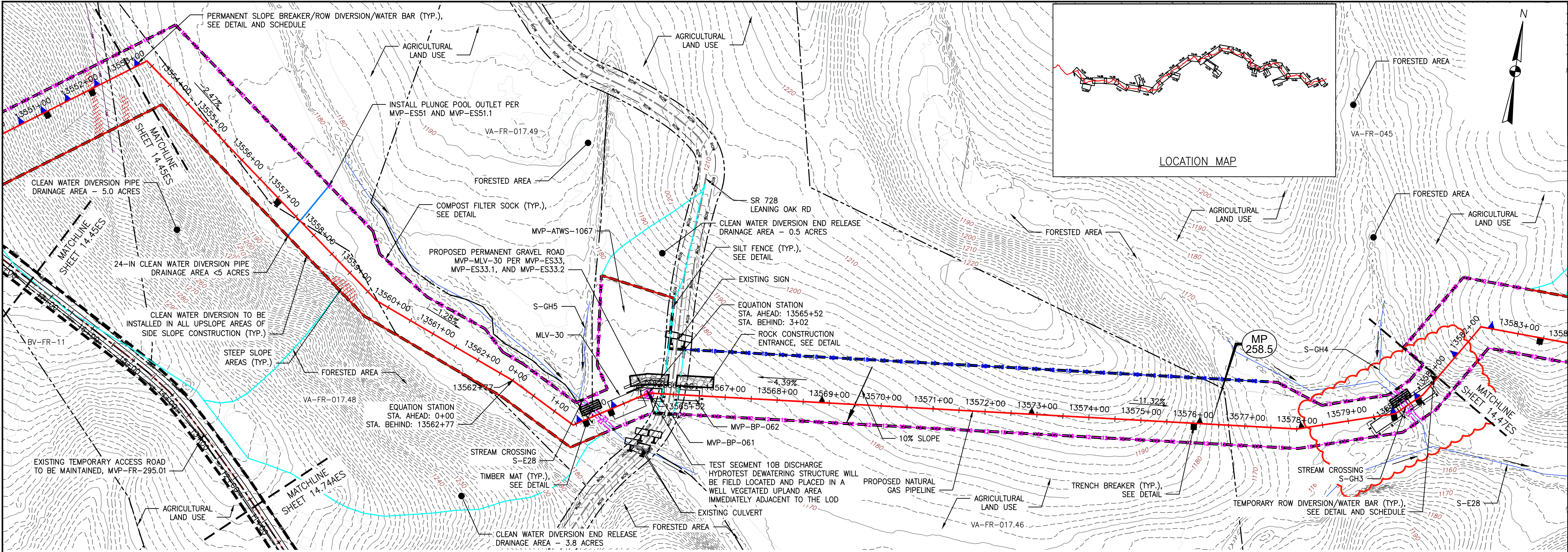


LEGEND

- | | | |
|---|---|--|
| <ul style="list-style-type: none">PROPOSED LIMIT OF DISTURBANCESTREAMUSDA FOREST SERVICE (NATIONAL FOREST) LANDSAPPALACHIAN NATIONAL SCENIC TRAILEXISTING ROAD/TRAILEXISTING PROPERTY LINEEXISTING STATE LINEEXISTING COUNTY LINEPONDWETLANDACID FORMING MATERIALEXISTING FOREST | <ul style="list-style-type: none">PROPOSED ACCESS ROAD CENTERLINEPROPOSED PIPELINEPROPOSED SILT FENCE (SEE NOTE 5)PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)ORANGE CONSTRUCTION SAFETY FENCEPROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)CLEAN WATER DIVERSION PIPECLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51) | <ul style="list-style-type: none">STREAM FLOW DIRECTIONFEMA 100 YEAR FLOODPLAINDRAINAGE AREA BOUNDARYTIMBER MAT (SEE DETAIL MVP-ES37)STEEP SLOPE EROSION CONTROL (SEE NOTE 2)STEEP SLOPE AREAS (SEE NOTE 4)PROPOSED ROCK CONSTRUCTION ENTRANCEPROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)TEMPORARY ROW DIVERSION/WATER BAR (SEE DETAIL MVP-17)PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAIL MVP-17) |
|---|---|--|

NOTES:

- TOPSOIL SEGREGATION WILL BE PERFORMED IN ALL IMMEDIATE CONSTRUCTION AREAS OF THE PROJECT IN ACCORDANCE WITH DETAILS MVP-ES46.1 THROUGH MVP-ES46.3.
- FLEXITERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
- CONTRACTOR IS RESPONSIBLE TO IDENTIFY ALL UTILITIES. THE UTILITY LINES SHOWN ON THE PLAN ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT REPRESENT SURVEYED LINE INFORMATION. SLOPES OF 30° OR GREATER EXIST. CONSTRUCTION FOR STEEP SLOPES TO BE PERFORMED USING STEEP SLOPE TECHNIQUES IDENTIFIED IN THE DETAIL SHEETS. ALSO REFER TO THE SITE-SPECIFIC DESIGN OF STABILIZATION MEASURES IN SELECTED HIGH-HAZARD PORTIONS OF THE ROUTE OF THE PROPOSED MOUNTAIN VALLEY PIPELINE PROJECT.
- WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
- IMPROVEMENTS TO PERMANENT AND TEMPORARY ACCESS ROADS WILL BE PERFORMED PER THE SITE SPECIFIC ACCESS ROAD DETAILS.
- TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS.
- ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE.

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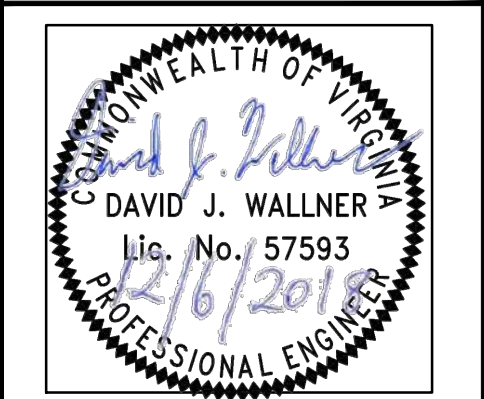
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8	12/06/18	JUZ	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
7	06/22/18	JUZ	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
6	03/16/18	KAL	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
5	03/04/18	KAL	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
4	02/27/18	KAL	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
3	02/05/18	KAL	RE	DW	RE	DW	RE	DW	RE	DW	RE	DW
REVISIONS:												

EROSION AND SEDIMENT CONTROL PLANS	
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE	
SPREAD 10 - FRANKLIN COUNTY, VIRGINIA	
MOUNTAIN VALLEY PIPELINE, LLC	
2200 ENERGY DRIVE	
CANONSBURG, PA 15317	

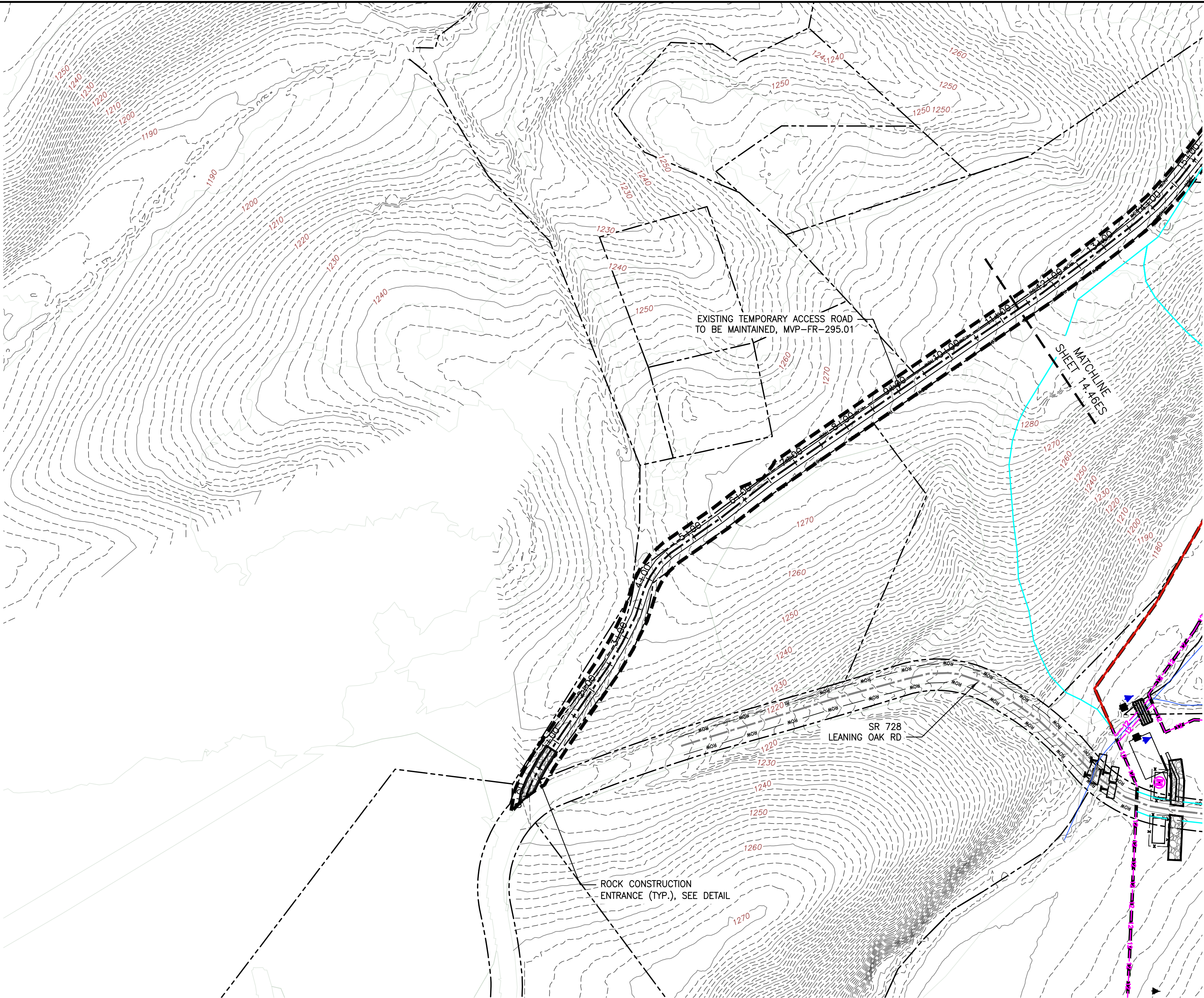
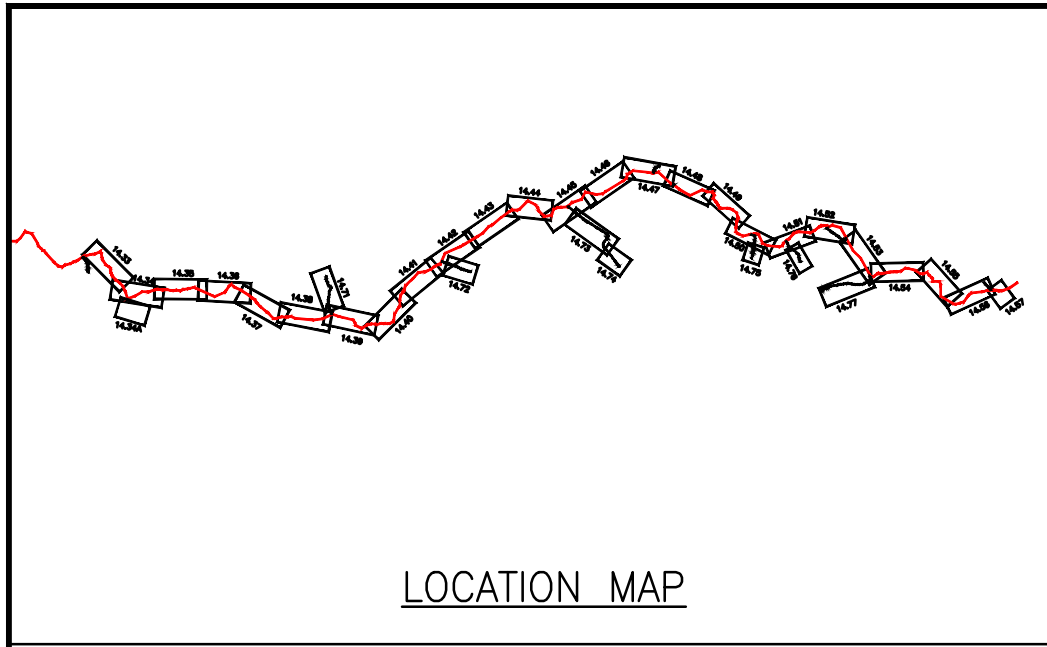
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT
CONTROL PLANS



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CHECKED BY:	RE
APPROVED BY:	DW
DATE:	12/06/2018
SCALE:	AS SHOWN
SHT. NO. 14.46ES	OF 14.81ES

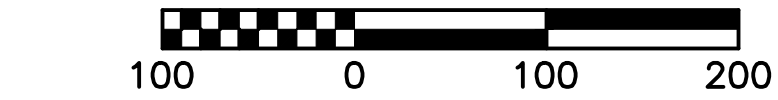


LEGEND

- | | |
|---|--|
| --- PROPOSED LIMIT OF DISTURBANCE | --- PROPOSED ACCESS ROAD CENTERLINE |
| --- STREAM | --- PROPOSED PIPELINE |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | --- PROPOSED SILT FENCE (SEE NOTE 5) |
| --- APPALACHIAN NATIONAL SCENIC TRAIL | --- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| --- EXISTING ROAD/TRAIL | --- PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| --- EXISTING PROPERTY LINE | --- ORANGE CONSTRUCTION SAFETY FENCE |
| --- EXISTING STATE LINE | --- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| --- EXISTING COUNTY LINE | --- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| --- POND | --- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| --- WETLAND | --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| --- ACID FORMING MATERIAL | --- CLEAN WATER DIVERSION PIPE |
| --- EXISTING FOREST | --- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51) |

PLAN

SCALE: 1" = 100'



- | |
|---|
| --- STREAM FLOW DIRECTION |
| --- FEMA 100 YEAR FLOODPLAIN |
| --- DRAINAGE AREA BOUNDARY |
| --- TIMBER MAT (SEE DETAIL MVP-ES37) |
| --- STEEP SLOPE EROSION CONTROL (SEE NOTE 2) |
| --- STEEP SLOPE AREAS (SEE NOTE 4) |
| --- PROPOSED ROCK CONSTRUCTION ENTRANCE |
| --- PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20) |
| --- TEMPORARY ROW DIVERSION/WATER BAR (SEE DETAIL MVP-17) |
| --- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAIL MVP-17) |

NOTES:

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6. IMPROVEMENTS TO PERMANENT AND TEMPORARY ACCESS ROADS WILL BE PERFORMED PER THE SITE SPECIFIC ACCESS ROAD DETAILS.
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NO.	DATE	DWN.	CHKD.	APPD.	DESCRIPTION
7	12/06/18	KAL	RE	DW	FIELD MODIFICATION
6	03/16/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	02/05/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS

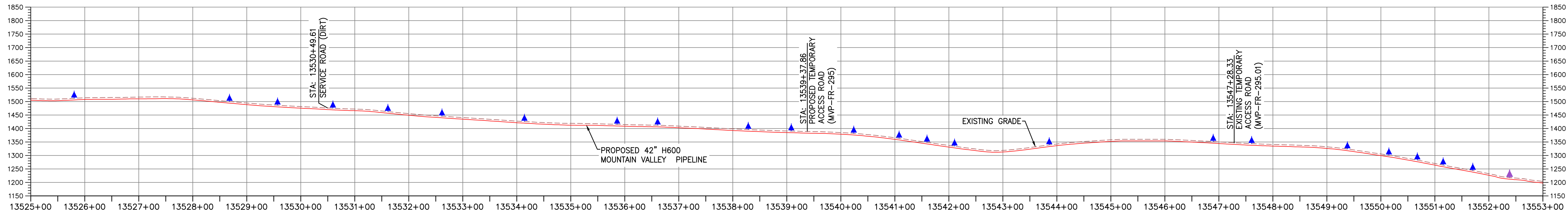
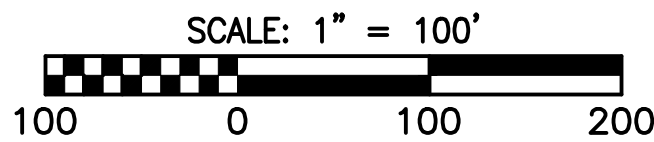
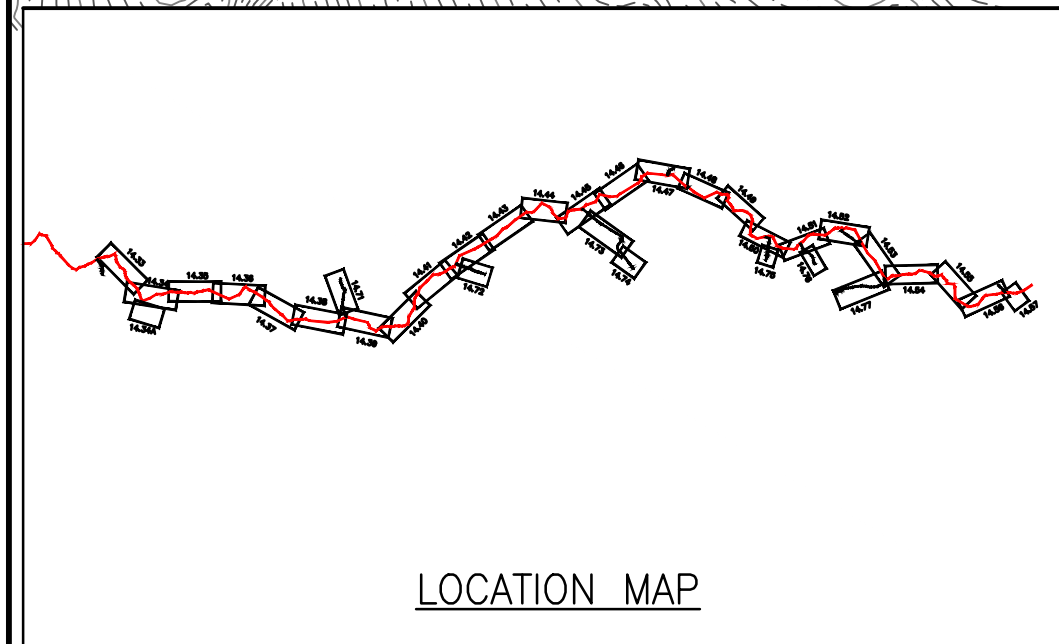
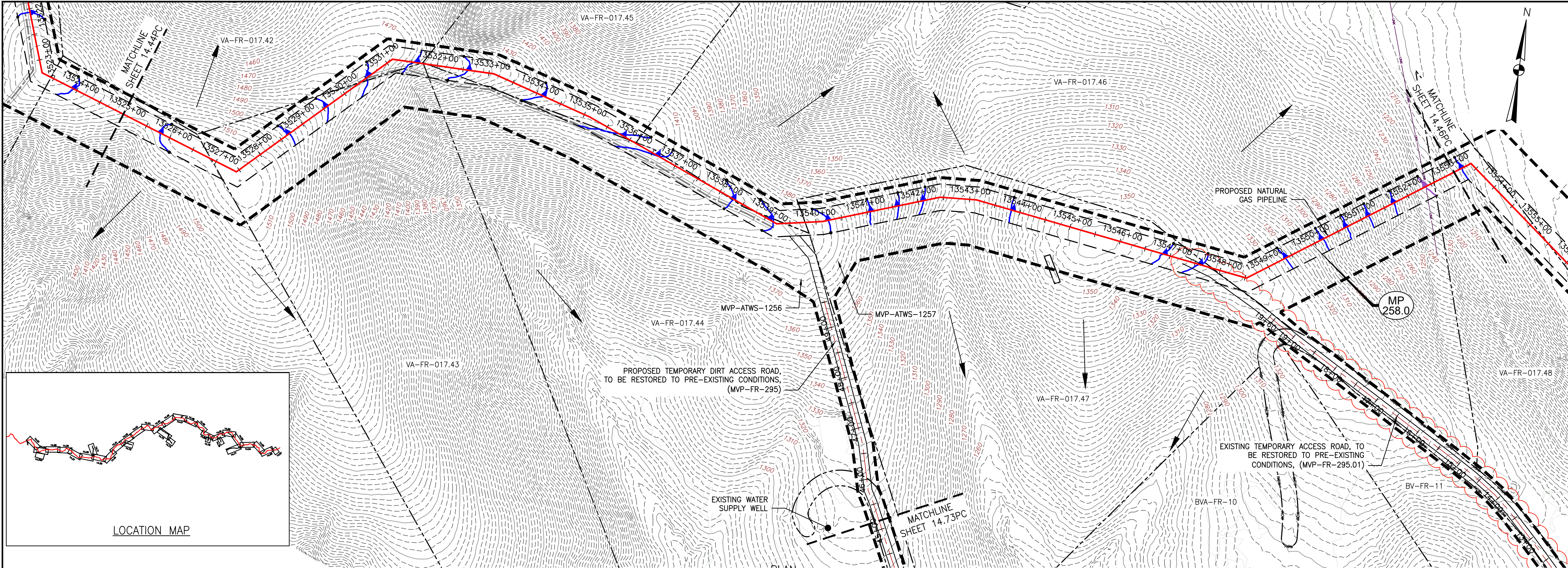
Mountain Valley Pipeline EROSION AND SEDIMENT CONTROL PLANS MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE SPREAD 10 - FRANKLIN COUNTY, VIRGINIA	MOUNTAIN VALLEY PIPELINE, LLC 2200 ENERGY DRIVE CANONSBURG, PA 15317
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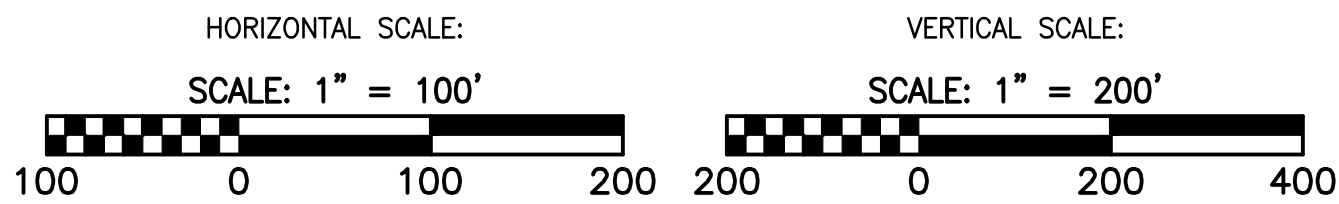
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 57593
12/16/2018
PROFESSIONAL ENGINEER

DRAWN BY:	JUZ
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	12/06/2018
SCALE:	AS SHOWN
SHT. NO. 14.74AES OF 14.81ES	REVISION



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)

- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT

- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

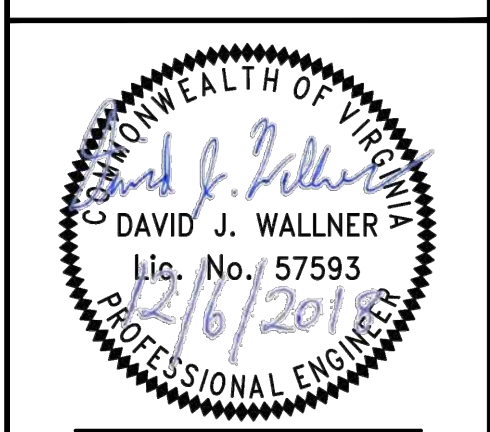
- NOTE THAT ALL WATER BARS REGARDLESS OF SPECIFIED CALCULATION LENGTH ARE TO BE INSTALLED WITH 20-FT END TREATMENT LENGTHS, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE KEY PLAN OF THIS PLAN SET, WATER BARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

FIELD MODIFICATION		ADDRESS VAEQ COMMENTS	
RE	DW	RE	DW
6	12/06/18	KAL	RE
5	03/16/18	KAL	RE
4	03/04/18	KAL	RE
3	02/22/18	KAL	RE
2	11/21/17	KAL	RE
NO.	DATE:	CHD.	APPO.
REVISIONS:			

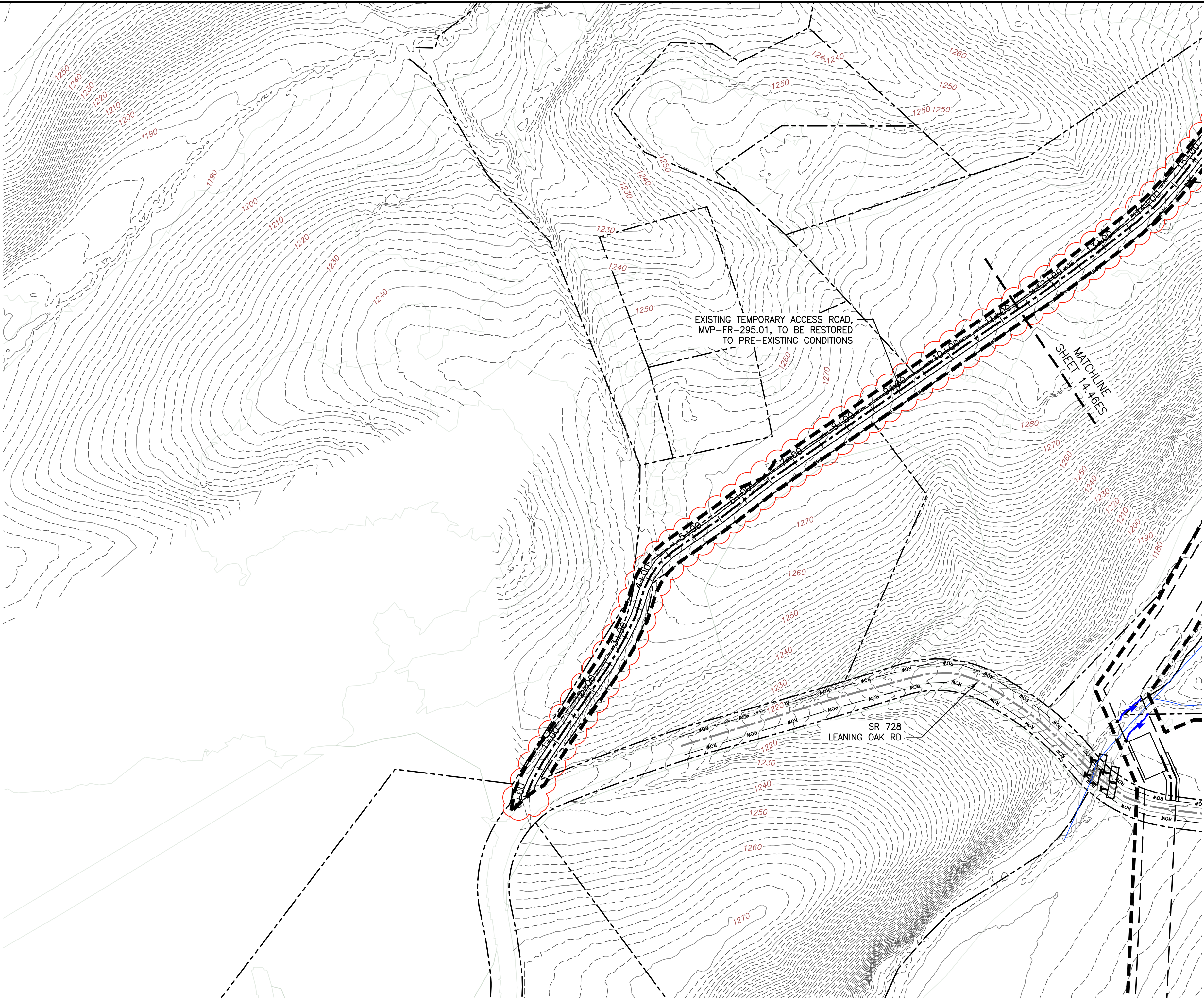
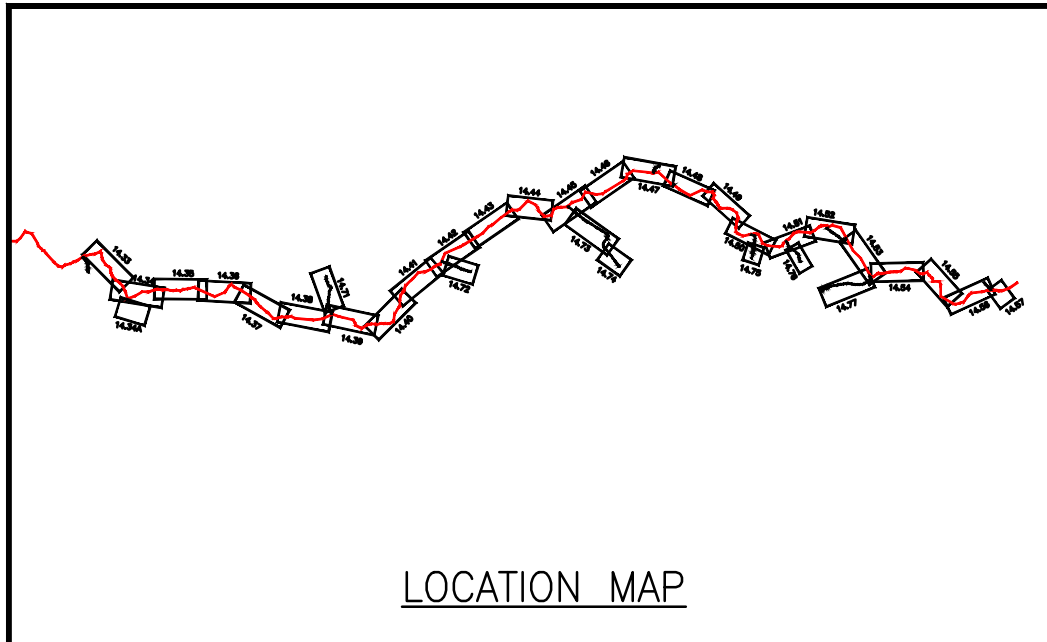
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS	
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE	
SPREAD 10 - FRANKLIN COUNTY, VIRGINIA	
MOUNTAIN VALLEY PIPELINE, LLC	
2200 ENERGY DRIVE	
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POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	12/06/2018
SCALE:	AS SHOWN
SHT. NO. 14.45PC	OF 14.77PC



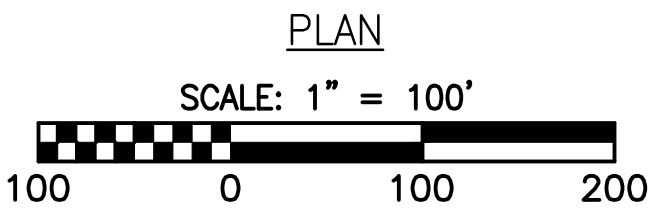
LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY

- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
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FIELD MODIFICATION		ADDRESS VADO COMMENTS	
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4	03/04/18	KAL	DW
3	02/22/18	KAL	DW
2	11/21/17	KAL	DW
NO:	DATE:	CHD:	APPD:
DESCRIPTION:			
REVISIONS:			

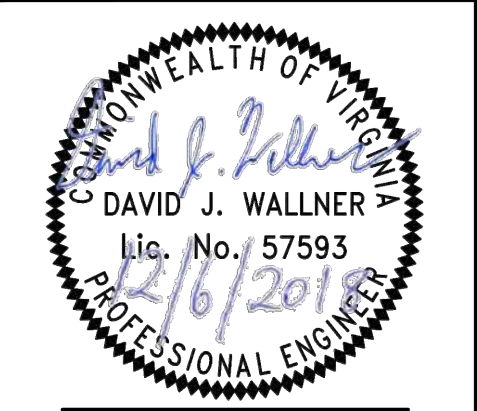
Mountain Valley PIPELINE	
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS	
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE	
SPREAD 10 - FRANKLIN COUNTY, VIRGINIA	
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POST CONSTRUCTION
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APPROVED BY:	RE
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SHT. NO. 14.74PC OF 14.77PC	REVISION