

Date of Meeting: June 14, 2016

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**BOARD OF SUPERVISORS
FINANCE/GOVERNMENT OPERATIONS AND
ECONOMIC DEVELOPMENT COMMITTEE
ACTION ITEM**

SUBJECT: **CONTRACT AWARD/Utilities Relocation for Claiborne Parkway – Columbia Gas Transmission, LLC**

ELECTION DISTRICT: Dulles

CRITICAL ACTION DATE: June 14, 2016

STAFF CONTACTS: Melissa Tello, Transportation and Capital Infrastructure
Joe Kroboth, Transportation and Capital Infrastructure
Cheryl Middleton, Finance and Procurement
Belkys Escobar, Assistant County Attorney

PURPOSE: To award a utilities relocation contract to Columbia Gas Transmission, LLC (CGT) for the Claiborne Parkway project.

RECOMMENDATION: Staff recommends that the Finance/Government Operations and Economic Development Committee recommend that the Board of Supervisors (Board) authorize the Purchasing Agent to award a contract for the relocation of utilities for the construction of the Claiborne Parkway project to CGT in the estimated amount of \$1,700,971.

BACKGROUND: The Claiborne Parkway project will construct a new four lane median divided roadway between Ryan Road and Croson Lane. At their September 20, 2011 Business Meeting the Board appropriated and transferred \$585,595 in cash proffers to be used for the design of Claiborne Parkway. On April 17, 2012, the Board approved the contract award for Roadway and Civil Design Services for Claiborne Parkway to Bowman Consulting Group, Ltd. In September 2013, the County and Virginia Department of Transportation (VDOT) executed a Programmatic Project Administration Agreement for the revenue sharing of the design and construction of Claiborne Parkway. On September 17, 2014, the Board appropriated and transferred an additional \$400,000 in cash proffers to the Claiborne Parkway project.

The design of the Claiborne Parkway roadway project was approved by the VDOT and Department of Building and Development in 2014. There are two (2) Columbia Gas Transmission (CGT) natural gas transmission lines (26" diameter each) that cross the alignment for the future Claiborne Parkway project. CGT maintains a fifty (50) feet wide easement (25' on either side) for each gas line. CGT was originally engaged by the Department of Transportation and Capital Infrastructure (DTCI) for coordination of the construction phase and for a preliminary engineering assessment

of the condition of the gas lines. Through the course of that coordination process, it was confirmed that due to the design elevation of the roadway, the maximum coverage permitted by CGT would be exceeded; therefore, requiring a vertical relocation of the lines and that CGT would require the project to bear that cost.

The County's design consultant initiated discussions with CGT in May 2012 to outline the roadway project scope and discuss the impacts, if any, on adjacent utilities. At that time, staff and our design consultant requested technical design information relative to the gas line and its relationship to the road project. In February and March 2013 on-site coordination meetings were held with the CGT. In May 2013, the County's design consultant was notified that CGT had determined that the gas transmission lines did not need to be relocated due to the Claiborne Parkway project. CGT indicated they would had initiated an engineering analysis of the transmissions lines in anticipation of CGT completing a transmission line replacement project that included the lines in the area of Claiborne Parkway. CGT advised they would issue a "no objection" letter and their specifications for work adjacent to the existing lines (to date the County has not received written confirmation of this determination). CGT continued with the engineering analysis of the lines to support their replacement project. At some point in calendar year 2014, they discontinued their efforts to replacement the existing lines. The County's design consultant continued to attempt coordination with CGT, leaving several messages and requests for updated information through August 2015.

Following the coordination of the CGT transmission line conflicts on the Mooreview Parkway project, and recognizing the CGT had not issued the "no objection" determination letter, county staff consulted again with CGT to re-affirm their position and obtain clearance to move toward construction. CGT advised a new engineering analysis of the transmission lines would be required. On March 8, 2016, DTCI contracted with CGT to deliver a Preliminary Engineering Study. DTCI received the Preliminary Engineering Study on April 29, 2016 and subsequently a project schedule on May 13, 2016 (Attachment 1). CGT has identified a relocation cost of \$1,700,971 (Attachment 2). From the Preliminary Engineering Study, CGT, developed a Scope of Work and Special Conditions (VB Line Attachment 3, VB Loop Line Attachment 4) and engineering drawings (Attachment 5) describing the relocation work to be completed.

The CGT requires the County to enter into a "Pipeline Relocation and Reimbursement Agreement" prior to the execution of any gas line relocation work. CGT developed a proposed project schedule and delivered the schedule to the County on May 13, 2016. The proposed agreement (Attachment 6) requests payment of one-half of the initial cost estimate prior to the scheduling of the work. The remaining balance of the cost estimate is to be paid within ten (10) days of completion of the first crossing. Following the completion of the second transmission line crossing, a reconciliation of actual costs will be invoiced, if any. This cost includes the vertical relocation of both 26-inch diameter transmission lines. The requested contract award is a sole source contract because CGT, as the owner of the utility, is the only firm that may relocate its assets.

ISSUES: In recent weeks, the terms of the Agreement with CGT for their relocation work has been in review. County staff submitted several comments and questions to CGT relating to the Scope of Work and Special Conditions, Cost Estimate, design drawings, and relocation schedule

and draft Agreement. The CGT response is provided as Attachment 7. Upon execution of the Agreement, CGT plans to complete the relocation work by November 2016; however, this commitment is weather permitting particularly as CGT has alerted the relocation project may be delayed in the period from October to February, which is the high demand heating season. Staff will continually monitor the activity of CGT and plans to advertise the Invitation for Bid for the construction of the Claiborne Parkway project shortly after CGT initiates relocation work for the first transmission line. The utility relocation work for both conflicting lines must be completed before the County can issue a Notice to Proceed to the County’s contractor, and based on the duration of the CGT relocation work, it is likely that the road construction will not begin until spring 2017. If for some reason, CGT is delayed and unable to complete one or both line relocations in calendar year 2016, CGT will reschedule their work for some time after February 2017 through October 2017. If this occurs, the Claiborne Parkway project will experience an additional 12 – 15 month delay. Once roadway construction begins, the estimated time to complete the road construction is 16 months.

FISCAL IMPACT: The current available balance of the Claiborne Parkway project in the Capital Fund is \$6,127,034.70. Sufficient funding is available in the Claiborne Parkway project to award the contract to CGT for the natural gas transmission line relocation in the estimated amount of \$1,700,971. Typically an additional 10% is budgeted for unforeseen conditions and listed as a contingency (assumed at \$170,000, see Table 1 below). If approved by the Board, the purchase order will be issued for the original estimate amount. Following award of the gas line relocation contract, the available balance in the project will be \$4,256,063.70.

The current construction cost estimate¹ for the Claiborne Parkway project is summarized as follows:

Table 1 - Summary of Construction Cost Estimate for Claiborne Parkway:

Cost Component	Cost Value
Engineer’s construction cost estimate (as of May 5, 2016)	\$5,344,022.40
Construction contingency (@ 10% rounded)	\$535,000.00
Third party construction engineering and VDOT acceptance	\$665,000.00
Sub-total for Construction	\$6,544,022.40
Columbia Gas Transmission relocation estimate (as of April 29, 2016)	\$1,700,971.00
Columbia Gas Transmission relocation, contingency (@ 10% rounded)	\$170,000.00
Sub-total for Gas Line Relocation	\$1,870,971.00
Cost estimate for roadway construction and gas line relocation	\$8,414,993.40

¹ The roadway construction cost estimate has been adjusted based on more recent information. The prior estimate was \$6,967,850 as previously reported in Capital Projects Quarterly Reports.

Because the available balance on the project will be \$4,256,063.70 after award of the contract for gas line relocation, supplemental funding in the amount of \$2,287,958.70 will be required to award the future construction contract. Staff is currently researching options for supplemental funding to be presented with the contract award for the construction of Claiborne Parkway following the project's bid.

This project is funded partially by VDOT Revenue Sharing funds. As such, the project must be completed in accordance with the VDOT Locally Administered Projects Manual and VDOT policies. The utility relocation work is eligible for the VDOT reimbursement as the utility is directly impacted by the road project.

ALTERNATIVES:

1. Recommend to the Board that the Purchasing Agent be authorized to award a contract to CGT in the estimated amount of \$1,700,971 for the Claiborne Parkway project.

OR

2. Do not recommend award of contract and direct staff on how to proceed.

DRAFT MOTIONS:

1. I move that the Finance, Government Operations and Economic Development Committee recommend that the Board of Supervisors authorize the Purchasing Agent to award a contract to Columbia Gas Transmission, LLC in the estimated amount of \$1,700,970.95 for the Claiborne Parkway project.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. Columbia Gas Transmission's proposed project schedule, dated May 9, 2016, submitted to County on May 13, 2016.
2. Columbia Gas Transmission estimate of cost.
3. Columbia Gas Transmission, Scope of Work and Special Conditions for the relocation of the VB East Line natural gas transmission line, dated April 12, 2016, submitted to the County on April 29, 2016.
4. Columbia Gas Transmission, Scope of Work and Special Conditions for the relocation of the VB Loop Line natural gas transmission line, dated April 12, 2016, submitted to the County on April 29, 2016.

5. Columbia Gas Transmission, VB East & VB Loop, Design Drawings – Mechanical, dated April 18, 2016, Submitted to the County on April 29, 2016.
6. Draft Pipeline Relocation and Reimbursement Agreement between Loudoun County and Columbia Gas Transmission, LLC
7. Columbia Gas Transmission's response to County staff generated comments and questions, dated June 2, 2016, Submitted to County on June 7, 2016.

Activity ID	Activity Name	Remaining Duration	Start	Finish	2016																																			
					May	June	July	August	September	October	November	December																												
22306 - VIRGINIA RELOCATION - CLAIBORNE PARKWAY EXTENSION - VB / VB LOOP					2	01	0	1	22	2	0	12	1	26	0	1	17	2	3	07	1	2	28	0	11	1	2	02	0	1	23	3	06	1	2	27	0	1	18	2
	22306 - VIRGINIA RELOCATION - CLAIBORNE PARKWAY EXTENSION - VB / VB LOOP	129	08-Mar-16 A	08-Nov-16																																				
	22306 - VIRGINIA RELOCATION - CLAIBORNE PARKWAY EXTENSION - VB / VB LOOP	81	08-Mar-16 A	31-Aug-16																																				
ENG2570	DEVELOP SCOPE OF WORK / BID PACKAGE - CLAIBORNE PARKWAY EXTENSION	26	08-Mar-16 A	14-Jun-16	DEVELOP SCOPE OF WORK / BID PACKAGE - CLAIBORNE PARKWAY EXTENSION																																			
CON2080	PLACE MATERIAL ORDER - CLAIBORNE PARKWAY EXTENSION	0	25-Apr-16 A	25-Apr-16 A	PLACE MATERIAL ORDER - CLAIBORNE PARKWAY EXTENSION																																			
ENG2480	DEVELOP ENGINEERING REPORT - CLAIBORNE PARKWAY EXTENSION	0	25-Apr-16 A	29-Apr-16 A	DEVELOP ENGINEERING REPORT - CLAIBORNE PARKWAY EXTENSION																																			
CON2090	PROCURE / DELIVER MATERIAL - CLAIBORNE PARKWAY EXTENSION	34	25-Apr-16 A	24-Jun-16	PROCURE / DELIVER MATERIAL - CLAIBORNE PARKWAY EXTENSION																																			
ENG2580	BID PROCESS - CLAIBORNE PARKWAY EXTENSION	10	15-Jun-16	28-Jun-16	BID PROCESS - CLAIBORNE PARKWAY EXTENSION																																			
ENG2590	REVIEW / EVALUATE / RECOMMEND BIDS - CLAIBORNE PARKWAY EXTENSION	4	29-Jun-16	05-Jul-16	REVIEW / EVALUATE / RECOMMEND BIDS - CLAIBORNE PARKWAY EXTENSION																																			
ENG2600	CREATE / AWARD INSTALLATION PO - CLAIBORNE PARKWAY EXTENSION	4	06-Jul-16	11-Jul-16	CREATE / AWARD INSTALLATION PO - CLAIBORNE PARKWAY EXTENSION																																			
CON2210	EXECUTE SOW - MOOREVIEW PARKWAY - VB / VB LOOP [TENTATIVE]	30	21-Jul-16*	31-Aug-16	EXECUTE SOW - MOOREVIEW PARKWAY - VB / VB LOOP [TENTATIVE]																																			
	STRADDLE AGREEMENT	96	17-May-16	30-Sep-16																																				
ENG2650	LOUDOUN COUNTY APPROVE STRADDLE AGREEMENT FOR EARLY PERMITTING - CLAIBORNE PARKWAY EXTENSION	1	17-May-16*	17-May-16	LOUDOUN COUNTY APPROVE STRADDLE AGREEMENT FOR EARLY PERMITTING - CLAIBORNE PARKWAY EXTENSION																																			
PER1760	DEVELOP / REVIEW / APPROVE ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN [EM&CP]	65	18-May-16	18-Aug-16	DEVELOP / REVIEW / APPROVE ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN [EM&CP]																																			
CON2110	EXECUTE SOW - CLAIBORNE PARKWAY EXTENSION	30	19-Aug-16	30-Sep-16	EXECUTE SOW - CLAIBORNE PARKWAY EXTENSION																																			
	RELOCATION AGREEMENT	96	24-Jun-16	08-Nov-16																																				
ENG2660	LOUDOUN COUNTY APPROVE / REJECT RELOCATION AGREEMENT - CLAIBORNE PARKWAY EXTENSION	1	24-Jun-16*	24-Jun-16	LOUDOUN COUNTY APPROVE / REJECT RELOCATION AGREEMENT - CLAIBORNE PARKWAY EXTENSION																																			
PER1850	DEVELOP / REVIEW / APPROVE ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN [EM&CP]	65	27-Jun-16	27-Sep-16	DEVELOP / REVIEW / APPROVE ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN [EM&CP]																																			
CON2200	EXECUTE SOW - CLAIBORNE PARKWAY EXTENSION	30	28-Sep-16	08-Nov-16	EXECUTE SOW - CLAIBORNE PARKWAY EXTENSION																																			

ASSUMPTIONS AND QUALIFICATIONS:

- * ASSUMES IFB PACKAGE FROM 3RD PARTY ENGINEERING BY JUNE 14, 2016
- * ASSUMES LOUDOUN COUNTY AGREES TO & SIGNS STRADDLE AGREEMENT BY MAY 17, 2016
- * ASSUMES LOUDOUN COUNTY APPROVES / REJECTS RELOCATION AGREEMENT BY JUNE 24, 2016
- * ASSUMES GAS MARKET WILL ALLOW OUTAGE DURING THESE PROPOSED TIME FRAMES

Estimate Summary Report

PROJECT NAME:	Claiborne Relocation VB / VB Loop	REVISION NO.	
SCOPE NAME:		GATE	+40/-20% Gate 1
SCOPE OF WORK	Relocation of line VB / VB loop at Claiborne Parkway, in Loudoun County, VA		
		ESTIMATE DATE	4/13/2016

		Estimate	% of total
Direct Cost			
1	Environmental	\$48,894.08	2.87 %
2	Legal/ Government Affairs & Outreach	\$12,774.40	0.75 %
3	Right of Way	\$82,387.20	4.84 %
3a	Land Acquisiton/ROW	\$7,387.20	
4	Engineering	\$93,387.68	5.49 %
4a	Engineering	\$68,387.68	
4b	Survey	\$25,000.00	
5	Material	\$104,240.00	6.13 %
5a	Pipe, Valve & Fitting	\$79,840.00	
5b	Engineering Items	\$0.00	
5c	Other Material	\$24,400.00	
6	Removal / Demolitions	\$0.00	0.00 %
7	Installing & Maintaining	\$984,275.03	57.87 %
7a	Prime Construction	\$947,945.84	
7b	Other Construction	\$0.00	
7c	Other Cost	\$25,140.55	
7d	Project Mgt & Controls	\$9,588.64	
8	Inspection	\$125,593.28	7.38 %
8a	Construction Inspection	\$72,593.28	
8b	X-Ray Inspection	\$25,000.00	
8c	Environmental Inspection	\$28,000.00	
9	Commissiioning	\$0.00	0.00 %
	Total Direct Cost	\$1,451,551.67	85.34 %
Indirect Cost			
10a	AGSEO	\$98,995.82	5.82 %
10b	AFUDC/IDC Overheads	\$5,268.29	0.31 %
11a	Contingency	\$145,155.17	8.53 %
11b	Escalation	\$0.00	0.00 %
12a	Reimbursements	\$0.00	0.00 %
12b	Tax Gross UP	\$0.00	0.00 %
	Total Indirect Cost	\$249,419.28	14.66 %
	Total Cost Estimate	\$1,700,970.95	100.00 %

Estimate Summary Report

PROJECT NAME:	Claiborne Relocation VB / VB Loop	REVISION NO.	
SCOPE NAME:	LINE VB LOOP LOUDOUN COUNTY VA CLAIBORNE	GATE	+40/-20% Gate 1
SCOPE OF WORK	Relocation of line VB / VB loop at Claiborne Parkway, in Loudoun County, VA		
		ESTIMATE DATE	4/13/2016

		Estimate	% of total
Direct Cost			
1	Environmental	\$24,447.04	2.89 %
2	Legal/ Government Affairs & Outreach	\$6,387.20	0.76 %
3	Right of Way	\$41,193.60	4.88 %
3a	Land Acquisiton/ROW	\$3,693.60	
4	Engineering	\$46,693.84	5.53 %
4a	Engineering	\$34,193.84	
4b	Survey	\$12,500.00	
5	Material	\$51,240.00	6.07 %
5a	Pipe, Valve & Fitting	\$39,040.00	
5b	Engineering Items	\$0.00	
5c	Other Material	\$12,200.00	
6	Removal / Demolitions	\$0.00	0.00 %
7	Installing & Maintaining	\$488,117.23	57.78 %
7a	Prime Construction	\$469,847.92	
7b	Other Construction	\$0.00	
7c	Other Cost	\$12,674.99	
7d	Project Mgt & Controls	\$4,794.32	
8	Inspection	\$62,796.64	7.43 %
8a	Construction Inspection	\$36,296.64	
8b	X-Ray Inspection	\$12,500.00	
8c	Environmental Inspection	\$14,000.00	
9	Commissiioning	\$0.00	0.00 %
	Total Direct Cost	\$720,875.55	85.34 %
Indirect Cost			
10a	AGSEO	\$49,163.71	5.82 %
10b	AFUDC/IDC Overheads	\$2,616.36	0.31 %
11a	Contingency	\$72,087.56	8.53 %
11b	Escalation	\$0.00	0.00 %
12a	Reimbursements	\$0.00	0.00 %
12b	Tax Gross UP	\$0.00	0.00 %
	Total Indirect Cost	\$123,867.63	14.66 %
	Total Cost Estimate	\$844,743.18	100.00 %

Estimate Summary Report

PROJECT NAME:	Claiborne Relocation VB / VB Loop	REVISION NO.	
SCOPE NAME:	LINE VB LOUDOUN COUNTY VA CLAIBORNE	GATE	+40/-20% Gate 1
SCOPE OF WORK	Relocation of line VB / VB loop at Claiborne Parkway, in Loudoun County, VA		

		Estimate	% of total
Direct Cost			
1	Environmental	\$24,447.04	2.86 %
2	Legal/ Government Affairs & Outreach	\$6,387.20	0.75 %
3	Right of Way	\$41,193.60	4.81 %
3a	Land Acquisiton/ROW	\$3,693.60	
4	Engineering	\$46,693.84	5.45 %
4a	Engineering	\$34,193.84	
4b	Survey	\$12,500.00	
5	Material	\$53,000.00	6.19 %
5a	Pipe, Valve & Fitting	\$40,800.00	
5b	Engineering Items	\$0.00	
5c	Other Material	\$12,200.00	
6	Removal / Demolitions	\$0.00	0.00 %
7	Installing & Maintaining	\$496,157.80	57.95 %
7a	Prime Construction	\$478,097.92	
7b	Other Construction	\$0.00	
7c	Other Cost	\$12,465.56	
7d	Project Mgt & Controls	\$4,794.32	
8	Inspection	\$62,796.64	7.33 %
8a	Construction Inspection	\$36,296.64	
8b	X-Ray Inspection	\$12,500.00	
8c	Environmental Inspection	\$14,000.00	
9	Commisssioning	\$0.00	0.00 %
	Total Direct Cost	\$730,676.12	85.34 %
Indirect Cost			
10a	AGSEO	\$49,832.11	5.82 %
10b	AFUDC/IDC Overheads	\$2,651.93	0.31 %
11a	Contingency	\$73,067.61	8.53 %
11b	Escalation	\$0.00	0.00 %
12a	Reimbursements	\$0.00	0.00 %
12b	Tax Gross UP	\$0.00	0.00 %
	Total Indirect Cost	\$125,551.65	14.66 %
	Total Cost Estimate	\$856,227.77	100.00 %



SCOPE OF WORK AND SPECIAL CONDITIONS

COLUMBIA PIPELINE GROUP PROJECT B18738

**Claiborne Parkway
Line VB
Loudoun County, VA**

Prepared by:



April 12, 2016

**SCOPE OF WORK AND SPECIAL CONDITIONS
COLUMBIA PIPELINE GROUP
LINE VB - LOUDOUN COUNTY, VA
CLAIBORNE PARKWAY
PROJECT B18738**

Scope of Work

The Virginia Department of Transportation and Loudoun County, Virginia, will construct a new section of highway to connect the existing portion of Claiborne Parkway with Ryan Road (VA Route 772) once the CPG replacement is complete. The highway construction will impact the Columbia Pipeline Group pipeline easement for Line VB at approximate inventory stations 3936+75 to 3938+07 within Valve Section 10186. The existing Line VB is 26.00" OD, 0.281" WT, Grade X-52, A.O. Smith pipe with coal tar coating and was constructed in 1950. The pipeline at this location is in a Class 3 Location and is considered High-Consequence Area due to the population density. The established MAOP of the Line VB pipeline system is 674 psi, which is 60% SMYS for the existing pipe.

Remediation measures are necessary to accommodate the planned highway construction and to continue to operate and maintain a safe pipeline system. Remediation will be accomplished by replacing the existing pipe within the proposed limits of the highway right-of-way (ROW), using the lift-and-lay procedure. This procedure is performed by lifting the existing pipe and laying new pipe in the same trench. It is proposed that the existing pipe be replaced with 26.00" OD, 0.375" WT, Grade X-65 pipe. The new pipe section will be prefabricated on site. All welds will be nondestructively inspected, the weld areas coated, all coating holidays repaired, and the pipe section hydrostatically tested prior to removal of the existing pipe.

Line VB will be shut in and the gas evacuated from the Mainline Valve at Loudoun Compressor station to the Mainline Valve at Shellhorne Road. Gas flow will be diverted to the adjacent pipeline, Line VB Loop. During the planned construction season, this configuration will supply the volume of gas required to meet market demands.

When all systems are ready, the existing pipe will be excavated, separated on each side of the highway ROW, and lifted from the trench. The trench will then be re-graded to assure the proper depth and profile for the new pipe section.

The new pipe section will be positioned in the trench and tied in to the existing pipe on each end. All new welds will be nondestructively inspected and coated. When the tie-ins are completed and the pipeline is properly supported, Double Sack Breakers will be installed at each edge of the highway. The trench between the sack breakers will be backfilled with an approved backfilling procedure to the original ground level. The trench outside the breakers will be backfilled with select fill and compacted in accordance with CPG pipeline construction specifications.

Line VB will then be returned to service by purging and loading from Loudoun Compressor Station to Shellhorne Road and opening the mainline valves.

All disturbed areas outside the highway ROW will be cleaned up, seeded, fertilized, and mulched. Contractor shall stabilize the disturbed work area per the EM&CP.

It is assumed that Loudoun County contractors will remove existing trees and brush within the LOD.

All work performed on this project will be conducted in compliance with the Columbia Gas Transmission Construction Specifications.

Special Conditions

1. Access to the construction site will be from Early Light Place, North of the existing pipeline easement, to the Claiborne Parkway Highway ROW.
2. The construction work space consists of the existing 50' pipeline easement, an extra 25' of temporary construction easement, and the area between the two existing CPG ROWs. The pipeline easement and the extra temporary work space will be staked and cleared by the Pipeline Contractor, subject to CPG approval.
3. Temporary woven wire and post fencing will be installed along the easement boundaries to prevent the inadvertent encroachment of construction vehicles and equipment onto neighboring property.
4. Access to and from Early Light Place should be protected by installing a geotextile fabric and a minimum of 6" of 1-1/2" crusher run stone, or other approved stone size, approximately 25' wide by 50' long abutting Early Light Place and within the Loudon County limit of disturbance. The actual size of the pad may be determined by the width and length required for heavy trucks to unload construction equipment and material and to turn around. All material and installation cost of the stone access pad will be the responsibility of the Contractor. All stone and fabric will be removed and disposed of on final cleanup.
5. Material, including pipe, fittings (if required), line markers, etc., will be purchased by CPG to be delivered to a warehouse location in the vicinity (TBD) for temporary storage. The Pipeline Contractor will unload and store the material as directed by CPG. The Contractor will then load and haul material to job site as needed.
6. This construction will involve the operation of heavy equipment and excavation near or above Columbia's high-pressure pipelines. Each pipeline in the vicinity of planned excavation activities and equipment crossing locations shall be exposed and marked. Visible marking shall be maintained throughout the course of construction. Extra protection shall be provided to avoid damage to the existing pipelines, including the use of additional fill over the pipelines or swamp mats, if determined to be necessary by CPG's authorized representative. A line crossing permit will be required prior to commencement of construction activities.
7. Typical erosion and sediment control devices, as related to pipeline construction activities (consisting primarily of safety fence, silt fence, straw bales, and crushed stone), will be

installed and maintained by the Pipeline Contractor. Silt filtration bags may be required for trench dewatering incidents. Refer to the Sediment and Erosion Control Plan prepared specifically for this project.

8. All pipeline welds will be nondestructively inspected. All nonconforming defects will be repaired or replaced as specified in Columbia Gas Transmission Welding Specifications.
9. The Pipeline Contractor is responsible for measuring, engineering, fabricating, and installing the new road section to fit the existing pipe and maintain the existing depth. The tie-ins are to be completed with a minimum number of welds. No pipe or fittings are to be installed to complete tie-ins that have not been tested and approved. Extra pipe and fittings should be pre-tested with the road section to be available if needed for tie-ins.
10. The pipeline will cross under the planned location of a 30" storm sewer within the roadway and must be installed at a depth that will provide a minimum of 2' vertical clearance between the pipeline and the 30" RCP storm sewer.
11. The new pipe section will be hydrostatically tested to a minimum of 1,500 pounds per square inch gauge (psig) for a minimum of eight hours. The Pipeline Contractor shall be responsible for providing all instruments, equipment, and facilities necessary to conduct and properly document the test and to dewater and dispose of the test water. All gauges and deadweights must be accompanied with a recent calibration certificate.
12. The Pipeline Contractor will be responsible for acquiring and disposing of hydrostatic test water in compliance with Loudoun County environmental regulations.
13. When the pipeline has been isolated and purged, it will be separated from the existing pipe and lifted from the trench, cut into joint-size lengths, and removed from the ROW. Asbestos mitigation measures may be required when removing existing coating from the pipe to make the cuts.
14. The Pipeline Contractor will take possession of the removed pipe and is expected to sign a legal document absolving CPG from any and all liability regarding the future use of the pipe. The "Pipe Removal" pay item may reflect a credit to CPG for the value of the used 26" pipe minus the removal cost.
15. When tie-ins are complete and the pipe section is properly supported, Double Sack Breakers will be installed at each edge of the highway. The trench between the Double Sack Breakers will be backfilled with no less than 2-feet of flowable fill over top of the pipe and compacted backfill, per the VDOT specification, to the original ground level. The trench outside the breakers will be filled with select backfill material and compacted with mechanical tampers.
16. The Pipeline Contractor will install permanent line markers and cathodic test stations as required and directed by CPG.



SCOPE OF WORK AND SPECIAL CONDITIONS

COLUMBIA PIPELINE GROUP PROJECT B18738

**Claiborne Parkway
VB Loop
Loudoun County, VA**

Prepared by:



April 12, 2016

**SCOPE OF WORK AND SPECIAL CONDITIONS
COLUMBIA PIPELINE GROUP
VB LOOP - LOUDOUN COUNTY, VA
CLAIBORNE PARKWAY
PROJECT B18738**

Scope of Work

The Virginia Department of Transportation and Loudoun County, Virginia, will construct a new section of highway to connect the existing portion of Claiborne Parkway with Ryan Road (VA Route 772) once the CPG replacement is complete. The highway construction will impact the Columbia Pipeline Group pipeline easement for Line VB Loop at approximate inventory stations 3920+94 to 3922+19 within Valve Section 10186. The existing Line VB Loop is 26.00" OD, 0.281" WT, Grade X-52, A.O. Smith pipe with coal tar coating and was constructed in 1954. The pipeline at this location is in a Class 3 Location and is considered a high-consequence area due to the population density. The established MAOP of the Line VB Loop Pipeline system is 674 psi, which is 60% SMYS for the existing pipe.

Remediation measures are necessary to accommodate the planned highway construction and to continue to operate and maintain a safe pipeline system. Remediation will be accomplished by replacing the existing pipe within the proposed limits of the highway right-of-way (ROW) using the lift-and-lay procedure. This procedure is performed by lifting the existing pipe and laying new pipe in the same trench. It is proposed to replace the existing pipe with 26.00" OD, 0.375" WT, Grade X-65 pipe. The new pipe section will be prefabricated on site. All welds will be nondestructively inspected, the weld areas coated, all coating holidays repaired, and the pipe section hydrostatically tested prior to removal of the existing pipe.

Line VB Loop will be shut in and the gas evacuated from the Mainline Valve at Loudoun Compressor Station to the Mainline Valve at Shellhorne Road. Gas flow will be diverted to the adjacent pipeline, Line VB Loop. During the planned construction season, this configuration will supply the volume of gas required to meet market demands.

When all systems are ready, the existing pipe will be excavated, separated on each side of the highway ROW, and lifted from the trench. The trench will then be re-graded to assure the proper depth and profile for the new pipe section.

The new pipe section will be positioned in the trench and tied in to the existing pipe on each end. All new welds will be nondestructively inspected and coated. When the tie-ins are completed and the pipeline is properly supported, Double Sack Breakers will be installed at each edge of the highway. The trench between the sack breakers will be backfilled with an approved backfilling procedure to the original ground level. The trench outside the breakers will be backfilled with select fill and compacted in accordance with CPG pipeline construction specifications.

Line VB will then be returned to service by purging and loading from Loudoun Compressor Station to Shellhorne Road and opening the mainline valves.

All disturbed areas outside the highway ROW will be cleaned up, seeded, fertilized, and mulched. Contractor shall stabilize the disturbed work area per the EM&CP.

It is assumed that Loudoun County contractors will remove existing trees and brush within the LOD.

All work performed on this project will be conducted in compliance with the Columbia Gas Transmission Construction Specifications.

Special Conditions

1. Access to the construction site will be from Early Light Place, North of the existing pipeline easement, to the Claiborne Parkway Highway ROW.
2. The construction work space consists of the existing 50' pipeline easement and the area between the two existing CPG ROWs. The pipeline easement outside of Loudon County limit of disturbance will be staked and cleared by the Pipeline Contractor subject to CPG approval.
3. Temporary woven wire and post fencing will be installed along the easement boundaries to prevent inadvertent encroachment of construction vehicles and equipment onto neighboring property.
4. Access to and from Early Light Place should be protected by installing a geotextile fabric and a minimum of 6" of 1-1/2" crusher run stone, or other approved stone size, approximately 25' wide by 50' long abutting Early Light Place and within the Loudon County limit of disturbance. The actual size of the pad may be determined by the width and length required for heavy trucks to unload construction equipment and material and to turn around. All material and installation cost of the stone access pad will be the responsibility of the Contractor. All stone and fabric will be removed and disposed of on final cleanup.
5. Material, including pipe, fittings (if required), line markers, etc., will be purchased by CPG to be delivered to a warehouse location in the vicinity (TBD) for temporary storage. The Pipeline Contractor will unload and store the material as directed by CPG. The Contractor will then load and haul material to the job site as needed.
6. This construction will involve the operation of heavy equipment and excavation near or above Columbia's high-pressure pipelines. Each pipeline in the vicinity of planned excavation activities and equipment crossing locations shall be exposed and marked. Visible marking shall be maintained throughout the course of construction. Extra protection shall be provided to avoid damage to the existing pipelines, including the use of additional fill over the pipelines or swamp mats, if determined to be necessary by CPG's authorized representative. A line crossing permit will be required prior to commencement of construction activities.
7. Typical erosion and sediment control devices, as related to pipeline construction activities (consisting primarily of safety fence, silt fence, straw bales, and crushed stone), will be installed and maintained by the Pipeline Contractor. Silt filtration bags may be required for trench dewatering incidents. Refer to the Sediment and Erosion Control Plan prepared specifically for this project.

8. All pipeline welds will be nondestructively inspected. All nonconforming defects will be repaired or replaced as specified in Columbia Gas Transmission Welding Specifications.
9. The Pipeline Contractor is responsible for measuring, engineering, fabricating, and installing the new road section to fit the existing pipe and maintain the existing depth. The tie-ins are to be completed with a minimum number of welds. No pipe or fittings are to be installed to complete tie-ins that have not been tested and approved. Extra pipe and fittings should be pre-tested with the road section to be available if needed for tie-ins.
10. The pipeline will cross under the planned location of a 45" by 29" Elliptical Storm Sewer within the roadway and must be installed at a depth that will provide a minimum of 2' vertical clearance between the pipeline and the 45" by 29" elliptical concrete pipe.
11. The new pipe section will be hydrostatically tested to a minimum of 1,500 pounds per square inch gauge (psig) for a minimum of eight hours. The Pipeline Contractor shall be responsible for providing all instruments, equipment, and facilities necessary to conduct and properly document the test and dewater and dispose of the test water. All gauges and deadweights must be accompanied with a recent calibration certificate.
12. The Pipeline Contractor will be responsible for acquiring and disposing of hydrostatic test water in compliance with Loudoun County environmental regulations.
13. When the pipeline has been isolated and purged, the pipe to be removed will be separated from the existing pipe and lifted from the trench, cut into joint-size lengths, and removed from the ROW. Asbestos mitigation measures may be required when removing existing coating from the pipe to make the cuts.
14. The Pipeline Contractor will take possession of the removed pipe and is expected to sign a legal document absolving CPG from any and all liability regarding future use of the pipe. The "Pipe Removal" pay item may reflect a credit to CPG for the value of the used 26" pipe minus the removal cost.
15. When tie-ins are complete and the pipe section is properly supported, Double Sack Breakers will be installed at each edge of the highway. The trench between the Double Sack Breakers will be backfilled with no less than 2-feet of flowable fill over top of the pipe and compacted backfill, per the VDOT specification, to the original ground level. The trench outside the breakers will be filled with select backfill material and compacted with mechanical tampers.
16. The Pipeline Contractor will install permanent line markers and cathodic test stations, as required and directed by CPG.



VB EAST & VB LOOP

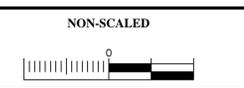
CLAIBORNE PKWY RELOCATION
 ENGINEERING SERVICES - DESIGN - PROJECT # 22306 / 22307
 DESIGN DRAWINGS - MECHANICAL

DESIGN DRAWINGS

TD-7062-COVER	COVER SHEET
TD-7062-NOTES	GENERAL NOTES
TD-7062-100	OVERALL ROUTE MAP
TD-7062-1103	26" VB EAST PIPELINE - PLAN & PROFILE
TD-7062-1104	26" VB LOOP PIPELINE - PLAN & PROFILE

ATTACHMENT 5

PRELIMINARY
 DATE: 4/27/2016



DESIGN PRESSURE _____ PSIG AT _____ °F (_____ DESIGN FACTOR); MAXIMUM HOOP STRESS LEVEL _____
 AT _____ PSIG _____ % SMYS, BASED ON _____
 MAOP OF _____ PSIG AT _____ °F IS LIMITED BY _____
 MINIMUM TEST PRESSURE _____ PSIG; MAXIMUM TEST PRESSURE _____ PSIG.
 TEST LIMITED BY _____ TEST PERIOD _____ HOURS.
 TEST MEDIUM _____ SERVICE _____
 NONDESTRUCTIVE INSPECTION REQUIREMENTS _____

PROJECT DELIVERY
 PROJECT ENGINEERING
 P.O. BOX 1273 CHARLESTON, WV 25325-1273
 1700 MACCORKLE AVENUE SE, CHARLESTON, WV 25314

TITLE
 CLAIBORNE PKWY RELOCATION
 COVER SHEET
 LOUDOUN COUNTY, VA

DRAWN BY: ENSITEUSA	DATE: 4/18/16	DRAWING NUMBER	ISSUE
PROJECT NUMBER: 22306 / 22307		TD-7062-COVER	P
W.O. NUMBER: -			

CERTIFICATE
 TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE COLUMBIA GUIDELINES AND SPECIFICATIONS.

 DESIGN ENGINEER DATE _____
 NOTE: ANY CHANGES TO THE DESIGN SHOWN ON THIS DRAWING MUST BE APPROVED BY THE DESIGN ENGINEER.

187380000
ISSUE

DWG_PATH_NAME USERNAME SAVE_DATE_TIME

NO.	REVISIONS	BY	DATE	NO.	REVISIONS	BY	DATE

NO.	REVISIONS	BY	DATE

NO.	REVISIONS	BY	DATE

DWG. NO.	REFERENCE

ISSUE DRAWING NUMBER ID-7062-NOTES

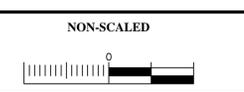
STANDARD GRADING NOTES	
A	APPLICABLE CODES AND STANDARDS:
1	ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO)
2	AMERICAN CONCRETE INSTITUTE – "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", (ACI-318-02).
B	MATERIALS
1	AASHTO #57 STONE
2	GEOTEXTILE FABRIC, WEED BARRIER, TYPE AR 3201 OR APPROVED EQUAL (IF APPLICABLE TO BE DETERMINED BY ENGINEER)
C	INSTALLATION
1	EXCAVATE TO PROPER ELEVATION AND GRADE.
2	AFTER SUBGRADE GRADING HAS BEEN COMPLETED A GEOTEXTILE FABRIC FOR WEED CONTROL SHALL BE INSTALLED.
3	AFTER THE INSTALLATION OF THE GEOTEXTILE HAS BEEN COMPLETED, BACKFILL AND COMPACT STONE IN SIX-INCH LIFTS.

STANDARD CONCRETE NOTES	
1	CONCRETE AND REBAR SPECIFICATIONS PER COLUMBIA SPECIFICATION CON-101.
2	ALL CONCRETE SHALL BE PROTECTED BY ONE OR MORE CURING MATERIALS, POLYETHYLENE SHEETING WILL BE PERMITTED AS CURING ONLY ON AREAS WHERE INTIMATE CONTACT WITH THE CONCRETE SURFACE CAN BE OBTAINED AND MAINTAINED FOR AT LEAST SEVEN DAYS. MEMBRANE FORMING CURING COMPOUND MAY BE USED IF IMMEDIATELY APPLIED AFTER ACCEPTANCE OF THE CONCRETE FINISH.
3	ALL FOUNDATIONS SHALL BE PLACED ON FIRM UNDISTURBED SOIL FREE OF FROST AND NOT FROZEN, BOULDERS, SOFT SPOTS, EXCESSIVE WATER AND ORGANIC MATERIALS. IF UNSUITABLE CONDITIONS ARE ENCOUNTERED, NOTIFY THE COLUMBIA PIPELINE GROUP ENGINEER BEFORE PROCEEDING.
4	ALL EXPOSED CONCRETE SURFACES SHALL BE A FLOAT FINISH AND STEEL TROWELED TO PRODUCE A SMOOTH, UNIFORM SURFACE. UPON REMOVAL OF FORMS ALL FINS AND IRREGULAR PROJECTIONS SHALL BE REMOVED. CAVITIES PRODUCED BY FORM TIES AND OTHER HOLES, HONEYCOMB SPOTS, BROKEN CORNERS OR EDGES AND OTHER DEFECTS SHALL BE REPAIRED AND THEN RUBBED.
5	ALL CORROSION CONTROL WORK TO BE PERFORMED PER THE REFERENCED PROCEDURE / SPECIFICATION.

STANDARD STRUCTURAL STEEL NOTES	
1	CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
2	ALL STRUCTURAL STEEL SHALL BE FABRICATED, AND TESTED IN ACCORDANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
3	UNLESS OTHERWISE SPECIFIED OR APPROVED BY COMPANY'S CERTIFYING ENGINEER, STRUCTURAL STEEL WIDE-FLANGES AND WT SHAPES SHALL CONFORM TO ASTM A992. ALL OTHER SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
4	STRUCTURAL BOLTS AND NUTS SHALL CONFORM TO ASTM A 325.
5	ALL STRUCTURAL WORK ON THIS PROJECT SHALL CONFIRM WITH COLUMBIA PIPELINE GROUP "COMPRESSOR STATION CONSTRUCTION SPECIFICATION NO. CSC-101"
6	ALL STEEL ITEMS FABRICATED BY THE CONTRACTOR SHALL BE HOT DIPPED/GALVANIZED.

STANDARD PIPING CORROSION NOTES	
1	FIELD COATING AND ASSOCIATED SURFACE PREPARATION SHALL BE APPLIED PER PROCEDURE 70.001.026 EXTERNAL COATING – UNDER GROUND FACILITIES – NEW CONSTRUCTION OR MAINTENANCE APPLICATION FOR BELOW GROUND COATING, 70.001.029 FOR ABOVEGROUND COATING, AND 70.001.040 FOR STANDARD PAINT COLORS.
2	THE BELOW TO ABOVE GROUND TRANSITION PIPING SHALL BE COATED WITH DENSO 7200 TWO-PART EPOXY. THE EXISTING MILL-APPLIED FBE WILL BE OVERCOATED WITH AN ADDITIONAL 20-40 MIL AND WILL BE APPLIED 18" ABOVE GRADE TO 18" BELOW GRADE, AS DETAILED IN PROCEDURE 70.001.032. ALL FBE OR TWO-PART EPOXY REMAINING ABOVE GRADE, INCLUDING 18" BELOW GROUND, WILL NEED COATED PER PROCEDURE 70.001.029.
3	ALL STUD BOLTS AND NUTS FOR FLANGES ARE TO BE TEFLON OR ZINC-COATED PER MS.50.001 BOLTS, NUTS AND WASHERS MATERIAL SPECIFICATION.
4	ALL FLANGES ARE TO BE FILLED WITH AN APPROVED DIELECTRIC FLANGE FILLER AND THE FLANGES COVERED WITH AN APPROVED FLANGE PROTECTOR PER PROCEDURE 70.001.041.
5	STEEL PIPE CLAMPS SHALL COME WITH A 1/8" THICK VIBALON LINER ATTACHED TO THE PIPE CLAMP. THE SHIM BLOCKS MAY BE OF THE EPOXY TYPE OR THE STEEL TYPE WITH A 1/8" PVC LINER. ALTERNATIVES TO THE STEEL PIPE CLAMP ARE CABLES OR U-BOLTS. A VIBALON SHEATH MAY BE ORDERED FOR EITHER THE CABLES OR U-BOLTS AS REQUIRED.
6	COATED U-BOLTS ARE REQUIRED FOR ALL HOLD DOWN U-BOLTS.
7	ALL INSTALLATIONS SHALL BE PER THE APPLICABLE CORROSION CONTROL PLAN OR PROCEDURE. SEE 70.001.045 CORROSION CONTROL STANDARD DRAWING FOR A LISTING OF THE STANDARD DRAWINGS.
8	DURING INSTALLATION ANY BARE PIPE SHALL BE ABRASIVE BLASTED AND COATING SHALL BE DONE IN ACCORDANCE WITH THE PROCEDURE 70.001.029 EXTERNAL COATING – ABOVE GROUND FACILITIES – NEW CONSTRUCTION & SYSTEM REHABILITATION COATING REGARDLESS OF WHETHER THE PIPE WAS SHOP OR FIELD FABRICATED.
9	ALL ABRASIVE BLASTING AND COATING SHALL BE APPLIED IN ACCORDANCE WITH THE APPROPRIATE PROCEDURE AND IN THE PRESENCE OF THE CORROSION CONTROL INSPECTOR.
10	ALL BELOW GRADE PIPING SHALL BE THOROUGHLY JEEPED IN ACCORDANCE WITH PROCEDURE 70.001.013 PIPE COATING – HOLIDAY DETECTION PROCEDURE; 1) TO LOCATE HOLIDAYS, 2) AFTER HOLIDAYS ARE PATCHED, AND 3) JUST BEFORE BACK FILLING BEGINS.
11	HOT-TAP FULL ENCIRCLEMENT REINFORCING SLEEVES MUST BE GREASED AND COATED AS PER PROCEDURE 70.001.042 CORROSION PROTECTION UNDER ENCIRCLEMENT TYPE REINFORCING SLEEVES
12	THE ABOVE GROUND PIPE SUPPORTS WILL BE CONSTRUCTED OF ALUMINUM OR STEEL WITH MINIMUM 1/8" FRP PAD OR OTHER APPROVED DIELECTRIC MATERIAL BONDED TO THE SUPPORT DEVICE. STEEL PIPE STRAPS WILL HAVE MINIMUM 1/8" FRP PAD OR OTHER APPROVED DIELECTRIC MATERIAL BONDED TO THE SURFACE FACING THE PIPE. DIELECTRIC PADS SHOULD NEVER BE BONDED TO THE PIPELINE.
13	ABOVE OR BELOW GRADE PIPING RESTING ON CONCRETE SUPPORTS OR PIPE SUPPORTS SHALL BE COATED PER PROCEDURE 70.001.026 EXTERNAL COATING – UNDER GROUND FACILITIES – NEW CONSTRUCTION OR MAINTENANCE APPLICATION WITH 40 MILS DFT OF TWO-PART EPOXY COMPLETELY AROUND THE CIRCUMFERENCE OF THE PIPE FOR A LENGTH OF 6" PAST EACH END. IF THE PIPE WAS MILL COATED WITH FBE, APPLY AND ADDITIONAL 30 MILS DFT PER PROCEDURE 70.001.032 EXTERNAL COATING – UNDERGROUND FACILITIES – OVER-COATINGS AND OVERWRAPS FOR PROTECTING COATED PIPE DIRECTLY OVER TOP OF THE FBE COMPLETELY AROUND THE CIRCUMFERENCE OF THE PIPE FOR A LENGTH 6" PAST EACH END. ABOVE GRADE PIPING SHALL BE PAINTED PER PROCEDURE 70.001.029 EXTERNAL COATING – ABOVE GROUND FACILITIES – NEW CONSTRUCTION & SYSTEM REHABILITATION COATING TO PROTECT FROM UV BREAKDOWN.

PRELIMINARY
DATE: 4/27/2016



DESIGN PRESSURE _____ PSIG AT _____ °F (_____ DESIGN FACTOR). MAXIMUM HOOP STRESS LEVEL _____
 AT _____ PSIG _____ % SMYS. BASED ON _____
 MAOP OF _____ PSIG AT _____ °F IS LIMITED BY _____
 MINIMUM TEST PRESSURE _____ PSIG. MAXIMUM TEST PRESSURE _____ PSIG.
 TEST LIMITED BY _____ TEST PERIOD _____ HOURS.
 TEST MEDIUM _____ SERVICE _____
 NONDESTRUCTIVE INSPECTION REQUIREMENTS _____

CERTIFICATE
 TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE COLUMBIA GUIDELINES AND SPECIFICATIONS.
 ENSITEUSA 04/27/16
 DESIGN ENGINEER _____ DATE _____
 DWG. NO. _____ REFERENCE _____

PROJECT DELIVERY
 PROJECT ENGINEERING
 P.O. BOX 1273 CHARLESTON, WV 25325-1273
 1700 MACCORKLE AVENUE SE, CHARLESTON, WV 25314

Columbia Gas Transmission

TITLE
 CLAIRBORNE PKWY RELOCATION
 GENERAL NOTES
 LOUDOUN COUNTY, VA

DRAWN BY: ENSITEUSA DATE: 04/18/16 DRAWING NUMBER: _____ ISSUE: _____
 PROJECT NUMBER: 22306 / 22307
 W.O. NUMBER: _____

TD-7062-COVER COVER SHEET

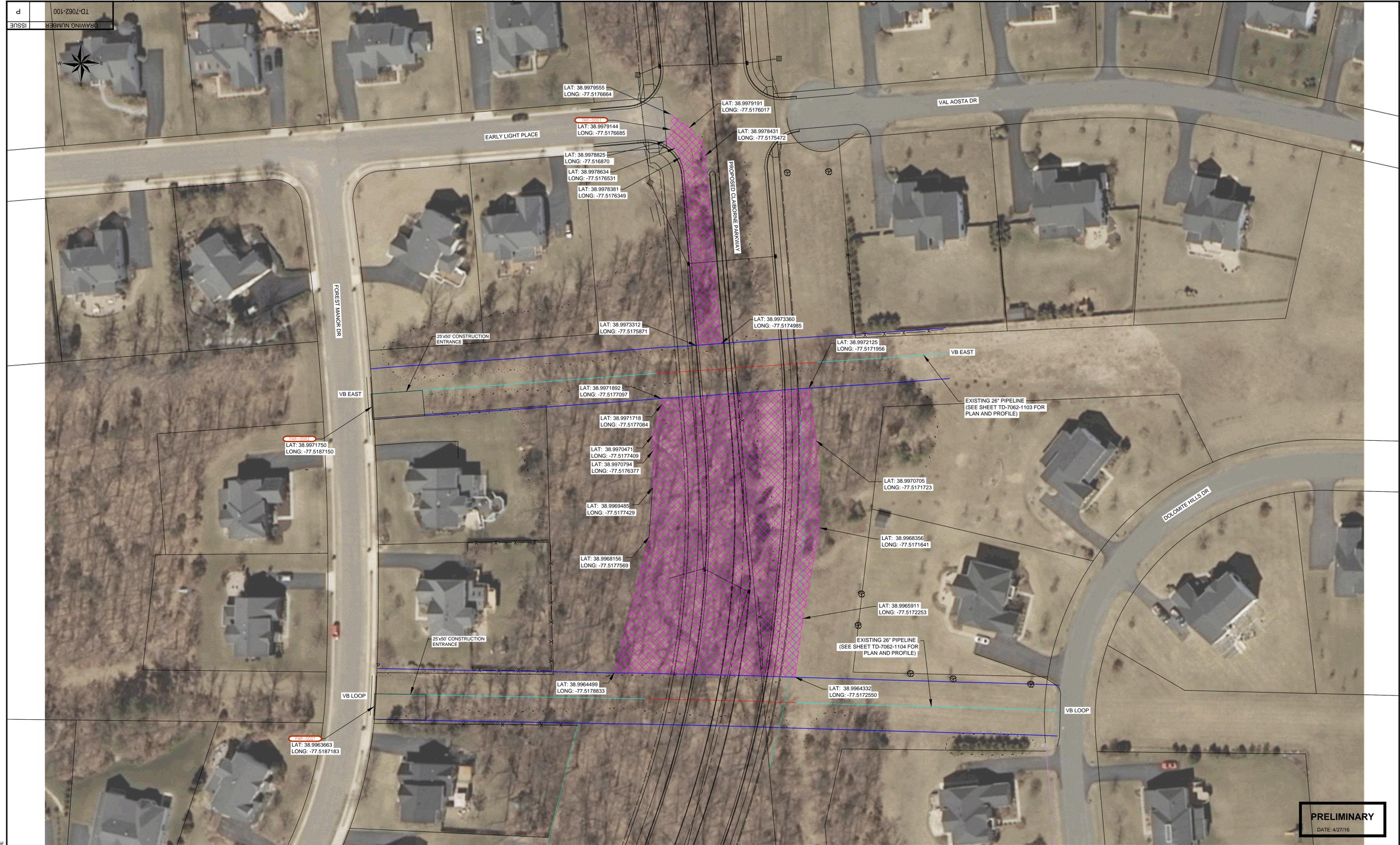
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NO.	REVISIONS	NO.	REVISIONS

NO.	REVISIONS

NO.	REVISIONS

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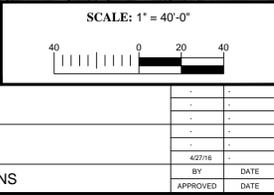


d	TD-7062-100
ISSUE	DRAWING NUMBER

DWG PATH NAME	USERNAME
SAVE DATE	TIME

NO.	REVISIONS	BY	DATE
NO.	REVISIONS	BY	DATE

EnSiteUSA			
PRELIMINARY			
NO.	REVISIONS	BY	DATE



DESIGN PRESSURE	PSIG AT	°F (DESIGN FACTOR)	MAXIMUM HOOP STRESS LEVEL
AT	PSIG	% SMS	BASED ON
MAOP OF	PSIG AT	°F IS LIMITED BY	
MINIMUM TEST PRESSURE	PSIG	MAXIMUM TEST PRESSURE	PSIG
TEST LIMITED BY		TEST PERIOD	HOURS
TEST MEDIUM		SERVICE	
NONDESTRUCTIVE INSPECTION REQUIREMENTS			

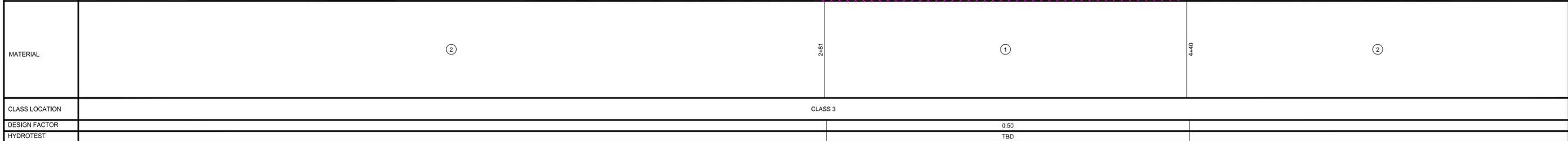
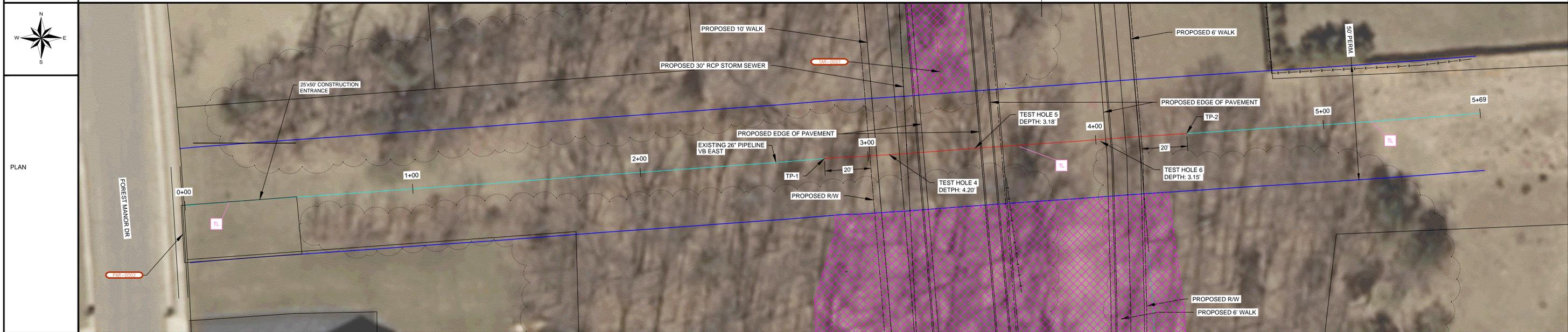
TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE COLUMBIA GUIDELINES AND SPECIFICATIONS.	TD-7062-COVER	COVER SHEET
DESIGN ENGINEER	DATE	
DWG. NO.	REFERENCE	

PROJECT DELIVERY PROJECT ENGINEERING			
P.O. BOX 1273 CHARLESTON, WV 25305-1273			
1700 MACCORRIE AVENUE SE, CHARLESTON, WV 25314			
Columbia Gas Transmission			
CLAIBORNE PKWY RELOCATION			
TITLE OVERALL ROUTE MAP LOUDOUN COUNTY, VA			
DRAWN BY:	ENSITEUSA	DATE:	04/18/16
PROJECT NUMBER:	22306 / 22307	DRAWING NUMBER	TD-7062-100
W.O. NUMBER:		ISSUE	P

PRELIMINARY
DATE: 4/27/16

STATIONING	ENVIRONMENTAL	CONSTRUCTION NOTES
STA: 2+81 TIE POINT STA: 3+01 PROPOSED R/W STA: 3+04 EDGE OF WALK STA: 3+14 EDGE OF WALK STA: 3+18 PROPOSED R/W STA: 3+22 EDGE OF PAVEMENT STA: 3+37 C.L. PROPOSED CLAIRBORNE PARKWAY SOUTHBOUND STA: 3+50 EDGE OF PAVEMENT STA: 3+55 EDGE OF PAVEMENT STA: 3+37 C.L. PROPOSED CLAIRBORNE PARKWAY NORTHBOUND STA: 4+07 EDGE OF PAVEMENT STA: 4+13 EDGE OF WALK STA: 4+19 EDGE OF WALK STA: 4+20 PROPOSED R/W STA: 4+40 TIE POINT	SEE SITE SPECIFIC EMCP	MINIMUM 36" OF COVER

MATERIAL	CLASS LOCATION	DESIGN FACTOR	HYDROTEST
② 2+81 ① 4+40 ②	CLASS 3	0.50	TBD



ITEM NUMBER	INSERVICE DATE	MATERIALS				ITEM	COATING DESCRIPTION	CASING		INDUCTION BENDS & SEGMENTABLE ELBOWS							
		OUTSIDE DIAMETER	WALL THICKNESS	GRADE	MANUFACTURER			ITEM	DIAMETER	ITEM NUMBER	INSERVICE DATE	OUTSIDE DIAMETER	WALL THICKNESS	GRADE	DEGREE	RADIUS	COATING
1	TBD	26"	0.375"	X-65	-	-											
2		26"	0.281"	X-52	-	-											

NOTES: ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PERMANENT R.O.W. UNLESS OTHERWISE NOTED ON THE DRAWINGS.

PRELIMINARY - NOT FOR CONSTRUCTION

TP-1
LAT: 38.9972572
LONG: -77.5177251

TP-2
LAT: 38.9972825
LONG: -77.5171659

LEGEND:
 - - - - - EXISTING COLUMBIA PIPELINE
 - - - - - PERMANENT ROW
 - X - FENCE
 TL TEST LEAD (TYPE)
 [Cross-hatched] ADDITIONAL TEMPORARY WORKSPACE
 [Red circle with 'PAR-0001'] ACCESS ROAD NUMBER

SCALE: 1" = 20'

No.	REVISIONS	APPROVED BY	DATE	No.	REVISIONS	APPROVED BY	DATE	No.	REVISIONS	APPROVED BY	DATE	DWG. NO.	REFERENCE
									PRELIMINARY	MAS	4/27/16		

PROJECT NUMBER	22306	DRAWING NUMBER	TD-7062-1103	SHEET	1 OF 2	ISSUE	P
PROJECT TITLE	CLAIRBORNE PKWY RELOCATION 26" VB EAST PIPELINE - PLAN & PROFILE LOUDOUN COUNTY, VA						
DRAWN BY	RMM	DATE	11/17/15	DRAWING NUMBER	TD-7062-1103	SHEET	1 OF 2
PROJECT NUMBER	22306	DRAWING NUMBER	TD-7062-1103	SHEET	1 OF 2	ISSUE	P

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Ryan Mitchell

PRELIMINARY
DATE: 4/27/2016



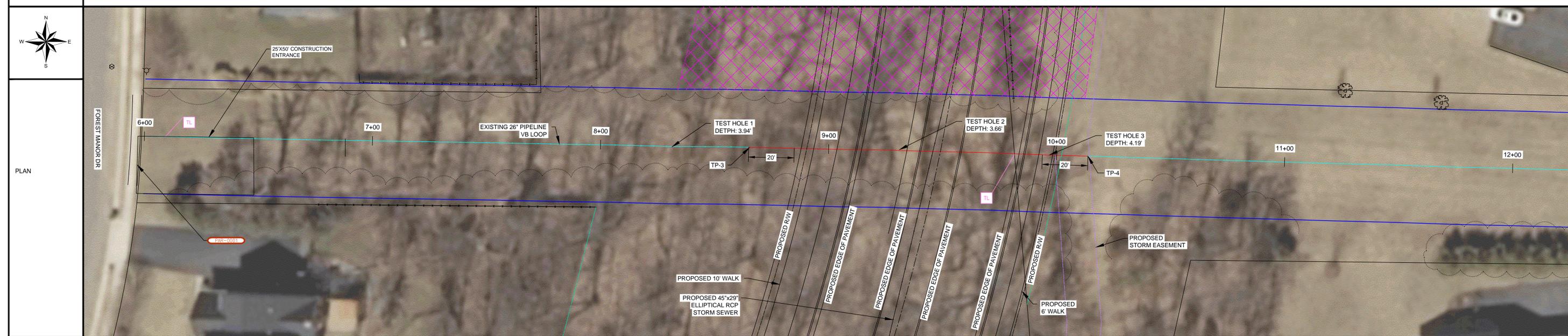
PROJECT DELIVERY
PROJECT ENGINEERING
5101 SAN FELICE, SUITE 2400, HOUSTON, TX 77056

ISSUE	DRIVING NUMBER	OWNERSHIP	FOREST MANOR, PHASE 2
d	TD-7062-1104		

STATIONING	STA. 8+45 PROPOSED R/W OF WALK STA. 8+65 PROPOSED EDGE OF WALK STA. 8+85 PROPOSED EDGE OF WALK STA. 9+05 PROPOSED EDGE OF PAVEMENT STA. 9+25 PROPOSED EDGE OF PAVEMENT STA. 9+45 PROPOSED EDGE OF PAVEMENT STA. 9+65 PROPOSED EDGE OF WALK STA. 9+85 PROPOSED EDGE OF WALK STA. 10+15 PROPOSED R/W
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ENVIRONMENTAL	SEE SITE SPECIFIC EMCP
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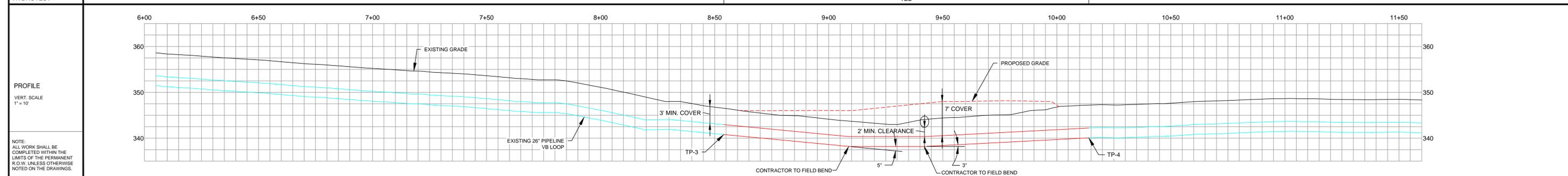
CONSTRUCTION NOTES	MINIMUM 36" OF COVER
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MATERIAL	②	8+54	①	10+14	②
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CLASS LOCATION	CLASS 3
----------------	---------

DESIGN FACTOR	0.50
HYDROTEST	TBD



ITEM NUMBER	INSERVICE DATE	MATERIALS			MANUFACTURER	ITEM	COATING		CASING		INDUCTION BENDS & SEGMENTABLE ELBOWS							
		OUTSIDE DIAMETER	WALL THICKNESS	GRADE			DESCRIPTION	ITEM	DIAMETER	ITEM NUMBER	INSERVICE DATE	OUTSIDE DIAMETER	WALL THICKNESS	GRADE	DEGREE	RADIUS	COATING	BEVEL
1	TBD	26"	0.375"	X-65	-	-												
2		26"	0.281"	X-52	-	-												

NOTES
 PRELIMINARY - NOT FOR CONSTRUCTION
 TP-3
 LAT: 38.963791
 LONG: -77.5177749
 TP-4
 LAT: 38.9963644
 LONG: -77.517516

No.	REVISIONS	APPROVED BY	DATE	No.	REVISIONS	APPROVED BY	DATE	No.	REVISIONS	APPROVED BY	DATE
△				△				△			
△				△				△	PRELIMINARY		

SCALE: 1" = 20'

PRELIMINARY
DATE: 4/27/2016

EnSiteUSA

Columbia Gas Transmission

PROJECT DELIVERY
PROJECT ENGINEERING
5101 SAN FELICE, SUITE 2400, HOUSTON, TX 77056

TITLE
CLAIBORNE PKWY RELOCATION
26" VB LOOP PIPELINE - PLAN & PROFILE
LOUDOUN COUNTY, VA

DRAWN BY:	RMM	DATE:	4/21/16	DRAWING NUMBER	TD-7062-1104	SHEET	2 OF 2	ISSUE	P
PROJECT NUMBER:	22307	WORK ORDER NUMBER:							

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4/28/2016 2:44 PM
Ryan Mitchell

PIPELINE RELOCATION AND REIMBURSEMENT AGREEMENT

THIS PIPELINE RELOCATION AND REIMBURSEMENT AGREEMENT (this "Agreement") is made this ____ day of _____, 2016, by and between Columbia Gas Transmission, LLC, a Delaware limited liability company authorized to do business in the Commonwealth of Virginia ("Company") and County of Loudoun, Virginia, a political subdivision of the Commonwealth of Virginia ("Owner", and together with Company, the "Parties").

WITNESSETH

WHEREAS, Owner has proposed the construction of the Claiborne Parkway ("Claiborne Parkway" or the "Project"), a four lane divided road in the vicinity of, across or above certain pipelines owned by Company in Loudoun County, Virginia; and

WHEREAS, Company owns and operates two (2) 26-inch natural gas pipelines designated as Line VB (the "VB Pipeline") and Line VB-Loop (the "VB-Loop Pipeline", and together with the VB Pipeline, the "Pipelines") and other facilities located in Loudoun County, Virginia; and

WHEREAS, Company has been granted valid right(s) of way and/or easement(s) to install, own and operate the Pipelines (collectively, the "Company Easements"); and

WHEREAS, certain portions of the Pipelines are located within the perimeter of Owner's proposed construction limits of the Project; and

WHEREAS, in order to enable Owner to construct the Claiborne Parkway and/or to conduct excavation activities in the vicinity thereof, Owner has requested that Company relocate approximately 180 feet of the VB-Loop Pipeline (the "VB-Loop Relocation Segment") and approximately 160 feet of the VB Pipeline (the "VB Relocation Segment", and together with the VB-Loop Relocation Segment, each, a "Relocation Segment") and together, the "Relocation Segments"); and

WHEREAS, Company has agreed, subject to the terms and conditions of this Agreement, to temporarily remove the Pipelines from service, to relocate the Relocation Segments during the period that the Pipelines are out of service and to perform the Work, as the term is defined in section 1 of this Agreement, to allow construction of Claiborne Parkway; and

WHEREAS, in connection with the Work (as hereinafter defined), Company engaged Ensite USA to perform field inspection(s), an engineering design, plan review, and site preparation services, and to prepare an engineering study related thereto, a copy of which is attached hereto as Exhibit A and incorporated herein by reference (the "Engineering Study"), in which the project for the relocation of the Relocation Segments is identified Columbia Pipeline Group Project #B18738

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. The work contemplated by this Agreement (the "Work") consists of (a) taking the Pipelines out of service during the removal and relocation of the Relocation Segments; (b) excavating and removing the Relocation Segments; (c) relocating the Relocation Segments to the location(s) indicated on the Engineering Study, which shall include but not be limited to work on the Relocation Segments to add and/or exchange necessary new material, actual relocation, filling of necessary spaces below

and above the Relocation Segments resulting from removal and relocation, and provision of adequate height of fill compacted; (d) performing all engineering and other work necessary for the removal and relocation of the Relocation Segments, including but not limited to removal of spoils or unused material from the site; and (e) obtaining all necessary land rights and governmental permits and approvals necessary for the removal and relocation of the Relocation Segments. Performance of the Work by Company shall be in accordance with paragraph 13 below.

2. The Parties agree that \$1,700,970.95 is a fair estimate of the cost of the Work (the "Initial Cost Estimate"), as itemized on Exhibit B attached hereto and incorporated herein by reference, which estimate does not include the \$75,000 previously paid to Company by Owner for the replacement pipe required by the Project. The Parties agree that the Initial Cost Estimate is only a good faith estimate of the cost of the Work, and that actual cost could be higher or lower, as the case may be, than the Initial Cost Estimate. Owner agrees to pay one hundred percent (100%) of all actual costs and expenses incurred by Company in connection with the Work (collectively, the "Cost" or "Costs", as applicable), even if such actual Costs exceed the Initial Cost Estimate. Owner agrees that it shall reimburse Company for all Costs in accordance with paragraph 3 of this Agreement.
3. Contemporaneous with the execution of this Agreement and in advance of any commencement of the Work by Company, Owner shall issue a purchase order for the Work ("Purchase Order") based on the \$1,700,970.95 Initial Cost Estimate and shall pay Company, in good and available funds, the amount of \$850,485.48, which represents one-half of the Initial Cost Estimate. Within ten (10) business days of completion (which shall mean the ability of the completed Relocation Segment to flow gas) of one of the Relocation Segments, Company shall provide to Owner an invoice manually generated by Company setting forth the Costs of the completed Relocation Segment ("Company Invoice"). Company shall continue working on the relocation of the second Relocation Segment that has yet to be completed. Within twenty (20) business days of receiving the Company Invoice for the Cost of the completed Relocation Segment, Owner shall pay Company, in good and available funds, the amount of \$850,485.48, which represents the other half of the Initial Cost Estimate. Within ten (10) business days of completion (which shall mean the ability of the completed Relocation Segment to flow gas) of the second Relocation Segment, Company shall provide to Owner a Company Invoice for the Cost of the second completed Relocation Segment. Within sixty (60) days of completion of the second Relocation Segment, Company shall provide Owner with copies of documentation supporting the said Costs of the Relocation Segments, including paid invoices, executed bills of sale, executed sale orders, affidavit of Company's actual overhead attributable to performing the Work, or affidavits of stored materials (the "Supporting Documentation"), all to the extent in Company's possession at such time.
4. Should Company anticipate that the Costs will exceed the Initial Cost Estimate, Company will notify Owner of the condition or other cause that originate the additional cost no later than seven (7) days following commencement of such condition or other cause. If the additional cost results from an increase in price by a provider other than the Company, the Company may provide to the Owner the additional invoice no later than thirty (30) days of receiving it from provider. Within twenty (20) days of the notice of additional cost to the Owner, Company will provide Owner with approved bills of sale, approved change orders, approved work orders, affidavit of stored materials or a new written estimate containing a description of, the justification for the additional Costs of the Work, and an itemized description of the additional costs (the "Additional Cost Estimate", and together with the Initial Cost Estimate, the "Cost Estimates"), The Additional Cost Estimate may include the actual overhead of the Company that was not included in the Initial Cost Estimate so far as it is attributable to performing the Work, but shall not include any profit of the Company. Owner will have twenty (20) business days after receiving the Additional Cost Estimate to submit the Additional Cost Estimate for approval or rejection, which review shall be done by Owner using

commercially reasonable discretion. Within twenty (20) business days of receiving the Company Invoice for the Cost of the by then completed Relocation Segment(s), Owner shall pay Company, in good and available funds, the amount of the approved Additional Cost Estimate for each completed Relocation Segment(s) (which shall mean the ability of the completed Relocation Segment to flow gas). Within sixty (60) days of the completion of both Relocation Segments, Company shall provide Owner with copies of the Supporting Documentation.

5. In the event that Owner disputes any Cost (“Disputed Cost”), Owner shall provide written notification to Company specifying in reasonable detail any objection and the basis therefor. Company and Owner shall work in good faith to resolve any such disputes. If Company and Owner are unable to resolve any such dispute within thirty (30) days of the receipt by Company of the foregoing written notice, then Company shall submit the unresolved dispute to the County Administrator, or his designee. The County Administrator shall render a decision within sixty (60) days of receipt of the appeal. Each party shall bear its own cost and expenses resulting from any litigation, including attorneys’ fees. Notwithstanding the finding of the County Administrator, the parties retain all rights and remedies at law and in equity.
6. Once any open cut has occurred in connection with the Work, the Company shall not interrupt or suspend the Work solely because a Disputed Cost or a rejection of an Additional Cost Estimate have arisen if such interruption or suspension would create a public safety issue.
7. Company may utilize subcontractors to perform all or any part of the Work. Company shall either (i) pay the subcontractor for the proportionate share of the total payment received attributable to the Work performed by the subcontractor, or (ii) notify Owner and subcontractor, in writing, of Company’s intention to withhold all or a part of the subcontractor’s payment and the reason for non-payment. With regard to this Agreement, Company shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements as set forth above with respect to each lower-tier subcontractor. Company’s obligation to pay an interest charge to a subcontractor pursuant to this provision may not be construed to be an obligation of Owner. The Company shall keep the land above and under the Relocation Segments free from any liens arising from the Work performed, materials furnished or obligations incurred by the Company. All persons either contracting with the Company or furnishing or rendering labor and materials to the Company shall be notified in writing by the Company that they may look only to the Company for payment of any labor or materials. If any lien is filed against the land above and under the Relocation Segments as a result of any acts or omissions of the Company, the Company shall discharge it by paying the creditor lien the amount of the lien within fifteen (15) days after the Company learns that the lien has been filed.
8. In the event that Owner cancels or indefinitely postpones the Work, then Owner shall notify Company in writing and Company, in its commercially reasonable discretion, shall advise Owner in writing whether the Work needs to be completed or, in the alternative, the Work that had been completed shall be restored to the original condition. In either case, Owner agrees that Company shall be reimbursed for all actual Costs expended by Company or for which Company remains obligated at the time of the notice of cancellation or indefinite postponement, plus any incremental Costs incurred by Company resulting from the completion of the Work or the restoration of the Work that had been completed, if reasonably needed.
9. If Company determines that new rights of way or easements on Owner’s property are required to perform the Work, Owner agrees to grant to Company right of way agreements, free and clear of all liens and encumbrances. If the necessary rights of way or easements free and clear of all liens and encumbrances cannot be acquired, then Company may cancel the Work and all funds paid to

Company shall be reimbursed to Owner less any actual Costs expended by Company. Within thirty (30) days of cancellation, the Company shall present the Supporting Documentation of the Costs it already expended to the Owner and refund the funds paid to Company, less actual Costs.

10. Company agrees to complete relocation of the Relocation Segments no later than six (6) months after the full execution of this Agreement; provided, however, in the event that such six (6) month timeframe encompasses the months of October through February, then the relocation of the Relocation Segments shall be delayed as required by weather. If the necessary permits or regulatory clearances cannot be obtained, Company may cancel the Work, and all funds paid to Company shall be reimbursed to Owner less any actual Costs expended by Company. Within thirty (30) days of cancellation, the Company shall present the Supporting Documentation of the Costs it already expended to the Owner and refund the funds paid to Company, less actual Costs.
11. Company shall notify Owner as soon as reasonably possible, but not later than seven (7) days upon Company's knowledge and/or determination of the commencement of a condition or cause for delay, that the deadline stated in paragraph 10 above cannot be met. Company's notice should include the justification for the delay. Company shall not be liable to Owner for such delay, unless Company's own actions are the cause of the delay.
12. Owner agrees that, prior to the relocation of the Relocation Segments, no permanent and/or temporary structures shall be erected over or within twenty-five (25) feet of either side of the permitted work space as shown on Exhibit A.
13. Within five (5) days from completion of the Work, Company will provide Owner with a notice that Company has substantially completed the Work, which shall mean the ability of the Relocation Segments to flow gas, and will authorize the Owner to initiate construction of Claiborne Parkway. Company and Owner will work together with respect to coordinating the commencement of Owner's construction of the Claiborne Parkway. The Parties shall observe the requirements of Company's current *Minimum Guidelines for Construction Activities in the Vicinity of Natural Gas Pipelines*, the current version of which is attached hereto as Exhibit C and incorporated herein by reference.
14. Within one hundred eighty (180) days from completion of the Work, the Company shall provide to Owner all final paid invoices and any Supporting Documentation not previously delivered for the Costs that were previously paid by Owner ("Final Amount"). In the event that the Company does not present Supporting Documentation or final paid invoices to support the funds previously anticipated by the Owner, then Company shall reimburse to Owner the difference between the Original Cost Estimate plus any approved Additional Cost Estimate paid by the Owner to the Company and the Final Amount, within thirty (30) days after the one hundred eighty (180) from completion of the Work.
15. To the extent of its Comprehensive Liability Insurance, Owner will be responsible for any damages to the Pipelines and injury to persons caused by Owner during construction above the Pipelines by Owner, and/or its agents, designees, successors, and assigns. To this effect the Owner shall (i) obtain and maintain comprehensive liability insurance against claims for bodily injury, death or property damage related to any and all work on the Project in a combined limit of at least \$1,500,000, (ii) name Company as an additional insured under such insurance policy, (iii) not cancel or rescind any such insurance policy without thirty (30) days' prior written notice to the Company, and (iv) deliver to Company a certificate of its insurance that provides that such insurance policy may not be cancelled or rescinded without thirty (30) days' prior written notice to the Company. Prior to its expiration, Owner shall replace any expiring policies of insurance covered

by this paragraph 15 and shall provide replacement certificates of insurance to Company related thereto. The Owner shall require its contractors for the execution of the Project to carry workers' compensation insurance and adequate liability insurance in conformity with procurement practice of the Owner, including contractors to carry builder's risk coverage during construction of the Project, naming the Owner and the Company as additional insured.

16. The Parties represent and warrant that each has all corporate and other authority to enter into this Agreement and that the individual executing this Agreement on each Party's behalf is the duly authorized representative of Owner or Company, as applicable, with full authority to bind.
17. This writing contains the entire agreement of the Parties, and all agreements entered into prior to or contemporaneously with the execution of this Agreement are excluded, whether oral or written. This Agreement cannot be amended without the written consent of the Parties.
18. All notices, demands and other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to be made or given when personally delivered or three (3) business days after being mailed by registered or certified United States mail, postage prepaid, return receipt requested, or one (1) business day after being sent by Federal Express or other recognized courier guaranteeing overnight delivery, postage prepaid, or on the day sent by electronic mail to the Parties at the following respective addresses, or at such other address as a respective Party may designate from time to time pursuant to a notice duly given hereunder to the other Party:

If to Company:

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, WV 25314
Attn: Scott Johns and Jerry Fishel
sjohns@cpg.com
jfishel@cpg.com

With a required copy to:

Columbia Pipeline Group
300 Woodcliff Drive
Canonsburg, PA 15317
Attn: Lisa Pampena, Esq.
(724) 743-6530
lpampena@cpg.com

If to Owner:

County of Loudoun
Division of Procurement
1 Harrison Street, SE
Fourth floor
P.O. Box 7000
Leesburg, VA 20177-7000

Attention: Cheryl Middleton
Purchasing Agent
703-737-8998
Cheryl.Middleton@loudoun.gov

With additional copy to

County of Loudoun, Virginia
Loudoun County Department of Transportation
And Capital Infrastructure
801 Sycolin Rd.
SE. Suite 310
Leesburg, VA 20175
Attention: Gary Pozzouli, *Construction Project Manager*
571-289-0754
Gary.pozzouli@loudoun.gov

19. The terms of this Agreement shall be kept confidential by the Parties hereto, except to the extent that any information must be disclosed to a third party to comply with regulatory requirements or to comply with the valid order or subpoena of any court, legislative or executive body or regulatory agency having valid jurisdiction, including the Virginia Freedom of Information Act §§ 2.2-3700 *et seq.*
20. This Agreement may be executed in multiple counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Delivery of the executed signature pages by facsimile transaction will constitute effective and binding execution and delivery of this Agreement.
21. This Agreement may not be assigned by either Party without the prior written consent of the other Party, which may be withheld in Owner's or Company's sole discretion, as applicable.

This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the laws of the Commonwealth of Virginia, without regard to any choice of law or conflicts of law rules that would direct the laws of another jurisdiction. The Parties agree to submit to the exclusive jurisdiction of, and venue in, state and federal courts of competent jurisdiction within the Commonwealth of Virginia in any dispute arising out of or related to this agreement.

22. Additional Terms and Conditions:

22.1. Notice of Required Disability Legislation Compliance: Owner is required to comply with state and federal disability legislation. The Rehabilitation Act of 1973 Section 504, The Americans with Disabilities Act (ADA) for 1990 Title II and The Virginians with Disabilities Act of 1990. Specifically, Loudoun County may not, through its contractual and/or financial arrangements, directly or indirectly avoid compliance with Title II of the Americans with Disabilities Act, Public Law 101-336, which prohibits discrimination on the basis of disability by public entities. Subtitle A protects qualified individuals with disability from discrimination on the basis of disability in the services, programs, or activities of all State and local governments. It extends the prohibition of discrimination in federally assisted programs

established by the Rehabilitation Act of 1973 Section 504 to all activities of State and local governments, including those that do not receive Federal financial assistance, and incorporates specific prohibitions of discrimination on the basis of disability in Titles I, III and V of the Americans with Disabilities Act. The Virginias with Disabilities Act of 1990 follows the Rehabilitation Act of 1973 Section 504.

- 22.2. Ethics in Public Contracting: The provisions contained in §§ 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the 1950 Code of Virginia, as amended, shall be applicable to all contracts solicited or entered into by the Owner. A copy of these provisions may be obtained from Owner upon request. The above-stated provisions supplement, but do not supersede, other provisions of law including, but not limited to, the Virginia State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§ 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the Virginia State and Local Government Conflict of Interests Act.
- 22.3. Immigration Reform and Control Act of 1986: By entering this Agreement, Company certifies that it does not and will not during the performance of this Agreement violate the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.
- 22.4. Faith Based Organizations: Owner does not discriminate against faith-based organizations.
- 22.5. Payment of Taxes: To the extent that Company is located in or owns property in Loudoun County, Company shall assure that all real and personal property taxes, due to date, are paid. Owner will verify payment of all real and personal property taxes by Company prior to the award of this Agreement or renewal thereof.
- 22.6. Business, Professional and Occupational License Requirement: By entering this Agreement, Company agrees to conform to local business license tax liabilities where and to the extent applicable.
- 22.7. Exemption from Taxes: Pursuant to Va. Code § 58.1-609.1, Owner is exempt from Virginia State Sales or Use Taxes and Federal Excise Tax. Therefore Company shall not charge Owner for Virginia State Sales or Use Taxes or Federal Excise Tax on the finished goods, products or services provided under this Agreement. To the extent required under applicable law, Company shall be responsible for the payment of any sales, use, or excise tax it incurs in providing the goods or services required by this Agreement; provided, however, that Owner shall provide reimbursement therefor in accordance with paragraphs 2 through 6 hereof. Nothing in this section shall prohibit Company from including its own sales tax expense in connection with this Agreement in its contract price.
- 22.8. Authority to Transact Business in Virginia: Company shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50 of the Code of Virginia, to be revoked or cancelled at any time during the term of the Agreement. Owner may void this Agreement if Company fails to remain in compliance with the provisions of this section.
- 22.9. Employment Discrimination by Company Prohibited:

- A. During the performance of this Agreement, Company agrees as follows:
1. Company will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bone fide occupational qualification reasonably necessary to the normal operation of the Company. Company agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 2. The Company, in all solicitations or advertisements for employees placed by or on behalf of the Company, shall state that such Company is an equal opportunity employer.
 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient to meet this requirement.
- B. Company will include the provisions of the foregoing subparagraphs 1, 2 and 3 in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

22.10. Drug-free Workplace:

During the performance of this Agreement, Company agrees to (i) provide a drug-free workplace for the Company's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Company's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of Company that Company maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Agreement.

23.11 In the event that a court of competent jurisdiction rules or an administrative decision of a competent federal agency determines (each on a non-appealable basis), that the Company was required to perform the Work, or a portion of it, in order to be in compliance with applicable federal statutes or federal government regulations, then Company shall reimburse Owner for all actual Costs paid by Owner attributable to such Work, or portion of it.

Signature Page to Follow

IN WITNESS WHEREOF, the parties hereto, intending to be legally bound hereby, have executed this Agreement as of the date here above written.

County of Loudoun, Virginia

By: _____

Name:

Title: Contracting Officer

Date: _____

Columbia Gas Transmission, LLC

By: _____

Name:

Title:

Date: _____

**RESPONSES TO LOUDOUN COUNTY, VIRGINIA MEMORANDUM
MEMORANDUM DATED MAY 17, 2016**

- I. Based on the review of "Exhibit A Drawing Package", please address the following comments: **CPG RESPONSES IN RED**
1. The profile on drawing TD-7062-1103 shows the gas pipe slightly higher than it should be upon coordination with the County's approved road construction plans (CPAP). Based on 2' of clear to the bottom of the 30" storm sewer, the top of pipe should be at an elevation no higher than 349.41. (Storm invert is 351.70 and pipe thickness is 3.5", so bottom of storm is 351.41.) The County recommends adjusting the profile to ensure clearance is met. The CPG Scope of Work and Special Conditions document requires the CPG Pipeline Contractor to provide the 2' clear, but that spot on the profile should be as close as possible to the desired elevation.
 - a. **Acknowledged, this will be confirmed and represented on the revised set of drawings.**
 2. Same as above on TD-7062-1104. The top of the gas pipe should be no higher than 339.93. (Invert of storm is 342.30 and pipe thickness is 4.5" so bottom of storm is 341.93). The County recommends adjusting the profile to ensure the clearance is met.
 - a. **Acknowledged, this will be confirmed and represented on the revised set of drawings.**
 3. Please clarify the intent of the area shaded in "purple" and the scope of work that Columbia Pipeline Group or the CPG Pipeline Contractor will perform relative to clearing and grubbing.
 - a. **This area will be used as a staging area and a laydown area as well as access between the two lines. No clearing or grubbing will be completed by Columbia Pipeline Group or Columbia Pipeline Group Contractor(s) outside of Columbia Pipeline Group existing 50-ft right-of-way.**
 4. The draft Reimbursement Agreement requires the County to obtain any right-of-way or easements needed to do their work (item #9 in the agreement). The Drawing Package shows the extents of temporary workspace needed, which coincides with the temporary easements shown on the County's roadway CPAP, and which corresponds with easements the County has already obtained. Are there any new easements required by Columbia Pipeline Group?
 - a. **Temporary access will be acquired from Val Aosta drive to Line VB.**
- II. Based on the review of "Exhibit B Estimate Summary Report", please provide a breakdown and provide explanation of the following items: **CPG RESPONSES IN RED**
- 1 thru 4 cost can be identified in greater detail after project is funded and or after reconciliation.**
1. T Line 1. Please explain Environmental costs. Please specifically address the \$40,000 already identified in the "straddle" agreement and provide explanation of the costs noted.
 2. Line 2. What legal/government affairs and outreach has been done? Please provide detailed explanation.
 3. Line 3. Explain right of way costs? Specifically, please confirm locations of ROW costs noted.
 4. Line 4. Engineering - Please provide consultant fees as breakdown. Please provide explanation of additional engineering beyond the Preliminary Engineering Report package received by the County.
 5. Line 5. Provide additional breakdown of materials. Please specifically address the \$75,000 already identified by CPG and paid for by the County. **Once we go through reconciliation all charges will be identified. Remaining funds will be refunded.**
- 6&7 AGSEO (Administrative, General, Supervision and Engineering Overheads)**

The rate is determined by dividing the estimated associated labor and expenses by the expected construction program dollars for the year. The allocation rate is applied to construction work orders based on actual monthly construction expenditures charged to those work orders. All eligible construction projects utilize the same rate for allocation purposes.

Below in the section on AFUDC from the FERC CFR Gas Plant Instructions #3 (Components of Construction Cost).

(17) "Allowance for funds used during construction" includes the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used, not to exceed without prior approval of the Commission allowances computed in accordance with the formula prescribed in paragraph (a) below, except when such other funds are used for exploration and development or leases acquired after October 7, 1969, no allowance on such other funds shall be included in these accounts. No allowance for funds used during construction charges shall be included in these accounts for expenditure.

The formula and elements for the computation of the allowance for funds used during construction shall be:

$$A_i = s \left(\frac{S}{W} \right) + d \left(\frac{D}{D+P+C} \right) \left(1 - \frac{S}{W} \right)$$

$$A_e = \left[1 - \frac{S}{W} \right] \left[p \left(\frac{P}{D+P+C} \right) + c \left(\frac{C}{D+P+C} \right) \right]$$

[View or download PDF](#)

A_i = Gross allowance for borrowed funds used during construction rate.

A_e = Allowance for other funds used during construction rate.

S = Average short-term debt.

s = Short-term debt interest rate.

D = Long-term debt.

d = Long-term debt interest rate.

P = Preferred stock.

p = Preferred stock cost rate.

C = Common equity.

c = Common equity cost rate.

W = Average balance in construction work in progress less asset retirement costs (See General Instruction 24)

(b) The rates shall be determined annually. The balances for long-term debt, preferred stock and common equity.

III. Based on the review of "Exhibit C Scope of Work and Special Conditions – Claiborne Parkway Line VB" and "Exhibit D Scope of Work and Special Conditions – Claiborne Parkway VB Loop", please address the following comments: **CPG RESPONSES IN RED**

1. Please confirm that the term "Contractor" used throughout the documents refer to the CPG Pipeline Contractor and replace, as required, to clarify. The term "Pipeline Contractor" is used in some instances but not all.
 - a. **The "Contractor" term will be clarified appropriately.**
2. Please clarify if any additional ROW or easements are required by CPG for performance of their work. The Scope of Work indicates that the replacement is "within the proposed limits of the highway right-of way (ROW), however the cost estimate and draft Agreement note ROW/land acquisition requirements.
 - a. **Temporary access will be acquired from Val Aosta drive to Line VB. No new permanent ROW will be required.**
3. Please confirm that the CPG Pipeline Contractor will perform the work noted by the following statement in the Scope of Work: *"All disturbed areas outside of the highway ROW will be cleaned up, seeded, fertilized, and mulched. Contactor shall stabilize the disturbed work area per the EM&CP."*

-
- a. **The impacted area due to construction will be required to be cleaned up and stabilized per the site specific EM&CP (Environmental Management & Construction Plan) by the CPG Contractor(s).**
 4. As noted in Comment 3 on the Drawings above, please clarify the scope of work that CPG is performing relative to clearing and grubbing. The Scope of Work indicates: *"It is assumed that Loudoun County contractors will remove existing trees and brush within the LOD."* Additionally, the Special Conditions, Item 2 in part notes: *"The pipeline easement and the extra temporary work space will be staked and cleared by the Pipeline Contractor, subject to CPG approval."*
 - a. **The CPG Contractor(s) will be responsible for any clearing and grubbing required within the existing 50-ft wide Columbia Pipeline Group Right-Of-Way. The required workspace between Columbia Pipeline Group Right-Of-Way was assumed to be cleared by Loudoun County contractors.**
- IV.** Based on the review of "Exhibit E 22306 – Virginia Relocation – Claiborne Parkway Extension – VB/VB Loop Schedule" received May 14, 2016, please address the following comments: **CPG RESPONSES IN RED**
- The schedule we provided to you was a courtesy our schedule is subject to change.**
1. Please explain the connection of Schedule Item CON2210 Execute SOW – Mooreview Parkway – VB/VB Loop (Tentative) from July 21, 2016 – August 31, 2016 as it relates to the performance of the work for Claiborne Parkway. If that task is the construction of the relocation of the pipelines at Mooreview Parkway and Schedule Item CON2200 Execute SOW – Claiborne Parkway Extension is the construction of the relocation of the pipelines at Claiborne Parkway, it appears that there is approximately a one month gap between the completion of Mooreview and the start of Claiborne. Please confirm.
 2. Please clarify the last Assumption noted as follows: *"Assumes gas market will allow outage during these proposed time frames."* Is the proposed time frame for the Schedule Item CON2200 within the typically allowable time frame? Will completion be November 8, 2016 be possible?
- V.** In general, has Columbia Pipeline Group explored any other potential alternatives (i.e. increase fill/cover, adding split casing, or concrete protective slab)? Please provide explanation as to why not these are not a viable alternatives.
- a. **No other alternatives are viable based upon the circumstances and conditions of this project.**