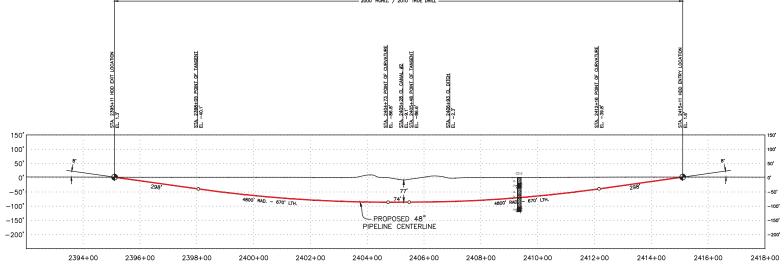


Figure 5: Sheet 7e-i

- 1. CROSSING HORIZONTAL LENGTH: 2000'
- 2.DIRECTIONAL DRILL LENGTH: 2010'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
  - b.UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

#### **GENERAL**

- 1.CALL LOUISIANA ONE—CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THOSE PRIOR TO CONSTRUCTION.
- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.
- 5.PROFILE BASED ON CIVIL SURVEY AND PUBLICLY AVAILABLE DATA.
- 6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS. NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.
- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

### DRILL NOTES

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- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS. REFER TO CONTRACT DOCUMENTS.

### PILOT HOLE TOLERANCES

1. ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.



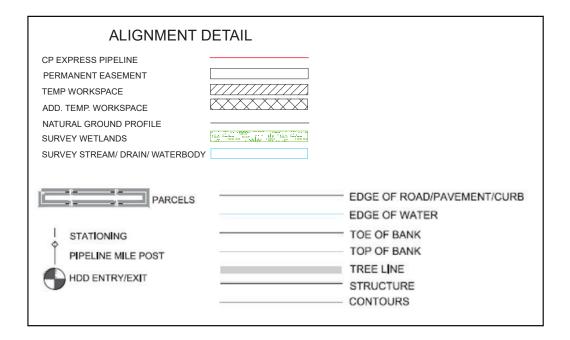


Figure 5: Sheet 7e-ii



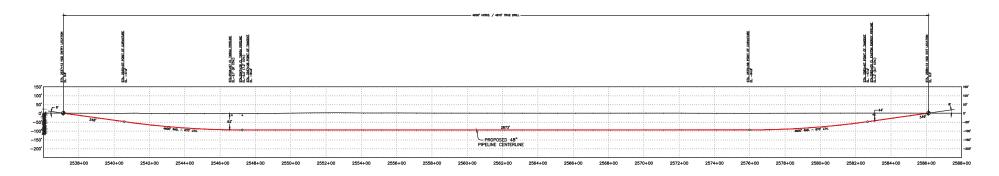


Figure 6: Sheet 7f-i

- 1. CROSSING HORIZONTAL LENGTH: 4900'
- 2.DIRECTIONAL DRILL LENGTH: 4910'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
- a. SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
- b. UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

### **GENERAL**

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- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

### PILOT HOLE TOLERANCES

1. ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.

### DRILL NOTES

- 1. CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOS DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.





DRAWN BY	RD	RD 09/16/2021	
CHK BY	JB 03/08/2023		
APPR BY	JC/MR	03/08/2023	
SCALE	1"=200'	YEAR	2023
JOB NO.	1971		

CP EXPRESS
PROPOSED 48" PIPELINE
WETLAND HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

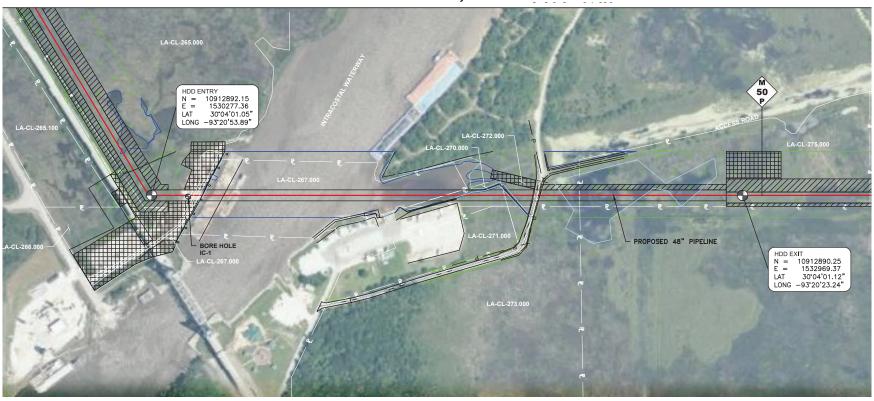
DWG NO. 1901-100-PL-DWG-7002-007

ALIGNMENT DETAIL EDGE OF ROAD/PAVEMENT/CURB STATIONING **CP EXPRESS PIPELINE** EDGE OF WATER PIPELINE MILE POST PERMANENT EASEMENT TOE OF BANK TEMP WORKSPACE HDD ENTRY/EXIT TOP OF BANK ADD. TEMP. WORKSPACE TREE LINE -FIBER OPTIC CABLE NATURAL GROUND PROFILE STRUCTURE SURVEY WETLANDS CONTOURS SURVEY STREAM/ DRAIN/ WATERBODY FENCE STREAM/ RIVER **PARCELS** COUNTY / PARISH SURVEY CORRIDOR ROAD CENTERLINE

### Figure 6: Sheet 7f-ii

www.erm.com Project No.: 0686016-321 Client: Venture Global LNG Graphics: VGL-23ERM-001:12

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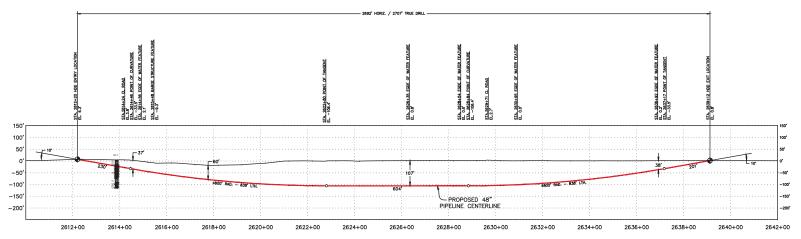


Figure 7: Sheet 7g-i

1. CROSSING HORIZONTAL LENGTH: 2692'

2.DIRECTIONAL DRILL LENGTH: 2704'

3.DESIGN RADIUS: 4800 FT

4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:

- a. SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
- b. UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

### **GENERAL**

- 1.CALL TEXAS/LOUISIANA ONE—CALL AND LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS AND DEPTHS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THOSE PRIOR TO CONSTRUCTION.
- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
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- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.

### DRILL NOTES

- 1.CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.





DRAWN BY RD 09/16/2021
CHK BY JB 03/08/2023
APPR BY JC/MR 03/08/2023
SCALE 1"=200' YEAR 2023
JOB NO. 1971

CP EXPRESS
PROPOSED 48" PIPELINE
INTRACOASTAL HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-008

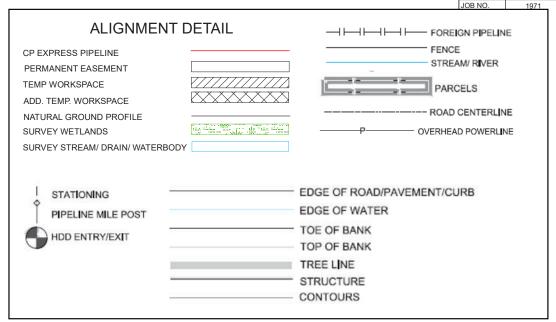
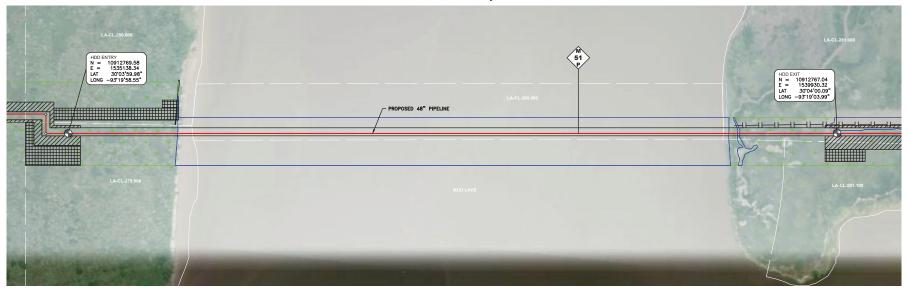


Figure 7: Sheet 7g-ii



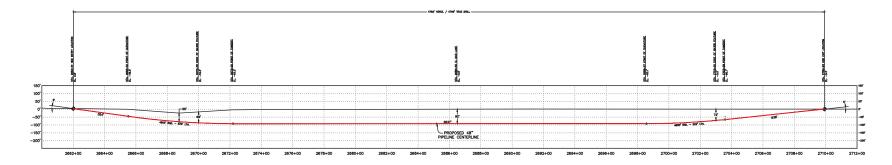


Figure 8: Sheet 7h-i

1. CROSSING HORIZONTAL LENGTH: 4792'

2.DIRECTIONAL DRILL LENGTH: 4799'

3.DESIGN RADIUS: 4800 FT

4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:

- a. SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
- b. UNKNOWN OR UNUSUAL PHYSICAL CONDITIONS AT THE SITE THAT DIFFER FROM THOSE ORDINARILY ENCOUNTERED.

### **GENERAL**

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- 2.INSTALL MATS OR OTHER APPROVED PROTECTIVE MEASURES OVER EXISTING FOREIGN LINES.
- 3.NOTIFY FOREIGN PIPELINE OWNERS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 4.DO NOT CLEAR ANY TREES BETWEEN THE ENTRY AND EXIT WORKSPACES. MINOR BRUSH CLEARING USING HAND TOOLS IS PERMITTED FOR INSTALLING SURFACE COIL FOR DOWNHOLE SURVEY SYSTEM.
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- 6.ROAD IDENTIFICATION AND LOCATION IS ESTIMATED AT THIS TIME BASED ON DESKTOP REVIEWS, NO CIVIL SURVEY HAS BEEN CONDUCTED AT THESE LOCATIONS.
- 7.COORDINATES ARE BASED UPON NAD83, UTM ZONE 15N, U.S. SURVEY FOOT.
- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

PILOT HOLE TOLERANCES

1. ELEVATION: +0 FEET AND -10 FEET.

2. ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.

#### DRILL NOTES

- 1.CONTRACTOR SHALL LOCATE, IDENTIFY AND PROTECT ANY FOREIGN UTILITY WITHIN 10 FEET OF THE PROPOSED DRILL ALIGNMENT THAT MAY BE AFFECTED BY THE HDD OPERATION.
- 2.HDD CONTRACTOR SHALL NOT MAKE ANY CHANGES TO DRILL DESIGN WITHOUT COMPANY APPROVAL.
- 3.CONTRACTOR SHALL DISPOSE OF ALL DRILL FLUID AND DRILL SPOILS AT COMPANY APPROVED LOCATIONS.
- 4.FOR ALL OTHER PERTINENT SPECIFICATIONS, REFER TO CONTRACT DOCUMENTS.



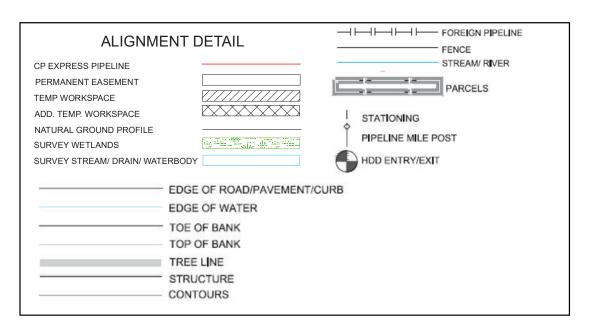


Figure 8: Sheet 7h-ii

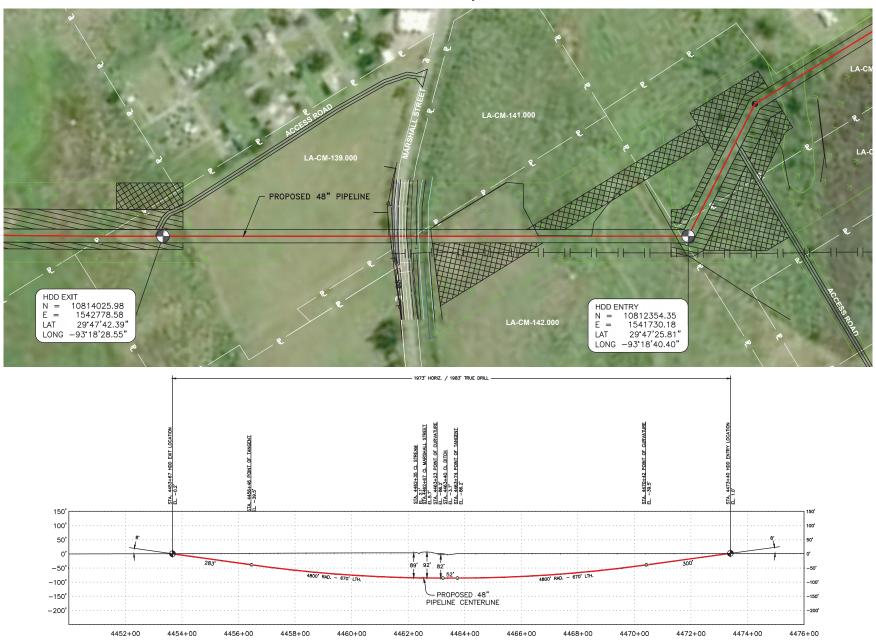


Figure 9: Sheet 7i-i

- 1. CROSSING HORIZONTAL LENGTH: 1983'
- 2.DIRECTIONAL DRILL LENGTH: 1985'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED: OR
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### PILOT HOLE TOLERANCES

1. ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

4.PILOT EXIT SHALL OCCUR WITHIN +20 FEET AND -10 FEET OF LOCATION SHOWN.



1971 DWG NO. 1901–100–PL–DWG–7002–010

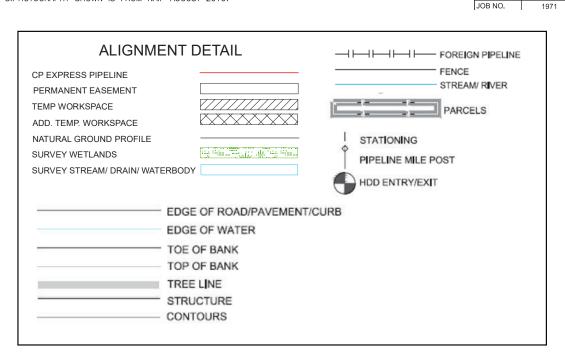


Figure 9: Sheet 7i-ii



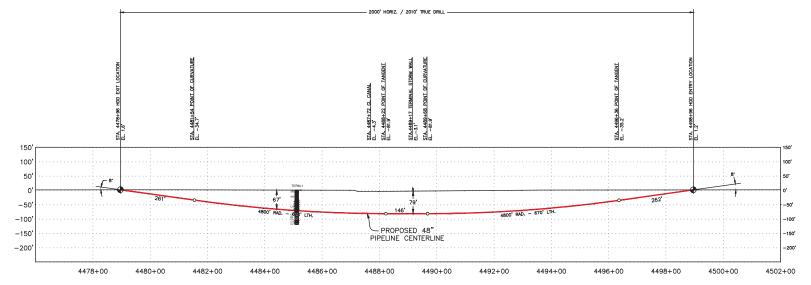


Figure 10: Sheet 7j-i

- 1. CROSSING HORIZONTAL LENGTH: 2000'
- 2.DIRECTIONAL DRILL LENGTH: 2010'
- 3.DESIGN RADIUS: 4800 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
  - a.SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED: OR
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### PILOT HOLE TOLERANCES

- 1. ELEVATION: +0 FEET AND -10 FEET.
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DRAWN BY	RD	09	9/16/2021	Γ
CHK BY	JB	00	3/08/2023	1
APPR BY	JC/MR	03	3/08/2023	1
SCALE	1"=200'	YEAR	2023	1
JOB NO.	1971			Ī

CP EXPRESS
PROPOSED 48" PIPELINE
TERMINAL HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-011

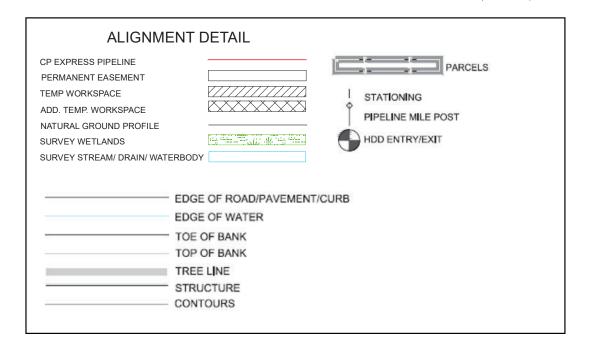


Figure 10: Sheet 7j-ii



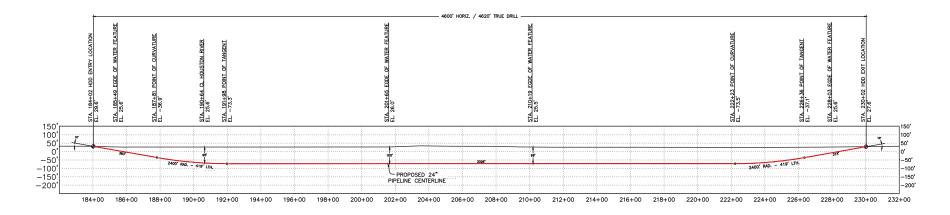


Figure 11: Sheet 7k-i

- 1. CROSSING HORIZONTAL LENGTH: 4600'
- 2.DIRECTIONAL DRILL LENGTH: 4620'
- 3.DESIGN RADIUS: 2400 FT
- 4.CONTRACTOR SHALL PROMPTLY NOTIFY COMPANY IN WRITING OF:
- a. SURFACE OR SUBSURFACE CONDITIONS AT THE SITE THAT WOULD SIGNIFICANTLY IMPACT THE INSTALLATION OF THE CONDUIT AS DESIGNED; OR
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- 8.PHOTOGRAPHY SHOWN IS FROM NAIP AUGUST 2019.

#### PILOT HOLE TOLERANCES

1.ELEVATION: +0 FEET AND -10 FEET.

2.ALIGNMENT: +/-10 FEET.

3.SPUD IN AT EXACT LOCATION SHOWN.

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### DRILL NOTES

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DRAWN BY	RD	09	9/16/2021	
CHK BY	JB	09	9/16/2021	1
APPR BY	JC/MR	09/16/2021		1
SCALE	1"=200'	YEAR	2021	1
JOB NO.	1901			T

CP EXPRESS
PROPOSED 24" PIPELINE
HOUSTON RIVER HDD
SITE SPECIFIC HORIZONTAL DIRECTIONAL DRILL

DWG NO. 1901-100-PL-DWG-7002-012

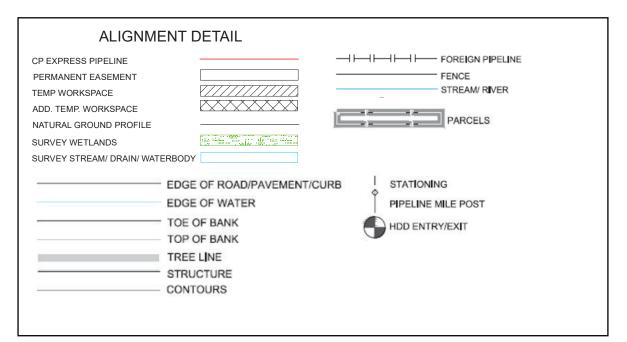
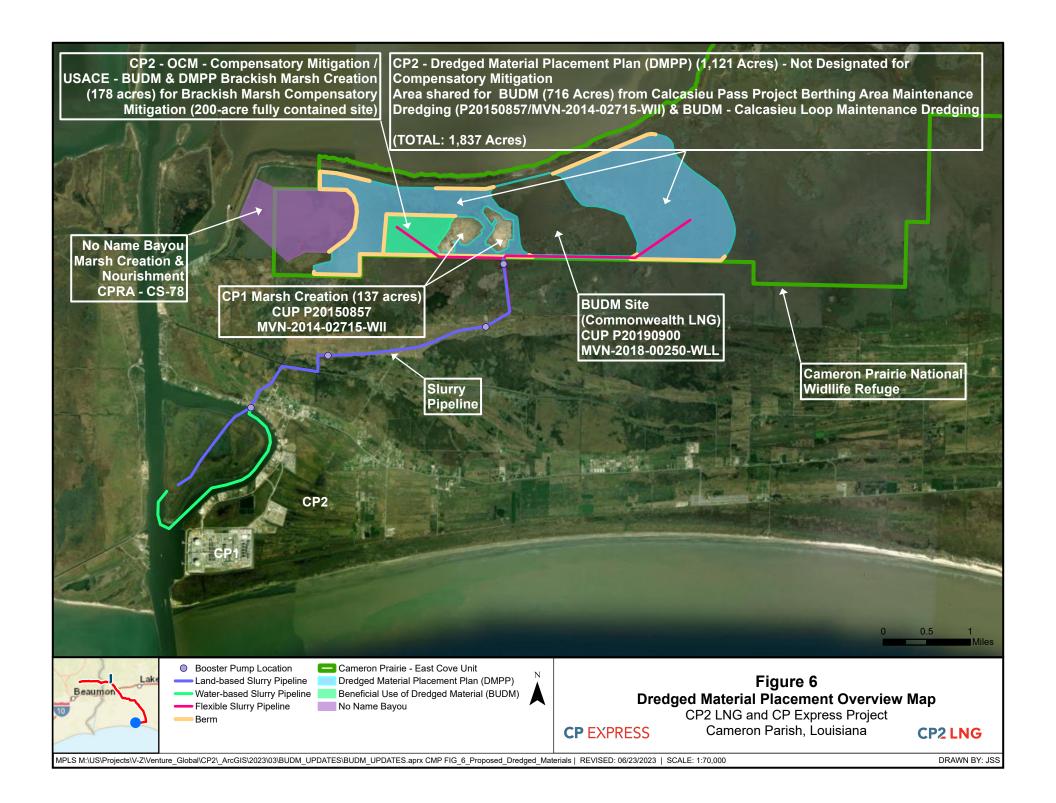
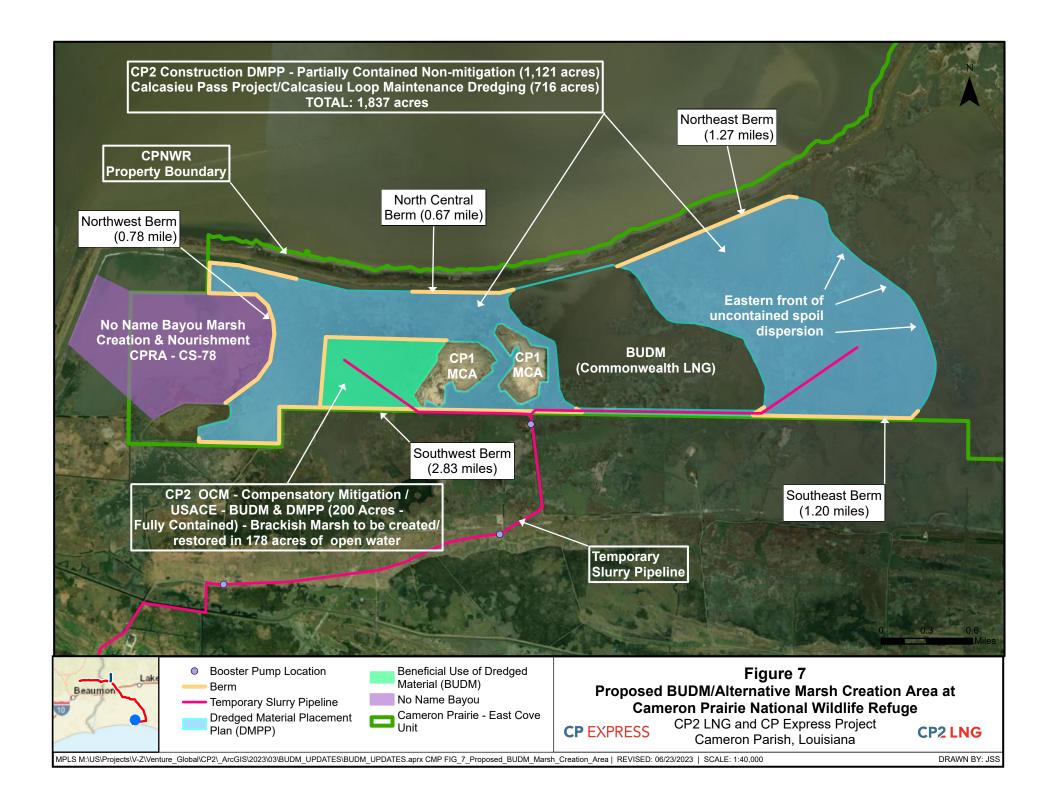


Figure 11: Sheet 7k-ii





# TABLE A CP2 LNG and CP Express Project NOLA COE Regulatory District Summary of Wetland Impacts

	ounimary of Wettand Impacts				
Facility	Wetland Type	Temporary Impacts (acres)	Extended Temporary Impacts (acres)	Permanent Loss (acres)	Total Impacts (acres)
Terminal Site					
	E2EM	2.5	0.0	5.3	7.8
	PEM	9.9	0.7	275.7	286.3
	Coastal Prairie	6.7	0.2	183.1	190.0
	Fresh Marsh	3.2	0.5	92.6	96.3
	PSS Fresh Marsh	<0.1	0.0	32.1	32.1
	PFO	<0.1	0.0	1.7	1.7
	Subtotal:	12.4	0.7	314.8	327.9
Marine Facilit	ies				
	E2EM	0.0	0.0	14.2	14.2
	PEM Fresh Marsh	0.0	0.0	13.8	13.8
	PSS Fresh Marsh	0.0	0.0	12.6	12.6
	PFO	0.0	0.0	0.6	0.6
	Subtotal:	0.0	0.0	41.2	41.2
LNG Transfer					
	PEM Fresh Marsh	8.2	3.1	0.0	11.3
	PSS Fresh Marsh	9.7	3.2	0.0	12.9
	Subtotal:	17.9	6.3	0.0	24.2
TERMINAL					
FACILITIES					
	E2EM	2.5	0.0	19.5	22.0
	PEM	18.1	3.8	289.5	311.4
	Coastal Prairie	6.7	0.2	183.1	190.0
	Fresh Marsh	11.4	3.6	106.4	121.4
	PSS Fresh Marsh	9.7	3.2	44.7	57.6
	PFO	<0.1	0.0	2.3	2.3
	TOTAL:	30.3	7.0	356.0	393.3
CP1/CP2 TER OVERLAP	MINAL				
	PEM	0.0	0.0	21.0	21.0
	Coastal Prairie	0.0	0.0	0.0	0.0
	Fresh Marsh	0.0	0.0	21.0	21.0
	PSS	0.0	0.0	3.1	3.1
	Fresh Marsh PFO			2.5	2.5
	TOTAL:	0.0 <b>0.0</b>	0.0 <b>0.0</b>	2.5 <b>26.6</b>	2.5 <b>26.6</b>
TEMPORARY PIPELINE	SLURRY				
I II ELIME	E2EM	<0.1	0.0	0.0	<0.1
	PEM Fresh Marsh	15.0	0.0	0.0	15.0
	PSS Fresh Marsh	0.1	0.0	0.0	0.1

## TABLE A CP2 LNG and CP Express Project NOLA COE Regulatory District Summary of Wetland Impacts

Facilit	туре	Temporary Impacts (acres)	Extended Temporary Impacts (acres)	Permanent Loss (acres)	Total Impacts (acres)
	TOTAL:	15.1	0.0	0.0	15.1
COMPENS	ATORY MITICATION	ADEA (CDAINAID)			
COMPENS	E2EM	22.0	0.0	0.0	22.0
	TOTAL:	<b>22.0</b>	0.0	0.0	<b>22.0</b>
	TOTAL:	ZZ.V	0.0	0.0	22.0
TERMINAL	FACILITIES AND CO	MPENSATORY MITIG	ATION FOOTPRINT		
	E2EM	24.5	0.0	19.5	44.0
	PEM				
	Coastal Prairie	6.7	0.2	183.1	190.0
	Fresh Marsh	26.4	3.6	127.4	157.4
	PSS	9.8	3.2	47.8	60.8
	Fresh Marsh				
_	PFO	0.0	0.0	4.8	2.5
	TERMINAL TOTAL:	67.4	7.0	382.6	457.0
CP Express Run Lateral	and Enable Gulf Pipelines				
	E2EM	299.1	0.0	0.0	299.1
	E2SS	0.4	0.0	0.0	0.4
	PAB	1.5	0.0	0.0	1.5
	PEM	351.1	0.0	0.0	351.1
	PFO	0.0	22.4 (Type Conversion)	0.0	22.4
	PSS	28.5	0.0	0.0	28.5
	TOTAL	680.6	<b>22.4</b> (Type Conversion)	0.0	703.0
Access			(Type conversion)		
Roads					
	E2EM	0.4	0.0	0.1	0.5
	PEM	2.5	0.0	0.2	2.7
	PFO	0.0	0.0	0.0	0.0
	PSS	0.2	0.0	0.0	0.2
	TOTAL	3.1	0.0	0.3	3.4
Abovegrou Facilities					
	E2EM	0.0	0.0	0.3	0.3
	PEM	0.0	0.0	32.3	32.3
	PFO	0.0	0.0	0.1	0.1
	PSS	0.0	0.0	0.0	0.0
	TOTAL	0.0	0.0	32.7	32.7
Contractor Yards	PEM	2.7	0.0	0.0	2.7
	TOTAL	2.7	0.0	0.0	2.7
	PIPELINE TOTAL:	686.4	<b>22.4</b> (Type Conversion)	33.0	741.8
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