



# Floodplain Development Permit

## 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: #21-601**

**Date Approved: November 22, 2021      Expires: November 22, 2022**

**Issued to: Antero Resources**

**POC: John M. Angiulli**

**Company Address: 535 White Oaks Blvd. Bridgeport, WV 26330**

**Project Address: Riggins Run Road West Union**

**Firm: 54017C0040C**

**Lat/Long: 39.399351N, -80.689805W**

**Purpose of Development: Improvement & Upgrade Project**

**Issued by: George C. Eidel, CFM, OEM Director/Doddridge County FPM (or designee)**

**Date: November 22, 2021**

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For additional information regarding this permit, please contact  
Doddridge County Floodplain Manager at 304.873.2631, or via email at  
doddridgecountyfpm@gmail.com  
118 East Court Street; West Union, WV 26456

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7019 2280 0000 5315 7879

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Certified Mail Fee \$ **3.95**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.53** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Barbara M. Swiger**  
 Street and Apt. No., or PO Box No.  
**1460 WYRt. 23**  
 City, State, ZIP+4®  
**West Union, WV 26456 21-601**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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West Union, WV 26456

**OFFICIAL USE**

Certified Mail Fee \$ **3.95**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.53** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Kathryn R. Blessing**  
 Street and Apt. No., or PO Box No.  
**19 Blessing Ln.**  
 City, State, ZIP+4®  
**West Union, WV 26456 21-601**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Arnoldsburg, WV 25234

**OFFICIAL USE**

Certified Mail Fee \$ **3.95**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.50** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Richard A. Talley**  
 Street and Apt. No., or PO Box No.  
**182 Sassafras Ridge Rd.**  
 City, State, ZIP+4®  
**Arnoldsburg, WV 25234 21-601**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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West Union, WV 26456

**OFFICIAL USE**

Certified Mail Fee \$ **3.95**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.53** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Russell F. & Penny R. Syck**  
 Street and Apt. No., or PO Box No.  
**P.O. Box 461**  
 City, State, ZIP+4®  
**West Union, WV 26456 21-601**

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Cockeysville, MD 21030

**OFFICIAL USE**

Certified Mail Fee \$ **3.75**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.53** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Antero Resources, LLC**  
 Street and Apt. No., or PO Box No.  
**P.O. Box 1826**  
 City, State, ZIP+4®  
**Cockeysville, MD 21030 21-601**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Ringgold, GA 30736

**OFFICIAL USE**

Certified Mail Fee \$ **3.75**

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$ **3.05**  
 Return Receipt (electronic) \$ **\$0.00**  
 Certified Mail Restricted Delivery \$ **\$0.00**  
 Adult Signature Required \$ **\$0.00**  
 Adult Signature Restricted Delivery \$ **\$0.00**

Postage \$ **.53** \$0.58

Total Postage and Fees \$ **7.33** \$7.38

0532 11  
 Postmark Here

10/29/2021

Sent To **Arnold L. Bonnell**  
 Street and Apt. No., or PO Box No.  
**43 Candy Circle**  
 City, State, ZIP+4®  
**Ringgold, GA 30736 21-601**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

CASH ONLY IF PAID TO CHECKER SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

**Allstar Ecology, LLC**  
1582 Meadowdale Road  
Fairmont, WV 26554  
(304)816-3490

Clear Mountain Bank  
69-259/515

18973

10/27/2021

PAY TO THE ORDER OF Doddridge County Commission

\$\*\*250.00

Two hundred fifty and 00/100

DOLLARS

Doddridge County Commission  
101 Church Street  
Suite #102  
West Union, WV 26456



⑈018973⑈ ⑆051502599⑆ 35 08668⑈

Natural Resource Specialists

10/27/2021

Doddridge County Commission

Floodplain Permit App Fee

250.00

FP#  
21-601

COPY

COPY

COPY

Clear Mountain Bank (8668)

250.00

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MEMO

Deposit on Back  
SecureCheck™  
CheckLock™

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West Union WV 26456 **OFFICIAL USE**

Certified Mail Fee	\$ 33.75	0532 11 Postmark Here
Extra Services & Fees (check box, add fee as appropriate)	\$ 37.05	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.30	
<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00	
<input type="checkbox"/> Adult Signature Required	\$ 0.00	10/29/2021
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00	
Postage	\$ .53	
Total Postage and Fees	\$ 7.33	
Sent To	Theodore J. Stumpf	
Street and Apt. No., or PO Box No.	4800 Riggins Run	
City, State, ZIP+4®	West Union, WV 26456 21-601	

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0000 5315 7947

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West Union WV 26456 **OFFICIAL USE**

Certified Mail Fee	\$ 33.75	0532 11 Postmark Here
Extra Services & Fees (check box, add fee as appropriate)	\$ 37.05	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.30	
<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00	
<input type="checkbox"/> Adult Signature Required	\$ 0.00	10/29/2021
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00	
Postage	\$ .53	
Total Postage and Fees	\$ 7.33	
Sent To	Shawn A. Glaspell	
Street and Apt. No., or PO Box No.	5512 Riggins Run	
City, State, ZIP+4®	West Union, WV 26456 21-601	

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West Union WV 26456 **OFFICIAL USE**

Certified Mail Fee	\$ 33.75	0532 11 Postmark Here
Extra Services & Fees (check box, add fee as appropriate)	\$ 37.05	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.30	
<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00	
<input type="checkbox"/> Adult Signature Required	\$ 0.00	10/29/2021
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00	
Postage	\$ .53	
Total Postage and Fees	\$ 7.33	
Sent To	Michael W. & Jodi A. Swiger	
Street and Apt. No., or PO Box No.	551 Riggins Run	
City, State, ZIP+4®	West Union, WV 26456 21-601	

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Oaks PA 19456 **OFFICIAL USE**

Certified Mail Fee	\$ 33.75	0532 11 Postmark Here
Extra Services & Fees (check box, add fee as appropriate)	\$ 37.05	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.30	
<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00	
<input type="checkbox"/> Adult Signature Required	\$ 0.00	10/29/2021
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00	
Postage	\$ .53	
Total Postage and Fees	\$ 7.33	
Sent To	Jason L. Travis	
Street and Apt. No., or PO Box No.	P.O. Box 875	
City, State, ZIP+4®	Oaks, PA 19456 21-601	

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

# FLOODPLAIN PERMIT #21-601

39.399351, -80.689805

Antero Resources, Riggins Run Rd Improvements and Upgrades ~~39.394569, -80.65033~~

TASK	COMPLETE (DATE)	NOTES
CHECK RECEIVED	11-1-2021	
US ARMY CORP. ENGINEERS (USACE)		
US FISH & WILDLIFE SERVICES (USFWS)	10/28/2021	
WV DEPT. NATURAL RESOURCES (WVDNR)		
WV DEPT. ENVIROMENTAL PROTECTION (WVDEP)		
STATE HISTORIC & PRESERVATION OFFICE (SHPO)		
OFFICE of LAND & STREAM (OLS)		
WVDOH		
Elevation Certificate		
DATE OF COMMISSION READING	11/2/2021	
DATE AVAILABLE TO BE GRANTED	11/22/2021	
PERMIT GRANTED		
COMPLETE		

7019 2280 0000 5315 7879

7019 2280 0000 5315 7886

7019 2280 0000 5315 7893

7019 2280 0000 5315 7909

7019 2280 0000 5315 7916

7019 2280 0000 5315 7923

7019 2280 0000 5315 7930

7019 2280 0000 5315 7947

7019 2280 0000 5315 7954


7019 2280 0000 5315 7961

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Barbara M. Swiger**  
**14660 WV Rt. 23**  
**West Union, WV 26456**



9590 9402 4868 9032 9566 91

2. Article Number (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) C. Date of Delivery  
**D. LeMasters** **11-1-21**

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  Priority Mail Express®  
 Adult Signature  Registered Mail™  
 Adult Signature Restricted Delivery  Registered Mail Restricted Delivery  
 Certified Mail®  Return Receipt for Merchandise  
 Certified Mail Restricted Delivery  Signature Confirmation™  
 Collect on Delivery  Signature Confirmation Restricted Delivery  
 Collect on Delivery Restricted Delivery  Insured Mail  
 Insured Mail Restricted Delivery (over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053


Domestic Return Receipt

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Theodore J. Stumpf**  
**4805 Riggins Run**  
**West Union, WV 26456**



9590 9402 4868 9032 9567 52

2. Article Number (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) C. Date of Delivery  
**T. Stumpf** **11/1/21**

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  Priority Mail Express®  
 Adult Signature  Registered Mail™  
 Adult Signature Restricted Delivery  Registered Mail Restricted Delivery  
 Certified Mail®  Return Receipt for Merchandise  
 Certified Mail Restricted Delivery  Signature Confirmation™  
 Collect on Delivery  Signature Confirmation Restricted Delivery  
 Collect on Delivery Restricted Delivery  Insured Mail  
 Insured Mail Restricted Delivery (over \$500)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt



## **Doddridge County Floodplain Permits**


**(Week of November 1, 2021)**


Please take notice that on the **(28<sup>th</sup>) of (October), 2021, (Antero Resources)** filed an application for a Floodplain Permit **(#21-601)** to develop land located at or about **(Riggins Run Rd at Route 23N);** **Coordinates: 39.399351, -80.689805.** The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance to 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 **(November 22, 2021)** (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 for road improvements and upgrades**

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

**GEORGE C. EIDEL, CFM**

Doddridge County Floodplain Manager

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>□ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature: <i>Jodi Swiger</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____ C. Date of Delivery _____</p>																
<p>1. Article Addressed to:</p> <p><b>Michael W. &amp; Jodi A. Swiger</b>  <b>557 Riggins Run</b>  <b>West Union, WV 26456</b></p>  <p>9590 9402 4868 9032 9567 76</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  If YES, enter delivery address below: <input type="checkbox"/> No</p>																
<p>2. Article Number (Transfer from service label)</p>	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																
<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise																
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™																
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																
<input type="checkbox"/> Insured Mail																	
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																	
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 <span style="float: right;">Domestic Return Receipt</span></p>																	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature: <i>Shawn A. Glaspell</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____ C. Date of Delivery <i>11-5-21</i></p>																
<p>1. Article Addressed to:</p> <p><b>Shawn A. Glaspell</b>  <b>5512 Riggins Run</b>  <b>West Union, WV 26456</b></p>  <p>9590 9402 4868 9032 9567 69</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  If YES, enter delivery address below: <input type="checkbox"/> No</p>																
<p>2. Article Number (Transfer from service label)</p>	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Return Receipt for Merchandise</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation™</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™	<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																
<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery																
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise																
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™																
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																
<input type="checkbox"/> Insured Mail																	
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																	
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 <span style="float: right;">Domestic Return Receipt</span></p>																	





Permit#	<u>21-601</u>
Project Name:	<u>Riggins Run Upgrade</u>
Permittees Name:	<u>Antero Resources</u>

00128 21 9:14AM

## ***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. The permit will expire if no work is commenced within six months of issuance.
5. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
6. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her representative to make inspections to verify compliance.
7. 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 John M. Angiulli

DATE 10/26/2021

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Kathryn R. Blessing  
69 Blessing Lane  
West Union, WV 26456**



9590 9402 4868 9032 9567 07

2. Article Number (Transfer from service label)

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *Roger Blessing*  Agent  
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

11-8-21

D. Is delivery address different from item 1?  Yes

If YES, enter delivery address below:  No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Antero Midstream, LLC  
P.O. Box 1826  
Cockeysville, MD 21030**



9590 9402 4868 9032 9567 38

2. Article Number (Transfer from service label)

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]*  Agent  
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

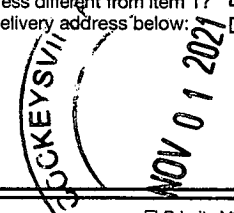
D. Is delivery address different from item 1?  Yes

If YES, enter delivery address below:  No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt



Doddridge County Commercial/Industrial  
Floodplain Development Permit Application

**Applicant Information:**

*Please provide all pertinent data.*

00728 21 9:14AM

<b>Applicant Information</b>		
<b>Responsible Company Name:</b> Antero Resources Corporation		
<b>Corporate Mailing Address:</b> 1615 Wynkoop Street		
<b>City:</b> Denver	<b>State:</b> CO	<b>Zip:</b> 80202
<b>Corporate Point of Contact (POC):</b> John M. Angiulli		
<b>Corporate POC Title:</b> Environmental Specialist III		
<b>Corporate POC Primary Phone:</b> (304) 842-4139		
<b>Corporate POC Primary Email:</b> jangiulli@anteroresources.com		
<b>Corporate FEIN:</b>	<b>Corporate DUNS:</b>	
<b>Corporate Website:</b> <a href="https://www.anteroresources.com/">https://www.anteroresources.com/</a>		
<b>Local Mailing Address:</b> 535 White Oaks Blvd		
<b>City:</b> Bridgeport	<b>State:</b> WV	<b>Zip:</b> 26330
<b>Local Project Manager (PM):</b> John M. Angiulli		
<b>Local PM Primary Phone:</b> (304) 842-4139		
<b>Local PM Secondary Phone:</b>		
<b>Local PM Primary Email:</b> jangiulli@anteroresources.com		
<b>Person Filing Application:</b> Anna Runner		
<b>Applicant Title:</b> Lead Senior Project Manager		
<b>Applicant Primary Phone:</b> (304) 627-7229		
<b>Applicant Secondary Phone:</b> (304) 816-3490		
<b>Applicant Primary Email:</b> anna@allstarecology.com		

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Arnold L. Bonnell  
4 Cindy Circle  
Ridgely, GA 30736**



9590 9402 4868 9032 9567 45

2. Article Number (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X**

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type

- |  |   |
|--|---|
| <input type="checkbox"/> Adult Signature                               | <input type="checkbox"/> Priority Mail Express®                     |
| <input type="checkbox"/> Adult Signature Restricted Delivery           | <input type="checkbox"/> Registered Mail™                           |
| <input type="checkbox"/> Certified Mail®                               | <input type="checkbox"/> Registered Mail Restricted Delivery        |
| <input type="checkbox"/> Certified Mail Restricted Delivery            | <input type="checkbox"/> Return Receipt for Merchandise             |
| <input type="checkbox"/> Collect on Delivery                           | <input type="checkbox"/> Signature Confirmation™                    |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery       | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail                                  |   |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) |   |

Doddridge County Office of Emergency Management  
George Eidel, Floodplain Manager  
101 Church Street, Suite 102  
West Union, WV 26456

**CERTIFIED MAIL**



7019 2280 0000 5315 7923

Arnold L. Bonnell  
43 Cindy Circle  
Ringgold, GA 30736

U.S. POSTAGE PAID  
FCM LETTER  
WEST UNION, WV  
26456  
OCT 29, 21  
AMOUNT

**\$7.38**

R2305K139552-11

*AWK*



30736

NIXIE 372 FE 1

0011/10/21

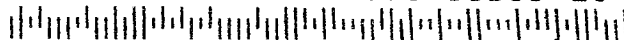
RETURN TO SENDER  
NOT DELIVERABLE AS ADDRESSED  
UNABLE TO FORWARD

UTF

BC: 26456119427

\*3059-06205-10-24

26456>1194  
30736-82234



Doddridge County Office of  
Emergency Management/Floodplain Management  
105 Court Street, Suite 3  
304-873-1343  
doddridgecountyfpm@gmail.com



Dear Sir or Ma'am,

October 29, 2021

You are receiving this letter because you have been identified as a land surface and/or mineral rights owner for property or adjacent property related to the proposed development/project identified by the following page.

No action is required of you. This letter is simply to inform you of the proposed development.

If you would like to comment on this proposed project, or would like additional information, you may contact the Doddridge County Floodplain Manager at the above address.

Respectfully yours,

A handwritten signature in cursive script, appearing to read 'George Eidel'.

George Eidel, CFM, OEM Director/Floodplain Manager



## **Doddridge County Floodplain Permits**

**(Week of November 1, 2021)**

Please take notice that on the **(28<sup>th</sup>) of (October), 2021, (Antero Resources)** filed an application for a Floodplain Permit **(#21-601)** to develop land located at or about **(Riggins Run Rd at Route 23N);**  
**Coordinates: 39.399351, -80.689805.** The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance to 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 **(November 22, 2021)** (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 for road improvements and upgrades**

**GEORGE C. EIDEL, CFM**

Doddridge County Floodplain Manager

**CERTIFIED MAIL®**

CHARLESTON

Doddridge County Office of Emergency Management  
George Eidel, Floodplain Manager  
101 Church Street, Suite 102  
West Union, WV 26456



7019 2280 0000 5315 7961

U.S. POSTAGE PAID  
FCM LETTER  
WEST UNION, WV  
26456  
OCT 29, 21  
AMOUNT

**\$7.38**

R2305K139552-11

ML

RETURN TO SENDER  
REQUIRED

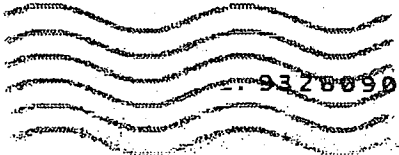
Jason L. Travis  
P.O. Box 875  
Oaks, PA 19456



19456

NIXIE 152 DE 1 0011/11/21

RETURN TO SENDER  
REFUSED  
UNABLE TO FORWARD



29 OCT 2021 PM 4 L

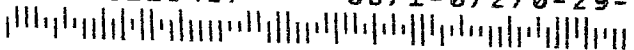
9328090102518726

REF

BC: 26456119427

\*0871-07270-29-42

CHARLESTON WV 26456  
19456-067575





PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT  
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: \_\_\_\_\_

**Jason L. Travis  
P.O. Box 875  
OAKs, PA 19456**



9590 9402 4868 9032 9566 84

2. Article Number (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X**

- Agent
- Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Doddridge County Office of  
Emergency Management/Floodplain Management  
105 Court Street, Suite 3  
304-873-1343  
doddridgecountyfpm@gmail.com



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Respectfully yours,

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George Eidel, CFM, OEM Director/Floodplain Manager



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**(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 for road improvements and upgrades**

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

**GEORGE C. EIDEL, CFM**

Doddridge County Floodplain Manager

**CERTIFIED MAIL®**

Doddridge County Office of Emergency Management  
George Eidel, Floodplain Manager  
101 Church Street, Suite 102  
West Union, WV 26456



CHARLESTON WV 250  
29 OCT 2021 PM 3 L

7019 2280 0000 5315 7893

*UTF*

Richard A. Talley  
782 Sassafras Ridge Road  
Arnoldsburg, WV 25234

U.S. POSTAGE PAID  
FCM LETTER  
WEST UNION, WV  
26456  
OCT 29, 21  
AMOUNT

**\$7.38**

R2305K139552-11



25234

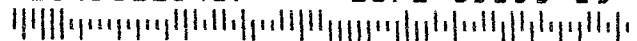
NIXIE 250 FE 1 0011/01/21

RETURN TO SENDER  
NOT DELIVERABLE AS ADDRESSED  
UNABLE TO FORWARD

UTF

BC: 26456119427 \*1871-03259-29-45

25234 26456 5315 7893



PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT  
OF THE RETURN ADDRESS, FOUND AT BOTTOM LINE

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Richard A. Talley**  
**782 Sassafras Ridge Road**  
**Arnoldsburg, WV 25234**



9590 9402 4868 9032 9567 14

2. Article Number *(Transfer from service label)*

**CHARLESTON WV 250**

PS Form 3811, July 2015 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X**

- Agent
- Addressee

B. Received by (*Printed Name*)

C. Date of Delivery

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- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt

Doddridge County Office of  
Emergency Management/Floodplain Management  
105 Court Street, Suite 3  
304-873-1343  
doddridgecountyfpm@gmail.com



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**GEORGE C. EIDEL, CFM**

Doddridge County Floodplain Manager





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OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Russell F. & Penny R. Syck**  
**P.O. Box 461**  
**West Union, WV 26456**



9590 9402 4868 9032 9567 21

2. Article Number (Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X**

Agent

Addressee

B. Received by (Printed Name)

C. Date of Delivery

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If YES, enter delivery address below:  No

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- Adult Signature Restricted Delivery
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- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
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- Insured Mail Restricted Delivery (over \$500)

- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Doddridge County Office of  
Emergency Management/Floodplain Management  
105 Court Street, Suite 3  
304-873-1343  
doddridgecountyfpm@gmail.com



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

**GEORGE C. EIDEL, CFM**

Doddridge County Floodplain Manager

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.*

<b>Project Narrative:</b>
Antero Resources Corporation (Antero) is proposing upgrades to a public roadway (Riggins Run Rd / CR5).
Proposed improvements include road widening, culvert installations/replacements, fill/grading, the installation of guardrails, and ditch clean out. Though work will occur within the floodplain, no rise in the floodplain is anticipated, as indicated by the No-Rise certification (attached).
Work is expected to begin in November of 2021 and end (final stabilization) in August of 2022
Coordination with the USACE, USFWS, WVDNR Office of Land and Streams, and WVDNR Natural Heritage Program was initiated September 2021. The only response received to date is the Natural Heritage Program response (attached).

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:**

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

Upgrades to an existing county road (Riggins Run Road)

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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: 1 of 11

Site/Property Information:		
Legal Description: MCELROY 18.66 AC		
Physical Address/911 Address: Beech District, WV- off CR 5		
Decimal Latitude/Longitude: 39.398966°, -80.690229°		
DMS Latitude/Longitude: 39°23'56.278"N, 80°41'24.825"W		
District: 5	Map: 0011	Parcel: 0014
Land Book Description: 108 - Mobile Home		
Deed Book Reference: 310, page 280		
Tax Map Reference: 0011		
Existing Buildings/Use of Property: 108 - Mobile Home		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
Community:	Number:	Panel:	Suffix:
Location (Lat/Long):		Approximate Elevation: <span style="font-size: 1.2em; font-family: cursive;">757.4 ft</span>	
Estimated BFE:		Is the development in the floodplain? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   Zone: <span style="font-size: 1.2em; font-family: cursive;">AE</span>	
Is the development in the floodway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Notes: <span style="font-size: 1.5em; font-family: cursive;">See Attached Map WV Flood Tool</span>	

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>  1  </u> of <u> 11 </u>
---

<b>Property Owner Data:</b>		
Name of Primary Owner (PO): TRAVIS JASON LEE		
PO Address: P O BOX 875		
City: OAKS	State: PA	Zip: 19456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:   2   of  11 

Site/Property Information:		
Legal Description: 4.5 AC MCELROY		
Physical Address/911 Address: Beech District, WV- off CR 5		
Decimal Latitude/Longitude: 39.397875°, -80.690708°		
DMS Latitude/Longitude: 39°23'52.349"N, 80°41'26.549"W		
District: 5	Map: 0011	Parcel: 0034-0001
Land Book Description: 109 - Auxiliary Improvement		
Deed Book Reference: 261, page 653		
Tax Map Reference: 0011		
Existing Buildings/Use of Property: 109 - Auxiliary Improvement		

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? <input type="checkbox"/> Yes <input type="checkbox"/> No		Is the development in the floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No    Zone: _____	
Notes:			



Doddridge County Commercial/Industrial  
Floodplain Development Permit Application

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*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: <u>  2  </u> of <u> 11 </u>
---

<b>Property Owner Data:</b>		
Name of Primary Owner (PO): SWIGER MICHAEL W & JODI A		
PO Address: 557 RIGGINS RN		
City: WEST UNION	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Doddridge County Commercial/Industrial  
Floodplain Development Permit Application

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Property Designation: 3 of 11

Site/Property Information:		
<b>Legal Description:</b> 254.51 AC SIX TRS MCELROY		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.394342°, -80.689705°		
<b>DMS Latitude/Longitude:</b> 39°23'39.631"N, 80°41'22.937"W		
<b>District:</b> 5	<b>Map:</b> 0011	<b>Parcel:</b> 0034-0000
<b>Land Book Description:</b> 112 - Active Farm		
<b>Deed Book Reference:</b> 271, page 230		
<b>Tax Map Reference:</b> 0011		
<b>Existing Buildings/Use of Property:</b> 112 - Active Farm		

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

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>  3  </u> of <u> 11 </u>
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Property Owner Data:		
Name of Primary Owner (PO): GLASPELL SHAWN A		
PO Address: 5512 RIGGINS RN		
City: WEST UNION	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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

Mineral Rights Owner Data: <i>(As Applicable)</i>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:** 4 of 11

Site/Property Information:		
<b>Legal Description:</b> .93 RIGGINS RUN		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.394877°, -80.685561°		
<b>DMS Latitude/Longitude:</b> 39°23'41.558"N, 80°41'8.019"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0003-0013
<b>Land Book Description:</b> 100 - Residential Vacant		
<b>Deed Book Reference:</b> WB38, page 584		
<b>Tax Map Reference:</b> 0011		
<b>Existing Buildings/Use of Property:</b> 100 - Residential Vacant		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: 4 of 11

Property Owner Data:		
Name of Primary Owner (PO): BONNELL ARNOLD LEE		
PO Address: 43 CINDY CIR		
City: RINGGOLD	State: GA	Zip: 30736
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Surface Rights Owner Data:		
Name of Primary Owner (PO): (same as above)		
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): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:** 5 of 11

Site/Property Information:		
<b>Legal Description:</b> 2.11 RIGGINS RUN		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.394569°, -80.685033°		
<b>DMS Latitude/Longitude:</b> 39°23'40.449"N, 80°41'6.118"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0003-0015
<b>Land Book Description:</b> 100 - Residential Vacant		
<b>Deed Book Reference:</b> WB38, page 584		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 100 - Residential Vacant		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>5</u> of <u>11</u>
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<b>Property Owner Data:</b>		
Name of Primary Owner (PO): BONNELL ARNOLD LEE		
PO Address: 43 CINDY CIR		
City: RINGGOLD	State: GA	Zip: 30736
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:** 6 of 11

Site/Property Information		
<b>Legal Description:</b> 60.71 RIGGINS RUN		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.393503°, -80.683811°		
<b>DMS Latitude/Longitude:</b> 39°23'36.609"N, 80°41'1.72"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0003-0007
<b>Land Book Description:</b> 113 - Inactive Farm		
<b>Deed Book Reference:</b> WB38, page 584		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 113 - Inactive Farm		

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



Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: 6 of 11

<b>Property Owner Data:</b>		
Name of Primary Owner (PO): BONNELL ARNOLD LEE		
PO Address: 43 CINDY CIR		
City: RINGGOLD	State: GA	Zip: 30736
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:** 7 of 11

Site/Property Information:		
<b>Legal Description:</b> 30 AC RAGANS RUN		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.391398°, -80.681445°		
<b>DMS Latitude/Longitude:</b> 39°23'29.032"N, 80°40'53.203"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0003-0017
<b>Land Book Description:</b> 112 - Active Farm		
<b>Deed Book Reference:</b> 240, page 472		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 112 - Active Farm		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>7</u> of <u>11</u>
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<b>Property Owner Data:</b>		
Name of Primary Owner (PO): STUMPF THEODORE J		
PO Address: 4805 RAGANS RN <i>Riggins</i>		
City: West Union	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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:** 8 of 11

Site/Property Information:		
<b>Legal Description:</b> 14 AC RIGGINS RUN ROAD		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.389321°, -80.680462°		
<b>DMS Latitude/Longitude:</b> 39°23'21.557"N, 80°40'49.663"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0003-0014
<b>Land Book Description:</b> 112 - Active Farm		
<b>Deed Book Reference:</b> WB39, page 506		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 112 - Active Farm		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>8</u> of <u>11</u>
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<b>Property Owner Data:</b>		
Name of Primary Owner (PO): BLESSING KATHRYN RENEE		
PO Address: 69 BLESSING LN		
City: West Union	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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: 9 of 11

Site/Property Information:		
<b>Legal Description:</b> 48 AC 80 PO 1/4 INT RIGGINS RUN		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.388258°, -80.679553 °		
<b>DMS Latitude/Longitude:</b> 39°23'17.73"N , 80°40'46.392"W		
<b>District:</b> 5	<b>Map:</b> 0017	<b>Parcel:</b> 0010-0000
<b>Land Book Description:</b> 112 - Active Farm		
<b>Deed Book Reference:</b> WB39, page 506		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 112 - Active Farm		

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

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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:** 9 of 11

<b>Property Owner Data:</b>		
<b>Name of Primary Owner (PO):</b> BLESSING KATHRYN RENEE		
<b>PO Address:</b> 69 BLESSING LN		
<b>City:</b> West Union	<b>State:</b> WV	<b>Zip:</b> 26456
<b>PO Primary Phone:</b>		
<b>PO Secondary Phone:</b>		
<b>PO Primary Email:</b>		

<b>Surface Rights Owner Data:</b>		
<b>Name of Primary Owner (PO):</b> (same as above)		
<b>PO Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
<b>PO Primary Phone:</b>		
<b>PO Secondary Phone:</b>		
<b>PO Primary Email:</b>		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
<b>Name of Primary Owner (PO):</b> N/A- road upgrade project, not fossil fuel-related		
<b>PO Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
<b>PO Primary Phone:</b>		
<b>PO Secondary Phone:</b>		
<b>PO Primary Email:</b>		

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:** 10 of 11

Site/Property Information:		
<b>Legal Description:</b> 10.76 AC MCELROY		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.398172 °, -80.689573°		
<b>DMS Latitude/Longitude:</b> 39°23'53.419"N , 80°41'22.465"W		
<b>District:</b> 5	<b>Map:</b> 0011	<b>Parcel:</b> 0034-0003
<b>Land Book Description:</b> 112 - Active Farm		
<b>Deed Book Reference:</b> WB39, page 506		
<b>Tax Map Reference:</b> 0017		
<b>Existing Buildings/Use of Property:</b> 112 - Active Farm		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			



Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: 10 of 11

<b>Property Owner Data:</b>		
Name of Primary Owner (PO): ANTERO MIDSTREAM LLC		
PO Address: P.O. BOX 1826		
City: COCKEYSVILLE	State: MD	Zip: 21030
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

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: 11 of 11

Site/Property Information:		
<b>Legal Description:</b> MCELROY 4.48 AC		
<b>Physical Address/911 Address:</b> Beech District, WV- off CR 5		
<b>Decimal Latitude/Longitude:</b> 39.398172 °, -80.689573°		
<b>DMS Latitude/Longitude:</b> 39°24'0.968"N, 80°41'22.656"W		
<b>District:</b> 5	<b>Map:</b> 0011	<b>Parcel:</b> 0015-0001
<b>Land Book Description:</b> 101 - Residential 1 Family		
<b>Deed Book Reference:</b> 347, page 233		
<b>Tax Map Reference:</b> 0011		
<b>Existing Buildings/Use of Property:</b> 101 - Residential 1 Family		

Floodplain Location Data: (to be completed by Floodplain Manager or designee)			
<b>Community:</b>	<b>Number:</b>	<b>Panel:</b>	<b>Suffix:</b>
<b>Location (Lat/Long):</b>		<b>Approximate Elevation:</b>	
<b>Is the development in the floodway?</b>		<b>Is the development in the floodplain?</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Zone:</b> _____	
<b>Notes:</b>			

Doddridge County Commercial/Industrial  
Floodplain Development Permit 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: <u>11</u> of <u>11</u>
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<b>Property Owner Data:</b>		
Name of Primary Owner (PO): SYCK RUSSELL F & PENNY R		
PO Address: PO BOX 461		
City: WEST UNION	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Surface Rights Owner Data:</b>		
Name of Primary Owner (PO): (same as above)		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

<b>Mineral Rights Owner Data: (As Applicable)</b>		
Name of Primary Owner (PO): N/A- road upgrade project, not fossil fuel-related		
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:** 1-10 of 10

<b>Contractor/Sub-Contractor (C/SC) Information:</b>		
<b>C/SC Company Name:</b> A contractor will be chosen from the attached list (next page)		
<b>C/SC WV License Number:</b>		
<b>C/SC FEIN:</b>	<b>C/SC DUNS:</b>	
<b>Local C/SC Point of Contact (POC):</b>		
<b>Local C/SC POC Title:</b>		
<b>C/SC Mailing Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip-Code:</b>
<b>Local C/SC Office Phone:</b>		
<b>Local C/SC POC Phone:</b>		
<b>Local C/SC POC E-Mail:</b>		

<b>Engineer Firm Information:</b>		
<b>Engineer Firm Name:</b> Thrasher Group, Inc		
<b>Engineer WV License Number:</b> WV PE #18226, Russell B. Messenger		
<b>Engineer Firm FEIN:</b> 119125631	<b>Engineer Firm DUNS:</b> 55-063359	
<b>Engineer Firm Primary Point of Contact (POC):</b> Cole Anderson		
<b>Engineer Firm Primary POC Title:</b> Project Manager		
<b>Engineer Firm Mailing Address:</b> 600 White Oaks Blvd		
<b>City:</b> Bridgeport	<b>State:</b> WV	<b>Zip-Code:</b> 26330
<b>Engineer Firm Office Phone:</b> 304-624-4108		
<b>Engineer Firm Primary POC Phone:</b> 304-326-6112		
<b>Engineer Firm Primary POC E-Mail:</b> janderson@thethrashergroup.com		

**C/SC Company Name: One contractor to be selected from the following: JF Allen (WV000376), Doss Enterprises (WV027217), Great Lakes (WV049648), High Point Construction Group (WV026530), Independence Excavating (WV041715), Kanawha Stone Company (WV006094), OH/WV Excavating (WV005911), Shallenberger Construction (WV051031), Wolfe's Excavating, (WV043545), Sheckler's Excavating (WV058244), Preston Contractors Inc (WV001285), Mountaineer Contractors Inc (WV001286), Trumbull Corporation (WV003212), Lindy Paving Inc (WV030737), RDR Energy Resources LLC (WV047502), Jennings's Excavating Inc, (WV024892), Entegra Energy Solutions LLC (WV054560), Energy Transportation.**

### 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): TALLEY RICHARD A		
Physical Address: 782 SASSAFRAS RIDGE RD		
City: ARNOLDSBURG	State: WV	Zip: 25234
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Upstream		
Name of Primary Owner (PO): ANTERO MIDSTREAM LLC		
Physical Address: P.O. BOX 1826		
City: COCKEYSVILLE	State: MD	Zip: 21030
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO): GLASPELL SHAWN A		
Physical Address: 5512 RIGGINS RN		
City: West Union	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		

Adjacent Property Owner Data: Downstream		
Name of Primary Owner (PO): SWIGER BARBARA M (LIFE)		
Physical Address: 14660 WV ROUTE 23		
City: West Union	State: WV	Zip: 26456
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 will be properly attained, are current and valid, and must be presented prior to a Doddridge County Floodplain Permit being 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. 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.**
- 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 Doddridge County Floodplain Manager and that I must stop all construction immediately until discrepancies of actual work vs. proposed work is resolved.

Applicant Signature: John M. Angiulli Date: 10/26/2021

Applicant Printed Name: John M. Angiulli





# Figures

# WV Flood Map



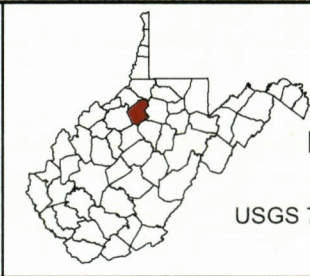
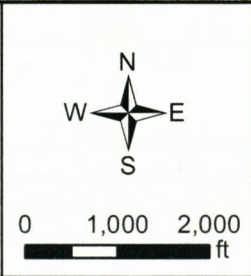
This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

H I G H  R I S K		1-Percent-Annual-Chance Flood Hazard Area <b>With Base Flood Elevation (BFE)</b>
		Regulatory <b>Floodway</b> in AE Zone
		1-Percent-Annual-Chance Flood Hazard Area <b>Without BFE</b> (may have Advisory Flood Heights)
		1-Percent-Annual-Chance <b>High Risk Advisory</b>

Download the Full Legend for all flood tool symbols  
[https://www.mapwv.gov/flood/map/docs/wv\\_flood\\_tool\\_legend.pdf](https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf)

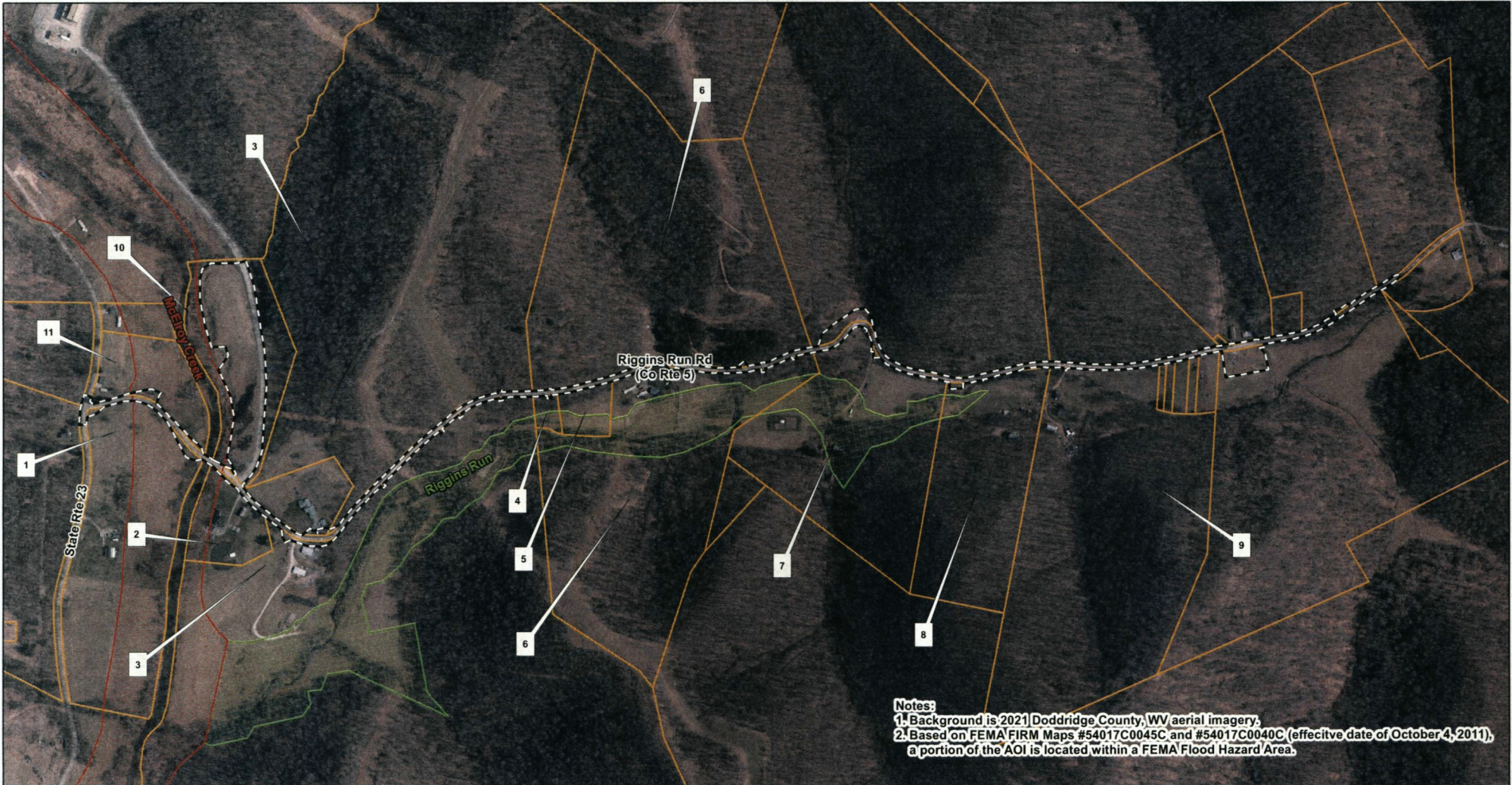
**Disclaimer:**  
 The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. Refer to the official Flood Insurance Study (FIS) for detailed flood elevation data 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.

Flood Info Location <span style="float: right;">Map created on 10/28/2021</span>	
<b>User Notes</b>	
<b>Flood Hazard Area</b>	Location is <b>WITHIN</b> the FEMA 100-year floodplain.
<b>Flood Zone</b>	AE
<b>Stream</b>	McElroy Creek
<b>Watershed (HUC8)</b>	Little Musringum-Middle Island (5030201)
<b>Flood Height</b>	Flood Height 2 757.4 ft (Source: BFE - Non-Restudy) NA
<b>Water Depth</b>	About 3.8 ft (Source: HEC-RAS)
<b>Elevation</b>	754.5 ft (Source: FEMA 2018-20) (NAVD88)
<b>Community &amp; ID</b>	Doddridge County (ID: 540024)
<b>FEMA Map &amp; Date</b>	54017C0040C; Effective Date: 10/4/2011
<b>Location (lat, long)</b>	(39.399351, -80.689805) (WGS84)
<b>Parcel ID</b>	No Parcel
<b>E-911 Address</b>	

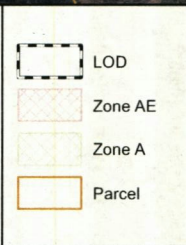
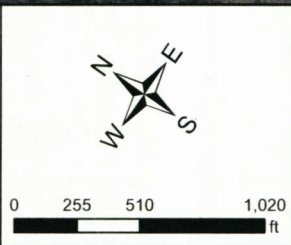
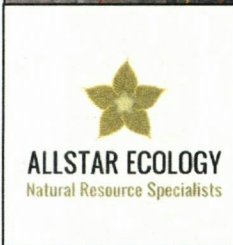


**Doddridge County,  
West Virginia**  
USGS 7.5' Quads: Center Point  
& Smithburg

<b>Antero Resources</b>	
Figure 1 Vicinity Map Riggins Run Road Upgrades	
Date: 09/15/2021	Version: #1

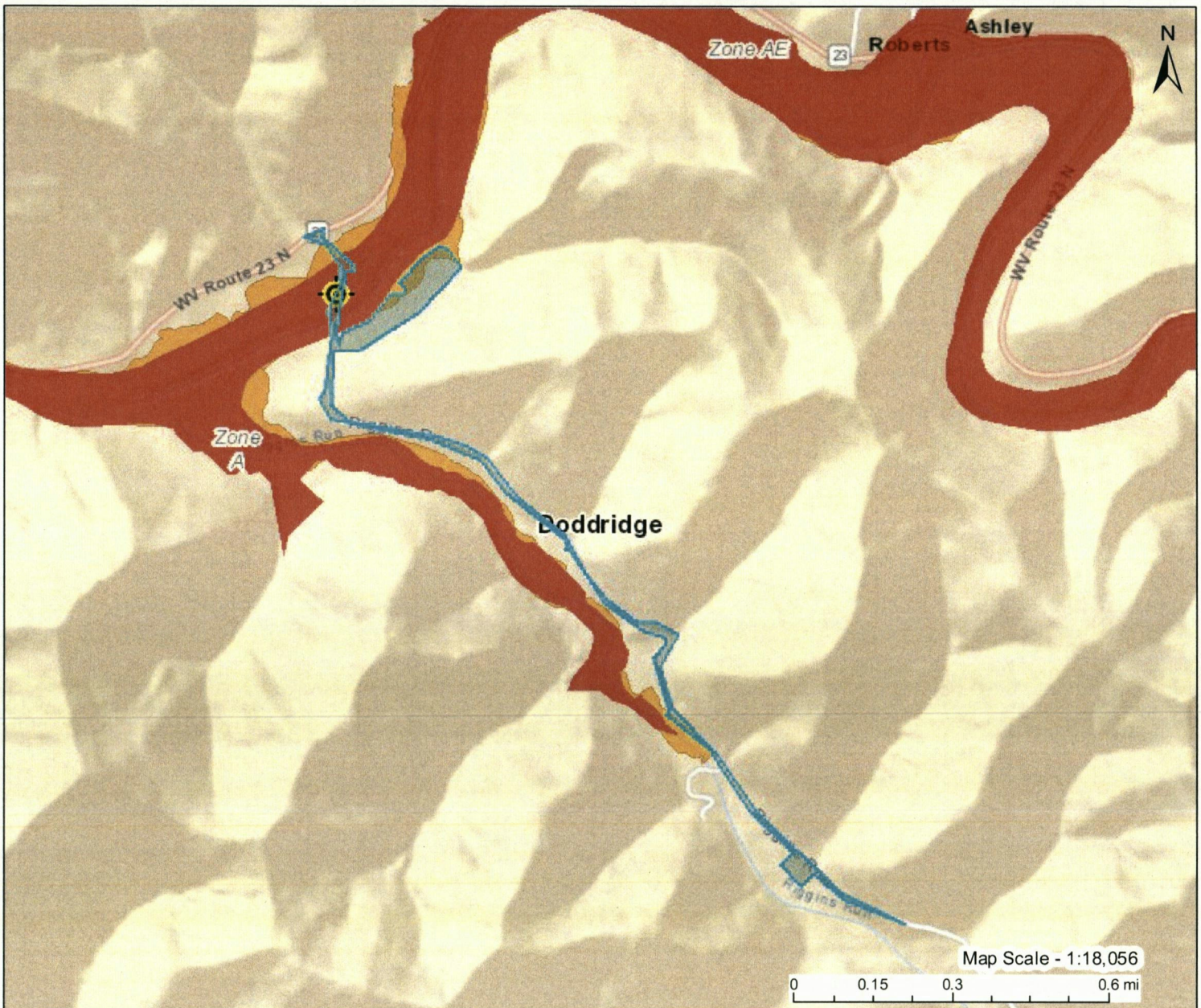


**Notes:**  
 1. Background is 2021 Doddridge County, WV aerial imagery.  
 2. Based on FEMA FIRM Maps #54017C0045C and #54017C0040C (effective date of October 4, 2011), a portion of the AOI is located within a FEMA Flood Hazard Area.



<b>Antero Resources</b>	
Figure 2 LOD with Flood Zones Riggins Run Road Upgrades	
Date: 10/18/2021	Sheet 1 of 1

# WV Flood Tool 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.

H I G H  R I S K		Regulatory Floodway	• Flood Info Location <span style="float: right;">Map created on 10/15/2021</span> <b>User Notes</b> Flood Hazard Area Location is <b>WITHIN</b> the FEMA 100-year floodplain. Flood Zone AE Stream McElroy Creek Watershed (HUC8) Little Musringum-Middle Island (5030201) Flood Height Flood Height 2 757.3 ft (Source: BFE - Non-Restudy) NAVD8: Water Depth About 3.1 ft (Source: HEC-RAS) Elevation 754.4 ft (Source: FEMA 2018-20) (NAVD88) Community & ID Doddridge County (ID: 540024) FEMA Map & Date 54017C0040C; Effective Date: 10/4/2011 Location (lat, long) (39.399221, -80.689984) (WGS84) Parcel ID 09-05-001 1-0014-0002 E-911 Address 14305 WV RT 23 N, WEST UNION, WV, 26456
		1-Percent-Annual-Chance Flood Hazard Area <b>With Base Flood Elevation (BFE)</b>	
		1-Percent-Annual-Chance Flood Hazard Area <b>Without BFE</b> (may have Advisory Flood Heights)	
		1-Percent-Annual-Chance Future Conditions (High Risk Advisory Flood Zones)	
Download the Full Legend for all flood tool symbols <a href="https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf">https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf</a>			
<b>Disclaimer:</b> 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 ( <a href="https://www.MapWV.gov/flood">https://www.MapWV.gov/flood</a> ) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.			



**ALLSTAR ECOLOGY**  
Natural Resource Specialists

**AllStar Ecology LLC**

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# No-Rise Certification



COMPLEX PROJECTS  
REQUIRE RESOLVE  
THRASHER'S GOT IT

October 26, 2021

Mr. George Eidel  
Doddridge County Office of Emergency Management  
101 Church Street Suite 102  
West Union, WV 26456

**RE: Antero Resources Corporation Riggins Run Road Upgrades No-Rise Certificate**

Mr. Eidel,

On behalf of Antero Resources Corporation, the Thrasher Group, Inc. (Thrasher) designed the proposed road upgrades and improvements to Riggins Run Road, Doddridge County Route 5. The proposed improvements will include asphalt pavement, drainage upgrades, and minor widening beginning at West Virginia Route 23 (39.400450° N, 80.690455° W) and continuing southwest approximately 1.5 miles. The roadway traverses the Federal Emergency Management Agency (FEMA) Flood Map Service Center 100-year floodplain of McElroy Creek as shown on the Flood Insurance Rate Map number 54017C0040C dated October 4, 2011 (see attached). The project area is located within Special Flood Hazard Area (SFHA) Zone AE and the base flood elevation (BFE) is approximately 757.6 feet.

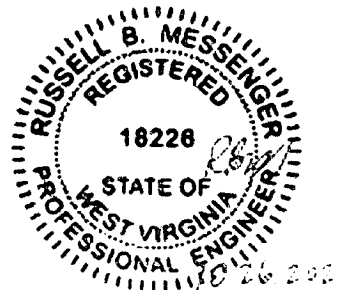
At the northern edge of the mapped floodplain and as shown in the attached Plan Sheet 20, the proposed upgrades include replacing an existing culvert that conveys an unnamed tributary of McElroy Creek (ASE\_Stream03) as well as minor widening and raising the roadway adjacent to the culvert replacement. The proposed roadway improvements will place approximately 120 cubic yards of fill below the BFE and within the mapped floodplain.

I hereby certify that I am a licensed engineer in the State of West Virginia (WV PE #18226). To the best of my knowledge, information, and belief, the proposed Riggins Run Road improvements will not increase the base flood heights during the occurrence of the base flood discharge (100-year flood) in the vicinity of the proposed improvements. If you have any questions or need additional information, please contact me at [bmessenger@thethrashergroup.com](mailto:bmessenger@thethrashergroup.com) or 304.203.1409.

Sincerely,  
THE THRASHER GROUP, INC.

R. Brad Messenger, P.E.  
Senior Project Manager

Enclosures



# National Flood Hazard Layer FIRMette



80°41'42"W 39°24'13"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                                    |  |   |
|------------------------------------|--|---|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br>Zone A, V, A99  |
|                                    |  | With BFE or Depth Zone AE, AO, AH, VE, AR   |
|                                    |  | Regulatory Floodway   |
|                                    |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard Zone X  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. Zone X  |
|                                    |  | Area with Flood Risk due to Levee Zone D  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | NO SCREEN Area of Minimal Flood Hazard Zone X   |
|                                    |  | Effective LOMRs   |
|                                    |  | Area of Undetermined Flood Hazard Zone D  |
| <b>GENERAL STRUCTURES</b>          |  | Channel, Culvert, or Storm Sewer  |
|                                    |  | Levee, Dike, or Floodwall   |
|                                    |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation   |
|                                    |  | 17.5 Coastal Transect   |
|                                    |  | Base Flood Elevation Line (BFE)   |
|                                    |  | Limit of Study  |
|                                    |  | Jurisdiction Boundary   |
|                                    |  | Coastal Transect Baseline   |
| <b>OTHER FEATURES</b>              |  | Profile Baseline  |
|                                    |  | Hydrographic Feature  |
|                                    |  | Digital Data Available  |
|                                    |  | No Digital Data Available   |
|                                    |  | Unmapped  |

### MAP PANELS



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



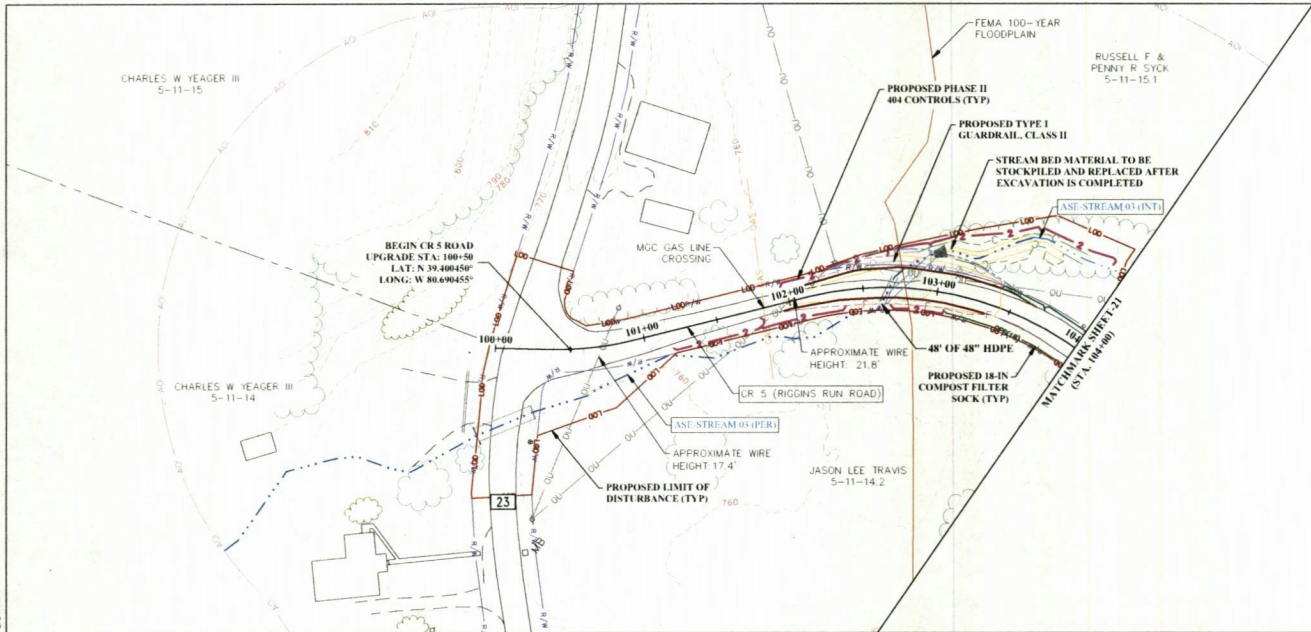
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/25/2021 at 8:08 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

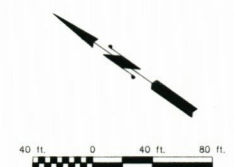
80°41'5"W 39°23'45"N



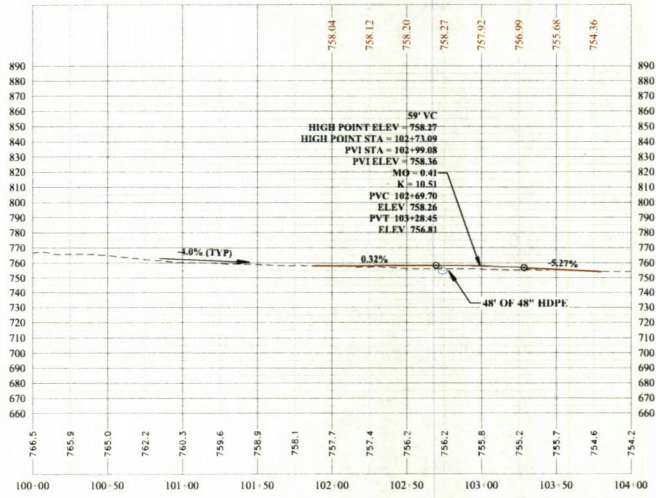


**PLAN LEGEND**

[Symbol]	EXISTING CONTOURS
[Symbol]	EXISTING PROPERTY LINES
[Symbol]	EXISTING RIGHT OF WAY
[Symbol]	PROPOSED LIMIT OF DISTURBANCE
[Symbol]	PROPOSED PERMANENT RIGHT OF WAY
[Symbol]	PROPOSED CONTOURS
[Symbol]	PROPOSED CUT LIMIT
[Symbol]	PROPOSED FILL LIMIT
[Symbol]	ENVIRONMENTAL AREA OF INTEREST
[Symbol]	DELINEATED STREAM - PERENNIAL (DPI)
[Symbol]	DELINEATED STREAM - INTERMITTENT (INT)
[Symbol]	DELINEATED STREAM - PERENNIAL (PER)
[Symbol]	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
[Symbol]	DELINEATED WETLAND - PALUSTRINE SCRUBSHRUB (PSS)
[Symbol]	EXISTING ROAD EDGE
[Symbol]	EXISTING UNPAVED DRIVEWAY
[Symbol]	EXISTING FENCE LINE
[Symbol]	EXISTING GUARDRAIL
[Symbol]	EXISTING OVERHEAD UTILITY
[Symbol]	EXISTING GAS LINE
[Symbol]	EXISTING TREE LINE
[Symbol]	EXISTING BUSH LINE
[Symbol]	EXISTING CULVERT
[Symbol]	EXISTING STRUCTURE
[Symbol]	EXISTING POST
[Symbol]	PROPOSED PHASE II 404 CONTROLS
[Symbol]	PROPOSED 18-IN COMPOST FILTER SOCK
[Symbol]	PROPOSED 24-IN COMPOST FILTER SOCK
[Symbol]	PROPOSED SMART FENCE
[Symbol]	PROPOSED ROAD EDGE
[Symbol]	PROPOSED GUARDRAIL
[Symbol]	PROPOSED CULVERT
[Symbol]	PROPOSED TYPE I CURB
[Symbol]	PROPOSED ROCK CHECK DAM
[Symbol]	PROPOSED OUTLET PROTECTION



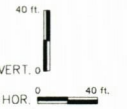
**RIGGINS RUN ROAD CENTERLINE PROFILE**



**PROFILE LEGEND**

[Symbol]	EXISTING GROUND
[Symbol]	PROPOSED GRADE
[Symbol]	PROPOSED CULVERT

- GENERAL NOTES**
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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**ISSUED FOR PERMITTING**  
2021-09-21



SCALE: DRANN: SCB DATE: 09.21.2021  
CHECKED: TBM DATE: 09.21.2021  
APPROVED: JCA DATE: 09.21.2021  
SURVEY DATE:  
SURVEY BY:  
FIELD BOOK No.:



PHASE No.
CONTRACT No.
PROJECT No.
015-10075

PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST VIRGINIA CR 5 STA. 100+00 - 104+00

SHEET No. **20**

C:\01\1015-10075-10215-Antero-Riggins Run Road Upgrade\Drawings\Temporary\Drawings\10215-10215-Antero-Riggins Run Road Upgrade.dwg 9/27/2021 12:34 PM



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Natural Resource Specialists

**AllStar Ecology LLC**

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## **Received Consultations**



**DIVISION OF NATURAL RESOURCES**

**Wildlife Resources Section  
Elkins Operations Center  
738 Ward Rd., PO Box 67  
Elkins, WV 26241  
Telephone 304-637-0245  
Fax 304-637-0250**

**Stephen S. McDaniel  
Director**

October 7, 2021

Ms. Anna Runner  
AllStar Ecology, LLC  
1582 Meadowdale Road  
Fairmont, WV 26554

Dear Ms. Runner:

We have reviewed Natural Heritage Program files for information on rare, threatened and endangered (RTE) species and sensitive habitats for the area of the proposed Riggins Run Road Upgrades project in Doddridge County, WV.

We have no known records of any RTE species or sensitive habitats within the project area. The Wildlife Resources Section knows of no surveys that have been conducted in the area for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the area under review. This response is valid for two years.

The information provided above is the product of a database search and retrieval. This information does not satisfy other consultation or permitting requirements for disturbances to the natural resources of the state, and further consultation may be required. Additionally, any concurrence requirements for federally listed species must come from the US Fish and Wildlife Service.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, or [barbara.d.sargent@wv.gov](mailto:barbara.d.sargent@wv.gov). Enclosed please find an invoice.

Sincerely,

A handwritten signature in black ink, appearing to read "Barbara Sargent".

Barbara Sargent  
Environmental Resources Specialist  
Environmental Coordination  
Operations Unit

enclosure

S:\Monthly\BSargent\Invoices\AllStar.doc

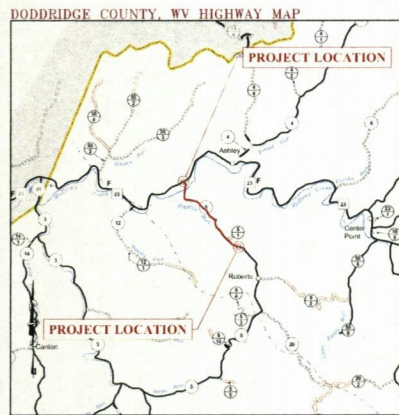


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Natural Resource Specialists

**AllStar Ecology LLC**

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# Site Design Plans

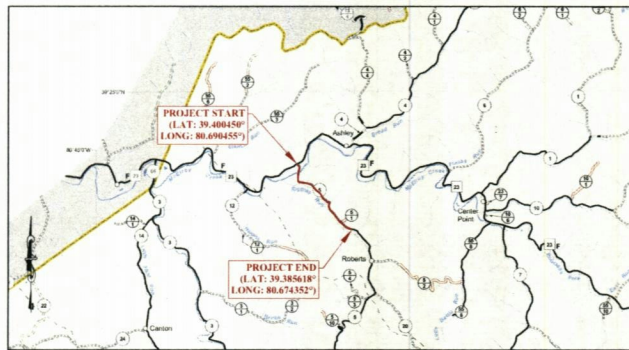


VICINITY MAP SCALE



ANTERO RESOURCES  
535 White Oaks Boulevard  
Bridgeport, WV 26330

# RIGGINS RUN ROAD UPGRADES ISSUED FOR PERMIT PLANS



DODDRIDGE COUNTY, WEST VIRGINIA  
DATE: SEPTEMBER 21, 2021



THE THRASHER GROUP INC.  
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
PHONE (304) 624-4108 • FAX (304) 624-7831



### SHEET INDEX

SHEET	DESCRIPTION
1	COVER
2-3	GENERAL NOTES
4-5	TYPICAL SECTIONS
6-9	MAINTENANCE OF TRAFFIC
10-18	DETAILS
19	OVERALL
20-30	COUNTY ROUTE 5 PLAN & PROFILE
31	WASTE AREA
SW1-SW3	STORMWATER PROFILES
ES1	EROSION & SEDIMENT COVER
ES2-ES9	EROSION & SEDIMENT DETAILS
X1-X10	CR 5 SECTIONS

### SITE COORDINATES

Coordinate Label	Project Start	Project End
WV83-N Latitude	N 39.480450°	N 39.385618°
WV83-N Longitude	W 80.690455°	W 80.674352°
WV27-N Latitude	330161.88 ft	324700.09 ft
WV27-N Longitude	1663548.03 ft	1668027.43 ft
UTM 83-17 Northing	4361262.180 m	4359621.018 m
UTM 83-17 Easting	526652.325 m	528044.760 m

TOTAL AREA AND TREE CLEARING	AREA	UNITS
LIMIT OF DISTURBANCE	13.77	ACRES
TREE CLEARING	1.12	ACRES

### FLOODPLAIN CONDITIONS

DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN A FLOODPLAIN?	YES/NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR?	YES/NO
FLOOD HAZARD ZONE?	YES/NO
HEC-RAS STUDY COMPLETED?	YES/NO
FLOODPLAIN SHOWN ON DRAWINGS?	YES/NO
FIRM MAP NUMBER(S) FOR THIS SITE:	54017C0040C
AREA OF RIGHT-OF-WAY IN FLOOD HAZARD AREA:	0.91 AC

**ISSUED FOR PERMITTING**  
**2021-09-21**

RIGGINS RUN ROAD UPGRADE: STREAM IMPACTS SUMMARY				
FEATURE ID	CLASSIFICATION	TEMPORARY DISTURBANCE (LF)	PERMANENT DISTURBANCE (LF)	TOTAL DISTURBANCE (LF)
ASE-STREAM 03	INTERMITTENT	27	38	65
ASE-STREAM 03	PERENNIAL	94	176	270
ASE-STREAM 04	EPHEMERAL	68	0	68
ASE-STREAM 07	INTERMITTENT	9	30	39
ASE-STREAM 08	EPHEMERAL	11	26	37
ASE-STREAM 09	INTERMITTENT	18	39	57
ASE-STREAM 10	EPHEMERAL	15	35	50
ASE-STREAM 11	INTERMITTENT	24	45	69
ASE-STREAM 12	EPHEMERAL	16	33	49
ASE-STREAM 14	INTERMITTENT	0	107	107
ASE-STREAM 16	EPHEMERAL	4	0	4
ASE-STREAM 17	EPHEMERAL	11	26	37
ASE-STREAM 18	EPHEMERAL	7	0	7
ASE-STREAM 19	EPHEMERAL	7	0	7
ASE-STREAM 20	EPHEMERAL	7	0	7
ASE-STREAM 21	EPHEMERAL	9	27	36
ASE-STREAM 22	EPHEMERAL	8	0	8
ASE-STREAM 24	INTERMITTENT	11	33	44
ASE-STREAM 24	PERENNIAL	10	0	10
ASE-STREAM 26	EPHEMERAL	8	0	8
ASE-STREAM 27	EPHEMERAL	3	0	3
<b>Totals</b>		<b>367</b>	<b>615</b>	<b>982</b>

RIGGINS RUN ROAD UPGRADE: WETLAND IMPACTS SUMMARY			
FEATURE ID	CLASSIFICATION	TEMPORARY DISTURBANCE (AC)	PERMANENT DISTURBANCE (AC)
ASE-WETLAND 09	PEM	0.01	0.02
<b>Totals</b>		<b>0.01</b>	<b>0.02</b>

RIGGINS RUN ROAD UPGRADE: DITCH IMPACTS SUMMARY				
FEATURE ID	CLASSIFICATION	TEMPORARY DISTURBANCE (LF)	PERMANENT DISTURBANCE (LF)	TOTAL DISTURBANCE (LF)
ASE-DITCH 01	NA	20	0	20
ASE-DITCH 02	NA	158	2	160
ASE-DITCH 03	NA	126	4	130
ASE-DITCH 04	NA	183	2	185
ASE-DITCH 05	NA	288	2	290
ASE-DITCH 06	NA	89	2	91
ASE-DITCH 07	NA	348	8	356
ASE-DITCH 08	NA	585	32	617
<b>Totals</b>		<b>1797</b>	<b>52</b>	<b>1849</b>

### ONE CALL UTILITY SYSTEM CONTACT INFO



CONTRACTOR SHALL NOTIFY THE ONE-CALL SYSTEM OF THE INTENDED EXCAVATION OR DEMOLITION NOT LESS THAN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL FEDERAL OR STATE HOLIDAYS, NOR MORE THAN TEN (10) WORK DAYS PRIOR TO THE BEGINNING OF SUCH WORK.

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ANTERO RESOURCES  
535 WHITE OAKS BOULEVARD  
BRIDGEPORT, WV 26330



RIGGINS RUN ROAD UPGRADES  
COVER SHEET

### REVISIONS

DATE TYPE



ITEM 0001: JMA ASPHALT BASE COURSE (P. 1)  
 PRICE IS BASE COURSE AS SHOWN IN THE TABLES AND DETAILS. ALL COSTS FOR MATERIALS, LABOR AND EQUIPMENT IS TO BE PAID BY THE CONTRACTOR. THIS ITEM IS TO BE PAID BY THE OWNER.

ITEM 0002: JMA WEARING COURSE (P. 1)  
 PRICE IS WEARING COURSE AS SHOWN IN THE TABLES AND DETAILS. ALL COSTS FOR MATERIALS, LABOR AND EQUIPMENT IS TO BE PAID BY THE CONTRACTOR. THIS ITEM IS TO BE PAID BY THE OWNER.

ITEM 0003: TAKEAWAYS  
 IDENTIFY TAKEAWAYS TO BE REMOVED AT THE END OF THE PROJECT. TAKEAWAYS TO BE REMOVED AT THE END OF THE PROJECT SHALL BE PAID BY THE CONTRACTOR. TAKEAWAYS TO BE REMOVED AT THE END OF THE PROJECT SHALL BE PAID BY THE CONTRACTOR.

ITEM 0004: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0005: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0006: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0007: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0008: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0009: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0010: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0011: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0012: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0013: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0014: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0015: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0016: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0017: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0018: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0019: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

ITEM 0020: CONCRETE CURBS  
 IDENTIFY CONCRETE CURBS TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED WITHIN THESE PLANS. THIS ITEM INCLUDES THE 24" HIGH CONCRETE CURBS (INSTALLATION, FORMWORK, REINFORCEMENT, CURB AND JOINTS). CONCRETE CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. CURBS SHALL BE CLASS 1 ABOVE CURB AND JOINTS. THIS ITEM IS TO BE PAID BY THE CONTRACTOR.

**CONTACTS**

<p><b>MISS UTILITY</b>          1-800-345-4847  <a href="http://www.wv811.com">http://www.wv811.com</a></p> <p><b>ANTERO RESOURCES</b>          JEFF MCCALLEY, PE          DESIGN ENGINEER/LEAD          304-842-4155  <a href="mailto:jmccalley@anteroresources.com">jmccalley@anteroresources.com</a></p>	<p><b>NATIONAL RESPONSE CENTER FOR REPORTING CHEMICAL OR OIL SPILLS</b>          1-800-424-8802</p> <p><b>STATE EMERGENCY SPILL NOTIFICATION</b>          1-800-642-7074</p> <p><b>THE THRASHER GROUP, INC.</b>          COLE ANDERSON, PE          PROJECT MANAGER          304-842-4100  <a href="mailto:janderson@thrashergrp.com">janderson@thrashergrp.com</a></p>	<p><b>WEST VIRGINIA DIVISION OF HIGHWAYS</b>          DISTRICT 44          P.O. BOX 4210          CLARKSBURG, WV 26301          304-842-1500</p> <p><b>AMBULANCE, FIRE, LAW ENFORCEMENT</b>          911</p>
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 2021-09-21



SCALE	DATE
DRAWN: SCB	DATE: 09/21/2021
CHECKED: BSM	DATE: 09/29/2021
APPROVED: JCA	DATE: 09/21/2021
SURVEY DATE	
SURVEY BY	
FIELD BOOK No.	

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 THE THRASHER GROUP, INC.  
 CIVIL ENGINEERING & CONSULTING • 1410 MARKET  
 600 WEST OAKS BOULEVARD (BROOKFIELD), WV 26330  
 PHONE: (304) 624-4100 • FAX: (304) 624-7820

PROJECT No.	
CONTRACT No.	
PROJECT No.	015-10075

**PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DOODRIDGE COUNTY WEST UNION, WEST VIRGINIA GENERAL NOTES**

SHEET No.  
**3**

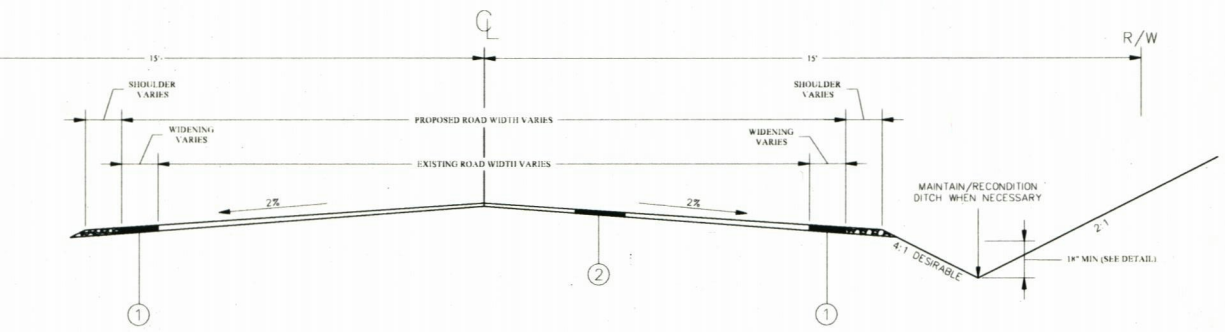
CAD FILE: B:\05\1005\1005 - Antero Resources - Riggins Run Road Upgrade\Drawings\Preparatory\Antero\1005-Sub-Notes-Details-Preperm.dwg  
 PLOT DATE/TIME: 8/27/2021 12:52 PM

**LEGEND**

NO.	ITEM	DESCRIPTION
①		BASE WIDENING AS PER PLAN (VARIABLE DEPTH SEE NOTE)
②		BASE REPAIR AS PER PLAN (VARIABLE DEPTH SEE NOTE)

**NOTE**

1. AREAS OUTSIDE OF THE EXISTING EDGES OF ROAD THAT ARE INCLUDED IN THE PROPOSED WIDENING SHALL BE PROOFROLLED AT EXISTING MOISTURE CONTENTS USING A FULLY LOADED TRIAXLE OR OFF-ROAD DUMP TRUCK TO DELINEATE UNSUITABLE MATERIAL. PROOFROLLING SHALL BE IN ACCORDANCE WITH SECTION 716.3.2.3 OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS ROADS AND BRIDGES, ADOPTED 2017 AND MATERIAL PROCEDURE 717.04.21, SECTION 5.8. IF THE PROPOSED WIDENED AREA OUTSIDE OF THE EXISTING ROAD DISPLAYS ELASTICITY OR DEFORMATION DURING THE PROOF ROLL, THE DEFLECTING MATERIAL SHOULD BE OVEREXCAVATED TO THE DEPTH OF THE PROPOSED FULL DEPTH RECLAMATION (FDR) SECTION. THIS MATERIAL CAN BE BLENDED WITH AGGREGATE CRUSHER RUN (WDOH CLASS 9) AND USED IN THE FDR SECTION. IF DEEPER OVEREXCAVATION IS REQUIRED TO ACHIEVE SUITABLE MATERIAL, THE OVEREXCAVATION BELOW THE PROPOSED FDR SECTION SHALL BE REPLACED WITH AGGREGATE CRUSHER RUN (WDOH CLASS 9). THE OVEREXCAVATION SHALL HAVE A MAXIMUM DEPTH OF 3 FEET FROM THE EXISTING GROUND SURFACE. OVEREXCAVATION WILL ONLY BE APPROVED AT ANTERO'S DIRECTION.

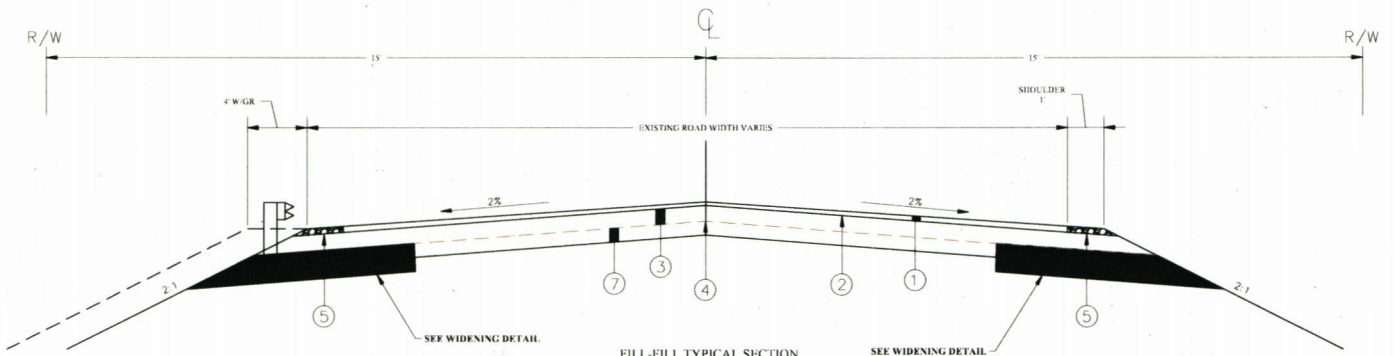


**ROADWAY WIDENING PREPARATION**  
NOT TO SCALE

TYPICAL FILL CONDITION

**LEGEND**

NO.	ITEM	DESCRIPTION
①	495	1.5\"/>
②	496	TACK COAT, 0.02 GAL/SY
③	490	4.5\"/>
④		EXISTING SURFACE
⑤		SHOULDER STONE
⑥	223	EXISTING DITCH CLEANOUT
⑦	415	FULL DEPTH RECLAMATION
⑧	345	TYPE 1 CONCRETE CURB



**FILL-FILL TYPICAL SECTION**  
NOT TO SCALE

STA 101-95 - STA 103-35

TYPICAL FILL CONDITION

TYPICAL FILL CONDITION

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**2021-09-21**



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SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No:	

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CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
PHONE: (204) 624-6108 • FAX: (204) 624-7831

PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

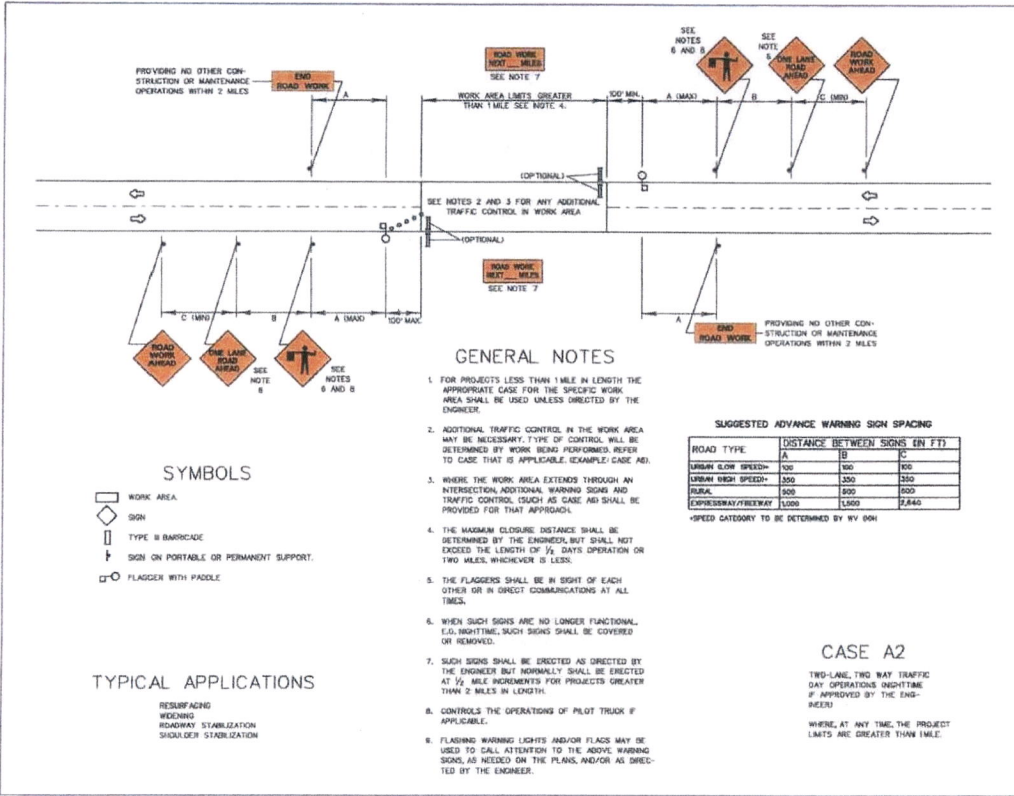
PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
TYPICAL SECTIONS

SHEET No.  
**4**





CADD FILE: G:\2021\10075-10075-4TrafficSignals\_Rd\_RoadApproachDrawings\Drawings\10075\_SignNotes\_Detail\_Sheet.dwg  
 PLOT DATE/TIME: 07/2021 10:31 AM



**GENERAL NOTES**

- 1. FOR PROJECTS LESS THAN 1 MILE IN LENGTH THE APPROPRIATE CASE FOR THE SPECIFIC WORK AREA SHALL BE USED UNLESS DIRECTED BY THE ENGINEER.
- 2. ADDITIONAL TRAFFIC CONTROL IN THE WORK AREA MAY BE NECESSARY. TYPE OF CONTROL WILL BE DETERMINED BY WORK BEING PERFORMED. REFER TO CASE THAT IS APPLICABLE (EXAMPLE: CASE A2).
- 3. WHERE THE WORK AREA EXTENDS THROUGH AN INTERSECTION, ADDITIONAL WARNING SIGNS AND TRAFFIC CONTROL, SUCH AS CASE A2, SHALL BE PROVIDED FOR THAT APPROACH.
- 4. THE MAXIMUM CLOSURE DISTANCE SHALL BE DETERMINED BY THE ENGINEER, BUT SHALL NOT EXCEED THE LENGTH OF  $\frac{1}{2}$  DAYS OPERATION OR TWO MILES, WHICHEVER IS LESS.
- 5. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATIONS AT ALL TIMES.
- 6. WHEN SUCH SIGNS ARE NO LONGER FUNCTIONAL, I.E. NIGHTTIME, SUCH SIGNS SHALL BE COVERED OR REMOVED.
- 7. SUCH SIGNS SHALL BE ERRECTED AS DIRECTED BY THE ENGINEER BUT NORMALLY SHALL BE ERRECTED AT  $\frac{1}{2}$  MILE INCREMENTS FOR PROJECTS GREATER THAN 2 MILES IN LENGTH.
- 8. CONTROLS THE OPERATIONS OF PILOT TRUCK IF APPLICABLE.
- 9. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ABOVE WARNING SIGNS, AS NEEDED ON THE PLANS, AND/OR AS DIRECTED BY THE ENGINEER.

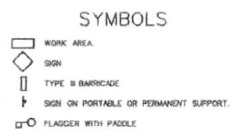
**SUGGESTED ADVANCE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS (IN FT)		
	A	B	C
URBAN LOW SPEED*	200	100	100
URBAN HIGH SPEED**	300	150	150
RURAL	500	300	300
EXPRESSWAY/FREEWAY	1,000	1,500	2,000

\*SPEED CATEGORY TO BE DETERMINED BY 85th



**CASE A2**

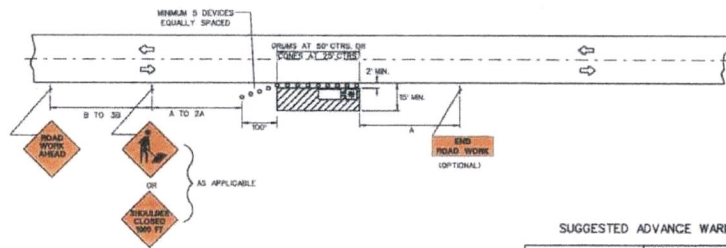
TWO-LANE, TWO WAY TRAFFIC  
 DAY OPERATIONS NIGHTTIME  
 IF APPROVED BY THE ENG-  
 INEER  
 WHERE, AT ANY TIME, THE PROJECT  
 LIMITS ARE GREATER THAN 1 MILE



**TYPICAL APPLICATIONS**

RESURFACING  
 WEDGING  
 ROADWAY STABILIZATION  
 SHOULDER STABILIZATION

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---	--	---	---	--	--	---	---



- SYMBOLS**
- ▨ WORK AREA
  - ◇ SIGN
  - ↳ SIGN ON PORTABLE OR PERMANENT SUPPORT
  - CONES OR DRUMS

**TYPICAL APPLICATIONS**

CULVERT EXTENSIONS  
 SIDE SLOPE CHANGES  
 GUARDRAIL INSTALLATION AND MAINTENANCE  
 DELINEATOR INSTALLATION AND MAINTENANCE  
 LANDSCAPING OPERATIONS  
 CLEANING DITCHES AND DRAINAGE STRUCTURES  
 SHOULDER REPAIR  
 ADJACENT WORK ON SIDE ROADS/BRIDGES  
 SIGNING OPERATIONS

**GENERAL NOTES**

1. OVERTIGHT OPERATIONS ILLUSTRATED AND IF SUCH USE DRUMS FOR DAYLIGHT OPERATIONS ONLY, USE CONES OR DRUMS AS DIRECTED BY THE ENGINEER.
  2. ANY UNATTENDED OBSTACLE OR EXCAVATION IN THE WORK AREA OVERTIGHT SHALL BE PROTECTED BY TYPE 1 OR TYPE 1 BARRICADES.
  3. IF THE WORK OPERATION REQUIRES THAT FOUR OR MORE WORK VEHICLES ENTER THE THROUGH TRAFFIC LANES IN A ONE HOUR PERIOD A FLAGGER SHALL BE PROVIDED AND THE FLAGGER SIGN SHALL BE USED (AT 300 FT. IN ADVANCE).
  4. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
  5. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ABOVE WARNING SIGNS, AS NOTED ON THE PLANS, AND/OR AS DIRECTED BY THE ENGINEER.
- ♦ WORK VEHICLE OF USED SHALL HAVE DUAL FLASHERS AND FLASHING AMBER DOME LIGHT OPERATING.

**SUGGESTED ADVANCE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS (IN FT)		
	A	B	C
URBAN LOW SPEED*	100	100	100
URBAN HIGH SPEED*	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640

\*SPEED CATEGORY TO BE DETERMINED BY WV DDM

**CASE A3**

TWO-LANE, TWO-WAY TRAFFIC  
 DAY OR NIGHT OPERATIONS  
 (STATIONARY)

WHERE, AT ANY TIME, ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES WILL ENCRUSH IN THE AREA BETWEEN 2 FT. AND 10 FT. FROM THE EDGE OF PAVEMENT.

CASE FILE: WVA021075-10276-Activities-Regen-Sub-Regen-Subpaved-Drum-Work-10275-Case-Notes-Details-Drawings-Rev  
 D:\07-DATA\TIME 5:27:2021\11.23.21.dwg

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**2021-09-21**

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DRAWN: SCB	09/21/2021
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SURVEY DATE	
SURVEY BY	
FIELD BOOK NO.	

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 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
 PHONE (204) 524-4108 • FAX (204) 524-1828

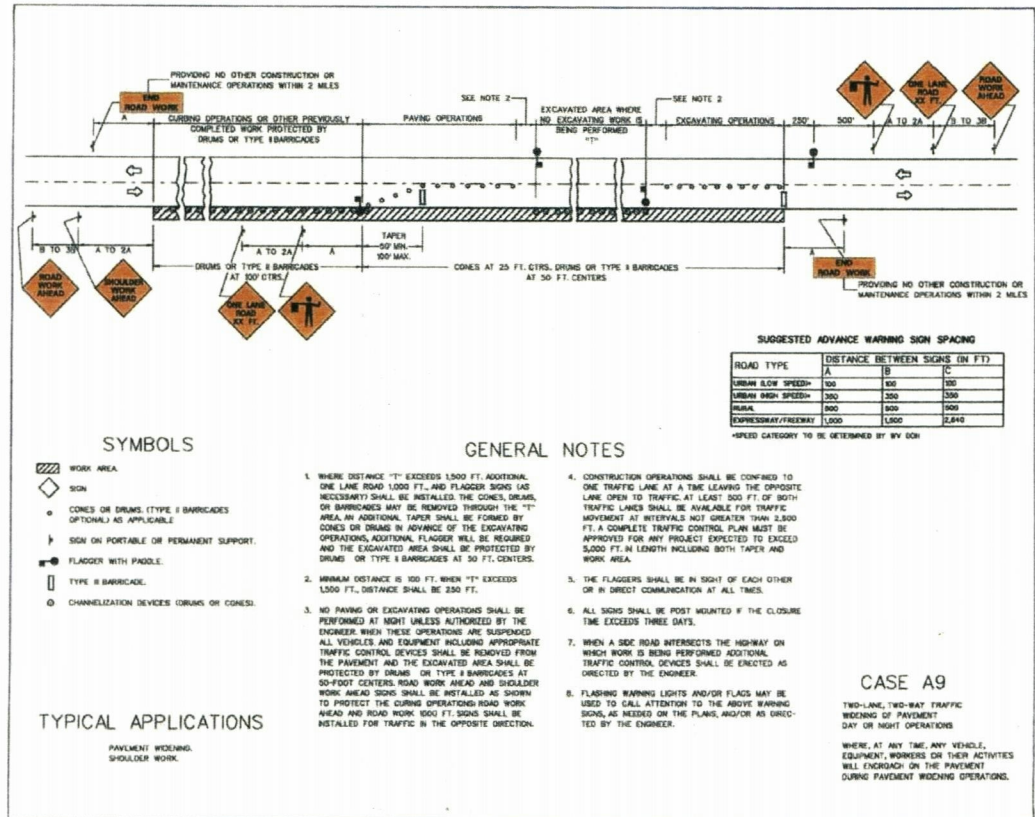
PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

**PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 MAINTENANCE OF TRAFFIC**

SHEET No.  
**7**



CASE FILE: K:\PROJECTS\10079\_Antero\_Regions\_Sur\_Road\_Upgrade\Drawings\Summary\Drawings\10079\_Sur\_Notes\Details\Plan-414.dwg PLOT DATE/TIME: 8/27/2021 12:31 PM



- SYMBOLS**
- WORK AREA
  - SIGN
  - CONES OR DRUMS (TYPE B BARRICADES OPTIONAL) AS APPLICABLE
  - SIGN ON PORTABLE OR PERMANENT SUPPORT
  - FLAGGER WITH PADDLE
  - TYPE B BARRICADE
  - CHANNELIZATION DEVICES (DRUMS OR CONES)

- GENERAL NOTES**
- WHERE DISTANCE "T" EXCEEDS 1,500 FT. ADDITIONAL ONE LANE ROAD 1,000 FT., AND FLAGGER SIGNS (AS NECESSARY) SHALL BE INSTALLED. THE CONES, DRUMS, OR BARRICADES MAY BE REMOVED THROUGHOUT THE "T" AREA. AN ADDITIONAL TAPER SHALL BE FORMED BY CONES OR DRUMS IN ADVANCE OF THE EXCAVATING OPERATIONS. ADDITIONAL FLAGGER WILL BE REQUIRED AND THE EXCAVATED AREA SHALL BE PROTECTED BY DRUMS OR TYPE B BARRICADES AT 50 FT. CENTERS.
  - MINIMUM DISTANCE IS 300 FT. WHEN "T" EXCEEDS 1,500 FT., DISTANCE SHALL BE 250 FT.
  - NO PAVING OR EXCAVATING OPERATIONS SHALL BE PERFORMED AT NIGHT UNLESS AUTHORIZED BY THE ENGINEER. WHEN THESE OPERATIONS ARE SUSPENDED ALL VEHICLES AND EQUIPMENT INCLUDING APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE PAVEMENT AND THE EXCAVATED AREA SHALL BE PROTECTED BY DRUMS OR TYPE B BARRICADES AT 50-FOOT CENTERS. ROAD WORK AHEAD AND SHOULDER WORK AHEAD SIGNS SHALL BE INSTALLED AS SHOWN TO PROTECT THE DURING OPERATIONS ROAD WORK AHEAD AND ROAD WORK 100 FT. SIGNS SHALL BE INSTALLED FOR TRAFFIC IN THE OPPOSITE DIRECTION.

- CONTRACTOR OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE AT A TIME LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC AT LEAST 500 FT. OF BOTH TRAFFIC LANES SHALL BE AVAILABLE FOR TRAFFIC MOVEMENT AT INTERVALS NOT GREATER THAN 2,500 FT. A COMPLETE TRAFFIC CONTROL PLAN MUST BE APPROVED FOR ANY PROJECT EXPECTED TO EXCEED 5,000 FT. IN LENGTH INCLUDING BOTH TAPER AND WORK AREA.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS THREE DAYS.
- WHEN A SIDE ROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.
- FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ABOVE WARNING SIGNS, AS NEEDED ON THE PLANS, AND/OR AS DIRECTED BY THE ENGINEER.

**CASE A9**  
TWO-LANE, TWO-WAY TRAFFIC  
BEDDING OF PAVEMENT  
DAY OR NIGHT OPERATIONS  
WHERE, AT ANY TIME, ANY VEHICLE,  
EQUIPMENT, WORKERS OR THEIR ACTIVITIES  
WILL ENDOURGE ON THE PAVEMENT  
DURING PAVEMENT BEDDING OPERATIONS.

**TYPICAL APPLICATIONS**  
PAVEMENT BEDDING,  
SHOULDER WORK

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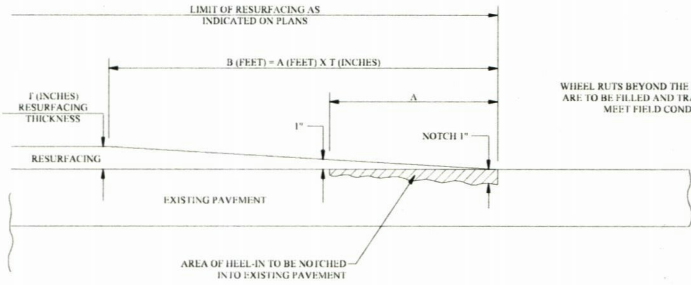
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SURVEY BY  
FIELD BOOK NO.



PHASE No.  
CONTRACT No.  
PROJECT No.  
**015-10075**

**PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST VIRGINIA MAINTENANCE OF TRAFFIC**

SHEET No.  
**9**

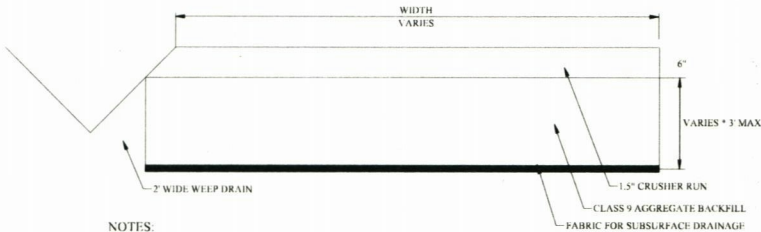
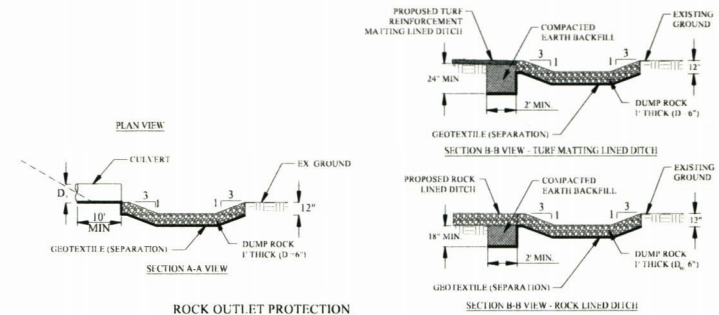
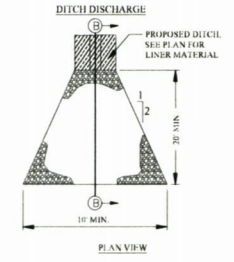
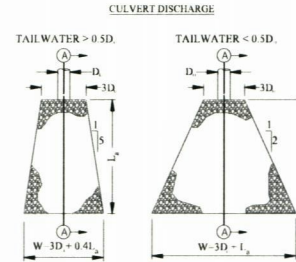


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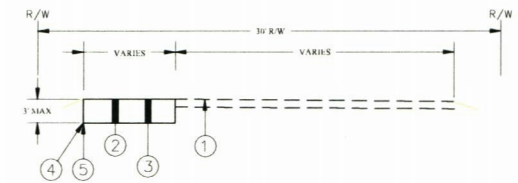
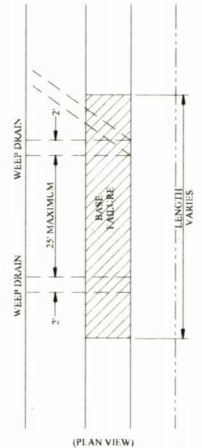
- 1 THIS DETAIL IS TO BE USED AT TERMINI OF RESURFACING PROJECTS AND AT ALL TERMINI FOR SKIP RESURFACING PROJECTS
- 2 THIS DETAIL TO BE USED AT LOCATIONS FOR HEEL-IN INTERSECTIONS OF THIS PROJECT.

POSTED SPEED LIMIT	A
25	2'
30 TO 35	4'
40 TO 45	6'
50 TO 55	8'

**PAVEMENT HEEL-IN**  
NOT TO SCALE



**BASE FAILURE REPAIR DETAIL**  
NOT TO SCALE



**TYPICAL WIDENING**  
NOT TO SCALE

- NOTE:**
- 1 EACH COURSE SHALL BE ROLLED AND COMPACTED TO SPECIFIC DEPTH PRIOR TO PLACEMENT OF NEXT COURSE
  - 2 UN 200 GEOTEXTILE TO BE USED UNLESS MATERIAL EXHIBITS POOR BEARING.
  - 3 GEGRID TO BE INSTALLED AT 3' DEPTH IF MATERIAL EXHIBITS POOR BEARING. AFTER APPROVAL FROM ANTERO RESOURCES AND THE ENGINEER.
  - 4 GEGRID TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- LEGEND**
- | NO. | ITEM | DESCRIPTION                          |
|-----|------|--------------------------------------|
| (1) | 208  | EXISTING PAVEMENT                    |
| (2) | 208  | X' UNCLASSIFIED EXCAVATION           |
| (3) | 208  | X' OF AGGREGATE BASE CLASS 9         |
| (4) | 208  | GEGRID SUBGRADE STABILIZATION        |
| (5) | 208  | TENSAK FX 190 OR APPROVED EQUIVALENT |

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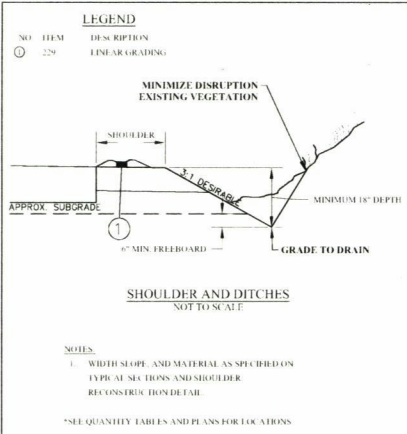
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CONTRACT No.	
PROJECT No.	
	015-10075

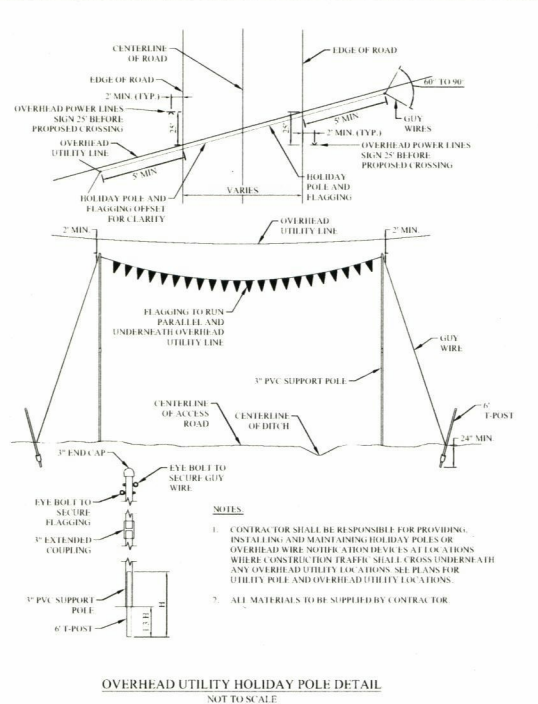
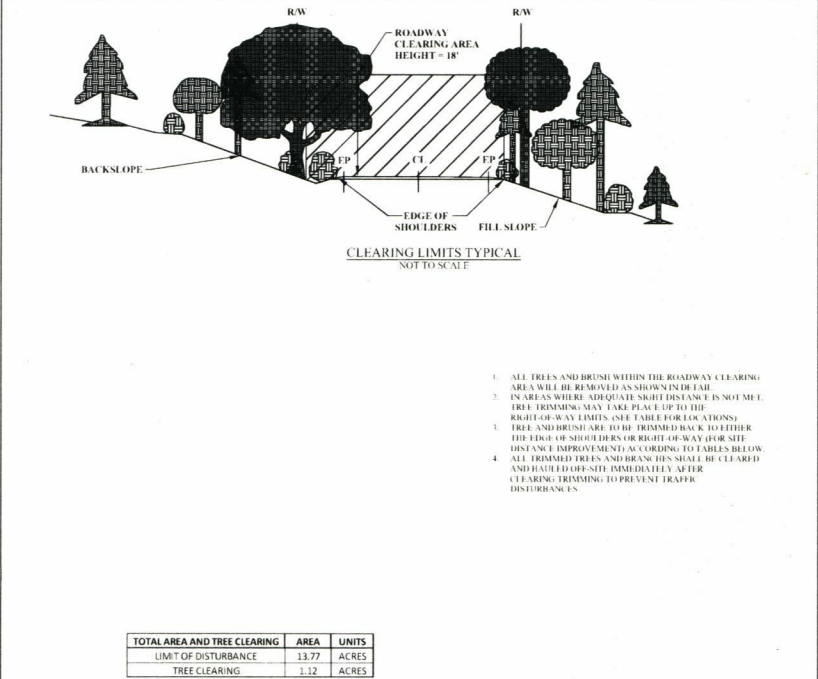
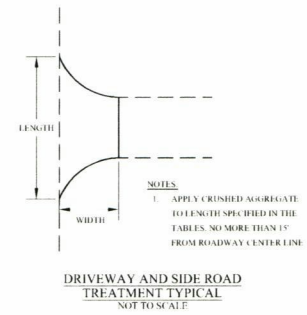
PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
DETAILS

SHEET No.	
	10



### DRIVEWAY SUMMARY

STATION	RT/LT	LENGTH (FT)	WIDTH (FT)	TOTAL AREA (SQ)	307 AGGREGATE (CY)
CR 5 (RIGGINS RUN ROAD)					
110+29	110+91	RT	45	3	15
113+96	114+92	RT	75	13	110
114+63	115+08	LT	24	30	49
116+62	116+84	RT	30	10	36
141+89	142+14	LT	15	30	50
150+03	150+28	RT	8	40	40
150+86	151+05	RT	12	35	56
161+07	161+53	RT	21	13	32
176+91	177+16	LT	8	50	44
<b>TOTALS</b>				<b>432</b>	<b>95</b>



	Yellow Ribbon Yellow Ribbons used to indicate top of Cut (C). Cut to be determined at time of subgrade. Slope determined by site design.
	Yellow & Orange Ribbons Yellow and Orange Ribbons used to indicate Grub at Top of Pad/Pond Fill.
	Orange Ribbons Orange Ribbons used to indicate toes of fills (F). Fill to be determined at time of subgrade. Slope determined by site design.
	Pink Ribbons Pink Ribbons used to indicate Top Hair Location. Pink Ribbons used to indicate Survey Control Locations.
	Pink & Black Striped Ribbons Pink & Black Striped Ribbons used to indicate Vertical Cur (VC) at Pad/Pond Fill corner or edge.
	Pink & White Striped Ribbons Pink & White Striped Ribbons used to indicate Vertical Cur (VC) at Pad/Pond Fill corner or edge. Vertical Cur (VC) to be determined at time of subgrade.
	Blue & White Striped Ribbons Blue & White Striped Ribbons used to indicate existing utility construction limits.
	Orange & Black Striped Ribbons Orange & Black Striped Ribbons used to indicate Vertical Cur (VC) at Centerline or edge of access road.
	Orange & White Striped Ribbons Orange & White Striped Ribbons used to indicate Vertical Cur (VC) at Centerline or edge of access road.
	Pink & White Striped Ribbons Pink & White Striped Ribbons used to indicate Erosion and Sediment Control Structures. Silt Fence (SF), Rockfall Filter Fence (RFF), Super Silt Fence (SSF), Filter Sand (FS).
	Orange & White Striped Ribbons Orange & White Striped Ribbons used to indicate Topsoil Storage Locations.
	Blue Ribbons Blue Ribbons used to indicate Centerline (CL) of Ditch.
	Blue Ribbons used to indicate Bottom (BT) of Ditch.

### STANDARD RIBBON COLOR DETAIL

NOT TO SCALE

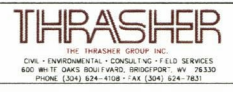
DETAIL PROVIDED BY ANTERO RESOURCES

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PROJECT No.	
<b>015-10075</b>	

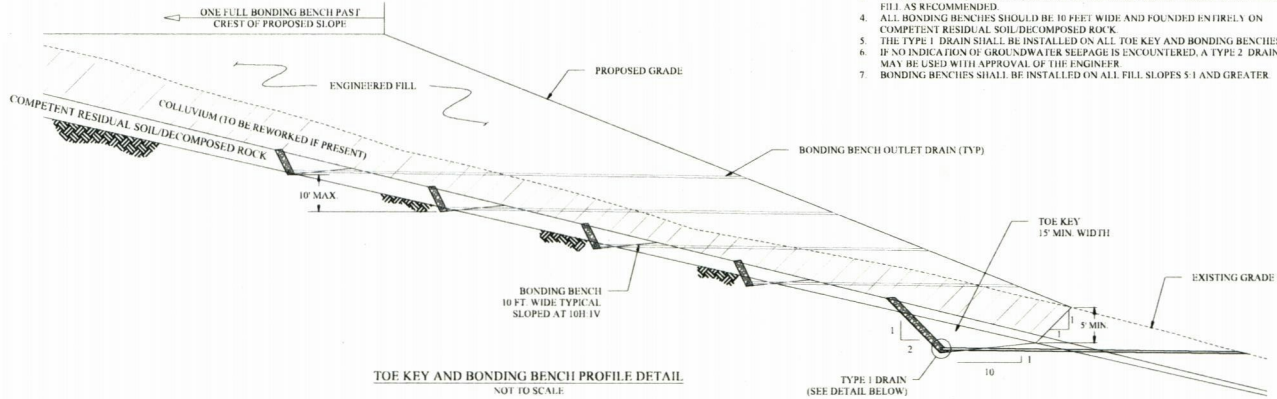
**PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA DETAILS**

SHEET No.  
**11**

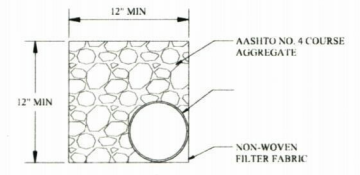
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**NOTES**

1. IF A GEOTECHNICAL STUDY HAS BEEN PERFORMED, THE RECOMMENDATIONS AND DETAILS CONTAINED WITHIN THE FORMAL GEOTECHNICAL REPORT SHALL GOVERN OVER THESE DETAILS AND NOTES.
2. SOIL TOE KEY EXCAVATIONS SHOULD BE A MINIMUM OF 15 FEET WIDE AND FOUNDED ENTIRELY ON DECOMPOSED ROCK.
3. ALL COLLUVIUM (IF PRESENT) SHOULD BE REMOVED AND REWORKED INTO THE BULK FILL AS RECOMMENDED.
4. ALL BONDING BENCHES SHOULD BE 10 FEET WIDE AND FOUNDED ENTIRELY ON COMPETENT RESIDUAL SOIL/DECOMPOSED ROCK.
5. THE TYPE 1 DRAIN SHALL BE INSTALLED ON ALL TOE KEY AND BONDING BENCHES.
6. IF NO INDICATION OF GROUNDWATER SEEPAGE IS ENCOUNTERED, A TYPE 2 DRAIN MAY BE USED WITH APPROVAL OF THE ENGINEER.
7. BONDING BENCHES SHALL BE INSTALLED ON ALL FILL SLOPES 5:1 AND GREATER.

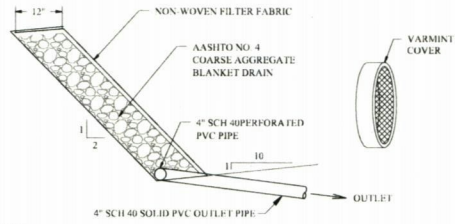


**TOE KEY AND BONDING BENCH PROFILE DETAIL**  
NOT TO SCALE



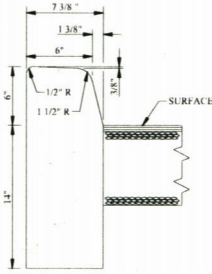
- NOTE:**
1. THE TYPE 1 DRAIN SHALL BE INSTALLED ON ALL KEYWAYS AND BONDING BENCHES.
  2. IF NO INDICATION OF GROUNDWATER SEEPAGE IS ENCOUNTERED, A TYPE 2 DRAIN MAY BE USED WITH APPROVAL OF THE ENGINEER.

**TYPE 2 DRAIN DETAIL**  
NOT TO SCALE



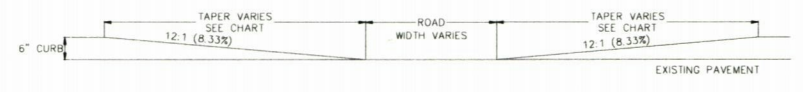
- NOTES**
1. THE TYPE 1 DRAIN SHALL BE INSTALLED ON ALL KEYWAYS AND BONDING BENCHES.
  2. IF NO INDICATION OF GROUNDWATER SEEPAGE IS ENCOUNTERED, A TYPE 2 DRAIN MAY BE USED WITH APPROVAL OF THE ENGINEER.
  3. KEYWAY OUTLETS AT 100 FT. CENTERS MAX. OR AS DEEMED NECESSARY.
  4. BONDING BENCH OUTLETS AT 250 FT. CENTERS MAX. OR AS DEEMED NECESSARY.
  5. SLOPE OUTLET TO PROVIDE POSITIVE DRAINAGE TO SLOPE FACE.
  6. ALL OUTLET PIPES TO HAVE VERMINT COVERS.

**TYPE 1 DRAIN DETAIL**  
NOT TO SCALE



- NOTES**
1. THE FACE OF THE CURBING SHALL BE OFFSET A MINIMUM OF TWO FEET FROM THE EDGE OF TRAFFIC LANE, UNLESS OTHERWISE SHOWN ON THE PLANS.
  2. CONSTRUCTION OF CONCRETE CURBING SHALL BE BY THE "SEPARATE METHOD" WHEN SAWED JOINTS ARE CONSTRUCTED IN THE PAVEMENT.
  3. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.
  4. THE SLOPE OF THE CONCRETE OR BITUMINOUS SURFACE ABUTTING THE RAISED PORTION OF THE CURB SHALL BE AS SPECIFIED ON THE PLANS.

**PLAIN CONCRETE CURBING**  
**TYPE 1 DETAIL**  
NOT TO SCALE



STREET PITCH	RAMP LENGTH (1:12)	
	LOW SIDE	HIGH SIDE
0%	6'-0"	6'-0"
1%	5'-5"	6'-10"
2%	4'-10"	7'-11"
3%	4'-5"	9'-5"
4%	4'-1"	11'-7"
5%	3'-9"	15'-0"
5% >	15'-0"	15'-0"

**CURB END TREATMENT DETAIL**  
NOT TO SCALE

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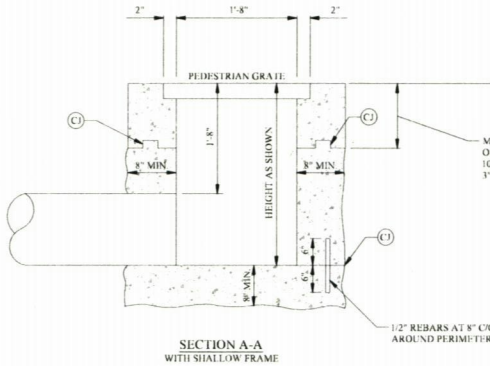


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<b>015-10075</b>	

**PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA DETAILS**

SHEET No.  
**12**





SECTION A-A  
WITH SHALLOW FRAME

1/2" REBAR AT 8" OC  
AROUND PERIMETER

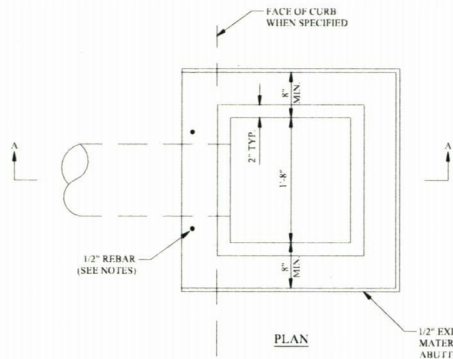
MAXIMUM DEPTH OF REQUIRED  
OUTSIDE NEAT FORMING:  
10" ADJACENT TO CONCRETE  
3" ADJACENT TO ASPHALT

**NOTES:**

- UNLESS OTHERWISE SPECIFIED ON THE PLANS, TYPE B INLETS ARE TO BE CONSTRUCTED IN THE SHAPE SHOWN.
- CONSTRUCTION MAY BE CAST-IN-PLACE, PRECAST IN ONE OR MORE MULTIPLE SECTIONS, OR ANY COMBINATION OF CAST-IN-PLACE AND PRECAST.
- OPTIONAL CONSTRUCTION JOINTS LABELED "CJ" MAY BE ROUGHENED CONCRETE, KEYS OR DOWELS AS PER THE TYPICAL DETAILS SHOWN HEREIN, OR AS APPROVED BY THE ENGINEER. NON-SHRINK GROUT MEETING THE REQUIREMENTS OF SUBSECTION 715.5 OF THE SPECIFICATIONS MAY BE USED TO A DEPTH OF 12" FOR LEVELING BETWEEN PRECAST SECTIONS. THICKER DEPTHS WILL BE ALLOWED AS PER THE MANUFACTURER'S RECOMMENDATIONS.
- THE FINAL INSTALLED TOP SURFACE OF INLET AND GRATE SHALL BE FLUSH WITH ADJACENT FINISHED SURFACES SUCH AS PAVEMENT, GUTTERS, CURBS, AND SIDEWALKS. TOP OF GRATE ELEVATION, IF SHOWN ON THE PLANS, IS FOR INFORMATION ONLY.
- REBARs ARE TO BE INSTALLED AT THE QUARTER POINTS TO CONNECT CURB TO INLET. REBARs ARE NOT REQUIRED IF CURB IS POURED MONOLITHICALLY WITH THE INLET OR IF TYPE V OR VI MEDIAN IS SPECIFIED ON THE PLANS.
- THE CONTRACTOR MAY, AT HIS OPTION, OMIT USE OF THE SHALLOW FRAME BY FORMING A LEDGE IN THE CONCRETE.
- SPECIAL CARE SHALL BE EXERCISED IN FORMING THE 2" WIDE CONCRETE LEDGE TO PROVIDE A SMOOTH, EVEN SURFACE FOR SUPPORTING THE GRATE IF A FRAME IS NOT USED. NO PROJECTIONS SHALL EXIST ON THE GRATE AND THE GRATE SHALL SEAT ON THE LEDGE WITHOUT ROCKING.
- FORMS SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT.
- PC (MINIMUM PIPE COVER) SHALL BE 12" BELOW INLET TOP FOR PIPES PLACED UNDER SIDEWALK OR GRASSSED AREA OR 24" BELOW INLET TOP FOR PIPES PLACED UNDER PAVEMENT OR SHOULDER.
- CURB, IF SPECIFIED, MAY BE EITHER CONCRETE PLACED ON THE INLET BACKWALL AS DETAILED HEREIN OR AN APPROVED CURB BOX AS MANUFACTURED WITH THE GRATE AND FRAME. DIMENSIONS OF THE CURB BOX SHOULD REASONABLY CONFORM TO THE STANDARD CURBS AS SPECIFIED IN THE PLANS. THE CURB WILL BE PAID FOR PER SECTION 610, IN EITHER CASE.
- THIS INLET SHALL NOT BE PLACED IN A PEDESTRIAN CROSS WALK.
- THE MINIMUM DISTANCE FROM THE TOP OF ANY PIPE OPENING TO ANY CONSTRUCTION JOINT ABOVE THE OPENING SHALL BE FOUR (4) INCHES.
- THE NUMBER AND LOCATION OF PIPE OPENINGS SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR AT NO ADDITIONAL COST, SHALL BE RESPONSIBLE FOR ANY TEMPORARY BRACING REQUIRED TO TRANSPORT PRECAST INLET SECTIONS DUE TO MULTIPLE OPENINGS.

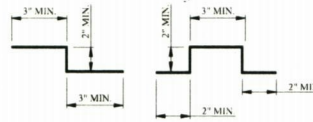
**NOTE:**

- SHALLOW FRAMES ARE ONLY TO BE USED IN THE LAWN AREAS.



PLAN

1/2" EXPANSION JOINT  
MATERIAL WHEN  
ABUTTING CONCRETE.

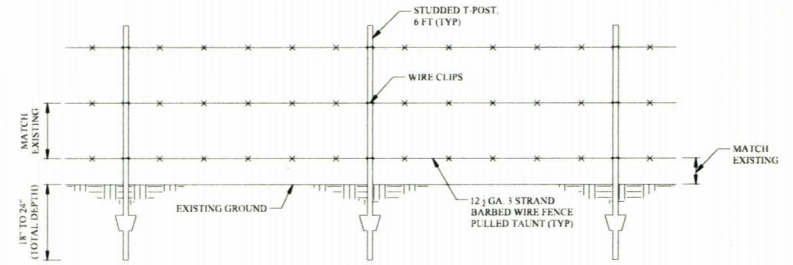


CONSTRUCTION JOINT DETAILS

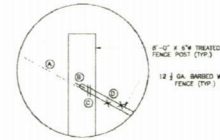
**NOTE:**

- SQUARE INLET STRUCTURE SHOWN. SQUARE OR CIRCULAR STYLE MAY BE USED.

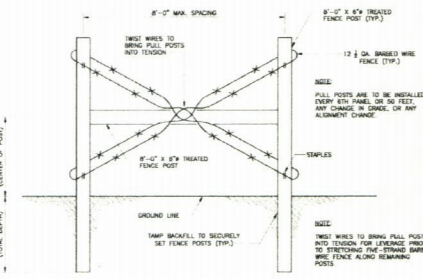
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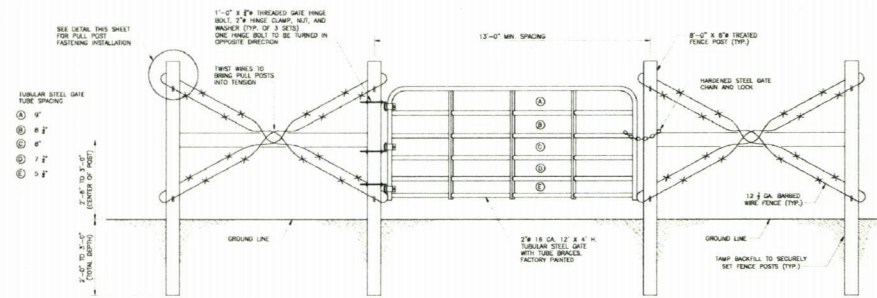
FARM FENCE DETAIL  
NOT TO SCALE



PULL POST FASTENING DETAIL  
N.T.S.



PULL POST DETAIL  
NOT TO SCALE



FARM GATE DETAIL  
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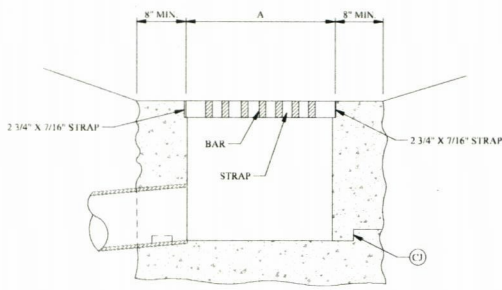
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CIVIL & ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
PHONE: (204) 624-4108 • FAX: (204) 624-7831

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CONTRACT No.	
PROJECT No.	015-10075

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
DETAILS

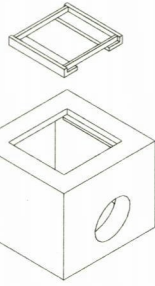
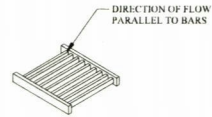
SHEET No.  
**13**

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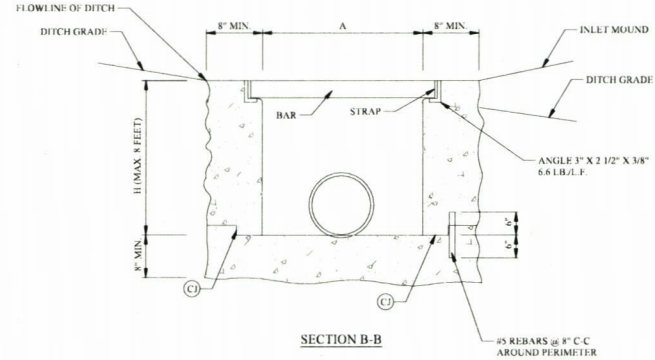


SECTION A-A  
(TYPE 2 GRATE SHOWN)

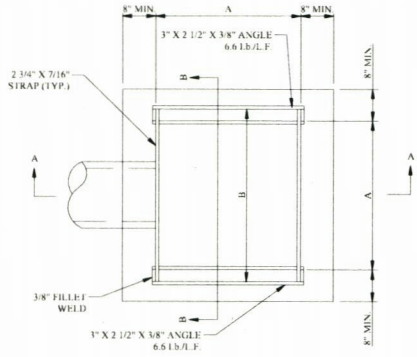
INLET MOUNDING TABLE			
DITCH GRADE (%)		L1, HORIZONTAL LENGTH (FT.)	L2, HORIZONTAL LENGTH (FT.)
FROM	TO		
0	3	10	15
3	5	9	20
5	7.5	8	40
7.5	UP	SPECIAL DESIGN	SPECIAL DESIGN



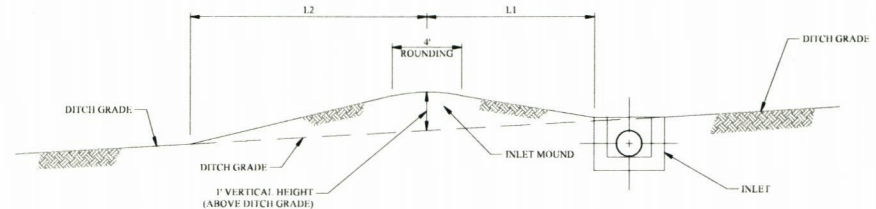
EXPLODED DETAIL



SECTION B-B



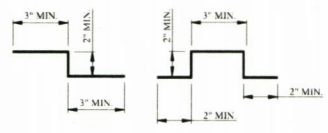
PLAN



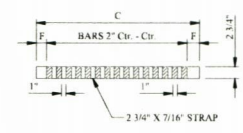
MOUNDING DETAIL  
MEDIAN AND SIDE DITCHES

PIPE SIZE	DIMENSIONS				TYPE 2 GRATE			FRAME		TYPE 1 GRATE		
	A	B	C	D	H (min)	F	BARS	WT.	WT.	F	BARS	WT.
18"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-0"	3 3/8"	7	223	62	1 3/8"	15	453
21"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-3"	3 3/8"	7	223	62	1 3/8"	15	453
24"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-6"	3 3/8"	7	223	62	1 3/8"	15	453
27"	3'-0"	3'-6"	2'-11 3/4"	3'-5 3/4"	2'-9"	3 3/8"	8	279	69	1 3/8"	17	566
30"	3'-6"	4'-0"	3'-5 3/4"	3'-11 3/4"	3'-0"	3 3/8"	9	357	80	1 3/8"	21	797
33"	3'-9"	4'-3"	3'-8 3/4"	4'-2 3/4"	3'-3"	3 3/8"	10	419	85	1 3/8"	21	847
36"	4'-0"	4'-6"	3'-11 3/4"	4'-5 3/4"	3'-6"	3 3/8"	11	486	90	1 3/8"	23	981
42"	4'-6"	5'-0"	4'-5 3/4"	4'-11 3/4"	4'-0"	3 3/8"	12	587	101	1 3/8"	27	1277
48"	5'-0"	5'-6"	4'-11 3/4"	5'-5 3/4"	4'-6"	3 3/8"	14	748	112	1 3/8"	29	1507

GRATE AND FRAME WEIGHTS ARE FOR INFORMATION ONLY AND WILL INCREASE IF LARGER STRAPS AND BARS ARE USED. THE FOLLOWING SUBSTITUTIONS IN DIMENSIONS ARE ACCEPTABLE FOR FABRICATING THE GRATE AND FRAME: STRAP THICKNESS 1/2" STRAP DEPTH 3" BAR DEPTH 3"



CONSTRUCTION JOINT DETAILS



SECTION THROUGH TYPE 1 GRATE

TYPE G INLET  
NOT TO SCALE

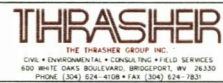
- NOTES:
- TYPE 2 GRATE, A RURAL AND EXPRESSWAY TYPE GRATE SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE SPECIFIED ON THE PLANS. TYPE 1 GRATE, AN URBAN TYPE GRATE, SHALL BE USED ONLY AT SPECIALLY DESIGNATED LOCATIONS.
  - THE CONTRACTOR, AT HIS OPTION, MAY DELETE THE FRAME AS SHOWN HEREIN IF THE INLET IS CAST IN A MANNER WHICH WILL ALLOW CONCRETE TO REPLACE THE AREA SHOWN AS OCCUPIED BY THE FRAME, AND THE GRATE SUPPORTING LEDGERS DO NOT PERMIT THE GRATE TO ROCK.
  - THE MOUNDING DETAIL AS SHOWN IS NOT REQUIRED WHEN AN INLET IS PLACED IN A VERTICAL SAG.
  - OPTIONAL CONSTRUCTION JOINTS LABELED "CJ" MAY BE KEYED OR DOWNEED AS PER THE TYPICAL DETAILS SHOWN HEREIN OR AS APPROVED BY THE ENGINEER.

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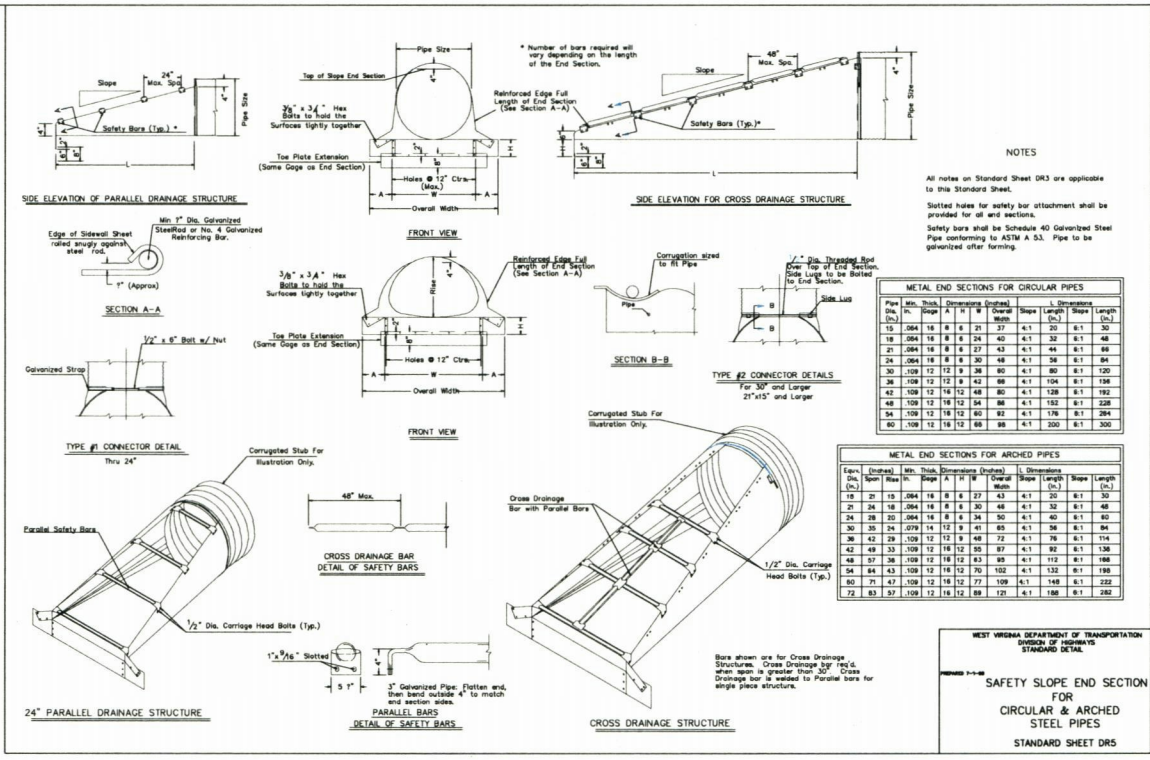


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APPROVED: SCA	DATE: 08/21/2021
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	



PHASE No.:	
CONTRACT No.:	
PROJECT No.:	015-10075

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 DETAILS



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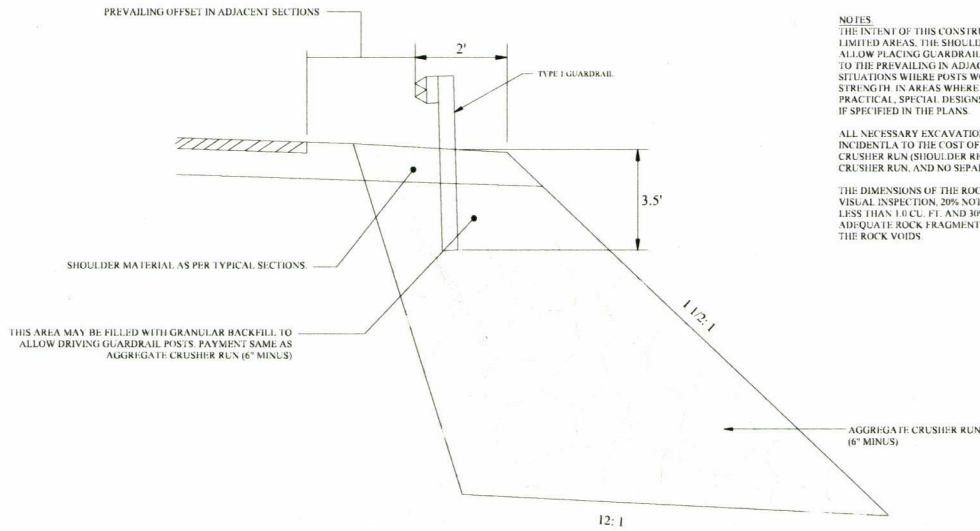


PHASE No.: CONTRACT No.: PROJECT No.: 015-10075

PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA DETAILS

SHEET No. 15

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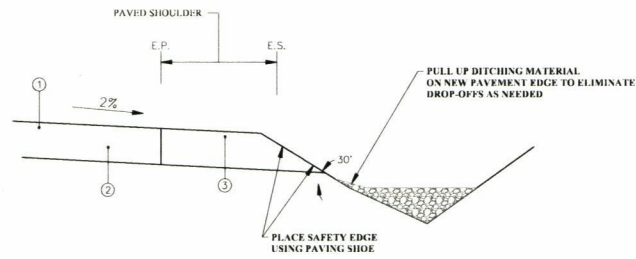


**NOTES**  
 THE INTENT OF THIS CONSTRUCTION IS TO RESTORE, IN LIMITED AREAS, THE SHOULDER WIDTH SUFFICIENTLY TO ALLOW PLACING GUARDRAIL AT AN OFFSET NEARLY EQUAL TO THE PREVAILING IN ADJACENT SECTIONS AVOIDING SITUATIONS WHERE POSTS WOULD NOT PROVIDE PROPER STRENGTH IN AREAS WHERE SUCH CONSTRUCTION IS NOT PRACTICAL. SPECIAL DESIGNS SUCH AS PILING WILL BE USED IF SPECIFIED IN THE PLANS.  
  
 ALL NECESSARY EXCAVATION OF THE FILL BENCH WILL BE INCIDENTAL TO THE COST OF ITEM RUC412 AGGREGATE CRUSHER RUN (SHOULDER RESTORATION) 6" MINUS CRUSHER RUN, AND NO SEPARATE PAYMENT WILL BE MADE.  
  
 THE DIMENSIONS OF THE ROCK BORROW SHALL, BASED ON VISUAL INSPECTION, 20% NOT LESS THAN 1.5 CU. FT., 50% NOT LESS THAN 1.0 CU. FT. AND 30% NOT LESS THAN 0.5 CU. FT. ADEQUATE ROCK FRAGMENTS SHALL BE INCLUDED TO FILL THE ROCK VOIDS.

**RESTORING SHOULDERS FOR GUARDRAILS DETAIL**  
 NOT TO SCALE

**LEGEND**

NO.	ITEM	DESCRIPTION
①	401	X" HMA WEARING COURSE, TYPE X
②	401	X" HMA SCRATCH COURSE, TYPE X
③	307	AGGREGATE SHOULDERS (AS NEEDED)



**SAFETY EDGE DETAIL**  
 NOT TO SCALE

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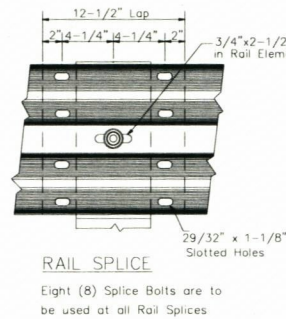
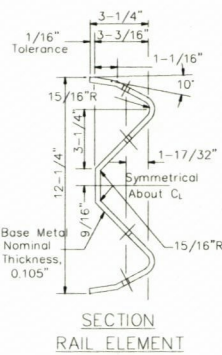
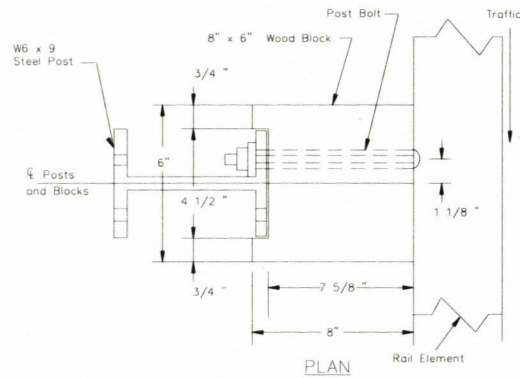
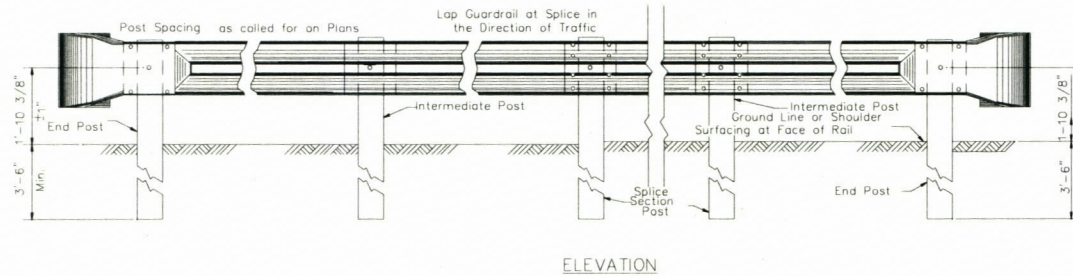
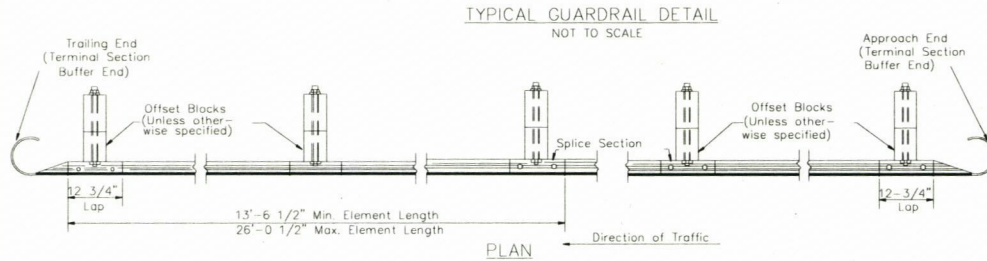
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FIELD BOOK No.:	

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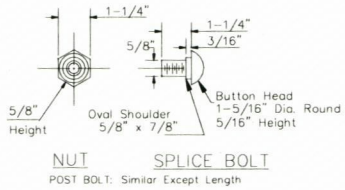
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CONTRACT No.	
PROJECT No.	
	015-10075

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 DETAILS

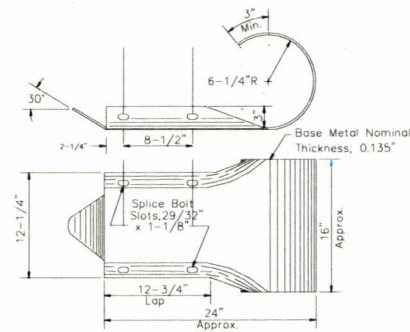
SHEET No.  
**16**



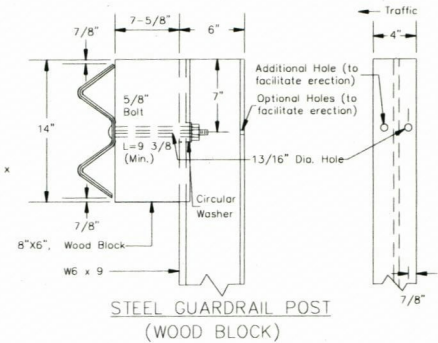
Eight (8) Splice Bolts are to be used at all Rail Splices



NUT SPLICE BOLT  
POST BOLT: Similar Except Length



TERMINAL SECTION BUFFER END  
(For Use Only on Unanchored Ends And on Special Trailing End Terminal)



STEEL GUARDRAIL POST  
(WOOD BLOCK)

NOTES:

Guardrail shall be secured to the blocks, posts and other elements by 5/8" dia. bolts and nuts conforming to the details herein and to the requirements of 712.4 of the Standard Specifications. Nuts shall conform to ASTM A563, Grade A or better.

Approach and Trailing End Treatments shall be as shown or directed by the Engineer. Approach and trailing ends shall be anchored unless otherwise specified on the Plans; the specific anchor terminal to be utilized shall be as shown or specified.

Only one type of block, steel or wood, shall be used throughout project, unless otherwise specified. "Blocks for block-outs" shall be used on all posts except when otherwise noted on plans. For steel posts without blocks, details of the posts shall conform to the "Steel Guardrail Post (Wood Block)" details herein, with the additional holes (to facilitate erection) being optional. The circular washers shall be made of steel and galvanized in accordance with the requirements of AASHTO M232.

Blocks shall be centered on their posts and the center of the block holes, for bolts connecting rails to blocks, shall be horizontally offset 1-1/8" from the center of the steel posts toward the post edge facing approaching traffic for both steel and wood blocks. Post length shall be 6' ± 1/2" unless otherwise noted.

CAD FILE: R:\03\0317\10875-Antero-Bojars-Road-Upgrade\Drawings\08075-Gar-Notes-Details-Form.dwg PLOT DATE/TIME: 9/27/2021 10:53 AM

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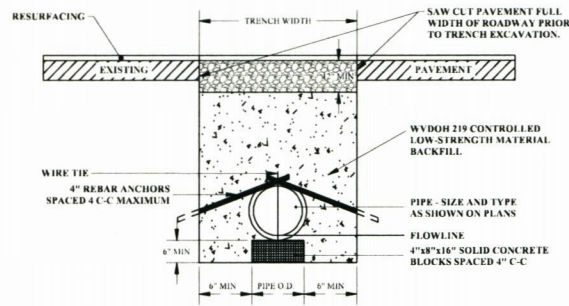
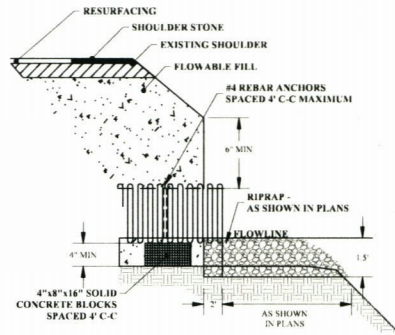
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SURVEY DATE	
FIELD BOOK NO.	



PHASE No.
CONTRACT No.
PROJECT No.
<b>015-10075</b>

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
DETAILS

SHEET No.  
**17**



**STANDARD CULVERT PIPE INSTALLATION**  
NOT TO SCALE

- IF FDR PRIOR TO NEW PIPE PLACEMENT, THEN PLACE FLOWABLE FILL UP TO TOP OF FDR, AND OVERLAY WITH NEW PAVEMENT OR STONE
- IF PIPE REPLACEMENT FIRST, THEN PLACE FLOWABLE FILL UP TO 12 INCHES BELOW TOP OF EXISTING PAVEMENT AND FILL WITH WYDOH ITEM 307 STONE UP TO EXISTING ROADWAY SURFACE.

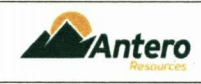
Pipe Table					
PIPE NAME	LENGTH	SLOPE	INVERT IN	INVERT OUT	DIAMETER
120	26'	2.0%	789.64	789.12	24
125	24'	2.0%	798.74	798.26	24
126	32'	3.5%	808.44	799.32	18
128	29'	2.0%	797.43	796.85	36
131	29'	3.0%	798.69	797.82	18
138	25'	2.0%	779.82	779.31	36
143	25'	2.0%	805.75	805.24	24
157	25'	1.0%	788.15	779.90	30
160	28'	1.0%	788.82	788.54	36
172	23'	3.0%	802.16	801.48	36
145	23'	3.0%	813.19	812.48	18
141	28'	8.0%	802.51	800.23	15
148	22'	7.7%	795.36	793.69	15
177	28'	8.0%	837.41	835.17	15
115	22'	8.0%	810.86	809.10	15
103	48'	2.9%	753.23	751.83	48
149	55'	2.8%	792.60	791.07	48

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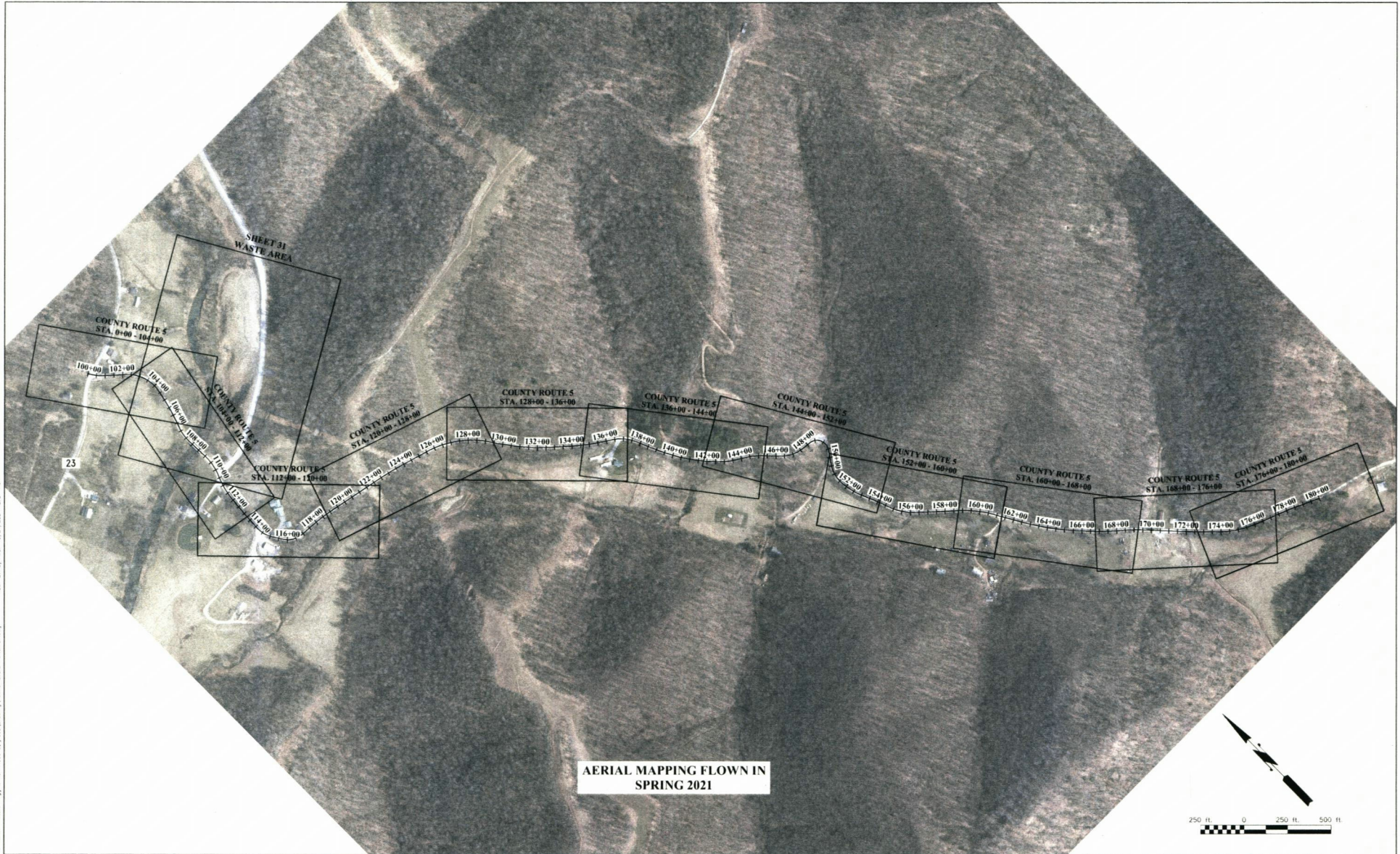
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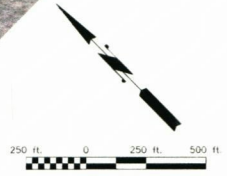
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PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
DETAILS

SHEET No.  
**18**



AERIAL MAPPING FLOWN IN  
SPRING 2021



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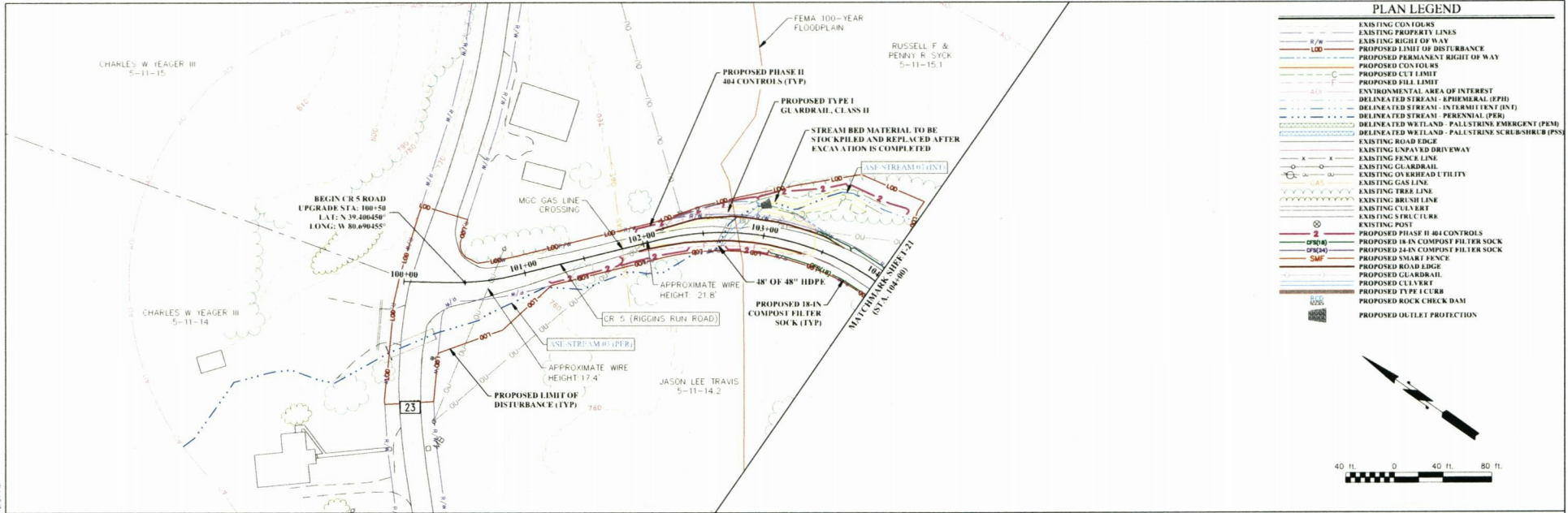
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PROJECT No.	015-10075

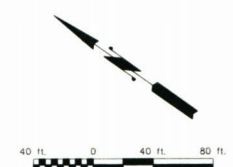
PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
OVERALL

SHEET No.  
**19**

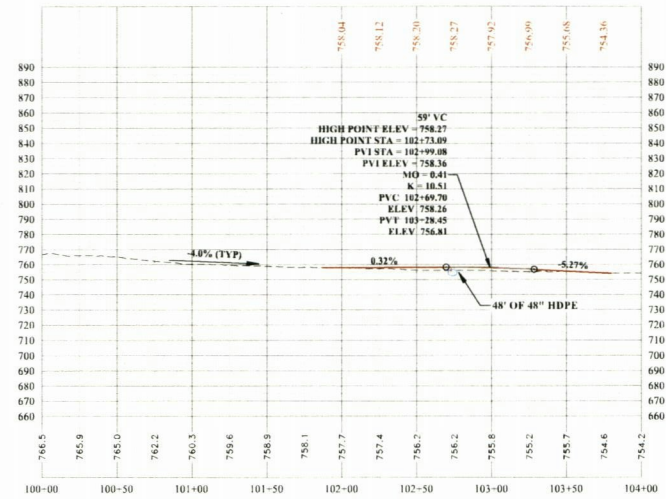


**PLAN LEGEND**

	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPI)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
	DELINEATED WETLAND - PALUSTRINE SCRUBSHRUB (PSS)
	EXISTING ROAD EDGE
	EXISTING UNIMPROVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRIDGE LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED PHASE II 484 CONTROLS
	PROPOSED 18-IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED GUARDRAIL
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



**RIGGINS RUN ROAD CENTERLINE PROFILE**



**PROFILE LEGEND**

	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

- GENERAL NOTES**
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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PROJECT No.:	015-10075

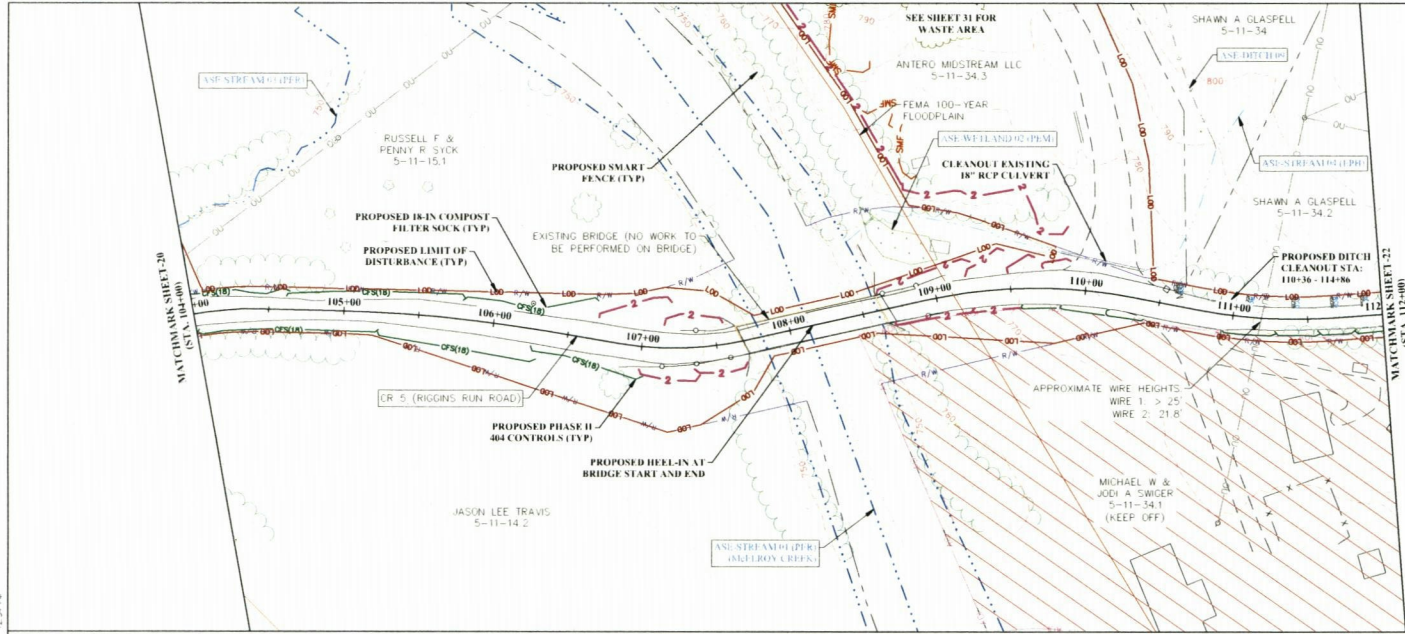
PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
CR 5 STA. 100+00 - 104+00

SHEET No.  
**20**

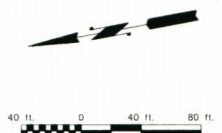
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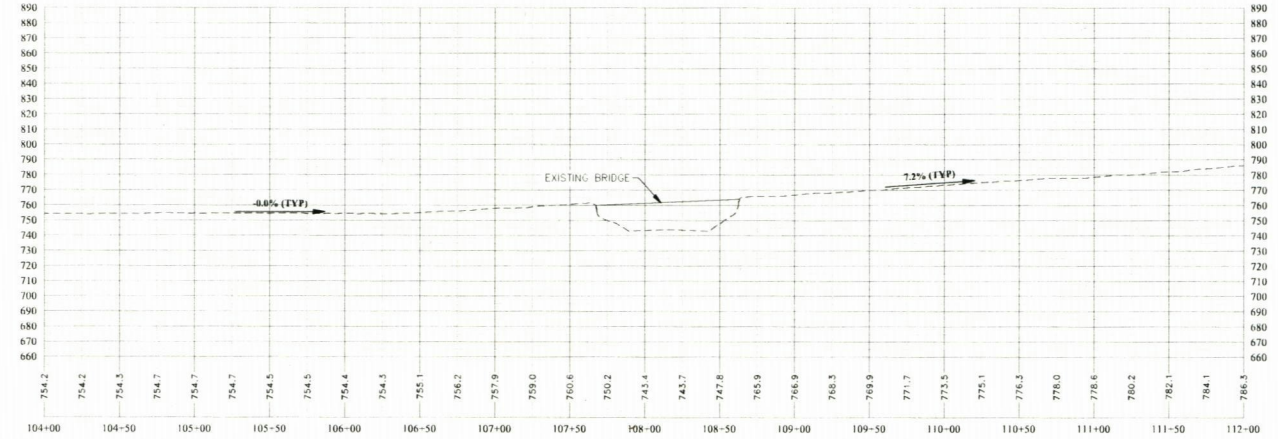
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PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CENTERLINES
	PROPOSED CUT LIMITS
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPI)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
	DELINEATED WETLAND - PALUSTRINE SCRUB/SHRUB (PSS)
	EXISTING ROAD EDGE
	EXISTING UNIMPROVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRIDGE LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED PHASE II 404 CONTROLS
	PROPOSED 18-IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



RIGGINS RUN ROAD CENTERLINE PROFILE



PROFILE LEGEND	
	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

- GENERAL NOTES**
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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2021-09-21

NO.	BY	DATE	DESCRIPTION



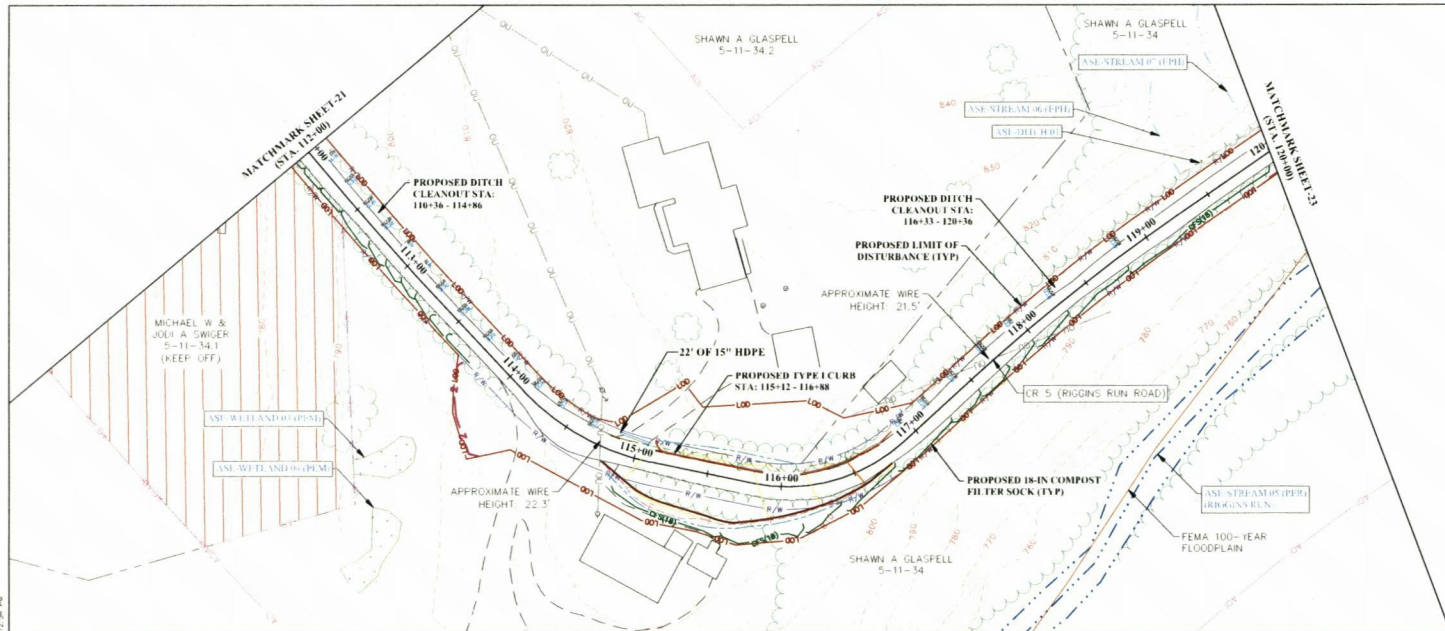
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APPROVED: JCA	DATE: 08/21/2021
SURVEY DATE	
SURVEY BY	
FIELD BOOK NO.	



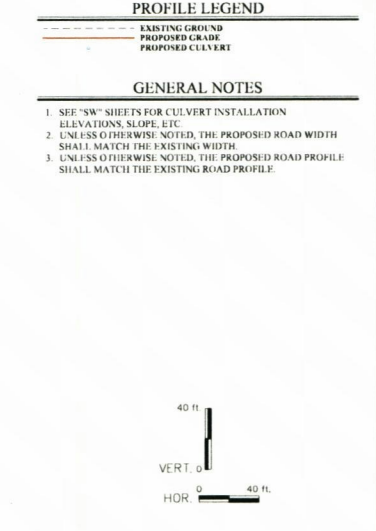
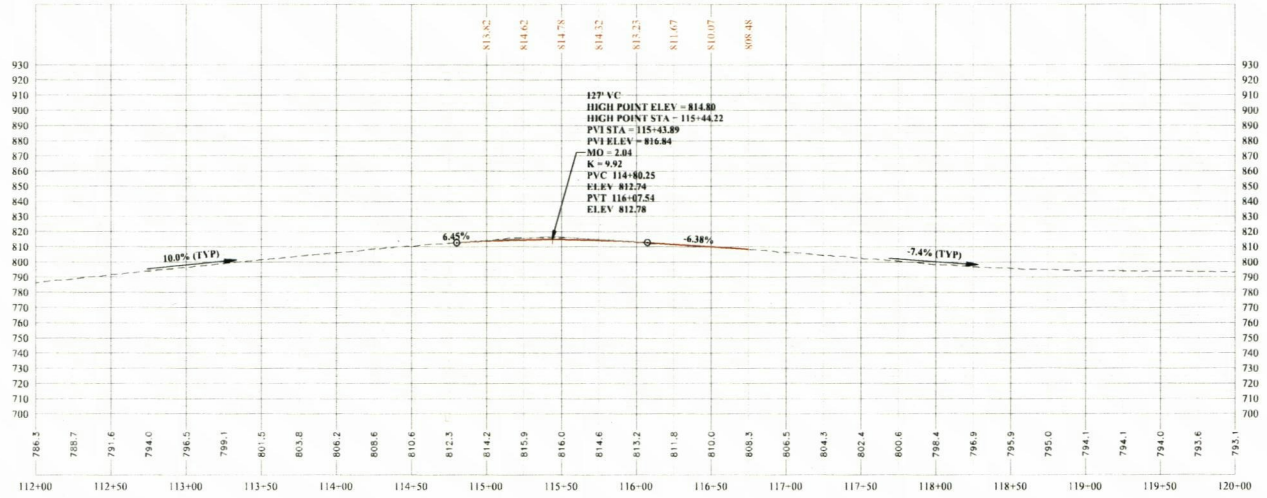
PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA CR 5 STA. 104+00 - 112+00

SHEET No.  
**21**



RIGGINS RUN ROAD CENTERLINE PROFILE



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FIELD BOOK NO:

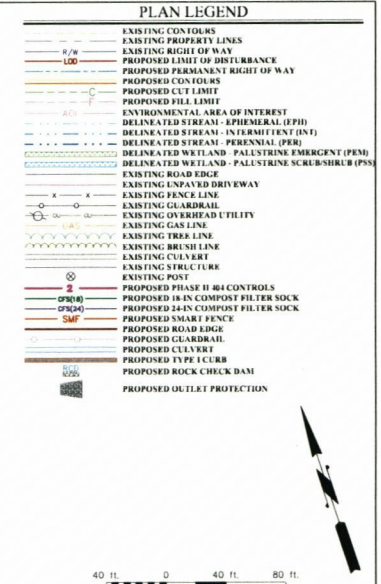
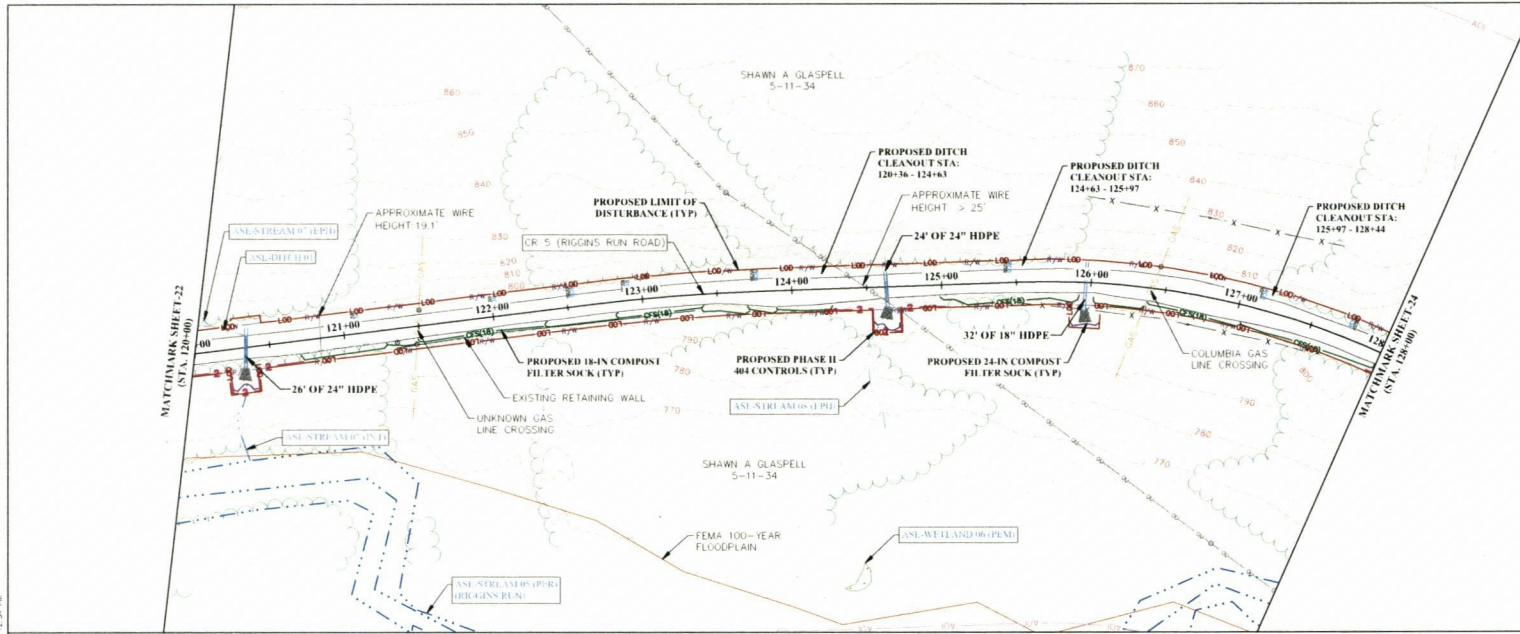


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CONTRACT No.  
PROJECT No.  
**015-10075**

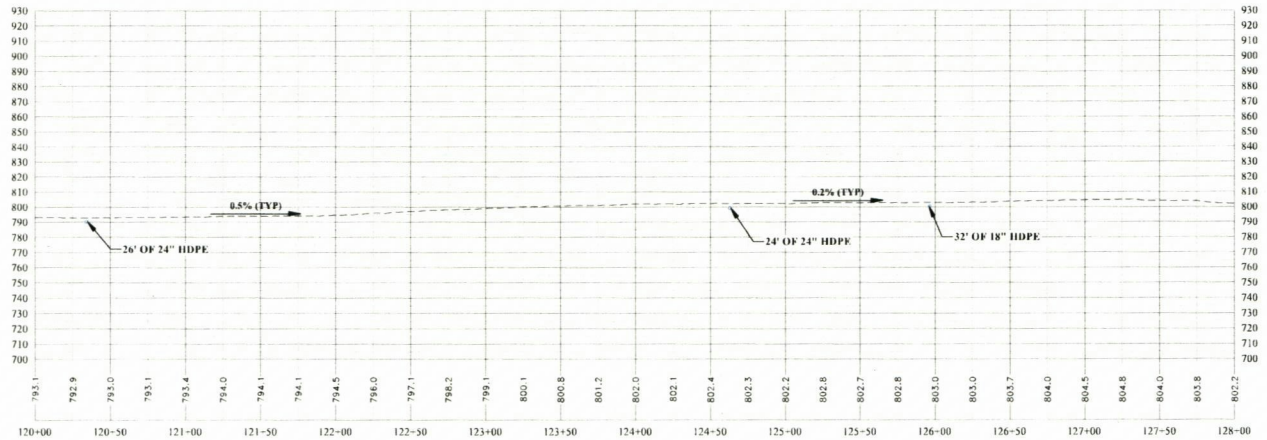
PRELIMINARY PLANS FOR  
**RIGGINS RUN ROAD UPGRADES**  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
**CR 5 STA. 112+00 - 120+00**

SHEET No.  
**22**

CAD: J.E. B. (JEB) (015-10075) Antero, Bridgeport, WV. Road Upgrade/Downsizing/Improvement/Design/Construction/Management/Operations/Support Services  
R.G.T. 0457/7466 8/27/2020 12:54 PM



RIGGINS RUN ROAD CENTERLINE PROFILE



### PROFILE LEGEND

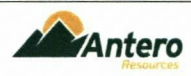
- EXISTING GROUND
- PROPOSED GRADE
- PROPOSED CULVERT

- ### GENERAL NOTES
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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APPROVED: JCA	09/21/2021
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FIELD BOOK NO.	

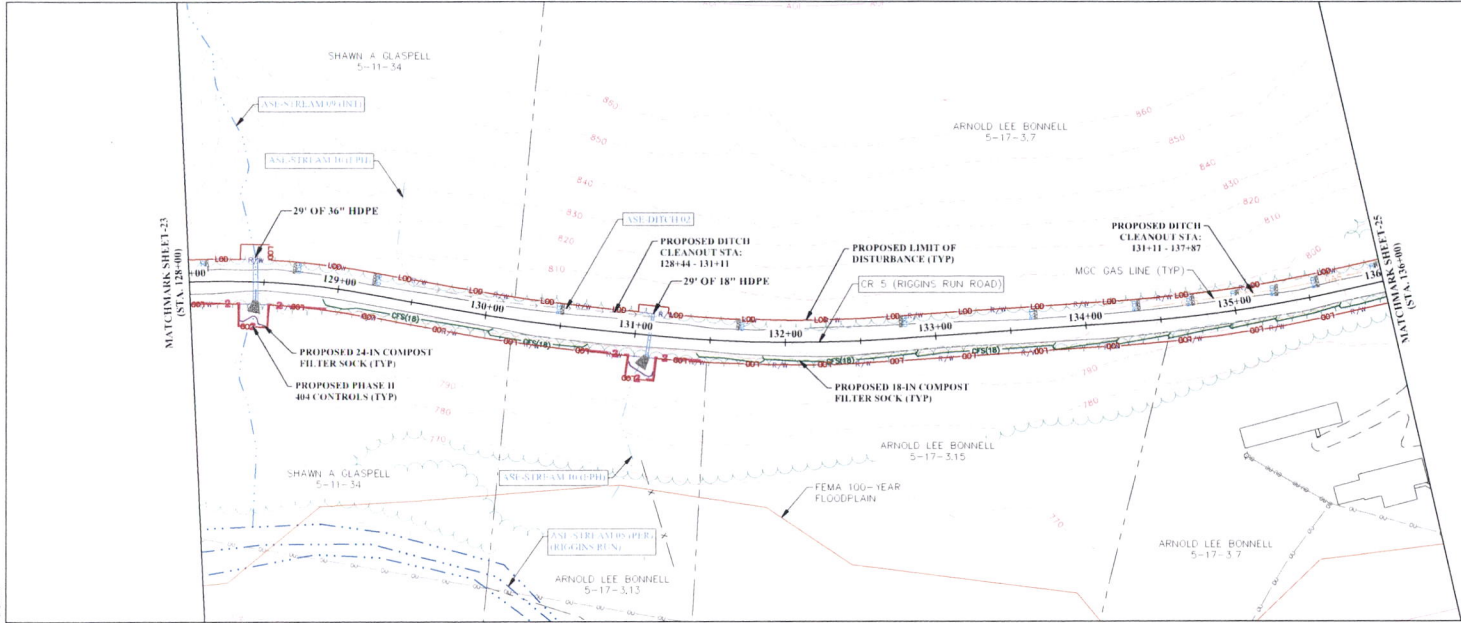


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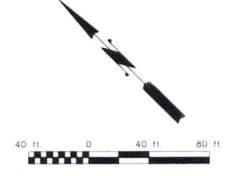
PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
CR 5 STA. 120+00 - 128+00

SHEET No.  
**23**

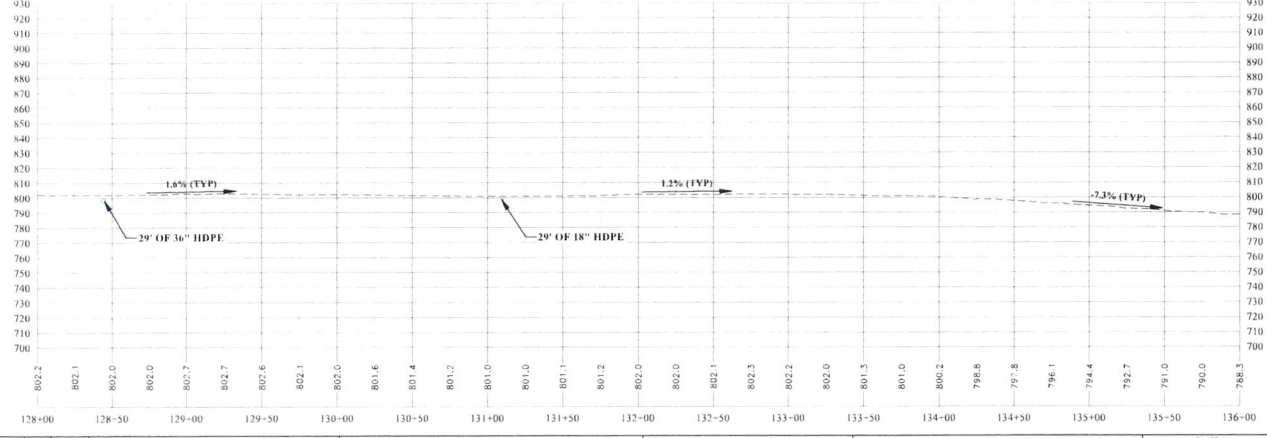
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PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPH)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
	DELINEATED WETLAND - PALUSTRINE SCRUB/SHRUB (PSS)
	EXISTING ROAD EDGE
	EXISTING PAVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRUSH LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED PHASE II 404 CONTROLS
	PROPOSED DRAIN COMPOST FILTER SOCK
	PROPOSED 24-IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED GUARDRAIL
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



RIGGINS RUN ROAD CENTERLINE PROFILE



PROFILE LEGEND	
	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

- GENERAL NOTES**
1. SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  2. UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  3. UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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APPROVED: JCA	DATE: 09/21/2021
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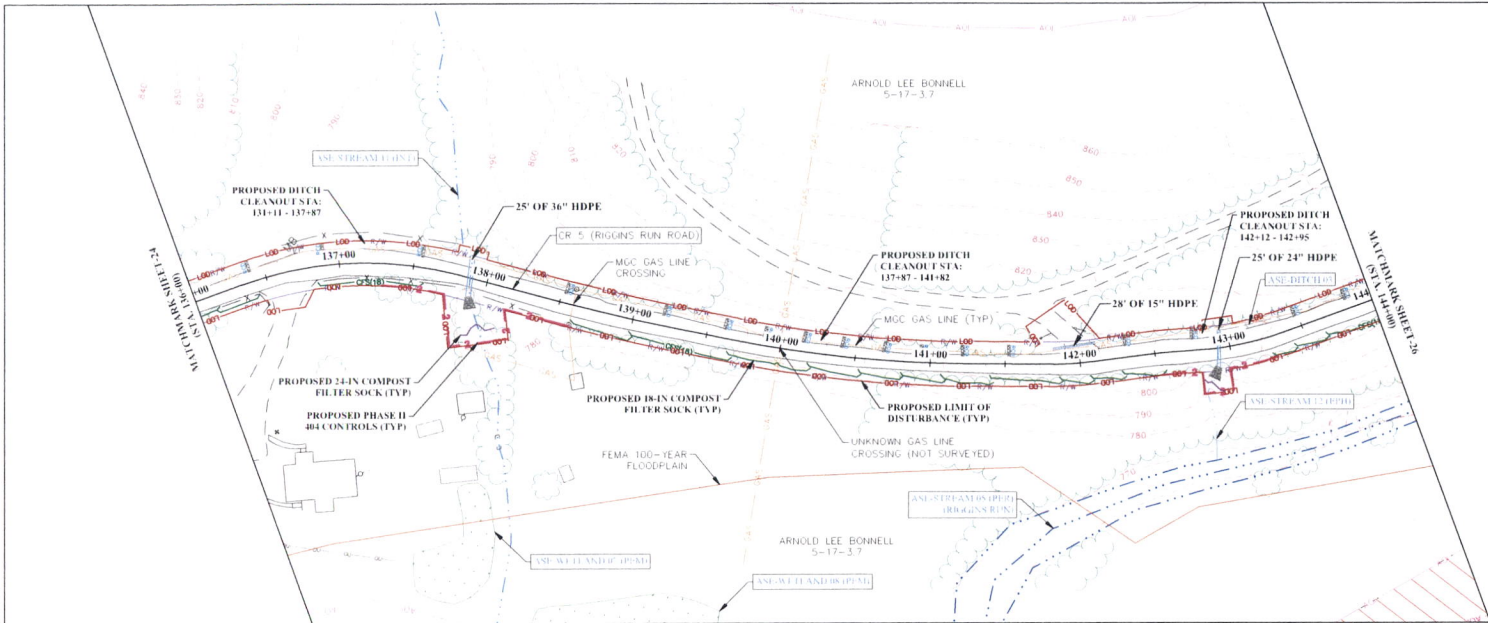


PHASE No.:	
CONTRACT No.:	
PROJECT No.:	015-10075

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
CR 5 STA. 128+00 - 136+00

SHEET No.  
**24**

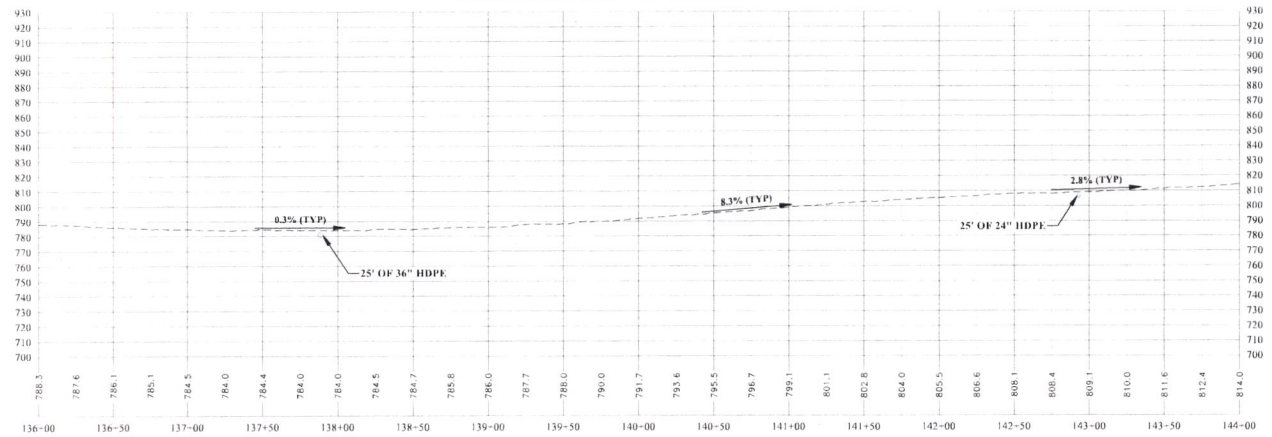
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### PLAN LEGEND

- EXISTING CONTOURS
- - - EXISTING PROPERTY LINES
- - - EXISTING RIGHT OF WAY
- - - PROPOSED LIMIT OF DISTURBANCE
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED CONTOURS
- - - PROPOSED CUT LIMIT
- - - PROPOSED FILL LIMIT
- - - ENVIRONMENTAL AREA OF INTEREST
- - - DELINEATED STREAM - EPHEMERAL (EPH)
- - - DELINEATED STREAM - INTERMITTENT (INT)
- - - DELINEATED STREAM - PERENNIAL (PER)
- - - DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
- - - DELINEATED WETLAND - PALUSTRINE SCUBUSH (PSB)
- - - EXISTING ROAD EDGE
- - - EXISTING INFANTRY DRIVEWAY
- - - EXISTING FENCE LINE
- - - EXISTING GUARDRAIL
- - - EXISTING OVERHEAD UTILITY
- - - EXISTING GAS LINE
- - - EXISTING TREE LINE
- - - EXISTING BRUSH LINE
- - - EXISTING CULVERT
- - - EXISTING STRUCTURE
- - - EXISTING POST
- ⊗ PROPOSED PHASE II 404 CONTROLS
- ⊗ PROPOSED 18-IN COMPOST FILTER SOCK
- ⊗ PROPOSED 24-IN COMPOST FILTER SOCK
- ⊗ PROPOSED SMART FENCE
- ⊗ PROPOSED ROAD EDGE
- ⊗ PROPOSED GUARDRAIL
- ⊗ PROPOSED CULVERT
- ⊗ PROPOSED TYPICAL CURB
- ⊗ PROPOSED ROCK CHECK DAM
- ⊗ PROPOSED FILTER PROTECTION

RIGGINS RUN ROAD CENTERLINE PROFILE



### PROFILE LEGEND

- - - EXISTING GROUND
- - - PROPOSED GRADE
- - - PROPOSED CULVERT

### GENERAL NOTES

1. SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
2. UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
3. UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.

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SURVEY BY	
FIELD BOOK No.	



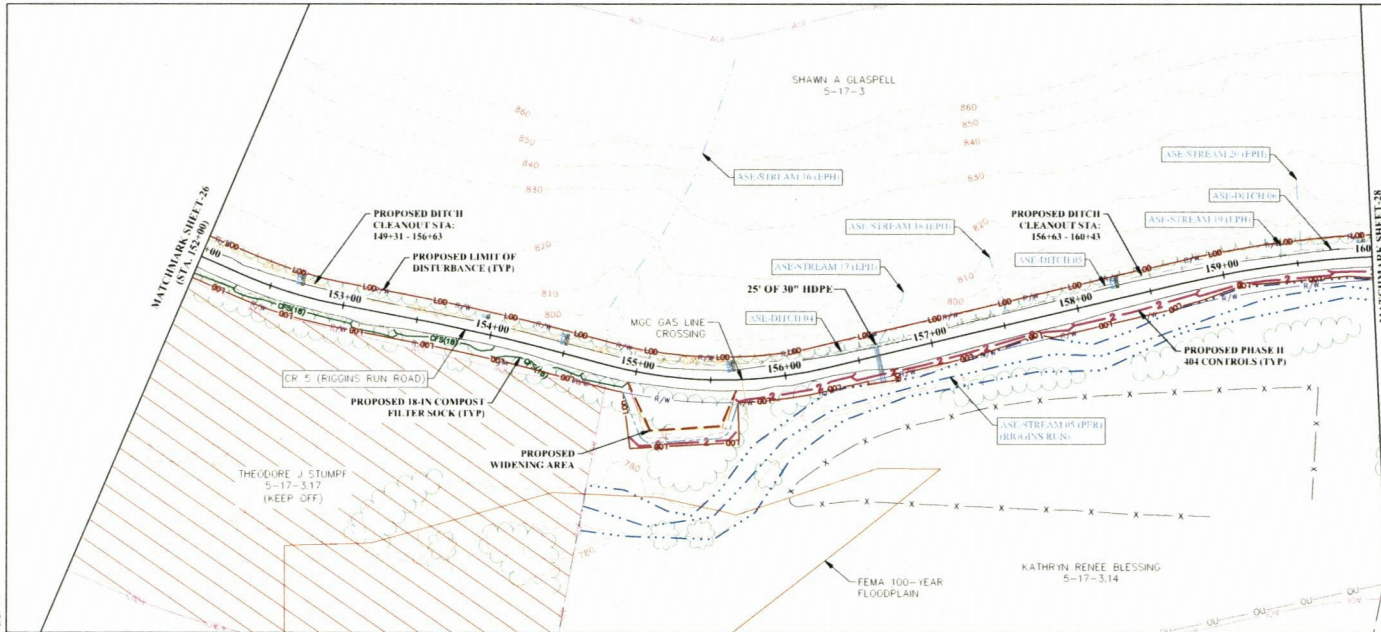
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PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
CR 5 STA. 136+00 - 144+00

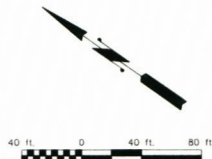
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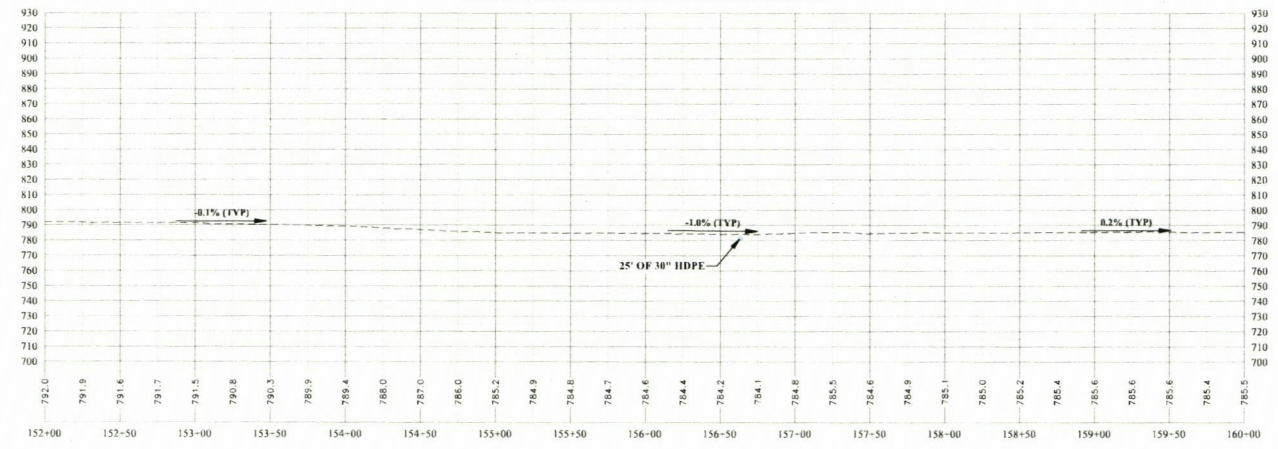




PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPH)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
	DELINEATED WETLAND - PALUSTRINE SCRUB/SHRUB (PSS)
	EXISTING ROAD EDGE
	EXISTING PAVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRUSH LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED PHASE II 84-IN CONTROL
	PROPOSED 18-IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED GUARDRAIL
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



RIGGINS RUN ROAD CENTERLINE PROFILE



PROFILE LEGEND	
	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

GENERAL NOTES	
1.	SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
2.	UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
3.	UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



NO. BY DATE DESCRIPTION  
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**2021-09-21**



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DRAWN: SCB	DATE: 09.21.2021
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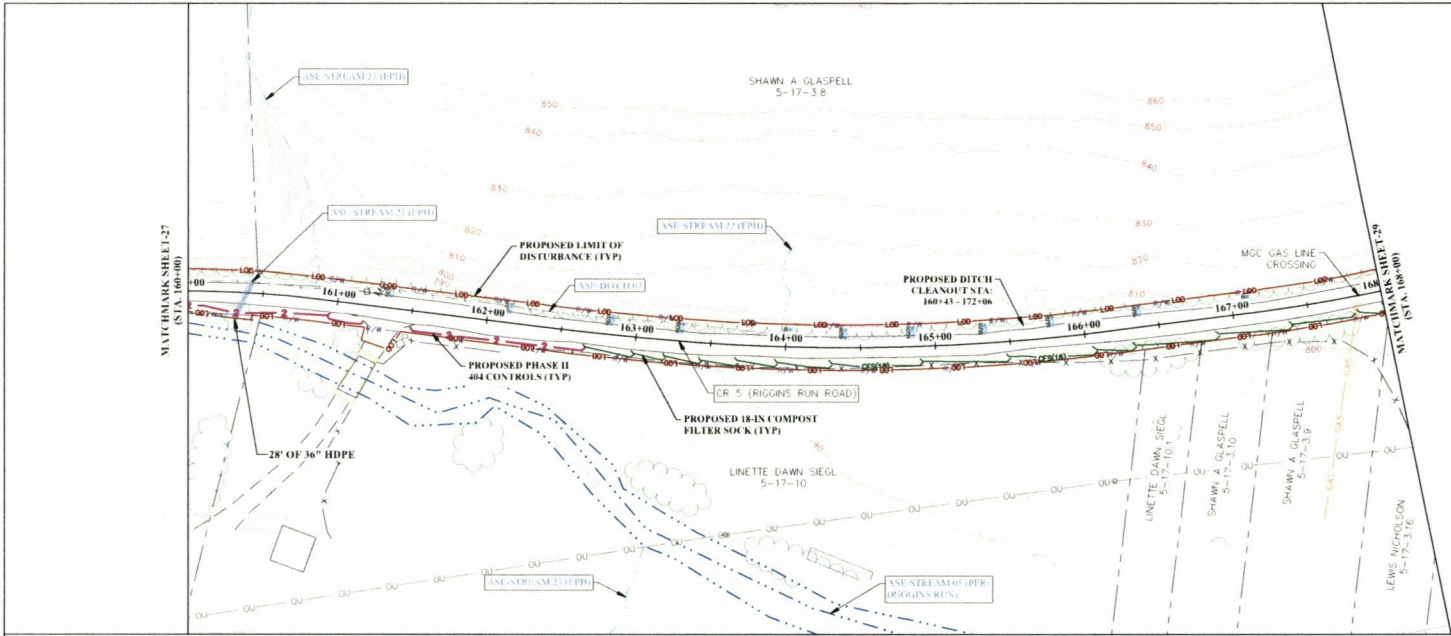


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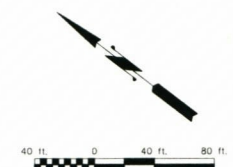
**PRELIMINARY PLANS FOR**  
**RIGGINS RUN ROAD UPGRADES**  
**DODDRIDGE COUNTY**  
**WEST UNION, WEST VIRGINIA**  
**CR 5 STA. 152+00 - 160+00**

SHEET No.  
**27**

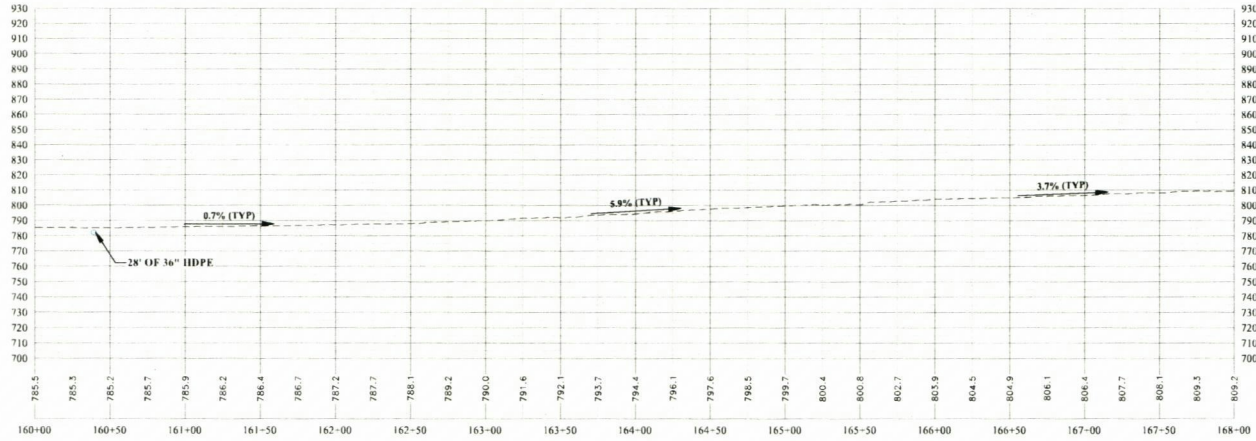
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PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CENTERLINE
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPI)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - FALLSTRINE EMERGENT (FEM)
	DELINEATED WETLAND - FALLSTRINE SCRUBSHRUB (FSS)
	EXISTING ROAD EDGE
	EXISTING UNAVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRUSH LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	PROPOSED PHASE II 484 CONTROLS
	PROPOSED 18-IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED GUARDRAIL
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



RIGGINS RUN ROAD CENTERLINE PROFILE



PROFILE LEGEND	
	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

- GENERAL NOTES**
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.

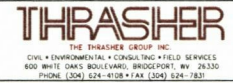


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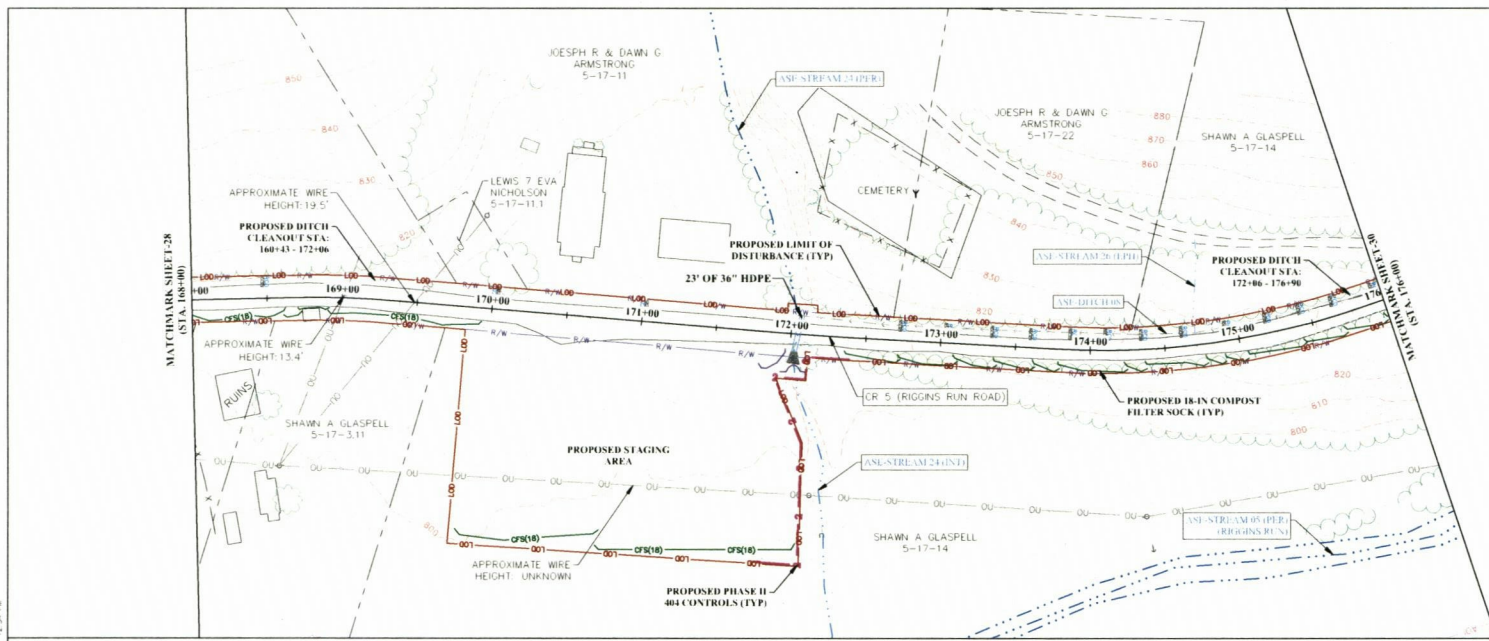
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PROJECT No.:	015-10075

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIEGE COUNTY  
WEST UNION, WEST VIRGINIA  
CR 5 STA. 160+00 - 168+00

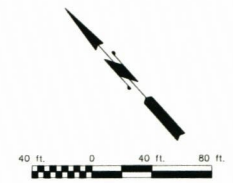
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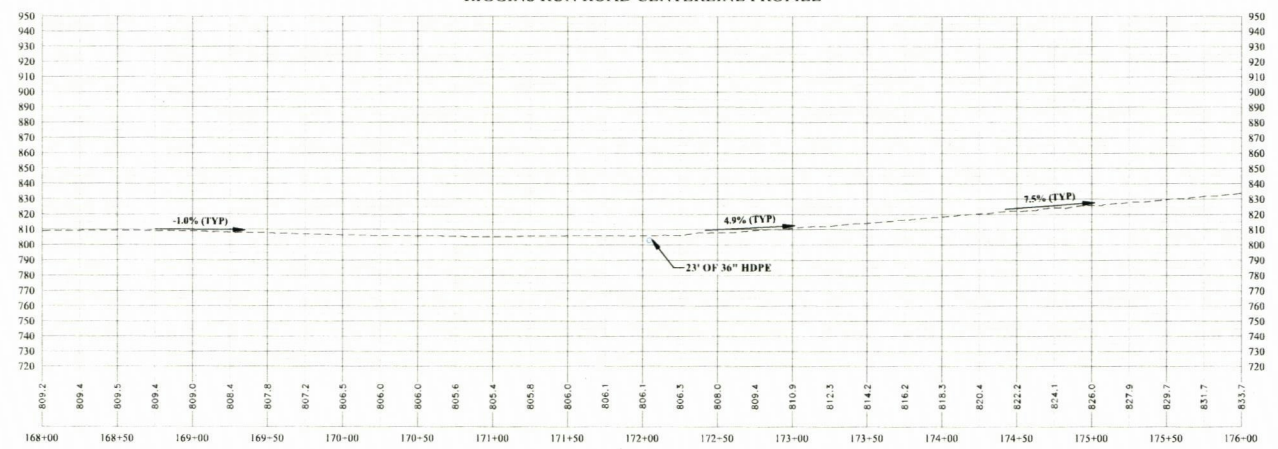
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PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING PROPERTY LINES
	EXISTING RIGHT OF WAY
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED CONTOURS
	PROPOSED CUT LIMIT
	PROPOSED FILL LIMIT
	ENVIRONMENTAL AREA OF INTEREST
	DELINEATED STREAM - EPHEMERAL (EPI)
	DELINEATED STREAM - INTERMITTENT (INT)
	DELINEATED STREAM - PERENNIAL (PER)
	DELINEATED WETLAND - PALUSTRINE EMERGENT (PEM)
	DELINEATED WETLAND - PALUSTRINE SCRUBSHRUB (PSS)
	EXISTING ROAD EDGE
	EXISTING UNIMPROVED DRIVEWAY
	EXISTING FENCE LINE
	EXISTING GUARDRAIL
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EXISTING TREE LINE
	EXISTING BRIDGE LINE
	EXISTING CULVERT
	EXISTING STRUCTURE
	EXISTING POST
	PROPOSED PHASE II 401 CONTROLS
	PROPOSED 14IN COMPOST FILTER SOCK
	PROPOSED SMART FENCE
	PROPOSED ROAD EDGE
	PROPOSED GUARDRAIL
	PROPOSED CULVERT
	PROPOSED TYPE I CURB
	PROPOSED ROCK CHECK DAM
	PROPOSED OUTLET PROTECTION



RIGGINS RUN ROAD CENTERLINE PROFILE



PROFILE LEGEND	
	EXISTING GROUND
	PROPOSED GRADE
	PROPOSED CULVERT

- GENERAL NOTES**
- SEE "SW" SHEETS FOR CULVERT INSTALLATION ELEVATIONS, SLOPE, ETC.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD WIDTH SHALL MATCH THE EXISTING WIDTH.
  - UNLESS OTHERWISE NOTED, THE PROPOSED ROAD PROFILE SHALL MATCH THE EXISTING ROAD PROFILE.



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SCALE:	DATE: 08.21.2021
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APPROVED: JCA	DATE: 08.21.2021
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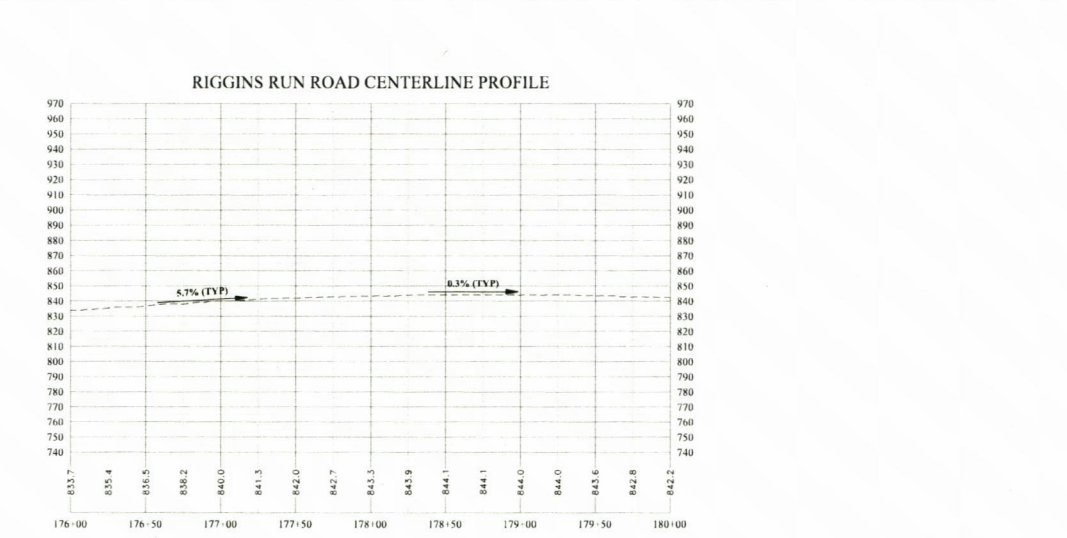
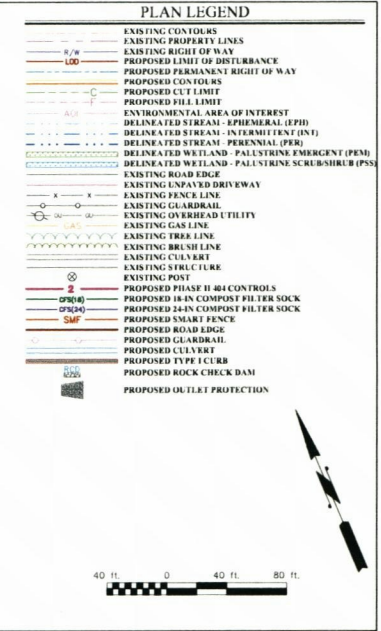
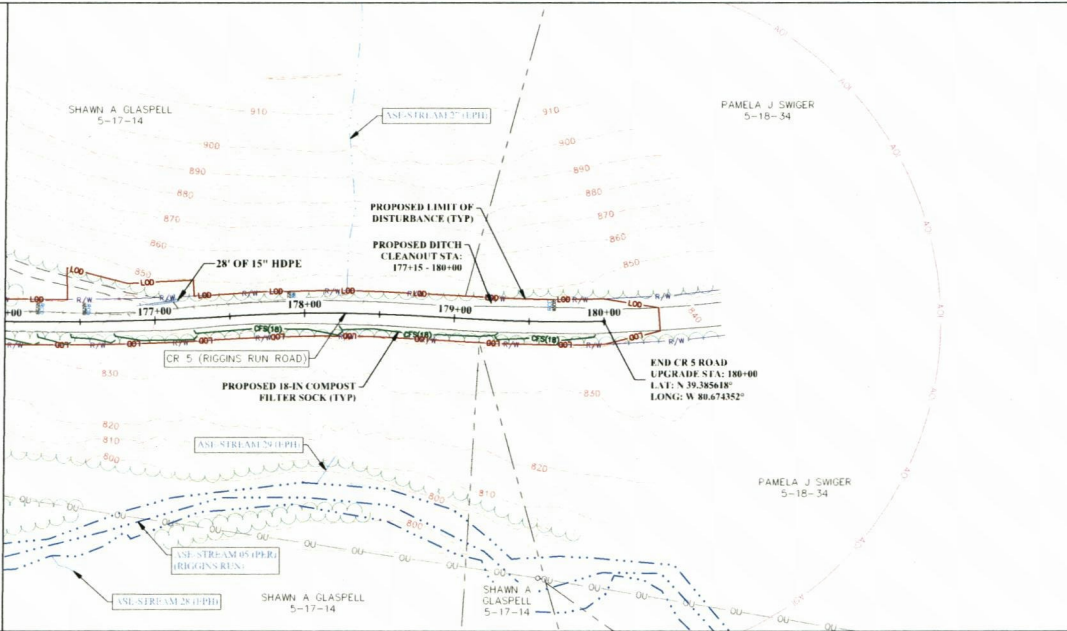
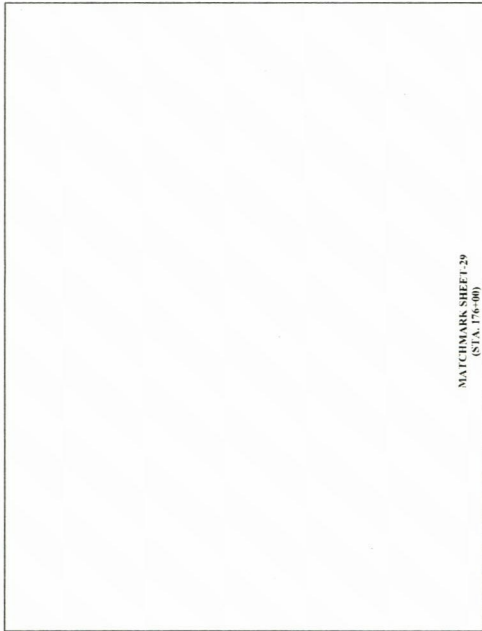
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CONTRACT No.:	
PROJECT No.:	015-10075

PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA CR 5 STA. 168+00 - 176+00

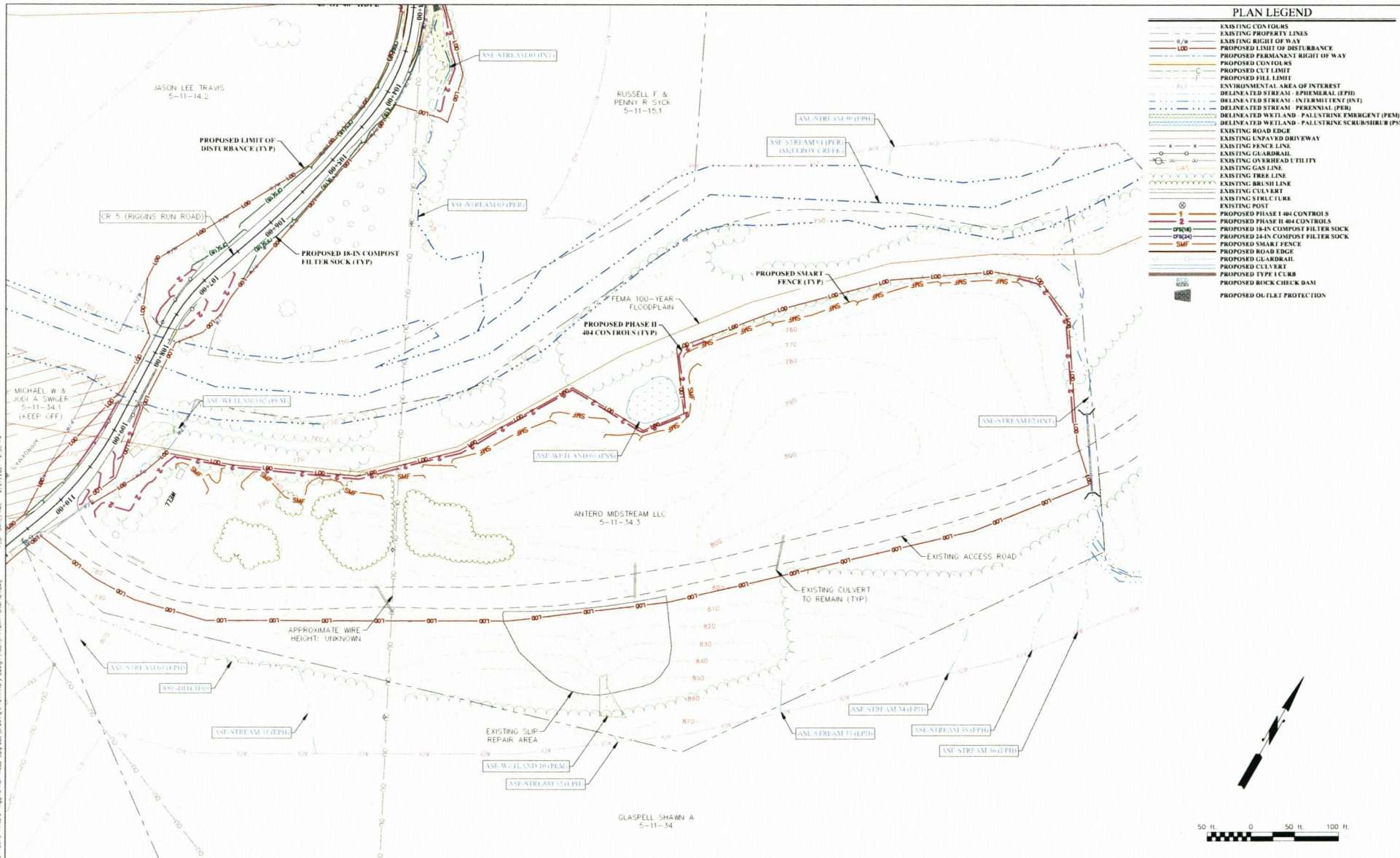
SHEET No.  
**29**

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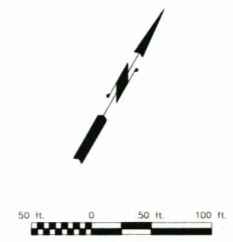
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PLAN LEGEND	
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SURVEY DATE:	
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FIELD BOOK NO.:	



PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

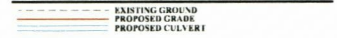
PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 WASTE AREA

SHEET No.  
**31**

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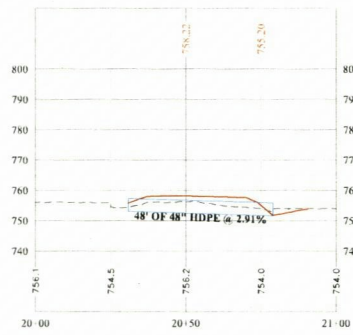
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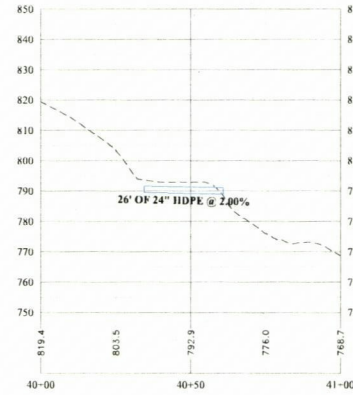
**GENERAL NOTES**

1. CULVERT NAME INDICATES CENTERLINE ALIGNMENT STATION FOR CULVERT CROSSING
2. CULVERT ELEVATIONS AS SHOWN SET TO PROVIDE A MINIMUM OF 1.25-FEET COVER FROM EXISTING CONTOUR DATA. CONTRACTOR TO FIELD ADJUST IF NECESSARY TO ENSURE SUFFICIENT COVER FOR FDR OPERATIONS
3. SEE SHEET 18 FOR ADDITIONAL STORMWATER NETWORK DETAILS.

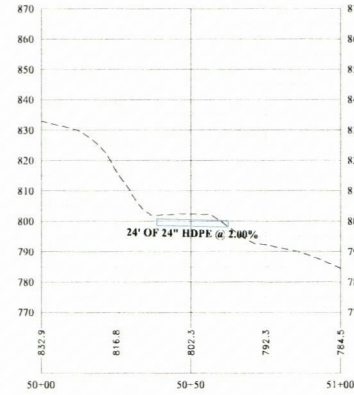
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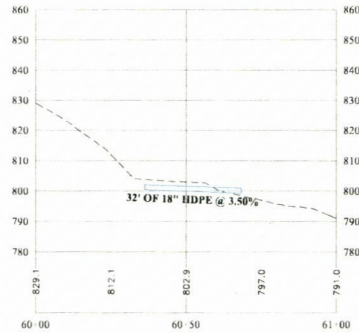
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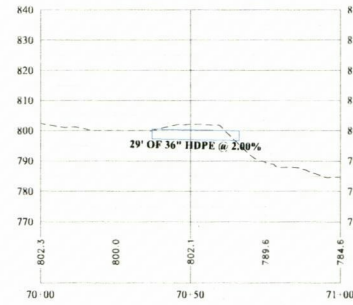
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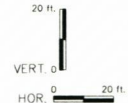
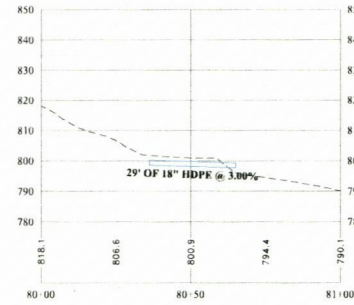
**Culvert 126 PROFILE**



**Culvert 128 PROFILE**



**Culvert 131 PROFILE**



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SURVEY BY	
FIELD BOOK NO.	



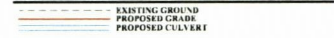
PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

**PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA STORMWATER PROFILES**

SHEET No.

**SW1**

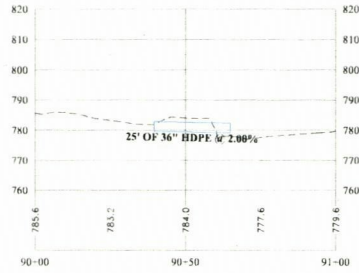
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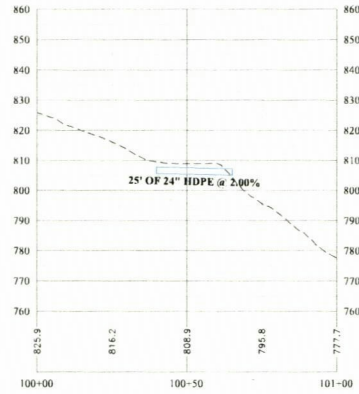
**GENERAL NOTES**

1. CULVERT NAME INDICATES CENTERLINE ALIGNMENT STATION FOR CULVERT CROSSING
2. CULVERT ELEVATIONS AS SHOWN SET TO PROVIDE A MINIMUM OF 1.25-FT COVER FROM EXISTING CENTERLINE DATA. CONTRACTOR TO FIELD ADJUST IF NECESSARY TO ENSURE SUFFICIENT COVER FOR FDR OPERATIONS
3. SEE SHEET 18 FOR ADDITIONAL STORMWATER NETWORK DETAILS.

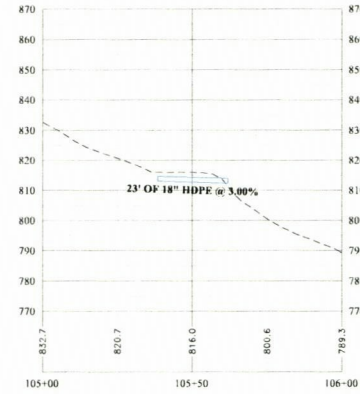
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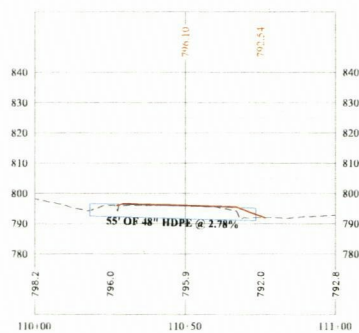
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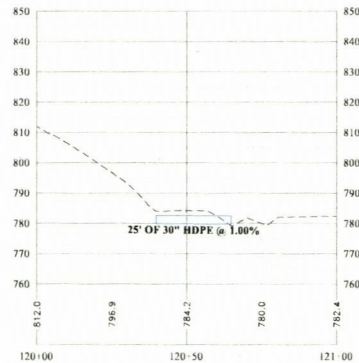
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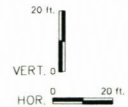
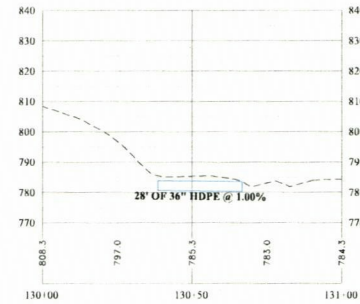
**Culvert 149 PROFILE**



**Culvert 157 PROFILE**



**Culvert 160 PROFILE**



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SURVEY BY	
FIELD BOOK No.	



PHASE No.	
CONTRACT No.	
PROJECT No.	
	015-10075

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
STORMWATER PROFILES

SHEET No.  
**SW2**

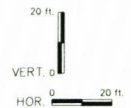
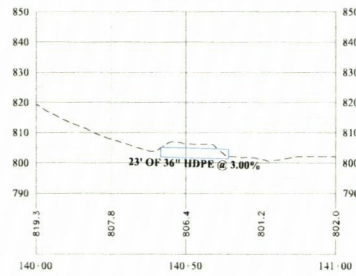
**PROFILE LEGEND**

- EXISTING GROUND
- PROPOSED GRADE
- PROPOSED CULVERT

**GENERAL NOTES**

1. CULVERT NAME INDICATES CENTERLINE ALIGNMENT STATION FOR CULVERT CROSSING
2. CULVERT ELEVATIONS AS SHOWN SET TO PROVIDE A MINIMUM OF 1.25-FT COVER FROM EXISTING CONTOUR DATA. CONTRACTOR TO FIELD ADJUST IF NECESSARY TO ENSURE SUFFICIENT COVER FOR FDR OPERATIONS
3. SEE SHEET 18 FOR ADDITIONAL STORMWATER NETWORK DETAILS.

**Culvert 172 PROFILE**



CASE FILE: R:\DATA\2021-10075-Stormwater\Drawings\Stormwater\10075-Stormwater.dwg  
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SURVEY DATE	
SURVEY BY	
FIELD BOOK No.	

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 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
 PHONE: (304) 624-4108 • FAX: (304) 624-7837

PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

**PRELIMINARY PLANS FOR**  
**RIGGINS RUN ROAD UPGRADES**  
**DODDRIDGE COUNTY**  
**WEST UNION, WEST VIRGINIA**  
**STORMWATER PROFILES**

SHEET No.  
SW3

EROSION CONTROL NOTES

- 1. EROSION AND SEDIMENT CONTROL MEASURES... 2. ALL PROTECTIVE ADVISORY... 3. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL... 5. EROSION AND SEDIMENT CONTROL... 51. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN... 52. LIMITS TO CLEARING AND GRADING... 53. INST. ALL EROSION AND SEDIMENT PERMIT... 54. CONCENTRATED STORM WATER RUNOFF... 55. EARTH STABILIZATION MEASURES... 56. STABILIZATION OF CRITICAL AREAS... 57. STORM WATER RUNOFF... 58. REVEGETATE SOIL... 59. SOIL STOCKPILES... 60. UNSTABLE SOILS... 61. SOIL SHALL BE REMOVED... 62. STABILIZE DISTURBED... 63. SEDIMENT AND EROSION CONTROL... 64. REMEDIATION FOR UNDERGROUND... 65. DISTURBED AREAS... 66. SOLID SANDS... 67. OFF-SITE... 68. ALL EROSION AND SEDIMENT... 69. OTHER EROSION AND SEDIMENT... 70. WINTERIZATION... 71. CONCRETE... 72. OPEN BURNING... 73. DUST CONTROL... 74. OTHER AIR POLLUTING... 75. PROCESS WASTE... 76. THIS WORK WILL OCCUR... 77. TREE CLEARING... 78. SEDIMENT BARRIERS... 79. LAND GRUBBING... 80. GRADING... 81. SURFACE STABILIZATION...

ADDITIONAL CONSTRUCTION SITE POLLUTION CONTROLS

- 1. CONSTRUCTION PERSONNEL... 2. CONTAINERS... 3. NO CONSTRUCTION... 4. HANDLING... 5. EQUIPMENT... 6. CONCRETE... 7. SPILL... 8. CONTAMINATED SOILS... 9. OPEN BURNING... 10. DUST CONTROL... 11. OTHER AIR POLLUTING... 12. PROCESS WASTE WATER... 13. THIS WORK WILL OCCUR... 14. TREE CLEARING... 15. SEDIMENT BARRIERS... 16. LAND GRUBBING... 17. GRADING... 18. SURFACE STABILIZATION...

EROSION & SEDIMENT CONTROL PLAN RIGGINS RUN ROAD IMPROVEMENTS PRELIMINARY PLAN

SEPTEMBER 2021

VICINITY MAP NOT TO SCALE

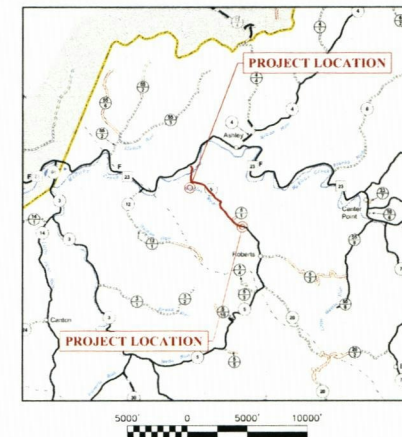


Table with 2 columns: SITE INFO and DEVELOPER. Includes site description, schedule of major construction, and developer information (Antero Resources Corporation).

CONSTRUCTION SEQUENCE

- 1. PRIOR TO COMMENCEMENT... 2. TREE CLEARING... 3. SEDIMENT BARRIERS... 4. LAND GRUBBING... 5. GRADING... 6. SURFACE STABILIZATION... 7. COUNTY ROUTE IMPROVEMENTS... 8. FINAL STABILIZATION... 9. AFTER 70%... 10. AFTER 70%...

PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES

WEST UNION, WEST VIRGINIA

EROSION & SEDIMENT COVER

SHEET No.

ES1

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Table with 2 columns: SCALE, DATE, and DESCRIPTION. Includes drawing scale and revision details.



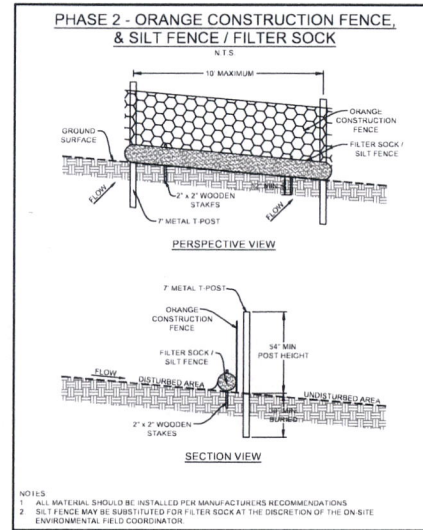
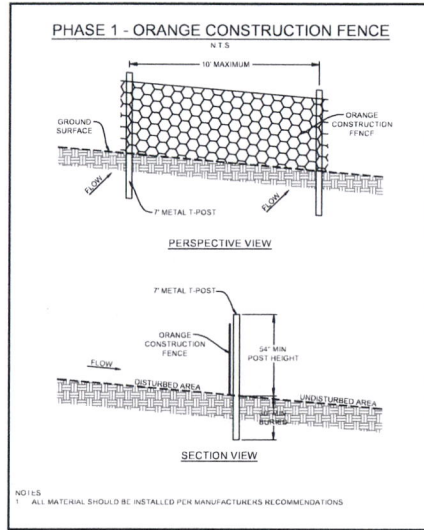
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**GENERAL GUIDELINES FOR INSTALLATION:**

1. ALL FEATURES WHICH ARE INSIDE OR IMMEDIATELY ADJACENT TO THE WORK AREA/LOD SHALL BE PROTECTED.
2. HEADWATERS OF ANY STREAM(S) INSIDE THE LOD SHOULD BE HORSESHOED WITH THE PROTECTION EXTENDING DOWN TO THE LOD AND FLARED OUT A MINIMUM OF 50'
3. ALL WETLANDS NOT SLATED FOR IMPACT INSIDE THE LOD SHOULD BE COMPLETELY WRAPPED WITH PROTECTION.
4. ALL STREAMS WHICH BEGIN OUTSIDE THE LOD OR ARE PARALLEL TO THE LOD WILL HAVE PROTECTIONS ANYTIME THE FEATURE IS WITHIN 100 FEET OF THE LOD AND CONSTRUCTION ACTIVITY.
5. ALL WETLANDS WITH CLOSE PROXIMITY TO THE LOD SHOULD HAVE PROTECTIONS INSTALLED ALONG THE LOD TO PROTECT THE FEATURE.
6. NO IMPACTS ARE AUTHORIZED TO ANY FEATURES OUTSIDE THE LOD.
7. PROTECTIONS SHOULD BE PROVIDED FOR ANY AND ALL SPECIAL SITUATIONS (I.E. NEARBY CEMETERIES, HOUSES, TREES) TO BE SAVED, WATER WELL, ETC.)



NOTES:  
1. ALL MATERIAL SHOULD BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

NOTES:  
1. ALL MATERIAL SHOULD BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS  
2. SILT FENCE MAY BE SUBSTITUTED FOR FILTER SOCK AT THE DISCRETION OF THE ON SITE ENVIRONMENTAL FIELD COORDINATOR

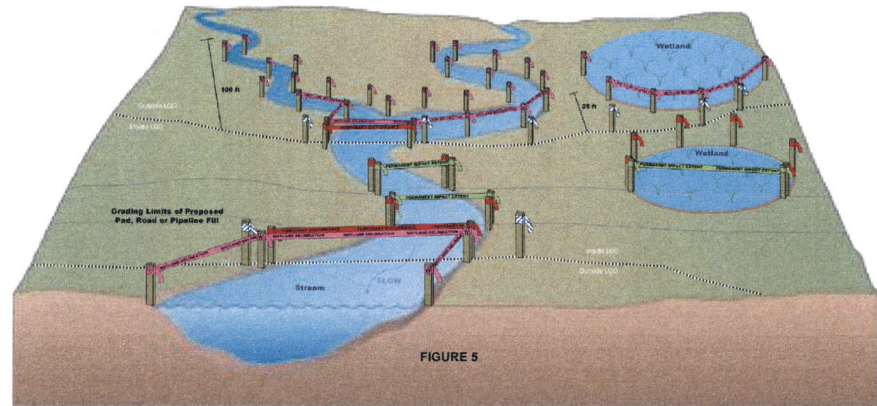
**STREAM AND WETLAND FLAGGING PROTOCOL**

A) JURISDICTIONAL AQUATIC FEATURES THAT ARE LOCATED WITHIN THE LOD AND WITHIN THE PROPOSED GRADING LIMITS AND HAVE BEEN AUTHORIZED FOR THE DISCHARGE OF PERMANENT FILL OR DREDGED MATERIAL SHOULD BE STAKED AND MARKED WITH **LIME GREEN - PERMANENT IMPACT EXTENT FLAGGING** AS SHOWN IN **FIGURE 1**. ADDITIONALLY, STAKES INSTALLED AT THE AUTHORIZED EXTENTS (UPSTREAM AND DOWNSTREAM) SHOULD BE CONNECTED BY **LIME GREEN - PERMANENT IMPACT EXTENT FLAGGING** AS SHOWN IN THE TYPICAL FLAGGING SCHEME (**FIGURE 5**).

B) JURISDICTIONAL AQUATIC FEATURES THAT ARE LOCATED WITHIN THE LOD, BUT ARE LOCATED OUTSIDE OF THE PROPOSED GRADING LIMITS AND HAVE NOT BEEN AUTHORIZED FOR THE DISCHARGE OF PERMANENT FILL OR DREDGED MATERIAL, BUT MAY BE SUBJECT TO TEMPORARY DISTURBANCE RESULTING FROM CONSTRUCTION ACTIVITIES. THESE FEATURES SHOULD BE STAKED AND MARKED WITH **RED - TEMPORARY DISTURBANCE FLAGGING** AS SHOWN IN **FIGURE 2**. ADDITIONALLY, STAKES INSTALLED AT THE EDGE OF THE LOD SHOULD BE CONNECTED BY **RED - TEMPORARY DISTURBANCE FLAGGING** AS SHOWN IN THE TYPICAL FLAGGING SCHEME (**FIGURE 5**). IF TEMPORARY DISTURBANCE TO THESE FEATURES IS UNAVOIDABLE DURING CONSTRUCTION, THEY MUST BE PROTECTED BY TEMPORARY MATTING AND EROSION AND SEDIMENT CONTROL MEASURES AND RETURNED TO RE-CONSTRUCTION CONDITIONS ONCE THE TEMPORARY DISTURBANCE HAS CEASED.

C) JURISDICTIONAL AQUATIC FEATURES THAT ARE LOCATED OUTSIDE OF THE LOD HAVE NOT BEEN AUTHORIZED FOR THE DISCHARGE OF PERMANENT FILL OR DREDGED MATERIAL AND SHOULD BE AVOIDED. FEATURES THAT ARE WITHIN 100 FEET OF THE LOD SHOULD BE STAKED AND MARKED WITH **PINK - WETLAND DELINEATION FLAGGING** AS SHOWN IN **FIGURE 3**. STAKES INSTALLED ON THESE FEATURES WITHIN 25 FEET OF THE LOD SHOULD BE CONNECTED WITH **VISIBLE PINK - WETLAND DELINEATION FLAGGING**.

D) THE LOD AROUND AQUATIC FEATURES SHOULD BE CLEARLY STAKED AND MARKED WITH **BLUE AND WHITE STRIPED FLAGGING** AS SHOWN IN **FIGURE 4**. STAKES INSTALLED AS THE LOD MARKER SHOULD BE CONNECTED WITH **BLUE AND WHITE STRIPED FLAGGING** AS SHOWN IN THE TYPICAL FLAGGING SCHEME (**FIGURE 5**). FEATURES LOCATED BEYOND THE LOD FLAGGING SCHEME SHOULD BE PROTECTED UPSTREAM WITH PROPER EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT THE TRANSPORT OF SEDIMENT INTO DOWNSTREAM WATERS OF THE UNITED STATES.



<p><b>FIGURE 1</b> <b>Pink Wetland Delineation Flagging</b></p> <p>Denotes aquatic features that are located outside of the LOD but are within 100 feet of the LOD and have not been authorized for permanent fill or temporary disturbance. Stakes with pink flagging will be installed using the specific feature extent stakes within 25 feet of the LOD will be connected by pink flagging.</p> <p><b>WETLAND DELINEATION</b></p>	<p><b>FIGURE 2</b> <b>Lime Green Permanent Impact Extent Flagging</b></p> <p>Denotes aquatic features located within the LOD that have been authorized for permanent fill. Stakes at extent of disturbance will be connected by lime green flagging.</p> <p><b>PERMANENT IMPACT EXTENT</b></p>	<p><b>FIGURE 3</b> <b>Red Temporary Disturbance Flagging</b></p> <p>Denotes aquatic features located within the LOD that are not permitted for permanent fill but are subject to temporary disturbance. Stakes at LOD edge will be connected by red flagging.</p> <p><b>TEMPORARY DISTURBANCE</b></p>	<p><b>FIGURE 4</b> <b>Blue and White Striped Flagging</b></p> <p>Denotes the project LOD. Aquatic features located outside of the LOD have not been authorized for the discharge of permanent fill or dredged material or temporary disturbance and must be avoided at all costs.</p> <p><b>WETLAND DELINEATION</b></p>
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SURVEY BY:	
FIELD BOOK No.:	

THE THRASHER GROUP, INC.  
CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
800 WEST OAKS BOULEVARD, BRIDGEPORT, WV 26330  
PHONE: (204) 624-4108 • FAX: (204) 624-7837

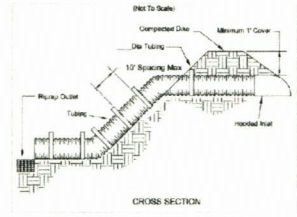
PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

PRELIMINARY PLANS FOR  
RIGGINS RUN ROAD UPGRADES  
DODDRIDGE COUNTY  
WEST UNION, WEST VIRGINIA  
EROSION & SEDIMENT DETAILS

SHEET No.  
**ES3**



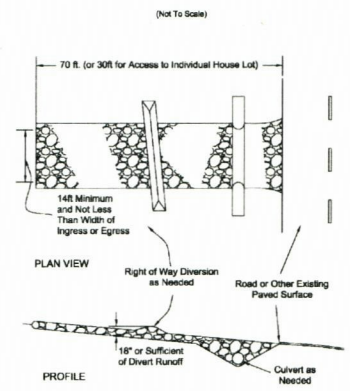
1. THE SLOPE DRAIN SHALL BE CONSTRUCTED ON A MINIMUM SLOPE OF 3 PERCENT.
2. ALL POINTS ALONG THE TOP OF THE DIKE/EARTHILL FOR THE STORAGE AREA SHALL BE AT LEAST ONE (1) FOOT HIGHER THAN THE TOP OF THE INLET PIPE.
3. THE PIPE DRAIN MAY BE CONSTRUCTED OF CORRUGATED METAL OR PVC PIPE. ALL PIPE CONNECTIONS SHALL BE WATER TIGHT. FLEXIBLE TUBING MAY BE USED, PROVIDED RIGID PIPE IS USED FOR THE INLET. THE FLEXIBLE TUBING IS OF THE SAME DIAMETER AS THE INLET, AND PIPE CONNECTIONS ARE MADE WITH METAL STRAPPING OR WATER TIGHT CONNECTING COLLARS. THE FLEXIBLE PIPE SHALL BE CONSTRUCTED WITH HOLD DOWN APPARATUS SPACED ON TEN (10) FOOT CENTERS FOR ANCHORING THE PIPE.
4. THE ENTRANCE TO THE PIPE SHALL BE A HOODED TYPE.
5. THE SOIL AROUND AND/OR UNDER THE PIPE SHALL BE PLACED IN 4-INCH LAYERS AND HAND COMPACTED TO THE TOP OF THE EARTH DIKE.
6. A RIPRAP APRON SHALL BE INSTALLED AT THE PIPE OUTLET WHERE CLEAN WATER IS DISCHARGED INTO A STABILIZED AREA OR DRAINAGEWAY.



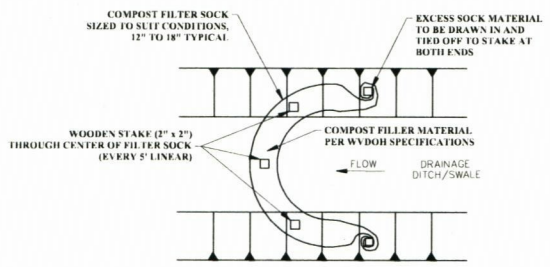
**SLOPE DRAIN**  
NOT TO SCALE

1. STONE SIZE - AASHO # 2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 16 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG, ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:
 

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 LBS
MINIMUM PUNCTURE STRENGTH	80 PSI
MINIMUM TEAR STRENGTH	50 LBS
MINIMUM BURST STRENGTH	170 PSI
MINIMUM ELONGATION	70%
EQUIVALANT OPENING SIZE	ED95 = 0.6 mm
PERMEABILITY	1.0 x 10 <sup>-6</sup> cm/s
6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ON TO PAVED SURFACES.
8. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SLURRY RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND ON TO PAVED SURFACES.
9. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROL S, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.



**CONSTRUCTION ENTRANCE**  
NOT TO SCALE

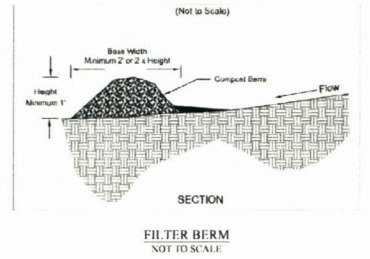


**COMPOST FILTER SOCK DITCH CHECK**  
NOT TO SCALE

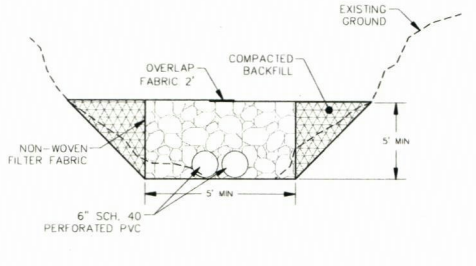
- NOTES:
1. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

1. SUBGRADE FOR THE FILTER AND RIPRAP SHALL BE PREPARED TO THE REQUIRED LIMITS AND GRADES AS SHOWN ON THE PLAN. THE SUBGRADE SHALL BE CLEARED OF ALL TREES, STUMPS, ROOTS, SOIL LOGS, ROCK, OR OTHER MATERIAL.
2. RIPRAP SHALL CONFORM TO THE GRADING LIMITS AS SHOWN ON THE PLAN.
3. NO ABRUPT DEVIATIONS FROM THE DESIGN GRADE OR HORIZONTAL ALIGNMENT SHALL BE PERMITTED.
4. GEOTEXTILE SHALL BE SECURELY ANCHORED ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
5. GEOTEXTILE SHALL BE LAID WITH THE LONG DIMENSION PARALLEL TO THE DIRECTION OF FLOW AND SHALL BE LAID LOOSELY BUT WITHOUT WRINKLES AND CREASES. WHERE JOINTS ARE NECESSARY, STRIPS SHALL BE PLACED TO PROVIDE A 12 IN. MINIMUM OVERLAP WITH THE UPSTREAM STRIP OVERLAPPING THE DOWNSTREAM STRIP.
6. GRAVEL BEDDING SHALL BE AASHO NO. 47'S OR 57'S UNLESS SHOWN DIFFERENTLY ON THE DRAWINGS.
7. RIPRAP MAY BE PLACED BY EQUIPMENT BUT SHALL BE PLACED IN A MANNER TO PREVENT SHIPPAGE OR DAMAGE TO THE GEOTEXTILE. RIPRAP SHALL BE PLACED BY A METHOD THAT DOES NOT CAUSE SHEAR OR PUSHING OF STRIPS IN ANY DIRECTION WITH A DRAPEY CAUSING SEGREGATION AND SHALL BE AVOIDED BY DELIVERING RIPRAP NEAR ITS FINAL LOCATION WITHIN THE CHANNEL.
8. CONSTRUCTION SHALL BE SEQUENCED SO THAT RIPRAP CHANNEL PROTECTION IS PLACED AND FUNCTIONAL WITHIN FIVE DAYS WHEN THE CHANNEL BECOMES OPERATIONAL.
9. ALL DISTURBED AREAS WILL BE VEGETATED AS SOON AS PRACTICAL.

1. MATERIALS - COMPOST USED FOR FILTER BERMS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY RESIDUE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF PARTICLES RANGING FROM 1/4\"/>
- 2. INSTALLATION - FILTER BERMS WILL BE PLACED ON A 1/4\"/>
- 3. MAINTENANCE - INSPECT FILTER BERMS AFTER EACH SIGNIFICANT RAIN, MAINTAINING THE BERMS IN A FUNCTIONAL CONDITION AT ALL TIMES. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER BERMS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE. WHERE THE FILTER BERM DEGRADATES OR FAILS IT WILL BE REPLACED IMMEDIATELY OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
- 4. REMOVAL - FILTER BERMS NO LONGER NEEDED WILL BE DISPERSED ON SITE IN A MANNER THAT WILL FACILITATE SEEDING.

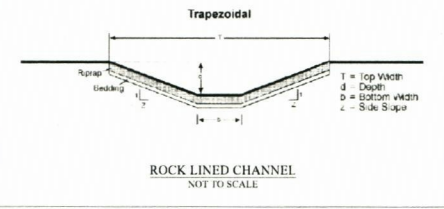


**FILTER BERM**  
NOT TO SCALE



**ROCK CORE DRAIN DETAIL**  
NOT TO SCALE

- NOTES:
1. CORE DRAIN SHALL BE PLACED IN ALL LOCATIONS WHERE EXISTING STREAMS ARE TO BE FILLED.
  2. ALL ROCK PLACED IN CORE DRAIN MUST BE DURABLE ROCK AND NOT BE PRONE TO DEGRADATE OR BREAK DOWN IN WATER.
  3. GEOTEXTILE FABRIC SHALL MEET WYDOH SPECIFICATION FOR ENGINEERING FABRIC FOR SUBSURFACE DRAINAGE.
  4. ALL ROCK SHALL RANGE FROM 6 IN TO 12 IN IN ALL DIMENSIONS.
  5. ALL DRAINAGE WAYS AND SEEP AREAS SHALL HAVE A ROCK CORE DRAIN WITH A 5 MIN BOTTOM WIDTH AND 5 MIN DEPTH. THESE DRAINS SHALL BE CONVEYED AND TIED INTO THE MAIN ROCK CORE DRAIN.
  6. NO EXCAVATION SHALL BE MADE THROUGH THE KEY AND DRAIN. THE ROCK CORE DRAIN SHALL BE PLACED ON TOP OF THE KEYWAY.
  7. THE BONDING BENCH DRAINS IN TO ROCK CORE DRAIN WHERE APPLICABLE.



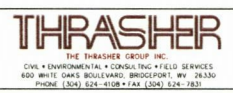
**ROCK LINED CHANNEL**  
NOT TO SCALE

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**2021-09-21**



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CHECKED: RHM	DATE: 09-21-2021
APPROVED: JCA	DATE: 09-21-2021
SURVEY DATE	
SURVEY BY	
FIELD BOOK NO.	



PHASE No.	
CONTRACT No.	
PROJECT No.	
015-10075	

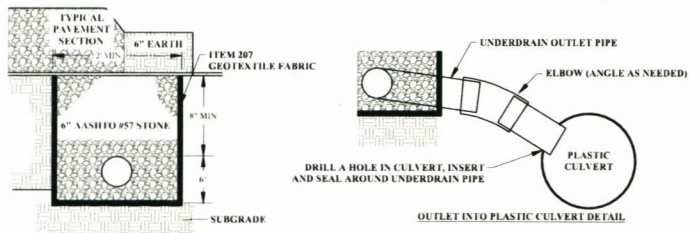
PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA EROSION & SEDIMENT DETAILS

SHEET No.  
**ES5**

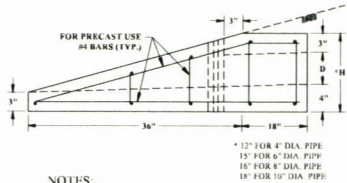
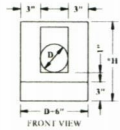
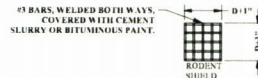
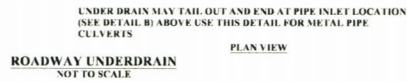
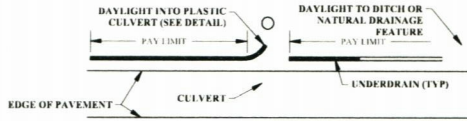




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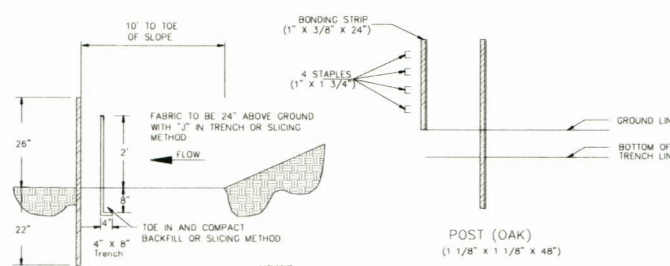


- NOTE: 1) PLASTIC PIPE TO BE 4\"/>



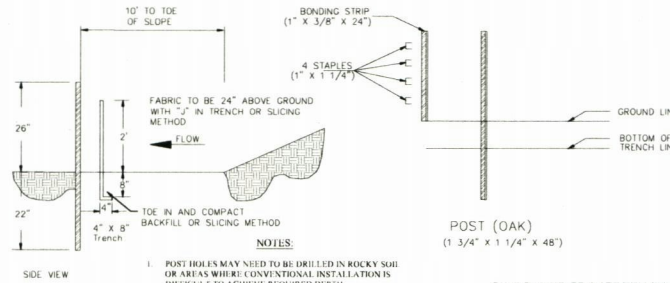
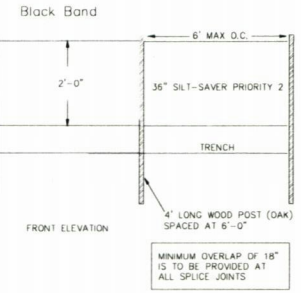
- NOTE: 1) SLOPEWALL SHALL BE INSTALLED AT EACH LOCATION WHERE TRENCH DRAIN DAYLIGHTS...

SLOPEWALL FOR DRAIN OUTLET DETAIL NOT TO SCALE



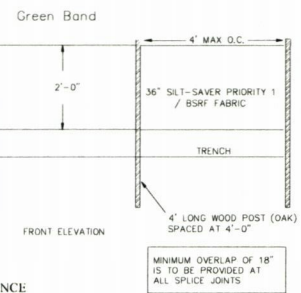
- NOTE: 1) POST HOLES MAY NEED TO BE DRILLED IN ROCKY SOIL...

SILT SAVER SS-2 (BLACK BAND) SILT FENCE NOT TO SCALE

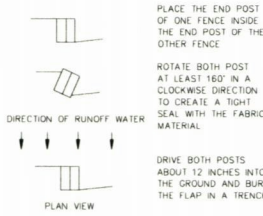


- NOTE: 1) POST HOLES MAY NEED TO BE DRILLED IN ROCKY SOIL...

SILT SAVER SS-1 (GREEN BAND) SILT FENCE NOT TO SCALE



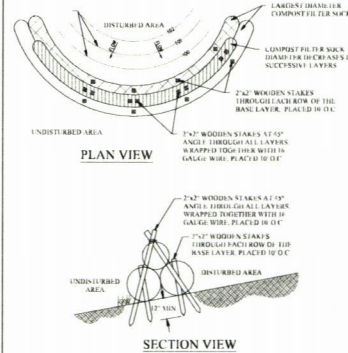
ATTACHING TWO SILT FENCES WHEN TREACHING IS USED



NOTE:

- 1) POST HOLES MAY NEED TO BE DRILLED IN ROCKY SOIL...

SILT SAVER SILT FENCE REPAIR NOT TO SCALE



NOTE:

- 1) COMPOST FILTER SOCK TO BE INSTALLED IN ACCORDANCE WITH FILTER MANUFACTURER SPECIFICATIONS...

STACKED COMPOST FILTER SOCK DETAIL NOT TO SCALE

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ISSUED FOR PERMITTING 2021-09-21



Table with columns: SCALE, DRAWN, CHECKED, APPROVED, SURVEY DATE, FIELD BOOK No.

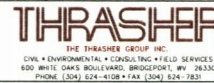


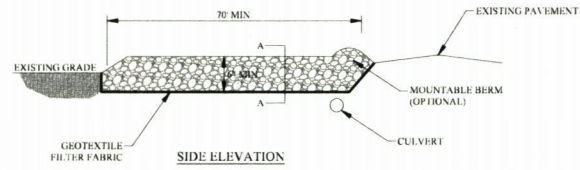
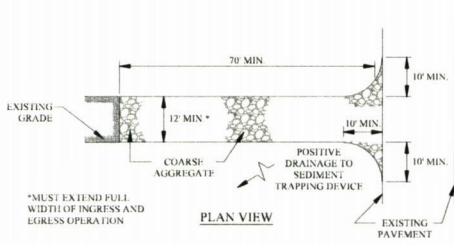
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PRELIMINARY PLANS FOR RIGGINS RUN ROAD UPGRADES DODDRIDGE COUNTY WEST UNION, WEST VIRGINIA EROSION & SEDIMENT DETAILS

SHEET No.

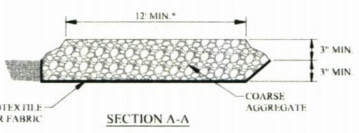
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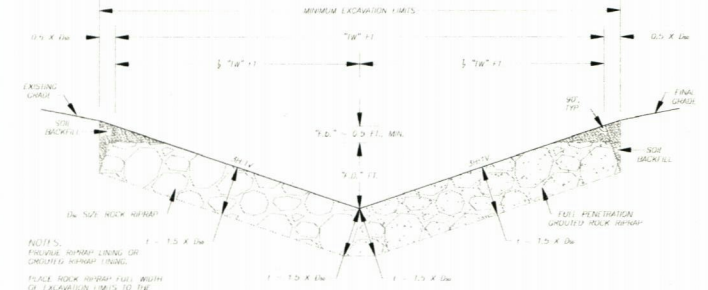
**NOTES:**

1. LENGTH - AS REQUIRED BASED ON FIELD CONDITIONS BUT NOT LESS THAN 70'
2. WIDTH - FULL WIDTH OF ENTRANCE BUT NOT LESS THAN 10' AND FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE.
4. STONE - 3" - 6" CLEAN AGGREGATE SHALL BE PLACED AT LEAST 9" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 7" OF STONE OVER THE PIPE. PIPE SHALL BE INSTALLED AS SHOWN ON THE PLAN.
6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT AS SHOWN ON THE PLAN AND EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.



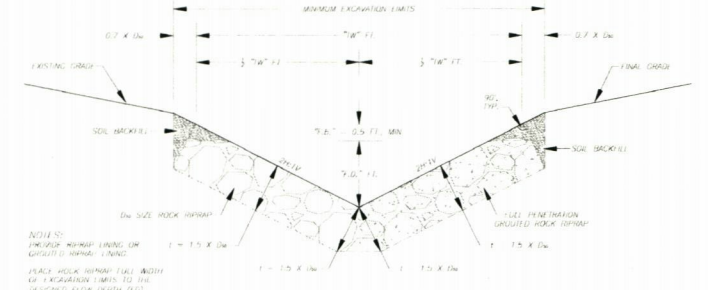
**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE

DRAINAGE	ROCK RIPRAP SIZING			
	Sw 6"	Sw 12"	Sw 18"	Sw 24"
SOIL	6" 9"	12" 18"	18" 24"	24" 36"
SOIL	3" 6"	6" 12"	9" 18"	12" 24"
SOIL	< 3"	3" 6"	4.5" 9"	6" 12"

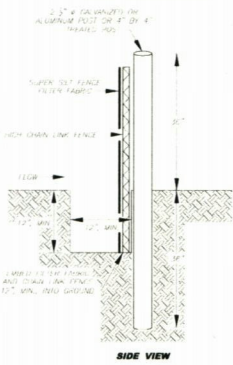
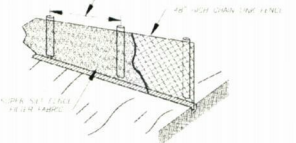
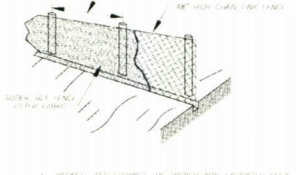
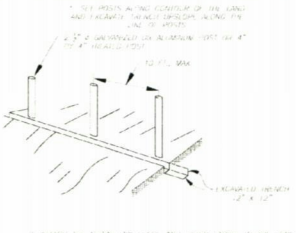


**RIPRAP OR GROUTED RIPRAP**  
**3H-IV "VEE" CHANNEL**  
NOT TO SCALE

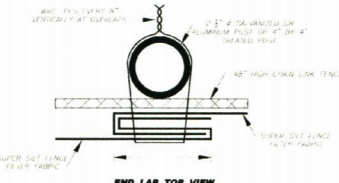
DRAINAGE	ROCK RIPRAP SIZING			
	Sw 6"	Sw 12"	Sw 18"	Sw 24"
SOIL	6" 9"	12" 18"	18" 24"	24" 36"
SOIL	3" 6"	6" 12"	9" 18"	12" 24"
SOIL	< 3"	3" 6"	4.5" 9"	6" 12"



**RIPRAP OR GROUTED RIPRAP**  
**2H-IV "VEE" CHANNEL**  
NOT TO SCALE



**SIDE VIEW**  
NO SCALE



**END LAP TOP VIEW**  
NO SCALE

**SUPER SILT FENCE NOTES:**

1. LENGTH - AS REQUIRED BASED ON FIELD CONDITIONS BUT NOT LESS THAN 70'
2. WIDTH - FULL WIDTH OF ENTRANCE BUT NOT LESS THAN 10' AND FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE.
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6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT AS SHOWN ON THE PLAN AND EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

**SUPER SILT FENCE DETAIL**  
NOT TO SCALE

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**2021-09-21**



SCALE	DATE
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CHECKED: RRP	DATE: 08.21.2021
APPROVED: JCA	DATE: 08.21.2021
SURVEY DATE	
SURVEY BY	
FIELD BOOK NO.	



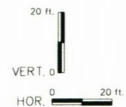
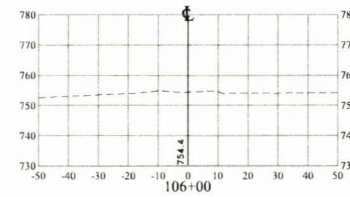
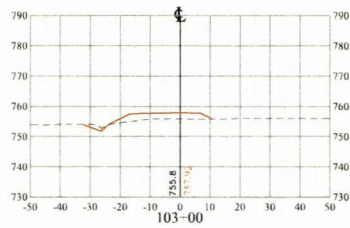
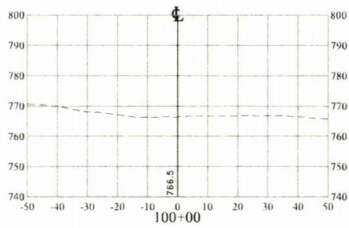
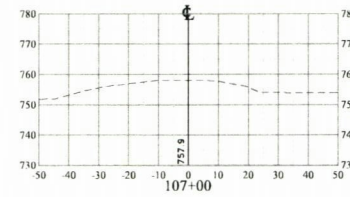
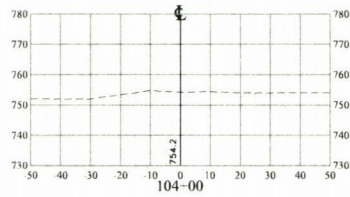
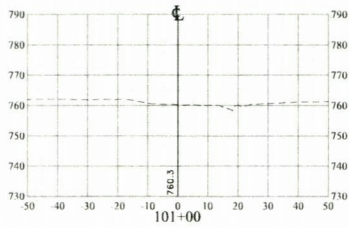
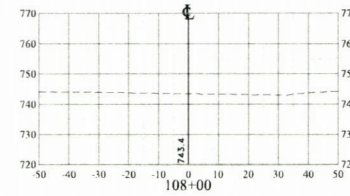
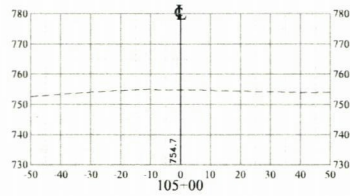
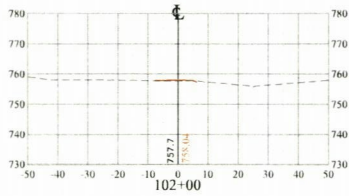
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CONTRACT No.	
PROJECT No.	
015-10075	

**PRELIMINARY PLANS FOR**  
**RIGGINS RUN ROAD UPGRADES**  
**DODDRIDGE COUNTY**  
**WEST VIRGINIA**  
**EROSION & SEDIMENT DETAILS**

SHEET No.  
**ES9**

SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE

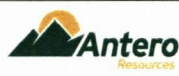


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**2021-09-21**

NO.	BY	DATE	DESCRIPTION



SCALE	DATE
DRAWN: SCB	DATE: 09-21-2021
CHECKED: RSM	DATE: 09-21-2021
APPROVED: JCA	DATE: 09-21-2021
SURVEY DATE	
SURVEY BY	
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 THE THRASHER GROUP, INC.  
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
 400 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
 PHONE: (304) 624-4108 • FAX: (304) 624-7831

PHASE No.	
CONTRACT No.	
PROJECT No.	
	<b>015-10075</b>

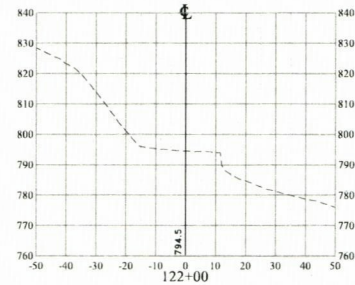
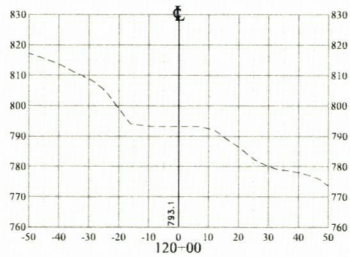
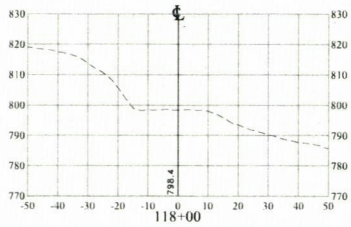
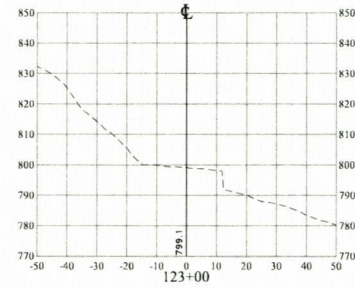
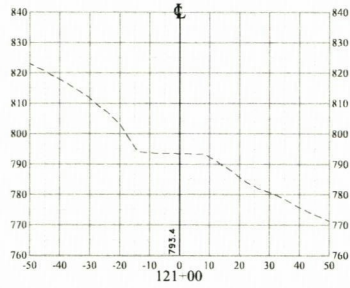
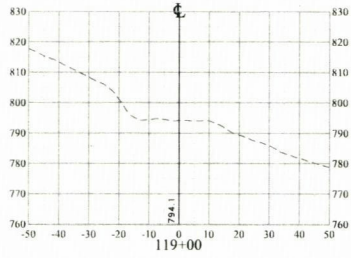
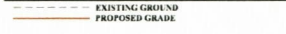
PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X1**





SECTION LEGEND



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CHECKED: RSM	DATE: 09-21-2021
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 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
 PHONE (304) 624-4108 • FAX (304) 624-7831

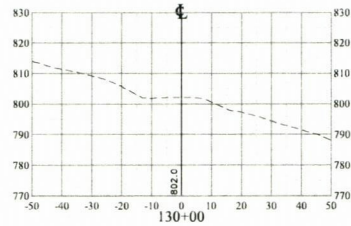
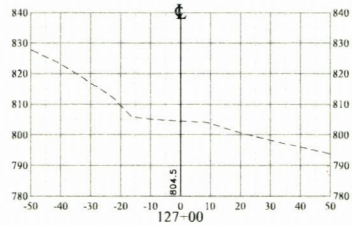
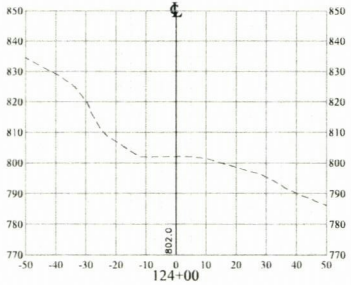
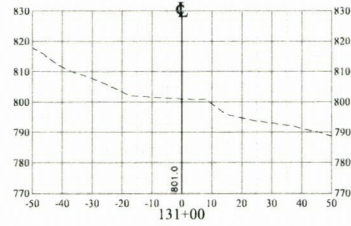
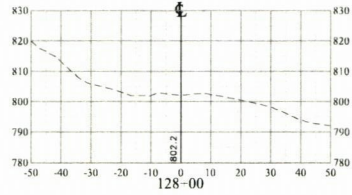
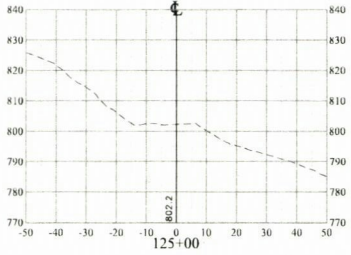
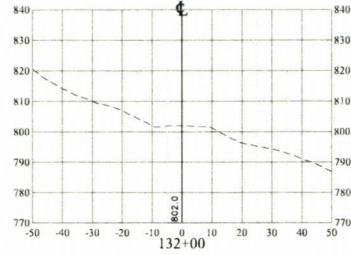
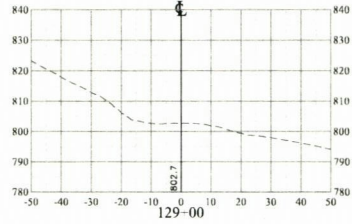
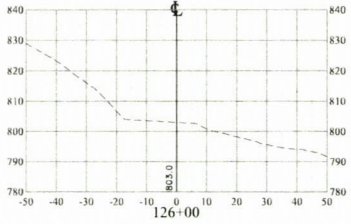
PHASE No.:	
CONTRACT No.:	
PROJECT No.:	<b>015-10075</b>

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X3**

**SECTION LEGEND**

- - - EXISTING GROUND  
 — PROPOSED GRADE



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 CIVIL + ENVIRONMENTAL + CONSULTING + FIELD SERVICES  
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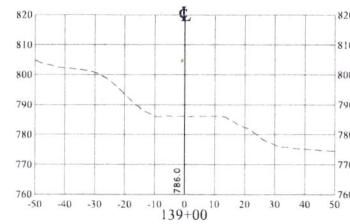
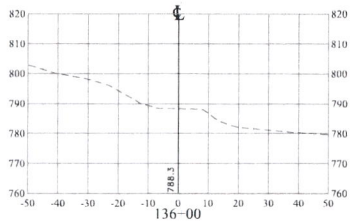
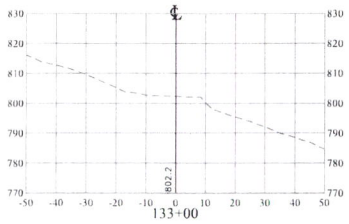
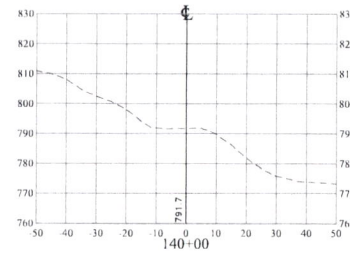
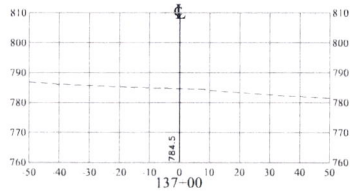
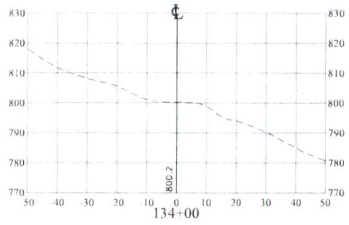
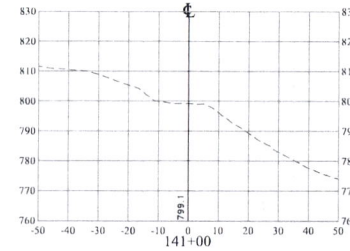
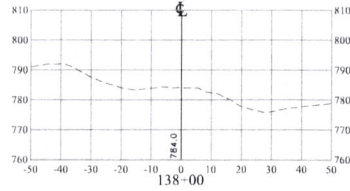
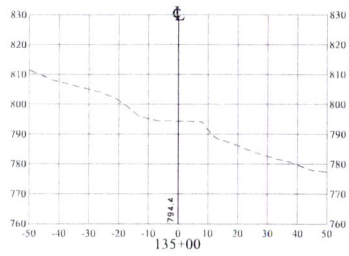
PHASE No.:	
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PROJECT No.:	015-10075

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X4**

SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE



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SURVEY BY	
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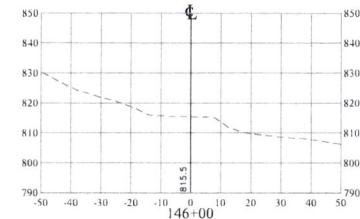
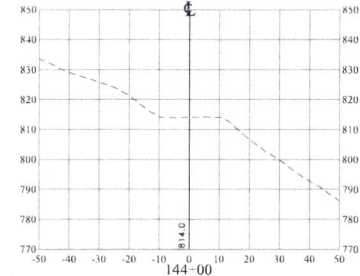
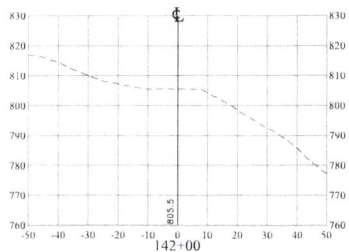
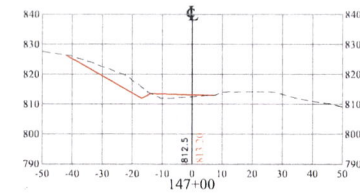
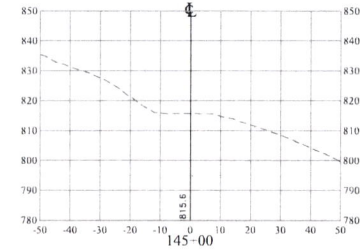
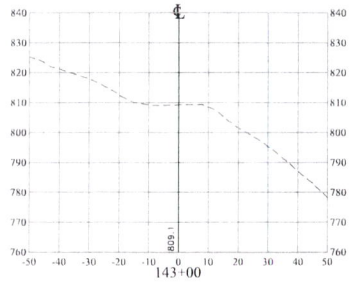
PHASE No.	
CONTRACT No.	
PROJECT No.	
<b>015-10075</b>	

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X5**

SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE



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**2021 - 09 - 21**

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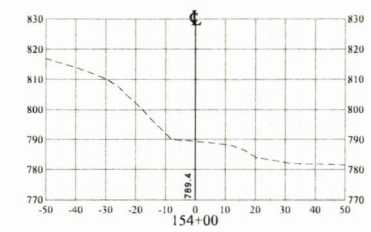
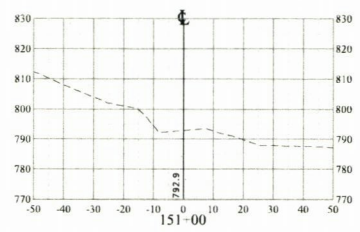
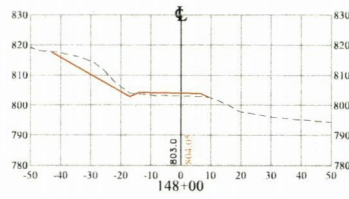
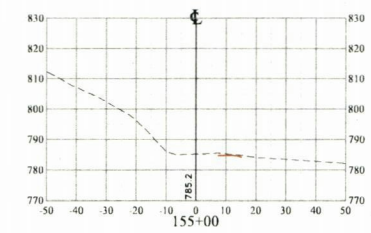
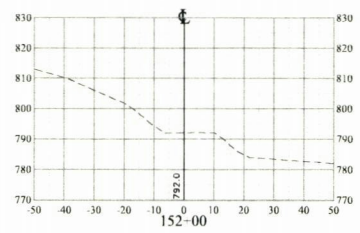
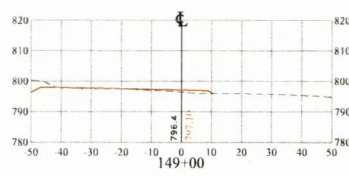
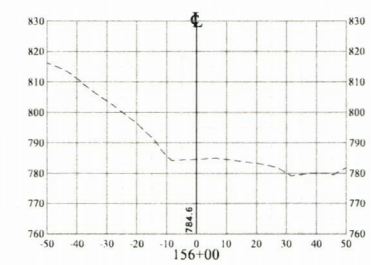
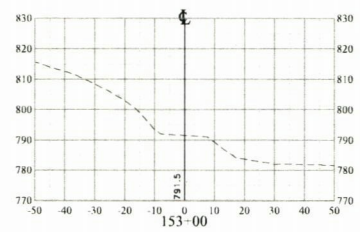
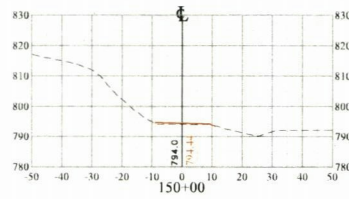
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PROJECT No.	
	015-10075

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X6**

SECTION LEGEND

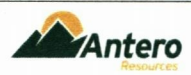
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 --- PROPOSED GRADE



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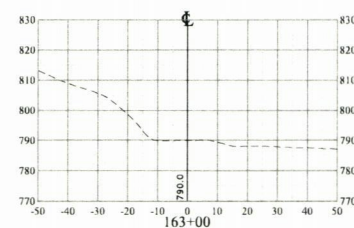
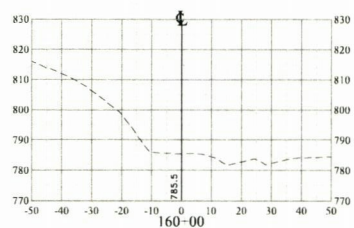
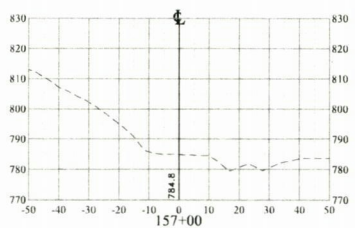
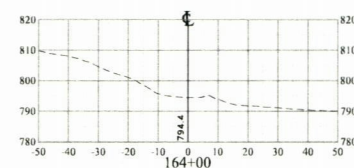
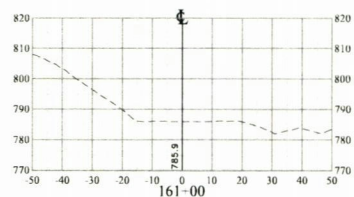
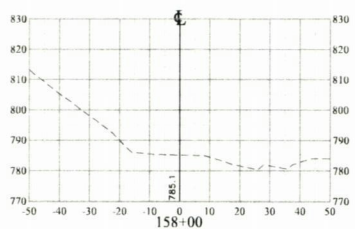
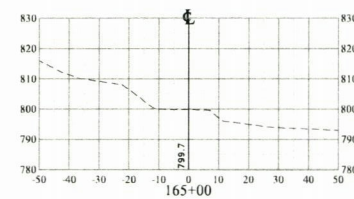
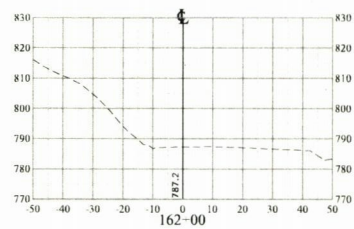
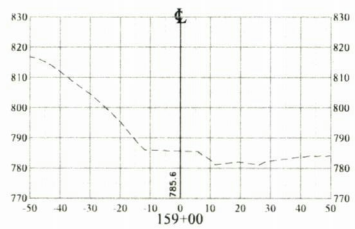
PHASE No.	
CONTRACT No.	
PROJECT No.	015-10075

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X7**

SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE



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SURVEY BY	
FIELD BOOK No.	

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 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
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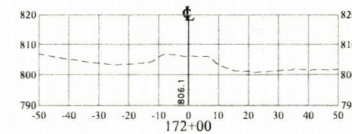
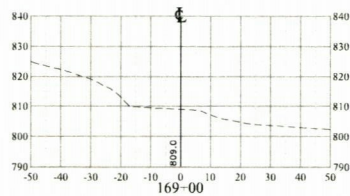
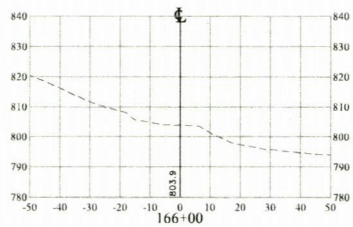
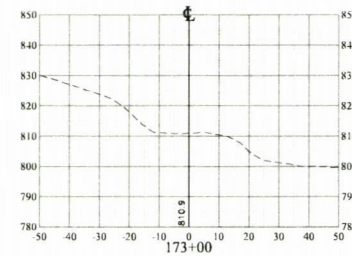
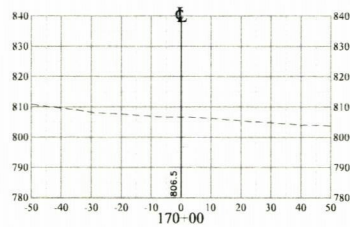
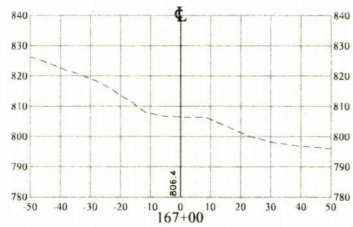
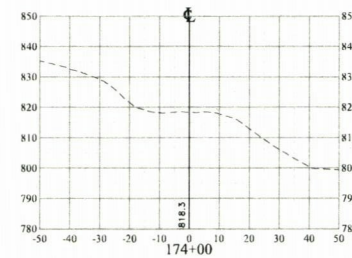
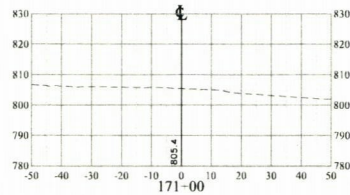
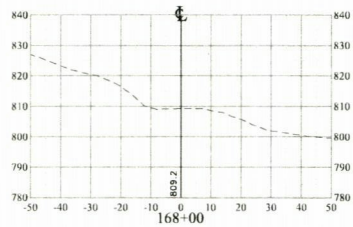
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PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X8**

SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE



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 SURVEY BY  
 FIELD BOOK No.

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 THE THRASHER GROUP, INC.  
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
 PHONE (204) 624-4108 • FAX (204) 624-7831

PHASE No.  
 CONTRACT No.  
 PROJECT No.  
**015-10075**

PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

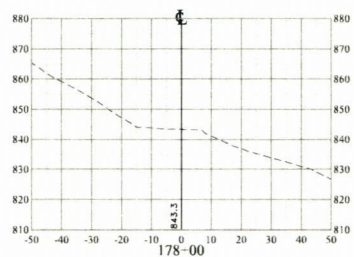
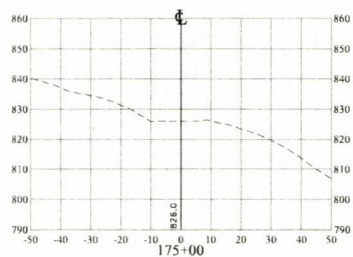
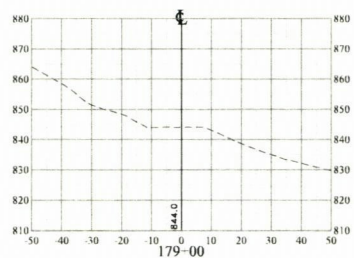
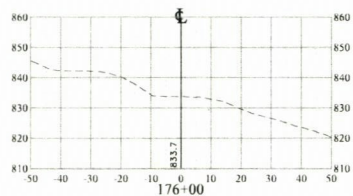
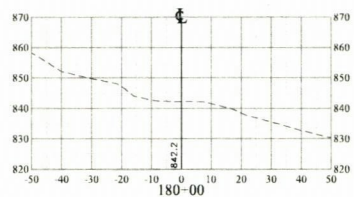
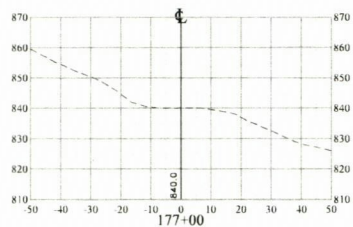
SHEET No.

**X9**



SECTION LEGEND

--- EXISTING GROUND  
 --- PROPOSED GRADE



CAD FILE: I:\2021\10075-Antero-Region-Road-Upgrade\Drawings\Drawings\0015-Prelim-Construction.dwg  
 PLOT DATE/TIME: 9/27/2021 12:58 PM

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**ISSUED FOR PERMITTING**  
**2021-09-21**

NO.	BY	DATE	DESCRIPTION



SCALE	DATE
DRAWN: SCB	09/21/2021
CHECKED: RSM	09/21/2021
APPROVED: JCA	09/21/2021
SURVEY DATE	
SURVEY BY	
FIELD BOOK NO.	

**THRASHER**  
 THE THRASHER GROUP INC.  
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES  
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330  
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PHASE No.	
CONTRACT No.	
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PRELIMINARY PLANS FOR  
 RIGGINS RUN ROAD UPGRADES  
 DODDRIDGE COUNTY  
 WEST UNION, WEST VIRGINIA  
 CR 5 SECTIONS

SHEET No.  
**X10**



George Eidel &lt;doddridgecountyfpm@gmail.com&gt;

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**Antero Resources Corporation: Riggins Run Road - Doddridge County Floodplain Crossing**

1 message

**John Lewis** <JALewis@kleinfelder.com>

Thu, Oct 21, 2021 at 10:37 AM

To: George Eidel &lt;doddridgecountyfpm@gmail.com&gt;

Cc: John Angiulli &lt;jangiulli@anteroresources.com&gt;, "Daniel Bulian (dbulian@anteroresources.com)" &lt;dbulian@anteroresources.com&gt;, "anna@allstarecology.com" &lt;anna@allstarecology.com&gt;, Jeff McCauley &lt;jmccauley@anteroresources.com&gt;, James Anderson &lt;janderson@thethrashergroup.com&gt;, Spencer Brescoach &lt;sbrescoach@thethrashergroup.com&gt;

Hi George,

Antero Resources Corporation (Antero) is proposing to upgrade County Route 5 (Riggins Run Road) in Doddridge County, WV. As a part of these upgrades, Antero proposes to replace an existing culvert and widen the road up to 9.5' along the edge of the FEMA Floodplain (Flood Zone AE, Map Number 54017C0040C). In order to provide adequate cover over the new culvert, Antero proposes re-profiling the area to raise the road a maximum of 2.25'. This re-profiling section is approximately 175' long, with 85' taking place within the floodplain. The re-profiling and widening will produce 145 CY of fill within the floodplain.

Additionally, the existing in-stream culvert is located within an unnamed tributary of McElroy Creek (ASE\_Stream03); with the outlet located below the stream bed elevation. To allow for proper stream flow through the proposed culvert replacement, Antero proposes to excavate and re-profile approximately 106' of the stream, generating approximately 25CY of excavation. This excavation will take place entirely within the FEMA floodplain.

Can you please confirm what is needed in addition to the floodplain permit, such as a no-rise certificate?

Thank you!

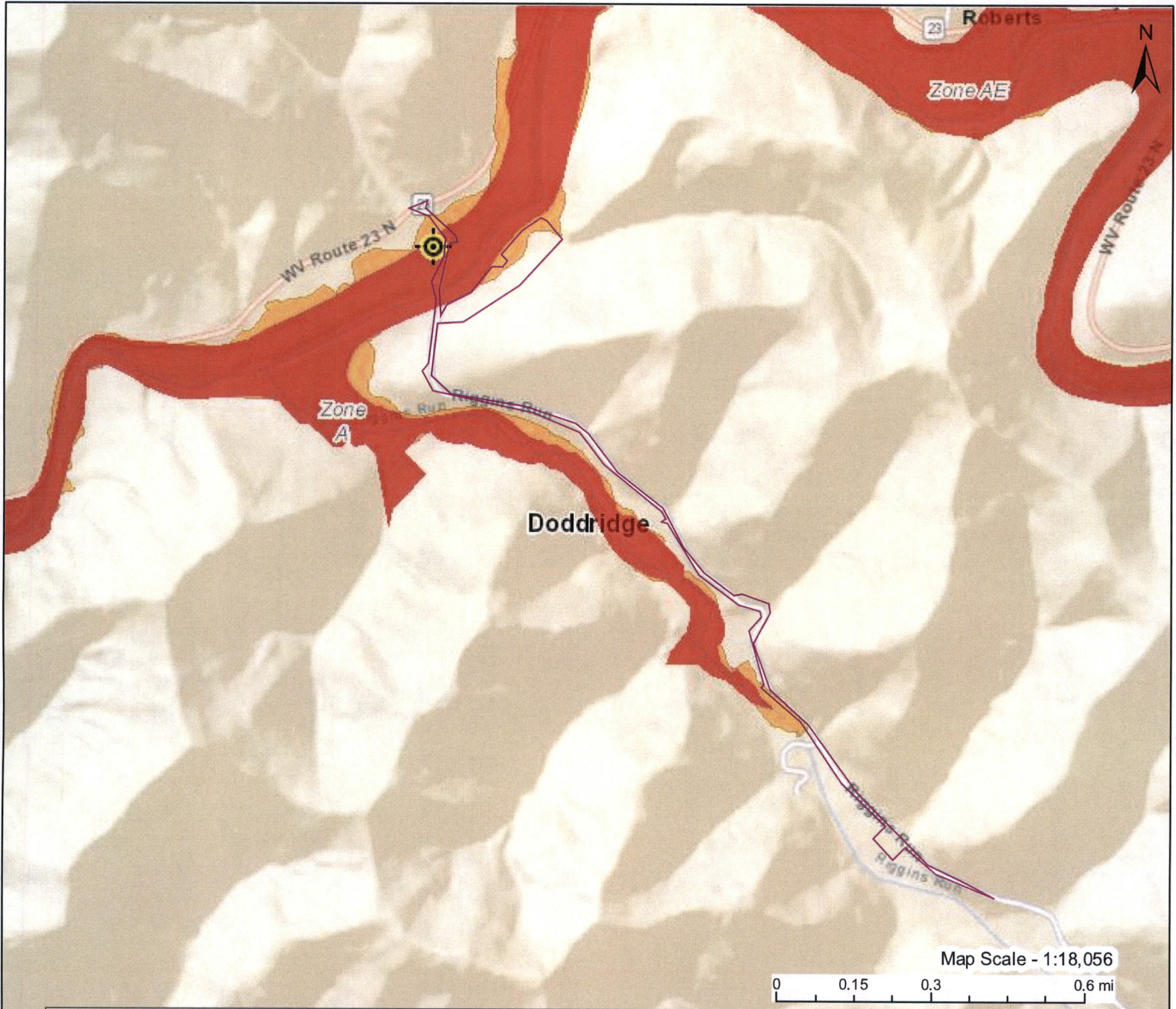
**John A. Lewis, PWS**  
Project Professional51 Dutilh Rd., Suite 240  
Cranberry Township, PA 16066  
d| 724.200.7512  
o| 724.772.7072  
m| 412.848.7376

*This email may contain confidential information. If you have received this email—including any attachments—in error, please notify the sender promptly and delete the email and any attachments from all of your systems.*

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 **Riggins Run Road Upgrades\_Doddridge County\_Floodplain.pdf**  
346K

# WV Flood Map - Riggins Run Road Upgrades



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

H I G H  R I S K	Regulatory Floodway	Flood Info Location <span style="float: right;">Map created on 10/21/2021</span>	
	<b>Zone AE</b> 1-Percent-Annual-Chance Flood Hazard Area <b>With Base Flood Elevation (BFE)</b>	<b>Flood Hazard Area</b> Location is <b>WITHIN</b> the FEMA 100-year floodplain.	
<b>Zone A</b> 1-Percent-Annual-Chance Flood Hazard Area <b>Without BFE</b> (may have Advisory Flood Heights)	<b>Flood Zone</b> AE		
<b>Advisory</b> 1-Percent-Annual-Chance Future Conditions (High Risk Advisory Flood Zones)	<b>Stream</b> McElroy Creek		
Download the Full Legend for all flood tool symbols <a href="https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf">https://www.mapwv.gov/flood/map/docs/wv_flood_tool_legend.pdf</a>	<b>Watershed (HUC8)</b> Little Musingum-Middle Island (5030201)		
<b>Disclaimer:</b> 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 ( <a href="https://www.MapWV.gov/flood">https://www.MapWV.gov/flood</a> ) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.	<b>Flood Height</b> Flood Height 2 757.2 ft (Source: BFE - Non-Restudy) NAVD83		
	<b>Water Depth</b> About 4.1 ft (Source: HEC-RAS)		
	<b>Elevation</b> 753.1 ft (Source: FEMA 2018-20) (NAVD88)		
	<b>Community &amp; ID</b> Doddridge County (ID: 540024)		
	<b>FEMA Map &amp; Date</b> 54017C0040C; Effective Date: 10/4/2011		
	<b>Location (lat, long)</b> (39.399635, -80.690190) (WGS84)		
	<b>Parcel ID</b> 09-05-0011-0014-0002		
	<b>E-911 Address</b> 14305 WV RT 23 N, WEST UNION, WV, 26456		

# 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:** 3534  
**Invoice Date:** November 10, 2021  
**Payment Due:** November 10, 2021  
**Amount Due (USD):** \$0.00

Items	Quantity	Price	Amount
<b>Class II Legal Ad -- Floodplain Permit # 601</b> Run Dates 11/3/21 -- 11/10/21	1	<del>\$0.00</del> 40.44	\$0.00
		<b>Total:</b>	40.44 <del>\$0.00</del>
		<b>Amount Due (USD) :</b>	\$0.00

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 Permits  
(Week of November 1, 2021)

Please take notice that on the (28th) of (October), 2021, (Antero Resources) filed an application for a Floodplain Permit (#21-601) to develop land located at or about (Roggens Run at Route 23N); Coordinates : 39.399351-80.689805. The Application is on file with the Floodplain Manager of the County and may be inspected or copied during regular business hours in accordance to 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 (November 22, 2021) (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 for road improvements and upgrade

George C. Eidel, CFM  
Doddridge County Floodplain Manager

11/3x2XB

FLOODPLAIN PERMIT NOTICE

21-601 ANTERO RESOURCES

RIGGENS RUN AT RT.23

was published in said paper for 2 successive weeks beginning with the issue of 11/03, 2021 and ending with the issue of 11/10, 2021 that contains 201 word space at 115 cents per word and amounts to the sum of \$ 23.11 FOR THE FIRST PUBLICATION.

SECOND PUBLICATION IS 75% OF THE FIRST PUBLICATION and each other publication thereafter \$ 17.33 for the TOTAL OF: \$ 40.44.

Editor,

Tamela B. Beamer

SWORN TO AND SUBSCRIBED BEFORE ME THIS  
THE 12<sup>th</sup> day of November,  
2021.

NOTARY PUBLIC

Alice A. Fultz

