



Doddridge County, WV Floodplain Management

This permit gives approval for the development/project listed that impacts the FEMA-designated floodplain and/or floodway of Doddridge County, WV, pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance. ***This permit must be posted at the site of work as to be clearly visible and must remain posted during entirety of development.***

Permit #: 23-633

Date Approved: August 7, 2023

Expires: August 7, 2024

Issued to: Mountain Valley Pipeline, LLC

POC: Matt Hoover

Company Address: 2200 Energy Drive, 2nd Floor Canonsburg, PA 15317

Project Address: Big Isaac Road @ Meathouse Fork Road Salem, WV 26426

Firm: 54017C0260C

Lat/Long: 39.201285, -80.553387

Purpose of development: Pipeline Project

Issued by: George C. Eidel, Doddridge County FPM (or designee)

Date: August 7, 2023

For additional information regarding this permit, please contact
Doddridge County Floodplain Manager at 304.873.1343, or via email at
doddridgecountyfpm@gmail.com
101 Church Street Suite 102; West Union, WV 26456

MVP, LLC
PO BOX 299
CANONSBURG, PA 15317

DODDRIDGE COUNTY COMMISSION
DODDRIDGE COUNTY OF EM MGMT
ATTN: GEORGE EIDEL
SUITE 102
101 CHURCH ST.
WEST UNION, WV 26456-1194

914 0486-3-3-MAAD
PAGE: 1



PAYMENT SUMMARY

VENDOR NO: 1055847
VOUCHER NO: 0000007728

VOUCHER DATE: 08/18/23

REF. DOC.	REFERENCE NUMBER	REF. DATE	DOCUMENT AMOUNT	DISCOUNT/ADJ AMOUNT	NET AMOUNT
SELLER INVCE	CKRQST072723PM76 317610 FLOODPLAIN PERMIT 23-633	07/27/23	1,620.00	0.00	1,620.00
TOTALS:			1,620.00	0.00	1,620.00

COPY FP # 23-633

(Detach Here)

MVP, LLC
PO BOX 299
CANONSBURG, PA 15317

60-160/433

CHECK DATE
08/18/2023

CHECK NUMBER
0000007728

PAY...ONE THOUSAND SIX HUNDRED TWENTY DOLLARS 00 CENTS

TO THE ORDER OF:

DODDRIDGE COUNTY COMMISSION
DODDRIDGE COUNTY OF EM MGMT
ATTN: GEORGE EIDEL
SUITE 102
101 CHURCH ST.
WEST UNION, WV 26456-1194

\$*****1,620.00

Jamie M. Sumner

THE BANK OF NEW YORK MELLON
PITTSBURGH, PENNSYLVANIA

⑈0000007728⑈ ⑆04330⑆60⑆ 904⑈0640

FLOODPLAIN PERMIT #23-633

Mountain Valley Pipeline LLC, Big Isaac Rd @ Meathouse Fork Rd, Pipeline Project, 39.201285, -80.553387

TASK	COMPLETE (DATE)	NOTES
<i>CHECK RECEIVED</i>		
<i>US ARMY CORP. ENGINEERS (USACE)</i>		
<i>US FISH & WILDLIFE SERVICES (USFWS)</i>		
<i>WV DEPT. NATURAL RESOURCES (WVDNR)</i>		
<i>WV DEPT. ENVIROMENTAL PROTECTION (WVDEP)</i>		
<i>STATE HISTORIC & PRESERVATION OFFICE (SHPO)</i>		
<i>OFFICE of LAND & STREAM (OLS)</i>		
<i>WVDOH</i>		
<i>Elevation Certificate</i>		
<i>DATE OF COMMISSION READING</i>	7/18/2023	
<i>DATE AVAILABLE TO BE GRANTED</i>	8/7/2023	
<i>PERMIT GRANTED</i>		
<i>COMPLETE</i>		



Doddridge County Floodplain Permits

(Week of July 10, 2023)

Please take notice that on the (5th) of (July), 2023, (Mountain Valley Pipeline LLC) filed an application for a Floodplain Permit (#23-633) to develop land located at or about (Big Isaac Road @ Meathouse Fork Road); Coordinates: 39.201285, -80.553387. The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance with WV Code Chapter 29B Freedom of Information, Article 1 Public Records and county policy and procedures. Any interested persons who desire to comment shall present the same in writing by (August 7, 2023) (20 calendar days after the announcement at the regularly scheduled Doddridge County Commission Meeting) delivered to the Floodplain Manager of the County at 105 Court Street, Suite #3, West Union, WV 26456. This project is a renewal of the Mountain Valley Pipeline Project

A handwritten signature in blue ink, appearing to read "George C. Eidel".

GEORGE C. EIDEL, CFM

Doddridge County Floodplain Manager

Applicant

Please read print name, sign and date below:

- I certify that I am authorized to submit this application for the primary project developer.
- I certify that the information included in this application is to the best of my knowledge true and complete.
- I certify that all required Federal, State, and local permits required by law and/or ordinance for the above described development of this project have been properly attained, are current and valid, and must be presented with this application before a Doddridge County Floodplain Permit may be issued.
- I understand that if in the course of the development project additional permits become required that were not needed during the initial proposal, the primary developer must notify the Doddridge County Floodplain Manager within 48 hours of such need, and that a "Stop Work" order may be issued for all project work directly impacting the floodplain or floodway, until such time the required additional permits are acquired.
- I understand that once the floodplain permit is submitted, the application will be entered into official public record at the next regularly scheduled Doddridge County Commission meeting after the date of submittal.
- I understand that from the date of submittal of the fully completed permit application, the Doddridge County Floodplain Manager has ninety (90) days to make a determination to either grant or deny said permit application. During this approval period, the Doddridge County Floodplain Manager may, at his or her discretion, conduct a review and/or additional study of provided documentation by means of an independent engineering firm. All costs associated with said review and/or study must be reimbursed to the County before issuance of approved permit.
- I understand that during the approval period, the Doddridge County Floodplain Manager or designee may at his or her discretion conduct site visits and document conditions of proposed development pursuant to the permit application.
- I understand that once the Floodplain Permit is granted, the permit will be entered into official public record at the next scheduled Doddridge County Commission meeting after the date of issuance. Appeals to the permit may be made no later than twenty (20) days after said issuance. If a valid appeal is submitted, as determined by the Doddridge County Floodplain Manager, a "Stop Work" order will be issued for all project development directly involving the floodplain or floodway. A public hearing by the Doddridge County Appeals Board will be scheduled no less than ten (10) days after the next regularly scheduled Doddridge County Commission meeting.
- I understand that all decisions of the Doddridge County Appeals Board shall be final.
- **I understand issuance of a Floodplain Permit authorizes me to proceed with construction as proposed. A Certificate of Compliance is required upon substantial completion of the project.**
- In signing this application, the primary developer hereby grants the Doddridge County Floodplain Manager or designee the right to enter onto the above-described location to inspect the development work proposed, in progress, and/or completed.
- I understand that if I do not follow exactly the site-plan submitted and approved by this permit that a "Stop Work" order may be issued by the Wirt County Floodplain Manager and that I must stop all construction immediately until discrepancies of actual work vs. proposed work is resolved.

Applicant Signature: Robert J. Cooper Date: 07/03/2023

Applicant Printed Name: Robert J. Cooper



Permit# 23-633
Project Name: Mountain Valley Pipeline
 Mountain Valley
Permittees Name: Pipeline, LLC

Doddridge County, WV

Floodplain Development Permit Application

This document is to be used for projects that impact/potentially impact the FEMA-designated floodplain and/or floodway of Doddridge County, WV pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance.

SECTION 1: GENERAL PROVISIONS (APPLICANT TO READ AND SIGN)

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
7. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her representative to make inspections to verify compliance.
8. I THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

APPLICANT'S SIGNATURE Robert J. Cooper

DATE 07/03/23

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Applicant Information:

Please provide all pertinent data.

Applicant Information		
Responsible Company Name: Mountain Valley Pipeline, LLC		
Corporate Mailing Address: 2200 Energy Drive, 2nd Floor		
City: Canonsburg	State: PA	Zip: 15317
Corporate Point of Contact (POC): Matt Hoover		
Corporate POC Title: Permitting Supervisor		
Corporate POC Primary Phone: 412 258-5627		
Corporate POC Primary Email: mhoover@equitransmidstream.com		
Corporate FEIN: 25-0754685	Corporate DUNS: N/A	
Corporate Website: N/A		
Local Mailing Address: N/A		
City: N/A	State: N/A	Zip: N/A
Local Project Manager (PM): Same as Point of Contact		
Local PM Primary Phone: Same as Point of Contact		
Local PM Secondary Phone: Same as Point of Contact		
Local PM Primary Email: Same as Point of Contact		
Person Filing Application: Same as Point of Contact		
Applicant Title: Same as Point of Contact		
Applicant Primary Phone: (412) 258 5627		
Applicant Secondary Phone: N/A		
Applicant Primary Email: Same as Point of Contact		

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Project Narrative:

Describe in detail the proposed development including project name/title, type of development, estimated start and completion timeline, and its potential impact on the floodplain. Use additional copies of this page as needed.

Project Narrative:
One floodplain crossing is located in Doddridge County with approximately 250 linear feet of pipeline construction at Station 1837+00. Temporary aboveground construction within floodplain limits include additional temporary work space (ATWS) utilized for stream crossing support, access roads including stone construction entrances, timber mats and various erosion and sediment control devices (compost filter sock (CFS), silt fence, super silt fence, and erosion matting). Permanent aboveground structures associated with crossings within the floodplain limits will be one service pole associated with the ground bed rectifier systems and mainline valve sites at linear Station 1837+00. It should be noted that the mainline valve site will be placed at the current ground elevation without increasing the current grade. Additionally, construction of permanent roads, temporary roads, or maintenance of existing roads will occur within the floodplain limits. Estimated construction cost is \$549,064.

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Proposed Development:

Please check all elements of the proposed project that apply.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

<u>ACTIVITY</u>		<u>STRUCTURAL TYPE</u>	
<input type="checkbox"/>	New Structure	<input type="checkbox"/>	Residential (1 – 4 Family)
<input type="checkbox"/>	Addition	<input type="checkbox"/>	Residential (more than 4 Family)
<input type="checkbox"/>	Alteration	<input type="checkbox"/>	Non-residential (floodproofing)
<input type="checkbox"/>	Relocation	<input type="checkbox"/>	Combined Use (res. & com.)
<input type="checkbox"/>	Demolition	<input type="checkbox"/>	Replacement
<input type="checkbox"/>	Manufactured/Mobil Home		

B. OTHER DEVELOPMENT ACTIVITIES:

- Fill Mining Drilling Pipelining
- Grading
- Excavation (except for STRUCTURAL DEVELOPMENT checked above)
- Watercourse Alteration (including dredging and channel modification)
- Drainage Improvements (including culvert work)
- Road, Street, or Bridge Construction
- Subdivision (including new expansion)
- Individual Water or Sewer System
- Other (please specify)

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Development Site/Property Information:

Please provide physical description of the site/property, along with pertinent ownership (surface and mineral rights) data as applicable. Attach appropriate maps from the WV Flood Tool showing location of proposed development. Use additional copies of this page if development spans multiple property boundaries. Designate each property by number (i.e. Property 1 of 1, Property 2 of 7, etc.)

Property Designation: ____ of ____

Site/Property Information:		
Legal Description: Please See Attached		
Physical Address/911 Address:		
Decimal Latitude/Longitude: 39.201285, -80.553387		
DMS Latitude/Longitude:		
District:	Map:	Parcel:
Land Book Description:		
Deed Book Reference:		
Tax Map Reference:		
Existing Buildings/Use of Property:		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
Community:	Number:	Panel:	Suffix:
Location (Lat/Long):		Approximate Elevation:	
		Estimated BFE:	
Is the development in the floodway?		Is the development in the floodplain?	
Yes No	Yes No Zone: _____		
Notes:			

Doddridge County Commercial/Industrial Floodplain Development Permit Application

Mountain Valley provided a non-public list of affected landowners to FERC. FERC requires that this information be filed as privileged to protect the privacy of the landowners. To be consistent with these FERC requirements, the landowner information has been omitted from this application.

Property Owner Data:

Please provide data on current site/property landowner(s), both surface and mineral rights (as applicable). Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Designation: ____ of ____ See attached for property owners/adjacent landowners.

Property Owner Data:		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Surface Rights Owner Data:		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Mineral Rights Owner Data: (As Applicable)		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Contractor Data:

Please provide all pertinent data for contractors and sub--contractors that may be participating in this project. Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Designation: _____ of _____

Contractor/Sub-Contractor (C/SC) Information:		
C/SC Company Name: N/A		
C/SC WV License Number:		
C/SC FEIN:	C/SC DUNS:	
Local C/SC Point of Contact (POC):		
Local C/SC POC Title:		
C/SC Mailing Address:		
City:	State:	Zip-Code:
Local C/SC Office Phone:		
Local C/SC POC Phone:		
Local C/SC POC E-Mail:		

Engineer Firm Information:		
Engineer Firm Name:		
Engineer WV License Number:		
Engineer Firm FEIN:	Engineer Firm DUNS:	
Engineer Firm Primary Point of Contact (POC):		
Engineer Firm Primary POC Title:		
Engineer Firm Mailing Address:		
City:	State:	Zip-Code:
Engineer Firm Office Phone:		
Engineer Firm Primary POC Phone:		
Engineer Firm Primary POC E-Mail:		

Adjacent and/or Affected Landowners Data

Please provide data for all adjacent and/or affected surface owners (both up and down stream) whose property may be impacted by proposed development as demonstrated by a floodplain study or survey. Use additional copies of this page as needed.

Adjacent Property Owner Data: Upstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Upstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Site Plan

A Site Plan is an accurate and detailed map of the proposed development for this project. It shows the size, shape, location and special features of the project property, and the size and location of any development planned to the property, especially as that development will impact the floodplain and/or floodway. Site plans show what currently exists on the project property, and any changes or improvements you are proposing to make. **A certified and licensed engineering firm should complete site plans.**

A SITE PLAN MUST CONTAIN THE FOLLOWING INFORMATION:

1. Legal description of the parcel, north arrow and scale
2. All property lines and their dimensions
3. Names of adjacent roads, location of driveways
4. Location of sloughs, tributaries, streams, rivers, wetlands, ponds, and lakes, with setbacks indicated, and including FEMA floodplain data based on most updated FIRM.
5. Location, size, shape of all buildings, existing and proposed, with elevation of lowest floor indicated.
6. Location and dimensions of existing or proposed on-site sewage systems.
7. Location of all propane tanks, fuel tanks or other liquid storage tanks whether above ground or below ground level.
8. Location and dimensions of any proposed pipeline placement(s) into floodplain/floodway.
9. Location and dimensions of any roadway development into floodplain/floodway. *(Includes initial development access roads)*
10. Location and dimensions of any bridge and/or culvert development into floodplain/floodway.
11. Location and dimensions of any storage yard or facility into the floodplain/floodway.
12. Location of any existing utilities and/or proposed utility placement and/or displacement.
13. Location, dimensions and depth of any existing or proposed fill on site.
14. A survey showing the **existing ground elevations** of at least location on the building site. **ELEVATION NOTE:** All vertical datum will reference either NGVD 29 or NAVD 88. Assumed datum will not be acceptable unless the property is located in an area where vertical datum has not been published. For those areas where vertical datum has not been established, a site plan with contours, elevations using assumed datum, high water marks and existing water levels of sloughs, rivers, lakes or streams and proposed lowest floor elevation.

Applicant

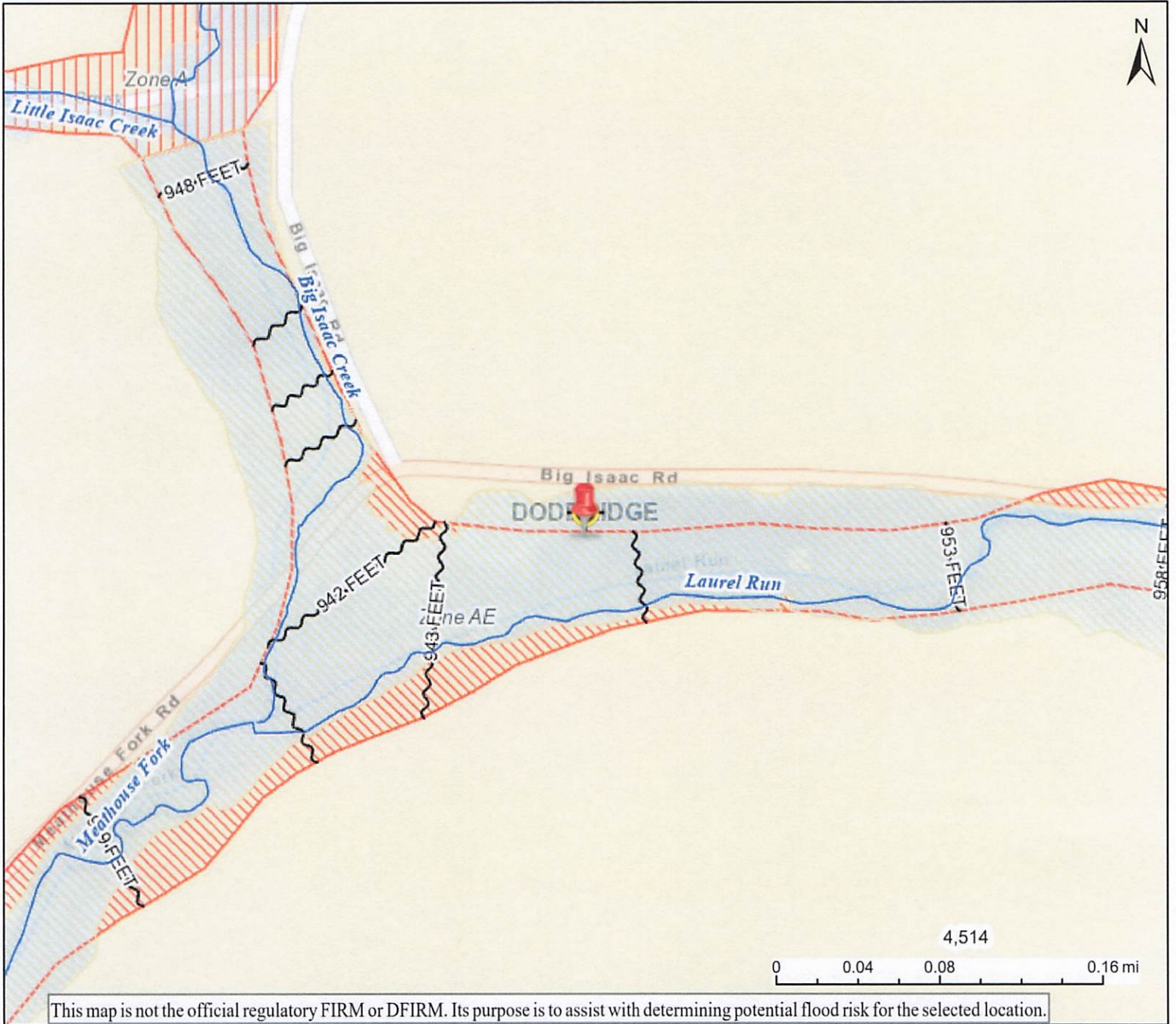
Please read print name, sign and date below:

- I certify that I am authorized to submit this application for the primary project developer.
- I certify that the information included in this application is to the best of my knowledge true and complete.
- I certify that all required Federal, State, and local permits required by law and/or ordinance for the above described development of this project have been properly attained, are current and valid, and must be presented with this application before a Doddridge County Floodplain Permit may be issued.
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- I understand that if I do not follow exactly the site-plan submitted and approved by this permit that a "Stop Work" order may be issued by the Wirt County Floodplain Manager and that I must stop all construction immediately until discrepancies of actual work vs. proposed work is resolved.

Applicant Signature: Robert J. Cooper Date: 07/03/2023

Applicant Printed Name: Robert J. Cooper

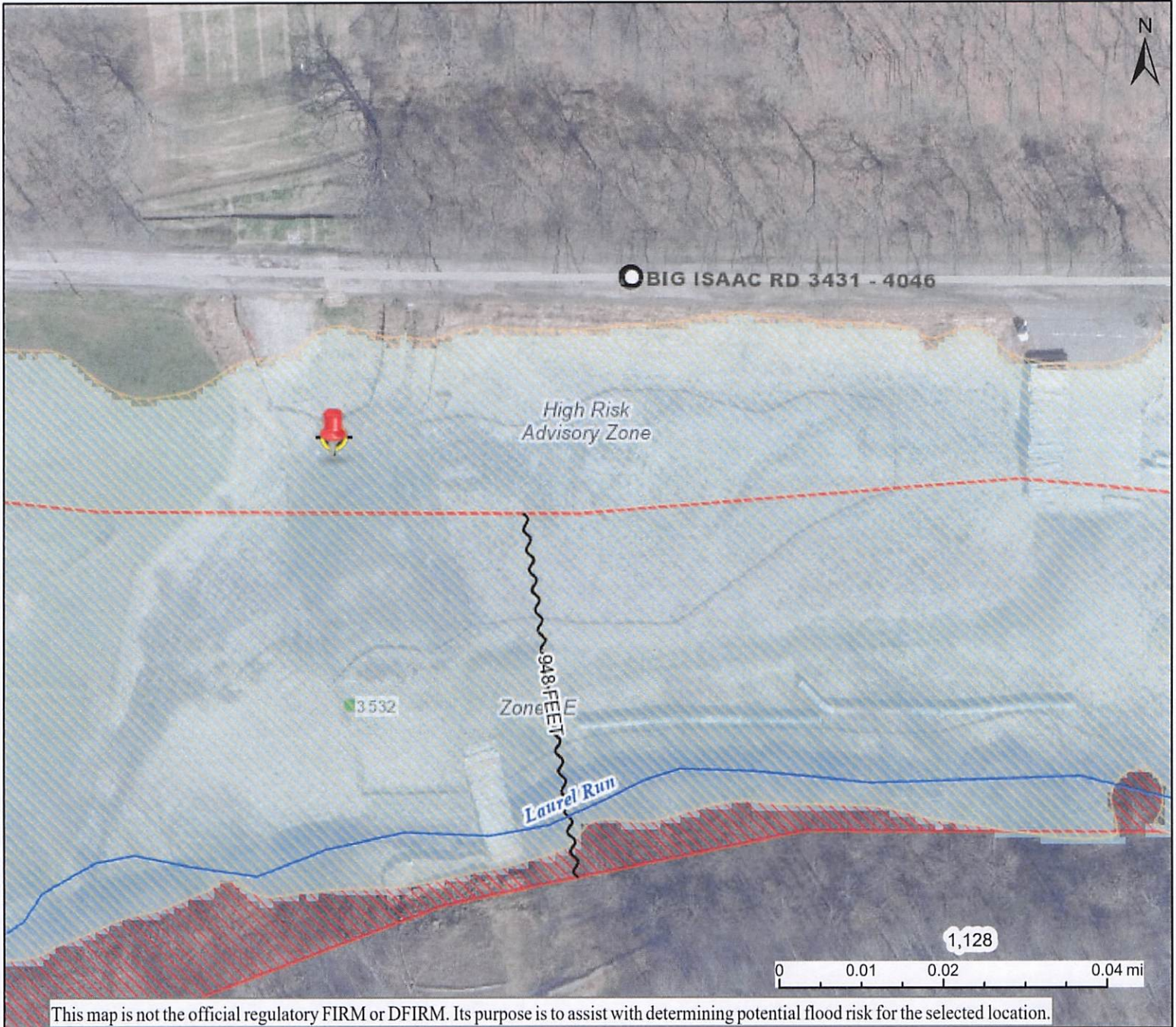
WV Flood Map



This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

<p>H I G H R I S K</p> <p>Zone AE 1-Percent-Annual-Chance Flood Hazard Area With Base Flood Elevation (BFE)</p> <p>Floodway Regulatory Floodway in AE Zone</p> <p>Zone A 1-Percent-Annual-Chance Flood Hazard Area Without BFE (may have Advisory Flood Heights)</p> <p>Advisory 1-Percent-Annual-Chance High Risk Advisory</p> <p>Download the Full Legend for all flood tool symbols https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf</p> <p>Disclaimer: The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. Refer to the official Flood Insurance Study (FIS) for detailed flood elevation data in flood profiles and data tables. WV Flood Tool (https://www.mapwv.gov/flood) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.</p>		<p> Flood Info Location Map created on 7/6/2023</p> <p>User Notes</p> <p>Flood Hazard Area Location is WITHIN the FEMA 100-year floodplain.</p> <p>Flood Zone A</p> <p>Stream Meathouse Fork</p> <p>Watershed (HUC8) West Fork (5020002)</p> <p>Flood Height Flood Height 6b None</p> <p>Water Depth About 4.9 ft (Source: HEC-RAS)</p> <p>Elevation 941.5 ft (Source: FEMA 2018-20) (NAVD88)</p> <p>Community & ID Harrison County (ID: 540053)</p> <p>FEMA Map & Date 54033C0210D; Effective Date: 10/4/2011</p> <p>Location (lat, long) (39.201285, -80.553387) (WGS84)</p> <p>Parcel ID 09-04-0011-0037-0006</p> <p>E-911 Address 3764 BIG ISAAC RD, SALEM, WV, 26426</p>	
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WV Flood Map



This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

Flood Info Location Map created on 7/6/2023	
H I G H R I S K	Zone AE 1-Percent-Annual-Chance Flood Hazard Area With Base Flood Elevation (BFE)
	Floodway Regulatory Floodway in AE Zone
	Zone A 1-Percent-Annual-Chance Flood Hazard Area Without BFE (may have Advisory Flood Heights)
	Advisory 1-Percent-Annual-Chance High Risk Advisory
	Download the Full Legend for all flood tool symbols https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf
Disclaimer: The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. Refer to the official Flood Insurance Study (FIS) for detailed flood elevation data in flood profiles and data tables. WV Flood Tool (https://www.mapwv.gov/flood) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.	
User Notes	Flood Hazard Area Location is WITHIN the FEMA 100-year floodplain.
Flood Zone	A
Stream	Meathouse Fork
Watershed (HUC8)	West Fork (5020002)
Flood Height	Flood Height 6b None
Water Depth	About 4.9 ft (Source: HEC-RAS)
Elevation	941.5 ft (Source: FEMA 2018-20) (NAVD88)
Community & ID	Harrison County (ID: 540053)
FEMA Map & Date	54033C0210D; Effective Date: 10/4/2011
Location (lat, long)	(39.201285, -80.553387) (WGS84)
Parcel ID	09-04-0011-0037-0006
E-911 Address	3764 BIG ISAAC RD, SALEM, WV, 26426

**DODDRIDGE COUNTY FLOODPLAIN
LANDOWNER INFORMATION
MOUNTAIN VALLEY PIPELINE**

Owner	Address	Legal Description	Mile Post	District	Map	Parcel	Deed Book/Page
Landowners							
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	Meathouse 90.74 AC	34.8	04	11	36	281/665
Adjacent Landowners							
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	BIG Isaac 1 AC	34.8	04	11	31	281/665
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	BIG Isaac 30 AC	34.8	04	11	35	WB41/619
Earl Richards (Life)	544 Independence Road Salem, WV 26426	5.36 AC Meathouse	34.8	04	11	37.7	258/200
Earl Richards (Life)	544 Independence Road Salem, WV 26426	2 AC Meathouse	34.8	04	11	37.6	258/194
John R Clowser	3735 Big Issac Road Salem, WV 26426	1.51 AC Meathouse	34.8	04	11	37.4	305/436
John Russel Clowser	PO Box 98 Lost Creek, WV 26385	77 PO Two Lots Meathouse	34.8	04	11	37.2	296/700
Brett Cox	3611 Haigker Road Monroe, NC, 28110	Meathouse 30.18 AC	34.8	04	11	37.5	316/583

Mountain Valley provided a non-public list of affected landowners to FERC. FERC requires that this information be filed as privileged to protect the privacy of the landowners. To be consistent with these FERC requirements, the landowner information has been omitted from this application.



118 E Ct St, West Union, WV 26456 to 39.201285, -80.553387

Drive 18.3 miles, 32 min



Imagery ©2017 Google, Map data ©2017 Google 2 mi

118 E Ct St

West Union, WV 26456

Take Railroad St to WV-18 S

1 min (0.2 mi)

↑ 1. Head northeast on Cross St toward Court St

52 ft

↘ 2. Turn right onto Railroad St

0.2 mi

↙ 3. Turn left toward WV-18 S

279 ft

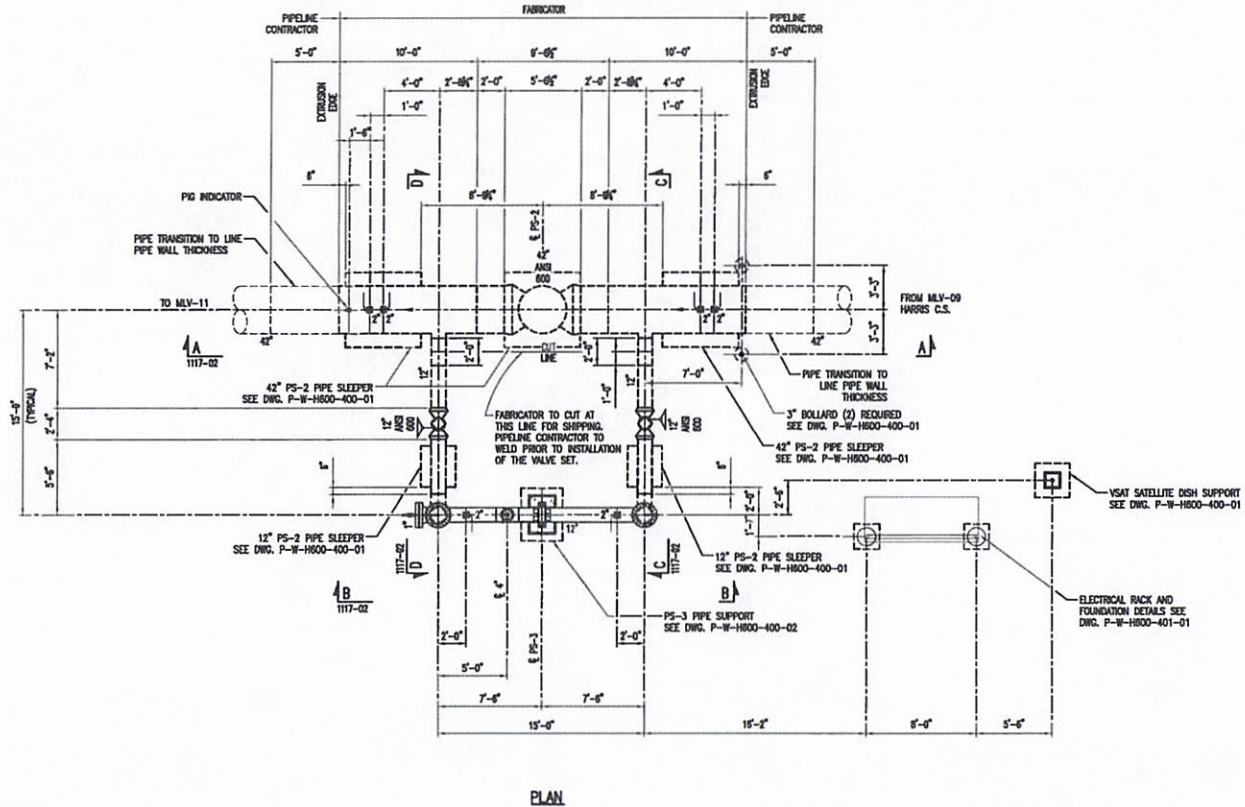
Take US-50 E, Co Rte 15 and Big Isaac to Meathouse Fork in Oak

31 min (18.1 mi)

4. Turn right onto WV-18 S 0.5 mi
5. Turn left onto US-50 E 5.6 mi
6. Turn right at Co Rte 50/35 0.1 mi
7. Continue onto Blacklick Rd 2.1 mi
8. Turn right onto Co Rte 15/Blacklick Rd/Sherwood-Greenbrier Rd
i Continue to follow Co Rte 15 6.3 mi
9. Turn right onto Big Isaac 3.4 mi
10. Big Isaac turns left and becomes Meathouse Fork
i Destination will be on the right 436 ft

39.201285, -80.553387

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



PLAN

DESIGN & TEST DATA

DESIGN PRESSURE 1480 PSIG AT 120°F L 0.5 DESIGN FACTOR L
 MAXIMUM HOOP STRESS LEVEL AT 1480 PSIG 50 M SHYS. BASED ON 42\"/>

Plotted by: [unclear] on April 7, 2016 10:58 AM

REFERENCE DRAWING	DRAWING TITLE	REV.	DATE	REVISION	BY	CHK	APP'D	REV.	DATE	REVISION	BY	CHK	APP'D
P-W-1000-400-01	PS-2 PIPE SLEEPER AND FOUNDATION DETAILS	PS	04/08/2016	ISSUED FOR BID	JAM	ASB	RLB	-	-	-	-	-	-
P-W-1000-400-02	PS-3 AND PS-4 PIPE SUPPORT DETAILS	-	-	-	-	-	-	-	-	-	-	-	-
P-W-1000-401-01	ELECTRICAL EQUIP. RACK & FOUNDATION DETAIL	-	-	-	-	-	-	-	-	-	-	-	-
P-W-1000-1100-12	MLV-10 VALVE SETTING - PLYF PLAN	-	-	-	-	-	-	-	-	-	-	-	-
P-W-1000-1117-02	MLV-10 VALVE SETTING INSTALLATION - SECTION	-	-	-	-	-	-	-	-	-	-	-	-
P-W-1000-1117-03	MLV-10 VALVE SETTING INSTALLATION - BOM	-	-	-	-	-	-	-	-	-	-	-	-

TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE GUIDELINES AND SPECIFICATIONS

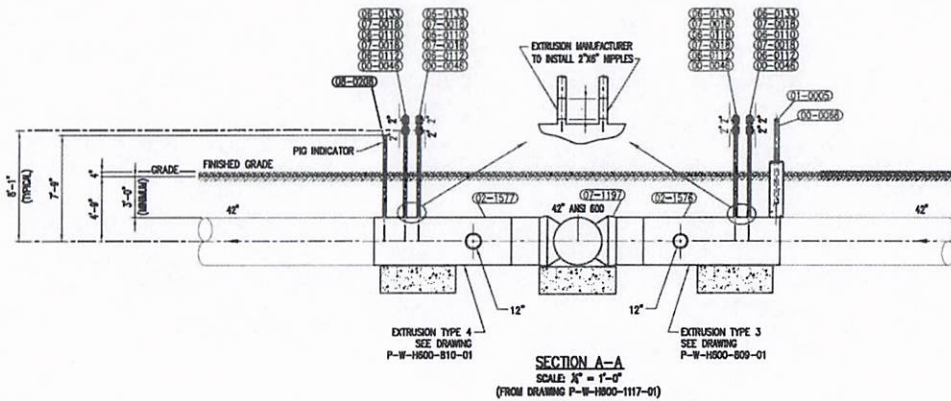
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DATE: 4/8/2016

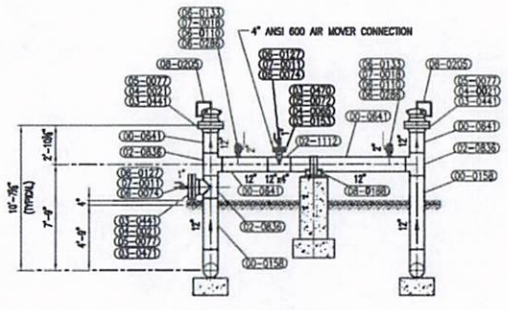
NOTE: ANY CHANGES TO THE DESIGN SHOWN ON THIS DRAWING MUST BE APPROVED BY THE DESIGN ENGINEER.

		DRAWING TITLE: H600 42" 1480 PSIG ANSI 600 MLV-10 VALVE SETTING INSTALLATION PLAN			
PROJECT ID	FACILITY/STATE	CONTRACTOR	SERIES	SHEET	REVISION
DRAWING SCALE: NONE	P W	H600	1117	01	P9

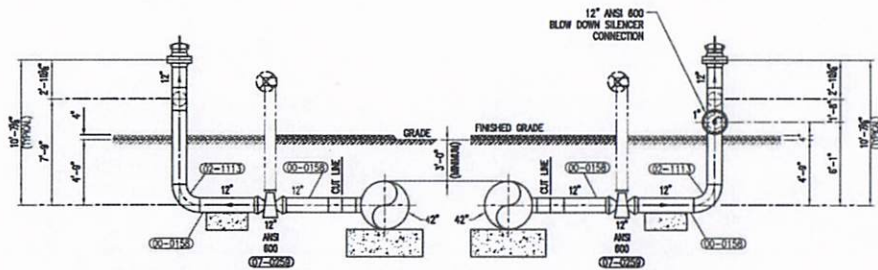
WEBSTER COUNTY, WV



SECTION A-A
SCALE: 1/4" = 1'-0"
(FROM DRAWING P-W-1800-1117-01)



SECTION B-B
SCALE: 1/4" = 1'-0"
(FROM DRAWING P-W-1800-1117-01)



SECTION C-C
SCALE: 1/4" = 1'-0"
(FROM DRAWING P-W-1800-1117-01)

SECTION D-D
SCALE: 1/4" = 1'-0"
(FROM DRAWING P-W-1800-1117-01)

WEBSTER COUNTY, WY

REFERENCE DRAWING	DATE	REVISION	BY	CHK	APP'D	DATE	REVISION	BY	CHK	APP'D	DATE
DRAWING NUMBER	DRAWING TITLE										
P-W-1800-1117-01	MLV-10 INSTALLATION - PLAN										
P-W-1800-1117-02	MLV-10 INSTALLATION - BILL OF MATERIALS										
P-W-1800-800-01	VALVE SET EXTRUSION TYPE 3										
P-W-1800-810-01	VALVE SET EXTRUSION TYPE 4										

TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE GUIDELINES AND SPECIFICATIONS.

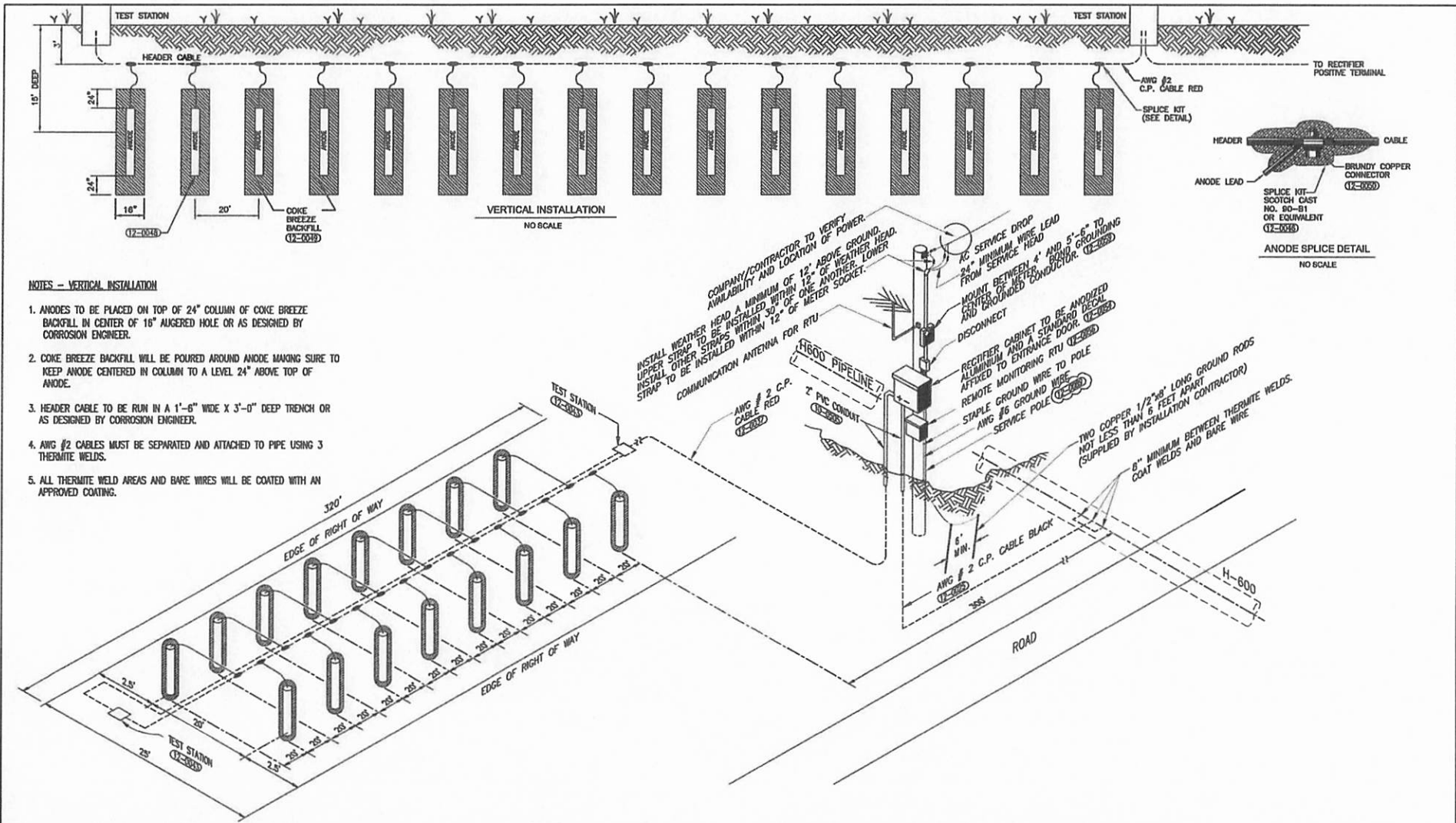
DRAFT

DATE: 4/8/2016

NOTE: ANY CHANGES TO THE DESIGN SHOWN ON THIS DRAWING MUST BE APPROVED BY THE DESIGN ENGINEER.

	DRAWING TITLE:			
	H600 42" 1480 PSIG ANSI 600 MLV-10 VALVE SETTING INSTALLATION SECTIONS			
PROJECT ID:	FACILITY/STATE:	IDENTIFICATION:	SERIES:	SHEET/REVISION:
DRAWING SCALE: NONE	P W	H600	1117 02	P9

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REVISION	NO.	DATE	BY	CHK	APPD	NO.	DATE	REVISION	BY	CHK	APPD
PRELIMINARY		5/25/2014	JLS								

TO THE BEST OF MY KNOWLEDGE, ALL COMPONENTS OF THIS DRAWING ARE DESIGNED IN ACCORDANCE WITH APPLICABLE GUIDELINES AND SPECIFICATIONS

PAUL LAYNE
MECHANICAL DESIGN ENGINEER

DATE

ELECTRICAL DESIGN ENGINEER

DATE

NOTE: ANY CHANGES TO THE DESIGN SHOWN ON THIS DRAWING MUST BE APPROVED BY THE DESIGN ENGINEER.

	DRAWING TITLE:			
	H600 42" 1480 PSIG ANSI 600 RECTIFIER AND CONVENTIONAL GROUND BED INSTALLATION - (16) VERTICAL ANODES			
PROJECT ID:	PS000	FAMILY/STATE:	IDENTIFICATION:	SERIES:
DESIGNER:	NONE		P W	H600-01
				1204 06 P

NO.	DATE	BY	CHKD.	APPV.	DESCRIPTION

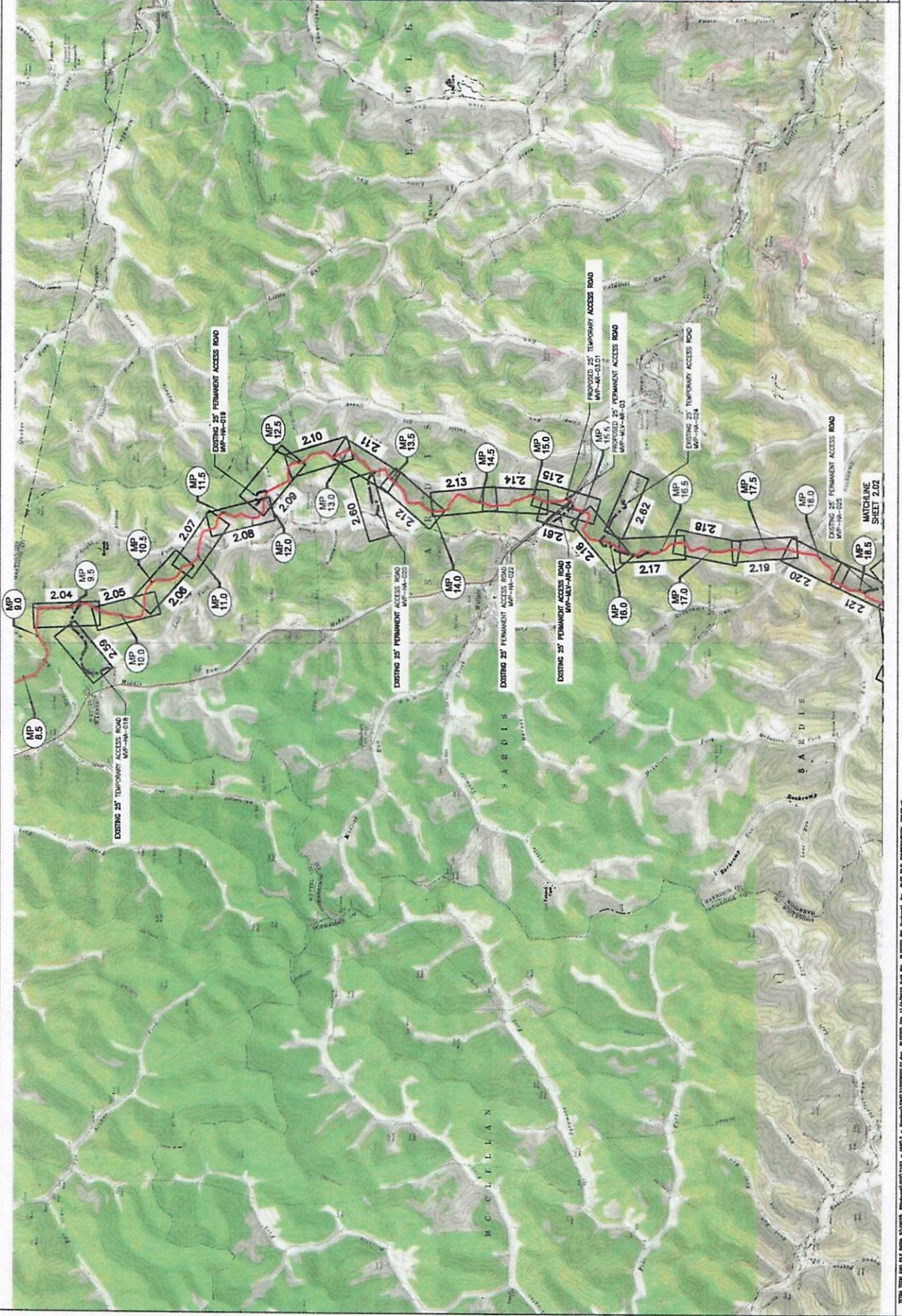
REVISIONS:

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 HARRISON COUNTY, WEST VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 505 SOUTHPOINT BOULEVARD, SUITE 200
 CHARLOTTE, PA 15317

TETRA TECH
 601 ALLEGHENY DRIVE
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

DATE: 2/17/2018	SCALE: AS SHOWN	BY: NO. 231 OF 239
CHECKED BY:	DATE:	NO.:
APPROVED BY:	DATE:	NO.:



THIS PLAN AND THE PIPING PLANS, ELECTRICAL PLANS, AND INSTRUMENTATION PLANS ARE PART OF THE PROJECT'S DESIGN. THE PROJECT'S DESIGN IS THE PROPERTY OF TETRA TECH AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TETRA TECH.

NO.	DATE	BY	CHKD.	DESCR.

REVISIONS:

ERSON AND SEYMOUR CONSULTING PLANS
 1000 Mountain Valley Road
 Mountain Valley, PA 15200

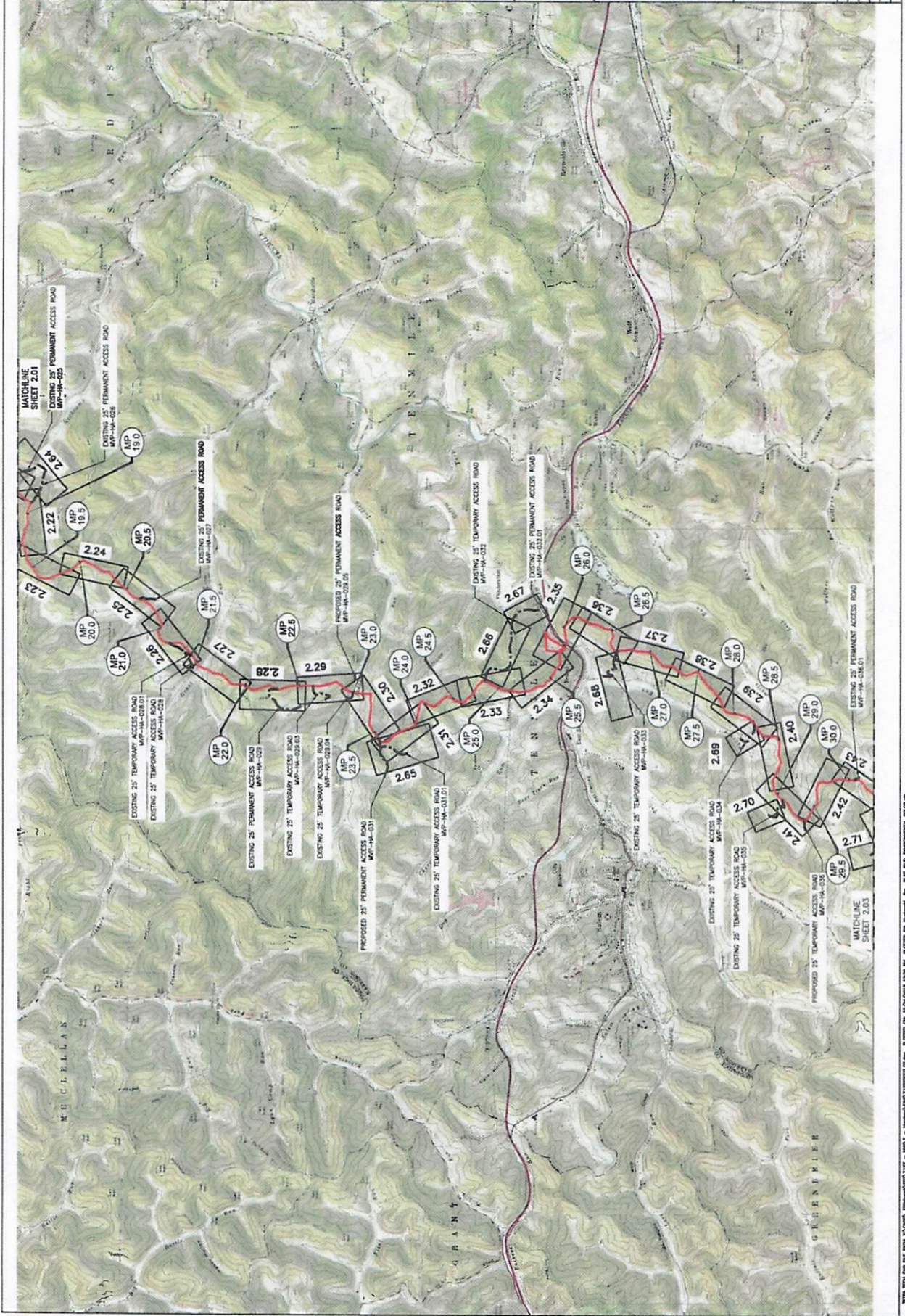
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 HARRISON & DOORIDGE COUNTY, WEST VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 555 SOUTHPOINT BOULEVARD, SUITE 200
 CHARLESTON, PA 15017

TETRA TECH
 601 JONES ROAD, SUITE 100
 PITTSBURGH, PA 15202

CONSTRUCTION PLANS

DATE	2/17/2018
SCALE	AS SHOWN
SHEET NO.	202 OF 278



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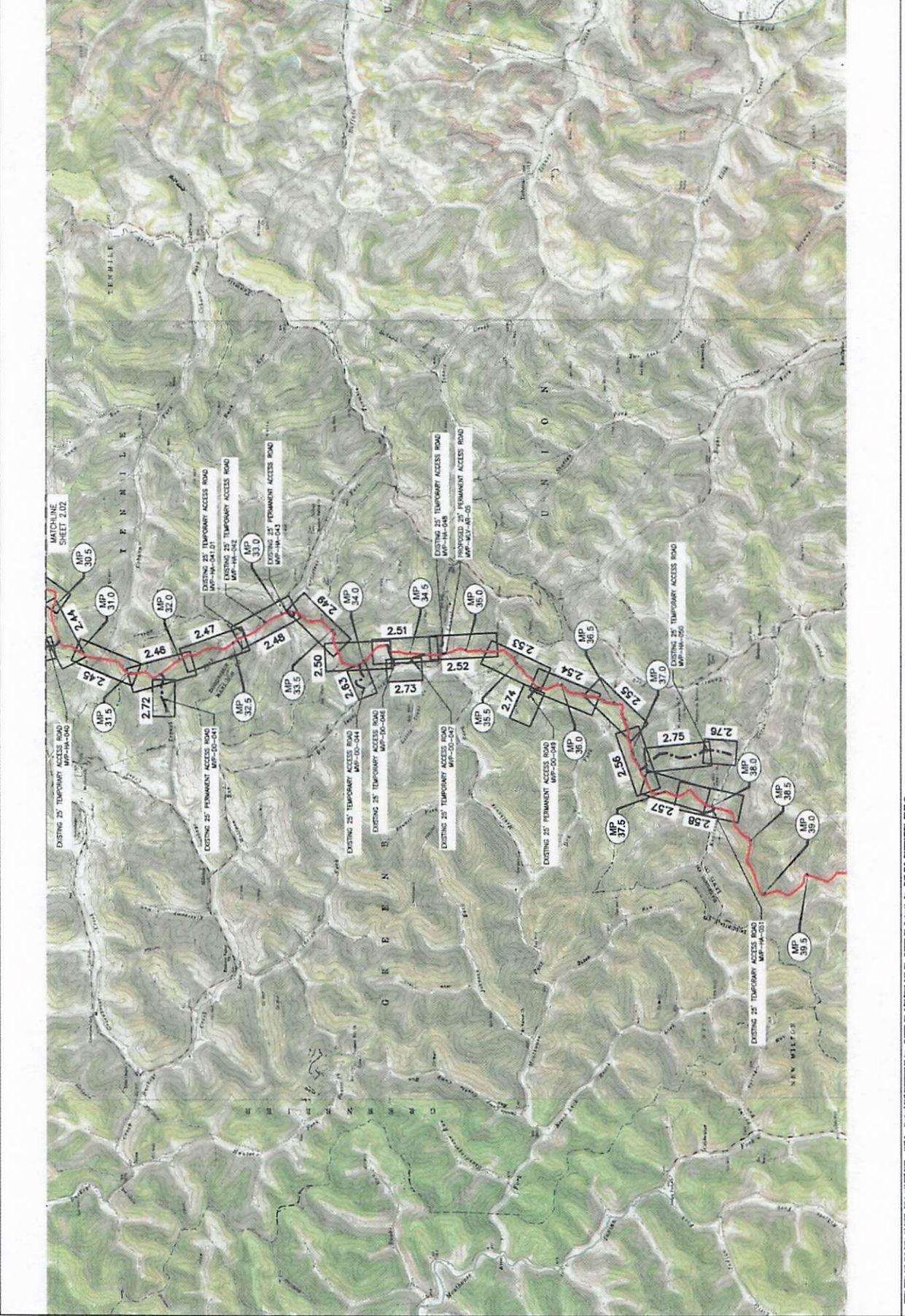
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SHEET NO.	128	OF	139

CONSTRUCTION PLANS

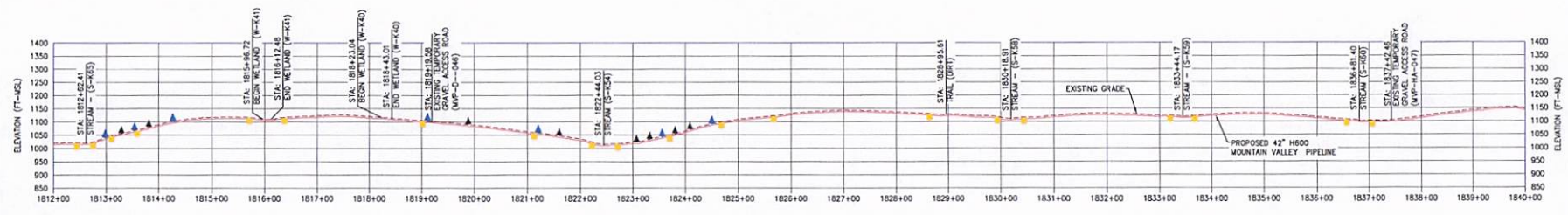
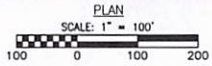
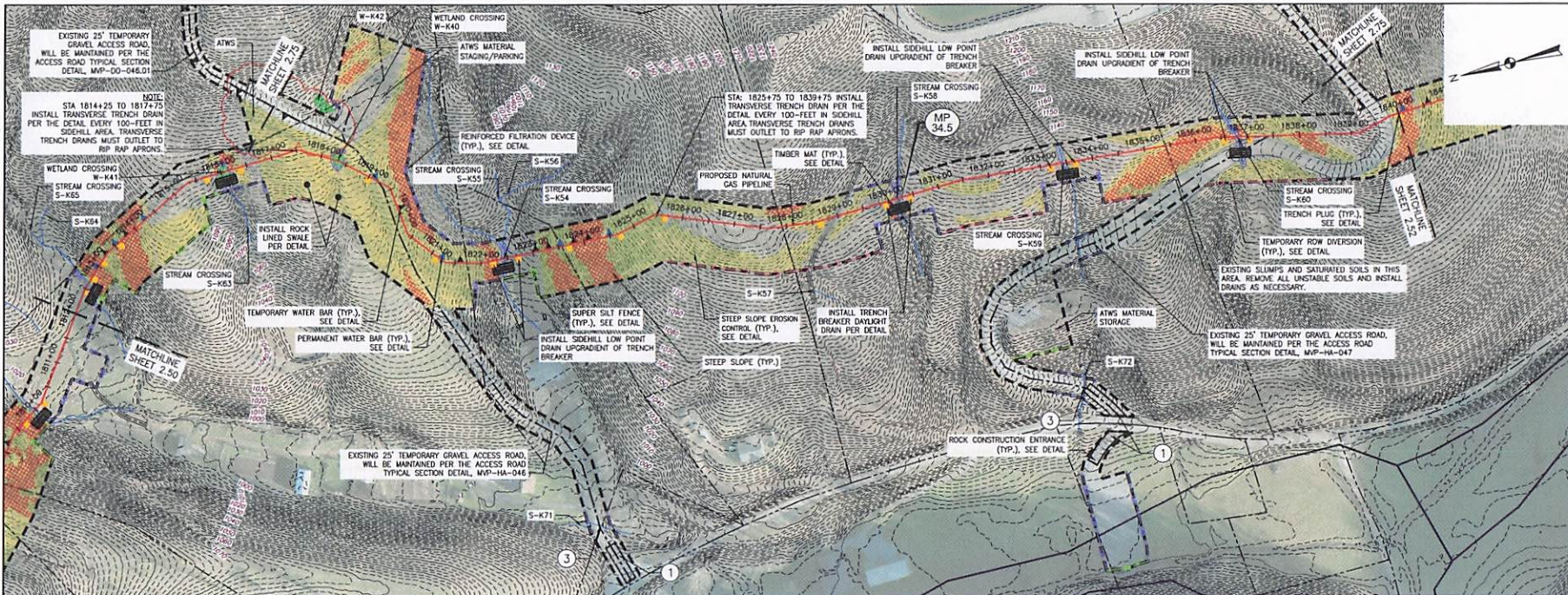
TETRA TECH
 850 ANDERSON DRIVE
 FLOOR 1000
 PITTSBURGH, PA 15220

Mountain Valley
 EROSION AND SEDIMENT CONTROL PLANS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 HARRISON & DOODGE COUNTY, WEST VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 800 SOUTHPOINT BOULEVARD, SUITE 200
 CHARLESTON, PA 15017

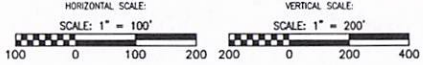
REVISIONS:					
NO.	DATE	BY	CHKD.	APPV.	DESCRIPTION



THIS PLAN AND THE PIPES, SLABS, AND STRUCTURES THEREON, SHALL BE CONSIDERED VOID WITHOUT THESE PIPES, SLABS, AND STRUCTURES.



PROFILE



- LEGEND**
- PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - PROPOSED SUPER SILT FENCE (SEE NOTE 6)
 - ORANGE CONSTRUCTION SAFETY FENCE
 - PROPOSED COMPOST FILTER SOCK
 - PROPOSED REINFORCED FILTRATION DEVICE
 - PROPOSED TEMPORARY RIGHT OF WAY DIVERSION AND OUTLET
 - EXISTING CULVERT
 - STREAM
 - WETLAND
 - POND
 - PROPOSED CULVERT WITH OUTLET PROTECTION
 - TIMBER MAT
 - STEEP SLOPE EROSION CONTROL (SEE NOTE 3)
 - STEEP SLOPE (SEE NOTE 5)
 - PROPOSED PERMANENT WATER BAR
 - PROPOSED BROAD BASED DIP
 - PROPOSED TRENCH PLUG
 - PROPOSED ROCK CONSTRUCTION ENTRANCE

- ACCESS ROAD LEGEND**
- ① ROCK CONSTRUCTION ENTRANCE
 - ② WETLAND CROSSING
 - ③ STREAM CROSSING

- NOTES:**
1. WATERBARS WITHIN AGRICULTURAL AREAS SHALL BE USED AS TEMPORARY FEATURES.
 2. NO EROSION CONTROL MATTING SHALL BE INSTALLED IN AGRICULTURAL AREAS.
 3. FLEXTRIM OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY M.P.
 4. 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.
 5. SLOPES OF 3% OR GREATER EXIST. CONSTRUCTION FOR STEEP SLOPES TO BE PERFORMED USING STEEP SLOPE TECHNIQUES IDENTIFIED IN THE DETAIL SHEETS.
 6. IMPROVEMENTS TO PERMANENT AND TEMPORARY ACCESS ROADS WILL BE PERFORMED AS NEEDED AND BMP'S MAY BE SUBSTITUTED IF FIELD EVALUATIONS REQUIRE ADJUSTMENTS TO ACCOMMODATE FIELD VERIFIED CONDITIONS.
 7. WETLANDS AND STREAMS WILL BE CROSSED ACCORDING TO THE APPROPRIATE DETAILS. ACCESS ROADS WILL UTILIZE CULVERTS WHERE THEY EXIST AND NON-CULVERTED STREAMS OR STREAM SEGMENTS WILL BE CROSSED UTILIZING TIMBER MATS, BRIDGES, OR CULVERTS AS INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

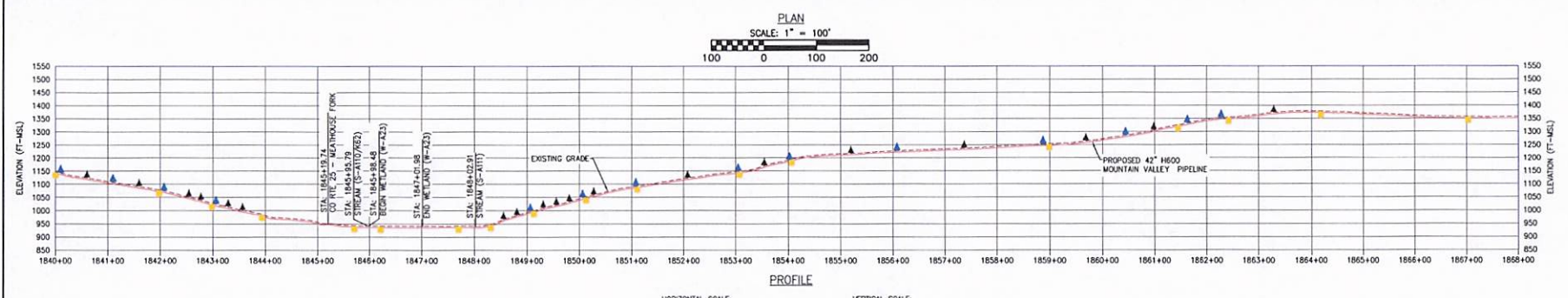
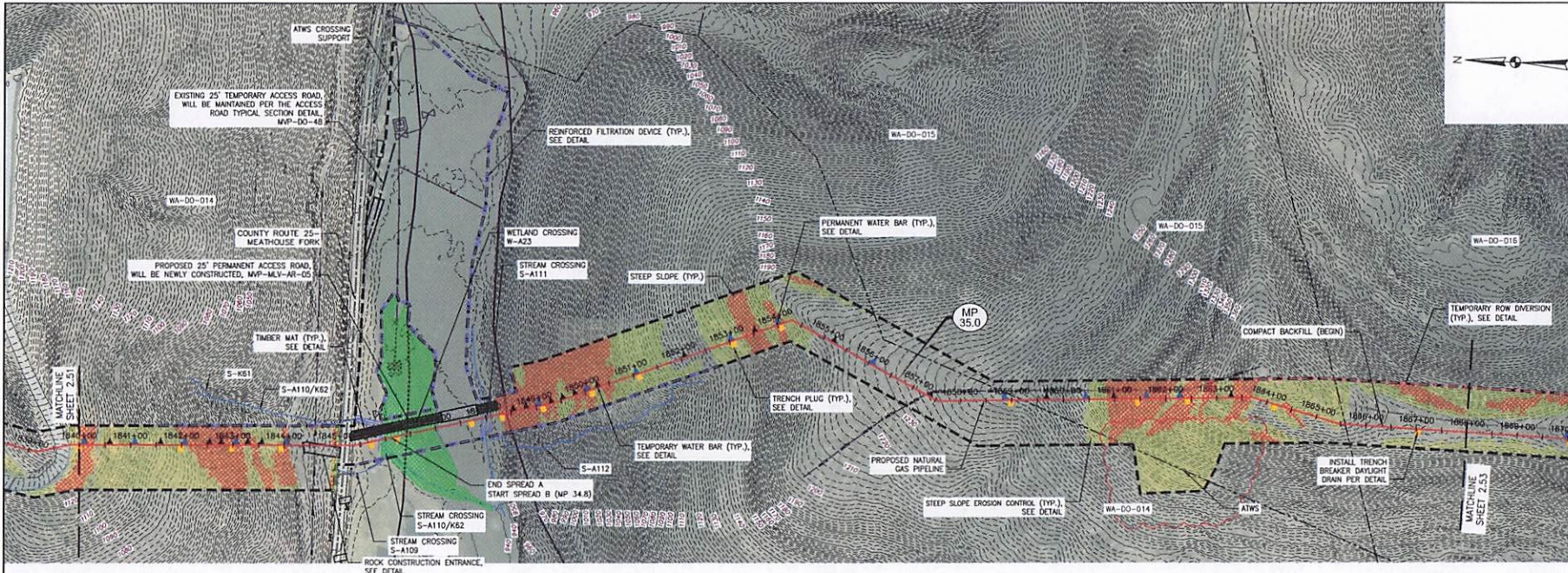
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13	08-04-20	JMK	JMK		ES MODIFICATION 018
12	08-04-20	JMK	JMK		ES MODIFICATION 017
11	09-20-19	JMK	JMK		ES MODIFICATION 016
10	08-20-19	JMK	JMK		ES MODIFICATION 015
9	03-22-19	JMK	JMK		ES MODIFICATION 013

Mountain Valley Pipeline
EROSION AND SEDIMENT CONTROL PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 WOODBORO COUNTY, WEST VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2300 ENERGY BLVD
 CHARLESTON, PA 15317

TETRA TECH
 861 ANDERSON DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

Drawn By: JZ
 Checked By: ME
 Approved By: ME
 Date: 04/02/2021
 Scale: AS SHOWN
 SHT. NO. 251 OF 275



- LEGEND**
- PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - PROPOSED SILT FENCE (SEE NOTE 6)
 - PROPOSED SUPER SILT FENCE
 - ORANGE CONSTRUCTION SAFETY FENCE
 - EPS
 - PROPOSED COMPOST FILTER SOCK
 - PROPOSED REINFORCED FILTRATION DEVICE
 - PROPOSED TEMPORARY WATER BAR
 - PROPOSED TEMPORARY RIGHT OF WAY DIVERSION AND OUTLET
 - EXISTING CULVERT
 - STREAM
 - WETLAND
 - POND
 - PROPOSED CULVERT WITH OUTLET PROTECTION
 - TIMBER MAT
 - STEEP SLOPE EROSION CONTROL (SEE NOTE 3)
 - STEEP SLOPE (SEE NOTE 5)
 - PROPOSED PERMANENT WATER BAR
 - PROPOSED TEMPORARY WATER BAR
 - PROPOSED BROAD BASED DIP
 - PROPOSED TRENCH PLUG
 - PROPOSED ROCK CONSTRUCTION ENTRANCE

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 - ② WETLAND CROSSING
 - ③ STREAM CROSSING

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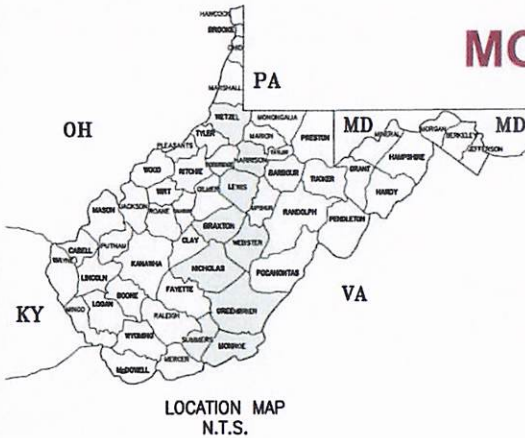
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2	DATE: 02-27-18
3	DATE: 04-20-18
4	DATE: 04-20-18
5	DATE: 07-24-18
6	DATE: 08-22-18

Mountain Valley
EROSION AND SEDIMENT CONTROL PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - HD00 LINE
 DOODRIDGE COUNTY, WEST VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 555 SOUTHSHORE BOULEVARD, SUITE 200
 CHARLESTON, PA 15317

TETRA TECH
 CLEAN SOLUTIONS
 661 ANDERSON DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

DRAWN BY: KAL
 CHECKED BY: HT
 APPROVED BY: RE
 DATE: 08/27/2018
 SCALE: AS SHOWN
 SHEET NO. 252 OF 272

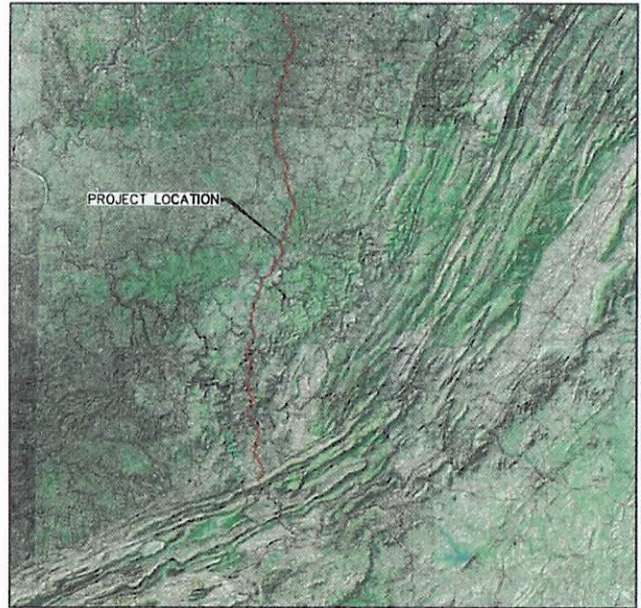


LOCATION MAP
N.T.S.

MOUNTAIN VALLEY PIPELINE, LLC

WVDEP GENERAL WATER POLLUTION CONTROL PERMIT EROSION & SEDIMENT CONTROL PLAN

MVP PIPELINE PROJECT WETZEL COUNTY TO MONROE COUNTY NOVEMBER 2016



LOCATION MAP
MVP PIPELINE PROJECT
WETZEL COUNTY, WEST VIRGINIA TO MONROE COUNTY, WEST VIRGINIA

DRAWING INDEX	
SHEET No.	DRAWING TITLE
	GENERAL SET
ES-0.00	COVER SHEET
ES-0.01 TO ES-0.19	EROSION AND SEDIMENT CONTROL DETAILS
ES-0.20 TO ES-0.21	GENERAL NOTES AND LEGEND
WETZEL COUNTY	
ES-1.01	KEY PLAN
ES-1.02 TO ES-1.33	EROSION & SEDIMENT CONTROL PLANS
HARRISON COUNTY	
ES-2.01 TO ES-2.03	KEY PLAN
ES-2.04 TO ES-2.76	EROSION & SEDIMENT CONTROL PLANS
LEWIS COUNTY	
ES-3.01 TO ES-3.03	KEY PLAN
ES-3.04 TO ES-3.79	EROSION & SEDIMENT CONTROL PLANS
BRAXTON COUNTY	
ES-4.01 TO ES-4.02	KEY PLAN
ES-4.03 TO ES-4.50	EROSION & SEDIMENT CONTROL PLANS
WESTER COUNTY	
ES-5.01 TO ES-5.04	KEY PLAN
ES-5.05 TO ES-5.99	EROSION & SEDIMENT CONTROL PLANS
NICHOLAS COUNTY	
ES-6.01 TO ES-6.03	KEY PLANS
ES-6.04 TO ES-6.66	EROSION & SEDIMENT CONTROL PLANS
GREENERBERRY COUNTY	
ES-7.01	KEY PLAN
ES-7.02 TO ES-7.63	EROSION & SEDIMENT CONTROL PLANS
SUMMERS COUNTY	
ES-8.01	KEY PLAN
ES-8.02 TO ES-8.51	EROSION & SEDIMENT CONTROL PLANS
MONROE COUNTY	
ES-9.01	KEY PLAN
ES-9.02 TO ES-9.59	EROSION & SEDIMENT CONTROL PLANS
PIPE YARDS	
ES-10.01 TO ES-10.07	KEY PLAN
ES-10.08 TO ES-10.24	PIPE YARD PLANS
LANDSLIDE MITIGATION	
ES-11.01	LANDSLIDE MITIGATION LEGEND
ES-11.02 TO ES-11.19	LANDSLIDE MITIGATION PLANS

WEST VIRGINIA 811

CALL BEFORE
YOU DIG!

THREE DAYS BEFORE YOU DIG

CALL WV ONE CALL
SYSTEM TOLL FREE
811
OR
1-800-245-4848

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.

NO.	DATE	BY	REVISIONS:

MOUNTAIN VALLEY PIPELINE, LLC

305 SOUTHPOINTE BOULEVARD, SUITE 200
CHAMBERSBURG, PA 15317

TETRA TECH

COMPLETE THE GREAT SOLUTIONS™

681 ANDERSON DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

CONSTRUCTION
PLANS

DRAWN BY:	NCL	SCALE:	AS SHOWN
CHECKED BY:	HT	DATE:	2/16/2016
APPROVED BY:	RE	SHEET NO.	0.00 OF 0.21

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REV. NO.	DATE	DESCRIPTION

REVISIONS:

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

Table 3.3.5.1
Average slope of watershed

Drainage area (acres)	Average slope of watershed			
	1%	3%	8%	16%
1 - 25	24	30	30	30
26 - 50	24	30	30	30
51 - 100	24	30	30	30
101 - 150	30	42	48	48
151 - 200	36	42	48	54
200 - 250	42	48	60	60
251 - 300	42	48	60	60
301 - 350	42	48	60	60
351 - 400	42	48	60	60
401 - 450	42	48	60	60
451 - 500	42	48	60	60
501 - 550	48	60	60	72
551 - 600	48	60	60	72
601 - 650	48	60	60	72

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

CULVERT SIZING CHART
TAKEN FROM 2008 MANUAL

DITCH RELIEF CULVERT
TAKEN FROM 2012 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

STONE CONSTRUCTION ENTRANCE
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STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

SEDIMENT AND EROSION CONTROL FOR ACCESS ROADS
TAKEN FROM 2012 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

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TAKEN FROM 2008 MANUAL

STONE CONSTRUCTION ENTRANCE
TAKEN FROM 2008 MANUAL

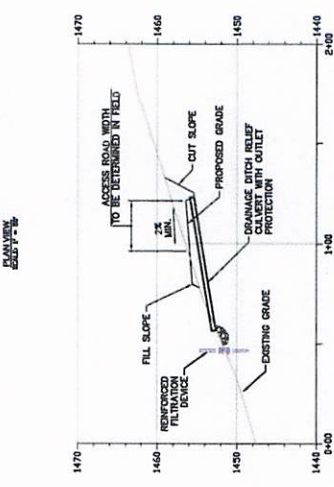
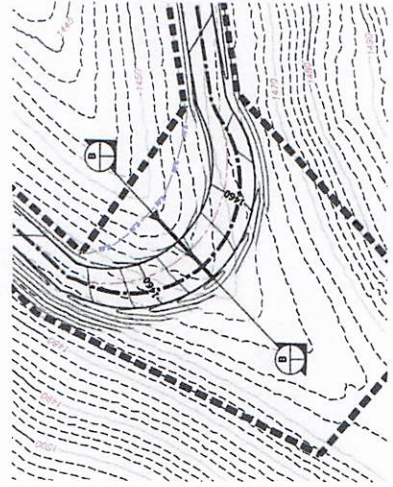
NO.	DATE	BY	CHKD.	APPR.	DESCRIPTION

Mountain Valley Pipeline
 Mountain Valley Pipeline Project - H600 Line
 HENRIETTA COUNTY THROUGH MONROE COUNTY, WEST VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 505 SOUTHPOINTE BOULEVARD, SUITE 200
 CHAMBERSBURG, PA 15317

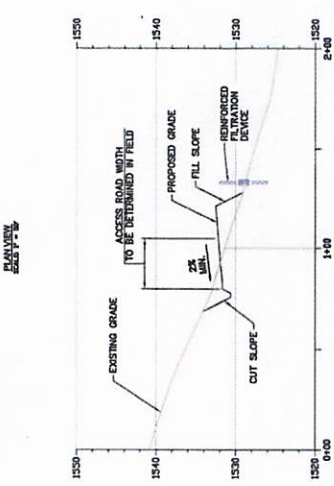
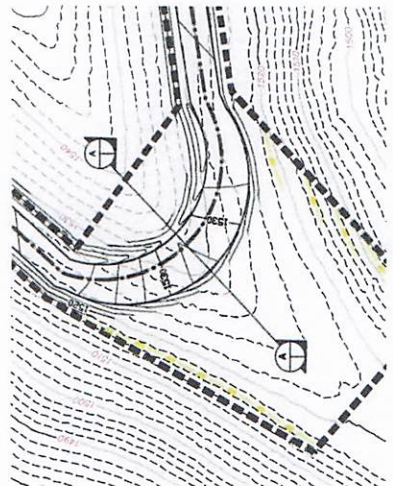
TETRATECH
 ENGINEERING CONSULTANTS
 681 ANDERSON DRIVE
 SUITE 100
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

DESIGN NO.	
PROJECT NO.	
APPROVED BY	
DATE	2/1/2018
SCALE	AS SHOWN
SHEET NO.	021 OF 021



PROFILE VIEW
 ROAD W/RT
 ATWS VEHICLE TURNING RADIUS
 VALLEY DETAIL
 SCALE AS SHOWN



PROFILE VIEW
 ROAD W/RT
 ATWS VEHICLE TURNING RADIUS
 NOSE DETAIL
 SCALE AS SHOWN

- NOTES:
- ELEVATIONS ARE FOR ILLUSTRATIVE PURPOSES AND ARE NOT SPECIFIC TO EACH SITE. ACTUAL ELEVATIONS WILL BE DETERMINED IN THE FIELD.
 - CUT SLOPES ARE TO BE SEEDED AND MULCHED IMMEDIATELY.

DATE: 02/01/2018 10:58 AM
 USER: JACOB.BELMONT@TETRATECH.COM
 PROJECT: MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SHEET: 021 OF 021

TRENCH DEPTH (IN)	MINIMUM COVER (FEET)	EMBEDDED MATERIALS
< 18"	12"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
18" TO 24"	18"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
24" TO 30"	24"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
30" TO 36"	30"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
36" TO 42"	36"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
42" TO 48"	42"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	48"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	50"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	50"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	50"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	50"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS
> 48"	50"	EARTHEN FILL, SAND, OR CONCRETE FILLED SACKS

TRENCH BREAKERS ARE REQUIRED AT ALL STREAM AND WATERWAY CROSSING CROSSINGS OF TRENCH DEPTH OTHER THAN NOT REQUIRED AT SLOPES 4:1.

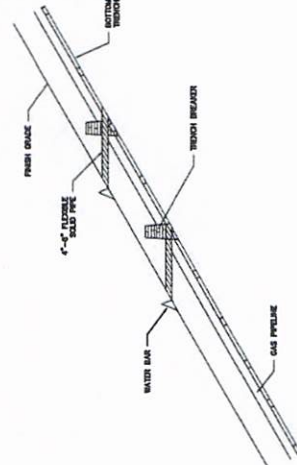
*** FOR SLOPE RATIO AND TRENCH BREAKER CHARGE DETAILS INCLUDING THOSE FOR STEP SLOPES, SEE LANDSCAPE ARCHITECTURE TYPICAL DETAIL.



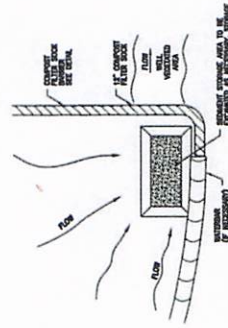
TRENCH BREAKER



TRENCH PLUG
TRENCH PLUG SPACING AND DIMENSIONS TO EQUAL THAT OF TRENCH BREAKERS. SEE TRENCH BREAKER DETAIL THIS SHEET.



TRENCH DETAIL
N.T.S.
TRENCH BREAKERS TO BE INSTALLED AT TRENCH BREAKERS ON STEP SLOPES TO OAKN



TYPICAL SUMP FILTER
1. SUMP FILTER SHALL BE LOCATED ENTIRELY WITHIN PROPOSED RIGHT OF WAY.
2. SUMP FILTER SHALL BE LOCATED ENTIRELY WITHIN PROPOSED RIGHT OF WAY.
3. SUMP FILTER SHALL BE LOCATED ENTIRELY WITHIN PROPOSED RIGHT OF WAY.
4. ADDITIONAL CHARGE FILTER SOCKS MAY BE NECESSARY BEYOND WHAT IS SHOWN ON DETAIL TO MEET PROPOSED MAP REPRESENTATION.

REV. NO.	DATE	DESCRIPTION

REVISIONS:

PROJECT: MOUNTAIN VALLEY PIPELINE PROJECT - 1600 LINE

DRAWN BY: MOUNTAIN VALLEY PIPELINE, LLC

CHECKED BY: MOUNTAIN VALLEY PIPELINE, LLC

DATE: 02/07/2018

SCALE: AS SHOWN

TITLE: CONSTRUCTION PLANS

DESIGNED BY: TETRA TECH

APPROVED BY: TETRA TECH

DATE: 02/07/2018

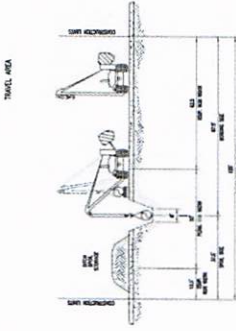
SCALE: AS SHOWN

TITLE: CONSTRUCTION PLANS

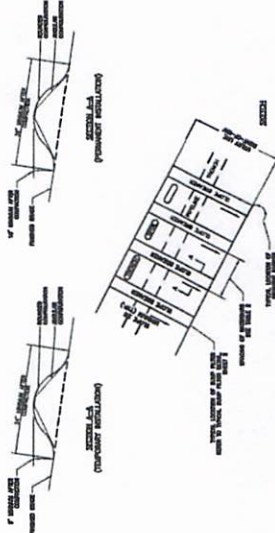
**MAINLINE CONSTRUCTION
NON-PARALLEL CONSTRUCTION
NO TOP SOIL SEGREGATION**

DEVELOPED FROM 2012 FIELD MANUAL.

SEE TRENCH BREAKER DETAIL FOR TRENCH BREAKER DETAILS.



TRENCH AREA



TRENCH DEPTH (IN)	SPACING (FEET)
3-4	100
4-6	150
6-8	200
8-12	300
12-18	450
18-24	600
24-30	900

NOTES:

1. WEIRBARS SHALL BE INSTALLED WEIRBARS (ONLY ON ACTIVE ROADS) AND AFTER EACH MAJOR EVENT. DAMAGED OR EXPOSED WEIRBARS SHALL BE RESTORED TO ORIGINAL CONDITIONS WITHIN 48 HOURS OF INSPECTION.

2. MAINTENANCE OF WEIRBARS SHALL BE PROVIDED UNTIL DEMOLITION, REPAIR, OR REPAIR-OF-ANY HAS ACHIEVED PERMANENT STABILIZATION.

3. WEIRBARS SHALL BE INSTALLED AT THE OUTLET OF ALL WEIRBARS. REFER TO WEIRBARS DETAIL ON SHEET 2 FOR MORE DETAIL.

4. WEIRBARS SHALL BE INSTALLED AT THE OUTLET OF ALL WEIRBARS. REFER TO WEIRBARS DETAIL ON SHEET 2 FOR MORE DETAIL.

5. WEIRBARS SHALL BE INSTALLED AT THE OUTLET OF ALL WEIRBARS. REFER TO WEIRBARS DETAIL ON SHEET 2 FOR MORE DETAIL.

WEIRBAR INSTALLATION DETAIL

NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION

REVISIONS:

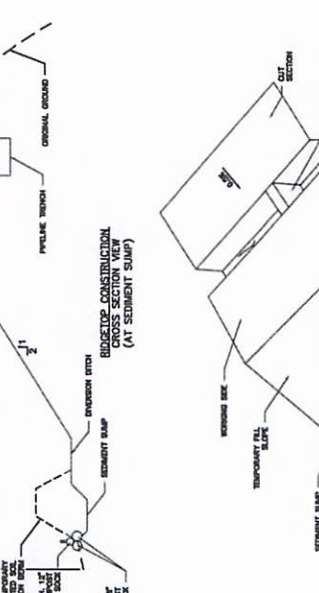
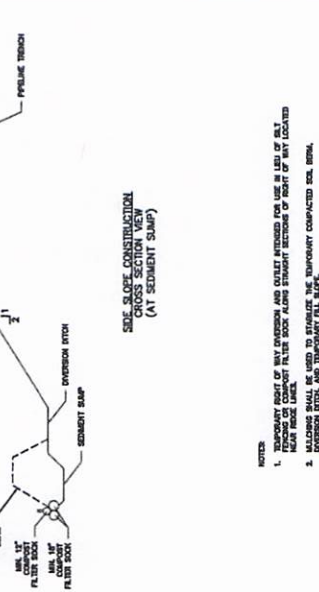
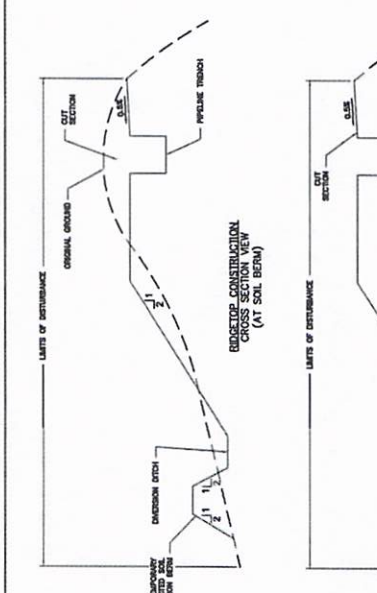
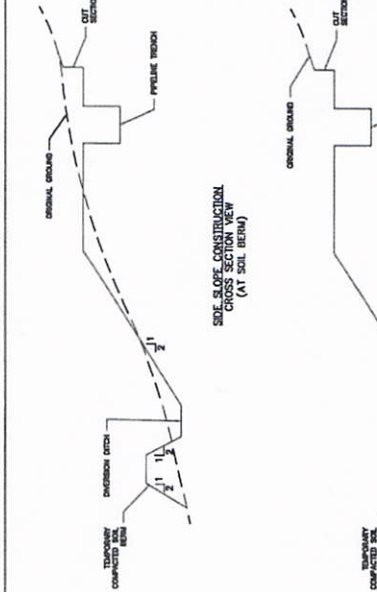
NO. DATE BY CHKD. APP'D. DESCRIPTION

EROSION AND SEDIMENT CONTROL DETAILS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 MOUNTAIN VALLEY PIPELINE, LLC
 505 SOUTHPIKE BUILDING, SUITE 200
 CAMDEN, PA 17027

TETRA TECH
 681 ANDERSON DRIVE
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

DATE: 2/19/2018
 SCALE: AS SHOWN
 SHEET NO. 038 OF 031



NOTES:

- TEMPORARY DITCH OF NEW EROSION AND OUTLET INTENDED FOR USE IN LIEU OF SILT TRAP OR COMPOST FILTER SOCK ALONG STRAIGHT SECTIONS OF TROUGH AT ALL LOCATIONS.
- TEMPORARY DITCH OF NEW EROSION AND OUTLET INTENDED FOR USE IN LIEU OF SILT TRAP OR COMPOST FILTER SOCK ALONG STRAIGHT SECTIONS OF TROUGH AT ALL LOCATIONS.
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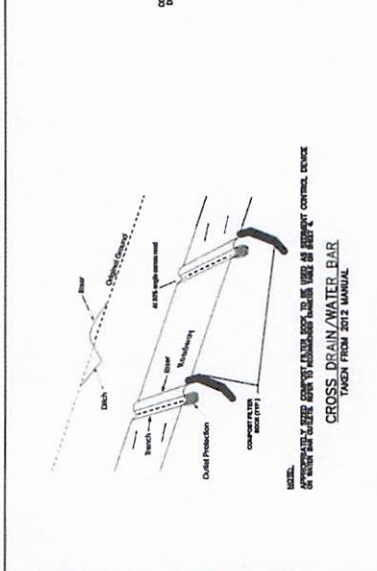
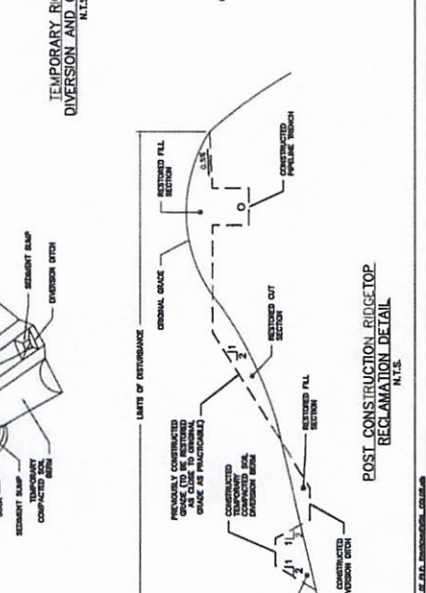
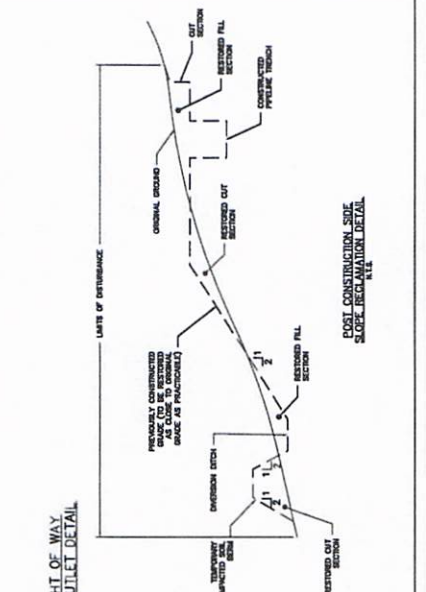
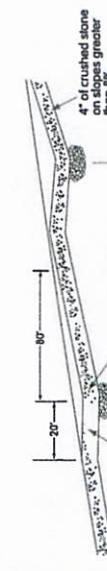


Table 1-4. Spacing of Broad-based Dips

Width (Feet)	Spacing (Feet)
2	300
3	225
4	180
5	150
6	135
7	126
8	120
9	117
10	114
12	108



DESCRIPTION: A CONSTRUCTED DIP OF STONE, ACROSS THE ROAD SURFACE, SLOPED TO THE OUTSIDE FOR DRAINAGE OF THE ROAD SURFACE.

- CONSTRUCTED DIP SHALL BE CONSTRUCTED AS SHOWN.
- CONSTRUCTED DIP SHALL BE CONSTRUCTED IN THE EXISTING CORNER, BY THE SIDE OF THE ROAD, OR IN THE CENTER OF THE ROAD.
- CONSTRUCTED DIP SHALL BE CONSTRUCTED WITH STONE TO MINIMUM CORNER OR CENTER OF THE ROAD.
- CONSTRUCTED DIP SHALL BE CONSTRUCTED WITH APPROXIMATE SPACING AS SHOWN IN TABLE 1-4.
- CONSTRUCTED DIP SHALL BE CONSTRUCTED WITH APPROXIMATE SPACING AS SHOWN IN TABLE 1-4.

REFERENCES:
 WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL FOR PAVED AND UNPAVED ROADS
 WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL, DATED MAY 2012

DATE: 2/19/2018
 SCALE: AS SHOWN
 SHEET NO. 038 OF 031

REVISIONS:

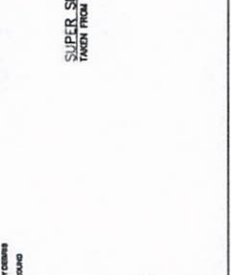
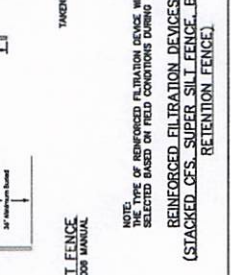
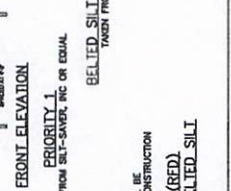
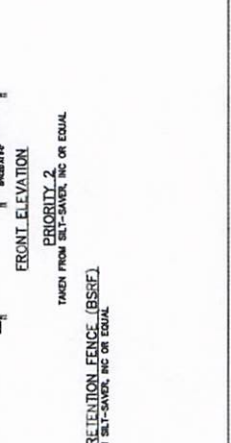
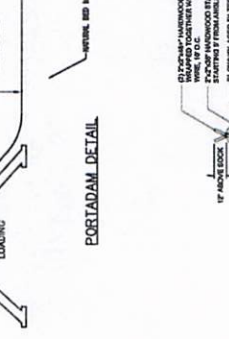
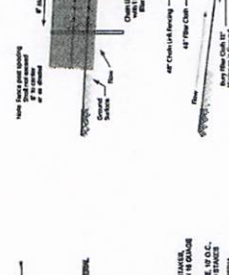
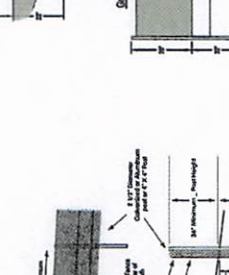
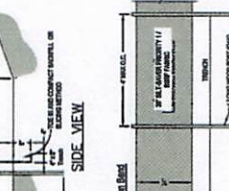
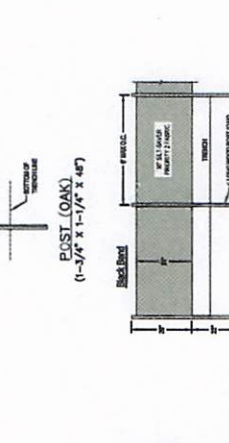
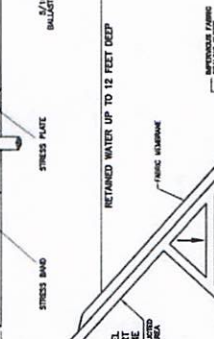
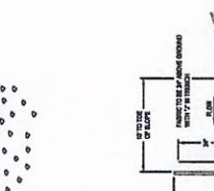
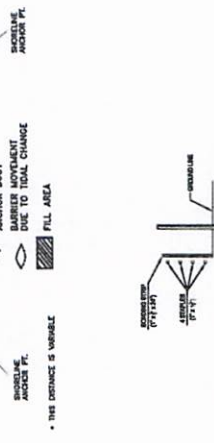
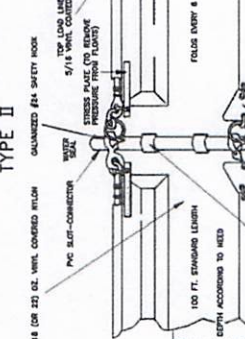
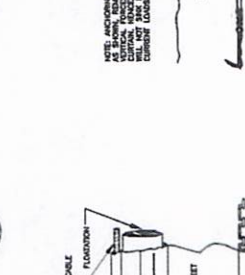
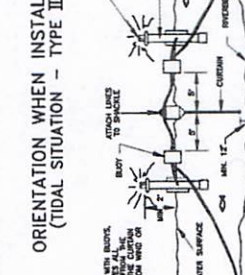
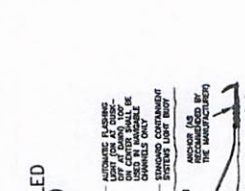
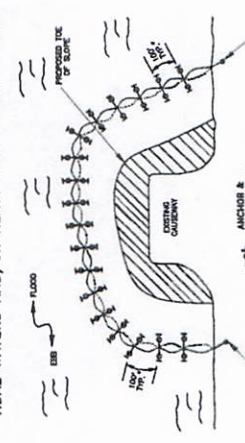
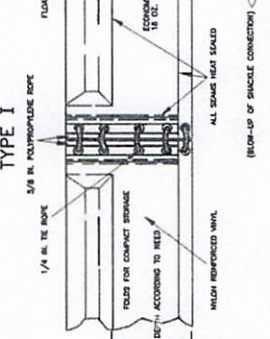
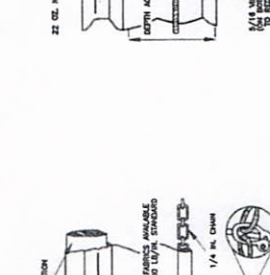
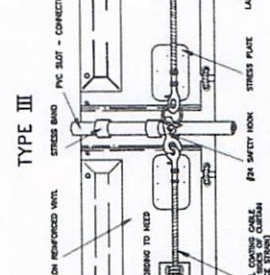
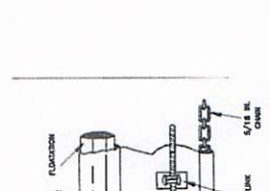
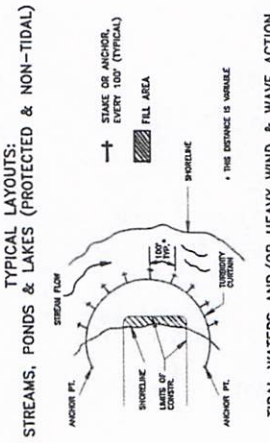
NO.	DATE	DESCRIPTION

EPOSON AND SEEDING CONTROL DETAILS
 MOUNTAIN VALLEY PIPELINE, LLC
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 HEZZEL COUNTY THROUGH HONNE COUNTY, WEST VIRGINIA
 955 SOUTHWEST BOULEVARD, SUITE 200
 CHARLESTON, PA 15317

TETRA TECH
 651 ABERDEEN DRIVE
 PITTSBURGH, PA 15220

CONSTRUCTION PLANS

SHEET NO. 001 OF 031
 DATE: 5/7/2018
 SCALE: AS SHOWN
 APPROVED BY: [Signature]
 CHECKED BY: [Signature]
 FILE NO.: 001



TYPICAL LAYOUTS:
 STREAMS, PONDS & LAKES (PROTECTED & NON-TIDAL)

TIDAL WATERS AND/OR HEAVY WIND & WAVE ACTION

ORIENTATION WHEN INSTALLED
 (TIDAL SITUATION - TYPE III)

TURBIDITY CURTAIN DETAIL
 DEVELOPED FROM 2008 MANUAL

SUPER SILT FENCE
 TAKEN FROM 2008 MANUAL

BELTED SILT RETENTION FENCE (BSRF)
 TAKEN FROM SILT-SAVER, INC OR EQUAL

NOTE: THE TYPE OF REINFORCED FILTRATION DEVICE WILL BE SELECTED BASED ON FIELD CONDITIONS DURING CONSTRUCTION.
 REINFORCED FILTRATION DEVICES (RED) (STACKED CFS, SUPER SILT FENCE, BELTED SILT RETENTION FENCE)

REFERENCES:
 BEST MANUFACTURING PRACTICES MANUAL, DATED 2008.
 WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL, DATED MAY 2017.
 WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL, DATED MAY 2017.

WITH THIS AND THE OTHER DRAWINGS, SEE DRAWING SHEET NO. 002 FOR THE COMPLETE PROJECT.

REV.	DATE	BY	CHKD.	APPROV.	DESCRIPTION

REVISIONS:

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

MOUNTAIN VALLEY PIPELINE
EROSION AND SEDIMENT CONTROL DETAILS

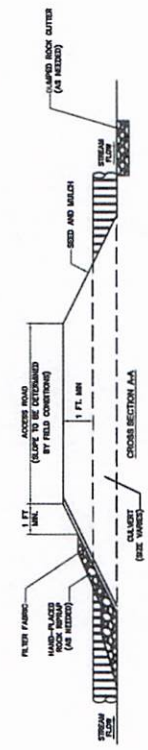
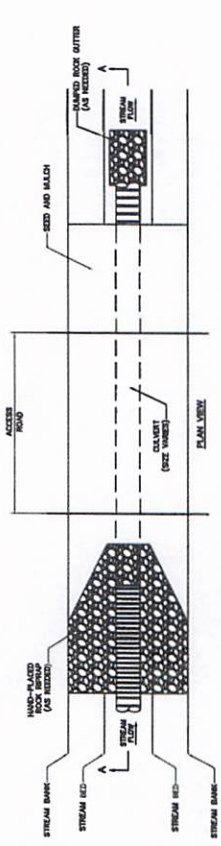
MOUNTAIN VALLEY PIPELINE, LLC
555 SOUTHPOINT BUILDING, SUITE 200
CAMBERSBURG, PA 15317

TETRA TECH

601 ANDERSON ROAD
PITTSBURGH, PA 15220

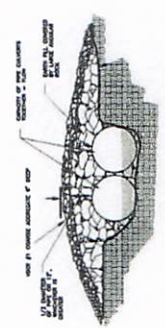
THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE FIELD AND CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL REQUIREMENTS AND CONDITIONS ON THE FIELD. THIS TYPICAL CONSTRUCTION DETAIL MAY DIFFER DEPENDING UPON FIELD REQUIREMENTS.

DATE	2/1/2018
SCALE	AS SHOWN
SHEET NO.	038 OF 033
PROJECT NO.	
CONTRACT NO.	
APPROVED BY:	
CHECKED BY:	
DATE	

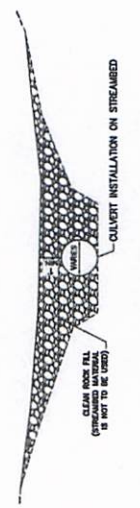


CULVERT SHALL BE DERESSED A MINIMUM OF 8 INCHES INTO STREAM BED TO ENSURE UPSTREAM AND DOWNSTREAM CONNECTIVITY

TYPICAL ROAD CROSS-SECTION AT STREAM CROSSING



TEMPORARY CULVERT CROSSING TAKEN FROM VARIOUS 1982 MANUAL



TYPICAL STREAM CROSSING PROFILE - SINGLE CULVERT TAKEN FROM WOODS MANUAL

NOTE: THE CULVERT TYPES, SIZES AND LOCATIONS RELATIVE TO THE PIPELINE ARE SHOWN ON THE TABLE INCLUDED AS ATTACHMENT AND THE REVISIONS.

NO.	DATE	BY	CHKD.	APPD.	DESCRIPTION

REVISIONS:

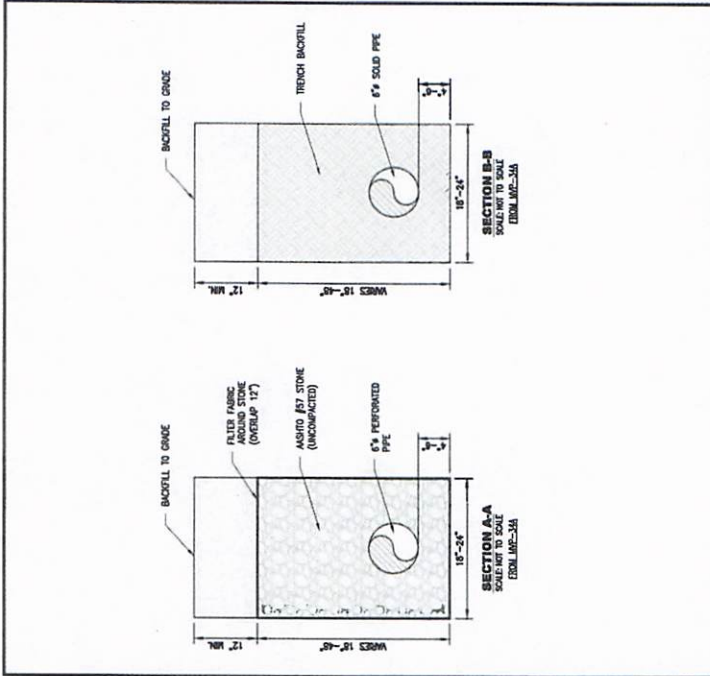
Mountain Valley
 EROSION AND SEDIMENT CONTROL DETAILS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 505 SOUTHPOINTE BOULEVARD, SUITE 200
 OAKTON, VA 22127

TETRA TECH
 681 ANDERSON DRIVE
 SUITE 100
 PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE PIPELINE CONTRACTOR. THE ACTUAL CONSTRUCTION TECHNIQUES MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

DATE:	2/17/2018
SCALE:	AS SHOWN
REV.:	0
DWG. NO.:	MVP-36B
PROJECT NO.:	PXXXX

Printed by Lutz, Keith on October 18, 2018 - 3:28 PM
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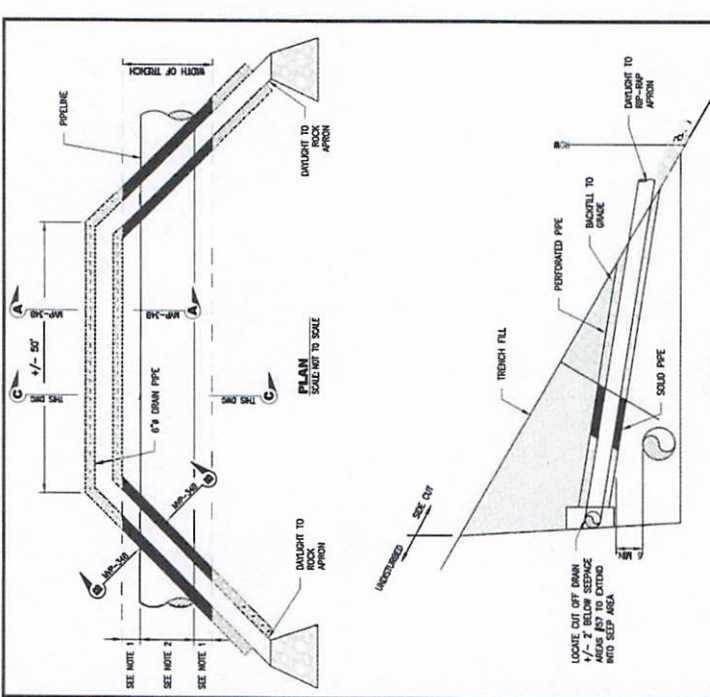
THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE PIPELINE CONTRACTOR. THE ACTUAL CONSTRUCTION TECHNIQUES MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

TYPICAL CONSTRUCTION DETAIL
 CUTOFF DRAIN-SIDEHILL

Mountain Valley PIPELINE
 DESIGN ENGINEERING

DATE:	2/03/2018
SCALE:	N.T.S.
SHEET:	2 OF 2

DRAWING NO. MVP-36B
 REV. 0



THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE PIPELINE CONTRACTOR. THE ACTUAL CONSTRUCTION TECHNIQUES MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

TYPICAL CONSTRUCTION DETAIL
 CUTOFF DRAIN-SIDEHILL

Mountain Valley PIPELINE
 DESIGN ENGINEERING

DATE:	2/03/2018
SCALE:	N.T.S.
SHEET:	1 OF 2

DRAWING NO. MVP-36A
 REV. 0

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SUP. PREVENTION DETAIL

NO.	DATE	BY	DESCRIPTION

REVISIONS:

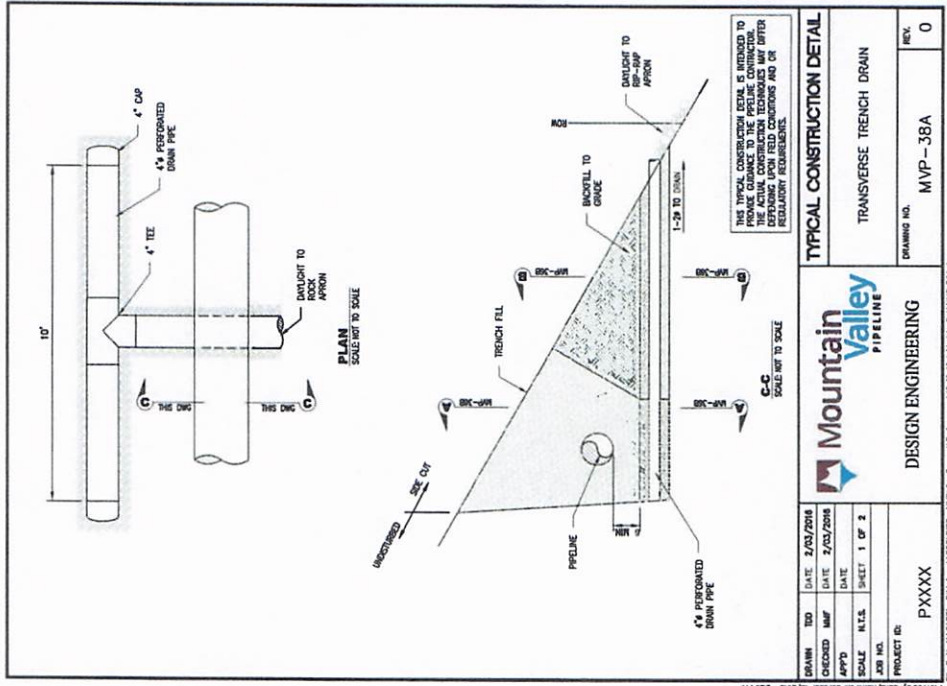
MOUNTAIN VALLEY PIPELINE, LLC
 555 SOUTHPOINTE BOULEVARD, SUITE 200
 CHICAGO, PA 15217

MOUNTAIN VALLEY PIPELINE PROJECT - H6000 LINE
 PROVISION AND SECTION CONTROL DETAILS

TETRA TECH
 681 ANDERSON DRIVE
 SUITE 100
 PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE PIPELINE CONTRACTOR IN THE FIELD. THE ACTUAL CONSTRUCTION TECHNIQUES AND MATERIALS TO BE USED SHALL BE DETERMINED BY THE CONTRACTOR DEPENDING UPON FIELD REQUIREMENTS AND REGULATORY REQUIREMENTS.

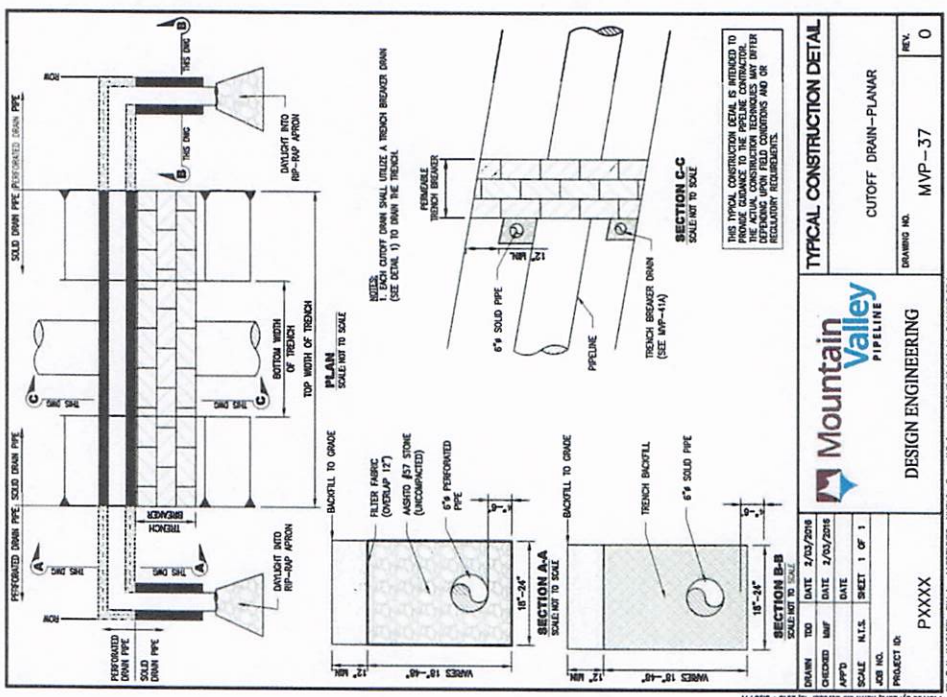
DATE	2/1/2018
SCALE	AS SHOWN
PROJECT NO.	PXXXX
DRAWING NO.	MVP-38A
REV.	0



TYPICAL CONSTRUCTION DETAIL
 TRANSVERSE TRENCH DRAIN

DATE	2/03/2018
CHECKED	MAP
APP'D	MAP
SCALE	N.T.S.
SHEET	1 OF 2
PROJECT NO.	PXXXX
DRAWING NO.	MVP-38A
REV.	0

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 Printed by: Lutz, Keith on October 18, 2018 - 3:29 PM



TYPICAL CONSTRUCTION DETAIL
 CUTOFF DRAIN-PLANAR

DATE	2/03/2018
CHECKED	MAP
APP'D	MAP
SCALE	N.T.S.
SHEET	1 OF 1
PROJECT NO.	PXXXX
DRAWING NO.	MVP-37
REV.	0

File Path: S:\CALCAD_P\114846\A\11787 - MVP3 - General\Drawings\18-12-18 Added to Set\MVP-37.dwg
 Printed by: Lutz, Keith on October 18, 2018 - 3:28 PM

SUP. PREVENTION DETAIL

NO.	DATE	DESCRIPTION

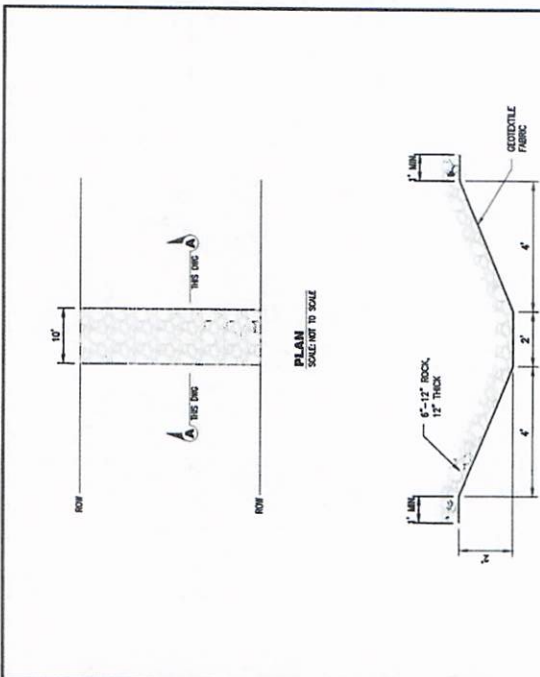
REVISIONS:

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 EROSION AND SEDIMENT CONTROL DETAILS
 Mountain Valley PIPELINE, LLC
 505 SOUTHPOINT BOULEVARD, SUITE 200
 CAMONSTER, PA 15317

TETRA TECH
 www.tetra-tech.com
 851 ANDERSON DRIVE
 FOSTER, PA 17038
 PHILADELPHIA, PA 19102

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE FIELD CONSTRUCTION PERSONNEL. THE ACTUAL CONSTRUCTION TECHNIQUES MAY DIFFER FROM THOSE SHOWN HEREIN BASED ON LOCAL REGULATORY REQUIREMENTS AND ON FIELD CONDITIONS. THIS TYPICAL CONSTRUCTION DETAIL MAY VARY BASED ON LOCAL REGULATORY REQUIREMENTS AND ON FIELD CONDITIONS. THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE FIELD CONSTRUCTION PERSONNEL. THE ACTUAL CONSTRUCTION TECHNIQUES MAY DIFFER FROM THOSE SHOWN HEREIN BASED ON LOCAL REGULATORY REQUIREMENTS AND ON FIELD CONDITIONS.

DATE: 11/11/2016	SCALE: AS SHOWN
APPROVED BY: [Signature]	DATE: 11/11/2016
CHECKED BY: [Signature]	DATE: 11/11/2016
DRAWN BY: [Signature]	DATE: 11/11/2016



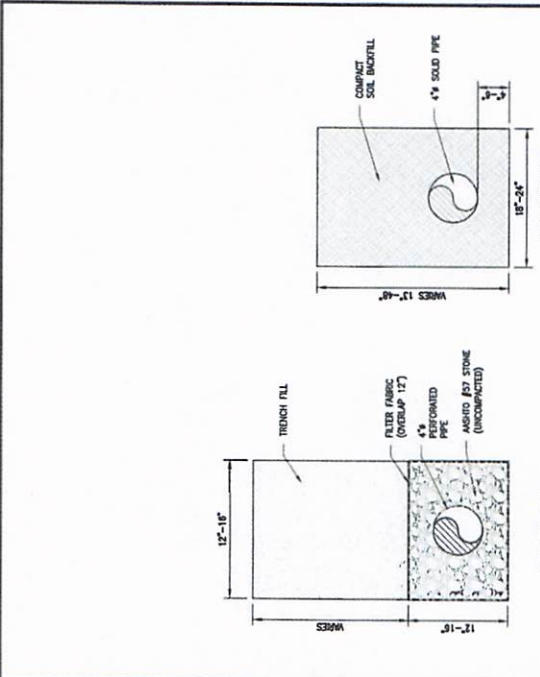
Mountain Valley PIPELINE
 DESIGN ENGINEERING

PROJECT ID: PXXXX
 DRAWING NO: MVP-39
 REV: 0

TYPICAL CONSTRUCTION DETAIL
 ROCK LINED SWALE

DRAWN: [Signature]	DATE: 2/21/2016
CHECKED: [Signature]	DATE: 2/21/2016
APP'D: [Signature]	DATE: 2/21/2016
SCALE: N.T.S.	SHEET 1 OF 1
JOB NO.	
PROJECT ID:	PXXXX

This typical construction detail is intended to provide guidance to the pipeline contractor. The actual construction techniques may differ from those shown herein based on local regulatory requirements and on field conditions. This typical construction detail may vary based on local regulatory requirements and on field conditions.



Mountain Valley PIPELINE
 DESIGN ENGINEERING

PROJECT ID: PXXXX
 DRAWING NO: MVP-38B
 REV: 0

TYPICAL CONSTRUCTION DETAIL
 TRANSVERSE TRENCH DRAIN

DRAWN: [Signature]	DATE: 2/21/2016
CHECKED: [Signature]	DATE: 2/21/2016
APP'D: [Signature]	DATE: 2/21/2016
SCALE: N.T.S.	SHEET 2 OF 2
JOB NO.	
PROJECT ID:	PXXXX

This typical construction detail is intended to provide guidance to the pipeline contractor. The actual construction techniques may differ from those shown herein based on local regulatory requirements and on field conditions. This typical construction detail may vary based on local regulatory requirements and on field conditions.

SUP. PREVENTION DETAIL

NO.	DATE	DESCRIPTION

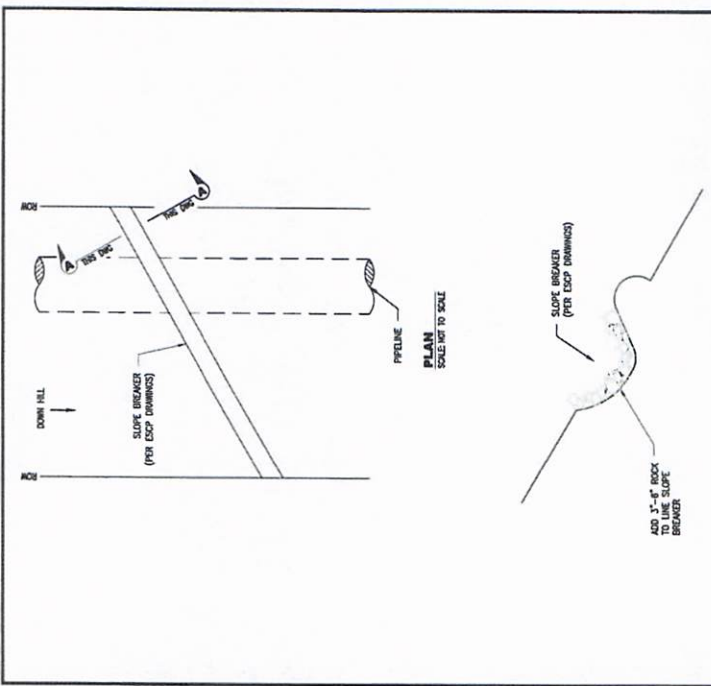
REVISIONS:

Mountain Valley
EROSION AND SEDIMENT CONTROL DETAILS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
505 SOUTHPOINTE BOULEVARD, SUITE 200
OWENSBURG, PA 15317

TETRA TECH
681 ANDERSON DRIVE
SUITE 100
PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE PIPELINE CONTRACTOR. THE ACTUAL CONSTRUCTION TECHNIQUES MAY VARY DEPENDING UPON FIELD CONDITIONS AND ON REGULATORY REQUIREMENTS.

DATE	2/16/2018
SCALE	AS SHOWN
SHEET NO.	0.14 OF 0.21



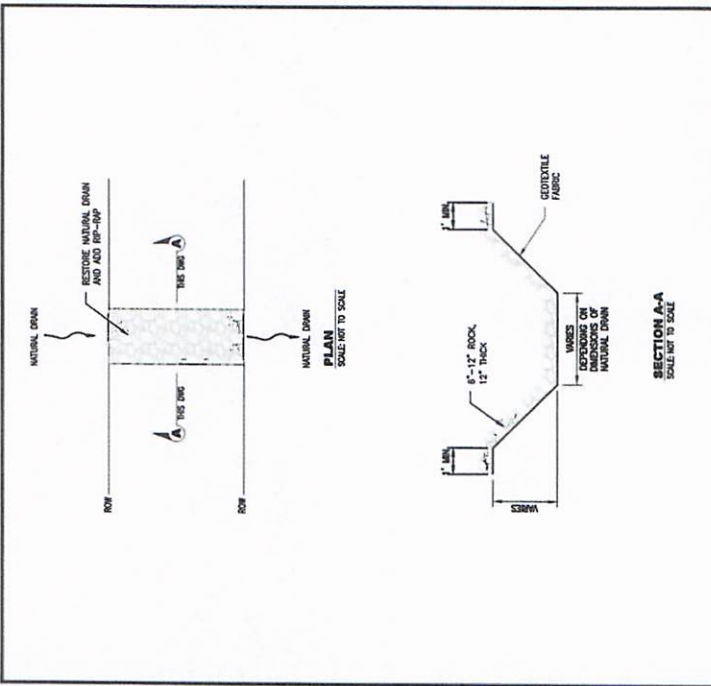
SECTION A-A
SCALE: NOT TO SCALE

ADD 3"-6" ROCK TO LINE SLOPE BREAKER

TYPICAL CONSTRUCTION DETAIL
RIP-RAP SLOPE BREAKERS

DATE	2/16/2018
SCALE	AS SHOWN
SHEET	1 OF 1
PROJECT NO.	PXXXX
DRAWING NO.	MVP-41
REV.	0

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SECTION A-A
SCALE: NOT TO SCALE

WIDENES DEPENDING ON DEPTH OF NATURAL DRAIN

TYPICAL CONSTRUCTION DETAIL
RIP-RAP NATURAL DRAIN

DATE	2/16/2018
SCALE	AS SHOWN
SHEET	1 OF 1
PROJECT NO.	PXXXX
DRAWING NO.	MVP-40
REV.	0

Path: \\S:\CAD\01_PITTSBURGH\011705 - MVP4 - General\References\15-12-18_Added to Set\VP-40.dwg

SIP PREVENTION DETAIL

WITH THIS AND THE OTHER PROJECTS, MOUNTAIN VALLEY PIPELINE PROJECTS ARE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS: [http://www.mountainvalley.com/About/About-Us/About-Us.aspx](#)

NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION

REVISIONS:

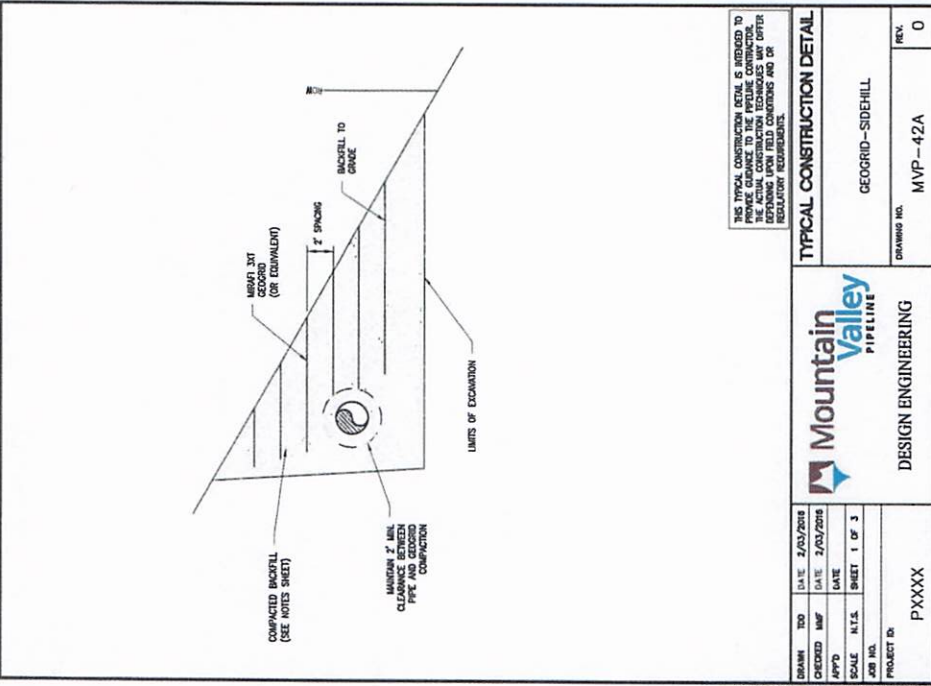
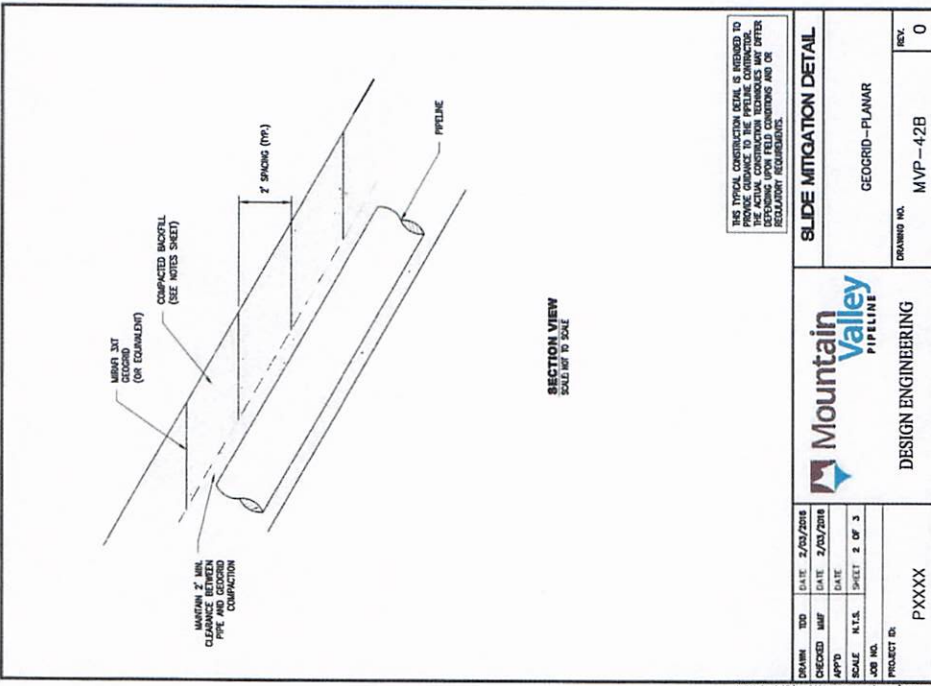
Mountain Valley
EROSION AND SEDIMENT CONTROL DETAILS
MOUNTAIN VALLEY PIPELINE PROJECT - H600

500 SOUTHPOINTE BOULEVARD, SUITE 200
CAMDEN, PA 17017

TETRA TECH
801 ANDERSON DRIVE
SUITE 100
PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE FOR THE ACTUAL CONSTRUCTION TECHNIQUES TO BE USED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE TYPICAL CONSTRUCTION DETAIL MEETS ALL APPLICABLE REGULATORY REQUIREMENTS AND FOR OBTAINING NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.

DATE	2/10/2018
SCALE	AS SHOWN
SHEET NO.	015 OF 021



DATE	2/10/2018
SCALE	AS SHOWN
SHEET NO.	015 OF 021

DATE	2/10/2018
SCALE	AS SHOWN
SHEET NO.	015 OF 021

SLIP PREVENTION DETAIL

NO.	DATE	BY	CHKD.	APPR.	DESCRIPTION

REVISIONS:

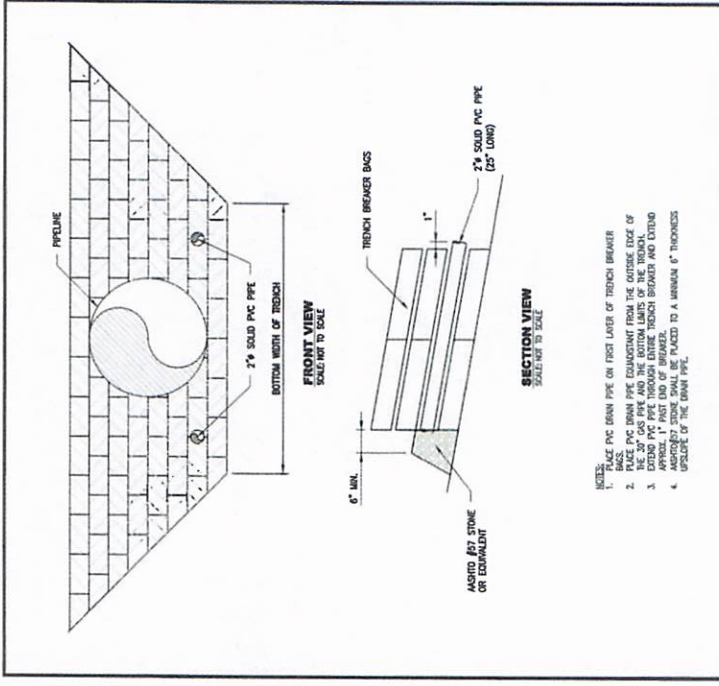
MOUNTAIN VALLEY PIPELINE, LLC
 505 SOUTHWEST BOULEVARD, SUITE 200
 CAMONSBURG, PA 15317

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 EROSION AND SEDIMENT CONTROL DETAILS

TETRA TECH
 651 ANDERSON DRIVE
 SUITE 100
 PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND REGULATORY REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS PRIOR TO CONSTRUCTION.

DESIGNED BY	
CHECKED BY	
APPROVED BY	
DATE	2/17/2018
SCALE	AS SHOWN
DWG. NO.	013
REV.	0



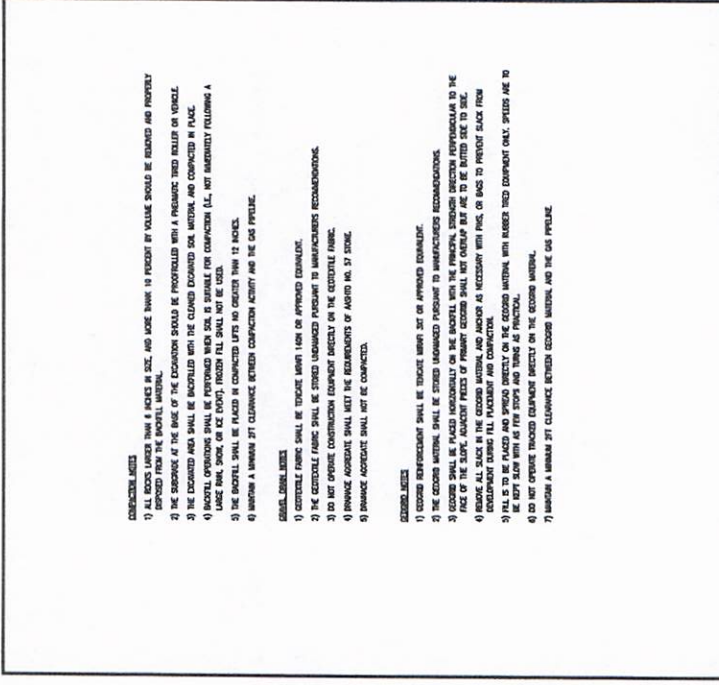
NOTES:
 1. PLACE 24" SOLID PVC DRAIN PIPE ON FIRST LAYER OF TRENCH BREAKER BAGS.
 2. PLACE 1/2" PVC DRAIN PIPE SUBSEQUENT FROM THE BREAKER END OF THE 5/8" GAS PIPE AND THE BOTTOM LAYER OF THE TRENCH BREAKER.
 3. EXTEND PVC PIPE THROUGH ENTIRE TRENCH BREAKER AND EXTEND TRENCH BREAKER TO A MINIMUM 6" THICKNESS UPSTREAM OF THE DRAIN PIPE.

THE TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND REGULATORY REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS PRIOR TO CONSTRUCTION.

DESIGN NO.	DATE	4/1/2018
CHECKED BY	DATE	4/1/2018
APPROVED BY	DATE	4/1/2018
SCALE	N.T.S.	SHEET 1 OF 2
JOB NO.		
PROJECT ID		
PRODUCT ID		PXXXX
DRAWING NO.		MVP-43A
REV.		0

Mountain valley PIPELINE
 DESIGN ENGINEERING

Printed by: Lutz, Edith on October 15, 2018 - 3:41 PM
 File Path: S:\CAD\001_P111\mvp\15101703 - MVP4 - General\References\15-10-18_Added to Set\MVP-43A.dwg



CONSTRUCTION NOTES:
 1) ALL BACKFILLS SHALL BE 4 INCHES WIDER IN SIZE AND HAVE 14 PERCENT BY VOLUME SHOULD BE REMOVED AND PROPERLY REFINED FROM THE SHOVELL MATERIAL.
 2) THE SHOULDER AT THE BASE OF THE EXCAVATION SHOULD BE PROTECTED WITH A PNEUMATIC TIRE ROLLER OR VIBRATOR.
 3) THE EXCAVATED AREA SHALL BE BACKFILLED WITH THE CLEANED EXCAVATED SOIL MATERIAL AND COMPACTED IN PLACE.
 4) BACKFILL OPERATIONS SHALL BE PERFORMED WHEN SOIL IS SUITABLE FOR COMPACTION (I.E., NOT IMMEDIATELY FOLLOWING A LARGE RAIN, SNOW, OR ICE EVENT). TRENCH FILL SHALL NOT BE USED.
 5) THE SHOVELL SHALL BE PLACED IN CONTACT WITH NO GREATER THAN 12 INCHES.
 6) MAINTAIN A MINIMUM 2' FT CLEARANCE BETWEEN COMPACTION ACTIVITY AND THE GAS PIPELINE.

GEOSGRID NOTES:
 1) EXCAVATION SHALL BE TRENCH WIDTH 14" OR APPROVED EQUIVALENT.
 2) THE GEOSGRID FABRIC SHALL BE STORED UNWOUND PENDING TO MANUFACTURER'S RECOMMENDATIONS.
 3) DO NOT OPERATE CONSTRUCTION EQUIPMENT DIRECTLY ON THE GEOSGRID FABRIC.
 4) SPANNE ADJUSTMENT SHALL MEET THE REQUIREMENTS OF AUSTRIAN MS 57 STONE.
 5) SPANNE ADJUSTMENT SHALL NOT BE COMPACTION.

CONSTRUCTION NOTES:
 1) EXCAVATION SHALL BE TRENCH WIDTH 14" OR APPROVED EQUIVALENT.
 2) THE GEOSGRID FABRIC SHALL BE STORED UNWOUND PENDING TO MANUFACTURER'S RECOMMENDATIONS.
 3) DO NOT OPERATE CONSTRUCTION EQUIPMENT DIRECTLY ON THE GEOSGRID FABRIC.
 4) SPANNE ADJUSTMENT SHALL MEET THE REQUIREMENTS OF AUSTRIAN MS 57 STONE.
 5) SPANNE ADJUSTMENT SHALL NOT BE COMPACTION.

THE TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND REGULATORY REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS PRIOR TO CONSTRUCTION.

DESIGN NO.	DATE	2/10/2018
CHECKED BY	DATE	2/10/2018
APPROVED BY	DATE	2/10/2018
SCALE	N.T.S.	SHEET 3 OF 3
JOB NO.		
PROJECT ID		
PRODUCT ID		PXXXX
DRAWING NO.		MVP-42C
REV.		0

Mountain valley PIPELINE
 DESIGN ENGINEERING

Printed by: Lutz, Edith on October 15, 2018 - 3:41 PM
 File Path: S:\CAD\001_P111\mvp\15101703 - MVP4 - General\References\15-10-18_Added to Set\MVP-42C.dwg

SUP. PREVENTION DETAIL

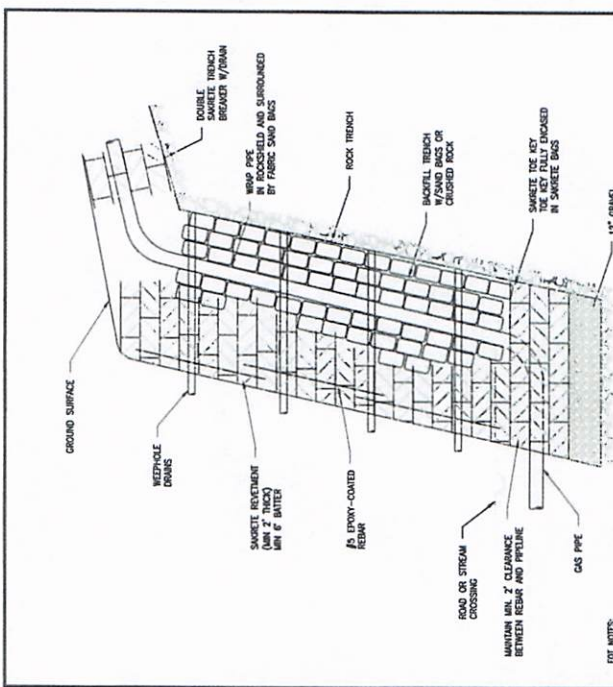
REVISIONS:			
NO.	DATE	BY	DESCRIPTION

MOUNTAIN VALLEY PIPELINE, LLC
 855 SOUTHWEST BOULEVAR, SUITE 200
 CAMDEN, PA 17002

TETRA TECH
 851 ANDERSON DRIVE
 PITTSBURGH, PA 15220

DESIGN NO.	002
CHECKED BY	SP
APPROVED BY	ME
DATE	2/7/2018
SCALE	AS SHOWN
SHEET NO.	517 OF 521

FRONSON AND SCOTTY CONTROL DETAILS
MOUNTAIN VALLEY PIPELINE PROJECT - H500 LINE



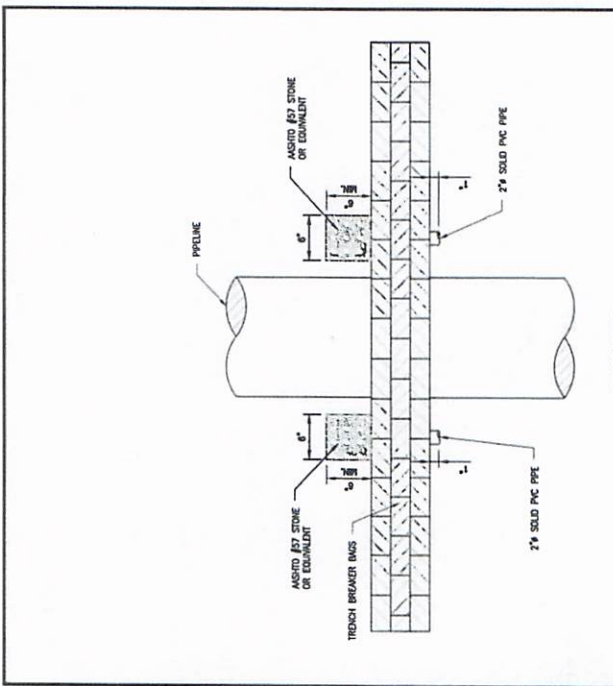
NOTE:
 1. SARRETE BAGS SHOULD EXCEED 4 BAGS DEEP PIPE SHOULD BE COMPLETELY SURROUNDED BY SAND BAGS, OR CRUSHED ROCK (NOT 6").
 2. SARRETE BAGS SHOULD BE STAGGERED IN A MANDATORY FASHION. THE TOP OF THE WALL SHALL BE RECESSED 9'-10" FROM VERTICAL.
 3. AS BAGS SHOULD BE OPEN THROUGH THE SARRETE BAGS (SEE DETAIL 1).
 4. 2" PVC RETICULATE FABRIC SHALL BE INSTALLED EVERY 15 FT.

DESIGN NOTES:
 1. SARRETE BAGS SHOULD EXCEED 4 BAGS DEEP PIPE SHOULD BE COMPLETELY SURROUNDED BY SAND BAGS, OR CRUSHED ROCK (NOT 6").
 2. SARRETE BAGS SHOULD BE STAGGERED IN A MANDATORY FASHION. THE TOP OF THE WALL SHALL BE RECESSED 9'-10" FROM VERTICAL.
 3. AS BAGS SHOULD BE OPEN THROUGH THE SARRETE BAGS (SEE DETAIL 1).
 4. 2" PVC RETICULATE FABRIC SHALL BE INSTALLED EVERY 15 FT.

TYPICAL CONSTRUCTION DETAIL
SLIDE MITIGATION
HIGHWALL REVEMENT
SIDE VIEW

DESIGN NO.	MVP-44A	REV.	0
Mountain Valley PIPELINE			
DESIGN ENGINEERING			
PROJECT NO.	PXXXX	DRAWING NO.	MVP-44A
SCALE	N.T.S.	SHEET	1 OF 2
APPROVED	DATE	CHECKED	DATE
APP'D	6/29/2018	MVF	---
DATE	---	DATE	---
SCALE	N.T.S.	SHEET	1 OF 2
PROJECT NO.	PXXXX	DRAWING NO.	MVP-44A
DESIGNER	PXXXX	DATE	6/29/2018

File Path: X:\CADD_P\18\01371707 - MVP4 - General\References\18-01-18 Added to Set\VP-44A.dwg
 Printed by: Lutz, Keith on October 18, 2018 - 3:42 PM



PLAIN VIEW
SCALE: NOT TO SCALE

NOTE:
 1. SARRETE BAGS SHOULD EXCEED 4 BAGS DEEP PIPE SHOULD BE COMPLETELY SURROUNDED BY SAND BAGS, OR CRUSHED ROCK (NOT 6").
 2. SARRETE BAGS SHOULD BE STAGGERED IN A MANDATORY FASHION. THE TOP OF THE WALL SHALL BE RECESSED 9'-10" FROM VERTICAL.
 3. AS BAGS SHOULD BE OPEN THROUGH THE SARRETE BAGS (SEE DETAIL 1).
 4. 2" PVC RETICULATE FABRIC SHALL BE INSTALLED EVERY 15 FT.

DESIGN NOTES:
 1. SARRETE BAGS SHOULD EXCEED 4 BAGS DEEP PIPE SHOULD BE COMPLETELY SURROUNDED BY SAND BAGS, OR CRUSHED ROCK (NOT 6").
 2. SARRETE BAGS SHOULD BE STAGGERED IN A MANDATORY FASHION. THE TOP OF THE WALL SHALL BE RECESSED 9'-10" FROM VERTICAL.
 3. AS BAGS SHOULD BE OPEN THROUGH THE SARRETE BAGS (SEE DETAIL 1).
 4. 2" PVC RETICULATE FABRIC SHALL BE INSTALLED EVERY 15 FT.

TYPICAL CONSTRUCTION DETAIL
TRENCH BREAKER
PASS-THROUGH DRAIN

DESIGN NO.	MVP-43B	REV.	0
Mountain Valley PIPELINE			
DESIGN ENGINEERING			
PROJECT NO.	PXXXX	DRAWING NO.	MVP-43B
SCALE	N.T.S.	SHEET	2 OF 2
APPROVED	DATE	CHECKED	DATE
APP'D	4/7/2018	MVF	---
DATE	---	DATE	---
SCALE	N.T.S.	SHEET	2 OF 2
PROJECT NO.	PXXXX	DRAWING NO.	MVP-43B
DESIGNER	PXXXX	DATE	4/7/2018

File Path: X:\CADD_P\18\01371707 - MVP4 - General\References\18-01-18 Added to Set\VP-43B.dwg
 Printed by: Lutz, Keith on October 18, 2018 - 3:42 PM

SLIP PREVENTION DETAIL

REVISIONS:

NO.	DATE	BY	REVISION

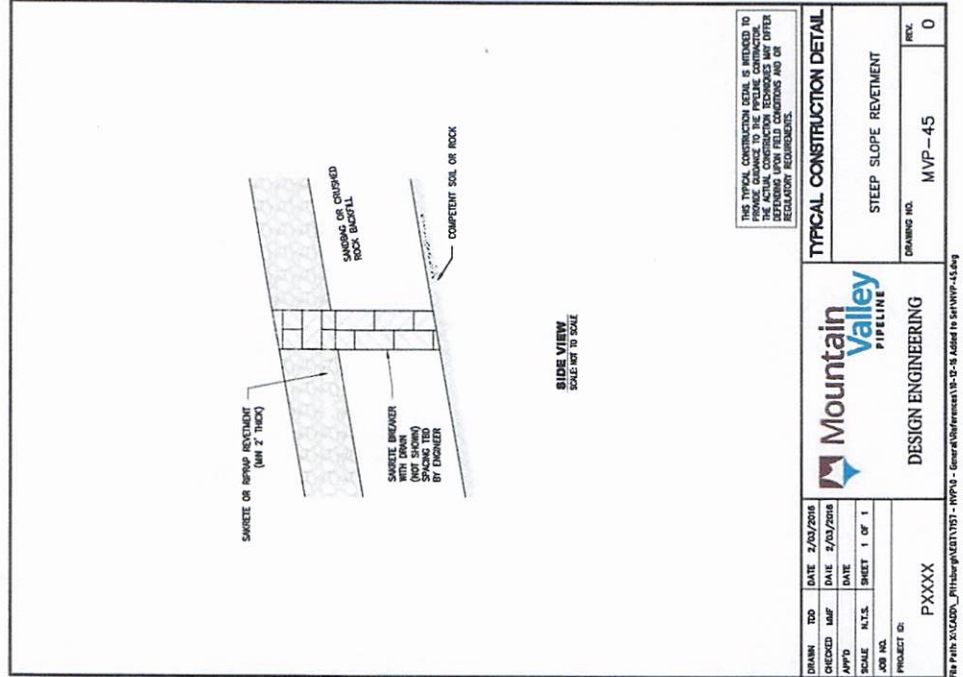
MOUNTAIN VALLEY PIPELINE, LLC
 505 SOUTHPOINTE BOULEVARD, SUITE 200
 CHANGERSBURG, PA 15317

EROSION AND SEDIMENT CONTROL DETAILS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

TETRA TECH
 681 AMERSON DRIVE
 SUITE 100
 PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE ACTUAL CONSTRUCTION. THE ACTUAL CONSTRUCTION REQUIREMENTS MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

DATE: 2/21/2018
 SCALE: AS SHOWN
 SHEET NO. 41B OF 423



THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE ACTUAL CONSTRUCTION. THE ACTUAL CONSTRUCTION REQUIREMENTS MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

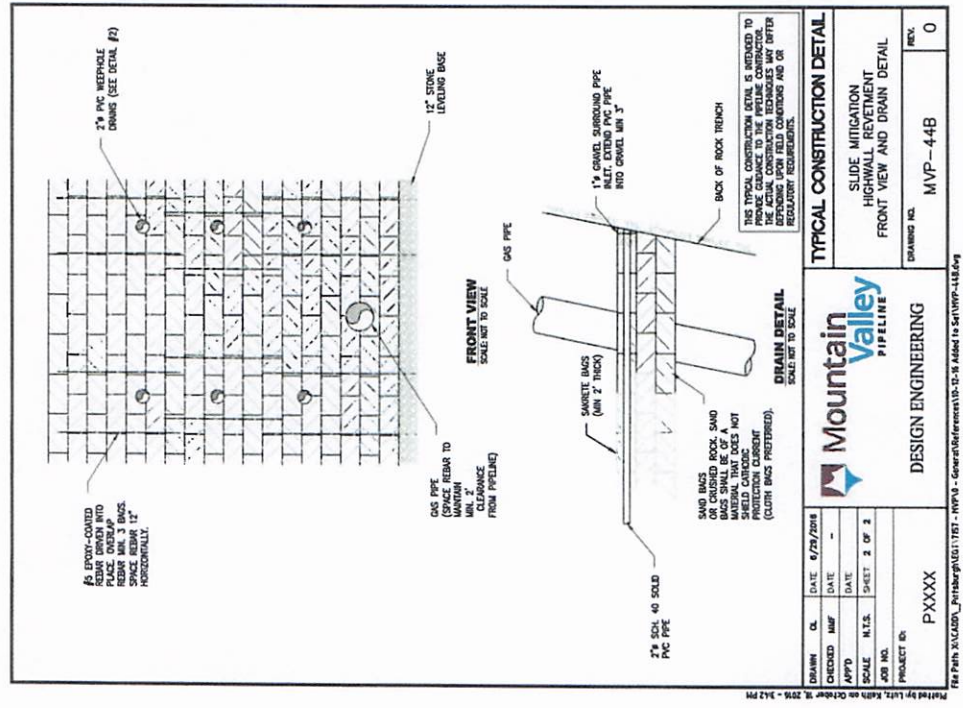
TYPICAL CONSTRUCTION DETAIL
 STEEP SLOPE RETENMENT
 DRAWING NO. MVP-45
 REV. 0

Mountain Valley PIPELINE
 DESIGN ENGINEERING

DATE: 2/03/2018
 CHECKED: MAF
 APP'D: MAF
 SCALE: N.T.S.
 SHEET: 1 OF 1

PROJECT ID: PXXXX
 DRAWING NO. MVP-45
 REV. 0

FILE PATH: X:\CAD\2018\11757 - MVP4 - General\Drawings\18-02-4 Added is Set\MVP-45.dwg



THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE ACTUAL CONSTRUCTION. THE ACTUAL CONSTRUCTION REQUIREMENTS MAY VARY DEPENDING UPON FIELD CONDITIONS AND OR REGULATORY REQUIREMENTS.

TYPICAL CONSTRUCTION DETAIL
 SLIDE MITIGATION
 HIGHWALL RETENMENT
 FRONT VIEW AND DRAIN DETAIL
 DRAWING NO. MVP-44B
 REV. 0

Mountain Valley PIPELINE
 DESIGN ENGINEERING

DATE: 6/29/2016
 CHECKED: MAF
 APP'D: MAF
 SCALE: N.T.S.
 SHEET: 3 OF 3

PROJECT ID: PXXXX
 DRAWING NO. MVP-44B
 REV. 0

FILE PATH: X:\CAD\2016\11757 - MVP4 - General\Drawings\18-02-4 Added is Set\MVP-44B.dwg

SLIP PREVENTION DETAIL

WITH THESE AND ALL OTHER DRAWINGS, SPECIFICATIONS AND CONTRACT DOCUMENTS, THESE DRAWINGS SHALL BE INTERPRETED AS A SINGLE ENTIRETY.

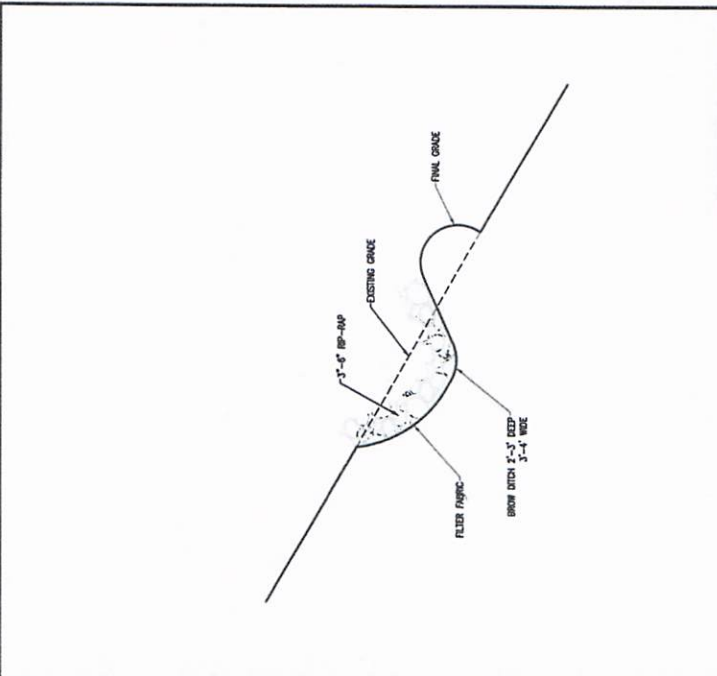
REV.	DATE	BY	CHKD.	APPROV.	DESCRIPTION

Mountain Valley
 ENGINEERING AND SURVEY CONTRACTORS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 555 SOUTHWEST BOULEVARD, SUITE 200
 CAMDEN, PA 17017

TETRA TECH
 661 ANDERSON DRIVE
 PITTSBURGH, PA 15220

THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE FIELD CONSTRUCTION PERSONNEL AND TO THE FIELD SUPERVISOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS.

DATE	7/12/2016
SCALE	AS SHOWN
PROJECT NO.	0.19 OF 0.23
DRAWN BY	
CHECKED BY	
APPROVED BY	
DATE	2/12/2016
SCALE	AS SHOWN
PROJECT NO.	0.19 OF 0.23



THIS TYPICAL CONSTRUCTION DETAIL IS INTENDED TO PROVIDE GUIDANCE TO THE FIELD CONSTRUCTION PERSONNEL AND TO THE FIELD SUPERVISOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS.

TYPICAL CONSTRUCTION DETAIL	
BROW DITCH DETAIL	REV. 0
DRAWING NO.	MVP-46

Mountain Valley PIPELINE
DESIGN ENGINEERING
 PROJECT NO. PXXXX
 The Path X:\CAD\0_P11509\101710171 - MVP4 - General\References\10-18-Add to Set\MVP-46.dwg
 Plotted by: Lyle R. Smith on October 18, 2016 - 3:43 PM

SUP. PREVENTION DETAIL



Permit# 23-633
Project Name: Mountain Valley Pipeline
Permittees Name: Mountain Valley Pipeline, LLC

Doddridge County, WV

Floodplain Development Permit Application

This document is to be used for projects that impact/potentially impact the FEMA-designated floodplain and/or floodway of Doddridge County, WV pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance.

SECTION 1: GENERAL PROVISIONS (APPLICANT TO READ AND SIGN)

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
7. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her representative to make inspections to verify compliance.
8. I THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

APPLICANT'S SIGNATURE Robert J. Cooper

DATE 07/03/23

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Project Narrative:

Describe in detail the proposed development including project name/title, type of development, estimated start and completion timeline, and its potential impact on the floodplain. Use additional copies of this page as needed.

Project Narrative:
One floodplain crossing is located in Doddridge County with approximately 250 linear feet of pipeline construction at Station 1837+00. Temporary aboveground construction within floodplain
limits include additional temporary work space (ATWS) utilized for stream crossing support, access
roads including stone construction entrances, timber mats and various erosion and sediment control
devices (compost filter sock (CFS), silt fence, super silt fence, and erosion matting). Permanent
aboveground structures associated with crossings within the floodplain limits will be one service pole
associated with the ground bed rectifier systems and mainline valve sites at linear Station 1837+00.
It should be noted that the mainline valve site will be placed at the current ground elevation without
increasing the current grade. Additionally, construction of permanent roads, temporary roads, or
maintenance of existing roads will occur within the floodplain limits. Estimated construction cost
is \$549,064.

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Applicant Information:

Please provide all pertinent data.

Applicant Information		
Responsible Company Name: Mountain Valley Pipeline, LLC		
Corporate Mailing Address: 2200 Energy Drive, 2nd Floor		
City: Canonsburg	State: PA	Zip: 15317
Corporate Point of Contact (POC): Matt Hoover		
Corporate POC Title: Permitting Supervisor		
Corporate POC Primary Phone: 412 258-5627		
Corporate POC Primary Email: mhcoover@equitransmidstream.com		
Corporate FEIN: 25-0754685	Corporate DUNS: N/A	
Corporate Website: N/A		
Local Mailing Address: N/A		
City: N/A	State: N/A	Zip: N/A
Local Project Manager (PM): Same as Point of Contact		
Local PM Primary Phone: Same as Point of Contact		
Local PM Secondary Phone: Same as Point of Contact		
Local PM Primary Email: Same as Point of Contact		
Person Filing Application: Same as Point of Contact		
Applicant Title: Same as Point of Contact		
Applicant Primary Phone: (412) 258 5627		
Applicant Secondary Phone: N/A		
Applicant Primary Email: Same as Point of Contact		

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Development Site/Property Information:

Please provide physical description of the site/property, along with pertinent ownership (surface and mineral rights) data as applicable. Attach appropriate maps from the WV Flood Tool showing location of proposed development. Use additional copies of this page if development spans multiple property boundaries. Designate each property by number (i.e. Property 1 of 1, Property 2 of 7, etc.)

Property Designation: ____ of ____

Site/Property Information:		
Legal Description: Please See Attached		
Physical Address/911 Address:		
Decimal Latitude/Longitude: 39.201285, -80.553387		
DMS Latitude/Longitude:		
District:	Map:	Parcel:
Land Book Description:		
Deed Book Reference:		
Tax Map Reference:		
Existing Buildings/Use of Property:		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
Community:	Number:	Panel:	Suffix:
Location (Lat/Long):		Approximate Elevation:	
		Estimated BFE:	
Is the development in the floodway?		Is the development in the floodplain?	
Yes No	Yes No Zone: _____		
Notes:			

**Doddridge County Commercial/Industrial
Floodplain Development Permit Application**

Proposed Development:

Please check all elements of the proposed project that apply.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

<u>ACTIVITY</u>	<u>STRUCTURAL TYPE</u>
<input type="checkbox"/> New Structure	<input type="checkbox"/> Residential (1 – 4 Family)
<input type="checkbox"/> Addition	<input type="checkbox"/> Residential (more than 4 Family)
<input type="checkbox"/> Alteration	<input type="checkbox"/> Non-residential (floodproofing)
<input type="checkbox"/> Relocation	<input type="checkbox"/> Combined Use (res. & com.)
<input type="checkbox"/> Demolition	<input type="checkbox"/> Replacement
<input type="checkbox"/> Manufactured/Mobil Home	

B. OTHER DEVELOPMENT ACTIVITIES:

- Fill Mining Drilling Pipelining
- Grading
- Excavation (except for STRUCTURAL DEVELOPMENT checked above)
- Watercourse Alteration (including dredging and channel modification)
- Drainage Improvements (including culvert work)
- Road, Street, or Bridge Construction
- Subdivision (including new expansion)
- Individual Water or Sewer System
- Other (please specify)
-
-
-

Doddridge County Commercial/Industrial Floodplain Development Permit Application

Contractor Data:

Please provide all pertinent data for contractors and sub---contractors that may be participating in this project. Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Designation: ____ of ____		
Contractor/Sub-Contractor (C/SC) Information:		
C/SC Company Name: N/A		
C/SC WV License Number:		
C/SC FEIN:	C/SC DUNS:	
Local C/SC Point of Contact (POC):		
Local C/SC POC Title:		
C/SC Mailing Address:		
City:	State:	Zip-Code:
Local C/SC Office Phone:		
Local C/SC POC Phone:		
Local C/SC POC E-Mail:		

Engineer Firm Information:		
Engineer Firm Name:		
Engineer WV License Number:		
Engineer Firm FEIN:	Engineer Firm DUNS:	
Engineer Firm Primary Point of Contact (POC):		
Engineer Firm Primary POC Title:		
Engineer Firm Mailing Address:		
City:	State:	Zip-Code:
Engineer Firm Office Phone:		
Engineer Firm Primary POC Phone:		
Engineer Firm Primary POC E-Mail:		

Doddridge County Commercial/Industrial Floodplain Development Permit Application

Mountain Valley provided a non-public list of affected landowners to FERC. FERC requires that this information be filed as privileged to protect the privacy of the landowners. To be consistent with these FERC requirements, the landowner information has been omitted from this application.

Property Owner Data:

Please provide data on current site/property landowner(s), both surface and mineral rights (as applicable). Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Designation: ____ of ____ See attached for property owners/adjacent landowners.

Property Owner Data:		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Surface Rights Owner Data:		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Mineral Rights Owner Data: (As Applicable)		
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Site Plan

A Site Plan is an accurate and detailed map of the proposed development for this project. It shows the size, shape, location and special features of the project property, and the size and location of any development planned to the property, especially as that development will impact the floodplain and/or floodway. Site plans show what currently exists on the project property, and any changes or improvements you are proposing to make. A certified and licensed engineering firm should complete site plans.

A SITE PLAN MUST CONTAIN THE FOLLOWING INFORMATION:

1. Legal description of the parcel, north arrow and scale
2. All property lines and their dimensions
3. Names of adjacent roads, location of driveways
4. Location of sloughs, tributaries, streams, rivers, wetlands, ponds, and lakes, with setbacks indicated, and including FEMA floodplain data based on most updated FIRM.
5. Location, size, shape of all buildings, existing and proposed, with elevation of lowest floor indicated.
6. Location and dimensions of existing or proposed on-site sewage systems.
7. Location of all propane tanks, fuel tanks or other liquid storage tanks whether above ground or below ground level.
8. Location and dimensions of any proposed pipeline placement(s) into floodplain/floodway.
9. Location and dimensions of any roadway development into floodplain/floodway. *(Includes initial development access roads)*
10. Location and dimensions of any bridge and/or culvert development into floodplain/floodway.
11. Location and dimensions of any storage yard or facility into the floodplain/floodway.
12. Location of any existing utilities and/or proposed utility placement and/or displacement.
13. Location, dimensions and depth of any existing or proposed fill on site.
14. A survey showing the **existing ground elevations** of at least location on the building site. **ELEVATION NOTE:** All vertical datum will reference either NGVD 29 or NAVD 88. Assumed datum will not be acceptable unless the property is located in an area where vertical datum has not been published. For those areas where vertical datum has not been established, a site plan with contours, elevations using assumed datum, high water marks and existing water levels of sloughs, rivers, lakes or streams and proposed lowest floor elevation.

Adjacent and/or Affected Landowners Data

Please provide data for all adjacent and/or affected surface owners (both up and down stream) whose property may be impacted by proposed development as demonstrated by a floodplain study or survey. Use additional copies of this page as needed.

Adjacent Property Owner Data: Upstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Upstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

DODDRIDGE COUNTY FLOODPLAIN LANDOWNER INFORMATION MOUNTAIN VALLEY PIPELINE

Owner	Address	Legal Description	Mile Post	District	Map	Parcel	Deed Book/Page
Landowners							
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	Meathouse 90.74 AC	34.8	04	11	36	281/665
Adjacent Landowners							
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	BIG Isaac 1 AC	34.8	04	11	31	281/665
Jeffery J Ford	15 Meadow Lane Bridgeport, WV 26330	BIG Isaac 30 AC	34.8	04	11	35	WB41/619
Earl Richards (Life)	544 Independence Road Salem, WV 26426	5.36 AC Meathouse	34.8	04	11	37.7	258/200
Earl Richards (Life)	544 Independence Road Salem, WV 26426	2 AC Meathouse	34.8	04	11	37.6	258/194
John R Clowser	3735 Big Issac Road Salem, WV 26426	1.51 AC Meathouse	34.8	04	11	37.4	305/436
John Russel Clowser	PO Box 98 Lost Creek, WV 26385	77 PO Two Lots Meathouse	34.8	04	11	37.2	296/700
Brett Cox	3611 Haigker Road Monroe, NC, 28110	Meathouse 30.18 AC	34.8	04	11	37.5	316/583

Mountain Valley provided a non-public list of affected landowners to FERC. FERC requires that this information be filed as privileged to protect the privacy of the landowners. To be consistent with these FERC requirements, the landowner information has been omitted from this application.

Applicant

Please read print name, sign and date below:










- I certify that I am authorized to submit this application for the primary project developer.
- I certify that the information included in this application is to the best of my knowledge true and complete.
- I certify that all required Federal, State, and local permits required by law and/or ordinance for the above described development of this project have been properly attained, are current and valid, and must be presented with this application before a Doddridge County Floodplain Permit may be issued.
- I understand that if in the course of the development project additional permits become required that were not needed during the initial proposal, the primary developer must notify the Doddridge County Floodplain Manager within 48 hours of such need, and that a "Stop Work" order may be issued for all project work directly impacting the floodplain or floodway, until such time the required additional permits are acquired.
- I understand that once the floodplain permit is submitted, the application will be entered into official public record at the next regularly scheduled Doddridge County Commission meeting after the date of submittal.
- I understand that from the date of submittal of the fully completed permit application, the Doddridge County Floodplain Manager has ninety (90) days to make a determination to either grant or deny said permit application. During this approval period, the Doddridge County Floodplain Manager may, at his or her discretion, conduct a review and/or additional study of provided documentation by means of an independent engineering firm. All costs associated with said review and/or study must be reimbursed to the County before issuance of approved permit.
- I understand that during the approval period, the Doddridge County Floodplain Manager or designee may at his or her discretion conduct site visits and document conditions of proposed development pursuant to the permit application.
- I understand that once the Floodplain Permit is granted, the permit will be entered into official public record at the next scheduled Doddridge County Commission meeting after the date of issuance. Appeals to the permit may be made no later than twenty (20) days after said issuance. If a valid appeal is submitted, as determined by the Doddridge County Floodplain Manager, a "Stop Work" order will be issued for all project development directly involving the floodplain or floodway. A public hearing by the Doddridge County Appeals Board will be scheduled no less than ten (10) days after the next regularly scheduled Doddridge County Commission meeting.
- I understand that all decisions of the Doddridge County Appeals Board shall be final.
- I understand issuance of a Floodplain Permit authorizes me to proceed with construction as proposed. A Certificate of Compliance is required upon substantial completion of the project.
- In signing this application, the primary developer hereby grants the Doddridge County Floodplain Manager or designee the right to enter onto the above—described location to inspect the development work proposed, in progress, and/or completed.
- I understand that if I do not follow exactly the site—plan submitted and approved by this permit that a "Stop Work" order may be issued by the Wirt County Floodplain Manager and that I must stop all construction immediately until discrepancies of actual work vs. proposed work is resolved.

Applicant Signature: _____ Date: _____

Applicant Printed Name: _____

5/23/2017

118 E Ct St, West Union, WV 26456 to 39.201285, -80.553387 - Google Maps

-  4. Turn right onto WV-18 S 0.5 mi
-  5. Turn left onto US-50 E 5.6 mi
-  6. Turn right at Co Rte 50/35 0.1 mi
-  7. Continue onto Blacklick Rd 2.1 mi
-  8. Turn right onto Co Rte 15/Blacklick Rd/Sherwood-Greenbrier Rd
 Continue to follow Co Rte 15 6.3 mi
-  9. Turn right onto Big Isaac 3.4 mi
-  10. Big Isaac turns left and becomes Meathouse Fork
 Destination will be on the right 436 ft

39.201285, -80.553387

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



118 E Ct St, West Union, WV 26456 to 39.201285, -80.553387

Drive 18.3 miles, 32 min



Imagery ©2017 Google, Map data ©2017 Google 2 mi

118 E Ct St

West Union, WV 26456

Take Railroad St to WV-18 S

- ↑ 1. Head northeast on Cross St toward Court St
- ↘ 2. Turn right onto Railroad St
- ↙ 3. Turn left toward WV-18 S

1 min (0.2 mi)

52 ft

0.2 mi

279 ft

Take US-50 E, Co Rte 15 and Big Isaac to Meathouse Fork in Oak

31 min (18.1 mi)

The Doddridge Independent

The Doddridge Independent PUBLISHER'S CERTIFICATE

I, Michael D. Zorn, Publisher of The Doddridge Independent, A newspaper of general circulation published in the town of West Union, Doddridge County, West Virginia, do hereby certify that:

Please take notice that on the (5th) of (July), 2023, (Mountain Valley Pipeline LLC) filed an application for a Floodplain Permit (#23-633) to develop land located at or about (Big Isaac Road @ Meathouse Fork Road); Coordinates: 39.201285, -80.553387. The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance with WV Code Chapter 29B Freedom of Information, Article 1 Public Records and county policy and procedures. Any interested persons who desire to

was published in The Doddridge Independent 2 times commencing on Friday, July 14, 2023 and Ending on Friday, July 21, 2023 at the request of:

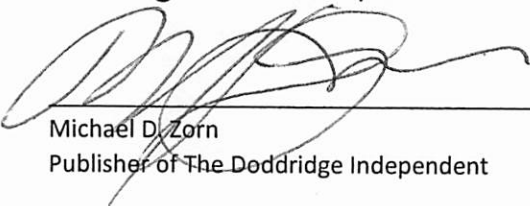
George Eidel, Doddridge County Floodplain Manager & Doddridge County Commission

Given under my hand this Friday, July 21, 2023

The publisher's fee for said publication is:


\$ 31.05 1st Run/\$ 23.29 Subsequent Runs

This Legal Ad Total: \$ 54.34


Michael D. Zorn
Publisher of The Doddridge Independent

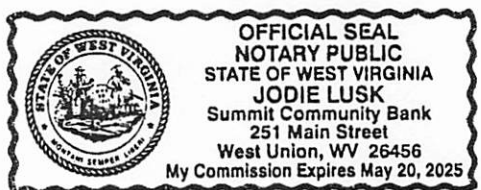
Subscribed to and sworn to before me on

this date: 7/21/2023


Notary Public in and for Doddridge County
My Commission expires on

The 20 day of May 2025

Floodplain Public Notice • Legal Notice
Please take notice that on the (5th) of (July), 2023, (Mountain Valley Pipeline LLC) filed an application for a Floodplain Permit (#23-633) to develop land located at or about (Big Isaac Road @ Meathouse Fork Road); Coordinates: 39.201285, -80.553387. The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance with WV Code Chapter 29B Freedom of Information, Article 1 Public Records and county policy and procedures. Any interested persons who desire to comment shall present the same in writing by (August 7, 2023) (20 calendar days after the announcement at the regularly scheduled Doddridge County Commission Meeting) delivered to the Floodplain Manager of the County at 105 Court Street, Suite #3, West Union, WV. This notice is a renewal of the Mountain Valley Pipeline Project C2 07/14-07/21



INVOICE

The Herald Record LLC
177 MAIN STREET
WEST UNION, WV 26456
United States

Phone: 304-873-1600
Fax: 304-666-1017
Mobile: 304-266-2247
TheHeraldRecord.com

Doddridge County OFFICE OF EMERGENCY MANAGEMENT
101 Church Street
West Union, West Virginia 26456
United States

Invoice Number: 4151
Invoice Date: July 21, 2023
Payment Due: July 21, 2023
Amount Due (USD): \$98.00

Items	Quantity	Price	Amount
CLASS II FLOODPLAIN PERMIT # 23-634 RUN DATES: 7/12/23 & 7/19/23	1	\$49.00	\$49.00
CLASS II FLOODPLAIN PERMIT # 23-633	1	\$49.00	\$49.00

Total: \$98.00

Amount Due (USD) : \$98.00

Doddridge County Floodplain Permits
(Week of July 10, 2023)

Please take notice that on the (5th) of (July), 2023, (Mountain Valley Pipeline LLC) filed an application for a Floodplain Permit (#23-633) to develop land located at or about (Big Isaac Road @ Meathouse Fork); Coordinates: 39.201285, - 80.553387. The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance with WV Code Chapter 29B Freedom of Information, Article 1 Public Records and county policy and procedures. Any interested persons who desire to comment shall present the same in writing by (August 7, 2023) (20 calendar days after the announcement at the regularly scheduled Doddridge County Commission Meeting) delivered to the Floodplain Manager of the County at 105 Court Street, Suite #3, West Union, WV 26456. This project is a renewal of the Mountain Valley Pipeline Project

George Eidel, CFM, OEM
Doddridge County Floodplain Manager

STATE of WEST VIRGINIA;
COUNTY OF DODDRIDGE, TO WIT:

I, Tamela B. Beamer, Editor of THE HERALD RECORD, a certified weekly newspaper published regularly in Doddridge County, West Virginia, Do Hereby Certify Upon Oath that the accompanying Legal Notice entitled:

Doddridge County Floodplain Permit
#23-633

was published in said paper for 2 successive weeks beginning with the issue of July 12, 2023 and ending with the issue of July 19, 2023 that contains 252 word space at .115 cents per word and amounts to the sum of \$ 28.00 FOR THE FIRST PUBLICATION.

SECOND PUBLICATION IS 75% OF THE FIRST PUBLICATION and each other publication thereafter \$ 21.00 for the TOTAL OF: \$ 49.00.

Editor,

Tamela B. Beamer

SWORN TO AND SUBSCRIBED BEFORE ME
THIS THE 19th day of July, 2023

NOTARY PUBLIC

Alice A. Fultz

