

FORT BEND COUNTY FY 2009  
COMMISSIONERS COURT AGENDA REQUEST FORM  
Return Completed Form by E-Mail to: Agenda Coordinator, County Judge's Office

Date Submitted: 06/16/2009 Submitted By: P.Batts  
Department: Engineering  
Court Agenda Date: 06/23/09 Phone Number: 281 633 7507

SUMMARY OF ITEM: Take all appropriate action on Standard Utility Agreement between Fort Bend County, the State of Texas, and Houston Pipe Line Company, LP regarding West Bellfort Road (from Martinez Street to FM1464), County expenditure not to exceed \$340,890.00, Precinct 4, (Fund: Right of Way)

RENEWAL AGREEMENT/APPOINTMENT YES  NO   
REVIEWED BY COUNTY ATTORNEY'S OFFICE: YES  NO

FINANCIAL SUMMARY:

BUDGETED ITEM: YES  NO

FUNDNG SOURCE: Accounting Unit: \_\_\_\_\_ Account Number: \_\_\_\_\_  
Activity (If Applicable): \_\_\_\_\_

DESCRIPTION OF LAWSOM ACCOUNT: \_\_\_\_\_

Instructions to submit Agenda Request Form:

- Completely fill out agenda form: incomplete forms will not be processed.
- Agenda Request Forms should be submitted by e-mail, fax, or inter-office mail, and all back-up information must be provided by Wednesday at 2:00 p.m. to all those listed below.
- All original back-up must be received in the County Judge's Office by 2:00 p.m. on Wednesday.

**DISTRIBUTION:**

Original Form Submitted with back up to County Judge's Office  (✓ when completed)  
If by E-Mail to [ospindon@co.fort-bend.tx.us](mailto:ospindon@co.fort-bend.tx.us) If by Fax to (281) 341-8609

Distribute copies with back-up to all listed below. If by fax, send to numbers below:

<input type="checkbox"/> Auditor (281-341-3774)	<input type="checkbox"/> Comm. Pct. 1 (281-342-0587)
<input type="checkbox"/> Budget Officer (281-344-3954)	<input type="checkbox"/> Comm. Pct. 2 (281-403-8009)
<input type="checkbox"/> Facilities/Planning (281-633-7022)	<input type="checkbox"/> Comm. Pct. 3 (281-242-9060)
<input type="checkbox"/> Purchasing Agent (281-341-8642)	<input type="checkbox"/> Comm. Pct. 4 (281-980-9077)
<input type="checkbox"/> Information Technology (281-341-4526)	<input type="checkbox"/> County Clerk (281-341-8697)
<input type="checkbox"/> Other:	<input type="checkbox"/> County Atty (281-341-4557)

**RECOMMENDATION / ACTION REQUESTED:**

Special Handling Requested (specify):

6-30-09 3 orig. ret. to Paulette at Engineering



**STANDARD UTILITY AGREEMENT  
ACTUAL COST – FORT BEND COUNTY**

County: Fort Bend  
Project No.: n/a  
Road Project Letting Date: May 2009

Road: West Bellfort Road  
Limits: From: Martinez Street  
To: FM 1464

This Agreement by and between Fort Bend County, Texas, (“**County**”), acting by and through its duly authorized official, and Houston Pipe Line Company LP, acting by and through its duly authorized representative, (“**Owner**”), shall be effective on the date of approval and execution by and on behalf of the **County**.

**WHEREAS**, the **County** has determined that it is necessary to make certain improvements to West Bellfort Road, which said changes are generally described as follows: the expansion of the existing two-lane asphalt roadway with open ditches into a four-lane concrete boulevard street with curbs and underground storm sewer. ]

**WHEREAS**, these proposed roadway improvements will necessitate the adjustment, removal, and/or relocation of certain facilities of **Owner** as indicated in the following statement of work: as described in Exhibit "A" and such work is described in **Owner**'s Estimate (estimated at \$340,890.00), which is attached hereto and made a part hereof, and which is prepared in form and manner required by 23 CFR 645, Subpart A, and amendments thereto; and

**WHEREAS**, the **Owner**, has provided sufficient legal authority to the **County** to establish an interest in properties affected by the abovementioned roadway improvements. Said facilities are located upon such properties as indicated in the statement of work as described in Exhibit "A".

**NOW, THEREFORE**, in consideration of the covenants and agreements herein contained, the parties mutually agree as follows:

The **County will pay for** reasonable and necessary eligible costs incurred in the adjustment or relocation of **Owner**'s facilities to the extent authorized under Title 23, Code of Federal Regulations, Part 645, Subpart A. The **County**'s participation shall consist of one hundred percent (100%) of the cost of the adjustment or relocation.

The **Owner** has determined that the method to be used in developing the adjustment or eligible relocation costs shall be as specified for the method checked and described hereinafter:

- (1) Actual direct and related indirect eligible costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
- (2) Actual direct and related indirect eligible costs accumulated in accordance with an established accounting procedure developed by the **Owner** and approved by the **County**.

Subject to the participation percentage as set out above, the **County** will, upon satisfactory completion of the adjustment or relocation, and upon receipt of a final billing prepared in the form and manner prescribed by Federal regulations, make payment in the amount of one hundred percent (100%) of the eligible costs as shown in the final billing.

Reasonable and necessary bills for work completed herein shall be submitted to the **County** not later than ninety (90) days after completion of the work. Upon receipt of the final billing and conclusion of the audit, the **County** agrees to pay **Owner** one hundred (100%) of the eligible cost as indicated. The **County** shall make payment within 45 days of acceptance of the final billing.

In the event there is a substantial change for the statement of work contained in Exhibit "A", reimbursement is limited to the amount approved pursuant to this agreement and its attached exhibits unless written approval is obtained from the **County**. All changes shall be documented on the **Owner's** "as-built" plans supplied to the **County**. **County** shall reimburse **Owner** for any additional cost or expense resulting from any delays waiting for **County's** written approval.

Upon execution of this agreement by all parties, the **County** will, by written notice, authorize the **Owner** to proceed with the necessary adjustment or relocation, and the **Owner** agrees to prosecute such work diligently in accordance with the **Owner's** plans. Such plans are attached as Exhibit "B". **Owner** shall provide the **County** with forty-eight (48) hours written notice prior to proceeding with the adjustment or relocation and agrees to proceed in such a manner that will not result in avoidable delay or interference with the **County's** roadway construction. Should **Owner** by its actions cause interference or delay resulting in the imposition of damages upon the **County** by a third party, **Owner** agrees to be responsible for said damages. Such authorization to proceed shall constitute notice on the part of the **County** that the relocation has been included in an approved program as an item of right of way acquisition, that a project agreement which includes the work has or will be executed, and that the utility relocation or adjustment will be required by the final approved project agreement and plans.

The **Owner** will retain records of such eligible costs in accordance with the provisions of 23 CFR Part 645, Subpart A.

The **Owner**, by execution of this agreement, does not waive any rights to which **Owner** may legally have within the limits of the law.


This agreement is subject to cancellation by the **County** at any time up to the date that work under this agreement has been authorized. **County** shall reimburse **Owner** 100% of all reasonable and necessary cost incurred by **Owner** up to the date of receipt of Notice of Cancellation.

The **County Auditor** may conduct an audit or investigation of any entity receiving funds from the **County** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the **County Auditor**, to conduct an audit or investigation in connection with those funds.


It is also expressly understood that the **Owner** conducts the adjustment, removal, or relocation at its own risk, and that the **Owner** agrees to indemnify and hold the **County** harmless for damage to existing facilities caused by the **Owner's** conduct.

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

**UTILITY**

<b>Owner: Houston Pipe Line Company LP</b>	
Executed and approved by Houston Pipe Line Company LP for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by Houston Pipe Line Company LP, By HPL GP, LLC, it's general partner.	
By:	 Michael L. Spears
Title:	Senior Vice President
Date:	4/28/2009

**COUNTY**

<b>Fort Bend County</b>	
Executed and approved by Fort Bend County for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by Fort Bend County.	
By:	 Robert Hebert
Title:	Judge, Fort Bend County
Date:	June 23, 2009

## STANDARD UTILITY AGREEMENT ACTUAL COST – FORT BEND COUNTY

County: Fort Bend  
Project No.:  
Road Project Letting Date:

Road: West Bellfort Road  
Limits: From: SH 99  
To: West Chase Trail

This Agreement by and between Fort Bend County, Texas, (“**County**”), acting by and through its duly authorized official, and Houston Pipe Line Company LP, acting by and through its duly authorized representative, (“**Owner**”), shall be effective on the date of approval and execution by and on behalf of the **County**.

**WHEREAS**, the **County** has determined that it is necessary to make certain improvements to West Bellfort Road, which said changes are generally described as follows: the expansion of the existing two-lane asphalt roadway with open ditches into a four-lane concrete boulevard street with curbs and underground storm sewer.

**WHEREAS**, these proposed roadway improvements will necessitate the adjustment, removal, and/or relocation of certain facilities of **Owner** as indicated in the following statement of work: as described in Exhibit "A" and such work is described in **Owner's** Estimate (estimated at \$340,890.00), which is attached hereto and made a part hereof, and which is prepared in form and manner required by 23 CFR 645, Subpart A, and amendments thereto; and

**WHEREAS**, the **Owner**, has provided sufficient legal authority to the **County** to establish an interest in properties affected by the abovementioned roadway improvements. Said facilities are located upon such properties as indicated in the statement of work as described in Exhibit “A”.

**NOW, THEREFORE**, in consideration of the covenants and agreements herein contained, the parties mutually agree as follows:

The **County will pay** for reasonable and necessary eligible costs incurred in the adjustment or relocation of **Owner's** facilities to the extent authorized under Title 23, Code of Federal Regulations, Part 645, Subpart A. The **County's** participation shall consist of one hundred percent (100%) of the cost of the adjustment or relocation.

The **Owner** has determined that the method to be used in developing the adjustment or eligible relocation costs shall be as specified for the method checked and described hereinafter:

- (1) Actual direct and related indirect eligible costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
- (2) Actual direct and related indirect eligible costs accumulated in accordance with an established accounting procedure developed by the **Owner** and approved by the **County**.

Subject to the participation percentage as set out above, the **County** will, upon satisfactory completion of the adjustment or relocation, and upon receipt of a final billing prepared in the form and manner prescribed by Federal regulations, make payment in the amount of one hundred percent (100%) of the eligible costs as shown in the final billing.

Reasonable and necessary bills for work completed herein shall be submitted to the **County** not later than ninety (90) days after completion of the work. Upon receipt of the final billing and conclusion of the audit, the **County** agrees to pay **Owner** one hundred (100%) of the eligible cost as indicated. The **County** shall make payment within 45 days of acceptance of the final billing.

**Exhibit "A" – Scope of Work**

**HOUSTON PIPE LINE COMPANY LP**

**HPL 30-INCH (3015) PEARLAND – KATY PIPELINE CASING PIPE EXTENSION  
ASSOCIATED WITH FORT BEND COUNTY'S WEST BELLFORT IMPROVEMENTS PROJECT**

(April 28, 2009)

AFE No.: 19110684

**PROJECT OVERVIEW:**

Fort Bend County has requested that Houston Pipe Line Company, LP (HPL) extend the existing 36" casing pipe on HPL's existing 30" (3015) Pearland – Katy Pipeline to accommodate their proposed West Bellfort Road Improvements Project in Fort Bend County, Texas. The physical location of the project is just southwest Houston, Texas. The location is depicted on drawing P1-1.

**THE SCOPE OF WORK FOR EXTENDING THE 36" CASING PIPE ON HPL'S 30-INCH (3015) PEARLAND – KATY PIPELINE IS AS FOLLOWS:**

The Contractor shall mobilize initially to the project, demobilize after the project is completed and furnish all labor, technical expertise, supervision, equipment and material; excluding that material which Company herein agrees to provide for the installation of approximately 83 feet of 36" split casing pipe (i.e. approximately 44 feet on the south side of West Bellfort and approximately 39 feet on the north side of West Bellfort) and related vent pipes, insulators, end seals, boots, etc. The above stated work shall include, but not be specifically limited to, providing temporary and permanent fencing and fence gaps/gates, clearing and grading the right-of-way, trenching including all rock removal, handling of ground water and rain water, loading and transporting and off-loading of all equipment and materials, pipe stringing, laying, welding and lowering-in, fabrication and installation, all civil work, sleeper pads, coating of all field joints and coating of all field joints and split weld seams using Protal 7200 via brush or roll application in accordance with manufacturer's specifications, inspect coating with Holiday Detector and repair damaged coating, install padding, fill, backfill, & crushed surface rock as required, sand blasting and painting, make final cleanup, re-seeding, return all unused material to HPL, and all other work necessary to construct and complete the work in accordance with this scope of work Exhibit "A", the bid drawings dated 4/28/2009 referenced in Exhibit "B", the Energy Transfer Construction Specifications referenced in Exhibit "B", and the Specific Requirements as follows:

**SPECIFIC REQUIREMENTS:**

1. It is anticipated that the Contractor will be released to begin work on 6/1/2009 and he shall perform the work at such a rate to achieve a final completion date of 6/13/2009. The Contractor shall base his proposal on a 6 day work week and a 10 hour/day work day.

2. The Contractor shall access the proposed job site by using HPL's existing right of way from Fort Bend County's existing West Bellfort right of way and adjacent access roads.
3. The available temporary work space is shown on drawings P4-1TEMP. The Contractor shall contain all of his construction activities within this temporary work space. Should the Contractor not have adequate space to stockpile the excavated spoil within the temporary work space he will be responsible for hauling and stockpiling the spoil elsewhere (at a site provided by the Contractor) until it is needed for backfill and cleanup. Should some spoil be lost due to this activity, the Contractor shall furnish and place new select backfill. The Contractor is responsible for disposing of any unused soil or spoil left over after the construction activities are complete at an approved disposal site.
4. The Contractor shall be responsible for furnishing and installing a temporary chain link fence with lockable gates around the proposed work area to totally enclose the landowner's property on the south side of West Bellfort to prevent animals and people from entering the property and the proposed work area during none work hours. Upon completion of the construction activities, the Contractor shall be responsible for removing and disposing of the temporary fencing materials.
5. The Contractor shall be responsible for grading/installing/compacting select fill (as required), and installing geotextile material and 4" of crushed rock in the disturbed areas on the existing access roads off the West Bellfort Road right of way.
6. The Contractor shall leave the existing HPL 30" Pearland – Katy (3015) Line in place and in-service while completing the casing extensions. The materials to be permanently removed are depicted on drawing P4-1 and P12-1.
7. The Contractor is reminded that this project is alongside West Bellfort Road, which has high volumes of traffic. The Contractor shall be responsible for all vehicular and pedestrian traffic control at the job site, including the traffic control plan. This means the appropriate flagman, barrels, flashing lights, road warning signs, safety netting around excavations, barricades (including concrete barricades if required), etc., are the responsibility of the Contractor. The traffic control plan shall comply with all Fort Bend's standards, specifications, and requirements. The Contractor shall also be responsible for obtaining permission and/or permits for any road closers, as required, to perform the work, from the applicable governing authorities.
8. **Materials:**
  - a. The 120 feet of 36.000" O.D., 0.375" W.T. casing pipe for this project will be located at a Houston area coating yard.
  - b. The 40 feet of 4.5" O.D. vent pipe for this project will be located at Houston area coating yard.
  - c. The related casing materials for this project will be located at Energy Transfer's Pearland Operations Warehouse in Pearland, Texas.

The Contractor shall be responsible for hauling the pipe and casing materials from these locations to the job site. The Contractor shall be responsible for arranging the loading of the pipe with the coating vendor. ETC's Pearland Operations personnel will be responsible for loading the casing materials on the Contractor's haul trucks. Once the project is awarded to the Contractor, Pegasus will provide the Contractor with a Material Expediting and Tracking Report (METS) documenting the details of the materials.

Prior to picking up materials, the Contractor shall give 48 hours notice to both ETC's Chief Inspector, Operations and Procurement personnel and Pegasus Procurement personnel. The contact information for ETC's personnel is as follows:

ETC Pearland Operations – Kory Parton (281-850-1417, cell)  
ETC Victoria Procurement – Perry Roberts (361-648-6364, cell)  
Pegasus Procurement – Jasmine King (281-605-4494, office)

At the completion of the project, the Contractor shall return all new surplus materials to ETC's Victoria Warehouse yard. All new surplus pipe greater than 15 feet is to be beveled by the Contractor, prior to returning it to the yard. The Contractor shall ensure that all paperwork related to the surplus materials goes with the shipment and the material documentation is noted on the materials. It is preferred that the Contractor does **NOT** stack the pipe in a pyramid arrangement on the haul trucks. ETC's Victoria Warehouse staff shall be responsible for off loading all returned new surplus materials from Contractor's trucks at the ETC's Victoria Warehouse yard. The Contractor shall give 48 hour notice to ETC's Victoria staff, prior delivering the new surplus materials.

At the completion of the project, the Contractor shall return all removed and junk materials to ETC's Pearland Operations Yard. ETC's Pearland Operations personal shall be responsible for off loading and stacking the removed and junk materials from Contractor's trucks at the ETC's Pearland Operations Yard. The Contractor shall give 48 hour notice to both ETC's Chief Inspector and Pearland Operations personnel, prior delivering the materials. The Contractor is responsible for disposing of all unusable existing materials such as barbed wire, fence posts, chain link fencing materials, etc. at an approved disposal site.

The Contractor shall furnish all labor and equipment to off load and load the materials at the West Bellfort Site job site.

9. Materials to be furnished by the Contractor are depicted on the material list by an asterisk "\*" in the CTR FUR Column. In addition, some of the Contractor furnished materials are noted on the bid drawings such as fencing materials, bollards, coating materials, paint, cement, etc.

10. The Contractor's bid proposal is to include all state and local taxes such as sales tax, use tax and gross receipt tax, etc.

11. The Contractor shall acquire and be responsible for all required state and local permits and licenses. Examples of this requirement are local building permits, traffic control plans, permits and notices to the Railroad Commission & State Health Department and the TNRCC for asbestos abatement.

12. The coating on the existing pipeline is considered to contain asbestos; therefore, the Contractor shall be responsible for providing trained asbestos abatement workers to remove and dispose of the coating per the applicable regulatory requirements. The Contractor shall provide paper documentation that the coating was properly removed and disposed of in accordance with applicable regulatory requirements. This is required for all coating removed by the Contractor on this project.

13. A staff manpower and equipment loading schedule is to be submitted by the Contractor with his bid proposal and a bar chart schedule of key work activities.

14. The Contractor is to conduct a safety meeting (tailgate) every morning with ETC's Chief Inspector to identify, discuss, and document the operations that will be performed during the work day, to identify/discuss/mitigate potential risks, and to implement a safe work plan.
15. The Contractor is to submit with his bid proposal a copy of his current safety record (i.e. TRIR – Total Recordable Incident Rate).
16. This project is considered a D.O.T. project; therefore, the Contractor shall submit with his bid proposal and for Company approval, an "Anti-Drug Policy" and an "Anti-Drug Plan".
17. The Contractor shall have written authorization from Company for all extra work, prior to commencing with extra work. The Contractor's proposal shall include labor and equipment rate sheets to cover such approved extra work.
18. The Contractor shall furnish the Manufacture's Material Safety Data Sheet for all Contractor furnished cleaning solvents to be used on this project and the product must be EPA approved.
19. The Contractor shall be responsible for notifying the Texas One Call System, Lone Star Notification Center, Common Ground Alliance (811), and the local water line and sewer line companies 48 hours prior to excavation. Also, Contractor shall locate all foreign lines and utilities and notify ETC's Chief Inspector, before excavation or welding, of any conflicts or busts in drawings. The Contractor is responsible for field checking all sizes, dimensions, locations, and elevations and notifying ETC's Chief Inspector of any discrepancies or conflicts, prior to construction.
20. The Contractor shall be responsible for excavating the pipeline at both ends of the existing casing pipe at the proposed work area, as required, to confirm the location (horizontal and vertical position) of the existing 30" pipeline and 36" casing pipe and to ensure that the proposed facilities are aligned and depicted correctly on the Approved for Construction drawings. If minor adjustments are required to the proposed casing pipe such as mitering, this is considered part of the Contractor scope of work and shall not be considered an extra cost to the Company.
21. The Contractor shall submit, with his bid proposal, a list of sub-contractors to be utilized. ETC reserves the right to approve or disapprove the sub-contractor.
22. The Contractor shall perform a daily site cleanup of trash and dispose of same at an approved location.
23. The Contractor shall provide sanitary waste facilities for his personnel during construction. The Contractor shall have the sanitary waste facilities serviced on a frequent basis to maintain a clean environment.
24. The Contractor shall be responsible for the R-O-W cleanup and grade settling at the work area for twenty-four (24) months from its completion should it need repair.
25. The Contractor shall furnish, install, maintain, and remove silt screens around the entire work site, as necessary, to prevent silt runoff.
26. The proposed 36" casing pipe and 4" vent pipe will be provided to Contractor with FBE coating. The Contractor shall sandblast in accordance with the coating manufacturer's specifications all below grade uncoated line pipe, casing pipe, vent pipe, fittings, field joints,

split weld seams, damaged coating areas, holidays and shall furnish and coat these items with Protal 7200 coating in accordance with manufacturer's coating standards.

27. The Contractor shall sandblast to "Near White" all above grade piping materials, furnish paint, and paint these facilities per ETC's painting standards. This includes the proposed vent pipes.

28. The Contractor is responsible for all dewatering (both ground and rain water) of the bell holes and work areas as required to perform the work.

29. The Contractor shall provide and install temporary mats and shoring materials, as required, to perform the work, including mats to offload equipment to the job site.

30. The Contractor shall furnish and install a new chain link fence and poles on the south side of the West Bellfort Road right of way, if the existing fence is damaged. The new fencing materials are to be in accordance with drawing P11-1.

**31. Hydrostatic Testing Activities:**

a. NO HYDROSTATIC TESTING WILL BE REQUIRED.

32. When excavating existing foreign lines to install the new facilities, the Contractor shall **NOT** be allowed to dig closer than the allowed Tolerance Zone per 16 TAC Chapter 18.9 and 18.10 (which is defined as half the width of the underground pipeline plus a minimum of eighteen inches (18") on either side of the outside edge of the underground pipeline on a horizontal plane. The tolerance zone shall not be less than twenty-four inches (24")) with the equipment. The Contractor shall complete the remaining distance by hand. Additionally, the side cutters shall be removed from the buckets and a piece of plate will be welded across the teeth, or the teeth are to be removed.

33. The Contractor's proposal shall include the cost to furnish its employees Flash Fire Protection "FFP" outer wearing apparel which will be made of either Nomex III, Kevlar or Fire Retardant Cotton. It will be either one piece coveralls or pants and shirt and it must be worn as the outer layer of clothing. The FFP shall be worn by employees when working in an area where ignition hazards are present or are likely to be present. This includes but is not limited to "Hot Tie-ins" and while working in or near an area with escaping gas or flammable gas.

**34. Welding:**

- NO X-RAY/RADIOGRAPHY WILL BE REQUIRED. However, all such welds shall be made by a welder qualified in accordance with the API 1104. Such welder qualification shall be in accordance with the API 1104 for Multiple Qualification using existing ETC's welding procedures as follows:
  - a. Butt (Bellhole) Weld - Per ETC's welding standards make one weld on 12.750" O.D. x 0.250"W.T. grade X60 using E6010 Fleetweld 5P+ for the root bead and E8010G Shield-Arc 70+ for the fillers and cap.
  - b. Branch (T) Weld - Per the ETC's welding standards make one 12" on 12" weld using 12.750" O.D. x 0.250"W.T. Grade X60. Use E8010G Shield-Arc 70+ all the way.

- ETC will furnish only the pipe for the welder test. All other material, including the pulling machine, will be furnished by the Contractor.
- All cracks and arc burns in welds shall be cut out. If pipe or fittings are arc burned, the Contractor shall cut out said arc burn and install new pipe or fittings which will be provided by ETC, but charged to the Contractor's account.

35. The Contractor will **NOT** be required to set up a temporary construction office at the project site.

36. Pegasus International will perform the initial construction staking for the existing pipeline centerline and the temporary work space corners, and will be on site towards the end of the project to perform as-built surveying, as deemed necessary by ETC. Contractor shall be responsible for off setting the construction stakes, as required, to allow the excavation and installation activities to proceed unencumbered, but still maintain reference points for proper alignment. The Contractor shall do all detailed staking, layout, and elevation survey work during the construction phase of the project.

37. ETC's Chief Inspector shall be responsible for performing the as-built activities such as material tracking, pipe tally, and red lining as-built drawings.

38. ETC's personnel will be responsible for furnishing and installing the proposed cathodic protection test stations. The Contractor shall be very careful during back fill activities to prevent damage to the test stations.

39. The Contractor shall be responsible for furnishing and installing the proposed pipeline marker poles. The marker poles shall be the same type that Energy Transfer normally uses.

40. The Contractor will **NOT** be required to have a designated safety person on the job site at all times.

41. The Contractor shall furnish and install sand bags under the existing 30" pipeline and the proposed/existing 36" casing pipe, as required, to support the piping.

42. The Contractor shall be responsible for compacting the backfill to normal pipeline industry specifications. Stabilized sand or compaction testing will **NOT** be required unless the area under the proposed roadways is disturbed. If the area under the proposed roadway is disturbed by the Contractor, the Contractor shall furnish and install stabilized sand in this area in accordance with Fort Bend County's requirements, specifications, and procedures.

43. ETC's Chief Inspector is the point of contact for the Contractor.

44. Following the clean-up activities, the Contractor shall disc and harrow the right of way and disturbed areas to a smooth service and fertilize and seed the disturbed areas with 400 pounds per acre of 13-13-13 fertilize, 2 pounds of Bermuda Grass seed per 1,000 Sq. Feet, and 40 pounds per acre of Rye grass. The Contractor shall furnish and install geotextile fabric and crushed rock in the disturbed areas in any access roads.

45. The Contractor shall perform all construction activities in accordance with Energy Transfer's Construction Specifications for Land Pipeline Construction and Meter Stations (dated May 27<sup>th</sup>, 2005) referenced in Exhibit "B", unless otherwise noted in this scope of work or

related bid drawings. If conflict(s) exist between ETC Construction Specifications, this scope of work, and related bid drawings, the Contractor is note concerns in bid proposal and request for clarification from ETC. It should be noted that after the bid is awarded to the Contractor, ETC will have the option to select the specification that they deem is the most practical if the Contractor does **NOT** note concerns or clarifications prior to receiving the bid award.

# HOUSTON PIPE LINE COMPANY, LP

Est

## PROJECT COST ESTIMATE

April 28, 2009

**CUSTOMER COMPANY NAME:** HOUSTON PIPE LINE COMPANY, LP

**PROJECT NAME:** Fort Bend County West Bellfort - Casing  
Extension on the HPL 30" (3015) Pearland -  
Katy Line

**PIPELINE NAME:** HPL 30" (3015) Pearland - Katy Line

**AFE NUMBER:** 19110684

**ETC PROJECT MANAGER:** Emily Terry

**PEGASUS PROJECT MANAGER:** Rodney Rogers

**PEGASUS PROJECT NO.:** 15086

**REVISION NUMBER:**

### Summary Page

	Estimate	Contingencies	Estimate with Contingencies
<b>Material and Equipment Cost</b>	\$ 28,758		
<b>Field Direct Costs</b>	\$ 174,401		
<b>Project Support Costs</b>	\$ 68,251		
<b>Overhead</b>	\$ 69,481		
<b>Total</b>	<b>\$ 340,890</b>	<b>\$ -</b>	<b>\$ -</b>

### Project Scope

This cost estimate captures the normal resources required to extend 36-inch O.D. Casing Pipe on ETC's existing 30-inch (3015) Pearland - Katy Pipeline at Fort Bend County's West Bellfort Road crossing in southwest Houston, Texas (Fort Bend County). This casing extension is required to accommodate Fort Bend County's proposed widening of West Bellfort just south of Westheimer Blvd. Approximately 39 feet of new 36-inch split casing pipe will be installed on the north side of West Bellfort Road and approximately 44 feet of new 36-inch split casing pipe will be installed on the south side of West Bellfort Road.

For the location of the existing ETC 30" (3015) Pearland - Katy Pipeline, see drawing HC-3015-17-H.


#### MAOP:

The existing ETC 30" (3015) Pearland - Katy Pipeline has a Maximum Allowable Operating Pressure (MAOP) of 740 psig.

#### Design Code/Regulations:

The pipelines and related facilities will be designed in accordance with 49 CFR 192.

# HOUSTON PIPE LINE COMPANY, LP

 Est

## PROJECT COST ESTIMATE

April 28, 2009

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### Gas Blow down Requirements:

No blow down activities will be required. Therefore, no monies have been included in the cost estimate for gas loss.

### Continuous Natural Gas Requirements:

No continuous gas service will be required, since the pipeline will not be blown down. Therefore, no monies have been included in the cost estimate for continuous gas service.

### Right-Of-Way:

Temporary Work Space is required on the east and west sides of the existing West Bellfort Road crossing. The required temporary work space is as follows:

South Side of West Bellfort Road

1. 75 feet wide x 125 feet long
2. Use the existing landowner access road

North Side - Utilize the available open space in HPL's existing 30" pipeline right of way (approx. 75 feet wide x 125 feet long)

1. 75 feet wide x 125 feet long
2. Use Romtex Dr. to off load equipment onto HPL's existing right of way

Ingress and Egress rights will need to be obtained off West Bellfort Road on both sides to access ETC's existing right of way.

HOUSTON PIPE LINE COMPANY, L.P.

PROJECT COST ESTIMATE  
April 28, 2009

CUSTOMER COMPANY NAME: HOUSTON PIPE LINE COMPANY, LP  
PROJECT NAME: Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearlard - Katy Line  
PIPELINE NAME: HPL 30" (3015) Pearlard - Katy Line  
AFE NUMBER: 19110684  
ETC PROJECT MANAGER: Emily Terry  
PEGASUS PROJECT MANAGER: Rodney Rogers  
PEGASUS PROJECT NO.: 15086  
REVISION NUMBER:

Notes and Assumptions

1. Ingress and egress can be obtained at all locations at minimum costs. (A)
2. Temporary work space can be obtained at all required locations at minimum costs. (A)
3. Job duration is estimated at 12 Days (mobilization to clean-up), weather permitting. (N)
4. Per requester, cost estimate accuracy is order of magnitude (+ or - 20%). (N)
5. Cost est. is based on completing the proposed work during dry lay conditions. (N)
6. Materials can be obtained without expediting or hot shotting services. (A)
7. No major road closing will be required. (A)
8. Cost est. is based on minimum site preparation (i.e. stable soil conditions). (N)
9. Cost est. is based on minimum clearing of brush and disposing offsite. (N)
10. Base lay price assumes Contractor will pick-up the pipe at a local pipe distributor in the Houston area. (A)
11. Cost est. assumes environmental surveys and permits will be completed by ETC staff, if required. (N)
12. Cost est. assumes right of way work will be completed by ETC staff. (N)
13. Cost est. assumes purchasing and expediting work will be completed by Pegasus staff. (N)
14. Cost est. assumes construction management will be completed by ETC staff. (N)
15. Cost est. contains costs for 25.6% overhead. (N)
16. Cost est. does NOT contain costs for AFUDC or Income Tax Gross-Up charges. (N)
17. Cost est. does NOT include costs for any unforeseen re-routes, overbends, or P.I.'s. (N)
18. Cost est. does NOT include costs for condemnation activities or related activities. (N)
19. Cost est. does NOT include costs for repair of drain tiles. (N)
20. Cost est. does NOT include costs for encountering extensive rock. (N)
21. Cost estimate does NOT include monies for encountering or addressing extensive environmental issues. (N)
22. Cost estimate does NOT include monies for encountering or addressing any Archeological areas. (N)
23. Cost estimate does NOT include monies for contingencies. (N)
24. Cost est. does NOT include costs for taxes on materials, per Fort Bend County's direction. (N)

(A) - Assumption

(N) - Note

**HOUSTON PIPE LINE COMPANY, L.P.**

**PROJECT COST ESTIMATE**  
April 28, 2009

CUSTOMER COMPANY NAME: **HOUSTON PIPE LINE COMPANY, LP**

PROJECT NAME: **Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearland - Katy Line**

PIPELINE NAME **HPL 30" (3015) Pearland - Katy Line**

AFE NUMBER: **19110684**

ETC PROJECT MANAGER: **Emily Terry**

PEGASUS PROJECT MANAGER: **Rodney Rogers**

PEGASUS PROJECT NO.: **15086**

REVISION NUMBER:

**MATERIAL AND EQUIPMENT COSTS**

		Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE	
<b>Mark No.</b>	<b>30" (3015) Pearland - Katy Line - 36" Casing Extension</b>					
<b>P-001</b>	Casing Pipe, 36" O.D., 0.375" W.T., Gr. B, DSAW, Coated with FBE	120	FT	\$199.99	\$ 23,998.80	
<b>P-002</b>	Pipe, 4.5" O.D., 0.237" W.T., Gr. B, ERW, Coated with FBE (For Vent Pipe)	40	FT	\$22.02	\$ 880.80	
<b>P-003</b>	Casing Insulators, PSI Model PE to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe coated with 156 mils of Type "A-2" Coal Tar Enamel coating. Insulators to be installed at a maximum distance of 6 feet (center to center).	6	Ea	\$52.89	\$ 317.34	
<b>P-004</b>	Casing End Seals to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe, Wrap-Around Type, PSI Model W or equal.	2	Ea	\$165.12	\$ 330.24	
<b>P-005</b>	Casing Link Seal, Thunderline Corp Type, 500 Series, Model LS-500-C, Complete Link Seal Order No. 3036, to fit 36" O.D. x 0.375" W.T. Casing Pipe and 30" O.D. Carrier Pipe Coated with Type "A-2" Coal Tar Enamel Coating (i.e. 156 mils).	2	Ea	\$622.47	\$ 1,244.94	
<b>P-006</b>	Casing Vent Cap, 4", 180 degree Weld Ell or Equal.	2	FT	\$28.91	\$ 57.82	
<b>P-007</b>	Test Station, Cathodic Protection.	2	Ea	\$150.00	\$ 300.00	
					\$ -	
	<b>CASING EXTENSION MATERIALS SUB-TOTAL</b>				\$ 27,129.94	\$ -
	<b>FREIGHT (6.00% of materials)</b>				\$ 1,627.80	
	<b>TAX (Removed per TxDOT's direction)</b>					
	<b>MATL. &amp; EQUIP. SUB-TOTAL</b>				\$ 28,757.74	\$ -
	<b>CONTINGENCIES (10%)</b>				\$ -	
	<b>MATL. &amp; EQUIP. SUB-TOTAL WITH CONTINGENCIES</b>				\$ 28,757.74	

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## HOUSTON PIPE LINE COMPANY, L.P.

### PROJECT COST ESTIMATE

April 28, 2009

CUSTOMER COMPANY NAME: HOUSTON PIPE LINE COMPANY, LP

PROJECT NAME: Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearland - Katy Line

PIPELINE NAME HPL 30" (3015) Pearland - Katy Line

A/E NUMBER: 19110684

ETC PROJECT MANAGER: Emily Terry

PEGASUS PROJECT MANAGER: Rodney Rogers

PEGASUS PROJECT NO.: 15086

REVISION NUMBER:

#### FIELD DIRECT COSTS

	Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE	
<b>CONSTRUCTION SUPPORT:</b>					
ETC Construction Coordinator	0	Days	\$0.00	\$ -	
ETC Project Manager	15	Days	\$700.00	\$ 10,500	
<b>CONSTRUCTION SUPPORT SUB TOTAL</b>				<b>\$ 10,500.00</b>	<b>\$ -</b>
<b>SURVEY</b>					
Preliminary Survey for Pipeline (Includes 3 man crew, GPS unit, Pipe Locator, Mileage)	5	Days	\$2,000.00	\$ 10,000	
Survey Tech	12	Hours	\$74.00	\$ 888	
Construction Staking Survey	1	Day	\$2,000.00	\$ 2,000	
As-Built Survey	1	Day	\$2,000.00	\$ 2,000	
				\$ -	
<b>SURVEY SUB TOTAL</b>				<b>\$ 14,888.00</b>	<b>\$ -</b>
<b>X-RAY</b>					
X-Ray	0	Days	\$0.00	\$ -	
<b>X-RAY SUB TOTAL</b>				<b>\$ -</b>	<b>\$ -</b>
<b>FIELD INSPECTION:</b>					
Construction - 1 Chief Insp. (Casing Extension)	15	Days	\$719.00	\$ 10,785	
Construction - 1 Chief Insp. (Days for Initial Day Lighting)	0	Days		\$ -	
Construction - Pipe Mill Load Out & Receiving	0	Days		\$ -	
Construction - 1 Material Clerk	0	Days		\$ -	
Construction - Welding Inspector	0	Days		\$ -	
Construction - Cost Tracking and Scheduling - 1 Inspector	0	Days		\$ -	
Construction - Utility Inspector	0	Days		\$ -	
Pipe Mill QA Inspection - 1 Inspector	0	Days		\$ -	
Pipe Coating QA Inspection - 1 Inspector	0	Days		\$ -	
Heat Induction Bend QA Inspection - 1 Inspector	0	Days		\$ -	
<b>FIELD INSPECTION SUB TOTAL</b>				<b>\$ 10,785.00</b>	<b>\$ -</b>
<b>CONTRACT INSTALLATION:</b>					
Install new 36-inch Split Casing Pipe with insulators, end seal, wrap around boot, and 4" vent pipe on the SOUTH side of West Bellfort Road crossing. (This work includes: Clearing, Depositing of debris and junk materials offsite, Hauling and Handling Materials, Stringing, Welding, Coating, Dewatering, Fence Removal, Digging, Shoring, Furnish and installing sand bags under the existing 30" pipeline and Casing Pipe for support, Clean-Up, Final Grade, Reseeding/Revegetation.) (Top of pipe is approximately 8 feet deep)	44	LF	\$1,246.67	\$ 54,853	

Install new 36-inch Split Casing Pipe with insulators, end seal, wrap around boot, and 4" vent pipe on the NORTH side of West Bellfort Road crossing. (This work includes: Clearing, Depositing of debris and junk materials offsite, Hauling and Handling Materials, Stringing, Welding, Coating, Dewatering, Digging, Shoring, Furnish and installing sand bags under the existing 30" pipeline and Casing Pipe for support, Clean-Up, Final Grade, Reseeding/Revegetation.) (Top of pipe is approximately 8 feet deep)	39	LF	\$1,246.67	\$ 48,620	
Furnish and Install a temporary chain link fence on the SOUTH side of West Bellfort Road for security.	1	Ea	\$2,766.67	\$ 2,767	
Furnish and Install a new chain link fence on the SOUTH side of West Bellfort Road following construction activities.	1	Ea	\$4,666.67	\$ 4,667	
Field Coat Field Joints on the Casing Pipe	4	LF	\$350.00	\$ 1,400	
Field Coat Long. Weld Seam on the Casing Pipe	176	LF	\$19.00	\$ 3,344	
Separate Topsoil	120	LF	\$8.00	\$ 960	
Silt Fence	300	LF	\$6.50	\$ 1,950	
Furnish and install stabilized sand under the proposed roadway.	160	Ton	\$115.00	\$ 18,400	
Well Points (None estimated)	0	Sets	\$0.00	\$ -	
Haul all surplus materials to ECT's Victoria Warehouse in Victoria, Texas.	1	Load	\$1,266.67	\$ 1,267	
<b>CONTRACT INSTALLATION SUB TOTAL</b>				<b>\$ 138,227.62</b>	<b>\$ -</b>
<b>FIELD DIRECT SUB TOTAL</b>				<b>\$ 174,400.62</b>	<b>\$ -</b>
CONTINGENCIES				\$ -	
<b>FIELD DIRECT SUB TOTAL WITH CONTINGENCIES</b>				<b>\$ 174,400.62</b>	

<b>TOTAL INSTALLED COST (Labor + Material)</b>	<b>\$ 203,158</b>
CONTINGENCIES	\$ -
<b>TOTAL INSTALLED COST (Labor + Material) WITH CONTINGENCIES</b>	<b>\$ 203,158</b>

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**HOUSTON PIPE LINE COMPANY, L.P.**

**PROJECT COST ESTIMATE**  
April 28, 2009

CUSTOMER COMPANY NAME: **HOUSTON PIPE LINE COMPANY, LP**

PROJECT NAME: **Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearland - Katy Line**

PIPELINE NAME: **HPL 30" (3015) Pearland - Katy Line**

A.F.E. NUMBER: **19110684**

ETC PROJECT MANAGER: **Emily Terry**

PEGASUS PROJECT MANAGER: **Rodney Rogers**

PEGASUS PROJECT NO.: **15086**

REVISION NUMBER:

**PROJECT SUPPORT COSTS**

	Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE		
<b>ENVIRONMENTAL</b>						
Permitting	0	Ea	\$0.00	\$ -		
Environmental Inspection during Construction	0	Days	\$0.00	\$ -		
<b>ENVIRONMENTAL SUB TOTAL</b>				<b>\$ -</b>	<b>\$ -</b>	
<b>RIGHT OF WAY</b>						
ROW Costs for Preparing Reimbursement Package	0	Days	\$0.00	\$ -		
ROW Agent	5	Days	\$500.00	\$ 2,500.00		
ROW Other Damages (Fences, Roads, Gates, Etc.)	2	Ea	\$500.00	\$ 1,000		
Temporary Work Space	2	Ea	\$750.00	\$ 1,500		
<b>RIGHT OF WAY SUB TOTAL</b>				<b>\$ 5,000.00</b>	<b>\$ -</b>	
<b>DISTRICT LABOR</b>						
Support for Line Locations	10	Hrs	\$53.00	\$ 530		
Expenses	0	Ea	\$0.00	\$ -		
<b>DISTRICT/FIELD OPERATIONS LABOR</b>				<b>\$ 530.00</b>	<b>\$ -</b>	
<b>ENGINEERING</b>						
ENGINEERING - COMPANY	0	Hrs	\$0.00	\$ -		
ENGINEERING - CONTRACT	160	Hrs	\$175.00	\$ 28,000		
Pipeline Engineering	18	Hrs	\$160.00	\$ 2,880		
Drafting - Index, General Notes, Vicinity Dwgs.	12	Hrs	\$105.00	\$ 1,260		
Drafting - Road Crossing Casing Extension Plan and Profile Dwg.	110	Hrs	\$105.00	\$ 11,550		
Drafting - Detail 1. Casing Extension Dwg.	12	Hrs	\$105.00	\$ 1,260		
Drafting - Detail 2. Casing Extension Dwg.	12	Hrs	\$105.00	\$ 1,260		
Drafting - Casing Extension Temporary Work Space Dwg.	5	Hrs	\$105.00	\$ 525		
Drafting - Fence Reference Dwg.	2	Hrs	\$105.00	\$ 210		
Drafting - Removal Drawings	10	Ea	\$105.00	\$ 1,050		
Drafting - Pick up comments	24	Ea	\$105.00	\$ 2,520		
Material Purchasing	8	Hrs	\$175.00	\$ 1,400		
Material Expediting and Tracking	30	Hrs	\$70.00	\$ 2,100		
Design Engineered Ditch (Depth > 20')	0	Ea	\$0.00	\$ -		
Cathodic Protection Design and Installation	0	Hrs	\$0.00	\$ -		
AC Mitigation Design	0	Hrs	\$0.00	\$ -		
Aerial Photography	0	Hrs	\$0.00	\$ -		
Cost Tracking	4	Hrs	\$175.00	\$ 700		
Schedule preparation/tracking/reporting	4	Hrs	\$175.00	\$ 700		
Outside Services (Soil Boring for directional drills)	0	Ea	\$0.00	\$ -		
As-Built Drawings (To Be Performed and Managed by ETC)	40	Hrs	\$50.00	\$ 2,000		
Printing (9 Dwgs)	25	Sets	\$182.25	\$ 4,556		
FedEx	30	Pkg	\$25.00	\$ 750		
<b>ENGINEERING SUB TOTAL</b>				<b>\$ 62,721.25</b>	<b>\$ -</b>	
<b>GAS LOSS (Blow down , Purge, &amp; Pack)</b>						
No Blow Down, Purge, or Pack will be required.	0	mmbtu	\$0.00	\$ -	\$ -	

**HOUSTON PIPE LINE COMPANY, L.P.**

**PROJECT COST ESTIMATE**  
April 28, 2009

CUSTOMER COMPANY NAME: **HOUSTON PIPE LINE COMPANY, LP**

PROJECT NAME: **Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearland - Katy Line**

PIPELINE NAME: **HPL 30" (3015) Pearland - Katy Line**

A.F.E. NUMBER: **19110684**

ETC PROJECT MANAGER: **Emily Terry**

PEGASUS PROJECT MANAGER: **Rodney Rogers**

PEGASUS PROJECT NO.: **15086**

REVISION NUMBER:

**PROJECT SUPPORT COSTS**

	Est. Quantity	Est. Unit	A.F.E. Unit Cost	A.F.E. COST ESTIMATE	
<b>GAS LOSS SUB TOTAL</b>				\$ -	\$ -
<b>PROJECT SUPPORT SUB TOTAL BEFORE "OTHER" CATEGORIES</b>				\$ 68,251.25	\$ -
Income Tax Gross-Up Charge (NOT INCLUDED)	0		\$0.00	\$ -	
Overhead (25.6%)	0		\$0.00	\$ 69,481	
AFUDC (NOT INCLUDED)      Number of Days =	0	0	\$0.00	\$ -	
<b>OTHER SUB TOTAL</b>				\$ 69,480.86	\$ -
<b>PROJECT SUPPORT SUB TOTAL</b>				\$ 137,732.11	\$ -
CONTINGENCIES				\$ -	
<b>PROJECT SUPPORT SUB TOTAL WITH CONTINGENCIES</b>				\$ 137,732.11	
<b>TOTAL ESTIMATED COST FOR ENTIRE WORK ORDER</b>				\$ 340,890	
CONTINGENCIES				\$ -	
<b>TOTAL ESTIMATED COST FOR ENTIRE WORK ORDER WITH CONTINGENCIES</b>				\$ 340,890	

**HOUSTON PIPE LINE COMPANY, L.P.**

**PROJECT COST ESTIMATE**  
**April 28, 2009**

**CUSTOMER COMPANY NAME:** HOUSTON PIPE LINE COMPANY, LP  
**PROJECT NAME:** Fort Bend County West Bellfort - Casing Extension on the HPL 30" (3015) Pearland - Katy Line  
**PIPELINE NAME:** HPL 30" (3015) Pearland - Katy Line  
**AFE NUMBER:** 19110684  
**ETC PROJECT MANAGER:** Emily Terry  
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**PEGASUS PROJECT NO.:** 15086  
**REVISION NUMBER:**

**RISK FACTORS**

1. Weather delays.
2. Right of Way problems.
3. Material hot shot and expediting requirements.
4. Pipeline is fairly deep in the area of the proposed casing extension. May encounter ground water or bad soil.

HOUSTON PIPE LINE COMPANY, L.P.

PROJECT COST ESTIMATE  
April 28, 2009

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PIPELINE NAME HPL 30" (3015) Pearland - Katy Line

AFE NUMBER: 19110684

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PEGASUS PROJECT NO.: 15086

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PROJECT CONTACT LIST

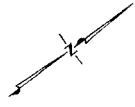
Name	Title	Office	Pager	Cell
Emily Terry	ETC Right-of-Way	832-668-1256	N/A	713-594-9089
Robert Oravetz	ETC Pipeline - Operations Mgr.	281-652-2207	281-262-4249	713-299-8394
Merl Vanek	ETC Pipeline - Operations Supv.	281-652-2472	281-262-1684	713-483-4305
Kory Parton	ETC Pipeline - Operations Tech.		N/A	281-850-1417
Rodney Rogers	Pegasus Project Manager	713-365-8338	N/A	713-962-3045
Richard Spell	ETC Environmental	832-668-1392	N/A	713-408-0437







FORT BEND COUNTY, TEXAS  
D. A. CONNER A-158



L. REED (MCDONALD EST.) (36.4)

WEST BELFORT RIGHT OF WAY (COUNTY ROAD)

M. D. LILLE (MCDONALD EST.) (36.4)

POWER POLE

EXIST. 20' INNER MORGAN PIPELINE

EXIST. 24" DIRT HWY

EXIST. 30' INNER MORGAN VENT PIPE

EXIST. 30' CASING PIPE

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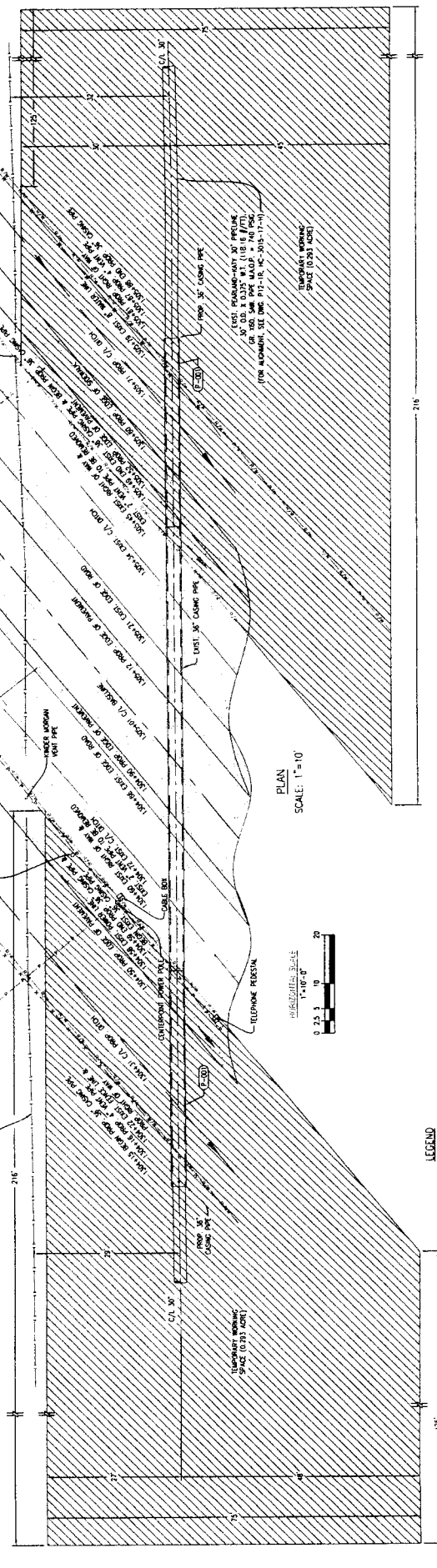
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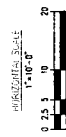
EXIST. 30' CASING PIPE

EXIST. 30' CASING PIPE

EXIST. 30' CASING PIPE



PLAN  
SCALE: 1" = 10'



**LEGEND**

PROG.	PROPOSED
EXIST.	EXISTING
TO BE REMOVED	TO BE REMOVED
AWAYED IN PLACE	AWAYED IN PLACE
TEMPORARY WORK SPACE (0.586 ACRES)	TEMPORARY WORK SPACE (0.586 ACRES)

**ENERGY TRANSFER CO.**  
**PRELIMINARY**  
**NOT FOR CONSTRUCTION**  
This Document is issued for preliminary review only.  
04/28/2009

NO.	REVISION - DESCRIPTION	DATE	BY	APP'D	DATE	CHK'D	APPROVED	SCALE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	
012-1R	REMOVAL DRAWING FOR CASING VENTS																		
011-1	TYPICAL CHAIN LINK FENCE DETAILS																		
014-2	CASING DETAILS (BOTH SIDES)																		
014-1	PLAN & PROFILE																		
011-1	UTILITY MAP, NOTES, INDEX																		
011-1	REFERENCE DRAWING TITLE																		

**PEGASUS**  
International  
FILE NO. \_\_\_\_\_  
SCALE 1" = 10'

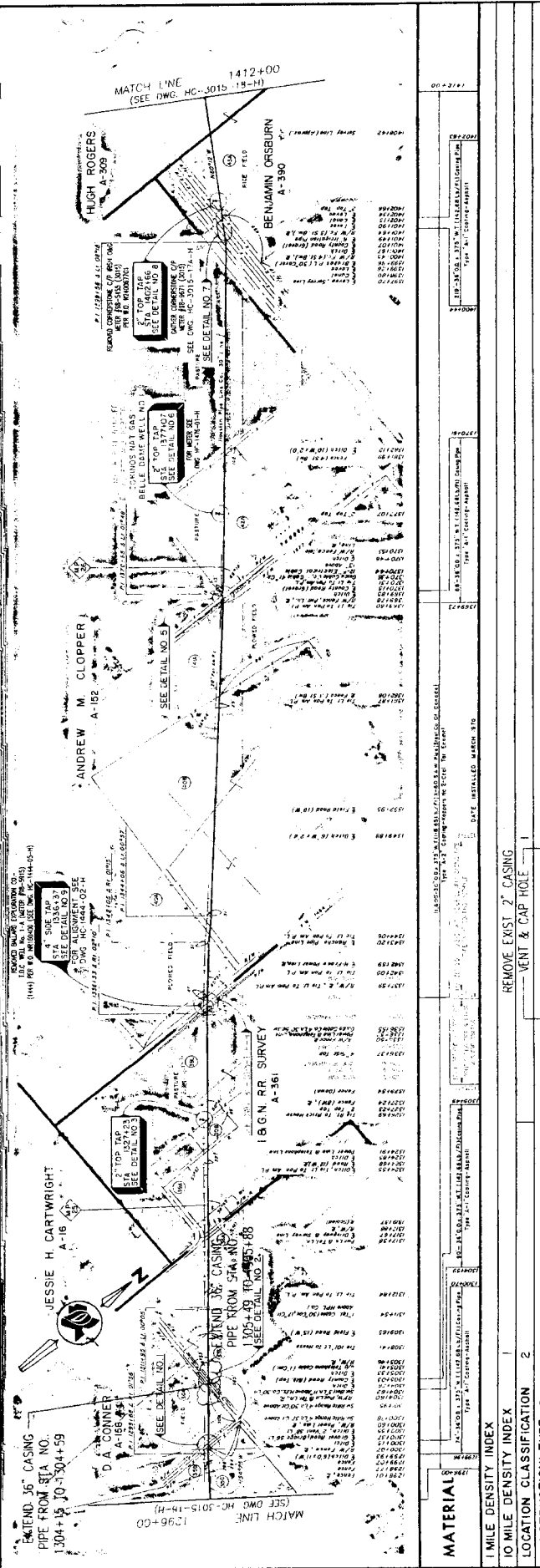
70' EARLAND-RAIL LINE CASING EXTENSION  
WEST BELFORT ROAD IMPROVEMENTS  
TEMPORARY WORK SPACE DRAWING  
FORT BEND COUNTY, TEXAS

ENGINEERING DEPARTMENT  
PROJECT NO. \_\_\_\_\_  
DRAWING NO. P4-11EATP  
REV.



COUNTY & STATE FORT BEND COUNTY, TEXAS

TERRAIN	OWNERSHIP	TRACT NO.	RODDAGE
FLAT	BLACK LAND		
12-19	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-19	12-19
12-18	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-18	12-18
12-17	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-17	12-17
12-16	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-16	12-16
12-15	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-15	12-15
12-14	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-14	12-14
12-13	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-13	12-13
12-12	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-12	12-12
12-11	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-11	12-11
12-10	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-10	12-10
12-9	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-9	12-9
12-8	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-8	12-8
12-7	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-7	12-7
12-6	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-6	12-6
12-5	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-5	12-5
12-4	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-4	12-4
12-3	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-3	12-3
12-2	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-2	12-2
12-1	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-1	12-1
12-0	W.B. MCINTYRE & CHAS. J. WHITEHEADS	12-0	12-0



**MATERIAL LIST**

ITEM QUAN.	DESCRIPTION
1	PROPERTY UNIT NO. 356-10
2	PROPERTY UNIT NO. 356-11
3	PROPERTY UNIT NO. 356-12
4	PROPERTY UNIT NO. 356-13
5	PROPERTY UNIT NO. 356-14
6	PROPERTY UNIT NO. 356-15
7	PROPERTY UNIT NO. 356-16
8	PROPERTY UNIT NO. 356-17
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86	PROPERTY UNIT NO. 356-95
87	PROPERTY UNIT NO. 356-96
88	PROPERTY UNIT NO. 356-97
89	PROPERTY UNIT NO. 356-98
90	PROPERTY UNIT NO. 356-99
91	PROPERTY UNIT NO. 356-100

**DESIGN DATA**

CODE A.N.S.I. 813-1988 (PART 1) & 813-1988 (PART 2)

TEST MEDIUM & PRESSURE MODERATE 200 PSI

MINIMUM ALLOWABLE OPERATING PRESS. 70 PSI

AERIAL PHOTO COVERAGE DATE 5/17/88

SCALE 1"=100'

**DETAIL NO. 1** SCALE 1"=100'

**DETAIL NO. 2** SCALE 1"=100'

**DETAIL NO. 3** SCALE 1"=100'

**DETAIL NO. 4** SCALE 1"=100'

**DETAIL NO. 5** SCALE 1"=100'

**DETAIL NO. 6** SCALE 1"=100'

**DETAIL NO. 7** SCALE 1"=100'

**DETAIL NO. 8** SCALE 1"=100'

**DETAIL NO. 9** SCALE 1"=100'

**HOUSTON PIPE LINE COMPANY**

HOUSTON DEPARTMENT - HOUSTON, TEXAS

PEARLAND - KATY 30" LINE

AS-BUILT ALIGNMENT

FORT BEND COUNTY, TEXAS

DATE 12/15/88

PROJECT NO. 12-15-88

SCALE 1"=100'

REGAS PROJECT NUMBER		15086		HOUSTON PIPE LINE COMPANY, LP										Run Date		4/28/2009	
PROJECT NAME:		KATY LINE CASING EXTENSION TO ACCOMMODATE FORT BEND COUNTY WEST BELLFORT IMPROVEMENTS												ETC AFE No.		19110884 (Casing Extension)	
NR NUMBER:		MATERIALS LIST (PRELIMINARY)												County:		FORT BEND, TX	
CTR MARK NUMBER	QUANTITY	UNIT	ITEM DESCRIPTION	P/WBS ASSET/ACTIVITY	PURCHASE ORDER OR TRANSFER	QTY RECEIVED	QTY NOT ACCOUNTED	QTY TRANSFERRED	QTY SURPLUS								
PIPELINE MATERIALS																	
P-001	120	FT	CASING PIPE 36" O.D. X 0.375" WT. (142 TO LEFT), GR. B. DS/AV. COATED WITH 14 - 16 MILS DRY FILM THICKNESS (DFT) OF FUSION BONDED EPOXY FIBER COATING PER ENERGY TRANSFER COMPANY STANDARDS. PIPE TO BE MANUFACTURED, TESTED, COATED AND INSPECTED IN ACCORDANCE WITH ENERGY TRANSFER COMPANY'S STANDARDS AND SPECIFICATIONS. PIPE TO COME IN DOUBLE RANDOM JOINTS (I.E. 40 FEET LENGTH).	15086-3015-01													
P-002	40	FT	PIPE 4.5" O.D. X 0.237" WT. (1079 LEFT), API 5L GR. B. PS2 SMLS. COATED WITH 14 - 16 MILS DRY FILM THICKNESS (DFT) OF FUSION BONDED EPOXY FIBER COATING PER ENERGY TRANSFER COMPANY STANDARDS. PIPE TO BE MANUFACTURED, TESTED, COATED AND INSPECTED IN ACCORDANCE WITH ENERGY TRANSFER COMPANY'S STANDARDS AND SPECIFICATIONS. PIPE TO COME IN DOUBLE RANDOM JOINTS (I.E. 40 FEET LENGTH). PIPE TO BE USED FOR CASING/VENT PIPE.	15086-3015-01													
P-003	6	EA	CASING INSULATORS, PSI MODEL PE TO FIT 36" O.D. X 0.375" WT. CASING PIPE AND 30" O.D. CARRIER PIPE COATED WITH TYPE "A-2" COAL TAR ENAMEL COATING. INSULATORS TO BE INSTALLED AT 4' MINIMUM DISTANCE OF 6 FEET (CENTER TO CENTER).	15086-3015-02													
P-004	2	EA	CASING END SEALS TO FIT 36" O.D. X 0.375" WT. CASING PIPE AND 30" O.D. CARRIER PIPE. WRAP-AROUND, PSI MODEL W OR EQUAL.	15086-3015-02													
P-005	2	EA	CASING LINK SEAL, TRANSFER LINE CORP. TYPE 590 SERIES, MODEL LS-600C. COMPLETE LINK SEAL ORDER NO. 3038. TO FIT 36" O.D. X 0.375" WT. CASING PIPE AND 30" O.D. CARRIER PIPE COATED WITH TYPE "A-2" COAL TAR ENAMEL COATING (I.E. 158 MILS).	15086-3015-02													
P-006	2	EA	CASING VERT. C/F, 4" TYPICAL ETC CAP OR 180 DEGREE WELD FITTING.	15086-3015-02													
P-007	2	EA	TEST STATION, CATHODIC PROTECTION, 2 WIRE, TYPICAL ENERGY TRANSFER TYPE.	ENERGY TRANSFER OPERATIONS TO PROVIDE AND INSTALL													
* P-008	AR	FT	CHAIN LINK FENCE MATERIALS	CONTRACTOR TO PROVIDE AND INSTALL													

PRELIMINARY

