



**CH2M**  
1100 Wayne Ave  
Suite 670  
Silver Springs, MD 20910  
**Tel 301.495.8840**  
**Fax 301.495.8823**

July 21, 2015

Mr. Tod Ericson  
State Forest Conservation Program  
2 South Bond Street, Suite 101  
Bel Air, MD 21014  
410-836-4568

**Subject: Columbia Gas Transmission, LLC  
Forest Conservation Plan  
Line MB Extension Project, FCA File # C13-15  
Baltimore and Harford Counties, Maryland**

Dear Mr. Ericson:

In a letter dated February 18, 2014, CH2M HILL (CH2M) requested MDNR's preliminary approval on four Forest Conservation Plans (FCPs) for Columbia Gas Transmission, LLC's (Columbia's) Line MB Extension Project (Project). The four FCPs included varying workspace configurations based on two potential stream crossing methods at properties adjacent to Maryland-owned properties. The two stream crossing methods are known as "Horizontal Directional Drill" (HDD) and "Open Cut", and the four configurations were named according to the various proposed methods and locations. The four plan sets submitted to you on February 18, 2014, were as follows:

- HDD at Veteran's Cemetery/HDD at Torrey C. Brown Trail (HDD/HDD)
- Open Cut at Veteran's Cemetery/HDD at Torrey C. Brown Trail (Open Cut/HDD)
- HDD at Veteran's Cemetery/Open Cut at Torrey C. Brown Trail (HDD/Open Cut)
- Open Cut at Veteran's Cemetery/Open Cut at Torrey C. Brown Trail (Open Cut/Open Cut)

CH2M previously coordinated with Maryland Department of Natural Resources (MDNR) to request approval on the Open Cut/HDD FCP and in a letter dated April 24, 2014, MDNR approved the Open Cut/HDD FCP. Additionally, MDNR granted a specimen tree removal variance for the Open Cut/HDD FCP in a letter dated April 11, 2014.

CH2M is now seeking MDNR's review and approval for the Open Cut/Open Cut FCP (attached). This Open Cut/Open Cut FCP is unchanged from the February 2014 submittal. Note that the workspace depicted within the Maryland-owned areas on the FCP is accurate to date, but the workspace east and west of the Maryland-owned areas may not be accurate, and review and approval is not requested for these areas.

Project construction has not occurred on any Maryland-owned properties to date.

The previously approved Open Cut/HDD FCP required 0.57 acre of forest removal. The Open Cut/Open Cut FCP, for which CH2M is requesting your approval at this time, requires 0.59 acre of forest removal. Columbia purchased 4.0 acres of forest retention credit from the Browns Road Forest Retention Bank for the Project on April 23, 2014.

The one specimen tree that was approved for removal with MDNR's April 11, 2014, letter is on FCP-03 of the Open Cut/HDD FCP. This specimen tree is on the same sheet (FCP-03) of the Open Cut/Open Cut FCP. There are no additional specimen trees associated with the Open Cut/Open Cut FCP; therefore, there are no

changes in proposed specimen tree removals between what was approved in 2014 and what is being requested for approval at this time.

Should you have any questions about the Project or require additional information, please contact me via phone at (678) 530-4418 or via email at [julia.ripley@ch2m.com](mailto:julia.ripley@ch2m.com). Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink that reads "Julia Ripley". The signature is written in a cursive, flowing style.

Julia Ripley  
Environmental Scientist  
CH2M HILL

Attachments: Two copies of the Open Cut/Open Cut FCP for State-Owned Lands

Cc: Jennifer Cannon, Columbia  
Marian Honeczy, MDNR  
Pamela Bush, MDNR

# FOREST CONSERVATION PLAN ( MARYLAND STATE LANDS ) COLUMBIA GAS TRANSMISSION, LLC LINE MB PIPELINE EXTENSION PROJECT OPEN CUT ALTERNATIVE

## GENERAL NOTES

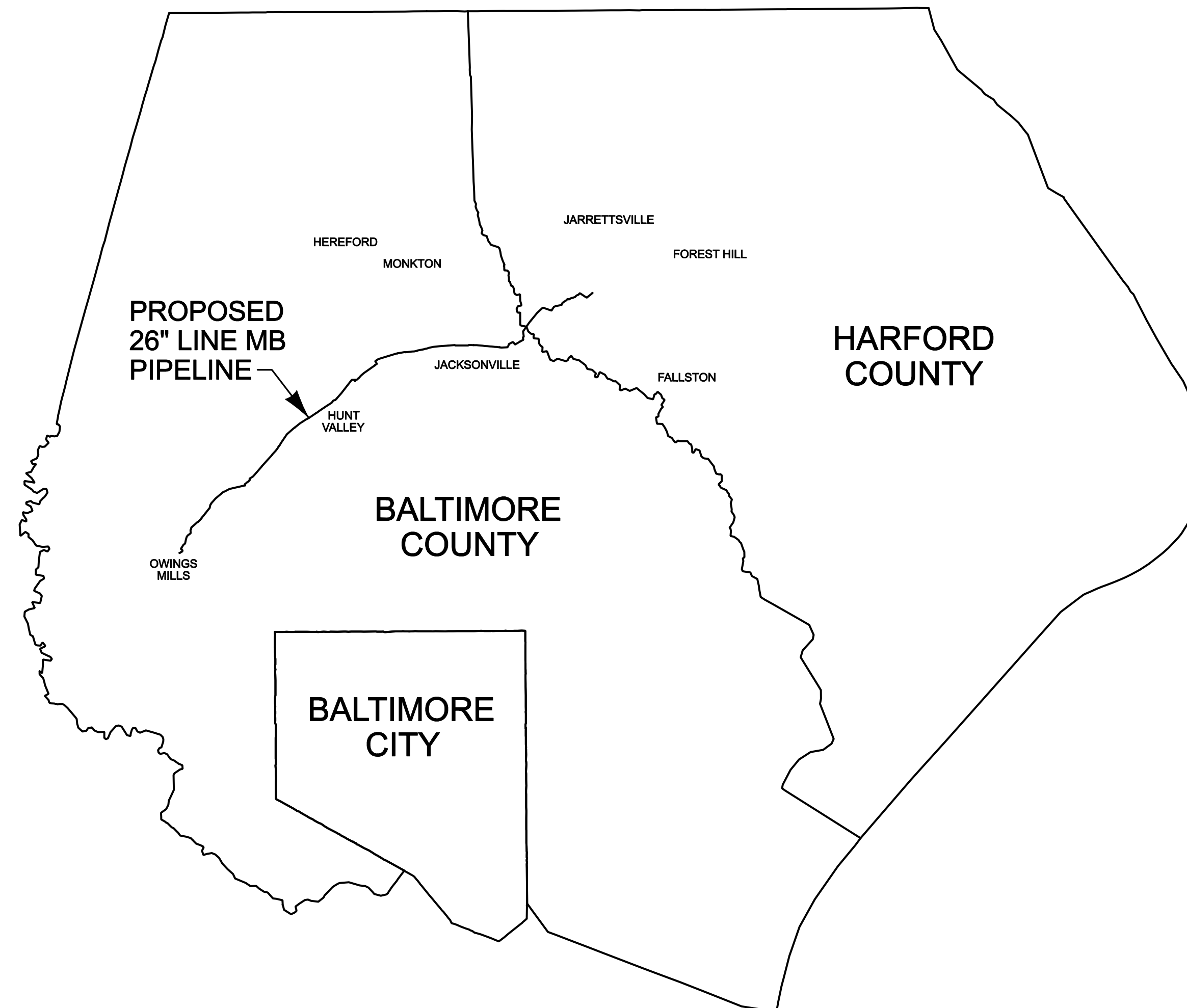
- THIS FCP ILLUSTRATES THE OPEN CUT ALTERNATIVE FOR THE UNNAMED TRIBUTARY TO THE NORTH BRANCH OF JONES FALLS NEAR THE VETERANS CEMETERY AND THE GUNPOWDER RIVER AT THE TORREY C. BROWN TRAIL.
- THIS FCP ONLY ADDRESSES THE PORTIONS OF THE LINE MB PIPELINE EXTENSION PROJECT THAT CROSS STATE OWNED LANDS.
- TOPOGRAPHICAL SURVEY DATA WAS PROVIDED BY BALTIMORE AND HARFORD COUNTIES IN 2012. (BALTIMORE COUNTY TOPOGRAPHIC CONTOUR DATA FROM 2005) (HARFORD COUNTY TOPOGRAPHIC CONTOUR DATA FROM 2008)
- THE PROJECT CROSSES A NUMBER OF LAND USES INCLUDING INSTITUTIONAL, PARKLAND, AND UNDEVELOPED FOREST.
- CRITICAL HABITATS CONSIST OF NON-TIDAL WETLANDS, THEIR BUFFERS, STEEP SLOPES, AND WATERS OF THE U.S.
- NO RARE, THREATENED, OR ENDANGERED SPECIES WERE ENCOUNTERED DURING THE FIELD INVESTIGATIONS. CORRESPONDENCE WITH MARYLAND DEPARTMENT OF NATURAL RESOURCES INDICATES THAT BOG TURTLE HABITAT EXISTS IN SOME WATERSHEDS CROSSED BY THE PROJECT CORRIDOR. BOG TURTLE SURVEYS ARE COMPLETE, AND NO BOG TURTLE POPULATIONS WERE IDENTIFIED. COLUMBIA GAS TRANSMISSION, LLC RECEIVED BOG TURTLE CONCURRENCE FROM MDNR ON MAY 28, 2013.
- CORRESPONDENCE FROM MARYLAND HISTORICAL TRUST ON JULY 9, 2012 INDICATED THAT THE WORK WITHIN STATE LANDS WILL NOT IMPACT SITES ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER.
- BLAZE ORANGE FENCE/TREE PROTECTION FENCE (SEE DETAIL, SHEET GN-1) SHALL BE USED IN FORESTED AREAS ALONG THE LIMIT OF DISTURBANCE WHERE SILT FENCE OR SUPER SILT FENCE IS NOT PROPOSED.

## WATER RESOURCES NOTES

- WATERS OF THE UNITED STATES (WUS) AND WETLANDS WERE DELINEATED BY CH2M HILL FROM DECEMBER 2011 THROUGH FEBRUARY 2014 WITHIN A 200 - 300 FT SURVEY CORRIDOR. THE WETLAND DELINEATION SURVEY CORRIDOR VARIES FROM THE FOREST STAND CORRIDOR IN CERTAIN AREAS. SEE WETLAND AND WATERBODY DELINEATION REPORT SUBMITTED PREVIOUSLY UNDER SEPARATE COVER FOR MORE INFORMATION.
- ONE NONTIDAL WETLAND, THREE WUS, AND ONE EPHEMERAL CHANNEL WERE LOCATED WITHIN THE CONSTRUCTION WORK AREA ON STATE LANDS.
- TO RESTABILIZE STREAMBANKS AFTER CONSTRUCTION, COLUMBIA GAS IS PROPOSING LIVE STAKE PLANTING AS ILLUSTRATED ON THESE PLANS.

## FOREST RESOURCES NOTES

- THE STUDY AREA BOUNDARY IS A 250-FOOT TO 300-FOOT WIDE CORRIDOR.
- FOREST STANDS EXTEND BEYOND THE STUDY AREA BOUNDARY.
- FIVE (5) FOREST STANDS WERE IDENTIFIED DURING FIELD INVESTIGATIONS ON STATE LANDS.
- SPECIMEN TREES HAVE BEEN MARKED WITH AN "X" FOR REMOVAL WHERE MORE THAN 30% OF THE SPECIMEN TREE'S CRITICAL ROOT ZONE IS IMPACTED AND THE TREE IS LOCATED WITHIN THE LIMITS OF DISTURBANCE.
- FOREST CLEARING AND SPECIMEN TREE REMOVAL WITHIN PUBLIC ROAD RIGHTS-OF-WAY ARE ACCOUNTED FOR IN THE ROADSIDE TREE PERMIT, SUBMITTED TO MARYLAND DEPARTMENT OF NATURAL RESOURCES ON JANUARY 16, 2013, RENEWED ON NOVEMBER 8, 2013, AND ARE NOT INCLUDED IN THIS FOREST CONSERVATION PLAN.
- MITIGATION WILL BE CONDUCTED OFF-SITE. THERE WILL BE NO ON-SITE REPLANTINGS.



## LEGEND

----- 600 -----	EX. CONTOUR
---SD---SD---	EX. STORM DRAIN
---W---	EX. WATER LINE
---FO---	EX. FIBER OPTIC LINE
---//---	EX. FOREIGN PIPELINE
---OH---	EX. OVERHEAD ELECTRIC
---E---	EX. UNDERGROUND ELECTRIC
---T---	EX. UNDERGROUND TELEPHONE
---MA---	EX. LINE MA GAS LINE
---X---X---	EX. FENCE
-----	EX. STREAM
-----	PUBLIC ROAD RIGHT-OF-WAY
-----	PROPERTY LINE
-----	EX. EASEMENT
---MB---MB---	PROPOSED LINE MB NATURAL GAS PIPELINE
-----	LINE MB PERMANENT RIGHT-OF-WAY
-----	LINE MB TEMPORARY WORKSPACE
-----	LINE MB ADDITIONAL TEMPORARY WORKSPACE
-----	EXISTING LINE MA RIGHT-OF-WAY
.....	PROPOSED ACCESS ROAD CENTERLINE
---X---X---	PROPOSED CONTRACTOR STAGING AREA
-----	100 YEAR FLOODPLAIN
-----	SOILS DELINEATION
-----	SLOPES 15-25%
-----	SLOPES 25% OR GREATER
-----	FIELD DELINEATED WATERS OF THE U.S.
-----	NON-TIDAL WETLAND
-----	25' MDE REGULATED WETLAND BUFFER
-----	50' STREAM BUFFER
-----	FOREST STAND BOUNDARY LINE SURVEYED BY KCI
-----	EX. VEGETATION LINE X
-----	EX. TREE
-----	FOREST DATA COLLECTION POINT
-----	SPECIMEN TREE
-----	TREE TO BE REMOVED
-----	FOREST STAND BREAK
-----	STUDY AREA BOUNDARY
-----	TREE PROTECTION FENCE
-----	LIMIT OF DISTURBANCE
-----	SILT FENCE
-----	SUPER SILT FENCE
-----	WOODLAND CLEARING
-----	PROPOSED STREAMBANK PLANTING

\* NOTE: NOT IN A DESIGNATED FOREST STAND

FOREST RESOURCES TABLE	
DESCRIPTION	STATE LAND
TOTAL PROPOSED FOREST CLEARING REQUIRING MITIGATION	0.59 AC.
TOTAL NUMBER OF SPECIMEN TREES IDENTIFIED DURING FIELD INVESTIGATIONS	13
TOTAL NUMBER OF PROPOSED SPECIMEN TREES WITHIN FOREST STANDS TO BE REMOVED	1
TOTAL NUMBER OF PROPOSED SPECIMEN TREES OUTSIDE FOREST STANDS TO BE REMOVED	0

STATE LANDS				
FCP SHEET NO.	MILEPOST	PARCEL	OWNER	
3, 4	0.8 to 1.2	MD-BA-011.000	STATE OF MARYLAND DEPT. OF MENTAL HYGIENE	
5, 6	1.4 to 1.7	MD-BA-015.000	STATE OF MARYLAND FOR USE OF THE MARYLAND VETERANS	
38, 39	11.6	MD-BA-180.000	STATE OF MARYLAND DEPT. OF NATURAL RESOURCES	

## SHEET INDEX

- T-1 TITLE SHEET
- VIC-1 TO VIC-2 VICINITY MAP
- GN-1 FOREST CONSERVATION NOTES AND DETAILS
- FCP-3 TO FCP-6 STATE OF MARYLAND FOREST CONSERVATION PLANS AND FCP-38 & 39
- PO-1 ADJACENT PROPERTY OWNER INFORMATION

PLOTED: 09:58 AM on Monday, February 17, 2014  
FILE: \\A2012\16121843\Drawings\01\_FCP\_TITLE\_SHT\_STATE\_LANDS\_OPEN\_CUT\_ALT.dgn

## OWNER

NISOURCE / COLUMBIA GAS TRANSMISSION, LLC  
1700 MacCORKLE AVE, SE  
CHARLESTON, WV 25314  
TELE: (304) 357-2040  
CONTACT: JENNIFER L. FRANCO

THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)  
*Jennifer Bird* 02/2014  
SIGNATURE DATE

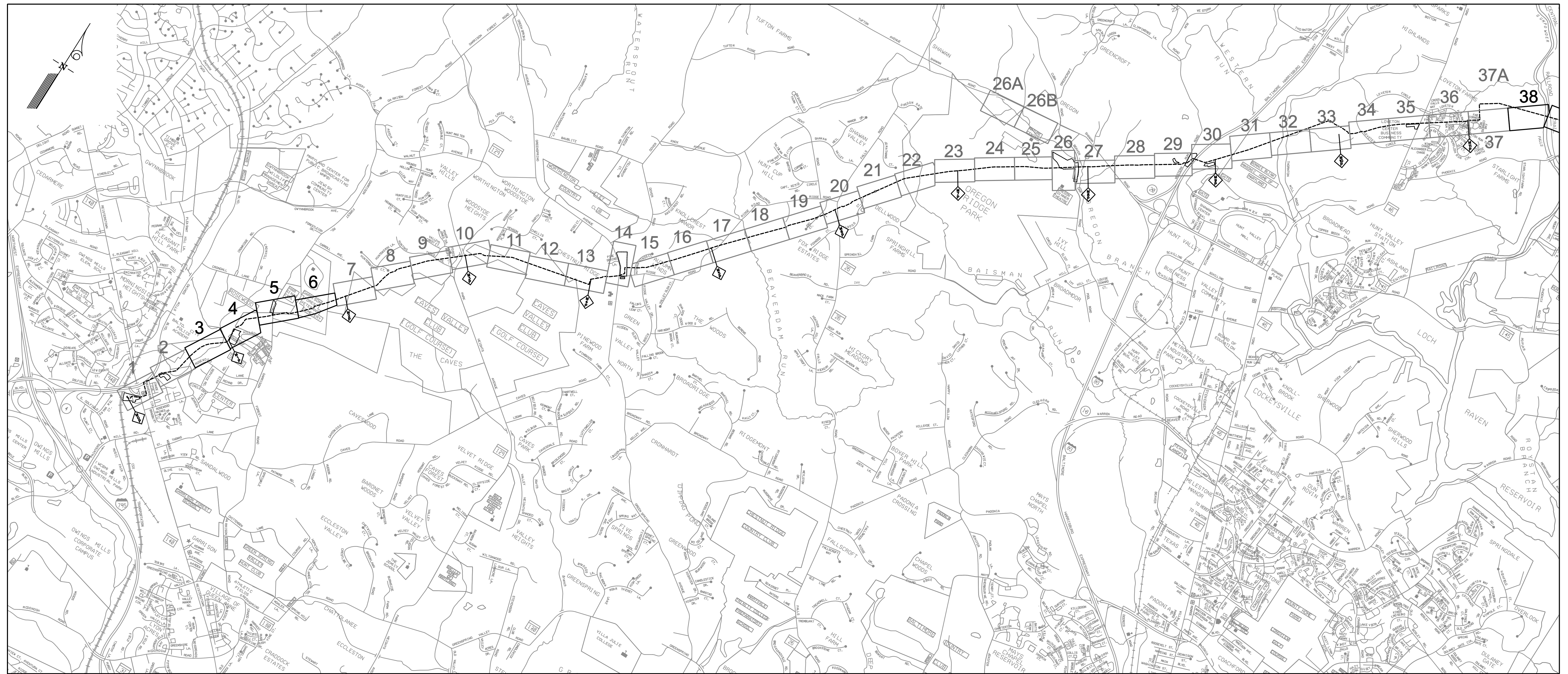
**KCI TECHNOLOGIES**  
ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
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**Columbia Gas Transmission**  
A NiSource Company

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	FEB. 2014

FOREST CONSERVATION PLAN  
( MARYLAND STATE LANDS )  
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
OPEN CUT  
STATE LANDS, MARYLAND

DRAWING NO.  
**T-1**  
SHEET 1 OF 85  
KCI JOB NUMBER  
16-121849



**NOTE:**

- PLEASE REFER TO STATE LAND PLAN SHEETS FCP-3 THROUGH FCP-6 AND FCP-38 & 39 WHEN USING THE SHEET REFERENCE NUMBERS LISTED ABOVE. ADDITIONAL SHEETS IN BALTIMORE COUNTY AND HARFORD COUNTY JURISDICTIONS (SHOWN IN GRAY) ARE NOT INCLUDED IN THIS PLAN SET.

**VICINITY MAP**

1" = 2000'

PLOTTED: 09:59 AM on Monday, February 17, 2014  
 FILE: M:\2012\16121843\G\G\STATE LANDS\LOCATION\PLAN\_OPEN\_CUT\_A1.dwg

THIS PLAN WAS PREPARED BY:  
 JENNIFER BIRD  
 KCI TECHNOLOGIES  
 MDNR QUALIFIED PROFESSIONAL  
 STATUS (SEPTEMBER 2011)

*Jennifer Bird* 02/2014  
 SIGNATURE DATE

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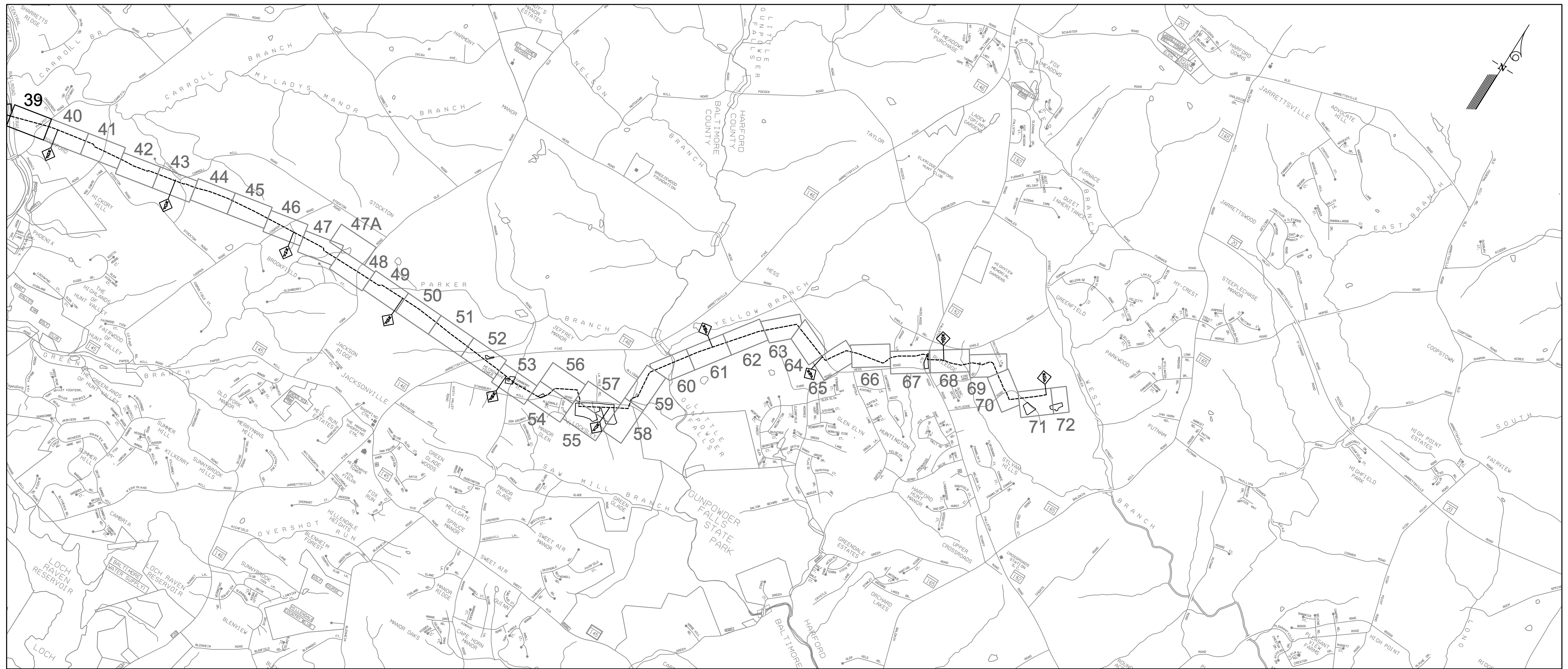
**Columbia Gas Transmission**  
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REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	FEB. 2014

SCALE  
 1" = 50'  
 DESIGNED BY  
 JB  
 DRAWN BY  
 CSD

VICINITY MAP  
 FOR  
 COLUMBIA GAS TRANSMISSION, LLC  
 LINE MB EXTENSION PROJECT  
 OPEN CUT  
 STATE LANDS, MARYLAND

DRAWING NO.  
**VIC-1**  
 SHEET 2 OF 85  
 KCI JOB NUMBER  
 16-121849



**VICINITY MAP**

1" = 2000'

**NOTE:**

- PLEASE REFER TO STATE LAND PLAN SHEETS FCP-39 WHEN USING THE SHEET REFERENCE NUMBERS LISTED ABOVE. ADDITIONAL SHEETS IN BALTIMORE COUNTY AND HARFORD COUNTY JURISDICTIONS (SHOWN IN GRAY) ARE NOT INCLUDED IN THIS PLAN SET.

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 FILE: \\MA2012\161218429\Geomatics\03\_FCP\_STATE\_LANDS\_LOCATION\_PLAN\_OPEN\_CUT\_A1.dgn

THIS PLAN WAS PREPARED BY:  
 JENNIFER BIRD  
 KCI TECHNOLOGIES  
 MDNR QUALIFIED PROFESSIONAL  
 STATUS (SEPTEMBER 2011)

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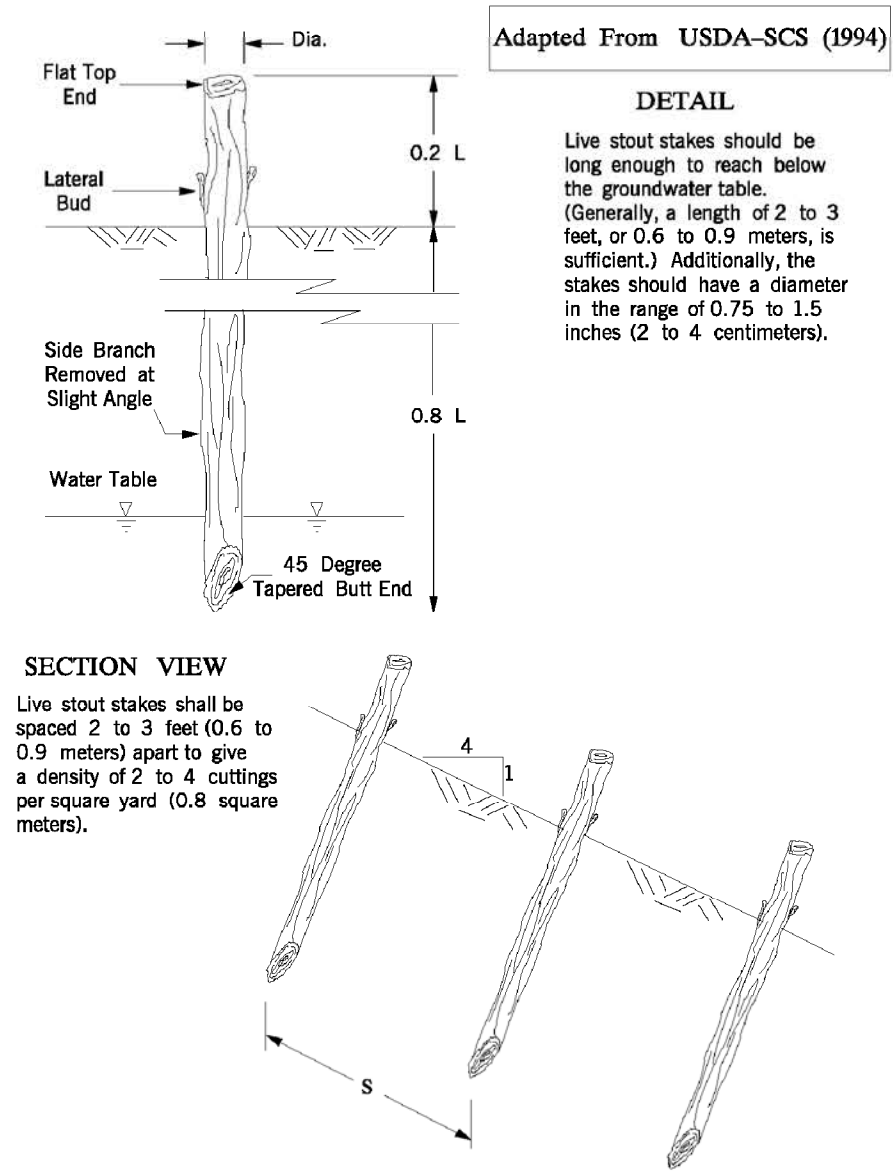
SCALE  
 1" = 50'  
 DESIGNED BY  
 JB  
 DRAWN BY  
 CSD

VICINITY MAP  
 FOR  
 COLUMBIA GAS TRANSMISSION, LLC  
 LINE MB EXTENSION PROJECT  
 OPEN CUT  
 STATE LANDS, MARYLAND

DRAWING NO.  
**VIC-2**  
 SHEET 3 OF 85  
 KCI JOB NUMBER  
 16-121849

PROPOSED STREAMBANK PLANTING

Maryland's Guidelines To Waterway Construction  
DETAIL 2.4: LIVE STAKES



MGWC 2.4: LIVE STAKES

Approximate Cost (\$1999)  
\$1 to \$4 per stake

INSTALLATION GUIDELINES

- Live stake installation should proceed as follows (refer to Detail 2.4):
- Live stake rooting areas should be soaked in barrels of water for 24 to 48 hours just prior to installation.
  - While keeping the bark of the live stakes intact, the side branches should be cleanly removed, the basal ends angled for easy insertion, and the tops cut square.
  - The cuttings should be implanted with the angled basal end down and buds oriented up at a minimum angle of 10 degrees to the horizontal so that rooting will not be restricted. All stakes should be positioned above the normal baseflow level. Project planners may need to study an aptly chosen vegetated reference reach for further guidance when installing live stakes.
    - In soft soils, the stakes can be inserted perpendicularly into the slope using a dead blow hammer; in hard soils, however, a steel rod should be employed to create a pilot hole before the stakes are planted.
    - Twenty percent of the live stakes, and a minimum of two lateral buds, should be exposed above the slope so that grown, leafy shoots will readily grow.
    - Split or otherwise damaged stakes should be discarded.
  - After the stakes have been inserted into the ground, soil should be tamped firmly around their bases to encourage root growth.
  - Successive stakes should be arranged in a triangular configuration and spaced a distance of 2 to 3 feet (0.6 to 0.9 meters) apart, allowing for a typical density of 2 to 4 cuttings per square yard (0.8 square meters). Willow posts require additional room for growth and propagation and should be planted at 3 to 5-foot (1 to 1.5-meter) intervals. When inserted in arrays, the stakes should be spaced 12 to 18 inches (30 to 46 centimeters) apart to form chevron-like rows that point downstream.
  - Unstable slope toes should be reinforced against scouring and undercutting using live fascines or rock fill to give the live stakes the best opportunity to root and grow.

Common Name/Scientific Name	Location	Availability	Habitat Value	Size/Form	Root Type	Rooting Ability from Cuttings
Silky dogwood <i>cornus amomum</i>	N, SE	very common	very good	small shrub	shallow/fibrous	very good
Red osier dogwood <i>cornus sericea</i> sp. <i>stolonifera</i>	N, NE, W	very common	very good	med.-small shrub	shallow	very good
Common ninebark <i>physocarpus opulifolius</i>	NE	common	good	med.-high shrub	shallow/lateral	fair-good
Allegheny blackberry <i>rubus allegheniensis</i>	NE	very common	very good	small shrub	fibrous	good
Red raspberry <i>rubus strigosus</i>	N, NE, W	very common	very good	small shrub	fibrous	good
Prairie willow <i>salix humilis</i>	N, NE	very common	good	medium shrub	fibrous	good
American elderberry <i>sambucus canadensis</i>	NE, SE	very common	very good	medium shrub	fibrous	good
Meadowsweet spica <i>spiroaea alba</i>	N, E	common	good	small dense tree	dense/shallow lateral	fair-good
Handlatch spica <i>spiroaea tomentosa</i>	NE	common	good	small shrub	dense/shallow	fair
Snowberry <i>symphoricarpos albus</i>	N, NW, E	common	good	small shrub	shallow/fibrous	good

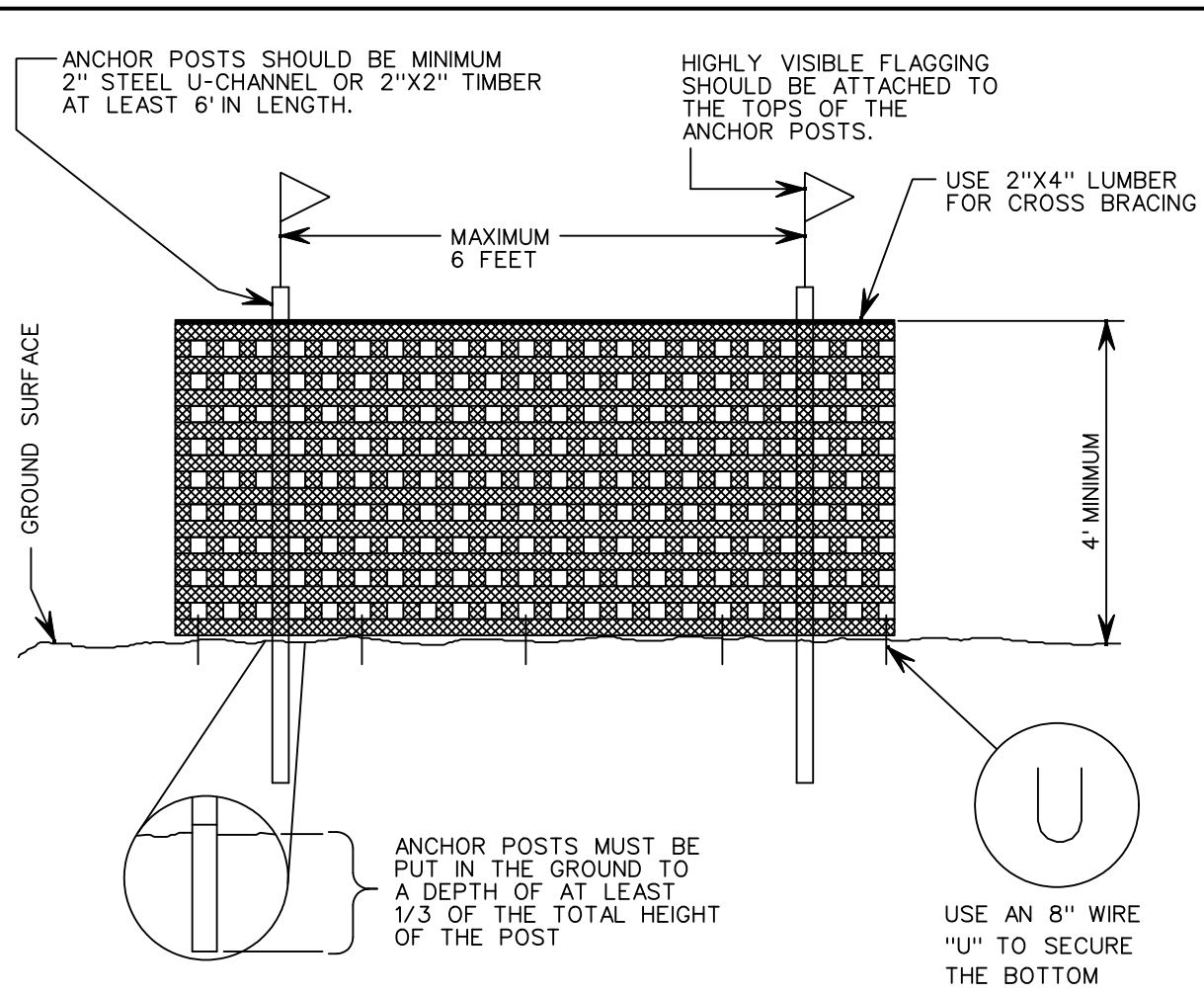
SLIPE PROTECTION AND STABILIZATION TECHNIQUES WATERWAY CONSTRUCTION GUIDELINES REVISED NOVEMBER 2000

FOREST STAND SUMMARY

Stand	Type	Size (AC)	Priority Retention	Sheet No.
D	Mixed Oak - Tulip Poplar	5.18	Priority 1: High	3, 4
E	Mixed Oak	1.99	Priority 1: High	3, 4
G	Mixed Oak - Tulip Poplar	34.14	Priority 1: High	6
Y	Tulip Poplar	0.68	Priority 1: High	39
Z	Tulip Poplar - Black Walnut	5.26	Priority 1: High	39

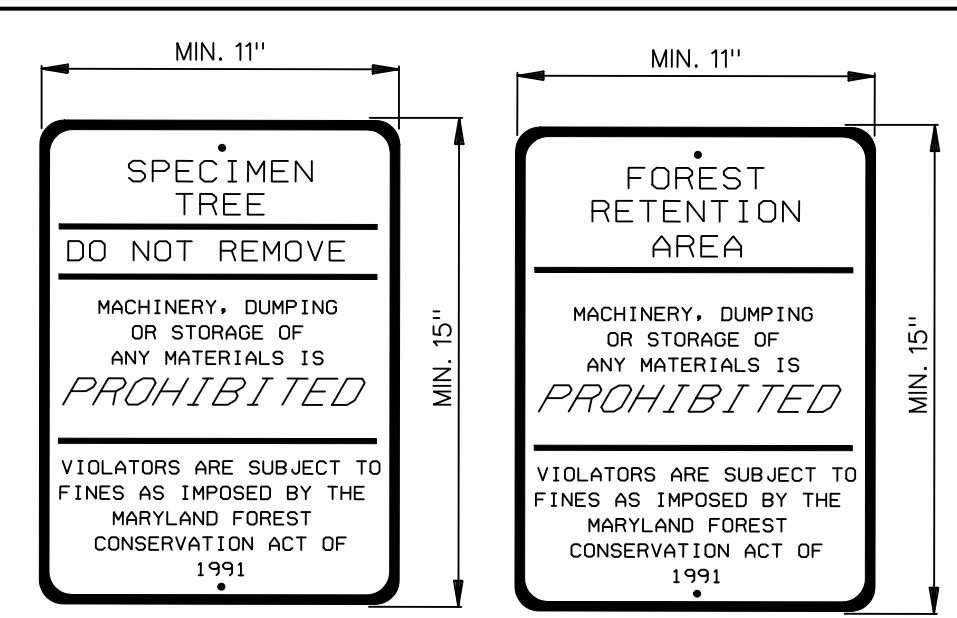
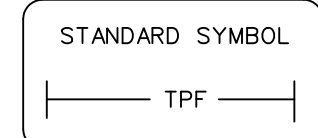
SOILS TABLE

Soil Symbol	Soil Unit Name	Percent Slope	K <sub>s</sub> value	Hydric (Y/N)
Baltimore County				
BaA	Baile silt loam	0-3	0.32	Y
BaB	Baile silt loam	3-8	0.32	Y
BgA	Benevicia silt loam	0-3	0.28	N
BgB	Benevicia silt loam	3-8	0.28	N
BgC	Benevicia silt loam	8-15	0.28	N
CJA	Codorus silt loams	0-3	0.37	N
ECB	Elicok silt loam	3-8	0.32	N
ECC	Elicok silt loam	8-15	0.32	N
GA	Galla loam	3-8	0.24	N
GAC	Galla loam	8-15	0.24	N
GA	Glenelg loam	0-3	0.28	N
GB	Glenelg loam	3-8	0.28	N
GC	Glenelg loam	8-15	0.28	N
GB	Glenelg channery loam	3-8	0.2	N
GC	Glenelg channery loam	8-5	0.2	N
GHA	Glenville silt loam	0-3	0.37	N
GNB	Glenville silt loam	3-8	0.37	N
CNC	Glenville silt loam	8-15	0.37	N
HBA	Harboro silt loams	0-3	0.24	Y
MaB	Manor loam	3-8	0.24	N
MaC	Manor loam	8-15	0.24	N
MaD	Manor loam	15-25	0.24	N
MaE	Manor loam	25-45	0.24	N
MbC	Manor channery loam	8-15	0.24	N
MbD	Manor channery loam	15-25	0.24	N
MbE	Manor channery loam	25-45	0.24	N
MdE	Manor-Brinklow complex	25-45	0.24	N
UaC	Udothents	8-15	0.28	N
Ur	Urban land	0-8	--	N
UjB	Urban land- Udothents complex	0-8	0.02	N
WgB	Wheaton-Glenelg complex	0-8	0.2	N
WHA	Wiltshire silt loam	0-3	0.32	N
WHB	Wiltshire silt loam	3-8	0.32	N
Harford County				
CcB2	Chester silt loam	3-8	0.32	N
Cu	Codorus silt loam	--	0.49	N
ScB2	Glenelg loam	3-8	0.32	N
ScC2	Glenelg loam	8-15	0.32	N
CgB2	Glenelg gravelly loam	3-8	0.32	N
GnA	Glenville silt loam	0-3	0.32	N
GnB	Glenville silt loam	3-8	0.32	N
MbC2	Manor loam	8-15	0.37	N
MbD2	Manor loam	15-25	0.37	N
McC2	Manor channery loam	8-15	0.37	N
McD2	Manor channery loam	15-25	0.37	N
McD3	Manor channery loam	15-25	0.37	N



BLAZE ORANGE PLASTIC MESH SAFETY FENCE/TREE PROTECTION DETAIL

- PLACEMENT OF ORANGE HIGH VISIBILITY FENCE:
- ORANGE HIGH VISIBILITY FENCE SHALL BE MANUALLY INSTALLED ALONG THE LIMITS OF DISTURBANCE, WHERE THAT LIMIT IS WITHIN 50' OF THE FOREST CONSERVATION/FOREST BUFFER EASEMENTS AND SHALL FUNCTION AS A FOREST PROTECTION DEVICE.
  - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  - BOUNDARIES OF THE RETENTION AREA SHALL BE STAKES AND FLAGGED PRIOR TO INSTALLING THE DEVICE.
  - ROOT DAMAGE SHALL BE AVOIDED.
  - PROTECTIVE SIGNAGE MAY ALSO BE USED.
  - DEVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.



- NOTES:
- BOTTOM OF SIGN TO BE HIGHER THAN TREE PROTECTION FENCE.
  - SIGNS TO BE PLACED 50 TO 100' APART, CONDITIONS ON SITE AFFECTING VISIBILITY MAY WARRANT PLACING SIGNS CLOSER OR FARTHER APART WITHIN THE ACCEPTABLE NOTED RANGE.
  - ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  - SIGNS MAY BE REMOVED FROM RESIDENTIAL LOTS UPON ISSUANCE OF USE AND OCCUPANCY RETENTION FOREST ONLY.
  - ALL SIGNAGE MUST REMAIN DURING THE MAINTENANCE PERIOD.
  - THE SIGNS NOTIFY CONSTRUCTION WORKERS AND FUTURE RESIDENTS OF THE NEWLY PLANTED MATERIAL, IMPROVING THE TREES' SURVIVAL RATES.
  - SIGNS MAY BE ADAPTED BY RESIDENTS FOR IDENTIFICATION OF FOREST RETENTION AREAS.

FOREST CONSERVATION SIGNAGE

NOT TO SCALE

THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)

*Jennifer Bird* 02/2014  
SIGNATURE DATE

ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS

**KCI**  
TECHNOLOGIES

936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818

Columbia Gas  
Transmission

A NiSource Company

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				FEB. 2014
				SCALE 1" = 50'
				DESIGNED BY JB
				DRAWN BY CSD

FOREST CONSERVATION NOTES AND DETAILS

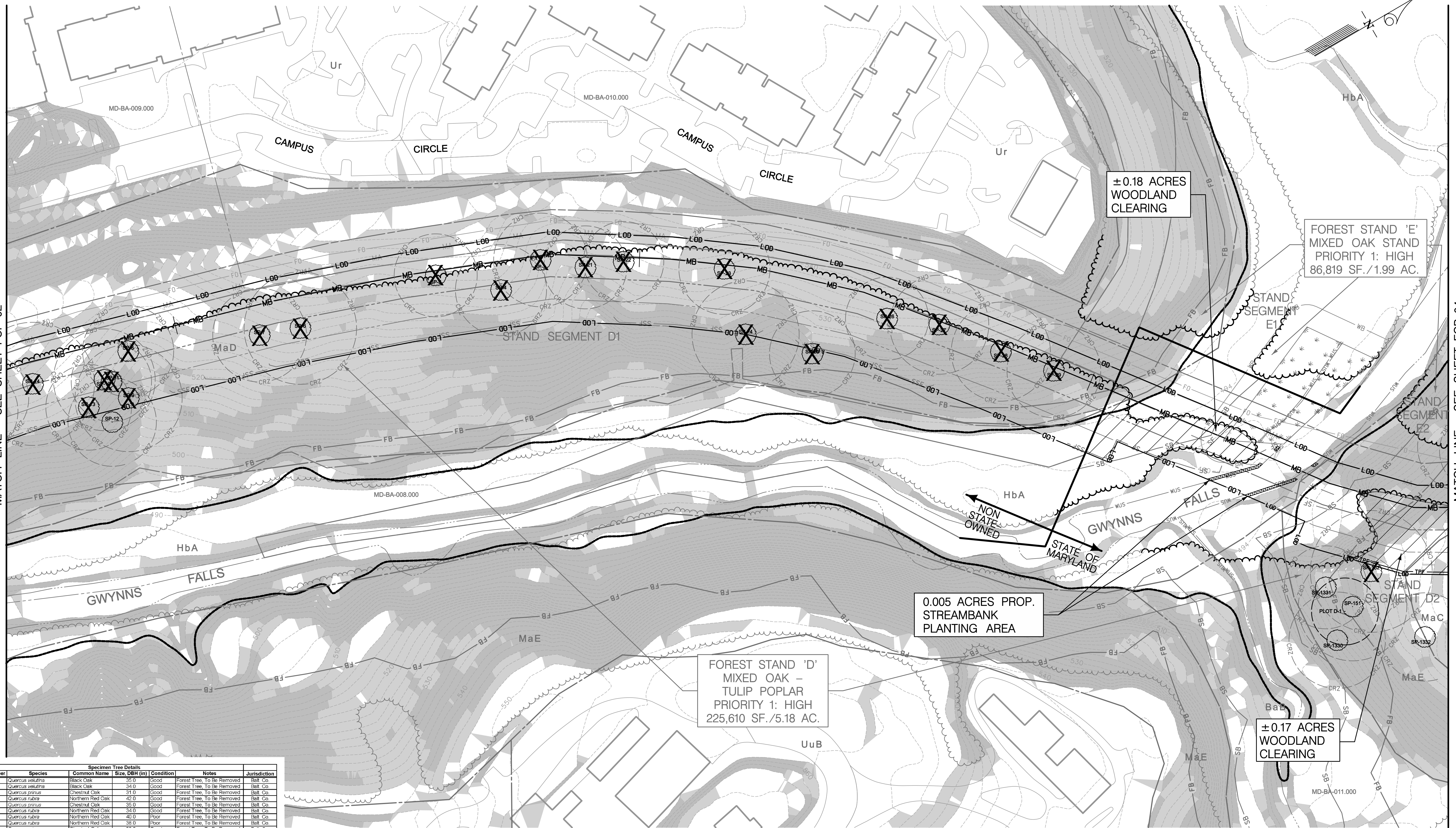
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
STATE LANDS, MARYLAND

DRAWING NO.  
**GN-1**

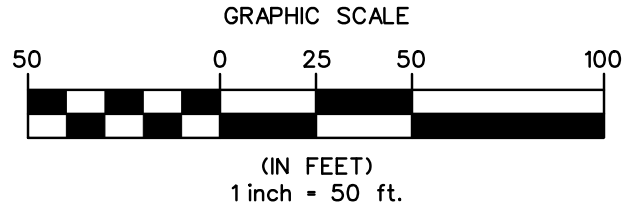
SHEET 4 OF 85  
KCI JOB NUMBER  
16-121849

MATCH LINE - SEE SHEET FCP-02

MATCH LINE - SEE SHEET FCP-04



Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-3	Quercus velutina	Black Oak	35.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-4	Quercus velutina	Black Oak	34.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-5	Quercus prinus	Chestnut Oak	31.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-6	Quercus rubra	Northern Red Oak	42.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-7	Quercus prinus	Chestnut Oak	35.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-8	Quercus rubra	Northern Red Oak	34.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-9	Quercus rubra	Northern Red Oak	41.0	Poor	Forest Tree, To Be Removed	Balt. Co.
SP-10	Quercus rubra	Northern Red Oak	38.0	Poor	Forest Tree, To Be Removed	Balt. Co.
SP-11	Quercus prinus	Chestnut Oak	30.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-12	Quercus rubra	Northern Red Oak	33.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-13	Quercus rubra	Northern Red Oak	32.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-14	Quercus rubra	Northern Red Oak	48.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-21	Quercus prinus	Chestnut Oak	31.0	Fair	Forest Tree, To Be Removed	Balt. Co.
SP-22	Alexandria hippocastanum	Horseshoevine	32.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-23	Quercus rubra	Northern Red Oak	34.0	Fair	Forest Tree, To Be Removed	Balt. Co.
SP-24	Quercus rubra	Northern Red Oak	40.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-25	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-26	Alexandria hippocastanum	Horseshoevine	31.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-27	Quercus rubra	Northern Red Oak	37.0	Fair	Forest Tree, To Be Removed	Balt. Co.
SP-28	Quercus rubra	Northern Red Oak	37.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-29	Quercus rubra	Northern Red Oak	33.0	Good	Forest Tree, To Be Removed	Balt. Co.
SP-151	Quercus rubra	Northern Red Oak	40.5	Good	Forest Tree, To Be Removed	State of MD
SP-152	Quercus prinus	Chestnut Oak	45.5	Good	Forest Tree, To Be Removed	State of MD
SP-1330	Quercus rubra	Northern Red Oak	36.0	Good	Forest Tree	State of MD
SP-1331	Quercus alba	White Oak	31.0	Good	Forest Tree	State of MD
SP-1332	Quercus prinus	Chestnut Oak	33.0	Fair	Forest Tree	State of MD
Total Specimen Trees on this Sheet = 26						
Total Specimen Trees Removed on this Sheet = 21						



NOTE:  
2.24 ACRES OF FOREST CLEARING ON BALTIMORE COUNTY LANDS NOT INCLUDED IN CALCULATIONS ON THIS SHEET.

TOTAL FOREST CLEARING: 0.35 AC.  
TOTAL AREA REPLANTED ON-SITE: 0.00 AC.  
TOTAL AREA REQUIRING OFF-SITE MITIGATION: 0.35 AC.

THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL STATUS (SEPTEMBER 2011)  
*Jennifer Bird*  
SIGNATURE DATE 02/2014

**KCI TECHNOLOGIES**  
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TELEPHONE: (410) 316-7800  
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**Columbia Gas Transmission**  
A NiSource Company

NO.		DATE	DESCRIPTION	BY	DATE
					FEB. 2014

FOREST CONSERVATION PLAN (MARYLAND STATE LANDS) FOR COLUMBIA GAS TRANSMISSION, LLC LINE MB EXTENSION PROJECT OPEN CUT  
STATE LANDS, MARYLAND

DRAWING NO. **FCP-03**  
SHEET 7 OF 85  
KCI JOB NUMBER 16-121849

PLOTTED: 10:04 AM on Monday, February 17, 2014  
FILE: \\MA2012\16121849\Drawings\FCP\PLAN\_03\_STATE\_LAND.dgn

FOREST STAND 'E'  
MIXED OAK  
PRIORITY 1: HIGH  
86,819 SF./1.99 AC.

FOREST STAND 'F'  
RED MAPLE - GREEN ASH  
PRIORITY 1: HIGH  
158,000 SF./3.63 AC.

FOREST STAND 'D'  
MIXED OAK -  
TULIP POPLAR  
PRIORITY 1: HIGH  
225,610 SF./5.18 AC.

± 0.01 ACRES  
WOODLAND  
CLEARING

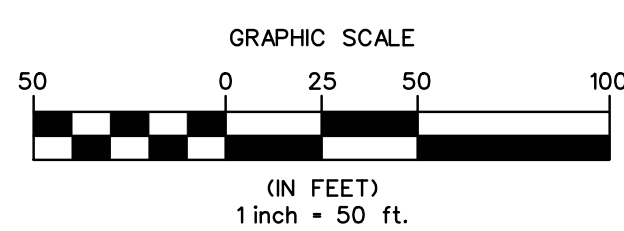
± 0.11 ACRES  
WOODLAND  
CLEARING

NOTE:  
0.17 ACRES OF FOREST CLEARING ON BALTIMORE COUNTY  
LANDS NOT INCLUDED IN CALCULATIONS ON THIS SHEET.

TOTAL FOREST CLEARING: 0.12 AC.  
TOTAL AREA REPLANTED ON-SITE: 0.00 AC.  
TOTAL AREA REQUIRING OFF-SITE MITIGATION: 0.12 AC.

Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-38	Acer rubrum	Red Maple	31.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-39	Quercus rubra	Northern Red Oak	37.0	Fair	Forest Tree	State of MD
SP-40	Quercus rubra	Northern Red Oak	32.0	Fair	Forest Tree	State of MD
SP-41	Quercus rubra	Northern Red Oak	30.0	Fair	Forest Tree	State of MD
SP-42	Quercus rubra	Northern Red Oak	33.0	Fair	Forest Tree	State of MD
SP-43	Quercus rubra	Northern Red Oak	33.0	Good	Forest Tree	State of MD
SP-44	Quercus rubra	Northern Red Oak	34.0	Fair	Forest Tree	Balt. Co.
SP-45	Quercus rubra	Northern Red Oak	40.0	Good	Forest Tree	Balt. Co.
SP-414	Quercus prinus	Chestnut Oak	32.0	Good	Forest Tree	State of MD

Total Specimen Trees on This Sheet = 9  
Total Specimen Trees Removed on This Sheet = 1



THIS PLAN WAS PREPARED BY:  
JENNIFER BIRO  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)

*Jennifer Biro* 02/2014  
SIGNATURE DATE

**KCI TECHNOLOGIES**  
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936 RIDGEBROOK ROAD  
SEABOARD, MARYLAND 21152  
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**Columbia Gas Transmission**  
A NiSource Company

REVISIONS			
NO.	DATE	DESCRIPTION	BY

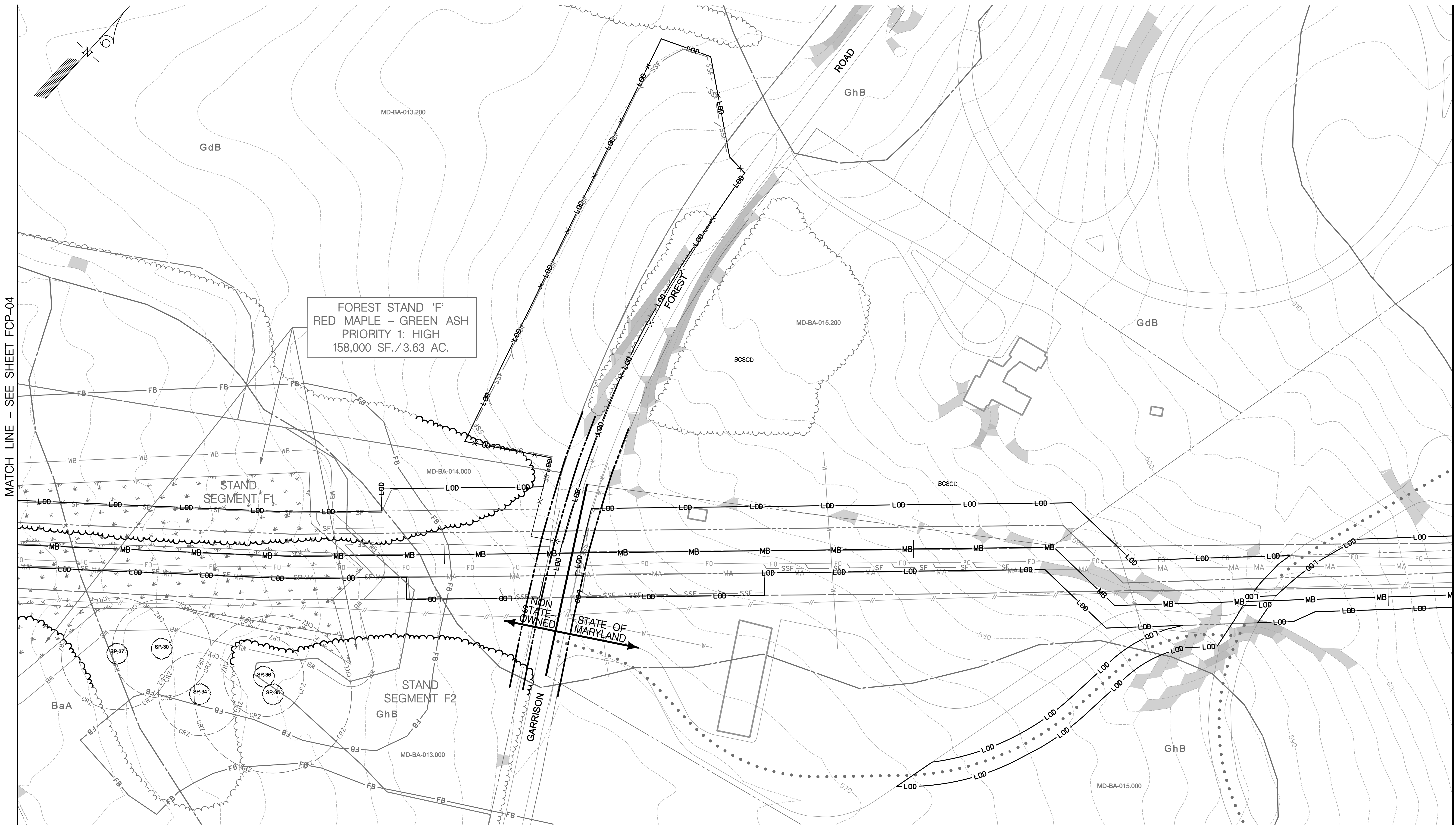
DATE: FEB. 2014  
SCALE: 1" = 50'  
DESIGNED BY: JB  
DRAWN BY: CSD

FOREST CONSERVATION PLAN  
(MARYLAND STATE LANDS)  
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
OPEN CUT  
STATE LANDS, MARYLAND

DRAWING NO.  
**FCP-04**  
SHEET 8 OF 85  
KCI JOB NUMBER  
16-121849

PLOTTER: 10:05 AM on Monday, February 17, 2014  
FILE: M:\2012\16121849\Drawings\FCP\PLAN\_04\_STATE\_LAND.dgn





MATCH LINE - SEE SHEET FCP-04

MATCH LINE - SEE SHEET FCP-06

FOREST STAND 'F'  
RED MAPLE - GREEN ASH  
PRIORITY 1: HIGH  
158,000 SF./3.63 AC.

STAND SEGMENT F2  
GhB

STAND SEGMENT F1

NON STATE OWNED  
STATE OF MARYLAND

GARRISON

ROAD

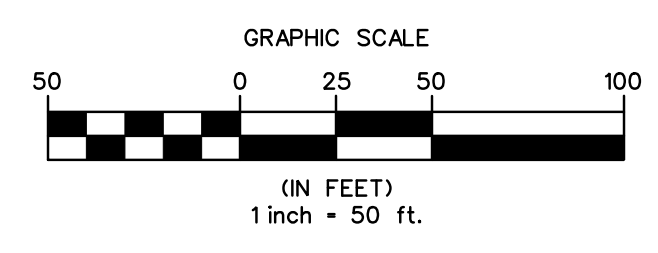
GhB

GdB

GhB

NOTE: NO IMPACTS ON THIS SHEET.

Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-30	Quercus alba	White Oak	37.0	Fair	Forest Tree	Ball Co.
SP-34	Quercus alba	White Oak	31.0	Fair	Forest Tree	Ball Co.
SP-36	Quercus alba	White Oak	65.0	Fair	Forest Tree	Ball Co.
SP-38	Quercus alba	White Oak	30.0	Fair	Forest Tree	Ball Co.
SP-37	Quercus alba	White Oak	42.0	Fair	Forest Tree	Ball Co.



THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)

*Jennifer Bird* 02/2014  
SIGNATURE DATE

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**Columbia Gas Transmission**  
A NiSource Company

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				FEB. 2014
				SCALE
				1" = 50'
				DESIGNED BY
				JB
				DRAWN BY
				CSD

FOREST CONSERVATION PLAN  
(MARYLAND STATE LANDS)  
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
OPEN CUT  
STATE LANDS, MARYLAND

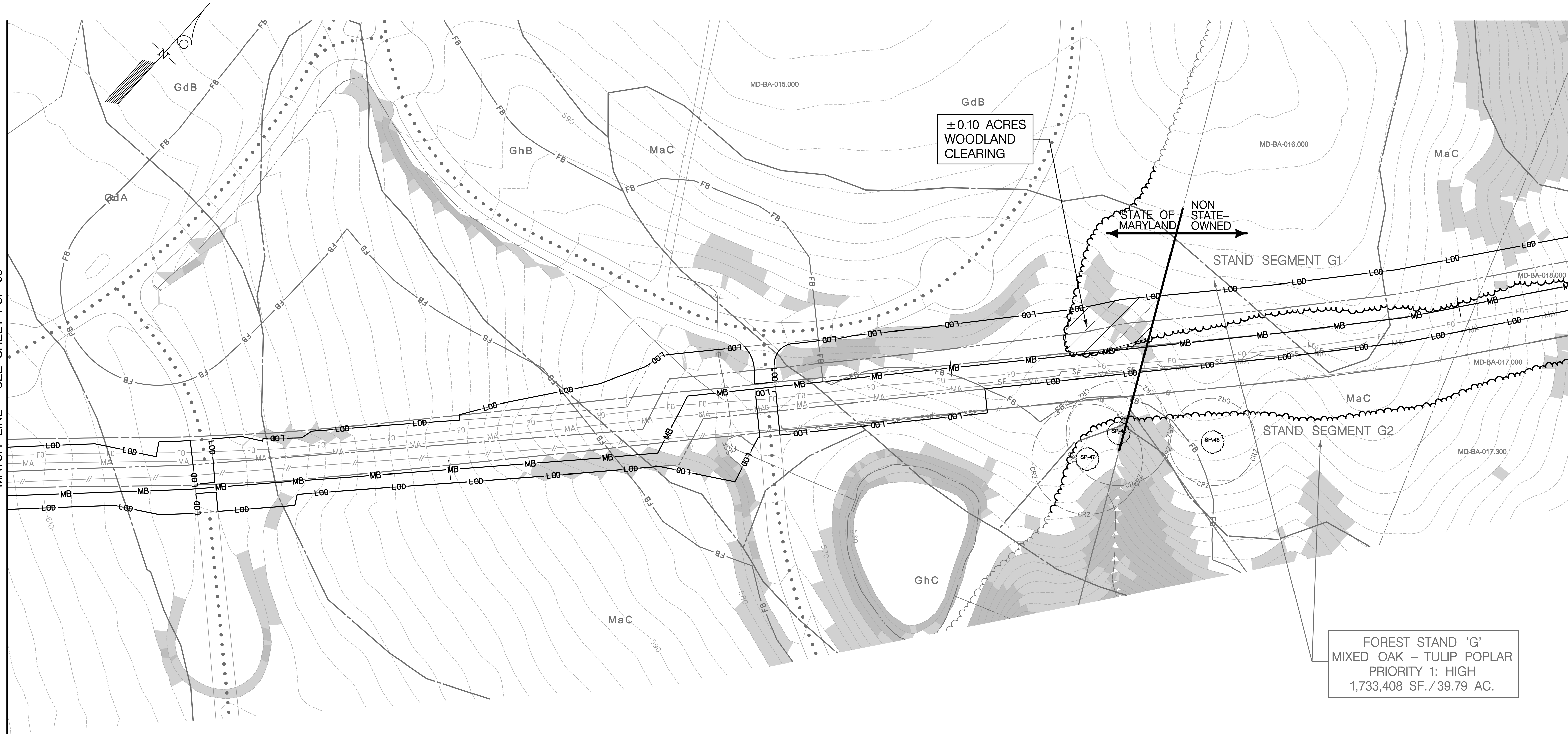
DRAWING NO.  
**FCP-05**

SHEET 9 OF 85  
KCI JOB NUMBER  
16-121849

PLOT: 10:06 AM on Monday, February 17, 2014  
FILE: \\A2012\16121849\Drawings\Fcp\PLAN\_05\_STATE\_LAND.dgn

MATCH LINE - SEE SHEET FCP-05

MATCH LINE - SEE SHEET FCP-07



±0.10 ACRES WOODLAND CLEARING

STATE OF MARYLAND / NON STATE-OWNED

STAND SEGMENT G1

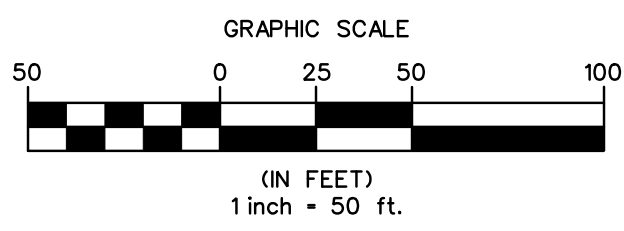
STAND SEGMENT G2

FOREST STAND 'G'  
MIXED OAK - TULIP POPLAR  
PRIORITY 1: HIGH  
1,733,408 SF./39.79 AC.

NOTE:  
0.37 ACRES OF FOREST CLEARING ON BALTIMORE COUNTY LANDS NOT INCLUDED IN CALCULATIONS ON THIS SHEET.

TOTAL FOREST CLEARING: 0.10 AC.  
TOTAL AREA REPLANTED ON-SITE: 0.00 AC.  
TOTAL AREA REQUIRING OFF-SITE MITIGATION: 0.10 AC.

Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-46	Quercus rubra	Northern Red Oak	36.0	Good	Forest Tree	State of MD
SP-47	Quercus alba	White Oak	36.0	Good	Forest Tree	State of MD
SP-48	Liriodendron tulipifera	Tulip Poplar	30.0	Good	Forest Tree	Balt. Co.



THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL STATUS (SEPTEMBER 2011)

*Jennifer Bird* 02/2014  
SIGNATURE DATE

**KCI TECHNOLOGIES**  
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**Columbia Gas Transmission**  
A NiSource Company

REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE: FEB. 2014  
SCALE: 1" = 50'  
DESIGNED BY: JB  
DRAWN BY: CSD

FOREST CONSERVATION PLAN (MARYLAND STATE LANDS) FOR COLUMBIA GAS TRANSMISSION, LLC LINE MB EXTENSION PROJECT OPEN CUT STATE LANDS, MARYLAND

DRAWING NO. **FCP-06**  
SHEET 10A OF 85  
KCI JOB NUMBER 16-121849

PLOTTED: 10:07 AM on Monday, February 17, 2014  
FILE: \\MA2012\16121849\Drawings\Fcp\PLAN\_06\_STATE\_LAND\_OPEN\_CUT\_ALT.dwg

MATCH LINE - SEE SHEET FCP-37 (OPEN CUT ALTERNATE)

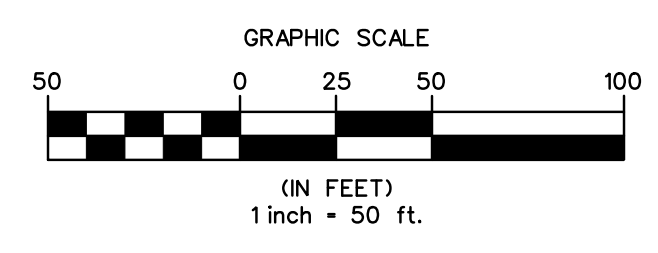
FOREST STAND 'X'  
TULIP POPLAR -  
BLACK WALNUT  
PRIORITY 1: HIGH  
434,681 SF./9.98 AC.

NON STATE-OWNED  
STATE OF MARYLAND

MATCH LINE - SEE SHEET FCP-39 (OPEN CUT ALTERNATE)

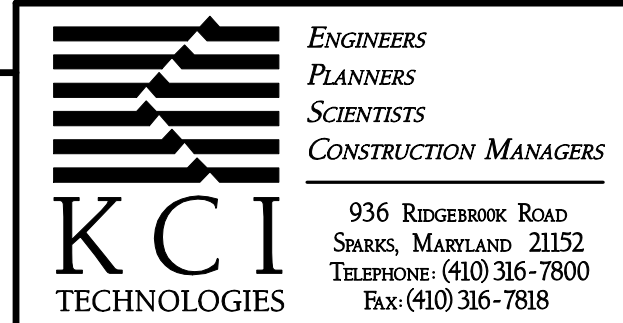
PLOTTED: 10:08 AM on Monday, February 17, 2014  
FILE: M:\2012\161216\424\Drawings\FCP\PLAN\_38.STATE\_LAND\_OPEN\_CUT\_ALT.dwg

Specimen Tree Details						
Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-540	Liriodendron tulipifera	Tulip Poplar	30.0	Good	Forest Tree	Balt. Co.
SP-541	Liriodendron tulipifera	Tulip Poplar	41.0	Good	Forest Tree	Balt. Co.
SP-560	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree	Balt. Co.
SP-561	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree	Balt. Co.
SP-562	Fagus grandifolia	American Beech	31.0	Good	Forest Tree	Balt. Co.
SP-563	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree	Balt. Co.
SP-564	Fagus grandifolia	American Beech	38.0	Fair	Forest Tree To Be Removed	Balt. Co.
SP-565	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-566	Liriodendron tulipifera	Tulip Poplar	36.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-567	Liriodendron tulipifera	Tulip Poplar	30.0	Good	Forest Tree	Balt. Co.
SP-568	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree	Balt. Co.
SP-569	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-570	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-571	Liriodendron tulipifera	Tulip Poplar	30.0	Good	Forest Tree	Balt. Co.
SP-572	Liriodendron tulipifera	Tulip Poplar	31.0	Good	Forest Tree	Balt. Co.
SP-573	Liriodendron tulipifera	Tulip Poplar	31.0	Good	Forest Tree	Balt. Co.
SP-574	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-575	Liriodendron tulipifera	Tulip Poplar	35.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-576	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-577	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-578	Liriodendron tulipifera	Tulip Poplar	31.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-579	Liriodendron tulipifera	Tulip Poplar	30.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-580	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-581	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-582	Platanus occidentalis	Sycamore	34.0	Good	Forest Tree	Balt. Co.
SP-583	Liriodendron tulipifera	Tulip Poplar	38.0	Good	Forest Tree	Balt. Co.
SP-584	Platanus occidentalis	Sycamore	37.0	Good	Forest Tree	Balt. Co.
SP-585	Platanus occidentalis	Sycamore	35.0	Good	Forest Tree	Balt. Co.
SP-586	Platanus occidentalis	Sycamore	40.0	Good	Forest Tree	Balt. Co.
SP-587	Liriodendron tulipifera	Tulip Poplar	31.0	Good	Forest Tree	Balt. Co.
SP-588	Quercus rubra	Northern Red Oak	36.0	Poor	Forest Tree	Balt. Co.
SP-591	Liriodendron tulipifera	Tulip Poplar	32.0	Good	Forest Tree	Balt. Co.
SP-597	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-598	Liriodendron tulipifera	Tulip Poplar	42.0	Good	Forest Tree	Balt. Co.
SP-599	Liriodendron tulipifera	Tulip Poplar	36.0	Good	Forest Tree	Balt. Co.
Total Specimen Trees on This Sheet = 35						
Total Specimen Trees Removed on This Sheet = 10						



THIS PLAN WAS PREPARED BY:  
JENNIFER BIRO  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)

*Jennifer Biro* 02/2014  
SIGNATURE DATE



REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE: FEB. 2014  
SCALE: 1" = 50'  
DESIGNED BY: JB  
DRAWN BY: CSD

NOTE: NO IMPACTS ON THIS SHEET.

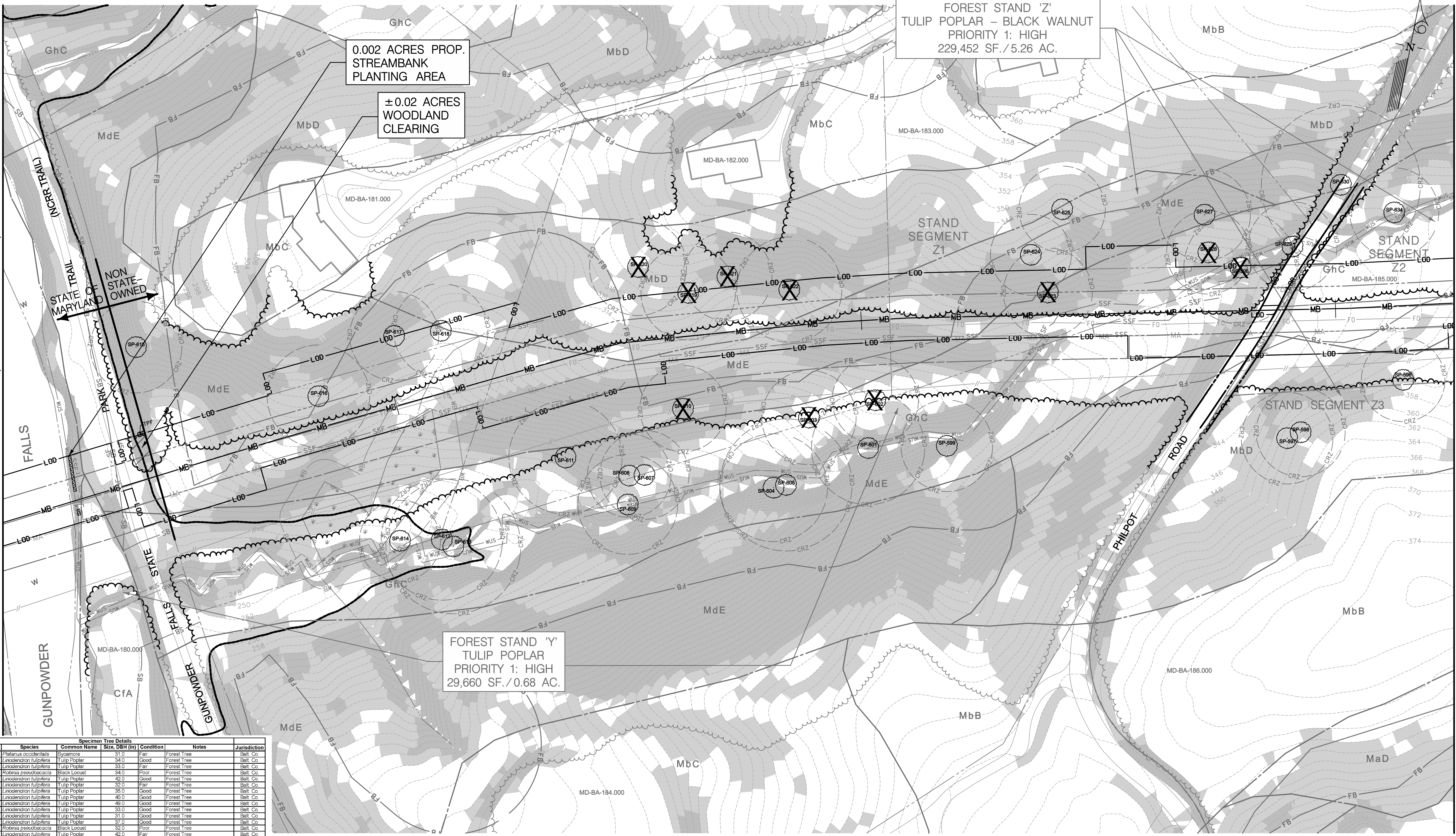
FOREST CONSERVATION PLAN  
(MARYLAND STATE LANDS)  
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
OPEN CUT  
STATE LANDS, MARYLAND

DRAWING NO.  
**FCP-38**

SHEET 44A OF 85  
KCI JOB NUMBER  
16-121849

MATCH LINE - SEE SHEET FCP-38 (OPEN CUT ALTERNATE)

MATCH LINE - SEE SHEET FCP-40



0.002 ACRES PROP. STREAMBANK PLANTING AREA

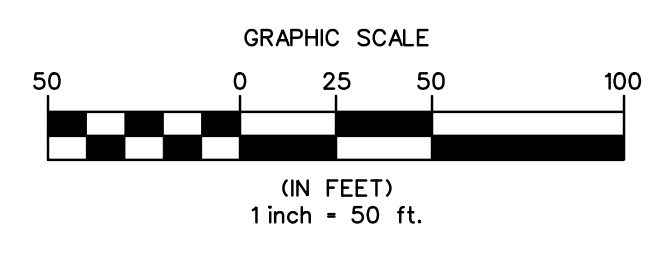
± 0.02 ACRES WOODLAND CLEARING

FOREST STAND 'Z'  
TULIP POPLAR - BLACK WALNUT  
PRIORITY 1: HIGH  
229,452 SF./5.26 AC.

FOREST STAND 'Y'  
TULIP POPLAR  
PRIORITY 1: HIGH  
29,660 SF./0.68 AC.

Number	Species	Common Name	Size, DBH (in)	Condition	Notes	Jurisdiction
SP-596	Platanus occidentalis	Sycamore	31.0	Fair	Forest Tree	Balt. Co.
SP-597	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-598	Liriodendron tulipifera	Tulip Poplar	33.0	Fair	Forest Tree	Balt. Co.
SP-599	Robinia pseudoacacia	Black Locust	34.0	Poor	Forest Tree	Balt. Co.
SP-600	Liriodendron tulipifera	Tulip Poplar	42.0	Good	Forest Tree	Balt. Co.
SP-601	Liriodendron tulipifera	Tulip Poplar	32.0	Fair	Forest Tree	Balt. Co.
SP-602	Liriodendron tulipifera	Tulip Poplar	35.0	Good	Forest Tree	Balt. Co.
SP-603	Liriodendron tulipifera	Tulip Poplar	40.0	Good	Forest Tree	Balt. Co.
SP-604	Liriodendron tulipifera	Tulip Poplar	49.0	Good	Forest Tree	Balt. Co.
SP-605	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree	Balt. Co.
SP-606	Liriodendron tulipifera	Tulip Poplar	31.0	Good	Forest Tree	Balt. Co.
SP-607	Liriodendron tulipifera	Tulip Poplar	37.0	Good	Forest Tree	Balt. Co.
SP-608	Robinia pseudoacacia	Black Locust	32.0	Poor	Forest Tree	Balt. Co.
SP-609	Liriodendron tulipifera	Tulip Poplar	42.0	Fair	Forest Tree	Balt. Co.
SP-610	Liriodendron tulipifera	Tulip Poplar	46.0	Fair	Forest Tree	Balt. Co.
SP-611	Liriodendron tulipifera	Tulip Poplar	50.0	Good	Forest Tree	Balt. Co.
SP-612	Liriodendron tulipifera	Tulip Poplar	30.0	Fair	Forest Tree	Balt. Co.
SP-613	Quercus rubra	Northern Red Oak	34.0	Good	Forest Tree	Balt. Co.
SP-614	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-615	Liriodendron tulipifera	Tulip Poplar	33.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-616	Liriodendron tulipifera	Tulip Poplar	35.0	Fair	Forest Tree To Be Removed	Balt. Co.
SP-617	Liriodendron tulipifera	Tulip Poplar	35.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-618	Liriodendron tulipifera	Tulip Poplar	35.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-619	Liriodendron tulipifera	Tulip Poplar	36.0	Good	Forest Tree	Balt. Co.
SP-620	Liriodendron tulipifera	Tulip Poplar	33.0	Fair	Forest Tree	Balt. Co.
SP-621	Liriodendron tulipifera	Tulip Poplar	39.0	Good	Forest Tree To Be Removed	Balt. Co.
SP-622	Liriodendron tulipifera	Tulip Poplar	33.0	Fair	Forest Tree To Be Removed	Balt. Co.
SP-623	Liriodendron tulipifera	Tulip Poplar	30.0	Fair	Forest Tree	Balt. Co.
SP-624	Liriodendron tulipifera	Tulip Poplar	32.0	Fair	Forest Tree	Balt. Co.
SP-625	Liriodendron tulipifera	Tulip Poplar	42.0	Fair	Forest Tree To Be Removed	Balt. Co.
SP-626	Liriodendron tulipifera	Tulip Poplar	34.0	Good	Forest Tree	Balt. Co.
SP-627	Liriodendron tulipifera	Tulip Poplar	31.0	Fair	Forest Tree	Balt. Co.
SP-628	Platanus occidentalis	Sycamore	33.0	Good	Forest Tree	Balt. Co.
SP-629	Platanus occidentalis	Sycamore	38.0	Poor	Forest Tree	Balt. Co.
SP-630	Platanus occidentalis	Sycamore	33.0	Good	Forest Tree	Balt. Co.

Total Specimen Trees on This Sheet = 34  
Total Specimen Trees Removed on This Sheet = 7



THIS PLAN WAS PREPARED BY:  
JENNIFER BIRD  
KCI TECHNOLOGIES  
MDNR QUALIFIED PROFESSIONAL  
STATUS (SEPTEMBER 2011)

*Jennifer Bird* 02/2014  
SIGNATURE DATE

**KCI TECHNOLOGIES**  
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CONSTRUCTION MANAGERS

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**Columbia Gas Transmission**  
A MiSource Company

REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE: FEB. 2014  
SCALE: 1" = 50'  
DESIGNED BY: [Blank]  
DRAWN BY: CSD

TOTAL FOREST CLEARING: 0.02 AC.  
TOTAL AREA REPLANTED ON-SITE: 0.00 AC.  
TOTAL AREA REQUIRING OFF-SITE MITIGATION: 0.02 AC.

FOREST CONSERVATION PLAN  
(MARYLAND STATE LANDS)  
FOR  
COLUMBIA GAS TRANSMISSION, LLC  
LINE MB EXTENSION PROJECT  
OPEN CUT  
STATE LANDS, MARYLAND

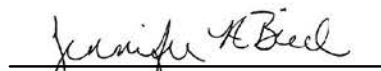
DRAWING NO.  
**FCP-39**  
SHEET 45A OF 85  
KCI JOB NUMBER  
16-121849

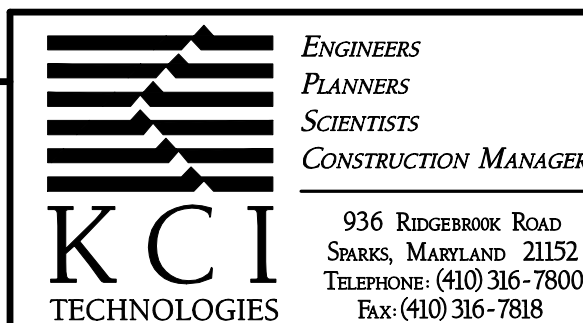
PLOTTED: 10:10 AM on Monday, February 17, 2014  
FILE: \\A20212\6121849\Drawings\FCP\PLAN\_59\_STATE\_LAND\_OPEN\_CUT\_ALT.dwg

PLOTTED: 10:11 AM on Monday, February 17, 2014  
 FILE: \\A2012\16121849\Drawings\CIP-PROP\_OWNERS-STATE\_LAND.dgn

NOTE: THESE ARE PROPERTIES OVERLAPPING THE CONSTRUCTION WORK AREA

TRACT NUMBER	DISTRICT - ACCOUNT #	OWNER	CONTACT ADDRESS	TAX MAP	GRID	PARCEL	LOT	DEED REFERENCE / PLAT REF.	ZONING
<b>FCP PLAN 03</b>									
MD-BA-011.000	04 - 0418047450	STATE OF MARYLAND DEPARTMENT OF MENTAL HYGIENE	C/O ROSEWOOD STATE HOSPITAL 200 ROSEWOOD LANE OWINGS MILLS MD 21117	58	16	346		N/A / N/A	DR 1
<b>FCP PLAN 04</b>									
MD-BA-011.000	04 - 0418047450	STATE OF MARYLAND DEPARTMENT OF MENTAL HYGIENE	C/O ROSEWOOD STATE HOSPITAL 200 ROSEWOOD LANE OWINGS MILLS MD 21117	58	16	346		N/A / N/A	DR 1
<b>FCP PLAN 05</b>									
MD-BA-015.000	04 - 1700005529	STATE OF MARYLAND FOR USE OF THE MARYLAND VETERANS	31 HOPKINS PLAZA ROOM 110 BALTIMORE MD 21201	58	11	500		05617/00555 / N/A	RC 2
<b>FCP PLAN 06</b>									
MD-BA-015.000	04 - 1700005529	STATE OF MARYLAND FOR USE OF THE MARYLAND VETERANS	31 HOPKINS PLAZA ROOM 110 BALTIMORE MD 21201	58	11	500		05617/00555 / N/A	RC 2
<b>FCP PLAN 38</b>									
MD-BA-180.000	10 - 2000002213	STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES	C/O TAWES ST OFFICE BLDG ATTN: MARGARET E TRUCHSON 580 TAYLOR AVE ANNAPOLIS MD 21401	34	12	317		09013/00449 / N/A	RC 6
<b>FCP PLAN 39</b>									
MD-BA-180.000	10 - 2000002213	STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES	C/O TAWES ST OFFICE BLDG ATTN: MARGARET E TRUCHSON 580 TAYLOR AVE ANNAPOLIS MD 21401	34	12	317		09013/00449 / N/A	RC 6

THIS PLAN WAS PREPARED BY:  
 JENNIFER BIRD  
 KCI TECHNOLOGIES  
 MDNR QUALIFIED PROFESSIONAL  
 STATUS (SEPTEMBER 2011)  
  
 SIGNATURE DATE 02/2014



REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				FEB. 2014
				SCALE 1" = 50'
				DESIGNED BY JB
				DRAWN BY CSD

PROPERTY OWNERS CHART  
 FOR  
 COLUMBIA GAS TRANSMISSION, LLC  
 LINE MB EXTENSION PROJECT  
 STATE LANDS, MARYLAND

DRAWING NO.  
**PO-1**  
 SHEET 80 OF 85  
 KCI JOB NUMBER 16-121849