

Source: Bing Maps Hybrid, National Geographic World Map; NAD 1983 UTM Zone 15N

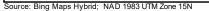


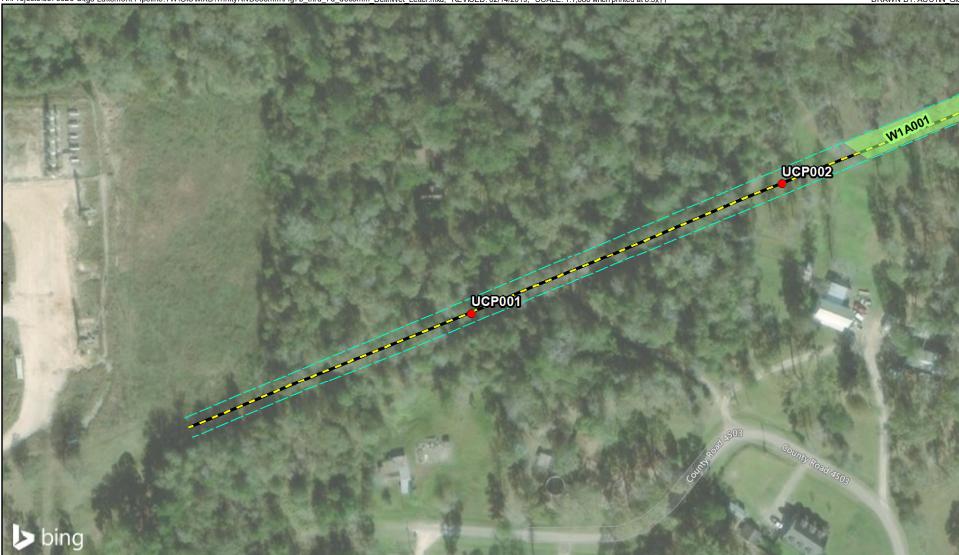
Legend

- ---- Proposed 12-inch Lakemont Pipeline Decommissioning
- ---- Proposed 12-inch Lakemont Pipeline Removal
- Existing 30ft. Right-of-Way
- Temporary Matted Workspace

Figure 2 Aerial Map Lakemont Pipeline Trinity River Decommissioning CITGŎ Liberty County, Texas

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Legend

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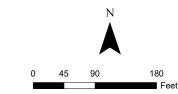
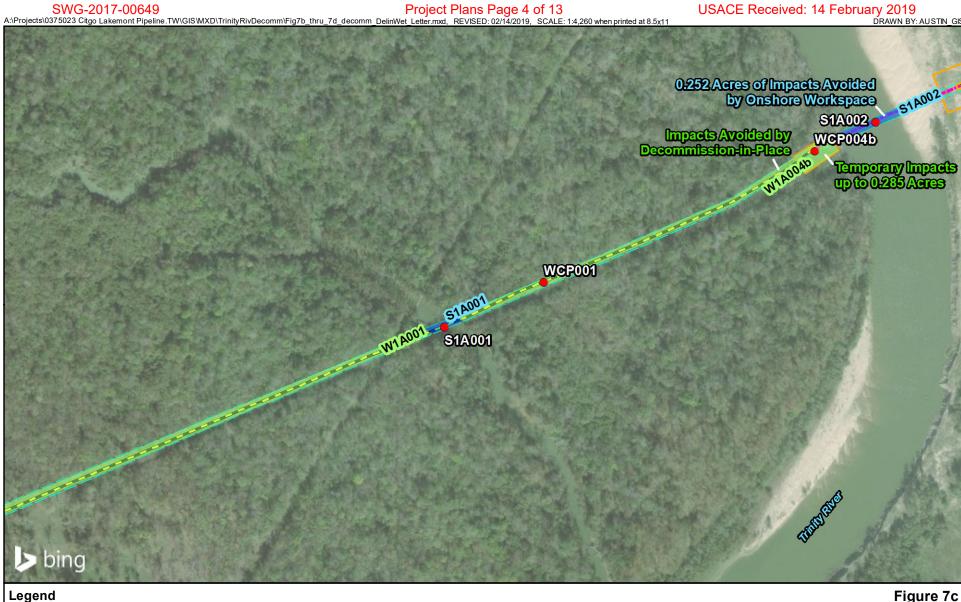


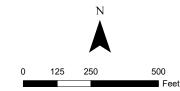
Figure 7b **Delineated Wetlands and Waterbodies** West Uplands Detail Lakemont Pipeline Trinity River Decommissioning CITGO

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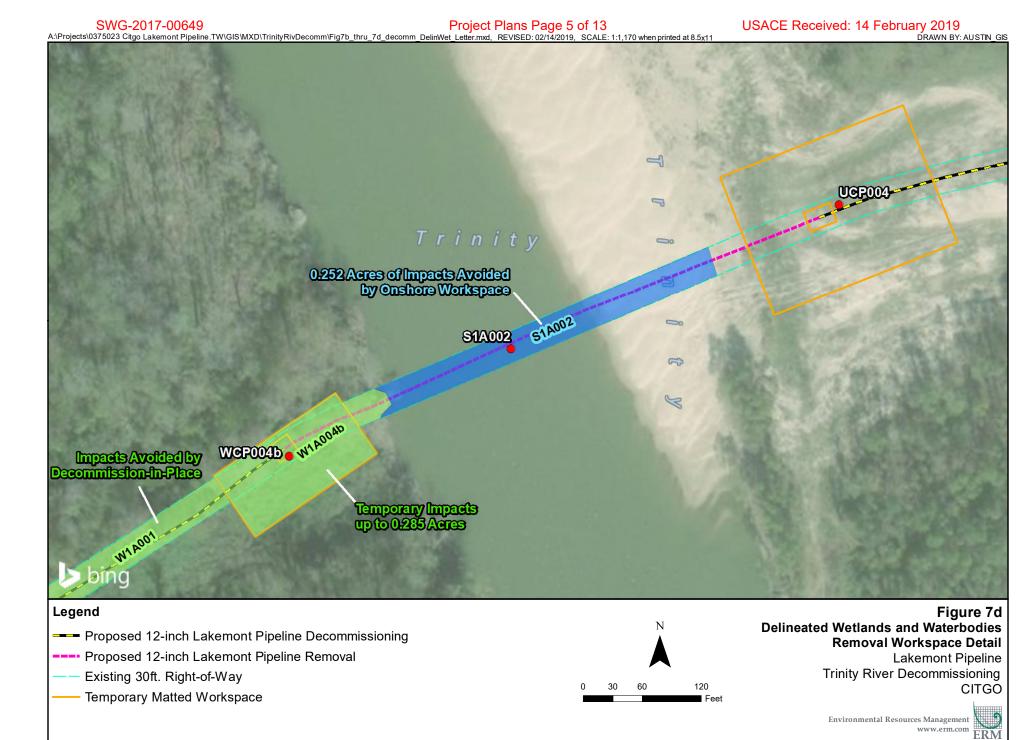
Legend

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Delineated Wetlands and Waterbodies Avoidance by Decommission-in-Place Lakemont Pipeline Trinity River Decommissioning CITGO

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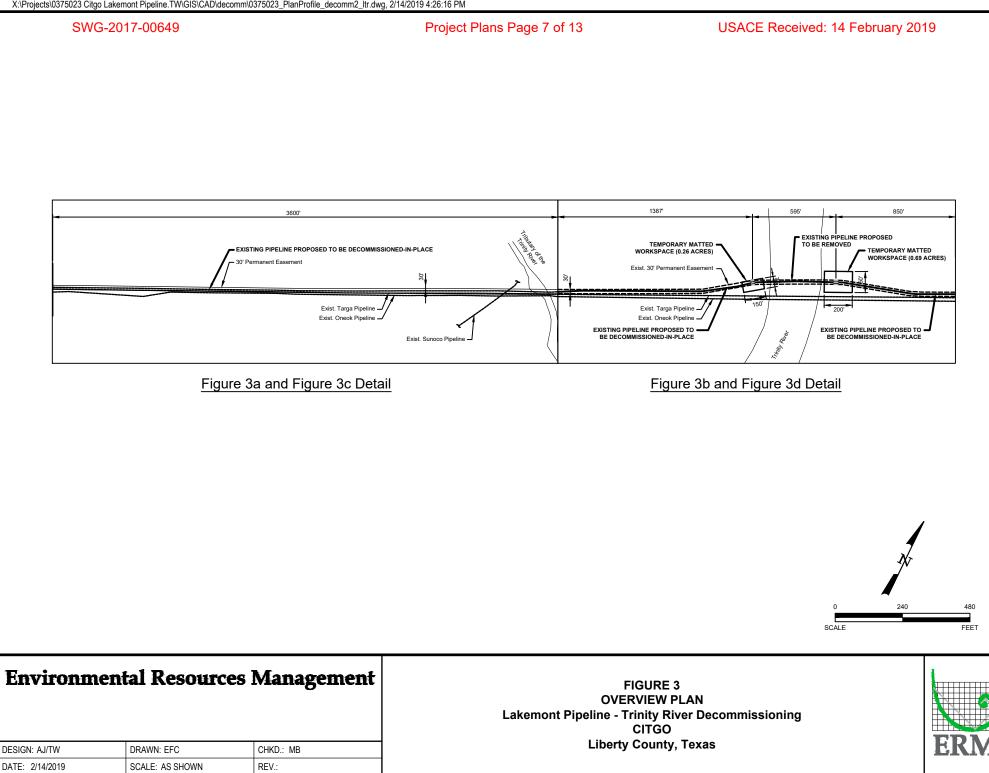


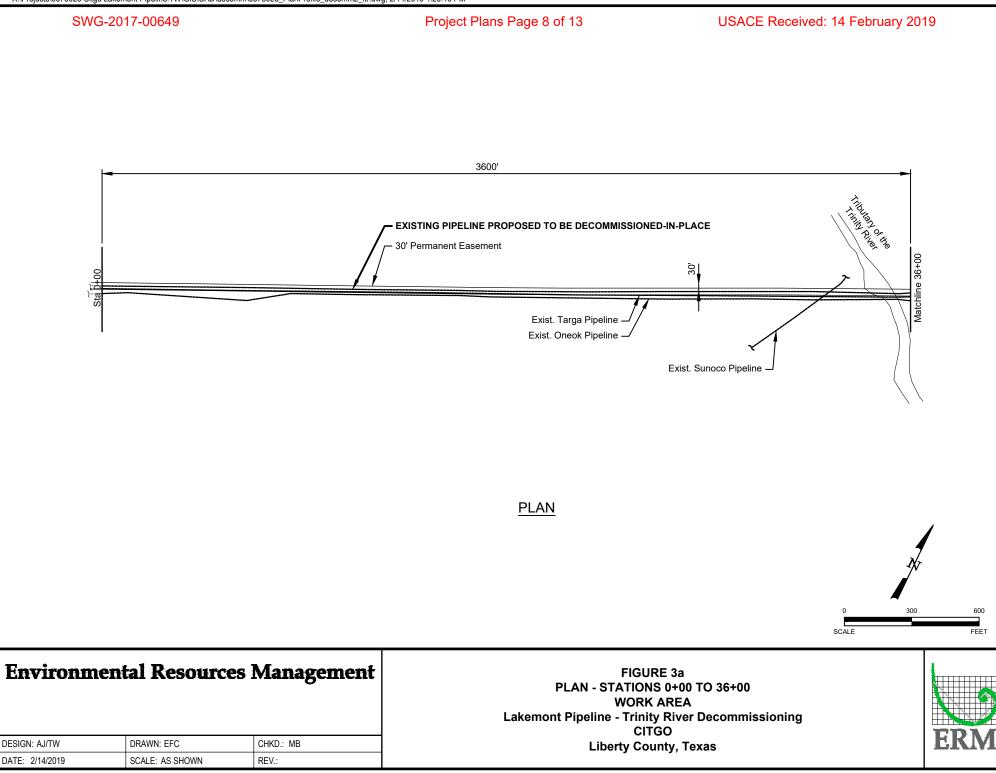


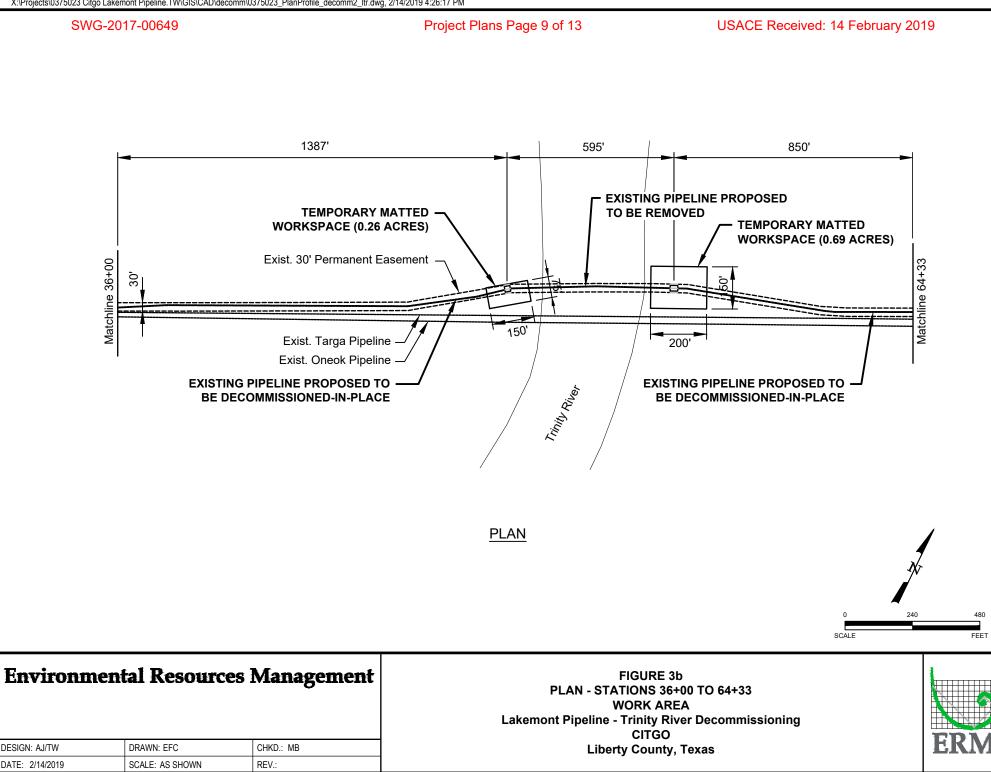
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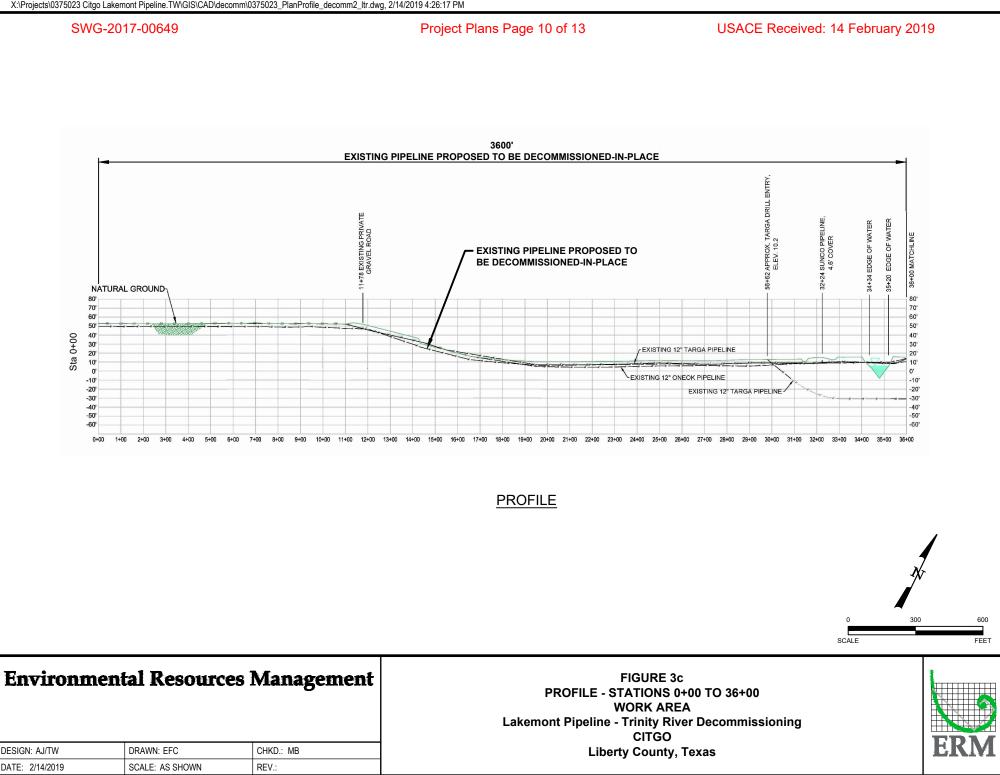
Avoidance by Decommission-in-Place Lakemont Pipeline Trinity River Decommissioning CITGO







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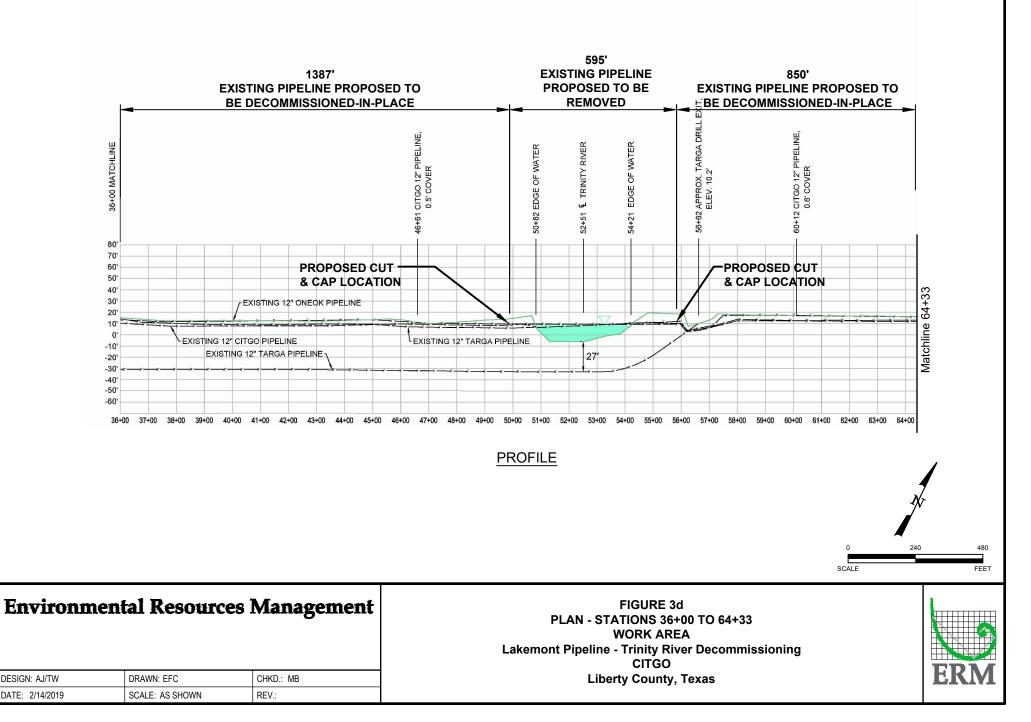


ERM-Southwest, Inc. TX PE Firm No. 2393



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USACE Received: 14 February 2019





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Pipe Extraction Plan CITGO _ Trinity River HDD

Intended Subcontractor: Directional Service South, LLC

- Contacts
 - o Jake Gautreaux: 337-661-9658
 - o Randy Buller: 337-661-9662

Extraction Procedure

- 1. A One-Call shall be made requesting that the obstruction owner marks all existing utilities and other obstacles prior to any work beginning.
- 2. Have safety and survey people do a preliminary on site survey, which consist of work area room and any existing pipelines or other structures they may affect the work area. Safety and survey personnel will also need to complete a pre task JSA at each proposed rammer site prior to moving in at actual job site. (rammer is either used to extract pipe or ram pipe.)
- 3. The work includes utilization of pipe ramming technology to assist equipment that is pulling pipe out of the ground for removal .The assist technique works directly on getting the pipe out by adding a pipe extractor to the pull side and also adding a pipe rammer to the rear of pipe and working in tandem with dozer or other pulling equipment to complete pipe removal.
- 4. The end and beginning of pipe to be removed will need to be sufficiently reinforced. This particular project will need a .500 wall 12" section added to each end of pipe if not .500 wall already. Then on pull side a weld on adapter from 12" to 36", then weld a 10' pulp of 36" to accommodate extractor. The 24" extractor is then welded to the 36" pulp a trackhoe will be needed to support the weight of extractor. The front of extractor has a pad eye to then hook to dozer cable. At this point air lines can be hooked up to air compressor.
- 5. On rear side of pipe after .500 wall ,weld on 12" to 20" adapter then a 3' pulp of 20" for hammer to weld to , also weld pad eyes to the 10:00 and 2:00 o'clock position at rear of .500 wall 12". Install the segmented ram cones into the end of pipe and clamp in place. Install the pipe rammer into the cones and secure the rammer to the pipe utilizing the safety chains and turnbuckles (hooked to pad eyes at 10 and 2) connect the air compressor to the pipe rammer and run at minimum volume to seat rammer. May need to retighten safety chains and turnbuckles.
- 6. At this point preparation of pipe extractor and pipe rammer is complete.
- 7. Establish radio communication between both pulling side and rear side. Dozer can now put a steady amount of pull force on wench line that is attached to front of extractor. Slowly open air valves on both sides to start extractor and rammer while dozer holds pull force until pipe starts to move as residence of force to remove pipe decreases rammer may be removed leaving extractor incase more force is needed while pulling remaining pipe out of ground.



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Safety

The safety of the general public, Contractor personnel, and Owner personnel is of utmost importance. Directional Service South L.L.C. shall at all times provide for the safety of all pipeline construction personnel and the general public during extracting operations by doing the following:

- 1. Restricting access to the immediate area involving the extracting operation to only those personnel engaged in the actual operation of the equipment, Company inspectors, and Company visitors that have been subject to a safety presentation.
- 2. Prohibiting pipeline work in or around the extracting site not directly associated with the drilling operation.
- 3. Providing and installing construction warning signs as necessary in the vicinity of the work site.
- 4. In case of pipeline strike incident on R-O-W, an emergency phone list is attached.

All Local, State and Federal laws and regulations pertaining to safety shall be complied with in and around all Company workplaces. Directional Service South L.L.C. personnel shall wear personal protective equipment at all times that they are on the jobsite. This equipment shall include steel toe shoes, hard hats, and eye protection and hearing protection as needed.