

LEGEND

- | | | | | |
|--|---|--|--|-----|
| | EXISTING CULVERT | | PROPOSED LIMIT OF DISTURBANCE | 100 |
| | STREAM | | PROPOSED ACCESS ROAD CENTERLINE | |
| | US FOREST SERVICE (NATIONAL FOREST) LANDS | | PROPOSED PIPELINE | |
| | APPALACHIAN NATIONAL SCENIC TRAIL | | PROPOSED SILT FENCE (SEE NOTE 5) | |
| | EXISTING ROAD/TRAIL | | PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) | |
| | EXISTING PROPERTY LINE | | PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) | |
| | EXISTING STATE LINE | | ORANGE CONSTRUCTION SAFETY FENCE | |
| | EXISTING COUNTY LINE | | PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) | |
| | POND | | PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) | |
| | WETLAND | | PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) | |
| | ACID FORMING MATERIAL | | GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | |
| | AGRICULTURAL LAND USE BOUNDARY | | PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | |

ACCESS ROAD LEGEND

- 1 ROCK CONSTRUCTION ENTRANCE
(VADEQ STD & SPEC 3.02)
- 2 WETLAND CROSSING
(DETAIL MVP-ES37)
- 3 STREAM CROSSING
(VADEQ STD & SPEC 3.24)

NOTES:

1. TOPSOIL SEGREGATION WILL BE PERFORMED IN ALL IMMEDIATE CONSTRUCTION AREAS OF THE PROJECT IN ACCORDANCE WITH DETAIL MVP-ES46.1 THROUGH MVP-ES46.3.
2. FLEXITERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
3. THE 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. 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.

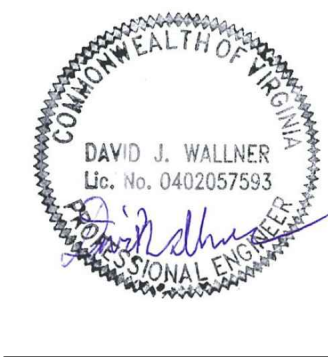
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 **Mountain Valley Pipeline**
EROSION AND SEDIMENT CONTROL PLANS
MOUNTAIN VALLEY PIPELINE PROJECT — H600 LINE
SPREAD 11 — PITTSYLVANIA COUNTY, VIRGINIA

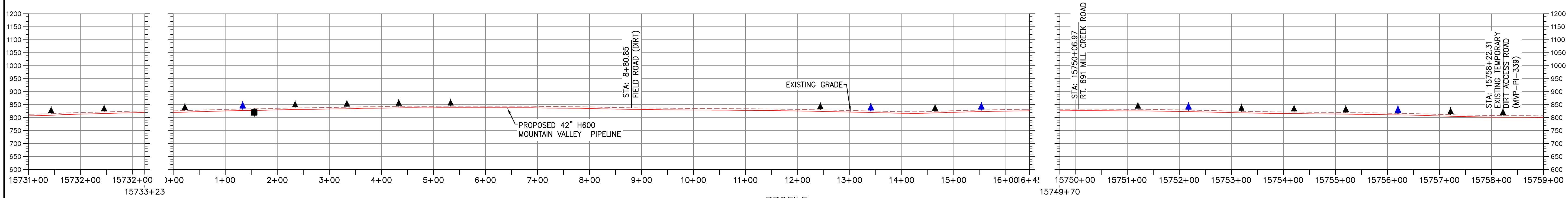
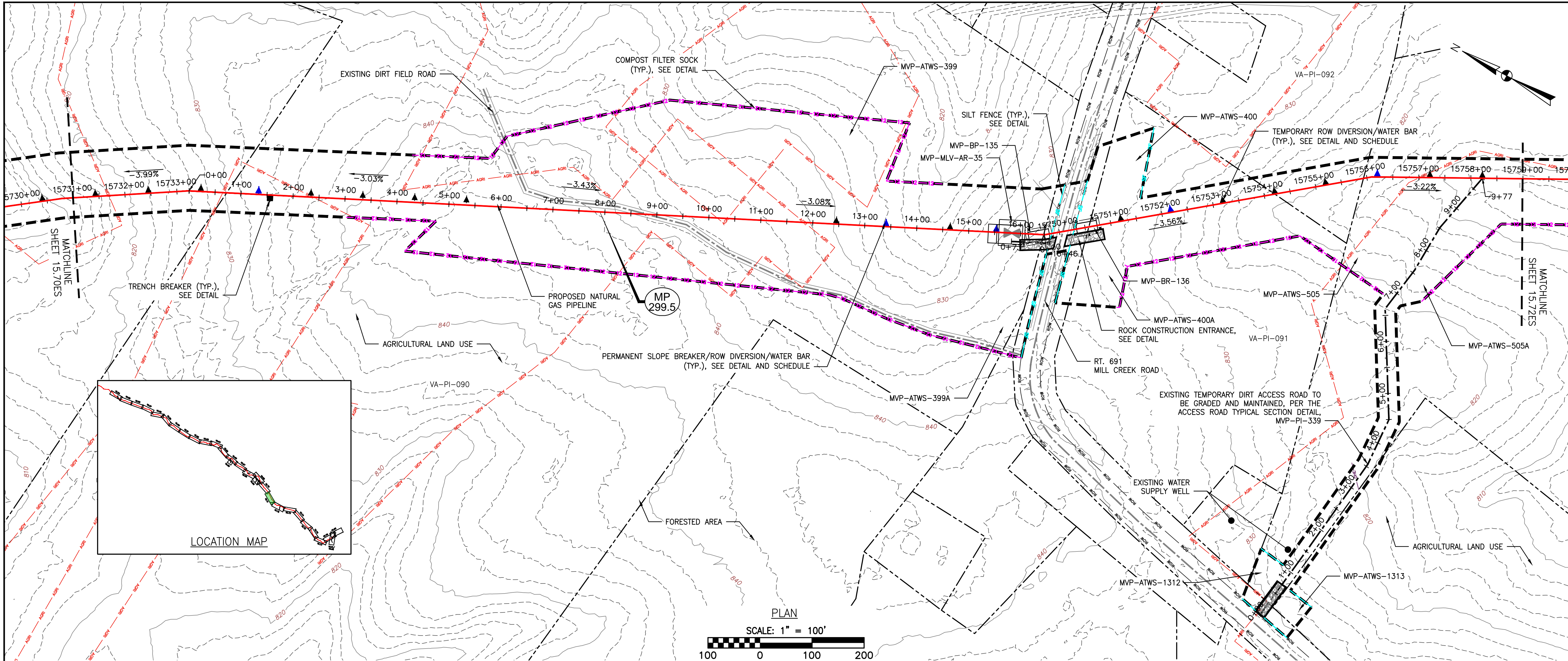
MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317



EROSION AND SEDIMENT CONTROL PLANS

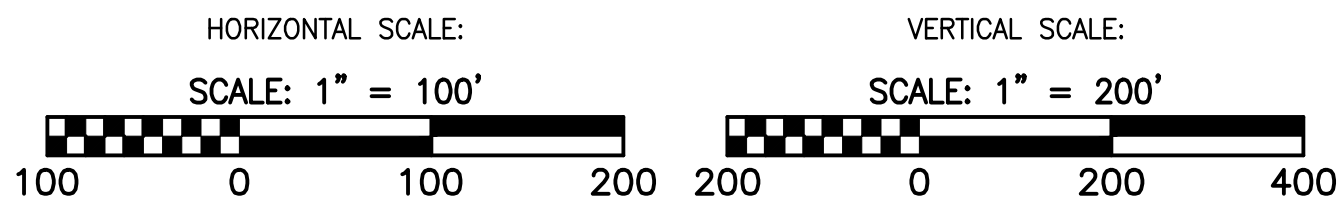


DRAWN BY:		KAL
CHECKED BY:		HT
APPROVED BY:		RE
DATE:	9/08/2017	 REVISION
SCALE:	AS SHOWN	
SHT. NO. 15.70ES OF 15.99ES		



LEGEND

- | | |
|---|--|
| — EXISTING CULVERT | — PROPOSED LIMIT OF DISTURBANCE |
| — STREAM | — PROPOSED ACCESS ROAD CENTERLINE |
| — US FOREST SERVICE (NATIONAL FOREST) LANDS | — PROPOSED PIPELINE |
| — APPALACHIAN NATIONAL SCENIC TRAIL | — PROPOSED SILT FENCE (SEE NOTE 5) |
| — EXISTING ROAD/TRAIL | — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| — EXISTING PROPERTY LINE | — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| — EXISTING STATE LINE | — ORANGE CONSTRUCTION SAFETY FENCE |
| — EXISTING COUNTY LINE | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — POND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — WETLAND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — ACID FORMING MATERIAL | — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| — AGRICULTURAL LAND USE BOUNDARY | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) |



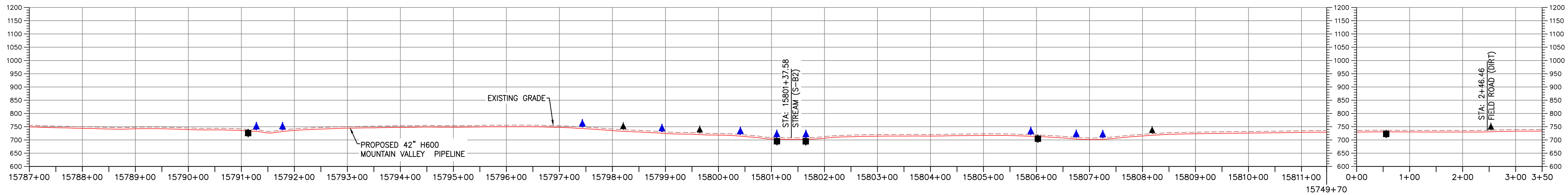
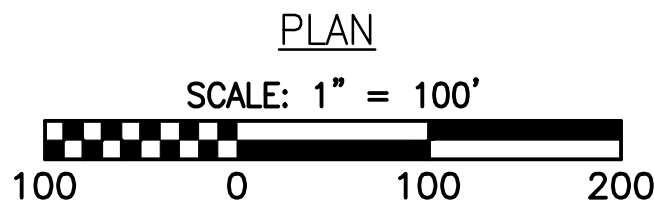
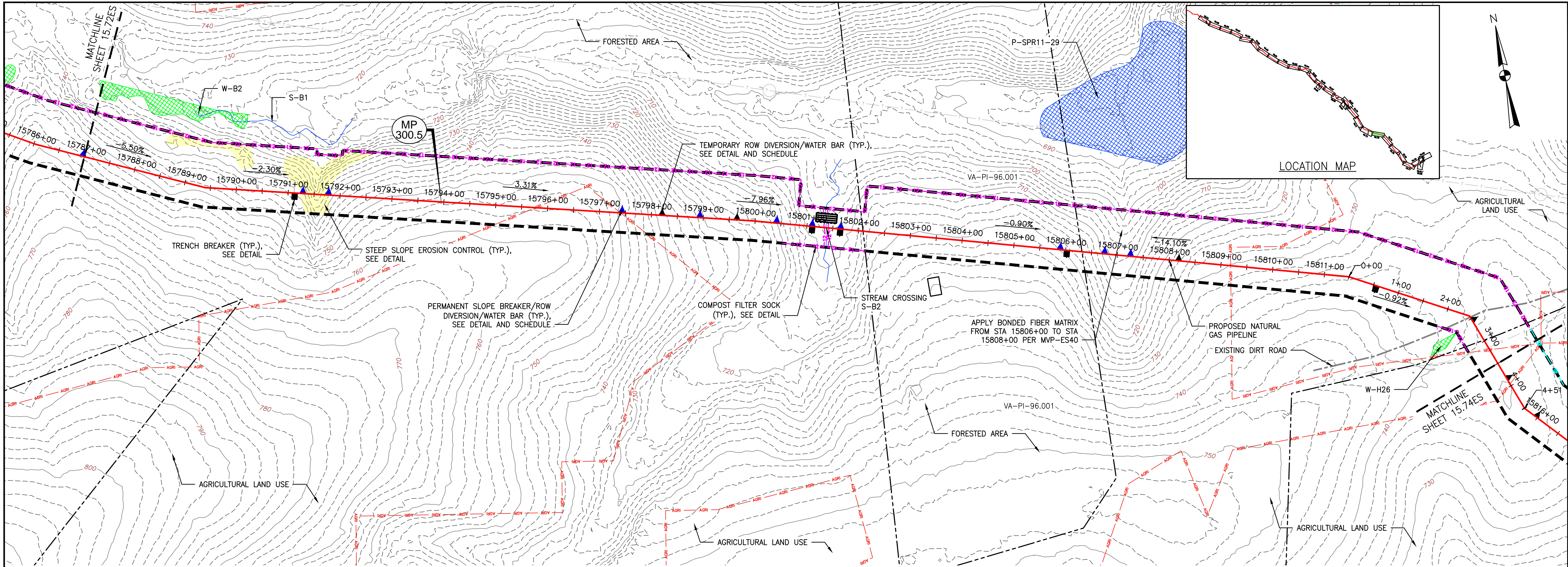
ACCESS ROAD LEGEND

- ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02)
- WETLAND CROSSING (DETAIL MVP-ES37)
- STREAM CROSSING (VADEQ STD & SPEC 3.24)

NOTES:

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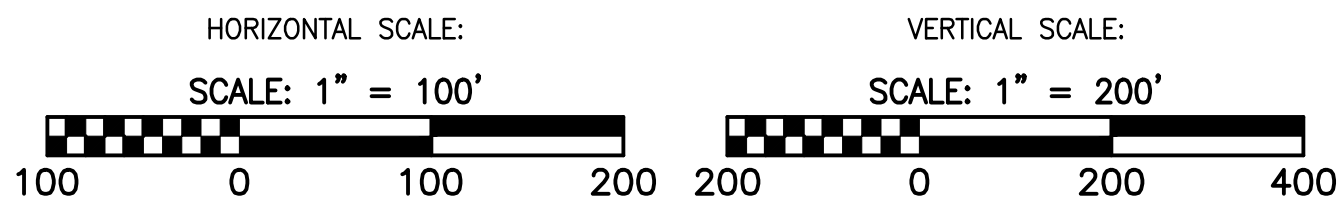
Mountain Valley Pipeline		EROSION AND SEDIMENT CONTROL PLANS	
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE		SPREAD 11 - PITTSYLVANIA COUNTY, VIRGINIA	
MOUNTAIN VALLEY PIPELINE, LLC		555 SOUTHPOINTE BOULEVARD, SUITE 200 CANONSBURG, PA 15317	
REVISIONS:		NO. DATE: DWG. CHKD. APPD. DESCRIPTION:	
TETRA TECH		complex world CLEAR SOLUTIONS™	
661 ANDERSEN DRIVE FOSTER PLAZA 7 PITTSBURGH, PA 15220		EROSION AND SEDIMENT CONTROL PLANS	
DAVID J. WALLNER Lic. No. 0402057593 Professional Engineer		DRAWN BY: KAL CHECKED BY: HT APPROVED BY: RE DATE: 9/08/2017 SCALE: AS SHOWN SHT. NO. 15.71ES OF 15.99ES	



PROFILE

LEGEND

- | | |
|---|--|
| — EXISTING CULVERT | --- PROPOSED LIMIT OF DISTURBANCE |
| — STREAM | --- PROPOSED ACCESS ROAD CENTERLINE |
| — US FOREST SERVICE (NATIONAL FOREST) LANDS | — PROPOSED PIPELINE |
| — APPALACHIAN NATIONAL SCENIC TRAIL | — PROPOSED SILT FENCE (SEE NOTE 5) |
| — EXISTING ROAD/TRAIL | — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| — EXISTING PROPERTY LINE | — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| — EXISTING STATE LINE | — ORANGE CONSTRUCTION SAFETY FENCE |
| — EXISTING COUNTY LINE | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — POND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
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| — ACID FORMING MATERIAL | — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| — AGRICULTURAL LAND USE BOUNDARY | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) |



- ACCESS ROAD LEGEND
- | |
|--|
| ① ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02) |
| ② WETLAND CROSSING (DETAIL MVP-ES37) |
| ③ STREAM CROSSING (VADEQ STD & SPEC 3.24) |
- | |
|--|
| — 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) |
| — PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5) |
| — 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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- ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE.

REVISIONS:			
NO.	DATE	CHKD.	DESCRIPTION

Mountain Valley Pipeline
EROSION AND SEDIMENT CONTROL PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 11 - PITTSBURGH COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINTE BOULEVARD, SUITE 200
CANONSBURG, PA 15317

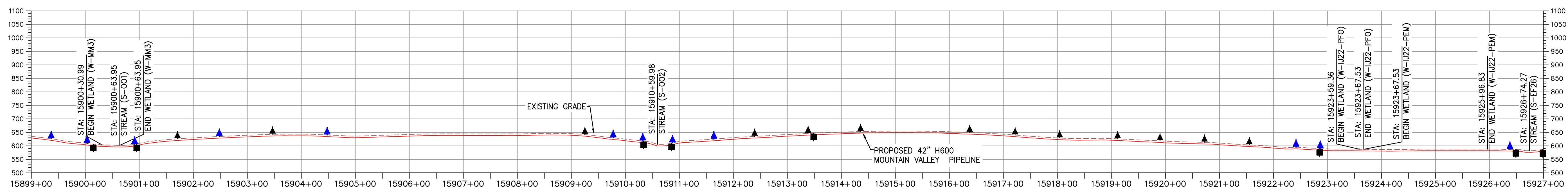
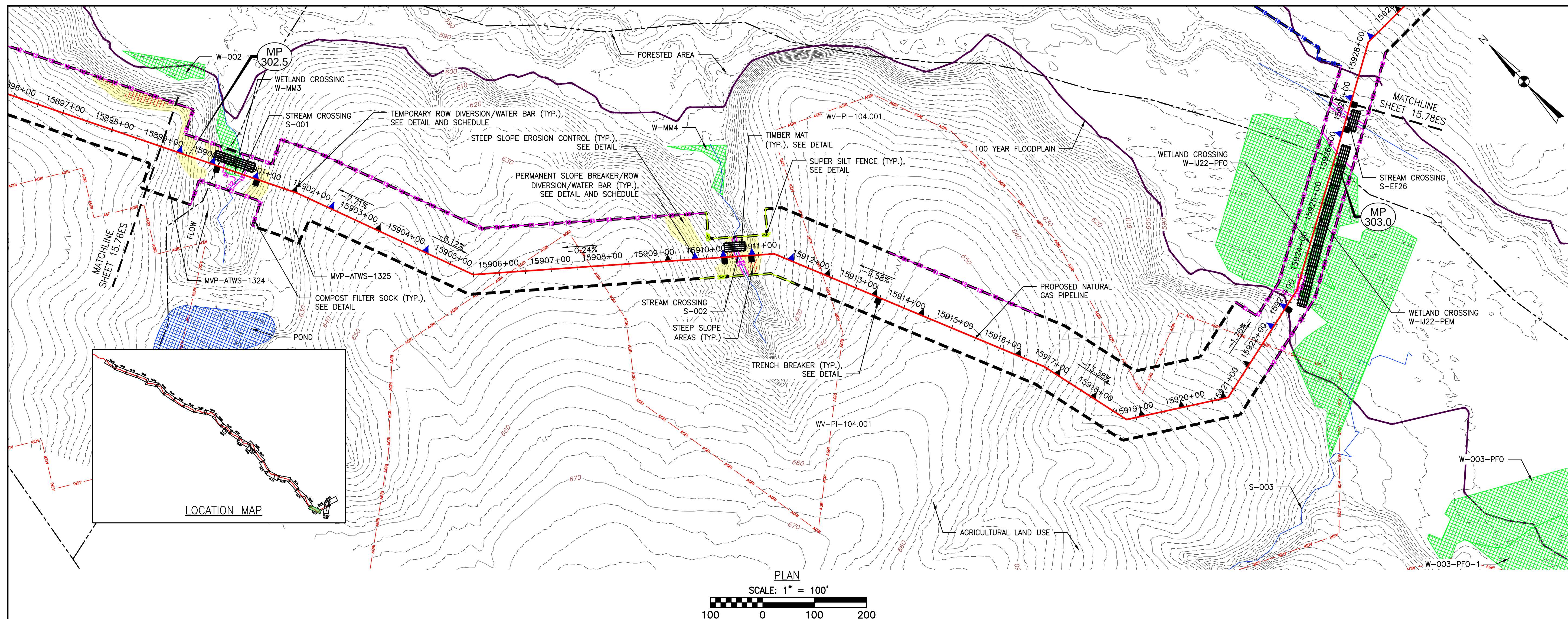
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

COMMONWEALTH OF PENNSYLVANIA
DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer

DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	9/08/2017
SCALE:	AS SHOWN
SHT. NO. 15.73ES OF 15.99ES	REVISION



LEGEND

- Legend:

 - EXISTING CULVERT
 - STREAM
 - US 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 LIMIT OF DISTURBANCE
 - 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)
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)

ACCESS ROAD LEGEND

- 1 ROCK CONSTRUCTION ENTRANCE
(VADEQ STD & SPEC 3.02)
- 2 WETLAND CROSSING
(DETAIL MVP-ES37)
- 3 STREAM CROSSING
(VADEQ STD & SPEC 3.24)

NOTES:

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Mountain Valley

PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11 – PITTSYLVANIA COUNTY, VIRGINIA

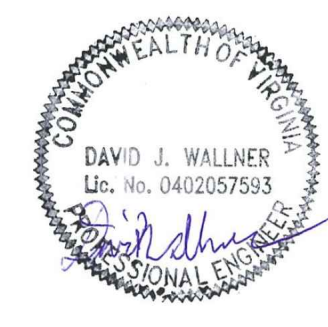
MOUNTAIN VALLEY PIPELINE, LLC


555 SOUTHPOINTE BOULEVARD, SUITE 200

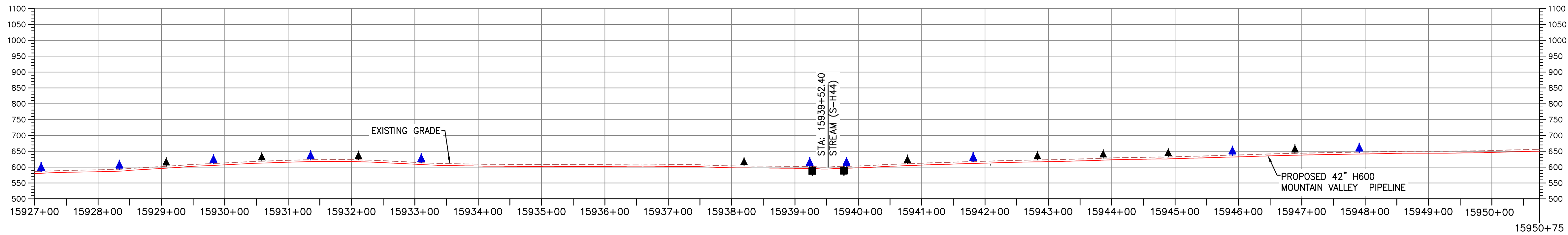
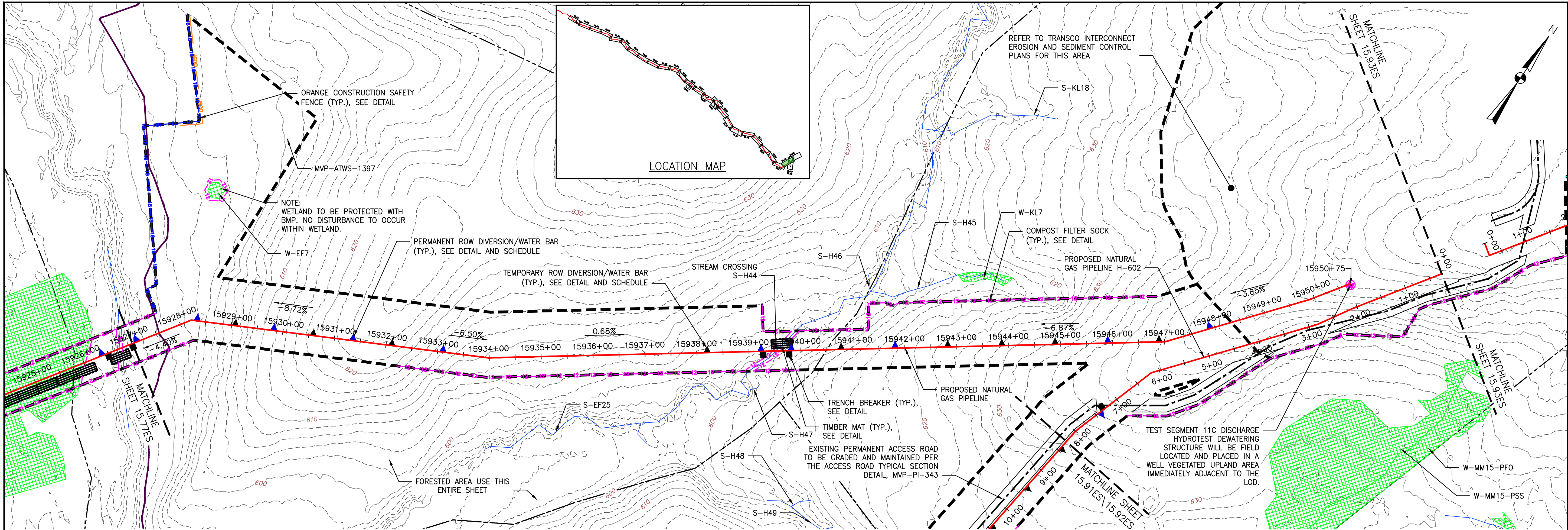
CANONSBURG, PA 15317



DESIGN AND SEDIMENT CONTROL PLANS

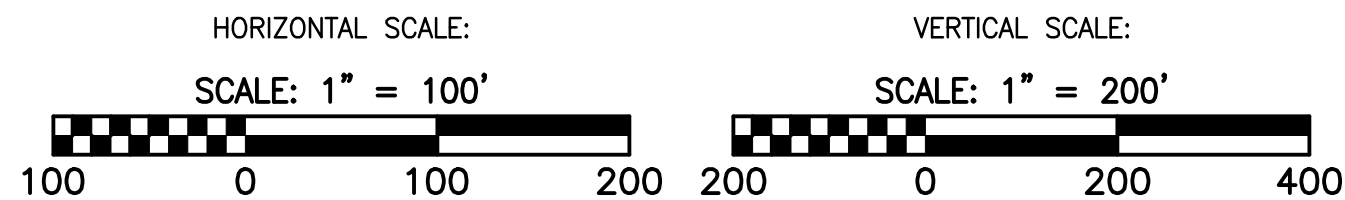


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DATE:	9/08/2017	 REVISION
SCALE:	AS SHOWN	
SHT. NO. 15.77ES OF 15.99ES		



LEGEND

EXISTING CULVERT	PROPOSED LIMIT OF DISTURBANCE
STREAM	PROPOSED ACCESS ROAD CENTERLINE
US FOREST SERVICE (NATIONAL FOREST) LANDS	PROPOSED PIPELINE
APPALACHIAN NATIONAL SCENIC TRAIL	PROPOSED SILT FENCE (SEE NOTE 5)
EXISTING ROAD/TRAIL	PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
EXISTING PROPERTY LINE	PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
EXISTING STATE LINE	ORANGE CONSTRUCTION SAFETY FENCE
EXISTING COUNTY LINE	PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
POND	PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
WETLAND	PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
ACID FORMING MATERIAL	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
AGRICULTURAL LAND USE BOUNDARY	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)



TIMBER MAT (SEE DETAIL MVP-ES37)	ACCESS ROAD LEGEND
STEEP SLOPE EROSION CONTROL (SEE NOTE 2)	1 ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02)
STEEP SLOPE AREAS (SEE NOTE 4)	2 WETLAND CROSSING (DETAIL MVP-ES37)
PROPOSED ROCK CONSTRUCTION ENTRANCE	3 STREAM CROSSING (VADEQ STD & SPEC 3.24)
PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)	
PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5)	
TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11)	
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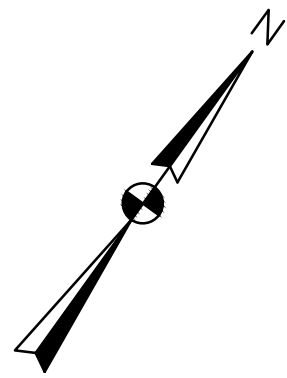
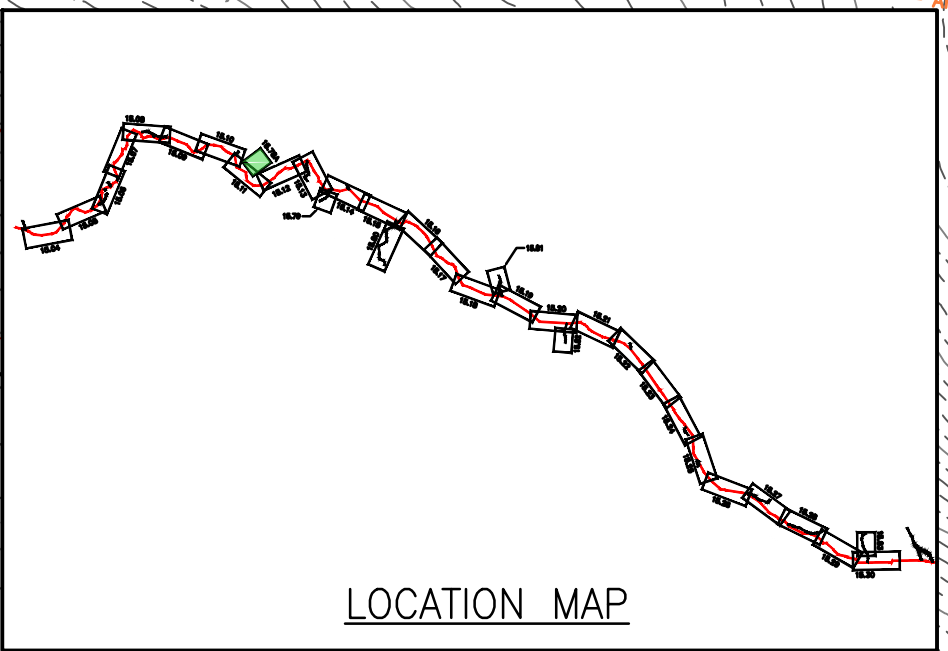
Mountain Valley Pipeline		EROSION AND SEDIMENT CONTROL PLANS		MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE		SPREAD 11 - PITTSBURGH COUNTY, VIRGINIA		MOUNTAIN VALLEY PIPELINE, LLC		555 SOUTHPOINTE BOULEVARD, SUITE 200		CANONSBURG, PA 15317	
NO.		DATE:		CHKD.:		APPD.:		REVISIONS:					
DESCRIPTION:													

661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220


EROSION AND SEDIMENT CONTROL PLANS

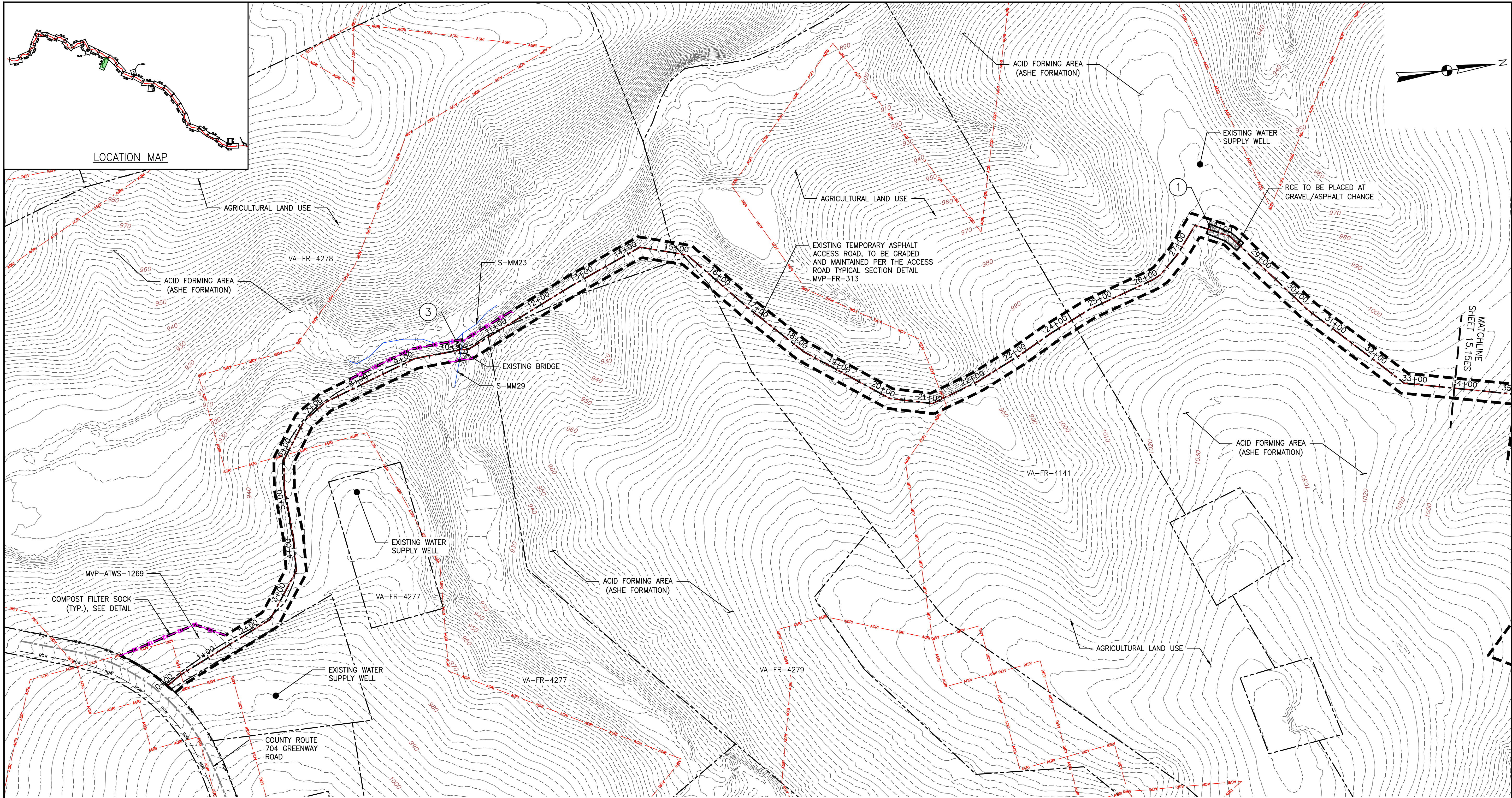
DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer

DRAWN BY: KAL
CHECKED BY: HT
APPROVED BY: RE
DATE: 9/08/2017
SCALE: AS SHOWN
SHT. NO. 15.78ES OF 15.99ES



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SCALE:	AS SHOWN	
SHT. NO. 15.78AES OF 15.99ES		



LEGEND

- | | |
|---|--|
| — EXISTING CULVERT | — PROPOSED LIMIT OF DISTURBANCE |
| — STREAM | — PROPOSED ACCESS ROAD CENTERLINE |
| — US FOREST SERVICE (NATIONAL FOREST) LANDS | — PROPOSED PIPELINE |
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| — EXISTING ROAD/TRAIL | — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
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PLAN

SCALE: 1" = 100'



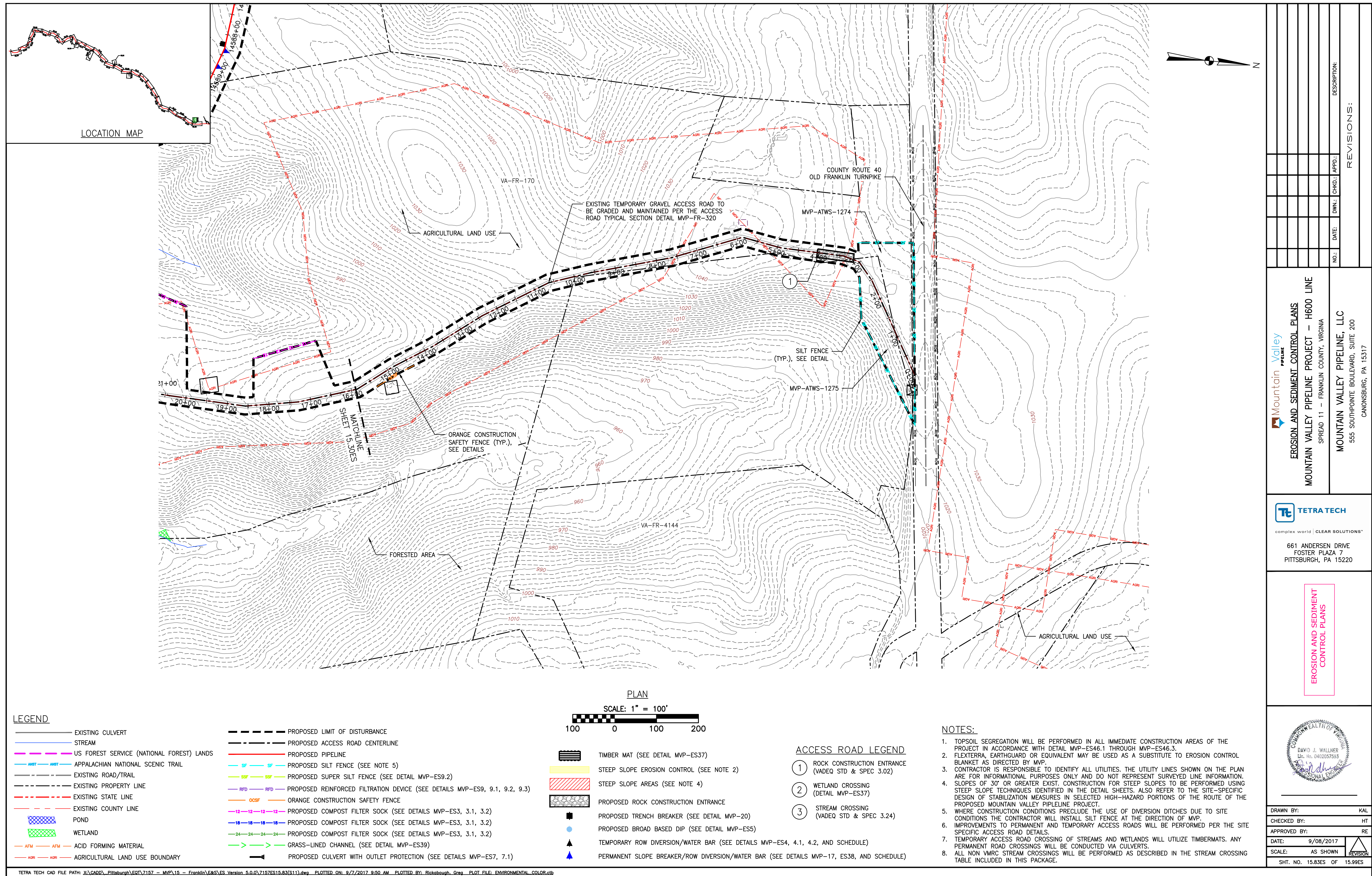
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|--|--|
| | TIMBER MAT (SEE DETAIL MVP-ES37) |
| | STEEP SLOPE EROSION CONTROL (SEE NOTE 2) |
| | STEEP SLOPE AREAS (SEE NOTE 4) |
| | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| | PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20) |
| | PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5) |
| | TEMPORARY ROW DIVERSION/WATER BAR (SEE DETAILS MVP-ES4, 4.1, 4.2, AND SCHEDULE) |
| | PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE) |
- ACCESS ROAD LEGEND**
- | | |
|---|--|
| ① | ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02) |
| ② | WETLAND CROSSING (DETAIL MVP-ES37) |
| ③ | STREAM CROSSING (VADEQ STD & SPEC 3.24) |

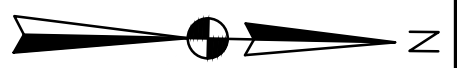
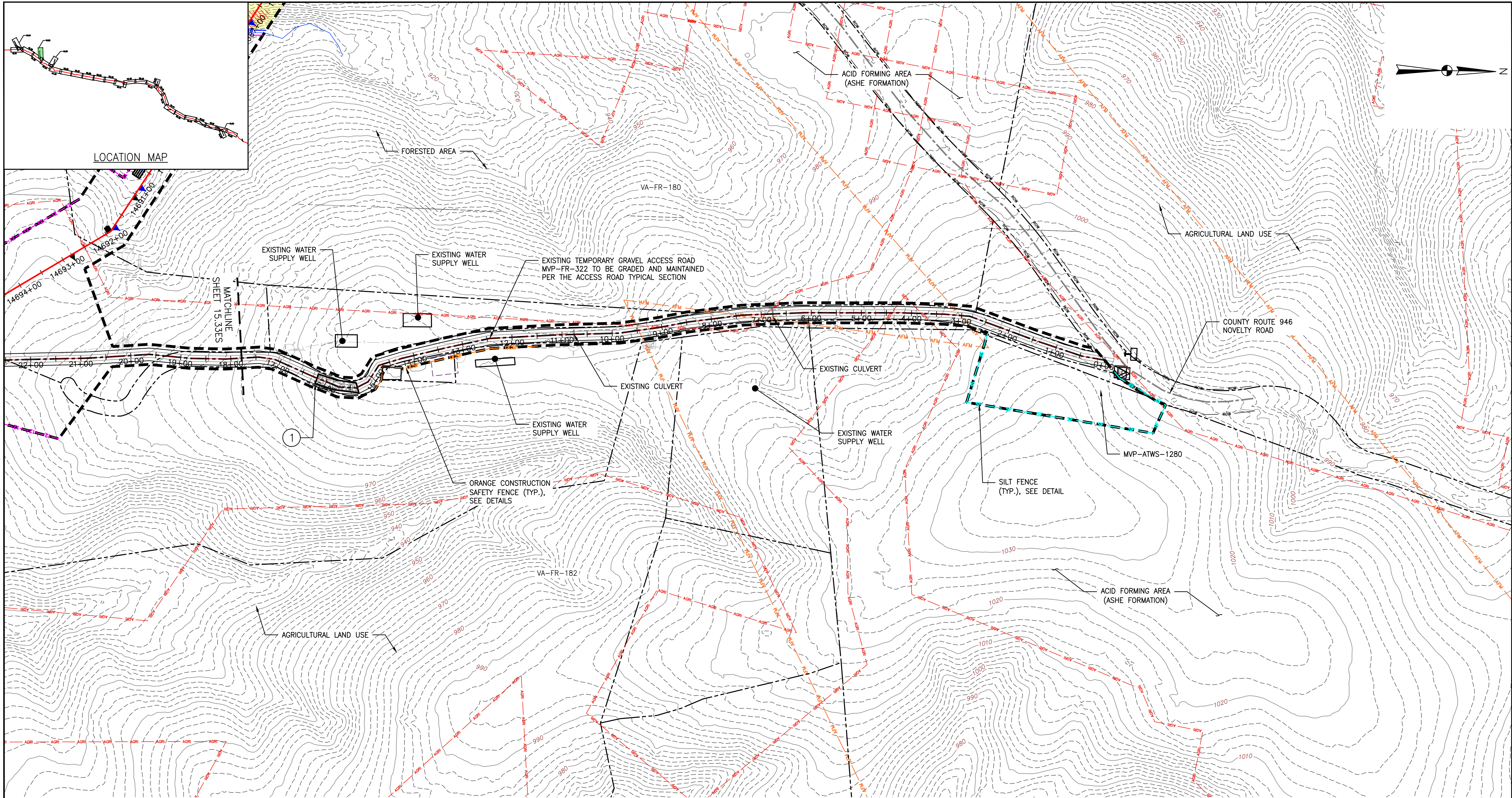
NOTES:

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- WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
- IMPROVEMENTS TO PERMANENT AND TEMPORARY ACCESS ROADS WILL BE PERFORMED PER THE SITE SPECIFIC ACCESS ROAD DETAILS.
- TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBERMATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS.
- ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE.

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	
NO.		DATE:		DWN.:		CHKD.:		APPD.:		REVISIONS:	
DESCRIPTION:											
DRAWN BY:		KAL									
CHECKED BY:		HT									
APPROVED BY:		RE									
DATE:		9/08/2017									
SCALE:		AS SHOWN									
SHT. NO. 15.80ES		OF 15.99ES									

DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer





LEGEND

- | | |
|---|--|
| — EXISTING CULVERT | --- PROPOSED LIMIT OF DISTURBANCE |
| — STREAM | --- PROPOSED ACCESS ROAD CENTERLINE |
| — US FOREST SERVICE (NATIONAL FOREST) LANDS | — PROPOSED PIPELINE |
| — APPALACHIAN NATIONAL SCENIC TRAIL | — PROPOSED SILT FENCE (SEE NOTE 5) |
| — EXISTING ROAD/TRAIL | — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| — EXISTING PROPERTY LINE | — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| — EXISTING STATE LINE | — ORANGE CONSTRUCTION SAFETY FENCE |
| — EXISTING COUNTY LINE | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — POND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
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| — ACID FORMING MATERIAL | — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| — AGRICULTURAL LAND USE BOUNDARY | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) |

PLAN

SCALE: 1" = 100'

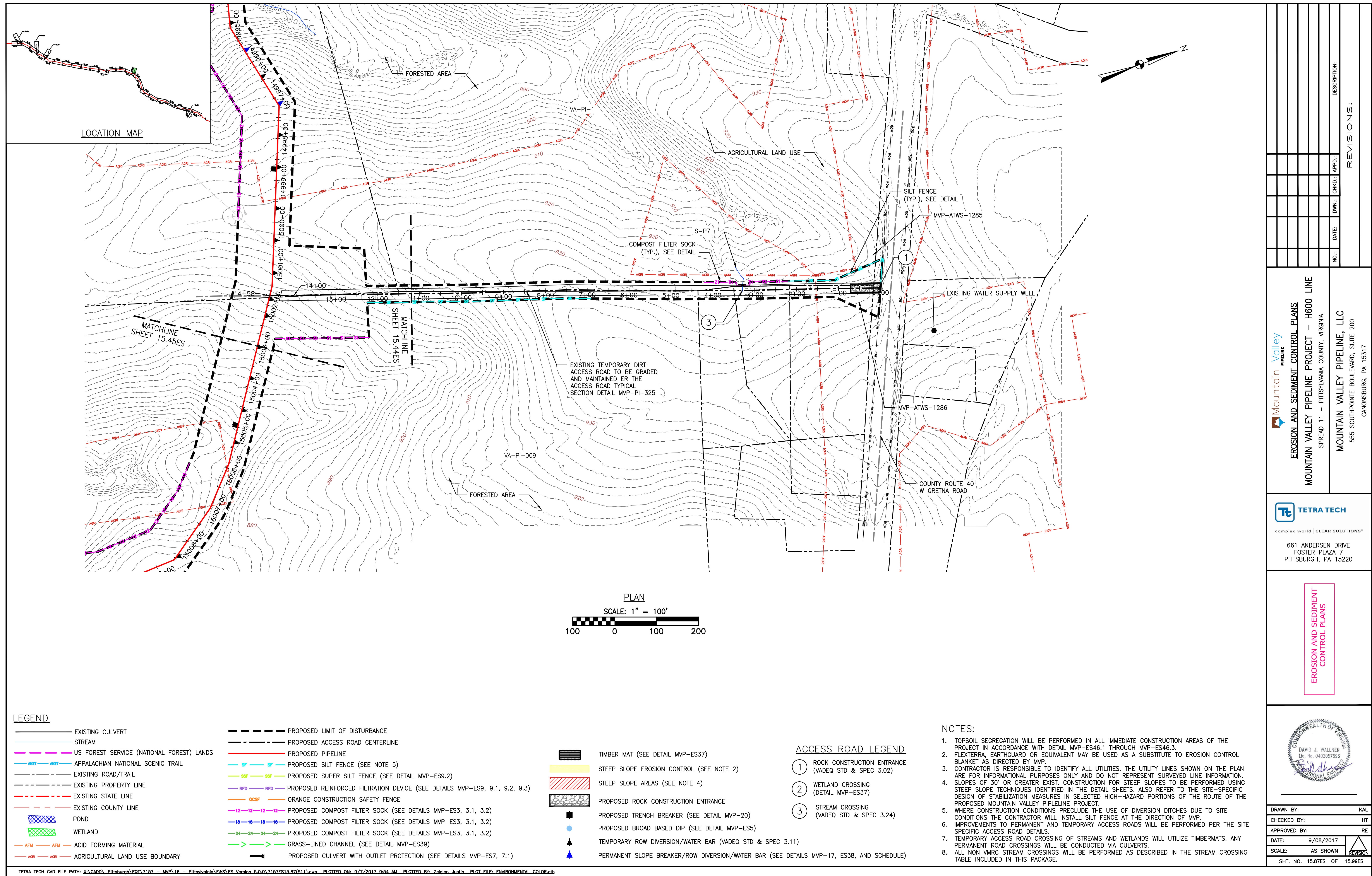


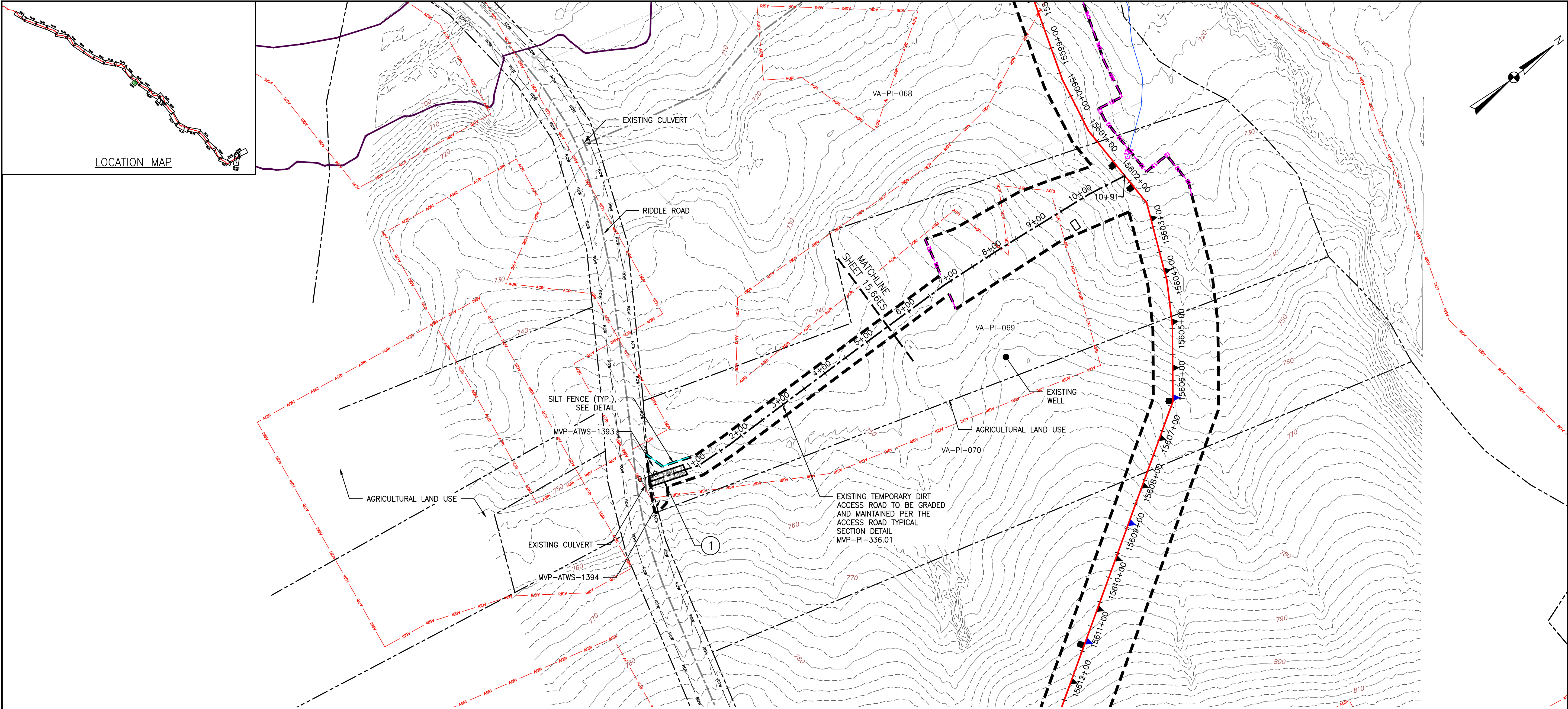
- | | |
|--|--|
| | TIMBER MAT (SEE DETAIL MVP-ES37) |
| | STEEP SLOPE EROSION CONTROL (SEE NOTE 2) |
| | STEEP SLOPE AREAS (SEE NOTE 4) |
| | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| | PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20) |
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- #### ACCESS ROAD LEGEND
- | | |
|---|--|
| ① | ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02) |
| ② | WETLAND CROSSING (DETAIL MVP-ES37) |
| ③ | STREAM CROSSING (VADEQ STD & SPEC 3.24) |

NOTES:

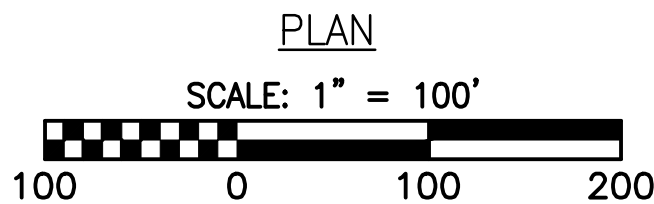
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Mountain Valley Pipeline		EROSION AND SEDIMENT CONTROL PLANS		MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE		SPREAD 11 - FRANKLIN COUNTY, VIRGINIA		MOUNTAIN VALLEY PIPELINE, LLC		555 SOUTHPOINTE BOULEVARD, SUITE 200		CANONSBURG, PA 15317	
NO.		DATE:		DWG.:		CHKD.:		APPD.:		REVISIONS:			
DESCRIPTION:													
TETRA TECH		complex world CLEAR SOLUTIONS™		661 ANDERSEN DRIVE		FOSTER PLAZA 7		PITTSBURGH, PA 15220					
EROSION AND SEDIMENT CONTROL PLANS													
DRAWN BY:		KAL		CHECKED BY:		HT		APPROVED BY:		RE			
DATE:		9/08/2017		SCALE:		AS SHOWN		SHT. NO. 15.85ES		OF 15.99ES			





LOCATION MAP



LEGEND

- | | |
|---|--|
| — EXISTING CULVERT | — PROPOSED LIMIT OF DISTURBANCE |
| — STREAM | — PROPOSED ACCESS ROAD CENTERLINE |
| — US FOREST SERVICE (NATIONAL FOREST) LANDS | — PROPOSED PIPELINE |
| — APPALACHIAN NATIONAL SCENIC TRAIL | — PROPOSED SILT FENCE (SEE NOTE 5) |
| — EXISTING ROAD/TRAIL | — PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| — EXISTING PROPERTY LINE | — PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| — EXISTING STATE LINE | — ORANGE CONSTRUCTION SAFETY FENCE |
| — EXISTING COUNTY LINE | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — POND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — WETLAND | — PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| — ACID FORMING MATERIAL | — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| — AGRICULTURAL LAND USE BOUNDARY | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) |

- | | |
|--|--|
| | 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) |
| | PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5) |
| | TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11) |
| | PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE) |
- ACCESS ROAD LEGEND**
- | | |
|---|--|
| ① | ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02) |
| ② | WETLAND CROSSING (DETAIL MVP-ES37) |
| ③ | STREAM CROSSING (VADEQ STD & SPEC 3.24) |

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Mountain Valley Pipeline		EROSION AND SEDIMENT CONTROL PLANS	
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE		SPREAD 11 - PITTSBURGH COUNTY, VIRGINIA	
MOUNTAIN VALLEY PIPELINE, LLC		555 SOUTHPOINTE BOULEVARD, SUITE 200 CANONSBURG, PA 15317	
NO:		DATE:	REVISIONS:
DWG:		CHKD:	APPD:
DESCRIPTION:			

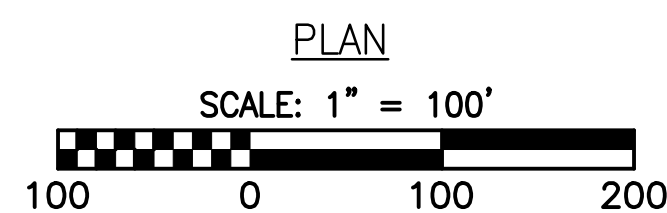
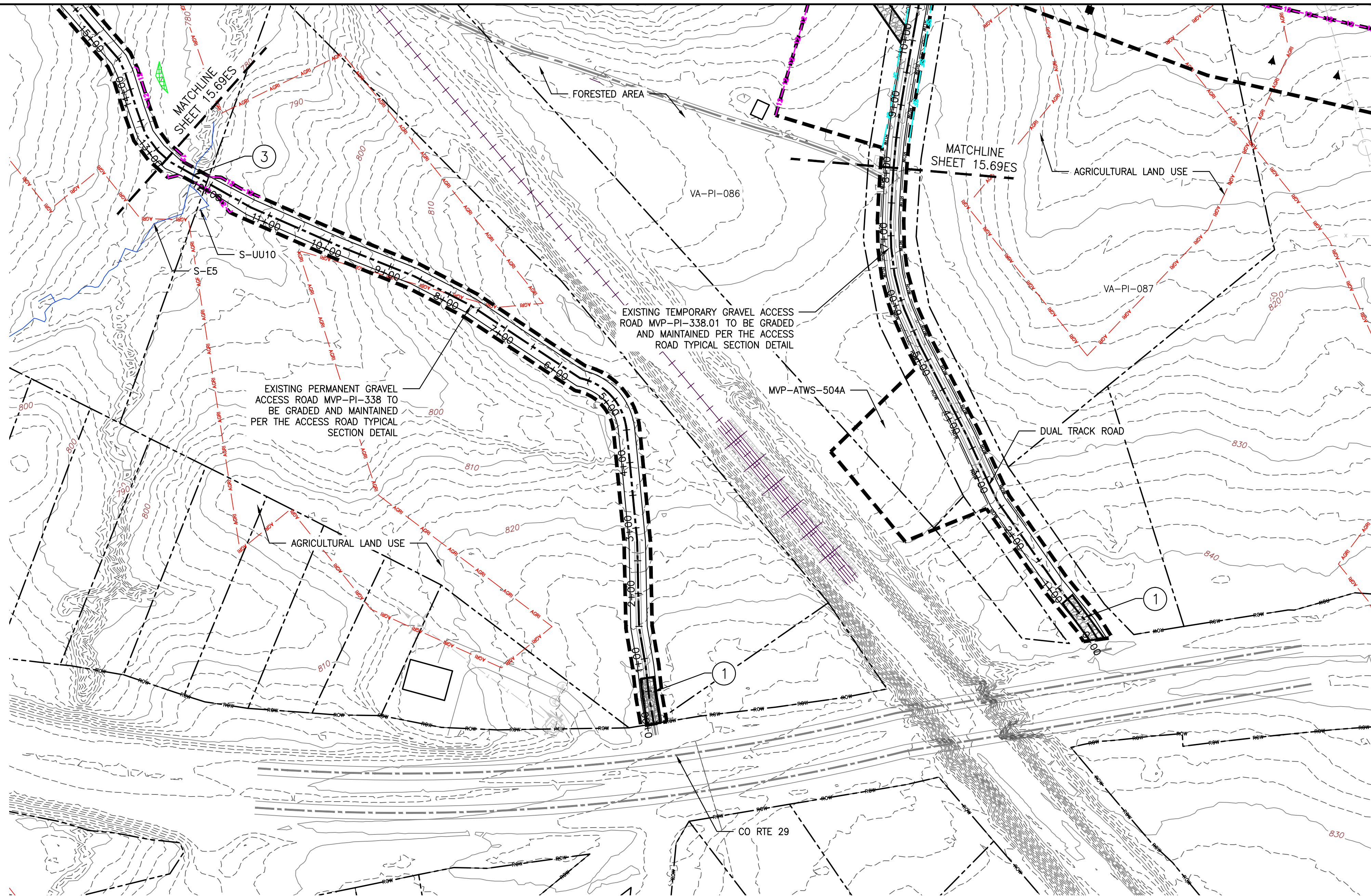
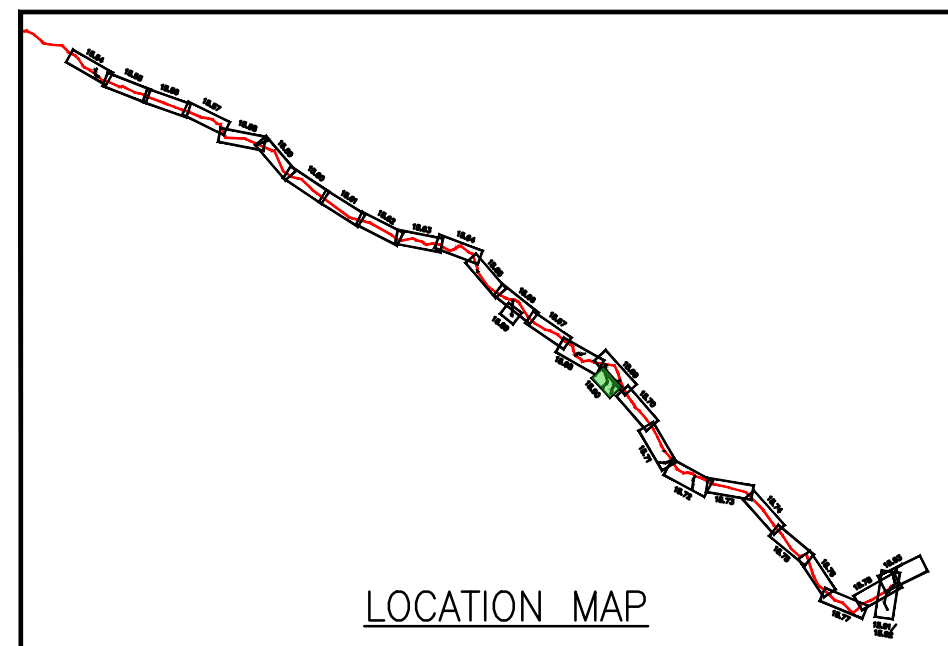
TETRA TECH
complex world | CLEAR SOLUTIONS™

661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS












DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer

DRAWN BY:	KAL
CHECKED BY:	HT
APPROVED BY:	RE
DATE:	9/08/2017
SCALE:	AS SHOWN
SHT. NO. 15.89ES OF 15.99ES	REVISION



LEGEND

- | | | | |
|--|---|--|--|
| | EXISTING CULVERT | | PROPOSED LIMIT OF DISTURBANCE |
| | STREAM | | PROPOSED ACCESS ROAD CENTERLINE |
| | US FOREST SERVICE (NATIONAL FOREST) LANDS | | PROPOSED PIPELINE |
| | APPALACHIAN NATIONAL SCENIC TRAIL | | PROPOSED SILT FENCE (SEE NOTE 5) |
| | EXISTING ROAD/TRAIL | | PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2) |
| | EXISTING PROPERTY LINE | | PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3) |
| | EXISTING STATE LINE | | ORANGE CONSTRUCTION SAFETY FENCE |
| | EXISTING COUNTY LINE | | PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
| | POND | | PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2) |
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| | AGRICULTURAL LAND USE BOUNDARY | | GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) |
| | | | |
| | | | PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) |

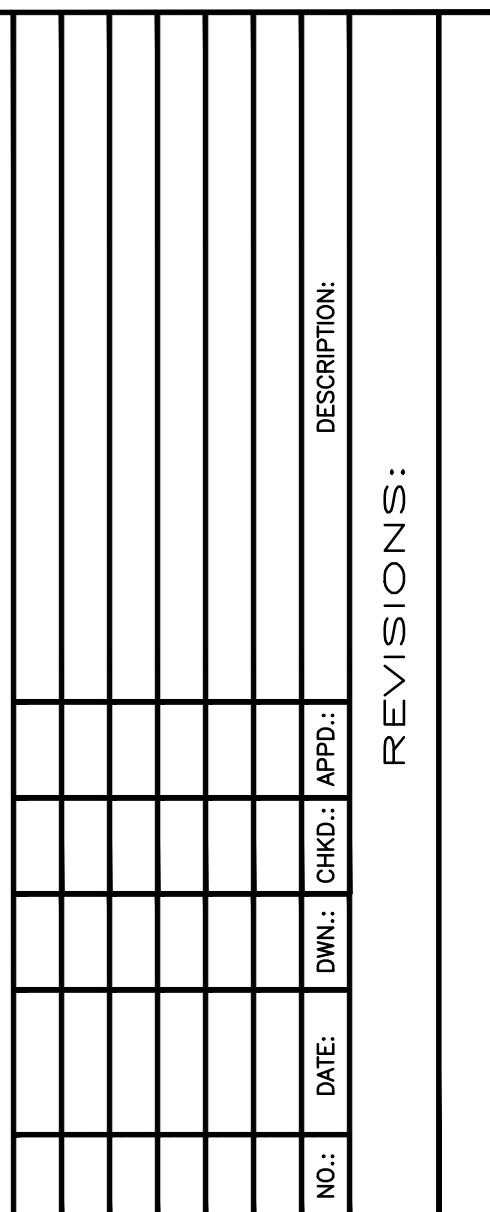
- | ACCESS ROAD LEGEND | |
|---|--|
|  | TIMBER MAT (SEE DETAIL MVP-ES37) |
|  | STEEP SLOPE EROSION CONTROL (SEE NOTE 2) |
|  | STEEP SLOPE AREAS (SEE NOTE 4) |
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|  | PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20) |
|  | PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5) |
|  | TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11) |
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(VADEQ STD & SPEC 3.02) |
|  | WETLAND CROSSING
(DETAIL MVP-ES37) |
|  | STREAM CROSSING
(VADEQ STD & SPEC 3.24) |

ACCESS ROAD LEGEND

- 1 ROCK CONSTRUCTION ENTRANCE
(VADEQ STD & SPEC 3.02)
- 2 WETLAND CROSSING
(DETAIL MVP-ES37)
- 3 STREAM CROSSING
(VADEQ STD & SPEC 3.24)

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 Mountain Valley
PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT — H600 LINE

SPREAD 11 — PITTSYLVANIA COUNTY, VIRGINIA

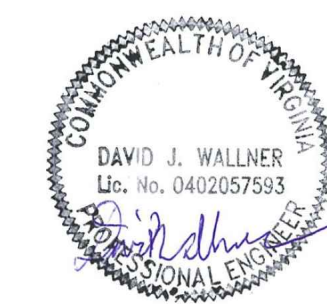
MOUNTAIN VALLEY PIPELINE, LLC


555 SOUTHPOINTE BOULEVARD, SUITE 200

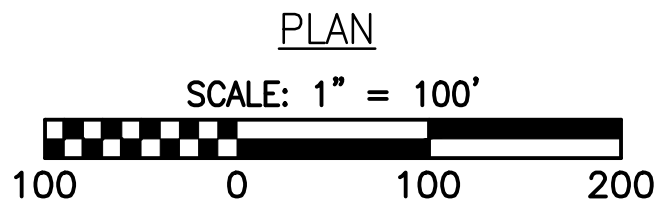
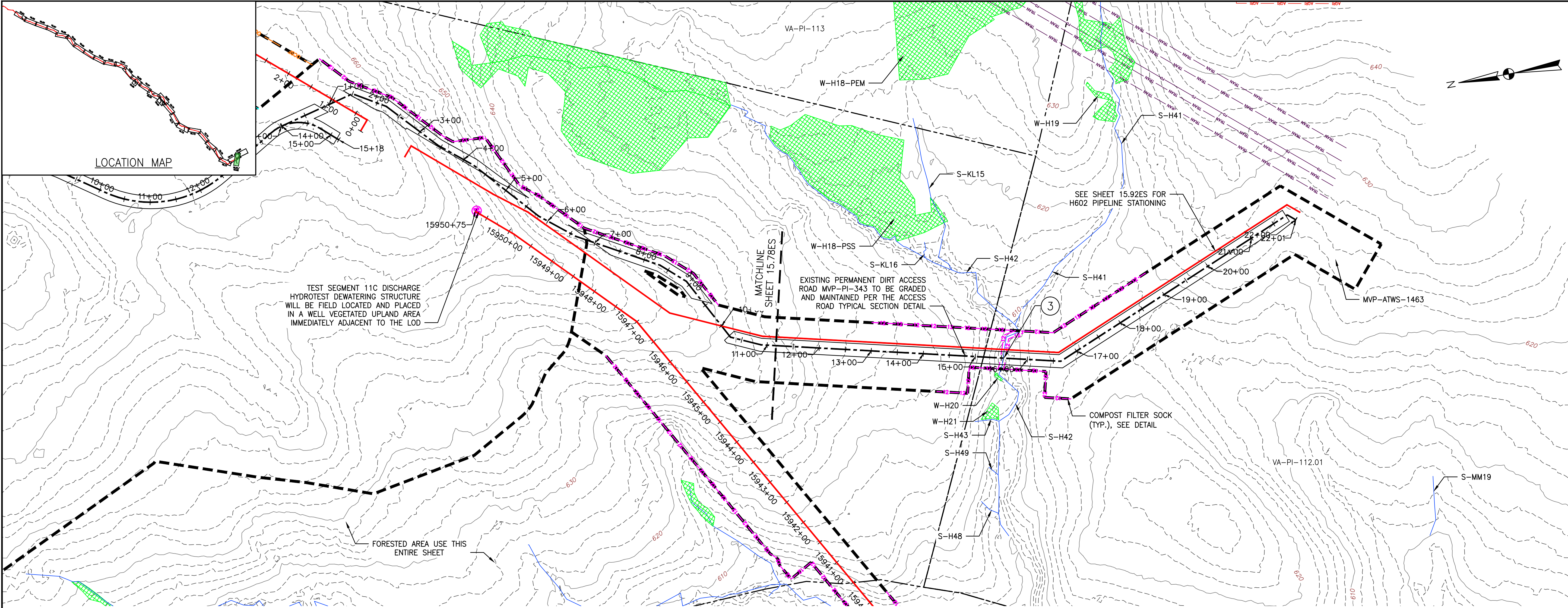
CANONSBURG, PA 15317



EROSION AND SEDIMENT CONTROL PLANS



DRAWN BY:		KAL
CHECKED BY:		HT
APPROVED BY:		RE
DATE:	9/08/2017	
SCALE:	AS SHOWN	
SHT. NO. 15.90ES OF 15.99ES		



LEGEND

- | | |
|---|--|
| EXISTING CULVERT | PROPOSED LIMIT OF DISTURBANCE |
| STREAM | PROPOSED ACCESS ROAD CENTERLINE |
| US FOREST SERVICE (NATIONAL FOREST) LANDS | PROPOSED PIPELINE |
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- | | |
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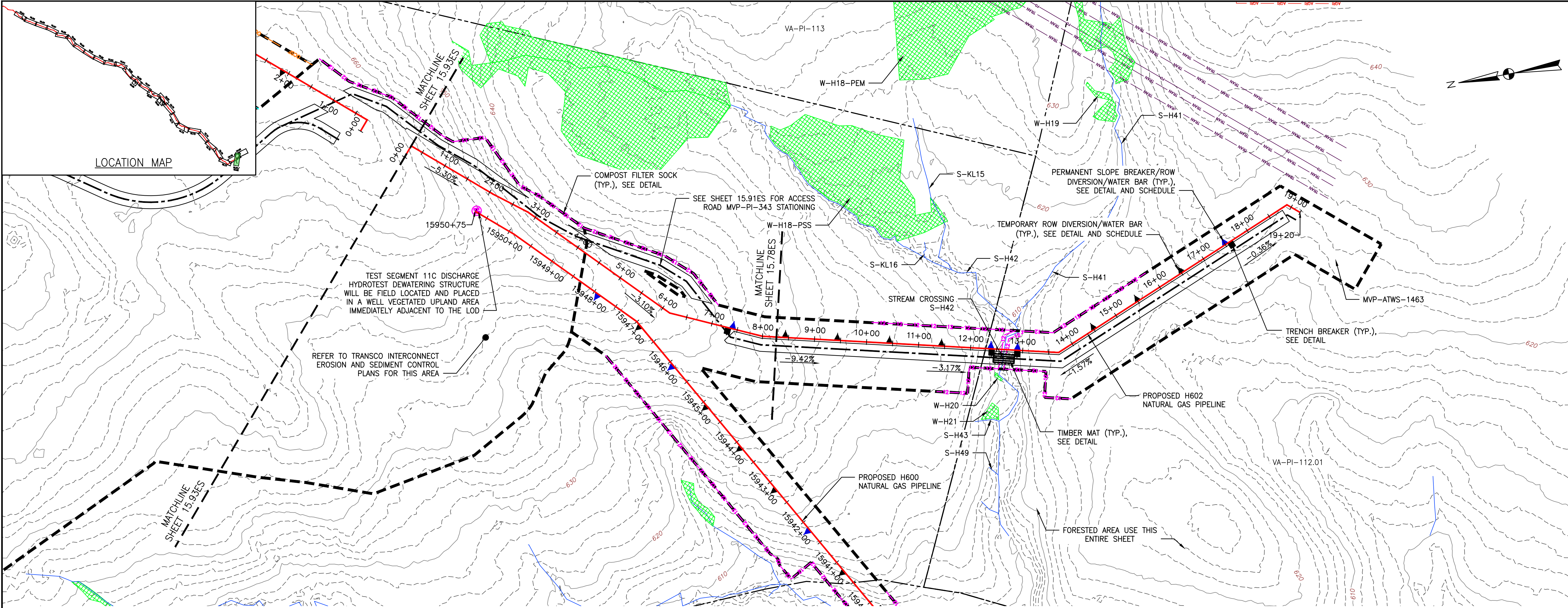
ACCESS ROAD LEGEND

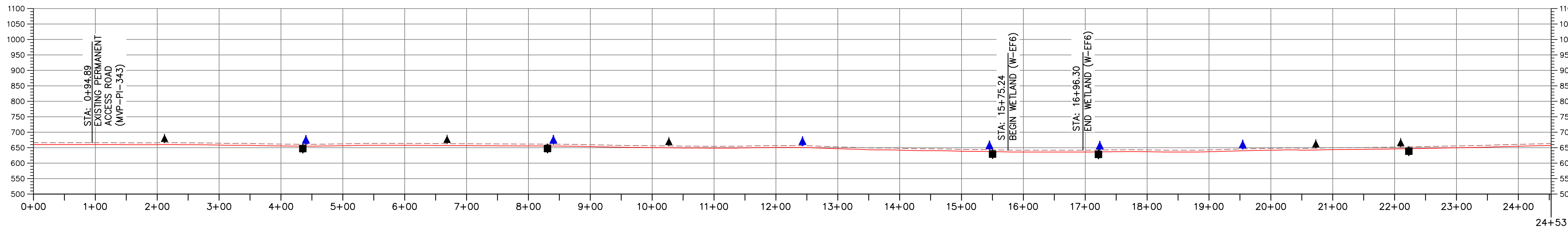
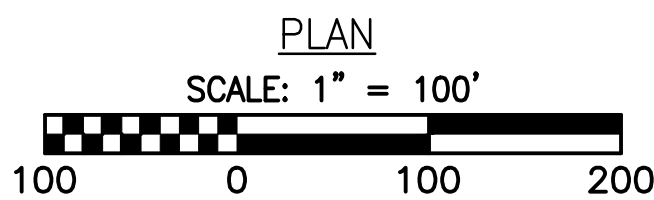
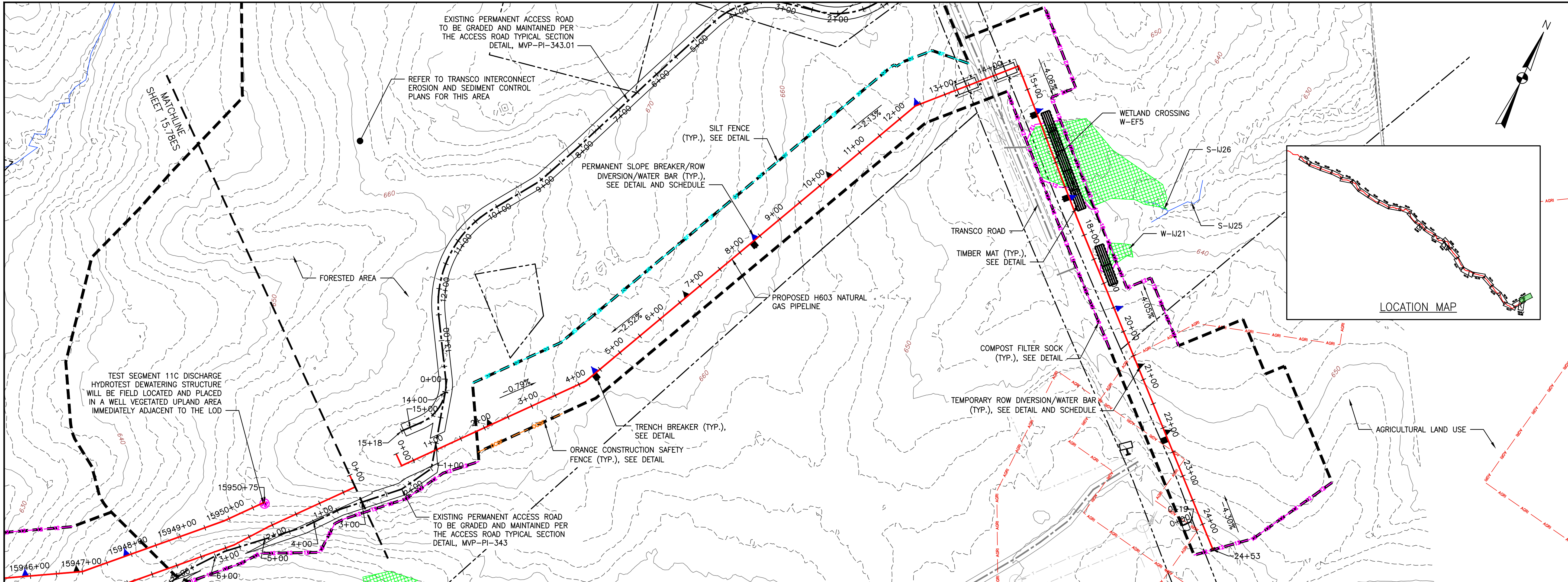
- | | |
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NO.		DATE:		DWN.:		CHKD.:		APPD.:		DESCRIPTION:		REVISIONS:	
1		2		3		4		5		6		7	
8		9		10		11		12		13		14	
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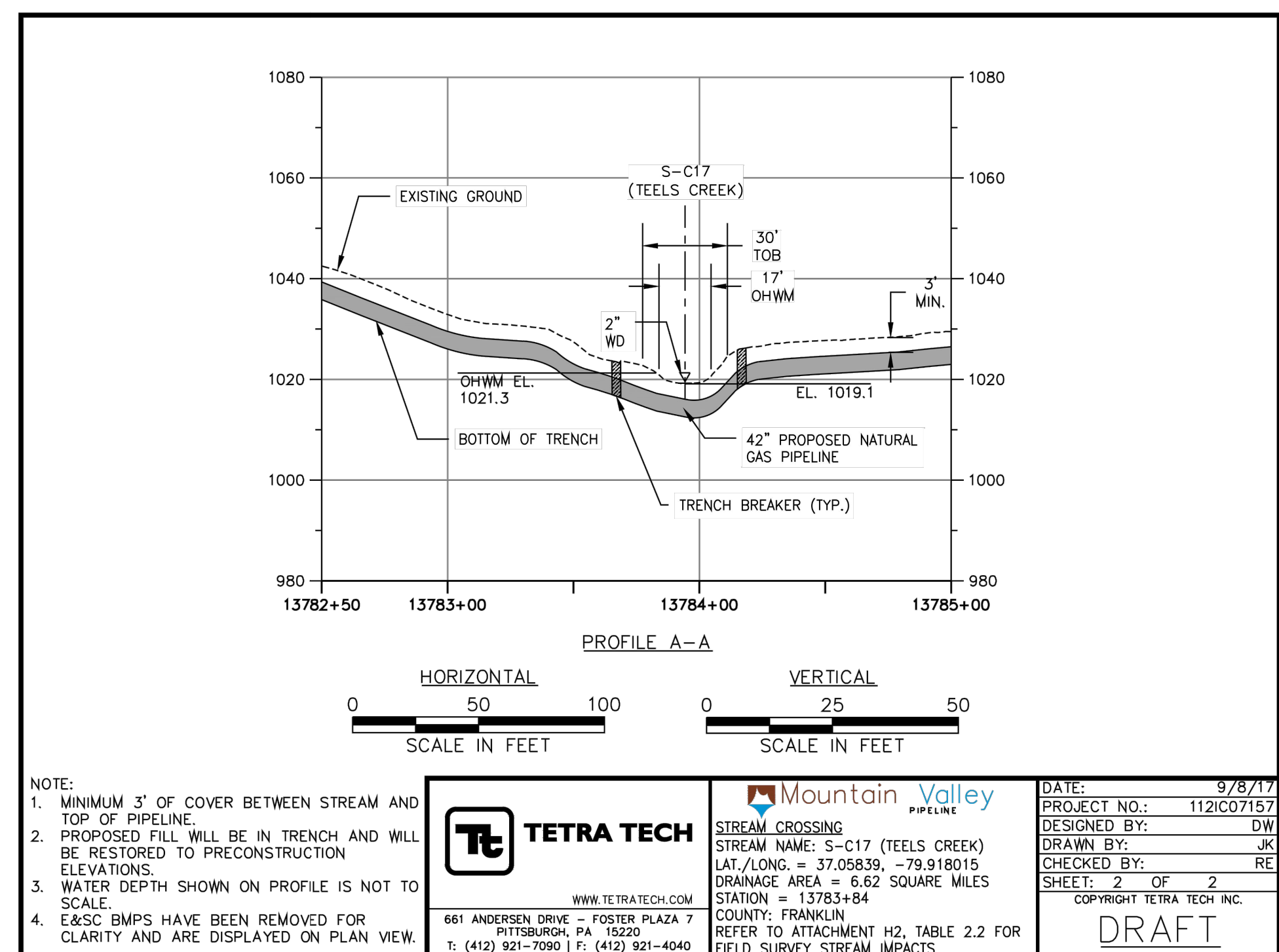
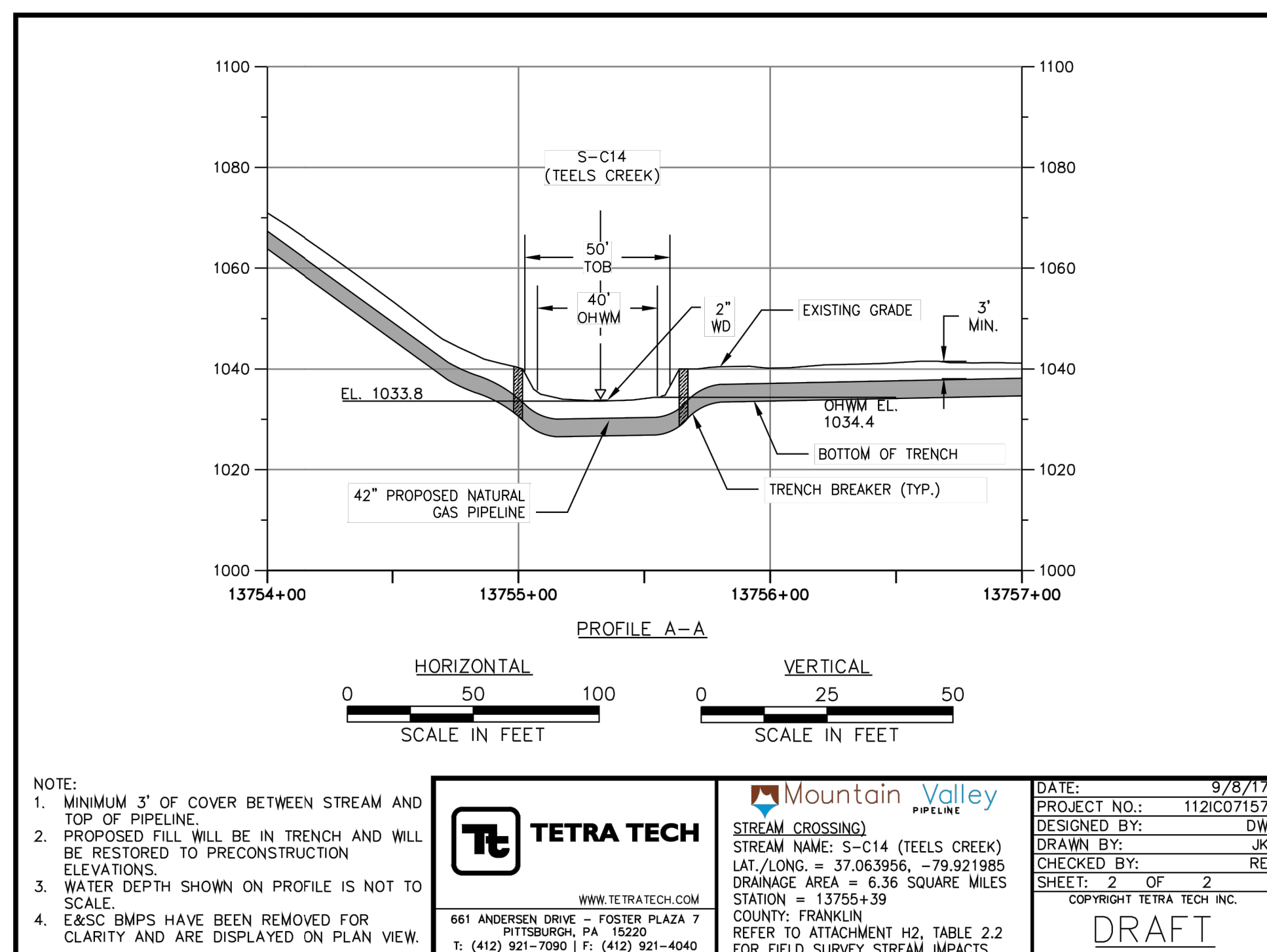
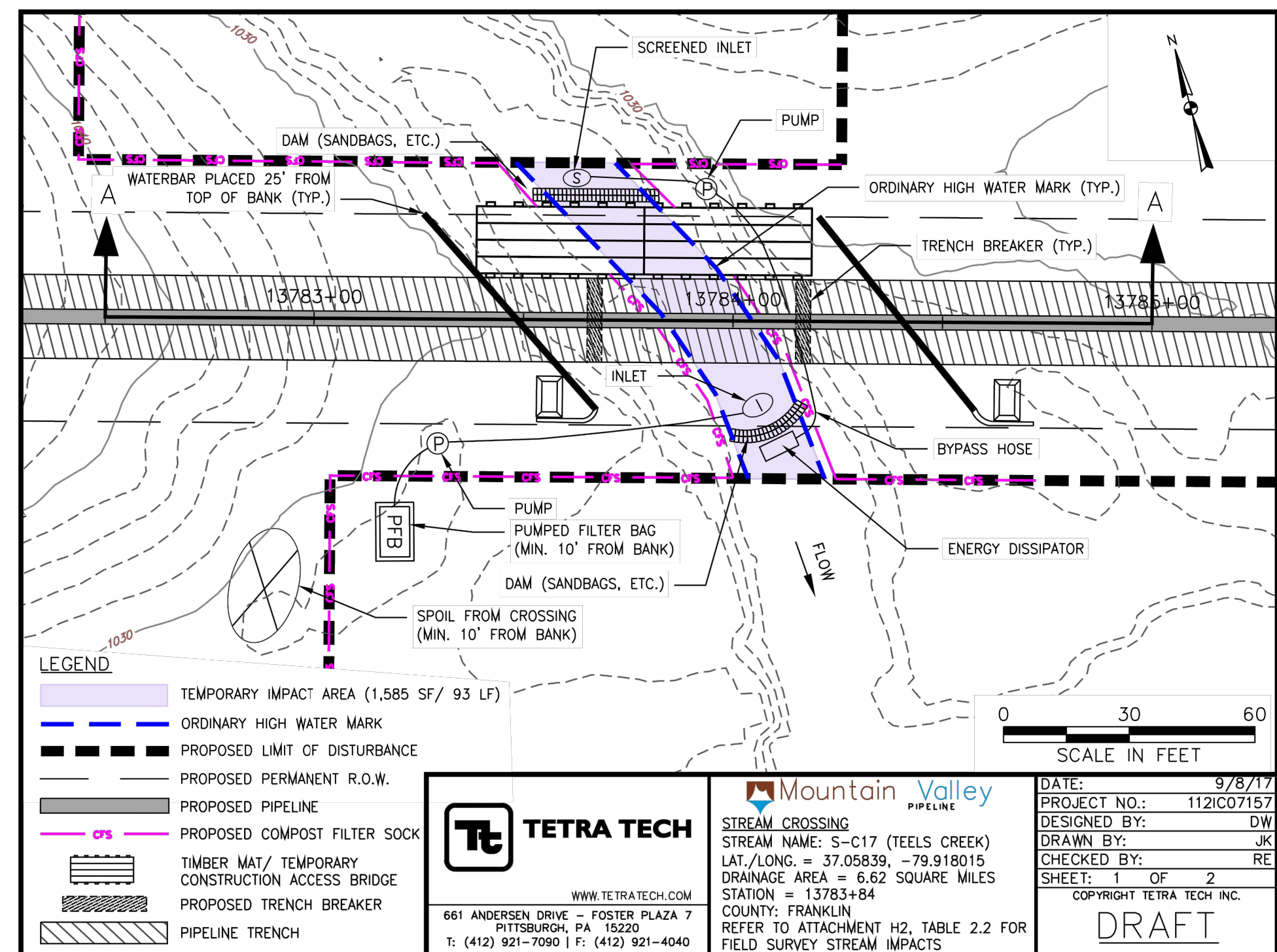
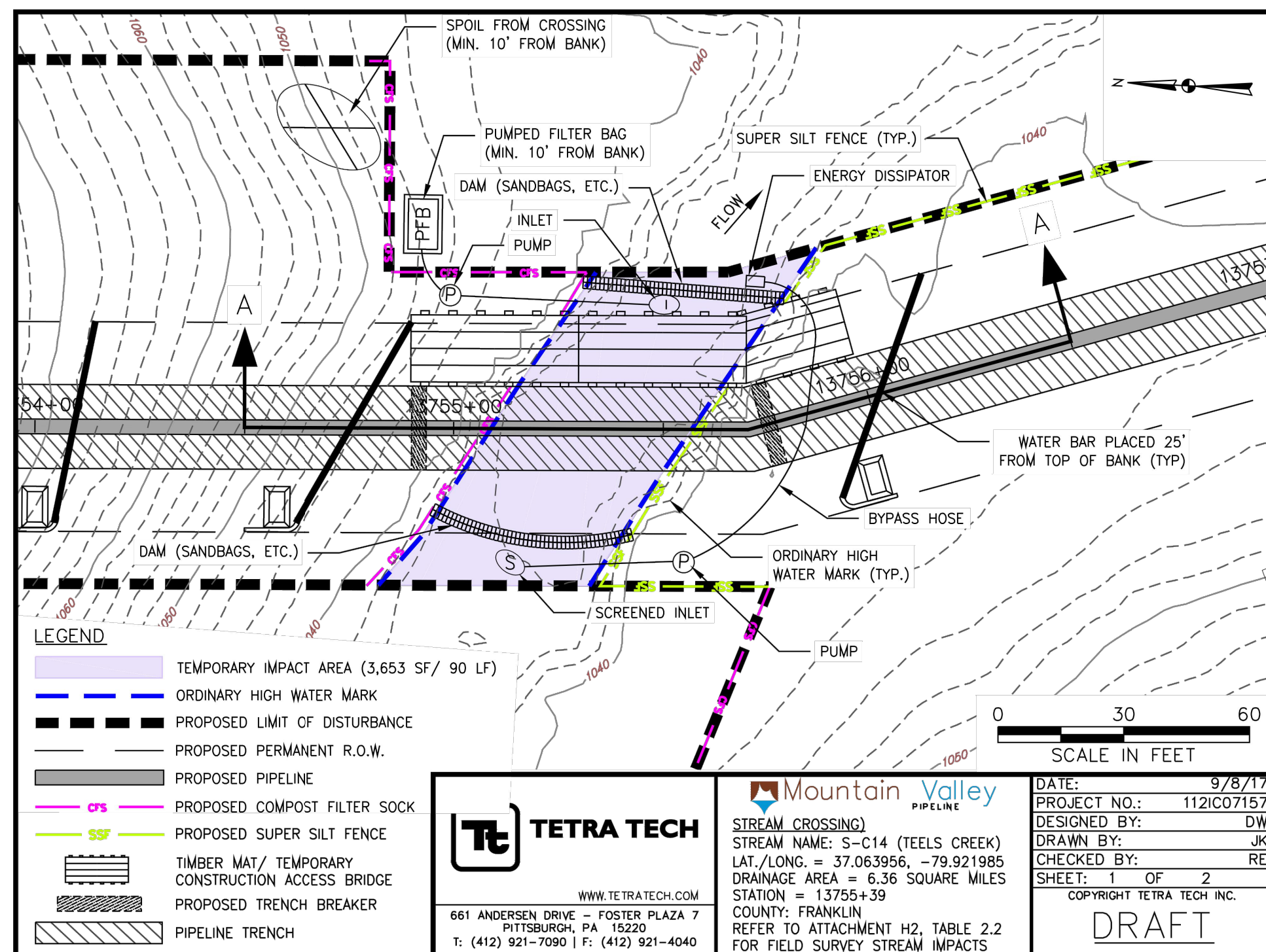
- EXISTING CULVERT
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- US FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- AGRICULTURAL LAND USE BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- 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)
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- 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)
- PROPOSED BROAD BASED DIP (SEE DETAIL MVP-ES5)
- TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

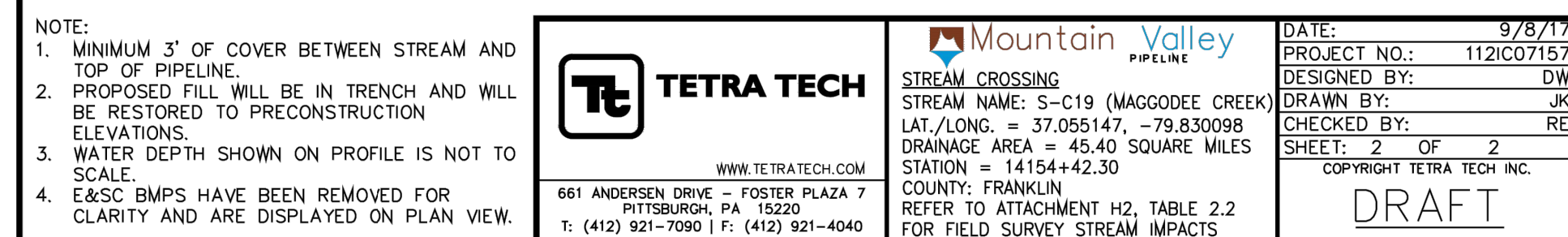
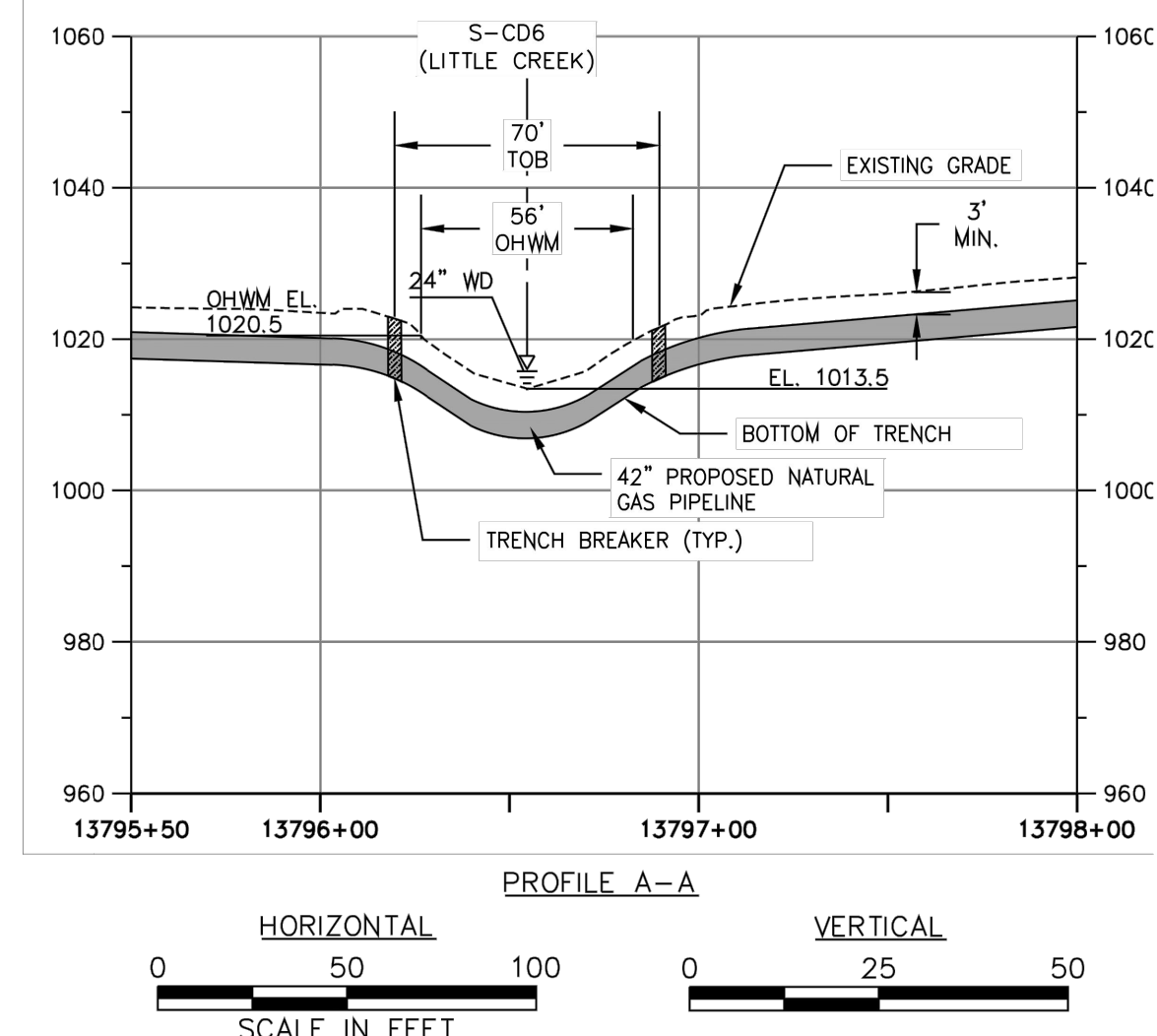
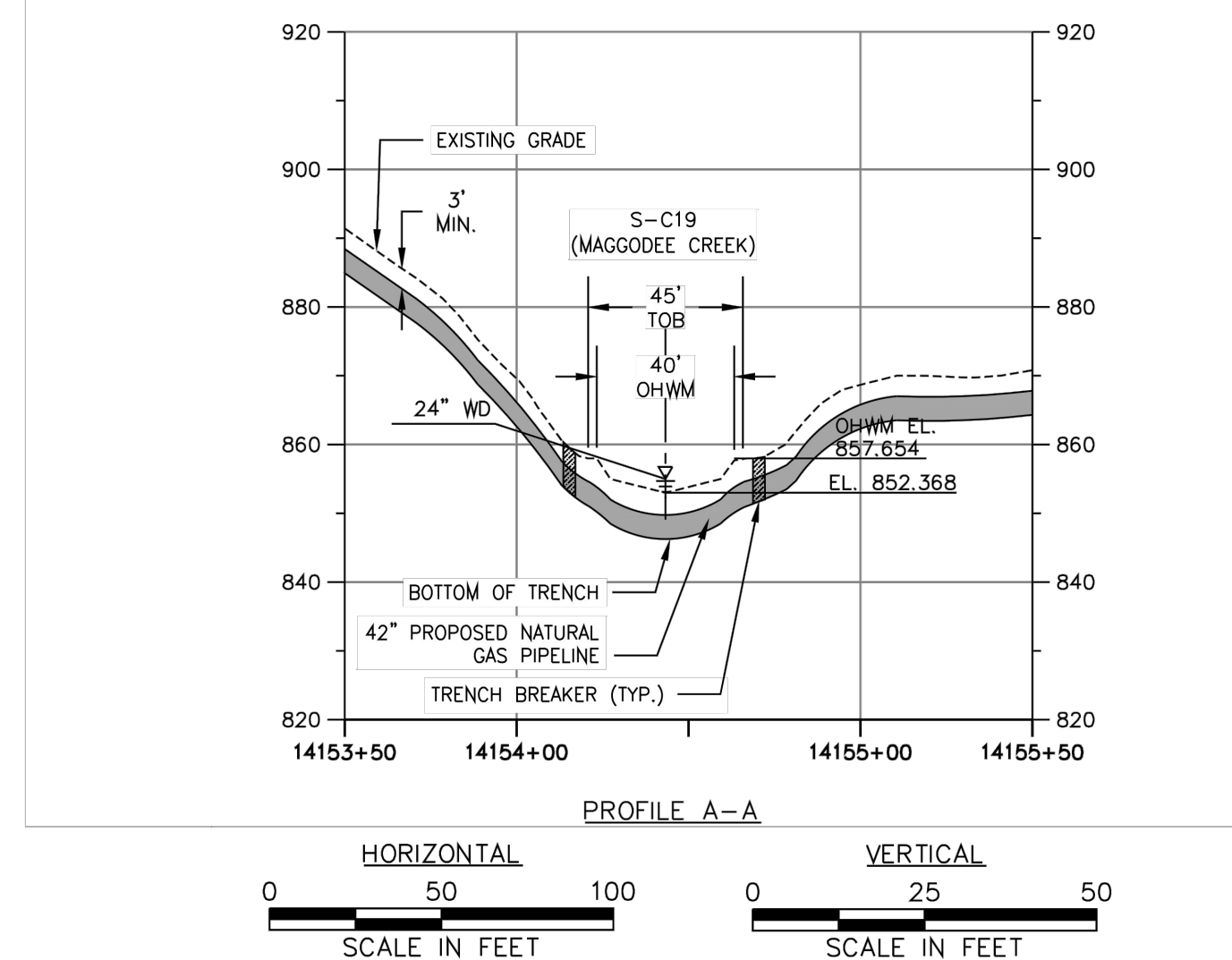
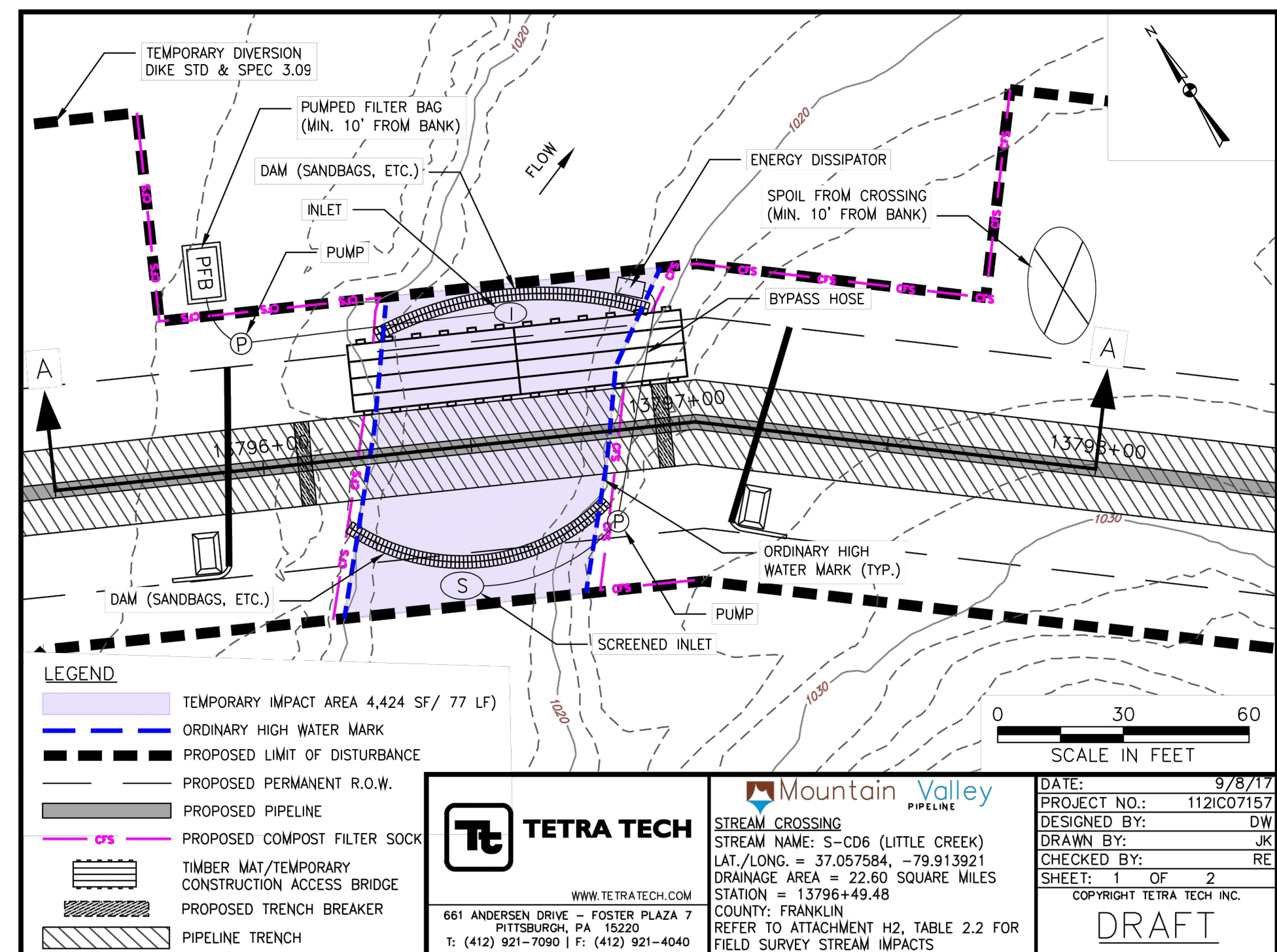
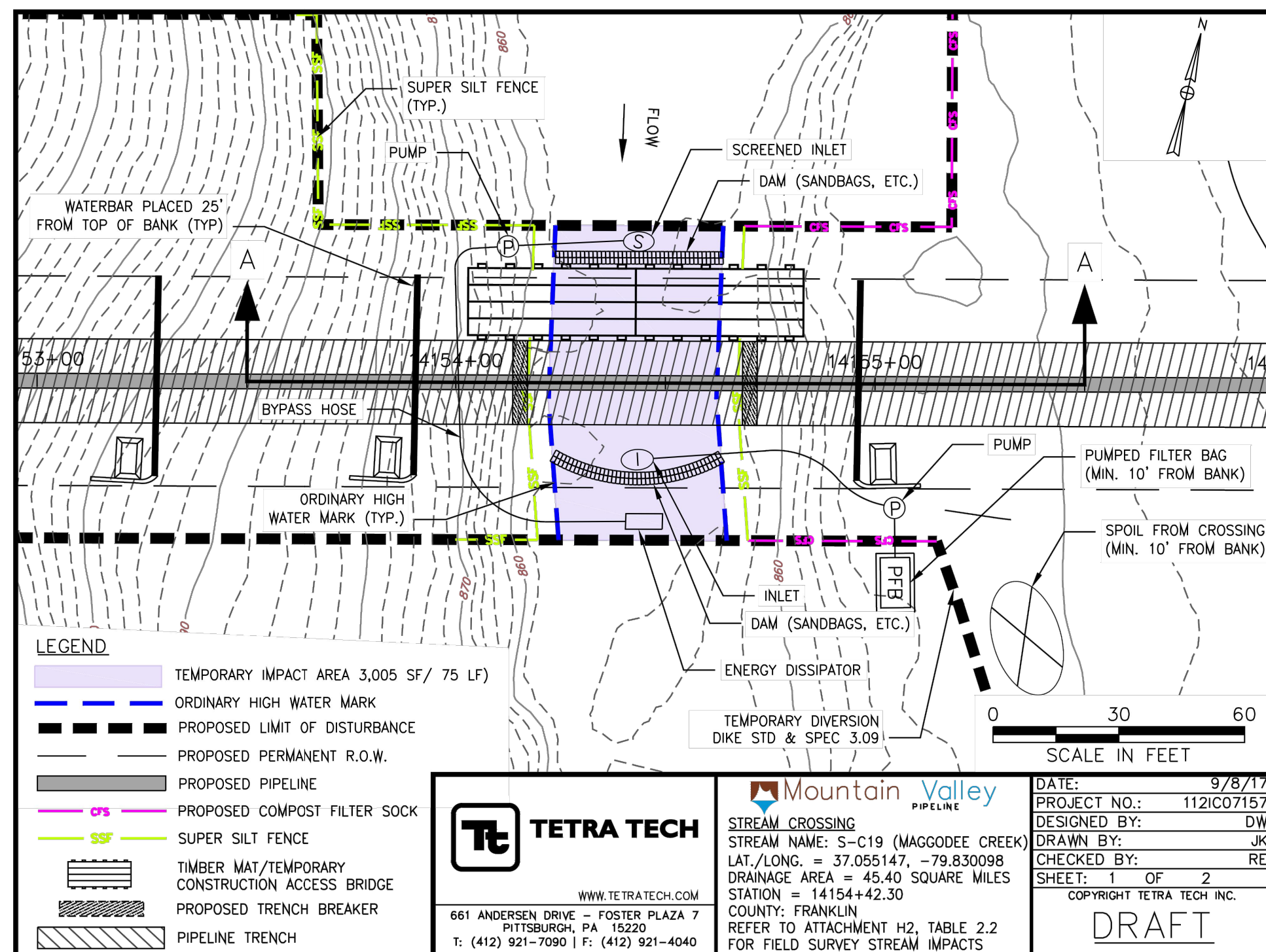
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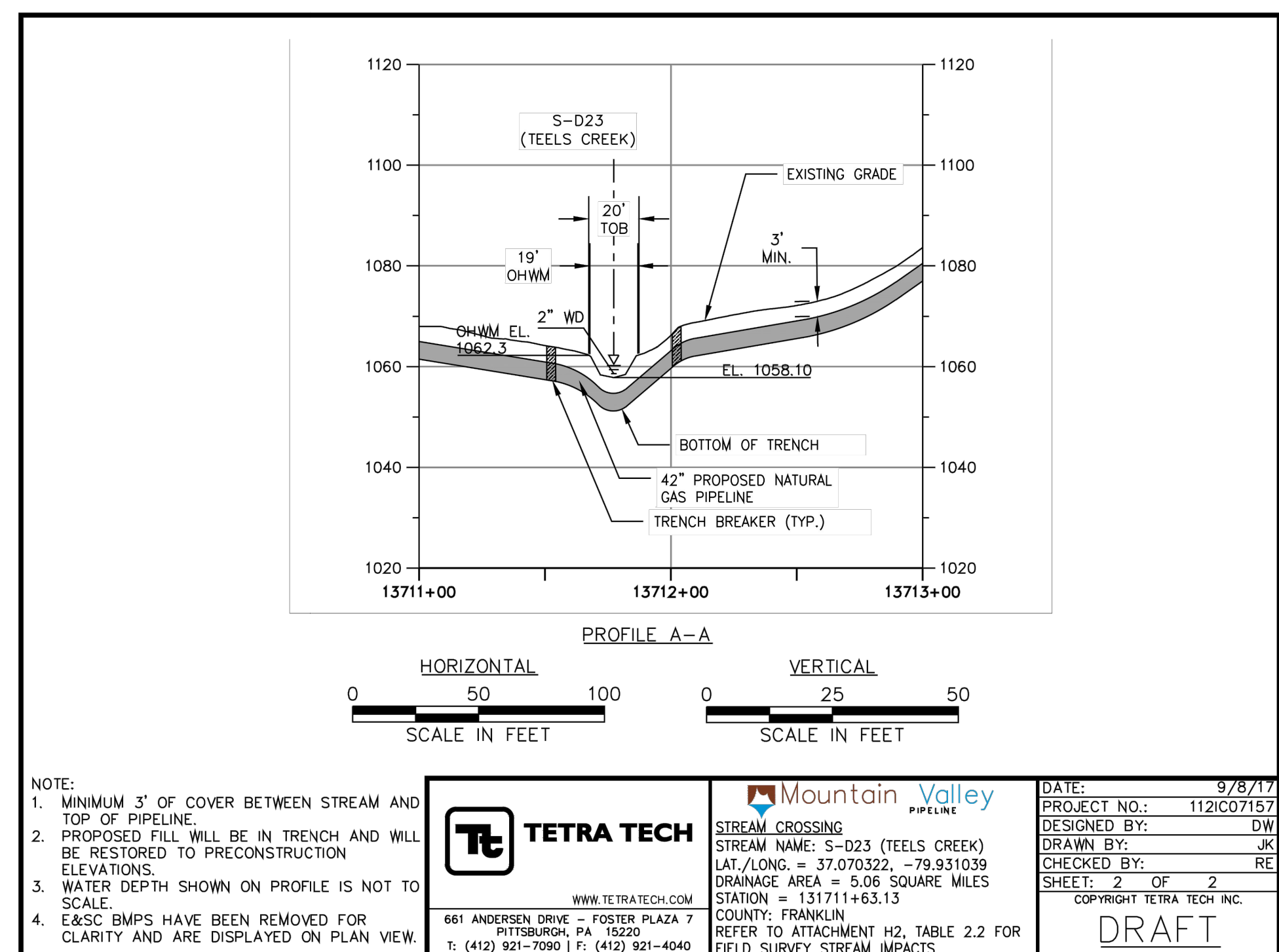
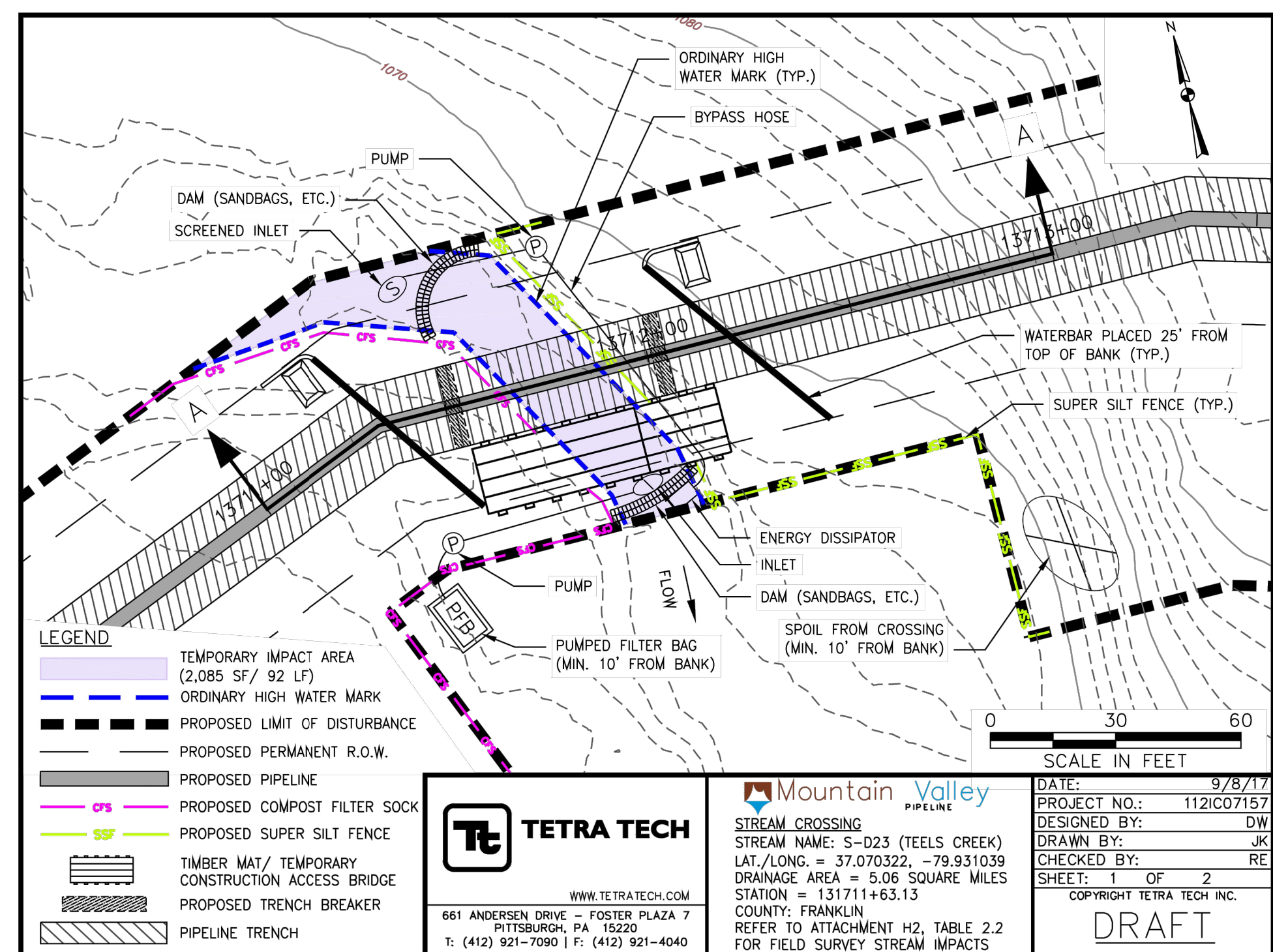
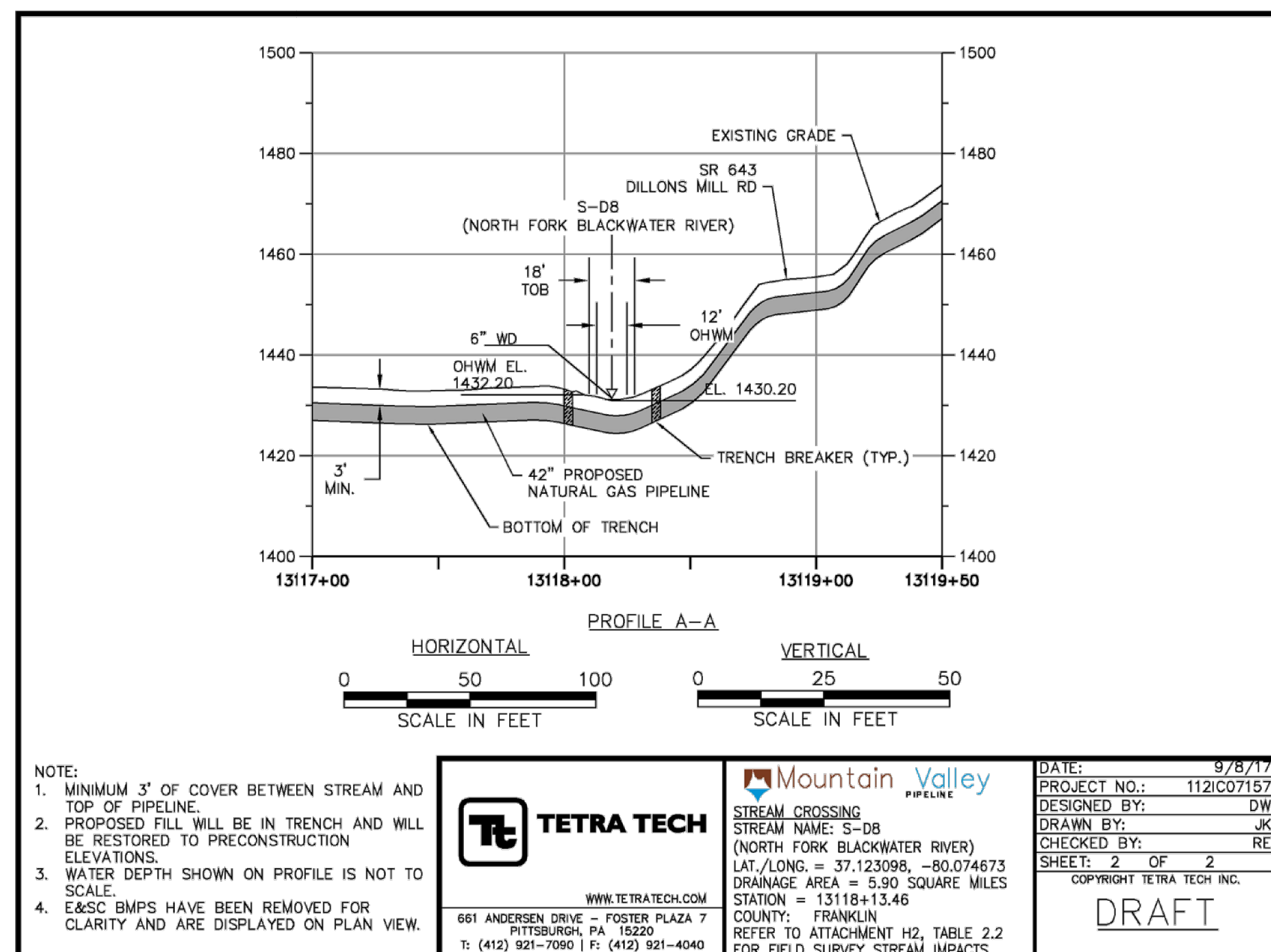
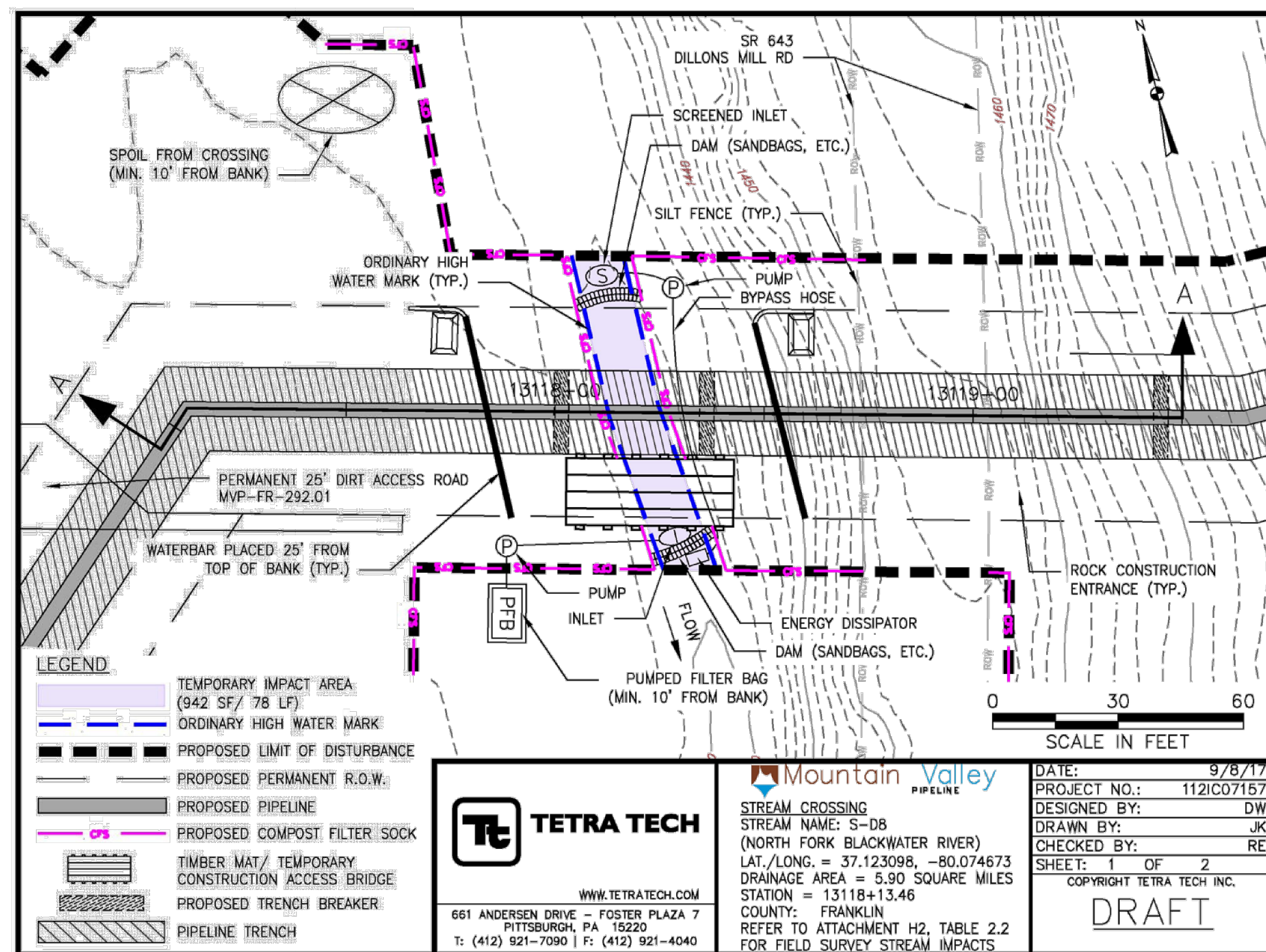
- 1 ROCK CONSTRUCTION ENTRANCE (VADEQ STD & SPEC 3.02)
- 2 WETLAND CROSSING (DETAIL MVP-ES37)
- 3 STREAM CROSSING (VADEQ STD & SPEC 3.24)

NOTES:

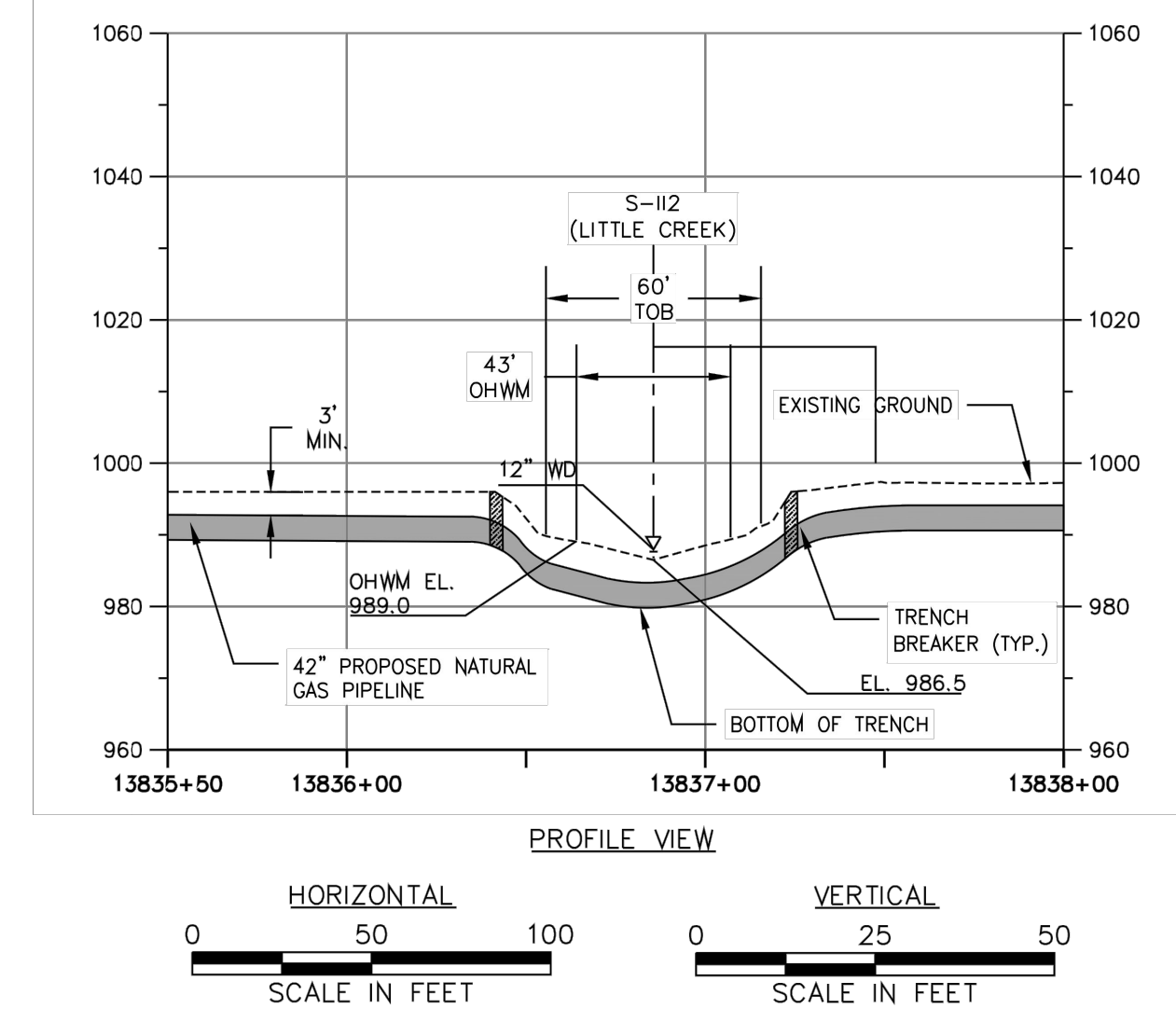
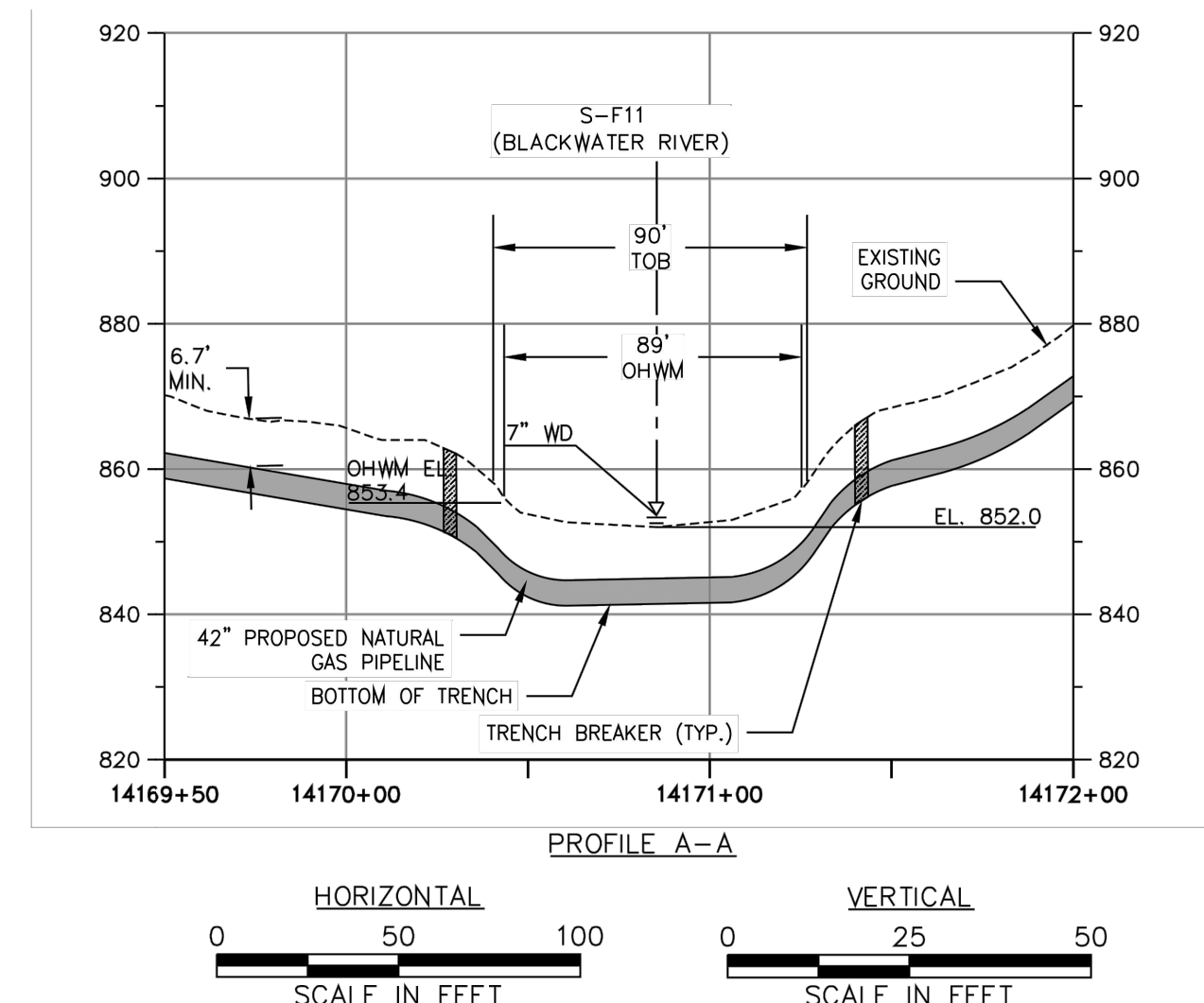
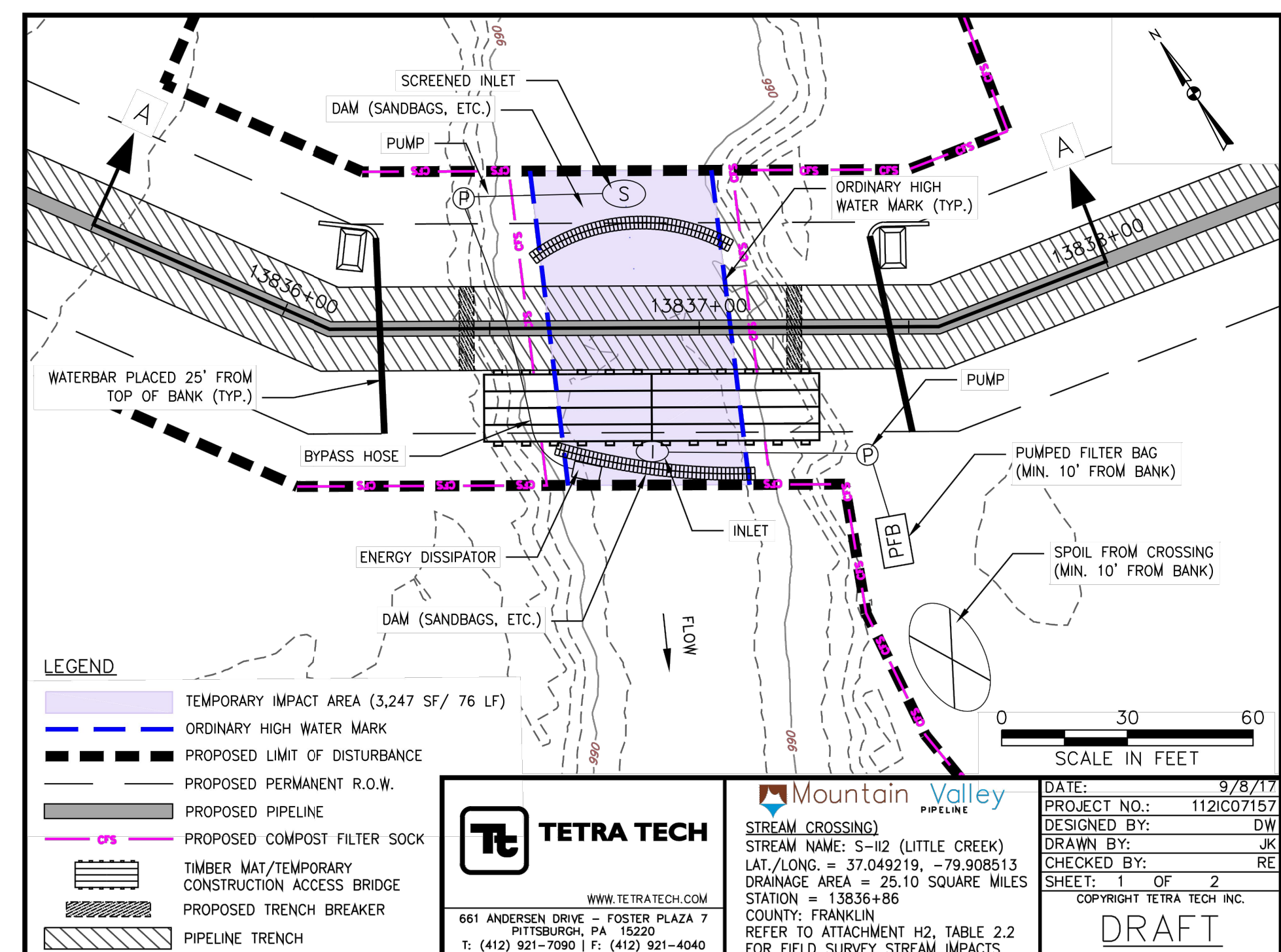
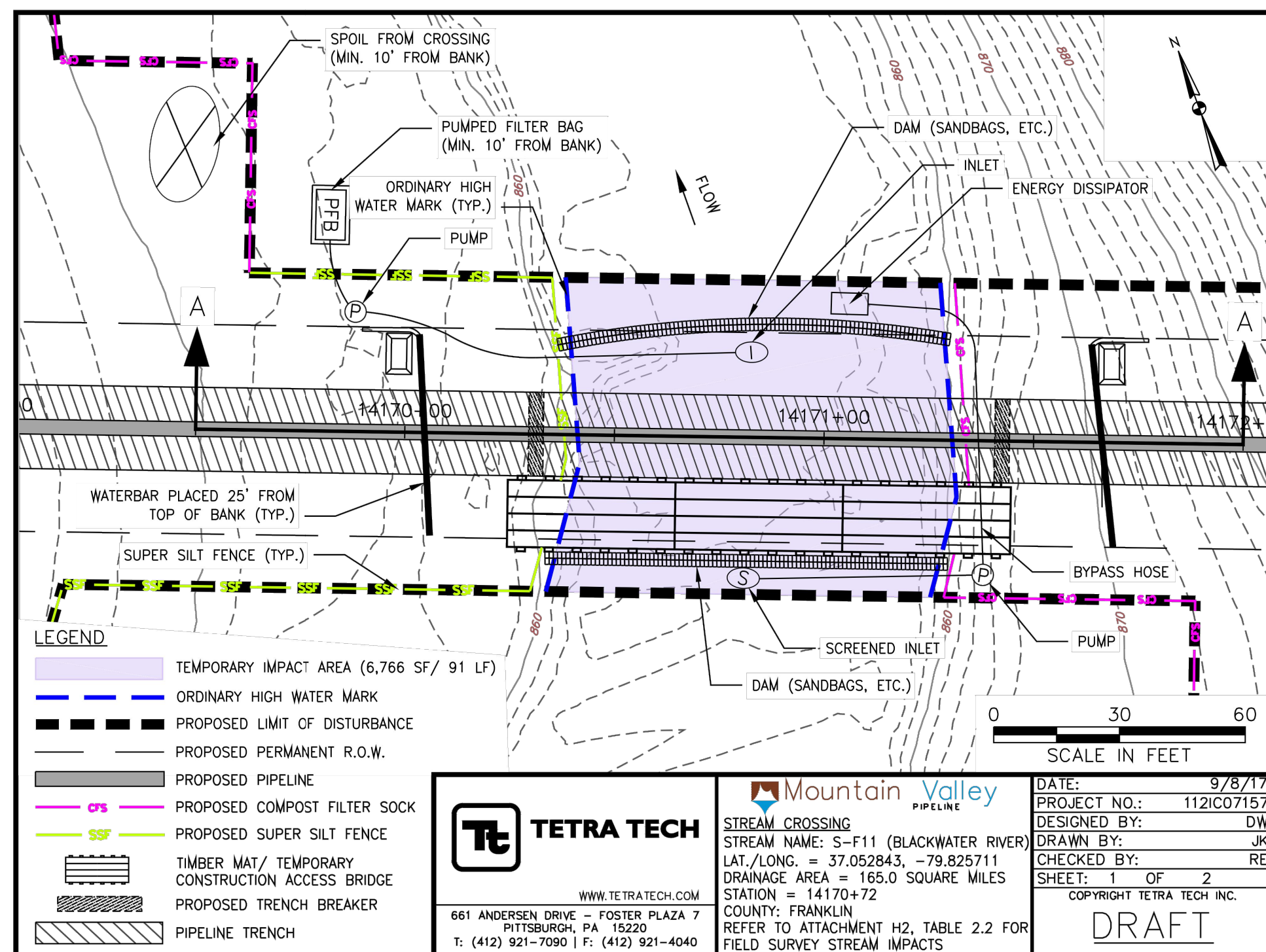
- TOPSOIL SEGREGATION WILL BE PERFORMED IN ALL IMMEDIATE CONSTRUCTION AREAS OF THE PROJECT IN ACCORDANCE WITH DETAIL MVP-ES46.1 THROUGH MVP-ES46.3.
- FLEXTERA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
- CONTRACTOR IS RESPONSIBLE TO IDENTIFY ALL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







<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <p style="text-align: center;">EROSION AND SEDIMENT CONTROL PLANS</p> <p style="text-align: center;">MOUNTAIN VALLEY PIPELINE PROJECT — H600 LINE</p> <p style="text-align: center;">SPREAD 11</p> </div> <div style="width: 45%;"> <p style="text-align: center;">MOUNTAIN VALLEY PIPELINE, LLC</p> <p style="text-align: center;">555 SOUTHPOINTE BOULEVARD, SUITE 200</p> <p style="text-align: center;">CANONSBURG, PA 15317</p> </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">661 ANDERSEN DRIVE FOSTER PLAZA 7 PITTSBURGH, PA 15220</p> </div> <div style="width: 45%;"> <div style="border: 2px solid red; padding: 10px; text-align: center; color: red;"> EROSION AND SEDIMENT CONTROL PLANS </div> </div> </div>									
<div style="text-align: center;">  </div>									
DRAWN BY: KAL					CHECKED BY: HT				
APPROVED BY: RE					DATE: 9/08/2017				
SCALE: AS SHOWN					<div style="text-align: center;">  </div>				
SHT. NO. 15.96ES OF 15.99ES					REVISION				

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Mountain Valley

PIPELINE

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT – H600 LINE

SPREAD 11


MOUNTAIN VALLEY PIPELINE, LLC

555 SOUTHPOINTE BOULEVARD, SUITE 200

CANONSBURG, PA 15317

661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

DRAWN BY:		KAL
CHECKED BY:		HT
APPROVED BY:		RE
DATE:	9/08/2017	 REVISION
SCALE:	AS SHOWN	
SHT. NO. 15.97ES OF 15.99ES		

Construction Spread Number	Stream ID	NHD Stream Name	County	Latitude	Longitud e	Top of Bank Width (ft)	Selected Crossing Method	Selected Crossing BMP No.
Spread 11	S-MM15	UNT to Flatwoods Branch	Montgomery	37.25867	-80.296446	6	Dam and Pump	MVP-ES8
Spread 11	S-EF48	UNT to Blackwater River	Franklin	37.06475	-79.87442	2	Dam and Pump	MVP-ES8
Spread 11	S-YZ4	UNT to Blackwater River	Franklin	37.06472	-79.87819	3	Dam and Pump	MVP-ES8
Spread 11	S-YZ5	UNT to Blackwater River	Franklin	37.06346	-79.878281	4	Dam and Pump	MVP-ES8
Spread 11	S-KL41	UNT to Blackwater River	Franklin	37.06226	-79.862639	12	Dam and Pump	MVP-ES8
Spread 11	S-KL39	UNT to Blackwater River	Franklin	37.06119	-79.880018	6.5	Dam and Pump	MVP-ES8
Spread 11	S-C16	UNT to Teels Creek	Franklin	37.06061	-79.921179	15	Dam and Pump	MVP-ES8
Spread 11	S-KL54	UNT to Maggodee Creek	Franklin	37.05954	-79.840624	10	Dam and Pump	MVP-ES8
Spread 11	S-C8	UNT to Blackwater River	Franklin	37.0591	-79.853595	5	Dam and Pump	MVP-ES8
Spread 11	S-F4	UNT to Blackwater River	Franklin	37.05906	-79.853379	10	Dam and Pump	MVP-ES8
Spread 11	S-KL52	UNT to Maggodee Creek	Franklin	37.05817	-79.844877	1	Dam and Pump	MVP-ES8
Spread 11	S-KL53	UNT to Maggodee Creek	Franklin	37.05814	-79.844603	7	Dam and Pump	MVP-ES8
Spread 11	S-F8	UNT to Maggodee Creek	Franklin	37.05772	-79.836406	30	Dam and Pump	MVP-ES8
Spread 11	S-HH4	UNT to Maggodee Creek	Franklin	37.05659	-79.835785	9	Dam and Pump	MVP-ES8
Spread 11	S-KL51	UNT to Blackwater River	Franklin	37.05608	-79.850384	5.5	Dam and Pump	MVP-ES8
Spread 11	S-KL38	UNT to Blackwater River	Franklin	37.05591	-79.883177	7	Dam and Pump	MVP-ES8
Spread 11	S-C20	UNT to Maggodee Creek	Franklin	37.05519	-79.833881	4	Dam and Pump	MVP-ES8
Spread 11	S-C19	Maggodee Creek	Franklin	37.05515	-79.830098	45	See VMRC Crossing Detail	Per VMRC Crossing Detail
Spread 11	S-KL36	UNT to Blackwater River	Franklin	37.05334	-79.884604	7.5	Dam and Pump	MVP-ES8
Spread 11	S-F11	Blackwater River	Franklin	37.05284	-79.825711	90	See VMRC Crossing Detail	Per VMRC Crossing Detail
Spread 11	S-KL35	UNT to Blackwater River	Franklin	37.05213	-79.886182	2.5	Dam and Pump	MVP-ES8
Spread 11	S-F9b	UNT to Blackwater River	Franklin	37.04924	-79.817223	15	Dam and Pump	MVP-ES8
Spread 11	S-F10	UNT to Blackwater River	Franklin	37.04804	-79.813934	9	Dam and Pump	MVP-ES8
Spread 11	S-F9a	UNT to Blackwater River	Franklin	37.04717	-79.813	15	Dam and Pump	MVP-ES8
Spread 11	S-GG4	UNT to Blackwater River	Franklin	37.04274	-79.809015	5	Dam and Pump	MVP-ES8
Spread 11	S-A36	UNT to Foul Ground Creek	Franklin	37.03792	-79.804237	4	Dam and Pump	MVP-ES8
Spread 11	S-A38	UNT to Foul Ground Creek	Franklin	37.03627	-79.799442	9	Dam and Pump	MVP-ES8
Spread 11	S-A40	UNT to Foul Ground Creek	Franklin	37.03617	-79.79924	5.8	Dam and Pump	MVP-ES8
Spread 11	S-A41	Foul Ground Creek	Franklin	37.03171	-79.788213	12	Dam and Pump	MVP-ES8
Spread 11	S-GH36	UNT to Foul Ground Creek	Franklin	37.03106	-79.778588	3	Dam and Pump	MVP-ES8
Spread 11	S-KL17	UNT to Foul Ground Creek	Franklin	37.03101	-79.778435	5	Dam and Pump	MVP-ES8
Spread 11	S-GH37	UNT to Foul Ground Creek	Franklin	37.03097	-79.77819	3	Dam and Pump	MVP-ES8
Spread 11	S-GH38	UNT to Foul Ground Creek	Franklin	37.03097	-79.778083	3	Dam and Pump	MVP-ES8
Spread 11	S-GH39	UNT to Foul Ground Creek	Franklin	37.03086	-79.778069	4	Dam and Pump	MVP-ES8
Spread 11	S-GH40	UNT to Foul Ground Creek	Franklin	37.02889	-79.774785	3	Dam and Pump	MVP-ES8
Spread 11	S-GH44	UNT to Foul Ground Creek	Franklin	37.02839	-79.773359	6	Dam and Pump	MVP-ES8
Spread 11	S-UJ47	UNT to Foul Ground Creek	Roanoke	37.02837	-79.773383	2	Dam and Pump	MVP-ES8
Spread 11	S-G22	UNT to Poplar Camp Creek	Franklin	37.01961	-79.761958	12	Dam and Pump	MVP-ES8
Spread 11	S-G23	UNT to Poplar Camp Creek	Franklin	37.01953	-79.762002	3	Dam and Pump	MVP-ES8
Spread 11	S-G21	UNT to Poplar Camp Creek	Franklin	37.01936	-79.761643	3	Dam and Pump	MVP-ES8
Spread 11	S-G20	Poplar Camp Creek	Franklin	37.01736	-79.76	10	Dam and Pump	MVP-ES8
Spread 11	S-G18	UNT to Blackwater River	Franklin	37.00924	-79.754238	2	Dam and Pump	MVP-ES8
Spread 11	S-G17	UNT to Blackwater River	Franklin	37.0055	-79.752655	5	Dam and Pump	MVP-ES8
Spread 11	S-E18	UNT to Blackwater River	Franklin	37.00127	-79.747749	7	Dam and Pump	MVP-ES8
Spread 11	S-E17	UNT to Blackwater River	Franklin	37.00053	-79.74276	8	Dam and Pump	MVP-ES8
Spread 11	S-E14	UNT to Blackwater River	Franklin	36.99581	-79.735144	20	Dam and Pump	MVP-ES8
Spread 11	S-H38	UNT to Jacks Creek	Franklin	36.98943	-79.722366	12	Dam and Pump	MVP-ES8
Spread 11	S-H32	UNT to Jacks Creek	Franklin	36.98827	-79.708199	10	Dam and Pump	MVP-ES8
Spread 11	S-H37	UNT to Jacks Creek	Franklin	36.98803	-79.71745	6	Dam and Pump	MVP-ES8
Spread 11	S-H34	UNT to Jacks Creek	Franklin	36.98801	-79.711881	3	Dam and Pump	MVP-ES8
Spread 11	S-H36	UNT to Jacks Creek	Franklin	36.98801	-79.714922	3	Dam and Pump	MVP-ES8
Spread 11	S-H30	UNT to Jacks Creek	Franklin	36.98796	-79.702711	1	Dam and Pump	MVP-ES8
Spread 11	S-A18	UNT to Jacks Creek	Franklin	36.98782	-79.700634	2.6	Dam and Pump	MVP-ES8
Spread 11	S-A19/H26	UNT to Jacks Creek	Franklin	36.98772	-79.698901	7	Dam and Pump	MVP-ES8
Spread 11	S-A20	UNT to Jacks Creek	Franklin	36.98772	-79.698555	7	Dam and Pump	MVP-ES8
Spread 11	S-H28	UNT to Jacks Creek	Franklin	36.98517	-79.692272	6	Dam and Pump	MVP-ES8
Spread 11	S-H27	UNT to Jacks Creek	Franklin	36.98512	-79.692272	10	Dam and Pump	MVP-ES8
Spread 11	S-A22	UNT to Jacks Creek	Franklin	36.98485	-79.69187	8	Dam and Pump	MVP-ES8
Spread 11	S-MM44	UNT to Little Jacks Creek	Franklin	36.98251	-79.687818	4	Dam and Pump	MVP-ES8
Spread 11	S-MM46	UNT to Little Jacks Creek	Franklin	36.98224	-79.6875	3	Dam and Pump	MVP-ES8
Spread 11	S-MM45	UNT to Little Jacks Creek	Franklin	36.98197	-79.686901	4	Dam and Pump	MVP-ES8
Spread 11	S-MM48	UNT to Little Jacks Creek	Franklin	36.97922	-79.684192	7	Dam and Pump	MVP-ES8
Spread 11	S-H25	Little Jacks Creek	Franklin	36.97853	-79.682186	7	Dam and Pump	MVP-ES8
Spread 11	S-H24	UNT to Little Jacks Creek	Franklin	36.97803	-79.680682	10	Dam and Pump	MVP-ES8
Spread 11	S-H23	UNT to Turkey Creek	Franklin	36.97642	-79.677525	5	Dam and Pump	MVP-ES8
Spread 11	S-HH1	UNT to Turkey Creek	Franklin	36.97465	-79.674453	5	Dam and Pump	MVP-ES8
Spread 11	S-A13	Turkey Creek	Franklin	36.97328	-79.673075	8	Dam and Pump	MVP-ES8
Spread 11	S-A11	UNT to Turkey Creek	Franklin	36.97324	-79.669898	3	Dam and Pump	MVP-ES8
Spread 11	S-H17	Dinner Creek	Franklin	36.97213	-79.662987	8	Dam and Pump	MVP-ES8
Spread 11	S-A7	UNT to Dinner Creek	Franklin	36.97203	-79.662504	6	Dam and Pump	MVP-ES8

SPREAD 11– STREAM CROSSING INFORMATION

Stream ID	NHD Stream Name	County	Latitude	Longitud e	Top of Bank Width (ft)	Selected Crossing Method	Selected Crossing BMP No.
S-SS8	Polecat Creek	Franklin	36.9709	-79.65737	8	Dam and Pump	MVP-ES8
S-CD8	UNT to Owens Creek	Franklin	36.97052	-79.653726	4.5	Dam and Pump	MVP-ES8
S-AB8	UNT to Owens Creek	Franklin	36.97013	-79.651328	4	Dam and Pump	MVP-ES8
S-DD3	Owens Creek	Franklin	36.96912	-79.645042	15	Dam and Pump	MVP-ES8
S-G16	Strawfield Creek	Franklin	36.96864	-79.642174	30	Dam and Pump	MVP-ES8
S-G15	UNT to Parrot Branch	Franklin	36.96771	-79.63659	9	Dam and Pump	MVP-ES8
S-G13	Parrot Branch	Franklin	36.96703	-79.630747	8	Dam and Pump	MVP-ES8
S-D3	UNT to Jonnikin Creek	Pittsylvania	36.96563	-79.605542	10	Dam and Pump	MVP-ES8
S-D4	UNT to Jonnikin Creek	Pittsylvania	36.9656	-79.604894	6	dam and Pump	MVP-ES8
S-D2	Jonnikin Creek	Pittsylvania	36.96541	-79.59913	18	Dam and Pump	MVP-ES8
S-D7	UNT to Jonnikin Creek	Franklin	36.96476	-79.617043	8	Dam and Pump	MVP-ES8
S-D1	UNT to Jonnikin Creek	Pittsylvania	36.96443	-79.595691	10	Dam and Pump	MVP-ES8
S-G11	UNT to Jonnikin Creek	Pittsylvania	36.96242	-79.5905	6	Dam and Pump	MVP-ES8
S-G9	UNT to Jonnikin Creek	Pittsylvania	36.95936	-79.586437	4	Dam and Pump	MVP-ES8
S-G8	UNT to Jonnikin Creek	Pittsylvania	36.95781	-79.583545	4	Dam and Pump	MVP-ES8
S-Q15	UNT to Jonnikin Creek	Pittsylvania	36.95758	-79.583492	5	Dam and Pump	MVP-ES8
S-A5	UNT to Rocky Creek	Pittsylvania	36.95413	-79.58087	8	Dam and Pump	MVP-ES8
S-A6	UNT to Rocky Creek	Pittsylvania	36.95228	-79.58046	5	Dam and Pump	MVP-ES8
S-H11	UNT to Rocky Creek	Pittsylvania	36.94958	-79.579537	3	Dam and Pump	MVP-ES8
S-F1	UNT to Rocky Creek	Pittsylvania	36.94516	-79.57402	8	Dam and Pump	MVP-ES8
S-F2	UNT to Rocky Creek	Pittsylvania	36.94405	-79.571442	7	Dam and Pump	MVP-ES8
S-C7	UNT to Rocky Creek	Pittsylvania	36.94402	-79.571517	20	Dam and Pump	MVP-ES8
S-E12	UNT to Pigg River	Pittsylvania	36.936	-79.549329	3	Dam and Pump	MVP-ES8
S-E11	Pigg River	Pittsylvania	36.93335	-79.538293	100	See VMRC Crossing Detail	Per VMRC Crossing Detail
S-H8	UNT to Pigg River	Pittsylvania	36.9325	-79.535087	6	Dam and Pump	MVP-ES8
S-A4	UNT to Pigg River	Pittsylvania	36.93225	-79.532989	8	Dam and Pump	MVP-ES8
S-H7	UNT to Pigg River	Pittsylvania	36.93218	-79.532963	5	Dam and Pump	MVP-ES8
S-C3	Harpen Creek	Pittsylvania	36.92976	-79.526109	18	See VMRC Crossing Detail	Per VMRC Crossing Detail
S-H13	Harpen Creek	Pittsylvania	36.92511	-79.51735	20	Dam and Pump	MVP-ES8
S-G4	Harpen Creek	Pittsylvania	36.91646	-79.492669	30	Dam and Pump	MVP-ES8
S-C4	UNT to Harpen Creek	Pittsylvania	36.92975	-79.52629	4	Dam and Pump	MVP-ES8
S-G6	UNT to Harpen Creek	Pittsylvania	36.92074	-79.505898	6	Dam and Pump	MVP-ES8
S-G5	UNT to Harpen Creek	Pittsylvania	36.91769	-79.496604	6	Dam and Pump	MVP-ES8
S-G3	UNT to Harpen Creek	Pittsylvania	36.91566	-79.490029	9	Dam and Pump	MVP-ES8
S-CC16	UNT to Harpen Creek	Pittsylvania	36.913	-79.487838	11	Dam and Pump	MVP-ES8
S-CC14	UNT to Cherrystone Creek	Pittsylvania	36.90533	-79.471492	8	Dam and Pump	MVP-ES8
S-CC13	UNT to Cherrystone Creek	Pittsylvania	36.90531	-79.471574	7	Dam and Pump	MVP-ES8
S-MM8	UNT to Cherrystone Creek	Pittsylvania	36.90299	-79.46822	6	Dam and Pump	MVP-ES8
S-CC15	UNT to Cherrystone Creek	Pittsylvania	36.90194	-79.466535	6	Dam and Pump	MVP-ES8
S-CC8	UNT to Cherrystone Creek	Pittsylvania	36.89944	-79.462685	8	Dam and Pump	MVP-ES8
S-CC5	UNT to Cherrystone Creek	Pittsylvania	36.89941	-79.462483	12	Dam and Pump	MVP-ES8
S-CC9	UNT to Cherrystone Creek	Pittsylvania	36.89774	-79.458046	5.5	Dam and Pump	MVP-ES8
S-CC10	UNT to Cherrystone Creek	Pittsylvania	36.89732	-79.456119	9	Dam and Pump	MVP-ES8
S-MM10	UNT to Cherrystone Creek	Pittsylvania	36.88592	-79.45296	7	Dam and Pump	MVP-ES8
S-CC11	UNT to Cherrystone Creek	Pittsylvania	36.88581	-79.45292	8	Dam and Pump	MVP-ES8
S-CC1	Cherrystone Creek	Pittsylvania	36.88404	-79.445744	15	Dam and Pump	MVP-ES8
S-CC3	UNT to Cherrystone Creek	Pittsylvania	36.88373	-79.444763	8	Dam and Pump	MVP-ES8
S-P5	UNT to Cherrystone Creek	Pittsylvania	36.88275	-79.440053	5	Dam and Pump	MVP-ES8
S-UJ35-EPH	UNT to Pole Bridge Branch	Pittsylvania	36.88145	-79.433781	4	Dam and Pump	MVP-ES8
S-Q4	UNT to Pole Bridge Branch	Pittsylvania	36.88611	-79.430914	5	Dam and Pump	MVP-ES8
S-Q3	Pole Bridge Branch	Pittsylvania	36.88444	-79.42822	25	Dam and Pump	MVP-ES8
S-Q2	UNT to Pole Bridge Branch	Pittsylvania	36.88428	-79.427914	7	Dam and Pump	MVP-ES8
S-Q1	UNT to Pole Bridge Branch	Pittsylvania	36.88345	-79.425169	4	Dam and Pump	MVP-ES8
S-B6	UNT to Pole Bridge Branch	Pittsylvania	36.87906	-79.420189	10	Dam and Pump	MVP-ES8
S-B8	UNT to Pole Bridge Branch	Pittsylvania	36.87794	-79.417992	4	Dam and Pump	MVP-ES8
S-B9	UNT to Pole Bridge Branch	Pittsylvania	36.87742	-79.416255	7	Dam and Pump	MVP-ES8
S-DD4	UNT to Mill Creek	Pittsylvania	36.87148	-79.403907	6	Dam and Pump	MVP-ES8
S-KL27	UNT to Mill Creek	Pittsylvania	36.86653	-79.400511	1	Dam and Pump	MVP-ES8
S-C1	Mill Creek	Pittsylvania	36.86351	-79.397914	6	Dam and Pump	MVP-ES8
S-G2	Little Cherrystone Creek	Pittsylvania	36.85193	-79.386051	7	Dam and Pump	MVP-ES8
S-B2	UNT to Little Cherrystone Creek	Pittsylvania	36.84939	-79.37778	5	Dam and Pump	MVP-ES8
S-H55	UNT to Little Cherrystone Creek	Pittsylvania	36.84349	-79.369222	3	Dam and Pump	MVP-ES8
S-H54	UNT to Little Cherrystone Creek	Pittsylvania	36.84111	-79.366848	12	Dam and Pump	MVP-ES8
S-GG11	UNT to Little Cherrystone Creek	Pittsylvania	36.84109	-79.366942	8	Dam and Pump	MVP-ES8
S-H3	UNT to Little Cherrystone Creek	Pittsylvania	36.8345	-79.360244	6	Dam and Pump	MVP-ES8
S-H5	UNT to Little Cherrystone Creek	Pittsylvania	36.83341	-79.359823	8	Dam and Pump	MVP-ES8
S-OO1	UNT to Little Cherrystone Creek	Pittsylvania	36.83029	-79.356618	5	Dam and Pump	MVP-ES8
S-H44	UNT to Little Cherrystone Creek	Pittsylvania	36.82982	-79.346016	8	Dam and Pump	MVP-ES8
S-H42	UNT to Little Cherrystone Creek	Pittsylvania	36.82901	-79.344496	5	Dam and Pump	MVP-ES8
S-OO2	UNT to Little Cherrystone Creek	Pittsylvania	36.82883	-79.353849	5	Dam and Pump	MVP-ES8
S-EF26	Little Cherrystone Creek	Pittsylvania	36.82621	-79.349814	20	Dam and Pump	MVP-ES8

SPREAD 11– STREAM CROSSING INFORMATION