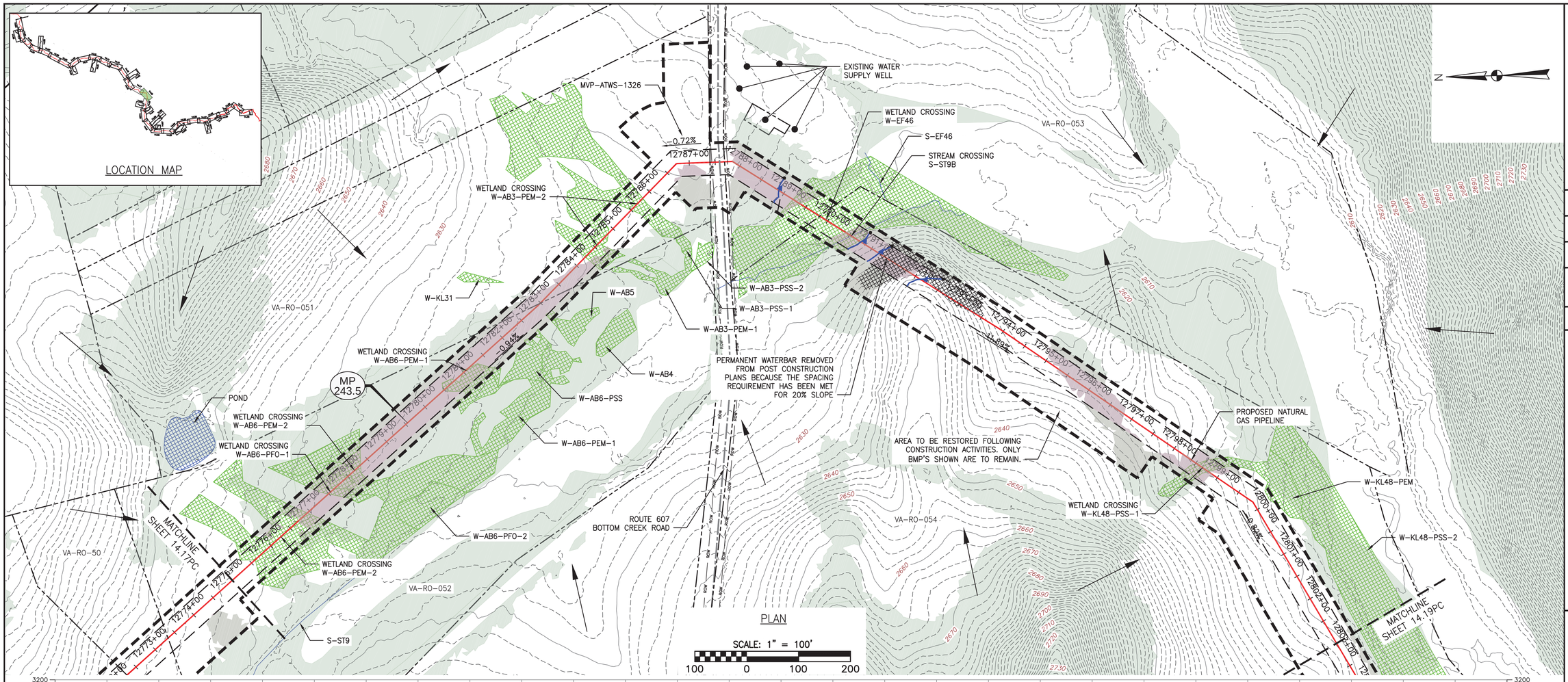
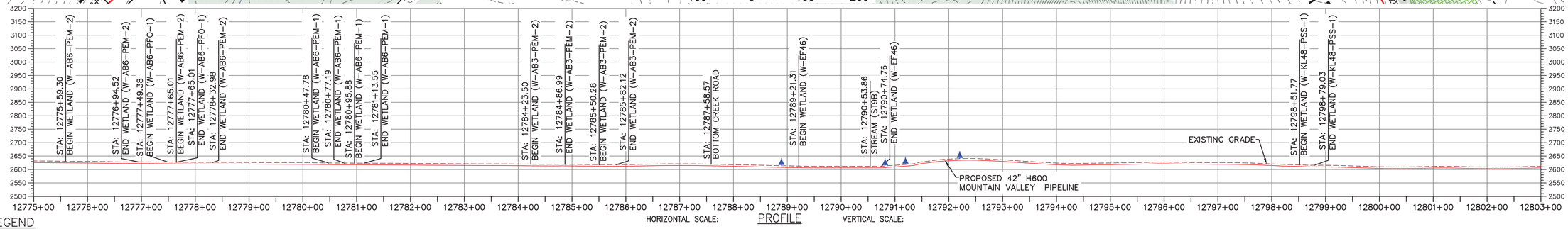


PLAN

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

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATER BARS REGARDLESS OF SPECIFIED CALCULATION LENGTH ARE TO BE INSTALLED WITH 20-FT END TREATMENT LENGTHS, EXCEPT AS NOTED IN NOTE 2 BELOW.
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4	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	02/22/18	KAL	RE	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 10 - ROANOKE COUNTY, VIRGINIA

Mountain Valley PIPELINE

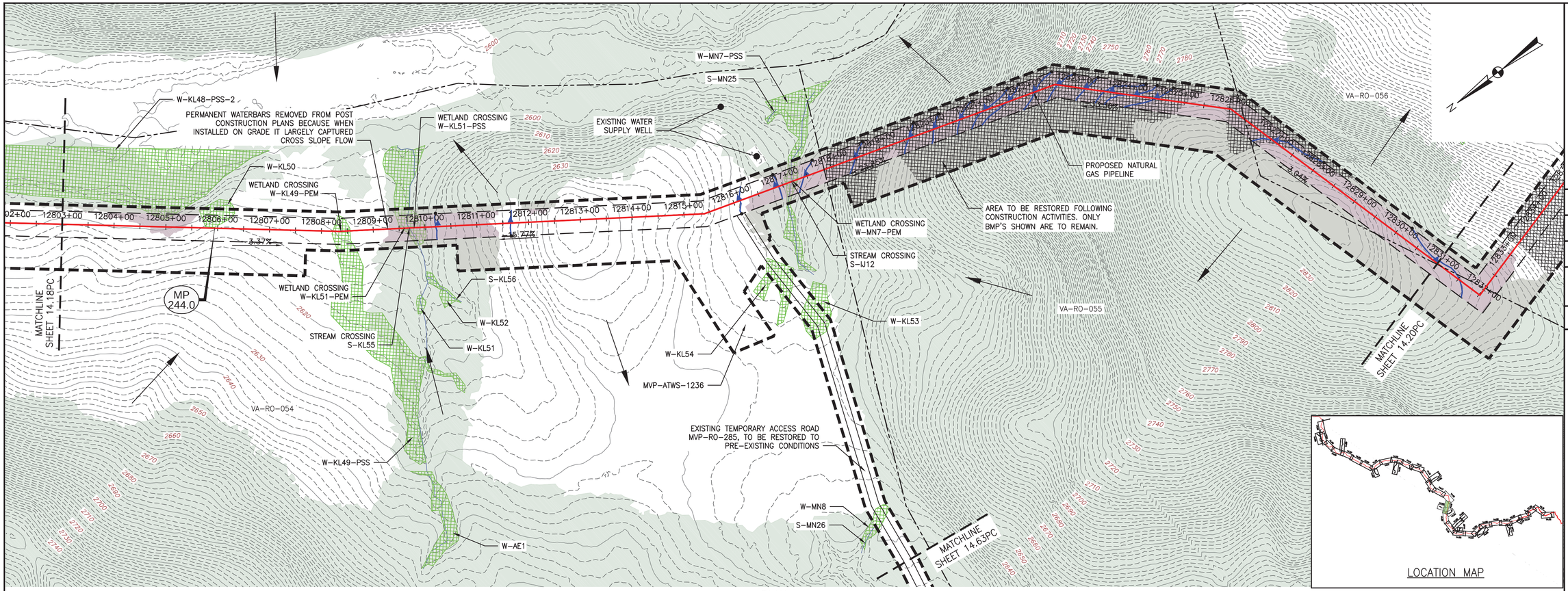
MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15311

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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

DRAWN BY:	LJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN
REVISION	5
SHT. NO.	14.18PC OF 14.77PC

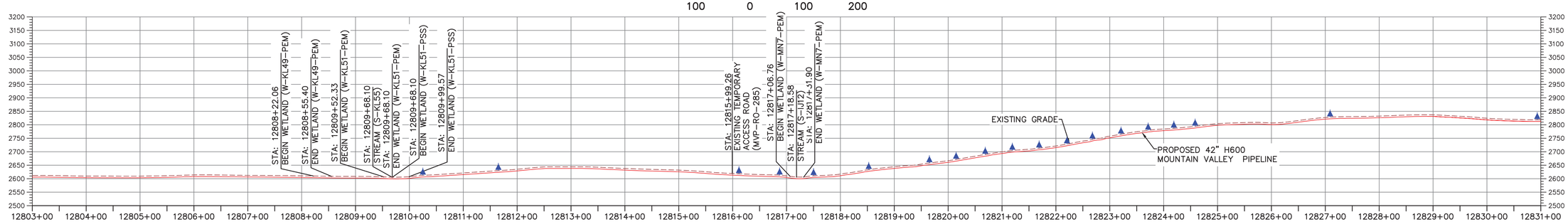


LOCATION MAP

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

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL (ANST)
- ACID FORMING MATERIAL (AFM)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
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1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

Mountain Valley PIPELINE

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 10 – ROANOKE COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15311

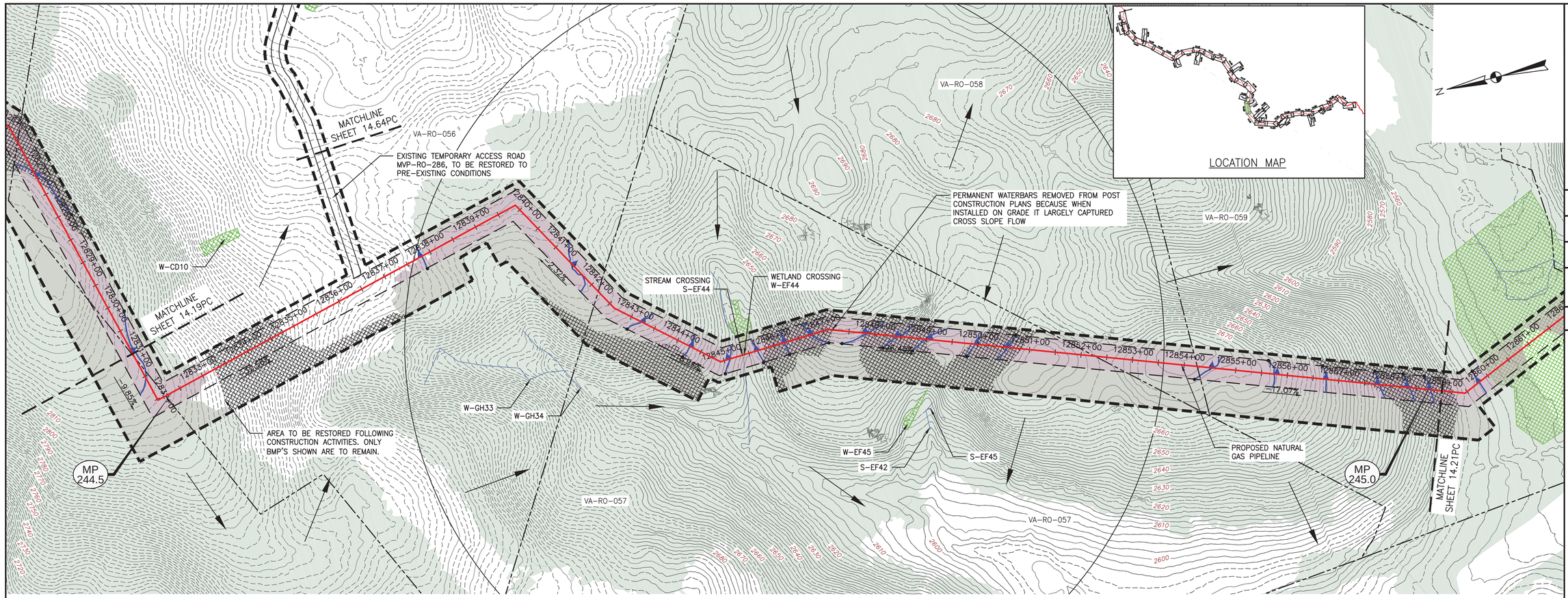
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PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

DRAWN BY:	LJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN
SHT. NO.	14.19PC OF 14.77PC

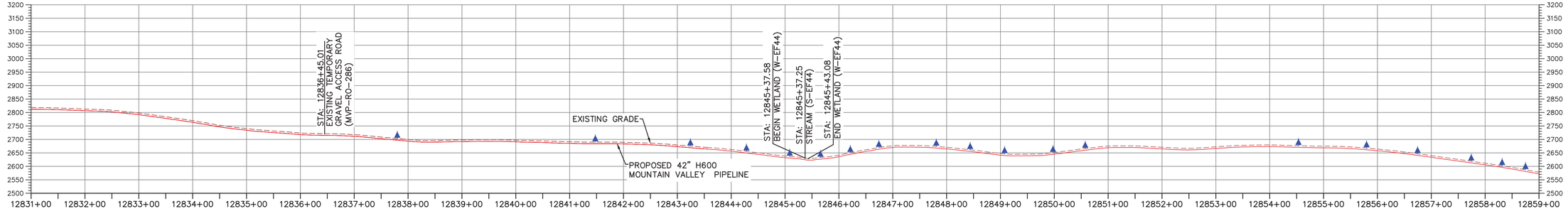
REVISION



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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- EXISTING CULVERT
- STREAM
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1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE
SPREAD 10 – ROANOKE COUNTY, VIRGINIA

Mountain Valley PIPELINE

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

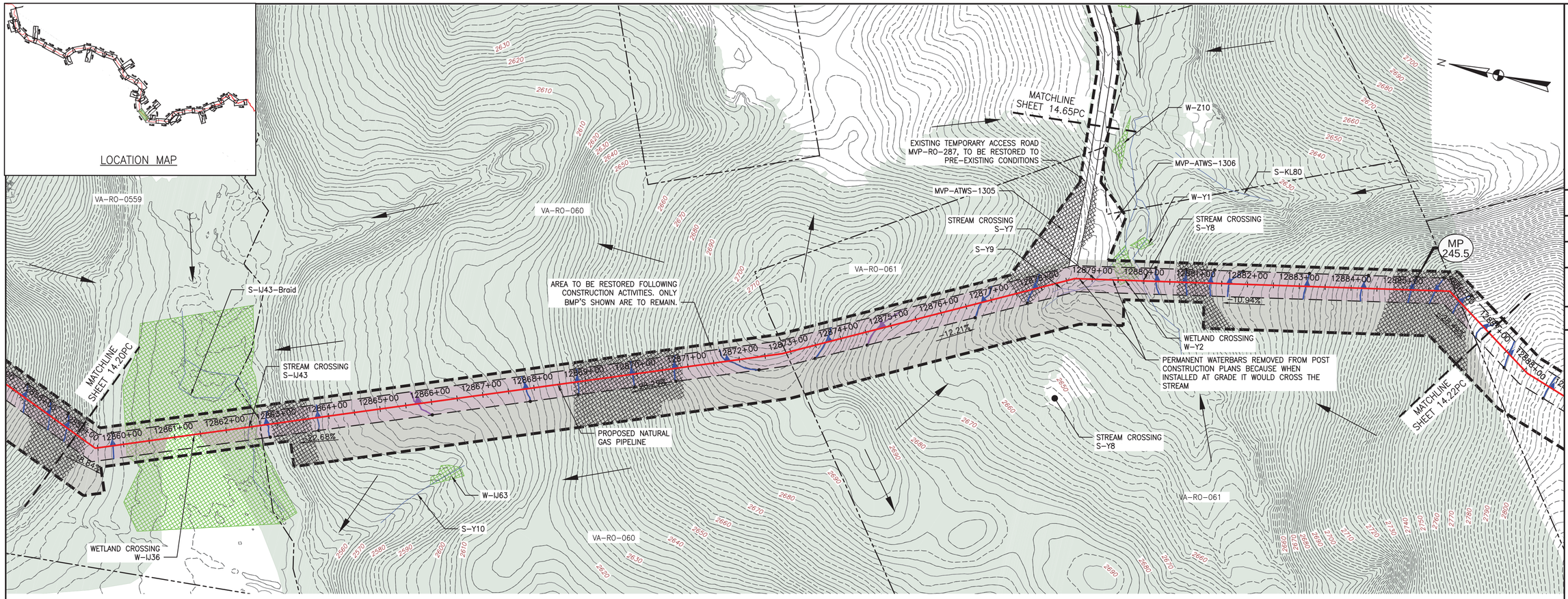
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	LJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN

REVISION

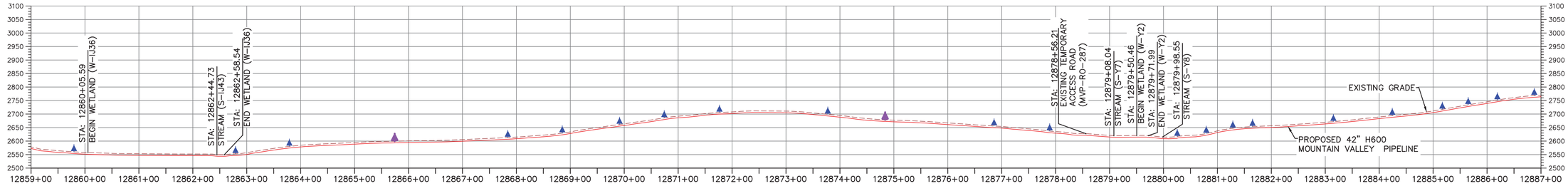
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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
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3	02/22/18	KAL	RE	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 10 – ROANOKE COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15311

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FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

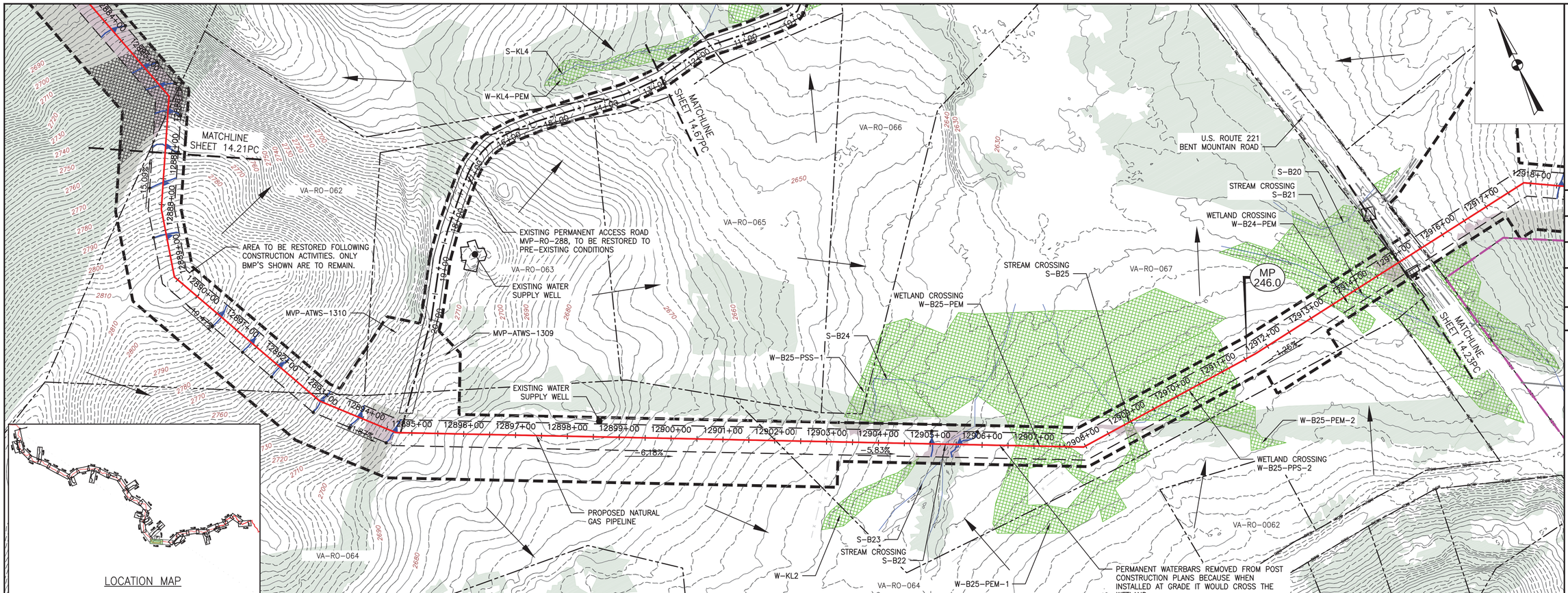
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	LJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN

REVISION

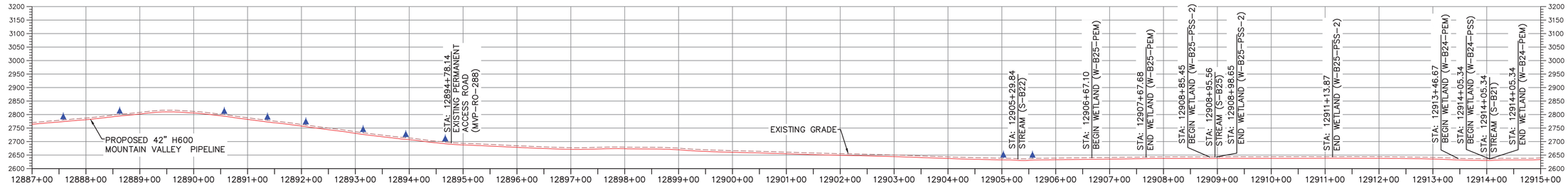
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PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
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- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
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- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
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REVISIONS:

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 10 – ROANOKE COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15311

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661 ANDERSEN DRIVE
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

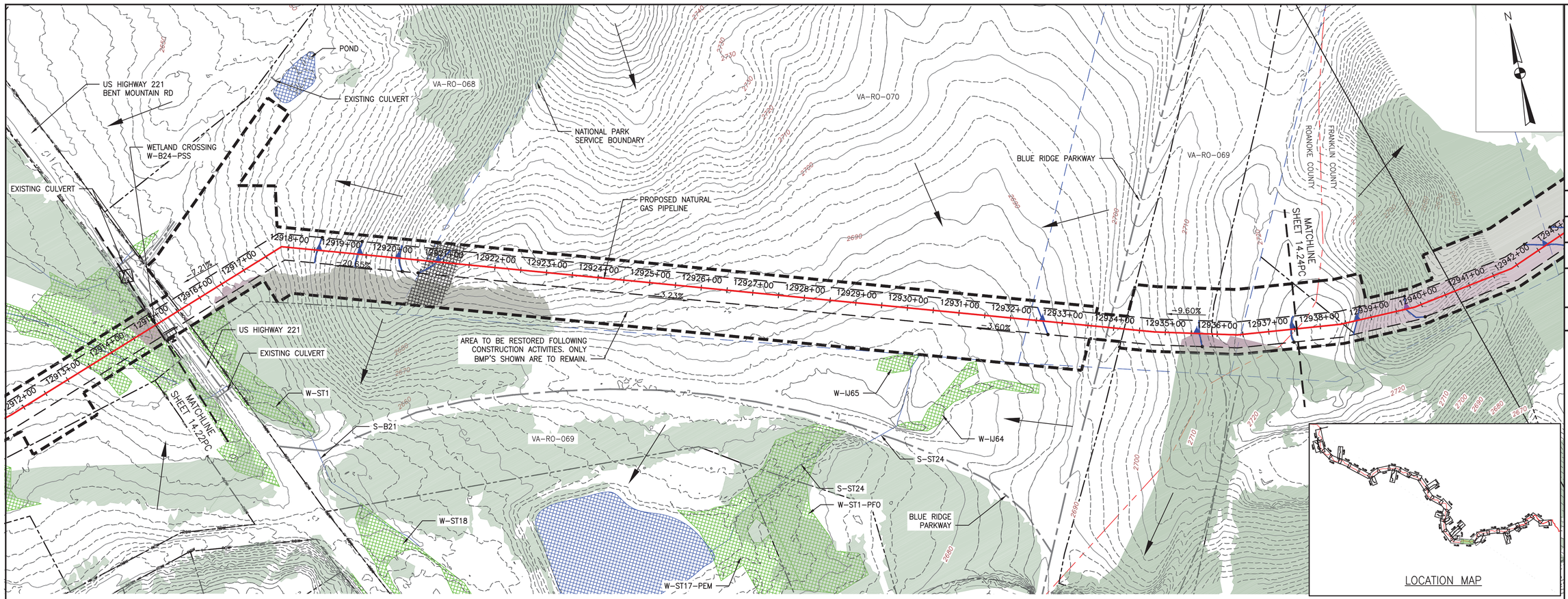
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	LJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 14.22PC OF 14.77PC

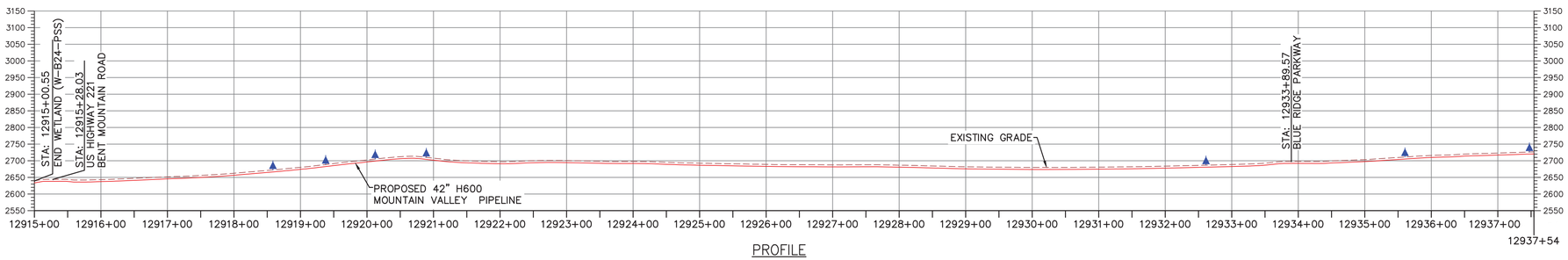
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PLAN

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

- EXISTING CULVERT
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- PROPOSED LEVEL SPREADER
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REVISIONS:

Mountain Valley PIPELINE

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 10 - ROANOKE COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

555 SOUTHPOINTE BOULEVARD, SUITE 200

CANONSBURG, PA 15311

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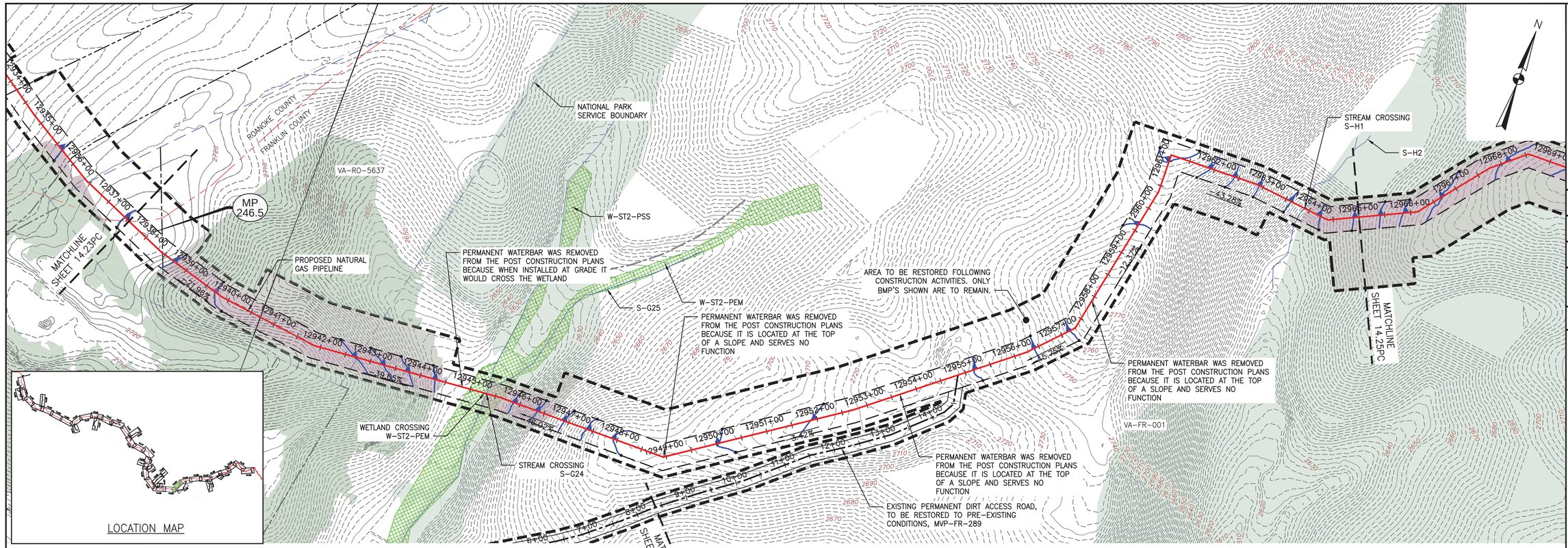
661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

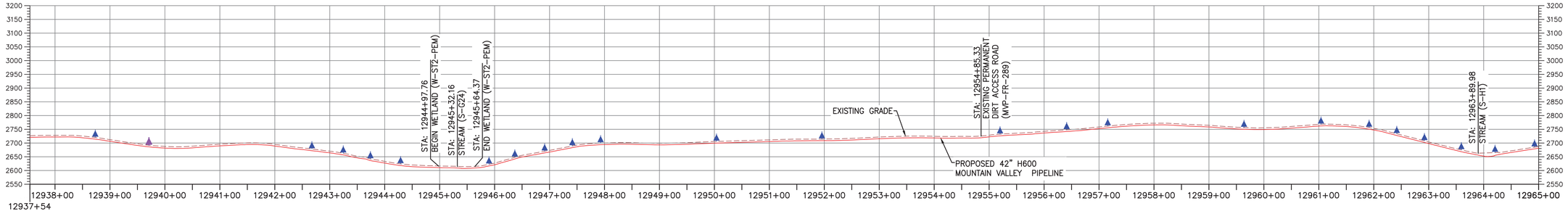
DRAWN BY:	IJK
CHECKED BY:	JRK
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN
REVISION	

SHT. NO. 14.23PC OF 14.77PC



PLAN

SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

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

NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
6	03/21/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
5	03/16/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	02/22/18	KAL	RE	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 10 – FRANKLIN COUNTY, VIRGINIA

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

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PITTSBURGH, PA 15220

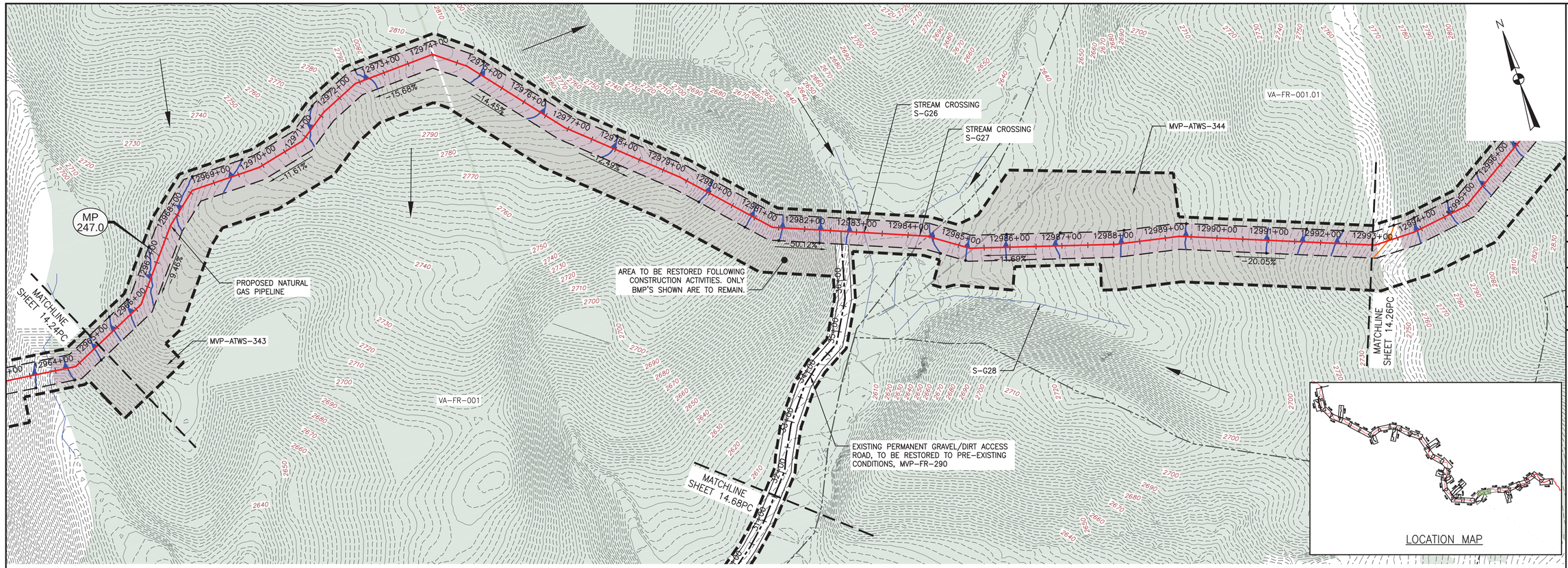
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN

SHT. NO. 14.24PC OF 14.77PC

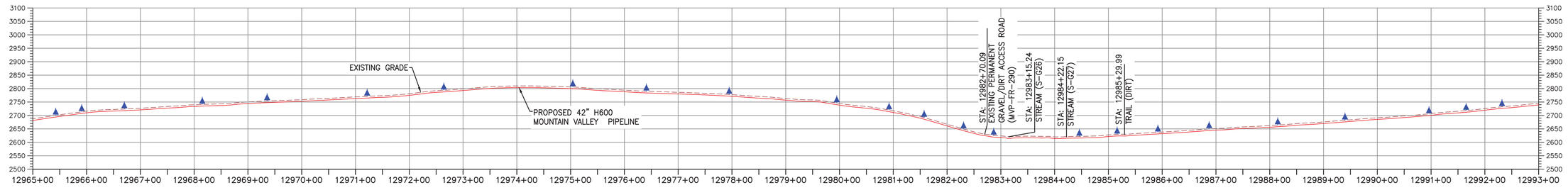
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PLAN

SCALE: 1" = 100'

100 0 100 200



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'

100 0 100 200

VERTICAL SCALE: SCALE: 1" = 50'

50 0 50 100

LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

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

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5	03/16/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
4	03/04/18	KAL	RE	DW	ADDRESS VADEQ COMMENTS
3	02/22/18	KAL	RE	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	RE	DW	ADDRESS VADEQ COMMENTS
1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 10 – FRANKLIN COUNTY, VIRGINIA

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

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PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

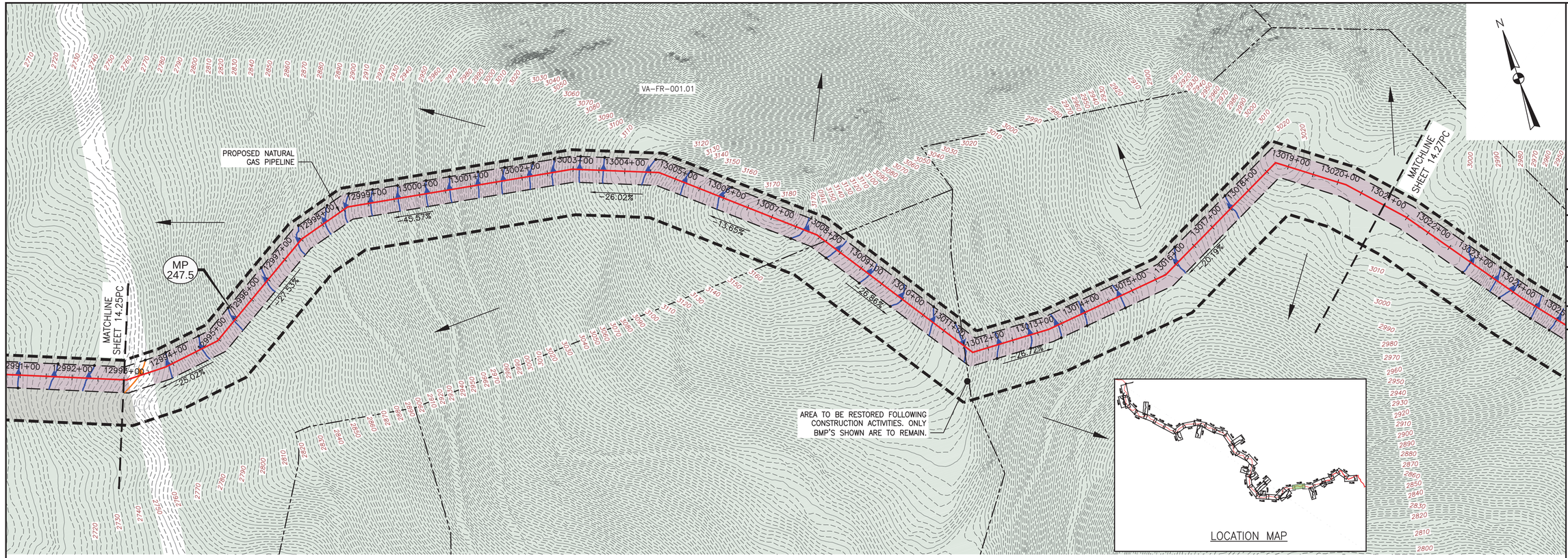
COMMONWEALTH OF VIRGINIA
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
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APPROVED BY:	RE
DATE:	03/21/2018
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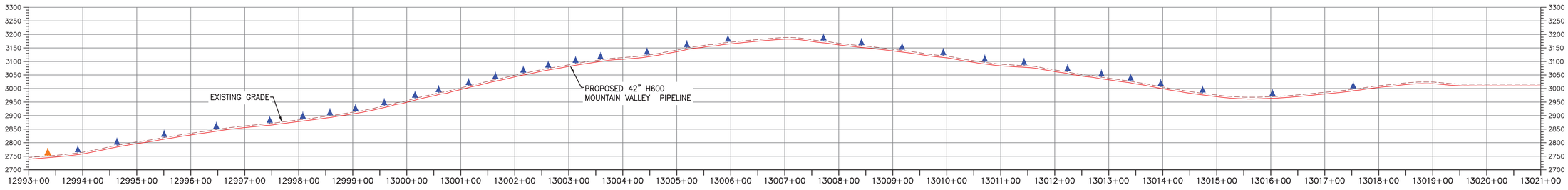
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PLAN

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

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED LEVEL SPREADER DIVERSION
- PROPOSED LEVEL SPREADER
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
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- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

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NO.	DATE:	DWN.:	CHKD.:	APPD.:	DESCRIPTION:
6	03/21/18	KAL	RE	DW	ADDRESS VADEO COMMENTS
5	03/16/18	KAL	RE	DW	ADDRESS VADEO COMMENTS
4	03/04/18	KAL	RE	DW	ADDRESS VADEO COMMENTS
3	02/22/18	KAL	RE	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	RE	DW	ADDRESS VADEO COMMENTS
1	09/21/17	KAL	RE	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley PIPELINE

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

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

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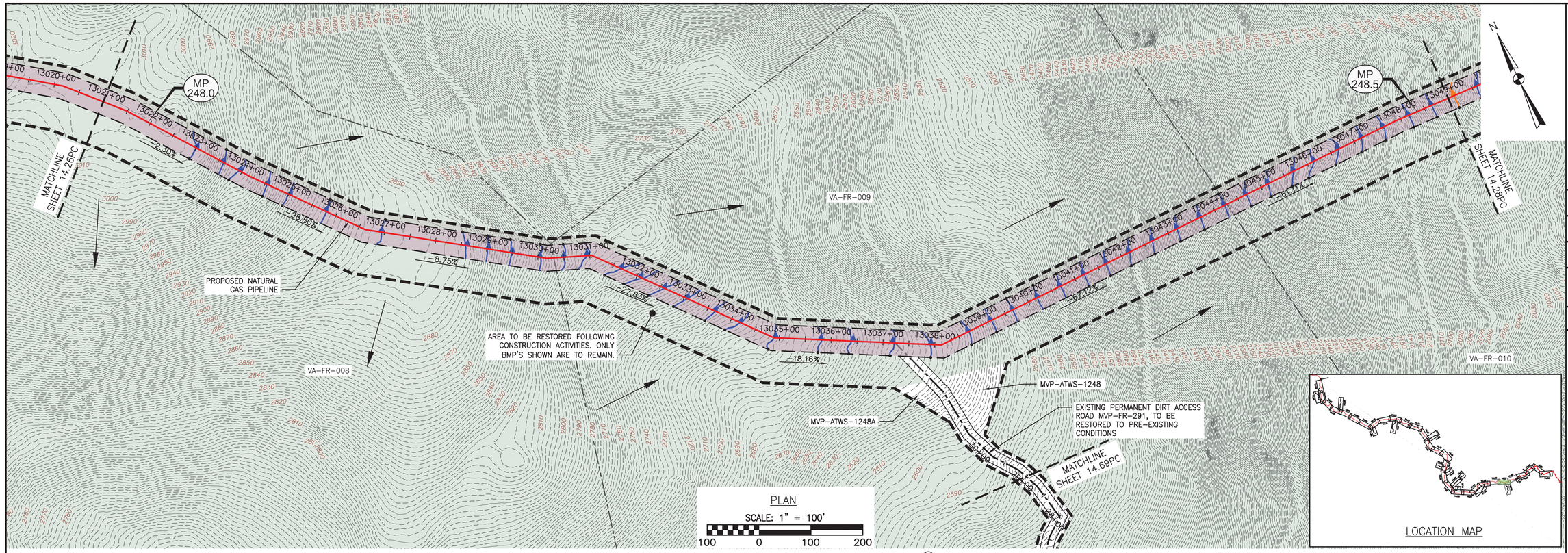
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	03/21/2018
SCALE:	AS SHOWN

REVISION

SHT. NO. 14.26PC OF 14.77PC



LEGEND

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

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE
SPREAD 10 – FRANKLIN COUNTY, VIRGINIA

Mountain Valley PIPELINE

MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

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

DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	03/21/2018
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REVISION

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