RIGHT-OF-WAY & OWNERSHIP DATA

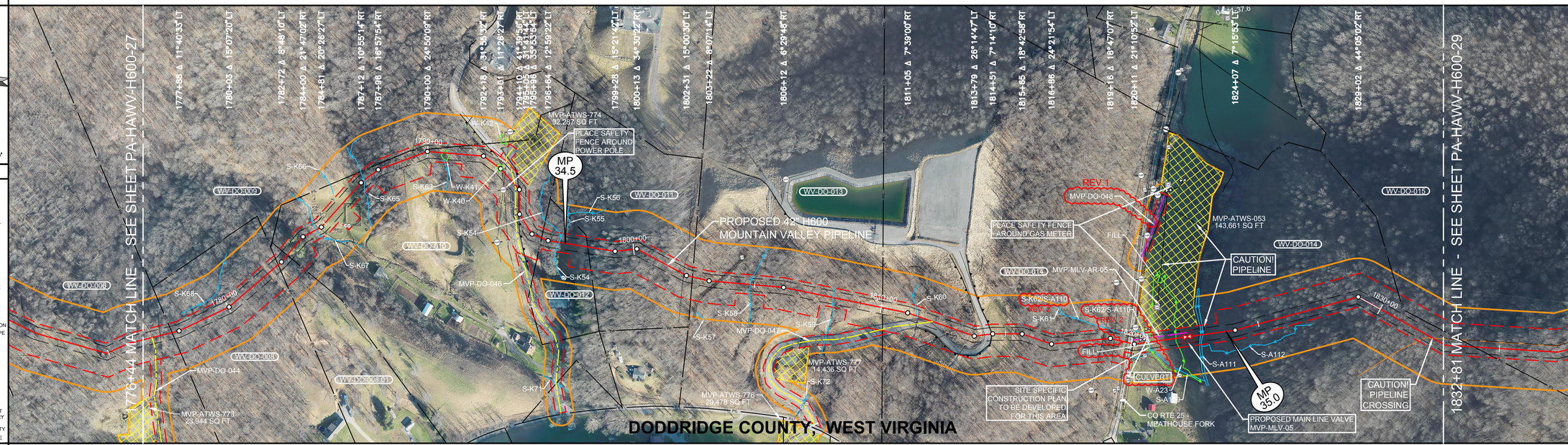
Ownership segment	Length / slope
WV-DO-006	116 LF, 121 SLOPE
WV-DO-008	495 LF, 512 SLOPE
WV-DO-008.01	51 LF, 57 SLOPE
WV-DO-010	422 LF, 441 SLOPE
WV-DO-009	435 LF, 460 SLOPE
WV-DO-010	483 LF, 482 SLOPE
WV-DO-012	171 LF, 183 SLOPE
WV-DO-011	38 LF, 41 SLOPE
WV-DO-012	410 LF, 425 SLOPE
WV-DO-011	749 LF, 757 SLOPE
WV-DO-013	972 LF, 1021 SLOPE
WV-DO-014	1025 LF, 1087 SLOPE
WV-DO-015	249 LF, 250 SLOPE
WV-DO-014	

DESIGN

PIPE / COATING	1776+44	1	1779+40	2	1806+40	1	1814+72	2	1819+78	5	1820+18	2	1827+63	1	1832+81								
SLOPE DISTANCE		308'		2817'		866'		525'		40'		774'		539'									
CLASS LOCATION / HCA		1		2		1				2				1									

ENVIRONMENTAL

CONSTRUCTION EXCLUSION																							
WETLAND / STREAM	S-K67 0.5 LF	S-K65 8 LF	W-K41 29 LF	S-K63 3 LF	W-K40 7 LF	S-K54 7 LF	S-K55 5 LF	S-K58 2.5 LF	S-K59 2.5 LF	S-K60 4 LF	REV. 2 S-K62/S-A110 7 LF	W-A23 125 LF	S-A111 9 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

REFERENCE DRAWINGS

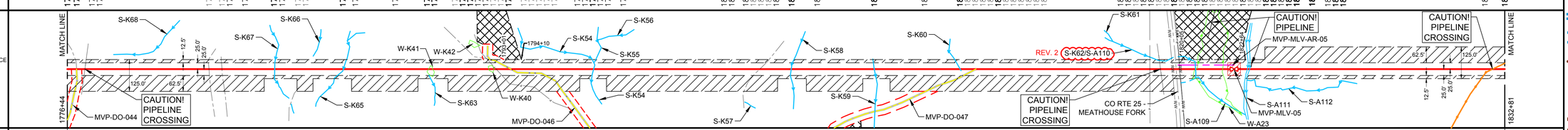
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

1776+44 MATCH LINE
1776+80 ACCESS ROAD–TEMPORARY(MVP–DO–044)
1777+13 (EQT)PIPELINE
1777+61 PROPERTY LINE
1782+00 ℄ FIELD ROAD(DIRT)
1782+51 ℄ FIELD ROAD(DIRT)
1782+55 PROPERTY LINE
1783+07 PROPERTY LINE
1784+57 ℄ STREAM(S–K67)
1784+72 FENCE – BARBED WIRE
1785+49 GATE POST 66'RT
1785+56 GATE POST 76'RT
1787+26 ℄ STREAM(S–K65)
1787+36 ℄ DRAIN
1789+30 FENCE – ELECTRIC
1790+54 BEGIN WETLAND(W–K41) 11'RT
1790+83 END WETLAND(W–K41) 12'RT
1792+19 CULVERT 65'LT
1792+87 BEGIN WETLAND(W–K40)
1793+07 END WETLAND(W–K40)
1793+10 FENCE – ELECTRIC
1793+28 OHP LINE
1793+49 CULVERT 43'LT
1793+69 POWER POLE 47'RT
1793+84 ℄ ACCESS ROAD – TEMPORARY (MVP–DO–046)
1794+07 GUARDRAIL
1794+60 CULVERT 33'RT
1794+78 CULVERT
1794+80 CULVERT 31'LT
1794+81 CULVERT
1796+37 PROPERTY LINE
1796+48 FENCE – WIRE
1797+08 ℄ STREAM(S–K54)
1797+11 ℄ DRAIN
1797+72 ℄ DRAIN
1798+20 PROPERTY LINE
1802+19 FENCE – BARBED WIRE
1802+21 FENCE – BARBED WIRE
1802+56 PROPERTY LINE
1803+47 ℄ TRAIL(DIRT)
1803+59 ℄ TRAIL(DIRT)
1803+65 EDGE OF DIRT
1804+45 LINE MARKER 87'LT
1804+83 ℄ STREAM(S–K58)
1805+84 WELL – MONITORING 418'LT
1808+08 ℄ STREAM(S–K59)
1810+05 PROPERTY LINE
1811+45 ℄ STREAM(S–K60)
1811+50 CULVERT 9'RT
1811+53 CULVERT 54'RT
1812+02 ℄ DRAIN
1812+02 ℄ BAR DITCH
1812+06 ACCESS ROAD–TEMPORARY(MVP–DO–047)
1812+41 CULVERT 60'RT
1813+56 CULVERT 52'RT
1814+19 EDGE OF GRAVEL
1814+45 EDGE OF GRAVEL
1814+49 GUARDRAIL
1818+87 OHP LINE
1819+31 (DOMINION)PIPELINE
1819+76 CULVERT 43'LT
1819+77 RIGHT-OF-WAY
1819+87 ℄ BAR DITCH
1819+83 EDGE OF ASPHALT
1819+85 CULVERT 62'RT
1819+92 ℄ CO RTE 25 – MEATHOUSE FORK
1820+05 EDGE OF ASPHALT
1820+05 OHP LINE – ELECTRIC
1820+07 RIGHT-OF-WAY
1820+23 CULVERT 56'LT
1820+23 CULVERT 52'RT
1820+25 POWER POLE 63'LT
1820+28 CULVERT 49'RT
1820+45 VALVE
1820+48 GAS – 17'LT
1820+48 EDGE OF GRAVEL
1820+57 BEGIN WETLAND(W–A23) 38'RT
1820+68 ℄ STREAM(S–K62/S–A110) REV. 2
1821+62 END WETLAND(W–A23) 38'RT
1822+19 PROPOSED MAIN LINE VALVE (MVP–MLV–05)
1822+19 ACCESS ROAD–PERMANENT (MVP–MLV–AR–05) 16'LT
1822+55 FENCE – ELECTRIC
1822+72 STREAM BANK(S–A111)
1822+81 STREAM BANK(S–A111)
1832+33 PIPELINE – FOREIGN – MOMENTUM – PROPOSED
1832+81 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 -
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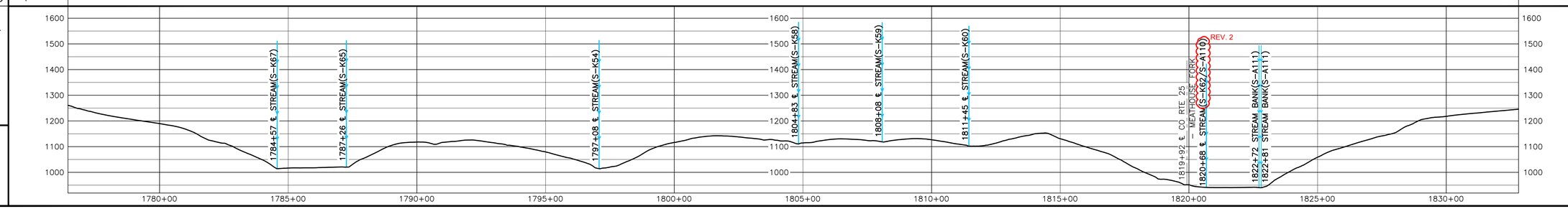
15 -
16 -

PROFILE



REV 4.0.0 - ISSUED TO FERC

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Southfield, Michigan 48076 USA
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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	01-05-16	FERC DATA REQUEST #1 - MVP-HA-031.01 LABELED MVP-HA-031.02
2	HEI	04-11-16	FERC DATA REQUEST NO.2

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	1713	42"O.D. X 0.687"W.T. - X-70, FUSION BONDED EPOXY
2	4116	42"O.D. X 0.740"W.T. - X-70, FUSION BONDED EPOXY
3	40	42"O.D. X 0.687"W.T. - X-70, ERW
5		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR BIDDING			
REV.	BY	DATE	

APPROVED FOR CONSTRUCTION			
REV.	BY	DATE	

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

Mountain Valley PIPELINE

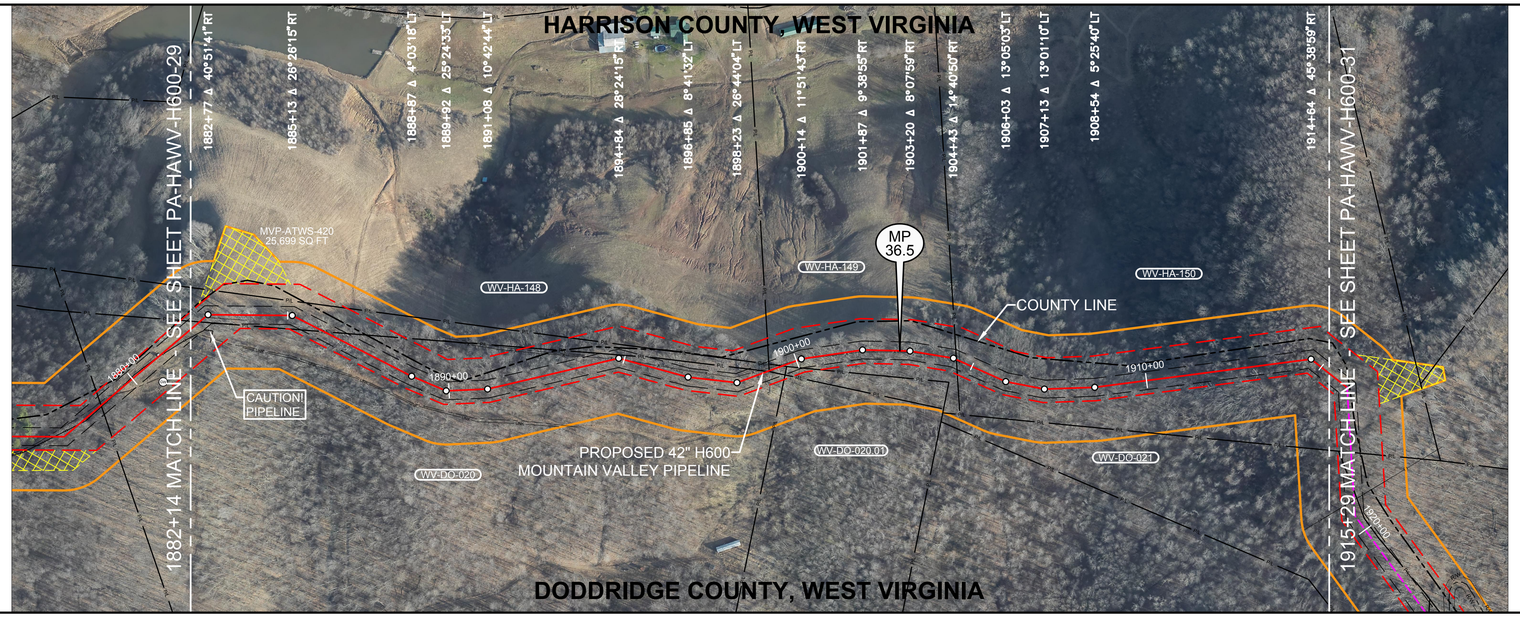
PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
GREENBRIER DIST., DODDRIDGE CO., W.V.
STA. 1776+44 TO STA. 1832+81

HORZ. SCALE: 1" = 200'
DRAWN BY: HEI(DRF) 4/4/2016
DRAFTING CK:
ENGINEERING CK:
CONSTRUCTION CK:
ENVIRONMENTAL CK:
AFE/P.O.NO.:
HEI PROJECT NO.: 14-10-052
DRAWING NO.: **PA-HAWV-H600 -28**
SHEET 37 OF 326 REV. 2
DATE OF PLOT: 4/19/2016 10:02 AM

| RIGHT-OF-WAY & OWNERSHIP DATA | | |

RIGHT-OF-WAY & OWNERSHIP DATA		WV-HA-148 / WV-DO-020: 610 LF, 614 SLOPE (1882+14 – 1888+24); WV-DO-020: 417 LF, 418 SLOPE (1888+24 – 1892+41); WV-HA-148 / WV-DO-020: 678 LF, 682 SLOPE (1892+41 – 1899+19); WV-HA-149 / WV-DO-020: 41 LF, 41 SLOPE (1899+19 – 1899+60); WV-HA-149 / WV-DO-020.01: 102 LF, 102 SLOPE (1899+60 – 1900+62); WV-HA-149: 390 LF, 392 SLOPE (1900+62 – 1904+52); WV-HA-150: 1077 LF, 1101 SLOPE (1904+52 – 1915+29)
DESIGN	PIPE / COATING	1 (1882+14 – 1915+29)
	SLOPE DISTANCE	3350'
	CLASS LOCATION / HCA	1
ENVIRONMENTAL	CONSTRUCTION EXCLUSION	
	WETLAND / STREAM	
	.	
	.	



PLAN VIEW

0' 100' 200' 400'

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
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- 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
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- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REFERENCE DRAWINGS

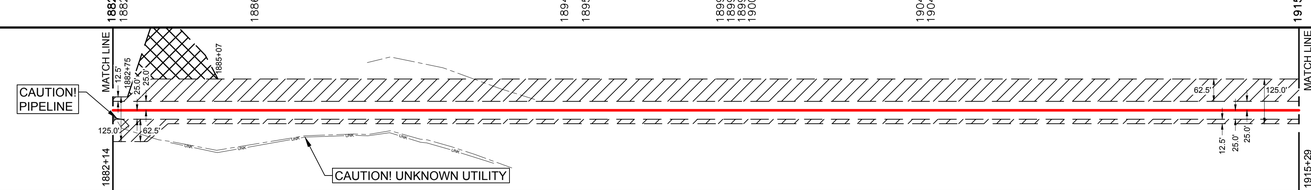
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

1882+14 MATCH LINE
1882+46 PROPERTY LINE
1886+12 PROPERTY LINE
1894+78 FENCE – ELECTRIC
1895+01 FENCE – ELECTRIC
1899+14 PROPERTY LINE
1899+16 PROPERTY LINE
1900+02 FENCE – ELECTRIC
1904+52 PROPERTY LINE
1904+62 FENCE – ELECTRIC
1915+29 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 CONFIGUARTION
3 - TYPICAL "SKINNEY" FOR WATER BODY
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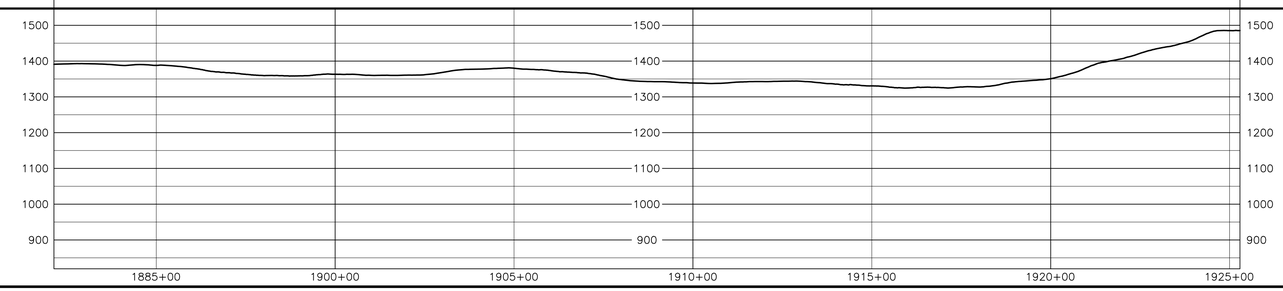
PROFILE



REV 4.0.0 - ISSUED TO FERC

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REVISIONS

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

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	3350	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 CONSTRUCTION			APPROVED FOR BIDDING			APPROVED FOR FERC		
REV.	BY	DATE	REV.	BY	DATE	REV.	BY	DATE
-	-	-	-	-	-	0	RRR	10-15-15

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

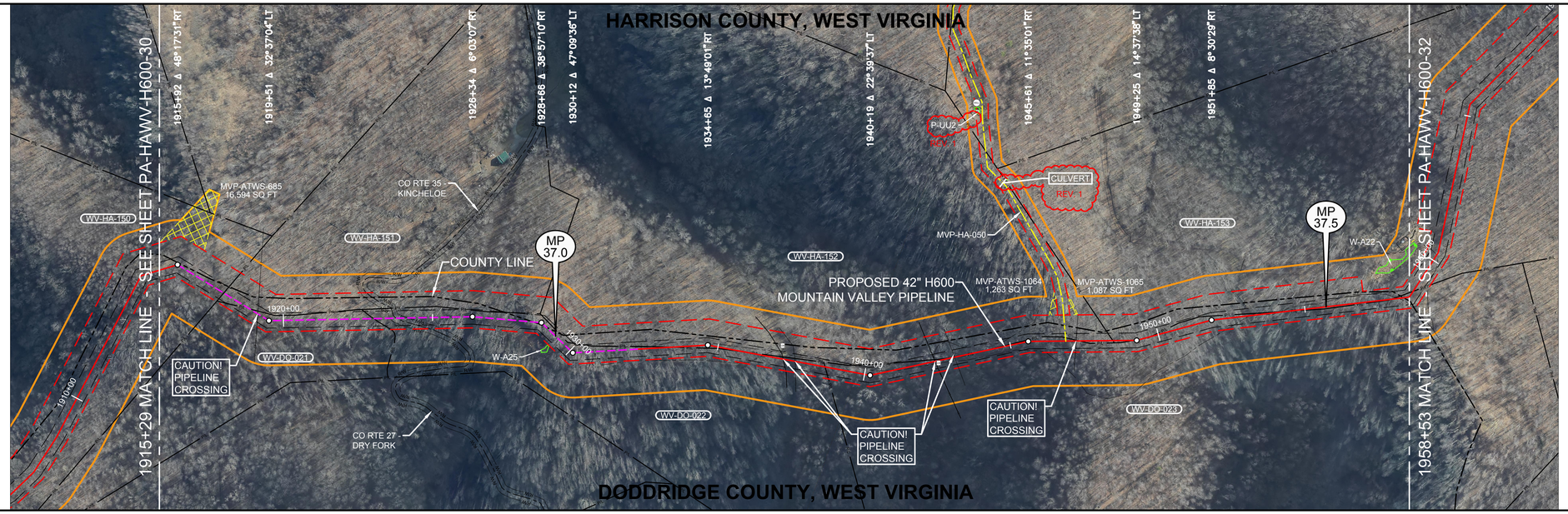
MOUNTAIN VALLEY PROJECT - H600 LINE

UNION DIST., HARRISON CO. & GREENBRIER DIST., DODDRIDGE CO., W.V.
STA. 1882+14 TO STA. 1915+29

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	4/4/2016
DRAFTING CK:	
ENGINEERING CK:	
CONSTRUCTION CK:	
ENVIRONMENTAL CK:	
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-HAWV-H600 -30	
SHEET 39 OF 326	REV. 0
DATE OF PLOT: 4/19/2016 10:03 AM	

RIGHT-OF-WAY & OWNERSHIP DATA

		1915+29	WV-HA-150	1917+74	WV-HA-151	1922+63	WV-HA-151 / CO RTE 27	1923+40	WV-HA-151 / COUNTY ROUTE 27	1925+29	WV-HA-151	1928+58	WV-HA-152	1938+58	WV-HA-152	1938+87	WV-HA-152	1947+87	WV-HA-153	1948+50	WV-HA-153	1957+86	WV-HA-153	1958+53
					WV-DO-021		WV-DO-021 / WV-DO-022		WV-DO-022		WV-DO-022		WV-DO-022		WV-DO-022 / WV-DO-023		WV-DO-023		WV-DO-023		WV-DO-023		WV-DO-023	
			245 LF 253 SLOPE		489 LF 503 SLOPE		100 LF 101 SLOPE		166 LF 168 SLOPE		323 LF 328 SLOPE		1006 LF 1010 SLOPE		26 LF 26 SLOPE		903 LF 920 SLOPE		63 LF 63 SLOPE		936 LF 943 SLOPE		67 LF 67 SLOPE	
DESIGN	PIPE / COATING	1915+29	1			1923+39	4	1924+19	1															1958+53
DESIGN	SLOPE DISTANCE		832'				80'		3471'															
DESIGN	CLASS LOCATION / HCA		1																					
ENVIRONMENTAL	CONSTRUCTION EXCLUSION																							
ENVIRONMENTAL	WETLAND / STREAM																							
ENVIRONMENTAL	.																							
ENVIRONMENTAL	.																							



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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- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REFERENCE DRAWINGS

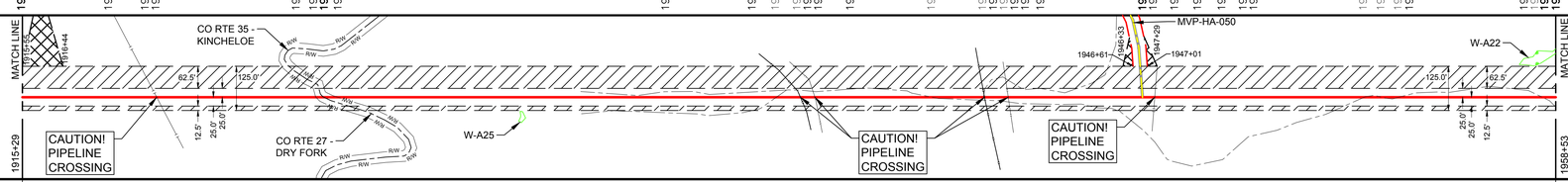
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

1915+29 MATCH LINE
1917+74 PROPERTY LINE
1918+77 PROPERTY LINE
1919+07 PIPELINE - FOREIGN - DOMINION NON-SURVEYED
1923+03 PROPERTY LINE
1923+56 RIGHT-OF-WAY
1923+79 ℄ CO RTE 27 - DRY FORK
1924+18 RIGHT-OF-WAY
1933+45 PROPERTY LINE
1935+89 PROPERTY LINE
1936+55 ℄ FIELD ROAD(DIRT)
1937+15 LINE MARKER 29"LT
1937+22 PIPELINE - FOREIGN - DOMINION
1937+64 30"TL-360/1(DOMINION)PIPELINE
1938+65 PROPERTY LINE
1940+94 ℄ FIELD ROAD(DIRT)
1942+39 ℄ FIELD ROAD(DIRT)
1942+42 PIPELINE - FOREIGN - DOMINION
1942+45 LINE MARKER 23"RT
1943+09 (DOMINION)PIPELINE
1943+11 PROPERTY LINE
1944+02 PROPERTY LINE
1946+87 ACCESS ROAD-TEMPORARY(MVP-HA-050)
1947+22 PIPELINE - FOREIGN - CHESAPEAKE NON-SURVEYED
1947+32 PROPERTY LINE
1948+45 PROPERTY LINE
1949+13 PROPERTY LINE
1949+47 PROPERTY LINE
1949+74 PROPERTY LINE
1953+12 ℄ FIELD ROAD(DIRT)
1953+62 ℄ FIELD ROAD(DIRT)
1954+10 ℄ FIELD ROAD(DIRT)
1954+43 PROPERTY LINE
1957+93 PROPERTY LINE
1958+15 ℄ FIELD ROAD(DIRT)
1958+34 COUNTY LINE
1958+53 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 CONFIGUARTION
3 - TYPICAL "SKINNEY" FOR WATER BODY
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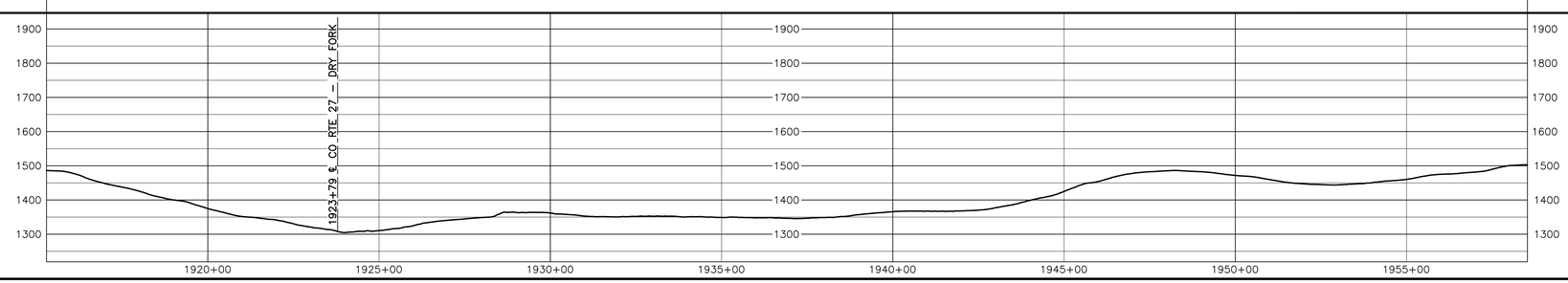
PROFILE



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REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	04-11-16	FERC DATA REQUEST NO 2

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
3	4303	42"O.D. X 0.617"W.T. X-70 FUSION BONDED EPOXY
4	80	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			APPROVED FOR BIDDING			APPROVED FOR FERC		
REV.	BY	DATE	REV.	BY	DATE	REV.	BY	DATE
-			-			0	HRR	10-15-15

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE

UNION DIST., HARRISON CO. & GREENBRIER DIST., DODDRIDGE CO.,W.V.
STA. 1915+29 TO STA. 1958+53

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	4/4/2016
DRAFTING CK:	
ENGINEERING CK:	
CONSTRUCTION CK:	
ENVIRONMENTAL CK:	
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-HAWV-H600 -31	
SHEET 40 OF 326	REV. 1
DATE OF PLOT: 4/19/2016 10:03 AM	

| RIGHT-OF-WAY & OWNERSHIP DATA | | |