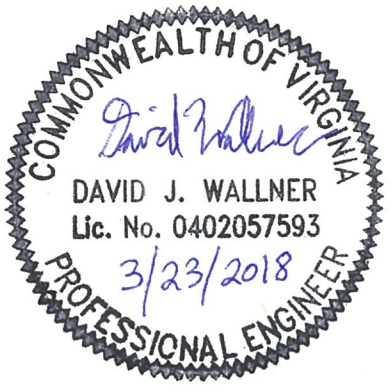
By virtue of this seal and signature, all supporting documents included in this package are accurate and support the design presented herein.



EXISTING PERMANENT ACCESS ROAD MVP-FR-309.05

EXISTING TEMPORARY ACCESS ROAD MVP-FR-309.06

EXISTING TEMPORARY ACCESS ROAD MVP-FR-310

EXISTING TEMPORARY ACCESS ROAD MVP-FR-309

EXISTING TEMPORARY ACCESS ROAD MVP-FR-311

EXISTING PERMANENT ACCESS ROAD MVP-MLV-AR-31

EXISTING PERMANENT ACCESS ROAD MVP-MVL-AR-32

EXISTING TEMPORARY ACCESS ROAD MVP-FR-306.04

MATCHLINE SHEET 14.57ES

EXISTING TEMPORARY ACCESS ROAD MVP-FR-306.03

EXISTING PERMANENT ACCESS ROAD MVP-FR-306.02

START SPREAD 11

EXISTING TEMPORARY ACCESS ROAD MVP-FR-313

SPREAD I

EXISTING TEMPORARY ACCESS ROAD MVP-FR-314

EXISTING TEMPORARY ACCESS ROAD MVP-FR-316

EXISTING PERMANENT ACCESS ROAD MVP-FR-315

EXISTING TEMPORARY ACCESS ROAD MVP-FR-317.01

EXISTING TEMPORARY ACCESS ROAD MVP-FR-317

EXISTING TEMPORARY ACCESS ROAD MVP-FR-318

MATCHLINE SHEET 15.02ES

EXISTING TEMPORARY ACCESS ROAD MVP-FR-319.01

EXISTING TEMPORARY ACCESS ROAD MVP-FR-319

EXISTING TEMPORARY ACCESS ROAD MVP-FR-320

MP 264.0 · MP 264.5 · MP 265.0 · MP 265.5 · MP 266.0 · MP 266.5 · MP 267.0 · MP 267.5 · MP 268.0 · MP 268.5 · MP 269.0 · MP 269.5 · MP 270.0 · MP 270.5 · MP 271.0 · MP 271.5 · MP 272.0 · MP 272.5 · MP 273.0 · MP 273.5 · MP 274.0 · MP 274.5 · MP 275.0 · MP 275.5 · MP 276.0 · MP 276.5 · MP 277.0 · MP 277.5 · MP 278.0

15.04 · 15.05 · 15.06 · 15.07 · 15.08 · 15.09 · 15.10 · 15.11 · 15.12 · 15.13 · 15.14 · 15.15 · 15.16 · 15.17 · 15.18 · 15.19 · 15.20 · 15.21 · 15.22 · 15.23 · 15.24 · 15.25 · 15.26 · 15.27 · 15.28 · 15.29 · 15.30 · 15.78 · 15.79 · 15.80 · 15.81 · 15.82 · 15.83

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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

KEY PLAN

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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MATCHLINE SHEET 15.01ES

15.84

EXISTING TEMPORARY ACCESS ROAD MVP-FR-321

15.85

EXISTING PERMANENT ACCESS ROAD MVP-FR-322

15.86

EXISTING TEMPORARY ACCESS ROAD MVP-FR-323

15.31 15.32 15.33 15.34 15.35 15.36 15.37 15.38 15.39 15.40 15.41 15.42 15.43 15.44 15.45 15.46 15.47 15.48 15.49 15.50 15.51 15.52 15.53 15.87 15.88

MP 278.5 MP 279.0 MP 279.5 MP 280.0 MP 280.5 MP 281.0 MP 281.5 MP 282.0 MP 282.5 MP 283.0 MP 283.5 MP 284.0 MP 284.5 MP 285.0 MP 285.5 MP 286.0 MP 286.5 MP 287.0 MP 287.5 MP 288.0 MP 288.5 MP 289.0 MP 289.5 MP 290.0

PROPOSED TEMPORARY ACCESS ROAD MVP-FR-321.01

PROPOSED PERMANENT ACCESS ROAD MVP-MLV-AR-33

EXISTING TEMPORARY ACCESS ROAD MVP-FR-324

SPREAD I

EXISTING PERMANENT ACCESS ROAD MVP-PI-325

EXISTING TEMPORARY ACCESS ROAD MVP-PI-326

EXISTING TEMPORARY ACCESS ROAD MVP-PI-328

PROPOSED TEMPORARY ACCESS ROAD MVP-PI-329

EXISTING TEMPORARY ACCESS ROAD MVP-PI-331

EXISTING TEMPORARY ACCESS ROAD MVP-PI-330

MATCHLINE SHEET 15.03ES

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REVISIONS:

Mountain Valley PIPELINE

KEY PLAN

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

555 SOUTHPOINTE BOULEVARD, SUITE 200

CANONSBURG, PA 15317

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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

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MATCHLINE SHEET 15.02ES

EXISTING TEMPORARY ACCESS ROAD MVP-PI-332

PROPOSED TEMPORARY ACCESS ROAD MVP-PI-332.01

SPREAD I

PROPOSED PERMANENT ACCESS ROAD MVP-MLV-AR-34

EXISTING TEMPORARY ACCESS ROAD MVP-PI-336.01

EXISTING PERMANENT ACCESS ROAD MVP-PI-337

EXISTING PERMANENT ACCESS ROAD MVP-PI-338

EXISTING PERMANENT ACCESS ROAD MVP-PI-338.01

PROPOSED PERMANENT ACCESS ROAD MVP-MLV-AR-35

EXISTING TEMPORARY ACCESS ROAD MVP-PI-339

EXISTING PERMANENT ACCESS ROAD MVP-PI-340

TBD PERMANENT ACCESS ROAD MVP-PI-344

PROPOSED PERMANENT ACCESS ROAD MVP-PI-343.01

END SPREAD 11

PROPOSED PERMANENT ACCESS ROAD MVP-PI-343

MP 290.5
MP 291.0
MP 291.5
MP 292.0
MP 292.5
MP 293.0
MP 293.5
MP 294.0
MP 294.5
MP 295.0
MP 295.5
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MP 301.0
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MP 302.0
MP 302.5
MP 303.0

15.54 15.55 15.56 15.57 15.58 15.59 15.60 15.61 15.62 15.63 15.64 15.65 15.66 15.67 15.68 15.69 15.70 15.71 15.72 15.73 15.74 15.75 15.76 15.77 15.78 15.89 15.90 15.91/15.92 15.93

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
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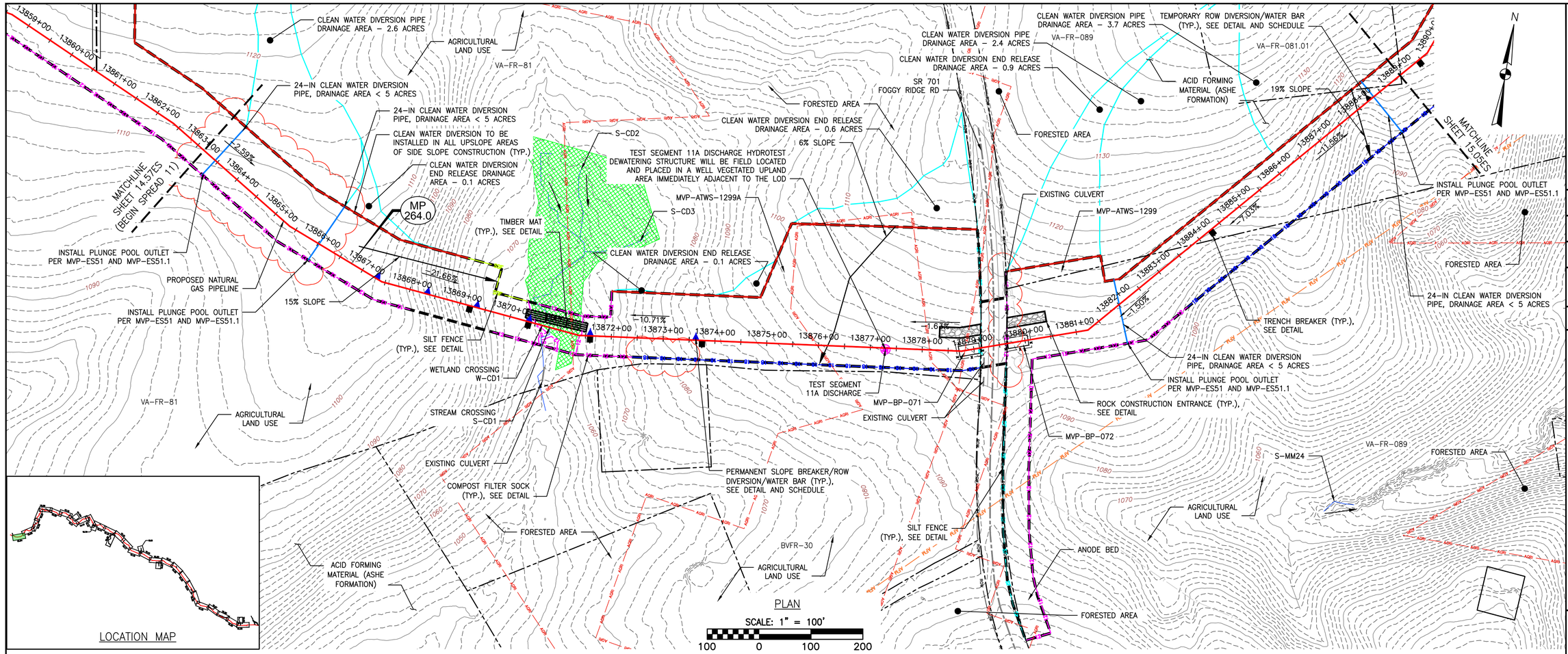
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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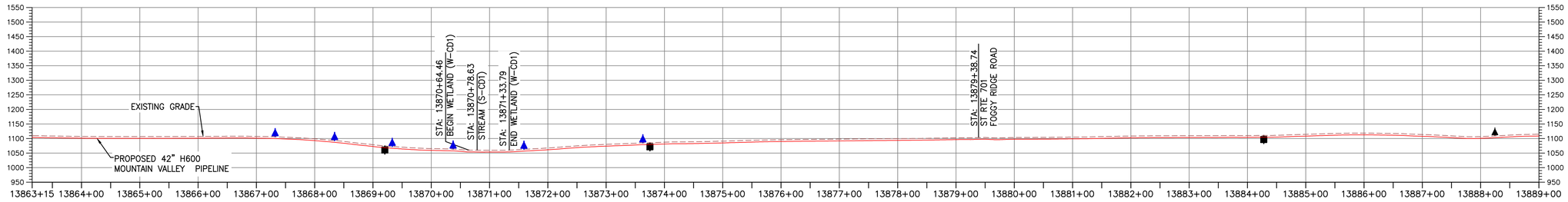


LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

100 0 100 200 | 200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — ACID FORMING MATERIAL
- AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP–ES9.2)
- RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP–ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- 12 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP–ES3, 3.1, 3.2)
- 18 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP–ES3, 3.1, 3.2)
- 24 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP–ES3, 3.1, 3.2)
- GRASS–LINED CHANNEL (SEE DETAIL MVP–ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP–ES50 AND MVP–ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP–17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION TO BE CONDUCTED THROUGHOUT THE JEFFERSON NATIONAL FOREST.
2. FLEXTERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
3. 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.
4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP–ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VWRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP–ES49.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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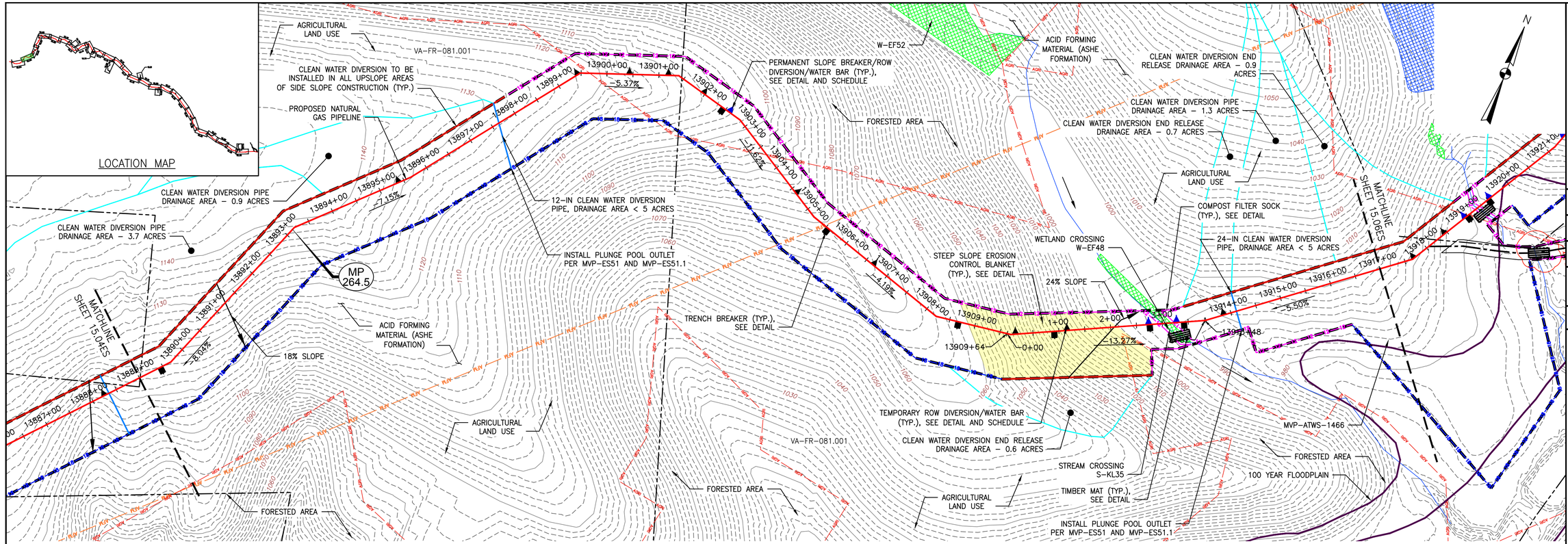
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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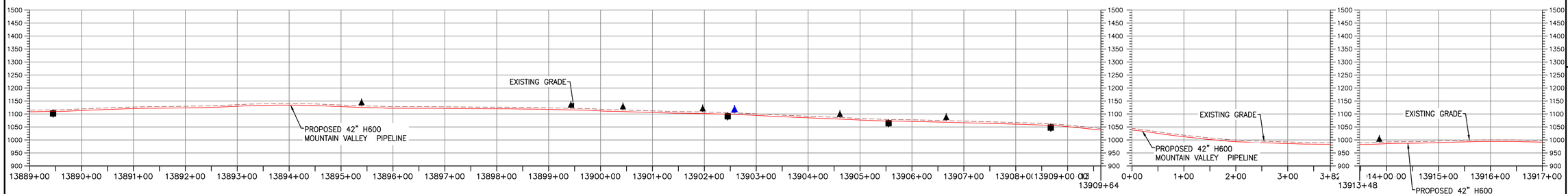
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

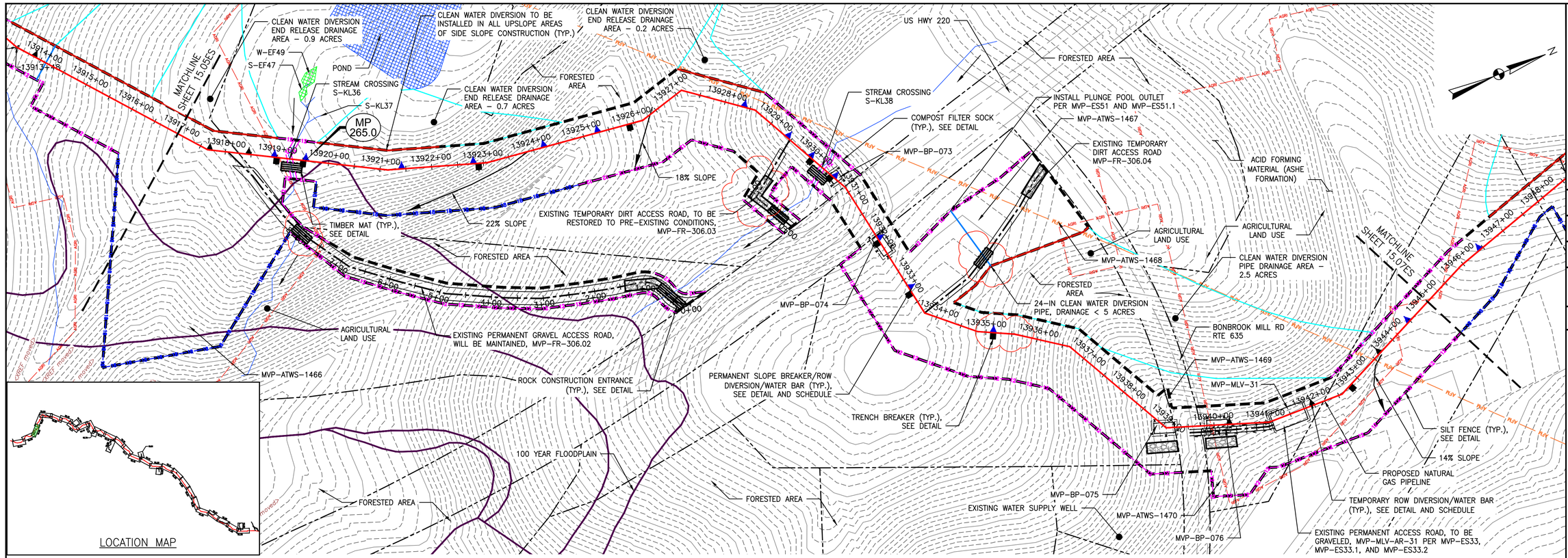
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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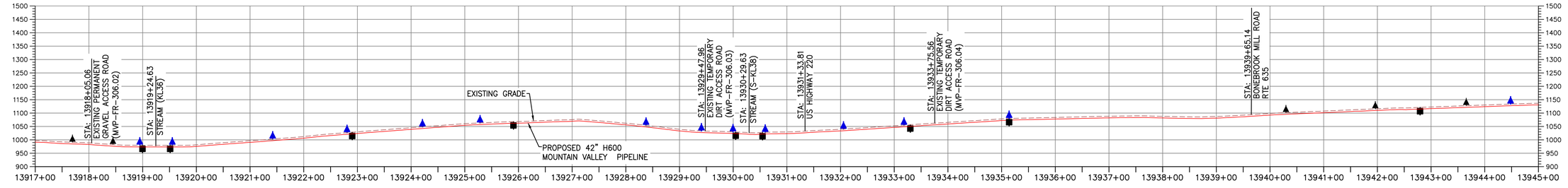
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
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- APPALACHIAN NATIONAL SCENIC TRAIL
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3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

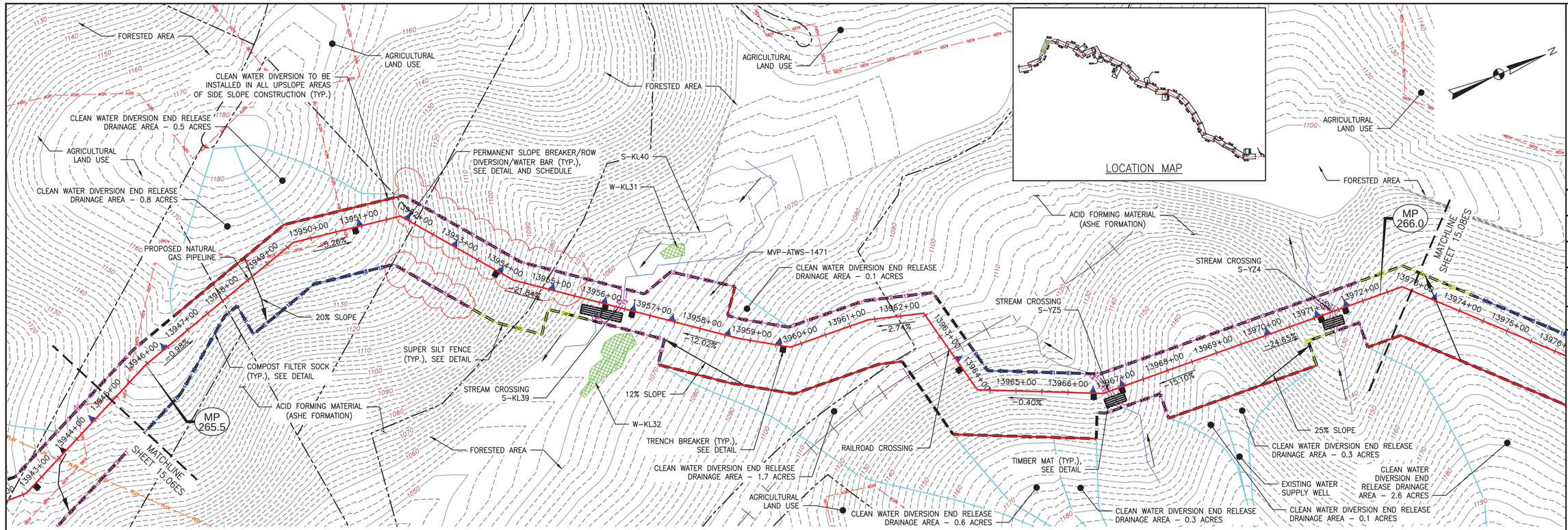
MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

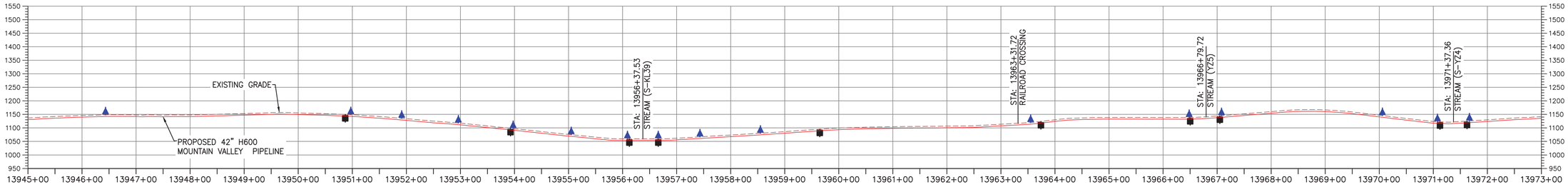
DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.06ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

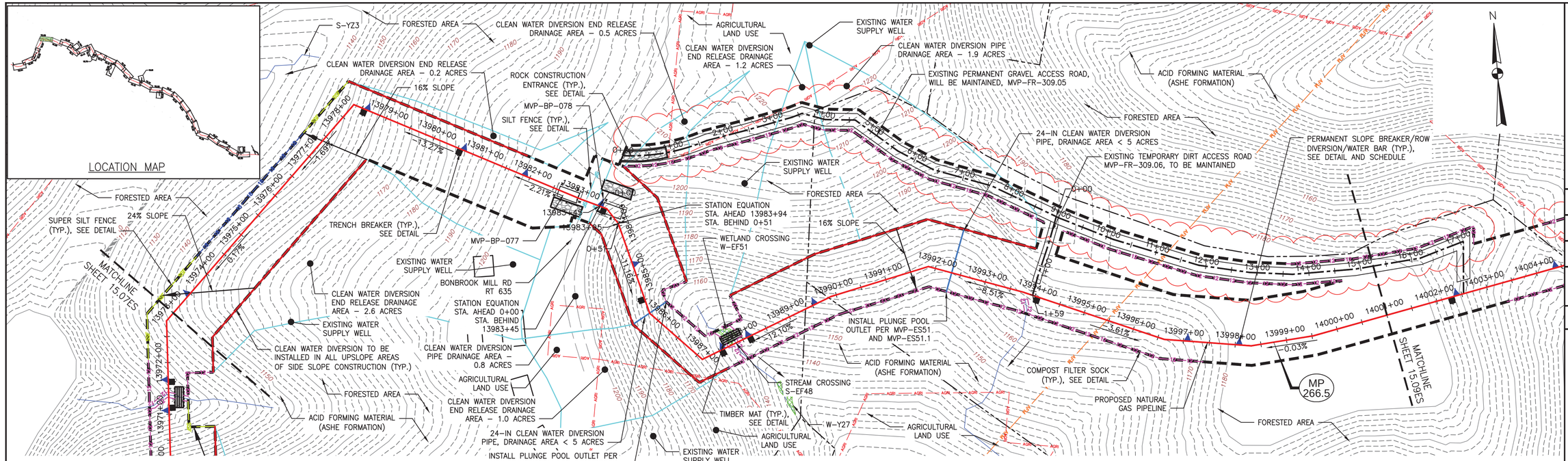
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.07ES OF 15.99ES

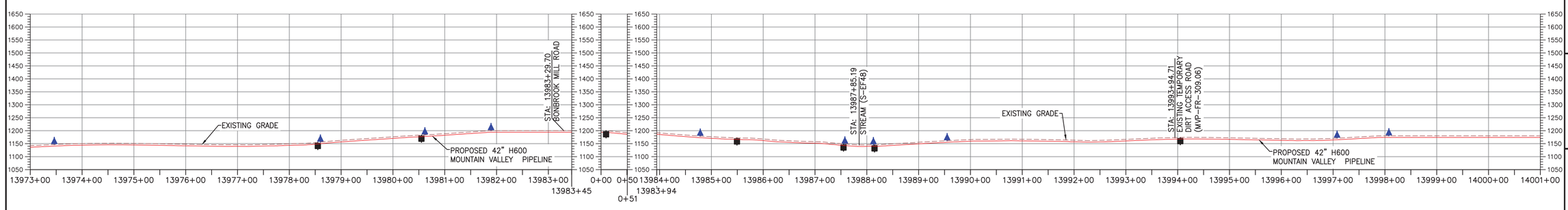
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — AFM — ACID FORMING MATERIAL
- AGRI — AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- RFD — RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- 12 — 12 — 12 — 12 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 18 — 18 — 18 — 18 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 24 — 24 — 24 — 24 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
- STEEP SLOPE EROSION CONTROL (SEE NOTE 2)
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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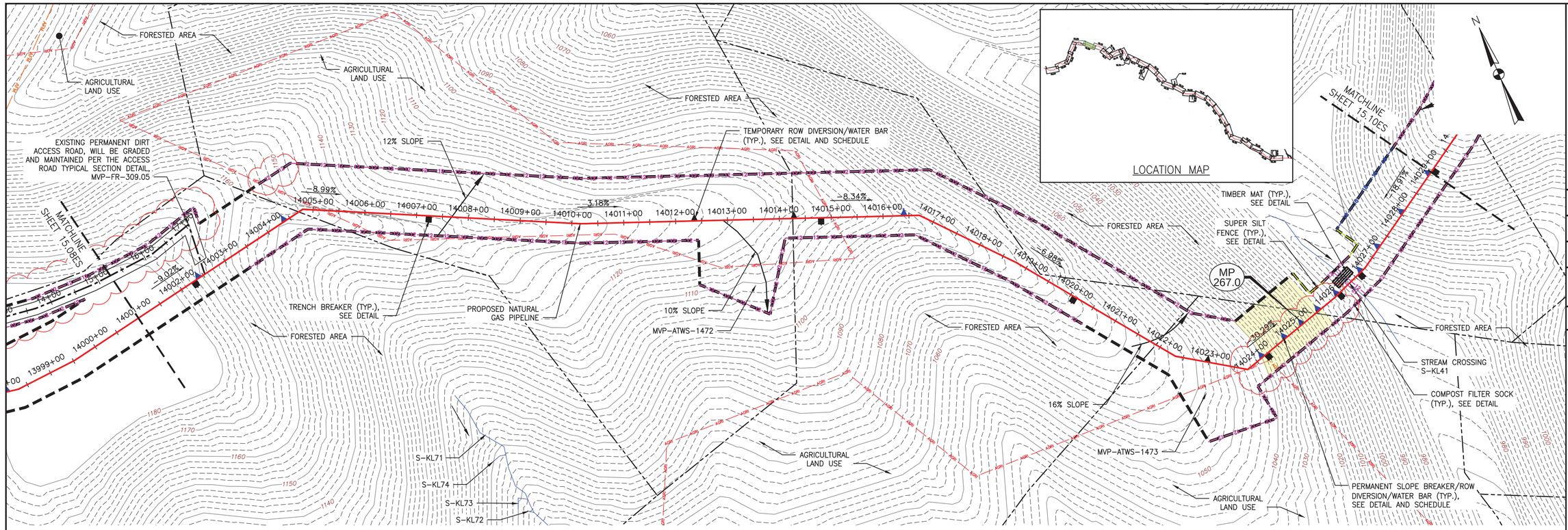
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.08ES OF 15.99ES

REVISION

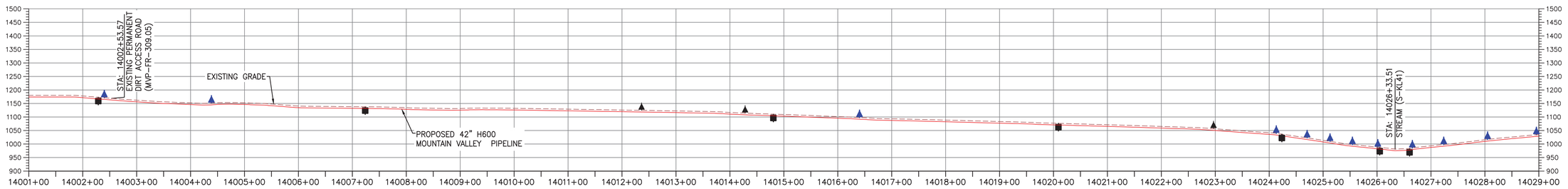
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

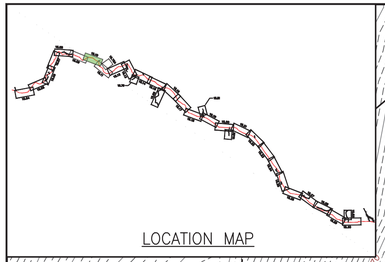
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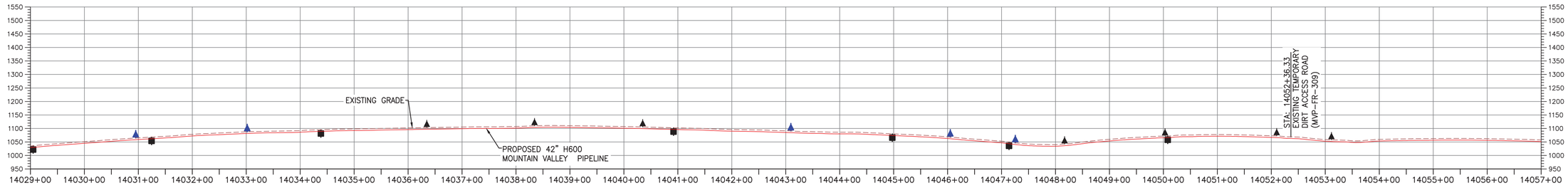
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
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PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.09ES OF 15.99ES



LOCATION MAP



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100' 100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200' 200 0 200 400

LEGEND

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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

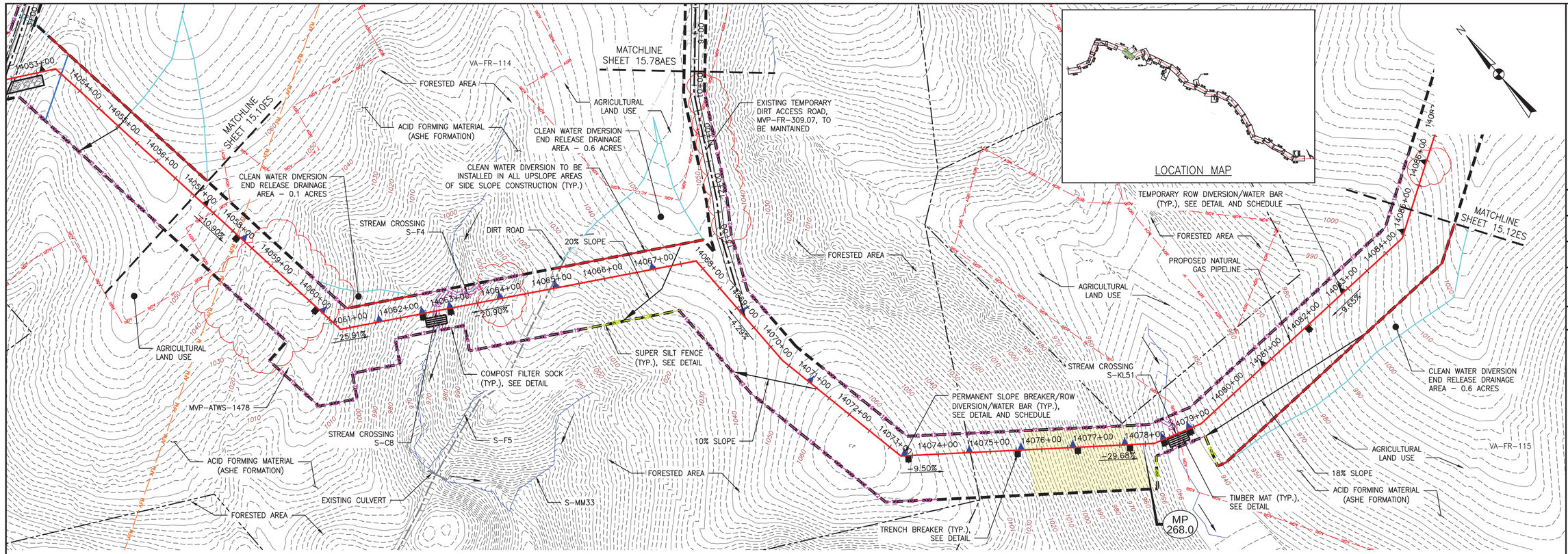
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.10ES OF 15.99ES

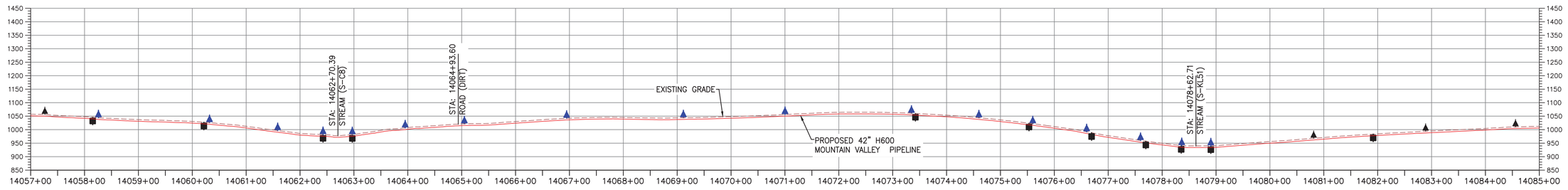
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
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- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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)
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- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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555 SOUTHPOINTE BOULEVARD, SUITE 200
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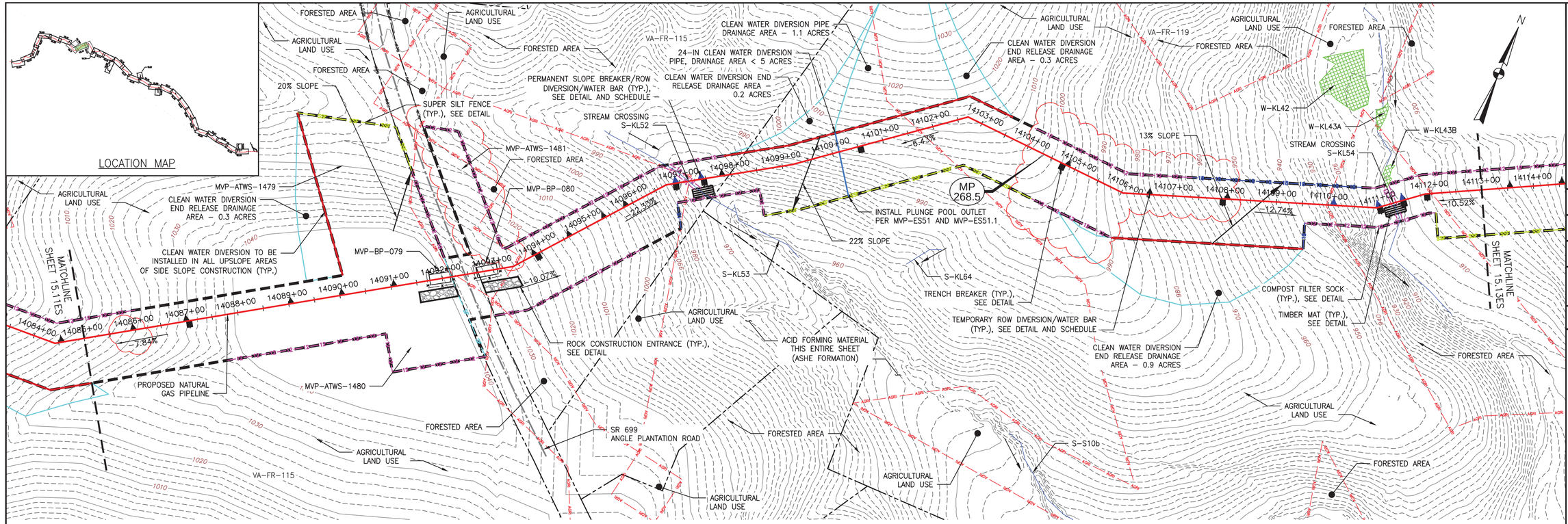
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PROFESSIONAL ENGINEER

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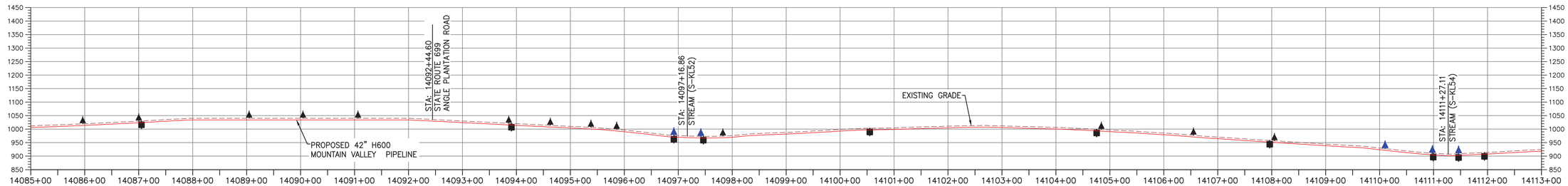
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PLAN

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200 0 200 400

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COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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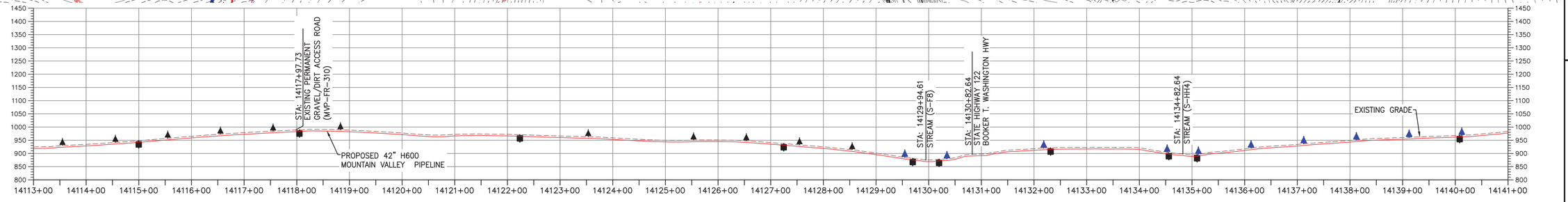
CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 1.2 ACRES
VA-FR-119
AGRICULTURAL LAND USE
FEMA FLOODPLAIN
STEEP SLOPE AREAS (TYP.)
MVP-ATWS-523
SR 644 FLINT HILL RD
CLEAN WATER DIVERSION TO BE INSTALLED IN ALL UPSLOPE AREAS OF SIDE SLOPE CONSTRUCTION (TYP.)
24-IN CLEAN WATER DIVERSION PIPE, DRAINAGE AREA < 5 ACRES
ACID FORMING MATERIAL THIS ENTIRE SHEET (ASHE FORMATION)
SILT FENCE (TYP.), SEE DETAIL
ROCK CONSTRUCTION ENTRANCE (TYP.), SEE DETAIL
COMPOST FILTER SOCK (TYP.), SEE DETAIL
FORESTED AREA
CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 1.5 ACRES
PROPOSED NATURAL GAS PIPELINE
STREAM CROSSING S-F8
STREAM CROSSING S-HH4
TRENCH BREAKER (TYP.), SEE DETAIL
14.65%
9.60%
23.54%
6.91%
21.27%
13.75%
8% SLOPE
INSTALL PLUNGE POOL OUTLET PER MVP-ES51 AND MVP-ES51.1
STEEP SLOPE EROSION CONTROL (TYP.), SEE DETAIL
MVP-ATWS-521A
MP 269.0
S-KL67
S-KL68
SUPER SILT FENCE (TYP.), SEE DETAIL
PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE
TIMBER MAT (TYP.), SEE DETAIL
MATCHLINE SHEET 15.14ES
TEMPORARY ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE
MVP-ATWS-521
16% SLOPE
AGRICULTURAL LAND USE
12.56%
EXISTING CULVERT
S-S11
EXISTING PERMANENT GRAVEL/DIRT ACCESS ROAD, TO BE MAINTAINED, MVP-FR-310
STATE HIGHWAY 122 BOOKER T. WASHINGTON HWY
S-KL66
FORESTED AREA
VA-FR-119.02
MVP-ATWS-1265
EXISTING CULVERT
MATCHLINE SHEET 15.12ES
FORESTED AREA
AGRICULTURAL LAND USE
VA-FR-119.01
S-S10
FORESTED AREA
MVP-ATWS-1266

PLAN

SCALE: 1" = 100'

100 0 100 200

LOCATION MAP



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

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200 0 200 400

LEGEND

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

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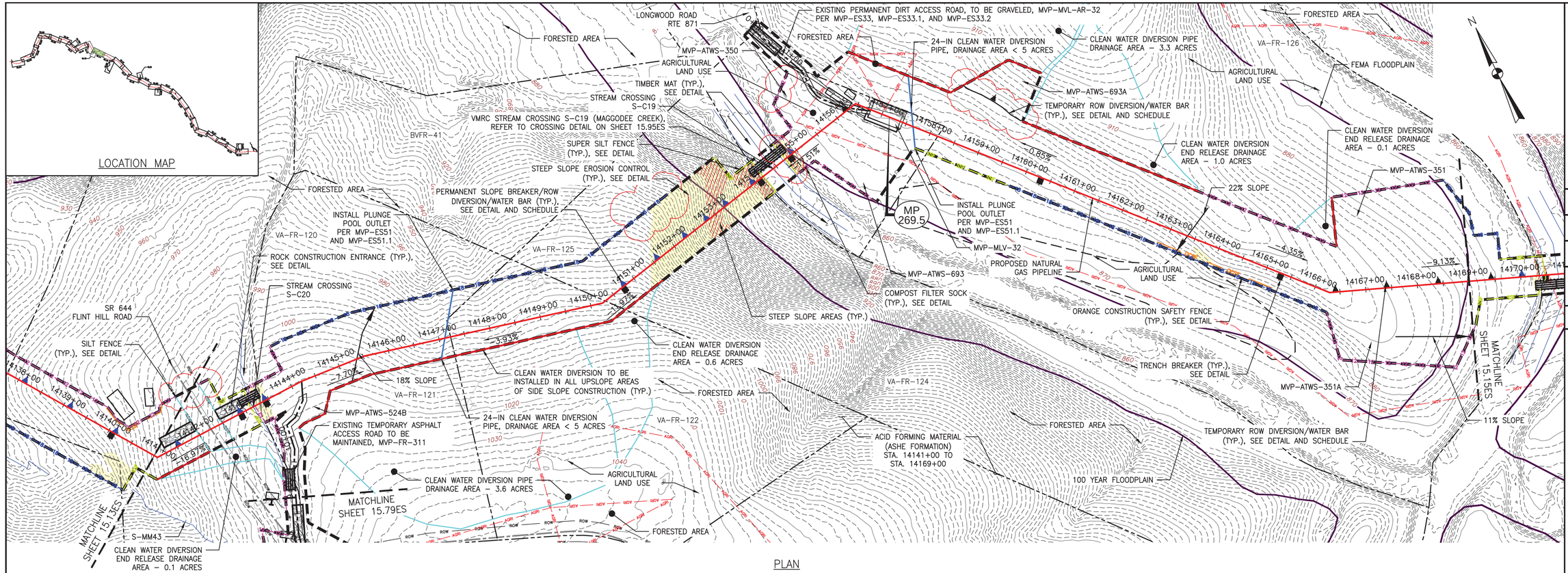
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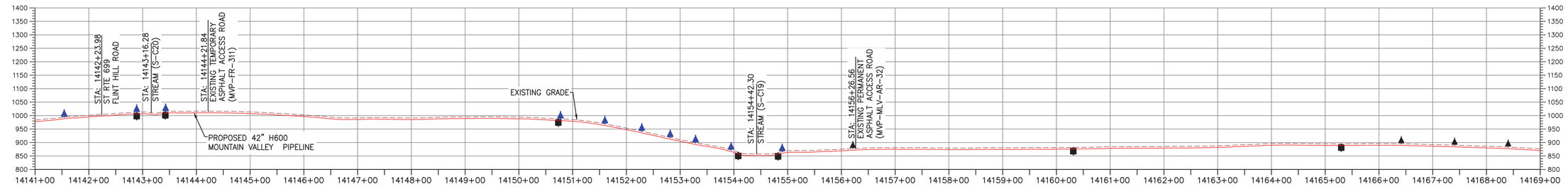
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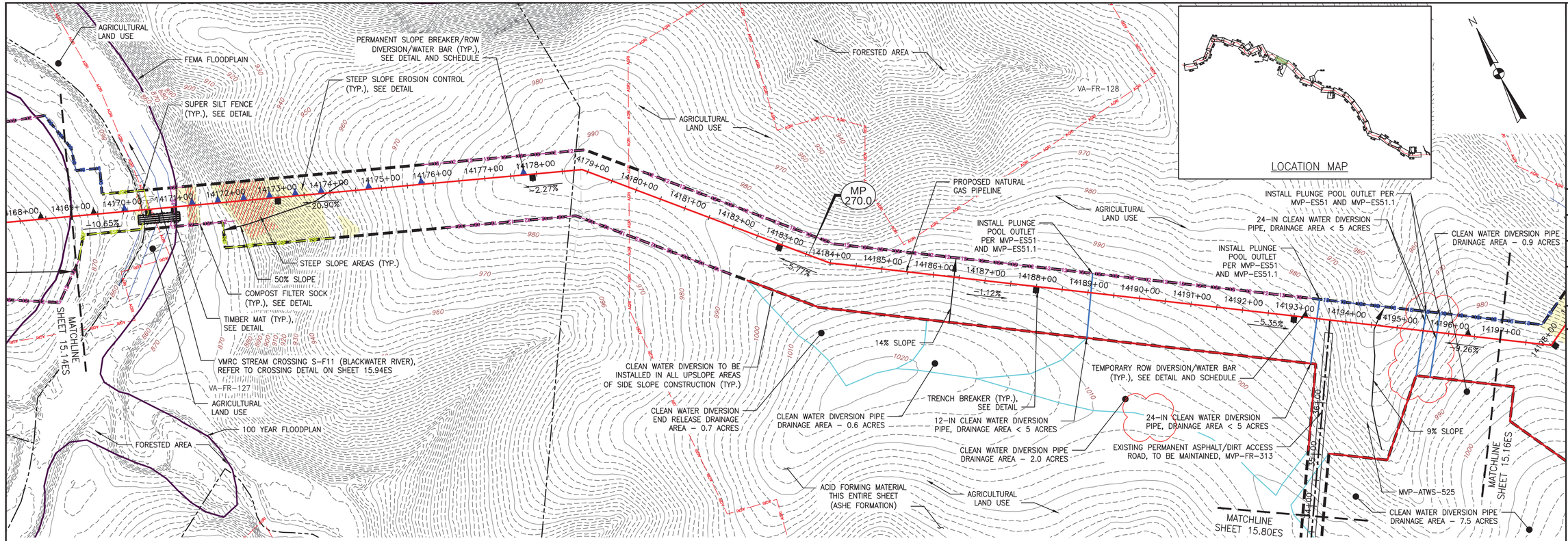
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.14ES OF 15.99ES

REVISION

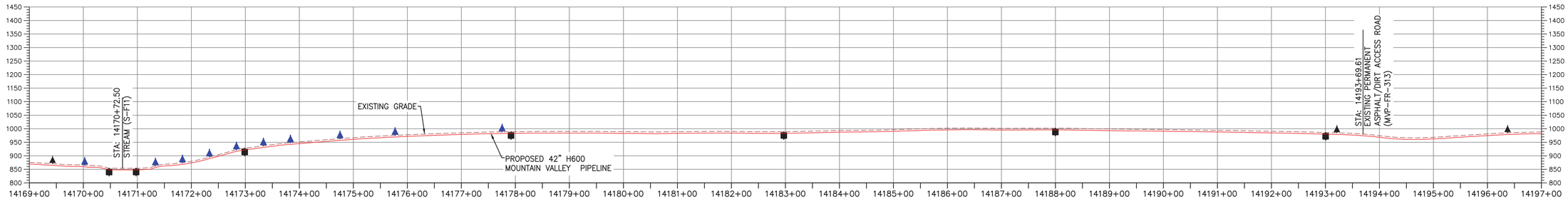
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION TO BE CONDUCTED THROUGHOUT THE JEFFERSON NATIONAL FOREST.
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5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

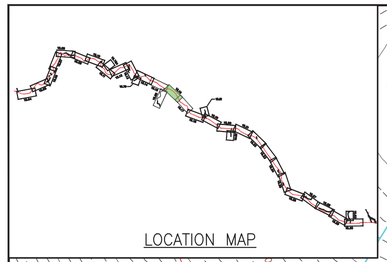
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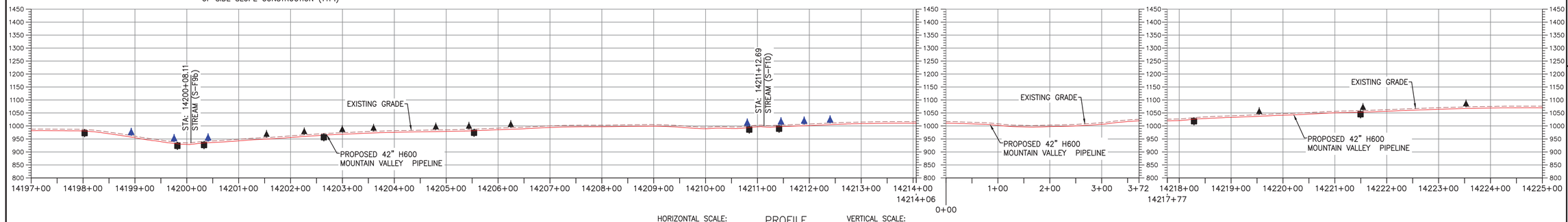
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REVISION

SHT. NO. 15.15ES OF 15.99ES

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PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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CANONSBURG, PA 15317

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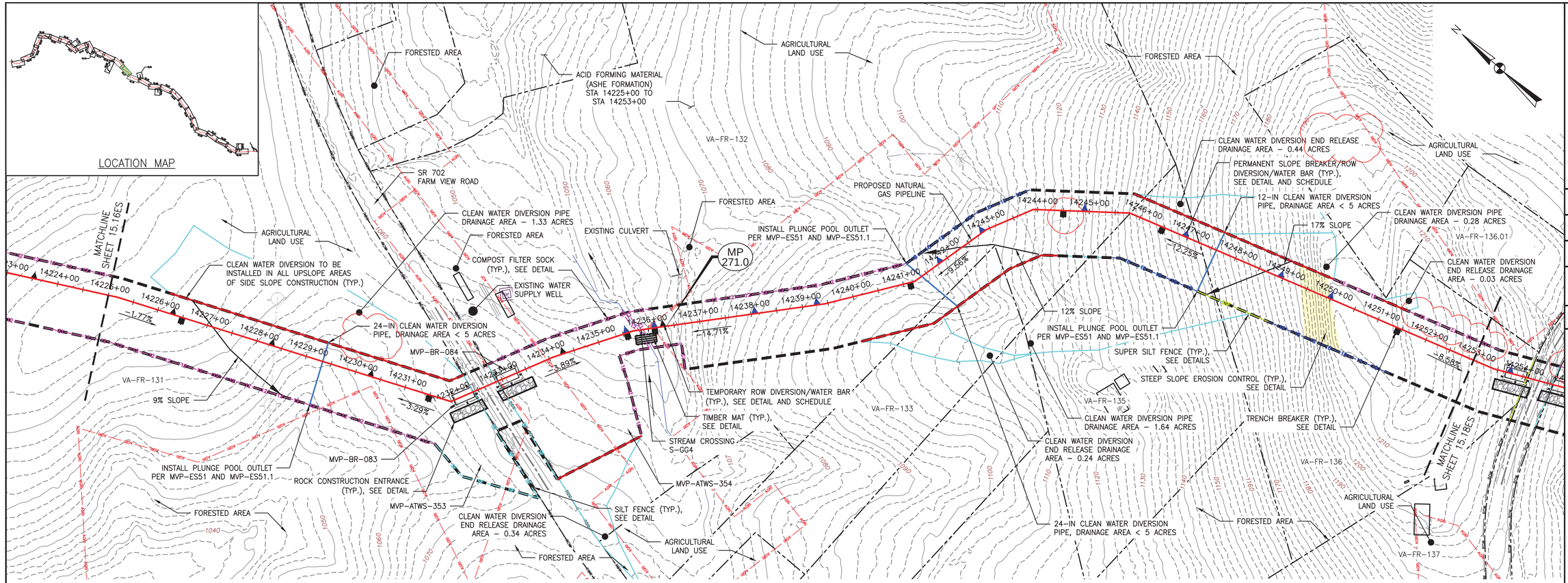
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.16ES OF 15.99ES

REVISION

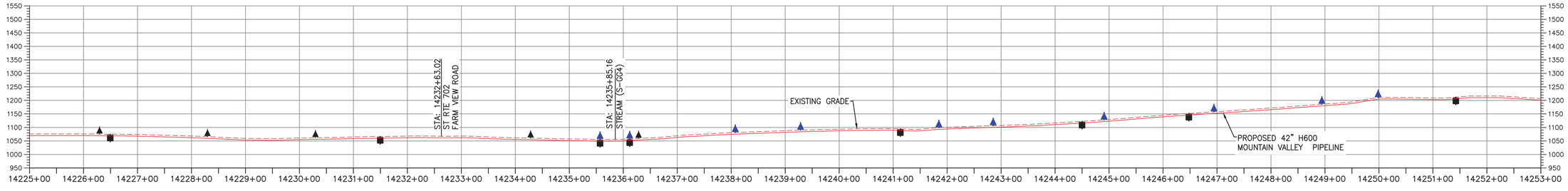
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

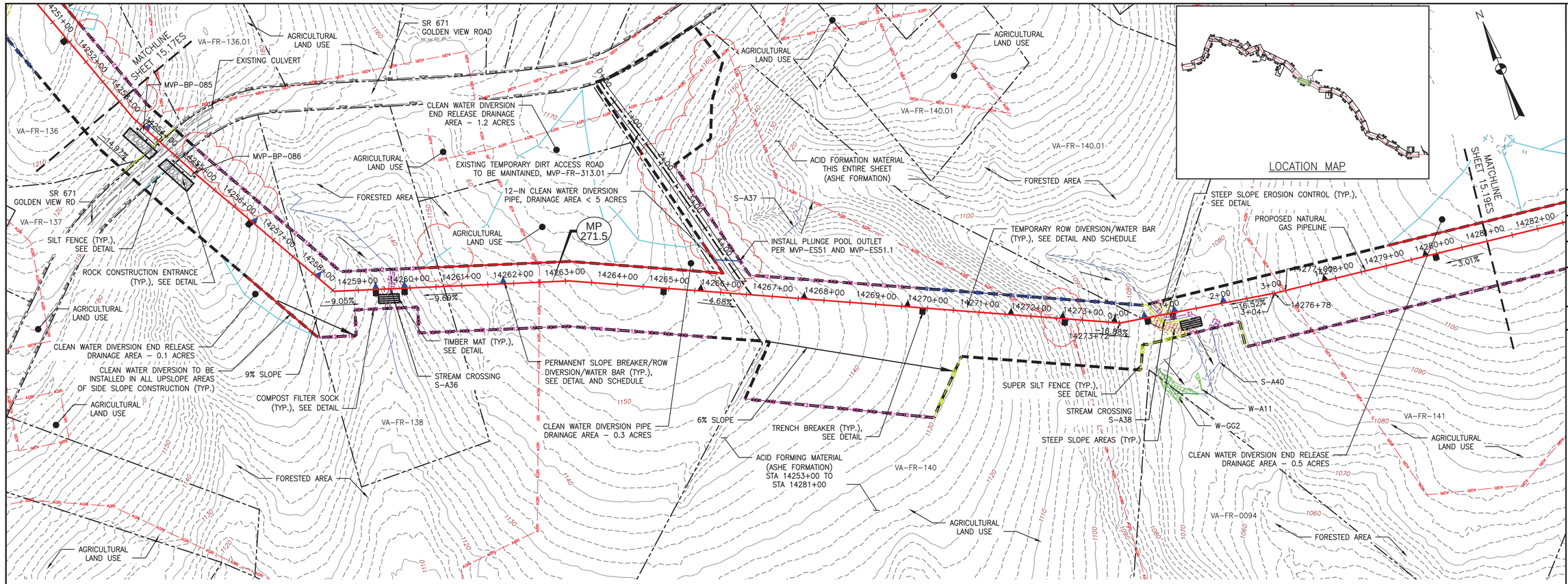
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5

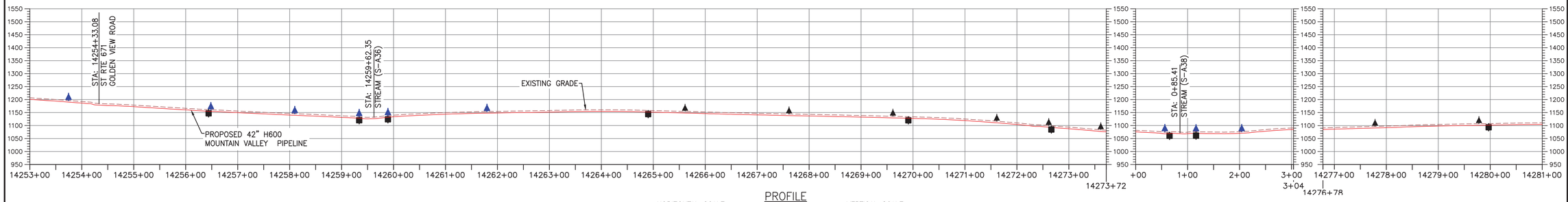
SHT. NO. 15.17ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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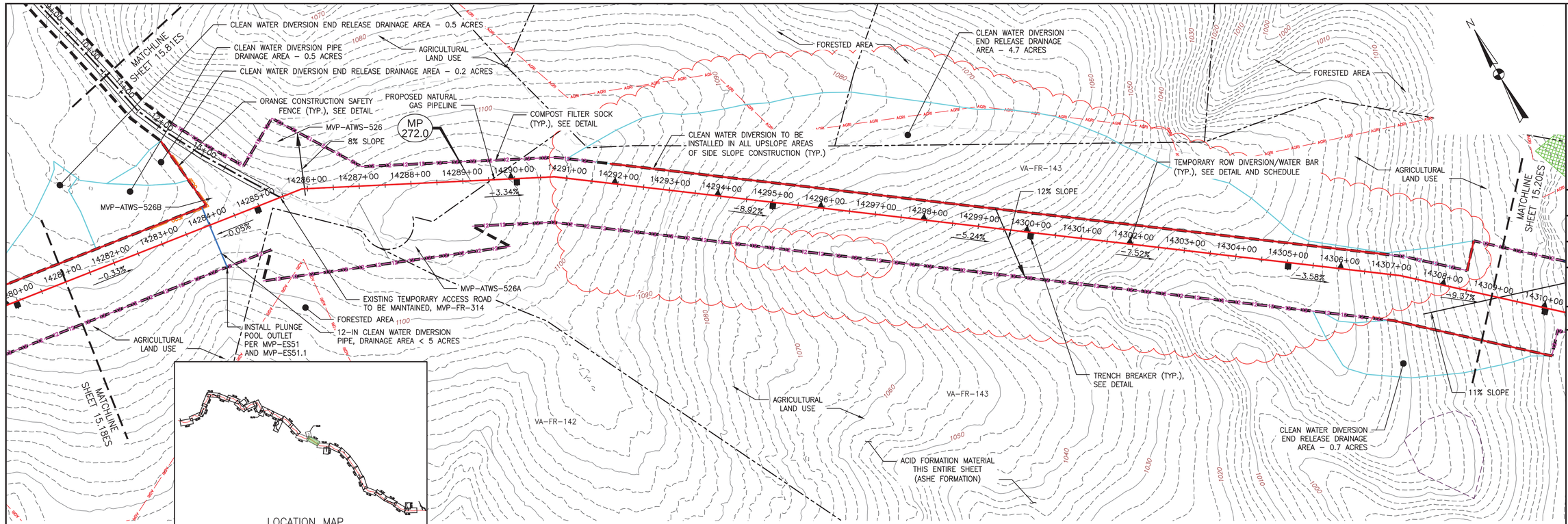
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SHT. NO.	15.18ES OF 15.99ES

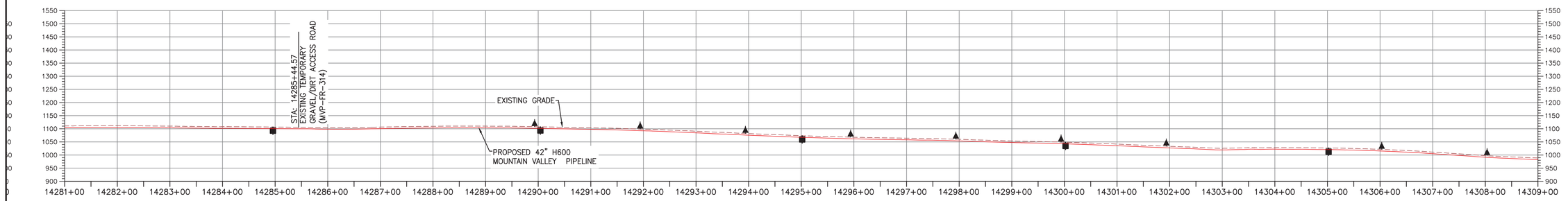
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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100 0 100 200

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200 0 200 400

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- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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- STEEP SLOPE AREAS (SEE NOTE 4)
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)
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NOTES:

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3. 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.
4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE, AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VWRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

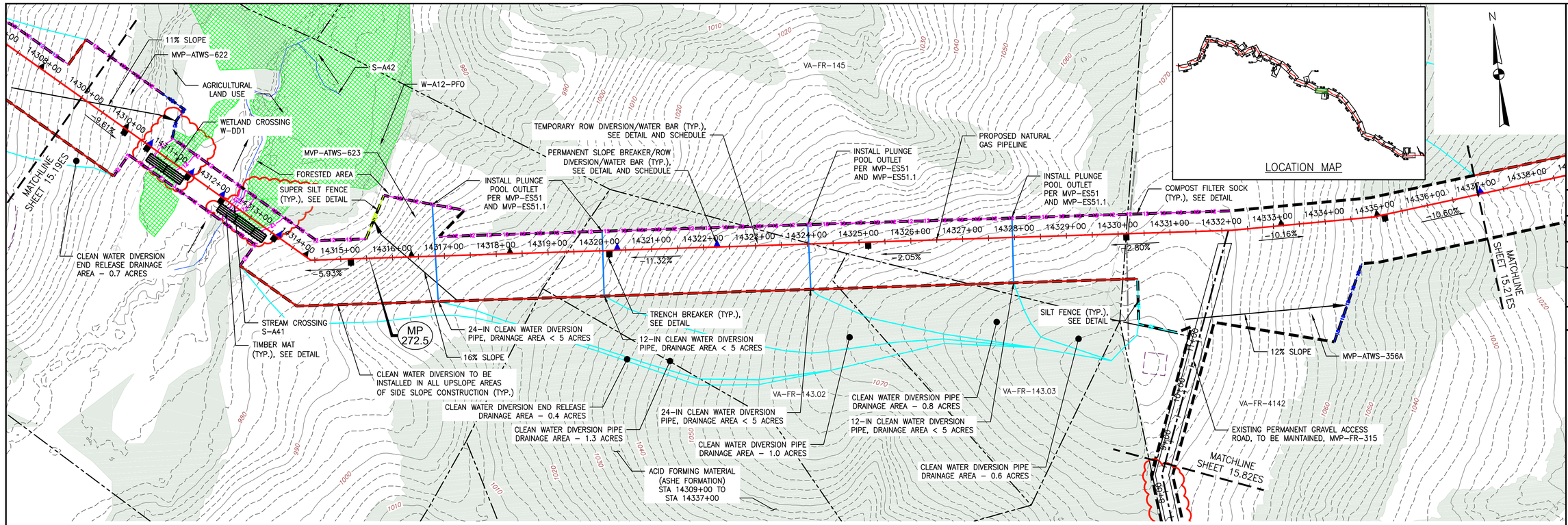
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 15.19ES OF 15.99ES

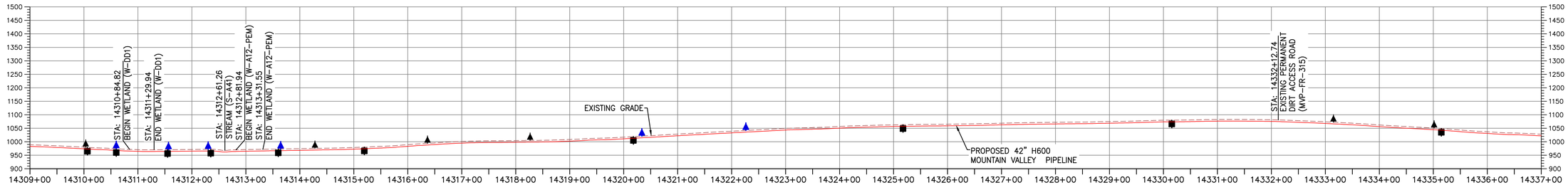
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- EXISTING FOREST
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- 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:

1. TOPSOIL SEGREGATION WILL BE PERFORMED IN ALL IMMEDIATE CONSTRUCTION AREAS OF THE PROJECT IN ACCORDANCE WITH DETAILS MVP-ES46.1 THROUGH MVP-ES46.3.
2. FLEXTERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
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5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. IMPROVEMENTS TO PERMANENT AND TEMPORARY ACCESS ROADS WILL BE PERFORMED PER THE SITE SPECIFIC ACCESS ROAD DETAILS.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
–	06/24/20	JK	RE	DW	CHANGES TO AQUATIC RESOURCES DELINEATIONS
7	04/30/18	JK	RE	DW	FIELD MODIFICATION
6	03/16/18	JK	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	01/07/18	KAL	RE	DW	VADEQ COMMENTS

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

2200 ENERGY DRIVE

CANONSBURG, PA 15317

TETRA TECH

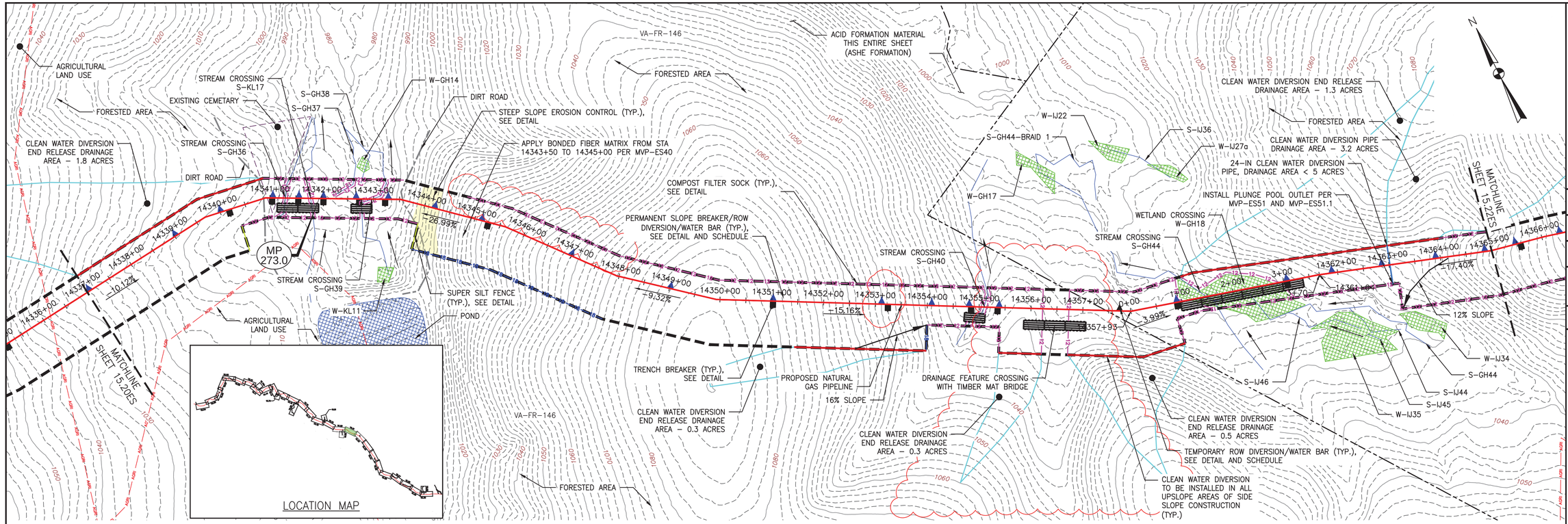
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
No. 0402057593
PROFESSIONAL ENGINEER

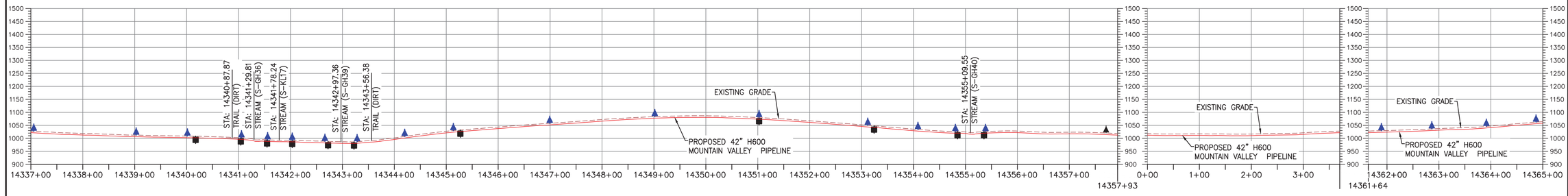
DRAWN BY:	JK
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	06/24/2020
SCALE:	AS SHOWN
REVISION	–
SHT. NO.	15.20ES OF 14.81ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

100 0 100 200 200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
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- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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NOTES:

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REVISIONS:

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4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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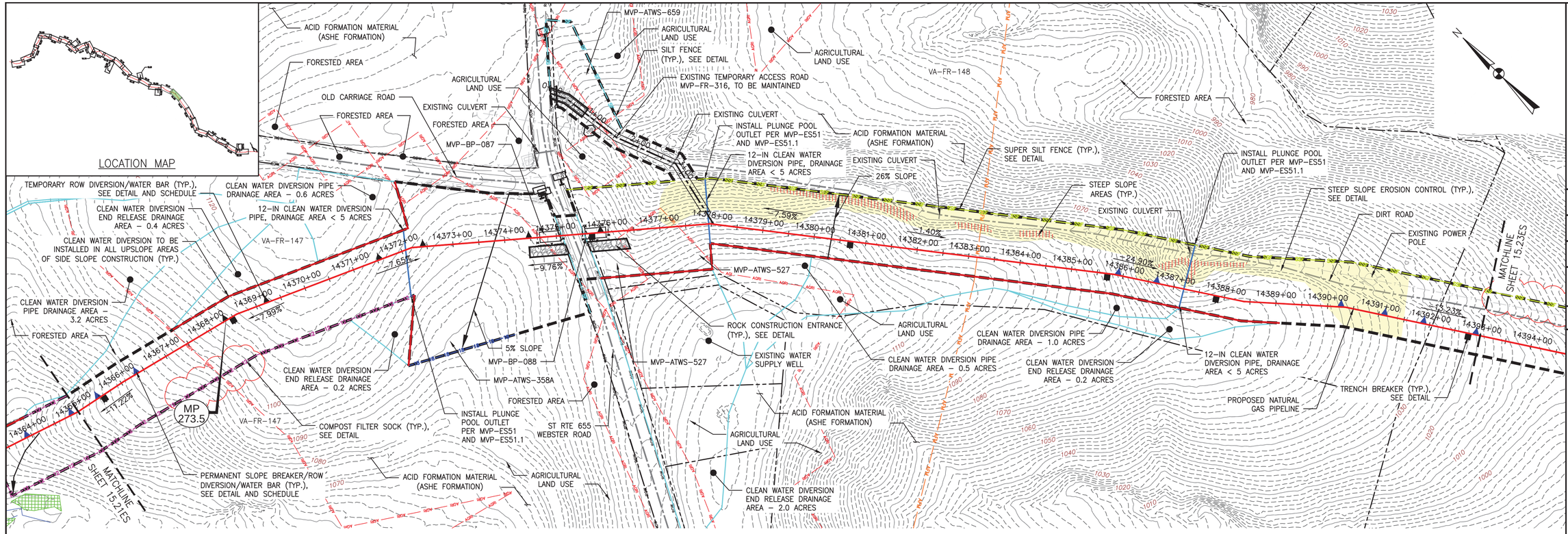
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

REVISION

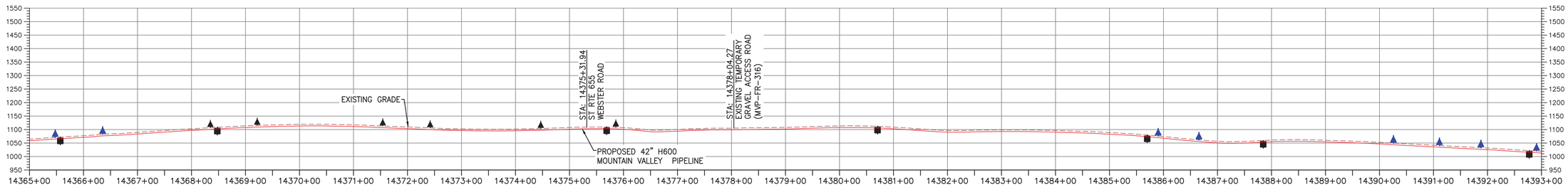
SHT. NO. 15.21ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
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NOTES:

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NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
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3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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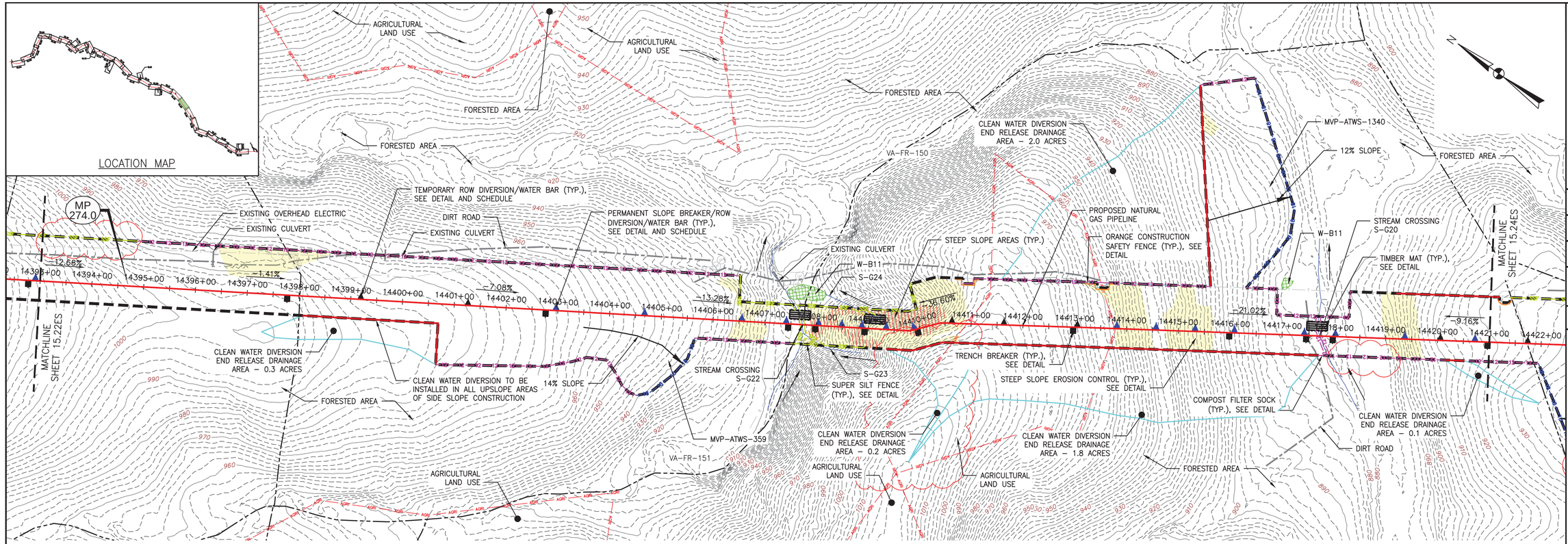
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.22ES OF 15.99ES

REVISION

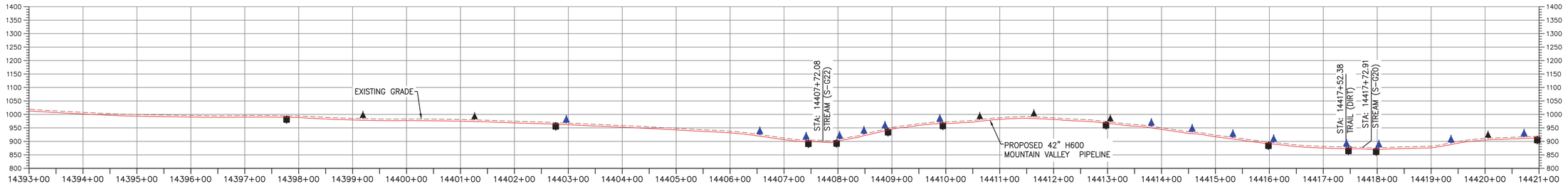
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
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8. ALL NON VWRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP–ES49.

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15_23(S11).dwg PLOTTED ON: 3/13/2018 9:02 AM PLOTTED BY: Rickabaugh, Greg PLOT FILE: ENVIRONMENTAL_COLOR.ctb

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3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

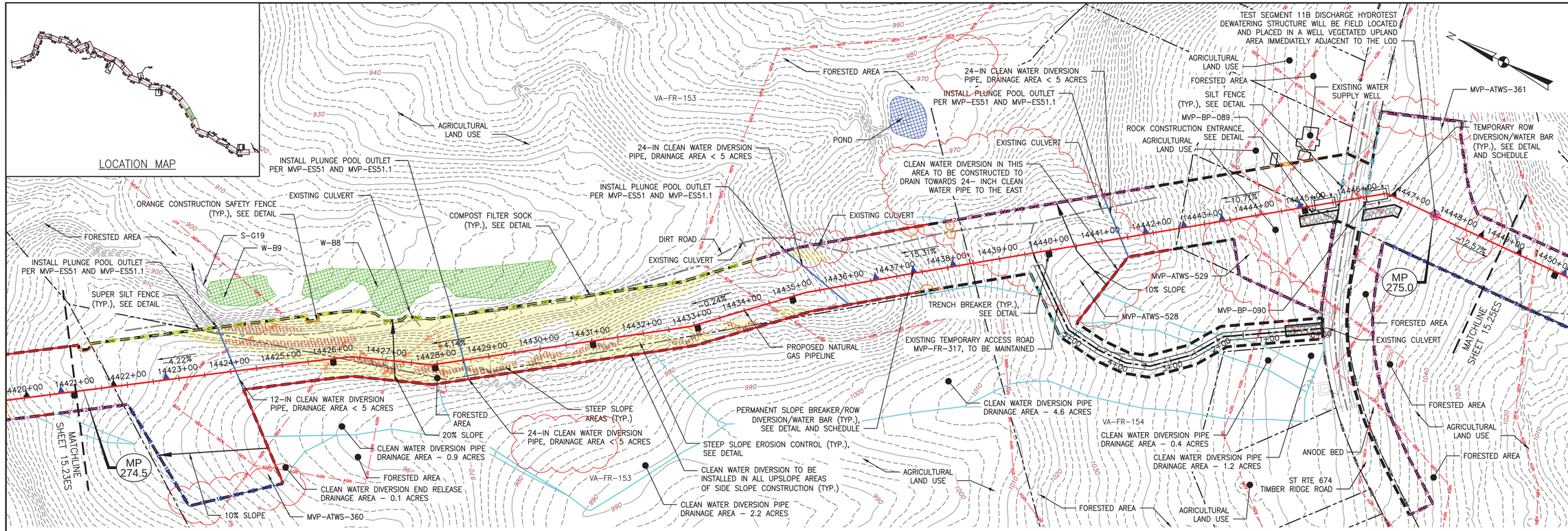
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PITTSBURGH, PA 15220

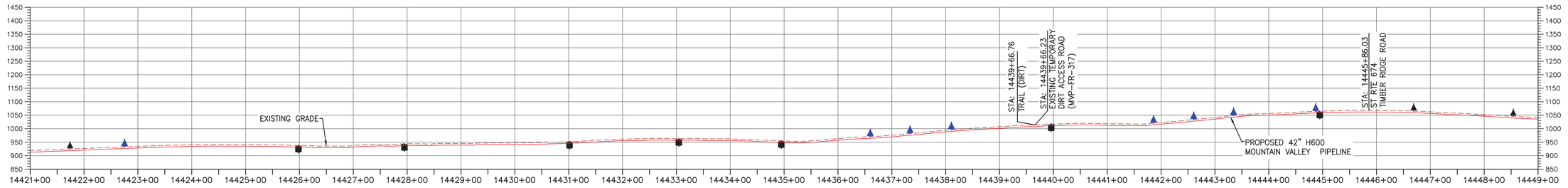
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.23ES OF 15.99ES

REVISION





LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP–ES9.2)
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- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP–ES37)
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- STEEP SLOPE AREAS (SEE NOTE 4)
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED TRENCH BREAKER (SEE DETAIL MVP–20)
- TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP–17, ES38, AND SCHEDULE)

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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

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SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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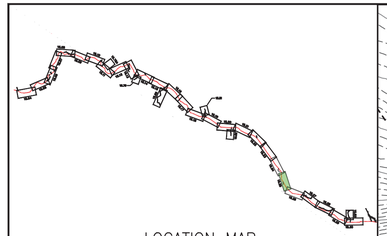
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.24ES OF 15.99ES

REVISION

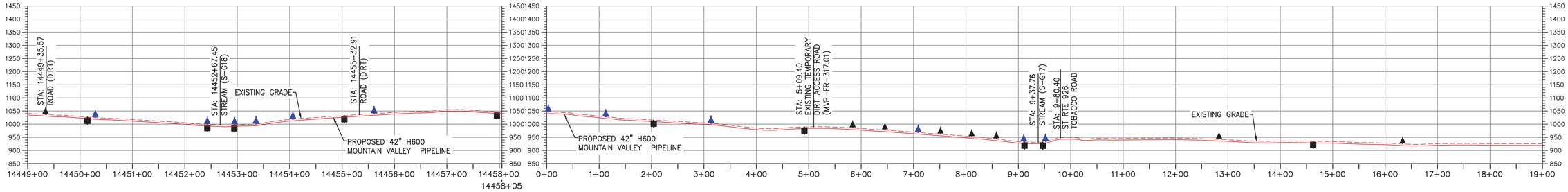
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LOCATION MAP

PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

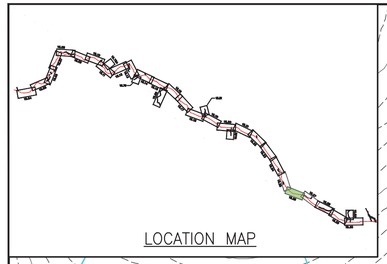
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.25ES OF 15.99ES

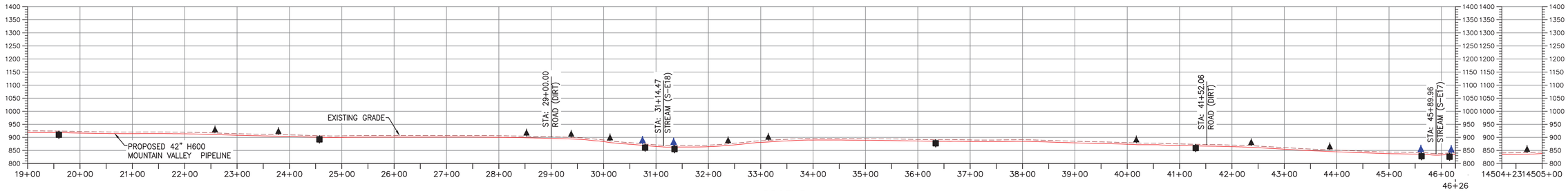
REVISION



LOCATION MAP

PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

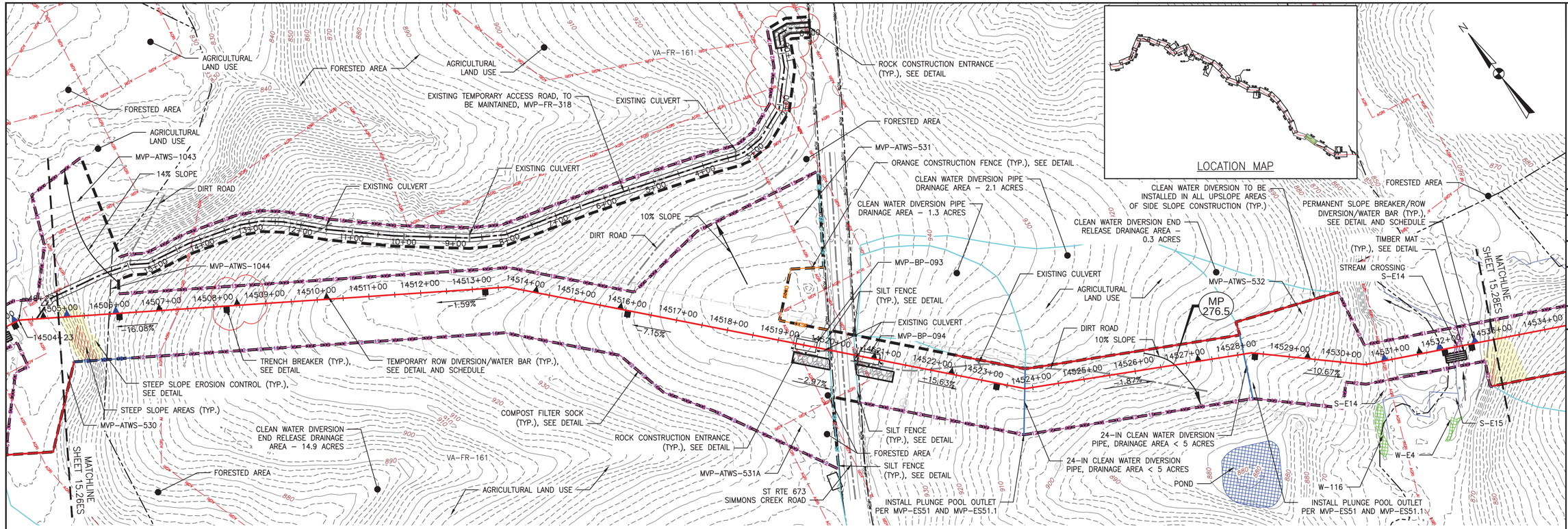
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5

SHT. NO. 15.26ES OF 15.99ES

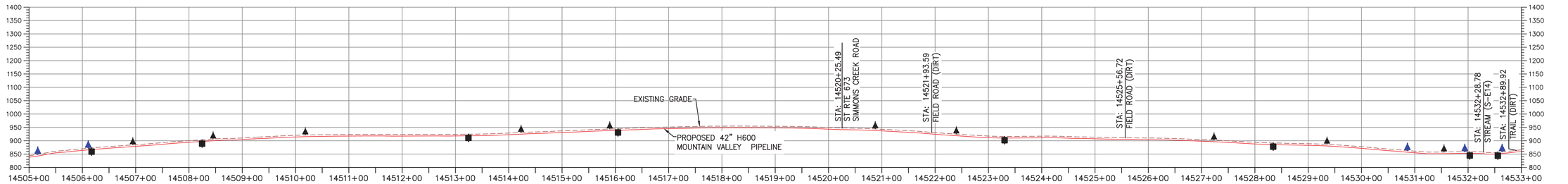


PLAN

SCALE: 1" = 100'

100 0 100 200

LOCATION MAP



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

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Mountain Valley PIPELINE

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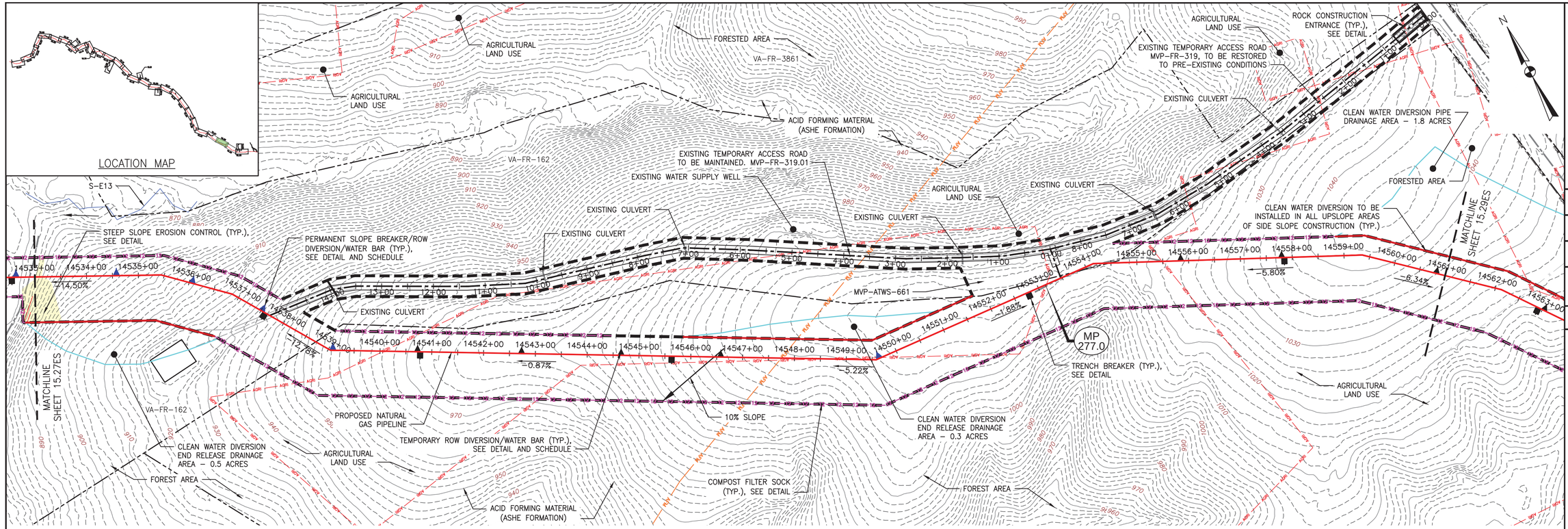
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SHT. NO.	15.27ES OF 15.99ES

REVISION

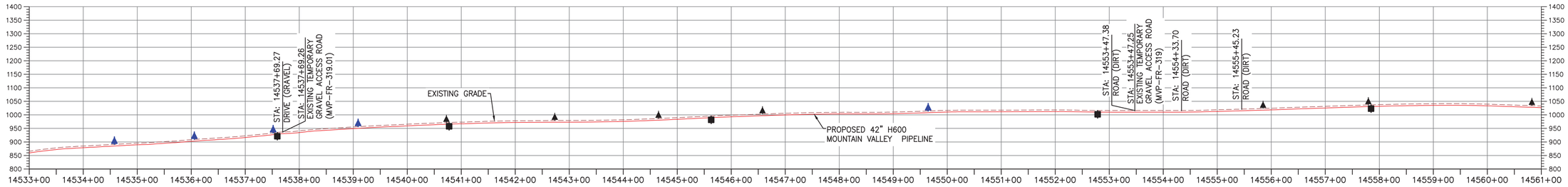
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

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5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

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5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

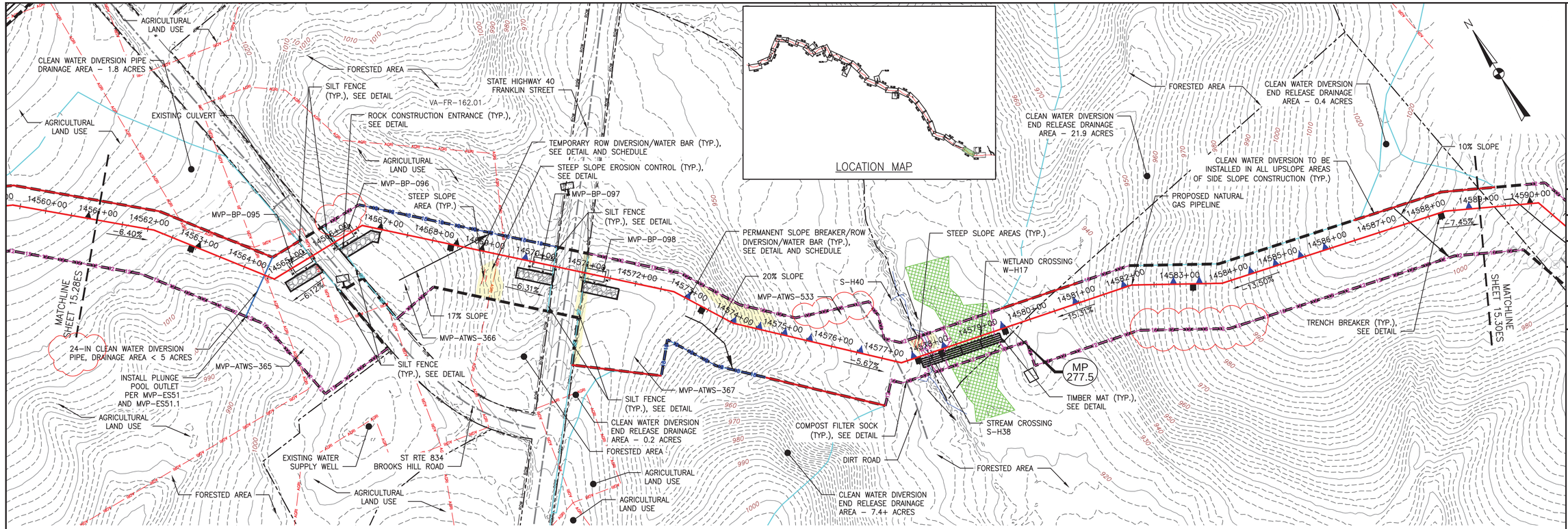
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.28ES OF 15.99ES

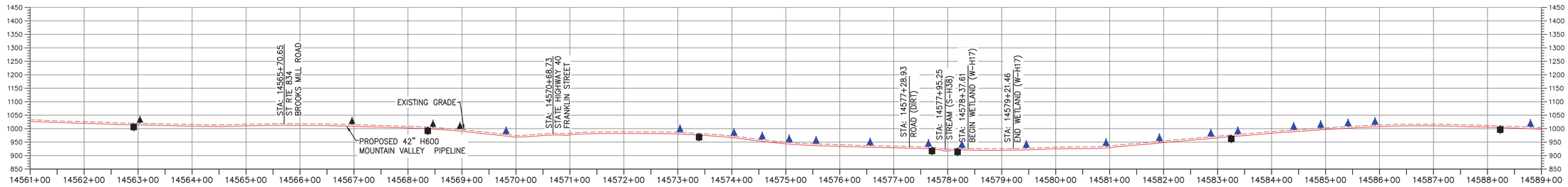
REVISION



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
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- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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- STEEP SLOPE AREAS (SEE NOTE 4)
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- PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)
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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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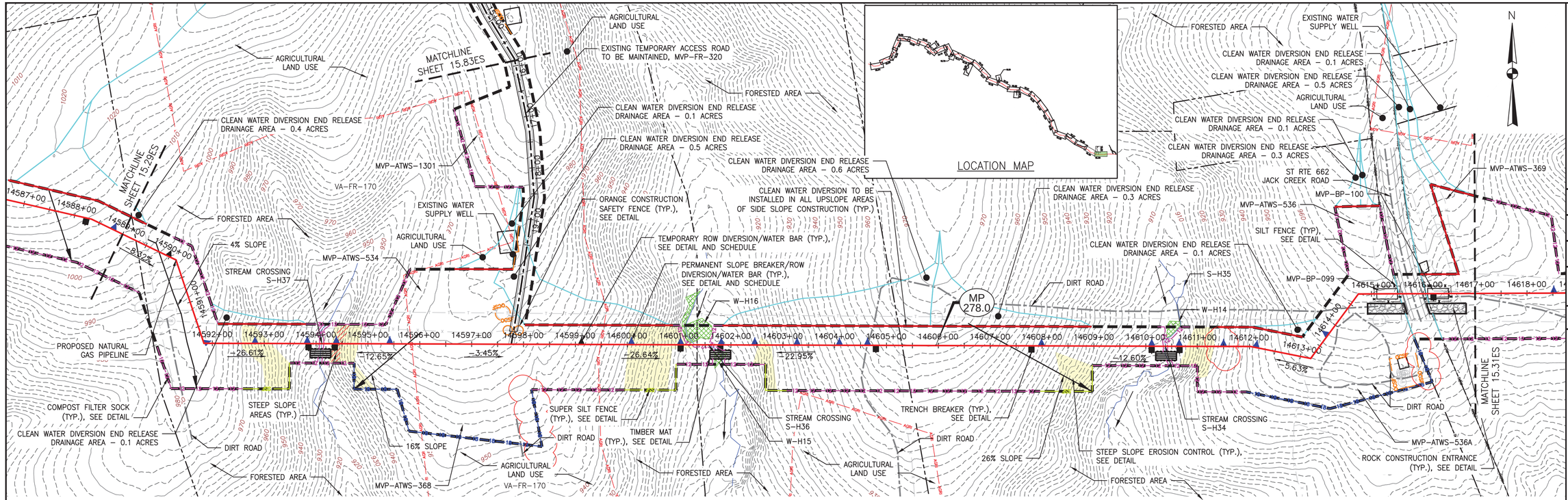
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.29ES OF 15.99ES

REVISION

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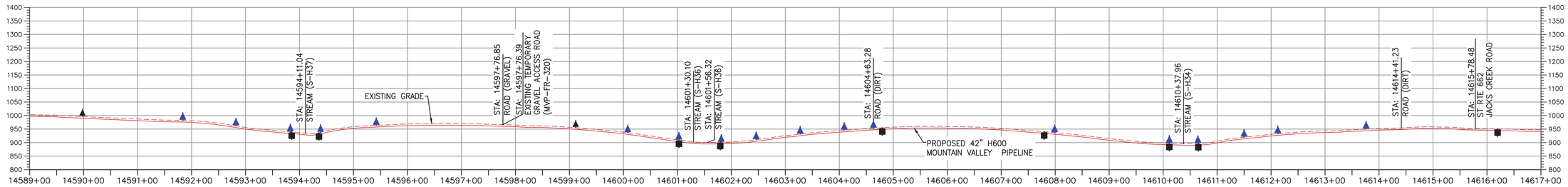


LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL (ANST)
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL (AFM)
- AGRICULTURAL LAND USE BOUNDARY (AGRI)
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5) (SF)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) (SSF)
- PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) (RFD)
- ORANGE CONSTRUCTION SAFETY FENCE (OCSF)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (12)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (18)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (24)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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)
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3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

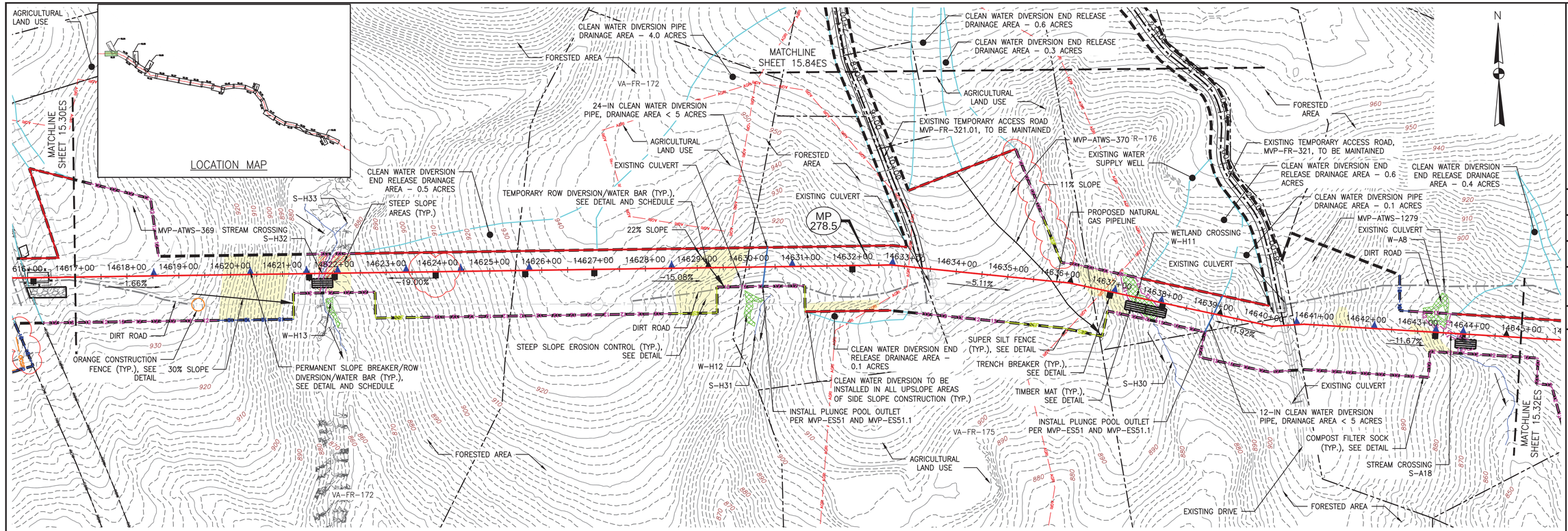
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.30ES OF 15.99ES

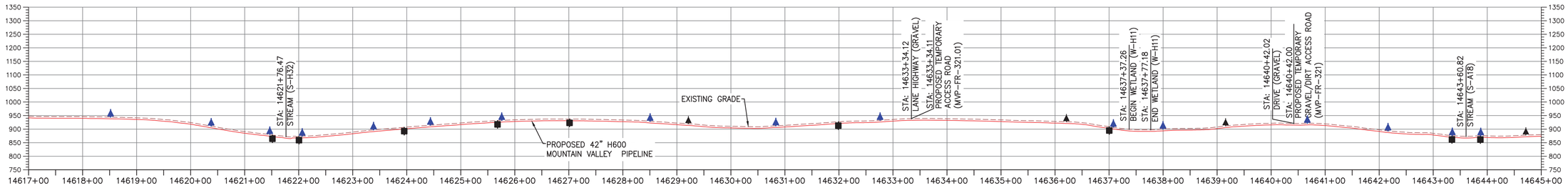
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — AFM — ACID FORMING MATERIAL
- AGRI — AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- RFD — RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- 12 — 12 — 12 — 12 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 18 — 18 — 18 — 18 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 24 — 24 — 24 — 24 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
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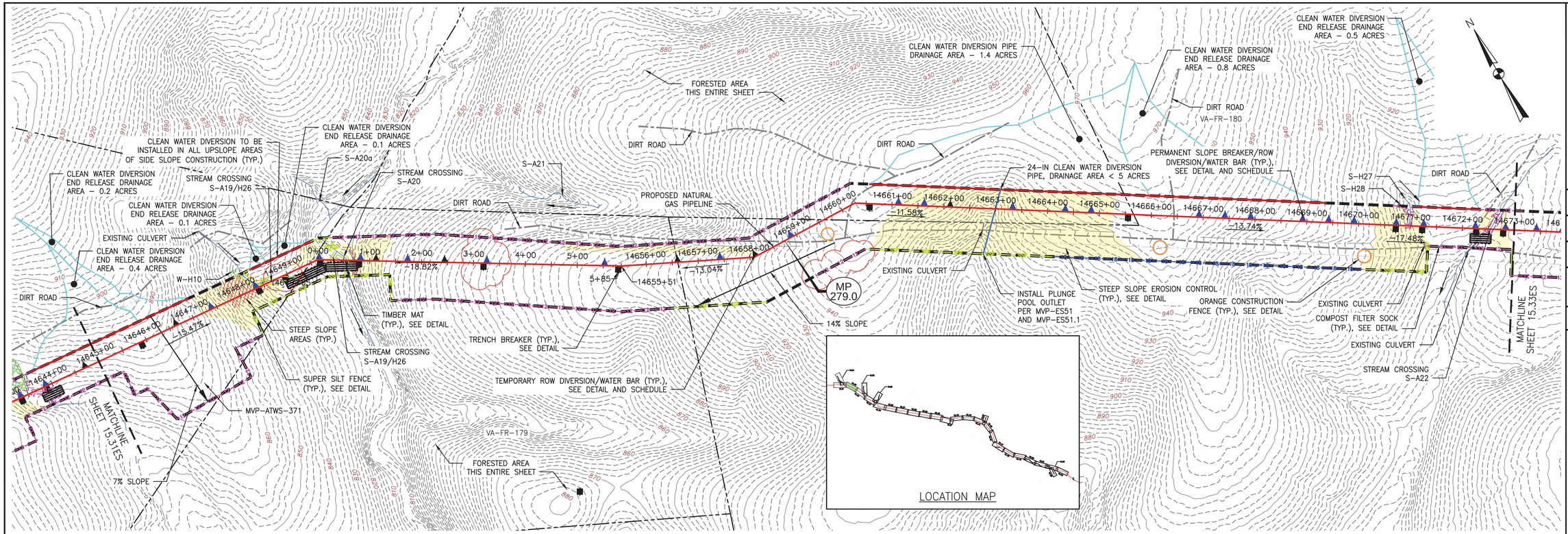
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.31ES OF 15.99ES

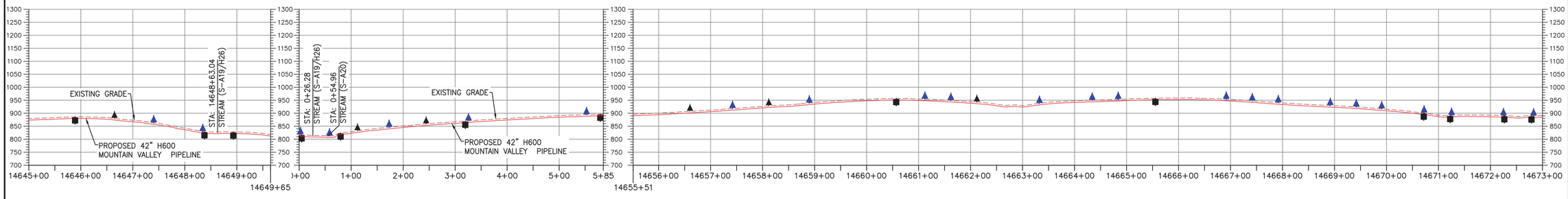
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15.32(S11).dwg PLOTTED ON: 3/2/2018 6:35 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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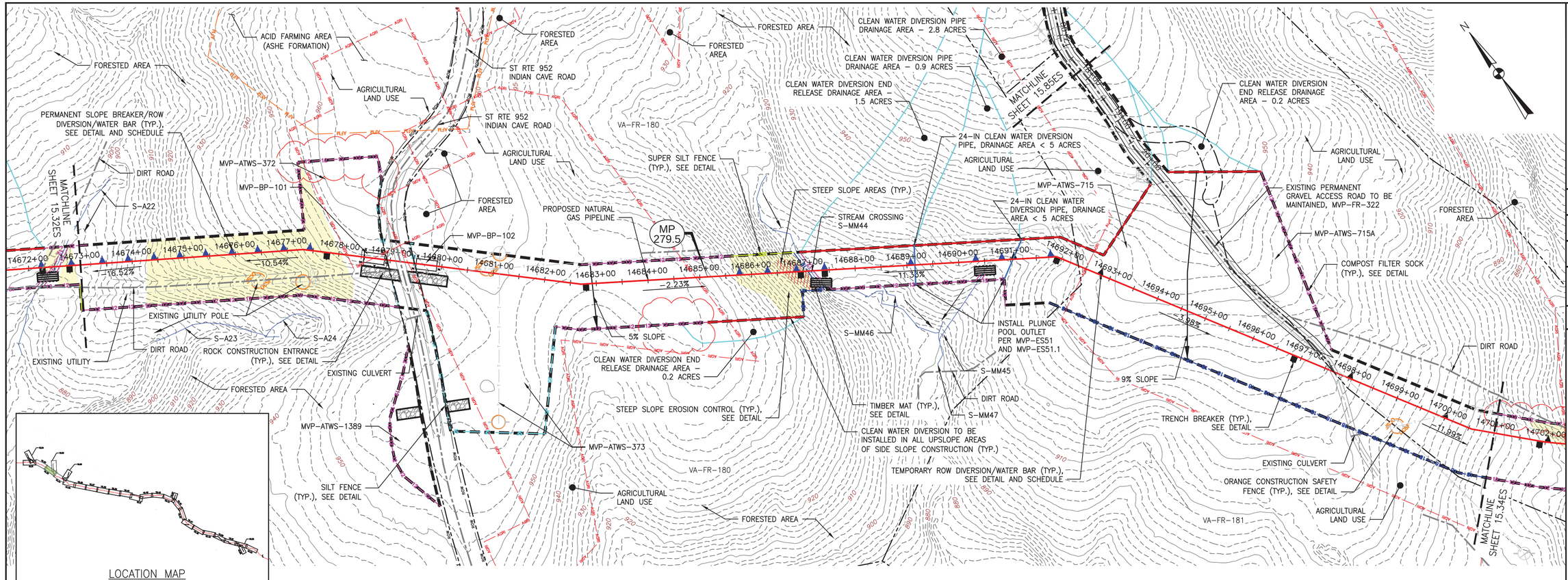
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

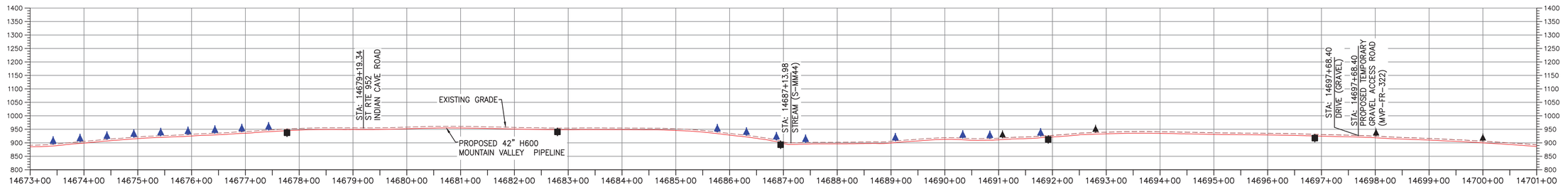
REVISION

SHT. NO. 15.32ES OF 15.99ES



LOCATION MAP

PLAN
SCALE: 1" = 100'
100 0 100 200



PROFILE
HORIZONTAL SCALE: SCALE: 1" = 100'
100 0 100 200
VERTICAL SCALE: SCALE: 1" = 200'
200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS
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SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
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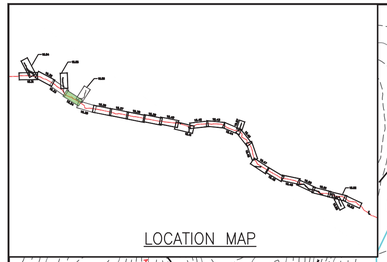
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EROSION AND SEDIMENT CONTROL PLANS

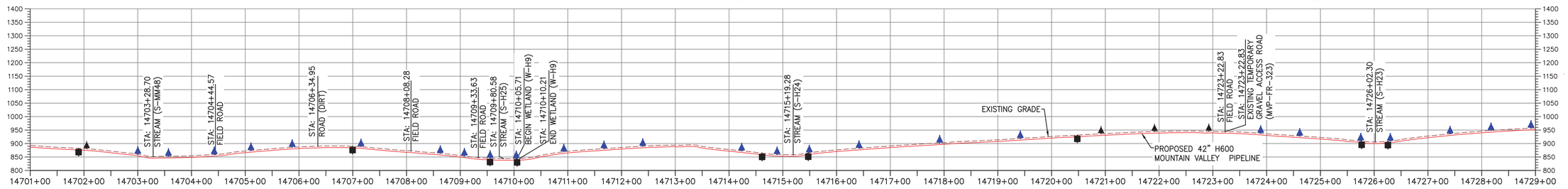
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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APPROVED BY:	DW
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SHT. NO.	15.33ES OF 15.99ES

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PLAN
SCALE: 1" = 100'
100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'
100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'
200 0 200 400

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS
MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE
SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

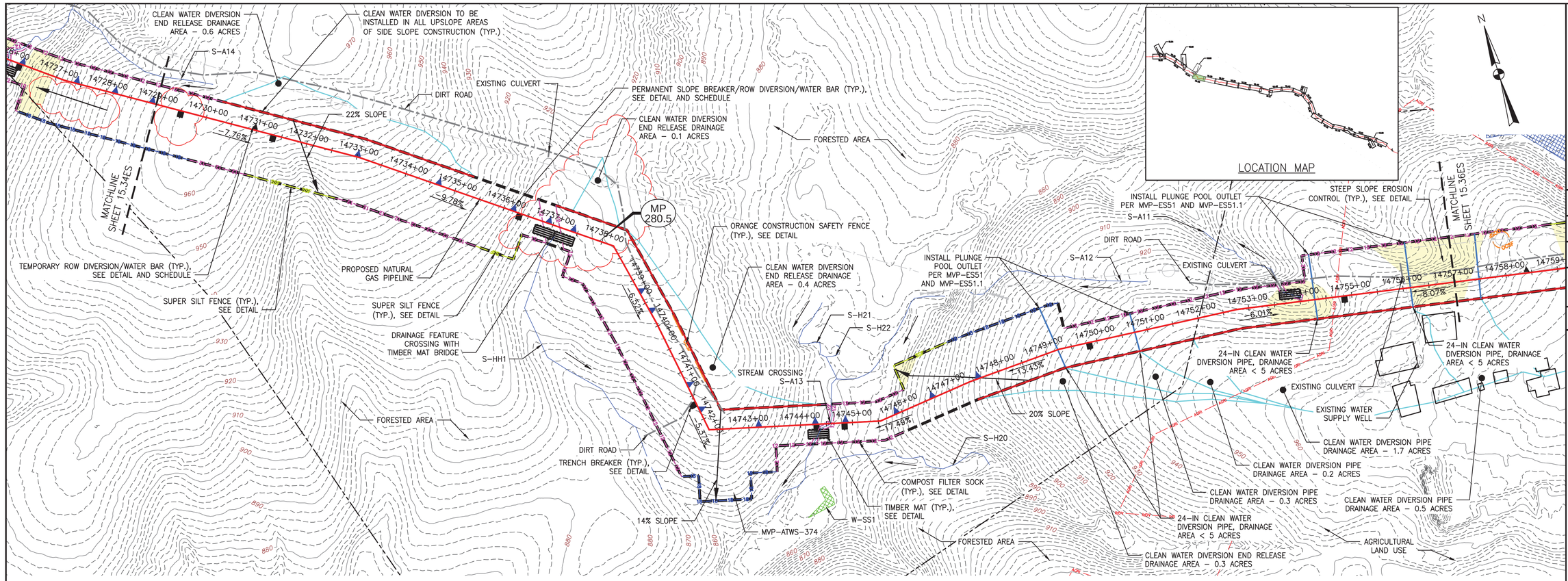
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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REVISION	5
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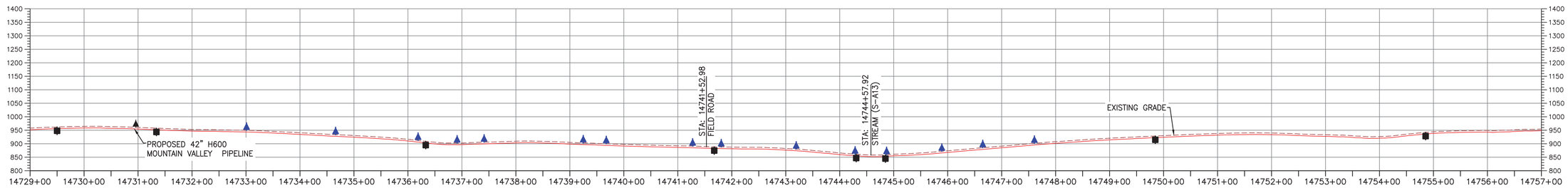
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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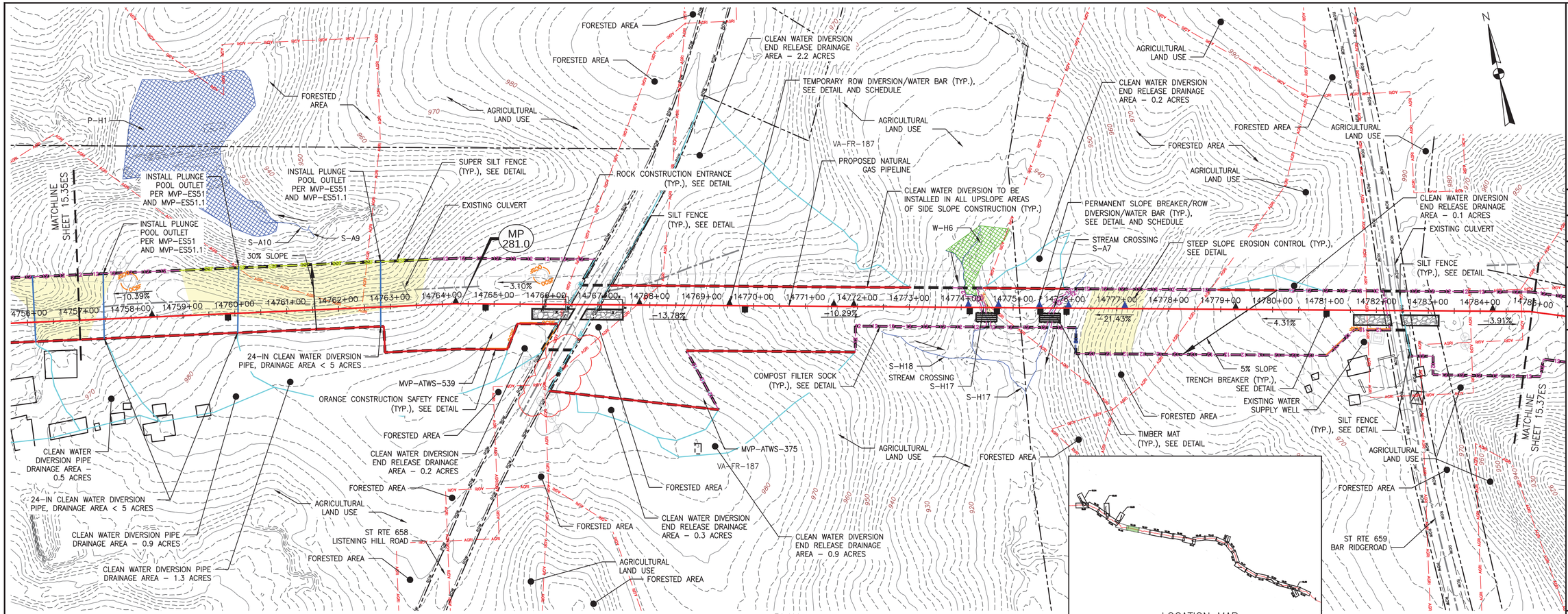
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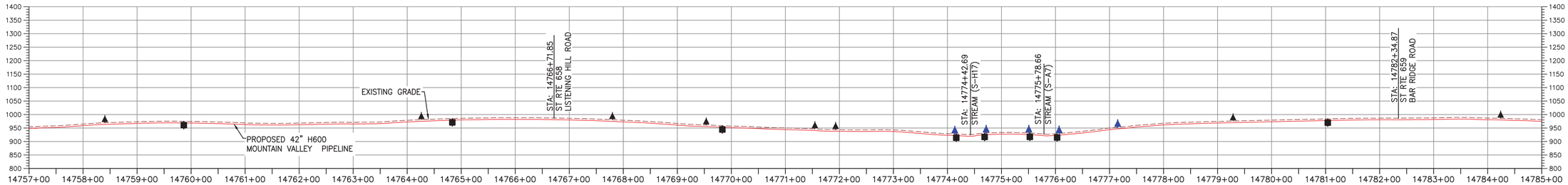
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PLAN
SCALE: 1" = 100'



PROFILE
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VERTICAL SCALE: SCALE: 1" = 200'

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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

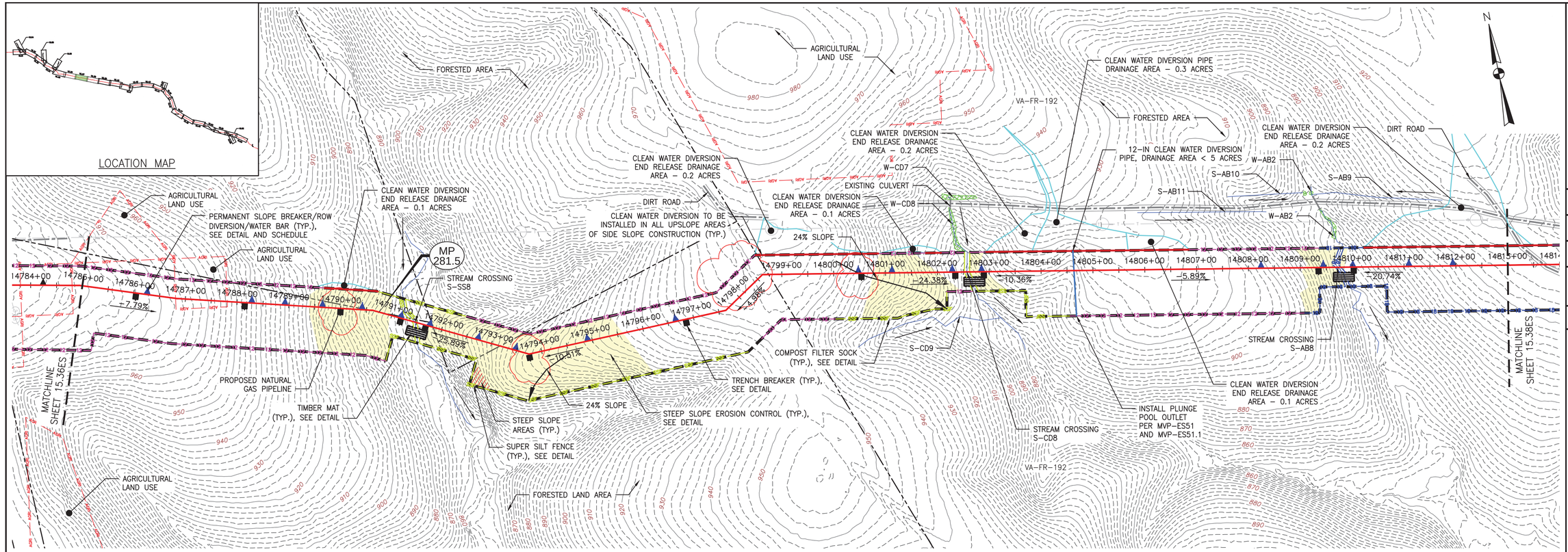
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

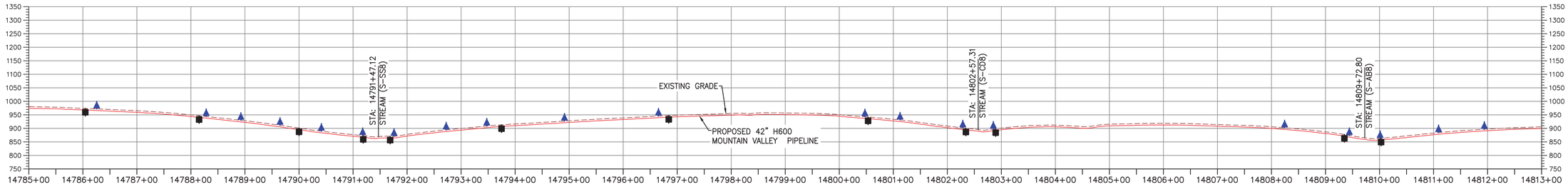
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.36ES OF 15.99ES

REVISION



PLAN
SCALE: 1" = 100'
100 0 100 200



PROFILE
HORIZONTAL SCALE: SCALE: 1" = 100'
100 0 100 200
VERTICAL SCALE: SCALE: 1" = 200'
200 0 200 400

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- STREAM
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- APPALACHIAN NATIONAL SCENIC TRAIL
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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APPROVED BY:	DW
DATE:	03/04/2018
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SHT. NO.	15.37ES OF 15.99ES

REVISION

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LOCATION MAP

STATION EQUATION
STA. AHEAD 0+00
STA. BEHIND 14815+11

MATCHLINE SHEET 15.37ES

DIRT ROAD

PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE

COMPOST FILTER SOCK (TYP.), SEE DETAIL

EXISTING CULVERT

MP 282.0

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.6 ACRES

DIRT ROAD

DRAINAGE FEATURE CROSSING WITH TIMBER MAT BRIDGE

16% SLOPE

TRENCH BREAKER (TYP.), SEE DETAIL

CLEAN WATER DIVERSION TO BE INSTALLED IN ALL UPSLOPE AREAS OF SIDE SLOPE CONSTRUCTION (TYP.)

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 1.0 ACRES

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.6 ACRES

INSTALL PLUNGE POOL OUTLET PER MVP–ES51 AND MVP–ES51.1

FORESTED AREA THIS ENTIRE SHEET

STATION EQUATION
STA. AHEAD 14824+26
STA. BEHIND 9+11

EXISTING CULVERT

STREAM CROSSING S–DD3

24–IN CLEAN WATER DIVERSION PIPE, DRAINAGE AREA < 5 ACRES

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 0.4 ACRES

STEEP SLOPE AREAS (TYP.)

STEEP SLOPE EROSION CONTROL (TYP.), SEE DETAIL

MVP–ATWS–541

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 2.5 ACRES

DIRT ROAD

EXISTING CULVERT

FORESTED AREA THIS ENTIRE SHEET

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 1.8 ACRES

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.1 ACRES

TIMBER MAT (TYP.), SEE DETAIL

30% SLOPE

DIRT ROAD

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.2 ACRES

PROPOSED NATURAL GAS PIPELINE

STREAM CROSSING S–G16

20% SLOPE

MVP–ATWS–377

SUPER SILT FENCE (TYP.), SEE DETAIL

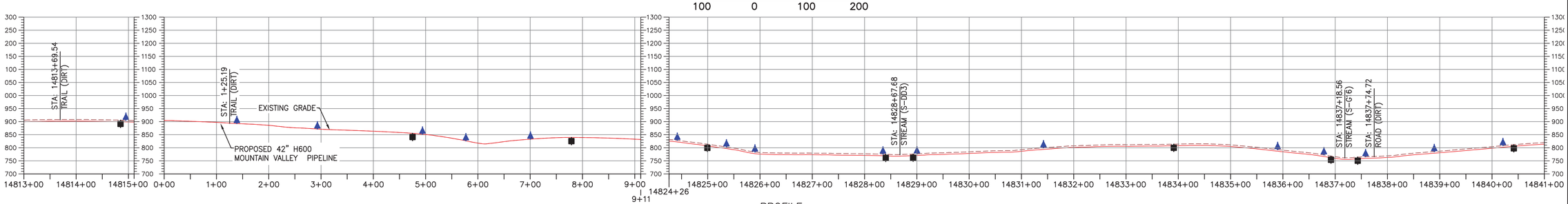
W–B7

DIRT ROAD

MATCHLINE SHEET 15.39ES

N

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100 0 100 200



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EROSION AND SEDIMENT CONTROL PLANS

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EROSION AND SEDIMENT CONTROL PLANS

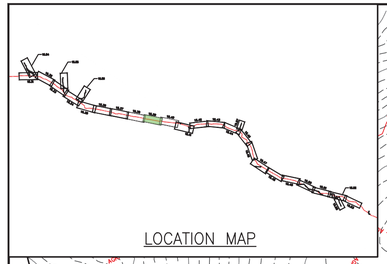
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
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REVISION

SHT. NO. 15.38ES OF 15.99ES

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PLAN
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100 0 100 200

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VERTICAL SCALE: SCALE: 1" = 200'
200 0 200 400

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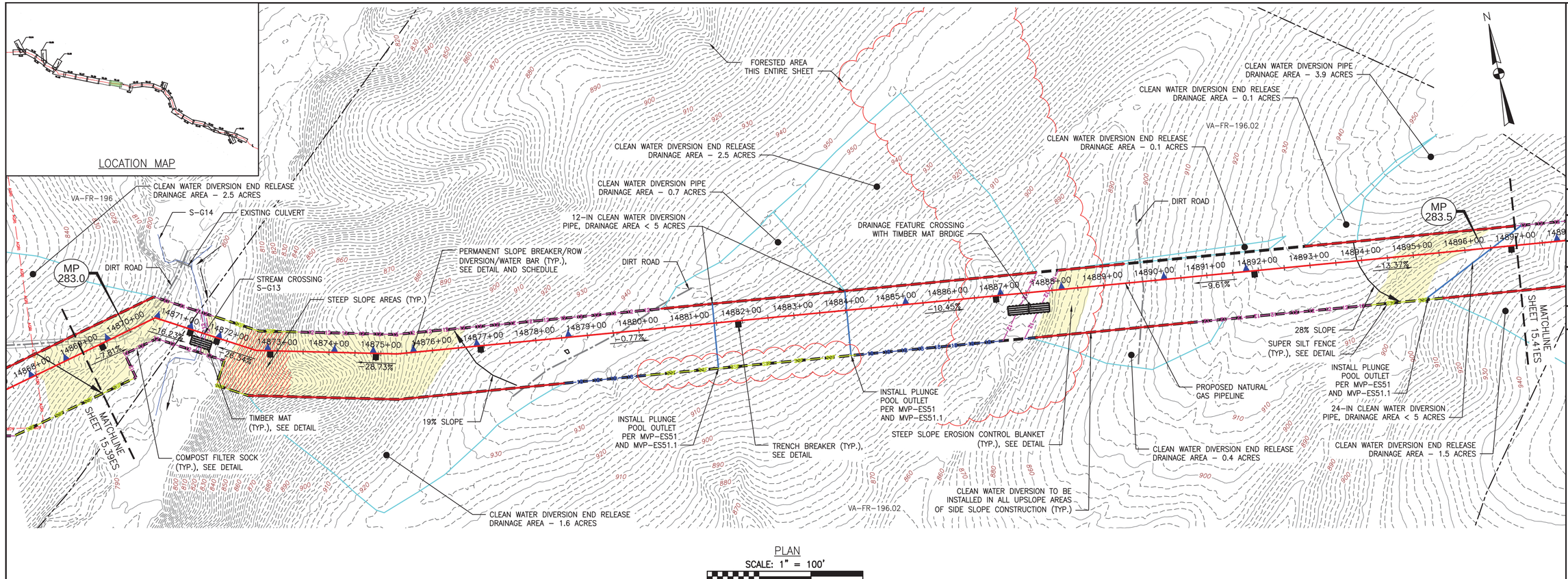
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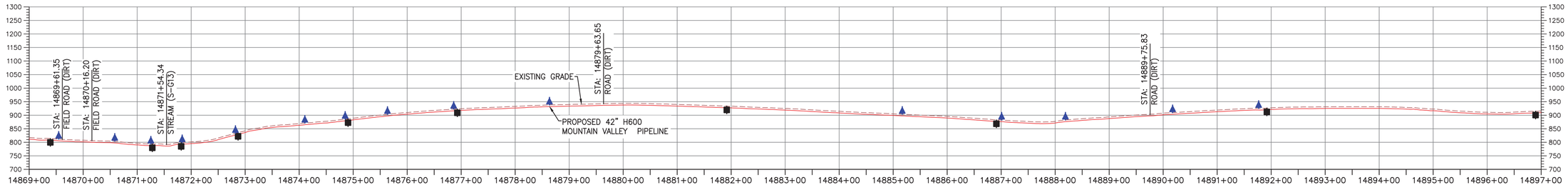
LOCATION MAP



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100 0 100 200



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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
complex world | CLEAR SOLUTIONS™
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	
SHT. NO.	15.40ES OF 15.99ES

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15.40(S11).dwg PLOTTED ON: 3/2/2018 7:25 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

PROPOSED PERMANENT ACCESS ROAD, WILL BE GRAVELED, MVP-MLV-AR-33 PER MVP-ES33, MVP-ES33.1, AND MVP-ES33.2

MVP-MLV-33

MVP-BP-108

SILT FENCE (TYP.), SEE DETAIL

FORESTED AREA

INSTALL PLUNGE POOL OUTLET PER MVP-ES51 AND MVP-ES51.1

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.1 ACRES

AGRICULTURAL LAND USE

STREAM CROSSING S-D7

FORESTED AREA

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.5 ACRES

TEMPORARY ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE

AGRICULTURAL LAND USE

PROPOSED NATURAL GAS PIPELINE

EQUATION STATION STA. AHEAD: 0+00 STA. BEHIND: 14916+21.30

14916+21

0+00

MATCHLINE SHEET 15.40ES

MATCHLINE SHEET 15.42ES

MVP-ATWS-380

MVP-BP-107

ROCK CONSTRUCTION ENTRANCE (TYP.), SEE DETAIL

EXISTING CULVERT

EXISTING ROAD SIGN

TRENCH BREAKER (TYP.), SEE DETAIL

TIMBER MAT (TYP.), SEE DETAIL

WETLAND CROSSING W-MM17

S-D6

PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 2.2 ACRES

AGRICULTURAL LAND USE

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 3.9 ACRES

FORESTED AREA

FORESTED AREA

CLEAN WATER DIVERSION TO BE INSTALLED IN ALL UPSLOPE AREAS OF SIDE SLOPE CONSTRUCTION

MVP-ATWS-1284

12-IN CLEAN WATER DIVERSION PIPE PER DRAINAGE AREA < 5 ACRES

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 0.3 ACRES

AGRICULTURAL LAND USE

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 1.5 ACRES

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 0.7 ACRES

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 2.0 ACRES

SR 782 ASHWORTH ROAD

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.1 ACRES

COMPOST FILTER SOCK (TYP.), SEE DETAIL

MVP-ATWS-1283

AGRICULTURAL LAND USE

EXISTING TEMPORARY DIRT ACCESS ROAD MVP-FR-324, TO BE RESTORED TO PRE-EXISTING CONDITIONS.

FRANKLIN COUNTY

PITTSYLVANIA COUNTY

FORESTED AREA

FORESTED AREA

AGRICULTURAL LAND USE

FORESTED AREA

SILT FENCE (TYP.), SEE DETAIL

SR 890 SNOW CREEK ROAD

MVP-ATWS-650

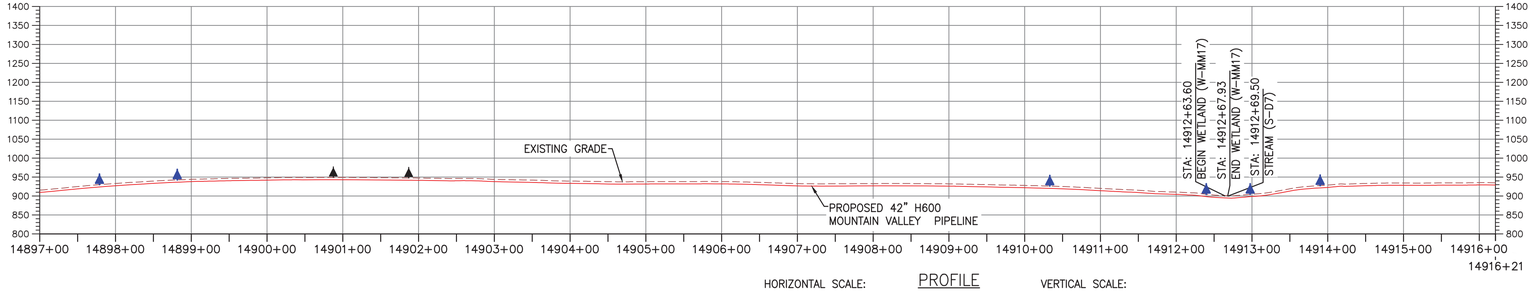
ROCK CONSTRUCTION ENTRANCE, SEE DETAIL

LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- PROPOSED PIPELINE
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- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
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- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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- STEEP SLOPE AREAS (SEE NOTE 4)
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NOTES:

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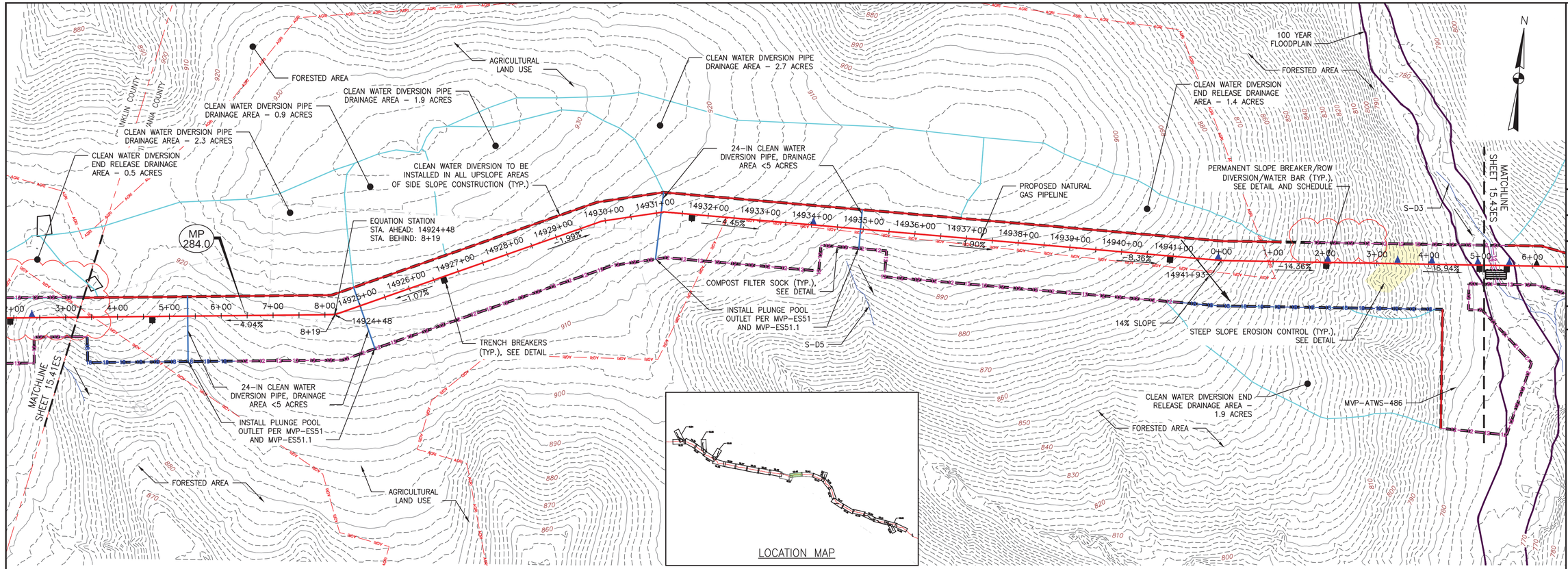
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REVISION	5

SHT. NO. 15.41ES OF 15.99ES

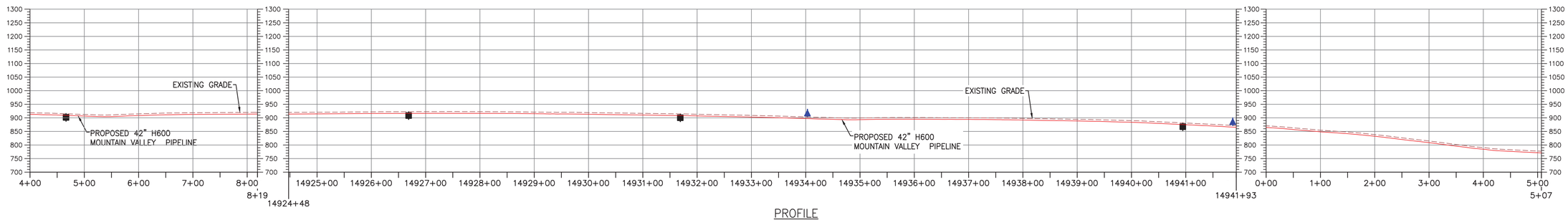


LOCATION MAP

PLAN

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100 0 100 200



PROFILE

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200 0 200 400

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REVISIONS:

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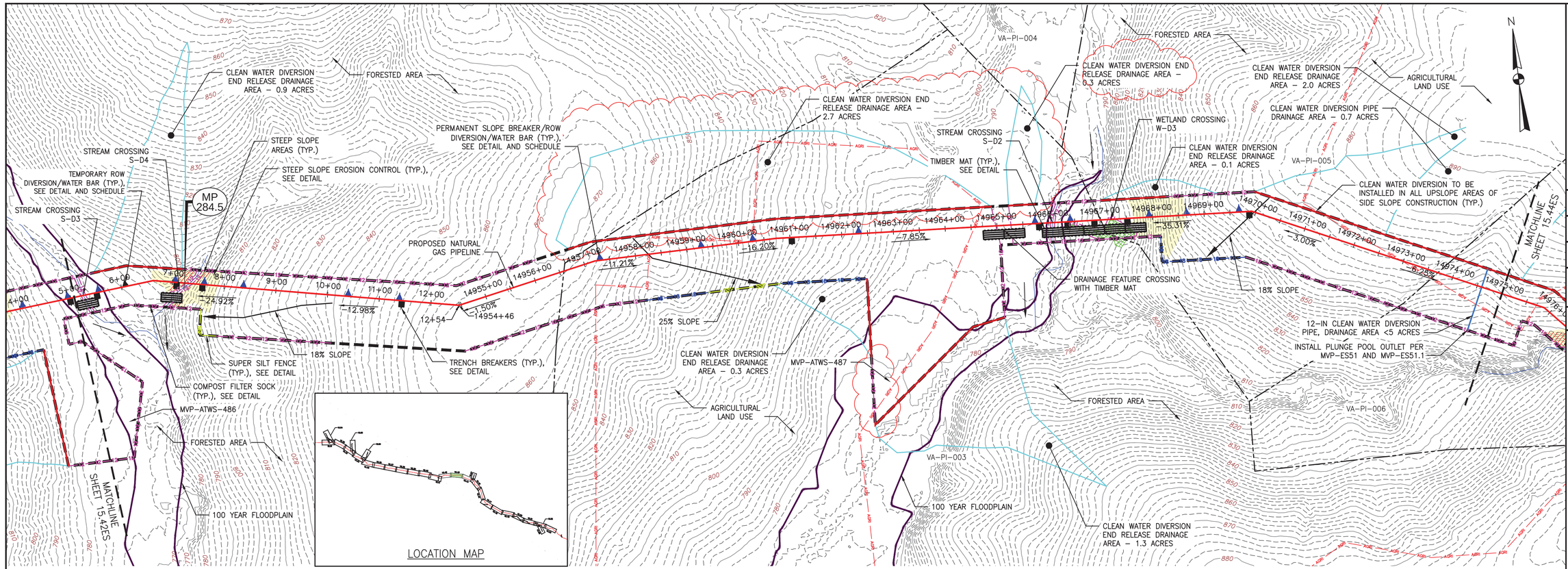
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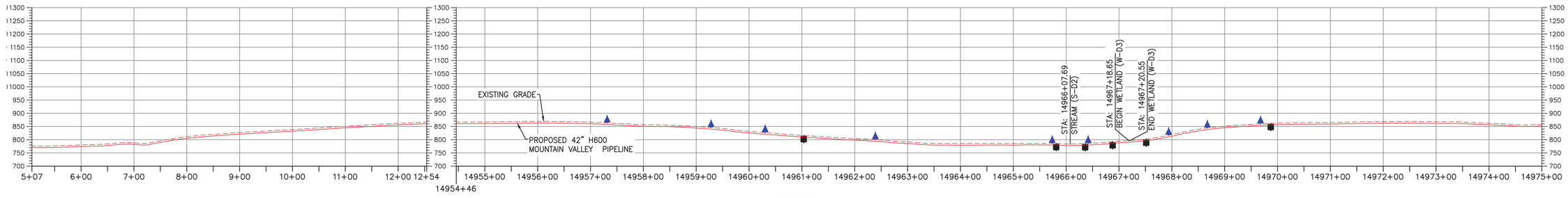
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

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100 0 100 200

VERTICAL SCALE:

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200 0 200 400

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REVISIONS:

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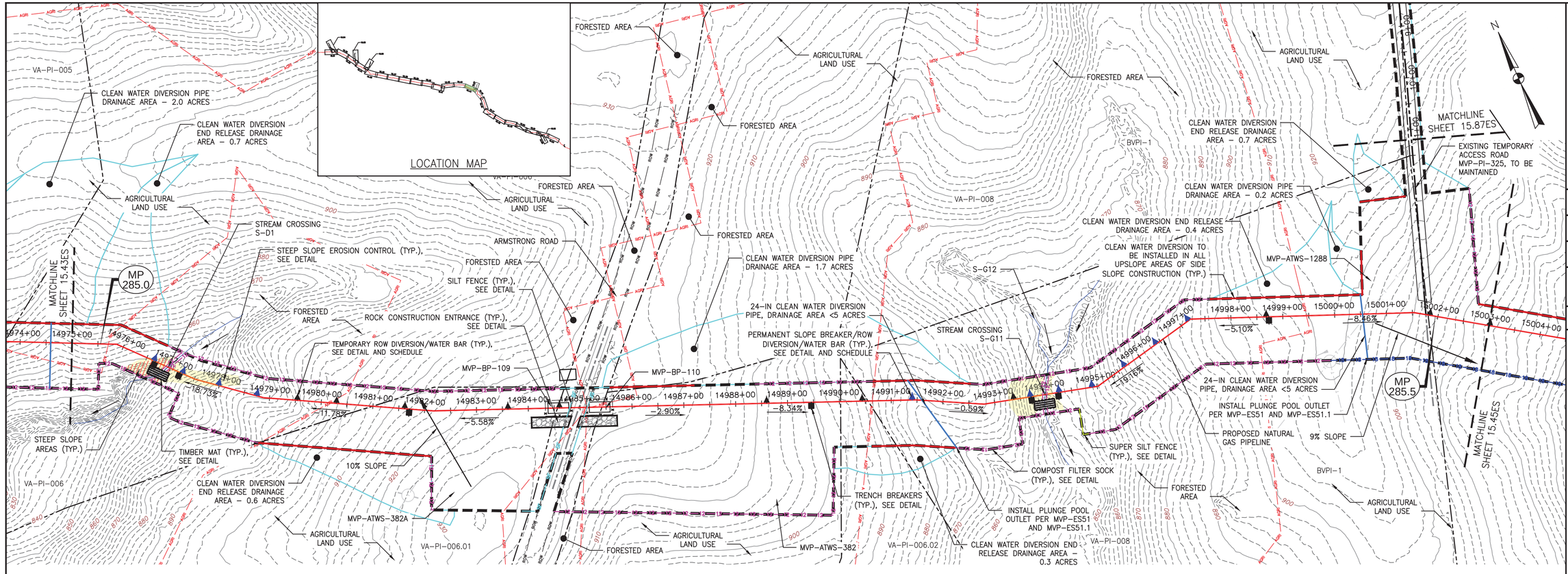
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REVISION

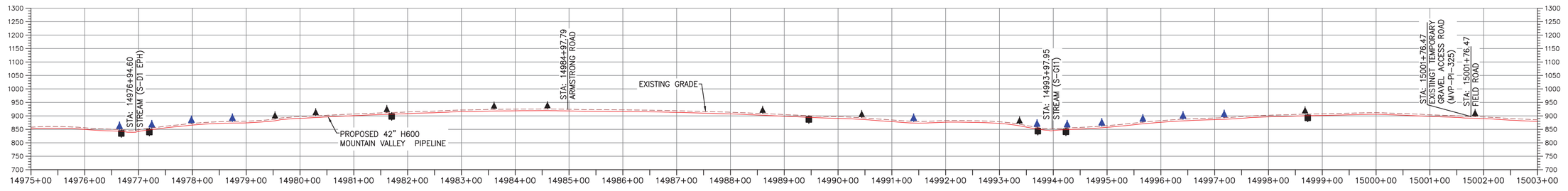
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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3	01/07/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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661 ANDERSEN DRIVE
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PITTSBURGH, PA 15220

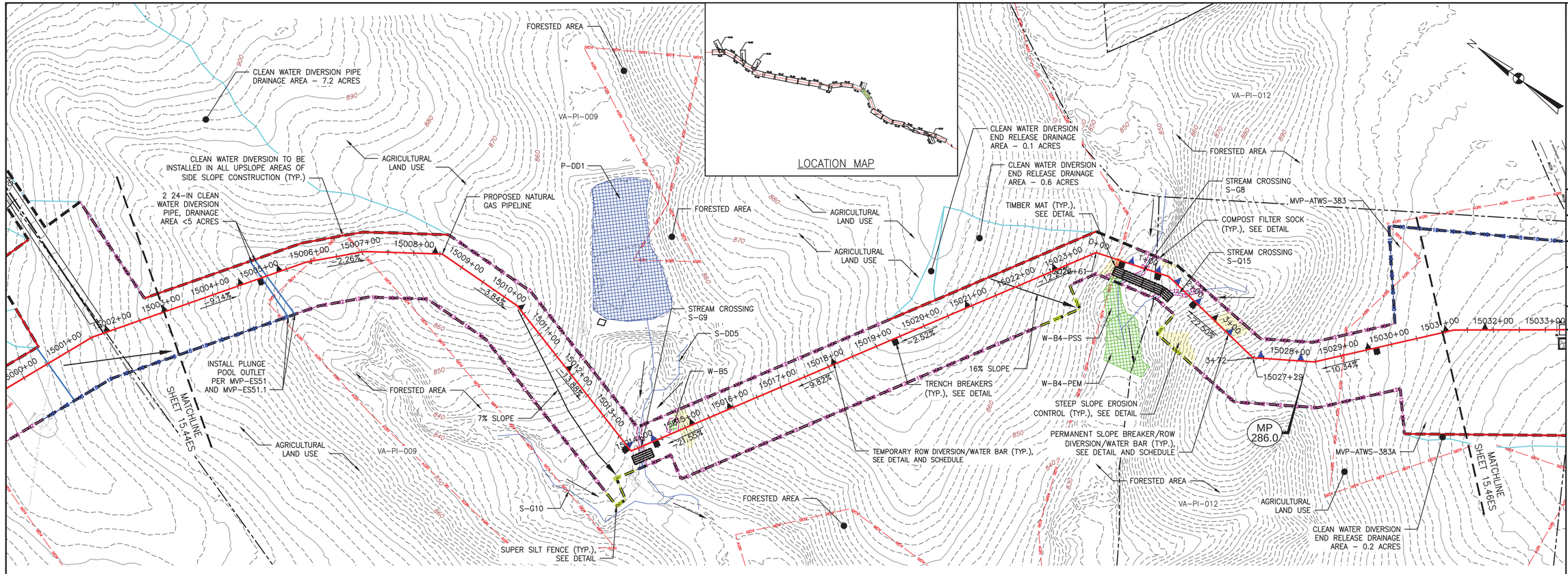
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.44ES OF 15.99ES

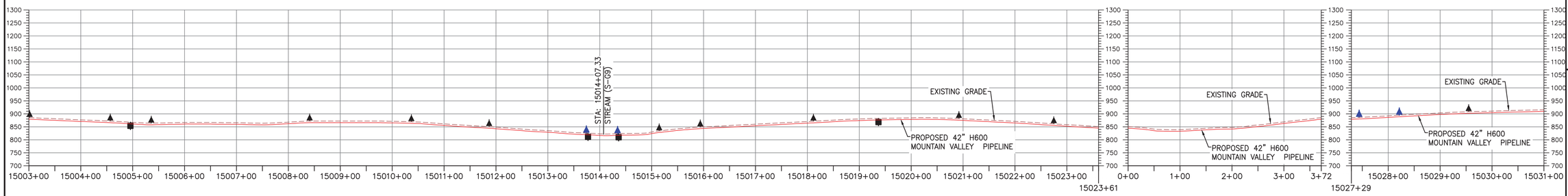
REVISION

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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
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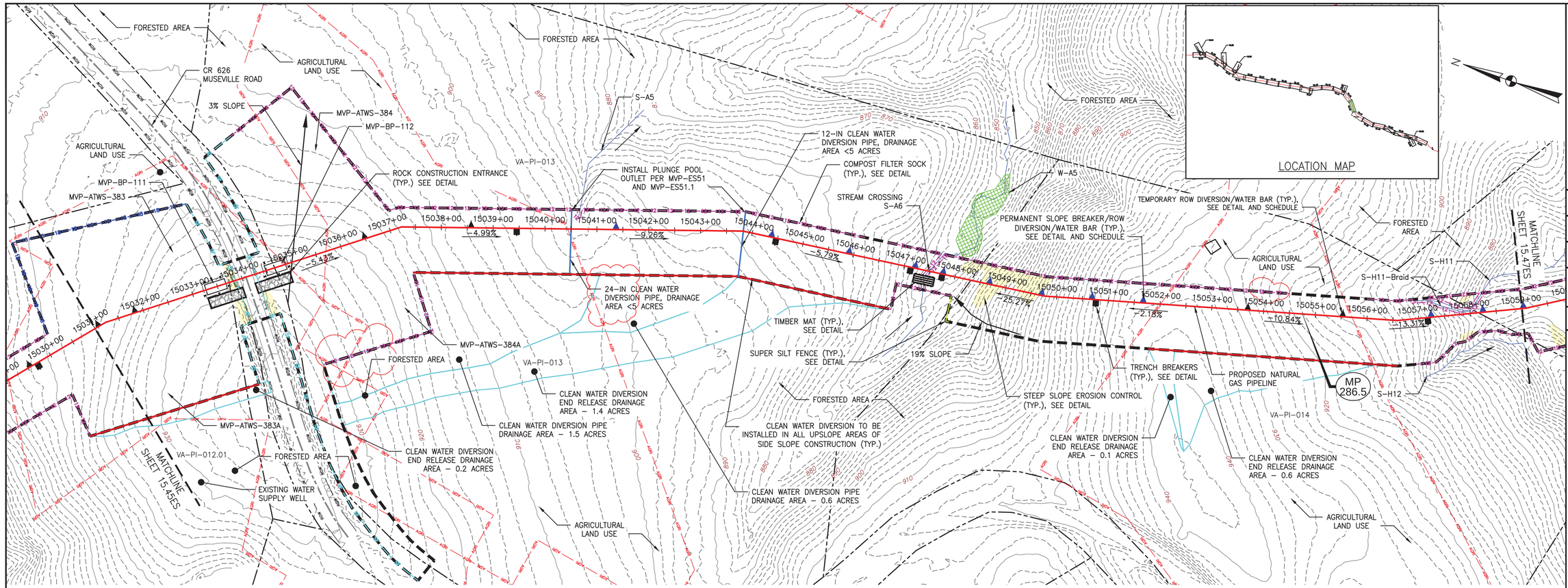
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	

SHT. NO. 15.45ES OF 15.99ES

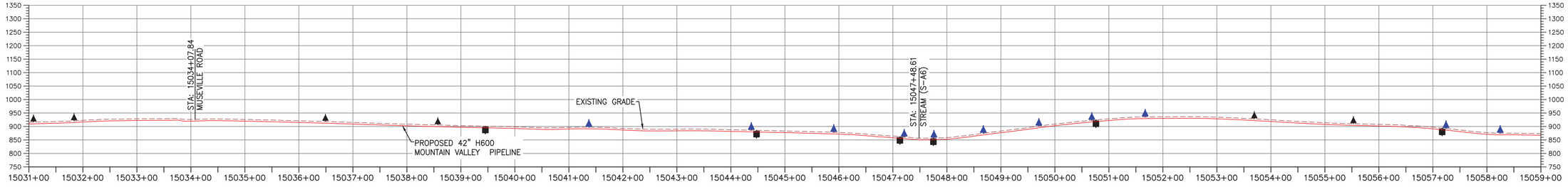
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
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- PROPOSED PIPELINE
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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

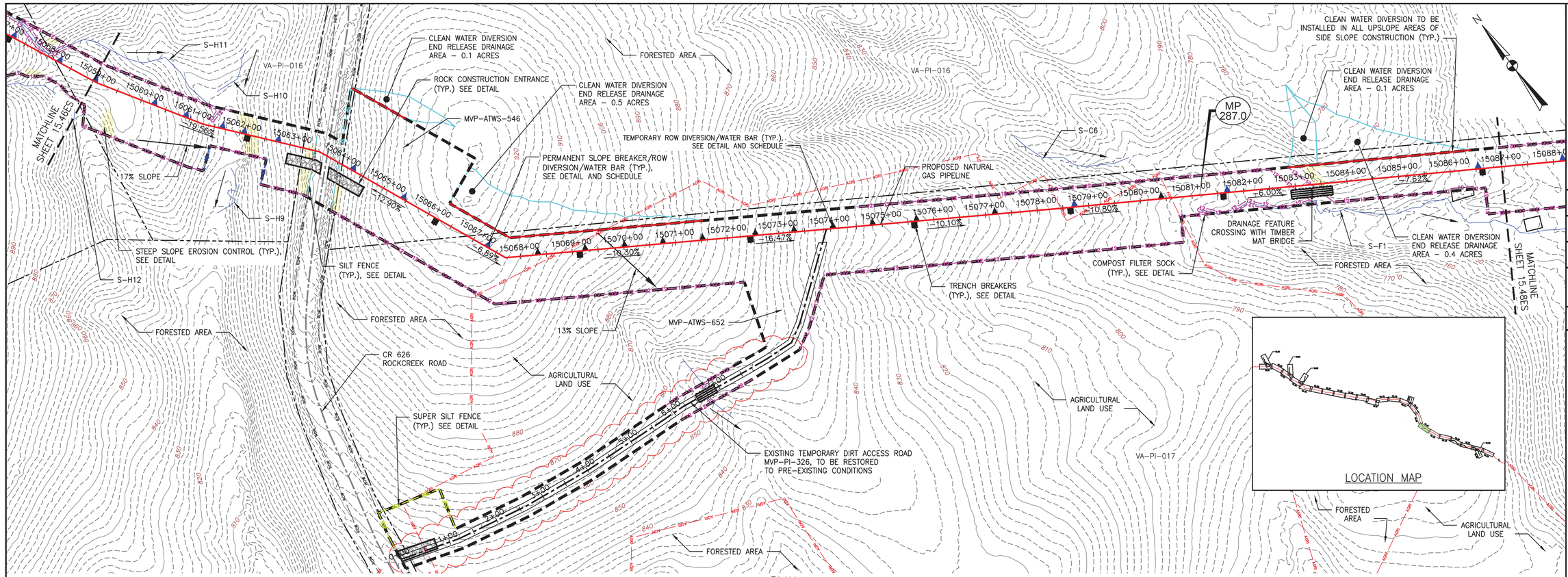
MOUNTAIN VALLEY PIPELINE, LLC
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

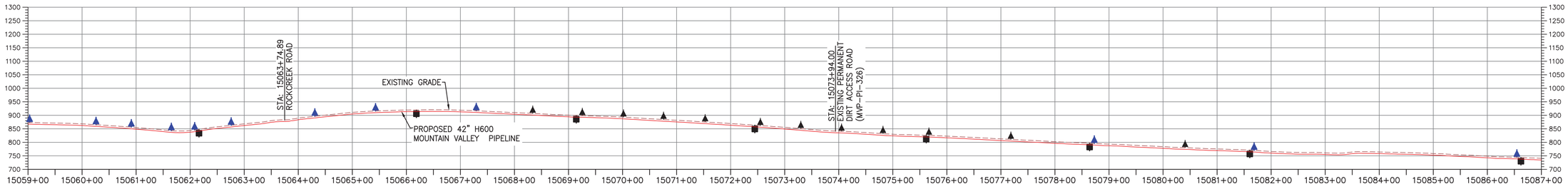
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CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.46ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
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- POND
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- ACID FORMING MATERIAL
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

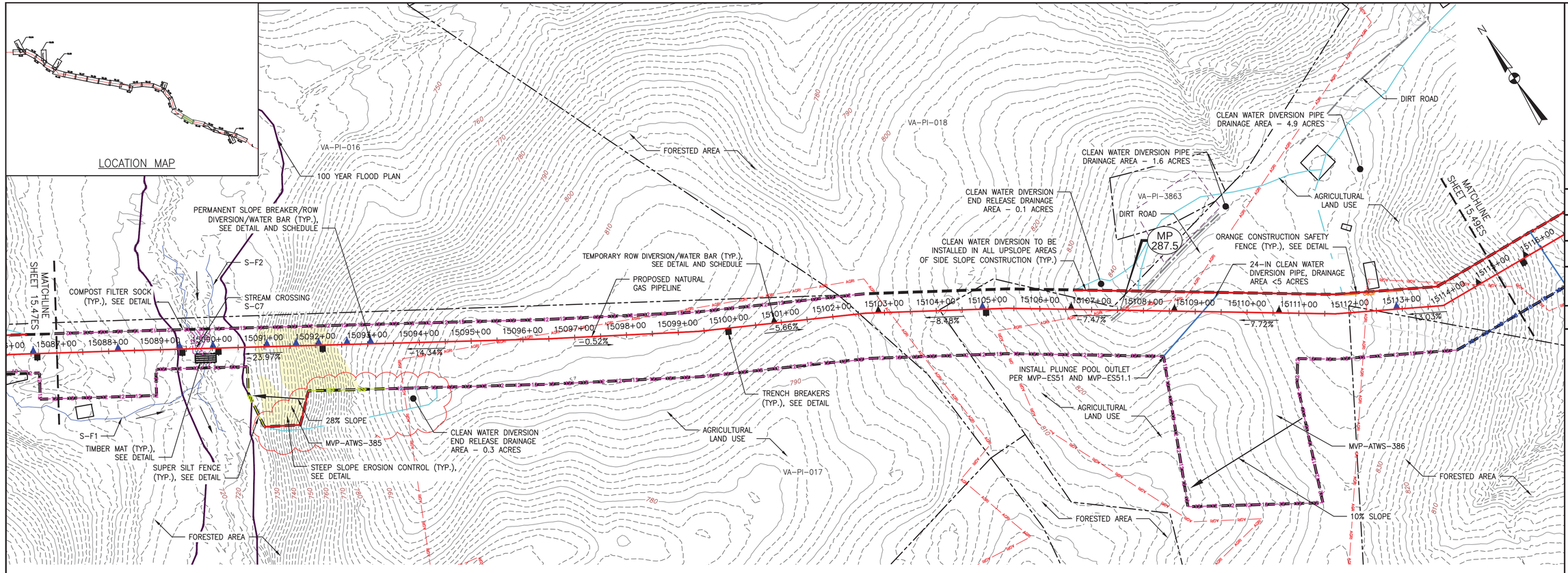
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057503
PROFESSIONAL ENGINEER

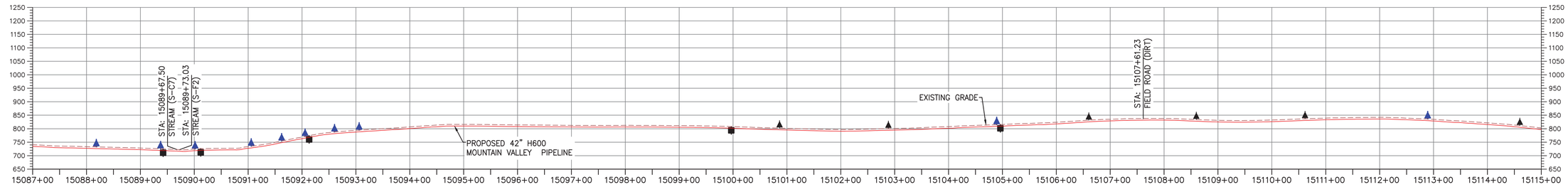
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CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.47ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

100 0 100 200 0 200 400

LEGEND

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

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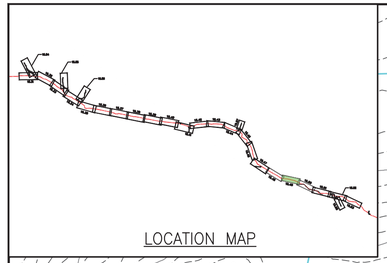
EROSION AND SEDIMENT CONTROL PLANS

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DRAWN BY:	KAL
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DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.48ES OF 15.99ES

REVISION

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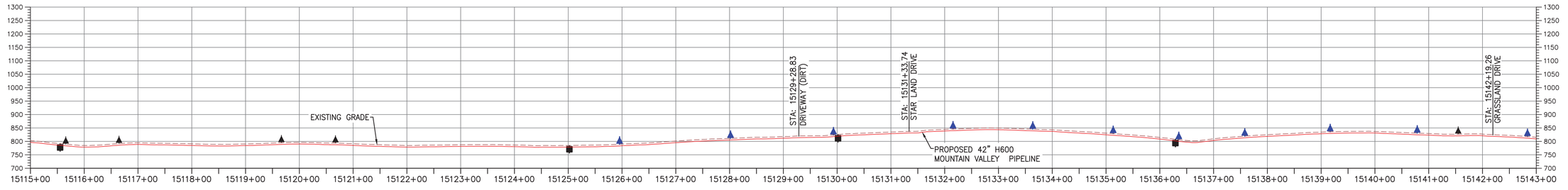


LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP–ES50 AND MVP–ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP–17, ES38, AND SCHEDULE)

NOTES:

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4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE, AT THE DIRECTION OF MVP.
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8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP–ES49.

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\16 – Pittsylvainia\E&S\ES Version 5.0.0\7157ES15.49(S11).dwg PLOTTED ON: 3/13/2018 9:58 AM PLOTTED BY: Rickabaugh, Greg PLOT FILE: ENVIRONMENTAL_COLOR.ctb

REVISIONS:

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
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4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

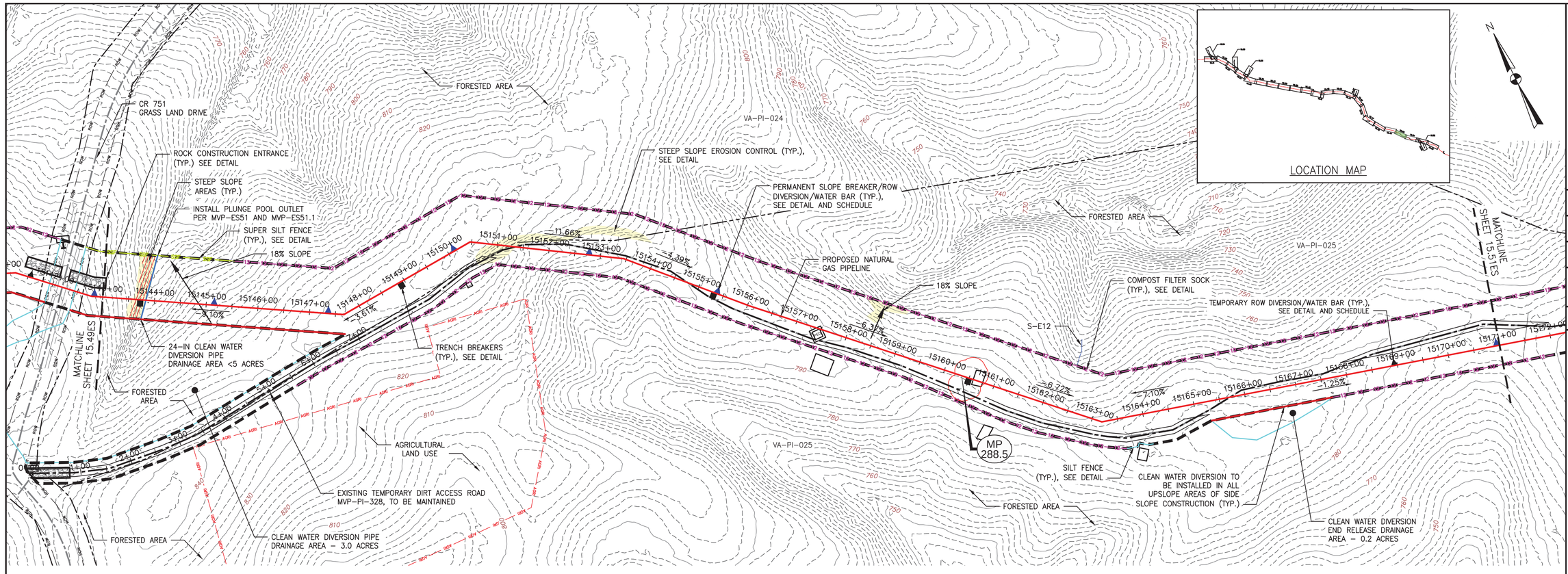
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.49ES OF 15.99ES

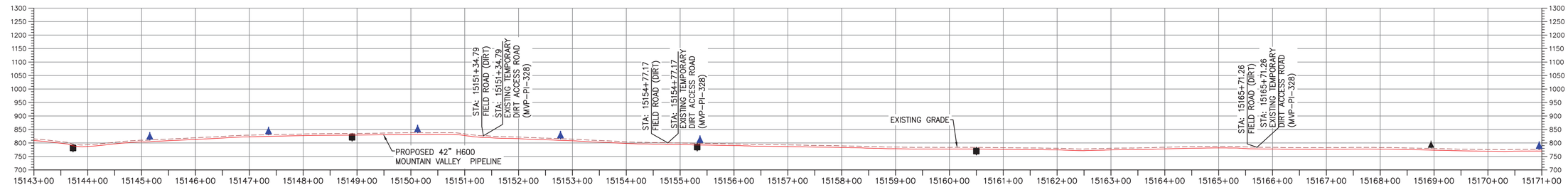
REVISION



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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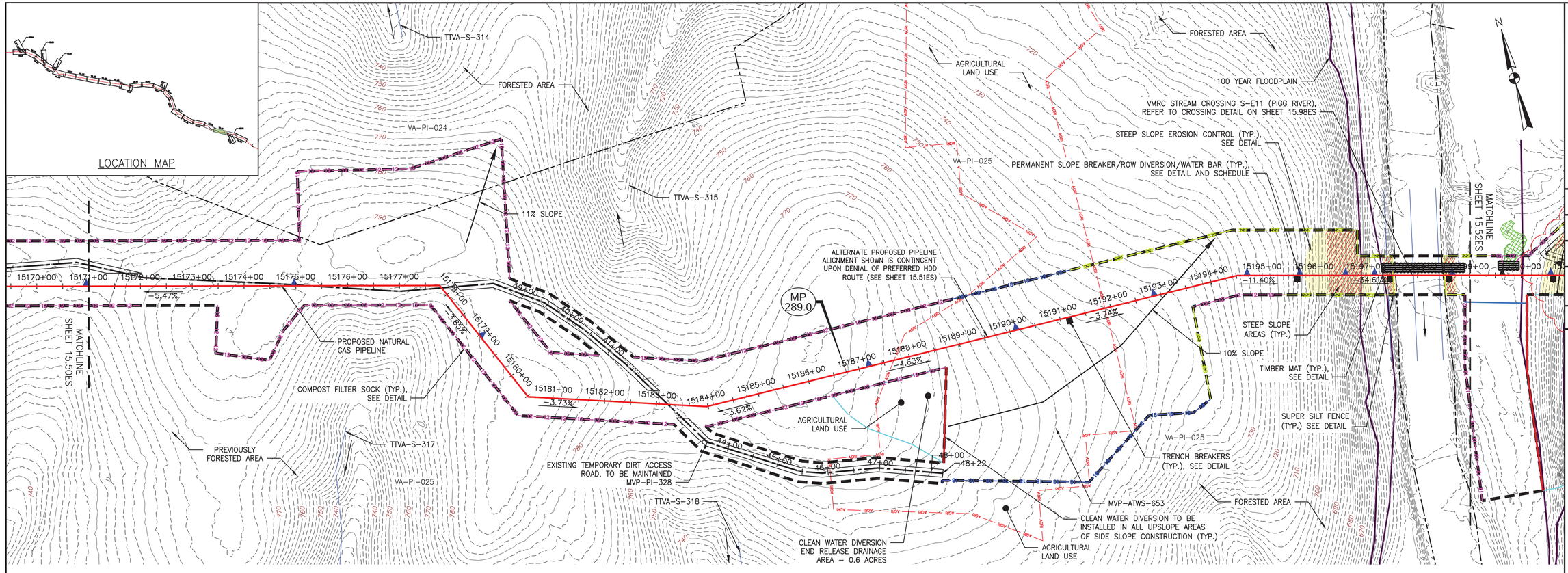
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.50ES OF 15.99ES

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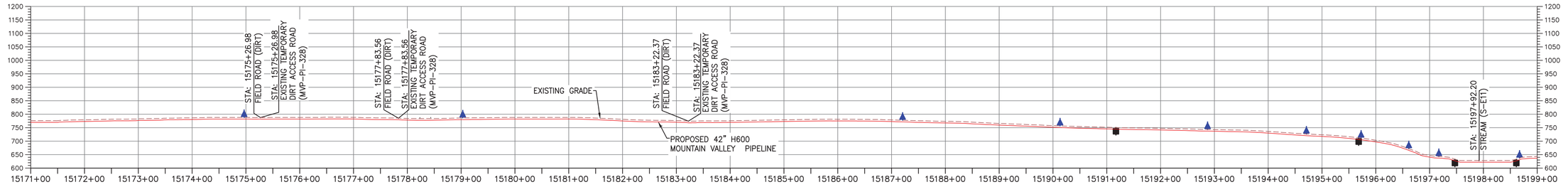
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — ACID FORMING MATERIAL
- AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- 12 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 18 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 24 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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661 ANDERSEN DRIVE
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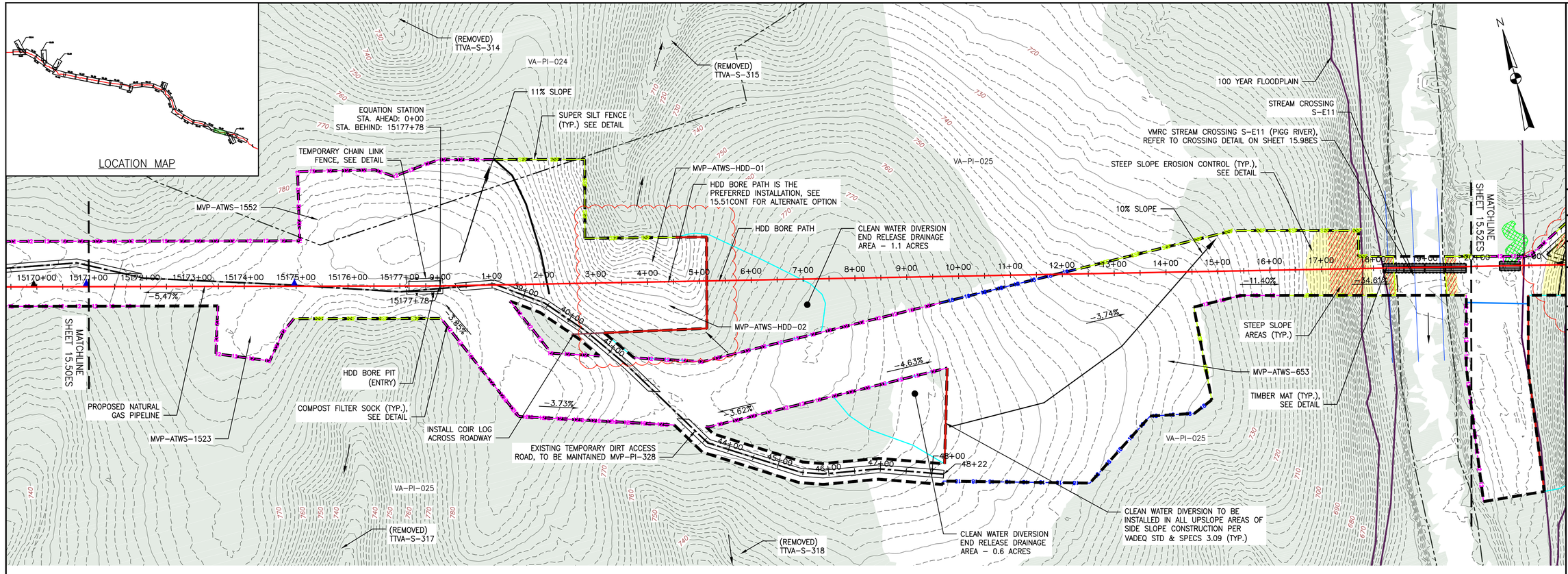
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO. 15.51ESCONT OF	15.99ES

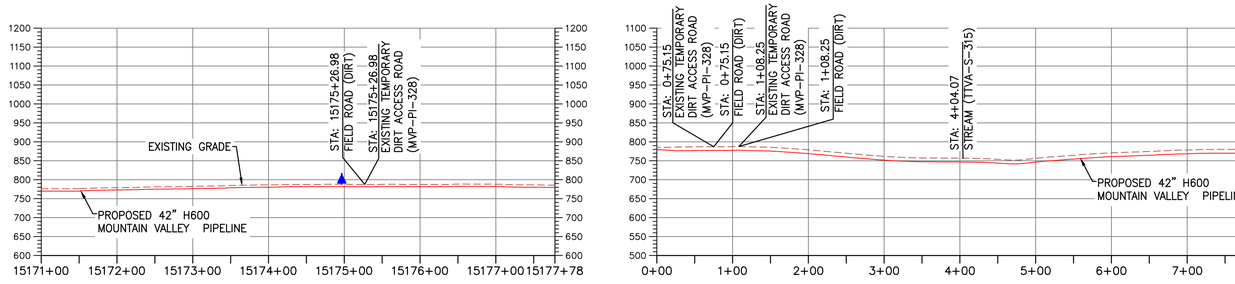
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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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- POND
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- PROPOSED PIPELINE
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9	07/20/18	KAL	RE	DW	FIELD MODIFICATION
8	04/30/18	KAL	RE	DW	FIELD MODIFICATION
7	04/19/18	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

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA

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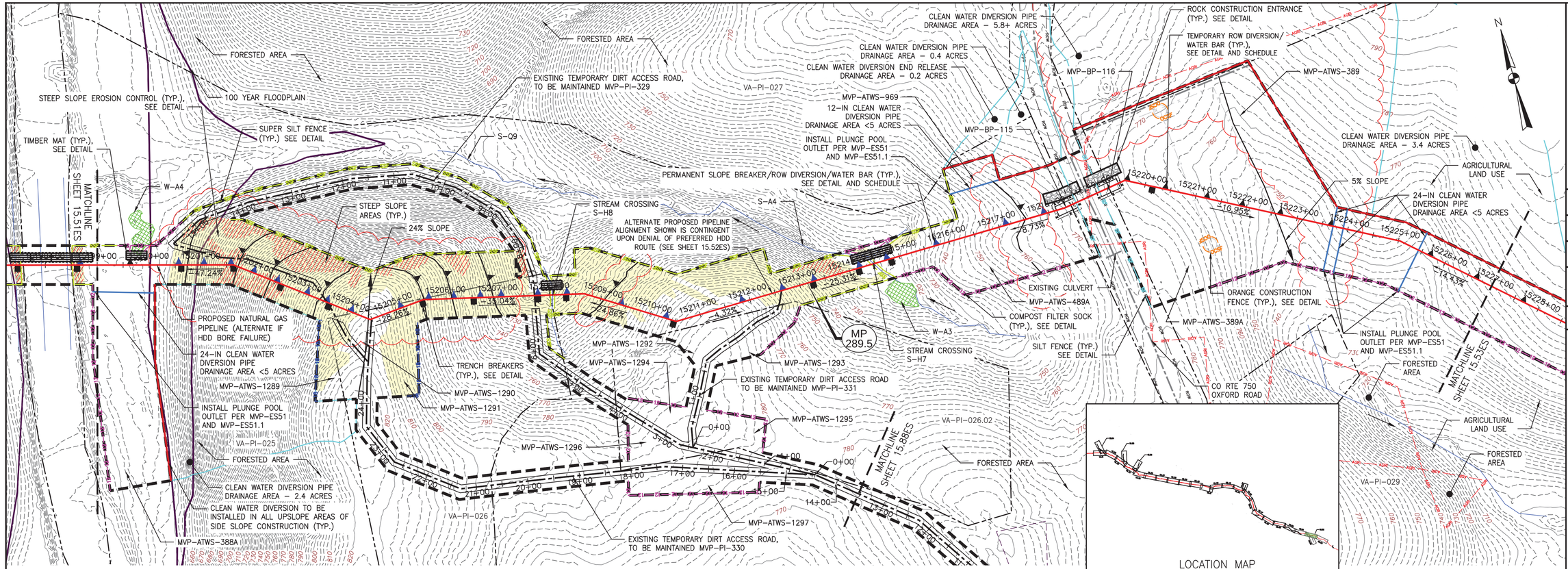
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	JWK
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	10/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.51ES OF 15.99ES

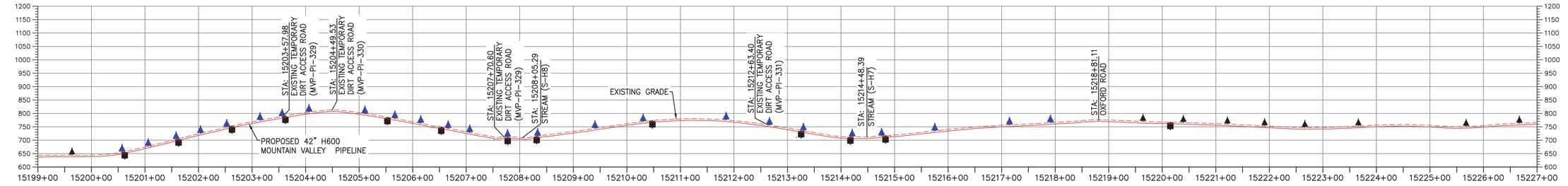
REVISION

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PLAN

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PROFILE

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NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

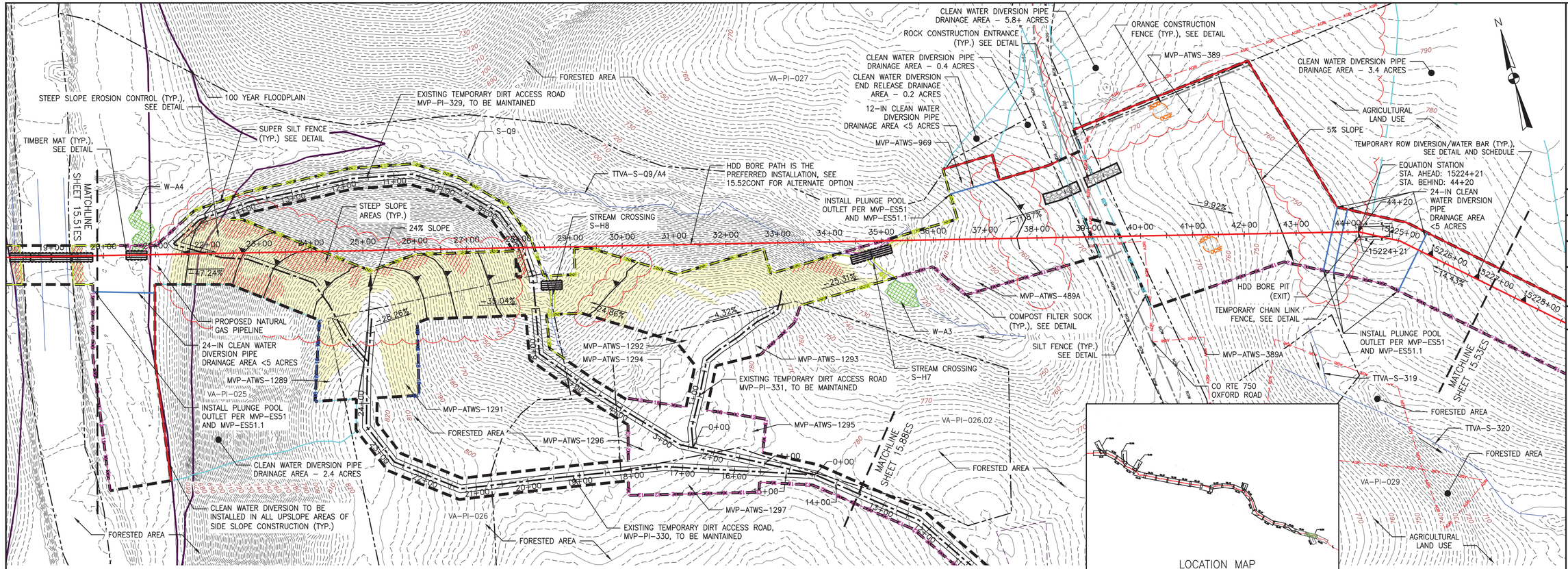
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO. 15.52ESCONT OF	15.99ES

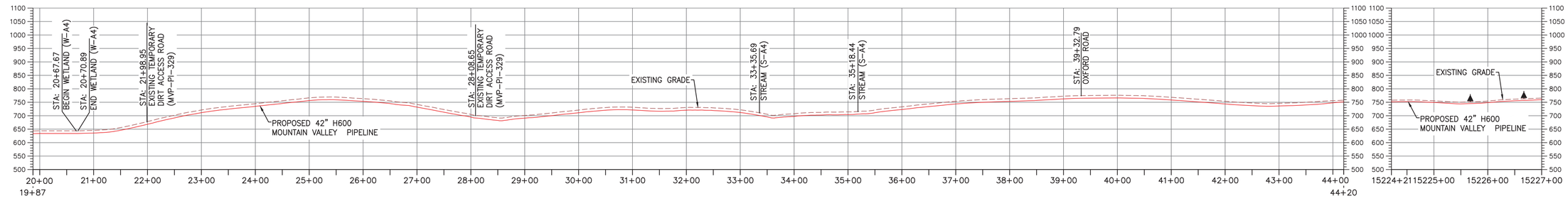
REVISION

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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
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- 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 (VADEQ STD & SPEC 3.11)
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EROSION AND SEDIMENT CONTROL PLANS

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SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

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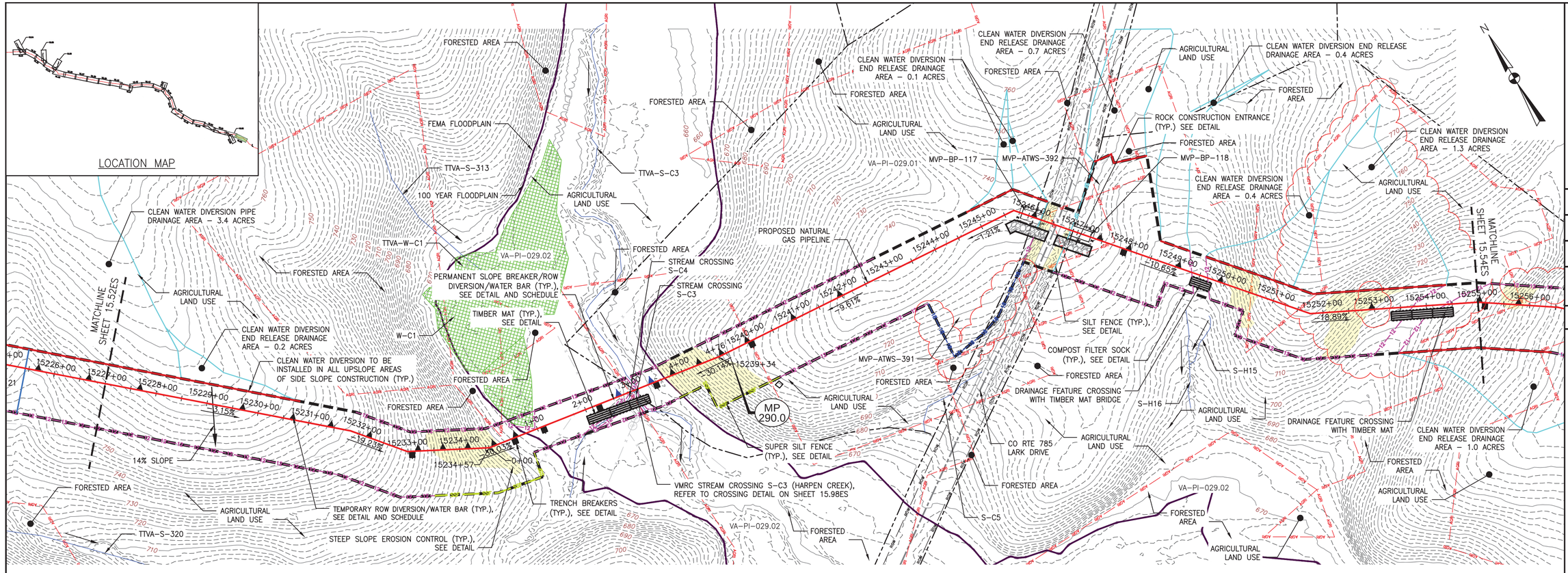
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.52ES OF 15.99ES

REVISION

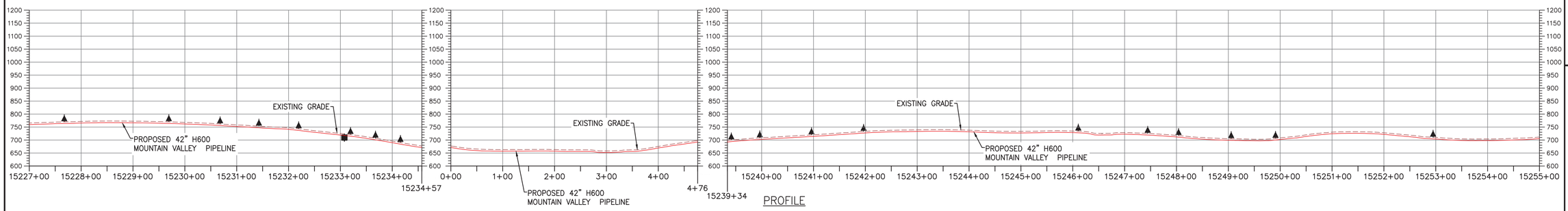
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

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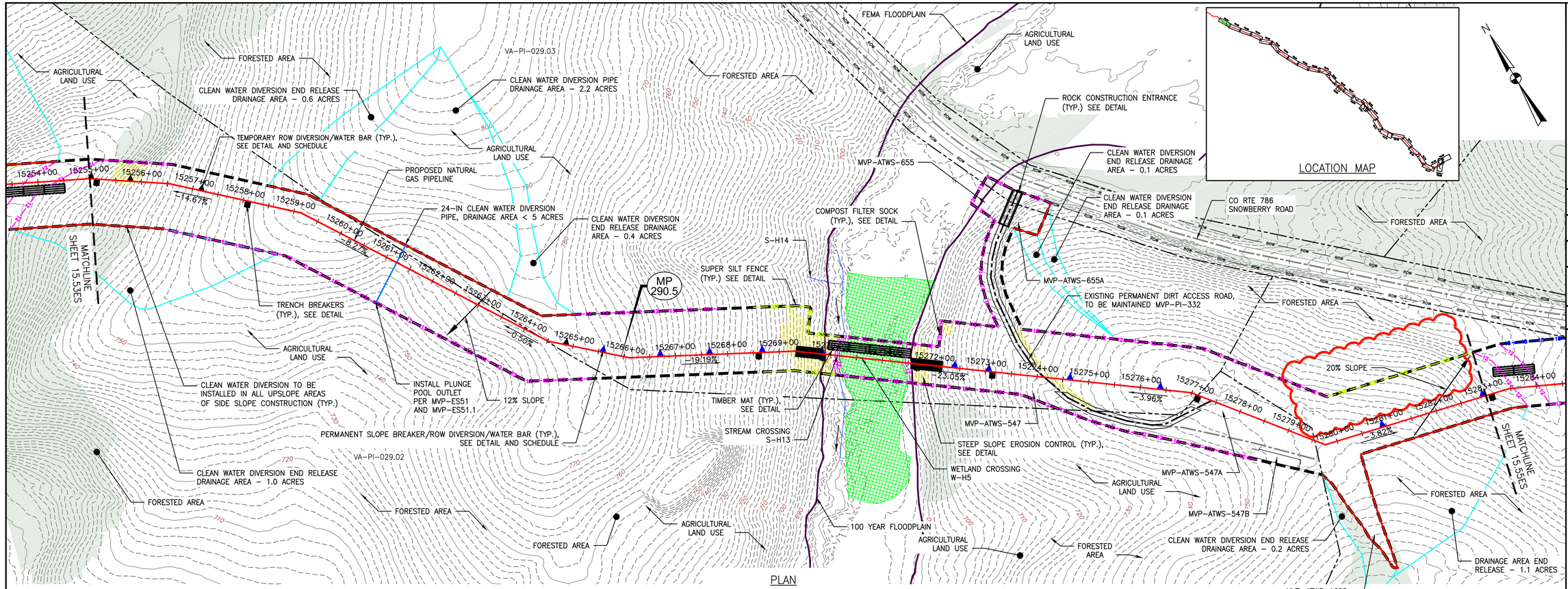
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
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DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.53ES OF 15.99ES

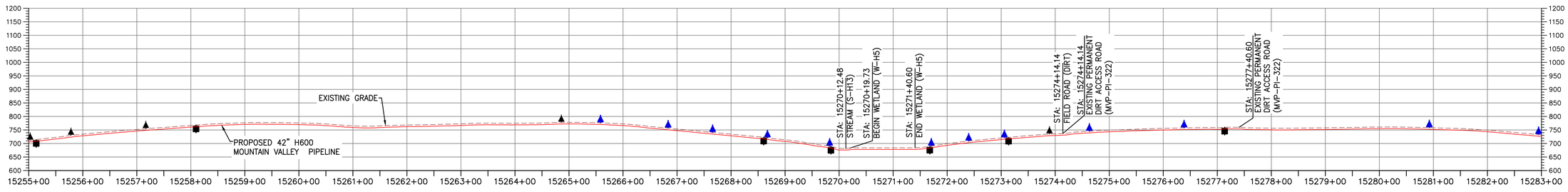
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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6	12/14/18	GAR	RE	DW	FIELD MODIFICATION
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

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CANONSBURG, PA 15317

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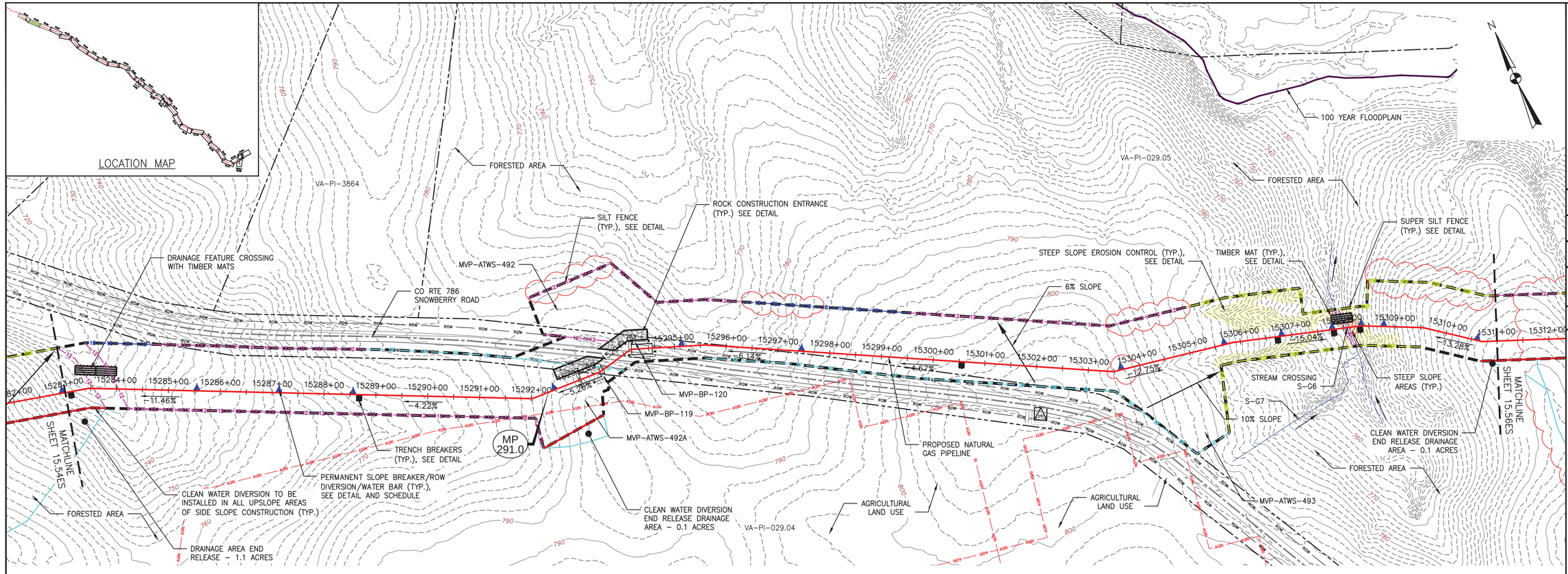
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PROFESSIONAL ENGINEER

DRAWN BY:	JWK
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	01/11/2021
SCALE:	AS SHOWN
REVISION	
SHT. NO.	15.54ES OF 15.99ES

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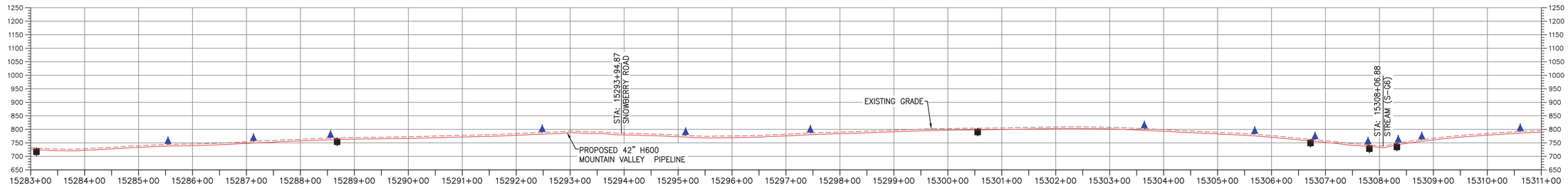
LOCATION MAP



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

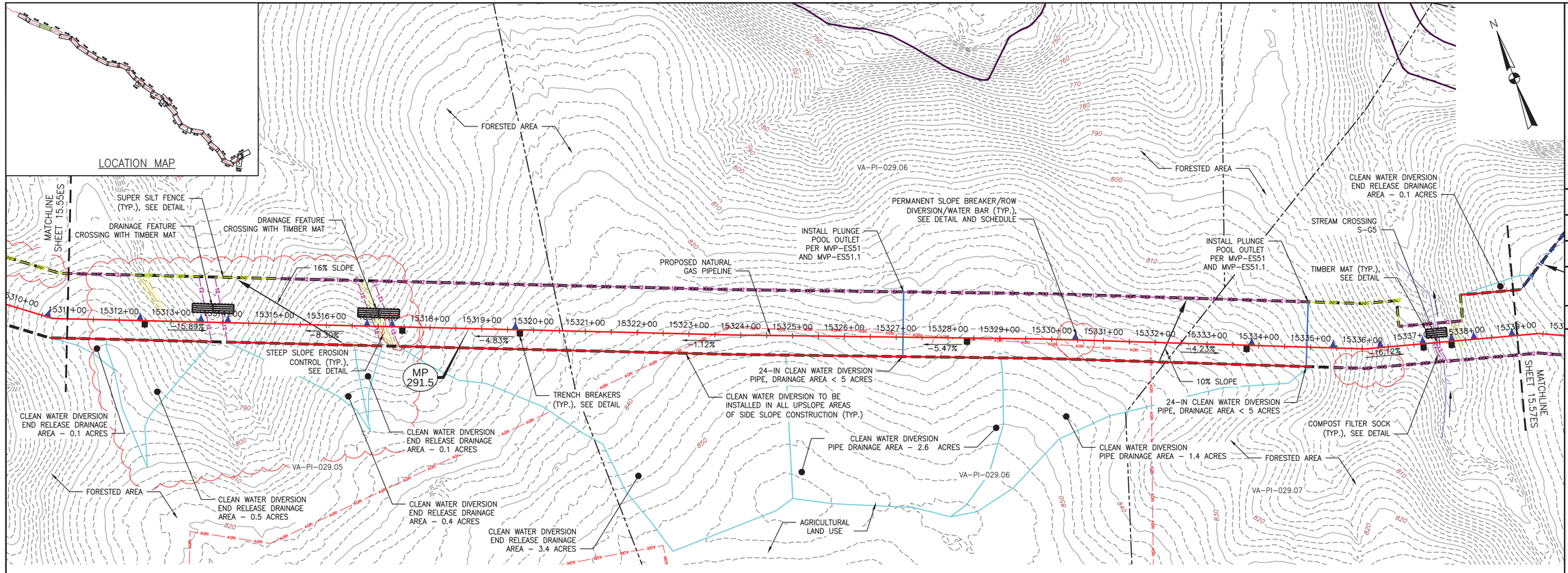
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.55ES OF 15.99ES

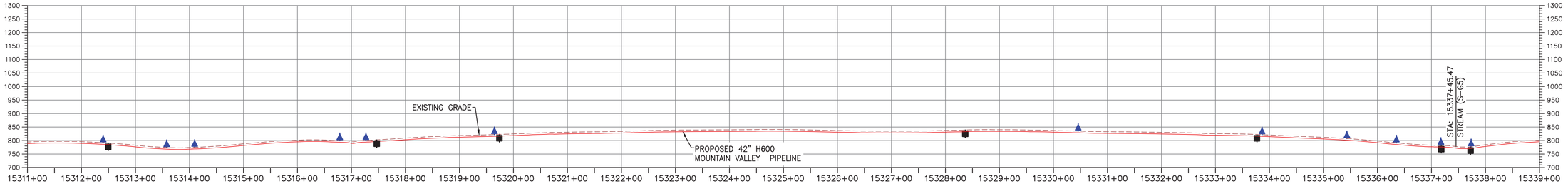
REVISION



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION TO BE CONDUCTED THROUGHOUT THE JEFFERSON NATIONAL FOREST.
2. FLEXTERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
3. 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.
4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

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SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

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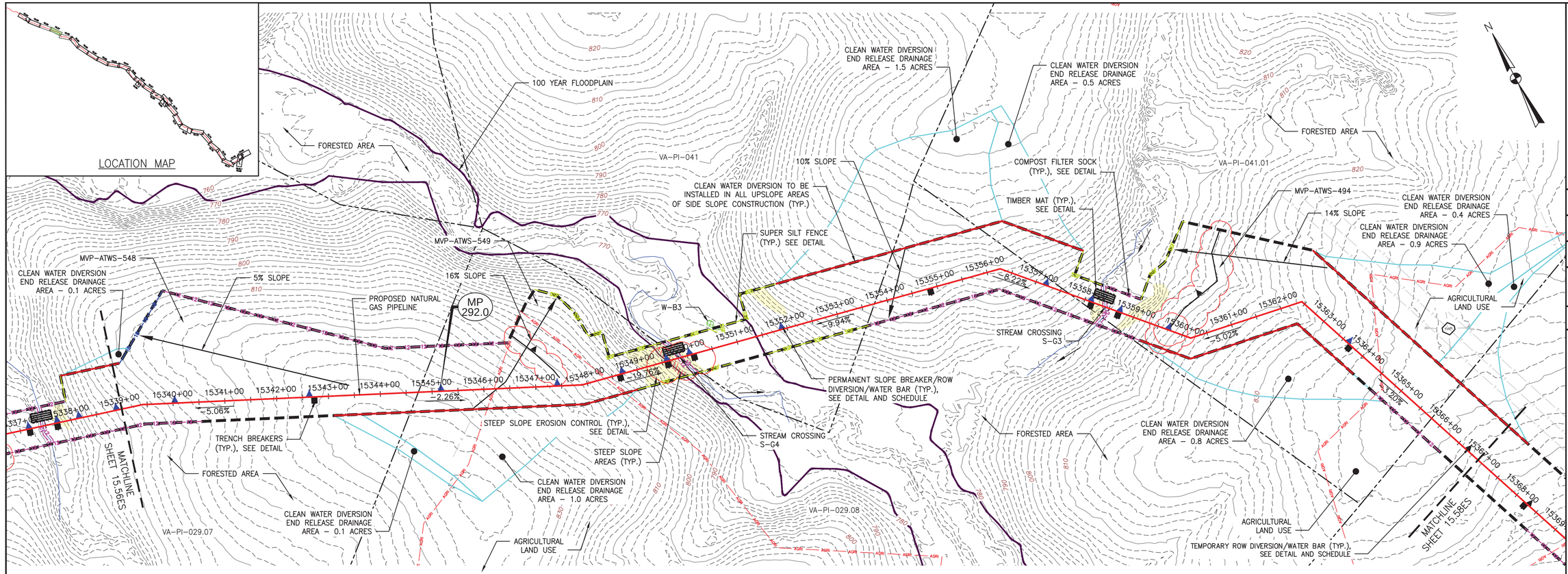
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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REVISION

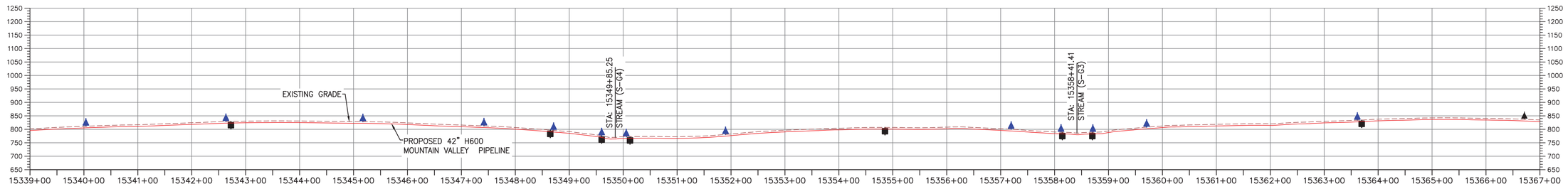
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- WETLAND
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
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CANONSBURG, PA 15317

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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.57ES OF 15.99ES

REVISION

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LOCATION MAP

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

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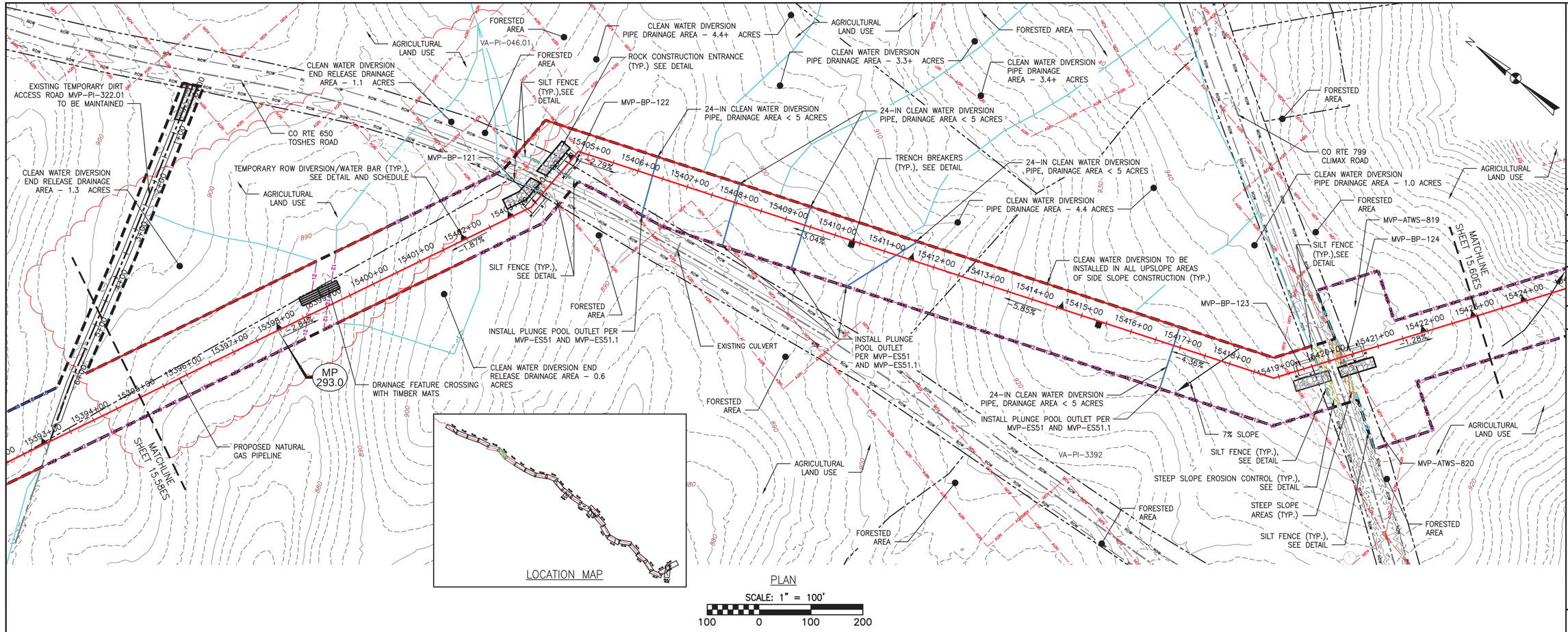
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
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REVISION

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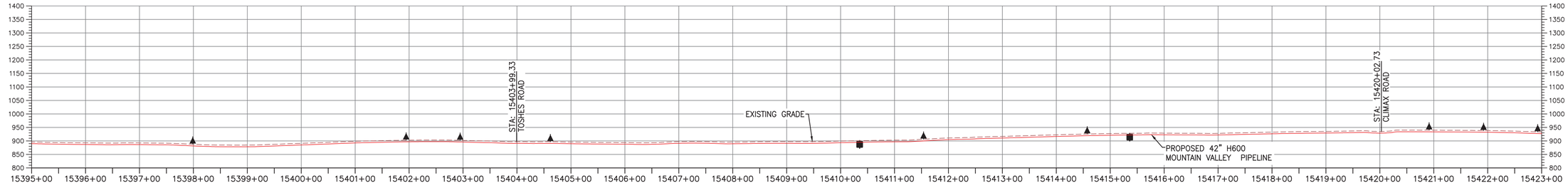


LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
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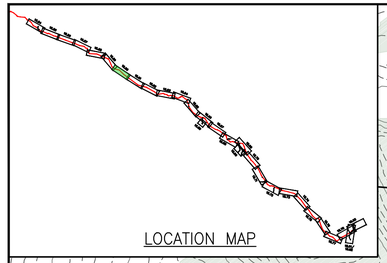
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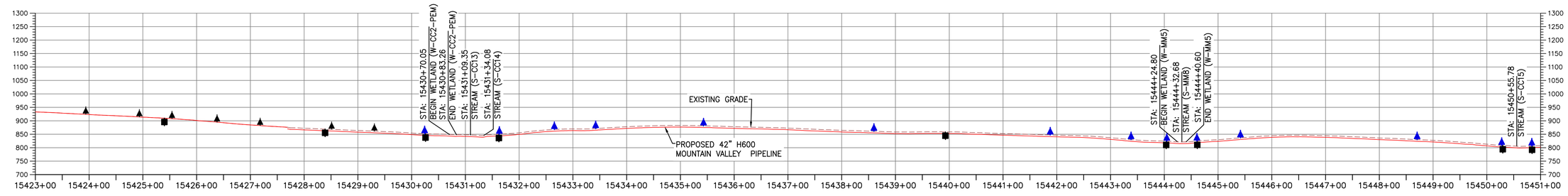
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PLAN

SCALE: 1" = 100'



PROFILE

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VERTICAL SCALE: SCALE: 1" = 200'

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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP–ES50 AND MVP–ES51)
- 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)
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NOTES:

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8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP–ES49.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
–	06/24/20	JK	RE	DW	CHANGES TO AQUATIC RESOURCES DELINEATIONS
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15317

TETRA TECH
complex world | CLEAR SOLUTIONS™
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

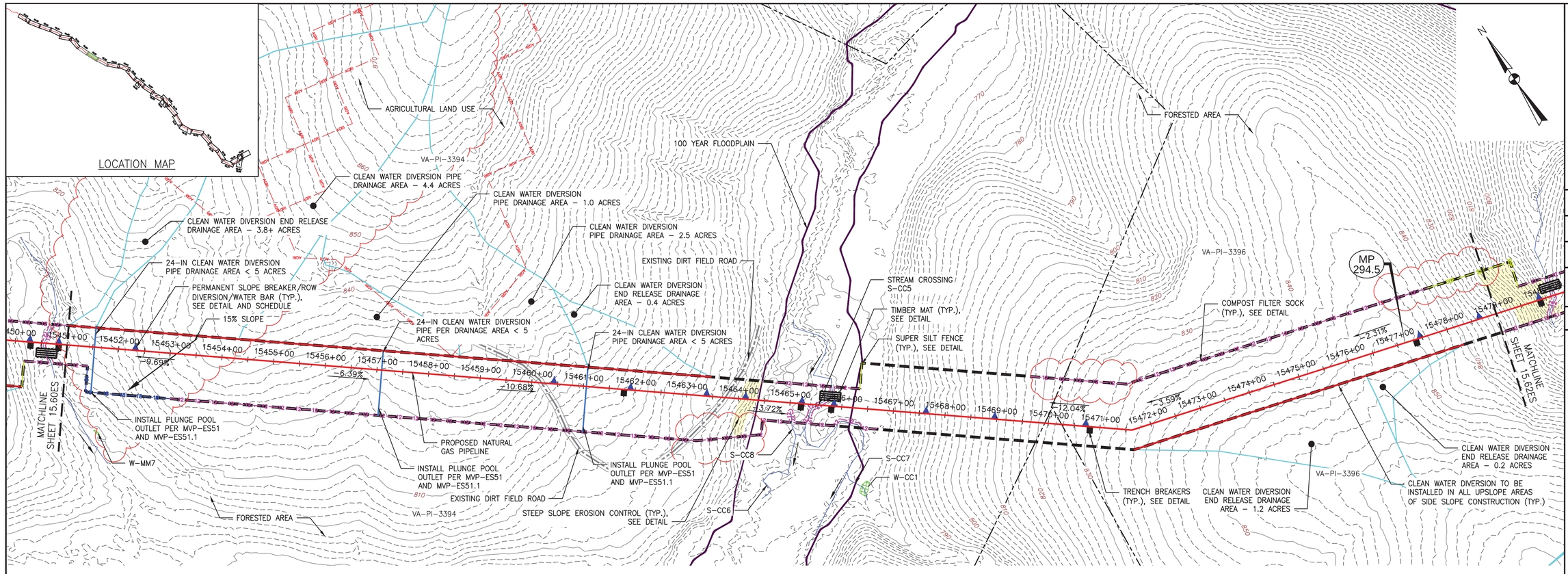
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	JK
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	06/24/2020
SCALE:	AS SHOWN
SHT. NO.	15.60ES OF 15.99ES

LOCATION MAP

PLAN

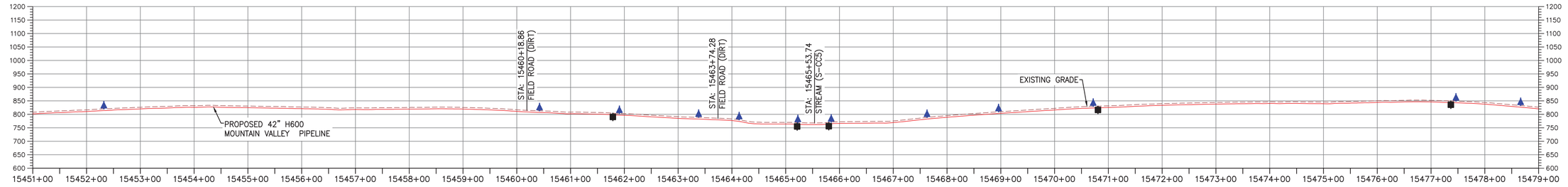
SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'



LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
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- ACID FORMING MATERIAL
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- PROPOSED ACCESS ROAD CENTERLINE
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- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

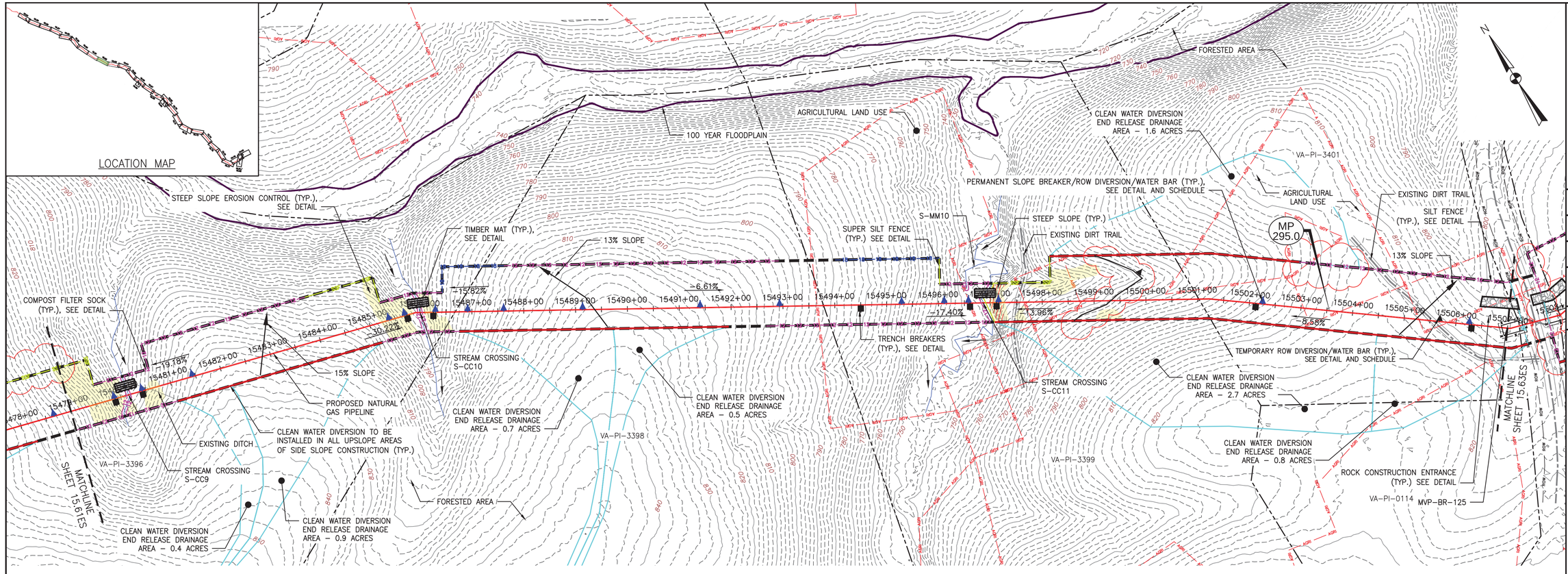
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.61ES OF 15.99ES

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\16 – Pittsylvania\E&S\ES Version 5.0.0\7157ES15.61(S11).dwg PLOTTED ON: 3/2/2018 9:00 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

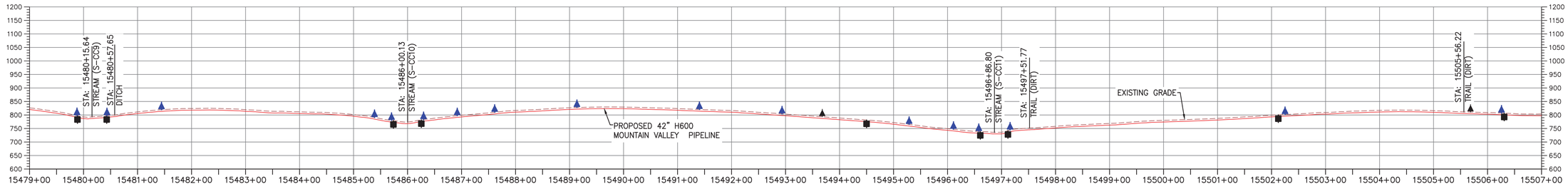
LOCATION MAP



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
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- APPALACHIAN NATIONAL SCENIC TRAIL
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5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
complex world | CLEAR SOLUTIONS™
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

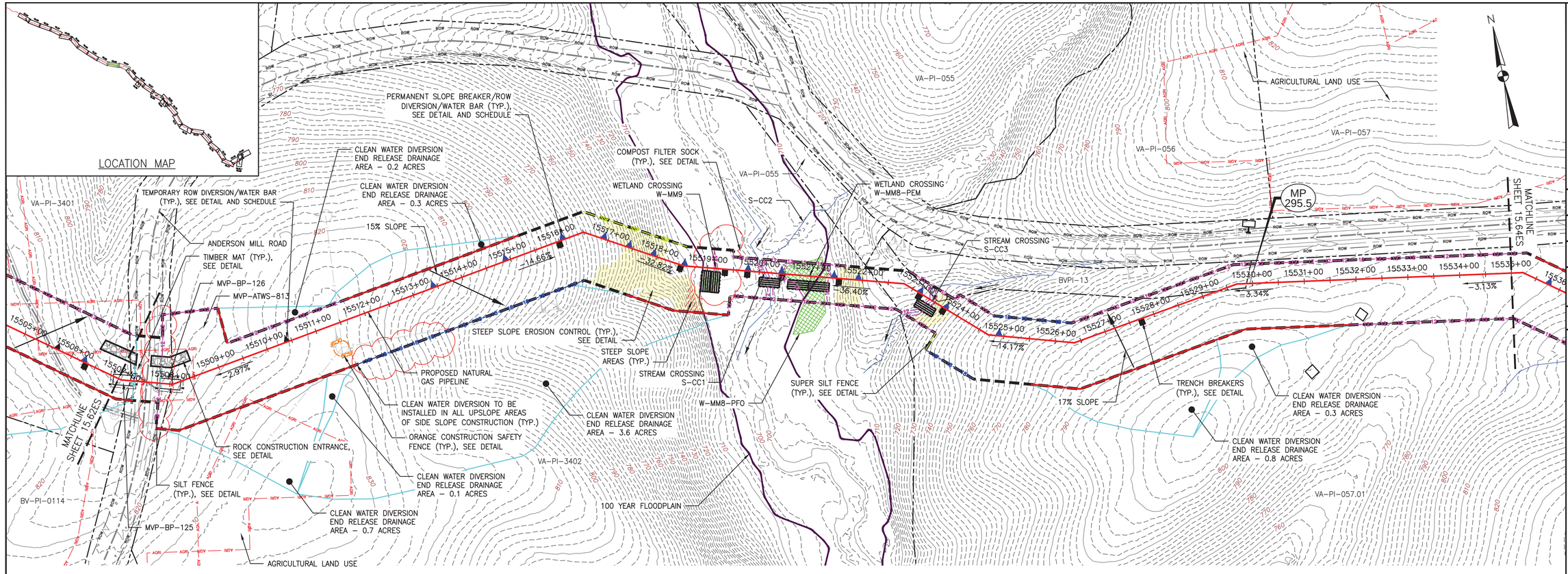
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.62ES OF 15.99ES

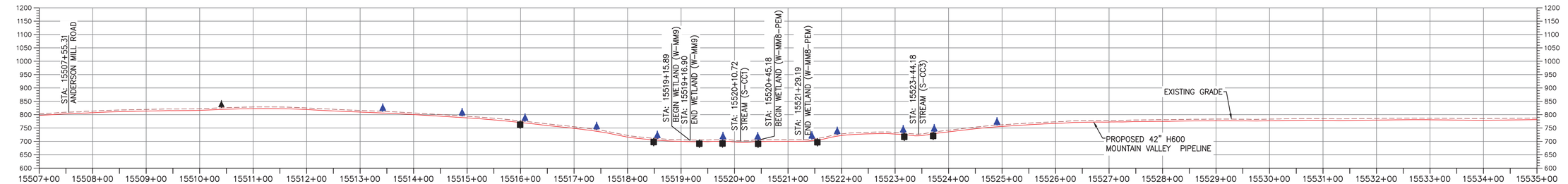
REVISION

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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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- APPALACHIAN NATIONAL SCENIC TRAIL
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
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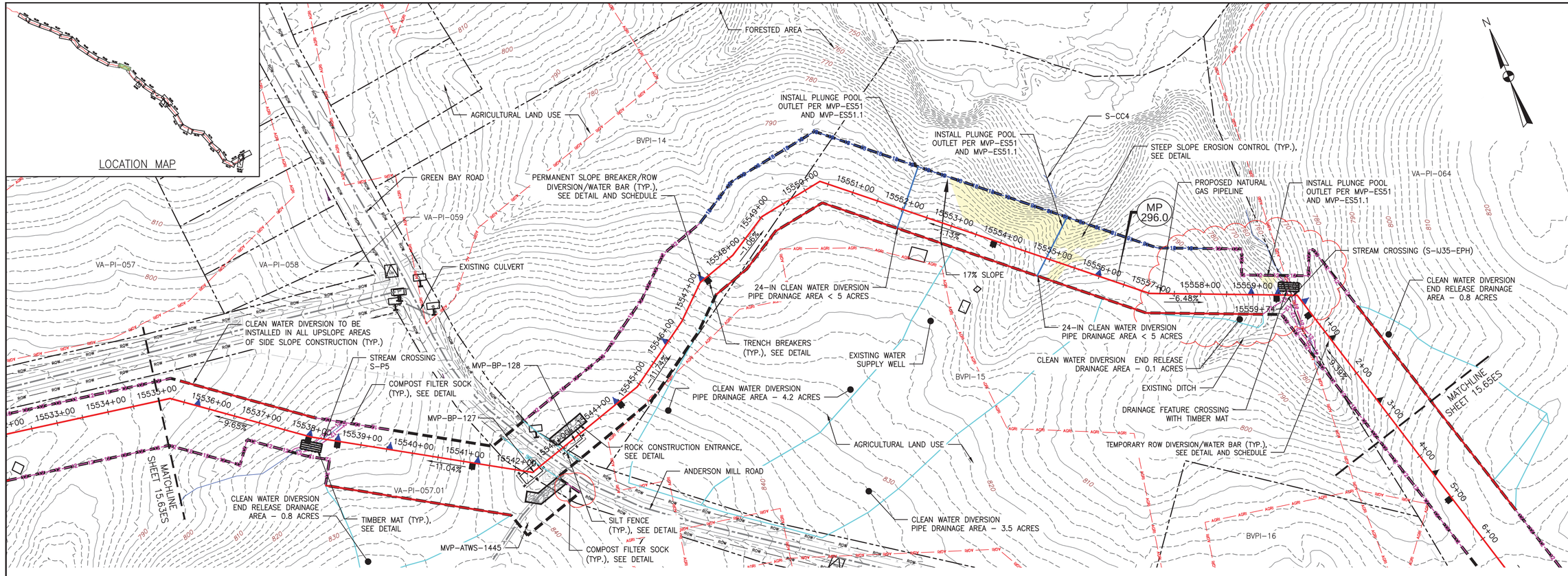
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.63ES OF 15.99ES

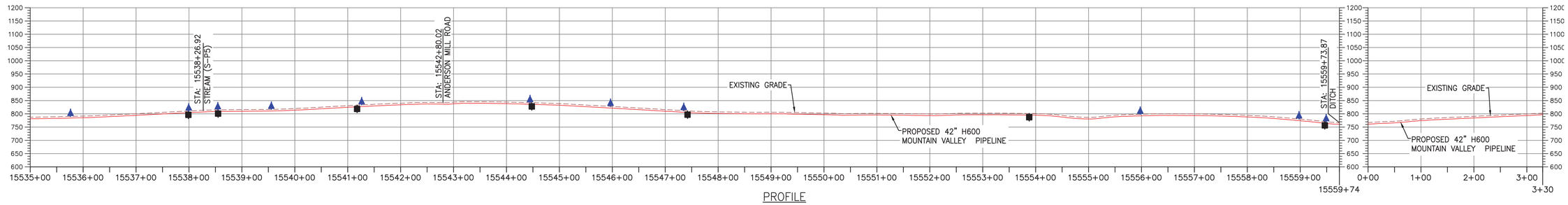
REVISION

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\16 – Pittsylvania\E&S\ES Version 5.0.0\7157ES15.63(S11).dwg PLOTTED ON: 3/2/2018 9:09 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb



PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

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3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

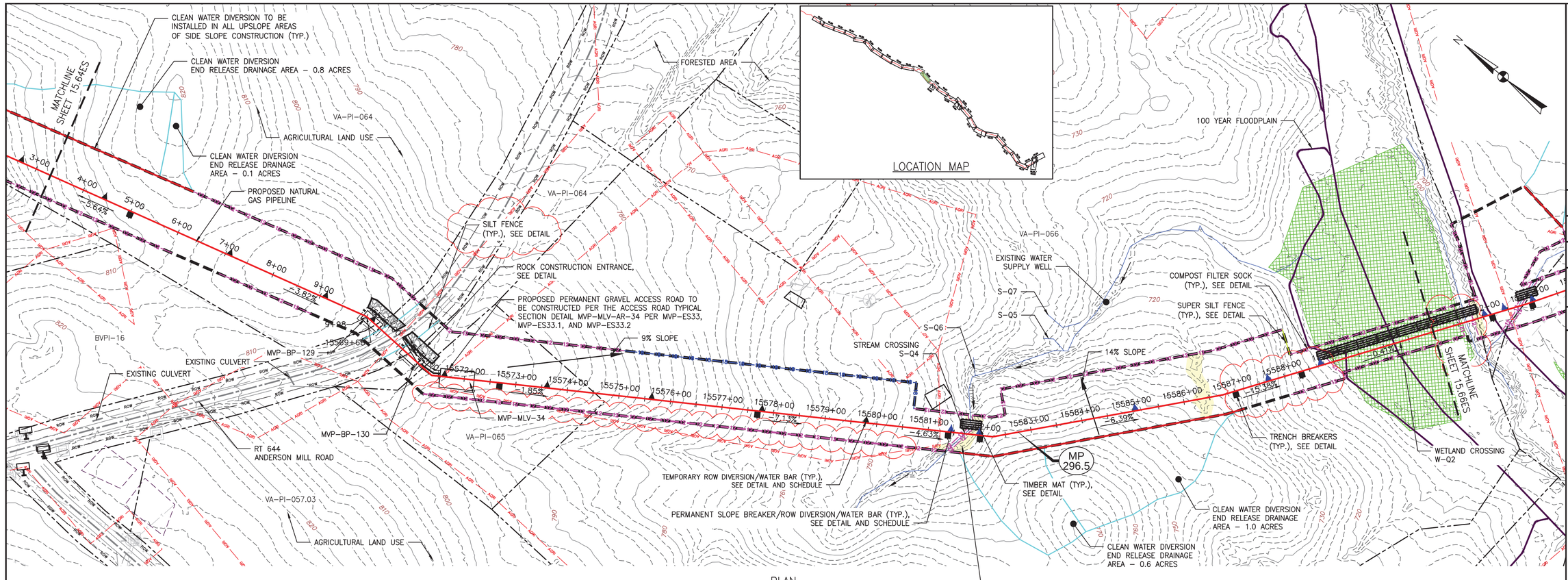
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.64ES OF 15.99ES

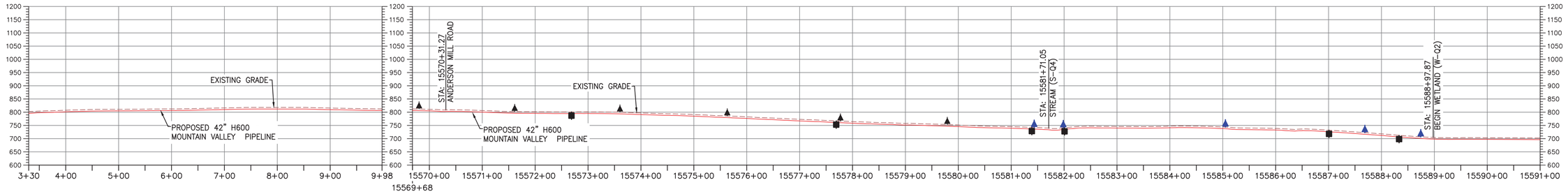
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — ACID FORMING MATERIAL
- AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.65ES OF 15.99ES

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LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200

PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
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- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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- STEEP SLOPE AREAS (SEE NOTE 4)
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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

555 SOUTHPOINTE BOULEVARD, SUITE 200

CANONSBURG, PA 15317

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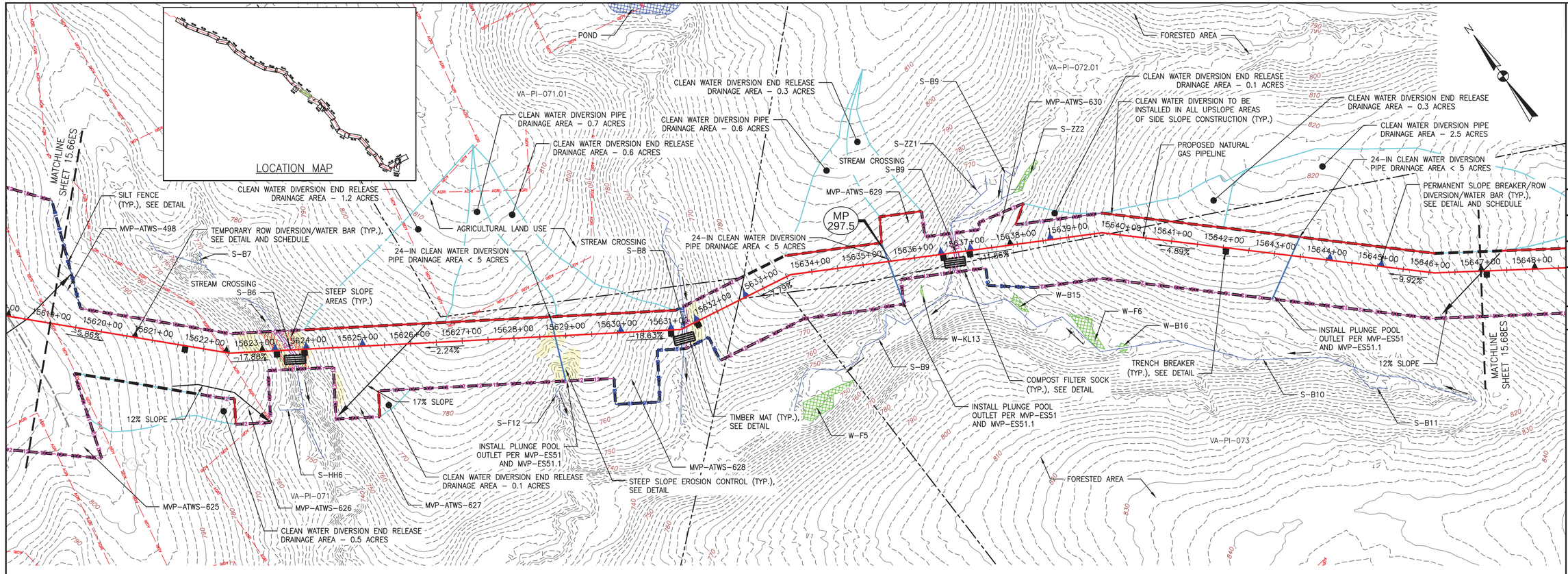
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.66ES OF 15.99ES

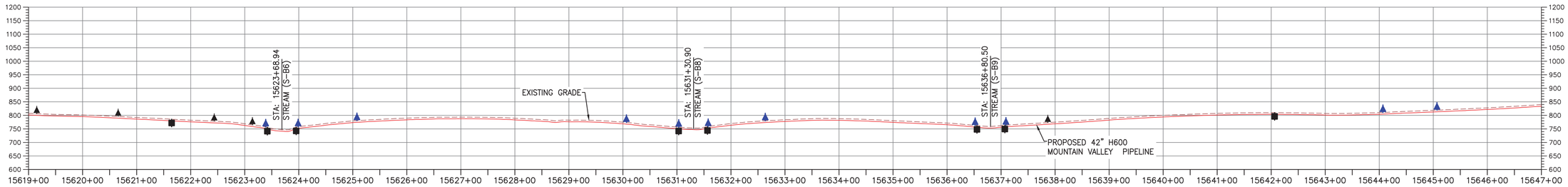
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
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- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
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- PROPOSED ACCESS ROAD CENTERLINE
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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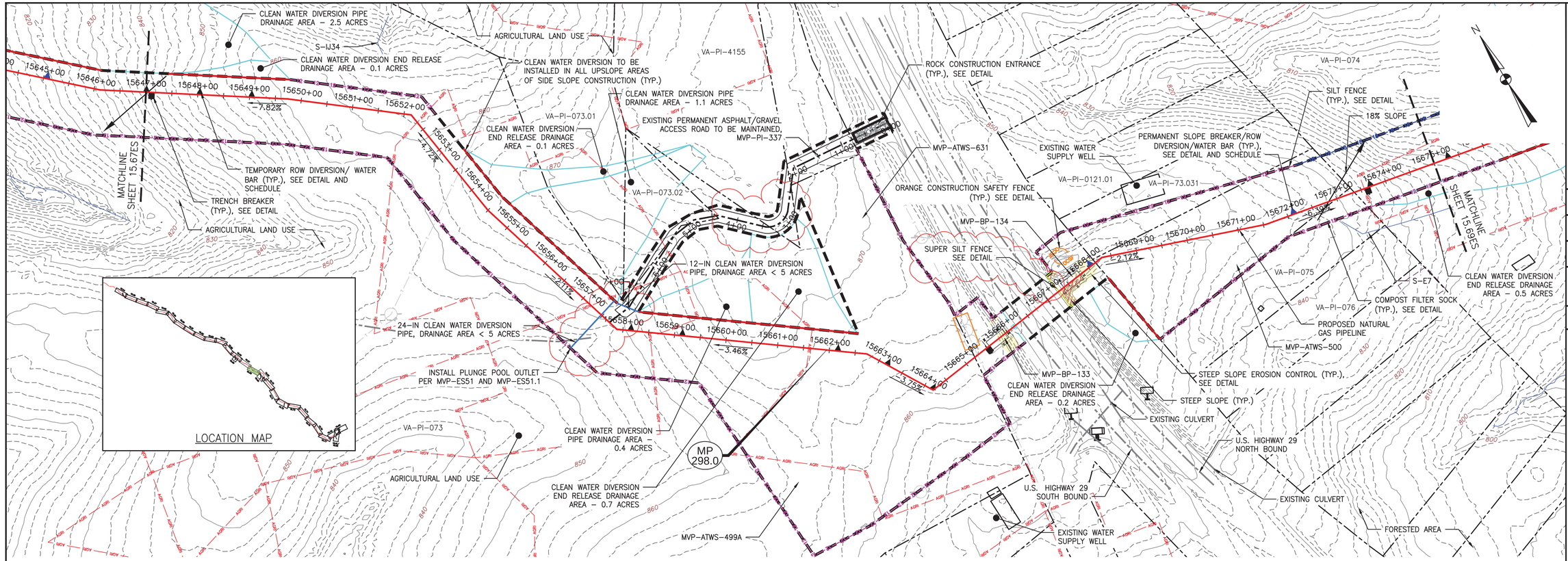
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	

SHT. NO. 15.67ES OF 15.99ES

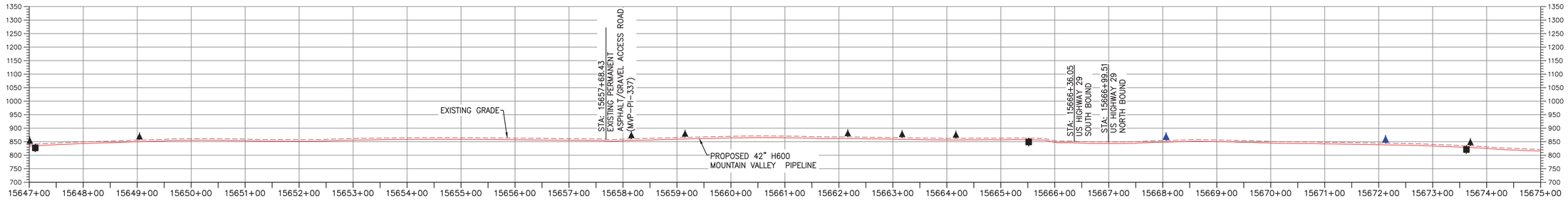
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL (ANST)
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL (AFM)
- AGRICULTURAL LAND USE BOUNDARY (AGRI)
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5) (SF)
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- ORANGE CONSTRUCTION SAFETY FENCE (OCSF)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (12)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (18)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (24)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

100 0 100 200 200 0 200 400

- 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
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
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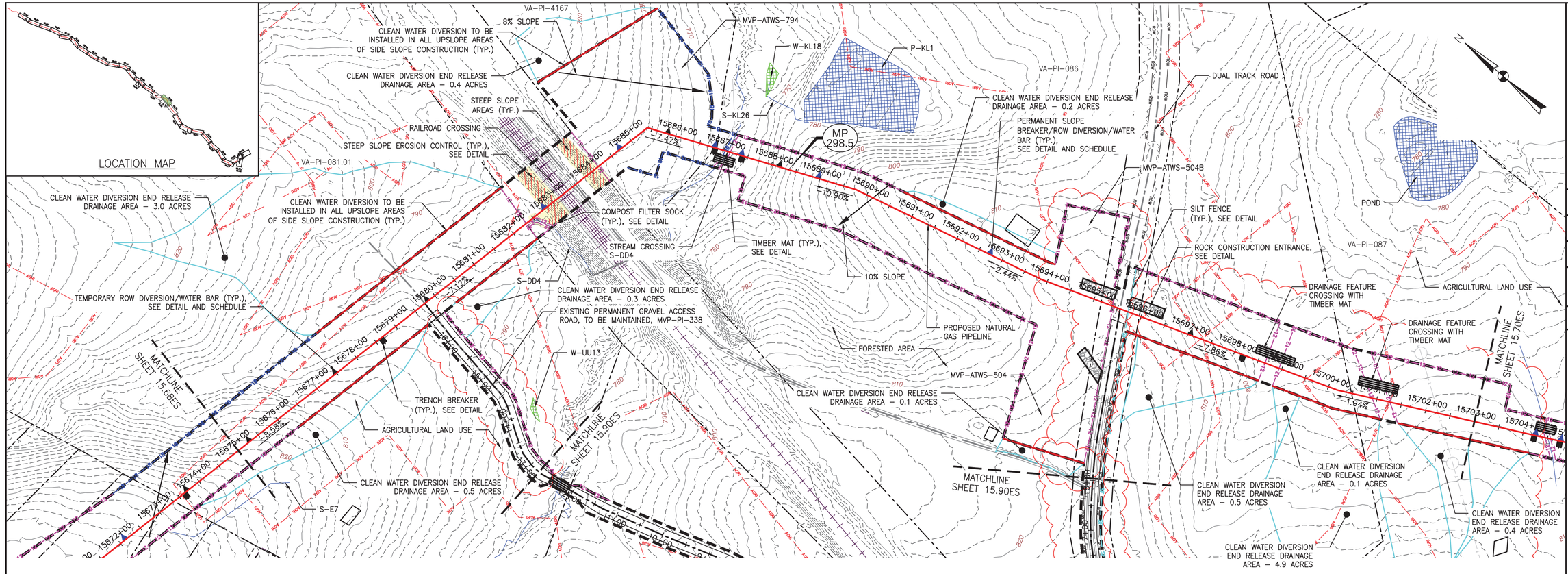
EROSION AND SEDIMENT CONTROL PLANS

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PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
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REVISION	5
SHT. NO.	15.68ES OF 15.99ES

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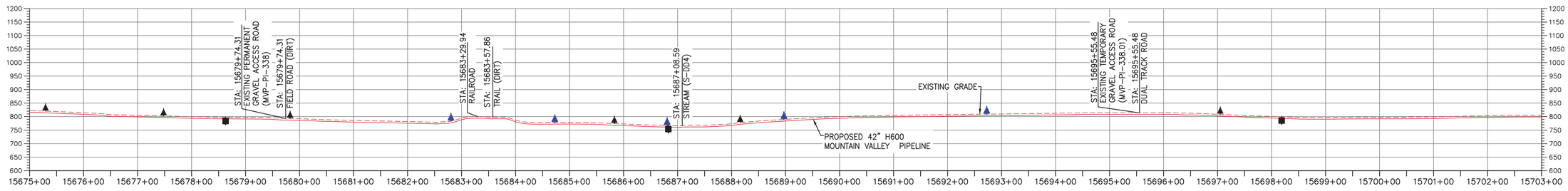
LOCATION MAP



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
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- CLEAN WATER DIVERSION PIPE
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- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
- STEEP SLOPE EROSION CONTROL (SEE NOTE 2)
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- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)
- TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

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TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\16 – Pittsylvania\E&S\ES Version 5.0.0\7157ES15_69(S11).dwg PLOTTED ON: 3/2/2018 9:36 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

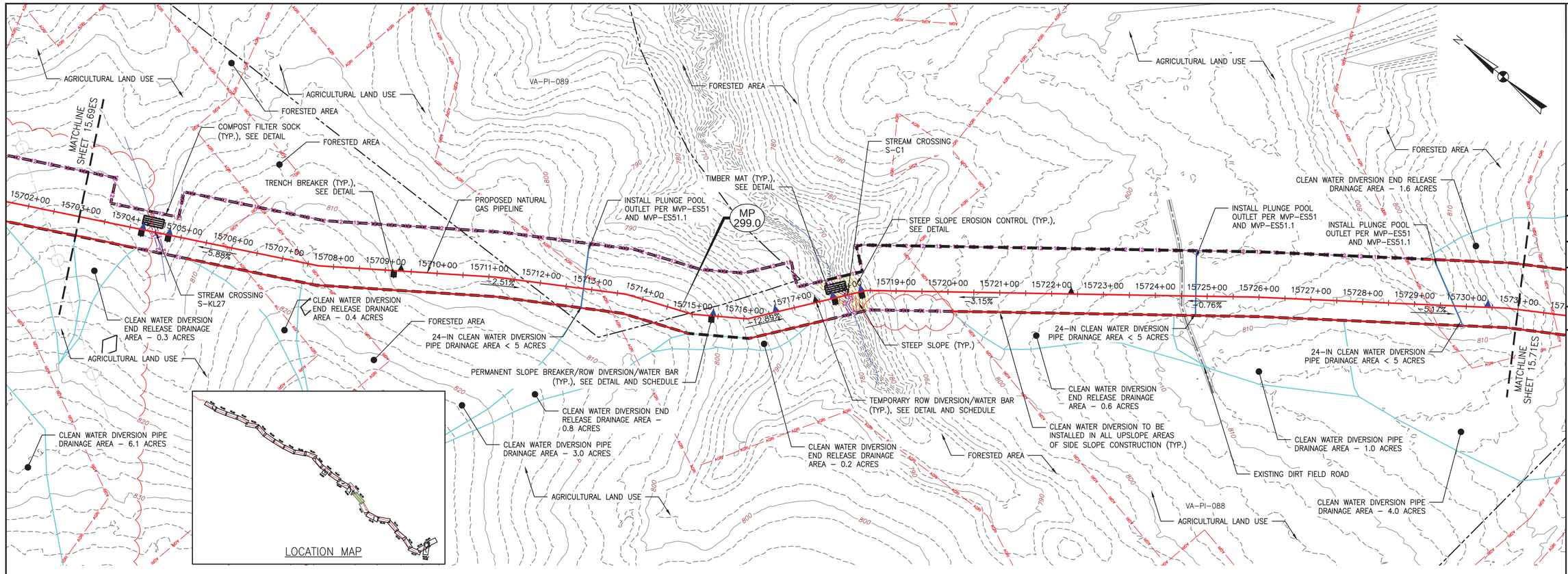
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	

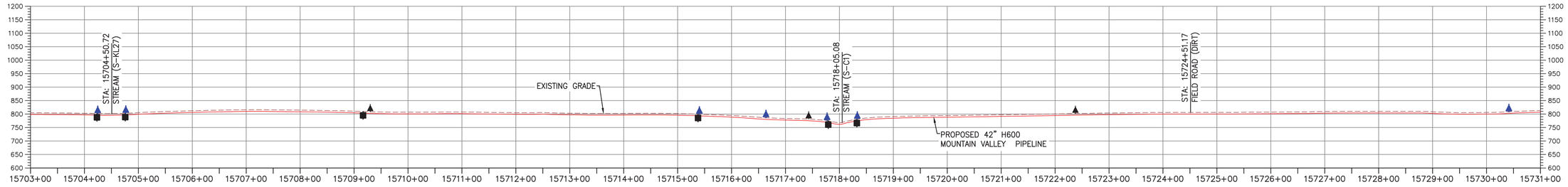
SHT. NO. 15.69ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.70ES OF 15.99ES

REVISION

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CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 1.6 ACRES

CLEAN WATER DIVERSION TO BE INSTALLED IN ALL UPSLOPE AREAS OF SIDE SLOPE CONSTRUCTION (TYP.)

EXISTING DIRT FIELD ROAD

COMPOST FILTER SOCK (TYP.), SEE DETAIL

MVP-ATWS-399

INSTALL PLUNGE POOL OUTLET PER MVP-ES51 AND MVP-ES51.1

EQUATION STATION
STA. AHEAD: 0+00
STA. BEHIND: 15733+24

MATCHLINE SHEET 15.70ES

TRENCH BREAKER (TYP.), SEE DETAIL

PROPOSED NATURAL GAS PIPELINE

MP 299.5

5% SLOPE

AGRICULTURAL LAND USE

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 4.0 ACRES

PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (TYP.), SEE DETAIL AND SCHEDULE

24-IN CLEAN WATER DIVERSION PIPE DRAINAGE AREA < 5 ACRES

PROPOSED PERMANENT GRAVEL ACCESS ROAD MVP-MLV-35 PER MVP-ES33, MVP-ES33.1, AND MVP-ES33.2

CLEAN WATER DIVERSION PIPE DRAINAGE AREA – 4.5 ACRES

MVP-ATWS-399A

FORESTED AREA

LOCATION MAP

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 5.0 ACRES

EQUATION STATION
STA. AHEAD: 15749+71
STA. BEHIND: 16+46

MVP-ATWS-400

SILT FENCE (TYP.), SEE DETAIL

MVP-BP-135

MVP-MLV-AR-35

MVP-BR-136

MVP-ATWS-400A

ROCK CONSTRUCTION ENTRANCE, SEE DETAIL

RT. 691 MILL CREEK ROAD

MVP-ATWS-505

MVP-ATWS-505A

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 1.6 ACRES

EXISTING TEMPORARY DIRT ACCESS ROAD TO BE MAINTAINED, MVP-PI-339

CLEAN WATER DIVERSION END RELEASE DRAINAGE AREA – 0.3 ACRES

EXISTING WATER SUPPLY WELL

AGRICULTURAL LAND USE

MVP-ATWS-1312

MVP-ATWS-1313

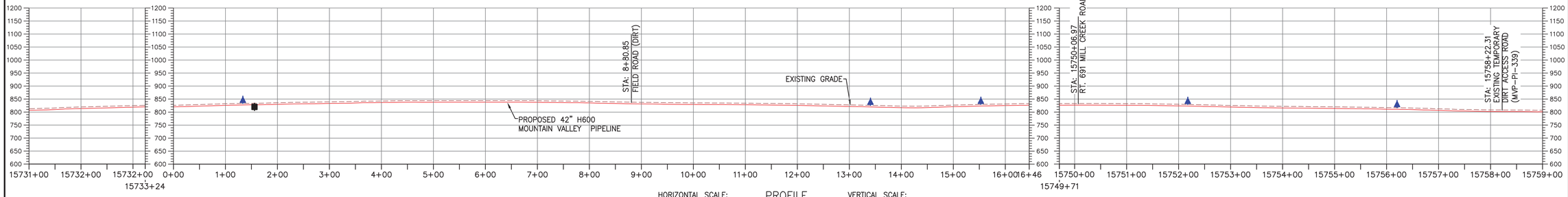
MATCHLINE SHEET 15.72ES

VA-PI-090

VA-PI-091

VA-PI-092

PLAN
SCALE: 1" = 100'
100 0 100 200



PROFILE
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

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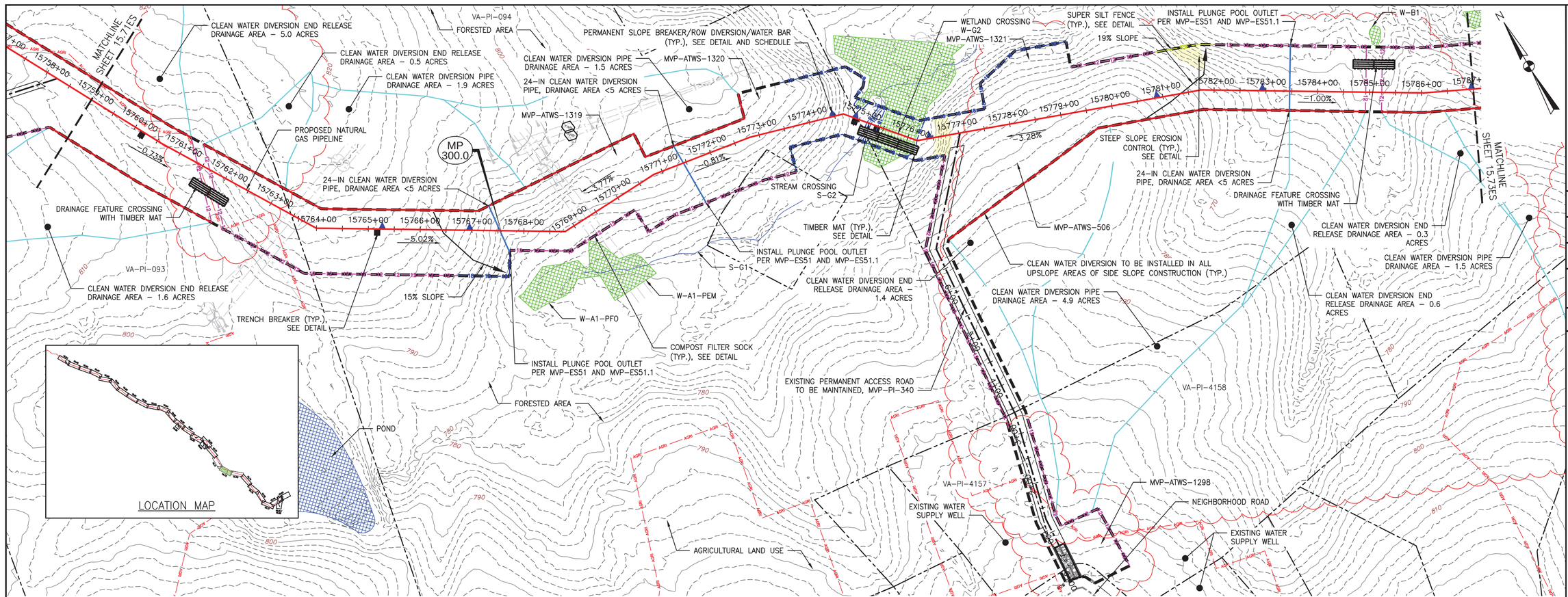
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

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SCALE:	AS SHOWN
REVISION	5

SHT. NO. 15.71ES OF 15.99ES

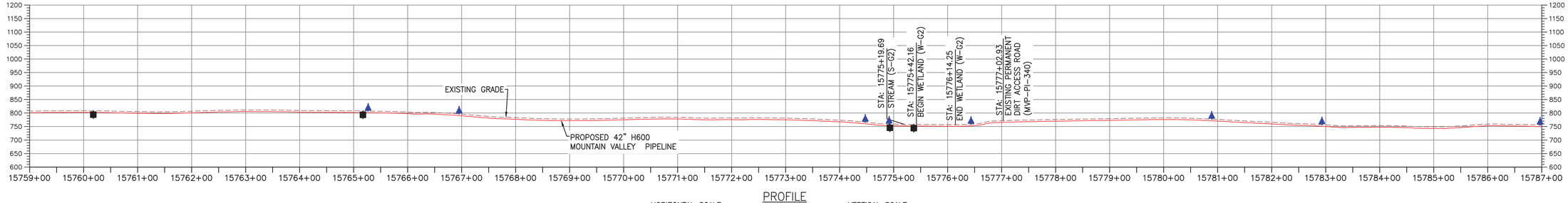
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

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100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

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- EXISTING ROAD/TRAIL
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- POND
- WETLAND
- AFM — AFM — ACID FORMING MATERIAL
- AGR — AGR — AGRICULTURAL LAND USE BOUNDARY
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- PROPOSED PIPELINE
- SF — SF — PROPOSED SILT FENCE (SEE NOTE 5)
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- RFD — RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP–ES9, 9.1, 9.2, 9.3)
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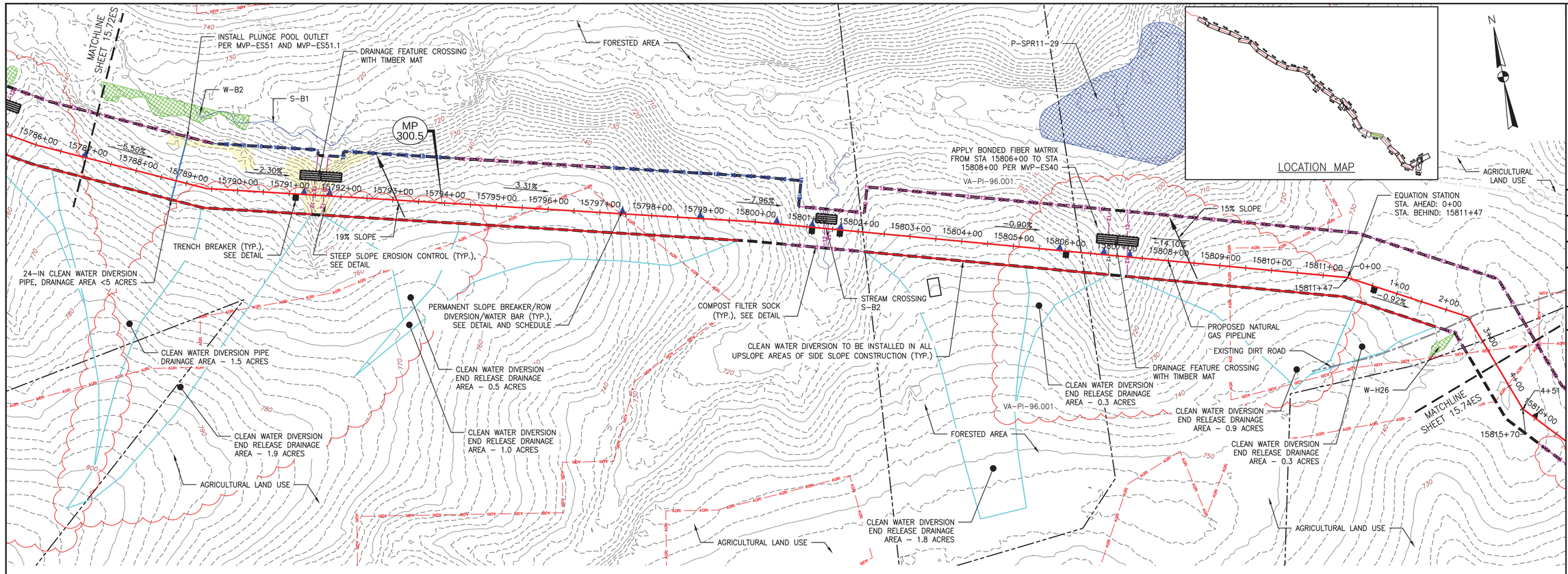
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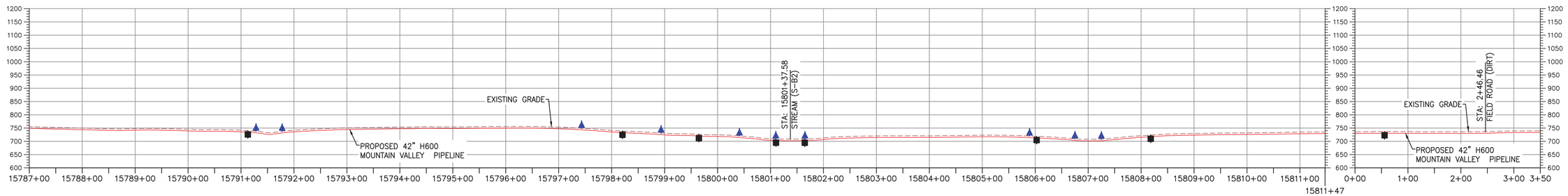
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- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
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- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

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4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

REVISIONS:

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
complex world | CLEAR SOLUTIONS™
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

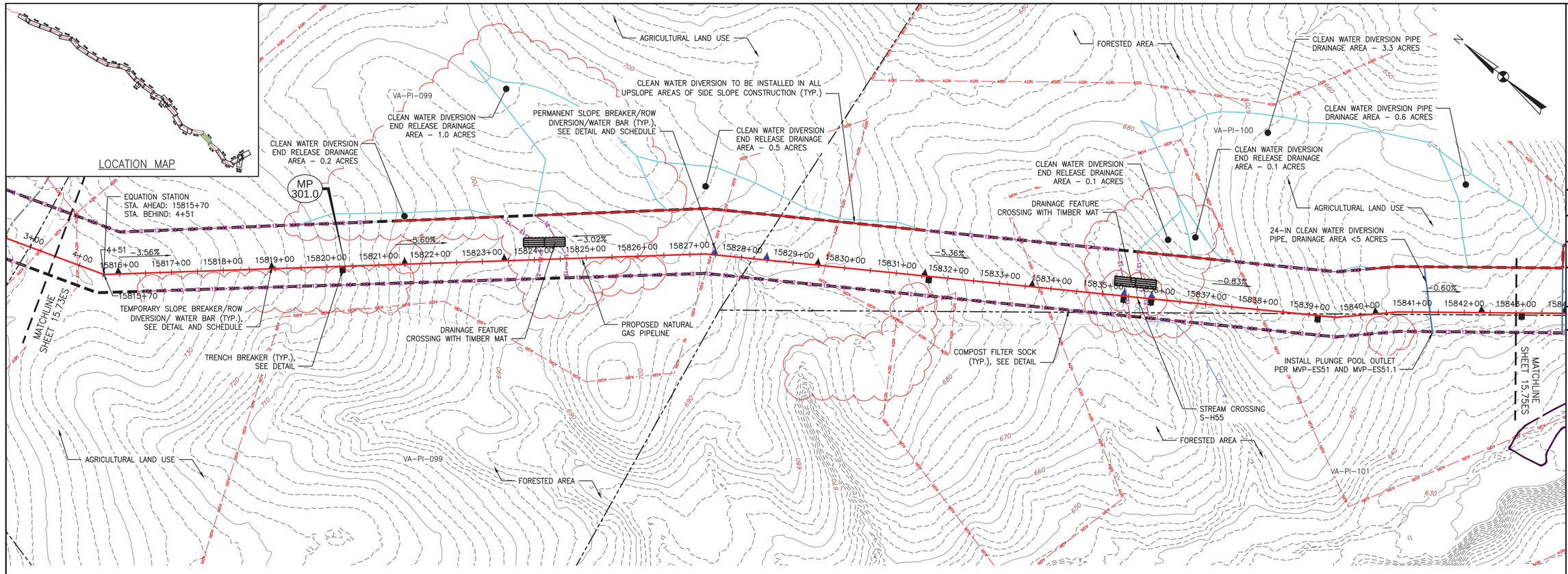
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 15.73ES OF 15.99ES

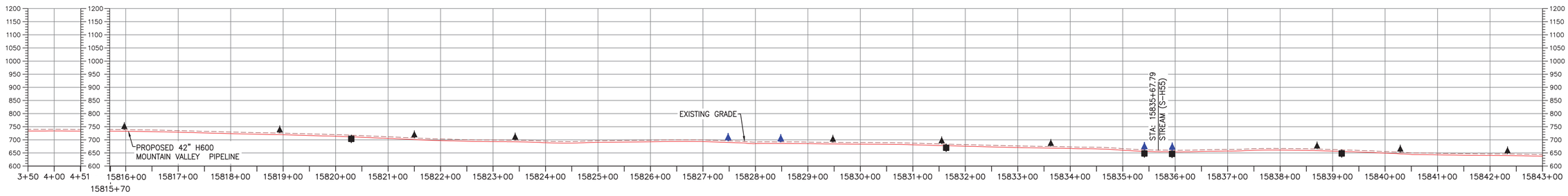
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

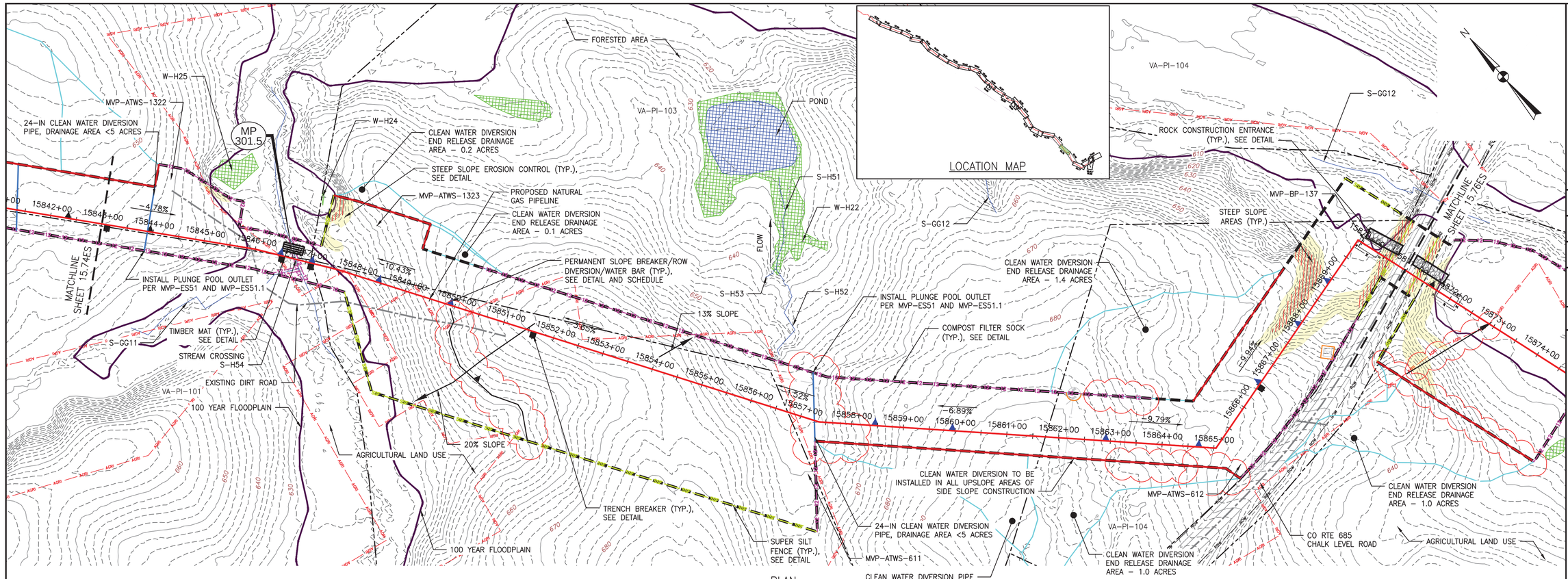
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.74ES OF 15.99ES

REVISION

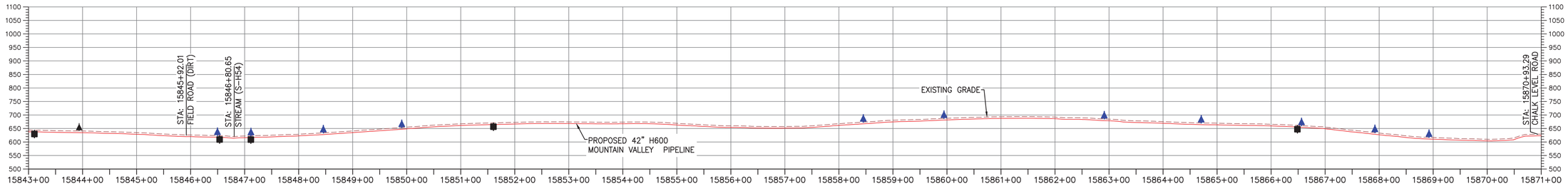
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — AFM — ACID FORMING MATERIAL
- AGRI — AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP–ES9.2)
- RFD — RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP–ES9, 9.1, 9.2, 9.3)
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- FEMA 100 YEAR FLOODPLAIN
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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

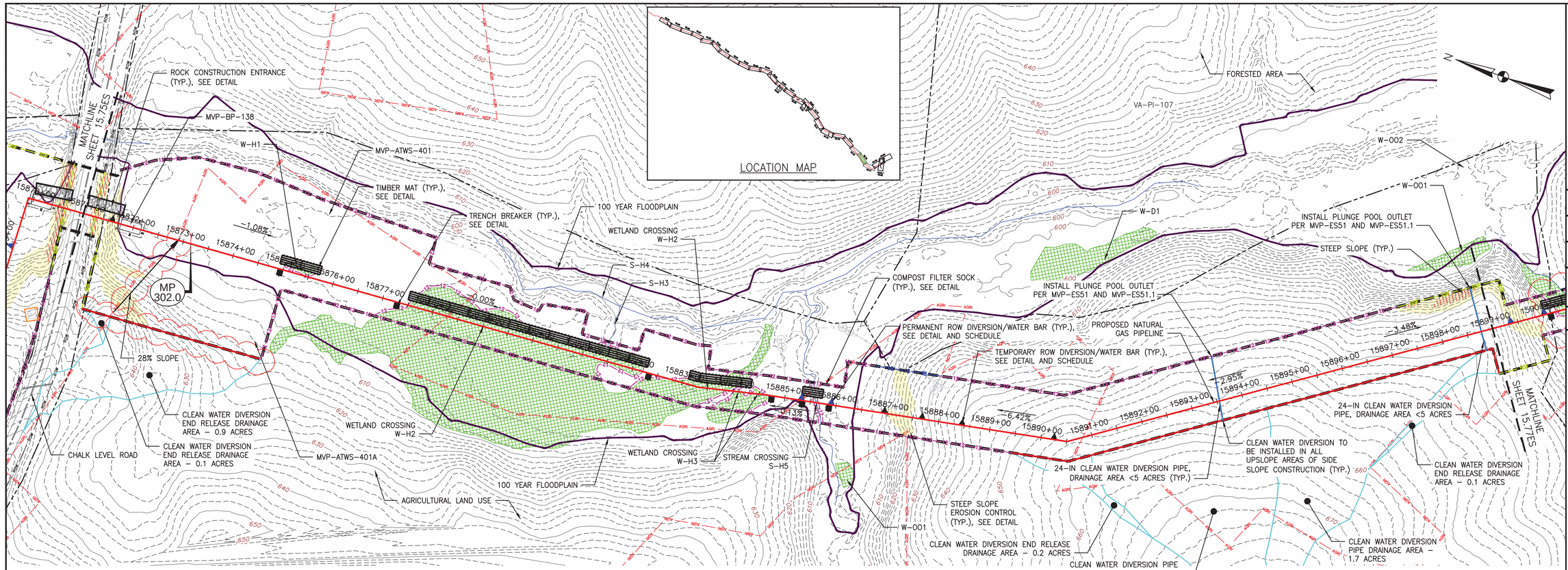
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.75ES OF 15.99ES

REVISION

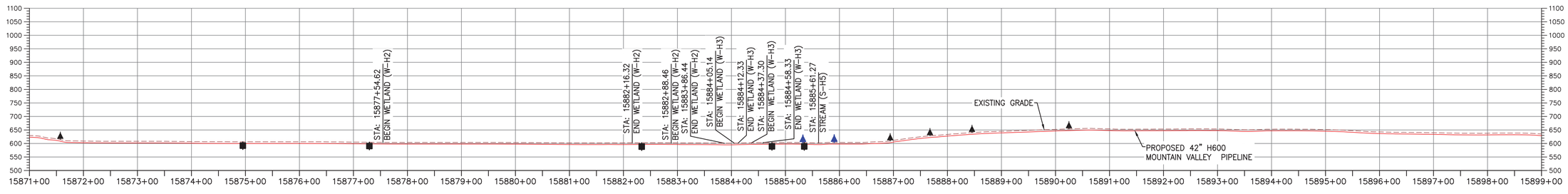
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

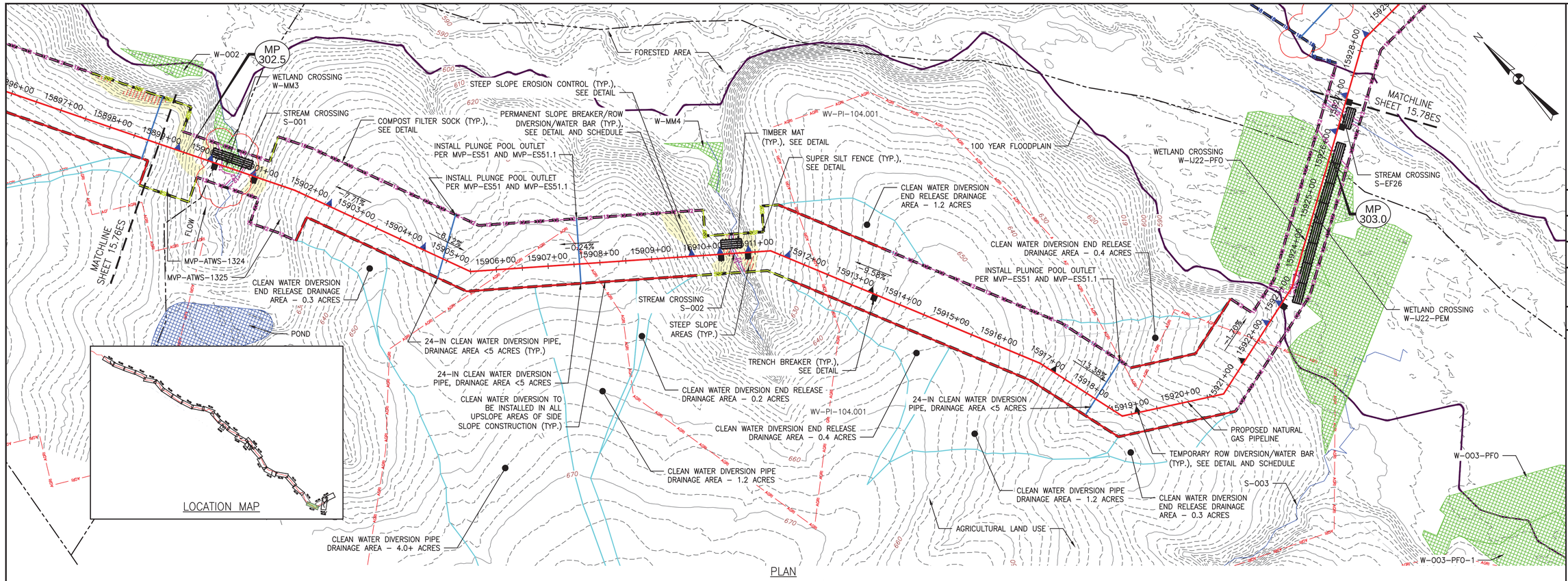
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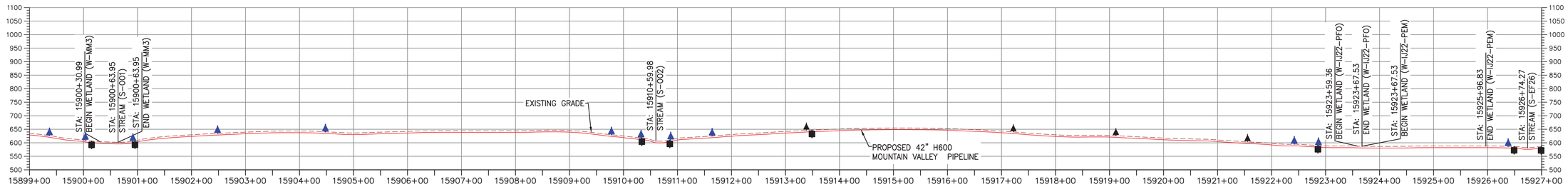
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CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.76ES OF 15.99ES



PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE:

SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE:

SCALE: 1" = 200'

200 0 200 400

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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

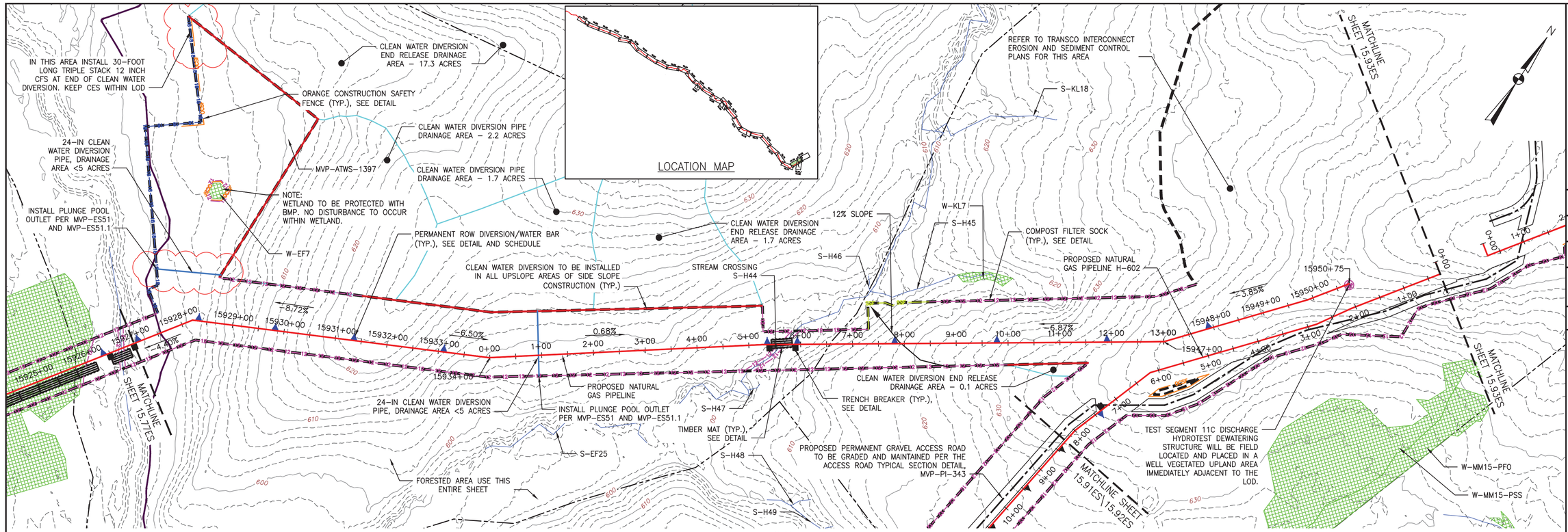
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.77ES OF 15.99ES

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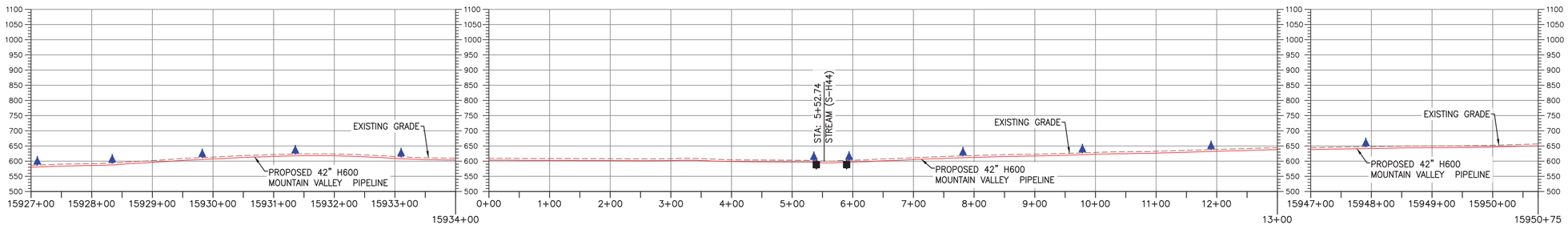


LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- AFM — ACID FORMING MATERIAL
- AGRI — AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SF — PROPOSED SILT FENCE (SEE NOTE 5)
- SSF — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- RFD — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- OCSF — ORANGE CONSTRUCTION SAFETY FENCE
- 12 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 18 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- 24 — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

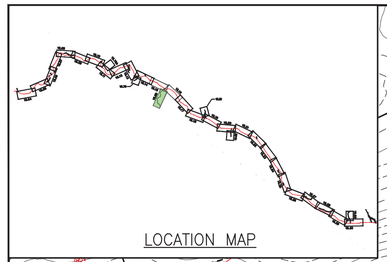
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	

SHT. NO. 15.78ES OF 15.99ES



LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

PLAN

SCALE: 1" = 100'

100 0 100 200

- 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 (VADEQ STD & SPEC 3.11)
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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EROSION AND SEDIMENT CONTROL PLANS

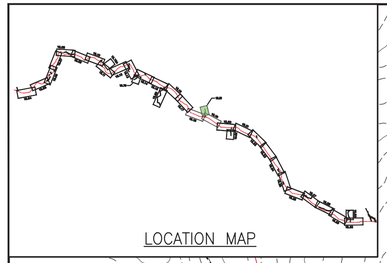
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 040202575
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 15.80ES OF 15.99ES

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LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL (ANST)
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL (AFM)
- AGRICULTURAL LAND USE BOUNDARY (AGR)
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5) (SF)
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- PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) (RFD)
- ORANGE CONSTRUCTION SAFETY FENCE (OCSF)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) (12)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

PLAN

SCALE: 1" = 100'

100 0 100 200

- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

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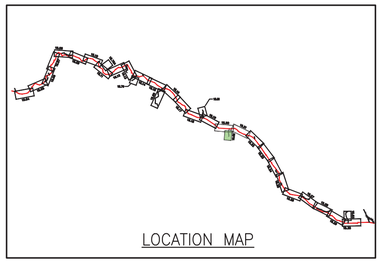
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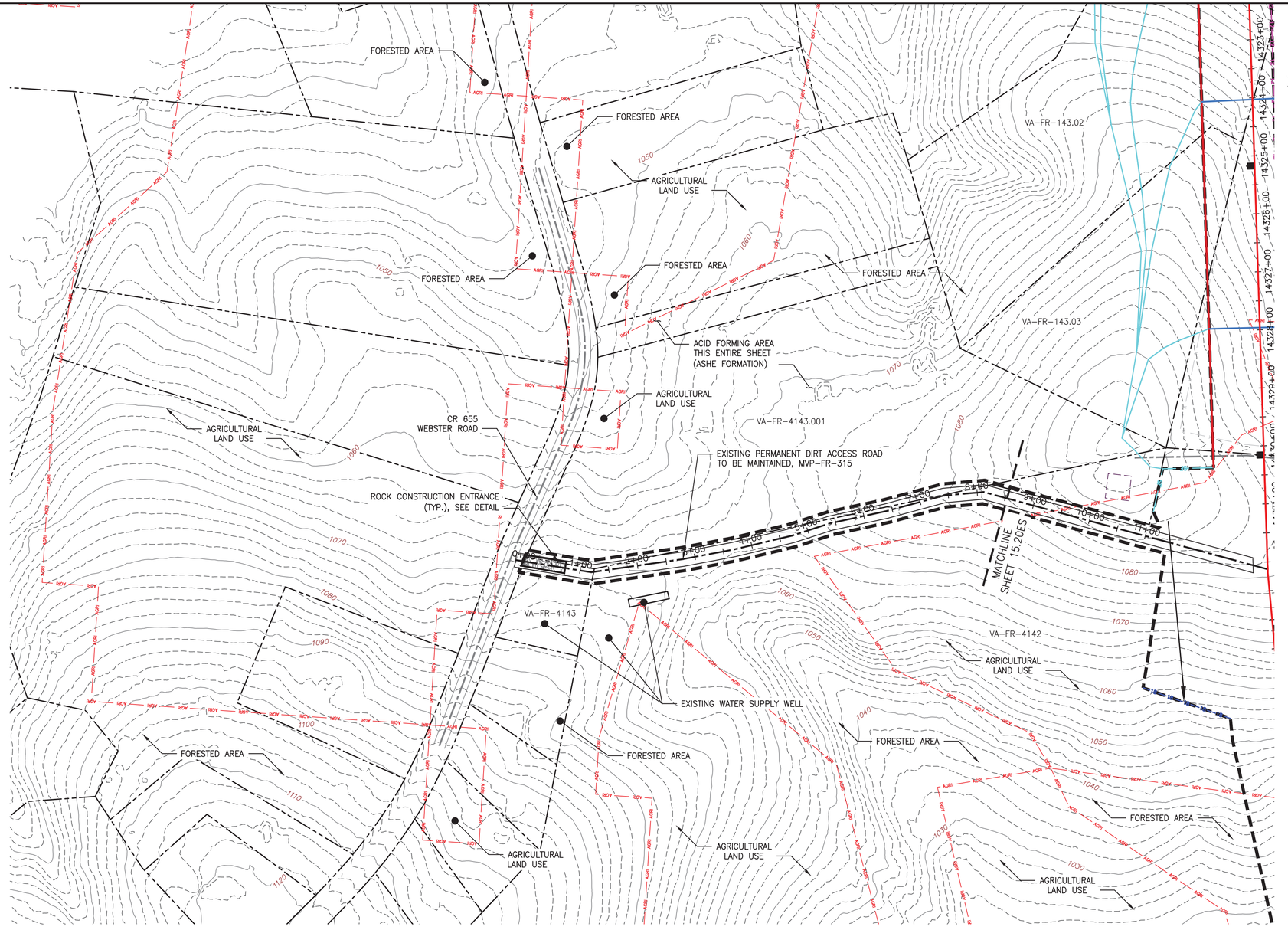
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COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5

SHT. NO. 15.81ES OF 15.99ES





LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
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PLAN

SCALE: 1" = 100'

100 0 100 200

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Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

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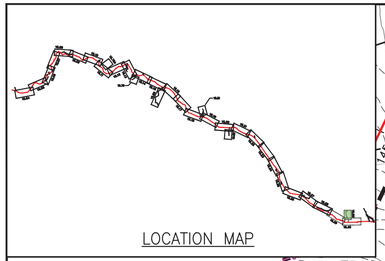
EROSION AND SEDIMENT CONTROL PLANS

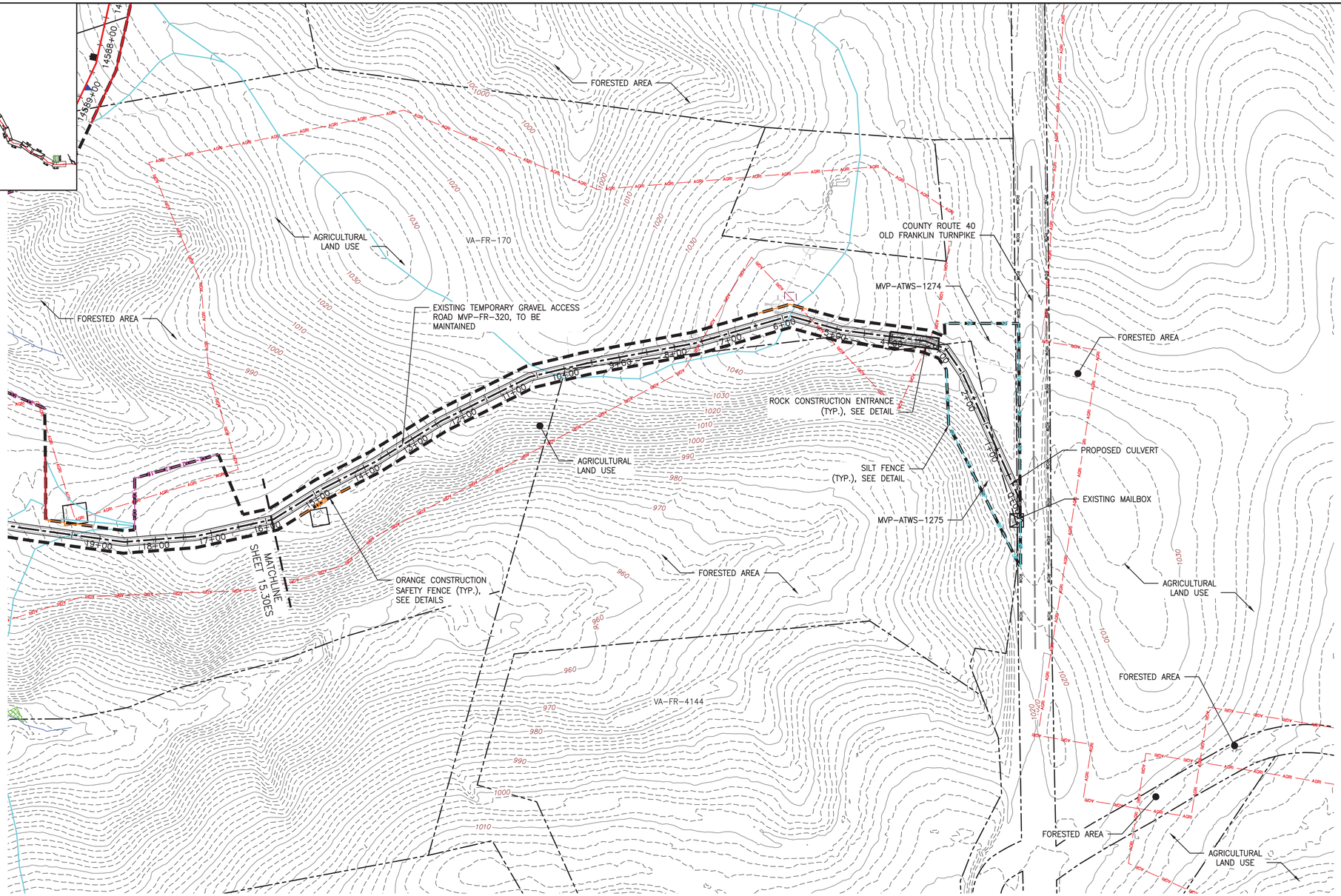
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.82ES OF 15.99ES

REVISION

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15.82(S11).dwg PLOTTED ON: 3/2/2018 10:22 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb





LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

PLAN

SCALE: 1" = 100'

100 0 100 200

- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION TO BE CONDUCTED THROUGHOUT THE JEFFERSON NATIONAL FOREST.
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3. 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.
4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE, AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

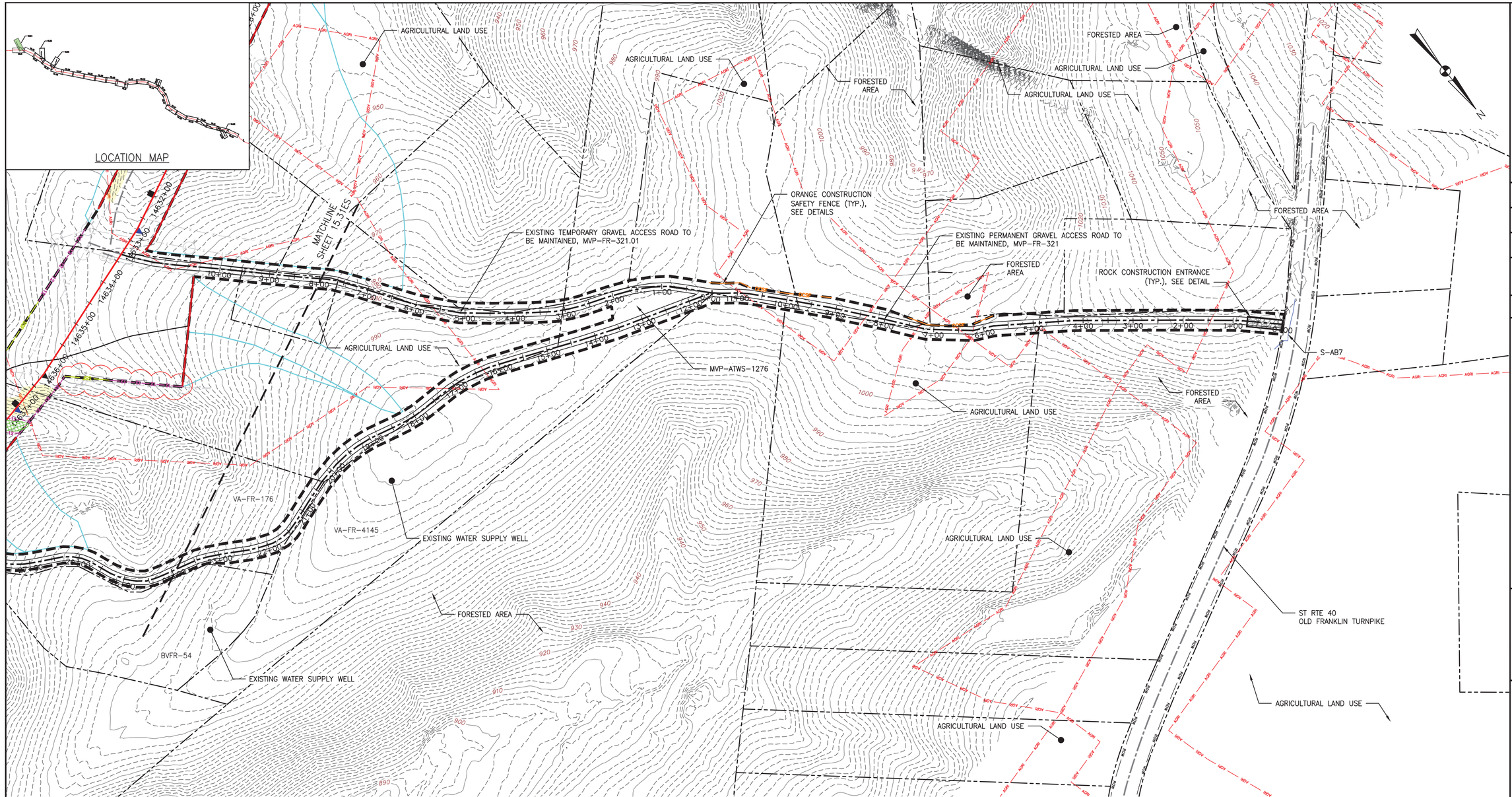
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 15.83ES OF 15.99ES

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15.83(S11).dwg PLOTTED ON: 3/2/2018 10:24 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb



LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
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- PROPOSED PIPELINE
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- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

PLAN

SCALE: 1" = 100'

100 0 100 200

- 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
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3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

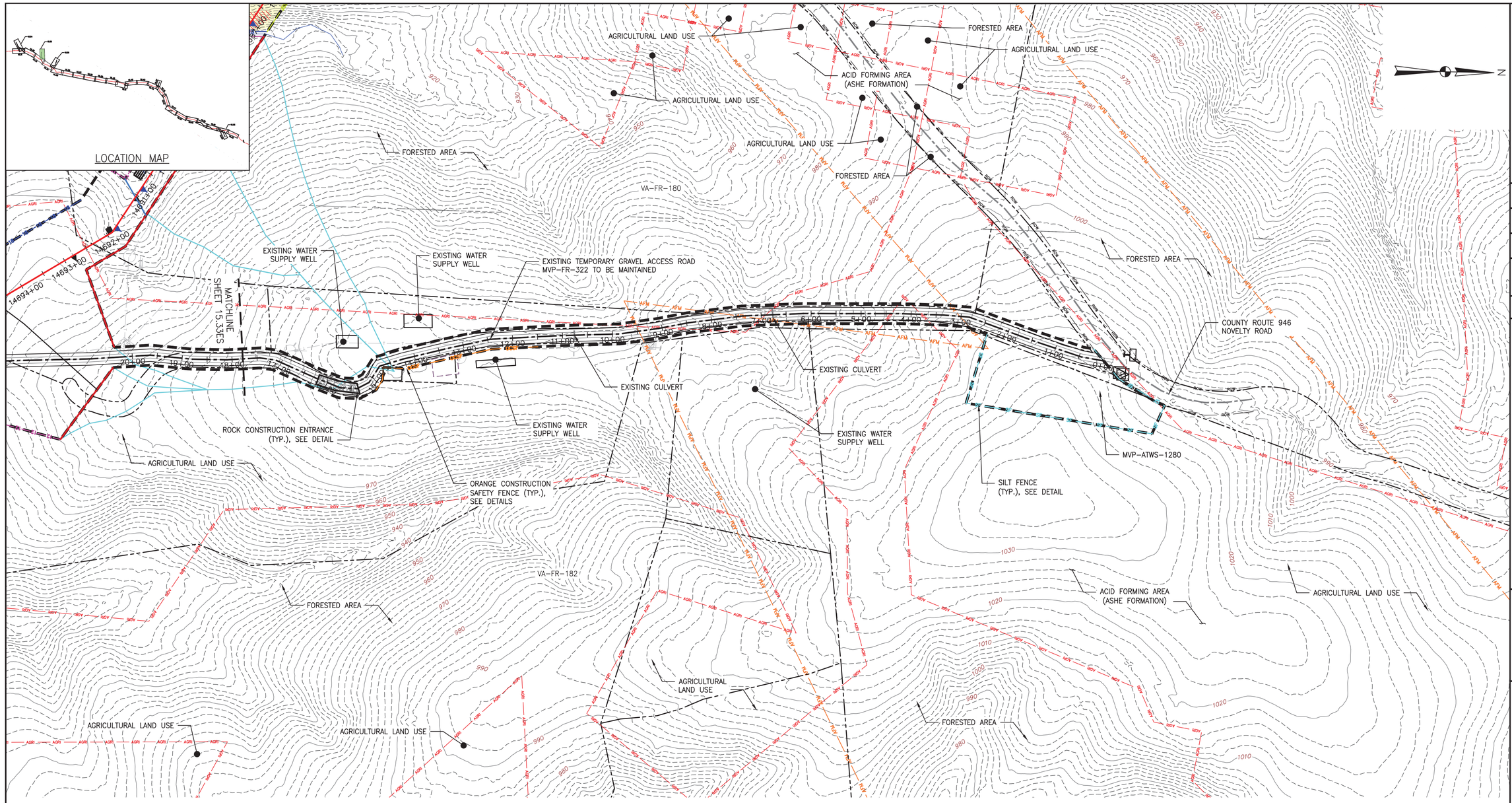
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.84ES OF 15.99ES

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LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)

PLAN

SCALE: 1" = 100'

100 0 100 200

- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
- STEEP SLOPE EROSION CONTROL (SEE NOTE 2)
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TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\15 – Franklin\E&S\ES Version 5.0.0\7157ES15.85(S11).dwg PLOTTED ON: 3/2/2018 10:27 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

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4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

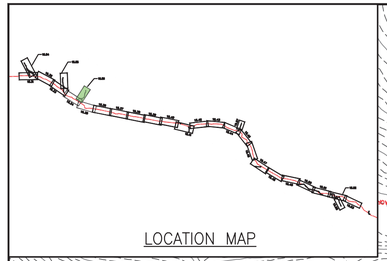
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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.85ES OF 15.99ES

REVISION



LOCATION MAP

PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
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- STREAM FLOW DIRECTION
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1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – FRANKLIN COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
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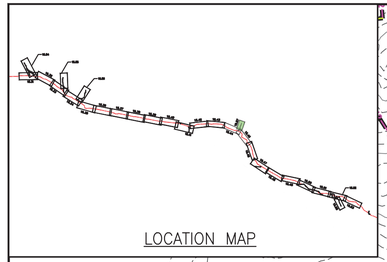
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.86ES OF 15.99ES

REVISION

LOCATION MAP



PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
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NO.	DATE	DWN.	CHKD.	APPD.	DESCRIPTION
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

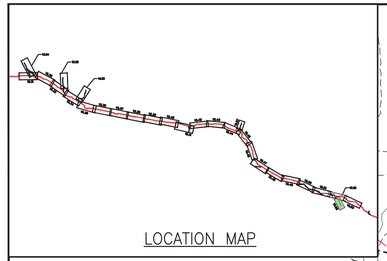
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PITTSBURGH, PA 15220

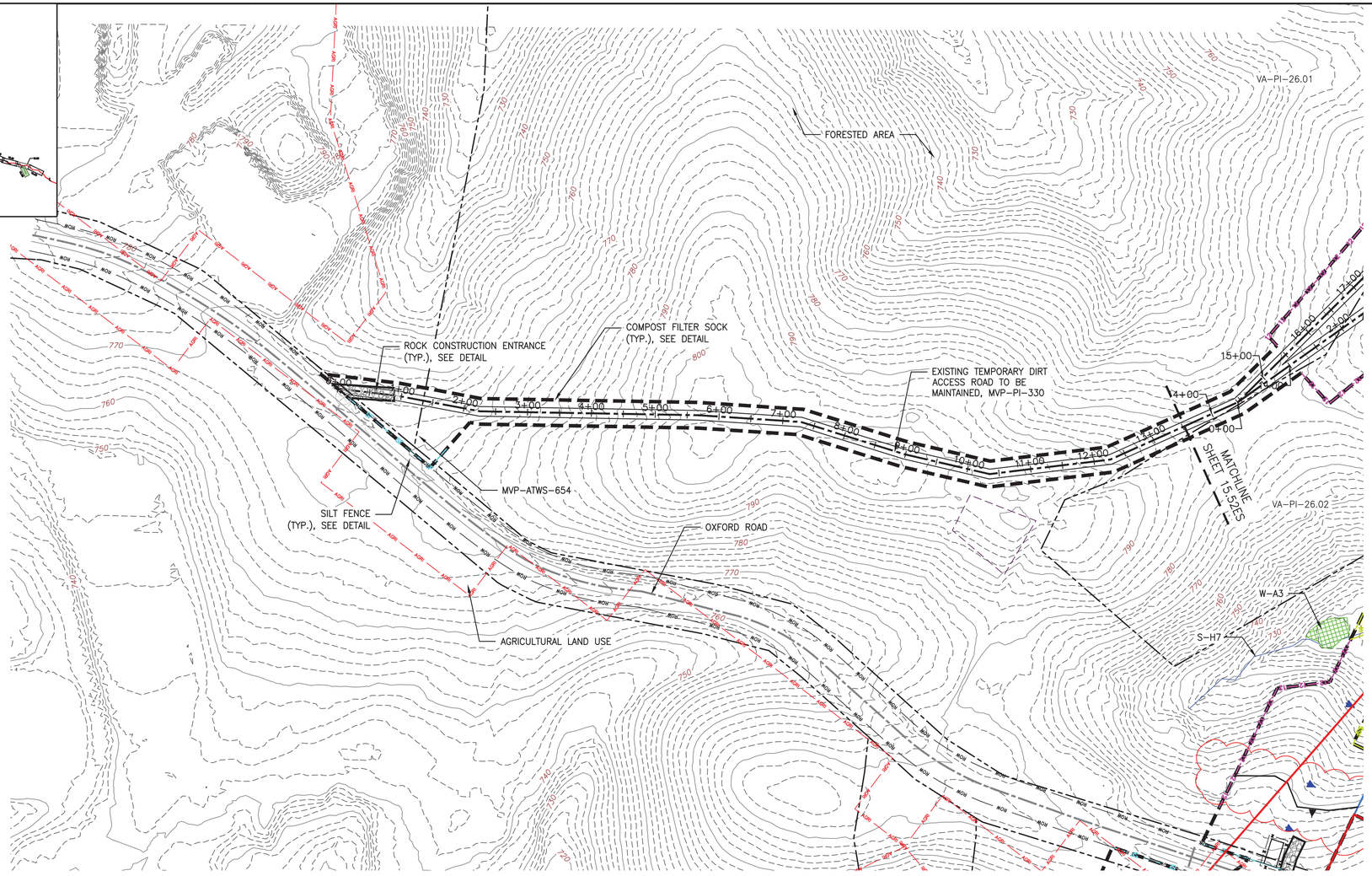
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.87ES OF 15.99ES

TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 – MVP\16 – Pittsylvainia\E&S\ES Version 5.0.0\7157ES15.87(S11).dwg PLOTTED ON: 3/2/2018 10:29 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb





PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
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- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

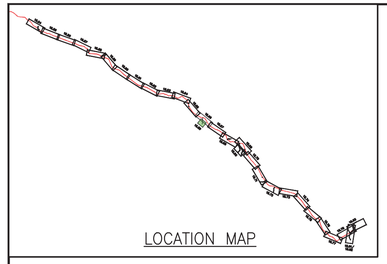
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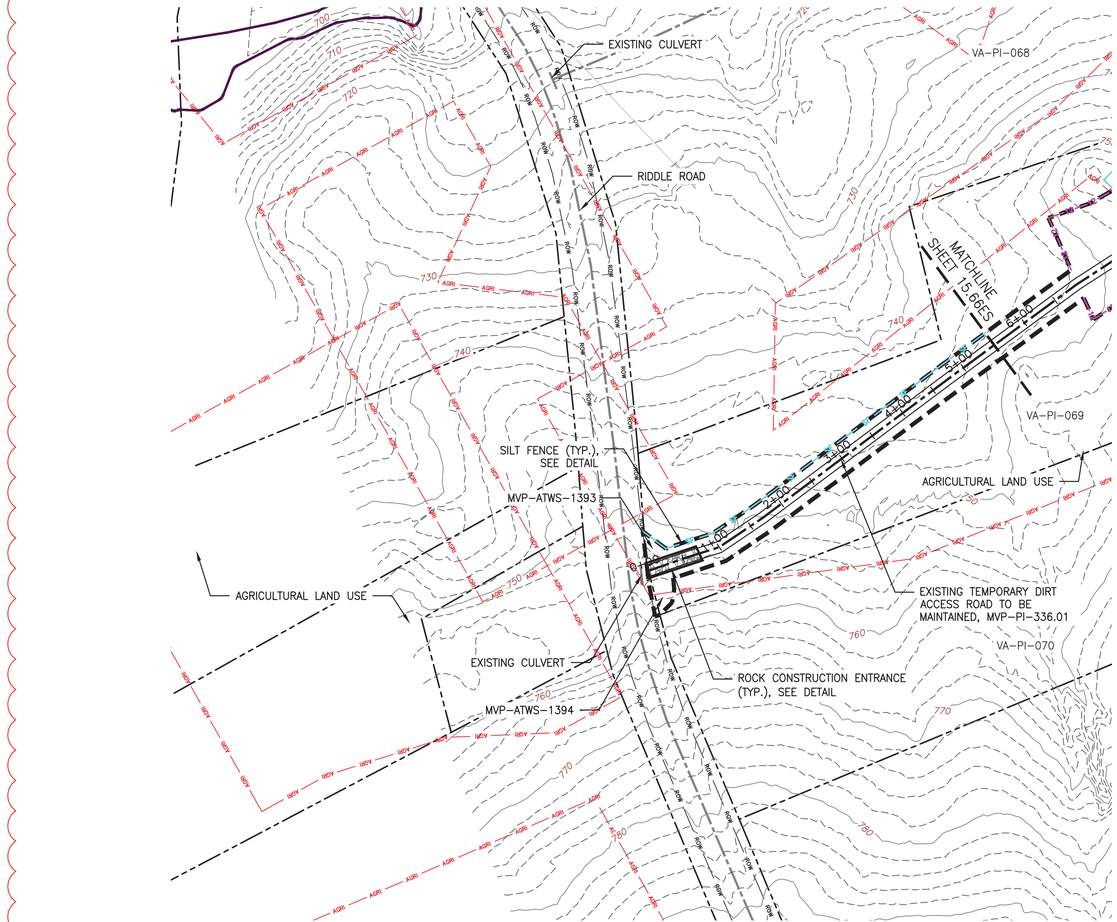
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
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SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.88ES OF 15.99ES

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PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- EXISTING COUNTY LINE
- POND
- WETLAND
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

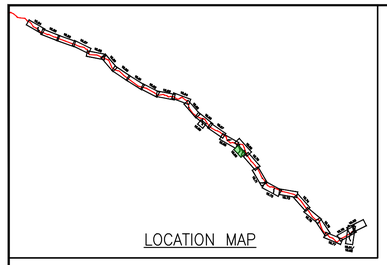
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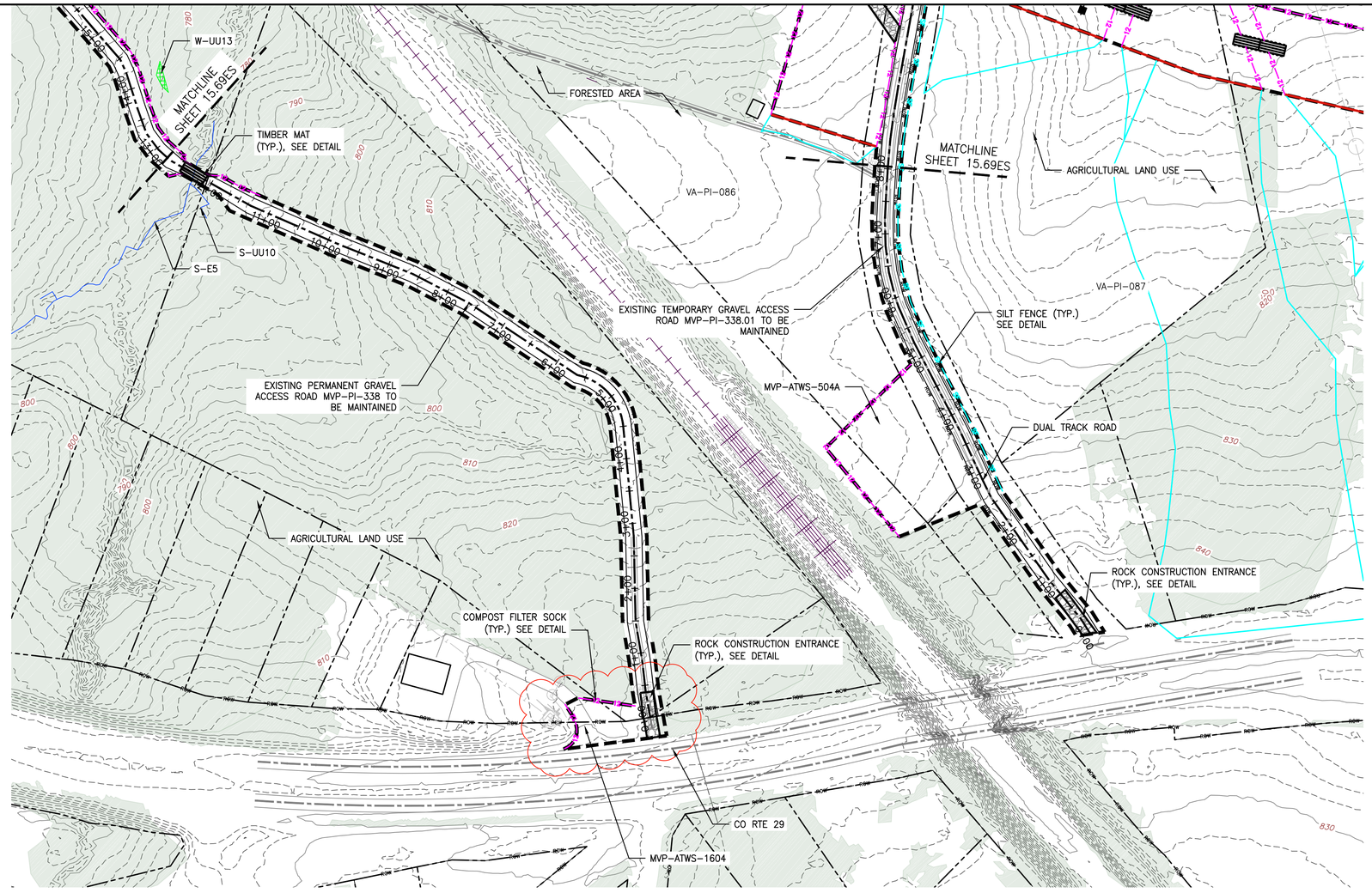
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.89ES OF 15.99ES

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PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
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- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
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REVISIONS:

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
6	12/14/18	KAL	RE	DW	FIELD MODIFICATION
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15317

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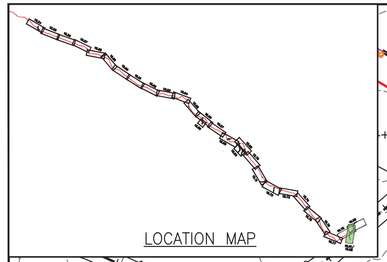
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 04020575S3
PROFESSIONAL ENGINEER

DRAWN BY:	JWK
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	12/14/2018
SCALE:	AS SHOWN
REVISION	6

SHT. NO. 15.90ES OF 15.99ES

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PLAN

SCALE: 1" = 100'

100 0 100 200

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
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REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

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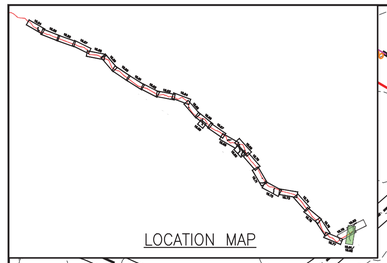
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EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

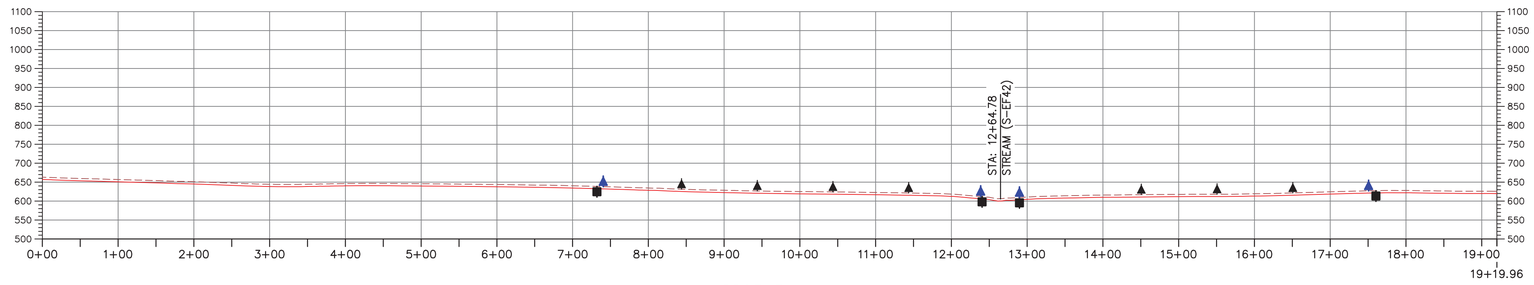
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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED 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 FENCE
- PROPOSED 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 PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- 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 (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION TO BE CONDUCTED THROUGHOUT THE JEFFERSON NATIONAL FOREST.
2. FLEXTERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
3. 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.
4. 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.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VWRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE AND PER DETAIL MVP-ES49.

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
5	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	02/27/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	01/07/18	KAL	RE	DW	ADDRES VADEQ COMMENTS
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H602 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

TETRA TECH
complex world | CLEAR SOLUTIONS™
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

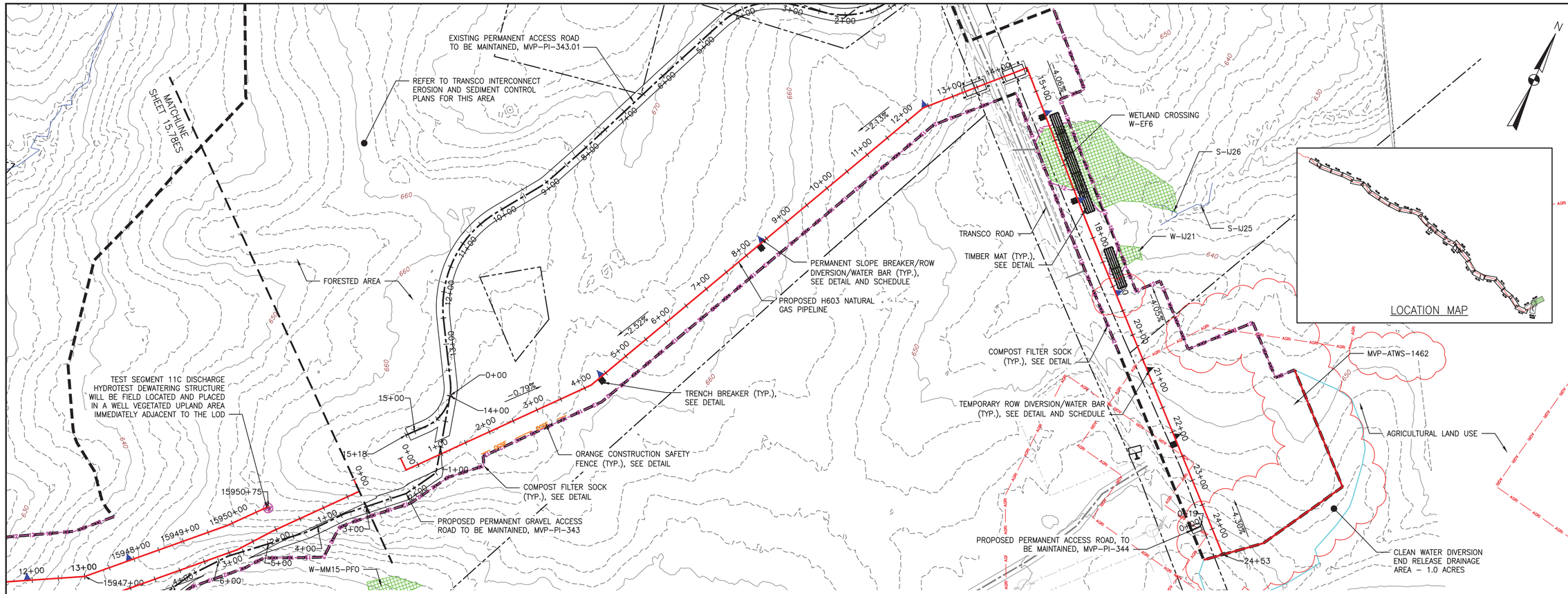
EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
SHT. NO.	15.92ES OF 15.99ES

REVISION

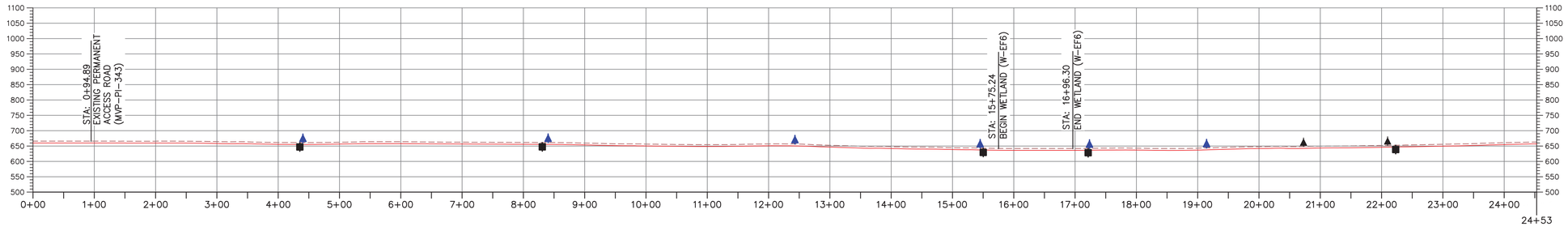
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 200'

200 0 200 400

LEGEND

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- APPALACHIAN NATIONAL SCENIC TRAIL
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TETRA TECH CAD FILE PATH: X:\CADD_Pittsburgh\EQT\7157 - MVP\16 - Pittsylvainia\E&S\ES Version 5.0.0\7157ES15.93(S11).dwg PLOTTED ON: 3/2/2018 10:44 PM PLOTTED BY: Zeigler, Justin PLOT FILE: ENVIRONMENTAL_COLOR.ctb

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
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2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/11/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H603 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

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PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	RE
APPROVED BY:	DW
DATE:	03/04/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	15.93ES OF 15.99ES