MVP Variance Request Form

Variance Request No.:	A-5
Date Approval Requested by Contractor:	4/5/2018
Date Submitted by Chief Inspector to LEI:	
Date Received by FERC:	
FERC Approval Reference No.:	

Requested By:	*Brent Ladd*	**Spread:**	A	**Variance Type:**	RA
Request Prepared By *:	*Megan Neylon*			**Variance Sequence Number:**	*005*

* The FERC compliance monitor should be alerted and given a copy of the draft variance for review prior to submittal

Location (Use either Station or Milepost)

Station:	*1538+30*	**To:**	*1586+30*	**Milepost:**	*28.97*	**To:**	*29.88*
Alignment Sheet Number:	31-32			**Tract No.:**	*WV-HA-128, WV-HA-126, WV-HA-129,WV-HA-130, WV-HA-132*		
Current Land Use/ Vegetative Cover:	*Deciduous Forest; Developed*			**Other Agency Jurisdiction:**	*N/A*		

Nearby Features (Water body, T&E Habitat, Wetland, Noxious Weed Area, Residence (distance), Cultural Resource Site (distance) etc.):

☐ Noxious Weed Area ☐ Raptor Nest ☐ Residence (Distance)

☑ T/E Species Habitat ☐ Cultural Resource Site ☐ Water Well

☐ Other (Specify): *MYSO (+ 0.09 ac USSH; -0.51 ac SUSH)*

In or w/in 50 feet of a wetland: ☐ Yes ☑ No

In or w/in 50 feet of a waterbody: ☑ Yes ☐ No

Wetland or Waterbody ID: *S-UU4*

N/A

Additional Stream footage impacted:	*0*	**Additional Wetland impacts:**	*N/A*
Net acreage affected:	*-0.42*		
Tree Clearing Required:	*YES*	**Acreage of tree clearing:**	*-0.42*

Variance Level: ☐ Level 1 ☐ Level 2 ☑ Level 3

Variance From: ☑ Permit ☐ Plan ☐ Procedures ☐ EPPM ☐ Specification ☐ Drawing ☐ Mitigation Measure ☐ Line List ☐ Other: Describe:

Detailed Description of Variance: Attachments? ☑ Yes ☐ No Photos? ☐ Yes ☑ No

Based on discussions with the third party operator (Dominion), Mountain Valley has shifted its LOD 25 feet to avoid encompassing the foreign pipeline in its permanent easement, and to minimize the number of times Mountain Valley crosses the Dominion pipeline. MVP-HA-035, MVP-ATWS-414 and MVP-ATWS-414A were reduced to align with the new LOD of the pipeline. A portion of the pipeline was also shifted in order to better follow the existing contours for long term pipeline / slope stability and ease of construction. MVP-HA-036 was shifted as the certificated alignment did not follow the existing road. The proposed variance alignment now follows the existing road. The associated work spaces (MVP-ATWS-415A, MVP-ATWS-415, MVP-ATWS-766, MVP-ATWS-766A) were shifted to match the new centerline adjustment of MVP-HA-036. A figure is included in Attachment 1 that more closely represents the changes to the access roads and ATWSs. Delineated Stream S-UU4 is outside of LOD and incurs no impacts.

This variance has a net decrease of 0.42 acres of LOD and tree clearing from the original permit (1.58 acres of trees are required to be cleared that were not designated to be cleared in original permit, but 2.00 acres of trees that were permitted to be cleared will no longer be cleared). The modification of the tree clearing results in a net increase of 0.09 acres MYSO - Unknown Use Summer Habitat (USSH) and a net decrease of 0.51 acres MYSO - Suitable Unoccupied Summer Habitat (SUSH). On January 29, 2018 the USFWS concurred with MVP's proposed process for reviewing variances that require tree clearing. A copy of that email is included in Attachment 2. Attachment 2 also includes a table that shows MVP's acreage "banks" will remain net positive following approval of this variance request.

List Attachments: Attachment 1-Alignment Sheets; Attachment 2- Rare, Threatened, and Endangered Species; Attachment 3- Waterbodies and Wetlands; Attachment 4- Cultural and Historic Resources CUI//PRIV -- DO NOT RELEASE); Attachment 5- Landowner Exhibits (CUI//PRIV -- DO NOT RELEASE);

Variance Justification:

Adjustment necessary to facilitate Dominion foreign line crossings and survey reconciliation. Resources have been avoided to the extent practicable. Per approved Project plans, BMPs will be installed to minimize potential impacts to Environmentally Sensitive Areas within/abutting the area.

For MVP Use Only

Additional Surveys Required	Surveyed Corridor Description	Additional Surveys Completed
Cultural Survey ☑ Yes ☐ No	The locations for this variance request were evaluated for cultural resources, waterbodies and wetlands, threatened and endangered species, and habitat. See the attached cover page list of reports.	☑ **Yes** ☐ **No**
T & E Survey ☑ Yes ☐ No		☑ Yes ☐ No
Waterbodies/Wetlands ☐ Yes ☑ No		☐ **Yes** ☑ **No**

Proof of Previous Biological and Cultural Survey Clearance

See attachments 2 and 3 that describe rare, threatened, and endangered species surveys and stream and wetland delineations. The cultural resources survey was reported in: Mountain Valley Pipeline Project, Cultural Resources Survey, Volume I, Wetzel, Harrison, Doddridge and Lewis Counties, West Virginia (Espino et al. July 2015); Mountain Valley Pipeline Project, Cultural Resources Survey Report, Addendum 1, Volume I, Wetzel, Harrison, Doddridge, and Lewis Counties, West Virginia (Espino et al. November 2016); Mountain Valley Pipeline Project, Cultural Resource Survey Report, Addendum 3 to Volume 1, Wetzel, Harrison, Doddridge, and Lewis Counties, West Virginia (Espino et al. December 2017);Mountain Valley Pipeline Project, Cultural Resource Survey, Combined County Report 1, Wetzel, Harrison, Braxton, Nicholas, and Greenbrier Counties, West Virginia (Espino et al. February 2018) Filed with FERC on 9/12/15, 12/22/16,1/8/18, and 2/20/2018. Clearance received from WVDCH 10/6/15, 11/8/16,1/8/18 and 3/7/2018. Letters of concurrence are provided in Attachment 4.

Landowner:	**REDACTED**
Land Agent Contact	**JANNA ARNOLD**
Landowner Approval Obtained	☑ Yes ☐ No

Sign Off:	**Name**	**Signature**	**Date**
Construction Manager	*Brent Ladd*	*Brent Ladd*	
Lead Environmental Inspector	*Travis Huskins*	*Travis Huskins*	
Third Party Compliance Manager or monitor			
ROW Land Agent *	*Janna Arnold*	*Janna Arnold*	
Environmental Supervisor	*Megan Neylon*	*Megan Neylon*	

*signature denotes confirmed landowner approval

For FERC Compliance Monitor and Compliance Manager Use Only

Variance Approved:		Variance Denied:		Beyond Authority:	
Signature:					
Date:					
Stipulations:					

Spread No.: A — Variance Request No.: A-5

VARIANCE CONDITIONS

Name:		Title:		Organization:	

Conditions:

Name: Title: Organization:

Conditions:

Name: Title: Organization:

Conditions:

Mountain Valley Pipeline, LLC
Mountain Valley Pipeline Project
Docket No. CP16-10-000

Alignment Sheets
Attachment 1

RIGHT-OF-WAY & OWNERSHIP DATA

Station from	Station to	Tracts	Length
1506+86	1508+84	WV-HA-125 / WV-HA-5674	198 LF 198 SLOPE
1508+84	1510+78	WV-HA-125	194 LF 196 SLOPE
1510+78	1512+35	WV-HA-126 / WV-HA-125	157 LF 157 SLOPE
1512+35	1512+56	WV-HA-126 / WV-HA-125 / WV-HA-5674	21 LF 21 SLOPE
1512+56	1512+73	WV-HA-126 / WV-HA-5674	17 LF 17 SLOPE
1512+73	1517+02	WV-HA-126	429 LF 438 SLOPE
1517+02	1521+93	WV-HA-126 / WV-HA-124	491 LF 492 SLOPE
1521+93	1525+31	WV-HA-126	338 LF 339 SLOPE
1525+31	1527+90	WV-HA-126 / WV-HA-124	259 LF 261 SLOPE
1527+90	1531+22	WV-HA-124	332 LF 333 SLOPE
1531+22	1533+63	WV-HA-127	241 LF 242 SLOPE
1533+63	1542+23	WV-HA-128	960 LF 966 SLOPE
1542+23	1543+66	WV-HA-126 / WV-HA-128	43 LF 44 SLOPE
1543+66	1550+83	WV-HA-126 / WV-HA-129	717 LF 719 SLOPE
1550+83	1551+25	WV-HA-126 / WV-HA-130 / WV-HA-129	42 LF 42 SLOPE
1551+25	1557+18	WV-HA-126 / WV-HA-130	592 LF 598 SLOPE
1557+18	1558+90	WV-HA-126	172 LF 176 SLOPE

DESIGN

Item	Value
PIPE / COATING	1506+86 – 1558+73: 1; 1558+73 – 1558+78: 7; 1558+78 – 1558+90: 1
SLOPE DISTANCE	5219'; 5'; 13'
CLASS LOCATION / HCA	1

ENVIRONMENTAL

Item	Value
CONSTRUCTION E□CLUSION	1506+86 – 1558+90: TIME OF YEAR RESTRICTION: NO CLEARING JUNE 1 - JULY 31 SEE TREE CLEARING PLAN FOR FURTHER DETAILS
WETLAND / STREAM	
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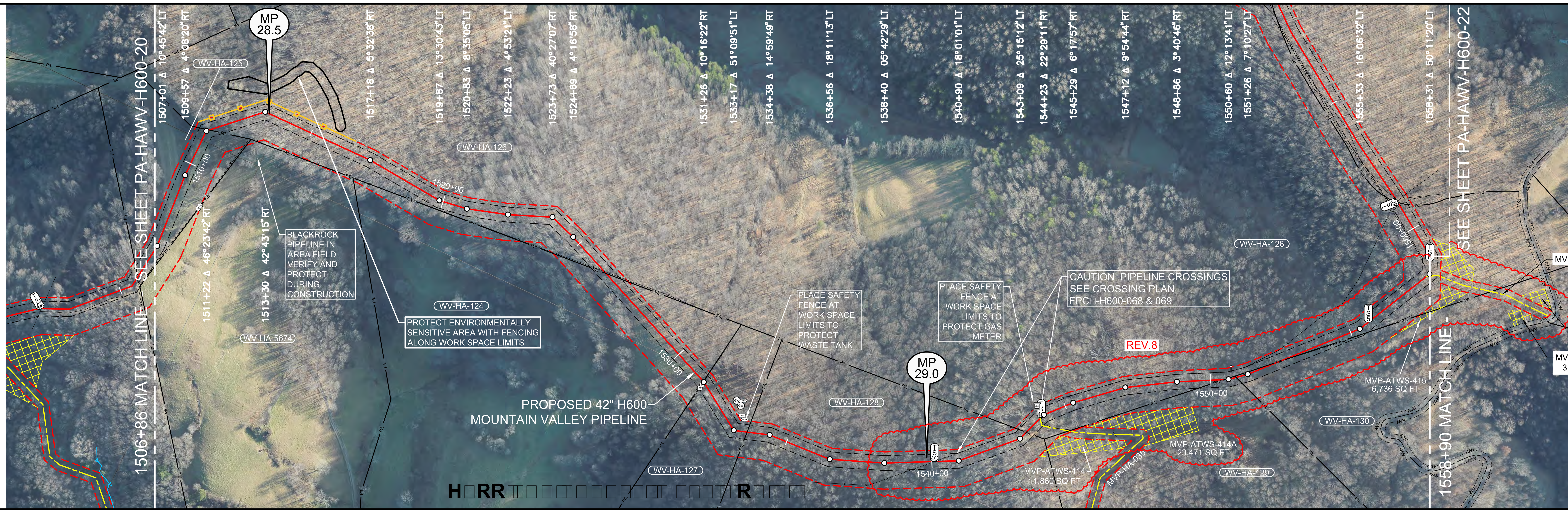
PLAN VIEW

0□ 100□ □00□ □00□



LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- E□ISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRICADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBO□
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REFERENCE DRAWINGS

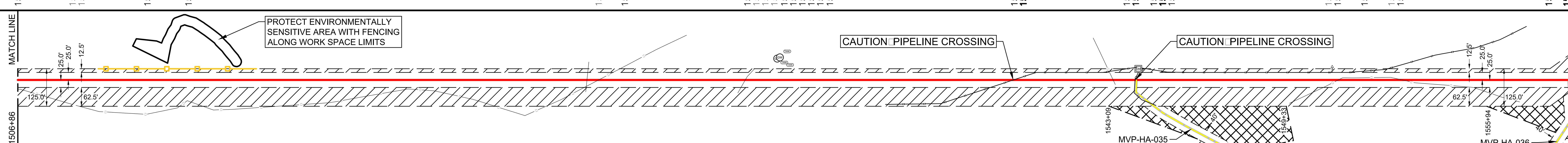
DRAWING NO.	DESCRIPTION
MVP-AR-H600-02	ACCESS ROADS, ANCILLARY SITES, MAINLINE VALVES & LAUNCHER/RECEIVER SITES
MVP-QDAR-H600-11	ACCESS ROAD DETAIL MAP
FPC□-H600-068	FOREIGN PIPELINE □-ING PLAN
FPC□-H600-069	FOREIGN PIPELINE □-ING PLAN
P-W-H600-1204-01	CATHODIC PROTECTION STANDARD DRAWING
P-W-H600-1204-02	CATHODIC PROTECTION STANDARD DRAWING

HORI□ONTAL STATIONING

- 1506+86 MATCH LINE
- 1508+69 GATE POST 82'RT
- 1508+80 GATE POST 85'RT
- 1511+32 PROPERTY LINE
- 1512+56 PROPERTY CORNER 73'RT
- 1526+25 FENCE – WIRE
- 1527+12 PROPERTY LINE
- 1531+22 PROPERTY LINE
- 1531+25 FENCE – WIRE
- 1531+31 GATE POST 11'RT
- 1531+36 GATE POST 22'RT
- 1532+33 WELL – GAS 61'LT
- 1532+37 WELL – GAS 61'LT
- 1532+49 TANK – WASTE 80'LT
- 1532+89 TANK – WASTE 50'LT
- 1533+05 TANK – WASTE 50'LT
- 1533+63 PROPERTY LINE
- 1540+09 PIPELINE–FOREIGN–DOMINION 6" H15366
- **1540+09 PROPOSED TYPE 4C TEST STATION**
- 1543+40 PROPERTY LINE
- **1544+04 ℄ ACCESS RD – TEMPORARY (MVP–HA–035)**
- 1544+10 PIPELINE – FOREIGN – 10 MILE UNK
- **1544+10 PROPOSED TYPE 4A TEST STATION**
- 1544+23 METER – GAS 37'LT
- 1550+43 FENCE – BARBED WIRE
- 1550+46 PROPERTY LINE
- 1550+86 PROPERTY LINE
- 1552+32 FENCE – BARBED WIRE
- 1552+40 PROPERTY LINE
- **1558+18 ℄ ACCESS RD – TEMPORARY (MVP–HA–036)**
- **1558+75 PROPOSED TYPE 6 TEST STATION**
- 1558+90 MATCH LINE

WORK SPACE

- PROPOSED PIPELINE
- E□ISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)



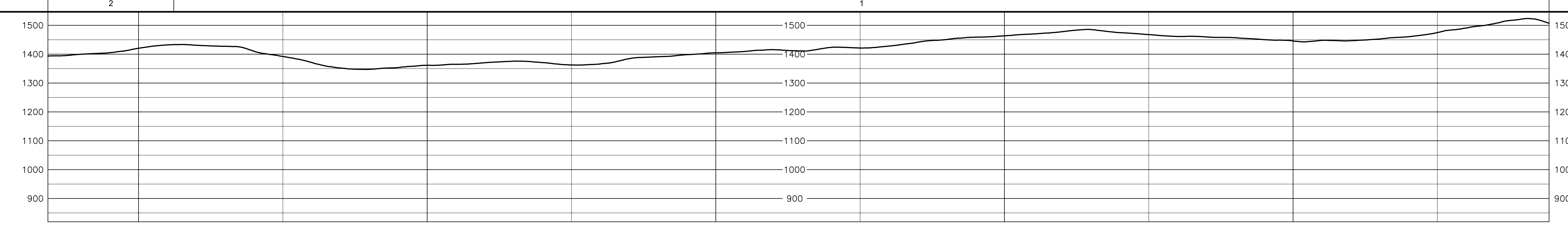
CONSTRUCTION METHOD

Station	Method
1506+86 – approx. 1511+32	2
approx. 1511+32 – 1558+90	1

CONSTRUCTION METHOD KEY

1 - TYPICAL R/W WORKING SIDE RIGHT
1.1 - TYPICAL R/W WORKING SIDE LEFT
2 - TOPSOIL SEGREGATED R/W WORKING SIDE RIGHT
2.1 - TOPSOIL SEGREGATED R/W WORKING SIDE LEFT
3 - TYPICAL WETLAND □-ING
4 - ROAD □-ING - BORE
5 - RAILROAD □-ING - BORE
6 - WATERBODY □-ING OPEN CUT - FLUME
7 - PARALLEL TO POWER LINE
8 - RIDGE CONSTRUCTION
10 - HDD ENTRY PLAN
11 - HDD E□IT PLAN
12 - HDD CONSTRUCTION
13 - PARALLEL TO POWER LINE
14 - PARALLEL TO POWER LINE
15 - WATERBODY □-ING OPEN CUT - DRY/DAM & PUMP
33 - SIDE HILL CONSTRUCTION
34 - 2-TONE SIDE HILL CONSTRUCTION
53 - REDUCED CONSTRUCTION R/W WITH TOPSOIL SEGREGATION
54 - REDUCED CONSTRUCTION R/W FOR NON-WETLAND OR STREAM REASONS

PROFILE



ISSUED FOR CONSTRUCTION

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	5232	42"O.D. □ 0.617"W.T., □-70, FUSION BONDED EPO□Y
7	5	ANSI 600 MONOLITHIC INSULATING JOINT
	1	TYPE 4A TEST STATION - SINGLE LINE FOREIGN □ING
	3	TYPE 4C TEST STATION - SINGLE LINE FOREIGN □ING WITH REFERENCE CELL
	1	TYPE 5 TEST STATION - METAL IR DROP TEST STATION
	1	TYPE 6 TEST STATION - ISO. JOINT - BELOW GRADE

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-11-16	FERC DATA REQUEST No.1
2	HEI	04-14-16	FERC DATA REQUEST No.2
3	HEI	09-03-16	REV. 4.1.13 ISSUED FOR BID
4	HEI	10-14-16	OCTOBER 2016 PROPOSED ROUTE - ISSUED TO FERC
5	HEI	11-9-16	REMOVED EQUATIONS
6	HEI	11-27-17	ISSUED FOR CONSTRUCTION
7	HEI	04-13-18	ISSUED FOR CONSTRUCTION - FERC REVISION REQUEST
8	HEI	04-14-18	ISSUED FOR VARIANCE - RE-ROUTE FROM STATION 1538+40 TO EQUATION: 1585+91 BACK = 1586+07 AHD ON PA-HAWV-H600-22 REVISED ACCESS ROAD MVP-HA-036 AND ASSOCIATED ATWS

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
6	JJS	11-27-17
7	JJS	04-13-18

APPROVED FOR BIDDING

REV.	BY	DATE
3	RRR	09-03-16

APPROVED FOR FERC

REV.	BY	DATE
0	RRR	10-15-15
4	RRR	10-14-16
6	JJS	11-27-17
7	JJS	04-13-18

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Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE

□□□M□□□D□□□H□RR□□□□□□□□□□

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HOR□. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/09/15
DRAFTING CK:	
ENGINEERING CK:	
CONSTRUCTION CK:	
ENVIRONMENTAL CK:	
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: P□-H□□ □-H600 -□1	
SHEET 31 OF 329	REV. 8
DATE OF PLOT: 4/19/18 8:16 AM	

RIGHT-OF-WAY & OWNERSHIP DATA	1558+90	WV-HA-126 2582 LF 2607 SLOPE	1584+72	WV-HA-4222 WV-HA-126 34 LF 34 SLOPE	1585+06	EQUATION: 1585+91 BK= 1586+07 AHD WV-HA-4222 468 LF 470 SLOPE	1589+90
DESIGN – PIPE / COATING	1558+90	1					1589+90
DESIGN – SLOPE DISTANCE		3111'					
DESIGN – CLASS LOCATION / HCA		1					
ENVIRONMENTAL – CONSTRUCTION E□CLUSION	1558+90	TIME OF YEAR RESTRICTION: NO CLEARING JUNE 1 - JULY 31 SEE TREE CLEARING PLAN FOR FURTHER DETAILS					1589+90
ENVIRONMENTAL – WETLAND / STREAM							
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PLAN VIEW

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
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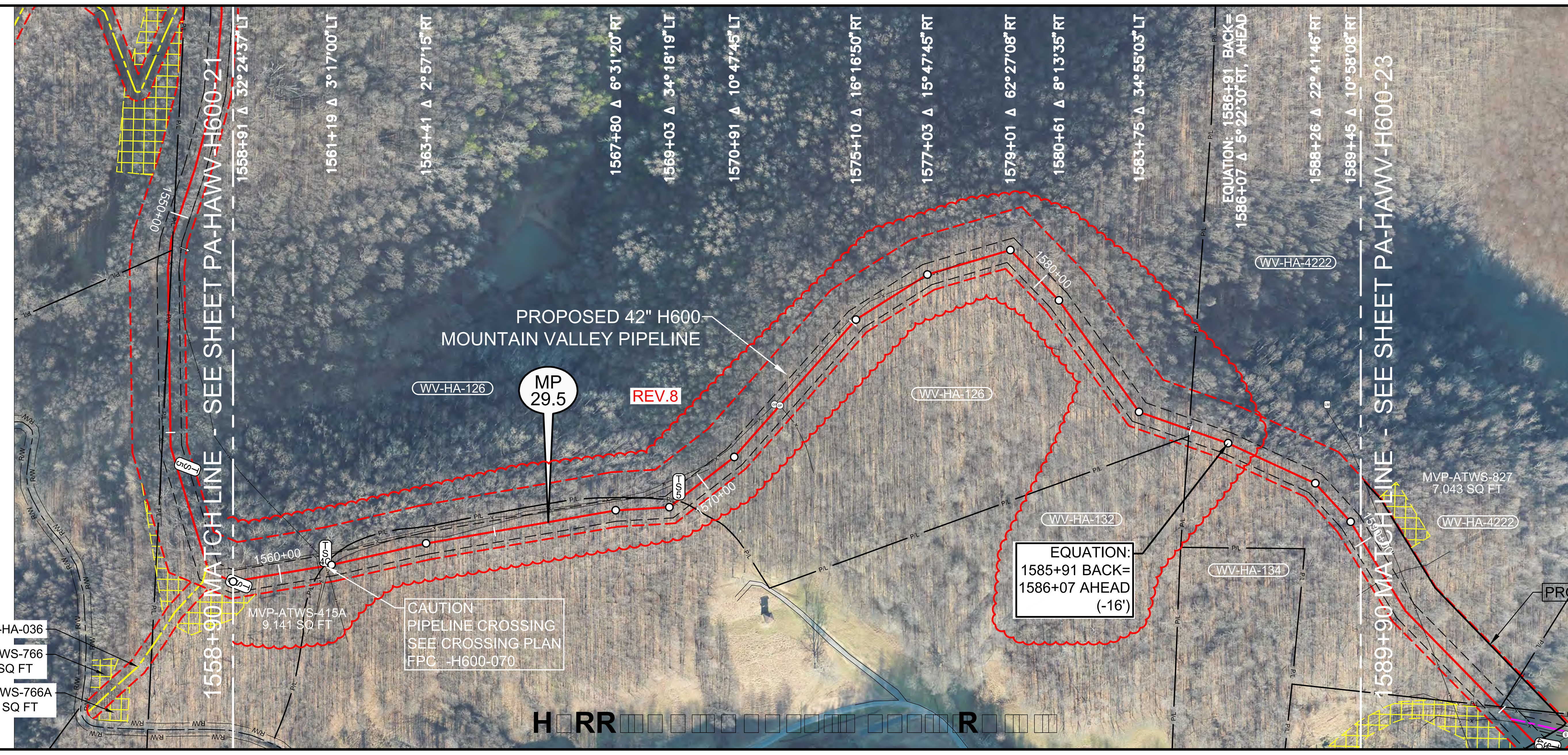


AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

ISSUED FOR CONSTRUCTION

REFERENCE DRAWINGS

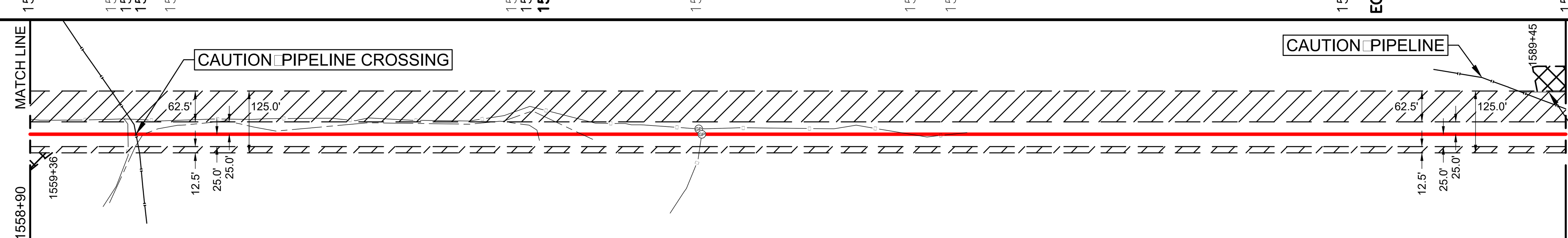
DRAWING NO.	DESCRIPTION
MVP-AR-H600-02	ACCESS ROADS, ANCILLARY SITES, MAINLINE VALVES & LAUNCHER/RECEIVER SITES
FPC□-H600-070	FOREIGN PIPELINE □-ING PLAN
P-W-H600-1204-01	CATHODIC PROTECTION STANDARD DRAWING

HORI□ONTAL STATIONING

- 1558+90 MATCH LINE
- 1560+89 FENCE – BARBED WIRE
- 1560+92 PROPERTY LINE
- 1561+05 PIPELINE–FOREIGN–DOMINION 6"H15366, **PROPOSED TYPE 4C TEST STATION**
- 1561+19 ℄ TRAIL(DIRT)
- 1569+18 ℄ TRAIL(DIRT)
- 1569+27 PROPERTY LINE
- **1569+31 PROPOSED TYPE 5 TEST STATION**
- 1572+48 GATE & POST
- 1576+70 FENCE – BARBED WIRE
- 1577+52 FENCE – BARBED WIRE
- 1584+96 PROPERTY LINE
- **EQUATION: 1585+91 BACK = 1586+07 AHEAD**
- 1589+90 MATCH LINE

WORK SPACE

- PROPOSED PIPELINE
- E□ISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)



CONSTRUCTION METHOD

1.1

CONSTRUCTION METHOD KEY

- 1 - TYPICAL R/W WORKING SIDE RIGHT
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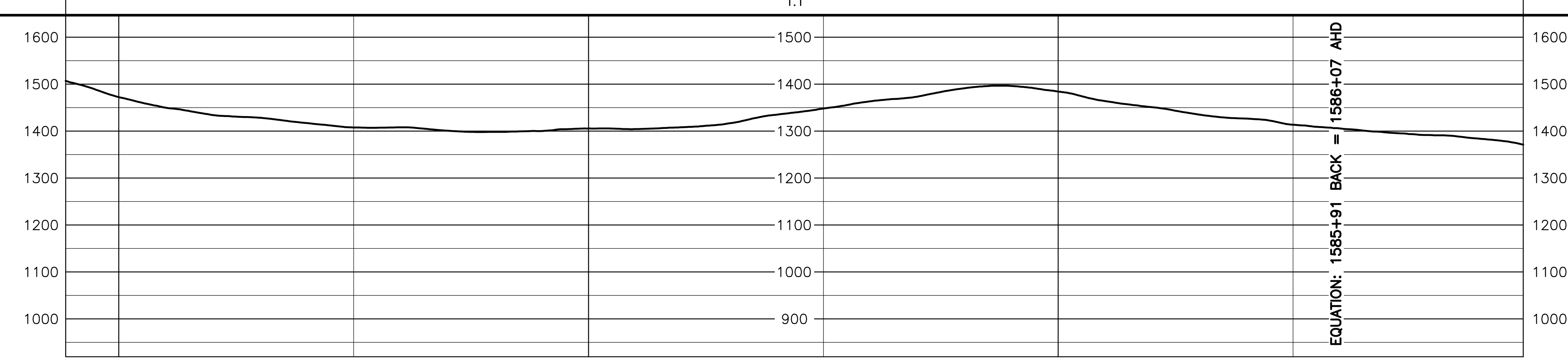
PROFILE



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REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-11-16	FERC DATA REQUEST No.1
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MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	3111	42"O.D. □0.617"W.T., □-70, FUSION BONDED EPO□Y
	1	TYPE 4C TEST STATION - SINGLE LINE FOREIGN □ING WITH REFERENCE CELL
	1	TYPE 5 TEST STATION - METAL IR DROP TEST STATION

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
6	JJS	11-27-17
7	JJS	04-13-18

APPROVED FOR BIDDING

REV.	BY	DATE
3	RRR	09-03-16

APPROVED FOR FERC

REV.	BY	DATE
0	RRR	10-15-15
4	RRR	10-14-16
6	JJS	11-27-17
7	JJS	04-13-18

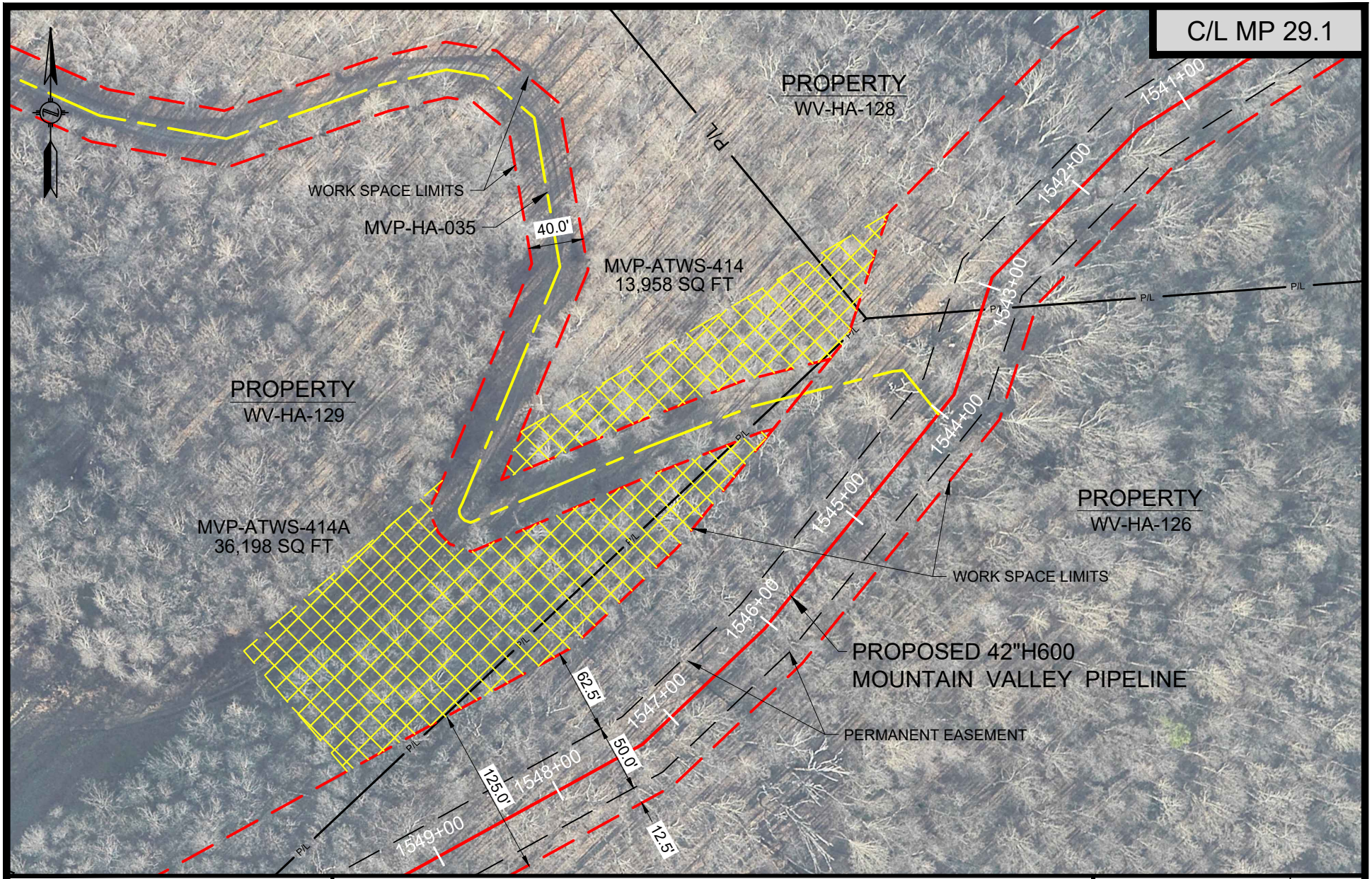
Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE

□□□M□□□D□□□H□RR□□□□□□□□□□
□□□□1□□□90□□□□□1□□9□90

HOR□. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/09/15
DRAFTING CK:	
ENGINEERING CK:	
CONSTRUCTION CK:	
ENVIRONMENTAL CK:	
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: P□-H□□ □-H600 -□□	
SHEET 32 OF 329	REV. 8
DATE OF PLOT: 4/19/18 8:17 AM	



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HEI PROJECT NO.: 14-10-052

Mountain Valley PIPELINE

PROPOSED IFC ACCESS ROAD & ATWS - MP 29.1

MOUNTAIN VALLEY PIPELINE PROJECT
PROPOSED H-600 PIPELINE
HARRISON COUNTY, WEST VIRGINIA

SHEET 1 OF 2

DRAWN BY: HEI(DRF)	05-17-18
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ENVIRONMENTAL CK:	
ENGINEERING CK: .	.
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DRAWING NO.: **PRM-H600-019**	
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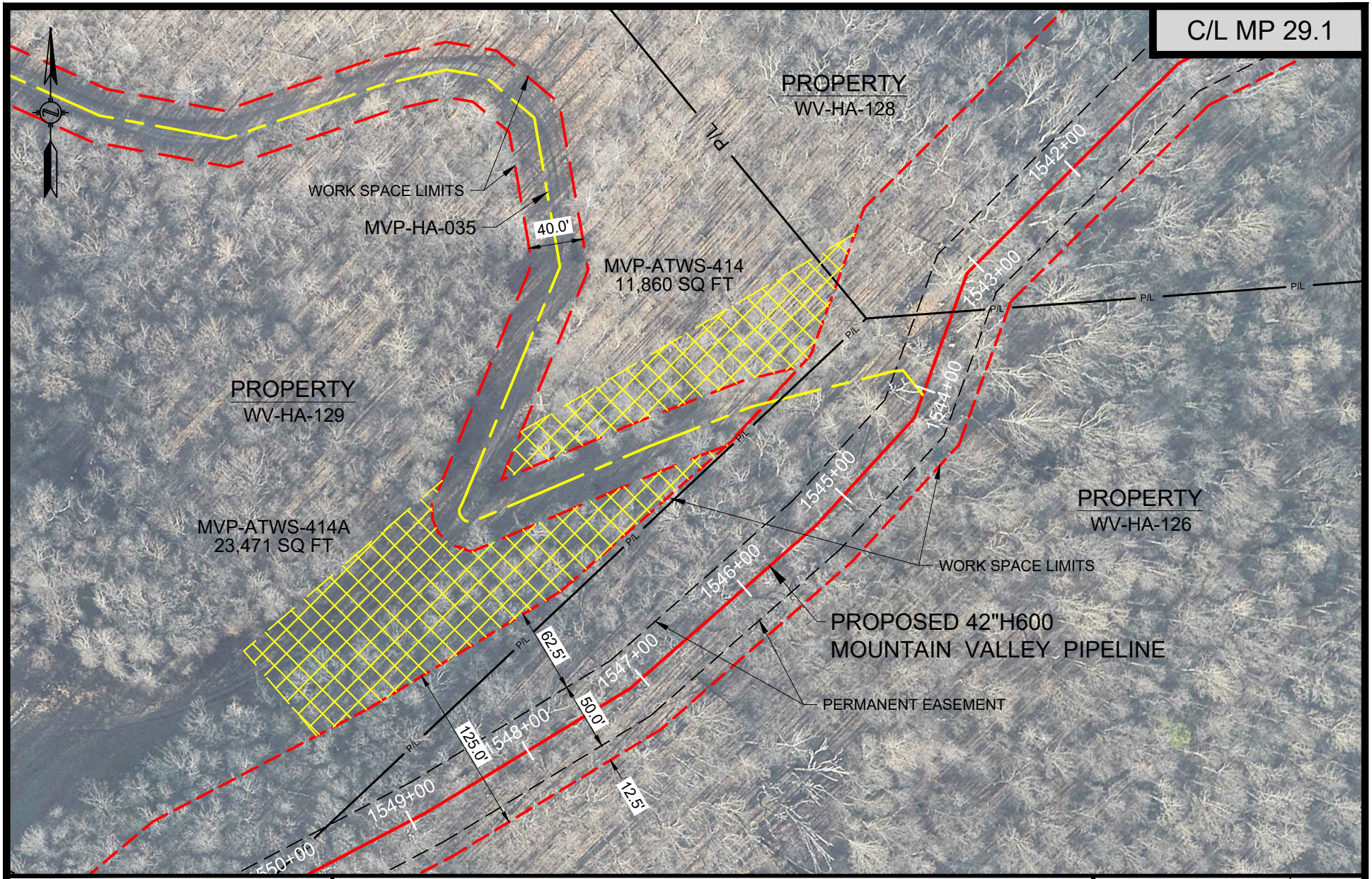

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Mountain Valley PIPELINE

PROPOSED AR & ATWS MODIFICATION - MP 29.1

MOUNTAIN VALLEY PIPELINE PROJECT
PROPOSED H-600 PIPELINE
HARRISON COUNTY, WEST VIRGINIA

SHEET 2 OF 2

DRAWN BY: HEI(DRF)	05-17-18
DRAFTING CK:	
ENVIRONMENTAL CK:	
ENGINEERING CK: .	.
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DRAWING NO.: **PRM-H600-019**	
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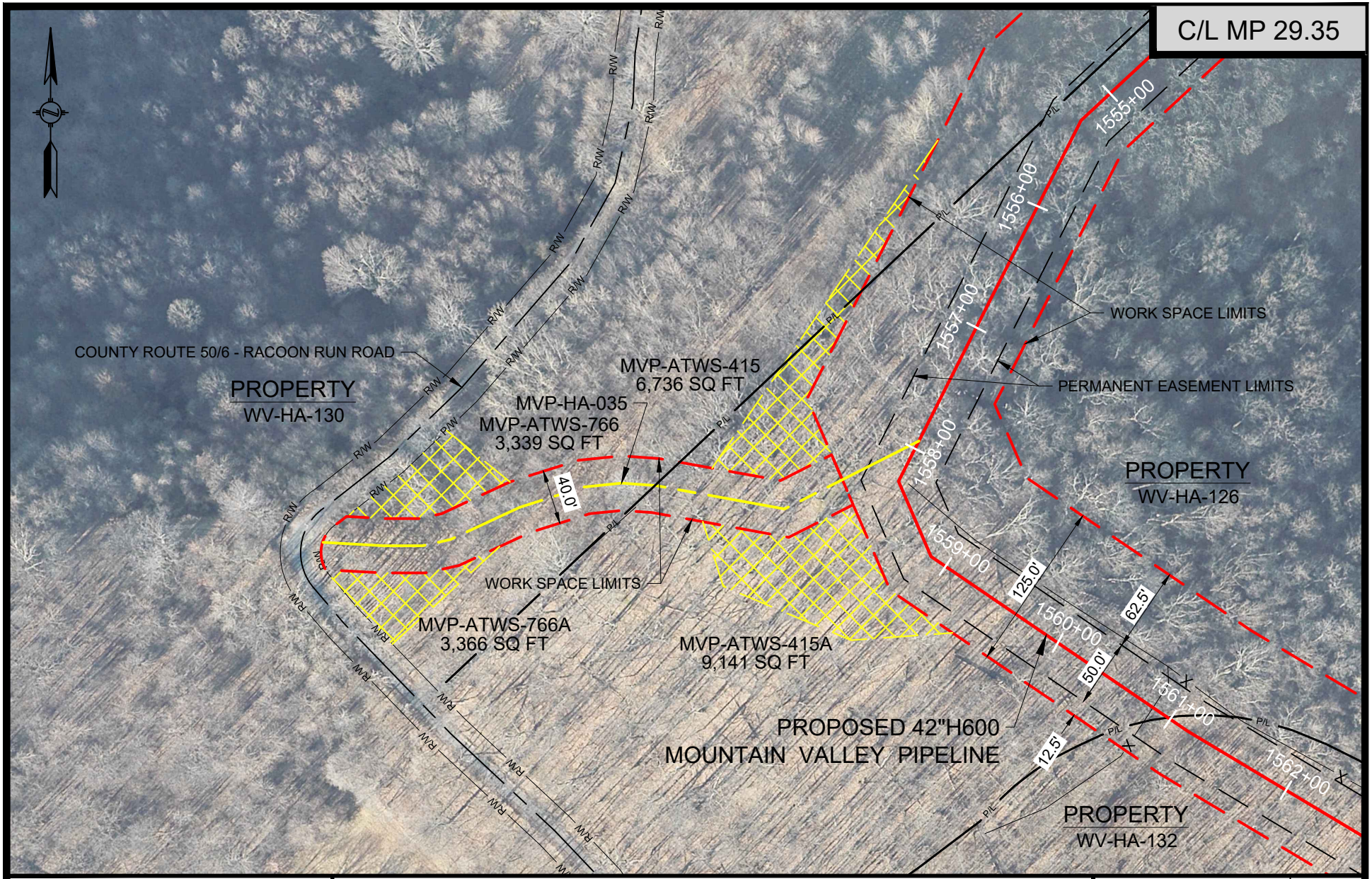

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PROPOSED H-600 PIPELINE
HARRISON COUNTY, WEST VIRGINIA

SHEET 1 OF 2

DRAWN BY: HEI(DRF)	05-17-18
DRAFTING CK:	
ENVIRONMENTAL CK:	
ENGINEERING CK: .	.
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DRAWING NO.: **PRM-H600-020**	
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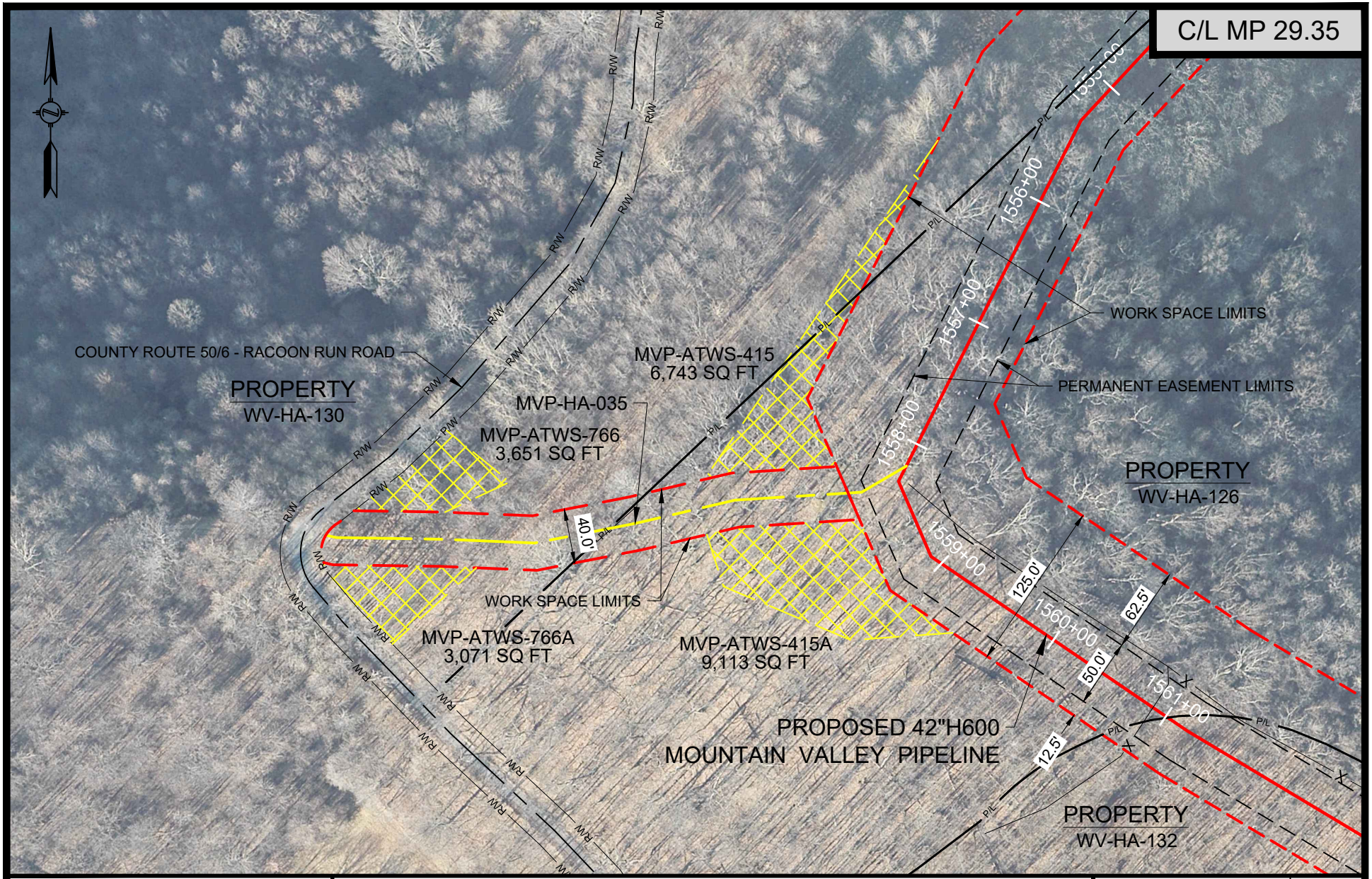

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PROPOSED H-600 PIPELINE
HARRISON COUNTY, WEST VIRGINIA

SHEET 2 OF 2

DRAWN BY: HEI(DRF)	05-17-18
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ENVIRONMENTAL CK:	
ENGINEERING CK: .	.
ALIGN. SHT: PA-HAWV-H600-22	
DRAWING NO.: **PRM-H600-020**	
SCALE: 1" = 100'	REV. 0
DATE OF PLOT: 5/17/2018 12:17 PM	

Mountain Valley Pipeline, LLC
Mountain Valley Pipeline Project
Docket No. CP16-10-000

Rare, Threatened, and Endangered Species
Attachment 2

Mountain Valley Pipeline Project
Variance A-5
May 3, 2018

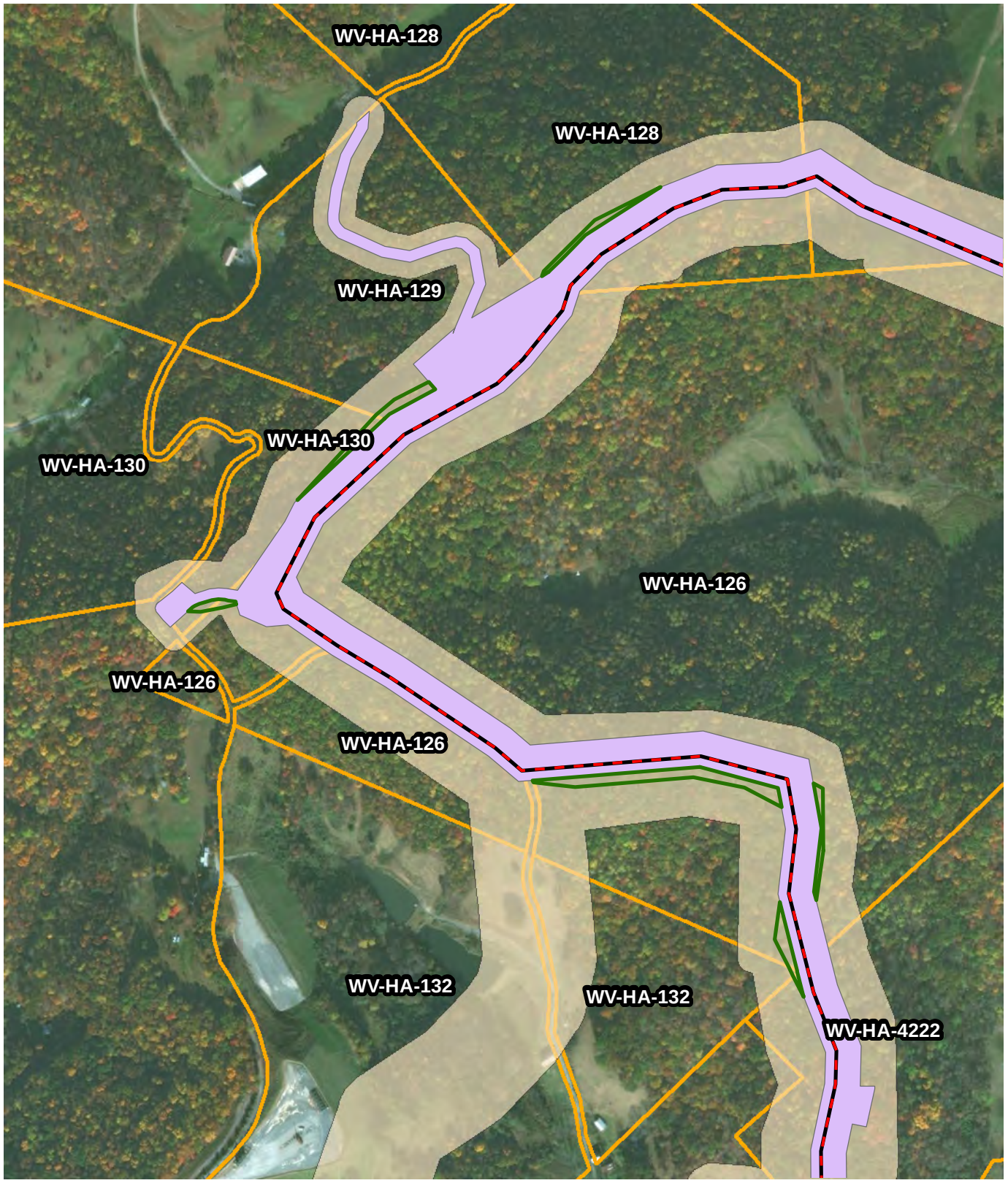
State and federal agencies identified areas where plant surveys were required. This variance does not occur in any of those areas.

There are no impacts to aquatic resources associated with this variance and thus no impacts to listed aquatic species.

The only avian species-specific presence-absence surveys required for the project are scrub-shrub habitat-specific in the state of Virginia, thus do not apply to this variance area. However, the Migratory Bird Conservation Plan for the project does address concerns for 28 species of migratory birds within the nesting season from April 1 to August 31; thus preconstruction nesting surveys for migratory birds will be conducted prior to clearing in accordance with this document.

This variance has a net decrease of 0.42 acres of LOD and tree clearing from the original permit (1.58 acres of trees are required to be cleared that were not designated to be cleared in original permit, but 2.00 acres of trees that were permitted to be cleared will no longer be cleared). The modification of the tree clearing results in a net increase of 0.09 acres MYSO - Unknown Use Summer Habitat (USSH) and a net decrease of 0.51 acres MYSO - Suitable Unoccupied Summer Habitat (SUSH). Tree clearing will not occur between June 1 and July 31 or October 1 and November 14 as per the BO.

On 11/13/2015, 9/15/2015, 8/15/2017, and 12/19/2017, Environmental Solutions and Innovations, Inc. (ESI) conducted field surveys to search for portal openings (winter bat habitat). Surveys were conducted in accordance with agency approved protocols for the project. No portal openings were observed in the variance area.



MVP Variance (increased area)
MVP LOD (20171127)
ESI Portal Coverage
Parcel Boundary

N
W
E
S

Mountain Valley Pipeline Variance Survey Exhibit; Variance A-5

Meters
75 0 75 150

Base Map: ESRI "World Imagery (Clarity)"; accessed 5/16/2018

Table 1
Bat Habitat Bank Acreage

	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)
Remaining bank acreage from IP-5 table	**0.37**	**1.47**	**13.04**	**6.81**	**13.79**	**0.59**
Bradshaw ATWS	0.02	0	0	0	0	0
ATWS 1544	0.03	0	0	0	0	0
ATWS 1545	0.1	0	0	0	0	0
LY-27	0	0	0	0	0.15	0
LY-45/46	0	0	0	0	0.053	0
Variance A-4 - MP 24.6	0	0	0	0	0.06	0
Bradshaw Slip Repair Phase 1	0.22	0	0	0	0	0
Variance A-5 - MP 28.97	0	0	(0.51)	0	0.09	0
Net Remaining Acreage for variances to date	0	1.47	13.55	6.81	13.437	0.59

Eggerding, Matthew

From: Troy Andersen <troy_andersen@fws.gov>
Sent: Monday, January 29, 2018 7:44 AM
To: Paul Friedman
Cc: Cindy Schulz; Stahl, Megan D.; Lavinia Disanto; John Schmidt; Tiernan Lennon; Sumalee Hoskin; Jennifer Stanhope; Eggerding, Matthew
Subject: RE: MVP Variances

Paul:

Megan's summary below is accurate as it reflects the necessary thought process associated with evaluating route modifications to the pipeline. As the federal action agency, it is FERC's responsibility to review proposed modifications and determine if the changes trigger any of the 4 clauses included in the "Reinitiation Notice" section of the BO (Page 46). Upon completion of the initial review, if you have questions or need additional assistance, we can certainly provide it.

V/R
Troy

From: Stahl, Megan D. [mailto:MStahl@eqt.com]
Sent: Tuesday, January 23, 2018 1:31 PM
To: Troy Andersen
Cc: Paul Friedman; 'lavinia.disanto@cardno.com'; Eggerding, Matthew
Subject: MVP Variances

Troy,

As we discussed on the phone today, MVP developed a process for evaluating and requesting route modifications in view of the analysis in the Biological Opinion and our prior conversations on the topic.

Last month, MVP submitted route modifications (including minor reductions within the limits of disturbance) to FERC for review. Based on our conversation on 11/27/17 regarding the process for submitting modifications, MVP included summaries that show (i) the modifications will have no effect on species evaluated during Section 7 consultation, plus the candy darter (proposed to be listed as a threatened species) and (ii) the changes in tree clearing by bat habitat type. The proposed modifications filed last month result in an overall net decrease in tree clearing for each bat habitat type.

Based on our discussions, our understanding is that FWS agrees that individual minor modifications are acceptable and would not require further review or consultation provided that (i) the modifications will have no effect on species evaluated during Section 7 consultation (plus the candy darter) and (ii) the modifications as a whole reflect an overall net decrease in tree clearing for each bat habitat type as compared to the Biological Opinion.

Please confirm that you agree with this approach for review of route modifications for the MVP Project.

Thank you,
Megan

Megan Stahl
Permitting Supervisor

625 Liberty Avenue, Suite 1700
Pittsburgh, PA 15222
T 412-553-7783
C 412-737-2587

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Mountain Valley Pipeline, LLC
Mountain Valley Pipeline Project
Docket No. CP16-10-000

Waterbodies and Wetlands
Attachment 3

Mountain Valley Pipeline Project

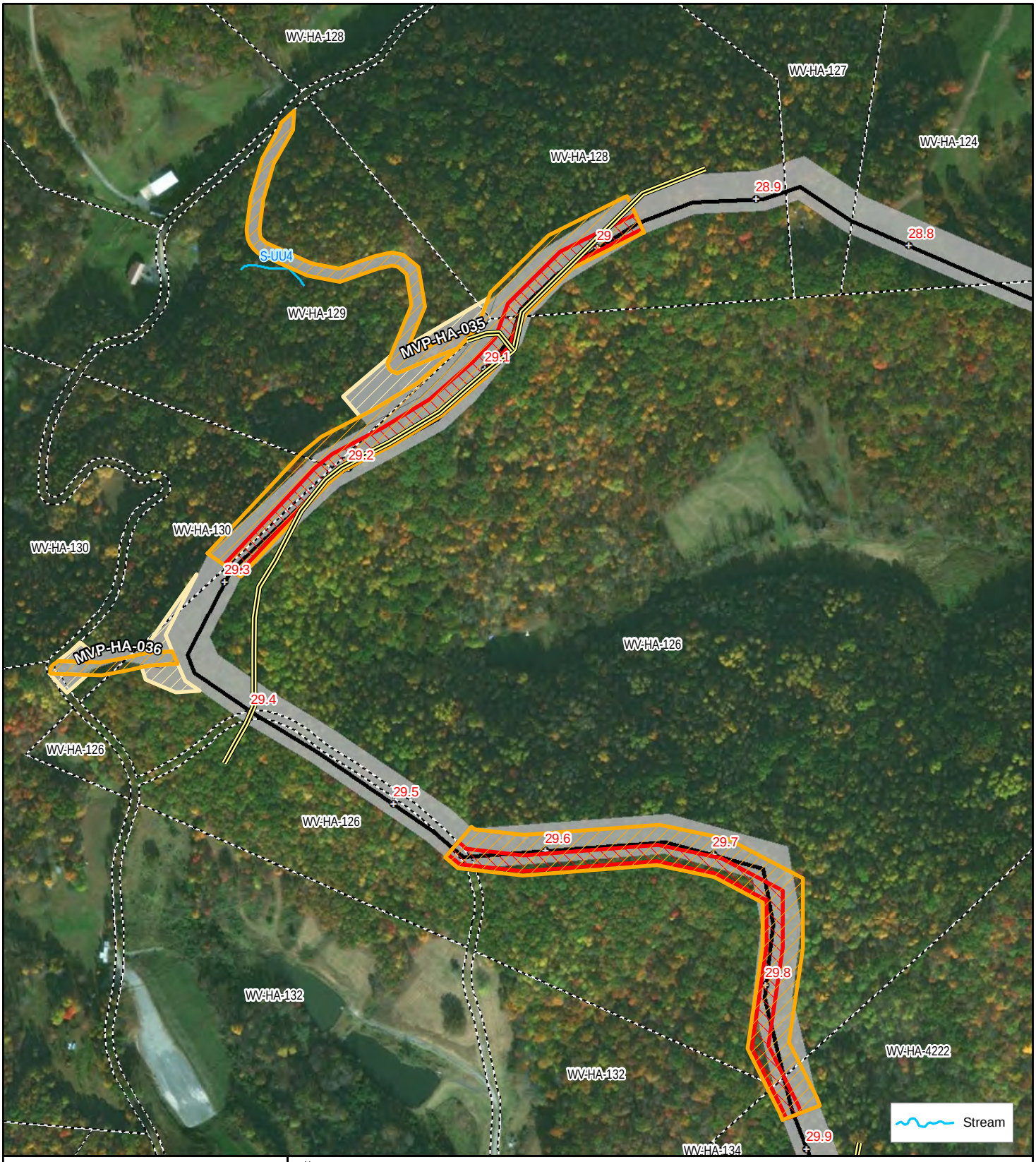
Variance A-5

April 11, 2018

On September 24th, 2015, Tetra Tech, Inc. (Tetra Tech) surveyed the proposed Variance A-5 and associated facilities: MVP-HA-035, MVP-HA-036, MVP-ATWS-414, MVP-ATWS-414A, MVP-ATWS-415, MVP-ATWS-415A, MVP-ATWS-766A, and MVP-ATWS-766A in Harrison Co., WV for wetlands and streams. Wetland delineations were conducted utilizing the Routine On-Site Determination Methodology presented in the US Army Corps of Engineers (USACE) Wetland Delineation Manual (Technical Report Y-87-1) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0).

During field surveys, Tetra Tech did not identify any wetlands, but did identify one ephemeral stream (S-UU4) in the survey area, as shown on the attached figure.

FIGURES



Mountain Valley Pipeline Project

N

NAD 1983 UTM 17N

0 50 100 200 300 400 Feet

Mountain Valley PIPELINE

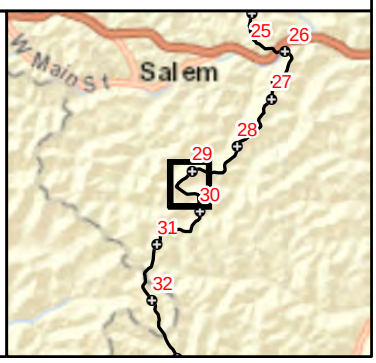
FERC Docket No. CP16-10-000

MVP Variance A-5

HARRISON COUNTY

April 2018

Data Sources: ESRI Aerial Imagery, All Issued for Construction data was filed with FERC on 12/20/2017.

Legend

- Issued for Construction Milepost
- Issued for Construction Route
- Issued for Construction Limits of Disturbance
- Parcel Boundary
- Existing Dominion Pipeline
- Proposed Variance Permanent Easement
- Proposed Variance Temporary Workspace
- Proposed Variance Additional Temporary Workspace