RIGHT-OF-WAY & OWNERSHIP DATA

Station	Owner(s)	Length
7590+97 – 7594+47	WV-GR-028	350 LF / 360 SLOPE
7594+47 – 7599+75	WV-GR-029.01	528 LF / 532 SLOPE
7599+75 – 7601+46	WV-GR-030 / WV-GR-029.01	171 LF / 171 SLOPE
7601+46 – 7612+75	WV-GR-030	1128 LF / 1132 SLOPE
7612+75 – 7617+04	WV-GR-030 / WV-GR-031	429 LF / 429 SLOPE
7617+04 – 7626+99	WV-GR-030	995 LF / 996 SLOPE
7626+99 – 7627+59	WV-GR-030 / WV-GR-032	60 LF / 60 SLOPE
7627+59 – 7627+93	WV-GR-032	35 LF / 35 SLOPE
7627+93 – 7630+10	WV-GR-032 / WV-GR-031	216 LF / 218 SLOPE
7630+10 – 7645+76	WV-GR-033	1566 LF / 1575 SLOPE

DESIGN

PIPE / COATING	7590+97 – 7612+80: 1	7612+80 – 7613+20: 4	7613+20 – 7645+76: 1
SLOPE DISTANCE	2200'	40'	3269'
CLASS LOCATION / HCA	1		

ENVIRONMENTAL

CONSTRUCTION EXCLUSION

WETLAND / STREAM

REV. 1

TTWV-W-11	TTWV-W-69	TTWV-W-10
113 LF	52 LF	145 LF

REV. 1

W-PP7
90 LF

.

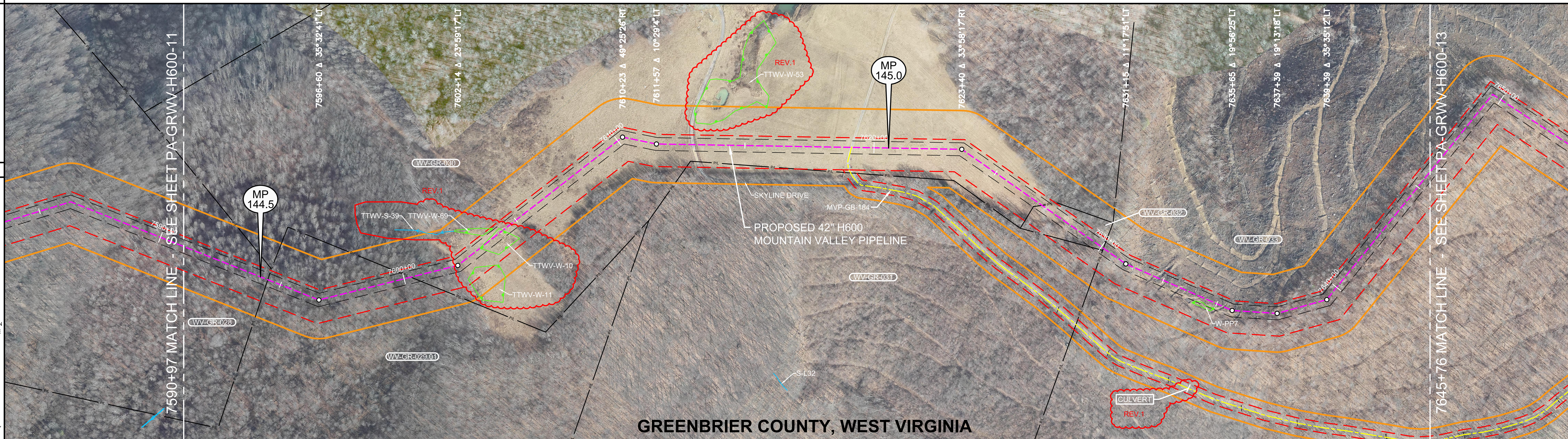
.

PLAN VIEW

0' 100' 200' 400'

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING 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
- BARRACADE FENCE
- PI SYMBOL / PROPOSED TEST STATION
- MAILBOX / 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



AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

REV 4.0.0 - ISSUED TO FERC

REFERENCE DRAWINGS

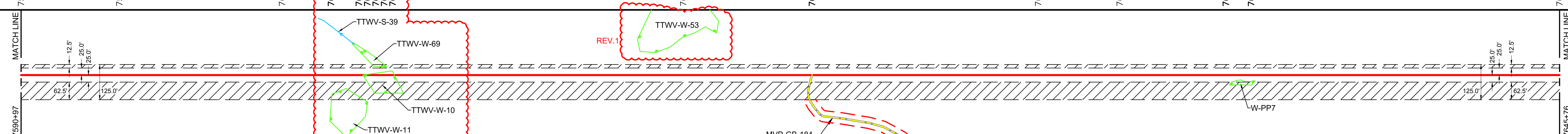
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

- 7590+97 MATCH LINE
- 7594+47 PROPERTY LINE
- 7600+26 PROPERTY LINE
- 7602+14 BEGIN WETLAND(TTWV-W-11)
- 7603+23 BEGIN WETLAND(TTWV-W-10)
- 7603+27 END WETLAND(TTWV-W-11)
- 7603+56 BEGIN WETLAND(TTWV-W-69)
- 7604+08 END WETLAND(TTWV-W-69)
- 7604+68 END WETLAND(TTWV-W-10)
- REV.1
- 7613+00 SKYLINE DRIVE
- 7619+14 ACCESS RD - TEMPORARY(MVP-GB-184)
- 7627+19 PROPERTY LINE
- 7630+09 PROPERTY LINE
- 7634+10 BEGIN WETLAND(W-PP7)
- 7635+00 END WETLAND(W-PP7)
- 7645+76 MATCH LINE

WORK SPACE

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



CONSTRUCTION METHOD

1

CONSTRUCTION METHOD KEY

1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
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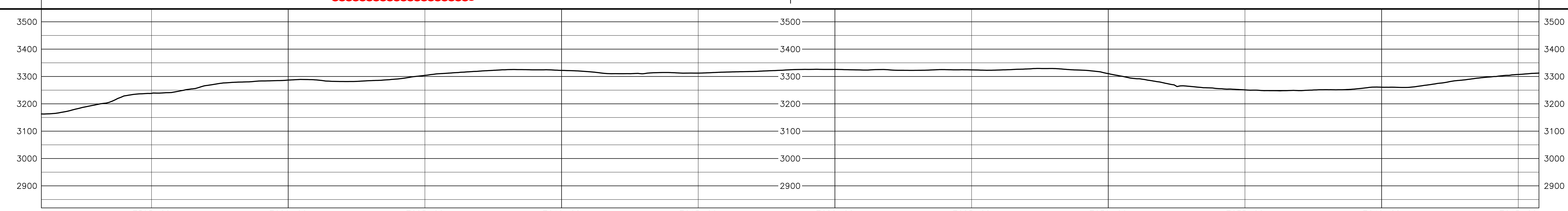
13 -
14 -
15 -
16 -

PROFILE



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Southfield, Michigan 48076
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www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV 4.0.0 ISSUED TO FERC
1	HEI	04-12-16	FERC DATA REQUEST No.2

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	5469	42"O.D. X 0.617"W.T., X-70, FUSION BONDED EPOXY
4	40	42"O.D. X 0.740"W.T., X-70, FBE & ARO
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
.	.	.

APPROVED FOR BIDDING

REV.	BY	DATE
.	.	.

APPROVED FOR FERC

REV.	BY	DATE
0	RRR	10-15-15

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

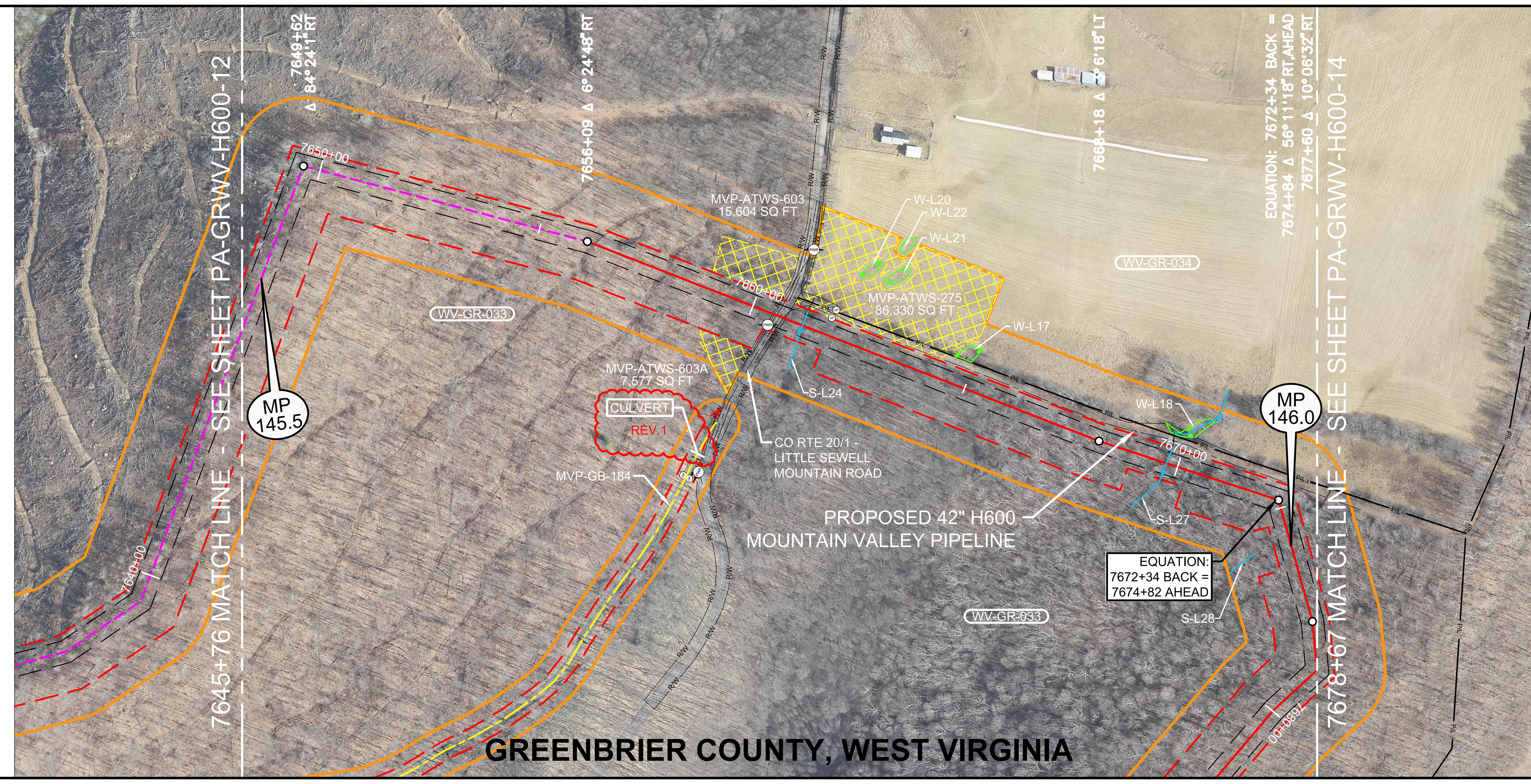
MOUNTAIN VALLEY PROJECT - H600 LINE
MEADOW BLUFF DIST., GREENBRIER CO.,W.V.
STA. 7590+97 TO STA. 7645+76

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/17/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-GRWV-H600-12	
SHEET 159 OF 326	REV. 1
DATE OF PLOT: 04/19/16 12:18 PM	

RIGHT-OF-WAY & OWNERSHIP DATA	7645+76 · WV-GR-033 · 1471 LF 1501 SLOPE	7660+47 · COUNTY ROUTE 60/31 30 LF - 30 SLOPE · 7660+77	WV-GR-033 · 1540 LF 1568 SLOPE · EQ:7672+34 BK= 7674+84 AHD	7678+67
DESIGN – PIPE / COATING	7645+76 · 1	7660+44 · 4 · 7660+84	1	7678+67
DESIGN – SLOPE DISTANCE	1496'	40'	1563'	
DESIGN – CLASS LOCATION / HCA		1		
ENVIRONMENTAL – CONSTRUCTION EXCLUSION				
ENVIRONMENTAL – WETLAND / STREAM		S-L24 4 LF	S-L27 2 LF	
.				
.				

0' 100' 200' 400'

PLAN VIEW



LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING 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
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- 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

REV 4.0.0 - ISSUED TO FERC

REFERENCE DRAWINGS

DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

7645+76 MATCH LINE

7660+45 POWER POLE 27'RT
7660+47 RIGHT-OF-WAY
7660+50 OHP LINE
7660+56 EDGE OF GRAVEL
7660+64 ℄ CO RTE 20/1 - LITTLE SEWELL MOUNTAIN ROAD
7660+72 EDGE OF GRAVEL
7660+77 RIGHT-OF-WAY
7661+16 CULVERT 33'LT
7661+17 ℄ STREAM (S-L24)
7661+20 CULVERT 64'LT
7661+71 GATE POST 39'LT
7661+75 GATE POST 59'LT

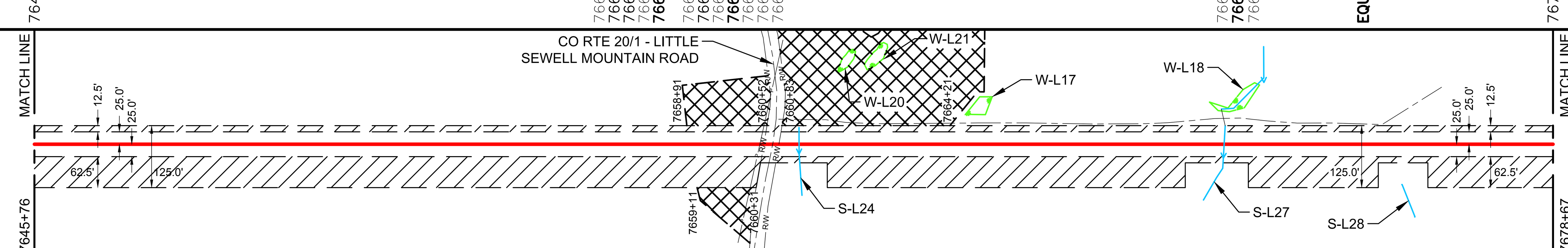
7669+71 CULVERT 69'LT
7669+75 ℄ STREAM (S-L27)
7669+76 CULVERT 33'LT

EQUATION: 7672+34 BACK = 7674+84 AHEAD

7678+67 MATCH LINE

WORK SPACE

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



CONSTRUCTION METHOD

1	3	1	3	1	3	1

CONSTRUCTION METHOD KEY
1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
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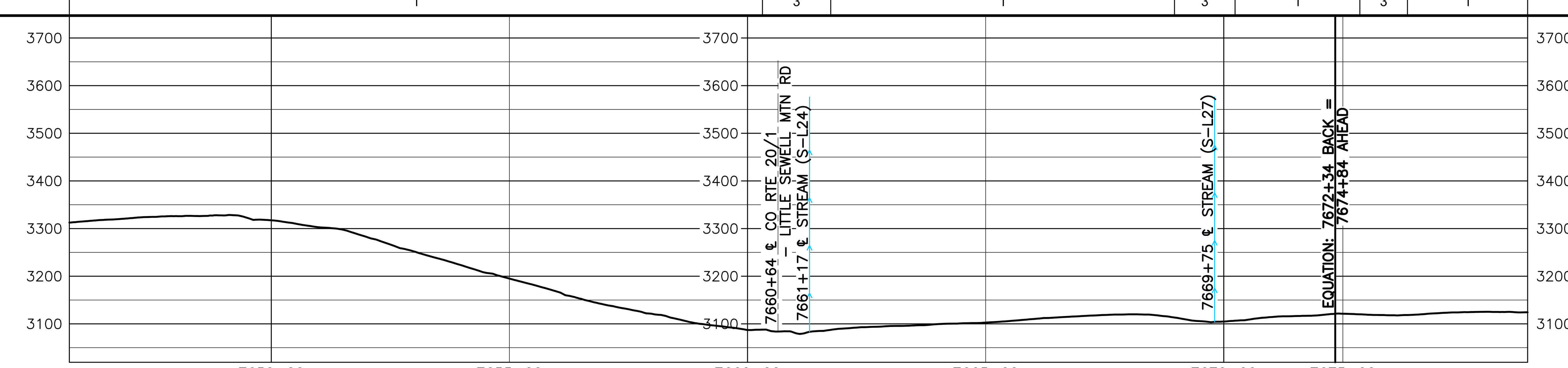
PROFILE



AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

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26555 Evergreen Rd. Suite. 430, Southfield, Michigan 48076, T 248-827-7322 F 248-827-7549
www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV 4.0.0 ISSUED TO FERC
1	HEI	04-12-16	FERC DATA REQUEST No.2

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	3059	42"O.D. X 0.617"W.T., X-70, FUSION BONDED EPOXY
4	40	42"O.D. X 0.740"W.T., X-70, FBE & ARO
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION	REV.	BY	DATE
	.	.	.

APPROVED FOR BIDDING	REV.	BY	DATE
	.	.	.

APPROVED FOR FERC	REV.	BY	DATE
	0	RRR	10-15-15

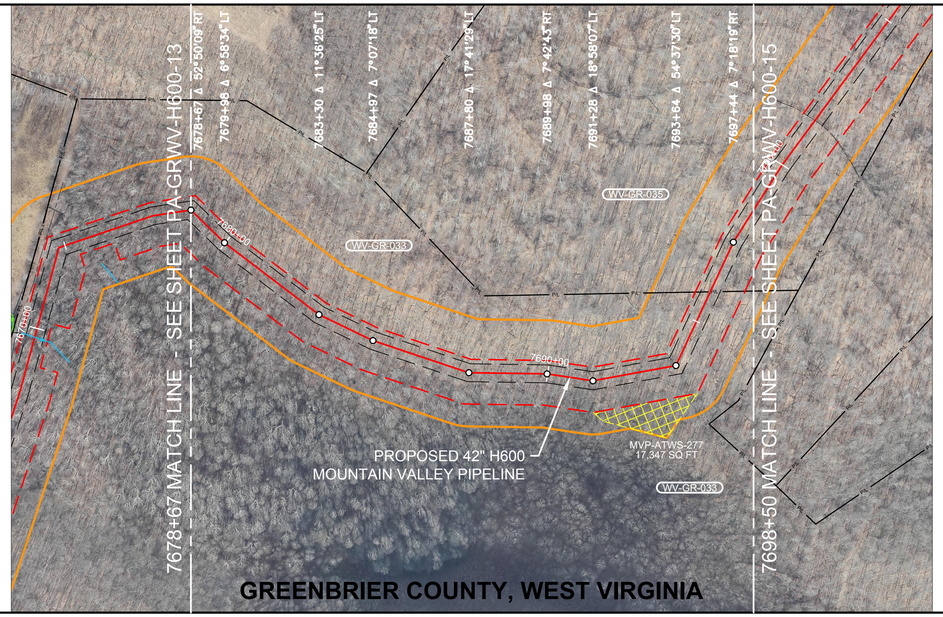
Mountain Valley PIPELINE

PIPELINE ALIGNMENT
MOUNTAIN VALLEY PROJECT - H600 LINE MEADOW BLUFF DIST., GREENBRIER CO.,W.V.
STA. 7645+76 TO STA. 7678+67

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/17/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:.	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-GRWV-H600-13	
SHEET 160 OF 326	REV. 1
DATE OF PLOT: 04/19/16 12:19 PM	

RIGHT-OF-WAY & OWNERSHIP DATA

		7678+67	WV-GR-033		7695+73	WV-GR-035 / WV-GR-033	7696+34	WV-GR-035	7698+50
			1706 LF 1722 SLOPE			61 LF 65 SLOPE		216 LF 234 SLOPE	
DESIGN	PIPE / COATING	7678+67	1						7698+50
	SLOPE DISTANCE		2021'						
	CLASS LOCATION / HCA		1						
ENVIRONMENTAL	CONSTRUCTION EXCLUSION								
	WETLAND / STREAM								
	.								
	.								



0' 100' 200' 400'

PLAN VIEW

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
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- TEMPORARY ACCESS RD
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- TANK
- GAS VALVE
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- 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

HORIZONTAL STATIONING

WORK SPACE

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

CONSTRUCTION METHOD

CONSTRUCTION METHOD KEY
1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
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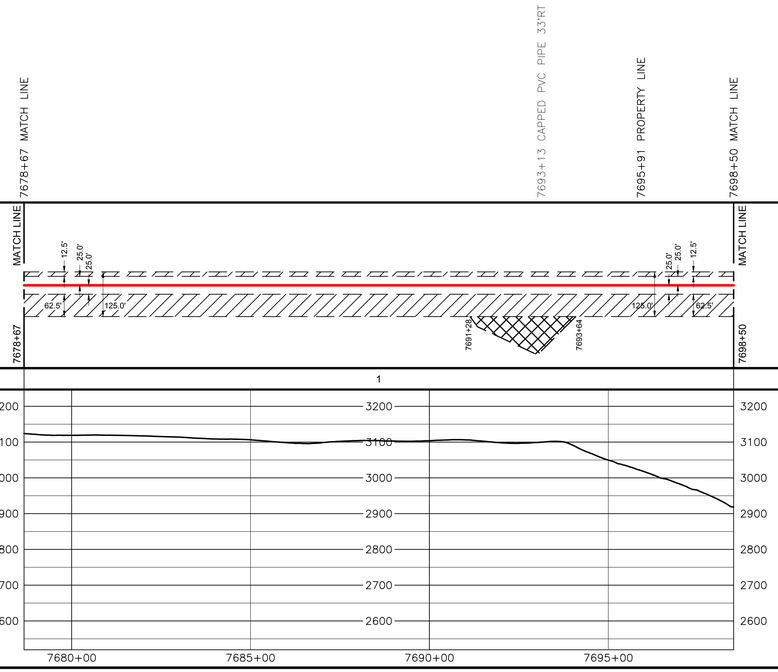
PROFILE



REV 4.0.0 - ISSUED TO FERC

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV 4.0.0 ISSUED TO FERC

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	2021	42"O.D. X 0.617"W.T. X70, FBE BONDED EPOXY
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR FERC			APPROVED FOR BIDDING			APPROVED FOR CONSTRUCTION		
REV.	BY	DATE	REV.	BY	DATE	REV.	BY	DATE
0	HRR	10-15-15	-	-	-	-	-	-

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www.hollandengineering.com

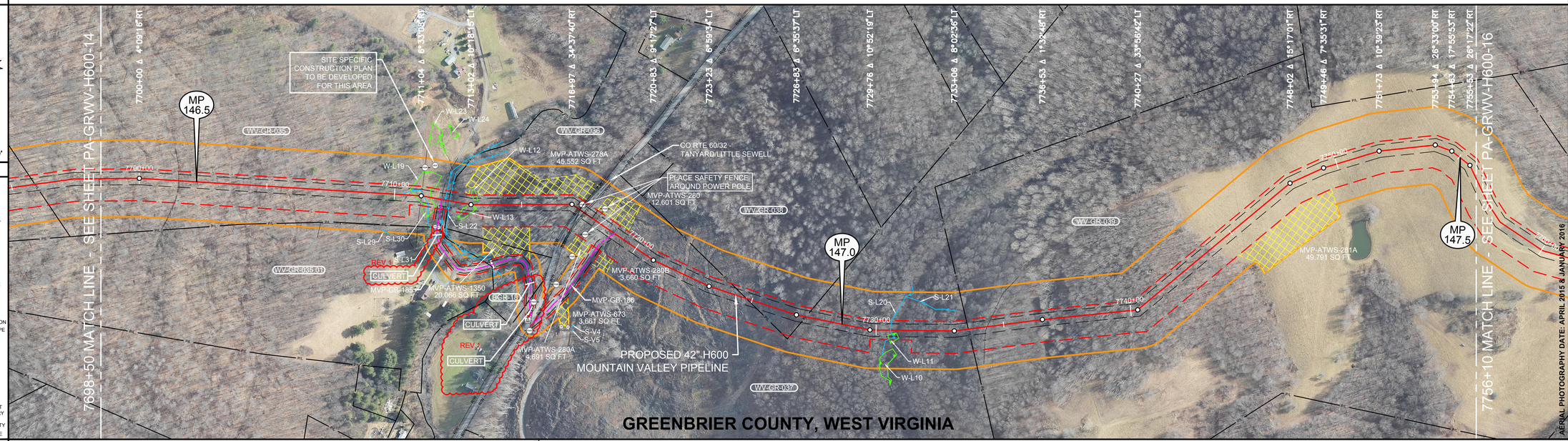
Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
MEADOW BLUFF DIST., GREENBRIER CO., W.V.
STA. 7678+67 TO STA. 7698+50

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/17/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:	.
AFE/P.O.NO.:	
HEI PROJECT NO.:	14-10-052
DRAWING NO.:	PA-GRWV-H600-14
SHEET 161 OF 326	REV. 0
DATE OF PLOT:	04/19/16 12:19 PM

RIGHT-OF-WAY & OWNERSHIP DATA		7698+50	WV-GR-035 1365 LF 1461 SLOPE	7712+15	WV-GR-036 514 LF 525 SLOPE	7717+29	COUNTY ROUTE 60/32 ON 7717+24	7717+59	WV-GR-037 642 LF 681 SLOPE	7724+01	WV-GR-038 340 LF 365 SLOPE	WV-GR-037	7727+41	WV-GR-037 620 LF 656 SLOPE	7733+61	WV-GR-039 2249 LF 2269 SLOPE	7756+10
DESIGN	PIPE / COATING	7698+50	1			7717+24	4	7718+64									7756+10
	SLOPE DISTANCE		1982'				40'								3960'		
	CLASS LOCATION / HCA		1														
ENVIRONMENTAL	CONSTRUCTION EXCLUSION																
	WETLAND / STREAM		W-L19 111 LF	S-L30 1 LF	S-L22 18 LF	W-L13 62 LF	W-L12 26 LF							W-L11 67 LF	S-L20 0 LF	W-L10 44 LF	
	.																
	.																



PLAN VIEW

0' 100' 200' 400'

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
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- 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

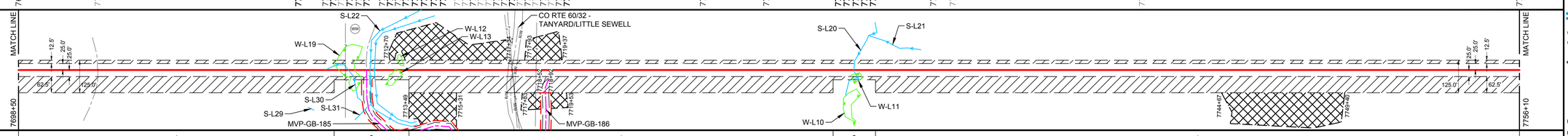
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

7698+50 MATCH LINE | 7701+54 ℄ TRAIL(DIRT) | 7710+59 BEGIN WETLAND(W-L19) | 7711+05 OHP LINE | 7711+16 ℄ STREAM(S-L30) | 7711+37 WELL - WATER 125'LT | 7711+70 END WETLAND(W-L19) | 7711+78 ACCESS RD - PERMANENT(MVP-GB-185) | 7711+86 ACCESS RD 49'RT | 7711+97 CULVERT 49'RT | 7711+99 STREAM BANK(S-L22) | 7712+15 EDGE OF ASPHALT | 7712+17 STREAM BANK(S-L22) | 7712+63 BEGIN WETLAND(W-L13)RT | 7713+04 BEGIN WETLAND(W-L12)LT | 7713+25 END WETLAND(W-L13)RT | 7713+30 END WETLAND(W-L12)LT | 7717+16 GUY ANCHOR 22'LT | 7717+18 GUY ANCHOR 22'LT | 7717+29 RIGHT-OF-WAY | 7717+34 EDGE OF ASPHALT | 7717+35 OHP LINE | 7717+36 OHP LINE | 7717+44 ℄ CO RTE 60/32-TANYARD/LITTLE SEWELL | 7717+59 RIGHT-OF-WAY | 7718+06 POWER POLE 68'RT | 7718+10 OHP LINE | 7718+13 POWER POLE 59'LT | 7718+33 CULVERT 411'RT | 7718+98 ACCESS RD - PERMANENT(MVP-GB-186) | 7724+77 PROPERTY LINE | 7727+20 PROPERTY LINE | 7730+15 BEGIN WETLAND(W-L11)RT | 7730+45 BEGIN WETLAND(W-L10)RT | 7730+56 ℄ STREAM(S-L20) | 7730+82 END WETLAND(W-L11)RT | 7730+89 END WETLAND(W-L10)RT | 7733+61 PROPERTY LINE | 7734+36 FENCE - WIRE | 7741+62 DEER BLIND 78'LT | 7756+10 MATCH LINE

WORK SPACE

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



CONSTRUCTION METHOD

CONSTRUCTION METHOD KEY
1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
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7 -
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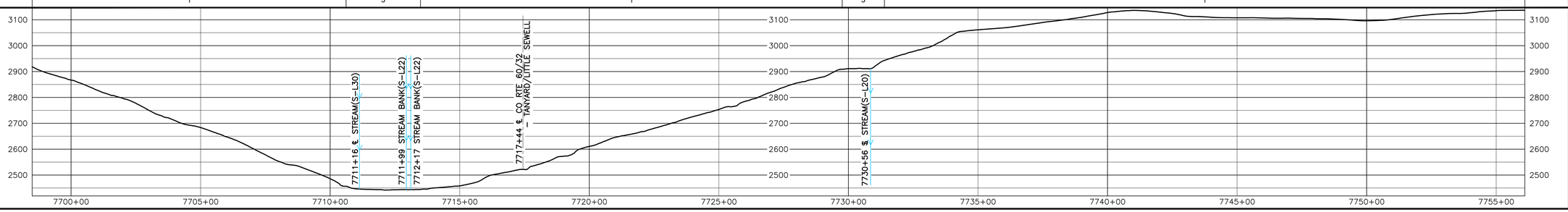
15 -
16 -

1 | 3 | 1 | 3 | 1

PROFILE



REV 4.0.0 - ISSUED TO FERC

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220 Hoover Boulevard, Suite 2 | 26555 Evergreen Rd, Suite 430
Holland, Michigan 49423-3786 | Southfield, Michigan 48076
T 616.355.0580 F 616.355.0581 | T 248.281.1030 F 248.281.1949
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REVISIONS

REV.	BY	DATE	DESCRIPTION
4	HEI	10-15-15	REV 4.0.0 ISSUED TO FERC
1	HEI	04-12-16	FERC DATA REQUEST Rev 2

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	5942	42"O.D. X 0.617"W.T. X 70 FUSION BONDED EPOXY
2	40	42"O.D. X 0.740"W.T. X 70 PRE & ARO
4		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
-	-	-

APPROVED FOR BIDDING

REV.	BY	DATE
-	-	-

APPROVED FOR FERC

REV.	BY	DATE
0	HRR	10-15-15

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
MEADOW BLUFF DIST., GREENBRIER CO., W.V.
STA. 7698+50 TO STA. 7756+10

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/17/15
DRAFTING CK:	-
ENGINEERING CK:	-
CONSTRUCTION CK:	-
ENVIRONMENTAL CK:	-
AFE/P.O.NO.:	
HEI PROJECT NO.:	14-10-052
DRAWING NO.:	PA-GRWV-H600-15
SHEET 162 OF 326	REV. 1
DATE OF PLOT:	04/19/16 12:19 PM