Doddridge County FPM 118 East Street STE 102 West Union, WW 26456-1262



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so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits.	B. Received by (Printed Name) C. Date of Delivery
1. Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
#14-290 Mary H. Holland	
PO Box 425 West Union, WV 26456	3. Sepice Type □ Certified Mail □ Priority Mail Express □ Registered □ Return Receipt for Merchandise □ Insured Mail □ Collect on Delivery
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PS Form 3811, July 2013 Domestic Ref	turn Receipt

المستشتن تستنشن



Doddridge County FPM 118 East Court Street, Suite 102 West Union, WV 26456

Dear Sir or Ma'am,

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,

Edwin L. Wriston

Doddridge County Floodplain Manager

304.873.2631

doddridgecountyfpm@gmail.com

Legal Advertisement:

Doddridge County

Floodplain Permit Application

Please take notice that on the 29th day of September, 2014

Cone Gathering, LLC

filed an application for a Floodplain Permit to develop land located at or about:

Grant/New Milton/Southwest District

39.171128N/80.762683W to 39.273142N/80.689713W

Permit #14-290 Sherwood South Pipeline

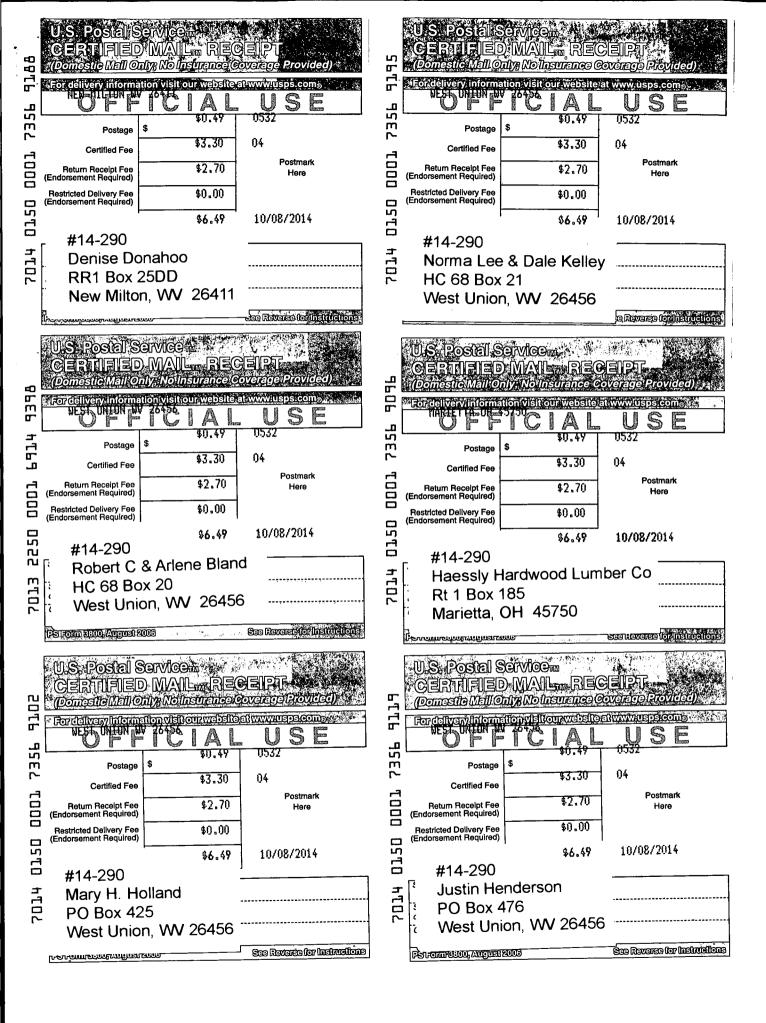
The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. Any interested persons who desire to comment shall present the same in writing by October 27, 2014, delivered to:

Clerk of the County Court

118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager



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A gent A gent A Addressee B. Received by (Printed Address) C. Date of Delivery
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196 Trails End Drive
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See Reverse for Instructions

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HC 68 Box 14 West Union, WV 26456	3. Service-Rype ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes
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United States Postal Service



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Robert C & Arlene Bland	
HC 68 Box 20 West Union, WV 26456	3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery
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UNITED STATES POSTAL SERVICE



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New Milton, WV 26411	☐ Certified Mail® ☐ Prority Mail Express*
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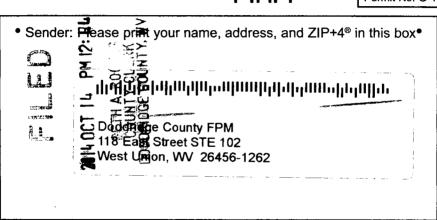
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1. Article Addressed to: #14-290 Haessly Hardwood Lumber Co	D. Is delivery address different from item 1? A Yes If YES, enter delivery address below: No 25 Sheets Run Rd.
Rt 1 Box 185 Marietta, OH 45750	3. Sep/ce Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes
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UNITED STATES POSTAL SERVICE

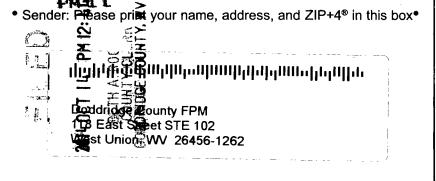


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Article Addressed to:	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
#14-290 Lewis Frederick Maxwell	
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New Milton, WV 26411	
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#14-290 Norma Lee & Dale Kelley	
HC 68 Box 21 West Union, WV 26456	3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery
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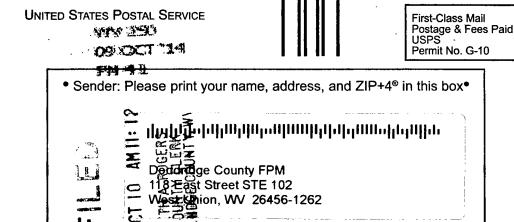


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PO Box 397 Glenville, WV 26351	3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery
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166 Jaden Lane Jane Lew, WV 26378	3. Service Type ☑ Certified Mali® ☐ Priority Mail Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ Collect on Delivery
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First-Class Mail Postage & Fees Paid USPS Permit No. G-10

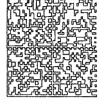
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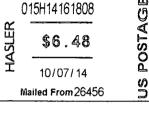
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Doddridge County FPM 118 East Court Street, Suite 102 West Union, WV 26456

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Respectfully yours,

Edwin L. Wriston

Doddridge County Floodplain Manager

304.873.2631

doddridgecountyfpm@gmail.com

Legal Advertisement:

Doddridge County

Floodplain Permit Application

Please take notice that on the 29^{th} day of September, 2014

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Grant/New Milton/Southwest District

39.171128N/80.762683W to 39.273142N/80.689713W

Permit #14-290 Sherwood South Pipeline

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118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager

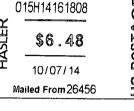
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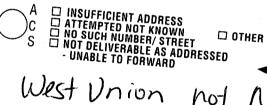
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#14-290 Denise Donahoo RR1 Box 25DD New Milton, WV 26411	3. Service Type Gright Certified Mail* Registered Return Receipt for Merchandis Collect on Delivery
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Doddridge County FPM 118 East Court Street, Suite 102 West Union, WV 26456

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304.873.2631

doddridgecountyfpm@gmail.com

Legal Advertisement:

Doddridge County

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Permit #14-290 Sherwood South Pipeline

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Clerk of the County Court

118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager



Commercial/Industrial Floodplain Development Permit

Doddridge County, WV Floodplain Management

This permit has been issued to **Cone Gathering, LLC**, and is for the approved commercial and/or industrial development project associated with this permit 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: #14-290 ~ Cone Gathering, LLC ~ Sherwood South Pipelines

Issued to: Cone Gathering, LLC via CESO, INC.

POC: Natalie Hooten 412.221.2236

Company Address: 800 Bursca Dr STE 804

Bridgeville, PA 15017-1451

Location: Grant/New Milton/Southwest Districts

Lat/Long: 39.171128N/80.762683W to 39.273142N/80.689713W

Purpose of development: 10.64 mile long gas and water pipelines.

Issued by: Edwin L. "Bo" Wriston, Doddridge County FPM (or designee)

Date: 01/27/2015

Legal Advertisement:

Doddridge County

Floodplain Permit Application

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Cone Gathering, LLC

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Grant/New Milton/Southwest District

39.171128N/80.762683W to 39.273142N/80.689713W

Permit #14-290 Sherwood South Pipeline

The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. Any interested persons who desire to comment shall present the same in writing by October 27, 2014, delivered to:

118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager

Legal Advertisement:

Doddridge County

Floodplain Permit Application

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39.171128N/80.762683W to 39.273142N/80.689713W

Permit #14-290 Sherwood South Pipeline

The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. Any interested persons who desire to comment shall present the same in writing by **November 6, 2014,** delivered to:

Clerk of the County Court

118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager



Edwin Wriston <doddridgecountyfpm@gmail.com>

Floodplain Permit Application Status- Sherwood South (Email 1 of 3) 1 message

Natalie Hooton hooton@cesoinc.com To: Edwin Wriston <doddridgecountyfpm@gmail.com> Tue, Jan 20, 2015 at 3:11 PM

Good afternoon Mr. Wriston. We have finally received the USACE permit for this project. I am now providing you a copy of all of the permits that were required for this project. Because of the size of many of the permit documents. I must send them via multiple e-mails. In this first e-mail, I am providing the following documents:

- WV DNR Approval
- **USFWS** Approval
- WV DEP Stream Activity Permits
- **USACE** Permit
- WV DOH Approvals

Email #2 will include WVDOH Approaches and Email #3 will include Utility Gas and Water Approvals for the Sherwood South project. We would appreciate your assistance in issuing a Doddridge County Floodplain Permit as soon as possible. Additionally, we expect to have the USACE for our one remaining project, EQT-OX11, by the end of this week. I will provide you all of those permits once we have them in hand.

Thank you,

Natalie Hooton



CESO, Inc.

800 Bursca Dr. Suite 804

Bridgeville, PA 15017

P: (412) 221-2236 x 2009 | F: (412) 221-2267

Email: hooton@cesoinc.com | Website: www.cesoinc.com

7 attachments

- 2013-12-05 SherwoodSouth WVDNR RTE Response.pdf
- 2014-12-08 Sherwood South WVDEP Approval Permit #WVR310384.pdf
- SherwoodSouth_License&RightofEntry_LS-14VI_09-1405.pdf 119K
- SherwoodSouth_License&RightofEntry_P-14VI_09-1404.pdf 513K
- SherwoodSouth_USACE_Permit.pdf 2872K
- USFWS_Approval_EQTtoOX11andSherwoodSouthPipelines .pdf 699K
- **40-3 and 13-3 WVDOH improvements Approvals.pdf** 17113K



DEPARTMENT OF THE ARMY

HUNTINGTON DISTRICT, CORPS OF ENGINEERS 502 EIGHTH STREET HUNTINGTON, WEST VIRGINIA 25701-2070

January 20, 2015

Regulatory Division
Energy Resource Branch
LRH-2014-910-UNT South Fork Hughes River-OHR

Mr. Adam White Cone Gathering LLC One Energy Drive Post Office Box 1248 Jane Lew, WV 26378

Dear Mr. White:

I refer to the Pre-Construction Notification (PCN) submitted on your behalf by GAI Consultants, Inc. requesting authorization to discharge dredged and/or fill material into waters of the United States (U.S.) in conjunction with the Sherwood South Pipeline Project near Porto Rico, Doddridge County, West Virginia. The project will consist of the installation of approximately 10.64 miles of new 16-inch and 20-inch gas transmission lines and a 16-inch waterline to deliver gas produced at the existing Noble OX 11 Well Pad to the Sherwood Gas Processing Facility. The project will require the temporary discharge of dredged and/or fill material into unnamed tributaries of Lick Run, Bluestone Creek, Buckeye Creek, Cain Run, and the South Fork Hughes River and adjacent wetlands in conjunction with the installation of gaslines, waterlines, and temporary access roads. All of the streams are tributaries to the South Fork Hughes River, a tributary of the Ohio River, a traditionally navigable water of the U.S.

The United States Army Corps of Engineers (Corps) authority to regulate waters of the U.S. is based on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to discharging dredged or fill material into waters of the U.S., including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

Based on a review of the aquatic resources in the PCN submittal, fifty (50) stream channels totaling 11,922 linear feet and twenty-four (24) palustrine emergent wetlands totaling 0.178 acre are located within the Area of Interest (AOI) as indicated in Table 1, which is described in the attached PJD form. The on-site aquatic resources may be waters of the U.S. in accordance with the Regulatory Guidance Letter for Jurisdictional Determinations (JDs) issued by the Corps on June 26, 2008 (Regulatory Guidance Letter NO. 08-02). As

indicated in the guidance, this Preliminary Jurisdictional Determination (PJD) is non-binding and cannot be appealed (33 CFR 331.2) and only provides a written indication that waters of the U.S. may be present on-site.

You have declined to exercise the option to obtain an approved JD in this instance and at this time. However, for the purposes of the determine of discharges of fill into waters of the U.S., compensatory mitigation, and aquatic resource protection measures for activities which require authorization from this office, the streams referenced above will be evaluated as if they were waters of the U.S.

Enclosed please find two (2) copies of the PJD form. If you agree with the findings of this PJD and understand your options regarding the same, please sign and date one copy of the PJD form and return it to this office within thirty (30) days of receipt of this letter. You should submit the signed copy to the following address:

United States Army Corps of Engineers
Huntington District
Attn: Energy Resource Branch
502 8th Street
Huntington, WV 25701

You have requested authorization to temporarily discharge fill material into waters of the U.S. in conjunction with the installation of gaslines, waterlines, and temporary access roads associated with the Sherwood South Pipeline Project. The proposal will consist of the installation of a 16-inch and 20-inch gas pipeline and 16-inch waterline under twenty stream channels and three wetlands utilizing the open trench method (See Table 1). The excavation of the trench and subsequent installation of the gas gathering pipeline and twin waterlines with the same trench will result in the temporary discharge of dredged material into 455 linear feet of stream channel and 0.051 acre of three wetlands within the project limits. Upon completion of the installation of the waterlines, the temporarily affected wetland will be restored to its predisturbance contours and elevations. Upon completion of the installation of the pipelines, the stream channels and wetlands will be restored to their pre-construction condition. The proposal will also include the discharge of dredged and/or fill material into 180 linear feet of four (4) stream channels and 0.057 acre of two (2) wetlands in conjunction with the installation of seven (7) culverted road crossings to provide access for the installation and the gaslines and waterlines (See Table 1). For the temporary access roads, upon completion of the installation of the gaslines and waterline, you will remove the culverted crossings and restore the streams and wetlands to their pre-construction conditions.

Based on the information provided in the permit application, it has been determined the discharge of dredged and/or fill material into waters of the U.S meets the criteria for authorization under Nationwide Permit (NWP) #12 (enclosed) under the February 21, 2012 Federal Register, Notice of Reissuance of NWPs (77 FR 10184) provided you comply with all terms and conditions of the enclosed material. A copy of this NWP can be found on our website at http://www.lrh.usace.army.mil/Missions/Regulatory.aspx. Please note that you must

comply with all applicable terms and conditions of the enclosed material and the attached special conditions for the authorizations to be valid.

In view of the above, your project as described above is authorized subject to the terms and conditions of the enclosed material, including the enclosed special conditions. It is your responsibility to ensure that your work conforms to all of the environmental management conditions and the attached Special Conditions listed within the enclosed material. Please be aware this NWP verification does not obviate the requirement to obtain any state or local assent required by law for the activities.

A copy of this NWP and verification letter must be supplied to your project engineer responsible for construction activities. A copy of the verification letter must be kept at the site during construction. Upon completion of the work, the enclosed certification must be signed and returned to this office. If you have any questions concerning the above, please contact Kimberly Courts-Brown at (304) 399-6906 or by email at Kimberly.d.courtsbrown@usace.army.mil.

Richard Berkes

Regulatory Project Manager Energy Resource Branch

CF: (w/out encls)

Mr. Andrew Longenecker CESO, Inc. 2800 Corporate Exchange Drive Suite 160 Columbus, Ohio 43231 Longenecker@cesoinc.com

Table 1
Discharges of Fill Material into Aquatic Resources
Sherwood South Pipeline Project

Stream/Wetland ID	Stream/Wetland Category	Discharge of Fill Linear Feet/Acreage	Duration of Fill	Type of Fill and Nature of Discharge	
UNT Buckeye Creek Stream G-101	Intermittent NRPW	20 lf 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
Right Hand Fork Lick Run Stream S-6	Perennial RPW	20 lf 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-53	Ephemeral NRPW	20 If 0.005 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-52	Intermittent RPW	20 If 0.003 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Creek Stream G-50	Perennial RPW	20 If 0.003 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Creek Stream G-48	Intermittent RPW	20 If 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Creek Stream G-49	Intermittent RPW	20 lf 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-44	Intermittent RPW	55 If 0.005 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Bluestone Creek Stream G-41	Intermittent RPW	20 If 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Bluestone Creek Stream G-40	Ephemeral NRPW	20 If 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Bluestone Creek Stream G-39	Ephemeral NRPW	20 lf 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-36	Intermittent RPW	20 If 0.001 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-32	Intermittent RPW	20 If 0.002 acre	Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill	
UNT Lick Run Stream G-31	Intermittent RPW	20 If 0.001 acre	Temporary	Open Cut Trench 16" & 20" gastine	

UNT Lick Run Stream G-30 Cain Run Stream CC UNT South Fork Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Ephemeral NRPW Perennial RPW Intermittent RPW Ephemeral NRPW Intermittent RPW	20 If 0.001 acre 20 If 0.001 acre 20 If 0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary Temporary Temporary	Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline	
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Cain Run Stream CC UNT South Fork Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Perennial RPW Intermittent RPW Ephemeral NRPW Intermittent RPW Intermittent RPW	20 if 0.001 acre 20 if 0.001 acre 20 if 0.0005 acre 40 if 0.005 acre	Temporary Temporary Temporary	16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" & 20" gasline	
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UNT South Fork Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Intermittent RPW Ephemeral NRPW Intermittent RPW Intermittent RPW	20 If 0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" & 20" gasline	
UNT South Fork Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Intermittent RPW Ephemeral NRPW Intermittent RPW Intermittent RPW	20 If 0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary Temporary	16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline	
Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Ephemeral NRPW Intermittent RPW Intermittent RPW	0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary	16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline	
Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Ephemeral NRPW Intermittent RPW Intermittent RPW	0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" & 20" gasline	
Hughes River Stream ZA UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Ephemeral NRPW Intermittent RPW Intermittent RPW	0.001 acre 20 If 0.0005 acre 40 If 0.005 acre	Temporary Temporary	16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" & 20" gasline	
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UNT South Fork Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	NRPW Intermittent RPW Intermittent RPW	0.0005 acre 40 lf 0.005 acre	Temporury	Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline	
Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipel Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	NRPW Intermittent RPW Intermittent RPW	0.0005 acre 40 lf 0.005 acre	Temporury	Open Cut Trench 16" & 20" gasline 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gasline 16" waterline	
Hughes River Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipel Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	NRPW Intermittent RPW Intermittent RPW	0.0005 acre 40 lf 0.005 acre	Temporury	16" & 20" gastine 16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gastine 16" waterline	
Stream EH UNT Lick Run Stream AJ-9 UNT Lick Run G-44 Total Length of Gas Pipel Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Intermittent RPW Intermittent RPW	40 lf 0.005 acre 20 lf		16" waterline Excavated soil backfill Open Cut Trench 16" & 20" gastine 16" waterline	
UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	RPW Intermittent RPW	0.005 acre		Excavated soil backfill Open Cut Trench 16" & 20" gastine 16" waterline	
UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	RPW Intermittent RPW	0.005 acre		Open Cut Trench 16" & 20" gastine 16" waterline	
UNT Lick Run G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	Intermittent RPW	20 if		16" & 20" gastine 16" waterline	
G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	RPW			,	
G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	RPW				
G-44 Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run	RPW			Excavated soil backfill	
Total Length of Gas Pipe Crossings UNT Meathouse Fork Stream G-1 UNT Lick Run		0.001 acre	Temporary	Open Cut Trench	
UNT Meathouse Fork Stream G-1 UNT Lick Run				16" & 20" gasline	
UNT Meathouse Fork Stream G-1 UNT Lick Run				16" waterline Excavated soil backfill	
UNT Meathouse Fork Stream G-1 UNT Lick Run	line/Waterline	Twen	ity (20) Streams Totali		
Stream G-1 UNT Lick Run			ny (20) Streams rotan	ng 455 n	
Stream G-1 UNT Lick Run		Road Crossings			
UNT Lick Run	Intermittent	25 lf	Temporary	Culvert Replacement 1	
	RPW	0.001 acre	į	1-18" HDPE Culvert	
	Intermittent	35 lf	T	TAR-2	
Stream AJ-9	RPW	0.006 acre	Temporary	New Culvert 1-60" CMP	
out dan 715 7	ICI VI	0.000 acre		CR 40/3 Crossing	
UNT Lick Run	Intermittent	40 lf	Temporary	New Culvert	
Stream AJ-9	RPW	0.005 acre		1-60" CMP	
				CR 40/3 Crossing	
UNT Lick Run	Intermittant	25 lf	Temporary	New Culvert	
Stream AJ-12	RPW	0.001 acre		1-36" CMP	
Inter Calabase		2212		CR 40/3 Crossing	
UNT Lick Run G-44	Intermittent	55 lf	Temporary	New Culvert	
C-14	RPW	0.005 acre		1-54" CMP	
Total Length of Road Crossings		Four (4) Streams Totaling 180 If			
	-	Tour (4) Stitums Totaling (6) if			
TOTAL LENG		635 If			
TEMPORARY STREAM Temp		0.095 acre Discharges of Fill/Dredged Material into Wetlands			
			·		
Wetland E	PEM	0.022 асте	Temporary	Open Cut Trench	
				16" & 20" gasline	
				16" waterline	
Wetland G54	PEM	0.0003 acre	Temporary	Excavated soil backfill Open Cut Trench	
Wodana ODW	1 17571 1	v.cocs acic	тепрогагу	16" & 20" gasline	
				16" waterline	
				Excavated soil backfill	
Wetland CA	PEM	0.029 acre	Temporary	Open Cut Trench	
			***	16" & 20" gasline	
	1			16" waterline	
				Excavated soil backfill	
Total Acreage of Gas Pipe Crossings	line/Waterline	Three (3	3) Wetlands Totaling 0	.0513 acre	

Total Acreage Road Crossings		Two C	2) Wetlands Totaling 0	057 acro
Wotland AJ13	PEM	0.018 acre	Permanent	Permanent Access CR 40/3 Road Crossing
Wetland AJ11	PEM	0.039 acre	Permanent	Permanent Access CI 40/3 Road Crossing

Nationwide Permit 12 Verification Special Conditions CONE Gathering LLC Sherwood South Pipeline Project LRH-2014-910-UNT South Fork Hughes River – OHR

- 1. Section 7 obligations under the Endangered Species Act (ESA) must be reconsidered if new information reveals impacts of the project that may affect federally listed species or critical habitat in a manner not previously considered, the proposed project is subsequently modified to include activities which were not considered during Section 7 consultation with the United Stated Fish and Wildlife Service (USFWS), or new species are listed or critical habitat designated that might be affected by the subject project.
- 2. The Indiana Bat Conservation Plan and Avoidance and Minimization Measures, the Erosion and Sediment Control Measures, and the Frac-Out Contingency Plan prepared for the USFWS Elkins Field Office are included as a Special Condition for this NWP 12 Verification. If the Frac-Out Contingency Plan requires a discharge of fill material into waters of the U.S., you must contact this office regarding permitting requirements.
- 3. If any work within waters of the U.S. becomes necessary that may result in impacts and/or effects to properties listed on or which may be potentially eligible for the National Register of Historic Places, in particular, the Site 46DO82, you must contact this office and the West Virginia Division of Culture and History (WVDCH) at 304-558-0240. You have agreed to tulizine directional boring to avoid this site, however, if any work becomes necessary that would require a discharge of fill material into waters of the U.S. at this location, the Corps and WVDHC would have to determine potential effects for this site.
- 4. If any archeological resources are uncovered during the installation/removal of the access roads, the applicant will immediately cease all work in the area of discovery and contact the WVDHC at 304-558-0240 and the Huntington District Regulatory Office.

kdcb

Permit Number: LRH-2014-910-UNT South Fork Hughes River-OHR

Name of Permittee: CONE Gathering LLC

One Energy Drive Post Office Box 1248 Jane Lew, WV 26378

Date of Issuance: January 12, 2015

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

Huntington District
U. S. Army Corps of Engineers
502 8th Street
Huntington, West Virginia 25701-2070
Attn: RD-E

Please note that your permitted activity is subject to a compliance inspection by an U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee	Date



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office 694 Beverly Pike Elkins, West Virginia 26241

December 3, 2014

Mr. Andrew Longenecker CESO, Inc. (CESO) 800 Bursca Drive, Suite 804 Bridgeville, Pennsylvania 15017-1451

Re: EQT to OX11 and Sherwood South Pipelines, in Doddridge County, West Virginia

Dear Mr. Longenecker:

The U.S. Fish and Wildlife Service (Service) has received your Indiana Bat Conservation Plan dated November 20, 2014. This plan was developed because either: 1) \(\subseteq \) you have chosen to assume the federally endangered Indiana bat (Myotis sodalis) is present within your project area; OR 2) the Indiana bat is known to occur in the area as a result of _____ summer maternity surveys or ____ winter hibernacula/fall swarming surveys. These comments are provided pursuant to the Endangered Species Act (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Habitat assessments were conducted within the proposed project area in September 2014.

The results of the habitat assessment for the proposed project are as follows:

- 1. An estimated 106.7 acres of forest would be cleared for the project, which leaves an estimated 4.905 acres or 89.1 percent of forested habitat within the 1/4-mile buffer area after project clearing has been completed. The total number of acres in the buffer area is 5.504.
- 2. 74 potential Indiana bat roost trees were identified within the project area.
- 3. No portals or caves were observed within the project area.

In the Indiana Bat Conservation Plan, the project proponent stated their commitment to the avoidance, minimization, and conservation measures listed on the attached summary sheet.

These measures are designed to address the potential direct and indirect effects that may occur as a result of the project, and will ensure that no Indiana bats will be directly killed by the removal of trees, and that roosting and foraging habitat will remain within the project area after project construction.

Based on the commitment to implement these measures, the Service concurs that the proposed project is not likely to adversely affect the Indiana bat. The Indiana Bat Conservation Plan should be incorporated as a mandatory condition in any permits issued for this project, and all measures must be implemented as proposed.

Freshwater Mussels

The proposed projects occur within ¼-mile of Meathouse Fork and the South Fork Hughes River which provides habitat for clubshell (Pleurobema clava) and snuffbox (Epioblasma triquetra) mussels, which are listed as endangered under the ESA. Freshwater mussels feed by filtering food particles from the water column. Juvenile and adult freshwater mussels have been documented to feed on detritus, diatoms, phytoplankton, and zooplankton. Freshwater mussels rely on fish to complete their life histories. When mussel larvae (glochidia) are released into the water by adult females, they must attach themselves within a few days to an appropriate fish host, which they then parasitize for a short time while developing into juvenile mussels. The loss of many historic populations and the continuing degradation of current populations are due to the impacts of impoundments, navigation projects, water quality degradation from agricultural and industrial wastes, deforestation and other forms of habitat alteration, including gravel and sand dredging. Impacts that directly affect the species also include reduction or elimination of fish hosts.

Freshwater mussels play a key role in the health of aquatic environments by helping to maintain water quality, cycle nutrients, stabilize substrates, remove suspended sediments, and create habitat complexity (Anderson and Kreeger, 2012). Mussels remove suspended particulates from water by filter-feeding, which involves straining water over gills to remove microscopic food particles. Filter-feeding makes mussels very sensitive to excessive sedimentation caused by runoff from streambank and upland activities. Excessive sedimentation into a stream reduces suitable habitat for mussels and can smother them, causing death. Excessive suspended sediments can also impair feeding processes of mussels, leading to acute short-term or chronic long-term stress. Both excessive sedimentation and excessive suspended sediments can lead to reduced populations of mussels and therefore reduced benefits to the ecosystem (Anderson and Kreeger, 2010; Box and Mossa, 1999; Ellis, 1931; Ellis, 1936; Houp, 1993).

In correspondence dated <u>September 18, 2014</u>, the project proponent stated their commitment to the erosion and sedimentation best management practices (BMPs) listed on the attached summary sheet. These best management practices will help minimize effects of sedimentation and erosion to waterways that provide habitat to federally listed mussels near the action area. In addition, the project proponent will comply with the requirements set forth in the West Virginia Department of Environmental Protection's 2006 Best Management Protection Manual and the 2012 Erosion and Sediment Control Field Oil and Gas Manual. This office should be notified immediately if any deviations from the submitted plans are anticipated during construction of the project, or if any substantial sedimentation or erosion problems occur.

The project (Sherwood South Pipeline) proposes to cross Meathouse Fork and the South Fork Hughes River by horizontal directional drill (HDD). This method will allow the pipeline to be placed under the stream without direct affects to the waterway. The HDD method uses bentonite clay in its pressurized drilling that, on occasion, can result in an inadvertent release that releases bentonite clay and other drilling fluids into waterways.

In your <u>September 18, 2014</u> correspondence, the project proponent committed to the following measures that will be followed in the event of an inadvertent release:

- 1. Agencies will be contacted within 24 hours of the event.
- 2. Immediately contain the returned material.
- 3. Secondary containment measures including silt fence, sand bags, turbidity curtains, water pumps, and other BMPs will be installed.
- 4. Provide pictures and description of the return area and document all measures taken during clean-up and stability efforts.
- 5. A mussel investigation will promptly begin, as necessary.

In the event of an inadvertent release, the Service believes that implementation of the measures outlined above will minimize impacts to <u>Meathouse Fork and the South Fork Hughes River</u> and federally listed species. This office should be notified immediately if any deviations from the submitted plans are anticipated, or if an inadvertent release occurs during construction of the project. In the event of an inadvertent release additional coordination with the Service will be necessary to determine if adverse impacts to federally listed species have occurred.

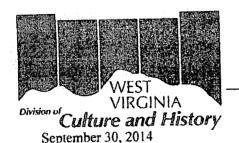
As a result of this information, the Service has concluded that the project may affect, but is not likely to adversely affect any federally listed endangered and threatened species. No biological assessment or further section 7 consultation under the ESA is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. Our determination that this project may affect, but is not likely to adversely affect any federally listed species does not apply in the event of an inadvertent release. If you have any questions regarding this letter, please contact <u>Tiernan Lennon</u> of my staff at (304) 636-6586, <u>ext. 12</u>, or at the letterhead address.

Sincerely,

Shul Lehnelt

John E. Schmidt Field Supervisor

Avoid	ance and Minimization Measures to be Applied on Project
Å	Seasonal tree clearing (all trees greater than 5" DBH) REQUIRED
X	Avoid cutting potential roost trees
X.	Minimize limits of disturbance (narrowed LOD or ROW)
X	Minimize impacts (clearing) around suitable swarming and summer habitat and
•	wetland/riparian zones
О	50-foot or greater forested buffer left along both sides of streams
X	Collocate project features with previously disturbed or cleared areas
	Phase tree clearing over multiple years
	Reforest disturbed areas
	Restore or enhanced riparian/wetland areas
X	Strong erosion and sedimentation best management practices
ΩX	Pollution control plan in place
Ö	Suitable habitat acreage permanently preserved within or adjacent to the project site
	Other:
	Other:
	Other:
	Other:
Comp	ensation Measures to be Applied on Project
X	Girdling trees on a 1:1 ratio for each potential roost tree that is lost during project
,	development
	Erecting bat boxes, artificial bark, or other artificial roosting structures on a 1:1 ratio
	A 2-year minimum monitoring plan of artificial structures
\Box	Preservation of suitable Indiana bat habitat off-site
	Creation of watering areas, wetlands, or ponds
	Other:
	Other:
	Other:
	n and Sedimentation Best Management Practices Triple-stack compost filter sock
X X	Super silt fence
γ λ	Corrugated metal fencing
П	Armored outlets
	Green space buffers
X.	Other: Waterbars
N N	Other: Kench Plugs
0	Other:
	Other



The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

Mr. Christopher Jackson Archaeological Consultants of the Midwest 535 Fulton Street Wheeling, WV 26003

RE: Sherwood Pipeline Stream Crossings Project

FR#: 14-1143-Multi

Dear Mr. Jackson:

We have reviewed the Phase I archaeological survey report that was submitted for the above referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the report, an archaeological survey was conducted within 54 stream crossings that are located along the southern section of the proposed Sherwood Pipeline Project located in Doddridge and Tyler Counties, WV. Systematic shovel probe excavation, pedestrian reconnaissance and bucket auguring were conducted within the proposed stream crossings. As well, limited test units were excavated when alluvial soils were encountered with the potential for containing deeply buried sites. The field investigations resulted in the identification of site 46DO82 within Stream Crossing 1047 and site 46Do81 within Stream Crossing 1048. All other stream crossings were negative for cultural materials.

Site 46DO81 consists of a low density lithic scatter comprised of three tertiary flakes and one secondary flake. The site lacks temporally diagnostic artifacts and evidence for stratified deposits and cultural features. As a result, we concur that 46DO81 is not eligible for inclusion in the National Register of Historic Places. No further work is necessary for this site.

Site 46DO82 consists of a scatter of historic/modern era artifacts, two depressions possibly representing the remains of a privy and/or well, a foundation remnant and depression, and a bottle dump containing mixed modern and historic era materials. The report states that a house, barn and other outbuildings are extant outside of the stream crossing boundaries and that the house appears to be in the same location as a building depicted on the 1924 Centerpoint 15' topographic map. The report also states that the current owners indicated any outbuildings within the site's defined boundaries were razed prior to their occupation of the property 10 years ago. The report concludes that the site likely dates to the late 19th and early 20th centuries and that all buildings associated with the site were razed prior to 1924.

However, it is unclear how these conclusions were reached. It is equally possible that 46DO82 represents continuous occupation of the property into the modern era. Of the 169 artifacts collected from the site, 2 porcelain Homer Laughlin ceramic fragments and 3 container glass fragments either date to or pre-date the

Mr. Christopher Jackson FR# 14-1143-Multi September 30, 2014 Page 2

hypothesized prc-1924 occupation of the site. The remaining 164 artifacts are either non-diagnostic or are representative of items still made today. The report does not provide the soil horizon(s) from which the artifacts were recovered, nor does it provide a plan map of the site showing the locations of the shovel probes in relation to the possible features. This makes it impossible to ascertain from the report whether stratified deposits or artifact patterning are apparent. As a result, we cannot concur at this time with the recommendation that the site undergo a Phase II National Register evaluation.

It is our understanding that CONSOL Energy is planning to avoid site 46DO82 by boring underneath it. Provided that this occurs, we concur that no further work is necessary for the site. However, if boring below 46DO82 is not feasible, we will require the information mentioned above before determining whether a Phase II National Register assessment is necessary.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.

Sincerely

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/LLD



DIVISION OF NATURAL RESOURCES

Wildlife Resources Section Operations Center P.O. Box 67 Elkins, West Virginia 26241-3235 Telephone (304) 637-0245 Fax (304) 637-0250

Earl Ray Tomblin

Governor

Frank Jezioro Director

December 5, 2013

Mr. Michael P. Eagan CESO, Inc. 402 2nd Street SE, Suite 310 Canton, OH 44702-1174

Dear Mr. Eagan:

We have reviewed our files for information on rare, threatened and endangered (RTE) species and sensitive habitats for the area of the proposed Sherwood South Pipeline project in Doddridge County, WV.

We have no known records of any RTE species or sensitive habitats within the project area; however, unless horizontal directional drilling (HHD) is utilized, surveys for freshwater mussels will be required in Meathouse Fork prior to any in-stream work. Because this is an endangered mussel stream, US Fish and Wildlife Service coordination will be required whether HDD is used or the site is trenched. In addition, although surveys are not required for the crossings of South Fork Hughes River, US Fish and Wildlife Service coordination will be necessary for these crossings as this is also an endangered mussel stream. 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.

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, extension 2048. Enclosed please find an invoice.

Sincerely

Barbara-Sargent

Environmental Resources Specialist

Wildlife Diversity Unit

enclosure

S:\Monthly\Barb\Invoices\CESO3.doc



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Governor

District Engineer/Manager
District Four
PO Box 4220 (EXIT 121, I-79) * Clarksburg, WV 26302 * 304-842-1550

Pagambar 11 2014 December 11, 2014

CONE GATHERING, LLC 1000 CONSOL ENERGY DRIVE CANONSBURG, PA 15317

cc:0409 Charleston Permits MR

Dear Applicant:	Rell
Your approved copy of Permit Number04-20: permit type is enclosed. A description of the world	
Please contact the District Four office:	
Mike Ro	acone 304-626-5472
by the permit. Failure to comply will result in cancellation of y	in work so arrangements can be made to inspect the work authorize your permit. at all times while the work is in progress for inspection by the
West virginia Division of Trighways personner.	Sincerely,
	Ray a. M District Engineer / District Manager
Initials: TC Attachments: Yes	Alneie Boncone Permit Supervisor

Form MM-109 Rev. 05-19-05	0 4 2 0 1 4 1 PERMIT NO.	. 194			
PERMIT TO ENTER UPON, UNDER, OVER OF WEST VIRGINIA, AS PROVIDED FOR IN SE ARTICLE 16, CHAPTER 17; SECTION 8, ARTICLE AMENDED.	R ACROSS THE STATE ROADS OF T CTION 6, ARTICLE 16, CHAPTER 1	7: SECTION 9			
THIS PERMIT, Made this9day of DEPARTMENT OF TRANSPORTATION, DIVISI called DIVISION and CONE Gathering, LLC	ON OF HIGHWAYS, a statutory corpora	ation hereinafter			
Address: One Energy Drive, Jane Lew, WV 26378 hereinafter called APPLICANT.	Phone No: (240)	506-7299			
WIT	NESSETH				
In consideration of the hereinafter set out covena 17; or Section 9, Article 16, Chapter 17; or Section Virginia, 1931, as amended, and the rules and regular apply to enter	n 8, Article 4, Chapter 17, of the Official ations promulgated thereunder, APPLICA	al Code of West NT does hereby			
Route Type & No. CR 40/3 De at 0.59 miles North West of Jct. CR	OH Project No. N/A	_(if applicable);			
at 0.59 miles North West of Jct. CR	40 and CR 13 Mile Post	3.60			
	he purposes hereinafter set forth and in acc				
plans and specifications which are attached hereto and standards to enable access to an approach for the standards to enable access to an approach for the standards are standards.					
standards to enable access to an approach for the	the construction of a natural gas pipelin	le.			
 APPLICANT further agrees to accept the condition. APPLICANT shall deposit with DIVISION the certified or cashier's check, or executed bond wand inspection costs DIVISION may sustain expense incurred in restoring said highway to damages that may result within one (1) year from the company of the condition of the condition of the certification. APPLICANT agrees to reimburse DIVISION for any inspection costs incurred under the condition of the certification. B. At \$	e sum of \$\frac{1,000,000}{1,000,000}\$ in the form with surety satisfactory to DIVISION to comby reason of the granting of this permit its original condition or the proper repair me the date of the completion of said work. For inspection costs as follows: This permit.	ver any damage , including any r of any and all			
B. At \$ per linear foot for feet of water line installed under this permit feet of sewer line installed under this permit feet of sewer line installed under this permit feet of sewer line installed under this permit 3. APPLICANT shall notify DIVISION at least 48 hours in advance of the date the work will begin.					
Failure to comply will be cause for cancellation	of this permit.				
 APPLICANT agrees to protect its employees, equipment and users of the highway at all times in accordance with the current Division of Highways manual "Traffic Control For Street and Highway Construction and Maintenance Operations". 					
APPLICANT agrees to comply with all applicable state and federal laws in the performance of work under this permit.					
Supplementary conditions cited on the reverse shereof.	side of this permit are understood and agre	eed to be a part			
7. The work authorized under this permit shall be of	completed on or before (Date):11/	01/2015			
Applicant's signature on this permit affirms that all text her Highways Encroachment Permit Form MM-109, revision da	rein is a verbatim reproduction of The West Vi	rginia Division of to this permit.			
RECOMMENDED: Frideric					
Title Dist. Faur Design	Signature and Title of Applicar	utting Supervisor			
BOND REQUIREMENT: BOND NO. SUR0022700 DATE 05/16/2014 Attached D On File 0	APPROVED: AMERICAN THE				
INSPECTION: Owner/Consultant Full Time Part Time	Title Assistant District Engineer - Ma West Virginia Division of Highwa				
Periodic Reimbursable No Cost AUTHORIZATION NO:	PERMIT NO: 04201411	9 4			
AUTHURIZATION NU;	PERMIT NO: U 4 4 V L T L T	- 679			

0420141194

Benjamin Miller

From:

DEP NPDESEP < DEP.NPDESEP@wv.gov>

Sent:

Monday, December 08, 2014 9:40 AM

To:

DEP NPDESEP; 'adamwhite@consolenergy.com'

Cc:

Benjamin Miller; Hodge, Timothy W; Swiger, Bradley C; Minigh, Christina D

Subject:

Approval for WVR310384, Sherwood South Pipeline, Doddridge Co., 136.2 Acres

Adam White Cone Gathering LLC One Energy Drive Jane Lew, WV 26378

Physical Site Location: Co. Rt. 40, Porto Rico

Please be advised that this e-mail constitutes approval for your project associated with Oil and Gas Construction Activities and your registration no. is WVR310384 You are now authorized to operate under WV General Water Pollution Control Permit No. WV0116815, issued on May 13, 2013.

You should carefully read the contents of this General Permit and become familiar with all requirements needed to remain in compliance with your permit. A "Notice of Termination" form is to be completed and submitted when all disturbed areas are stabilized. You can find the permit and Notice of Termination form via the Internet by visiting Permitting, Division of Water and Waste Management at www.gov Your annual permit fee has been assessed as \$1500.00. You will be invoiced by this agency upon the anniversary date of this approval date. Failure to submit the annual fee within ninety (90) days of the due date will render your permit void upon the date you are mailed a certified written notice to that effect. Please be advised that a pro-rated annual permit fee may be assessed upon the completion date and proper stabilization.

If you have any questions relative to this approval, please do not hesitate to contact Joseph Cochran at (304) 926-0499 Ext. 1069 or by email at joseph.w.cochran@wv.gov.

Scott G. Mandirola, Director WV DEP-Division of Water & Waste Mgt. 601 57th St. SE Charleston, WV 25304-2345 Phone: (304) 926-0495

Fax: (304) 926-0496



DIVISION OF NATURAL RESOURCES

324 Fourth Avenue, Room 200 South Charleston WV 25303-1228 TDD (304) 558-1439 TDD 1-800-354-6087 Fax (304) 558-6048 Telephone (304) 558-3225

Frank Jezioro

Director

Earl Ray Tomblin

Governor

November 6, 2014

Division of Natural Resources RIGHT OF ENTRY

Re: LS-14-VI/09-1405

CONE Gathering, LLC Adam White c/o CESO, Inc. 800 Bursca Drive Suite 804 Bridgeville, PA 15017-

Dear Mr. White:

The Division of Natural Resources hereby grants to you for a period of ten (10) years from the date hereof, a Right of Entry for the purpose of installing and maintaining an eighteen inch by twenty-five foot (18"x25") culvert, a six foot by thirty-five foot (6'x35") culvert, a two foot by twenty-five foot (2'x25") culvert, a six foot by forty foot (6'x40") culvert, and a four foot by fifty-five foot (4'x55") culvert in the streambeds (Sherwood South Pipeline) at five (5) separate locations along an unnamed tributary of Meathouse Fork, and unnamed tributaries of Lick Run near Porto Rico in Doddridge County, West Virginia.

This Right of Entry is subject to the following terms and conditions:

- 1. No in stream work during the fish-spawning season (April 1-June 30).
- 2. Work should be completed as quickly as possible during low flows in designated work areas only.
- 3. All shore areas disturbed by this operation must be reshaped, seeded and mulched immediately upon completion of work. The prompt establishment of vegetative cover will reduce future damage from high water levels.
- 4. Green concrete must not be put in the stream (highly toxic to aquatic life).
- 5. Guidance should be obtained from NRCS (formerly SCS) and a registered engineer for the design and construction. Must allow for passage of at least ten-year flood flow.

CONE Gathering, LLC LS-14-VI/09-1405 Page 2 November 6, 2014

- 6. Best management practices should be followed; measures such as hay bales must be used to reduce downstream siltation.
- 7. Applicant is responsible for removing debris from in and around the installation periodically to prevent stream flow obstruction.
- 8. Durable head walls of logs, rock, or concrete shall be constructed at both the upstream and downstream ends of crossing to prevent erosion of fill material into the stream.
- 9. The State's issuance of this Right-of-Entry does not provide for the applicant to work outside the requested boundaries nor does the State assume any liability for the applicant's/landowner's construction activities. By accepting this Right-of-Entry, the applicant/landowner assumes liability for any/all damages caused by this activity to both upstream and downstream landowners.

Guidelines of Best Management Practices for Sediment and Erosion Control as outlined by the Section of Water Resources, Division of Environmental Protection must be followed. Copies of those guidelines are available from the Section of Water Resources, 601 57th Street S.E., Charleston, West Virginia 25304-2345, Telephone No. (304) 926-0440.

The issuance of this Right of Entry by the Division of Natural Resources does not preclude the necessity to obtain a permit from the Corps of Engineers or any other state or federal permits which may be required by law, nor does this Right of Entry negate the need to comply with the West Virginia Water Pollution Control Act and/or the State Environmental Quality Board's administrative regulations, applicant is also responsible for determining if the proposed activity is located within an identified flood plain and it is the applicant's responsibility for contacting the local governmental agency in charge of that program and obtaining a flood plain development permit for it. This Right of Entry does not grant any rights or privileges, or permission to enter upon or to cross the property of any other person, nor is permission granted to remove any material that lies upon the property of any other persons. Work should be completed in as brief a period as possible and within one year from the date of this letter. In the event you fail or refuse to comply with any of the terms or conditions herein, this Right of Entry will be canceled and considered null and void and the Division will reject further applications.

Your payment is now due and payable in the amount of \$500.00 to the Division of Natural Resources covering the first year's annual fee of this agreement. Your agreement will be effective upon receipt of your payment in full. You must notify this office in writing when this installation has been removed.

Sincerely,

Joe T. Scarberry, Supervisor Office of Land and Streams

JTS:cb

pc:

DNR Fish Biologist
Jeremy Bandy, Environmental Enforcement
DNR Conservation Officers



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office 694 Beverly Pike Elkins, West Virginia 26241

December 3, 2014

Mr. Andrew Longenecker CESO, Inc. (CESO) 800 Bursca Drive, Suite 804 Bridgeville, Pennsylvania 15017-1451

Re: EOT to OX11 and Sherwood South Pipelines, in Doddridge County, West Virginia

Dear Mr. Longenecker:

The U.S. Fish and Wildlife Service (Service) has received your Indiana Bat Conservation Plan dated November 20, 2014. This plan was developed because either: 1) ✓ you have chosen to assume the federally endangered Indiana bat (Myotis sodalis) is present within your project area; OR 2) the Indiana bat is known to occur in the area as a result of ____ summer maternity surveys or ____ winter hibernacula/fall swarming surveys. These comments are provided pursuant to the Endangered Species Act (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Habitat assessments were conducted within the proposed project area in September 2014.

The results of the habitat assessment for the proposed project are as follows:

- 1. An estimated <u>106.7</u> acres of forest would be cleared for the project, which leaves an estimated <u>4.905</u> acres or <u>89.1</u> percent of forested habitat within the <u>1/4-mile</u> buffer area after project clearing has been completed. The total number of acres in the buffer area is <u>5.504</u>.
- 2. 74 potential Indiana bat roost trees were identified within the project area.
- 3. No portals or caves were observed within the project area.

In the Indiana Bat Conservation Plan, the project proponent stated their commitment to the avoidance, minimization, and conservation measures listed on the attached summary sheet.

These measures are designed to address the potential direct and indirect effects that may occur as a result of the project, and will ensure that no Indiana bats will be directly killed by the removal of trees, and that roosting and foraging habitat will remain within the project area after project construction.

Based on the commitment to implement these measures, the Service concurs that the proposed project is not likely to adversely affect the Indiana bat. The Indiana Bat Conservation Plan should be incorporated as a mandatory condition in any permits issued for this project, and all measures must be implemented as proposed.

Freshwater Mussels

The proposed projects occur within ¼-mile of Meathouse Fork and the South Fork Hughes River which provides habitat for clubshell (Pleurobema clava) and snuffbox (Epioblasma triquetra) mussels, which are listed as endangered under the ESA. Freshwater mussels feed by filtering food particles from the water column. Juvenile and adult freshwater mussels have been documented to feed on detritus, diatoms, phytoplankton, and zooplankton. Freshwater mussels rely on fish to complete their life histories. When mussel larvae (glochidia) are released into the water by adult females, they must attach themselves within a few days to an appropriate fish host, which they then parasitize for a short time while developing into juvenile mussels. The loss of many historic populations and the continuing degradation of current populations are due to the impacts of impoundments, navigation projects, water quality degradation from agricultural and industrial wastes, deforestation and other forms of habitat alteration, including gravel and sand dredging. Impacts that directly affect the species also include reduction or elimination of fish hosts.

Freshwater mussels play a key role in the health of aquatic environments by helping to maintain water quality, cycle nutrients, stabilize substrates, remove suspended sediments, and create habitat complexity (Anderson and Kreeger, 2012). Mussels remove suspended particulates from water by filter-feeding, which involves straining water over gills to remove microscopic food particles. Filter-feeding makes mussels very sensitive to excessive sedimentation caused by runoff from streambank and upland activities. Excessive sedimentation into a stream reduces suitable habitat for mussels and can smother them, causing death. Excessive suspended sediments can also impair feeding processes of mussels, leading to acute short-term or chronic long-term stress. Both excessive sedimentation and excessive suspended sediments can lead to reduced populations of mussels and therefore reduced benefits to the ecosystem (Anderson and Kreeger, 2010; Box and Mossa, 1999; Ellis, 1931; Ellis, 1936; Houp, 1993).

In correspondence dated <u>September 18, 2014</u>, the project proponent stated their commitment to the erosion and sedimentation best management practices (BMPs) listed on the attached summary sheet. These best management practices will help minimize effects of sedimentation and erosion to waterways that provide habitat to federally listed mussels near the action area. In addition, the project proponent will comply with the requirements set forth in the West Virginia Department of Environmental Protection's 2006 Best Management Protection Manual and the 2012 Erosion and Sediment Control Field Oil and Gas Manual. This office should be notified immediately if any deviations from the submitted plans are anticipated during construction of the project, or if any substantial sedimentation or erosion problems occur.

The project (Sherwood South Pipeline) proposes to cross <u>Meathouse Fork and the South Fork Hughes River</u> by horizontal directional drill (HDD). This method will allow the pipeline to be placed under the stream without direct affects to the waterway. The HDD method uses bentonite clay in its pressurized drilling that, on occasion, can result in an inadvertent release that releases bentonite clay and other drilling fluids into waterways.

In your <u>September 18, 2014</u> correspondence, the project proponent committed to the following measures that will be followed in the event of an inadvertent release:

- 1. Agencies will be contacted within 24 hours of the event.
- 2. Immediately contain the returned material.
- 3. Secondary containment measures including silt fence, sand bags, turbidity curtains, water pumps, and other BMPs will be installed.
- 4. Provide pictures and description of the return area and document all measures taken during clean-up and stability efforts.
- 5. A mussel investigation will promptly begin, as necessary.

In the event of an inadvertent release, the Service believes that implementation of the measures outlined above will minimize impacts to <u>Meathouse Fork and the South Fork Hughes River</u> and federally listed species. This office should be notified immediately if any deviations from the submitted plans are anticipated, or if an inadvertent release occurs during construction of the project. In the event of an inadvertent release additional coordination with the Service will be necessary to determine if adverse impacts to federally listed species have occurred.

As a result of this information, the Service has concluded that the project may affect, but is not likely to adversely affect any federally listed endangered and threatened species. No biological assessment or further section 7 consultation under the ESA is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. Our determination that this project may affect, but is not likely to adversely affect any federally listed species does not apply in the event of an inadvertent release. If you have any questions regarding this letter, please contact <u>Tiernan Lennon</u> of my staff at (304) 636-6586, <u>ext. 12</u>, or at the letterhead address.

Sincerely,

John E. Schmidt Field Supervisor

And Schwell

Avoid	ance and Minimization Measures to be Applied on Project
Ä	Seasonal tree clearing (all trees greater than 5" DBH) REQUIRED
烙	Avoid cutting potential roost trees
Ø	Minimize limits of disturbance (narrowed LOD or ROW)
凤	Minimize impacts (clearing) around suitable swarming and summer habitat and
·	wetland/riparian zones
	50-foot or greater forested buffer left along both sides of streams
X	Collocate project features with previously disturbed or cleared areas
	Phase tree clearing over multiple years
	Reforest disturbed areas
	Restore or enhanced riparian/wetland areas
(X	Strong erosion and sedimentation best management practices
ΙX	Pollution control plan in place
	Suitable habitat acreage permanently preserved within or adjacent to the project site
	Other:
	Other:
	Other:
	Other:
Comp	ensation Measures to be Applied on Project
X	Girdling trees on a 1:1 ratio for each potential roost tree that is lost during project
,	development
	Erecting bat boxes, artificial bark, or other artificial roosting structures on a 1:1 ratio
	A 2-year minimum monitoring plan of artificial structures
	Preservation of suitable Indiana bat habitat off-site
	Creation of watering areas, wetlands, or ponds
	Other:
	Other:
	Other:
T	
Erosio	n and Sedimentation Best Management Practices Triple-stack compost filter sock
X	Super silt fence
	Corrugated metal fencing
	Armored outlets
	Green space buffers
, .	Other: Waterbars
Œ	Other: trencholugs
	Other:
	Other:



DIVISION OF NATURAL RESOURCES

324 Fourth Avenue, Room 200 South Charleston WV 25303-1228 TDD (304) 558-1439 TDD 1-800-354-6087 Fax (304) 558-6048 Telephone (304) 558-3225

Frank Jezioro

Director

Earl Ray Tomblin

Governor

November 6, 2014

Division of Natural Resources
LICENSE AND RIGHT OF ENTRY

Re: P-14-VI/09-1404

CONE Gathering, LLC Adam White c/o CESO, Inc. 800 Bursca Drive Suite 804 Bridgeville, PA 15017-

Dear Mr. White:

The Division of Natural Resources hereby grants to you for a term of ten (10) years, from the date hereof, a License and Right of Entry to construct, replace, cover, repair, operate, maintain, use and remove a twenty inch (20") gas pipeline, a sixteen inch (16") gas pipeline, a sixteen inch (16") water pipeline, and a twelve inch (12") water pipeline (Sherwood South Pipeline) at twenty (20) separate locations along Meathouse Fork, an unnamed tributary of Buckeye Creek, Right Hand Fork Lick Run, unnamed tributaries of Lick Run, unnamed tributaries of Bluestone Creek, Cain Run, an unnamed tributary of Cain Run, and unnamed tributaries of the South Fork Hughes River, Grant, New Milton, and Southwest Districts, Doddridge County, West Virginia, as shown located and highlighted in red on the map attached hereto as Exhibit A - B.

This License and Right of Entry is subject to the following terms and conditions:

High Quality Streams (HQS) as listed in the West Virginia Division of Natural Resources High Quality Stream Sixth Edition published in 2001 and for any trout streams and direct tributaries of trout streams:

- Directional bore or slick bore are the only methods allowed on Meathouse Fork and the South Fork Hughes River.
- Directional boring is the only method permitted during the fish spawning season.
 Fish spawning season for warmwater streams runs from April 1st through June 30th.
 Trout spawning season runs from October 1st through April 30th.
- Other dry ditch methods (pump around, flume or cofferdam) as described in WVDEP water resources manual (published 2006) on page 3.21-4 may be used outside of spawning seasons.
- Each crossing that utilizes dry ditch methods must be completed in 2 consecutive work days.

CONE Gathering, LLC P-14-VI/09-1404 Page 2 November 6, 2014

Non-high quality stream:

- Directional boring or other dry ditch methods (pump around, flume or cofferdam) as described in WVDEP water resources manual (published 2006) on page 3.21-4 may be used at all times during fish spawning season from April 1st through June 30th. This eliminates the need for spawning season restrictions.
- Crossings using methods other than directional boring. Must be completed in 1 work
- Only ephemeral/intermittent streams that are dry can be trenched.

Bank Stabilization

All bank stabilization projects must begin immediately upon completion of utility line crossing and be completed within 24 hours of completion of utility line crossing.

Freshwater Mussels

Mussel surveys on streams with known US Fish and Wildlife listed or candidate endangered species will be required if directional boring is not an option. Contact Janet Clayton of the WVDNR Wildlife Diversity Program for information concerning mussels at 304-637-0245.

For further assistance, contact the appropriate WVDNR District Fisheries Biologist. District 1 304-825-6787 District 2 304-822-3551 District 3 304-924-6211 District 4 304-256-6947 District 5 304-675-0871 District 6 304-420-4550

The issuance of this License and Right of Entry by the Division of Natural Resources does not preclude the necessity to obtain a permit from the Corps of Engineers or any other state or federal permits which may be required by law, nor does this License and Right of Entry negate the need to comply with the West Virginia Water Pollution Control Act and/or the State Environmental Quality Board's administrative regulations, applicant is also responsible for determining if the proposed activity is located within an identified flood plain and it is the applicant's responsibility for contacting the local governmental agency in charge of that program and obtaining a flood plain development permit for it. This License and Right of Entry does not grant any rights or privileges, or permission to enter upon or to cross the property of any other person, nor is permission granted to remove any material that lies upon the property of any other persons. Work should be completed in as brief a period as possible and within one year from the date of this letter. In the event you fail or refuse to comply with any of the terms or conditions herein, this License and Right of Entry will be canceled and considered null and void and the Division will reject further applications.

Your check in the amount of \$18000.00 is now due and payable to the Division of Natural Resources covering the (10) ten-year fee of this agreement. Your agreement will be effective upon receipt of your payment in full.

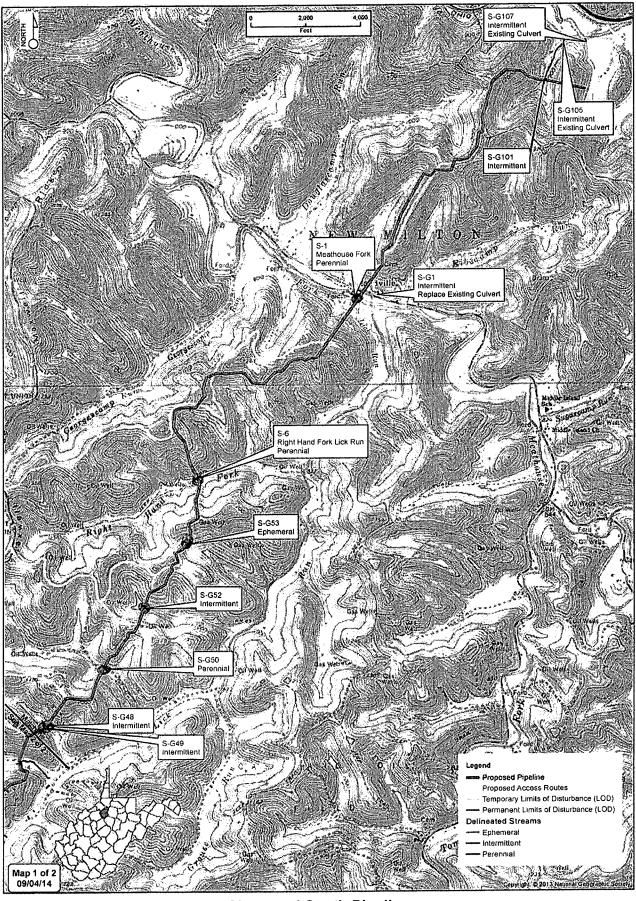
Joe 7. Scarberry/Supervisor Office of Land and Streams

JTS:cb attachment

DNR Fish Biologist DC:

Jeremy Bandy, Environmental Enforcement

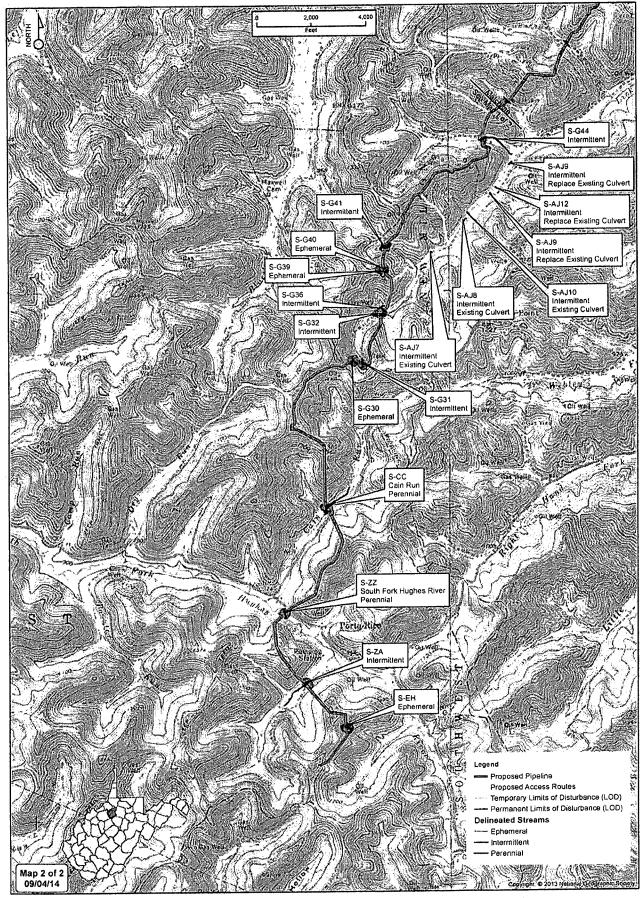
DNR Conservation Officers





Sherwood South Pipeline Stream Crossings Map Doddridge County, West Virginia







Sherwood South Pipeline Stream Crossings Map Doddridge County, West Virginia

lap
Virginia



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Governor Office of the District Engineer/Manager
District Four
PO Box 4220 (EXIT 121, I-79) * Clarksburg, WV 26302 * 304-842-1550
December 11, 2014

Paul A. Mattox, Jr., P. E. Secretary of Transportation / Commissioner of Highways

CONE GATHERING, LLC 1000 CONSOL ENERGY DRIVE CANONSBURG, PA 15317

cc:0409 Charleston Permits MR

Dear Applicant:	
Your approved copy of Permit Number <u>04-2014</u> permit type is enclosed. A description of the work	
Please contact the District <u>Four</u> office:	is on the points.
Mike Ronc	cone 304-626-5472
by the permit. Failure to comply will result in cancellation of you	work so arrangements can be made to inspect the work authorized our permit.
C salada aya pasaasaa	Sincerely,
	District Engineer / District Manager
initials: TC Attachments: Yes Enclosure: No	Alnui Goncone Permit Supervisor

Form MM-109 Rev. 05-19-05 PERMIT NO
PERMIT TO ENTER UPON, UNDER, OVER OR ACROSS THE STATE ROADS OF THE STATE OF WEST VIRGINIA, AS PROVIDED FOR IN SECTION 6, ARTICLE 16, CHAPTER 17; SECTION 9 ARTICLE 16, CHAPTER 17; SECTION 8, ARTICLE 4, CHAPTER 17, WEST VIRGINIA CODE, 1931, AS AMENDED.
THIS PERMIT, Made this 22 day of August 20 14, between the WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, a statutory corporation hereinafter called DIVISION and CONE Gathering, LLC
Address: One Energy Drive, Jane Lew, WV 26378 Phone No: (240) 506-7299 hereinafter called APPLICANT.
WITNESSETH
In consideration of the hereinafter set out covenants and in accordance with Section 6, Article 16, Chapter 17; or Section 9, Article 16, Chapter 17; or Section 8, Article 4, Chapter 17, of the Official Code of West Virginia, 1931, as amended, and the rules and regulations promulgated thereunder, APPLICANT does hereby apply to enter
Route Type & No. CR 40/3 DOH Project No. N/A (if applicable)
Route Type & No. CR 40/3 DOH Project No. N/A (if applicable); at 0.85 miles north of Jct. CR 40/3 and CR 13 Mile Post 8977
in Doddridge County, for the purposes hereinafter set forth and in accordance with the
plans and specifications which are attached hereto and made a part hereof: to construct a temporary access

TAR-C APPLICANT further agrees to accept the conditions hereinafter set forth: 1. APPLICANT shall deposit with DIVISION the sum of \$ 1,000,000 in the form of an official, certified or cashier's check, or executed bond with surety satisfactory to DIVISION to cover any damage

drive to enable the construction of a natural gas pipeline.

and inspection costs DIVISION may sustain by reason of the granting of this permit, including any expense incurred in restoring said highway to its original condition or the proper repair of any and all damages that may result within one (1) year from the date of the completion of said work.

2. APPLICANT agrees to reimburse DIVISION for inspection costs as follows: 8 A. For any inspection costs incurred under this permit. B. At \$_ ____ per linear foot for __ feet of water line installed under this permit per linear foot for C. At \$ feet of sewer line installed under this permit

3. APPLICANT shall notify DIVISION at least 48 hours in advance of the date the work will begin. Failure to comply will be cause for cancellation of this permit.

4. APPLICANT agrees to protect its employees, equipment and users of the highway at all times in accordance with the current Division of Highways manual "Traffic Control For Street and Highway Construction and Maintenance Operations".

5. APPLICANT agrees to comply with all applicable state and federal laws in the performance of work under this permit.

6. Supplementary conditions cited on the reverse side of this permit are understood and agreed to be a part hereof.

7. The work authorized under this permit shall be completed on or before (Date):

Applicant's signature on this permit affirms that all text herein is a verbatim reproduction of The West Virginia Division of Highways Encroachment Permit Form MM-109, revision date May 19, 2005. All attachments are inclusive to this permit.

RECOMMENDED!					
Title June	40M3				Kelly Eddy, permitting super visore (Signature and Polle of Applicant
BOND REQUIREMENT:					APPROVED:
BOND NO	SUR002270	00 DA	TE <u>05/</u>	16/2014	January Comments of the Commen
Attached 🔲	On File	B			
INSPECTION: O)wner/Consultar	nt 🔲			Tille Assistant District Engineer - Mountenance
Full Time P	art Time				West Virginia Division of Highways
Periodic R	teimbursable		No Cost		• ,
AUTHORIZATION	NO:				PERMIT NO: 0 4 2 0 1 4 1 1 9 3



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Governor Office of the District Engineer/Manager
District Four
PO Box 4220 (EXIT 121, I-79) * Clarksburg, WV 26302 * 304-842-1550
December 11, 2014

Paul A. Mattox, Jr., P. E. Secretary of Transportation / Commissioner of Highways

CONE GATHERING, LLC 1000 CONSOL ENERGY DRIVE CANONSBURG, PA 15317

Dear Applicant:		
Your approved copy of Permit Number 04-20		aUW - Utility Water
permit type is enclosed. A description of the wor	k is on the permit.	
Please contact the District Four office:		
Mike Roi	ncone 304-626-54	172
at least 48 hours in advance of the date you plan to beg by the permit.	in work so arrangem	ents can be made to inspect the work authorized
Failure to comply will result in cancellation of y	your permit.	
A copy of this permit is to be available on the job a West Virginia Division of Highways' personnel.	at all times while th	ne work is in progress for inspection by the
	Sincerely,	
	Ray	a.U
	Dist	rict Engineer / District Manager
Initials: TC Attachments: Yes	_de.	Pormit Suravisar
Enclosure: No		Permit Supervisor
cc:0409 Charleston Permits MR		

E.E.O./AFFIRMATIVE ACTION EMPLOYER

Form MM-109 Rev. 05-19-05	PERMIT NO.	042014	1172
PERMIT TO ENTER UPON, UNDER, OVER WEST VIRGINIA, AS PROVIDED FOR IN ARTICLE 16, CHAPTER 17; SECTION 8, ART AMENDED.	SHITION & ADTO	TE 1/ ATTANAMED	
THIS PERMIT, Made this 22 day of	August 20	14 hateria i 41 X	XIII CON X VID CON TO
DEPARTMENT OF TRANSPORTATION, DIV	ISION OF HIGHWA	YS a statutory corpo	WEST VIRGINIA
called DIVISION and CONE Gathering, LLC			ration nereinanter
Address: One Energy Drive, Jane Lew, WV 26378		Phone No: (240) 506-7299	
hereinafter called APPLICANT.	-		
	ITNESSETH		
In consideration of the hereinafter set out cover 17; or Section 9, Article 16, Chapter 17; or Section Virginia, 1931, as amended, and the rules and regapply to enter	gulations promulgated	ipter 17, of the Office the the third the thir	ial Code of West ANT does hereby
Route Type & No. CR 13	DOH Project No.	N/A	(if applicable):
Route Type & No. CR 13 at 0.22 miles west of Jct. CR 1; in Doddridge County for	3 and CR 40/3	Mile Post	_ (if applicable),
County, 101	HIE DIITHOSES BEFRING	Hanack Coult 1 '	
plans and specifications which are attached hereto a	ind made a part hereo	f.	
to install one 16" waterline under CR 13 using	the open cut metho	d.	
1.1.1			
Utilize CASE C-2			
APPLICANT further agrees to accept the condit	tions hereinafter set fo	orth:	
 APPLICANT shall deposit with DIVISION to certified or cashier's check, or executed hond. 	he sum of \$	in the form	of an official.
certified or cashier's check, or executed bond and inspection costs DIVISION may sustain	with surety satisfacto	ry to DIVISION to cov	ver any damage
and inspection costs DIVISION may sustai expense incurred in restoring said highway t	n by reason of the g	ranting of this permit	, including any
expense incurred in restoring said highway t damages that may result within one (1) year fr			
2. APPI ICANT agrees to saint.	on the date of the co	mpletion of said work.	·
2. APPLICANT agrees to reimburse DIVISION 8 A. For any inspection costs incurred und	er this nermit	s follows:	
B. At 5 per linear foot	<u>.</u>	f water line installed u	undou this
C. At \$ per linear foot	feet o	t sewer line installed u	inder this permit
 APPLICANT shall notify DIVISION at leas Failure to comply will be cause for cancellation 	or and permit.		
 APPLICANT agrees to protect its employee accordance with the current Division of High Construction and Maintenance Operations". 	es, equipment and us hways manual "Traf	sers of the highway a	at all times in and Highway
APPLICANT agrees to comply with all appli under this permit.	cable state and feder	al laws in the perforn	nance of work
6. Supplementary conditions cited on the reverse hereof.	side of this permit ar	e understood and agre	ed to be a part
7. The work authorized under this permit shall be			
Applicant's signature on this parmit assume at the state of the state			1/2015
Applicant's signature on this permit affirms that all text he Highways Encroachment Permit Form MM-109, revision danced MECOMMENDED:	rein is a verbatim repro ate May 19, 2005. All at	duction of The West Virg tachments are inclusive	ginia Division of to this permit.
Mest Jan			
Title Duy Aw M 3	Kelly E	Ldypermitti	na Superviso
BOND REQUIREMENT:		ture and litle of Applicant	- 3 - 3 + 0 - 0 130
BOND NO. <u>SUR0028729</u> DATE <u>07/10/2014</u>	APPROVED:	7 77	
Attached On File	- FOUND		$\frac{1}{2}$
NSPECTION: Owner/Consultant full Time Part Time	Title Assistant Distri	d Engineer - Mainte	nonce
Part Time	We	st Virginia Division of Highways	
AUTHORIZATION NO:	DEB	0420141	172
	PERMIT NO:	V 4 6 V 1 4 1	TIM



800 Bursca Drive, Suite 804 Bridgeville, Pennsylvania 15017-1451 (412) 221-2236 www.cesoinc.com

2014 SEP 29 PM 12: 06

September 24, 2014

Mr. Edwin "Bo" Wriston Doddridge County Floodplain Manager 118 East Court Street West Union, WV 26456 COUNTY CLERK
DODDFIDGE COUNTY, WY

RE:

Cone Gathering- Sherwood South Pipeline Doddridge County Floodplain Permit

Dear Mr. Wriston:

CESO, Inc. is pleased to submit this information for a Doddridge County Floodplain Permit, for the proposed Sherwood South Pipeline. Cone Gathering, LLC (Cone), is proposing to construct a new pipeline gathering system within a portion of Doddridge County, West Virginia. The proposed project will begin at the OX11 natural gas well pad near 39.171128 N Latitude, 80.762683 W Longitude (NAD83), which lies south of Porto Rico, West Virginia. The project starting location is bordered on the east by County Route 40. The proposed pipeline traverses in a general north and northeasterly direction, bisecting South Fork of Hughes River Road approximately 1.1 miles from its starting location and continues north-northeasterly crossing numerous County Roads and State Route 18, prior to reaching its terminus near Sherwood, West Virginia; south of State Route 50 at 39.273142 N Latitude, 80.689713 W Longitude (NAD83). The proposed new gathering line will be approximately 10.64 miles long, connecting the OX11 well pad to the Sherwood processing facility, which is under construction. A 16-inch gas line, a 20-inch gas line, a 16-inch water line, and a 12-inch water line (located north of Meathouse Fork only) will run in the proposed alignment.

CESO, Inc. has identified a total of twenty-five (25) crossings of named and/or unnamed waterways in Doddridge County as a result of this project. The Doddridge County Development Permit Application further describing project characteristics is presented in Attachment 1. A map depicting the proposed alignment location as well as a table and map identifying stream crossings are also provided.

Waterway crossings associated with the pipeline installation will be the result of open cutting of the stream channel, except for the Meathouse Fork and South Fork Hughes River crossings, which will utilize HDD bore and slick bore processes, respectively, to avoid impacts to federally protected mussel species. All waterways will be returned to their pre-disturbance plan, profile, and dimension after the pipe has been installed. In addition, proper construction sequencing and implementation of an approved erosion and sediment control plan will ensure water quality impacts are minimized throughout the project area and the proposed activities are in compliance with Nationwide Permit General Conditions and Regional General Conditions.

Should you have any questions or comments please don't hesitate to contact me at 412-221-2236 ext. 2009 or through email at hooton@cesoinc.com.

Sincerely,

CESO, Inc.

Natalie Hooton Staff Biologist



Attachment E- Project Location-Adjacent and/or Affected Landowners



Attachment E- Project Location-Adjacent and/or Affected Landowners

TAX ID: 09-03-0019-0031-0000-0000

NAME OF SURFACE OWNER/OWNERS: Dennis and Mellie Powell

ADDRESS OF PROPERTY: Route 50, Salem, WV 26426

ADDRESS OF SURFACE OWNER/OWNERS: 304 Stuart Street, West Union, WV 26456

TAX ID: 09-06-0002-0002-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Douglas Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0002-0006-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Eibscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0002-0004-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Hickory Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0004-0002-0003-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: WV Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0004-0001-0007-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456



Attachment E- Project Location-Adjacent and/or Affected Landowners

TAX ID: 09-06-0002-0004-0001-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: WV Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0002-0009-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C Bland Et Ux

ADDRESS OF PROPERTY: Off Route 18 Elbscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0004-0003-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C Bland Et Ux

ADDRESS OF PROPERTY: Off Route 18 Elbscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

TAX ID: 09-06-0004-0001-0004-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456

TAX ID: 09-06-0004-0001-0005-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456

TAX ID: 09-06-0004-0002-0001-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456



Attachment E- Project Location-Adjacent and/or Affected Landowners

TAX ID: 09-06-0003-0007-0001-0000

NAME OF SURFACE OWNER/OWNERS: Denise Donahoo

ADDRESS OF PROPERTY: Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: RR 1 Box 25DD, New Milton, WV 26411

TAX ID: 09-06-0003-0007-0002-3001

NAME OF SURFACE OWNER/OWNERS: Timothy & Rebecca Clyne

ADDRESS OF PROPERTY: Off Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 14, West Union, WV 26456

TAX ID: 09-06-0003-0006-0001-0000

NAME OF SURFACE OWNER/OWNERS: Timothy & Rebecca Clyne

ADDRESS OF PROPERTY: Off Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 14, West Union, WV 26456

TAX ID: 09-06-0003-0011-0000-0000

NAME OF SURFACE OWNER/OWNERS: Lewis Frederick Maxwell

ADDRESS OF PROPERTY: Lick Run Route 40, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 26B, New Milton, WV 26411

TAX ID: 09-06-0003-0012-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert Gayle Maxwell

ADDRESS OF PROPERTY: Off Route 13/Right Hand Fork Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 28 A, New Milton, WV 26411

TAX ID: 09-06-0003-0012-0001-0000

NAME OF SURFACE OWNER/OWNERS: Robert Gayle Maxwell

ADDRESS OF PROPERTY: Off Route 13/Right Hand Fork Road, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 28 A, New Milton, WV 26411

TAX ID: 09-06-0003-0001-0000-6001

NAME OF SURFACE OWNER/OWNERS: Sue Ann Spiker

ADDRESS OF PROPERTY: Off Route 18/Meathouse Fork, West Union, WV

ADDRESS OF SURFACE OWNER/OWNERS: 166 Linden Lane, Jane Lew, WV 26378



Attachment E- Project Location-Adjacent and/or Affected Landowners

TAX ID: 09-06-0003-0001-0001-0000

NAME OF SURFACE OWNER/OWNERS: George Adrian et al.

ADDRESS OF PROPERTY: Off of Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 95A, New Milton, WV 26411

TAX ID: 09-06-0007-0001-0000-0000

NAME OF SURFACE OWNER/OWNERS: I.L. Ike Morris

ADDRESS OF PROPERTY: 3 Route 40 Over, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 397, Glenville, WV 26351

TAX ID: 09-07-0006-0001-0000-0000

NAME OF SURFACE OWNER/OWNERS: Justin Henderson

ADDRESS OF PROPERTY: Route 13, West Union, WV 26456

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 476, West Union, WV 26456

TAX ID: 09-06-0003-0002-0000-6001

NAME OF SURFACE OWNER/OWNERS: I.L. Ike Morris

ADDRESS OF PROPERTY: Route 23, West Union, WV 26456

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 397, Glenville, WV 26351

TAX ID: 09-08-0023-0002-0000-0000

NAME OF SURFACE OWNER/OWNERS: Mary H. Holland

ADDRESS OF PROPERTY: Route 4, West Union, WV 26456

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 425, West Union, WV 26456

TAX ID: 09-06-0003-0006-0001-0000

NAME OF SURFACE OWNER/OWNERS: George W. and Barbara B Adrian

ADDRESS OF PROPERTY: Route 1, Box 95A, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1, Box 95A, New Milton, WV 26411

TAX ID: 09-06-0004-0009-0000-6001

NAME OF SURFACE OWNER/OWNERS: Haessly Hardwood Lumber Co.

ADDRESS OF PROPERTY: Route 18 Blandville, New Milton, WV, 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1Box 185, Marietta, OH 45750



TAX ID: 09-06-0003-0006-0001-0000

NAME OF SURFACE OWNER/OWNERS: George W. and Barbara B Adrian

ADDRESS OF PROPERTY: Route 1, Box 95A, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1, Box 95A, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 260/Page 630

TAX MAP REFERENCE: Map 1

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-003-0002-0000-6001

NAME OF SURFACE OWNER/OWNERS: I.L. Ike Morris

ADDRESS OF PROPERTY: Route 23, West Union, WV 26456

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 397, Glenville, WV 26351

DISTRICT: Southwest

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 230/ Page 307

TAX MAP REFERENCE: MAP 10/ Parcel 2

EXISTING BUILDINGS/USES OF PROPERTY: There are currently several horizontal 6A wells with access roads located on the property. One residential (rented) structure is present on the property. The remaining portions of the parcel are forested and undeveloped.

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0007-0001-0000-0000

NAME OF SURFACE OWNER/OWNERS: I.L. Ike Morris

ADDRESS OF PROPERTY: 3 Route 40 Over, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 397, Glenville, WV 26351

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 230/ Page 307

TAX MAP REFERENCE: MAP 7/ Parcel 1

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures on property; access roads and

possible oil wells present; forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-07-0006-0001-0000-0000

NAME OF SURFACE OWNER/OWNERS: Justin Henderson

ADDRESS OF PROPERTY: Route 13, West Union, WV 26456

ADDRESS OF SURFACE OWNER/OWNERS: P.O. Box 476, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: BOOK WB29/ Page 224

TAX MAP REFERENCE: MAP 6/ Parcel 1

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures; possible oil wells present:

Bluestone Creek flows through property

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.



TAX ID: 09-06-0003-0001-0000-6001

NAME OF SURFACE OWNER/OWNERS: Sue Ann Spiker

ADDRESS OF PROPERTY: Off Route 18/Meathouse Fork, West Union, WV

ADDRESS OF SURFACE OWNER/OWNERS: 166 Linden Lane, Jane Lew, WV 26378

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 214/ Page 675

TAX MAP REFERENCE: MAP 3/ Parcel 1

EXISTING BUILDINGS/USES OF PROPERTY: Possible oil wells present; small structure in the

northeast corner of the parcel; forested; Georgescamp Run flows through property

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0003-0001-0001-0000

NAME OF SURFACE OWNER/OWNERS: George Adrian et al.

ADDRESS OF PROPERTY: Off of Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 95A, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: BOOK 260/ Page 641

TAX MAP REFERENCE: MAP 3/ Parcel 1

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures; possible oil wells present;

forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.



TAX ID: 09-06-0003-0012-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert Gayle Maxwell

ADDRESS OF PROPERTY: Off Route 13/Right Hand Fork Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 28 A, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 220/ Page 79

TAX MAP REFERENCE: MAP 3/ Parcel 12

EXISTING BUILDINGS/USES OF PROPERTY: Apparent residential structure on the southern portion

of the parcel; Right Hand Fork flows through property; mostly forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0003-0012-0001-0000

NAME OF SURFACE OWNER/OWNERS: Robert Gayle Maxwell

ADDRESS OF PROPERTY: Off Route 13/Right Hand Fork Road, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 28 A, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 214/ Page 233

TAX MAP REFERENCE: MAP 3/ Parcel 12

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures; forested; Right Hand Fork

flows through the property

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0003-0006-0001-0000

NAME OF SURFACE OWNER/OWNERS: Timothy & Rebecca Clyne

ADDRESS OF PROPERTY: Off Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 14, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 260/ Page 630

TAX MAP REFERENCE: MAP 3/ Parcel 6

EXISTING BUILDINGS/USES OF PROPERTY: Possible residential structure in northwest corner of

the parcel; remaining land open fields or forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0003-0011-0000-0000

NAME OF SURFACE OWNER/OWNERS: Lewis Frederick Maxwell

ADDRESS OF PROPERTY: Lick Run Route 40, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: Route 1 Box 26B, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: BOOK 255/ Page 86

TAX MAP REFERENCE: MAP 3/ Parcel 11

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures; land is forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: There are currently no residential structures on the property.



TAX ID: 09-06-0003-0007-0001-0000

NAME OF SURFACE OWNER/OWNERS: Denise Donahoo

ADDRESS OF PROPERTY: Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: RR 1 Box 25DD, New Milton, WV 26411

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 260/Page 643

TAX MAP REFERENCE: Map 3/ Parcel 7

EXISTING BUILDINGS/USES OF PROPERTY: Residential structure on the northern portion of

parcel; remaining land is forested or open fields; Lick Run flows through the property

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0003-0007-0002-3001

NAME OF SURFACE OWNER/OWNERS: Timothy & Rebecca Clyne

ADDRESS OF PROPERTY: Off Route 18/Blandville, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 14, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 266/ Page 220

TAX MAP REFERENCE: MAP 3/ Parcel 7

EXISTING BUILDINGS/USES OF PROPERTY: No apparent structures, possible access roads, forested

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0004-0001-0005-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 0188/ Page 0723

TAX MAP REFERENCE: MAP 4

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0004-0002-0001-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 0191/ Page 0412

TAX MAP REFERENCE: MAP 4

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0004-0003-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C Bland Et Ux

ADDRESS OF PROPERTY: Off Route 18 Elbscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 196/ Page 186

TAX MAP REFERENCE: MAP 2

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0004-0001-0004-0000

NAME OF SURFACE OWNER/OWNERS: Norma Lee and Dale Kelley

ADDRESS OF PROPERTY: Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 21, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 0188/ Page 0723

TAX MAP REFERENCE: MAP 1

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0002-0004-0001-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: WV Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 262/ Page 143

TAX MAP REFERENCE: MAP 4

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0002-0009-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C Bland Et Ux

ADDRESS OF PROPERTY: Off Route 18 Elbscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 196/ Page 186

TAX MAP REFERENCE: MAP 2

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0004-0002-0003-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: WV Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 262/ Page 143

TAX MAP REFERENCE: MAP 4

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0004-0001-0007-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 262/ Page 143

TAX MAP REFERENCE: MAP 4

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-06-0002-0006-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Eibscamp Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 236/ Page 18

TAX MAP REFERENCE: MAP 2

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0002-0004-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Hickory Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 262/ Page 143

TAX MAP REFERENCE: MAP 2

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



TAX ID: 09-03-0019-0031-0000-0000

NAME OF SURFACE OWNER/OWNERS: Dennis and Mellie Powell

ADDRESS OF PROPERTY: Route 50, Salem, WV 26426

ADDRESS OF SURFACE OWNER/OWNERS: 304 Stuart Street, West Union, WV 26456

DISTRICT: Grant

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 200/Page 532

TAX MAP REFERENCE: Map 19

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

TAX ID: 09-06-0002-0002-0000-0000

NAME OF SURFACE OWNER/OWNERS: Robert C & Arlene Bland

ADDRESS OF PROPERTY: Off Route 18/5 Douglas Run, New Milton, WV 26411

ADDRESS OF SURFACE OWNER/OWNERS: HC 68 Box 20, West Union, WV 26456

DISTRICT: New Milton

LAND BOOK DESCRIPTION:

DEED BOOK REFERENCE: Book 236/ Page 18

TAX MAP REFERENCE: MAP 2

EXISTING BUILDINGS/USES OF PROPERTY: Unknown

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT

PROPERTY: Unknown

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT



Table 1. Stream Crossings by Pipeline Activity

Stream Field ID	Stream Category	Stream Name or Tributary Of	Project Activity	Type of Crossing	Coordinates (NAD83) (dd)	Width (feet)	Crossing Size (linear feet)
S-G101	Intermittent	UNT Buckeye Creek	Pipeline	Open Cut	39.273938968115, 80.693735534085	2	51
S-1	Perennial	Meathouse Fork	Pipeline	HDD	39.256976084829, 80.712342139369	105	50
S-6	Perennial	Right Hand Fork Lick Run	Pipeline	Open Cut	39.242703227090, 80.728573036809	2	51
S-G53	Ephemeral	UNT Lick Run	Pipeline	Open Cut	39.237554396969, 80.729640308866	1	51
S-G52	Intermittent	UNT Lick Run	Pipeline	Open Cut	39.232581717214, 80.733895101281	7	55
S-G50	Ephemeral	UNT Lick Run	Pipeline	Open Cut	39.227837362842, 80.737920148691	6	64
S-G49	Intermittent	UNT Lick Run	Pipeline	Open Cut	39.223246074954, 80.743942895832	3	53
S-G48	Intermittent	UNT Lick Run	Pipeline	Open Cut,	39.223242072742, 80.743950392031	3	90,
S-G44	Intermittent	UNT Lick Run	Pipeline	Open Cut	39.220285458317, 80.746423177108	4	66
S-G41	Intermittent	UNT Bluestone Creek	Pipeline	Open Cut.	39.211932483654, 80.756141223634	3 ,	63
S-G40	Ephemeral	UNT Bluestone Creek	Pipeline	Open Cut	39.210173602922, 80.756323818985	3	57
S-G39	Ephemeral	UNT Bluestone Creek	Pipeline	Open Cut	39.209878011567, 80.756201995696	3,	30





Stream Field ID	Stream Category	Stream Name or Tributary Of	Project Activity	Type of Crossing	Coordinates (NAD83) (dd)	Width (feet)	Crossing Size (linear feet)
S-G36	Intermittent	UNT Lick Run	Pipeline	Open Cut	39.206917288370, 80.756358154180	3	50
S-G32	Intermittent	UNT Lick Run	Pipeline	Open Cut	39.206583877587, 80.756618880342	3.5	52
S-G31	Intermittent	UNT Cain Run	Pipeline	Open Cut	39.202775765627, 80.758549171753	3	52
S-G30	Ephemeral	UNT Lick Run	Pipeline	Open Cut	39.202994666755, 80.759414976358	1.5	5,9
s-cc	Perennial	Cain Run	Pipeline	Open Cut	39.191405803599, 80.762179165847	3	169
S-ZZ	Perennial	South Fork Hughes River	Pipeline	Slick Bore	39.183030293290, 80.766360536989	10	63.
S-ZA	Intermittent	UNT South Fork Hughes River	Pipeline	Open Cut	39.177359492105, 80.764347244097	5	54
S-EH	Ephemeral	UNT South Fork Hughes River	Pipeline.	Open Cut	39.173917424057, 80.760253726677	1	51

Table 2. Stream Crossings by Access Road Activity

Stream Field ID	Stream Category	Stream Name or Tributary Of	Project Activity	Type of Crossing	Coordinates (NAD83) (dd)	Width (feet)	Crossing Size (linear feet)
S-G1	Ephemeral	UNT Meathouse Fork	Access Road	Culvert Replacement	39.273938968115, 80.710464413792	1.5	25
S-AJ9	Intermittent	UNT Lick Run	Access Road	New Culvert	39.256976084829, 80.745612310341	6;	3:5



SHERWOOD SOUTH PIPELINE STREAM ACTIVITY APPLICATION: STREAM CROSSING TABLES

Stream Field ID	Stream Category	Stream Name or Tributary Of	Project Activity	Type of Crossing	Type of Crossing (dd)		Crossing Size (linear feet)
S-AJ12	Intermittent	UNT Lick Run	Access Road	New Culvert	39.242703227090, 80.744975587149	2	25
S-AJ9	Intermittent	UNT Lick Run	Access Road	New Culvert	39.237554396969, 80.743679695699	6.	40
S-G44	Intermittent	UNT Lick Run	Access Road	New Culvert	39.232581717214, 80.743677506025	4	55

DODDRIDGE COUNTY FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

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.
- If revoked, all work must cease until permit is re-issued. 3.
- Development shall not be used or occupied until a Certificate of Compliance is issued. The permit will expire if no work is commenced within six months of issuance. 4.

5. The permit will expire it no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state, and
federal requirements.
7. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her
representative to make inspections to verify compliance.
8. I THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS
APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.
$\mathcal{L}_{\mathcal{L}}}}}}}}}}$
APPLICANT'S SIGNATURE for CESO, Inc
DATE 09/24/2014
DATE <u>09/24/2014</u>
SECTION 2: PROPOSED DEVELOPMENT (TO BE COMPLETED BY APPLICANT).
IF THE APPLICANT IS NOT A NATURAL PERSON, THE NAME, ADDRESS, AND TELEPHONE NUMBER
OF A NATURAL PERSON WHO SHALL BE APPOINTED BY THE APPLICANT TO RECEIVE NOTICE PURSUANT
TO ANY PROVISION OF THE CURRENT DODDRIDGE COUNTY FLOODPLAIN ORDINANCE.
APPLICANT'S NAME: Cone Gathering, LLC
ADDRESS: c/o Adam White, One Energy Drive PO Box 1248 Jane Lew, WV 26378
TELEPHONE NUMBER: 724.627.1300
CONTRACTOR NAME:
ADDRESS:
TELEPHONE #
WV CONTRACTOR LICENCE #
ENGINEER'S NAME: CESO, Inc.
ADDRESS: 2800 Corporate Exchange Drive, Suite 160, Columbus, OH 43231
TELEHONE NUMBER: 614.794.7080
PROJECT LOCATION:
NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see Attachment A.
ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see Attachment A.
DISTRICT: Please see Attachment A.
LAND BOOK DESCRIPTION: Please see Attachment A.
DEED BOOK REFERENCE: Please see Attachment A.

TAX MAP REFERENCE: Please see Attachment A.
EXISTING BUILDINGS/USES OF PROPERTY: Please see Attachment A.
NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT
PROPERTY Please see Attachment A.
ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT
PROPERTY Please see Attachment A.

To avoid delay in processing the application, please provide enough information to easily identify the project location.

The proposed pipeline gathering system will extend across portions of south-central Doddridge County, West Virginia. The proposed project will begin at the OX11 natural gas well pad near 39.171128 N Latitude, 80.762683 W Longitude (NAD83), which lies south of Porto Rico, West Virginia. The project starting location is bordered on the east by County Route 40. The proposed pipeline traverses in a general north and northeasterly direction, bisecting South Fork of Hughes River Road approximately 1.1 miles from its starting location and continues north-northeasterly crossing numerous County Roads and State Route 18, prior to reaching its terminus near Sherwood, West Virginia; south of State Route 50 at 39.273142 N Latitude, 80.689713 W Longitude (NAD83). The proposed new gathering line will be approximately 10.64 miles long, connecting the OX11 well pad to the Sherwood processing facility, which is under construction. A 16-inch gas line, a 20-inch gas line, a 16-inch water line, and a 12-inch water line (located north of Meathouse Fork only) will run in the proposed alignment.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

ACTIVITY				STRU	CTURAL T	YPE			
[]	New Structure				[]	Residential (1 – 4 Family)			
[]	Addition				[]	Residential	(more than	4 Family	
[]	Alteration				[]	Non-residential (floodproo			
[]	Relocation				[]	Combined U	Jse (res. & c	com.)	
[]	Demolition				[]	Replacemei	nt		
[]	Manufactured	/Mobil	Home						
В.	OTHER DEVELOPI	.MENT	ACTIVITIES:						
[]	Fill	[]	Mining	[]	Drilling	.	Pipelin	ing	
[]	Grading								
[]	Excavation (ex	cept for	STRUCTURAL	DEVELOR	MENT ch	ecked above)			
[]	Watercourse A	lteratio	n (including d	lredging a	nd channe	el modificatio	n)		
[X]	Drainage Impr	ovemer	its (including o	culvert wo	ork)				
[]	Road, Street, o	r Bridge	Construction	า					
[]	Subdivision (in	cluding	new expansion	on)					
[]	Individual Wat	er or Se	wer System						
[]	Other (please s	specify)							
[] []	Subdivision (in Individual Wat	cluding er or Se	new expansion						

C. STANDARD SITE PLAN OR SKETCH

- 1. SUBMIT ALL STANDARD SITE PLANS, IF ANY HAVE BEEN PREPARED (ENGINEERING PLANS MUST BE SIGNED AND SEALED).
- 2. IF STANDARD SITE PLANS HAVE NOT BEEN PREPARED:

SKETCH ON A SEPARATE 8 ½ X 11 INCH SHEET OF PAPER THE SHAPE AND LOCATION OF THE LOT. SHOW THE LOCATION OF THE INTENDED CONSTRUCTION OR LAND USE INDICATING BUILDING SETBACKS, SIZE & HEIGHT. IDENTIFY EXISTING BUILDINGS, STRUCTURES OR LAND USES ON THE PROPERTY.

3. SIGN AND DATE THE SKETCH. Please see Attachment B and Attachment C.

ACTUAL TOTAL CONSTRUCTION COSTS OF THE COMPLETE DEVELOPMENT/ PROPOSED CONSTRUCTION PROJECT WITHIN THE FLOODPLAIN \$ 436,110.00 (See Attachment D for calculations)

D. ADJACENT AND/OR AFFECTED LANDOWNERS: 1. NAME AND ADDRESS OF ALL OWNERS OF SURFACE TRACTS ADJACENT TO THE AREA OF THE SURFACE TRACT (UP & DOWN STREAM) UPON WHICH THE PROPOSED ACTIVITY WILL OCCUR AND ALL OTHER SURFACE OWNERS UP & DOWN STREAM) WHO OWN PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY (IF ONE HAS BEEN COMPLETED. NAME: Please see Attachment E. NAME:____ADDRESS:_____ ADDRESS: Please see Attachment E. NAME:_____ NAME:____ ADDRESS: ADDRESS: NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON 1. ANY ADJACENT PROPERTY AT THE TIME THE FLOODPLAIN PERMIT APPLICATION IS FILED AND THE NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN ANY HOME ON ANY PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY. NAME: Refer to Attachment E. NAME: ADDRESS: ADDRESS:____ E. **CONFIRMATION FORM** THE APPLICANT ACKNOWLEDGES, AGREES, AND CONFIRMS THAT HE/IT WILL PAY WITHIN 30 DAYS OF RECEIPT OF INVOICE BY THE COUNTY FOR ALL EXPENSES RELATIVE TO THE PERMIT APPLICATION PROCESS GREATER THAN THE REQUIRED DEPOSIT FOR EXPENSES INCLUDING: PERSONAL SERVICE OF PROCESS BY THE DODDRIDGE COUNTY SHERIFF AT THE RATES PERMITTED BY LAW FOR SUCH SERVICE. SERVICE BY CERTIFIED MAIL RETURN RECEIPT REQUESTED. (B) (C) (D) COURT REPORTING SERVICES AT ANY HEARINGS REQUESTED BY THE APPLICANT. CONSULTANTS AND/OR HEARING EXPERTS UTILIZED BY DODDRIDGE COUNTY FLOODPLAIN ADMINISTRATOR/MANAGER OR FLOODPLAIN APPEALS BOARD FOR REVIEW OF MATERIALS AND/OR TESTIMONY REGARDING THE EFFICACY OF GRANTING OR DENYING THE APPLICANT'S FLOODPLAIN PERMIT.

After completing SECTION 2, APPLICANT should submit form and fees to Clerk of Doddridge County Court or his/her representative for review.

SECTION 3: FLOODPLAIN DETERMINATION (to be completed by Floodplain Administrator/Manager or his/her representative)

THE PROPOSED DEVELOPMENT: THE PROPOSED DEVELOPMENT IS LOCATED ON: Is NOT located in a Specific Flood Hazard Area (Notify applicant that the application review is complete and NO FLOOPLAIN DEVELOPMENT PERMIT IS REQUIRED). П Is located in Special Flood Hazard Area. FIRM zone designation 100-Year flood elevation is NGVD . Stream name _____ Profile # _____ Unavailable The proposed development is located in a floodway. [] See section 4 for additional instructions. DATE SIGNED SECTION 4: ADDITIONAL INFORMATION REQUIRED FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREA (To be completed by Floodplain Administrator/Manager or his/her representative) The applicant must submit the documents checked below before the application can be processed. A plan showing the location of all existing structures, water bodies, adjacent roads and proposed development. Development plans, drawn to scale, and specifications, including where applicable: details for anchoring structures, storage tanks, proposed elevation of lowest floor, (including basement or crawl space), types of water resistant materials used below the first floor, details of flood proofing of utilities located below the first floor and details of enclosures below the first floor. Also Subdivision or other development plans (If the subdivision or development exceeds 10 lots or 2

acres, whichever is the lesser, the applicant must provide 100-year flood elevations if they are not

otherwise available).

[]	Plans showing the extent of watercourse relocation and/or landform alterations.						
[]	Top of new fill elevationFt. NGVD. For floodproofing structures applicant must attach certification from registered engineer or chitect.						
	Certification from a registered engineer that the proposed activity in a regulatory floodway will ult in any increase in the height of the 100-year flood. A copy of all data and calculations ting this finding must also be submitted.						
	Manufactured homes located in a Flood Hazard Area must have a West Virginia Contractor's and a Manufactured Home Installation License as required by the Federal Emergency ement Agency (FEMA).						
[]	Other:						
	N 5: PERMIT DETERMINATION (To be completed by Floodplain Administrator/Manager or representative)						
Floodpl	determined that the proposed activity (type is or is not) in conformance with provisions of the lain Ordinance adopted by the County Commission of Doddridge County on May 21, 2013. The is issued subject to the conditions attached to and made part of this permit.						
SIGNED	DATE						
	loodplain Administrator/Manager found that the above was not in conformance with the ons of the Doddridge County Floodplain Ordinance and/or denied that application, the applicant peal.						
APPEAL	Hearing Date:						
CONDIT	County Commission Decision - Approved [] Yes [] No						
SECTIO issued)	N 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is						
	lowing information must be provided for project structures. This section must be completed by a red professional engineer or a licensed land surveyor (or attach a certification to this application).						
COMPL	ETE 1 OR 2 BELOW:						
1	Actual (As-Built) Elevation of the top of the lowest floor (including basement or crawl space is FT. NGVD.						
2	Actual (As Built) elevation of floodproofing isFT. NGVD.						

Note: Any work performed prior to submittal of the above information is at risk of the applicant. SECTION 7: COMPLIANCE ACTION (To be completed by the Floodplain Administrator/Manager or his/her representative).

The Floodplain Administrator/Manager or his/her representative will complete this section as applicable based on inspection of the project to ensure compliance with the Doddridge County Floodplain Ordinance.

Ordinance. INSPECTIONS:						
	DATE:		BY:			
	·					
COMM	IENTS			•		
SECTION 8: CER his/her represe	RTIFICATE OF COMPI entative).	LIANCE (To	be complet	ed by Flood	plain Adminis	strator/Manager or
Certificate of C	ompliance issued:	DATE	:	BY:		
	F COMPLIANCE MENT IN SPECIAL FLO	OOD HAZAF	RD AREA (OV	VNER MUST	RETAIN)	
	PE	RMIT NUM	BER:			
	PURPOSE -	_				
CONSTRUCTIO	N LOCATION:					
	RESS:					

St. Commission	
A STATE AND STAT	
LEGAL ADVI	
Doddrid	e County
Floodplain Per	mit/Application
Please take notice that on	the 29th day of September, Ciled an application for a
Floodplain Permit to develo	illed an application for a
Grant/New Milton/	Southwest & District
39:17/1128N/80:762683W	011739:273142N/80:689713W
Permit #14-290 Sherwood So	th Pipeline The Application
is on file with the Clerk of th	e County Court and may be
interested persons who desi	regular business hours. Any resto comment shall present
the same in writing by Octo	
Delivere	
Clerk of the	
118 E. Court Street, W. Beth A. Rogers, Dod	
Edwin L. "Bo" Wriston Do	dridge County Flood Plain
	ger and the little of the
44.54Mp.	10-7-2xb

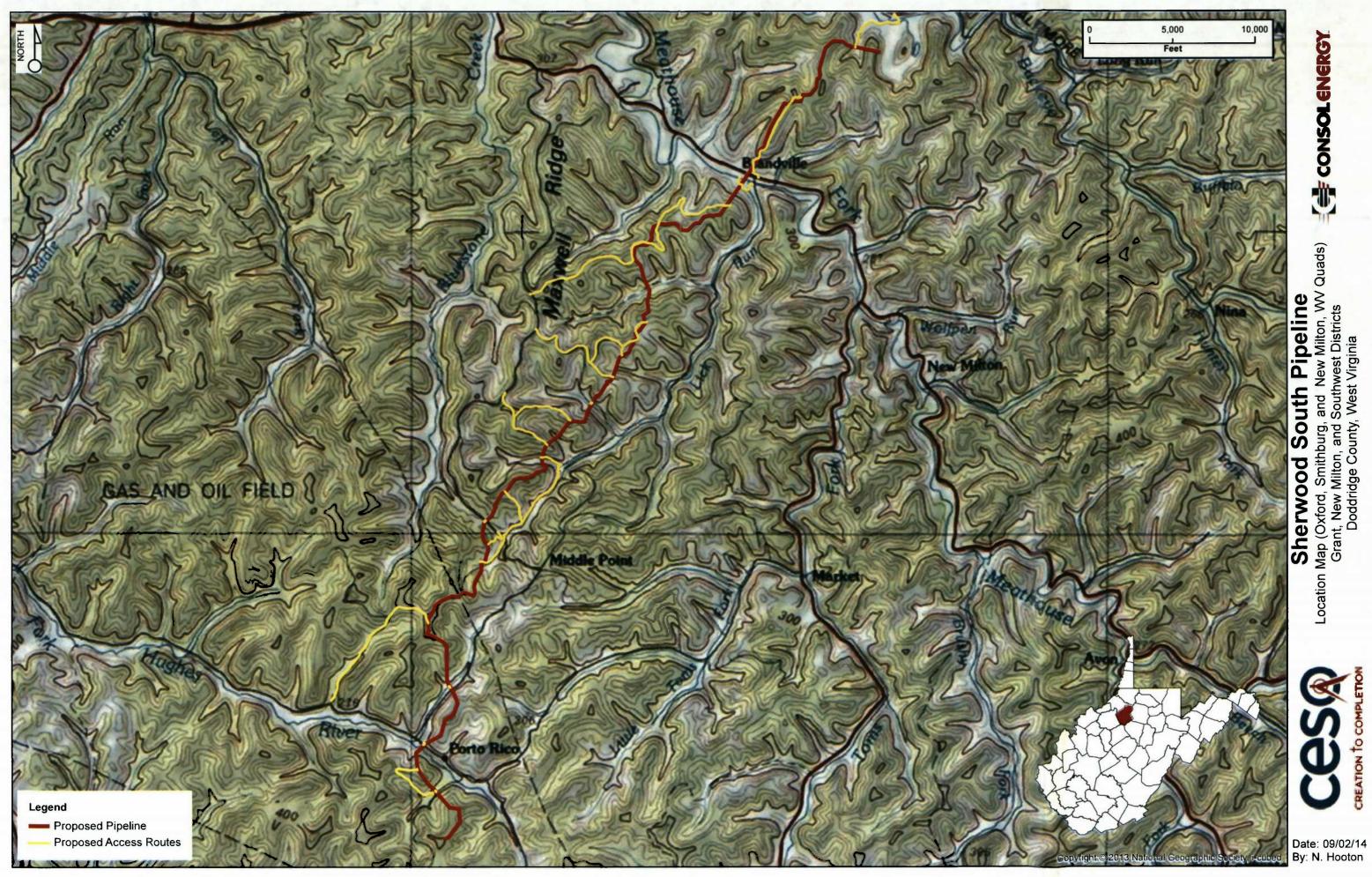
COUNTY OF DODDRIDGE, TO WIT I, Virginia Nicholson, Editor of THE HERALD RECORD, a weekly newspaper published regularly, in Doddridge County, West Virginia, Do Hereby Certify That the Accompanying Legal Notice Entitled: was published in said paper for . . . successive weeks beginning with the issue ending with the issue of amounts to the sum of \$ FOR FIRST PUBLICATION, SECOND **PUBLICATION IS 75% OF THE FIRST PUBLICATION** and each publication thereafter SWORN TO AND SUBSCRIBED NOTAR PUBLIC OFFICIAL SEAL OFFICIAL SEAL
Notary Public, State Of West Virginia
LAURA J ADAMS
212 Edmond Street
West Union, WV 26456
My Commission Expires June 14, 2023

STATE OF WEST VIRGINIA,

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inspe	cted or cop	ied during	regular	business h	ours. Any	١
inter	ested person	is who de	ire to cor	nment sh	all present	í
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STATE OF WEST VIRGINIA, COUNTY OF DODDRIDGE, TO WIT

I, Virginia Nicholson, Editor of THE HERALD RECORD, a weekly newspaper published regularly, in Doddridge County,
West Virginia, Do Hereby Certify
That the Accompanying Legal Notice
Entitled:
Floodplain Permit
\$ 14-290
was published in said paper for
successive weeks beginning with the issue
of Oclober 14 ta 2014 and
ending with the issue of
October 212t 2014 and
that said notice contains
WORD SPACE at
amounts to the sum of \$ 21.7.4
FOR FIRST PUBLICATION, SECOND PUBLICATION IS 75% OF THE FIRST PUBLICATION
\$
s 38,05 TOTAL
EDITOR
Nuginia Micholson
SWORN TO AND SUBSCRIBED
BEFORE ME THIS THE 23.24 DAY
OF October 2014
NOTARY POBLIC KULLOL GLOGO W.)
January Comments
OFFICIAL SEAL Notary Public, State Of West Virginia LAURA J ADAMS 212 Edmond Street West Union, WV 26456
My Commission Expires June 14, 2023





Sherwood South Pipe
Location Map (Oxford, Smithburg, and New Milte
Grant, New Milton, and Southwest Dis
Doddridge County, West Virginia





VICINITY MAP

ASSOCIATED WVDEP PERMITS:

1. EQT-OX11 PIPELINE - PERMIT # WVR310344

2. MEATHOUSE-OX11 WATERLINE - PERMIT # WVR310356

DRAWING INDEX					
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VERTICAL DATUM NOTE

VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1983

PLAN REPRODUCTION WARNING

THE PLANS HAVE BEEN CREATED ON ANSI D (22"x 34") SHEETS. FOR REDUCTIONS, REFER TO GRAPHIC SCALE.

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.

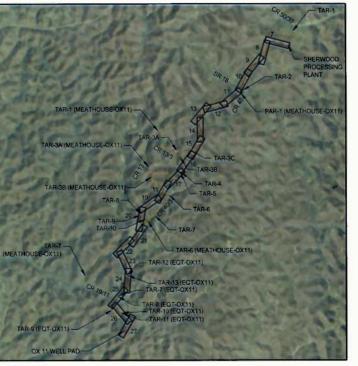
""WARNING" INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING

SHERWOOD SOUTH PIPELINE

DODDRIDGE COUNTY **WEST VIRGINIA**

APPROX. START POINT: STA 0+00 (NAD 83) LAT: 39.273282 N / LONG: 80.689736 W

(UTM) (ZONE 17) NORTHING: 246898.71 / EASTING: 1610454.96



PROJECT AREA MAP



Gathering LLC

- NOTES:

 1. THIS PLAN DOES NOT PURPORT TO BE A COMPREHENSIVE REPRESENTATION OF EXISTING UTILITIES IN THE PROJECT AREA. UTILITIES SHOWN ARE BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON SURFACE FEATURES OBSERVED IN THE FIELD. CESO, INC. MAKES NO GUARANTEE TO THEIR ACCURACY ANDIOR COMPLETENESS. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE. THE CONTRACTOR SHALL NOTIFY THE STATEWIDE ONE CALL SYSTEM, MISS UTILITY OF WEST VIRGINIA, INC. (WV811) AT 1-800-245-4848. THE CONTRACTOR SHALL ALSO NOTIFY ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES IN THE PROJECT AREA AND ARE NON-MEMBERS OF WV811.
- 2. QUANTITIES LISTED ARE BASED ON SLOPE LENGTH. CONTRACTOR SHALL VERIFY ALL

UTILITY OWNERS

- NOTES:

 CONTRACTOR SHALL CALL THE STATEWIDE ONE CALL SYSTEM, MISS UTILITY OF WEST VIRGINIA, INC. (WV811) AT 1-800-245-4848 72 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF
- UTILITIES SHOWN ARE TAKEN FROM THE SURVEY AND RECORDS OF RESPECTIVE UTILITY
 COMPANIES AND DO NOT NECESSARY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT
 TO OR UPON SITE SHOWN ON PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
 TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT AND TO PROTECT THEM
 FROM DAMAGE.

CONSOL ENERGY ONE ENERGY DRIVE JANE LEW, WV 26378

ECA / EAE

ECA/EAE 501 56th STREET SOUTH EAST CHARLESTON, WV 25304 RICK JETT 304-678-7446 KEY OIL COMPANY 22 GARTON PLAZA WESTON, WV 304-269-7102

DOMINION TRANSMISSION 445 W MAIN STREET CLARKSBURG, WV 26301

STEVEN D. GUM

ARMSTRONG TELEPHONE 600 FAST NORTH STREET HARRISVILE, WV 26362 ROGER RIGGS 304-643-2925

PENNZOIL 1-800-344-660

EQT P.O. BOX 1550 ROUTE 19 SOUTH AT OAKMOUND RD CLARKSBURG, WV 26301 304-624-9527

> ANTERO RESOURCES 981 E WASHINGTON AVE ELLENBORO, WV 26346 304-869-3405 RYAN BAKER RBAKER@ANTERORESOURCES.COM

RUBIN RESOURCES 1007 BRIDGE RD #C CHARLESTON, WV 25314 304-342-1205



APPROVED BY CONE GATHERING:

REPRESENTATIVE

DATE

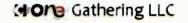
IFO		SUMMA	ARY OF MATERIALS	REFE	REFERENCE DRAWINGS			REVISIONS			
1 - (:	MRKR#	QTY.	DESCRIPTION	DWG.	DESCRIPTION	NO.	DATE	DESCRIPTION			
11 0	1	56,127 LF	PIPELINE (SLOPE LENGTH)			1	09/05/14	REVISED PER COME COMMENTS			
	2	180 EA	Elbow, 45° Segmentable Fitting		-	\top					
	3	1536 LF	BORED PIPELINE (SLOPE LENGTH)			\neg					
	4	40 EA	PIPELINE MARKER			T					
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08/29/2014											
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SHERWOOD SOUTH PIPELINE

COVER SHEET

STATION(S):



ONE ENERGY DRIVE **JANE LEW, WV 26378**

DATE:	08/29/2014
JOB NO.:	90126
DESIGN:	ВЕМ
DRAWN:	ВЕМ
CHECKED:	ВЈМ
SHEET NO.	

1 of 60

CONTRACTOR NOTES

- THIS PLAN DOES NOT PURPORT TO BE A COMPREHENSIVE REPRESENTATION OF EXISTING UTILITIES IN THE PROJECT AREA. UTILITIES SHOWN ARE BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON SURFACE FEATURES OBSERVED IN THE FIELD. CESO, INC. MAKES NO GUARANTEE TO THEIR ACCURACY ANDIOR COMPLETENESS. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE STATEWIDE ONE CALL SYSTEM, MISS UTILITY OF WEST VIRGINIA, INC. (W811) AT 1-800-245-4848. THE CONTRACTOR SHALL ALSO NOTIFY ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES IN THE PROJECT AREA AND ARE NON-MEMBERS OF W3911.
- 2. ALL CONTRACTORS/SUBCONTRACTORS PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE THEMSELVES WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM THEIR OPERATIONS. SAID EXISTING IMPROVEMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO, BERMS, OTTCHES, FENCES AND PLANTS, ANY REMOVAL OR DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTORS TO EXISTING OR BETTER CONDITIONS, AT THEIR EXPENSE, AND SHALL BE APPROVED BY THE OWNER.
- ALL CONSTRUCTION, TESTING AND MATERIALS SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE "PERMITTING ENTITY" AND LOCAL, STATE AND FEDERAL REGULATIONS.
- ALL NECESSARY TESTING SHALL BE PERFORMED BY AN APPROVED LABORATORY AT THE EXPENSE OF THE CONTRACTOR.
- PRIOR TO CONSTRUCTION, ALL CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS AND ALL OTHER NECESSARY DETAILS AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL STANDARDS OR SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL HAVE IN THEIR POSSESSION, PRIOR TO CONSTRUCTION, ALL NECESSARY
 PERMITS, LICENSES, BONDS, INSURANCE, ETC, CONTRACTORS SHALL EACH HAVE AT LEAST ONE SET OF
 APPROVED ENGINEERING PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES.
- . IN THE EVENT THAT AN ITEM IS NOT SPECIFICALLY COVERED IN THE PERTINENT AGENCIES CONSTRUCTION STANDARDS AND SPECIFICATIONS AND DETAILS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND PROJECT ENGINEER, THE OWNER SHALL HAVE THE FINAL DECISION ON ALL CONSTRUCTION MATERIALS, METHODS AND PROCEDURES.
- THE CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA AS SHOWN ON THE PLANS. NO ENCROACHMENTS OUTSIDE OF THE SPECIFIED AREAS SHALL BE ALLOWED, ANY DAMAGE RESULTING THERE FROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY OR EPAIR.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES OR LINE LOCATION SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES.
- 0. TRENCH BEDDING SHALL BE AS PER WYDOH CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST
- TOP OF NATURAL GAS PIPELINE SHALL BE A MINIMUM OF 3-0" BELOW THE FINISHED GROUND ELEVATION
 IN ALL YEGETATED AREAS, EXCEPT IN AGRICULTURAL FIELDS, WHICH THE DEPTH SHALL BE 4-0".
 MINIMUM BURY UNDER ROADWAYS AND OTHER PAVED AREAS SHALL BE PER THE PERMITTING
 AUTHORITIES SPECIFICATIONS AND THE ASSOCIATED PERMIT & DRAWMOS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH STANDARD TRENCH SAFETY GUIDELINES AND THE U.S. DEPARTMENT OF LABOR AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.
- THESE PLANS DO NOT CONSTITUTE A BOUNDARY SURVEY. BOUNDARY LINES AS SHOWN HEREON ARE BASED ON TAX MAPS AS PROVIDED BY OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE PROJECT MANAGER FOR ANY DEVIATION FOUND RELATIVE TO THE PROJECT.
- EXISTING EASEMENTS AND/OR RIGHT-OF-WAYS WERE NOT RESEARCHED AND SURVEYED DURING THIS
 PROJECT, OTHER THAN THOSE SHOWN WITHIN THE PLANS.
- FENCE LINES ENCOUNTERED DURING CONSTRUCTION SHOULD BE RELOCATED AND REPLACED PER LANDOWNER AND OWNER'S REPRESENTATIVE.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE GOVERNING AUTHORITIES PRIOR TO ALL ROAD CROSSINGS. MAINTENANCE OF TRAFFIC IS TO BE IMPLEMENTED AS NECESSARY TO ENSURE THAT THE ROAD HAS CONTINUAL ACCESS. MAINTENANCE OF TRAFFIC SHALL BE PER THE LATEST FOILTON OF THE WORDON TEMPORARY TRAFFIC CONTROL FOR STRIFFTS AND HIGHWAYS MANIJAL

GENERAL CONSTRUCTION SEQUENCE

THE PIPELINE PROJECT CONSISTS OF ONE GENERAL CONSTRUCTION PHASE. ALL EROSION AND SEDIMEN CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THE WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES (WYDNR) AND WEST VIRGINIA DEPARTMENT OF ENABLONG AND SEDIMENT CONTROL SEDIMENT

THE CONSTRUCTION SEQUENCE IS INTENDED AS A GENERAL COURSE OF ACTION TO COMPLY WITH WYDNR AND WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WYDEP) EROSION AND SEDIMENT CONTROL REGULATIONS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MEASURES NECESSARY TO MEET APPLICABLE RULES AND REGULATIONS ARE INSTALLED. MEASURES AS SHOWN ON THESE PLANS MAY BE ALTERED TO BETTER MEET SITE SPECIFIC CONDITIONS AT THE DISCRETION OF THE CONTRACTOR

BMP DETAILS AND CONSTRUCTION SPECIFICATIONS CAN BE FOUND ON THE STANDARD DETAIL SHEETS.

- A COPY OF THE FOR CONSTRUCTION PLANS MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
- AT LEAST THREE DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THESE ACTIVITIES SHALL NOTIFY THE WEST VIRGINIA ONE CALL SYSTEM BEFORE STARTING ANY CONSTRUCTION ACTIVITIES.
- PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, CONTRACTOR SHALL CLEARLY DELINEATE SENSITIVE AREAS, RIPARIAH FOREST BUFFER BOUNDARIES, THE LIMITS OF CLEARING, AND TREES THAT ARE TO BE CONSERVED WITHIN THE PROJECT SITE, AND INSTALL APPROPRIATE BARRIERS WHERE EQUIPMENT MAY NOT BE PARKED, STAGED, OPERATED OR LOCATED FOR ANY PURPOSE. APPROPRIATE BMPs SHOULD BE INSTALLED AND
- CONSTRUCTION FENCE SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS, CONSTRUCTION FENCE SHALL BE CHECKED REGULARLY FOR WEATHER RELATED OR OTHER DAMAGE. ANY NECESSAR' REPAIRS SHALL BE MADE IMMEDIATELY.
- INSTALLATION OF STONE CONSTRUCTION ENTRANCES AT ALL ACCESS LOCATIONS SHALL BE THE FIRST STEP OF CONSTRUCTION AND SHALL BE FOLLOWED BY INSTALLATION OF BMP's FOR ALL AREAS DESIGNATED FOR EQUIPMENT AND MATERIAL STAGING.
- 6. INSTALL ROCK CHECK DAMS AT LOCATIONS SHOWN ON THE PLANS. INSPECT EACH CHECK DAM AT A MINIMUM ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAT 0.5 INCHES OF RAIN PER 24 HOUR PERIODS. CHECK TO SEE IF WATER RAS FLOWED AROUND THE EGGE OF THE STRUCTURE. REPLACE STONE AND REPAIR DAM AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT AND CONFIGURATION. SEDIMENT SHALL BE REMOVED FROM BEHIND THE CHECK DAMS WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE DAM.
- INSTALL PERIMETER BMP's (SILT FENCING OR FILTER SOCKS) WHERE NECESSARY ALONG CLEARING AND GRUBBING BOUNDARIES.
- BEGIN LAND CLEARING AND GRADING (IF NECESSARY) ONLY AFTER ALL DOWNSLOPE BMP'S HAVE BEEN INSTALLED. IF POSSIBLE, MINIMIZE CLEARING AND GRADING AT STREAM CROSSINGS UNTIL THE TIME OF CROSSING.
- APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY TO ANY DISTURBED AREAS WHERE WORK HAS REACHED FINAL GRADE, HAS BEEN DELAYED OR OTHERWISE TEMPORARILY CLIEDER FOR THE PROPERTY OF THE PROPERTY OF
- 10. INSTALL TEMPORARY WATERBARS AT LOCATIONS SHOWN ON THE DRAWINGS, WATERBARS WILL BE INSTALLED WITH FILTER SOCKS AT THE DISCHARGE TO HELP CONTROL THE VOLUME AND SPEED OF
- INSTALL BMP's FOR TEMPORARY ROAD CROSSINGS OF WETLANDS AND WATER BODIES WITHIN THE
 PIPELINE ROW AS NECESSARY, FOLLOW STREAM AND WETLAND CROSSING DETAILS FOR ACCESS ROAD
 CROSSINGS OF THESE FEATURES. FILTER SOCKS SHALL BE USED AT ALL STREAM CROSSINGS, SEE
 STREAM CROSSING PROCEDURES AND WETLAND CROSSING PROCEDURES FOR ADDITIONAL
- 12. CONSTRUCTION OF UTILITIES (INSTALL NATURAL GAS PIPELINE), WHEN TRENCH EXCAVATION TAKES PLACE IN AN AGRICULTURAL, WETLAND, OR RESIDENTIAL AREA, THEN SEGREGATION OF TOPSOIL AND SUSSOIL WILL BE PERFORMED, PLACE TRENCH PLUGS AT THE REQUIRED SPACING DURING UTILITY INSTALLATION, FOLLOW STREAM AND WETLAND CROSSING DETAILS LOCATED ON THE EROSION AND SEDIMENT CONTROL DRAWINGS FOR UTILITY CROSSINGS OF THESE FEATURES. SEE STREAM CROSSING PROCEDURES AND WETLAND CROSSING, PROCEDURES FOR ADDITIONAL INFORMATION ON WATER BODY AND WETLAND CROSSING, DURING CONSTRUCTION, INSTALL AND MAINTAIN ANY ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS AND IMPLEMENT STRUCTURAL POST CONSTRUCTION ON THE BODY AND SEDIMENT CONTROL BMPS AND IMPLEMENT STRUCTURAL POST CONSTRUCTION OF THE BMPS (PERMANENT WATERBARS) THAT MAY BE REQUIRED. SEE UTILITY LINE INSTALLATION SEDIMENTS FOR HIMST OF WORK
- 13. ANY WATER ENCOUNTERED WITHIN THE EXCAVATION AREAS DURING CONSTRUCTION SHALL BE REMOVED BY USING PUMPS, HOSES, AND PUMPED WATER FILTER BAGS WHICH SHALL BE DISCHARGED INTO UNDISTURBED WELL-VEGETATED UPLAND AREAS.
- 14. BACKFILL AREAS EXCAVATED FOR THE INSTALLATION OF UTILITIES WITH SUITABLE EXCAVATED MATERIAL. IN AREAS WHERE TOPSOIL HAS BEEN SEGREGATED, THE SUBSOIL SHALL BE REPLACED FIRST, FOLLOWED BY THE TOPSOIL BEING SPREAD OVER THE AREA FROM WHICH IT WAS REMOVED.
- 15. AFTER CONSTRUCTION IS COMPLETE, FINAL SEEDING AND MULCHING OF ALL DISTURBED AREAS NOT YET STABILIZED SHALL BE COMPLETED, INSTALL EROSION CONTROL BLANKETING ON SLOPES WHICH ARE 3:1 OR STEEPER, STABILIZE AND SEED ALL OPEN AREAS INCLUDING BORROW AND SPOLJ AREAS.
- . REMOVAL OF ALL TEMPORARY BMP'S CAN BE PERFORMED UPON ACHIEVEMENT OF A UNIFORM 70 PERCENT PERENNAL VEGETATIVE COVER WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION FOR ALL AREAS WHICH WOULD CONTRIBUTE RUNOFF TO THE BMP'S. STABILIZE ANY DISTURBANCES ASSOCIATED WITH THE REMOVAL OF THE BMP'S.

WETLAND CROSSING SEQUENCE OF CONSTRUCTION

- INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS PRIOR TO EARTH DISTURBANCE.
- SEDIMENT BARRIERS SHALL BE INSTALLED AT THE EDGE OF THE RIGHT-OF-WAY AND AROUND TOPSOIL AND SUBSOIL PILES.
- 3. GEOTÉXTILE SHALL BE PLACED UNDER SUBSOIL AND TOPSOIL PILES.
- 4. WORKING SIDE OF TRENCH WILL BE STABILIZED WITH PRE-FABRICATED MATS, AS NEEDED, TO PROVIDE A FIRM SURFACE FOR CONSTRUCTION EQUIPMENT. FOR HEAVY SATURATED AREAS, GEOTEXTILE SHALL BE PLACED UNDER THE MATS TO PREVENT MOVEMENT OR PUMPING OF THE SOIL THROUGH THE MATS.
- IN WETLAND AREAS WITHOUT STANDING WATER OR SATURATED SOILS, TOPSOIL (TOP 12 INCHES) AND SUBSOIL SHALL BE SEGREGATED AND STOCKPILED DURING TRENCHING.
- UPON COMPLETION OF PIPE INSTALLATION THROUGH WETLAND, TRENCH PLUG(S) SHALL BE INSTALLED AS REQUIRED TO MAINTAIN ORIGINAL WETLAND HYDROLOGY.
- THE SEGREGATED TOPSOIL SHALL BE RESTORED TO IT'S ORIGINAL CONDITION DURING BACKFILLING.
 THE ORIGINAL TOPSOIL SHALL BE KEPT IN A CONDITION THAT WILL ALLOW IT TO MAINTAIN SUFFICIENT
 SEED AND ROOT MATERIAL AND TO PROVIDE VEGETATIVE COVER.
- ALL SEEDING SHOULD COMPLY WITH EITHER OPTION "A" OR OPTION "B" SEED MIXES LISTED UNDER THE SPECIAL NOTES SECTION FOR STREAMWETLAND CROSSINGS CONTAINED IN THESE DRAWNINGS. SEEDING ONLY, WITH NO FERTILIZING, SHALL BE DONE IN CRITICAL AREAS (I.e. WITHIN 50" OF AN HQ OR EV STREAM CHANNEL OR WITHIN WETLANDS). DO NOT APPLY MULCH WITHIN WETLANDS.

"OPEN CUT" STREAM CROSSING (TEMPORARY) CONSTRUCTION SEQUENCE - PIPE

- ALL IN-STREAM DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHOULD BE COMPLETED IN COMPLIANCE WITH WYDEP'S OFFICE OF CONSTRUCTION STORMWATER EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- ALL WORK SHALL BE PERFORMED IN LOW FLOW CONDITIONS AND EACH CROSSING SHALL BE COMPLETED WITHIN 72 HOURS OF START OF WORK.
- 3. POINTS OF INGRESS AND EGRESS TO STREAMS FOR EQUIPMENT SHALL BE WITHIN THE WORK SITE
- SURFACE DISTURBANCE WILL NOT EXTEND BEYOND THE RIGHT-OF-WAY LIMITS. STREAM CROSSINGS WILL BE CONDUCTED AS CLOSE TO A RIGHT ANGLE TO THE WATERCOURSE AS PRACTICAL AND THE AREA OF DISTURBANCE WILL BE LIMITED TO REDUCE IN STREAM ACTIVITY.
- INSTALL TEMPORARY COFFER DAM AT UPSTREAM EDGE OF PROPOSED WORK AREA, DEWATER THE COFFERDAM AS NECESSARY
- OPEN CUT CHANNEL TO A WIDTH AND DEPTH THAT IS NO MORE THAN WHAT IS NECESSARY FOR INSTALLATION OF PIPE. DURING EXCAVATION, SEPARATE THE INITIAL ONE FOOT OF STREAM SUBSTRATE FROM THE SUBSURFACE MATERIAL INTO TWO SEPARATE PLES.
- INSTALL PIPE AS SHOWN ON PLANS.
- BACKFILL TRENCH BY FIRST ADDING SUBSURFACE MATERIAL, THEN THE STREAM SUBSTRATE MATERIAL, ENSURING THAT ORIGINAL GRADE, DIMENSIONS, AND CONTOURS OF THE CHANNEL ARE RE-ESTABLISHED.
- REMOVE COFFERDAM AND STABILIZE ANY REMAINING DISTURBED AREAS.

STREAM CROSSING (TEMPORARY) CONSTRUCTION SEQUENCE - ACCESS ROADS

- ALL IN STREAM DISTURBANCE ACTIVITY SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE, EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH WYDEP, THE WEST VIRGINIA OFFICE OF LAID AND STREAMS (WYOLS), THE WIDNR, AND THE U.S. ARMY CORPS OF ENGINEERS (USACE) RULES AND REGULATIONS.
- 2. STREAM CROSSING SHALL MEET THE REQUIREMENTS OF THE WYDEP'S OFFICE OF CONSTRUCTION STORMWATER EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL CHAPTER
- SEE CULVERT STREAM CROSSING FROM THE WYDEP'S OFFICE OF CONSTRUCTION STORMWATER EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL.
- ALL WORK SHALL BE PERFORMED IN LOW FLOW CONDITIONS AND EACH CROSSING SHALL BE COMPLETED WITHIN 72 HOURS OF START OF WORK.
- POINTS OF INGRESS AND EGRESS TO STREAMS FOR EQUIPMENT SHALL BE WITHIN THE WORK SITE ONLY.
- SURFACE DISTURBANCE WILL NOT EXTEND BEYOND THE RIGHT-OF-WAY LIMITS. STREAM CROSSINGS WILL BE CONDUCTED AS CLOSE TO A RIGHT ANGLE TO THE WATERCOURSE AS PRACTICAL AND THE AREA OF DISTURBANCE WILL BE LIMITED TO REDUCE IN STREAM ACTIVITY.
- INSTALL TEMPORARY COFFER DAM AT UPSTREAM EDGE OF PROPOSED WORK AREA. DEWATER THE COFFERDAM AS NECESSARY.
- 8. INSTALL ACCESS ROAD TEMPORARY CROSSING AS SHOWN ON PLANS.
- 9. REMOVE COFFERDAM AND STABILIZE ANY REMAINING DISTURBED AREAS.

UTILITY LINE INSTALLATION REQUIREMENTS

- THE CONTRACTOR SHALL LIMIT TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILL THAT CAN BE INSTALLED IN ONE DAY.
- THE CONTRACTOR SHALL GRADE TO FINAL CONTOURS, INSTALL REQUIRED EROSION CONTROL MEASURES, AND SEED AND MULCH ALL DISTURBED AREAS AT THE END OF EACH WEEK.
- 3. DEWATER ALL TRENCHES PRIOR TO PIPE INSTALLATION AND BACKFILLING. ALL WATER TO BE PUMPED
- I. ALL TRENCH EXCAVATION MATERIAL TO BE PLACED ON DOWNHILL SIDE OF TRENCH.
- IN THE EVENT THAT THESE REQUIREMENTS CAN'T BE MET DUE TO FIELD CONDITION, THE CONTRACTOR SHALL COORDINATE ALTERNATE REQUIREMENTS WITH OWNER'S REPRESENTATIVE.

UTILITY RIGHT-OF-WAY RESTRICTIONS

- CONSTRUCTION VEHICLES, VEHICLES WITH BOOMS AND EQUIPMENT OPERATING WITHIN OR ADJACENT TO A UTILITY RIGHT-OF-WAY MUST BE PROPERLY GROUNDED.
- 2. CHANGES TO GRADE ELEVATION WITHIN THE UTILITY RIGHT-OF-WAY ARE NOT PERMITTED.
- GROUND DISTURBANCE OR EXCAVATIONS ARE NOT PERMITTED WITHIN 50 FEET OF ANY UTILITY STRUCTURES (POLES, TOWERS, GUYS, ETC.)
- EXPLOSIVES OR COMBUSTIBLE LIQUIDS, SUBSTANCES, OR MATERIALS ARE NOT PERMITTED WITHIN THE RIGHT-OF-WAY. PROHIBITED MATERIALS INCLUDE BUT ARE NOT LIMITED TO FUEL, WOOD CHIPS, MULCH, 89 ISLA AND TIBES.

SUMMARY OF MATERIALS REFERENCE DRAWINGS REVISIONS

MRKR # QTY. DESCRIPTION DWG. DESCRIPTION NO. DATE DESCRIPTION
1 0905/14 REVISED PER CONE COMMENTS

08/29/2014

DATE

cesa

CREATION TO COMPLETION

WWW.cesoinc.com

Engineering • Architecture • Survey • Ourstruction Mgt • Environmental

STATION(S):

SHERWOOD SOUTH PIPELINE

N/A

SWPPP NOTES

ONE ENERGY DRIVE JANE LEW, WV 26378

GONE Gathering LLC

DATE: 08/29/2014

JOB NO.: 90126

DESIGN: BEM

DRAWN: BEM

CHECKED: BJM

SHEET NO.

2 of 60

KIPROJECTSICONSOL ENERGY099128-00 - SHERWOOD SOUTH PIPELINEIDESIGMBASE DWGS90126-SHERWOOD SOUTH IFC TABLES DWG - 9/9/2014 4:56

EROSION AND SEDIMENT CONTROL NARRATIVE:

PLAN DESIGNER: CESO, INC

2800 CORPORATE EXCHANGE DRIVE, SUITE 160

OWNER: CONE GATHERING, LLC ONE ENERGY DRIVE JANE LEW, WV 26378

CONTACT: BENJAMIN J. MILLER, PE P: 614-794-7080

E: MILLER@CESOINC.COM

WV-DEP PERMIT #

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF CONSTRUCTING A 16" NATURAL GAS PIPELINE, A 20" NATURAL GAS PIPELINE AND A 16" WATER LINE (12" NORTH OF MEATHOUSE FORK) IN DODDRIDGE COUNTY, WEST VIRGINIA 136.17 ACRES TOTAL PROJECT AREA

ACRES DISTURIED: TAR4: 0.025 ACRES DISTURBED (NEW ACCESS ROAD WITHIN PIPELINE DISTURBANCE) TAR5: 0.025 ACRES DISTURBED (NEW ACCESS ROAD WITHIN PIPELINE DISTURBANCE) TAR8: 0.025 ACRES DISTURBED (NEW ACCESS ROAD WITHIN PIPELINE DISTURBANCE) TAR-9: 0.025 ACRES DISTURBED (NEW ACCESS ROAD WITHIN PIPELINE DISTURBANCE)

ACCESS ROADS:
TAR-1: 3.87 ACRES DISTURBED (UPGRADED ACCESS ROAD) TAR-2: 8.38 ACRES DISTURBED (UPGRADED ACCESS ROAD)
TAR-3: 3.23 ACRES DISTURBED (UPGRADED ACCESS ROAD)
TAR-3: 3.23 ACRES DISTURBED (UPGRADED ACCESS ROAD)
TAR-3: 7.58 ACRES DISTURBED (UPGRADED ACCESS ROAD)
TAR-3: 7.58 ACRES DISTURBED (UPGRADED ACCESS ROAD)

E: ADAMWHITE@CONSOLENERGY.COM

TAR-6: 1.05 ACRES DISTURBED (UPGRADED ACCESS ROAD) TAR-7: 1.35 ACRES DISTURBED (0.94 ACRES UPGRADED ACCESS ROAD, 0.41 ACRES NEW ACCESS ROAD)

TAR-10: 1.25 ACRES DISTURBED (UPGRADED ACCESS ROAD)

CR 13/3: 4.64 ACRES DISTURBED (UPGRADED COUNTY ROAD CR 40/3: 5.58 ACRES DISTURBED (UPGRADED COUNTY ROAD

8340 CY CUT / 8315 CY FILL (25 CY SPOIL - TO BE SPOILED IN LAYDOWN AREA BETWEEN STA. 428+00 THRU STA. 438+00)

EXISTING SITE CONDITIONS:

THE TOPOGRAPHY OF THIS SITE CONSISTS OF MANY RIDGES AND VALLEYS. THIS SITE CONSISTS PREDOMINATELY OF WOODS AND OPEN FIELDS. THIS SITE DRAINS TO S FORK HUGHES RIVER, MEATHOUSE FORK,

ADJACENT AREAS THAT MAY BE AFFECTED BY SITE DISTURBANCE INCLUDE STREAM G10, STREAM G2, WETLAND 2, WETLAND 1, WETLAND 671, STREAM G72, WETLAND A, WETLAND B, WETLAND C, STREAM G3, WETLAND G37, STREAM G33, WETLAND G34, STREAM G33, WETLAND G37, STREAM G38, WETLAND G37, WETLAND WETLAND CD, STREAM CB, STREAM EN, WETLAND EM, STREAM EJ, STREAM OBX4, STREAM OBX3, STREAM OBX2, SR 18, CR 13/3, CR 13, CR 40, AND CR 19/11.

THE DRAINAGE PATH LEADING FROM THE SITE TO THE RECEIVING BODY OF WATER CONSISTS OF VEGETATED SWALES, EXISTING EROSIONAL FEATURES, AND TRIBUTARIES OF STREAMS.

CRITICAL AREAS

ADJACENT AREAS:

PIPELINE: STREAM G101, STREAM 1, WETLAND E, STREAM 6, WETLAND G54, STREAM G53, STREAM G52, STREAM G50, STREAM G49, STREAM G49, STREAM G40, G36. STREAM G32, STREAM G31, STREAM G30, STREAM CC, WETLAND CA, STREAM ZZ, STREAM ZA, STREAM EH

ACCESS ROADS: STREAM G108, STREAM G1, STREAM AJ9, WETLAND AJ11, WETLAND AJ13, STREAM AJ13, STREAM G44

REQUIREMENTS FOR WORKING IN OR NEAR CRITICAL AREAS CAN BE FOUND ON SHEETS 2-6.

SOILS:

Soil name	Soil Mapping Unit	Erodibility (K Factor, Whole Soil)	I Settleahility	Permeability	Depth (cm)	Texture	Soil Structure (Unavailable)
CHAGRIN SILT LOAM	Ch	0.37		Well drained	>200	Siit loam	
GILPIN-PEABODY COMPLEX, 25 TO 35 PERCENT SLOPES	GpE	0.43	-	Well drained	69	Silt loam	-
GILPIN-PEABODY COMPLEX, 15 TO 35 PERCENT SLOPES, VERY STONY	GsE	0.37	E	Well drained	84	Silt loam	-
GILPIN-PEABODY COMPLEX, 35 TO 70 PERCENT SLOPES, VERY STONY	GsF	0.37	-	Well drained	84	Silt loam	-
GILPIN UPSHUR COMPLEX, 8 TO 15 PERCENT SLOPES	GuC	0.43	=	Well drained	84	Silt loam	
GILPIN UPSHUR COMPLEX, 15 TO 25 PERCENT SLOPES	GuD	0,43		Well drained	84	Silt loam	-
MONONGAHELA SILT LOAM, 3 TO 8 PERCENT SLOPES	MoB	0.43		Moderately well drained	56	Slit loam	•
MONONGAHELA SILT LOAM, 8 TO 15 PERCENT SLOPES	Mo¢	0.43		Moderately well drained	56	Slit loam	
SENSABAUGH SILT LOAM	Se	0.37		Well drained	>200	Slit loam	•
SENSABAUGH SILT LOAM, 3 TO 8 PERCENT SLOPES, RARELY FLOODED	SeB	0.37	=	Well drained	>200	Silt loam	•
VANDALIA SILT LOAM, 15 TO 25 PERCENT SLOPES	VaD	0.32		Well drained	>200	Silt loam	-
VANDALIA SILT LOAM, 25 TO 35 PERCENT SLOPES	VaE	0.49	•	Well drained	>200	Silt loam	-
VANDAUA SILT LOAM, 15 TO 35 PERCENT SLOPES, VERY STONY	VsE	0.49	=	Well drained	>200	Silt loam	

*Data obtained from NRCS-USDA Web Soll Survey

POTENTIAL EROSION PROBLEMS ON THIS SITE EXIST ALONG STEEP SLOPES WHERE THE PIPELINE WILL BE CONSTRUCTED. FROSION PROBLEM AREAS:

POLLUTION PREVENTION ELEMENTS:

CONSTRUCTION STORMWATER THE SEDIMENT CONTROL PLAN SHOWS ALL CLEARING LIMITS AND PROPOSED SEDIMENT CONTROLS. THE GENERAL NOTES ADDRESS THE STABILIZATION OF SOILS, SLOPE PROTECTION, CONTROL OF OTHER MANAGEMENT OF THE PROJECT, AND STABILIZATION. TYPES OF BMPs USED ON THIS PROJECT INCLUDE SUPER SILT FENCE, SILT FENCE, WATER BARS, AND TRENCH PLUGS. REFER TO SHEETS 7-27 AND 33-58 FOR LOCATIONS.

SCHEDULE:

CONSTRUCTION PHASING AND THE CONSTRUCTION SEQUENCE FOR THIS PROJECT CAN BE FOUND ON SHEET 2 WET SEASON CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, EROSION & SEDIMENT CONTROL INSTALLATION, ACCESS ROAD CONSTRUCTION, TRENCH EXCAVATION, UTILITY PLACEMENT, BACKFILLING, AND OPEN CUTTING OF STREAMS, CONSTRUCTION RESTRAINTS FOR ENVIRONMENTALLY CRITICAL AREAS CAN BE FOUND ON SHEET 2.

ENGINEERING CALCULATIONS: CUILVERTS FOR THIS PROJECT WERE SIZED USING THE TR-55 METHOD TO PASS THE PEAK DISCHARGE FROM A 10-YR/24-HR STORM

EROSION & SEDIMENT CONTROL PLAN NOTES

- ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED ACCORDING TO: THIS PLAN: WEST VIRGINIA GENERAL WATER POLLUTION CONTROL PERMIT; ANY AND ALL REQUIRED PERMITS, REPORTS, AND RELATED DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS MUST BECOME FAMILIAR WITH
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE EROSION CONTROL PLAN, ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED B CONDITIONS AND GRADE CHANGES TO THE SITE AT NO ADDITIONAL COST TO OWNER THROUGHOUT AL
- CONTRACTOR SHALL MINIMIZE CLEARING AND DISTURBANCE TO THE ENVIRONMENT TO THE MAXIMUM EXTENT POSSIBLE OR AS REQUIRED BY THE GENERAL PERMIT.
- PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING WITHIN SEVEN (7) DAYS FROM THE START OF CLEARING AND GRUBBING, AND SHALL CONTINUE TO FUNCTION
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS
- WHERE THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW
- WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G., THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE NITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE
- AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE. COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RESEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.
- TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH WYDEP'S OFFICE OF CONSTRUCTION STORMWATER EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL, CHAPTER
- PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH WYDEP'S OFFICE OF CONSTRUCTION STORMWATER EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL, CHAPTER
- 11. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION, ALL SLOPES 3:1 OR GREATER THAN 3:1 SHALL BE FERTILIZED, SEEDED, AND CURLEX BLANKETS BY AMERICAN EXCELSIOR COMPANY, NORTH AMERICAN GREEN, INC. OR AN APPROVED EQUAL AS SPECIFIED IN THE PLANS SHALL BE INSTALLED ON THE SLOPES.
- 12. NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL NON-SEDMENT POLLUTANTS MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUP. IN DESIGNATED PIT OR DIKED AREAS, WHERE WASHINGS CAN BE REMOVED AND PROPERLY DISPOSED OFF-SITE WHEN THEY HARDEN. STORAGE TANKS SHOULD ALSO BE LOCATED IN PIT OR DIKED. AREAS IN ADDITION SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CLEAN AND CONTAIN FUEL AND CHEMICAL SPILLS MUST BE KEPT ON SITE.
- 13. IF THE ACTION OF VEHICLES TRAVELING OVER THE STABILIZED CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE MOST OF THE DIRT AND MUD. THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WATER AND TRAF BEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DISPOSED INTO SEALED CONTAINERS MATERIALS SHALL BE PREVENTED FROM LEAVING THE SITE THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- DUST CONTROL USING APPROVED MATERIALS MUST BE PERFORMED AT ALL TIMES. THE USE OF MOTOR
 OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS PROHIBITED.
- 16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE ROADWAYS OR INTO THE STORM

TEMPORARY SEEDING CHART

			PLS	
Common Name	Scientific Name	Planting Dates	Lbs/Acre	
Annual Ryegrass	Lolium multiflorum	2/16-5/15, 8/1-11/1	40	
Field Bromegrass	Bromus ciliatus	3/1-6/15, 8/1-9/15	40	
Spring Oats	Avena sativa	3/1-6/15	100	
Winter Rye	Secale cereale	8/15-2/28	170	
Winter Wheat	Triticum aestivum	8/18-2/28	180	
Japanese Millet	Echinochloa crusgalli	5/15-8/15	30	
Redtop	Agrostis alba	3/1-6/15	10	
Annual Ryegrass and Spring Oats	Lotium multiflorum, Avena sativa	3/1-6/15	30, 70	
German, Foxtail Millet	Setaria italica	5/1-8/1	40	
Hairy Vetch	Vicia villosa	8/15-4/1	60	

- PRIOR TO SEEDING, INSTALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND
- SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRILL, CULTIPACKER SEEDER, OR
 HYDROSEEDER. SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1.5 INCHES DEEP. SMALL SEEDS, SUCH AS
 ANNUAL RYE, SHALL BE PLANTED NO MORE THAN A QUARTER INCH DEEP. OTHER GRASSES AND LEGUMES
 SHALL BE PLANTED NO MORE THAN A HALF INCH DEEP.
- TEMPORARY SEEDING CONDUCTED IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED WITH STRAW AND HAY ACCORDING TO THE STANDARD FOR MULCHING, HYDROMULCHES (FIBER MULCH) MAY NOT PROVIDE ADEQUATE TEMPERATURE AND MOISTURE CONTROL.

EROSION & SEDIMENT CONTROL MAINTENANCE NOTES

ALL CONTROL MEASURES STATED IN THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED PERSON IN ACCORDANCE TO THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED ACCORDING TO

- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STANDING OF GRASS IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
- SILT FENCES, AND CHECK DAMS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT ACCUMULATION MUST BE REMOVED WHEN SEDIMENT HEIGHT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE OR CHECK DAM.
- SEDIMENTATION TRAPS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT MUST BE REMOVED FROM TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 40%.
- MINIMIZE OFF-SITE SEDIMENT TRACKING OF VEHICLES BY THE USE OF STONE MATERIAL IN ALL MINIMIZE OFF-SITE SEDIMENT INCREMENT OF VEHICLES THE USE OF STONE INVESTMENT INVESTMENT OF STABILIZED CONSTRUCTION ENTRANCES, ALONG WITH REGULARLY SCHEDULED SWEEPING/GOOD HOUSEKEEPING. STABILIZED CONSTRUCTION ENTRANCES TO BE PROPERLY MAINTAINED BY GENERAL CONTRACTOR AND IN GOOD WORKING ORDER AT ALL TIMES; THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE STONE
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE) BY GENERAL CONTRACTOR. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
- CONTRACTORS AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ALL SEDIMENT FROM THE SITE, INCLUDING SEDIMENT TRAPS AND STORM SEWER PIPES. SEDIMENT DEPOSITION DURING SITE STABILIZATION MUST ALSO BE REMOVED.
- ALL ROCK CHANNEL PROTECTION MUST BE PLACED OVER GEOTEXTILE FILTER.
- ROCK CHECK DAMS SHOULD BE ROUTINELY CLEANED ONCE SEDIMENT BEGINS TO APPEAR ON THE UPSTREAM SIDE OF THE ROCK.
- CONTAINERS SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES, ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF, ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL
- AREA SHALL BE DESIGNATED BY CONTRACTOR AND SHOWN ON SWPPP MAP FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME ASPHALT, OR CONCRETE, THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA.
 - EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.
- A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE TOTAL ABOVE-GROUND
- ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN AN WYDEP APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.
- THE CONTRACTOR SHALL CONTACT THE WVDEP, THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN.

EROSION & SEDIMENT CONTROL MAINTENANCE NOTES

ALL EROSION AND SEDIMENT CONTROLS ON THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES PER 24 HOUR PERIOD, ANY REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.

PERMANENT SEEDING CHART

			PLS
Seed Mix	Common Name	Scientific Name	Lbs/Acre
О	Perennial Ryegrass	Lollum perenne	40
	Birdsfoot Trefoil	Lotus comiculatus	15
	Redtop	Agrostis alba	5
p	Serecia Lespedeza	Lespedeza cunata	40
	Orchardgrass	Dactylis glomerata	30
	Redtop	Agrostis alba	5

- ALL PERMANENT SEEDING SHALL CONFORM TO WV DEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL, SECTION 3.10-1.
- 2. SEED MIX O OR P SHALL BE USED FOR PERMANENT SEEDING.

IEC	SUMMARY OF MATERIALS			RE	REFERENCE DRAWINGS		REVISIONS		
IH()	MRKR#	QTY.	DESCRIPTION	DWG.	DESCRIPTION	NO.	DATE	DESCRIPTION	
11 🔾						1_	09/05/14	REVISED PER CONE COMMENTS	
						+			
						+		 	
						-			
						+			
08/29/2014	_			_+		+		 	
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DATE				 		1			
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SHERWOOD SOUTH PIPELINE

SWPPP NOTES

STATION(S)

GONE Gathering LLC

ONE ENERGY DRIVE **JANE LEW, WV 26378**

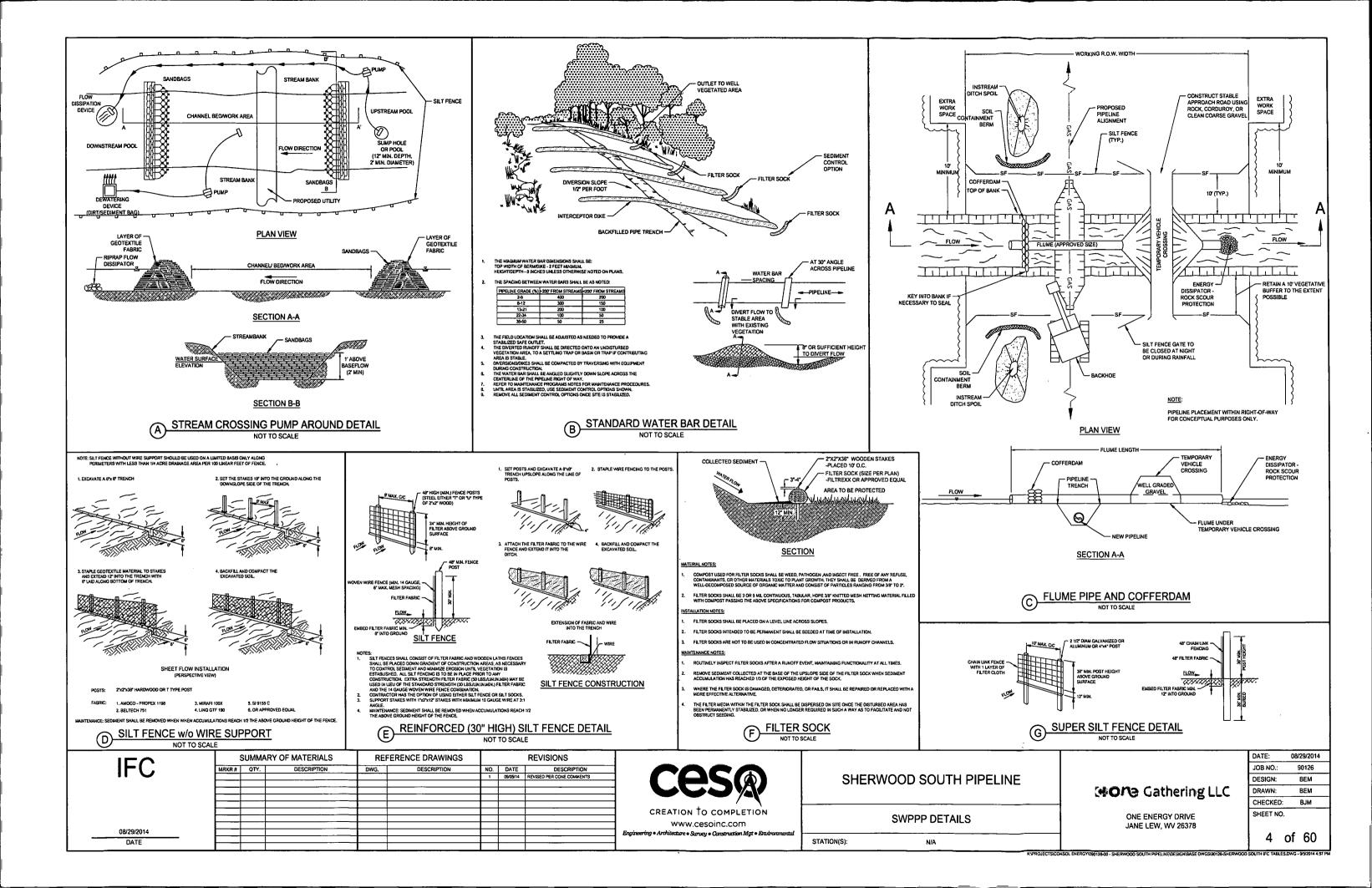
JOB N	10.:	90126
DESIG	SN:	BEM
DRAW	/N:	BEM
CHEC	KED:	ВЈМ
SHEE	T NO.	
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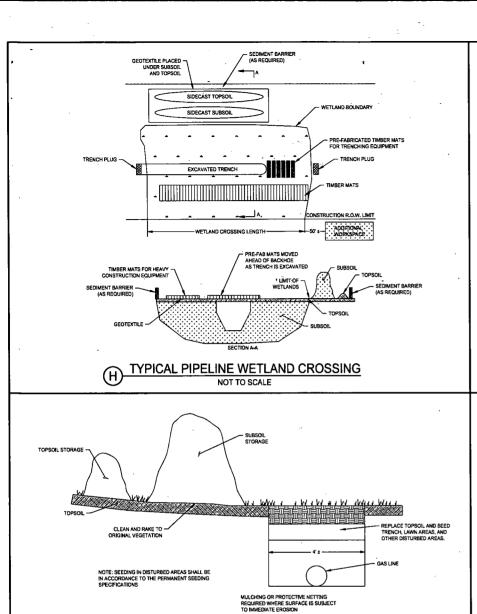
DATE:

3 of 60

08/29/2014

CONSOL ENERGY 090128-00 - SHERWOOD SOUTH PIPEL INFIDESIGNIBASE DWGS190128-SHERWOOD SOUTH IFC TABLES DWG - 9/5/20





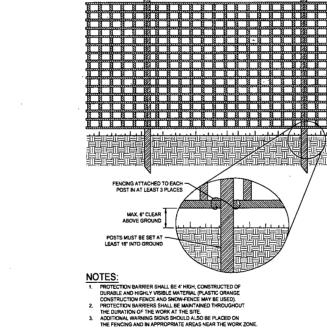
DOUBLE DITCH FOR UTILITY TRENCHES

M SEDIMENT FILTER BAG FOR PUMPED WATER DETAIL NOT TO SCALE

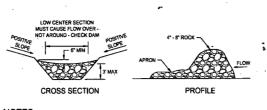
FILTER BAG -

ELEVATION VEW

NOT TO SCALE



THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER. WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.



- NU 1 E.S:

 1. THE CHECK DAM SHALL BE CONSTRUCTED OF 48" DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.

 2. MAXIMUM HEIGHT OF CHECK DAM SHALL NOT EXCEED 3.0 FEET.

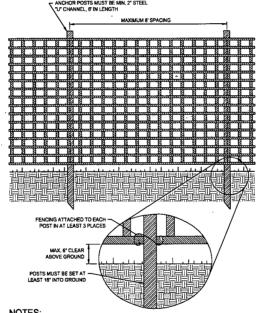
 3. THE MIDDIOTY OF THE ROCK OCHECK DAM SHALL BE A MINIMUM OF 6" LOWER THAN THE SIDES IN ORDER TO DIRECT ACROSS THE CENTER AND AWAY FROM THE CHANNEL SIDES.

 4. THE BASE OF THE CHECK DAM SHALL BE ENTERCHED APPROXIMATELY 6 INCHES.

 5. SAPLING OF CHECK DAMS SHALL BE IN A MANNER SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME BLEVATION AS THE TOP OF THE DOWNSTREAM DAM.

 5. A SPLASH APRON SHALL BE CONSTRUCTED WHERE CHECK DAMS ARE EXPECTED TO BE IN USE FOR AN EXTENSION PERIOD OF TIME, A STONE APRON SHALL BE CONSTRUCTED WHERE CHECK DAMS ARE EXPECTED TO DESIN USE FOR AN THE CHECK DAM TO PREVENT FLOWS FROM UNDERCUTTING THE STRUCTURE. THE APRON SHOULD BE 6 IN. THICK AND ITS LENGTH THO TIMES THE MEBRING OF THEM, STONE PLACEMENT SHALL BE CONSTRUCTED WHERE CHECK DAMS AND SHOWN SHOULD BE 6 IN. THICK AND ITS LENGTH THO TIMES THE MEBRING OF THE CHECK DAM SO AND SHALL BE CONSTRUCTED WHEN SHOULD BE 6 IN. THICK AND ITS LENGTH THO TIMES THE MEBRING THE PLACEMENT SHALL BE PERFORMED BY ETHER HAND OR MECHANICALLY AS LONG AS THE CENTER OF CHECK DAM SIGNATED THE STRUCTURE. THE APPROXES THE CENTER OF CHECK DAM SIGNATED THE SHALL BE PERFORMED BY ETHER HAND OR MECHANICALLY AS LONG AS THE CENTER OF CHECK DAM SIGNATED THE SHALL BE A MINIMUM OF 2-1.

(I) ROCK CHECK DAM DETAIL



CONSTRUCTION FENCE DETAIL NOT TO SCALE

		SUMMARY OF MATERIALS		REFER	REVISIONS			
IH(:	MRKR#	QTY.	DESCRIPTION	DWG.	DESCRIPTION	NO.	DATE	DESCRIPTION
11 🔾						1	09/05/14	REVISED PER CONE COMMENTS
	-					+-		
	-					+-		
08/29/2014								



CREATION TO COMPLETION www.cesoinc.com

SHERWOOD SOUTH PIPELINE

SWPPP DETAILS

STATION(S):

- SIZE NO. 1 STONE

Wooded Wetland Establish

Permanent Grasses/Sedges

Carex lupulina

Carex frankli

Temporary Cover: Avena sativa

Temporary Cover:

Campanula american

GEOTEXTILE

4° WVDOH ITEM 703 -

(J) STABILIZED CONSTRUCTION ENTRANCE

OPTION A

Common Hop Seda

Bristly Cattall Seda

Virginia Wild Rye

Rice Cut Grass

Dark Green Rush

Prairie Cord Grass

Common Oat

Water Plantain Mix

Great Angelica

Flat-Top Aster

Buttonbush

Tall Bellflowe

Swamp Rose Mallor

Great Blue Lobelia

Wild Golden Glo

NOTE: APPLY AT 32.8 PLS POUNDS PER ACRE,

NOT TO SCALE

ent Seed Mix* (available from JFNew or Ernst)

PLS

1.00

2.00

4.00 1.50

3.00 1:00 1.00 4.00

20.00 2.00

2.00

2.00

1.00

44.50

360.00

100.00

460.00

3.00

1.00

0.75

0.25 2.50 0.50

0.25

2.00

0.75

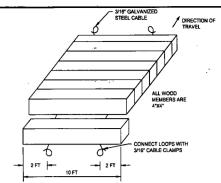
2.00

0.25 1.25

0.50

0.75 2.00

19.75

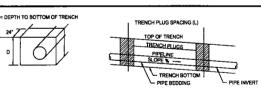


TYPICAL TIMBER MAT FOR WETLAND CROSSING NOT TO SCALE

	Scientific Name	OPTION B Wetland Restoration Mixture <u>Common Name</u>	PLS Ounces/Acre
	Avena sativa	Common Oat	480.00
	Secate cereate	Cereal Rye	480.00
	Panicum virgatum	Switch Grass	32.00
	Panicum clandestinum	Deer-tongue Grass	32.00
	Elymus riparlus	Riverbank Wild Rye	32.00
,	Poa palustris	March Bluegrass	32.00
	Sorghastrum nutans	Indian Grass	16.00
	Glycaria striata	Fowl Manna Grass	8.00
	Carex crinita	Fringe Sedge	8.00
	Carex lurida	Bottlebrush Sedge	8.00
	Scirpus atrovirens	Dark Green Rush	8.00
	Polygonum pensylvanicum	Pinkweed	8.00

STREAM/WETLAND CROSSING NOTES

- ALL TREES AND WOODY DEBRIS REMOVED FROM STREAM OR WETLAND CROSSINGS MUST BE DISPOSED OF OUTSIDE THE RIPARIAN OR WETLAND CROSSING AREAS.
- 2. CONSTRUCTION TIMBER MATTING MUST BE USED WHEN EQUIPMENT IS CROSSING WETLANDS AND/OR SOFT
- 3. THE SEED MIX FOR STREAM/WETLAND CROSSING AREAS (OPTIONS A OR B) SHALL BE USED.
- 4. NO FERTILIZER OR LIME SHALL BE USED IN STREAM/WETLAND CROSSING AREAS.
- 5. NO GRUBBING IS ALLOWED AT TEMPORARY ACCESS CROSSINGS OF STREAMS OR WETLANDS.



SECTION VIEW

ELEVATION NOT TO SCALE

8.00

8.00

1168,00

REQUIRED SPACING AND MATERIALS FOR TRENCH PLUGS					
TRENCH SLOPE (%)	SPACING (FT)	PLUG MATERIAL			
< 5	•	•			
5-15	500	" EARTH FILLED SACKS			
15-25	300	" EARTH FILLED SACKS			
25-35	200	" EARTH FILLED SACKS			
35-100	100	" EARTH FILLED SACKS			
> 100	50	CEMENT FILLED BAGS (WETTED) OR MORTARED STONE			

TRENCH PLUG DETAIL NOT TO SCALE

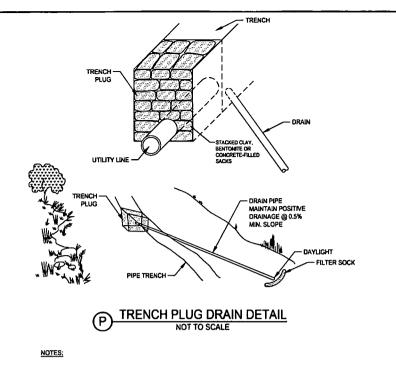
GONE Gathering LLC

JANE LEW, WV 26378

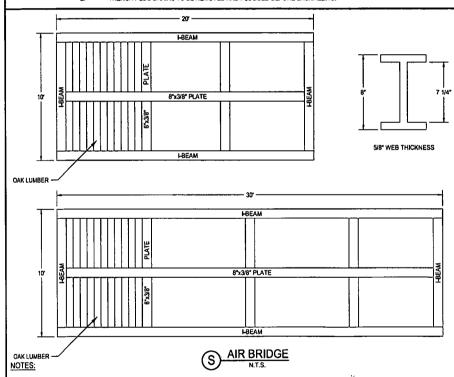
KAPROJECTS(CONSOL ENERGY090126-00 - SHERWOOD SOUTH PIPELINE/DESIGN/BASE DWGS(90126-SHERWOOD SOUTH IFC TABLES, DWG - 9/5/201

DATE:	08/29/2014
JOB NO.:	90126
DESIGN:	ВЕМ
DRAWN:	BEM
CHECKED:	ВЈМ
SHEET NO.	

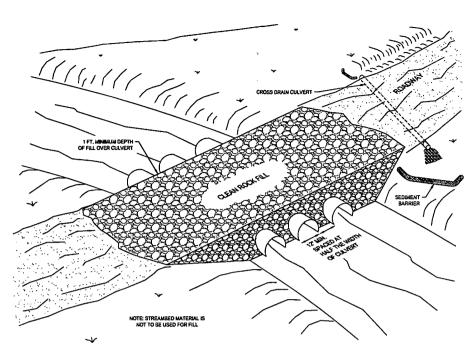
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- TRENCH PLUG DRAINS TO BE USED DURING HEAVY RAIN EVENTS ON STEEP SLOPES.
- TRENCH PLUG DRAINS TO BE REMOVED AND PLUGGED BEFORE BACKFILLING



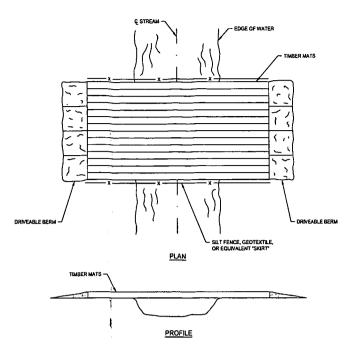
- CONTACT UTILITY COMPANY AT LEAST 72 HOURS PRIOR TO CONSTRUCTION TO HAVE THE EXISTING TRANSMISSION LINE FLAGGED.
- 2. CONE GATHERING REPRESENTATIVES MUST BE ON SITE DURING CONSTRUCTION TO APPROVE INSTALLATION.
- THE CURRENT PIPELINE COVER MUST BE MAINTAINED, DURING CONSTRUCTION, CONTRACTOR SHALL STRIP TOPSOIL AND PLACE MATTING BOARDS
 FOR EQUIPMENT CROSSING THE GAS TRANSMISSION EASEMENT. MATTING BOARDS BENEATH THE EMBANKMENT ARE TO REMAIN IN PLACE.
- 4. AR BRIDGE IS TO BE REMOVED DURING SITE RESTORATION PHASE. UTILITY COMPANY REPRESENTATIVES MUST BE ON SITE DURING REMOVAL FOR CONSTRUCTION APPROVAL. AFTER AIR BRIDGE IS REMOVED, FILL AIR GAP WITH SUBSOIL AND COMPACT TO SPECIFICATION. SEED AND MULCH FILL SLOPES.



O DETAIL FIGURE II-9: STREAM CROSSING - TEMPORARY, WITH CULVERT

NOTES:

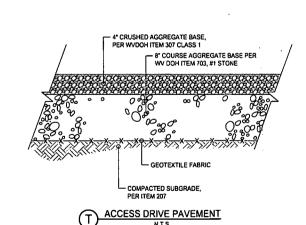
- 1. THE STRUCTURE SHALL BE LARGE ENOUGH TO HANDLE A 1-YEAR FREQUENCY STORM, 24 HOUR DURATION
- 2. DEPTH OF COVER OVER CULVERTS SHALL BE 1/2. THE DIAMETER OF THE CULVERTS USED OR 12 INCHES, WHICHEVER IS GREATER.
- 3. MULTI-CULVERTS SHOULD BE INSTALLED WITH SPACES BETWEEN THEM, EQUAL TO 1/2 THE PIPE DIAMETER.
- 4. LOW WATER CROSSINGS MAY BE USED, IF PROTECTED WHEN OVERFLOWING OCCURS. THIS CAN BE ACCOMPLISHED BY USING ROCK AND CONCRETE.
- 5. CROSS CRIBBING OF THE DOWNSTREAM SIDE OF CULVERT INSTALLATIONS MAY BE NEEDED TO AID IN REDUCING STRUCTURAL DAMAGE DURING HIGH VELOCITY WATER OVERFLOW PERIODS.
- 8. IF CULVERTS OR BRIDGES ARE NOT USED AND A STONE BASE DOESN'T EXIST, STONE SHALL BE INSTALLED, WITH THE ENTRANCE AND EXIT BEING STONED FOR APPROXIMATELY 100 FEET.
- 7. DITCH LINE EXIT POINTS AT STREAM CROSSINGS MUST HAVE SEDIMENT CONTROLS.



R STANDARD CONSTRUCTION DETAIL - TIMBER MAT BRIDGE

NOTES:

- 1. THIS TYPE OF BRIDGE IS GENERALLY USED FOR SMALL STREAM CROSSINGS LESS THAN 20 FEET IN WIDTH IN COMBINATION WITH A PROPER STREAM BANK CONFIGURATION.
- 2. BRIDGE WILL BE TEMPORARILY REMOVED IF HIGH WATER RENDERS IT UNSAFE FOR CROSSING.
- 3. BRIDGE TO REMAIN IN PLACE UNTIL THE COMPLETION OF FINAL RESTORATION.
- 4. SILT FENCE, SAND BAGS, DRIVABLE BERMS, OR OTHER APPROPRIATE EROSION CONTROL MAY BE USED INTERCHANGEABLY.
- 5. A "SKIRT" FORMED OF SILT FENCE, GEOTEXTILE FABRIC, OR EQUIVALENT SHALL BE PLACED ON THE SIDES AND BOTTOM OF THE BRIDGE TO TRAP SEDIMENT AS NECESSARY.
- 6. INDIVIDUAL MATS SHALL BE ANCHORED AND BUTTED TIGHTLY TO MINIMIZE THE INTRODUCTION OF SEDIMENT TO THE WATERBODY



EXISTING SUITABLE
TOPSOIL REPLACEMENT

EXISTING SUITABLE
SUBSOIL REPLACEMENT

EXISTING SUITABLE
SUBSOIL REPLACEMENT

LOWER LIMIT FOR
ROCK EXCAVATION REQUIRED

TRENCH DETAIL
NOT TO SCALE

- NOT
 - WHEN TRENCH EXCAVATION TAKES PLACE IN AN AGRICULTURAL, WETLAND, OR RESIDENTIAL AREA, THEN SEGREGATION OF TOPSOIL AND SUBSOIL WILL BE PERFORMED. PLACE TRENCH, PLUGS AT THE REQUIRED SPACING DURING UTILITY INSTALLATION. FOLLOW STREAM AND WETLAND CROSSING DETAILS LOCATED ON THE EROSION AND SEDIMENT CONTROL DRAWINGS FOR UTILITY CROSSINGS OF THESE FEATURES. SEE STREAM CROSSING PROCEDURES AND WETLAND CROSSING PROCEDURES FOR ADDITIONAL INFORMATION ON WATER BODY AND WETLAND CROSSING. DURING CONSTRUCTION, INSTALL AND MAINTAIN ANY ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS AND IMPLEMENT STRUCTURAL POST CONSTRUCTION STORMWATER BMP'S (PERMANENT WATERBARS) THAT MAY BE REQUIRED. SEE UTILITY LINE INSTALLATION REQUIREMENTS NOTES FOR LIMITS OF WORK.
 - ANY WATER ENCOUNTERED WITHIN THE EXCAVATION AREAS DURING CONSTRUCTION SHALL BE REMOVED BY USING PUMPS, NOSES, AND PUMPEN WATER FILTER BAGS WHICH SHALL BE DISCHARGED INTO UNDISTURBED WELL-VEGETATED UPLAND AREAS.
 - BACKFILL AREAS EXCAVATED FOR THE INSTALLATION OF UTILITIES WITH SUITABLE EXCAVATED MATERIAL. IN AREAS WHERE TOPSOIL HAS BEEN SEGREGATED, THE SUBSOIL SHALL BE REPLACED FIRST, FOLLOWED BY THE TOPSOIL BEING SPREAD OVER THE AREA FROM WHICH IT WAS REMOVED. FINAL GRADES SHALL BE THE SAME AS PRE-CONSTRUCTION CONTOURS.
 - AFTER CONSTRUCTION IS COMPLETE, FINAL SEEDING AND MULCHING OF ALL DISTURBED AREAS NOT YET STABILIZED SHALL BE COMPLETED, INSTALL EROSION CONTROL BLANKETING ON SLOPES WHICH ARE 3:1 OR STEEPER. STABILIZE AND SEED ALL OPEN AREAS INCLUDING BORROW AND SPOIL AREAS.

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SHERWOOD SOUTH PIPELINE

SWPPP DETAILS

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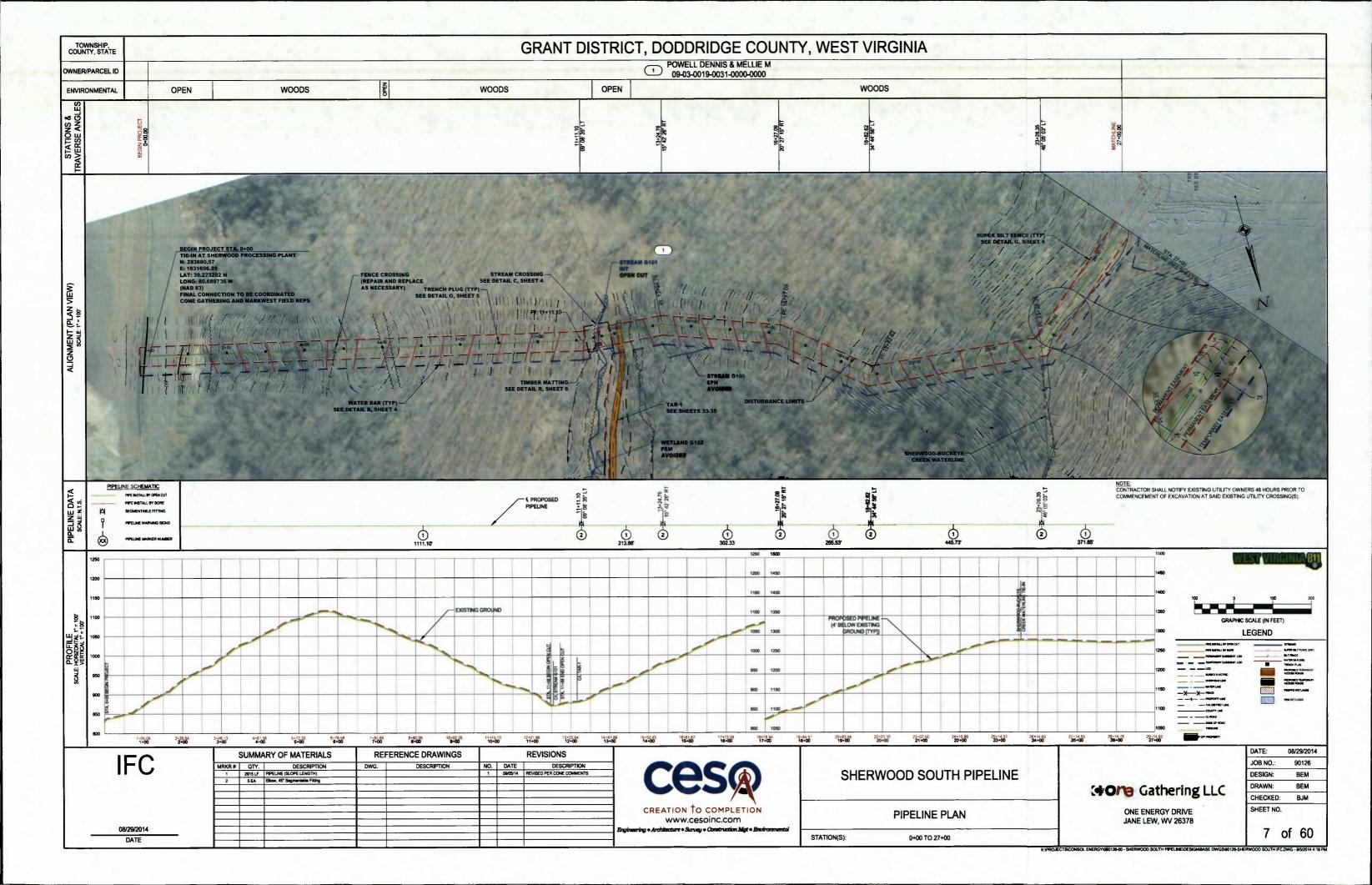
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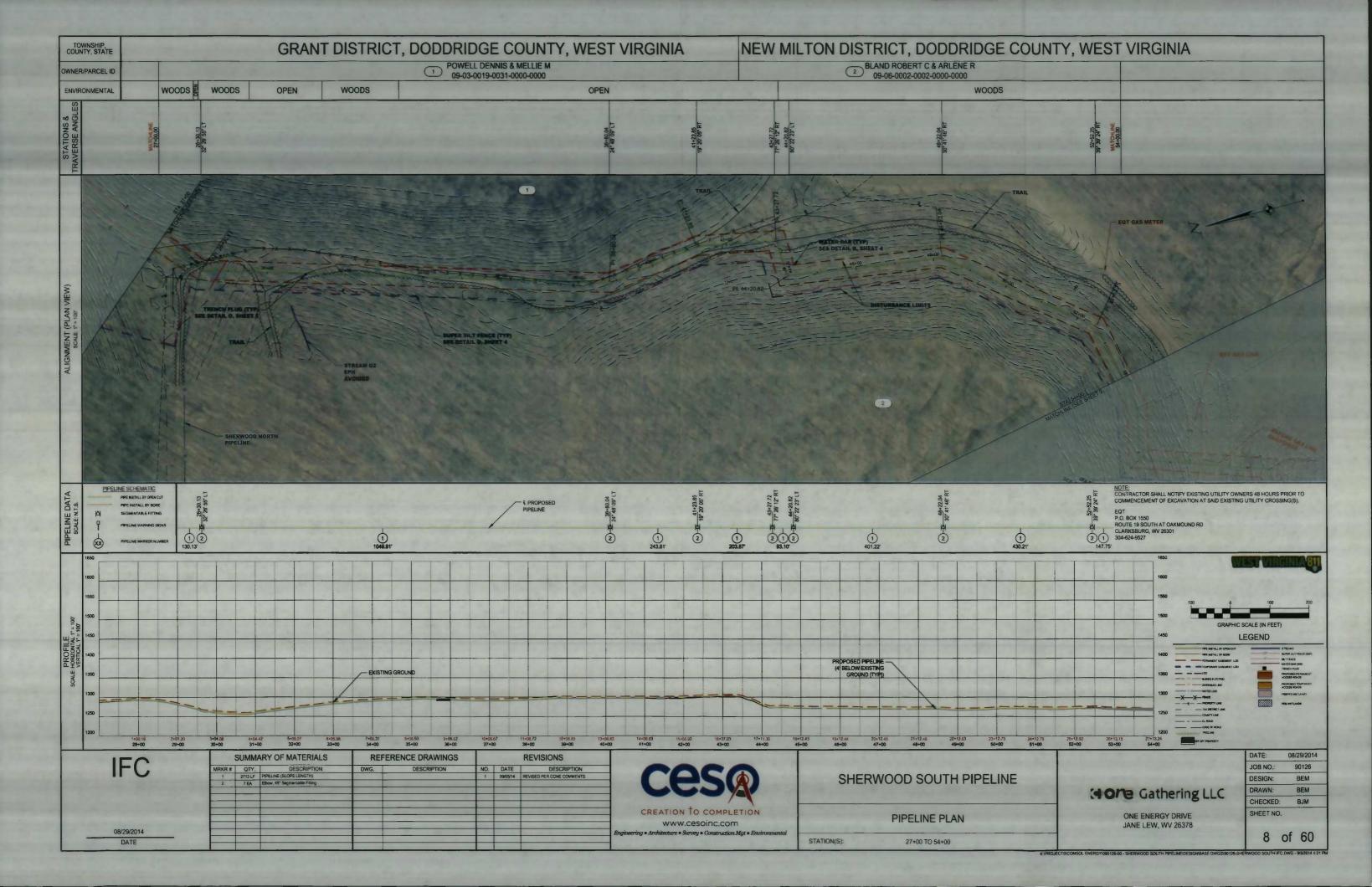
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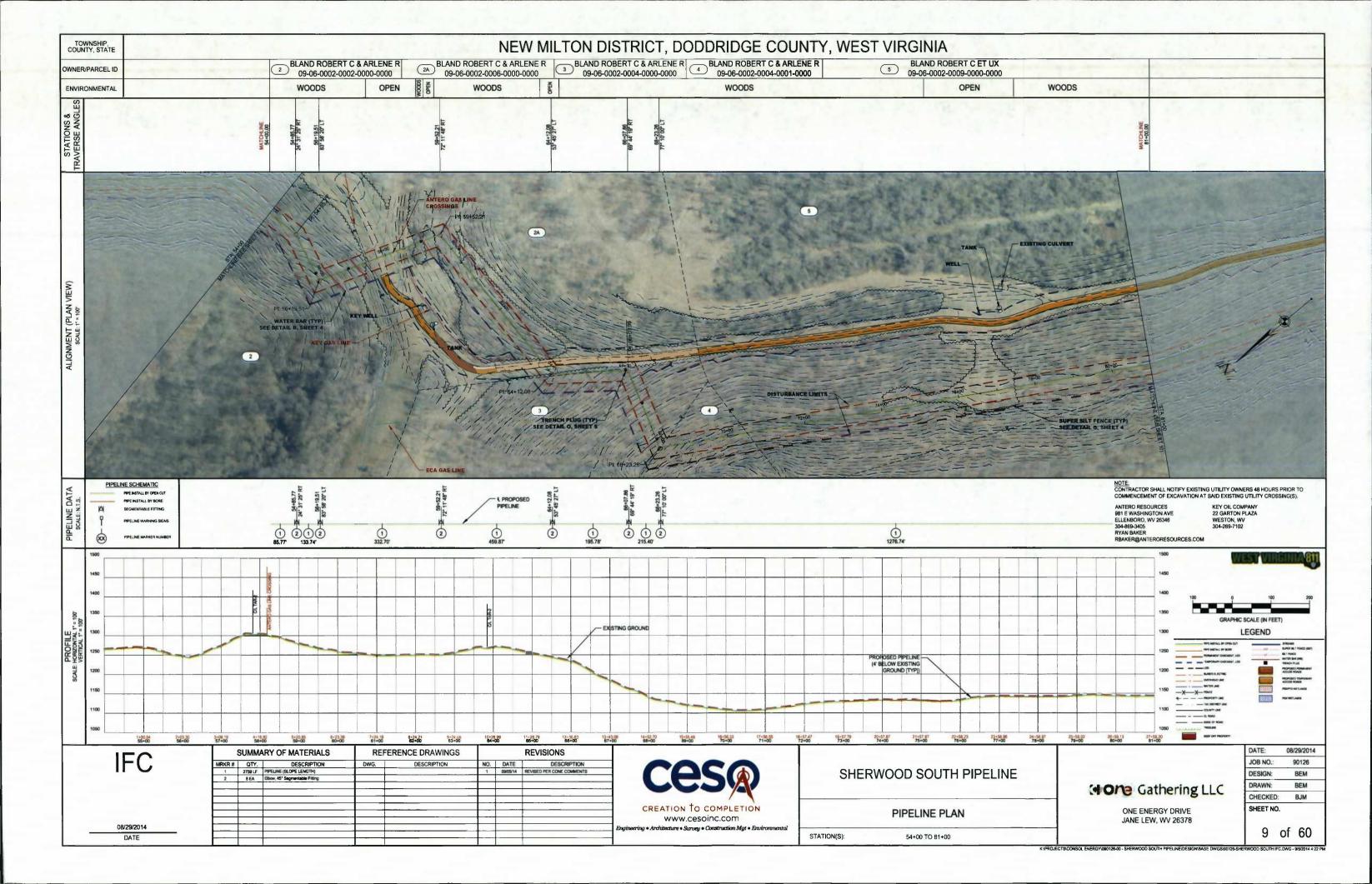
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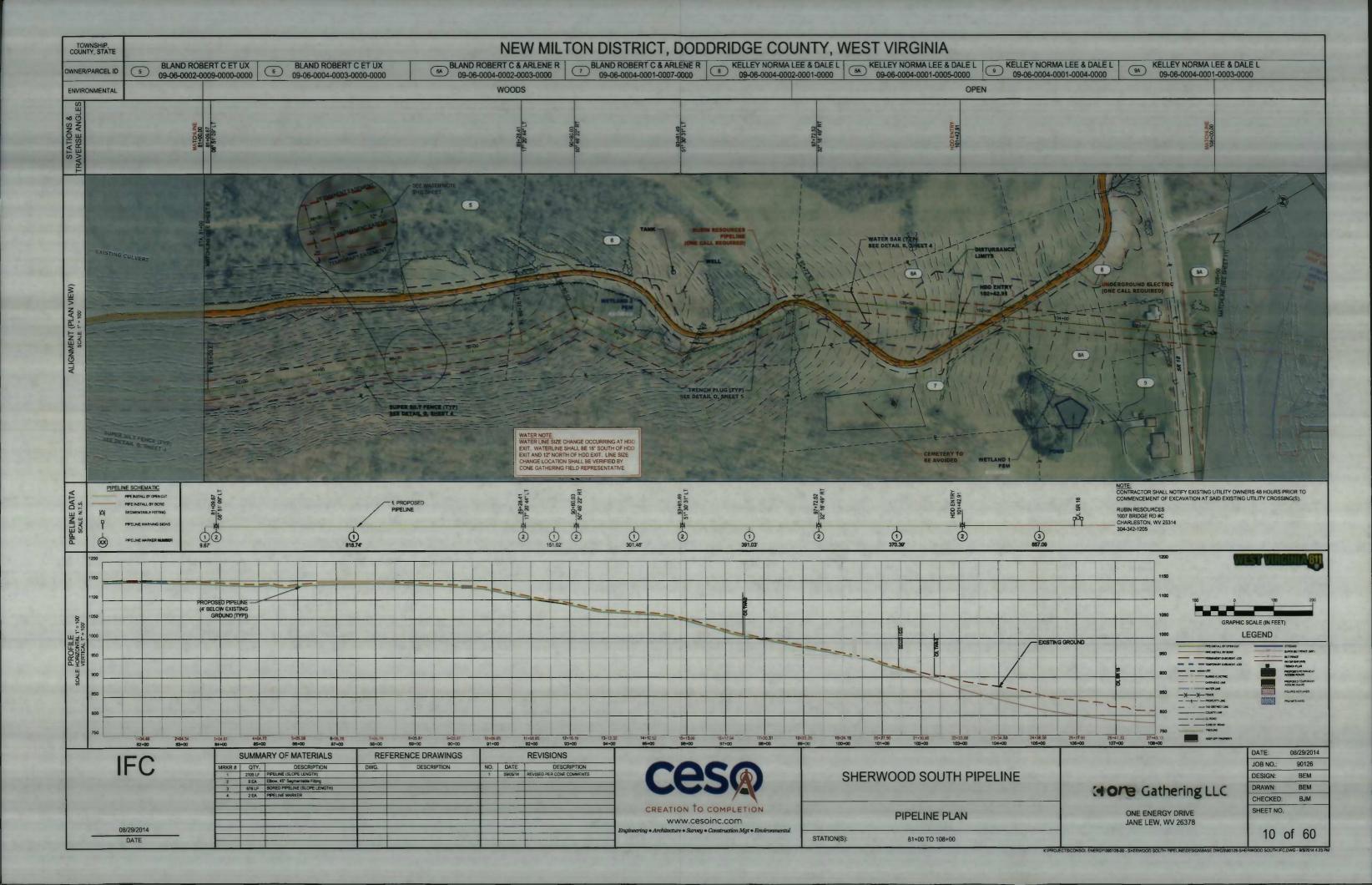
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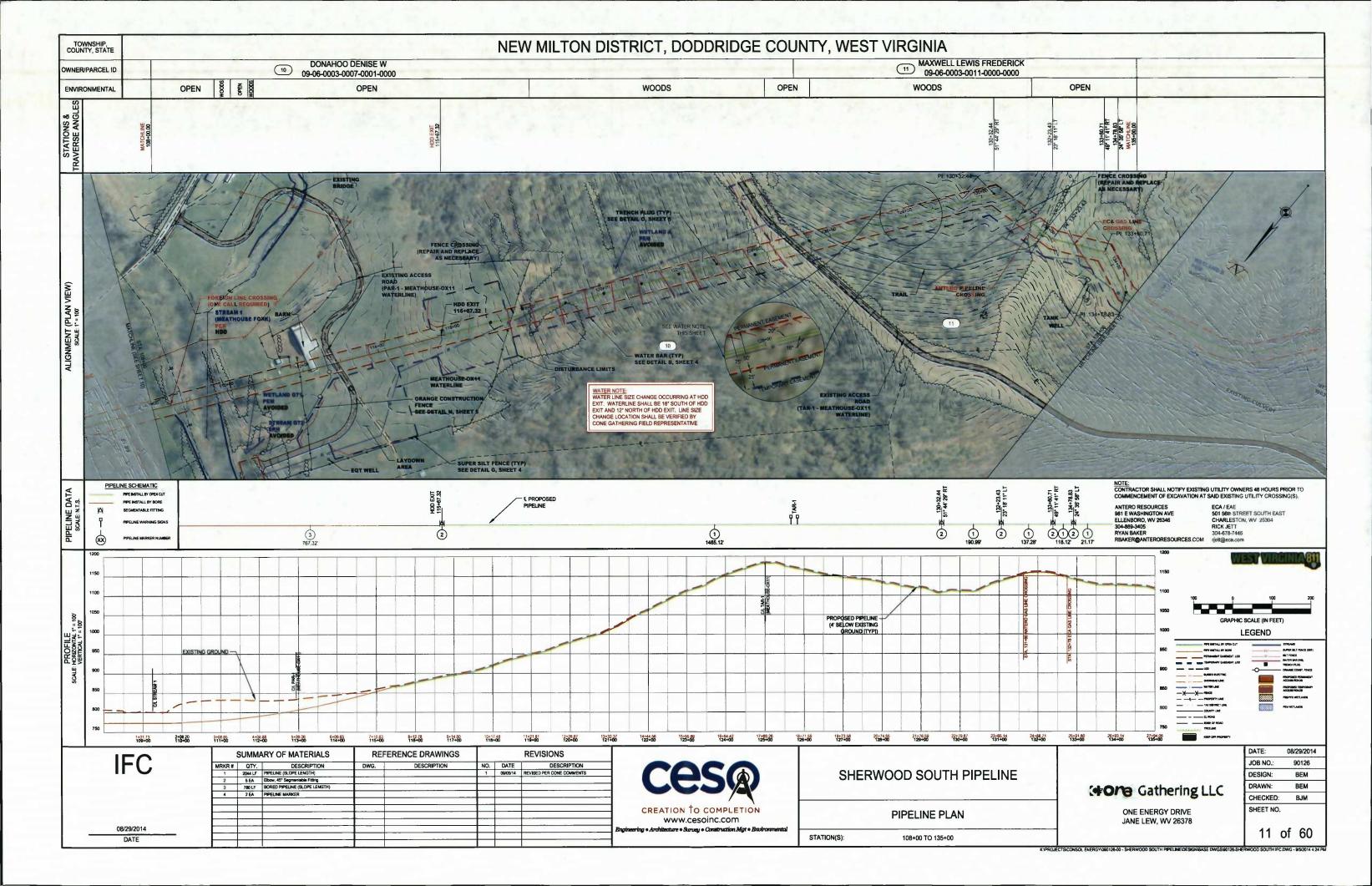
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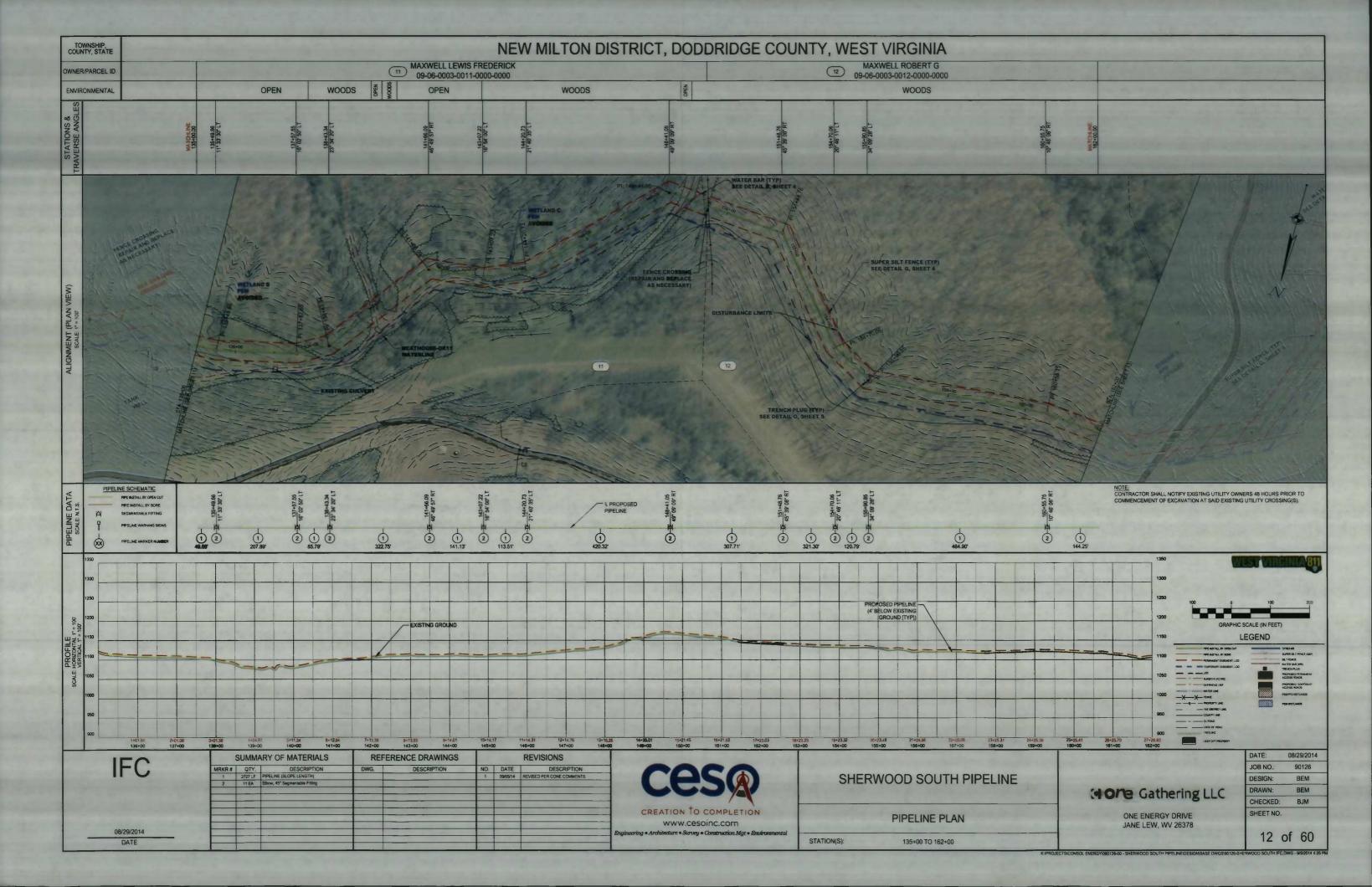


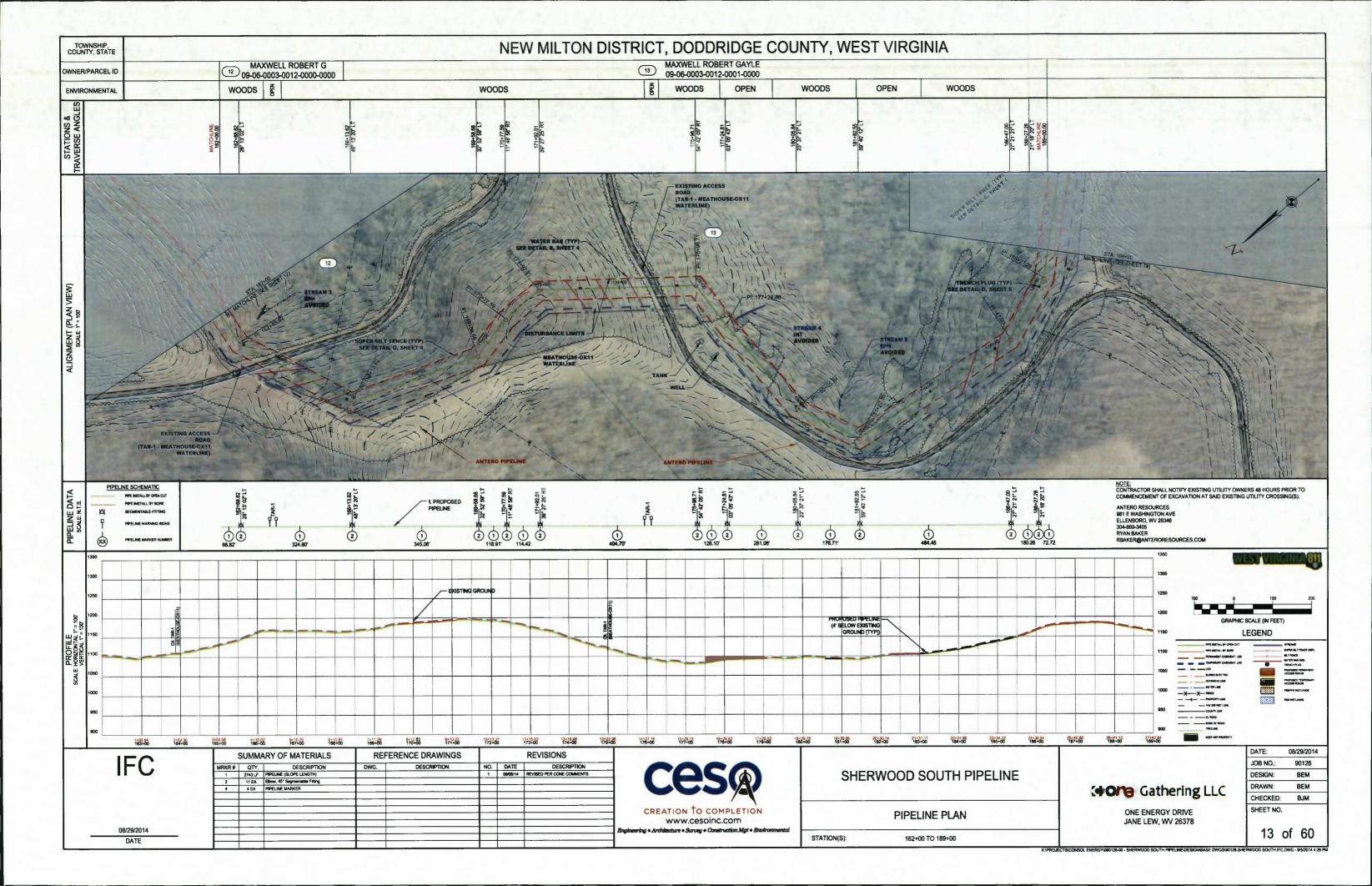


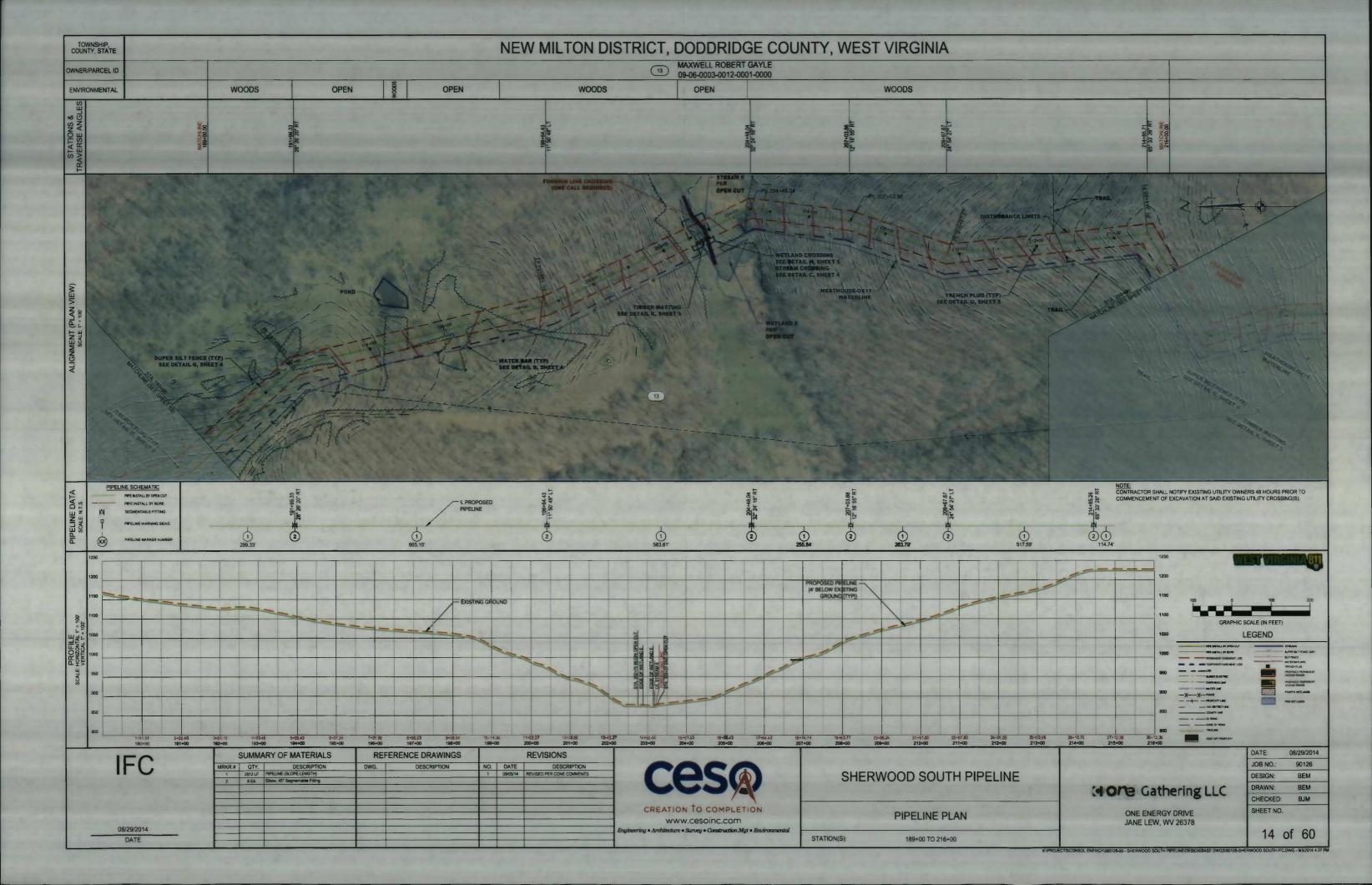


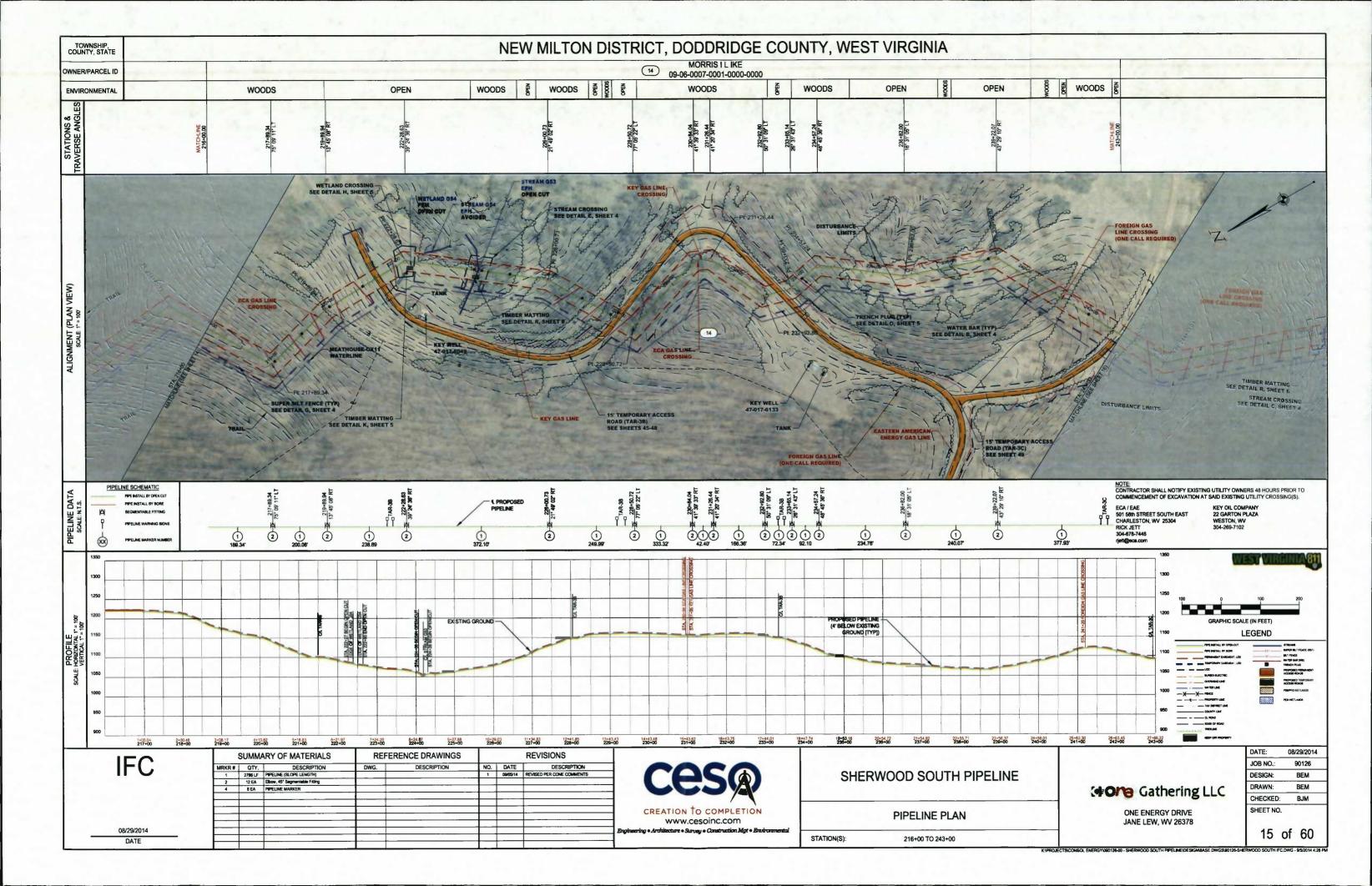


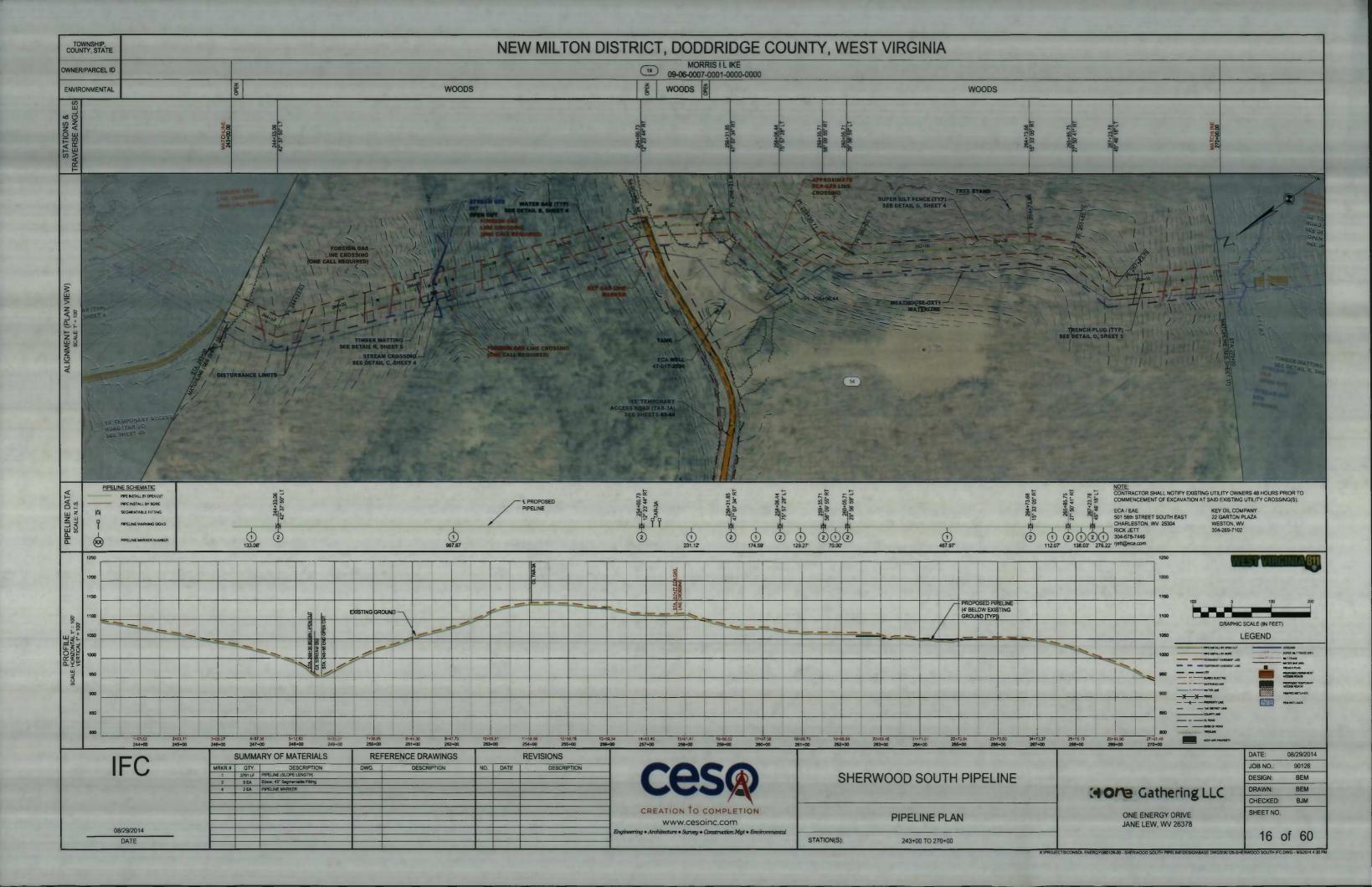


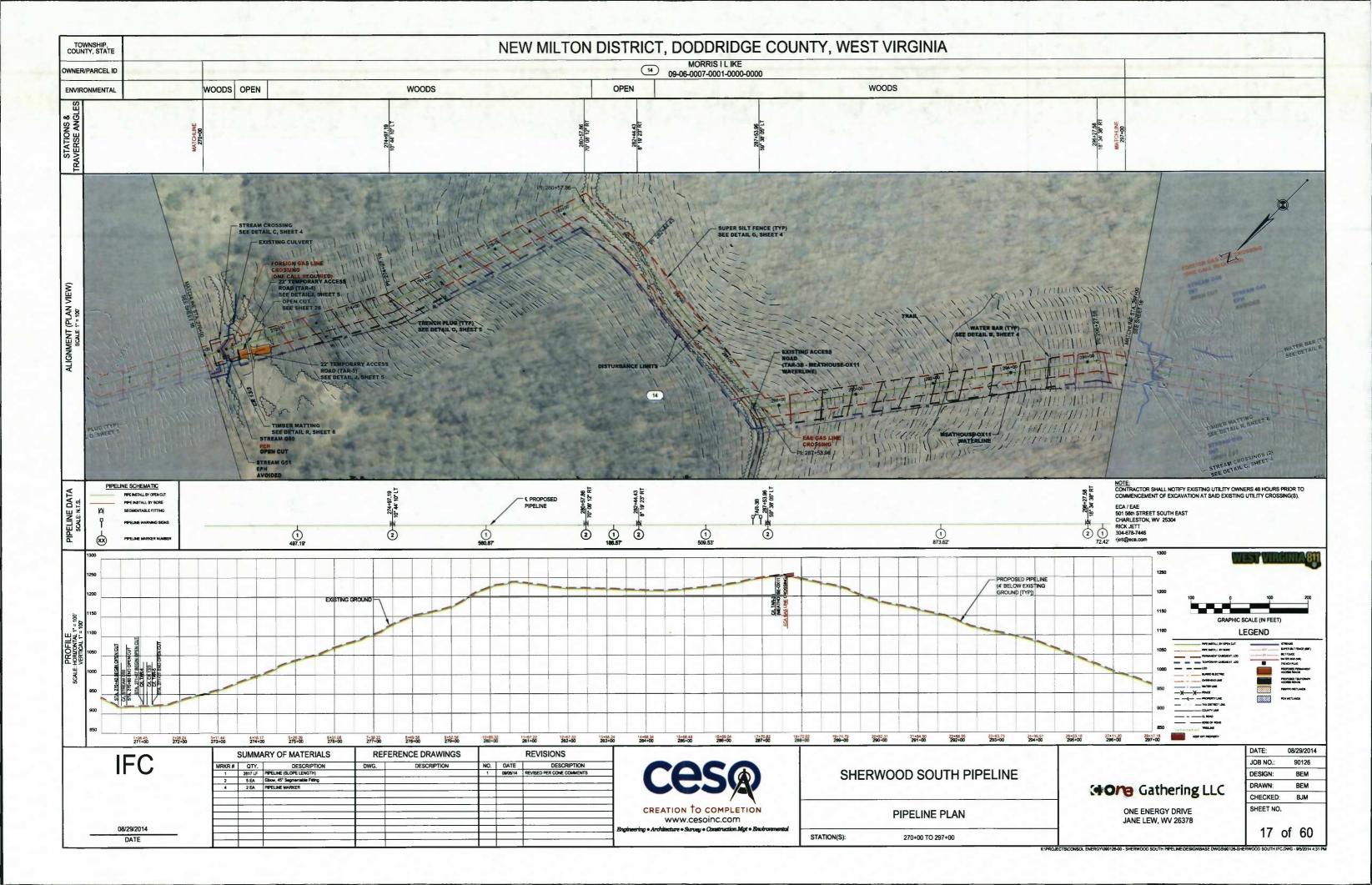


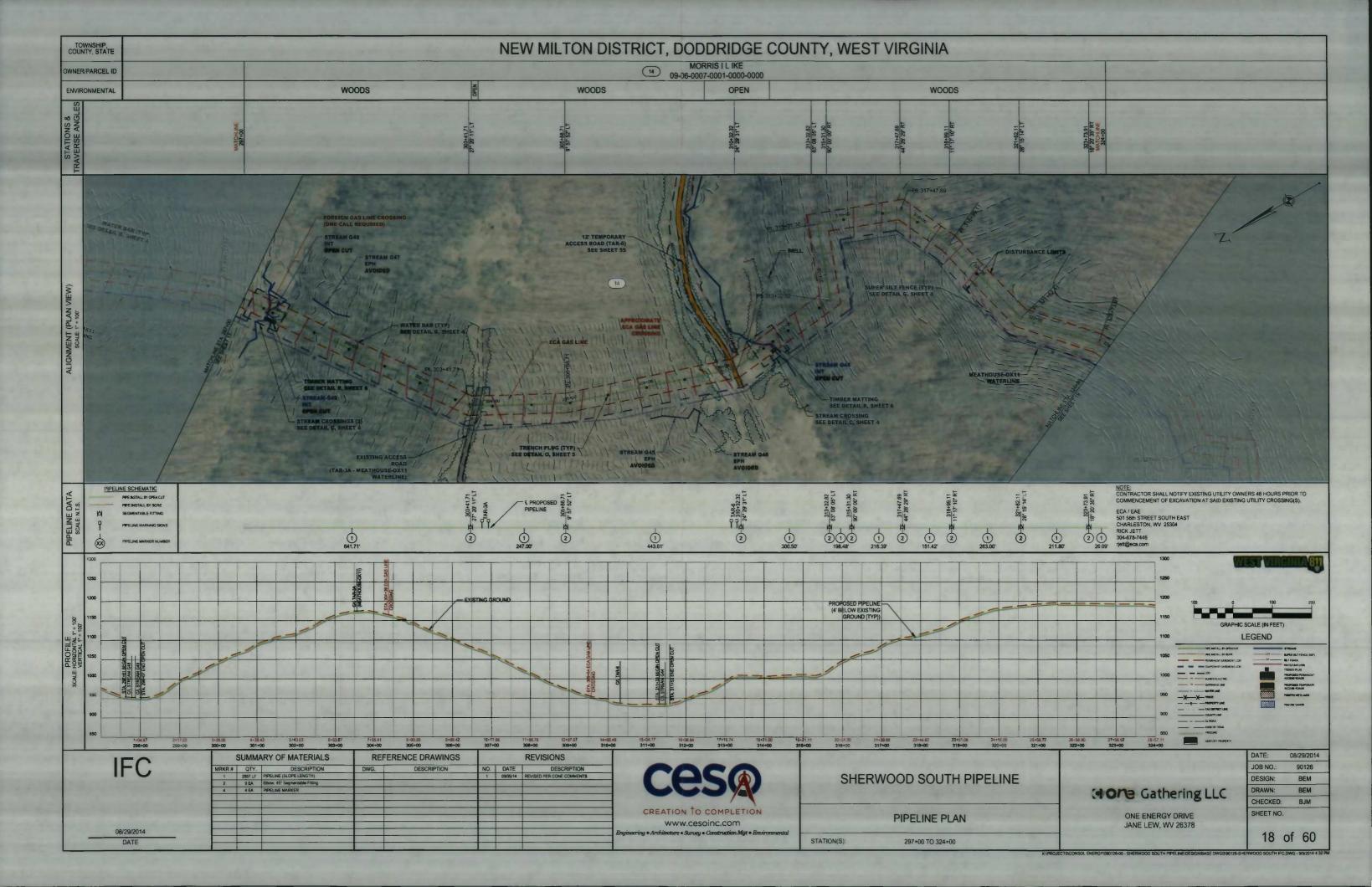


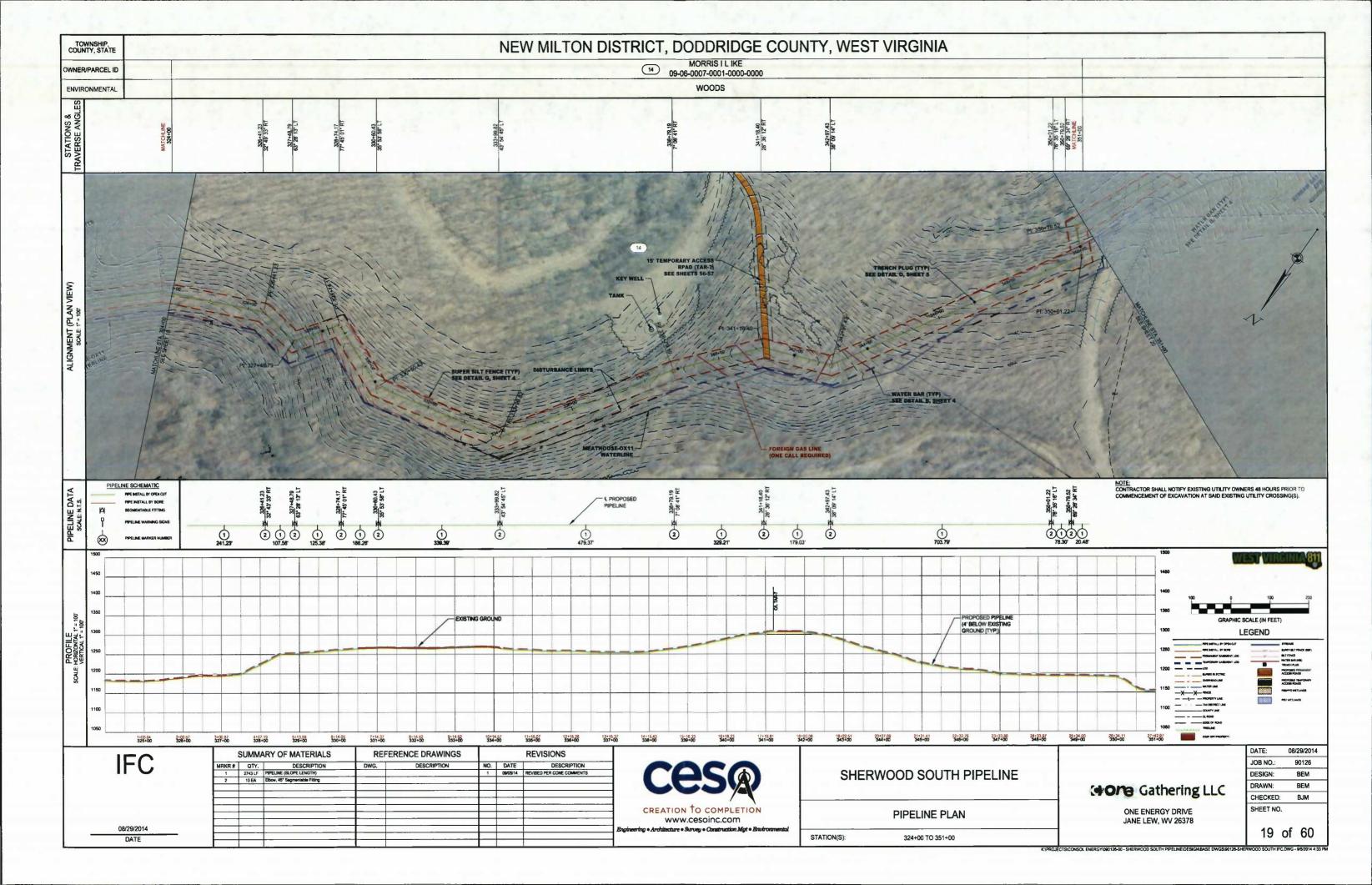


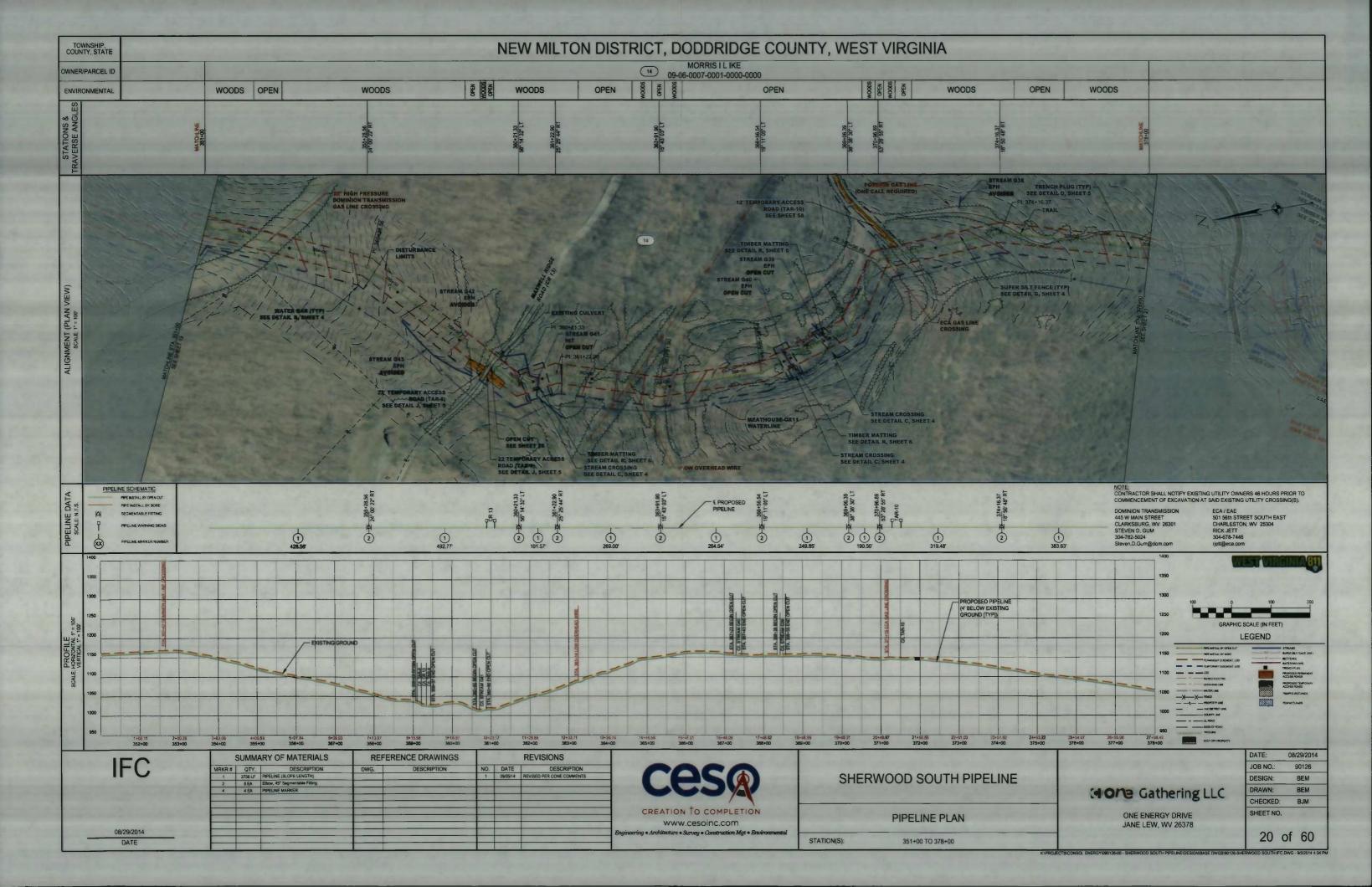


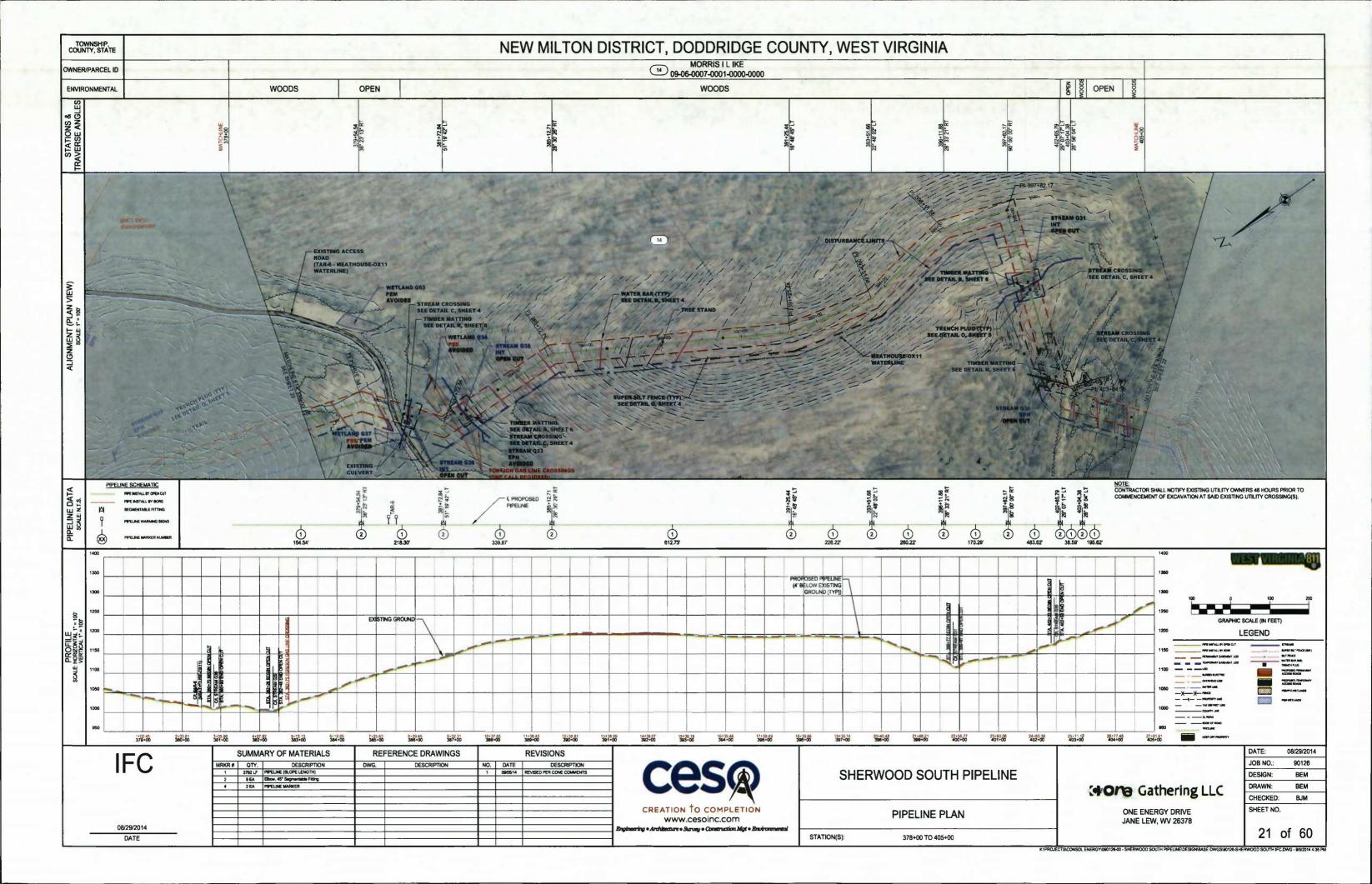


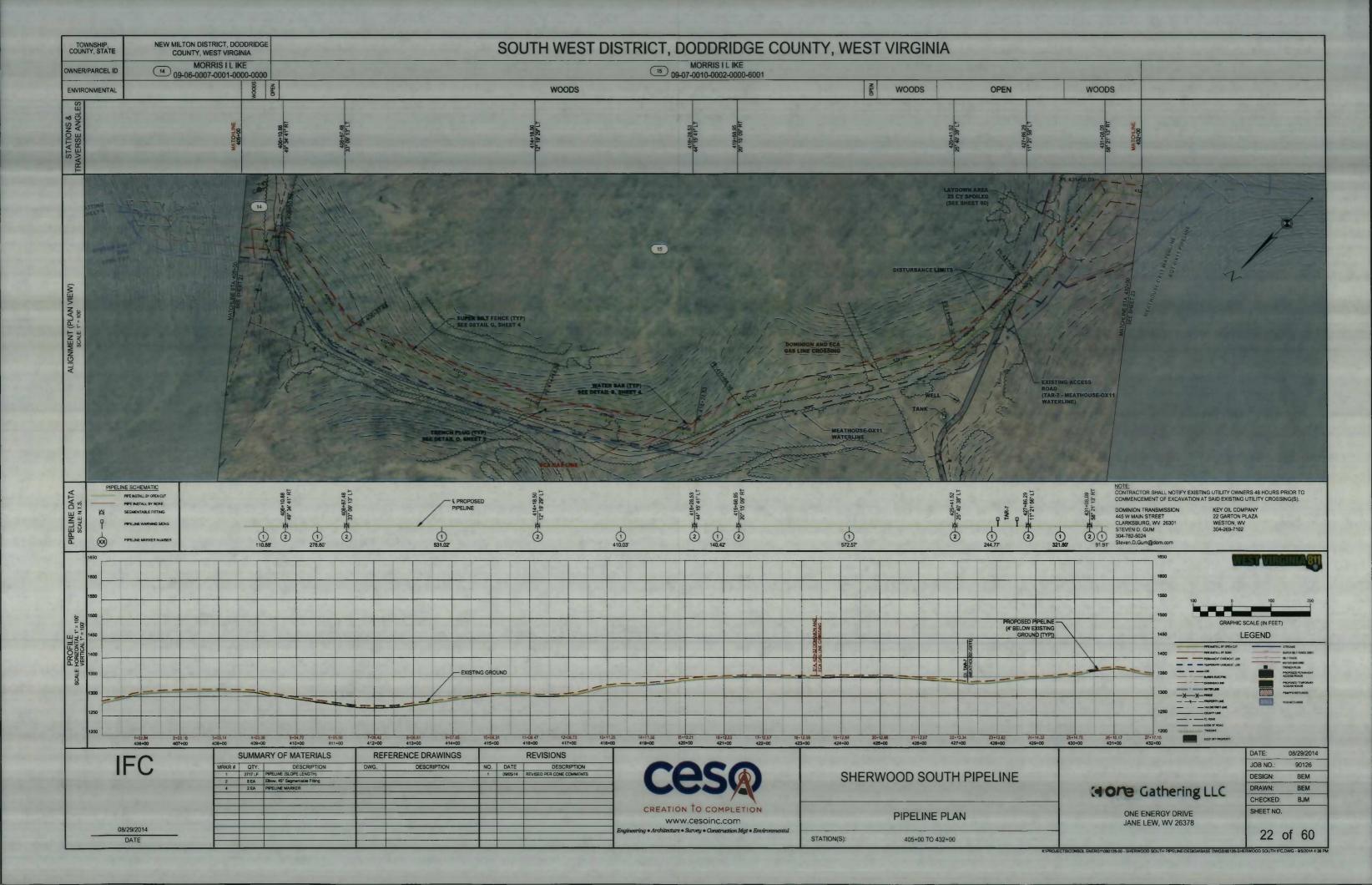


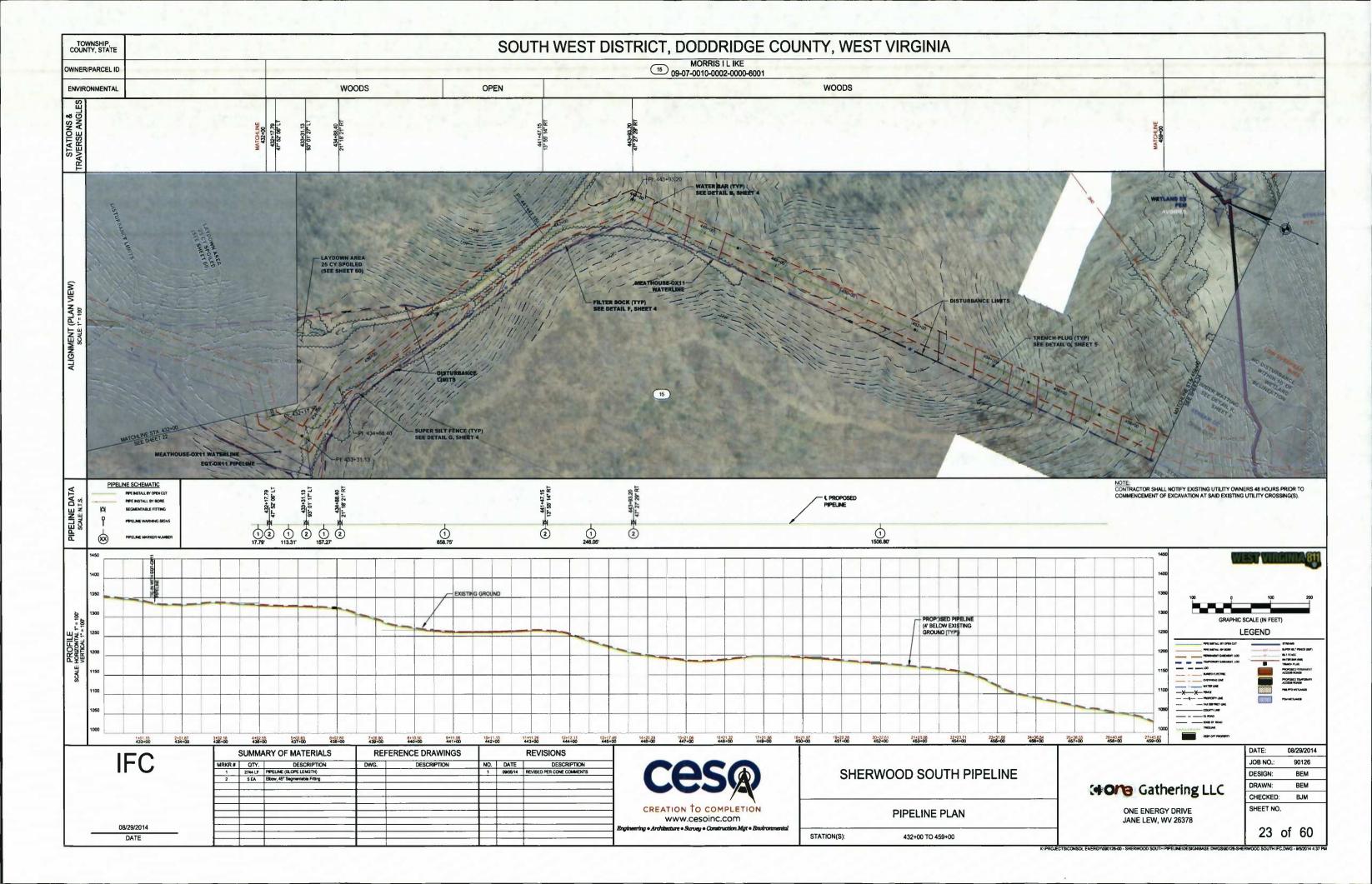


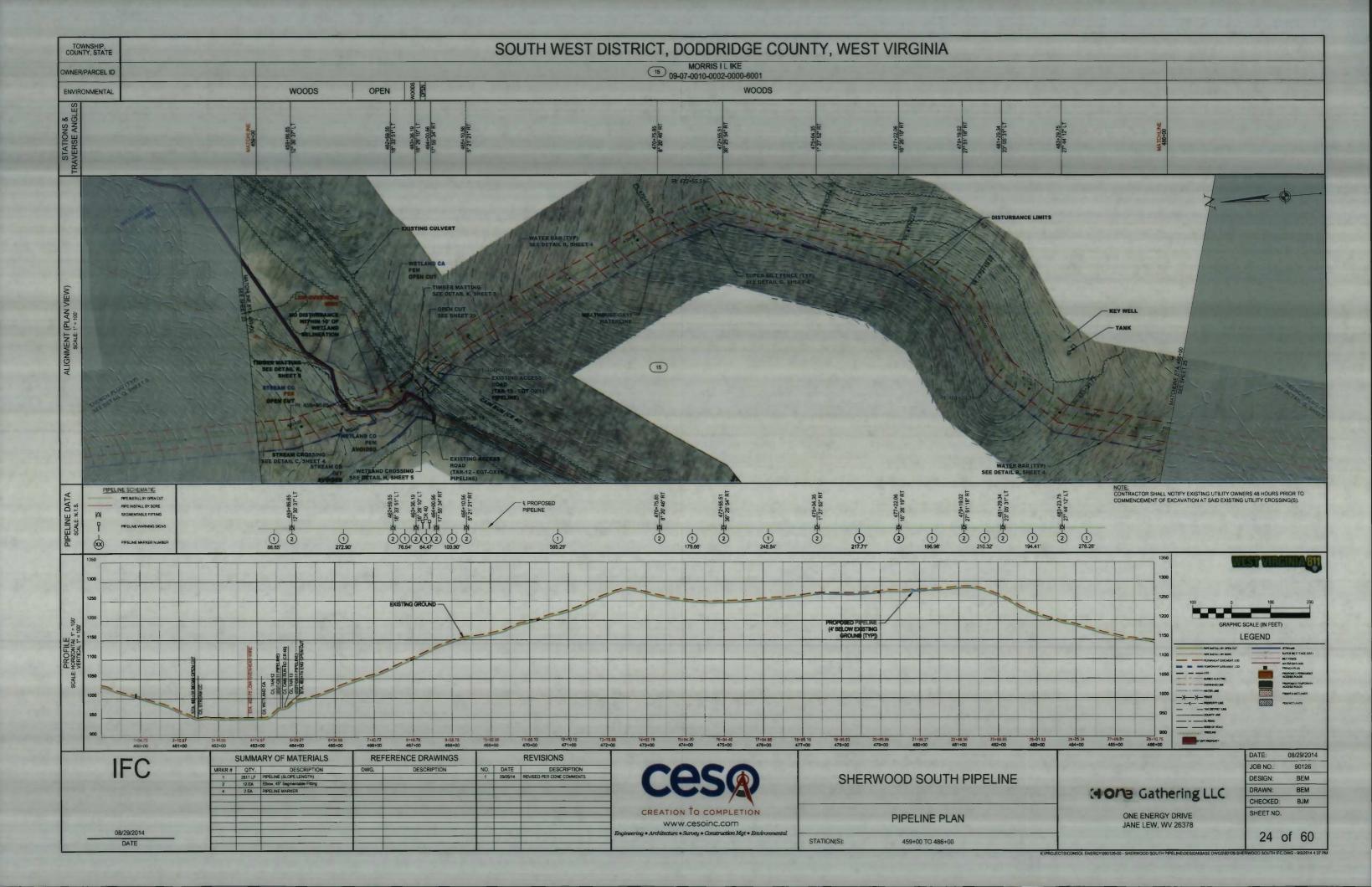


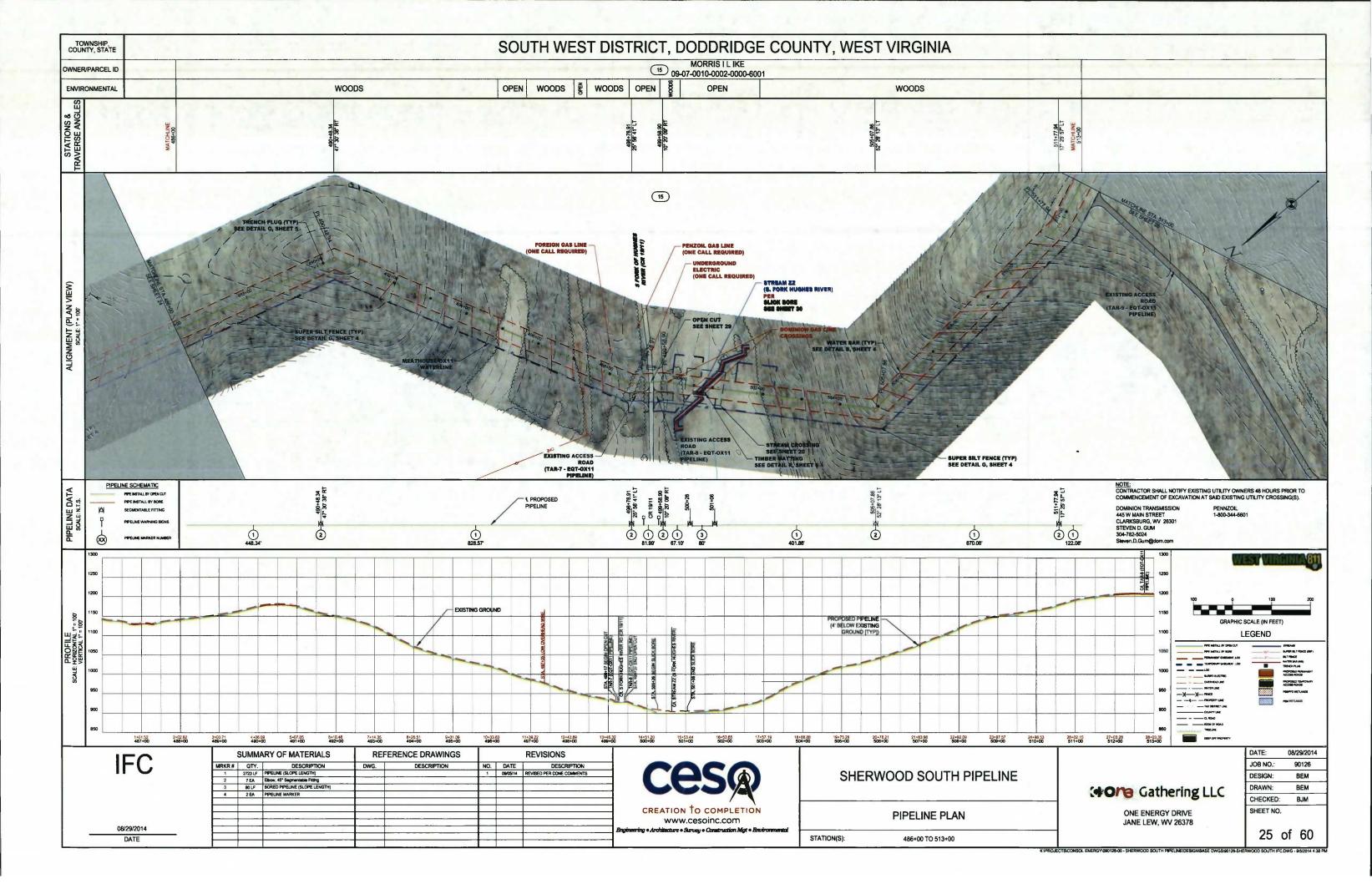


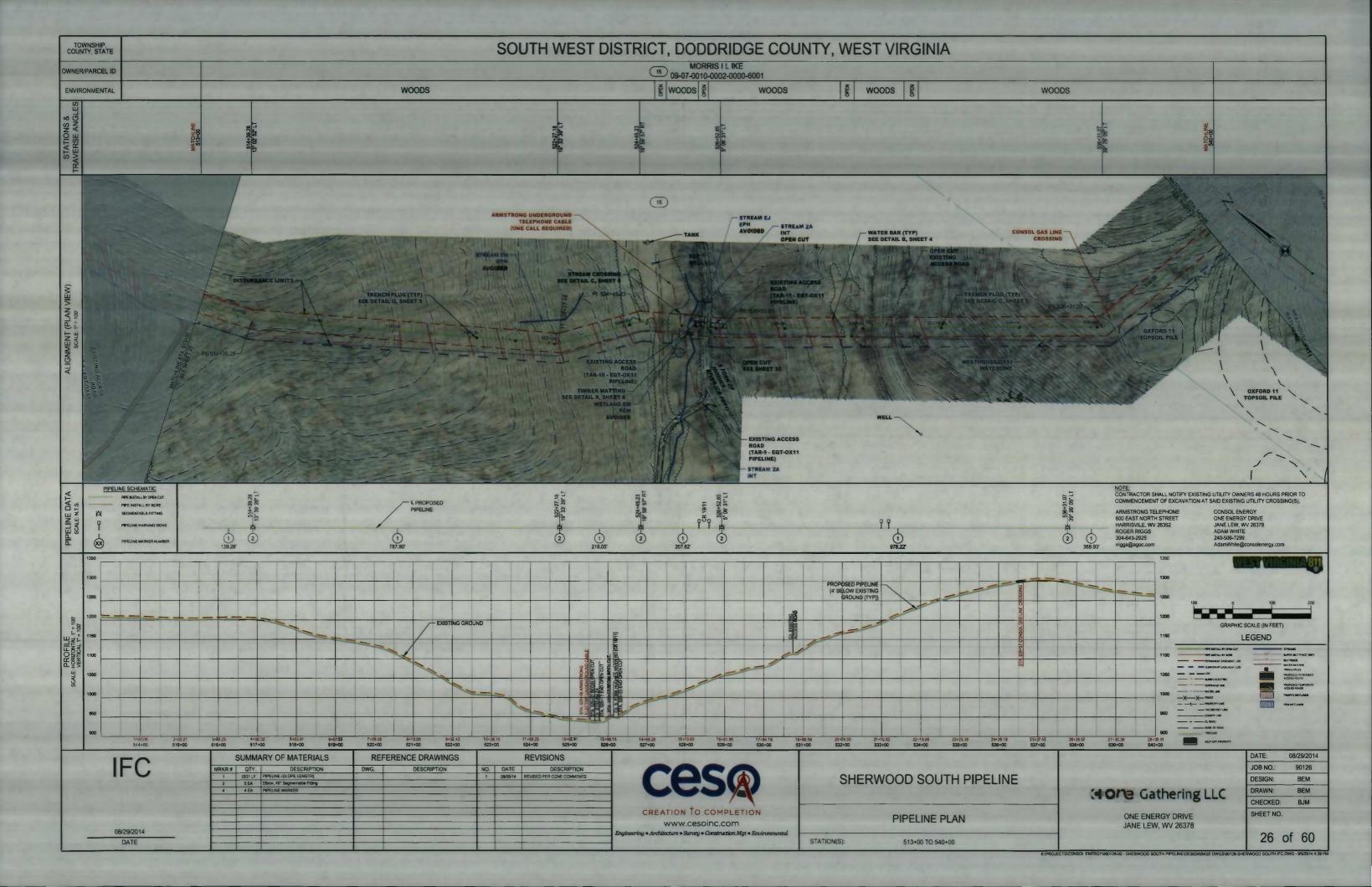


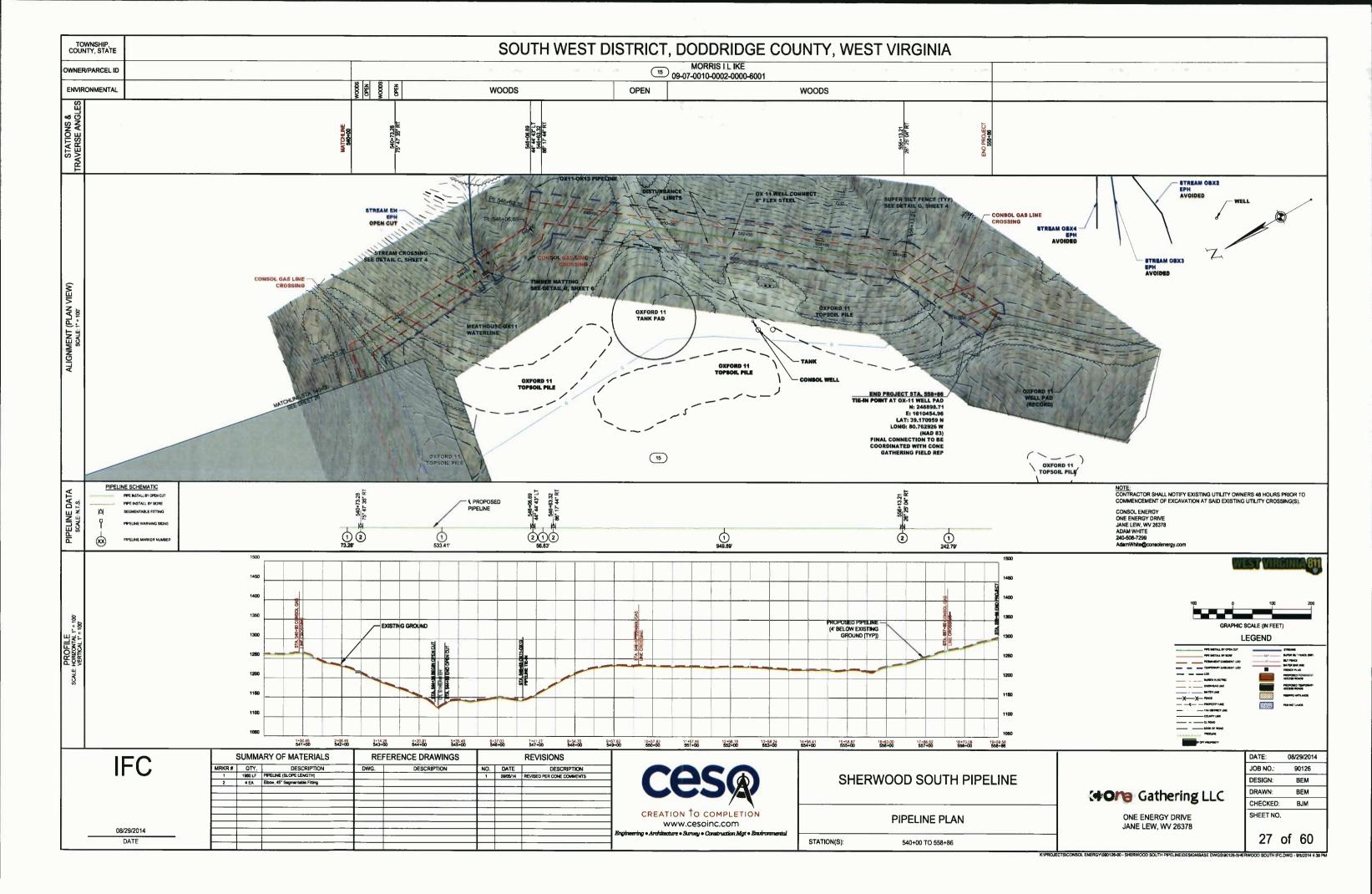


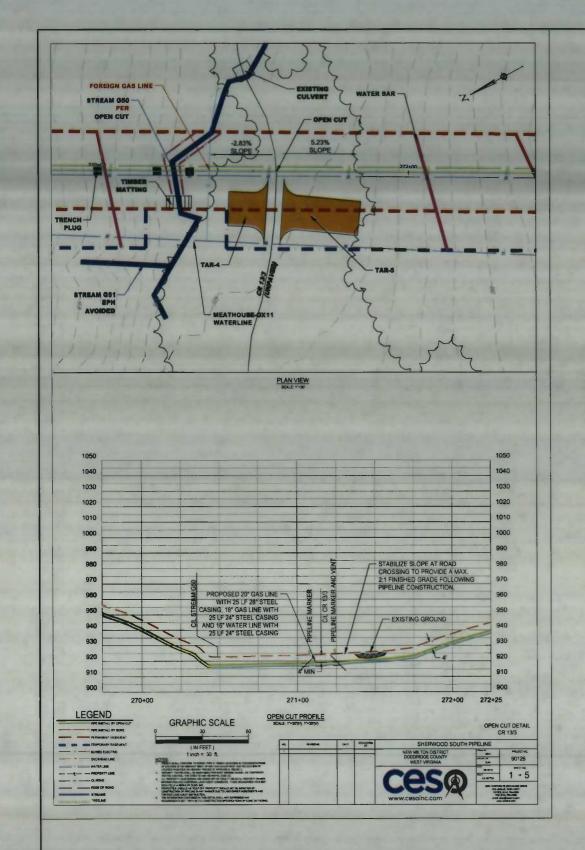


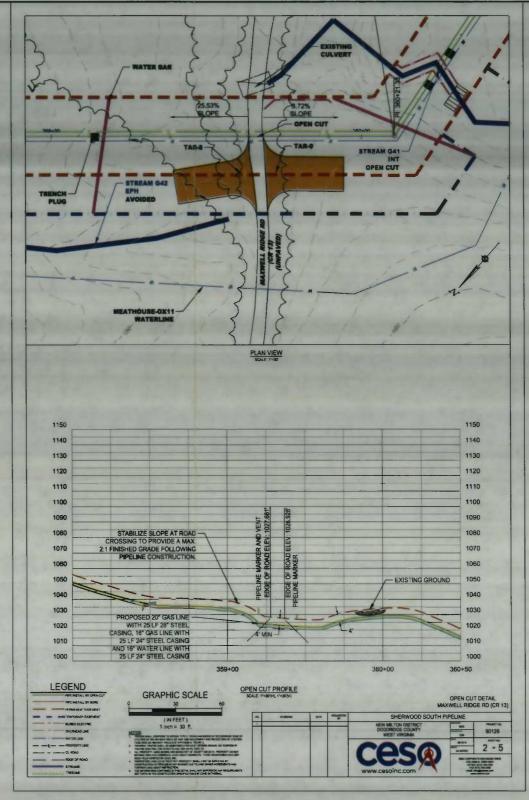












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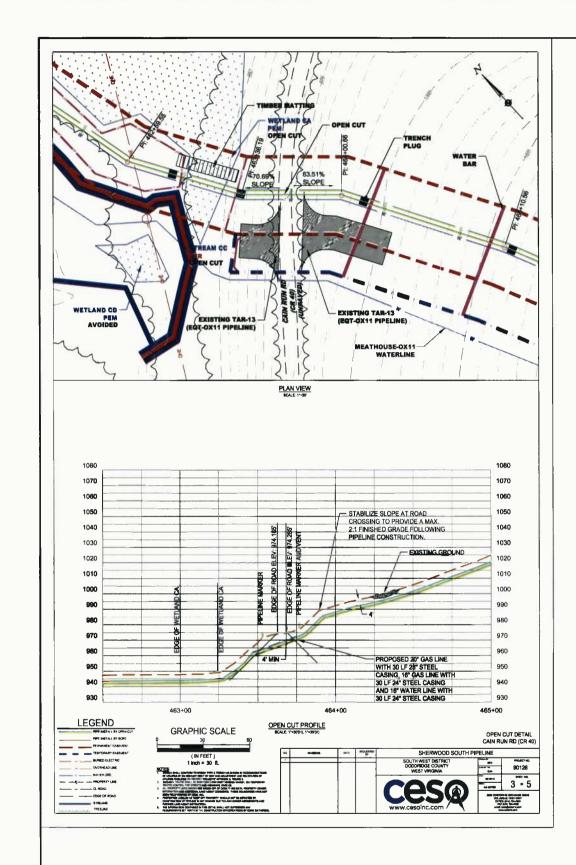
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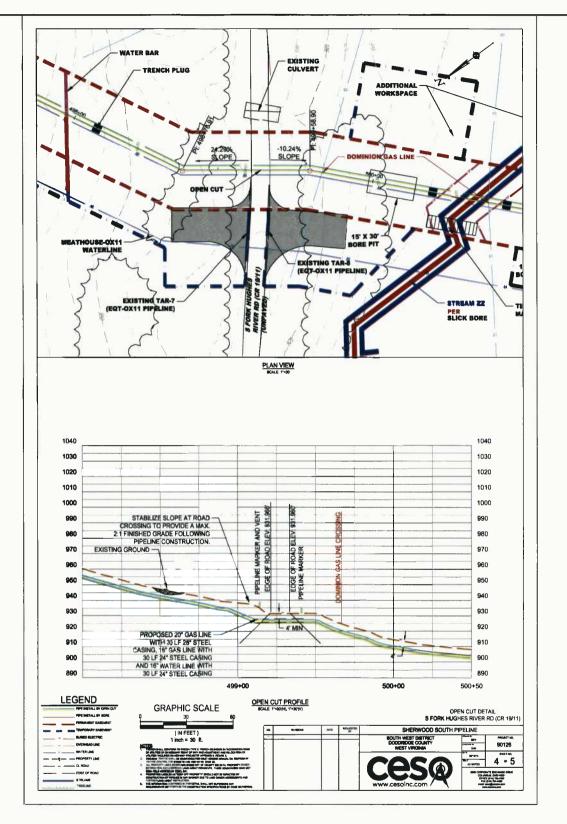
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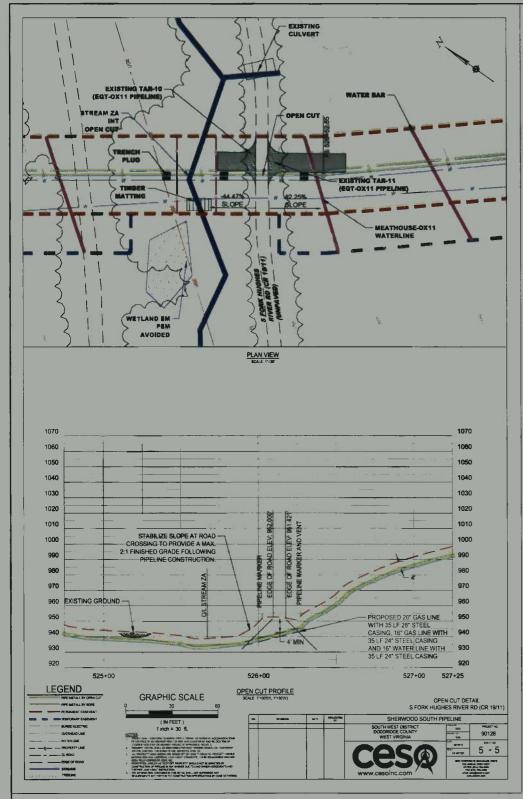
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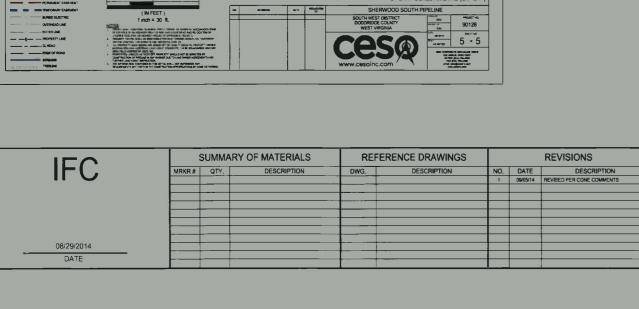
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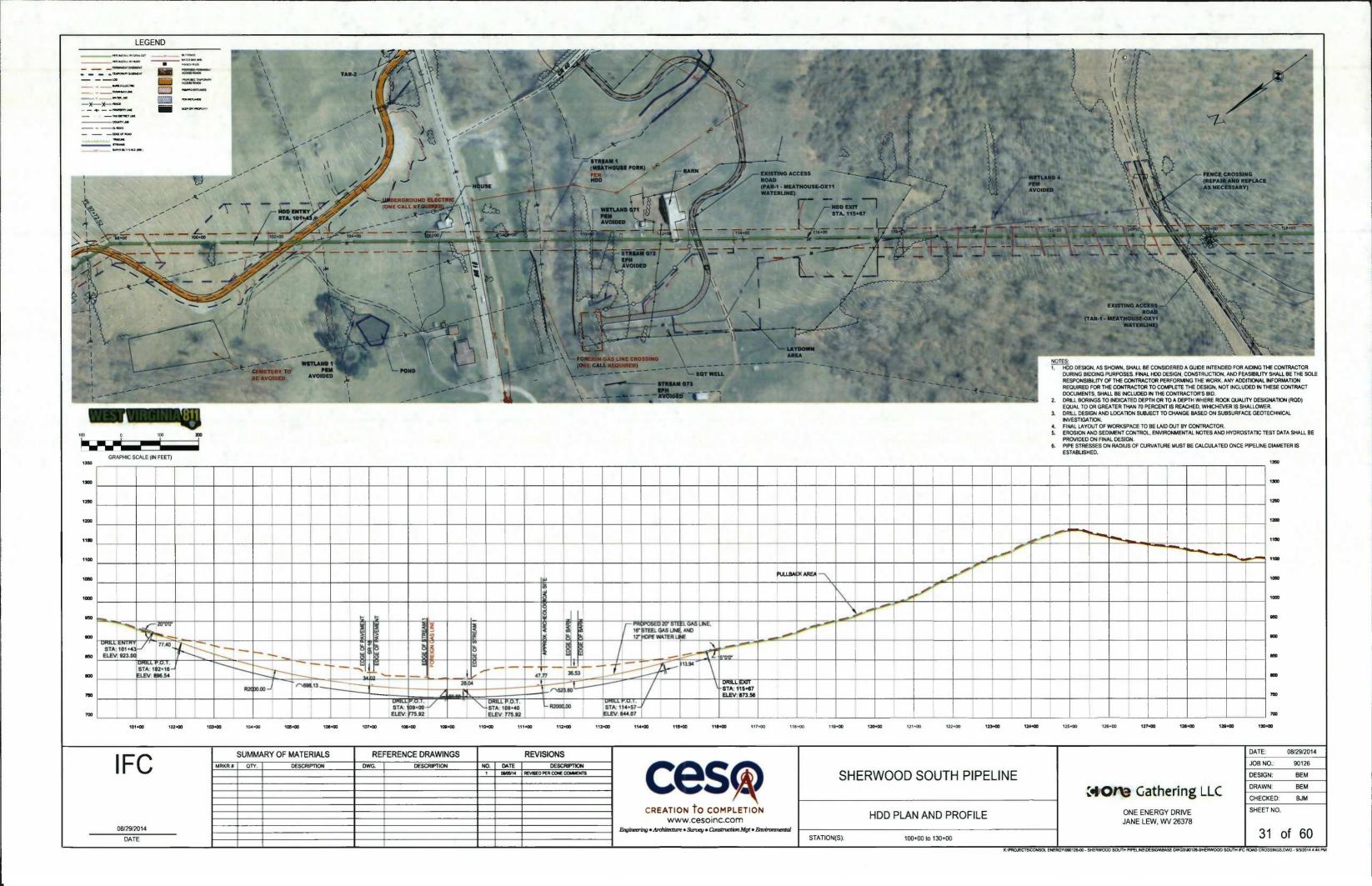
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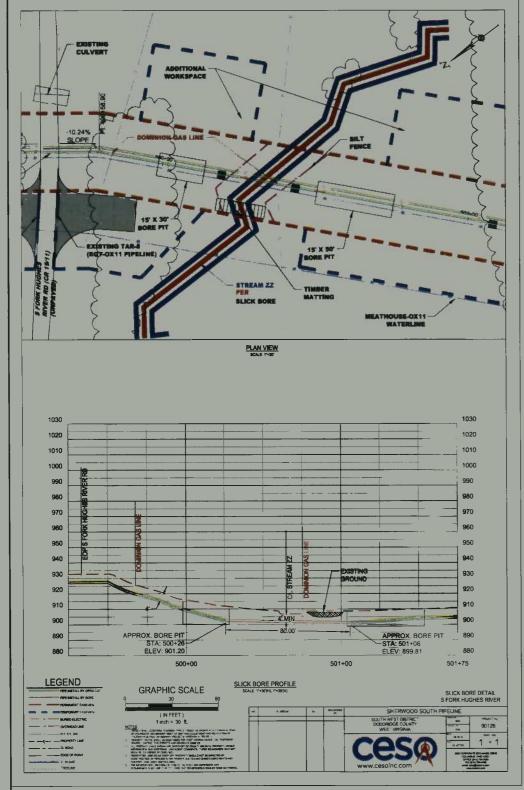
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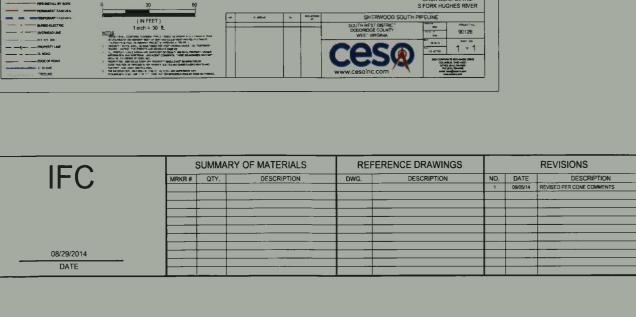
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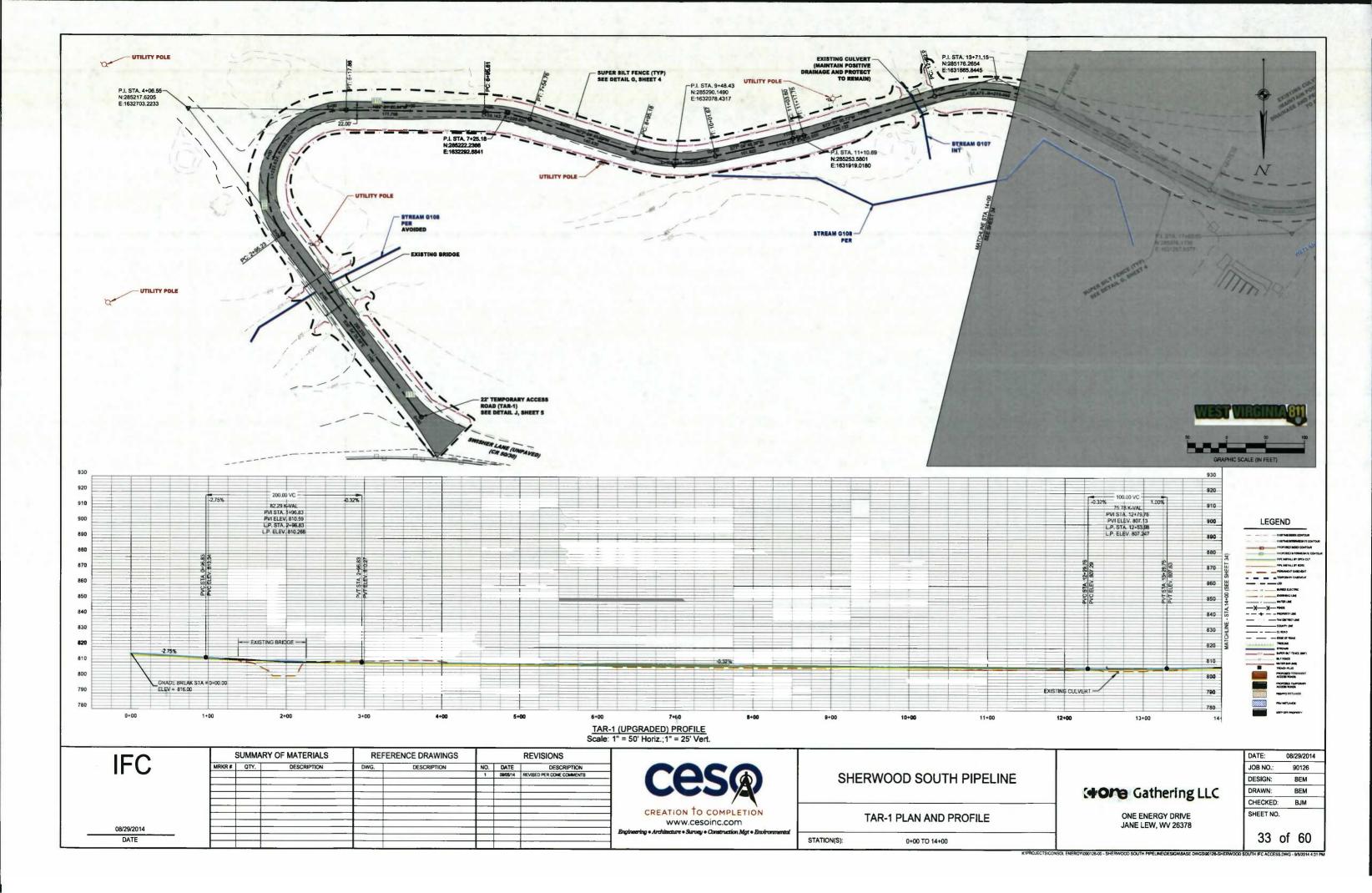
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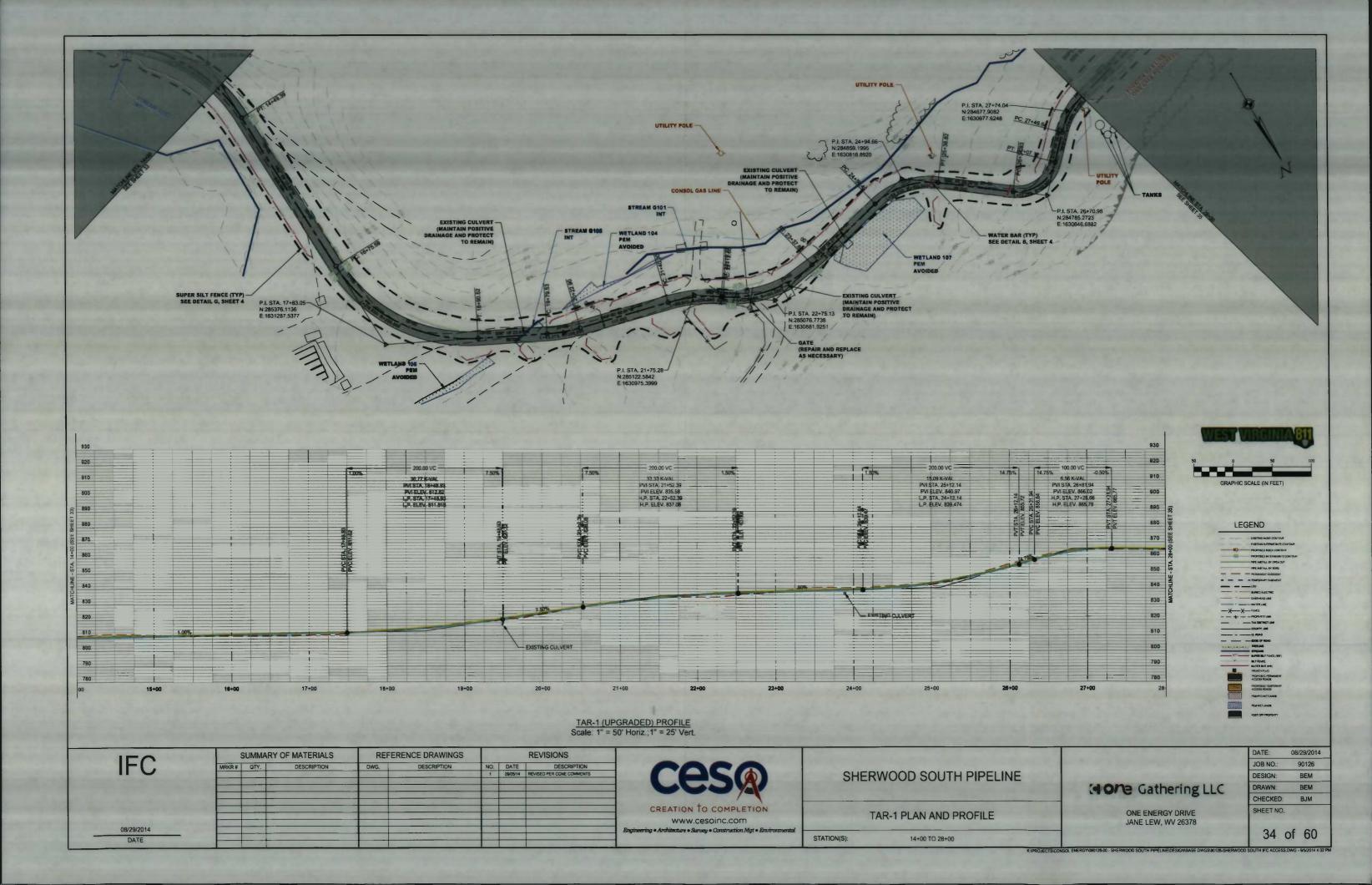
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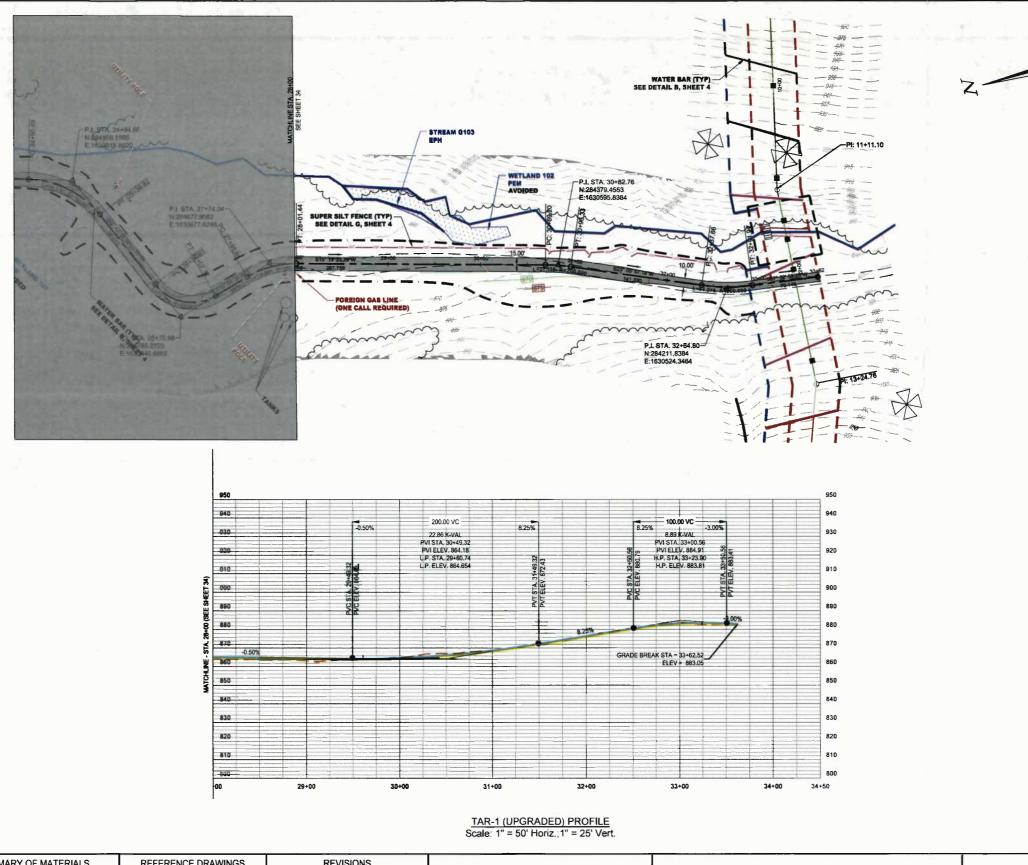
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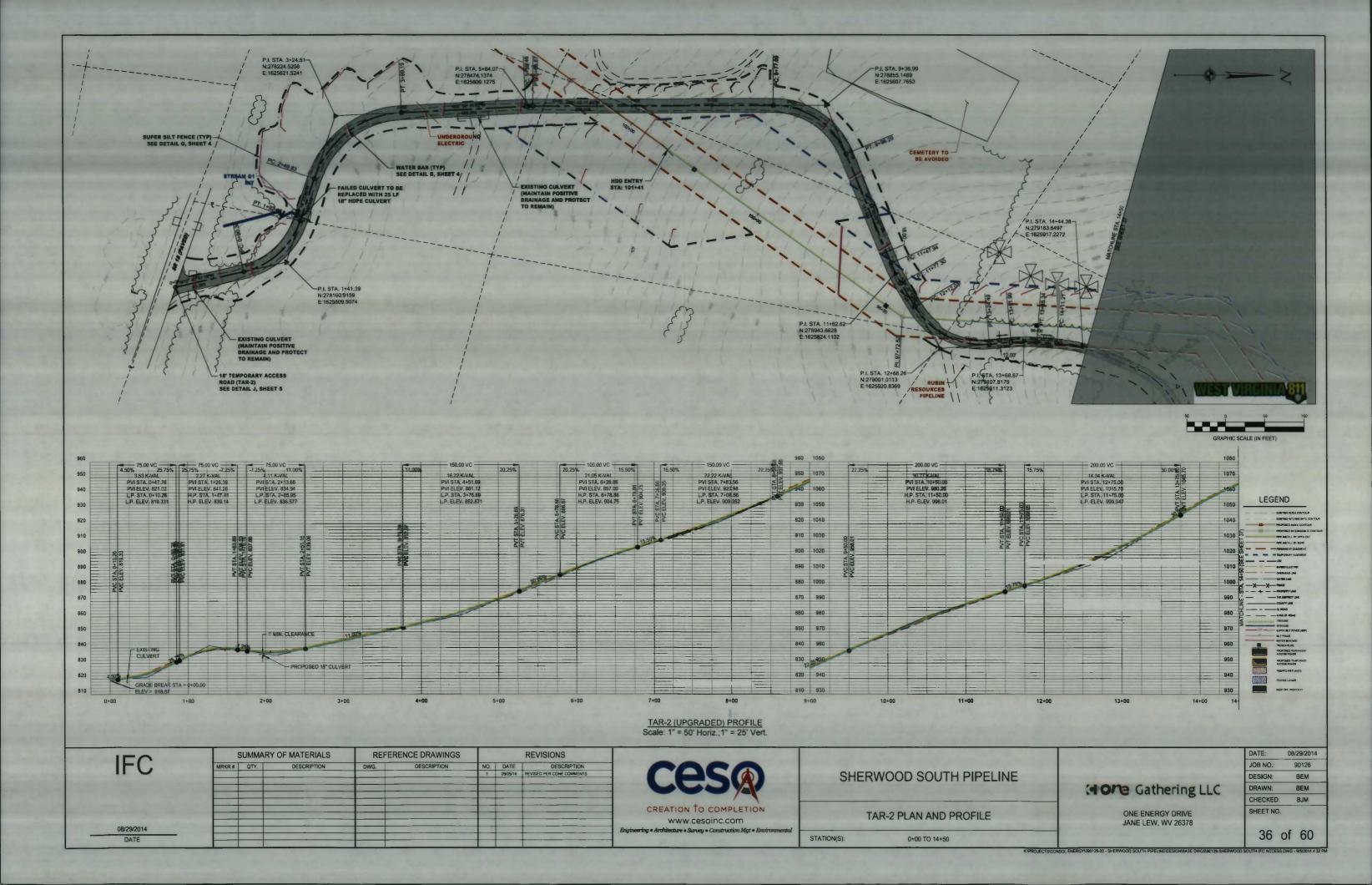
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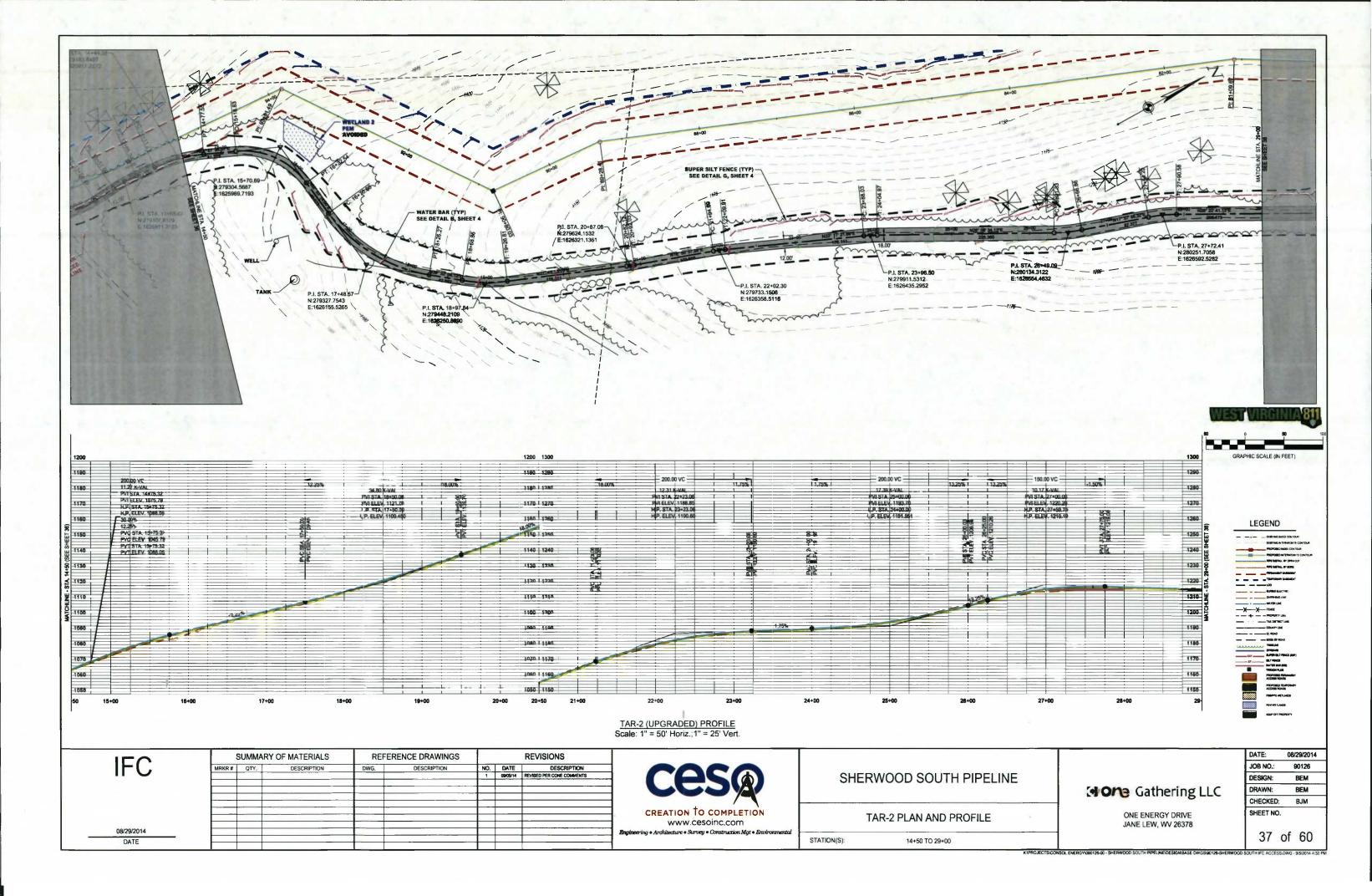
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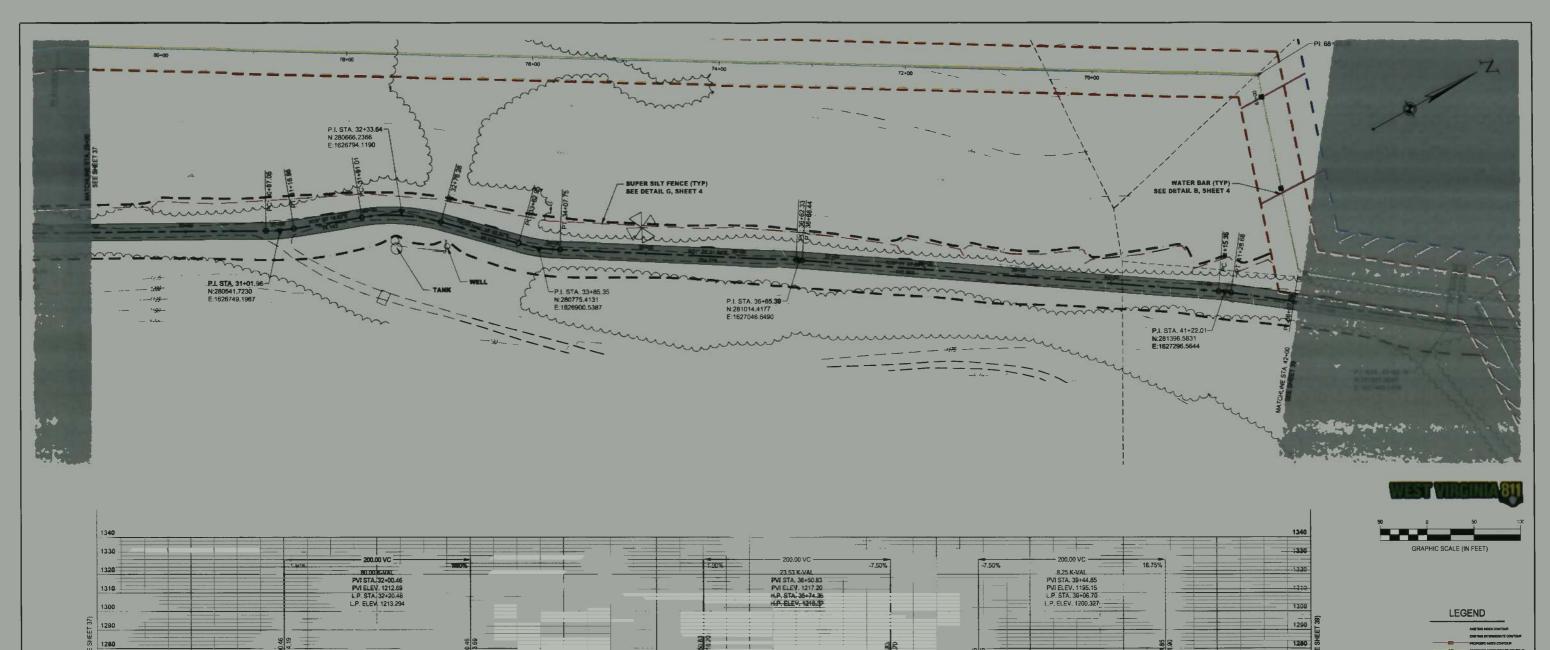
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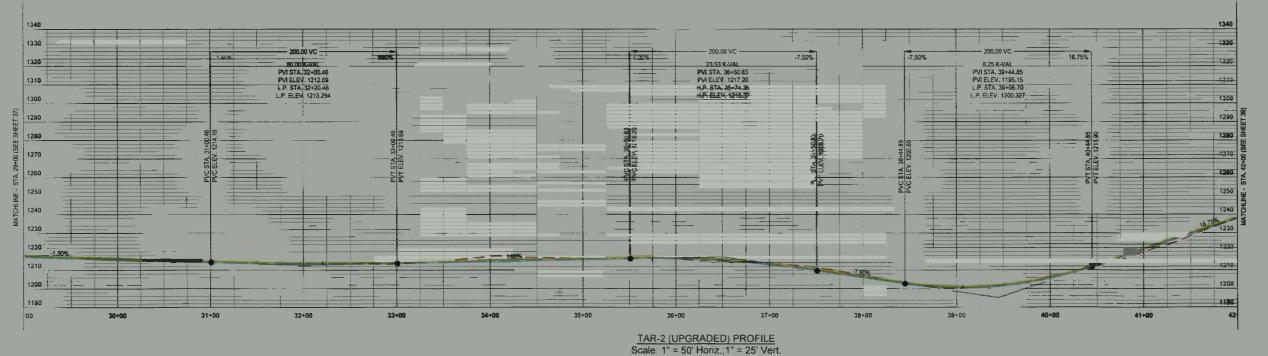
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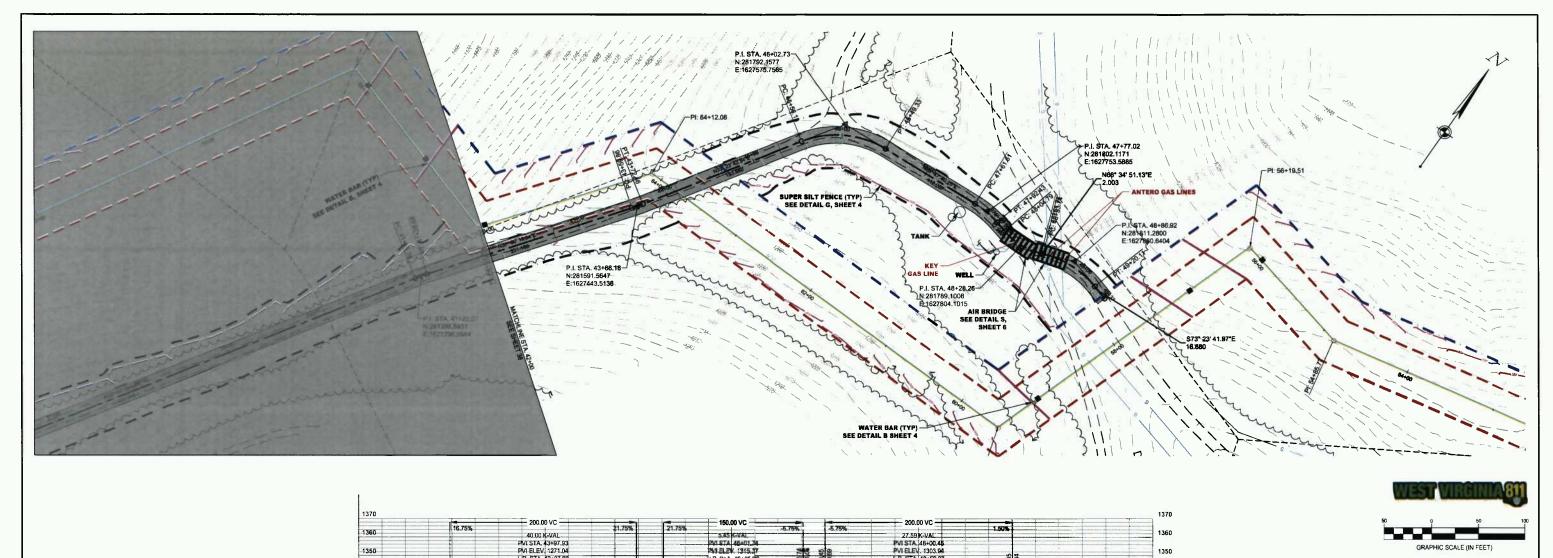
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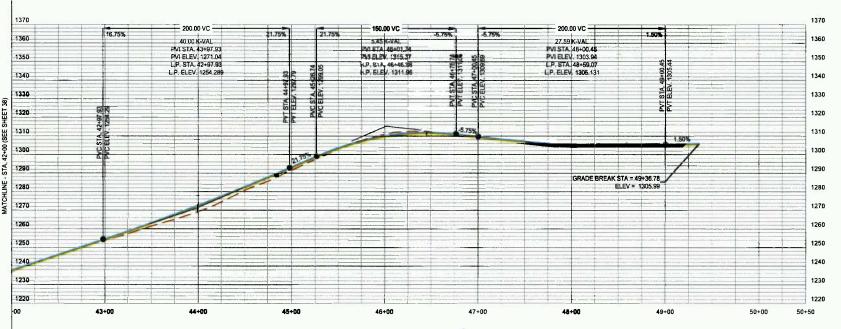
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SHERWOOD SOUTH PIPELINE

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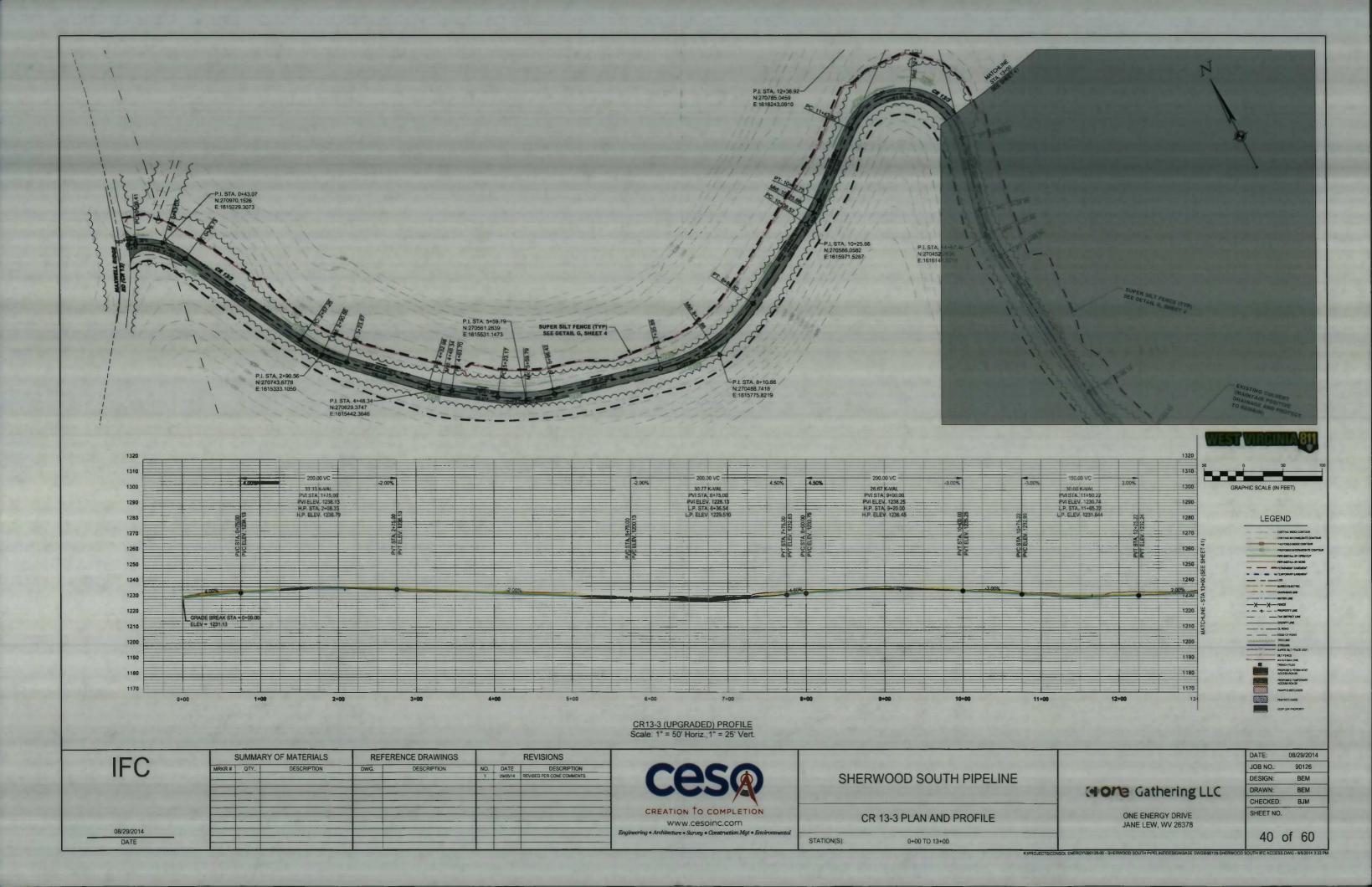
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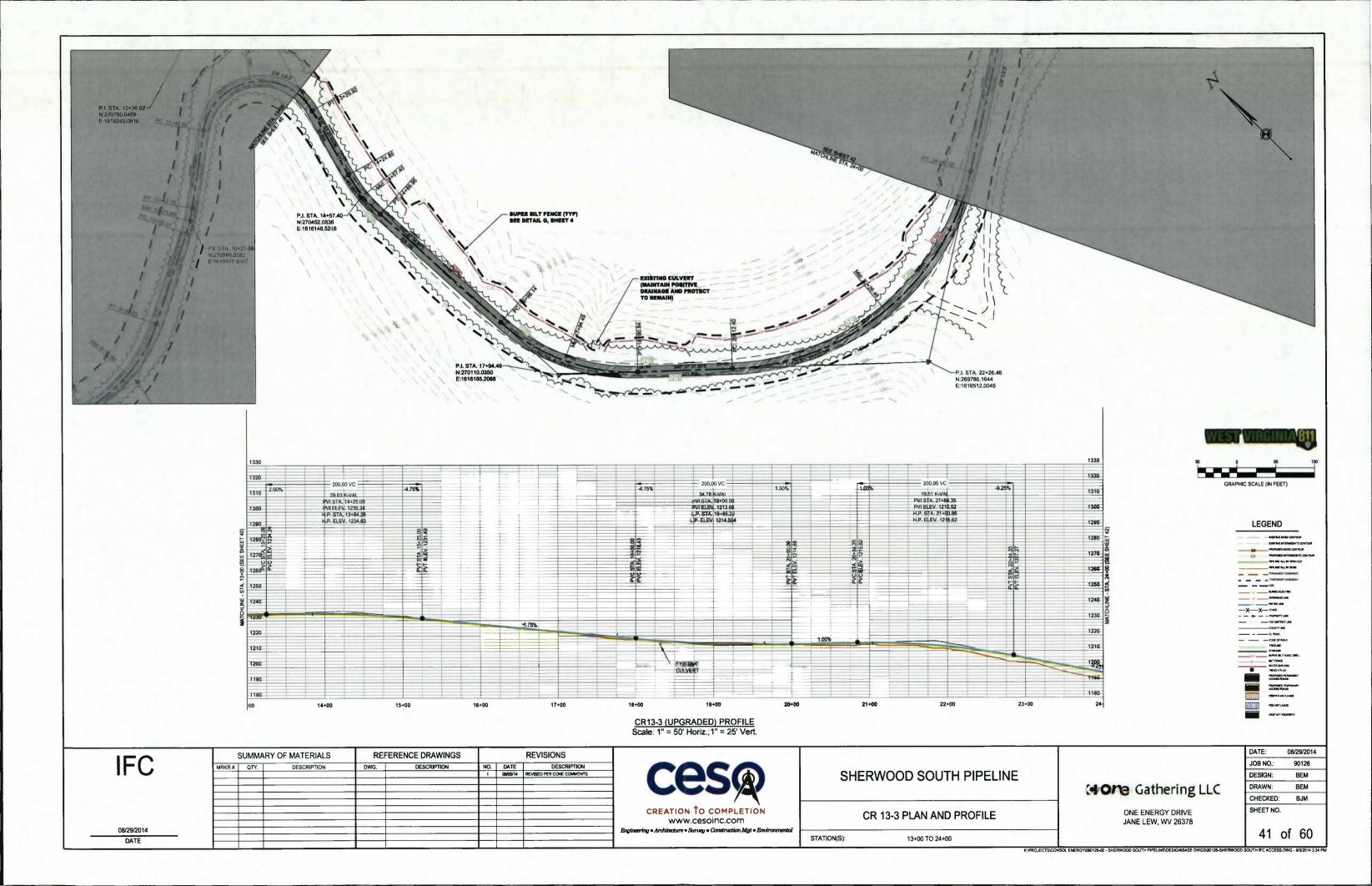
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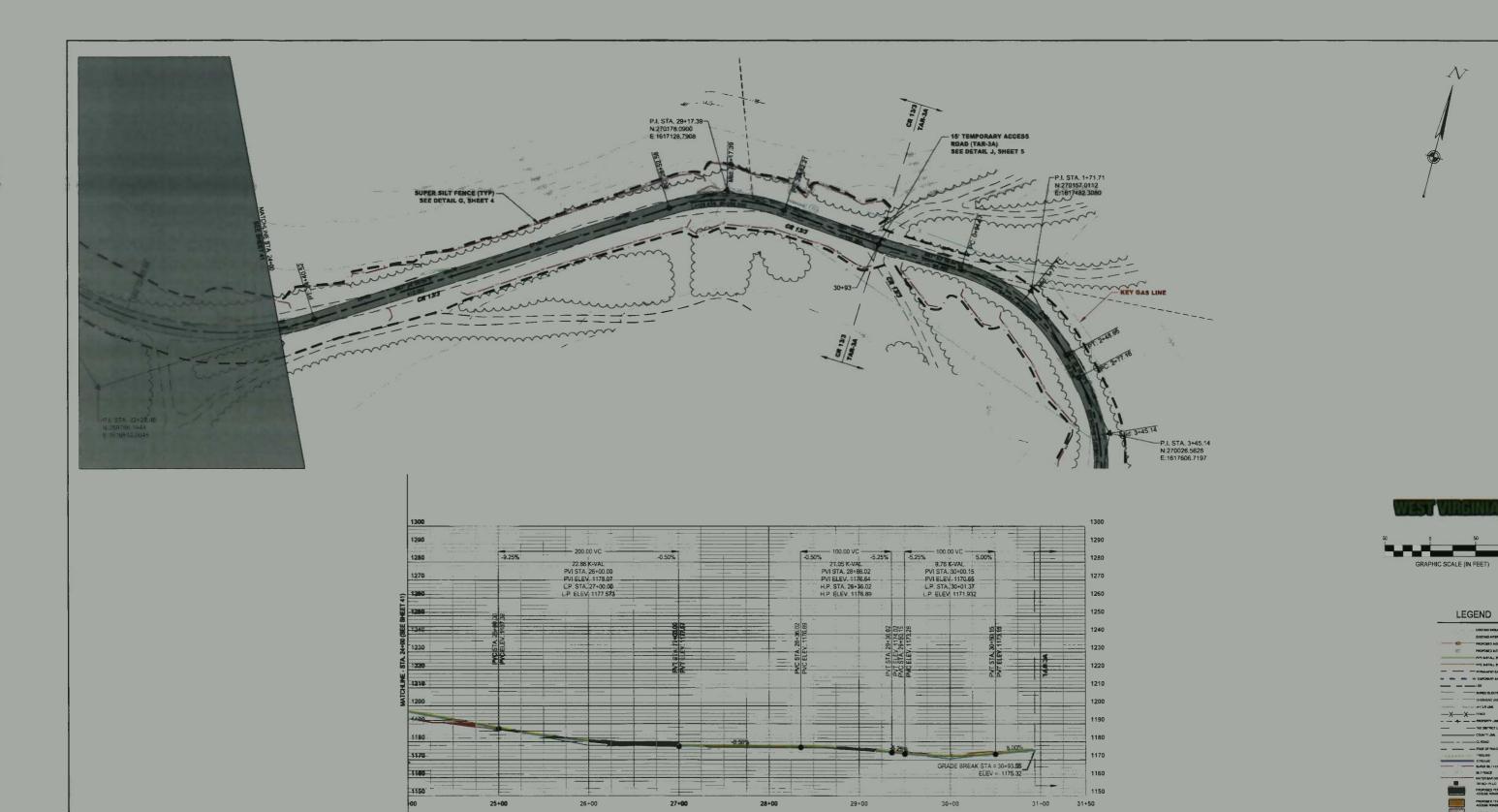
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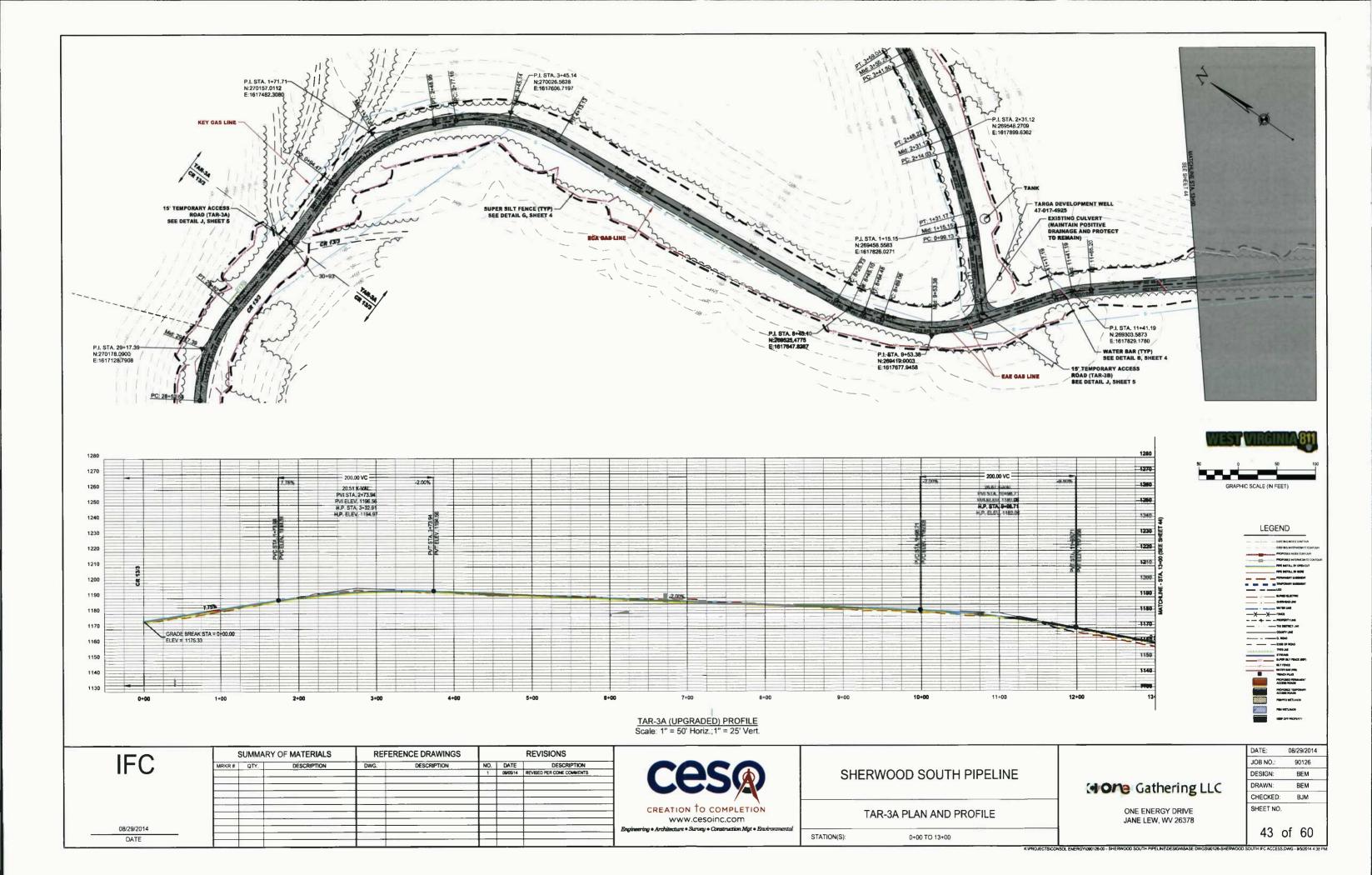
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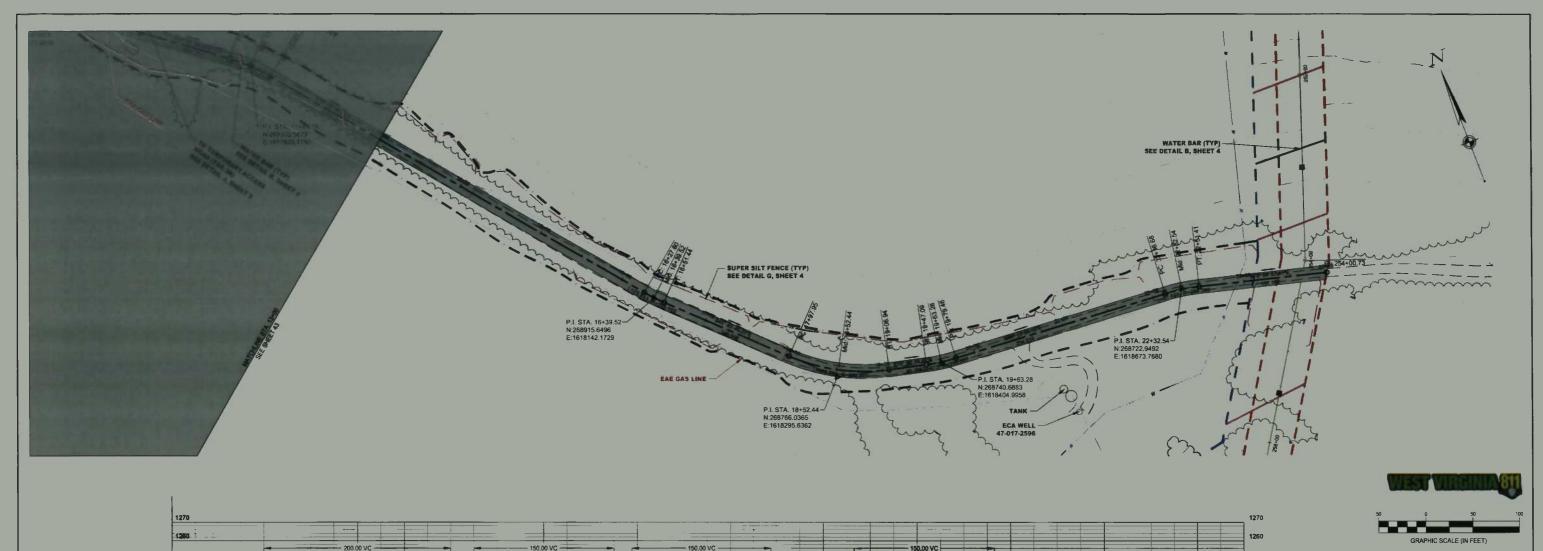
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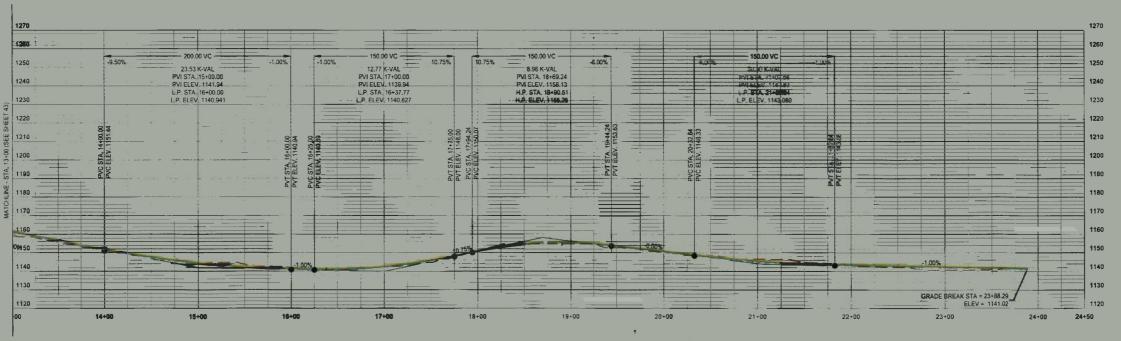
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TAR-3A (UPGRADED) PROFILE Scale: 1" = 50' Horiz.; 1" = 25' Vert.

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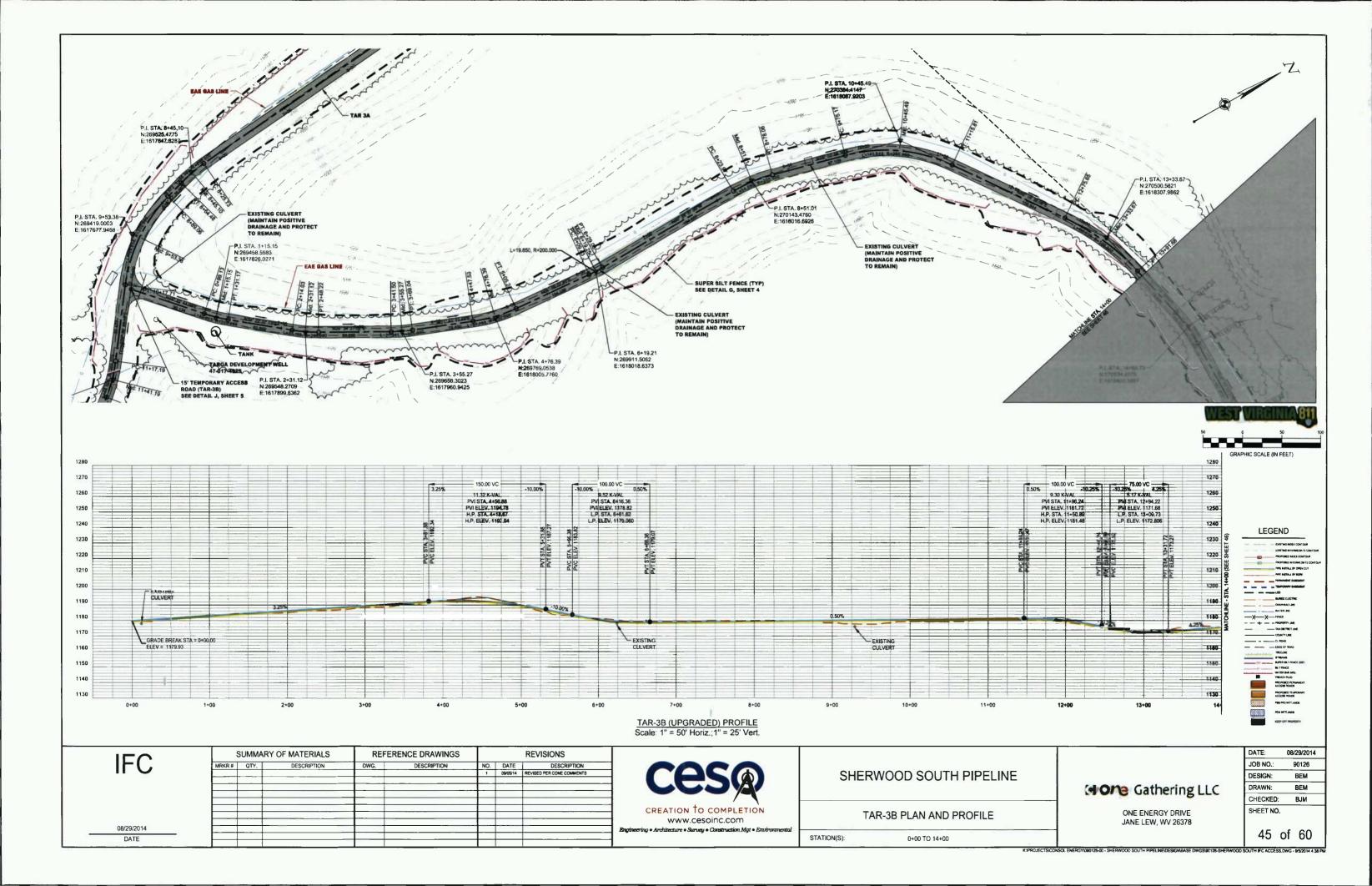
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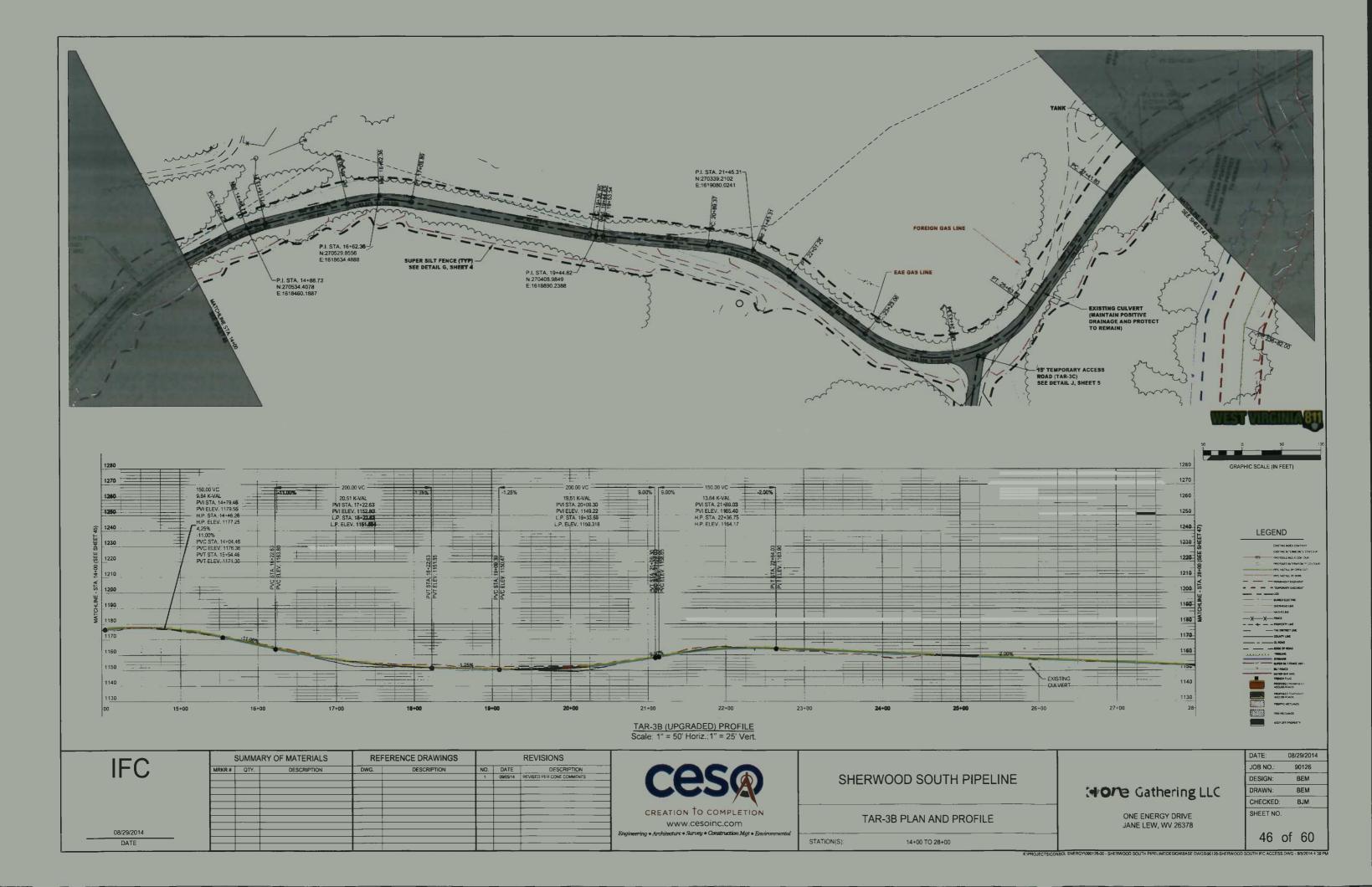
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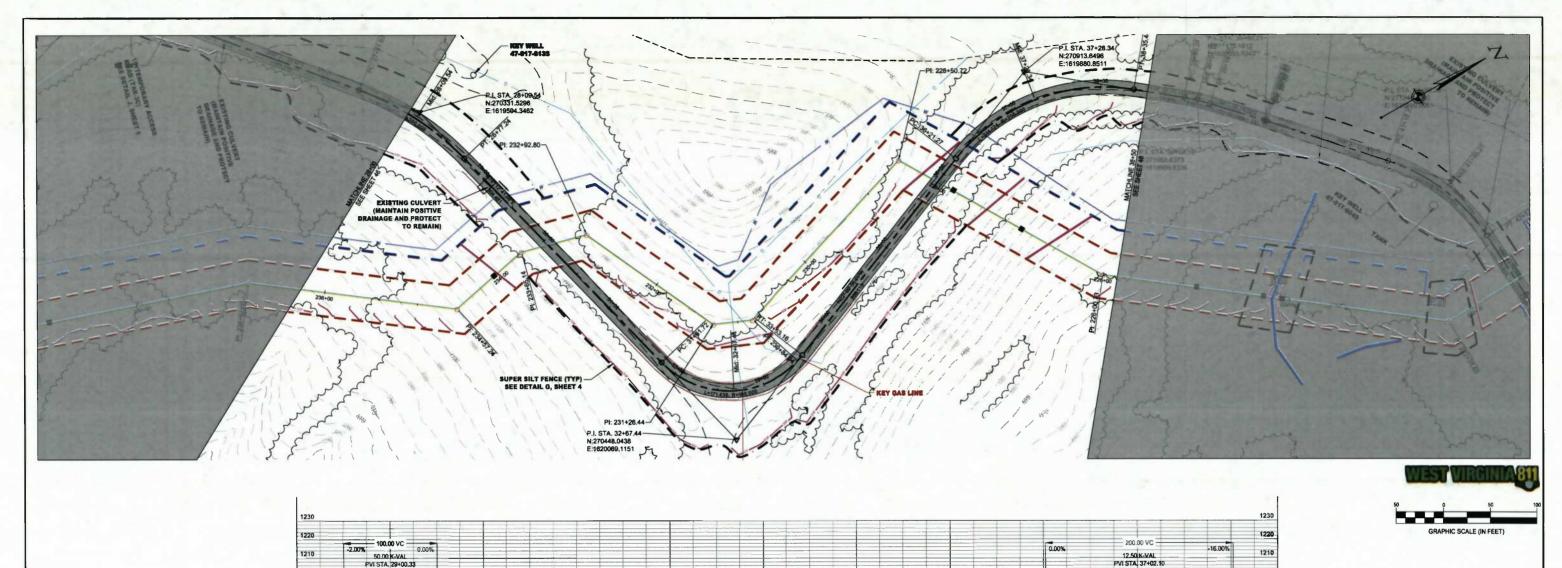
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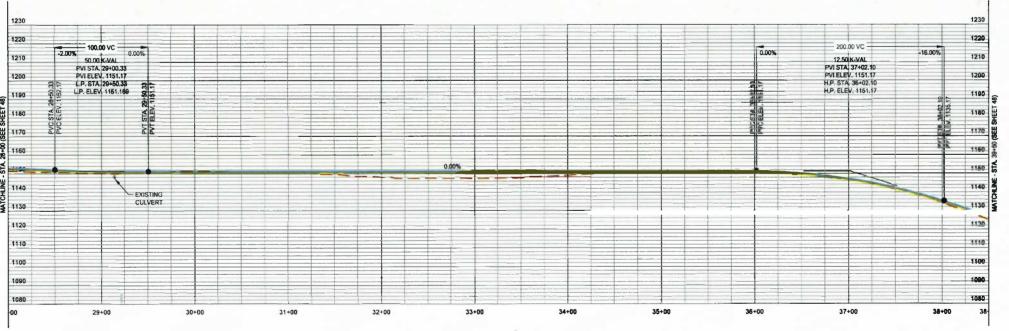
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TAR-3B (UPGRADED) PROFILE Scale: 1" = 50' Horiz.;1" = 25' Vert.

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SHERWOOD SOUTH PIPELINE

TAR-3B PLAN AND PROFILE

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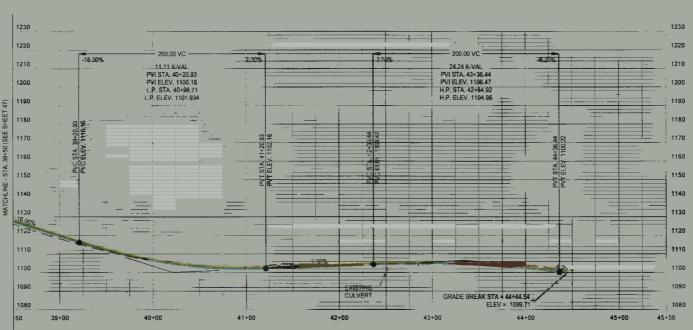
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TAR-3B (UPGRADED) PROFILE Scale: 1" = 50' Horiz.,1" = 25' Vert.

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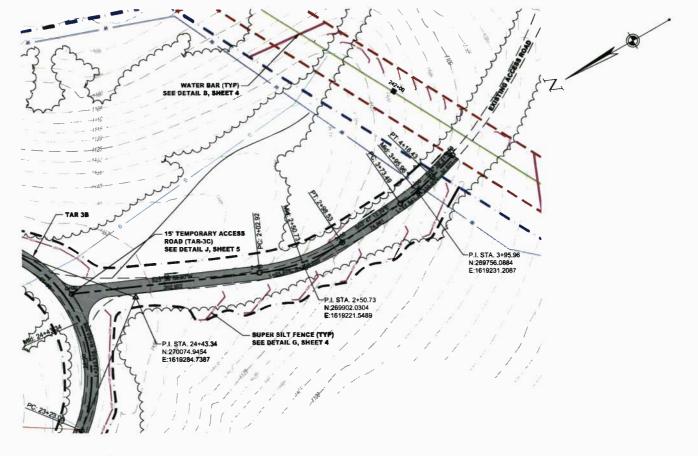
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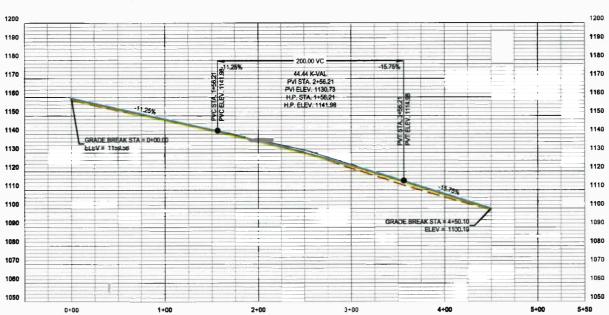
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SHEET NO.	





TAR-3C (UPGRADED) PROFILE Scale: 1" = 50' Horiz.;1" = 25' Vert.

SUMMARY OF MATERIALS REFERENCE DRAWINGS REVISIONS

MRKR # QTY. DESCRIPTION DWG. DESCRIPTION NO. DATE DESCRIPTION
1 090/5/14 REVISED PER COME COMMENTS

08/29/2014
DATE



SHERWOOD SOUTH PIPELINE

TAR-3C PLAN AND PROFILE

STATION(S):	0+00 TO 4+74

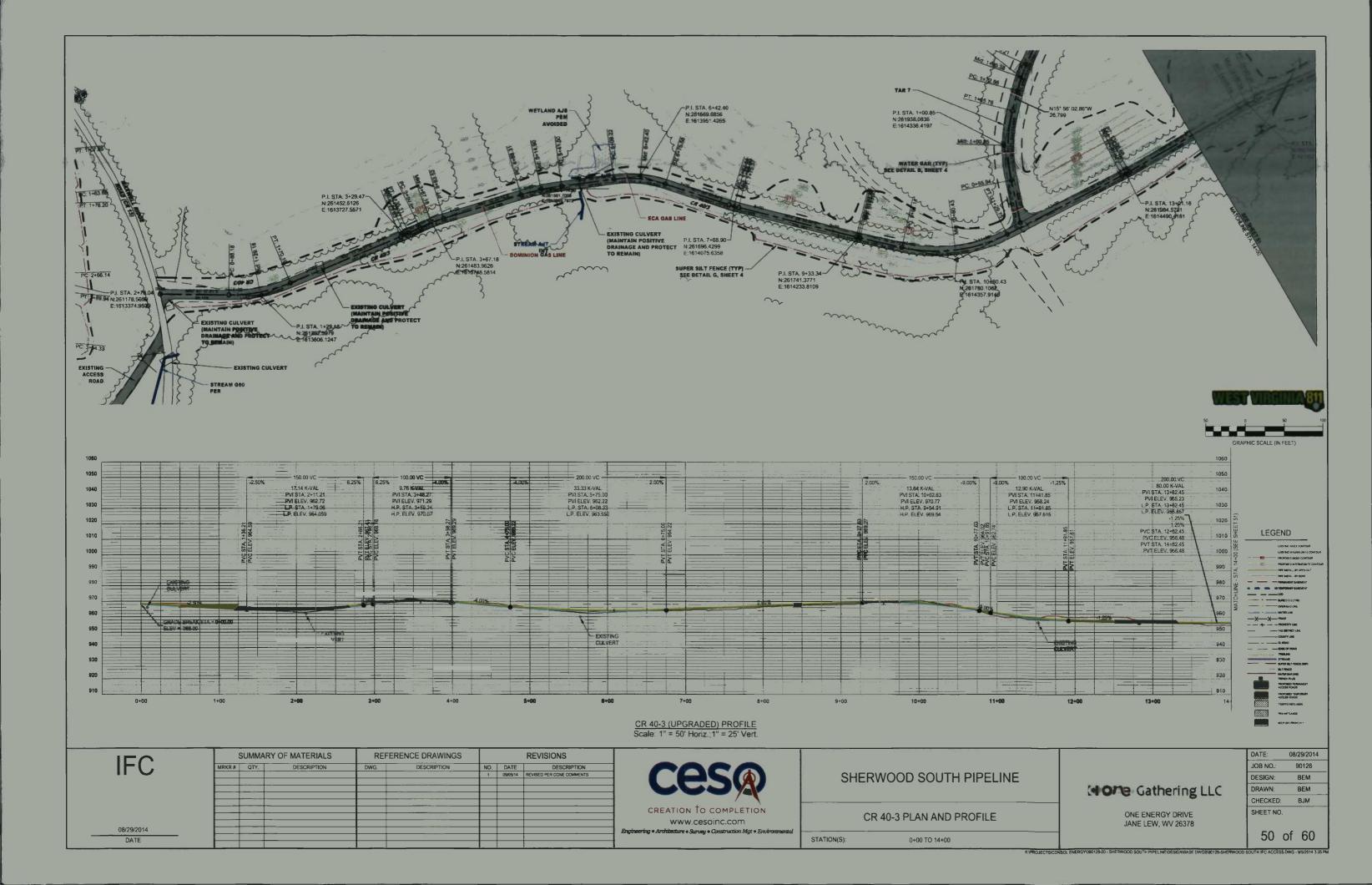
(40ne	Gathering	LLC

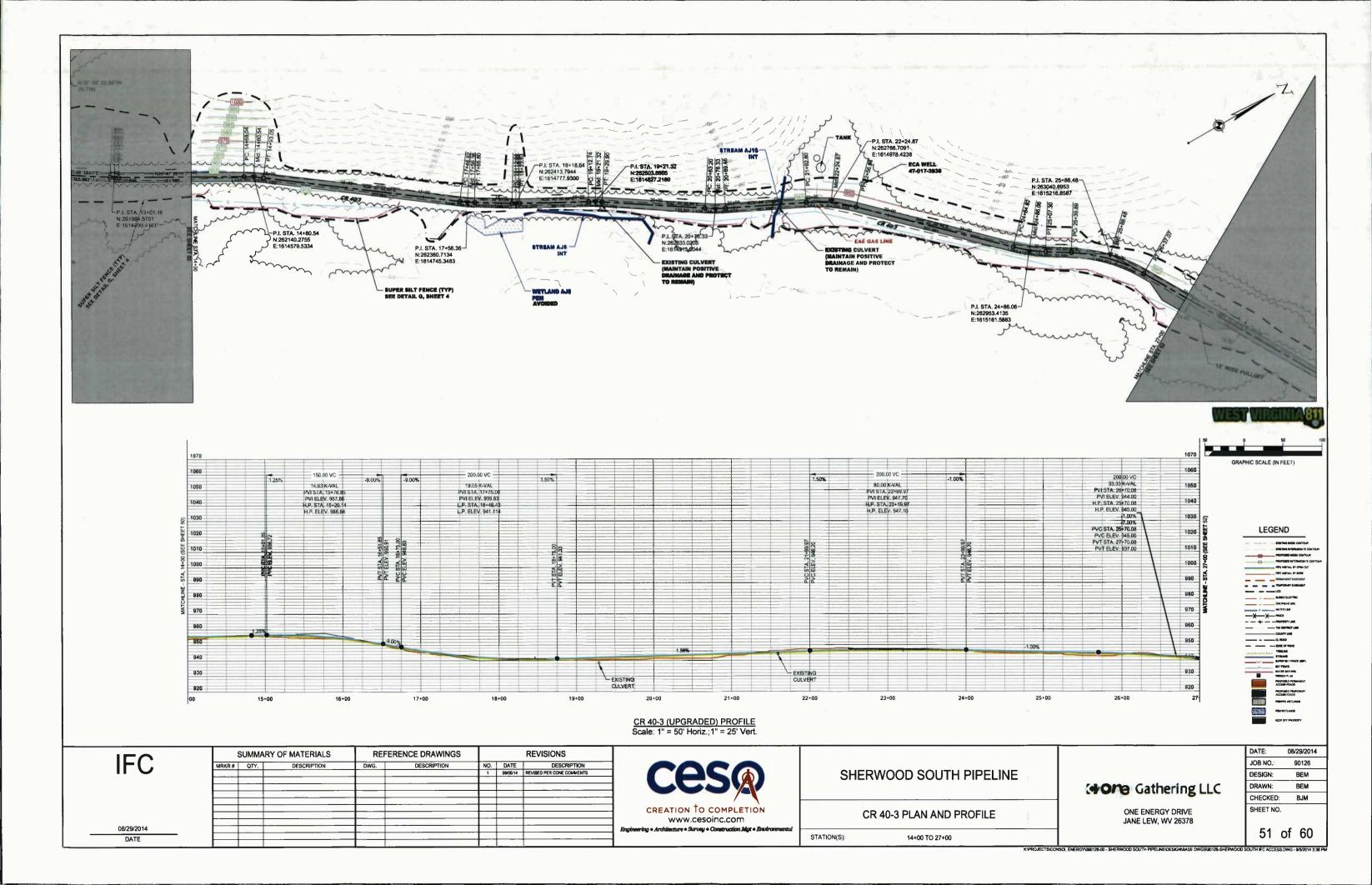
ONE ENERGY DRIVE JANE LEW, WV 26378

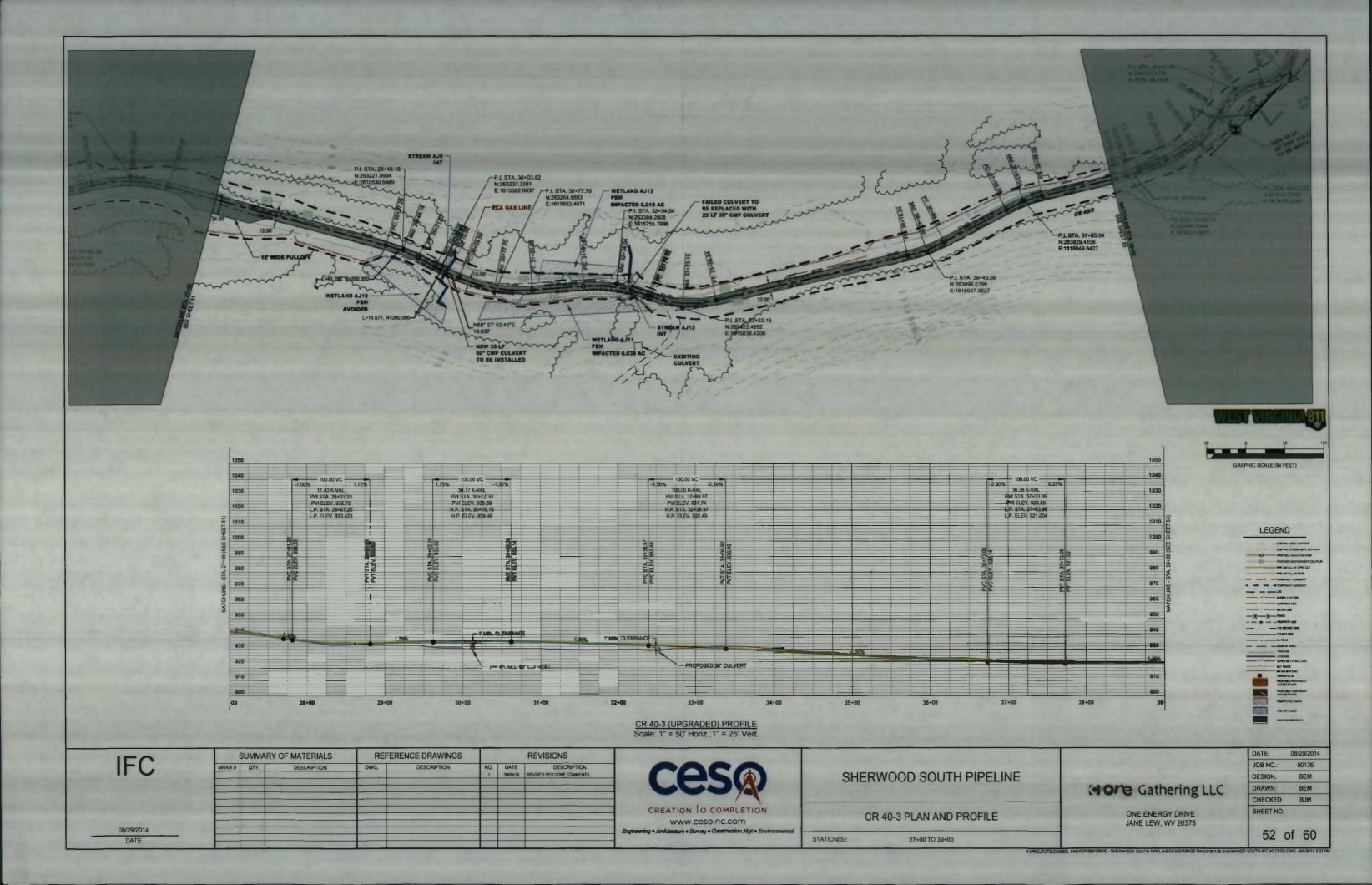
DATE:	08/29/2014	
JOB NO.:	90126	_
DESIGN:	BEM	_
DRAWN:	BEM	_
CHECKED:	ВЈМ	_
SHEET NO.		

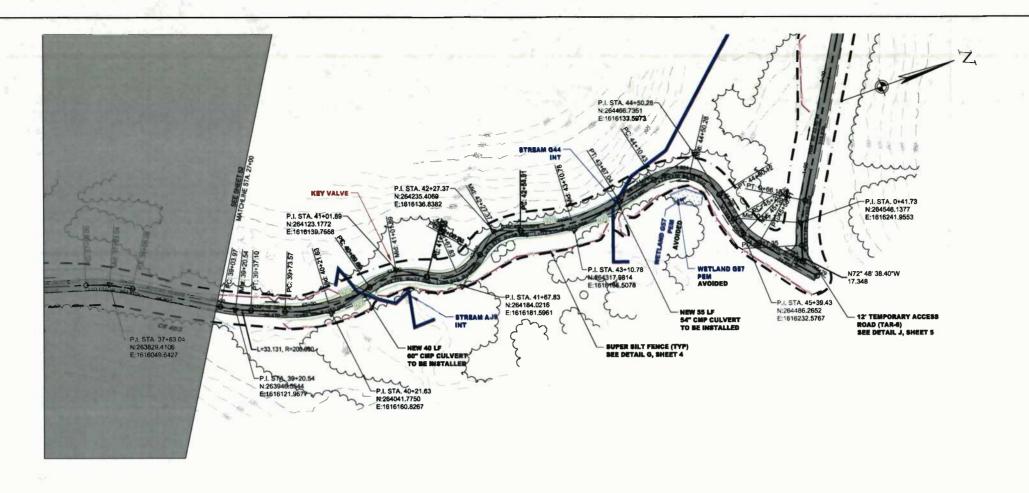
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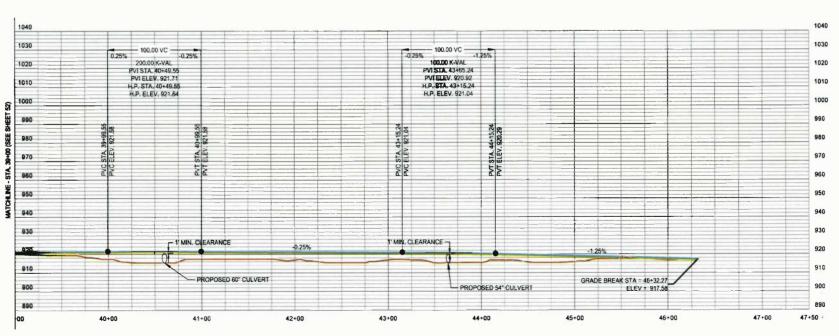
LEGEND











TOTAL PROPERTY

LEGEND

GRAPHIC SCALE (IN FEET)

CR 40-3 (UPGRADED) PROFILE Scale: 1" = 50' Horiz.;1" = 25' Vert.

IFO	SUMMARY OF MATERIALS		REFERENCE DRAWINGS		REVISIONS			
IF()	MRKR#	QTY.	DESCRIPTION	DWG.	DESCRIPTION	NO.	DATE	DESCRIPTION
11 0						1	09/05/14	REVISED PER COME COMMENTS
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	\vdash					+		
						+		
08/29/2014						+		
DATE			1150					
DATE								

CREATION	TO COMPLETION
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eering • Architecture • S	Survey • Construction Mgt • Environme

SHERWOOD SOUTH PIPELINE

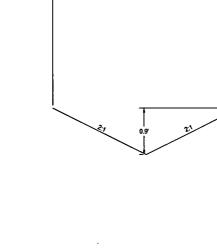
OD 40 2	DIANI	AND	
UK 40-3	PLAN	ANU	PROFILE

STATION(S):	39+00 TO 46+32

(+one	Gathering LLC
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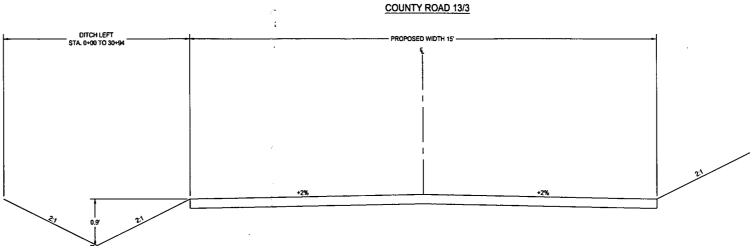
NE ENERGY DRIVE	
ANE EW W/ 26378	

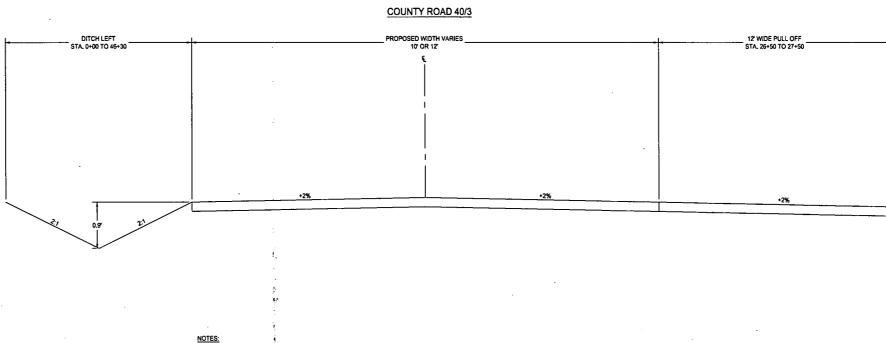
:	08/2	9/2014	
10. :	90	126	
GN:	В	EM	
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T NO.			
3	of	60	
	HO.: GN: WN: CKED: ET NO.	NO.: 90 GN: E WN: E CKED: E ET NO.	NO.: 90126 GN: BEM NN: BEM CKED: BJM ET NO.



WVDOH ITEM 207.09 SUBGRADE COMPACTION AND GEOTEXTILE FABRIC; PER WVDOH ITEM 715.11.
 WVDOH ITEM 307 CRUSHED AGGREGATE BASE COURSE - AASHTO #1, LIMESTONE; PER WVDOH ITEM 704.6
 WVDOH ITEM 307 CRUSHED AGGREGATE BASE COURSE - CLASS 1; PER WVDOH ITEM 307 CRUSHED AGGREGATE BASE COURSE - CLASS 1; PER WVDOH ITEM 704.6

08/29/2014





SCARIFY EXISTING ROAD SURFACE TO A MINIMUM DEPTH OF 8 INCHES. REMOVE UNSUITABLE MATERIAL. GRADE SCARIFIED MATERIAL TO A MINIMUM 2% CROWN AND COMPACT WITH STEEL DRUM ROLLER. PLACE GEOTEXTILE STABILIZATION FABRIC OVER COMPACTED SUBGRADE AND PLACE COMPACTED LIFTS OF CITED GRADATIONS OF LIMESTONE.

SUMMARY OF MATERIALS REFERENCE DRAWINGS REVISIONS **IFC**

CREATION TO COMPLETION www.cesoinc.com

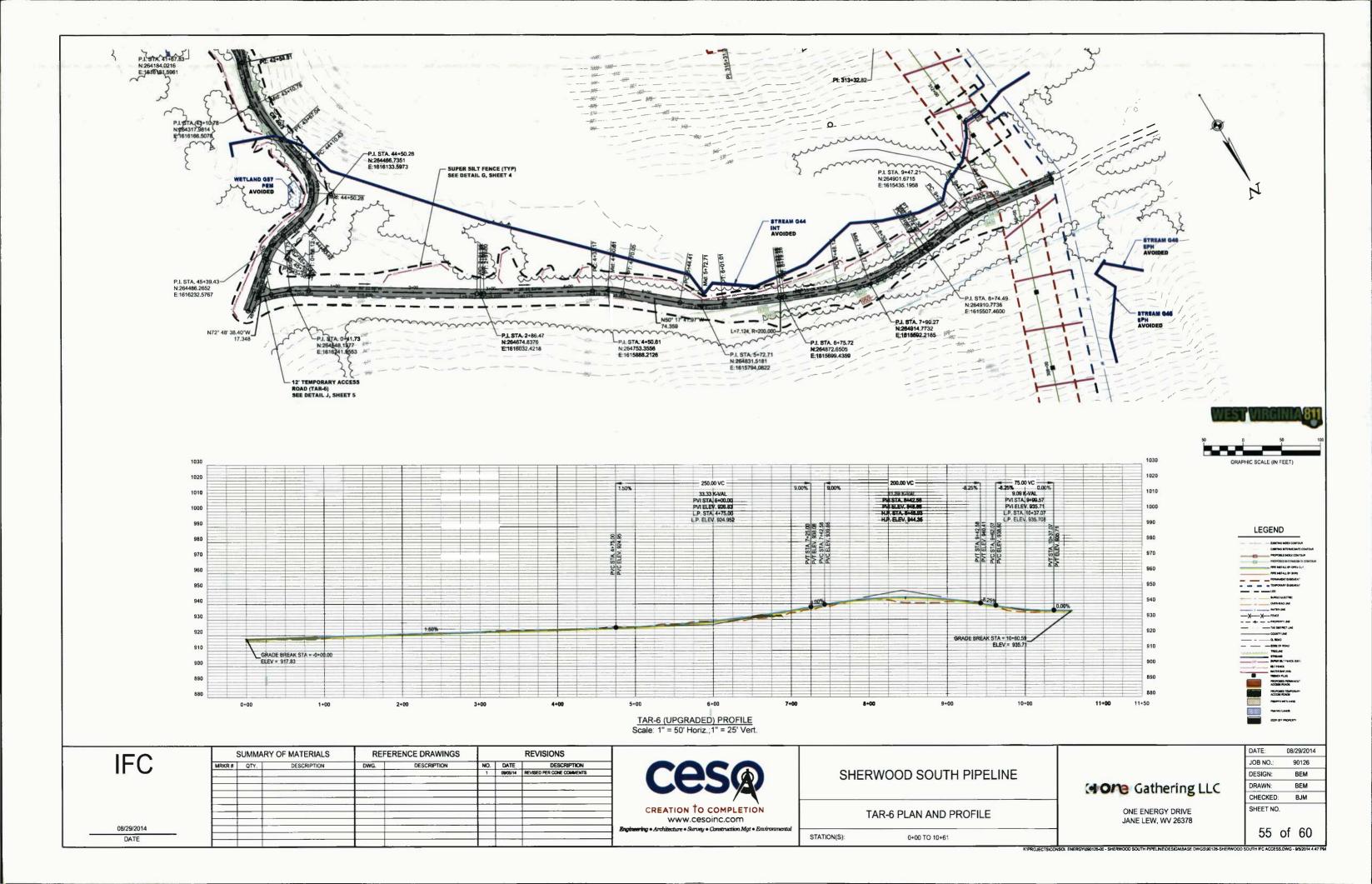
SHERWOOD SOUTH PIPELINE

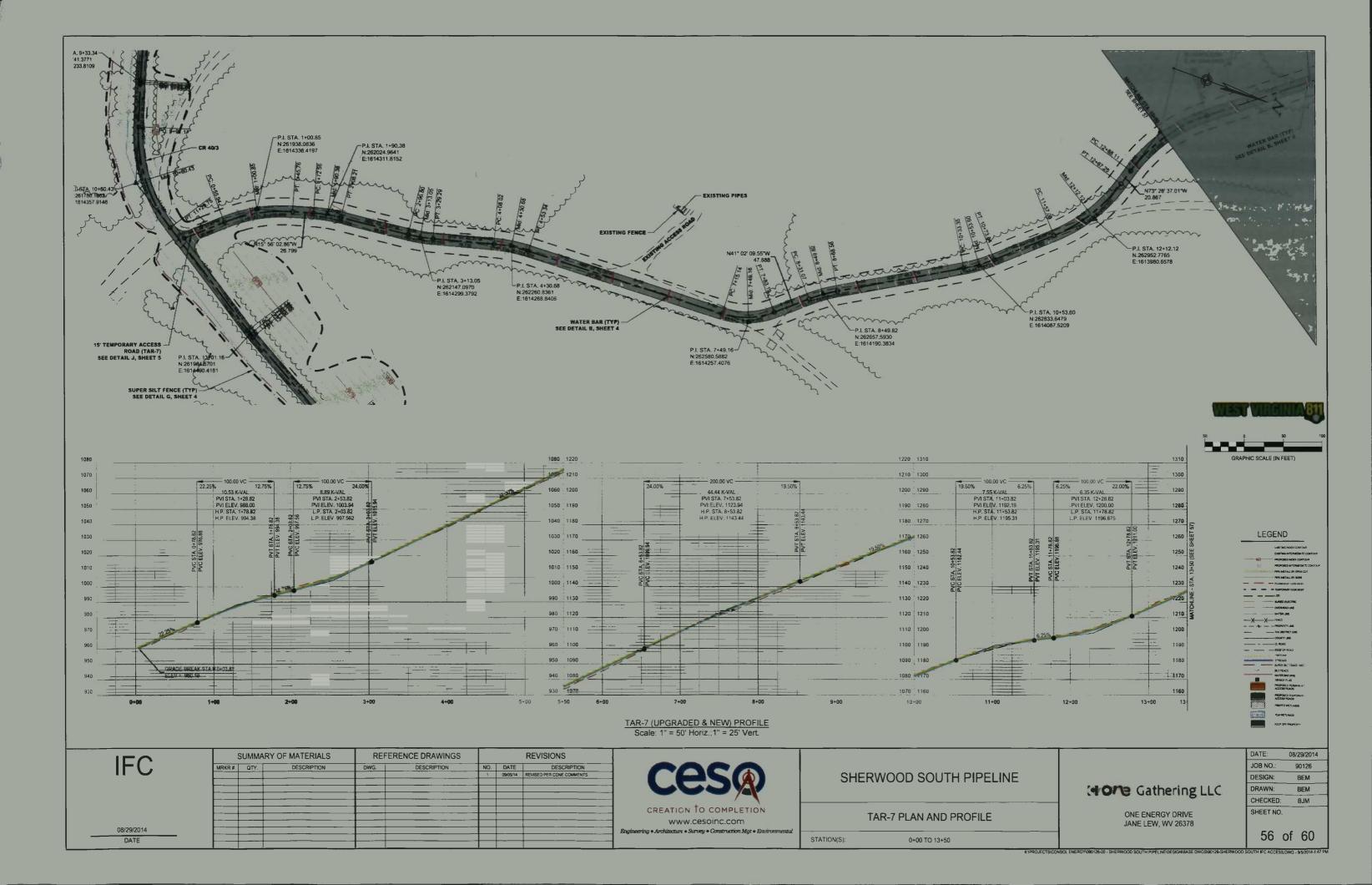
CR 13-3 AND 40-3 IMPROVEMENT DETAILS

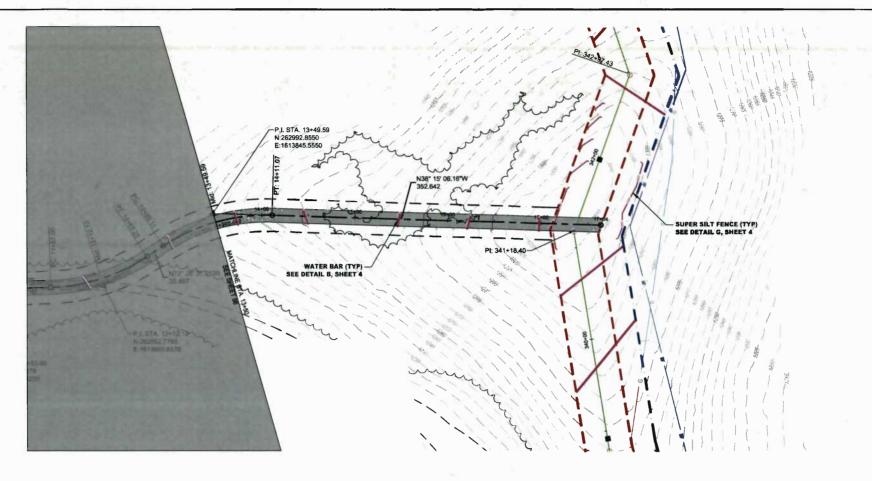
STATION(S): N/A (Gathering LLC

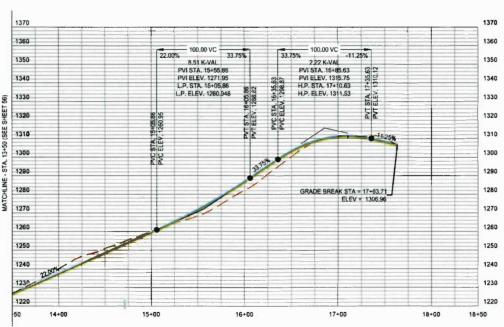
ONE ENERGY DRIVE **JANE LEW, WV 26378**

DATE:	08/29/2014
JOB NO.:	90126
DESIGN:	ВЕМ
DRAWN:	BEM
CHECKED:	ВЈМ
SHEET NO.	
1	









TAR-7 (UPGRADED & NEW) PROFILE Scale: 1" = 50' Horiz.;1" = 25' Vert.

SUMMARY OF MATERIALS REFERENCE DRAWINGS REVISIONS

MRKR # QTY. DESCRIPTION DWG. DESCRIPTION NO. DATE DESCRIPTION
1 09/09/14 REVISED PER CONE COMMENTS

08/29/2014

DATE



SHERWOOD SOUTH PIPELINE

TAR-7 PLAN AND PROFILE

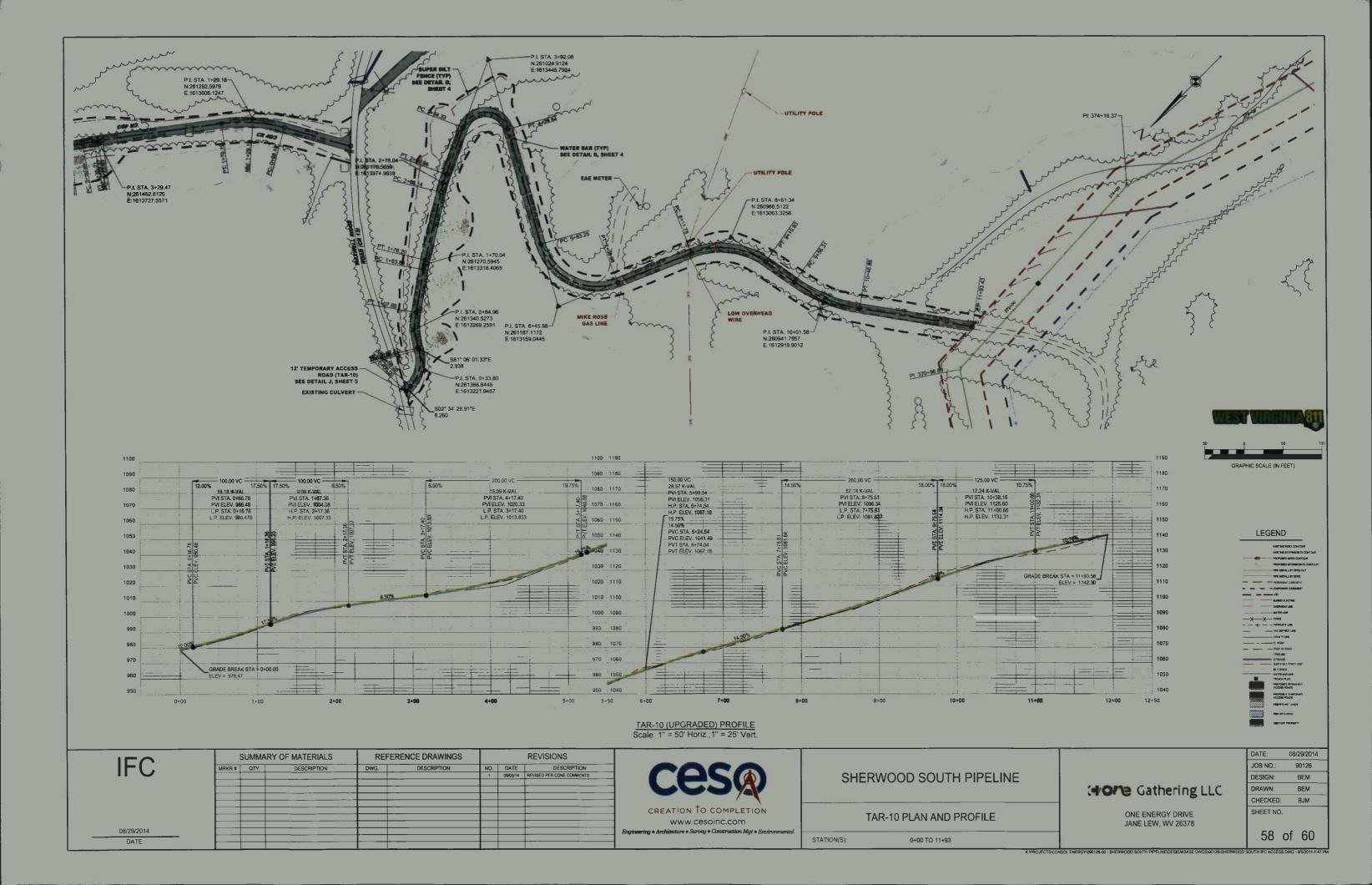
STATION(S): 13+50 TO 17+82

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ONE ENERGY DRIVE JANE LEW, WV 26378

DATE:	08/29/2014
JOB NO.:	90126
DESIGN:	ВЕМ
DRAWN:	BEM
CHECKED:	ВЈМ
SHEET NO.	

LEGEND



1	SHERWOO TRENCH PLU CHA	IG LOCATION	SHERWOO TRENCH PLU CHA	G LOCATION	SHERWOO TRENCH PLU CHA	G LOCATION								
2 3-96	PLUG#	STATION	PLUG#	STATION	PLUG#	STATION	PLUG#	STATION	PLUG#	STATION	PLUG#	STATION	PLUG#	STATION
1 1-00	1	1+00	34	91+00	67	204+48	100	270+59	133	318+00	166	402+56	199	490+16
A	2	2+00	35	96+00	68	205+00	101	273+00	134	320+03	167	403+64	200	492+16
1	3	3+00	36	98+00	69	206+00	102	275+00	135	328+26	168	404+67	201	493+16
6 6-6 31 110-0 72 272-01 33 272-01 33 272-01 34 36-0 41 175-0 46 175 280-0 18 280-0 19 346-0 12 424-0 26 46-1 1 5-0 41 171-0 73 278-0 13 289-0 10 347-2 17 428-0 20 46-1 0 3-0 41 171-0 73 278-0 18 289-0 11 36-2 19 428-0 20 46-0 1 11 11-0 44 790-0 77 271-0 110 232-0 14 382-2 19 46-0 22 00-0 1 11-44 46 790-0 241-0 111 284-0 111 284-0 113 284-0 113 46-0 22 00-0 1 11-44 46 790-0 71 344-0 11 294-0 <td>. 4</td> <td>4+00</td> <td>37</td> <td>101+00</td> <td>70</td> <td>208+00</td> <td>103</td> <td>277+00</td> <td>136</td> <td>330+46</td> <td>169</td> <td>405+67</td> <td>202</td> <td>494+16</td>	. 4	4+00	37	101+00	70	208+00	103	277+00	136	330+46	169	405+67	202	494+16
7	5	5+00	38	117+00	71	210+00	104	278+00	137	338+92	170	414+40	203	495+16
1	6	6+00	39	119+00	72	212+00	105	279+00	138	342+00	171	419+69	204	496+16
10	7	7+00	. 40	120+00	73	214+00	106	280+00	139	344+00	172	424+76	205	497+16
10	8	8+00	41	121+00	74	218+00	107	285+00	140	347+00	173	429+86	206	498+16
11	9	9+0¢	42	·' 122+00	75	219+00	108	288+00	141	350+24	174	433+18	207	500+39
11 11 11 12 13 14 13 14 13 14 14 13 14 14	10	10+00	43	123+00	76	220+00	109	290+00	142	353+22	175	438+05	208	500+87 .
11-16	11	11+00	44	124+00	77	221+00	110	292+00	143	356+29	176	443+93	209	502+16
14	12	11+46	45	125+45	78	224+08	111	294+00	144	358+28	1777	446+ 9 3	210	503+16
15 13-20 64 1354-5 81 227-60 134 227-57 147 362-16 150 455-16 23 597-17 151 151 151-17 17 151-10 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151-10 151-17 151	13	11+66	46	130+32	. 79	224+28	112	296+00	145	360+62	178	451+94	211	504+16
15	14	12+00	47	134+78	80	225+00	. 113	297+00	146	360+86	179	454+16	212	505+16
17	15	13+00	48	138+43	81	227+00	114	297+57	147	362+16	180	455+16	213	507+16
18 16-00 51 156-53 84 256-50 177 500-10 150 367-40 153 661-55 216 577-10 500-10 150 177-10 150 150-10 150 150-10 150 150-10 150 150-10 150 150-10 150 150-10 150 150-10 150 150-10 150 150-10 150-10 150 150-10 1	16	14+00	· 49	141+66	82	227+84	. 115	297+83	148	364+17	181	457+17	214	509+16
19 17-40 52 163-40 85 242-40 118 351-40 151 366-36 164 461-71 217 520-16 20 18-40 53 166-40 66 245-40 118 350-40 152 366-36 165 462-40 218 521-16 21 19-40 54 173-40 85 246-40 120 350-40 152 366-35 165 462-40 218 521-16 22 21-40 55 173-46 88 246-37 121 350-40 153 372-47 186 463-36 219 522-16 23 22-40 56 164-40 89 246-44 122 356-40 155 360-68 168 465-16 221 525-5 166-40 57 166-40 90 246-40 123 350-40 155 360-68 168 465-16 221 525-5 166-40 150 150 150 150 150 150 150 150 150 15	17	15+00	50	148+41	83	234+04	116	299+00	149	367+21	182	460+16	215	512+16
20 18+00 53 168+00 66 245+00 118 300+00 152 388+33 185 462+90 216 521+1 21 19+00 54 173+00 87 247+00 120 300+00 153 372+47 186 463+36 219 522+1 22 21+00 55 175+46 88 248+37 121 300+00 154 377+53 167 464+16 220 524+1 23 22+00 56 184+00 89 248+54 122 305+00 155 380+68 188 465+16 221 525+5 24 22+00 57 186+10 90 248+04 122 305+00 156 380+89 189 466+16 222 525+6 25 31+00 58 182+00 91 225+00 124 307+00 157 382+29 190 467+16 223 526+4 26 44+00 59 191+00 92 253+00 125 300+00 158 382+46 191 466+16 224 528+1 27 56+00 60 184+00 93 225+45 126 300+00 159 383+43 192 470+16 225 530+4 28 57+00 61 186+00 94 228+57 127 31+23 160 388+33 193 471+16 225 530+1 29 59+00 62 200+00 96 282+71 128 311+23 160 388+33 194 472+16 226 532+1 30 66+00 63 201+00 96 288+00 130 312+00 163 398+76 196 477+22 228 536+1 31 67+00 64 202+00 97 289+00 130 313+00 163 398+76 136 482+16 229 54+19	18	16+00	51	156+63	84	239+00	117	300+00	150	367+40	183	461+25	216	· 517+16
21 19-00 54 173-10 87 247-00 120 303-00 153 372-47 186 463-36 219 522-1 22 21+00 55 175-46 88 248-37 121 304-00 154 377-53 167 464-16 220 524-1 23 23-00 56 164-00 89 248-64 122 305-00 155 380-68 188 465-16 221 525-5 24 28-00 57 186-00 90 248-00 123 306-00 156 380-89 189 465-16 221 525-5 25 31+00 58 188-00 91 251-00 124 307-00 157 382-29 130 457+16 223 526-4 28 44-00 59 191-00 92 253-00 125 308-00 158 382-46 191 468-16 224 528-1 27 56-00 60 184-00 93 255-45 126 309-00 159 383-43 192 470-16 225 530-1 28 57-00 61 199-00 94 258-57 127 311-23 160 386-53 133 471+16 226 532-1 29 59-00 62 200-00 85 262-71 128 311-03 161 389-03 194 472-16 227 534-1 30 66-00 63 201-00 86 268-00 128 312-00 162 397-82 195 477-22 228 536-1 31 67-00 64 202-00 97 269-00 130 313-100 163 399-76 196 462-16 229 541-9	19	17+00	52	163+00	85	242+00	118	301+00	151	368+36	184	461+71	217	520+16
22 21+00 55 175+46 68 248+37 121 304+00 154 377+53 187 484+16 220 524+1 23 23+00 56 184+00 89 248+54 122 305+00 155 380+68 188 465+16 221 525+8 24 28+00 57 186+00 90 249+00 123 305+00 156 380+89 188 466+16 222 525+8 25 31+00 58 188+00 91 251+00 124 307+00 157 387+29 190 467+16 223 524-1 26 44+00 59 191+00 92 253+00 125 308+00 158 382+46 191 468+16 224 528+1 27 56+00 60 194+00 93 256+49 126 309+00 158 382+46 191 468+16 225 530+1 28 57+00 61 <td>20</td> <td>18+00</td> <td>53</td> <td>166+00</td> <td>86</td> <td>245+00</td> <td>119</td> <td>302+00</td> <td>152</td> <td>368+53</td> <td>185</td> <td>462,+90</td> <td>218</td> <td>521+16</td>	20	18+00	53	166+00	86	245+00	119	302+00	152	368+53	185	462,+90	218	521+16
23 23+00 56 184+00 89 248+64 122 305+00 155 380+68 188 465+16 221 525+5 24 28+00 57 186+00 90 249+00 123 306+00 156 380+89 189 466+16 222 525+8 25 31+00 58 188+00 91 251+00 124 307+00 157 382+29 190 467+16 223 526+8 26 44+00 59 191+00 92 233+00 125 308+00 158 382+46 191 468+16 224 528+1 27 56+00 60 184+00 93 256+45 126 309+00 159 383+43 192 470+16 225 530+1 28 57+00 61 199+00 94 258+57 127 311+23 160 386+53 193 471+16 226 532+1 29 58+00 62 200+00 95 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 462+16 229 541+9	21	19+00	54	173+00	87	247+00	120	303+00	153	372+47	186	463+36	219	522+16
24 28+00 57 186+00 90 249+00 123 306+00 156 380+89 189 466+16 222 525+8 25 31+00 58 188+00 91 251+00 124 307+00 157 382+29 190 467+16 223 526+4 26 44+00 59 191+00 92 253+00 125 308+00 158 382+46 191 468+16 224 528+1 27 56+00 60 194+00 93 255+45 126 309+00 159 383+43 192 470+16 225 530+1 28 57+00 61 199+00 94 258+57 127 311+23 160 386+53 193 471+16 226 532+1 29 59+00 62 200+00 96 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 83 <td>. 22</td> <td>21+00</td> <td>55</td> <td>175+46</td> <td>. 88</td> <td>248+37</td> <td>121</td> <td>304+00</td> <td>154 .</td> <td>377+53</td> <td>187</td> <td>464+16</td> <td>220</td> <td>524+16</td>	. 22	21+00	55	175+46	. 88	248+37	121	304+00	154 .	377+53	187	464+16	220	524+16
25 31400 58 188400 91 251400 124 307400 157 382429 190 467416 223 52644 26 44400 59 191400 92 253400 125 308400 158 38246 191 468416 224 5281 27 56400 60 194400 93 25545 126 309400 159 38343 192 470416 225 53041 28 57400 61 199400 94 258457 127 311423 160 386453 193 471416 226 53241 29 59400 159 59400 159 38343 194 47246 227 53441 30 66400 63 201400 96 268400 129 312400 162 397482 195 47742 228 53641 31 67400 64 202400 97 289400 130 313400 163 399476 196 482416 229 54149	23	23+00	56	184+00	89	248+54	122	305+00	155	380+68	188	465+16	221	525+52
26 44+00 59 191+00 92 253+00 125 308+00 158 382+46 191 468+16 224 528+1 27 56+00 60 194+00 93 255+45 126 309+00 159 383+43 192 470+16 225 530+1 28 57+00 61 199+00 94 258+57 127 311+23 160 386+53 193 471+16 226 532+1 29 59+00 62 200+00 95 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 482+16 229 541+9	24	28+00	57	186+00	90	249+00	123	306+00	156	380+89	189	466+16	222	525+89
27 56+00 60 194+00 93 255+45 126 309+00 159 383+43 192 470+16 225 530+1 28 57+00 61 199+00 94 258+57 127 311+23 160 386+53 193 471+16 226 532+1 29 59+00 62 200+00 95 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399-76 196 482+16 229 541+9	25	31+00	58	188+00	91	251+00	124	307+00	157	382+29	190	467+16	223	526+40
28 57+00 61 199+00 94 258+57 127 311+23 160 386+53 193 471+16 226 532+1 29 59+00 62 200+00 95 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 482+16 229 541+9	26	44+00	59	191+00	92	253+00	125	308+00	158	382+46	191	468+16	224	528+16
29 59+00 62 200+00 95 262+71 128 311+53 161 389+53 194 472+16 227 534+1 30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 482+16 229 541+9	27	56+00	60	194+00	93	255+45	126	309+00	159	383+43	192	470+16	225	530+16
30 66+00 63 201+00 96 268+00 129 312+00 162 397+82 195 477+22 228 536+1 31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 482+16 229 541+9	28	57+00	61	199+00	94	258+57	127	311+23	160	386+53	193	471+16	226	532+16
31 67+00 64 202+00 97 269+00 130 313+00 163 399+76 196 482+16 229 541+9	29	59+00	62	200+00	95	262+71	128	311+53	161	389+53	194	472+16	227	534+16
│ ──┼──┤ ──┼──┤ ──┼ ── │ ───	30	66+00	63	201+00	96	268+00	129	312+00	162	397+82	195	477+22	228	536+16
32 68+00 65 202+78 98 270+00 131 316+00 164 399+96 197 483+16 230 544+2	31	67+00	64	202+00	97	269+00	130	313+00	163	399+76	196	482+16	229	541+94
<u> </u>	32	68+00	65	202+78	98	270+00	131	316+00	164	399+96	197	483+16	230	544+25
33 90+80 66 203+28 99 270+38 132 317+00 165 402+31 198 485+16 231 544+6	33	90+80	66	203+28	99	270+38	132	317+00	165	402+31	198	485+16	231	544+67

*TRENCH PLUG DESIGN BASED ON THE TABLE PROVIDED ON THE TRENCH PLUG DETAIL ON SHEET 5. SOME TRENCH PLUGS HAVE BEEN OVER-DESIGNED AT THE DISCRETION OF THE ENGINEER BASED ON EXISTING FIELD CONDITIONS.

SUMMARY OF MATERIALS REFERENCE DRAWINGS REVISIONS

MRKR # OTY. DESCRIPTION DWG. DESCRIPTION NO. DATE DESCRIPTION

1 0809314 REVISED PER CONE COMMENTS

08/29/2014

DATE

CES®

CREATION TO COMPLETION
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SHERWOOD SOUTH PIPELINE

E&S TABLES

STATION(S):

GONE Gathering LLC

ONE ENERGY DRIVE JANE LEW, WV 26378

	DATE:	08/29/2014
	JOB NO.:	90126
1	DESIGN:	ВЕМ
1	DRAWN:	ВЕМ
	CHECKED:	ВЈМ
	SHEET NO.	

EARTHWORK S	UB-SUMMARY TAR	₹-1
DESCRIPTION	QUANTITY	UNITS
ACC	ESS DRIVE	
RAW CUT (EXIST. TO FINISHED GRADE)	840	CY
RAW FILL (EXIST. TO FINISHED GRADE)	615	CY
TOTAL DRIVE EARTHWORK	225 (SPOIL)	CY

EARTHWORK SU	B-SUMMARY TAP	₹-2
DESCRIPTION	QUANTITY	UNITS
ACCE	SS DRIVE	
RAW CUT (EXIST. TO FINISHED GRADE)	800	CY
RAW FILL (EXIST. TO FINISHED GRADE)	985	CY
TOTAL DRIVE EARTHWORK	185 (FILL)	CY

EARTHWORK SU	B-SUMMARY TAR-	-3A
DESCRIPTION	QUANTITY	UNITS
ACCI	ESS DRIVE	
RAW CUT (EXIST. TO FINISHED GRADE)	425	CY
RAW FILL (EXIST. TO FINISHED GRADE)	510	CY
TOTAL DRIVE EARTHWORK	85 (FILL)	CY

EARTHWORK SU	B-SUMMARY TAR	-3B			
DESCRIPTION QUANTITY UNITS					
ACCE	SS DRIVE				
RAW CUT (EXIST. TO FINISHED GRADE) 935 CY					
RAW FILL (EXIST. TO FINISHED GRADE)	1290	CY			
TOTAL DRIVE EARTHWORK	355 (FILL)	СУ			

EARTHWORK SU	B-SUMMARY TAR-	-3C			
DESCRIPTION QUANTITY UNITS					
ACCE	SS DRIVE				
RAW CUT (EXIST. TO FINISHED GRADE) 35 CY					
RAW FILL (EXIST. TO FINISHED GRADE)	RADE) 95 CY				
TOTAL DRIVE EARTHWORK 60 (FILL) CY					

EARTHWORK SUB-SUMMARY TAR-6					
DESCRIPTION QUANTITY UNITS					
ACCESS DRIVE					
RAW CUT (EXIST. TO FINISHED GRADE) 165 CY					
RAW FILL (EXIST. TO FINISHED GRADE)	330	CY			
TOTAL DRIVE EARTHWORK	165 (FILL)	CY			

EARTHWORK SI	JB-SUMMARY TAF	₹-7			
DESCRIPTION QUANTITY UNIT					
ACC	ESS DRIVE				
RAW CUT (EXIST. TO FINISHED GRADE) 115 CY					
RAW FILL (EXIST. TO FINISHED GRADE)	35 CY				
TOTAL DRIVE EARTHWORK 80 (SPOIL) CY					

EARTHWORK SUB-SUMMARY TAR-10					
DESCRIPTION QUANTITY UNITS					
ACCESS DRIVE					
RAW CUT (EXIST. TO FINISHED GRADE) 275 CY					
RAW FILL (EXIST. TO FINISHED GRADE)	320 CY				
TOTAL DRIVE EARTHWORK	45 (FILL)	CY			

EARTHWORK SU	IB-SUMMARY CR 1	3/3		
DESCRIPTION	QUANTITY	UNITS		
ACC	ESS DRIVE			
RAW CUT (EXIST, TO FINISHED GRADE) 1175 CY				
RAW FILL (EXIST. TO FINISHED GRADE)	920	CY		
TOTAL DRIVE EARTHWORK	255 (SPOIL)	CY		

EARTHWORK SU	B-SUMMARY CR 4	0/3			
DESCRIPTION QUANTITY UNITS					
ACCE	SS DRIVE				
RAW CUT (EXIST. TO FINISHED GRADE) 3575 CY					
RAW FILL (EXIST. TO FINISHED GRADE) 3215 CY					
TOTAL DRIVE EARTHWORK	360 (SPOIL)	CY			

EARTH-WORK NOTES:

1. ESTABLISHING THE GRADES SHOWN ON THIS PLAN WILL REQUIRE THAT A NET OF 25 CY BE SPOILED. THE SPOIL WILL BE PLACED AT THE LAYDOWN AREA LOCATED BETWEEN STA. 428-00 THRU STA. 438-00 SHOWN WITHIN THE EXISTING DISTURBANCE LIMITS (SEE SHEETS 22 AND 23).

2. CONTRACTOR SHALL CONFIRM QUANTITIES.

EROSION AND SEDIMENT CONTROL BMP PRACTICES				
ВМР	UNITS	QUANTITY		
SUPER SILT FENCE	FI	56,323		
SILT FENCE	FT	2,055		
STABILIZED CONSTRUCTION ENTRANCE	EA	8		
TRENCH PLUG	EA	231		
TEMPORARY WATERBARS	EA	327		
TIMBER MATS (10 FT WIDTH, ASSUME 8 FT SECTION LENGTHS)	LF	400		
STREAM CROSSING - PUMP AROUND (SEE DETAIL SHEET #4)	EA	20		
ORANGE CONSTRUCTION FENCE	LF	366		
18" HDPE CULVERT	LF	25		
36° CMP CULVERT	LF	25		
54° CMP CULVERT	LF	55		
60° CMP CULVERT	LF	75		
TOB-TOB (PIPELINE)	LF	186		
TOB-TOB (ACCESS ROADS)	LF	20		

ROAD CROSSINGS - PIPELINE				
ROAD	EOP	EOP	LENGTH (LF)	PAVED / UNPAVED
SR 18	106+88	107+11	23	PAVED (HDD)
CR 13/3	271+09	271+18	9	UNPAVED
MAXWELL RIDGE RD (CR 13)	359+27	359+37	10	UNPAVED
CAIN RUN RD (CR 40)	463+60	463+68	8	UNPAVED
S FORK HUGHES RIVER RD (CR 19/11)	499+21	499+34	13	UNPAVED
S FORK HUGHES RIVER RD (CR 19/11)	526+10	526+17	7	UNPAVED
		TOTAL:	70	

S ⁻	TREAM CROSS	SINGS - ACCES	SS ROADS	
STREAM ID	тов	TOB	LENGTH (LF)	CULVERTS
STREAM G1 (TAR-2)	1+98	2+00	2	1-18"
STREAM AJ9 (CR 40/3)	30+10	30+16	6	1-60*
STREAM AJ12 (CR 40/3)	32+48	32+50	2	1-36*
STREAM AJ9 (CR 40/3)	40+57	40+63	6	1-60"
STREAM G44 (CR 40/3)	43+57	43+61	4	1-54"
		TOTAL:	20	

W	ETLAND CF	ROSSINGS - P	IPELINE	
WETLAND ID	EDGE	EDGE	LENGTH (LF)	TIMBER MAT LENGTH (LF)
WETLAND E	202+84	203+06	22	40
WETLAND G54	222+39	222+49	10	16
WETLAND CA	462+99	463+25	26	40
		TOTAL:	58	96

WETLAND CROSSINGS - ACCESS ROADS						
WETLAND ID	WETLAND ID EDGE EDGE LENGTH (LF) ACRES IMPACTED					
WETLAND AJ13 (CR 40/3)	31+37	32+29	95	.018		
WETLAND AJ11 (CR 40/3)	30+95	32+66	168	.039		
		TOTAL:	263	.057		

STREAM CROSSINGS - PIPELINE						
STREAM ID	тов	тов	LENGTH (LF)	TIMBER MAT LENGTH (LF)		
STREAM G101	11+56	11+58	2	16		
STREAM 1	108+47	109+65	118	-		
STREAM 6	203+12	203+14	2	40		
STREAM G53	224+16	224+17	1	16		
STREAM G52	248+43	249+00	7	16		
STREAM G50	270+47	270+53	6	16		
STREAM G48	297+69	297+72	3	32		
STREAM G49	297+71	297+74	3	32		
STREAM G44	311+33	311+37	4	16		
STREAM G41	360+71	360+74	3	16		
STREAM G40	367+29	367+32	3	16		
STREAM G39	368+42	368+45	3	16		
STREAM G36	380+77	380+80	3	16		
STREAM G32	382+35	382+39	4	16		
STREAM G31	399+84	399+87	3	16		
STREAM G30	402+40	402+42	2	16		
STREAM CC	461+40	461+43	3	16		
STREAM ZZ	500+54	500+64	10	32		
STREAM ZA	525+65	525+70	5	16		
STREAM EH	544+46	544+47	1	16		
		TOTAL:	186	344		

IFO	SUMMARY OF MATERIALS			REFERENCE DRAWINGS		REVISIONS		
IH()	MRKR#	QTY.	DESCRIPTION	DWG.	DESCRIPTION	NO.	DATE	DESCRIPTION
•	 	-+		+		+-	09/05/14	REVISED PER COME COMMENTS
				1				
	 			+		╂—		
				T				
08/29/2014		-+		+		+	-	
DATE								
	1 1						1	



SHERWOOD SOUTH PIPELINE

QUANTITIES

Gone Gathering LLC

ONE ENERGY DRIVE JANE LEW, WV 26378

DATE:	08/29/2014
JOB NO.:	90126
DESIGN:	BEM
DRAWN:	BEM
CHECKED:	ВЈМ
SHEET NO.	

60 of 60

N/A

STATION(S):



Attachment D-Construction Cost Calculations

Sherwood South

- Pipeline & Waterline Construction "Open Cut" 370 LF *150 = \$55,500
- Pipeline & Waterline Construction "HDD" 325 LF *\$1,000 = \$325,000
- Temporary Access Roads 1,580 LF * \$30 = \$47,400
- Temporary Access Road Aprons 1 * \$2,500
- Laydown Area 1 * \$5,000 = \$5,000
- Timber Matting 80 LF * \$10 = \$800
- Silt Fence 205 LF * \$2 = \$410
- Total Floodplain Construction Cost = \$436,110

Check Amount Required = \$1,000 + (\$5 * (336,110/1,000) = \$2.680.55