

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT 7400 LEAKE AVENUE NEW ORLEANS LA 70160-0267

Operations Division
Operations Manager, Completed Works

14 Dec 17

Mr. Marshall Olson Perennial Environmental Services 13100 Northwest Freeway Suite 150 Houston, Texas 77040

Ms. Monica Howard Bayou Bridge Pipeline, L.L.C. 1300 Main Street Houston, Texas 77002

Dear Mr. Olson and Ms. Howard:

We have received Bayou Bridge Pipeline, L.L.C.'s (Requester) Section 408 permissions request letter dated September 27, 2016 and accompanying Drawings and Geotechnical Reports and Drilling Program Plans concerning permission to install, via horizontal directionally drilling (HDD) a new 162.52 mile long 24-inch crude oil pipeline that will be installed under the Calcasieu Ship Channel, Mermentau River, Vermilion River, Bayou Teche, Atchafalaya River, and Gulf Intracoastal Waterway (GIWW) and the West Atchafalaya Basin Protection levee (WABPL), in St. Martin Parish and the East Atchafalaya Basin Protection levee (EABPL), in Iberville Parish; the project commencing south of Lake Charles in Calcasieu Parish and terminating near St. James Parish, Louisiana. The afore-described proposed work shall be collectively referred to herein as the "Bayou Bridge Pipeline, L.L.C. 162.52 mile 24-inch Crude Oil Pipeline Project".

The New Orleans District of the U.S. Army Corps of Engineers (USACE) has performed an evaluation of the Requester's permission request pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 United States Code 408 (Section 408). This evaluation was performed in accordance with Engineer Circular (EC) 1165-2-216 and the New Orleans District Procedural Review Plan dated June 27, 2016.

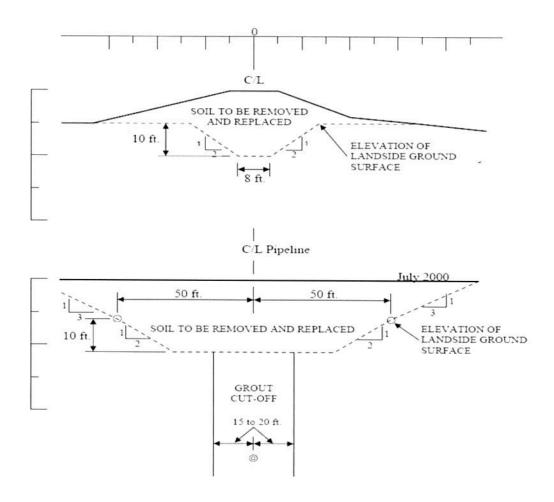
Based on this evaluation, the New Orleans District hereby grants Section 408 permission to construct the Bayou Bridge Pipeline, L.L.C. 162.52 mile 24-inch Crude Oil Pipeline Project (also referred to herein as the "work" or the "Project"), provided that the Requester complies with the following permission conditions:

a. In verifying authorization under this permission, USACE has relied in part on the information provided by the Requester and/or the Requester's Agent. If,

subsequent to verifying authorization, such information proves to be false, incomplete, or inaccurate, this permission may be modified, suspended, or revoked, in whole or in part.

- b. The Requester shall ensure that all structures, work, and activities authorized by this permission comply with all terms and conditions herein. Failure to abide by such conditions invalidates the authorization and permission and may result in a violation of the law, requiring restoration of the site or other remedial action.
- c. The approved alteration work shall be accomplished and performed in accordance with the Section 408 request letter dated September 27, 2016, and accompanying drawings and drilling program plan as well as revised drilling program plan dated April 24, 2017.
- d. Should any damage to the levees occur as a result of the drilling operation, the owner/applicant/driller is liable for replacing/repairing the damaged levee to the USACE satisfaction. Damage to the levee includes but is not limited to drilling fluid returns to the surface inside the levee cross-section and within 300 feet of the landside or flood side berm toe. Repair may include total replacement of the levee and installation of a grout curtain to the depth of the pipe. This repair/ replacement will be performed in an expedited fashion to the USACE specifications. See "Typical Flood Protection Repair" below.

TYPICAL FLOOD PROTECTION REPAIR



- e. Should any inadvertent returns occur along the drill path as a result of the drilling operation, the Requester is liable for repairing any possible seepage paths by installation of a grout plug/grout curtain to the USACE satisfaction.
- f. The fluid weight will be monitored and verified for the duration of HDD operations. Samples of drilling fluid will be tested every hour by a third party mud engineer. The samples will be tested for density, pH, Marsh Funnel Viscosity, Sand Content, Plastic Viscosity, Yield Point, and Filtrate Loss. The samples must meet required specifications or work shall be halted until the samples do meet required

specifications. The USACE representative monitoring the construction of the HDD crossing will have access to the drilling mud testing data.

- g. As soon as practical after the pipe is pulled into the reamed hole, on the entry and exit side, a section of the annular space between the reamed hole and the pipeline will be grouted with a cement/bentonite grout mix. The grout plug will provide friction resistance to any seepage through the annular space after the pipeline has been installed. The HDD contractor will furnish a procedure for the installation of the cement/bentonite grout plug to the owner and the USACE for approval prior to commencing the HDD operations. The plug shall for the WABPL crossing shall be to a minimum elevation of -80 feet North American Vertical Datum (NAVD) on the entry side and -104 feet NAVD on the exit side. The plug for the EABPL shall be to a minimum depth elevation of -75 feet NAVD on the entry side and -93 feet NAVD on the exit side. If the entry and exit angles of the directional drill are changed then these minimum depths will change based on those new angles.
- h. A 3rd party geotechnical representative is required at all times, to observe drilling operations and shall be permitted access to all the drilling operations and data. The representative shall make daily reports once per every 12 hour shift to both the owner and the USACE.
- i. It is the Requester's responsibility to inform the USACE Operations Division permits representative, Mr. Albert Terry, 48 hours in advance of beginning of installation. The Drilling beneath a zone of 300 feet beyond each levee toe (monitoring zone) **must** be scheduled to be performed during the daylight hours to facilitate inspection operation. If, due to unavoidable circumstances, the directional drill is substantially within the monitoring zone at the end of daylight hours the HDD contractor is allowed to continue drilling in this zone during nighttime hours. The Requester **must** estimate his work schedule and inform USACE so that inspection forces may have adequate time to inspect the site.
- j. Down hole pressure monitoring tool must be used during drill and reaming operations and must be within 5 feet of bit or reamer. Operations must cease if pressures exceed the "Max. Allowable Drilling Fluid Pressure (psi) for FS = 2.0" as shown as the red line on Figure 5,7,8 and 10 of the design reports for the entire drill for each crossing and a plan for reducing pressures must be provided to USACE for approval before restarting.
- k. At least **1 month** prior to commencement of HDD operations, driller, 3rd party mud engineer, 3rd party geotechnical representative, grout contractor and USACE inspector must meet to go over the monitoring plan.

- I. Calculations have been provided assuming a drill path, bore size, pump rates, and rheological mud properties, if HDD contractor plan differs, new calculations must be provided, such as change to intersect drilling method, different drill angles, etc. The USACE shall be notified of any changes even if calculations have already been submitted for the changes. Recommendations outlined in soils report must be adhered to and are considered permit requirements.
- m. Open excavations must be backfilled and drilling operations ceased 5 days prior to anticipated landfall of any high river event, tropical storm or hurricane. A high river event is defined by a Carrolton gage reading of +11.0 feet or higher. Information concerning current river stages may be obtained on our website at www.mvn.usace.army.mil. No waiver will be granted.
- n. Reaming advancement will be limited to 1.5 feet per minute and calculated annular solids must be kept to less than 20 percent. If annular solids exceed 20 percent, forward movement must stop and annular space cleaned out.
- o. A secondary survey monitoring system such as Tru Tracker or ParaTracker shall be employed to verify the drill bit location within the zone 300 feet either side of the levee footprint.
 - p. Please provide any required safety equipment required to enter the site.
- q. Entire drill path must be cleared to ground level to permit inspection. Flood lighting adequate for ground inspection must be provided to the entire drill path during night operations, otherwise operations will be limited to visible day light hours only.
- r. Boat access to and from the site shall be provided to USACE personnel by the applicant.
- s. Within 30 days of project completion, the Requester must provide a utility/pipeline point-of-contact (POC) that will be responsible for any future surveying, locations and identification efforts if required as described in the following paragraphs (s) through (u). Email the name, mailing address, email address and phone number of the POC to the Assistant Operations Manager, Albert Terry at 504-862-2311, Albert.J.Terry@usace.army.mil.

- t. Within 60 days of construction completion, the Requester is required to provide to the USACE current controlled as-built plan and profile surveys of the pipelines as they cross any federal navigation channel or levee. As-built documents shall consist of the following:
- (1) Electronic as-built drawing file(s), that include plan and profile views of each installed utility line. Portable Document Format (PDF) renderings are preferred.
- (2) Comma-separated text file(s) in Engineering Manual (EM) 15-P: Pipeline Specification format that include eastings, northings, and top of pipe elevations, which accurately define the location and elevation of each installed utility line. Email the required information along with the respective USACE Department of the Army (DA) permit reference number(s) in the subject line to MVN-Plover._ED-SE@usace.army.mil. For more information on EM15-P format and data requirements, refer to the Overview on the Regulatory website at http://www.mvn.usace.army.mil/Missions/Regulatory/Permits/EMPipelineSpecification.a spx.
- u. The Requester is advised that the proposed pipeline crosses under the Calcasieu River in or near an area that requires maintenance dredging of the federal navigation channel. A representative of the USACE or government contractor will contact the designated POC prior to dredging to coordinate these efforts. The pipeline owner is responsible for visibly marking the pipeline crossings, providing as-built plan and profile surveys of the pipeline and having a representative aboard the dredge as it dredges over the pipeline locale as requested.
- v. The Requester must perform and maintain the approved alteration authorized by this permission in good condition and in conformance with the terms and conditions of this permission. Requester is not relieved of this requirement if it abandons the alteration, although it may make a good faith transfer to a third party as described in condition "n" below. Should Requester wish to cease to maintain the authorized work/activity or should it desire to abandon it without a good faith transfer, it must obtain a modification of this permission from the New Orleans District Operations Division which may require restoration of the altered areas.
- w. If Requester sells the Bayou Bridge Pipeline Project or any part thereof, which is the subject of this permission, the Requester must provide the New Orleans District Operations Division with a copy of the permission and a letter noting the agreement to transfer the permission to the new owner, and the new owner's agreement to accept the permission and abide by all conditions of the permission. This letter must be signed by both parties.

- x. Without documentation of a transfer or ownership on file with USACE, the Requester will be considered the owner and responsible party for the Bayou Bridge Pipeline Project.
- y. If future operations by the United States require the removal, relocation, or other alteration of the approved alteration, or if, in the opinion of the Secretary of the Army or her/his authorized representative, the construction, operation, use or existence of the approved alteration causes or will cause an unreasonable obstruction to the free navigation of navigable waters or adversely impact a USACE project, the Requester will be required upon due notice from USACE, to remove, relocate or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made by the Requester or any agent, employee, representative, contractor or sub-contractor against the United States on account of any such removal, relocation, or alteration.
- z. Written notification is provided to this office of the construction timeline to include the proposed start and end dates. Additionally, notify this office prior to commencement and upon completion of the work permitted herein.
- aa. Any modification to the approved plans and specification requires a submission of the documentation of the modification.
- bb. The Requester is solely responsible for any remedial actions needed to correct any deficiencies in the design or construction of the approved alteration and its impacts to the federal projects. The approved alteration and related authorized activities shall not alter or change the alignment of the WABPL, EABPL and channel improvement project features in any way. The approved alteration shall not restrict the operations, nor shall the work obstruct or impede access within the USACE projects. No problems associated with or related to the operation, maintenance, repair, replacement, or rehabilitation of any USACE project may be created as a result of the approved alteration.
- cc. The Requester shall be solely responsible, physically and financially, for the response, mitigation, repair, remediation and restoration, in a manner satisfactory to USACE, of any damage to the USACE projects or injury to the public interest.
- dd. Any individual authorization granted under this permission may be modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permission or that such action would otherwise be in the public interest.
 - ee. Any modification to the approved plans and specification requires a submission

of the documentation of the modification to the New Orleans District, Operations Division, for review and a determination of approval or denial of the requested modification. Significant changes, additions, and/or supplements to the approved scope of work for the approved alteration which alters the existing use and function of the approved alteration will require re-submission of a Section 408 permission application to USACE for reevaluation under Section 408 prior to the commencement of any construction activities. The documentation must be stamped by a registered engineer and approved by USACE before the Requester's modification may commence.

- ff. USACE may reevaluate its decision on this permission at any time the circumstances warrant.
- gg. Should changes occur in the location or section of the existing levee, revetment, channel improvement, or other federal project features, and/or the Mississippi River, and/or in the generally prevailing conditions in the vicinity, or in any maintenance be required in the future as determined solely with the discretion of USACE, the Requester shall make any USACE required changes to the approved alteration, as may be necessary to satisfactorily remedy the situation and the Requester shall bear all costs associated therewith.
- hh. Written notification to be provided by the Requester to the New Orleans District, Operations Division of the construction timeline for the Project shall include the proposed start and end dates. Additionally, the Requester shall notify the New Orleans District Operations Division prior to commencement of construction of the approved alteration and upon completion of the alteration authorized herein.
- ii. Any damage to the levee, batture, revetment, channel improvement features, banks, and/or any other features of the affected federal projects, resulting from the construction, operation, maintenance, use, and/or existence of the approved alteration authorized herein shall be repaired at the Requester's sole expense. The Requester shall promptly repair or remediate any sedimentation and bank stability damage caused by the Project in accordance with USACE specifications and at Requester's expense. Cranes in the batture must be matted at all times other than during relocation and are not allowed on the batture without a written USACE approved stability analysis.
- jj. Any individual authorization granted under this permission may be modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permission or that such action would otherwise be in the public interest.
 - kk. It is the Requester's responsibility to coordinate with all public entities, including

but not limited to, the Atchafalaya Basin Levee District, Coastal Protection and Restoration Authority of Louisiana, and United States Coast Guard regarding any additional permits and/or permissions for this work. Additionally, any permission granted hereby does not obviate Requester's requirement to obtain other federal, state, or local permits required by law, and no work shall commence until all necessary permits are required.

- II. Many local governing bodies have instituted laws and/or ordinances in order to regulate fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. This project involves placement of fill, therefore, the Requester must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of the authorized activities with local floodplain ordinances, regulations, or permits.
- mm. The United States shall not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the Project, nor for damages to the property or injuries to Requester's officers, agents, servants, or employees, or others who may be on Requester's premises or the Project work areas or the federal project(s) rights-of-way. The Requester shall fully defend, indemnify and hold harmless the United States of America and USACE from any and all such claims.
- nn. In issuing this permission, the United States of America and USACE do not assume any liability for the following:
- (1) Damages to the approved alteration/permitted work or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- (2) Damages to the approved alteration/permitted work or uses thereof as a result of current or future activities undertaken by or on behalf of the Unites States in the public interest.
- (3) Damages to persons, property, approved alteration or to other permitted or unpermitted activities or structures caused by the work authorized by this permission letter.
- (4) Design or construction deficiencies associated with the approved alteration/permitted work.
- (5) Damage claims associated with any future modifications, suspension, or revocation of this permission letter.

- oo. The determination by the New Orleans District Operations Division that issuance of the permission is not contrary to public interest was made in reliance on the information provided by the Requester.
- pp. Since a portion of the work will impact real estate interests under the jurisdiction of the New Orleans District, a separate real estate instrument is being processed by USACE Real Estate and will be provided under separate cover. The Requester is advised that work should not proceed until such real estate instrument is received.
- qq. Requester shall conduct all work related to the federal project and easement crossings in accordance with the engineer-stamped drawings on file with USACE. Any changes to the crossing plans shall be submitted in writing to USACE for review and approval prior to construction. This evaluation was based on the project description and other information provided by Bayou Bridge. Any substantive modification thereof shall require evaluation by USACE.
- rr. Following the completion of construction, Requester shall restore all disturbed areas to pre-construction grades and contours on the federal project and easement crossings. All areas cleared of vegetation outside the maintained corridors shall be allowed to revegetate. Bayou Bridge shall reseed all non-inundated areas with a native seed mix to establish vegetation cover quickly while natural succession contributes to overall restoration. Invasive species shall be managed as specified in the Environmental Assessment (EA).
- ss. Requester shall use temporary sediment control measures at the federal project and easement crossings, such as silt fences, to minimize the introduction of sediment into waterbodies during construction and minimize the movement of spoil and sediment from surface runoff during and after construction. Requester shall implement the best management practices outlined in the project-specific Stormwater Pollution Prevention Plan (SWPPP) included within Appendix B of the EA.
- tt. Requester shall minimize impacts to soils, wetlands, waterways, and groundwater at the federal project and easement crossings by implementing the protective measures set forth in the project-specific Spill Prevention and Response Plan included within Appendix B of the EA.
- uu. In the event of an inadvertent release of drilling mud, the requester shall implement the measures outlined in the Plan for Containment of Inadvertent Release of Drilling Mud During Horizontal Directional Drilled Wetland and Waterbody Crossings (HDD Inadvertent Release Response Plan) included within Appendix B of the EA.

- vv. The requester shall obtain a permit from the USACE-MVN Regulatory Branch (formerly known as Regulatory Functions Branch) for compliance with Section 10 of the Rivers and Harbors Act (33 CFR Part 322) and Section 404 of the Clean Water Act (33 CFR Part 320-332) prior to any respective construction activities at the federal project and easement crossings.
- ww. Requester shall mitigate for impacts on waters of the U.S. at the federal project and easement crossings, including permanent and temporary conversion of forested wetlands. Required mitigation for wetland impacts shall be coordinated through the Regulatory Functions Branch as part of the evaluation of the Section 10/404 permit evaluation. The requester shall complete the mitigation as required by the USACE-MVN Regulatory Functions Branch.
- xx. The requester shall obtain a Section 401 Water Quality Certification from the Louisiana Department of Environmental Quality prior to any construction activities at the federal project and easement crossings.
- yy. Requester shall allow for tribal monitoring for the presence of previously unidentified or unknown cultural, archaeological, or human remains during construction at the federal project and easement crossings in accordance with the Tribal Monitoring Plan coordinated with the Coushatta Tribe of Louisiana found in Appendix F of the EA.
- zz. Requester shall adhere to the attached Unanticipated Discoveries Plan Cultural Resources, Human Remains, and Contaminated Media (UDP) for work at the federal project and easement crossings. This UDP stipulates a process to be followed by the applicant in the event of unanticipated discovery of human remains within the permit area including procedures for the notification of federally-recognized Indian Tribes and proper treatment of unanticipated human remains. If human remains are encountered, the requestor shall immediately cease work in the vicinity of the discovery and contact USACE. USACE shall then contact federally-recognized Indian Tribes, State Historic Preservation Officer (SHPO), and conduct other federal coordination requirements under 36 CFR 800. The USACE, with federally-recognized Indian Tribes and the SHPO, shall consult on the treatment and final disposition of the remains.
- aaa. The requester shall notify the USACE Operational Project Manager, Mr. Albert Terry, when an updated Facility Response Plan has been filed with Pipeline and Hazardous Materials Safety Administration (PHMSA) so that operations staff involved in spill planning and response can access the secure website to facilitate spill planning activities. To facilitate CEMVN staff involvement in emergency response planning, the Requester shall notify the relevant CEMVN Project Offices at least thirty (30) days prior to initiation of any field training exercises within 10 miles of any federal project and easement crossings.

bbb. The requester shall comply with the Coastal Use Permit that was issued by the Louisiana Department of Natural Resources – Office of Coastal Management on April 3, 2017.

ccc. The requester shall take steps to prevent entrainment or impingement of pallid sturgeon larvae if water is to be withdrawn from the Atchafalaya River and/or the Gulf Intracoastal Waterway for use during HDD operations and/or hydrostatic testing of the pipeline. Intake hoses shall not be placed within eddies and shall be placed at depths greater than 15 feet below the surface, but no closer than 2 feet from the bottom. A small diameter hose (typically 6-inch diameter) fitted with a 0.25-inch mesh screen or smaller shall be utilized. The intake velocity cannot exceed 0.5 feet per second.

ddd. If construction activities associated with any of the federal projects and easement crossings occur during the nesting season for colonial nesting birds (February 15 through August 1), the requester shall conduct surveys where suitable habitat is present no more than two weeks prior to the start of construction activities. If colonial nesting bird rookeries are identified, the requester shall restrict clearing and trenching construction activities to the extent practicable in areas within 300 meters of active rookeries until the nesting period is over. A compliance summary of this condition shall be submitted to CEMVN within thirty (30) days of the field survey.

eee. If bald eagles and/or nests are documented within the any of the federal projects or easement crossings during or immediately prior to construction, the requester shall adhere to the buffer requirements established in the USFWS National Bald Eagle Management Guidelines (2007) to avoid and/or minimize potential impacts on the bald eagles or their nests.

fff. The Requester shall comply with all applicable Federal, state, and local environmental laws and regulations, including those relating to the release, storage and handling of hazardous substances and those relating to the prevention of and response to oil spills. In the event of any release or spill, the Requester shall immediately notify the New Orleans District Operations Division.

The New Orleans District Regulatory Branch is evaluating the proposed alteration under a Department of the Army (DA) Standard/Individual Permit for compliance with Section 10 of the Rivers and Harbors Act (33 Code of Federal Regulations (CFR) Part 322) and Section 404 of the Clean Water Act (33 CFR Part 320-332). The Requester is advised that it must obtain this DA permit prior to the commencement of any work. The USACE point of contact in the New Orleans District Regulatory Branch for the DA permit (MVN-2015-02295-WII), is Mr. James Little at 225-342-3099, or by email at james.little@usace.army.mil. The requester is required to contact the New Orleans District Regulatory Branch to discuss the specifications and

requirements for any mitigation necessitated by the Project.

The New Orleans District Real Estate Division is evaluating the Project under a separate real estate instrument since a portion of the work contemplated by this Section 408 request will impact real estate interests under the jurisdiction of the New Orleans District. The USACE point of contact in the New Orleans District Real Estate Division is Ms. Linda Labure at 504-862-1295, or by email at Linda.C.Labure@usace.army.mil.

This permission letter does not obviate the Requester's requirement to obtain other federal, state, or local permits required by law, and no work shall commence until all necessary permits are acquired.

If you have any questions, please contact Amy Powell, Operations Manager for Completed Works or Albert Terry, Civil Engineer for Completed Works of my office at 504-862-2241 or 504-862-2311, respectively. Additionally, future correspondence concerning this Project should reference number 16-169 to allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

Michael N. Clancy Colonel, U.S. Army District Commander

Enclosure

CERTIFIED MAIL NO. 7011 0470 0001 7661 3233 (Bayou Bridge Pipeline, L.L.C.) RETURN RECEIPT REQUESTED

CC:

Mr. Ignacio Harrouch Chief Operations Coastal Restoration and Protection Authority Post Office Box 44027 Baton Rouge, Louisiana 70804-4027

Mr. John Grezaffi, President Board of Commissioners Atchafalaya Basin Levee District Post Office Box 170 Port Allen, Louisiana 70767

Bayou Bridge Pipeline Project

Tribal Monitoring Plan

August 2017

Prepared for:

Bayou Bridge Pipeline, LLC 1300 Main St Houston, Texas 77002

U.S. Army Corps. of Engineers

New Orleans District / Regulatory Branch 7400 Leake Avenue New Orleans, Louisiana 70118 File Number: MVN-2015-02295-WII (New Orleans District)

Prepared by:

Tribal Energy Resource, LLC PO Box 3187 Kalispell, MT 59937

BAYOU BRIDGE PIPELINE PROJECT TRIBAL MONITORING PLAN

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BAYOU BRIDGE PIPELINE PROJECT TRIBAL MONITORING PLAN

1.0 Background

Bayou Bridge Pipeline, LLC (BBP) is seeking approval from the U.S. Army Corps of Engineers (USACE) to install and operate the Bayou Bridge Pipeline Project (Project), a 24-inch diameter crude oil pipeline approximately 162.52 miles in length. The pipeline facilities include a 161.40 mainline section beginning south of Lake Charles, Louisiana and terminating near St. James, Louisiana, as well as a 1.12-mile lateral pipeline that will commence at the terminus of the mainline. The Project also involves the construction of two pump stations and other ancillary facilities along the pipeline. The Project activities include clearing and grading the right-of-way, trenching, temporarily stockpiling materials, installing below ground pipelines, installing aboveground facilities, and performing horizontal directional drilling (HDD) operations.

Phase I cultural resource investigations have been completed in compliance with Section 106 of the National Historic Preservation Act and guidelines set forth by the Louisiana Division of Archaeology (LDOA) to identify cultural resource sites within the project footprint and to assess any potential impacts by the Project to historic properties or other sensitive cultural resources. The Phase I Cultural Resources Report, which provides a detailed analysis of the results of the investigation, was submitted to the LDOA. The LDOA issued letters concurring with determinations that the project will not adversely affect any properties listed or eligible for listing on the National Register of Historic Places.

Tribal Energy Resource, LLC (TER) has prepared this Tribal Monitoring Plan (Plan) for BBP in regard to the Project. This Plan describes the procedures for tribal monitoring and identifies the process in which tribal monitors are deployed to the right-of-way to observe Project construction. This Plan also references the Project's Unanticipated Discovery Plan which describes the procedures to be implemented in the event that an unanticipated discovery is encountered during construction. The monitoring program has been prepared based on the analysis of the cultural resource surveys and tribal participation in the project up to this point. The monitoring program reflects the potential risks for exposure of previously unidentified or buried cultural material within the project route during construction.

2.0 Objective

The objective of this tribal monitoring program is to develop a reasonable monitoring process while minimizing the potential for adverse effects from the Project activities to previously unidentified historic properties. This plan provides guidelines to assist in the coordination and communication for successful tribal participation in protecting cultural resources.

3.0 Summary

To facilitate construction, the overall pipeline route is divided into 3 smaller sections, or spreads, of varying lengths. Construction, environmental and tribal monitoring oversight will be assigned at the spread level. Tribal monitors will be assigned to all three spreads and will observe ground disturbing activities during Project construction. Spread 3 will be predominantly under water and monitoring is not warranted in inundated areas.

Bayou Bridge Pipeline / Tribal Monitoring Plan / File Number: MVN-2015-02295-WII

There will be one (1) tribal monitor per clearing, grading and trenching construction crew and one (1) Chief Monitor/Liaison for the Project. The tribal monitors are required to have adequate training to work on the right-of-way and must follow strict protocols as outlined in this plan while in the field. The tribal monitors will be selected or approved by the Coushatta Tribe of Louisiana and recognized as having experience in the identification of historic properties. Their role will be to alert the Environmental Inspector (EI) of any previously unidentified historic properties uncovered during construction activities.

Environmental Inspection services will be employed throughout construction of the project. There will be clear lines of communication between the tribal monitors, environmental inspectors and the Tribal Liaison. Tribal monitors will be required to keep detailed records of their activities through daily reports provided to the Tribal Liaison and lead EI.

4.0 Processes

The USACE, in consultation with the Coushatta Tribe of Louisiana, TER and BBP, has recommended tribal monitoring in their areas of jurisdiction for compliance with Section 106. TER has an agreement with the Coushatta Tribe of Louisiana to act as a representative on this project. Bayou Bridge has agreed to tribal monitoring along the Project regardless of federal jurisdiction and will bear the cost of tribal monitoring on the Project in an agreement with TER.

5.0 Environmental Inspection

To facilitate construction compliance with all environmental regulations and project conditions, BBP employs EIs. It is anticipated that the project will have two to three field EIs that report to one Lead EI per spread, that report to an overall Chief EI. The tribal monitors working with each ground disturbing construction crew will report to the respective lead EI in addition to the Tribal Liaison during the Project.

6.0 Monitoring

Monitoring will occur during ground-disturbing construction activities. For the purposes of this Plan, ground-disturbing activities are defined as any activities that have moderate to high potential to expose or impact buried cultural resources. These include, but are not limited to, vegetation clearing and grubbing (in which soils are exposed), blading, grading, and trenching activities. Certain activities during construction will not require monitoring such as lowering-in and clean-up as these activities have low potential to expose cultural resources or for which monitoring would not identify disturbed or exposed cultural activities. Additional examples of activities with low potential to expose cultural resources that will not require monitoring include simple transportation between sites by rubber-tired vehicles, installation of temporary fence posts, and transportation between areas that have been previously monitored. However, it should be noted that if significant rutting is expected prior to ground disturbing activities by rubber-tired vehicles mobilizing to a site, then an archaeological or tribal monitor should be present.

Monitoring locations will generally be observed by one tribal monitor when machinery is actively involved in ground disturbance activities as described above. The monitor will actively observe the ground disturbance to look for indications of cultural remains exposed by construction equipment. For safety purposes, monitors are not to enter the trench at any point and shall generally inspect disturbed or excavated soils behind the equipment at a safe distance in accordance with health and safety protocols. In the event that a *new discovery* (see Unanticipated Discovery Plan; UDP) is observed during construction, the materials will be recorded using standard cultural material recording protocol.

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Construction will be suspended in the immediate area for the assessment and recording of the cultural material or human remains discovered in accords with the UDP.

At HDD sites, the actual monitoring will take place at the entry/exit points of that drill. Although unlikely, should an inadvertent return (IR) of drilling fluid occur within the monitoring site, the monitor will be allowed to monitor activities associated with the containment and cleanup of the drilling fluid. If an IR occurs within a known cultural site, BBP would notify the SHPO and federal agency, if applicable; special care will be taken to reduce impacts at the surface. Monitors and project archeologists would coordinate with the EI to help determine low impact containment and cleanup methodologies.

7.0 <u>Tribal Monitors</u>

Tribal monitors will work collaboratively with the environmental inspection team in an advisory role to assist the Project in achieving compliance with Section 106, this monitoring plan, and any unanticipated discovery that may be encountered during construction.

If another tribe requests to monitor during construction then the tribes will meet and decide amongst themselves which areas will be monitored by which tribe. In some instances it may be necessary for a tribe to designate an alternate monitor to provide monitoring for all areas of concern for the tribe in the event that the primary monitor is unavailable.

7.1 Position Description:

- Tribal monitors are deployed to the right-of-way to observe ground disturbing activities during
 Project construction in compliance with Section 106, this monitoring plan, and any unanticipated
 discovery that may be encountered during construction. Monitors shall observe ground disturbing
 construction activities to identify any previously unidentified historic properties that may be of
 significance to the tribe.
- It is the responsibility of the tribal monitor to actively observe and report any cultural artifact or human remains found either on the surface or subsurface within the Project boundaries. Any potential significant find shall be reported to the Tribal Liaison and Lead EI. Upon notification, the project archaeologist will be engaged. The archaeologist will evaluate whether the find constitutes a potential historic property in accordance with applicable regulations and proceed in implementing the UDP as warranted.
- Monitors are responsible for reporting daily activities that identify the areas and activities monitored during the week, describe any issues or concerns that were encountered, and describe how the issue/concern was resolved. Reports must be submitted daily in writing to the Lead EI and Tribal Liaison.
- The tribal monitor is required to adhere to this tribal monitoring plan. The Chief and Lead EIs shall
 review the Unanticipated Discovery Plan with the Tribal monitors so that roles and responsibilities of
 the monitor and the lead EI are clearly understood. The monitors shall be well versed in the Plan and
 UDP prior to being deployed on the project.
- Tribal monitors shall communicate directly to the Lead EI and the Tribal Liaison.
- The tribal monitors are part of the construction team and as such are required to participate in the safety and environmental training on site as well as tailgate meetings. They must abide by all safety rules and wear personal protective equipment at all times while on site.
- Monitors may not direct construction personnel or equipment.

- At the start of each work day, tribal monitors must meet with the Lead EI at the applicable spread office or other designated location determined by the Lead EI at the prescribed time to receive daily safety and information briefings. Failure to attend the briefing may preclude the monitor's ability to participate on that day.
- Lead EIs will seek the advice and input of tribal monitors when unanticipated discoveries are
 encountered, if available, and will consider their input when implementing the UDP.
- If a tribal monitor needs to pick up a potentially significant artifact to examine it, they are to replace it
 to the same location where it was found.
- Monitors are not to remove any artifacts from the right-of-way or any ancillary properties unless directly instructed to do so by the project archeologist, the USACE and/or State Historic Preservation Office (SHPO). Should they be instructed to remove the cultural material, they will place the material in an appropriate container and properly label the container to preserve the provenience of the material. If these materials are collected by the tribal monitor, that monitor will deliver these directly to the Lead EI or Project archaeologist. The Project archaeologist will retain and temporarily house all collected items collected pending completion of analysis, reporting, and consultation. Transfer of the cultural material from the tribal monitor to anyone's custody will be documented within the monitors' daily reports. Upon completion of analysis, reporting, consultation, and/or construction, the artifacts will be returned to the appropriate landowners or curated with an approved curation facility within the state in accordance with applicable regulations.

7.2 Qualifications:

Credentials and qualifications of the tribal monitors shall be within the purview of the tribe. The individuals selected will be officially recognized by the tribe as having the capabilities to perform the duties as described in the job description. Tribal Energy Resource, LLC will work with the Coushatta Tribe to articulate the responsibilities of the monitors and deploy them to optimize their role in reducing the potential for Project effects to historic properties.

All tribal monitors shall have experience identifying the various site types of cultural sites and resources from the specific regions crossed by the Project. In addition, the tribal liaison must have demonstrated professional training in and/or experience with identification of human remains and/or unmarked graves to ensure quick and accurate identification and reporting of discoveries.

8.0 Training

Training of project personnel is critical to project compliance and success. Safety and environmental training is provided to all personnel that will be working on the project construction.

8.1 Training of Tribal Monitors

All monitors will be required to satisfactorily complete a two-day comprehensive training focused on the activities on the pipeline right-of-way conducted by TER. Completion of this program is compulsory.

It also is required that the monitors also attend the environmental/safety trainings provided to all on-site project personnel. Monitors will be required to be up-to-date on the Project's safety protocol for the project and will be expected to follow all safety guidelines at all times.

Monitors will be required to read and fully understand the procedures set forth in this Plan.

Additional training could be required once the monitor has deployed to the site.

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8.2 Training of Construction Personnel

Construction personnel will be working in areas outside of federally jurisdictional areas; however, the potential still exists for cultural resources to be encountered. Training of construction personnel is necessary for them to recognize potential cultural resources and comply with Section 106 and applicable state regulations. During the pre-construction training provided by BBP, approximately one hour will be designated for TER to provide this training so that construction personnel are familiar with the types of archaeological resources that may be encountered during construction. This training will also outline the steps to be followed in the event of a significant archaeological discovery during construction (e.g., the discovery of human remains or new discoveries). Tribal representatives will be allowed to participate in presenting the training provided it can be completed concurrently with the scheduled pre-construction training.

The following items will be reviewed during the training program:

- Brief overview of the laws and regulations associated with discoveries of cultural resources and unmarked burials, both within and outside of USACE jurisdiction.
- Definition of a discovery along with examples.
- Steps towards protection of a discovery until such time as they can be properly evaluated by a qualified archaeologist.
- Proper notification to the appropriate personnel.
- The necessity of reporting discoveries in a timely manner and complying with the stipulations in this Plan.
- The need to treat any human skeletal remains that are encountered with dignity and respect.
- What to do in the event of witnessing ground disturbing activities, or the intent to conduct ground disturbing activities in an area that requires monitoring and a tribal monitor is not present.

9.0 Communications

At the start of each work day, tribal monitors must meet with the respective Lead EI at the applicable spread office or other designated location determined by the Lead EI at the prescribed time to receive daily safety and information briefings. Failure to attend the briefing may preclude the monitor's ability to participate on that day.

Tribal monitors will complete daily reports for daily submittal to the Tribal Liaison and Lead EI.

It is the responsibility of the tribal monitor to actively observe and report any cultural artifact or human remains found either on the surface or subsurface within the Project boundaries.

Any potential significant find shall be reported in a timely manner to the Tribal Liaison and Lead El The Lead El will issue a stop work order in the immediate area of the discovery.

The Lead EI, the project archaeologist will be engaged to evaluate whether the find constitutes a potential historic property in accordance with applicable regulations and proceed in implementing the UDP as warranted.

Tribal monitors may not direct construction personnel or equipment.

If an unanticipated discovery is observed by someone other than a tribal monitor, the advice of a tribal monitor, if available, will be sought and their input considered in determining eligibility.

If any issues develop, tribal monitors are encouraged to communicate with the EIs and the Tribal Liaison.

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The Lead EI will contact, either in person, via email, text, or telephone, the Tribal Liaison and notify them of emergencies or potential emergencies affecting the entire spread such as inclement or violent weather.

Ground disturbing activities are not to be precluded in the event a monitor is not present or available for any reason.

10.0 Administration

Through the government-to-government consultation process and correspondences with BBP, it is understood that BBP intends to contract with TER to develop and implement this tribal monitoring program. The Principal Point of Contact for this Project is Lou Thompson on behalf of TER.

TER will be responsible for administering the monitoring program and will collect all necessary contact information to ensure clear and timely communication.

The USACE is being provided a copy of the Plan for the administrative record. BBP and TER may modify this plan at any point in time.

All monitoring costs will be borne by BBP at an agreed upon rate and scale.

11.0 Coushatta Tribe of Louisiana Cultural Heritage Department

The Sovereign Nation of the Coushatta Tribe of Louisiana is a federally recognized Native American Tribe. The Tribe's Cultural Heritage Department will play a key role in the tribal monitoring program. The Department consists of Mr. Jonas John, Director, Dr. Linda Langley, Tribal Historic Preservation Officer and Michael Tarpley, Deputy THPO. The Heritage Department will select the monitors for the project and assist in the training programs. They will provide the Council updates and progress reports on the project. TER will work closely with the Heritage Department throughout the entire tribal monitoring effort to resolve issues as they arise.

12.0 <u>Unanticipated Discovery Plan</u>

UNANTICIPATED DISCOVERIES PLAN CULTURAL RESOURCES, HUMAN REMAINS AND CONTAMINATED MEDIA

Bayou Bridge Pipeline Project

A. INTRODUCTION

Bayou Bridge Pipeline, LLC (BBP) proposes to construct an approximately 162.68-miles of new 24-inch diameter crude oil pipeline that will commence south of Lake Charles, Louisiana in Calcasieu Parish, Louisiana and will terminate near St. James, Louisiana in St. James Parish, Louisiana. The proposed Project also involves the construction of two pump stations in Jefferson Davis and St. Martin parishes, Louisiana and other ancillary facilities along the proposed pipeline. This document describes the procedures for dealing with unanticipated discoveries during the course of project construction. It is intended to:

- Maintain compliance with applicable Federal and State laws and regulations during construction of the Project;
- Describe to regulatory and review agencies the procedure the Project or its representative will follow to prepare for and deal with unanticipated discoveries; and,
- Provide direction and guidance to project personnel as to the proper procedure to be followed should an unanticipated discovery occur.

B. PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

In the event that a tribal monitor or any member of the construction work force believes that a cultural resource discovery is encountered the following plan will be implemented:

- 1. All work within 100 feet of the discovery will immediately stop and the Environmental Inspector and the tribal Section 106 Compliance Coordinator will be notified. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the materials. A cultural resource can be prehistoric or historic and could consist of, but not be limited to, for example:
 - An accumulation of shell, burned rocks, ceramics or other subsistence related materials
 - · An area of charcoal or very dark soil with artifacts
 - Stone tools, arrowheads, or dense concentrations of stone artifacts
 - A cluster of bones in association with shell, charcoal, burned rocks, stone artifacts, ceramics, or other culturally-modified items. A historic structure or assemblage of historic materials older than 50 years
- 2. If the project archaeologist, tribal monitor, and tribal Section 106 Compliance Coordinator

all concur that the discovery is a cultural resource, then the Environmental Inspector will take appropriate steps to protect the discovery site. This will include flagging the immediate area of discovery and stop work or exclusion zone, as well as notifying the Environmental Project Manager and/or Company Representative and the Coushatta THPO. Work in the immediate area will not resume until treatment of the discovery has been completed.

- 3. BBP or its representative will arrange for the discovery to be evaluated by a qualified archaeologist and the Coushatta Heritage Department. The Coushatta Heritage Department and the archaeologist will evaluate the cultural material and provide recommendations for management of the resource under the appropriate State and Federal Historic Preservation Plan.
- 4. The Coushatta Tribe and the project archaeologist will seek consultation with the SHPO and the United States Army Corps of Engineers (USACE) New Orleans District regarding the National Register eligibility status of the discovery. If the discovery is determined to have the potential for eligibility, the archaeologist and Coushatta Heritage Department will consult with the SHPO and USACE regarding development of the mitigation plan to be implemented. Treatment measures may include mapping, photography, sample collection, or excavation activity.
- 5. The project archaeologist will implement the appropriate treatment measure(s) and provide a report on its methods and results. The investigation and technical report will be performed in compliance with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 CFR 44734--44737); the Advisory Council on Historic Preservation (ACHP) publication "Treatment of Archaeological Properties" (ACHP 1980); and follow the guidelines set forth by the applicable State(s) Historic Preservation Office.

C. PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS In the event that human remains are encountered during either construction or maintenance activities, the following plan outlines the specific procedures to be followed. These procedures meet or exceed the Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects adopted by the ACHP, "Protection of Historic and Cultural Properties" (36 CFR Part 800); Procedures for the Protection of Historic Properties (33 CFR 325 Appendix C); the Archaeological and Historic Preservation Act, and Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671-683).

All activity that might disturb the remains shall cease and may not resume until authorized by appropriate law enforcement officials or the State Archaeologist. Any human remains, burial sites, or burial related materials that are discovered during construction will at all times be treated with dignity and respect.

 The Site Manager or project archaeologist, if present, will notify BBP's Project Manager, the law enforcement agency, and the coroner of the jurisdiction where the site or remains are located within two days of the discovery. The State Archaeologist will also be contacted to assist with identifying the remains.

- Any activity that may disturb the unmarked burial site, human skeletal remains, or burial
 artifacts associated with the site will immediately cease on discovery. The site will be
 carefully covered and secured for protection from degradation by weather or unauthorized
 individuals.
- 3. The Environmental Inspector will be responsible for taking appropriate steps to protect the discovery. This will include fencing off the immediate area of discovery and flagging the area as an exclusion zone. No activity may resume until authorized by the agency authority governing the disposition of the human remains.
- 4. If the unmarked burial site, human skeletal remains, or funerary objects can be shown to have ethnic affinity with a living Native American tribe, a Company Representative will notify the SHPO and USACE to assist in determining the tribe(s), if any, who may have historic ties to the region and represent descendants of any Native American remains. If direct relations to a Native American tribe are verified, the tribe will have control of the disposition of the human skeletal remains
- 5. If the District Coroner finds that the unmarked burial site is over 50 years old and that there is no need for a legal inquiry by their office or for a criminal investigation, and if no direct relations to any Native American tribe are found, then the SHPO will have jurisdiction of the site, human skeletal remains, and the burial artifacts.
- 6. In the event of Unanticipated Discovery and subsequent identification of American Indian remains, tribal members and cultural practioners will be given the opportunity to perform ceremony for these individuals who have had their final journey interrupted.

D. PROCEDURES FOR THE DISCOVERY OF CONTAMINATED MEDIA

Indicators of possible contamination include, but are not limited to:

- Buried drums or containers, rusted or in otherwise poor condition
- Stained or otherwise discolored soil (in contrast to adjoining materials)
- Spoil material containing debris other than obvious construction material
- · Chemical or hydrocarbon odors emanating from excavations
- Oily residues
- · Visible sheen or other discoloration on groundwater
- Structures such as pipelines (concrete, PVC or steel) or underground storage tanks.

The EI and appropriate contractor personnel will be trained in hazard identification and worker protection and these topics will be discussed regularly in safety meetings. A contamination assessment including strategic sampling of soil and groundwater along the Project route indicated that no contamination will be encountered during construction. However pre-construction inspections shall be conducted prior to beginning work in each area of the project. In the event that contamination is encountered the following activities should take place:

1. Immediately cease construction activities within that area and notify the Environmental Inspector and Project Environmental Manager. Work in the immediate area will not resume until an assessment of the discovery has been completed and the Company has released the site. If safe to do so, the Environmental Inspector will take appropriate steps to mark (flag) off the area to identify the exclusion zone. Work in the immediate area will not resume

until an assessment discovery has been completed.

- 2. If potentially contaminated groundwater or soil reaches (or has the potential to reach) surface waters, booms and/or absorbent materials shall be immediately deployed to contain and reduce downstream migration of the spilled material.
- Upon notification, the Project Environmental Manager will perform or direct a hazard
 assessment to determine appropriate control measures to be implemented at the specific
 site. Activities may include sampling vapors, soil, sediments, groundwater, and/or wipe
 samples of materials.
- 4. If warranted by the assessment, the Project Environmental Manager will notify appropriate Federal, State and Local agencies.
- 5. Upon evaluation of the sampling results, additional notifications may be made to coordinate a work plan for measures to be implemented in the contaminated area to resume activities in a safe, environmentally compliant, and effective manner. Measures may include additional personal protective equipment, segregation of contaminated media, treatment or off-site disposal of contaminated media.
- All identification /characterization, handling, labeling, storage, manifesting, transportation, record keeping, and disposal of potentially contaminated materials shall be conducted in accordance with all applicable federal, state, and local regulations and guidance.

E. PROJECT CONTACTS Environmental Inspector

Attn: TBD Phone:

Chief Inspector
Attn: TBD
Phone:
Bayou Bridge Environmental Project Manager
Attn:
Phone
Bayou Bridge Project Manager
Attn:
Phone
USACE New Orleans District
Attn:
Phone
Louisiana Office of Cultural Development
Attn:
10511
Phone

Sherriff Contacts					
Parish	Sherriff	Address	Phone		
Acadia	Wayne Melancon	1037 Capitol Ave. Crowley, LA 70526	337-788-8700		
Assumption	Bruce Prejean	P.O. Box 69 Napoleonville, LA 70390	985-369-7281		
Calcasieu	Tony Mancuso	5400 E. Broad St. Lake Charles, LA 70615	337-491-3715		
Iberia	Louis Ackal	300 Iberia St. Suite 120 New Iberia, LA 70560	337-369-3714		
Iberville	Brett Stassi	58050 Meriam St. Plaquemine, LA 70764	225-687-5100		
Jefferson Davis	Ivy J. Woods	P.O. Box 863 321 E. Plaquemine St. Room 102 Jennings, LA 70546	337-824-3850		
Lafayette	Michael W. Neustrom	316 West Main St. Lafayette, LA 70501	337-232-9211		
St. Martin	Ronny Theriot	400 Saint Martin St. St. Martinville, LA 70582	337-394-3071		
St. James	Willy J. Martin, Jr.	5800 Louisiana Hwy 44 Convent, LA 70723	225-562-2200		
Vermillion	Michael. A. Couvillon	101 South State St. Abbeville, LA 70510	337-898-4409		