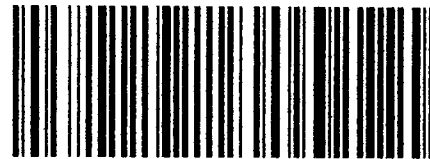
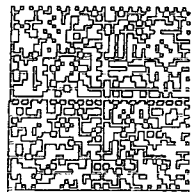


CERTIFIED MAIL™

George Eidell
Doddridge Co Floodplain MGT
118 E Court St., Room 102
West Union, WV 26456



7014 0150 0001 7356 7931



015H14161808

\$6.74

10/21/15

Mailed From 26456

HASLER

US POSTAGE



RETURNED TO SENDER

- MOVED, LEFT NO ADDRESS
- FORWARDING ORDER EXPIRED
- ATTEMPTED - NOT KNOWN
- UNCLAIMED REFUSED
- NO SUCH STREET
- NO SUCH NUMBER
- INSUFFICIENT ADDRESS

AM 11:00 500-4400
DODDRIDGE COUNTY, WV

2015 OCT 23 PM 12:13

FILED

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

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: # 15-387
 Nelson Bruffy
 HC 69 Box 12
 West Union, WV
 26456

2. Article Number
 (Transfer from service label)

7014 0150 0001 7356 7931

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Addressee

B. Received by (Printed Name) C. Date of Delivery

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

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes



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,

A handwritten signature in black ink, appearing to be "Lyle R. H.", followed by a horizontal line.

Doddridge County Floodplain Manager
304.873.2631
doddridgecountyfpm@gmail.com

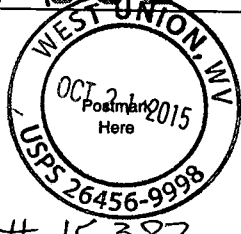
7014 0150 0001 7356 7917

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$.49
Certified Fee	3.45
Return Receipt Fee (Endorsement Required)	2.80
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.74



15-387

Sent To R. Blake Jr, D. Smith & E. Blake

Street, Apt. No., or PO Box No. HC 69 Box 12 D
City, State, ZIP+4 West Union WV 26456

PS Form 3800, August 2006 See Reverse for Instructions

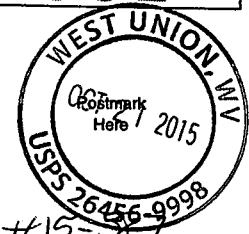
4262 9561 7324

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$.49
Certified Fee	3.45
Return Receipt Fee (Endorsement Required)	2.80
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.74



15-387

Sent To Micheal & Barbara Travis

Street, Apt. No., or PO Box No. 710 Crystal Lake Rd
City, State, ZIP+4 West Union, WV 26456

PS Form 3800, August 2006 See Reverse for Instructions

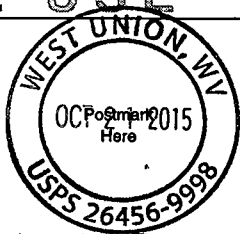
7014 0150 0001 7356 7917

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$.49
Certified Fee	3.45
Return Receipt Fee (Endorsement Required)	2.80
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.74



15-387

Sent To Nelson Bruffy

Street, Apt. No., or PO Box No. HC 69 Box 12
City, State, ZIP+4 West Union, WV 26456

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: # 15-387
 Michael & Barbara Travis
 710 Crystal Lake Rd
 West Union, WU
 26456

2. Article Number
 (Transfer from service label)

7014 0150 0001 7356 7924

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Michael Travis* Agent
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

10/23/2015

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

3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

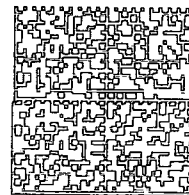
4. Restricted Delivery? (Extra Fee) Yes

CERTIFIED MAIL™

George Eidell
Doddridge Co Floodplain MGT
118 E Court St., Room 102
West Union, WV 26456



7014 0150 0001 7356 7917



015H14161808

\$6.74

10/21/15

Mailed From 26456

HASLER

US POSTAGE

AM 211000 RECEIVED
DODDRIDGE COUNTY WV

2015 OCT 23 PM 12:15

FILED



RETURNED TO SENDER

- MOVED, LEFT NO ADDRESS
- FORWARDING ORDER EXPIRED
- ATTEMPTED - NOT KNOWN
- UNCLAIMED REFUSED
- NO SUCH STREET
- NO SUCH NUMBER
- INSUFFICIENT ADDRESS

F. Blake

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

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: #15-387

R. Blake Jr., D. Smith &
E. Blake,
HC. 69 Box 12 D
West Union, WV
26456

2. Article Number
(Transfer from service label)

7014 0150 0001 7356 7917

COMPLETE THIS SECTION ON DELIVERY

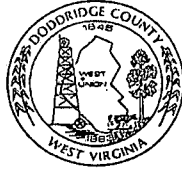
A. Signature Agent
X Addressee

B. Received by (Printed Name) C. Date of Delivery

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

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes



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,

Doddridge County Floodplain Manager
304.873.2631
doddridgecountyfpm@gmail.com

Floodplain Development Permit

Doddridge County, WV Floodplain Management

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

Permit: # 15-387

West Union

Date Approved: 11/18/2015



Expires: 11/18/2016

Issued to: Dominion Resources Services, Inc.

POC: Cristie D. Neller

(804) 771-4190

**Company Address: 707 E. Main Street, 19th floor
Richmond, VA 23219**

Project Address: RT 18 North, Tonkin compressor station

Firm: 120C

Lat/Long:

Purpose of development: improvement of three existing compressor stations and two new turbine units etc.

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

Date: 11/18/2015

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

Copy



PAY TO THE ORDER OF: DODDRIDGE COUNTY OF CLERKS OFFICE COUNTY COMMISSION 118 E COURT ST WEST UNION, WV 26456

CHECK NUMBER 278565

50-937 213

October 8, 2015

*** VOID AFTER 90 DAYS ***

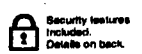
Vendor Number: 300133832

Document No: 20000209641004

CHECK AMOUNT

\$10,500.00

EXACTLY *****10,500 DOLLARS AND 00 CENTS



PMORGAN CHASE BANK, N.A. Syracuse, NY Dominion Transmission Inc

[Signature]

Authorized Signature

⑈ 278565⑈ ⑆021309379⑆ 601839988⑈



PAY TO THE ORDER OF: DODDRIDGE COUNTY OF CLERKS OFFICE COUNTY COMMISSION 118 E COURT ST WEST UNION, WV 26456

CHECK NUMBER 278566

50-937 213

October 8, 2015

*** VOID AFTER 90 DAYS ***

Vendor Number: 300133832

Document No: 20000209651004

CHECK AMOUNT

\$1,000.00

EXACTLY *****1,000 DOLLARS AND 00 CENTS



PMORGAN CHASE BANK, N.A. Syracuse, NY Dominion Transmission Inc

[Signature]

Authorized Signature

⑈ 278566⑈ ⑆021309379⑆ 601839988⑈

Doddridge County, West Virginia

RECEIPT NO: 5663

DATE: 2015/10/19

FROM: DOMINION

AMOUNT: \$ 1,000.00

ONE THOUSAND DOLLARS AND 00 CENTS

FOR: #15-387 LL TONKIN COMPRESSOR STATION

00000278566 FP-BUILDING PERMITS

020-318

TOTAL: \$1,000.00

MICHAEL HEADLEY

SHERIFF & TREASURER

MEC

CLERK

Customer Copy

Doddridge County, West Virginia

RECEIPT NO: 5662

DATE: 2015/10/19

FROM: DOMINION

AMOUNT: \$ 10,500.00

TEN THOUSAND FIVE HUNDRED DOLLARS AND 00 CENTS

FOR: #15-387 LL TONKIN COMPRESSOR STATION

00000278565 FP-BUILDING PERMITS

020-318

TOTAL \$10,500.00

MICHAEL HEADLEY

SHERIFF & TREASURER

MEC

CLERK

Customer Copy

TRANSACTION REPORT

P. 01

DEC-02-2015 WED 10:36 AM

FOR: DODDRIDGE CO. CLERK

304 873 1840

SEND

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
DEC-02	10:35 AM	16108327370	1'23"	2	FAX TX	OK	772	

TOTAL : 1M 23S PAGES: 2



DODDRIDGE COUNTY COMMISSION

BETH A. ROGERS, Clerk
Room 102
118 East Court Street
West Union, WV 26456-1297
Phone (304) 873-2631

Deputies:
Beth A. Keller
Jennifer L. Moore
Pauletta McKinney

FAX COVER SHEET

12-2-15
DATE

TO: Dominion Res Ser

Att: Heather Brewster

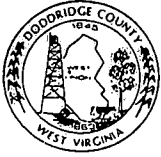
FROM: _____

SENDER'S DIRECT PHONE NUMBER: (304) 873-2631

RE: _____

COMMENTS: Copy of Permit

Number of pages (including this page): 2



DODDRIDGE COUNTY COMMISSION

BETH A. ROGERS, Clerk
Room 102
118 East Court Street
West Union, WV 26456-1297
Phone (304) 873-2631

Deputies:
Beth A. Kellar
Jennifer L. Moore
Pauletta McKinney

F A X C O V E R S H E E T

12-2-15

DATE

TO: Domnion Res Ser.

Att: Heather Brewster

FROM: _____

SENDER'S DIRECT PHONE NUMBER: (304) 873-2631

RE: _____

COMMENTS: Copy of Permit

Number of pages (including this page): (2)

Doddridge County Floodplain Permit Application (New)
Permits applications received October 16, 2015 through October 19, 2015
Announced October 20, 2015

Permit Application # 15-387

Dominion

L.L. Tonklin Compressor Station

Location: Rt. 18 N

Received: 10/16/2015

Announced: 10/20/15

Publication Date: Week of 10/19/15

20-Day Comment Period Window (from Commission Meeting) 11/10/2015

90-Day Approval Window (from date of receipt) N/A

Project Description: Upgrade of Compressor Station



Corporate Office

P.O. Box 580 (71273) - 603 Reynolds Drive - Ruston, LA 71270
318.255.6825 - Fax 318.255.8591

Pennsylvania Office

480 Johnson Road, Meadow Pointe II, - Suite 310,
Washington, Pennsylvania 15301
724.884.2800 - Fax 724.884.2801

Transmittal No: 0.P15002.00.0-238

Date: 3/29/2016

Project # - Client: 0.P15002.00.0-Dominion Transmission, West Union, WV

To: George Eidell - T

Project Title: LL Tonkin Compressor Station

Document Count : 1

We Transmit Herewith

Under Separate Cover

Sent By

Drawings

Preliminary

USPS Mail

Specifications

For Approval

Email

Schedules / Lists

Approved For Construction

Overnight

Brochures or Photos

Other

2nd Day

Correspondence

Messenger

General Description: BUILDING DRAWINGS - FLASH DRIVE

COPIES	DOC. / DWG. NO.	REV	DESCRIPTION
1			BUILDING PERMIT DRAWINGS ON FLASH DRIVE

Comments:

Cc: James Barvinchak - E Josh Cook - E Mark Sukay - E Michael Hughes - E Ron Lapiska - E File 1652 - T

Issued By: Michael Hughes
Project Manager

Sent By: Christa Lynch
Document Manager

If enclosures received are not as listed above, please notify us at once.

#15-387

Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308
Web address: www.dom.com



“Original”

October 9, 2015

Doddridge County Commission
Doddridge County Courthouse
118 East Court Street
West Union, West Virginia 26456

**Subject: Floodplain Development Permit Application
L.L. Tonkin Compressor Station
West Union, Doddridge County, West Virginia
Dominion Transmission, Inc.
Monroe to Cornwell Project**

FILED
2015 OCT 16 PM 1:56
CLERK
DODDRIDGE COUNTY, WV

Dear Floodplain Manager,

Dominion Transmission, Inc. (DTI) is submitting the enclosed Floodplain Development Permit application for activities at their L.L. Tonkin Compressor Station in support of the Monroe to Cornwell Project (the Project), which consists of improvement to three existing compressor stations located near West Union, Doddridge County; Hasting, Wetzel County; and Corton, Kanawha County, West Virginia.

The activities proposed at DTI's L.L. Tonkin Compressor Station (Station), located in Doddridge County, includes the addition of two new turbine units (combined 12,552 horsepower), and upgrades to the existing station for bidirectional flow on a 33.55 acre parcel owned by DTI. In order to add the new turbines, the compressor building will be expanded, and new coolers and station piping installed. The proposed Project will also require a temporary span bridge across Middle Island Creek due to the current load limits on the facility's existing bridge. The proposed activities will be situated within previously disturbed areas within the limits of the property boundary, consisting of either open land or commercial/industrial land associated with the facility. Construction techniques will be consistent with DTI's Erosion and Sediment Control Plan (ESCP) and applicable Federal and state permits. The enclosed documentation provides detail on the proposed activity and photographs of the existing Project location in support of the submitted application.

Per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Map Number 54017C0120C) effective date October 4, 2011, the AE 100-year floodplain encroaches into the Station property, specifically in the area of the compressor station expansion, coolers, and station piping. The Flood Insurance Study (54017CV000A) dated October 4, 2011 indicates the 100-year flood elevation is 770 feet. The FEMA information pertained herein demonstrates the location of the 100-year floodplain and the assigned elevation of 769 feet to 770 feet (see profile 22P in the Flood Insurance Study).

L.L. Tonkin is situated adjacent to Middle Island Creek and in order to expand the station, impacts to the 100-year floodplain are unavoidable. The proposed Project will result in minor grading and fill below 770 feet to build up the site in the area of the compressor station expansion and cooler. DTI has completed a Hydrologic Engineering Centers River Analysis System (HEC-RAS) assessment of the existing and proposed conditions and demonstrated within the purview of the Doddridge County Floodplain Ordinance, that the proposed grading and addition of fill will not pose an adverse impact on base flood elevations. Upon completion of construction all proposed Project components will be situated at elevations that are 2 feet above the limits of the 100-year floodplain. The temporary bridge will be installed at the elevation of the current bridge between 772ft and 770ft and will only be utilized for the life of the Project and then removed.

DTI as the applicant acknowledges and agrees to pay any and all fees associated with the permitting process as set forth in Article VII Sections 7.3 and 7.9 of the Floodplain Ordinance and agrees to allow the Floodplain Administrator and authorized representatives of floodplain management programs access to the Project to inspect for compliance.

Enclosed please find a check for \$10,500 (\$2,000,000 construction cost so \$1,000 + \$9,500) in addition to a second check for \$1,000 for "Deposit for Expenses" both made payable to the Doddridge County Commission.

Should you have any questions concerning this application and supporting information, please contact Ms. Elizabeth Lawrence at (804) 273-3573 or Elizabeth.J.Lawrence@dom.com.

Sincerely,



Paula A. Hamel
Director, Gas Environmental Business Support

Enclosures

cc: Elizabeth Lawrence



“Original”

TABLE OF CONTENTS

**Dominion Transmission, Inc.
Monroe to Cornwell Project**

**FLOODPLAIN DEVELOPMENT PERMIT APPLICATION
L.L. TONKIN COMPRESSOR STATION
West Union, Doddridge County, West Virginia**

SECTION	ITEM
SECTION 1	PERMIT APPLICATION
SECTION 2	PROJECT DESCRIPTION AND PREPARERS OF INFORMATION
SECTION 3	FEMA MAPS
SECTION 4	TAX MAP
SECTION 5	USGS FIGURE and PHOTOGRAPHS
SECTION 6	SIGNED/SEALED SITE PLAN
SECTION 7	SIGNED/SEALED HECRAS REPORT

The Doddridge Independent

The Doddridge Independent PUBLISHER'S CERTIFICATE

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

Floodplain Permit Application # 15-387

Please take notice that on the 16th day of October, 2015

Dominion

filed an application for a Floodplain Permit to develop land located at or about: L.L. Tonklin Compressor Station

Location: Rt. 18N Received: 10/16/2015

Announced: 10/20/15

was published in The Doddridge Independent
2 times commencing on Friday, October 23, 2015 and
Ending on Friday, October 30, 2015 at the request of:

OES Director George Eidel / Doddridge County Commission Floodplain Manager

Given under my hand this Friday, October 30, 2015

The publisher's fee for said publication is:

\$ 22.59 1st Run/\$ 16.94 Subsequent Runs

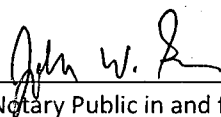
This Legal Ad Total: \$ 39.53

Michael D. Zorn

Publisher of The Doddridge Independent

Subscribed to and sworn to before me on

this date: 10 / 30 / 15



Notary Public in and for Doddridge County

My Commission expires on

The 23 day of Aug 2022 The

Doddridge Independent

Public Notice • Legal Notice

Doddridge County

Floodplain Permit Application # 15-387

Please take notice that on the 16th day of October 2015

Dominion

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

L.L. Tonklin Compressor Station

Location: Rt. 18 N

Received: 10/16/2015

Announced: 10/20/15

Publication Date: Week of 10/19/15

20-Day Comment Period Window (from Commission Meeting) 11/10/2015

90-Day Approval Window (from date of receipt) N/A

Project Description: Upgrade of Compressor Station

The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. As this project is outside the FEMA identified floodplain of Doddridge County, Doddridge County Floodplain Management has no regulatory authority. Any interested persons who desire to comment shall present the same in writing by August 28, 2015, delivered to:

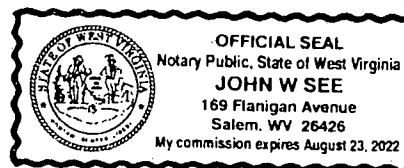
Clerk of the County Court

118 E. Court Street, West Union, WV 26456

Beth A. Rogers, Doddridge County Clerk

George Eidel, Doddridge County Floodplain Manager

10/23 - 10/30



SECTION 1.0



Dominion™

SECTION 1

PERMIT APPLICATION

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

APPLICANT'S SIGNATURE 

DATE 10/13/15

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: Dominion Transmission, Inc. c/o Cristie D. Neller
ADDRESS: 707 E. Main Street, 19th Floor Richmond, VA 23219
TELEPHONE NUMBER: 804-771-4190

CONTRACTOR NAME: To be provided once contractor selected closer to start of work in 1st quarter 2016. Names, address and evidence of a valid WV Contractor License will be provided no later than 14 days of execution of a contract with the selected contractor prior to beginning construction

ADDRESS: To be provided

TELEPHONE # To be provided

WV CONTRACTOR LICENCE # To be provided

ENGINEER'S NAME: Nathan Smith - Hunt, Guillot & Associates, LLC

ADDRESS: 480 Johnson Rd, Meadowpointe II, Ste 310, Washington, PA 15301

TELEPHONE NUMBER: 724.884.2806 x 487

PROJECT LOCATION:

NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Same as Applicant

ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Same as Applicant

DISTRICT: West Union

LAND BOOK DESCRIPTION: Not Available

DEED BOOK REFERENCE: Deed Book 110, Pg 195 & 198

TAX MAP REFERENCE: Tax Map 7, Parcel 17.3, 22, 32

EXISTING BUILDINGS/USES OF PROPERTY: L.L. Tonkin Compressor Station (natural gas)

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY Not applicable – Compressor Station

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY Not applicable – Compressor Station

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

L.L. Tonkin Compressor Station owned by Dominion Transmission, Inc. and located off of State Highway Route 18 west of West Union, Doddridge County. There is no physical address for the station property. See provided mapping for the station.

Lat/long: 39 18 41.82, -80 46 53.25

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

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

B. OTHER DEVELOPMENT ACTIVITIES:

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

C. STANDARD SITE PLAN OR SKETCH

- 1. SUBMIT ALL STANDARD SITE PLANS, IF ANY HAVE BEEN PREPARED (ENGINEERING PLANS MUST BE SIGNED AND SEALED).** See Section 6 of Application
- 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.**

**ACTUAL TOTAL CONSTRUCTION COSTS OF THE COMPLETE DEVELOPMENT/
PROPOSED CONSTRUCTION PROJECT WITHIN THE FLOODPLAIN**

\$10,500 (\$2MM construction cost \$1,000 + (\$1,900,000/\$1,000 = \$1,900 x \$5 = \$9,500)

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: R.Blake Jr., D. Smith & E. Blake
ADDRESS: HC69 Box 12D
West Union WV 26456

NAME: Nelson Bruffy
ADDRESS: HC69 Box 12
West Union WV 26456

NAME: Michael & Barbara Travis
ADDRESS: 710 Crystal Lake Rd
West Union WV 26456

NAME: Holland and Betty Hunt
ADDRESS: HC69 Box 10
West Union WV 26456

1. NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON 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: Same as Above
ADDRESS: _____

NAME: Same as Above
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:

- (A) PERSONAL SERVICE OF PROCESS BY THE DODDRIDGE COUNTY SHERIFF AT THE RATES PERMITTED BY LAW FOR SUCH SERVICE.
- (B) SERVICE BY CERTIFIED MAIL RETURN RECEIPT REQUESTED.
- (C) PUBLICATION.
- (D) COURT REPORTING SERVICES AT ANY HEARINGS REQUESTED BY THE APPLICANT.
- (E) 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.

NAME (PRINT): Cristie D. Neller

SIGNATURE: *Cristie D. Neller* DATE: 10/13/15

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:

FIRM Panel: _____

Dated: _____

Is **NOT** located in a Specific Flood Hazard Area (Notify applicant that the application review is complete and **NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED**).

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.

SIGNED _____ DATE _____

**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 elevation _____ Ft. NGVD.
For floodproofing structures applicant must attach certification from registered engineer or architect.
- Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.
- Manufactured homes located in a Flood Hazard Area must have a West Virginia Contractor's License and a Manufactured Home Installation License as required by the Federal Emergency Management Agency (FEMA).
- Other: _____

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Administrator/Manager or his/her representative)

I have determined that the proposed activity (type is or is not) in conformance with provisions of the Floodplain Ordinance adopted by the County Commission of Doddridge County on May 21, 2013. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED _____ DATE _____

If the Floodplain Administrator/Manager found that the above was not in conformance with the provisions of the Doddridge County Floodplain Ordinance and/or denied that application, the applicant may appeal.

APPEALS: Appealed to the County Commission of Doddridge County? Yes No
Hearing Date: _____
County Commission Decision - Approved Yes No

CONDITIONS: _____

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued).

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application).

COMPLETE 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 is _____ FT. 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.

INSPECTIONS:

DATE: _____ BY: _____
DEFICIENCIES ? Y/N

COMMENTS _____

SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by Floodplain Administrator/Manager or his/her representative).

Certificate of Compliance issued: DATE: _____ BY: _____

**CERTIFICATE OF COMPLIANCE
FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREA
(OWNER MUST RETAIN)**

PERMIT NUMBER: _____

PERMIT DATE: _____

PURPOSE –

CONSTRUCTION LOCATION: _____

OWNER'S ADDRESS: _____

THE FOLLOWING MUST BE COMPLETED BY THE FLOODPLAIN ADMINISTRATOR/MANAGER OR HIS/HER AGENT.

COMPLIANCE IS HEREBY CERTIFIED WITH THE REQUIREMENT OF THE FLOODPLAIN ORDINANCE ADOPTED BY THE COUNTY COMMISSION OF DODDRIDGE COUNTY ON MAY 21, 2013.

SIGNED _____ **DATE** _____

**DODDRIDGE COUNTY
FLOODPLAIN APPLICATION PERMIT FEES**

Accessory Building and/or Appurtenant Structures ----- \$100.00
(examples: garage, storage or pole building, carport)
(the total cost of which do not exceed \$10,000.00)

Accessory Building and/or Appurtenant Structures, Additions and/or Substantial Improvement to Single Family Residential or Manufactured Homes, New Single or Multi-Family Residential and Commercial Structures or Substantial Improvement to existing Commercial Structures, Commercial Land Use Changes and Land Altering Activities
(commercial structures includes buildings used for business purposes)
(the total costs of which exceed \$10,000.00 but do not exceed \$50,000.00) ----- \$250.00

Accessory Building and/or Appurtenant Structures, Additions and/or Substantial Improvement to Single Family Residential or Manufactured Homes, New Single or Multi-Family Residential and Commercial Structures or Substantial Improvement to existing Commercial Structures, Commercial Land Use Changes and Land Altering Activities
(commercial structures includes buildings used for business purposes)
(the total costs of which exceed \$50,000.00 plus \$2.00 per \$1,000.00 to cover costs over \$50,000.00) ----- \$350.00

New Industrial Structures or Additions and/or Substantial Improvement to Existing Industrial Structures, changes in Land Use and Land Altering Activities for Industrial purposes
(industrial structures includes oil and/or natural gas wells, roads, bridges, tank pads, and Buildings used or associated with oil and natural gas purposes)
(the total costs of which do not exceed \$100,000.00) ----- \$500.00

New Industrial Structures or Additions and/or Substantial Improvement to Existing Industrial Structures, changes in Land Use and Land Altering Activities for Industrial purposes
(industrial structures includes oil and/or natural gas wells, roads, bridges, tank pads, and Buildings used or associated with oil and natural gas purposes)
(the total costs of which exceed \$100,000.00 plus \$5.00 per \$1,000.00 in costs over \$100,000.00) ----- \$1,000.00

Appropriate fee for Monroe to Cornwell Project

Construction = \$2,000,000

$\$2,000,000 - \$100,000 = \$1,900,000 / \$1,000 = \$1,900 \times \$5.00 = \$9,500 + \text{Base } \$1,000 \text{ fee} = \$10,500$

Maximum Fee: In no event shall any Floodplain Application Permit Fee charged under the Doddridge County Floodplain Ordinance exceed the sum of \$25,000.00.



AECOM

625 W. Ridge Pike

Suite E-100

Conshohocken, PA 19428

SECTION 2.0



Dominion™

SECTION 2

PROJECT DESCRIPTION AND PREPARERS OF INFORMATION

Project Description

Dominion Transmission, Inc. Monroe to Cornwell Project

Proposed Additional Compression at L.L. Tonkin Compressor Station West Union, Doddridge County, West Virginia

The Dominion Transmission, Inc. (DTI) Monroe to Cornwell Project (Project) is designed to provide up to 205,000 dekatherms per day (Dt/d) of firm transportation service for Columbia Gas Transmission (NiSource) with the construction of the proposed facilities. The Project facilities include:

- (1) Additional compression at DTI's existing L.L. Tonkin Station, which is located in Doddridge County, West Virginia (WV). Two units will be added for a total of 12,552 additional horsepower as well as associated ancillary equipment, station piping, coolers, and buildings.
- (2) The addition of gas coolers at DTI's existing Mockingbird Hill Compressor Station in Wetzel County, WV.
- (3) A new measurement and regulation facility (M&R) owned and operated by DTI for the delivery of gas to NiSource. The M&R is to be located at DTI's existing compression station, Cornwell Compressor Station, located in Kanawha County, WV. Existing units 18 and 19 at Cornwell Station will be modified to ensure reliability with this project.

The L.L. Tonkin Compressor Station located on Route 18 in Doddridge County, WV will be upgraded to increase the natural gas throughput of the existing downstream mainline by boosting the pressure of the natural gas up to the current maximum allowable operating pressure (MAOP) of 1,200 pounds per square inch gauge (psig) to move gas south to Cornwell Station. DTI is proposing to upgrade the L.L. Tonkin Compressor Station with the addition of two (2) new turbine units (combined 12,552 horsepower), and upgrades to the existing station for bidirectional flow on a 33.55 acre parcel owned by DTI. Appurtenant facilities include an addition to the compressor building, a new office building, coolers, and station piping.

During construction of the proposed facilities, DTI anticipates utilizing existing compressor station property for any storage and contractor wareyard needs. In addition, Project engineers have determined that the existing bridge, which provides access to the Station, will not be adequate for construction activities. As a result a temporary span bridge is required to facilitate the movement of construction and Project-related equipment across Middle Island Creek. Installation of the proposed bridge crossing will result in temporary impacts above the ordinary high watermark of both banks of Middle Island Creek. Use of the proposed bridge and installation will not result in any instream impacts. Construction techniques will be consistent with DTI's Erosion and Sediment Control Plan (ESCP) and the conditions and requirements of Federal and state permits.

Per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Map Number 54017C0120C) effective date October 4, 2011, the AE 100-year floodplain encroaches into the Station property, specifically in the area of the compressor station expansion, coolers, and station piping. The Flood Insurance Study (54017CV000A) dated October 4, 2011 indicates the 100-year flood elevation is 770 feet. The FEMA information pertained herein demonstrates the location of the 100-year floodplain and the assigned elevation of 769 feet to 770 feet (see profile 22P in the Flood Insurance Study).

L.L. Tonkin is situated adjacent to Middle Island Creek and in order to expand the station and complete the necessary work impacts to the 100-year floodplain are unavoidable. The proposed Project will result in minor grading and fill below 770 feet in order to build up the site in the area of the compressor station expansion and cooler installation. DTI proposes to install 819 cubic yards (CY) of fill to build up the area to an elevation of 778 feet, which is necessary to match the grade of the existing compressor station and safely install the necessary components. DTI completed a Hydrologic Engineering Centers River Analysis System (HEC-RAS) assessment of the existing and proposed conditions and demonstrated, within the purview of the Doddridge County Floodplain Ordinance, that the proposed grading and addition of fill will not pose an adverse impact on base flood elevations and will not result in an increase to surface water levels. Upon completion of construction all proposed Project components will be situated at elevations that are 2 feet above the limits of the 100-year floodplain. The temporary bridge will be installed at the elevation of the current bridge between 772ft and 770ft and will only be utilized for the life of the Project and then removed and will not result in any grading or fill.

**Preparers of Information
Doddridge County Floodplain Permit**

**Dominion Transmission, Inc.
Monroe to Cornwell Project**

**Proposed Additional Compression at L.L. Tonkin Compressor Station
West Union, Doddridge County, West Virginia**

The following details those entities responsible for the information provided herein in support of Dominion Transmission, Inc.'s (DTI) Doddridge County Floodplain Permit for the proposed additional compression at the L.L. Tonkin Compressor station for the Monroe to Cornwell Project (Project):

L.L. Tonkin Site Design

Hunt, Guillot & Associates, LLC (HGA Engineering)
Design Engineer: Nathan Smith
West Virginia Registered Professional Engineer: License 21548
480 Johnson Road
Meadowpointe II, Suite 310
Washington, PA 15301

L.L. Tonkin HECRAS Assessment

AECOM
HECRAS Engineer: Bradely D. Newlin
West Virginia Registered Professional Engineer: License 20731
Foster Plaza 6
681 Andersen Drive, Suite 400
Pittsburgh, PA 15220

SECTION 3.0



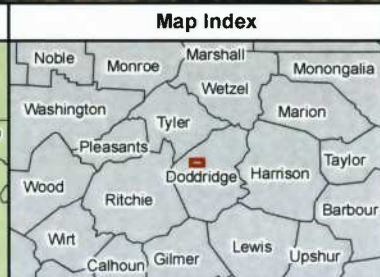
Dominion™

SECTION 3

FEMA MAPPING



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar (USA), USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community



Legend

Limits of Disturbance
 Flood Hazard Zone
 County Boundary

N
 1:12,000
 0 0.125 0.25 Miles

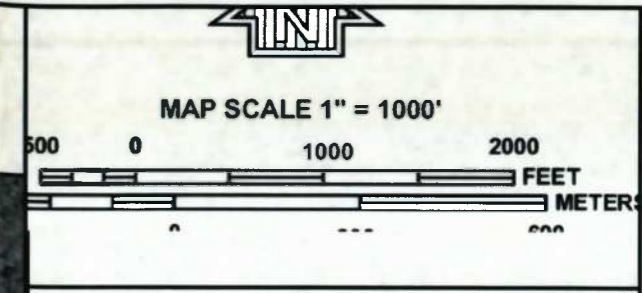
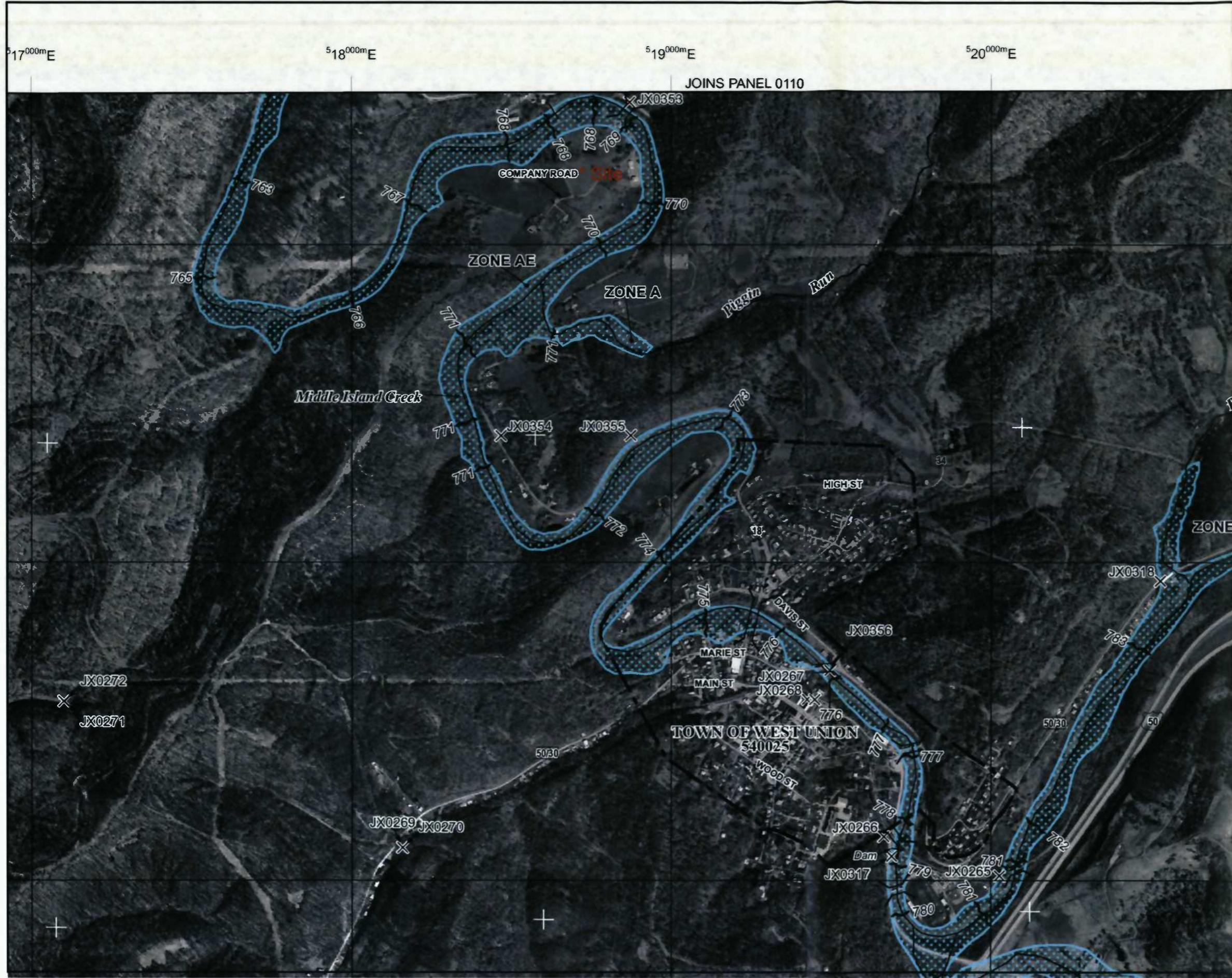
Dominion Transmission, Inc. (DTI)

Monroe to Cornwell Project - L.L. Tonkin CS
 West Union, Doddridge County
 FEMA Flood Zone Map

Source: ESRI 2014, FEMA 2013

Figure 1

August 2014



PANEL 0120C

FIRM
FLOOD INSURANCE RATE MAP
DODDRIDGE COUNTY,
WEST VIRGINIA
AND INCORPORATED AREAS

PANEL 120 OF 325
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	540024	0120	C
WEST UNION, TOWN OF	540025	0120	C

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
54017C0120C
MAP REVISED
OCTOBER 4, 2011


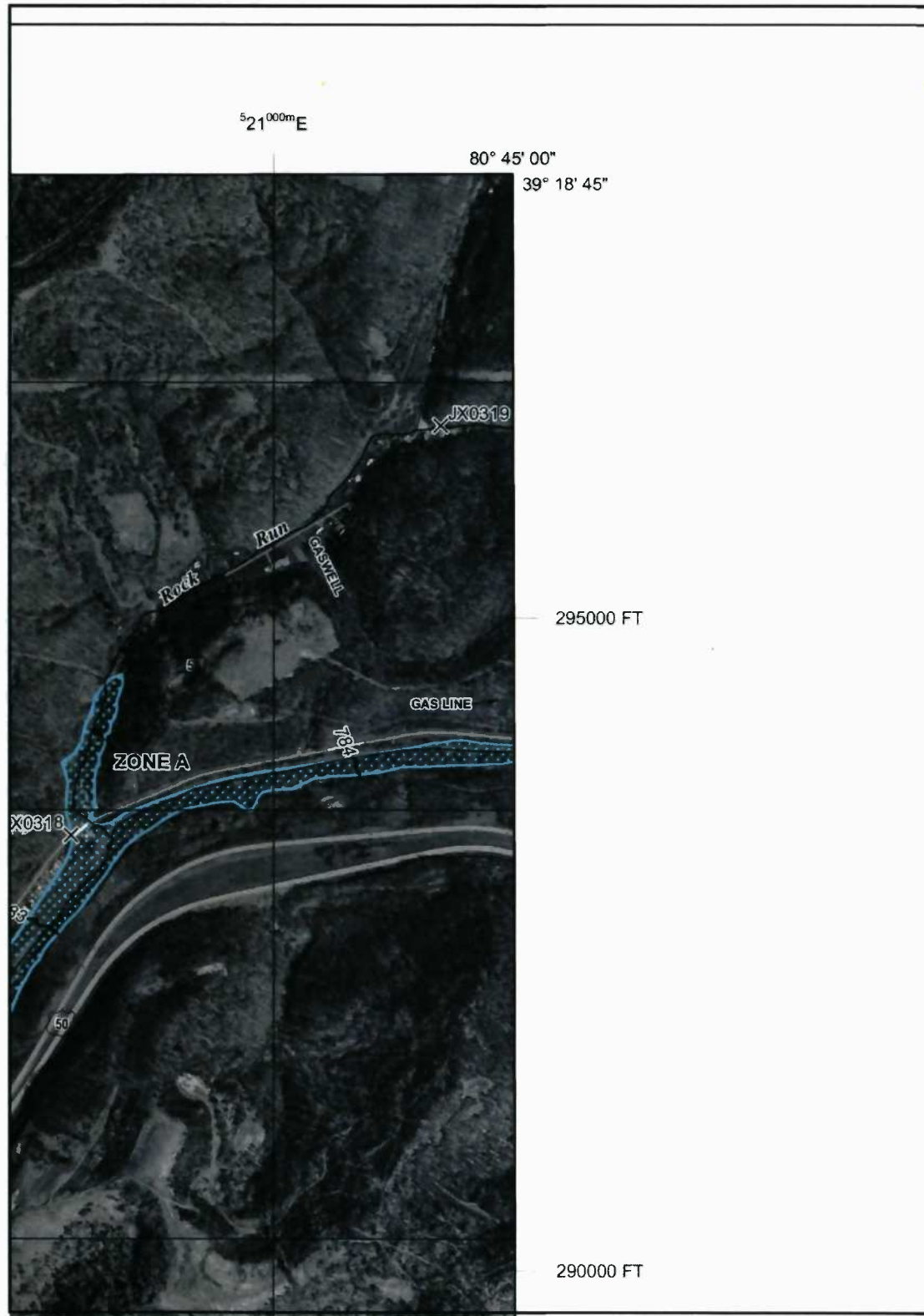

Federal Emergency Management Agency

FIGURE 2

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
 The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
 The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

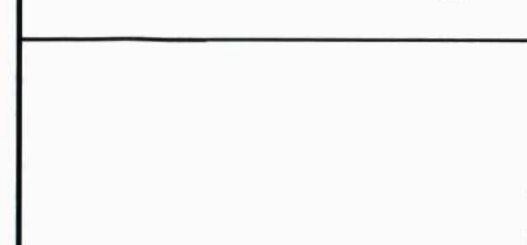
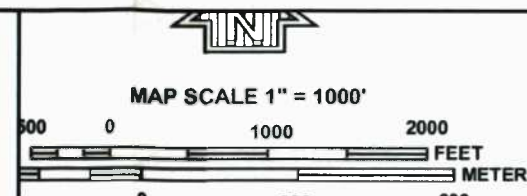
OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

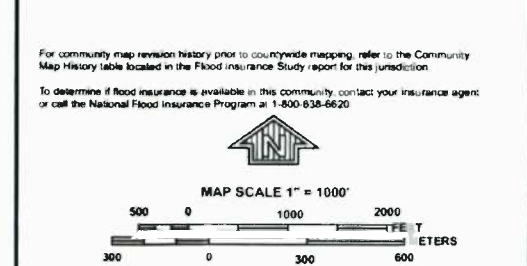
OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Base Flood Elevation line and value: elevation in feet*



- flood depths, or flood velocities.
- Base Flood Elevation line and value: elevation in feet*
- Base Flood Elevation value where uniform within zone: elevation in feet*
- *Referenced to the North American Vertical Datum of 1988
- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 5000-foot ticks: West Virginia State Plane North Zone (FIPS Zone 4701), Lambert Conformal Conic projection
- 1000-meter Universal Transverse Mercator grid values, zone 17
- Bench mark (see explanation in Notes to Users section of this FIRMA panel)
- River Mile
- MAP REPOSITORIES
- Refer to Map Repositories list on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
- March 16, 1991
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
- October 4, 2011 - to update corporate limits, to decrease Base Flood Elevations, to change Special Flood Hazard Areas, to update map format and to add roads and road names



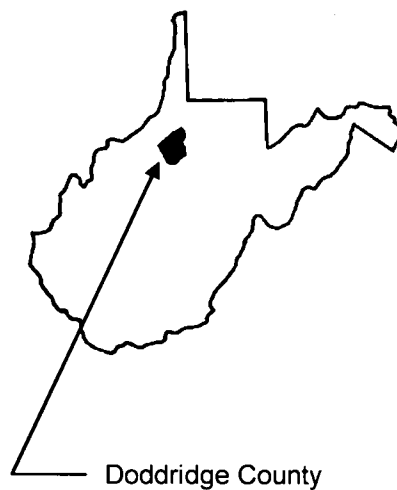
NFIP PANEL 0120C

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

FLOOD INSURANCE STUDY



DODDRIDGE COUNTY, WEST VIRGINIA AND INCORPORATED AREAS



COMMUNITY NAME

WEST UNION, TOWN OF
DODDRIDGE COUNTY (UNINCORPORATED
AREAS)

COMMUNITY NUMBER

540025

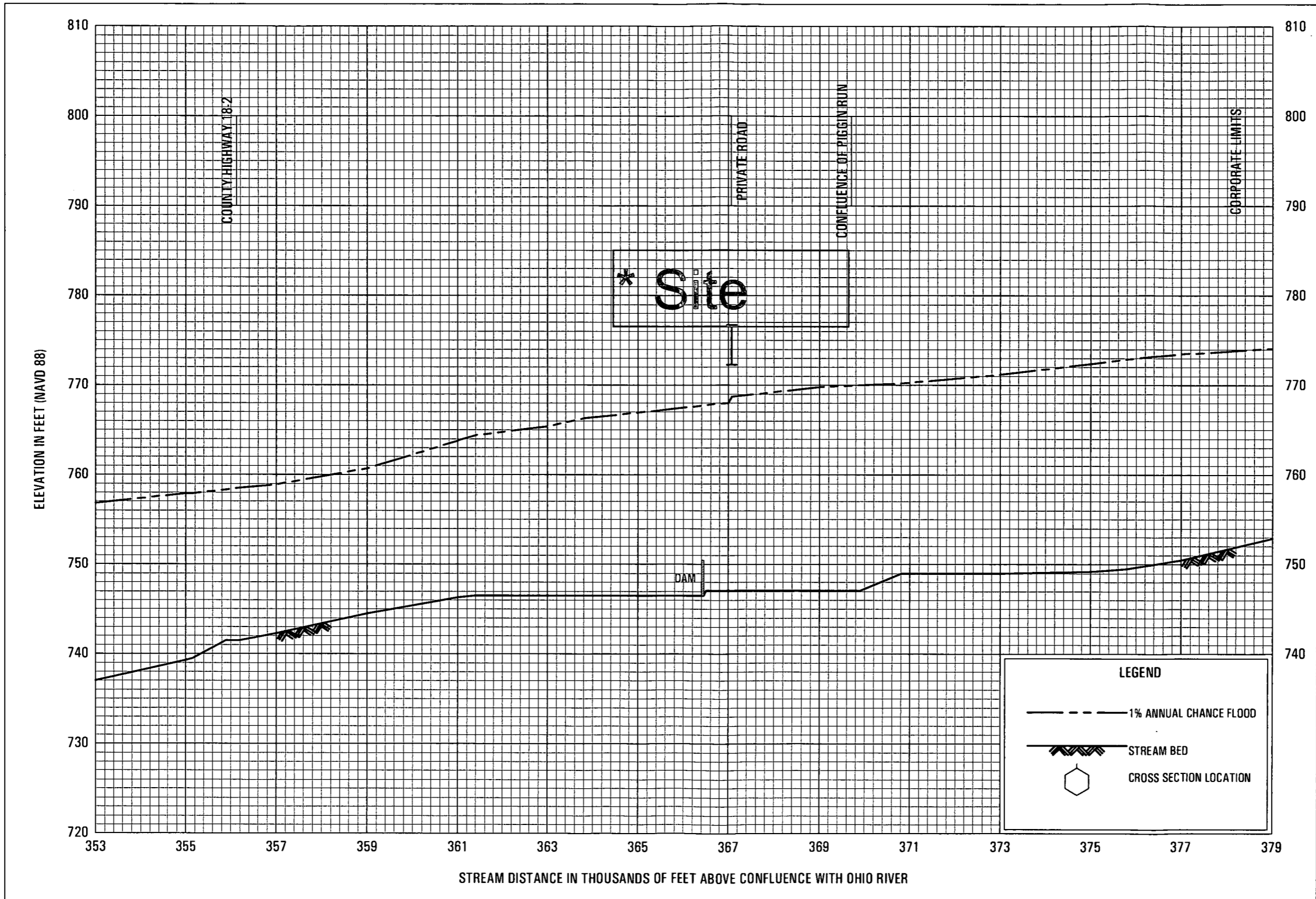
540024

Effective: October 4, 2011



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
54017CV000A



FLOOD PROFILES

MIDDLE ISLAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
DODDRIDGE COUNTY, WV
AND INCORPORATED AREAS

22P

SECTION 4.0



Dominion™

SECTION 4

TAX MAP

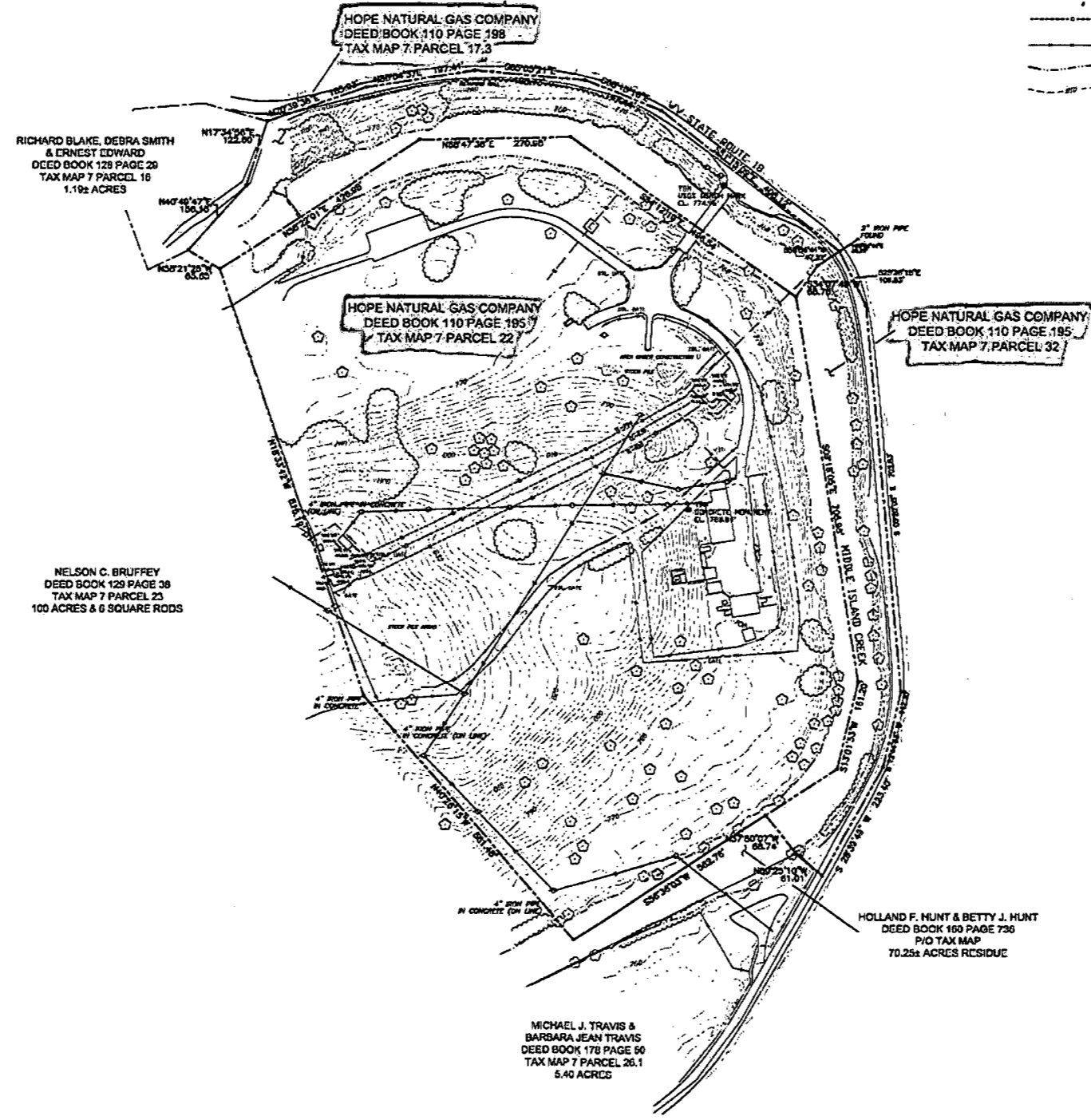
SURVEYED ON
WV STATE PLANE - NORTH HAD EDGED
NAVD83 GEOD 12N

NORTH

SCALE: 1" = 100'
CONTour INTERVAL: 1'

LEGEND

- OVERHEAD ELECTRIC LINE
- OVERHEAD COMMUNICATIONS LINE
- - - UNDERGROUND GAS LINE
- FENCE
- DRAIN
- - - EXISTING CONTOUR LINE
- ⊕ UTILITY POLE
- ⊞ LIGHT POLE
- ∇ UTILITY VALVE
- TRANSFORMER
- ⊙ TEMPORARY BENCH MARK



RICHARD BLAKE, DEBRA SMITH
& ERNEST EDWARD
DEED BOOK 129 PAGE 29
TAX MAP 7 PARCEL 18
1.192 ACRES

HOPE NATURAL GAS COMPANY
DEED BOOK 110 PAGE 198
TAX MAP 7 PARCEL 17.3

HOPE NATURAL GAS COMPANY
DEED BOOK 110 PAGE 195
TAX MAP 7 PARCEL 22

HOPE NATURAL GAS COMPANY
DEED BOOK 110 PAGE 195
TAX MAP 7 PARCEL 32

NELSON C. BRUFFEY
DEED BOOK 129 PAGE 38
TAX MAP 7 PARCEL 23
100 ACRES & 6 SQUARE RODS

HOLLAND F. HUNT & BETTY J. HUNT
DEED BOOK 160 PAGE 736
P/O TAX MAP
70.254 ACRES RESIDUE

MICHAEL J. TRAVIS &
BARBARA JEAN TRAVIS
DEED BOOK 178 PAGE 90
TAX MAP 7 PARCEL 26.1
5.40 ACRES

WEST UNION DISTRICT
DODDRIDGE COUNTY
WEST VIRGINIA

REFERENCE
GROUND CONTROL AND FIELD SURVEYED BY
I3ENGINEERING, LLC NOVEMBER 2014. AERIAL MAPPING BY KEDDAL
AERIAL MAPPING NOVEMBER 10, 2014

CAD FILE NO.

I3 Engineering and Consulting, LLC
DESIGN • CONSTRUCTION • MAINTENANCE

FOR **DOMINION TRANSMISSION, INC.**

TITLE: **L.L. TONKIN STATION
TOPOGRAPHIC & UTILITY SITE MAPPING**

Drawn	RPV	11/2/14	Scale	AS SHOWN
Engineer	RRS/2011	11/2/14	Proj. No.	
Checked	RRS/2011	11/2/14	Draw. No.	1 OF 1

20140518

SECTION 5.0



SECTION 5

USGS FIGURE AND PHOTOGRAPHS



Map Location



Dominion
Monroe to Cornwell Project - L.L. Tonkin CS
West Union, Doddridge County
7.5 Minute USGS Topographical Map

● Site Location



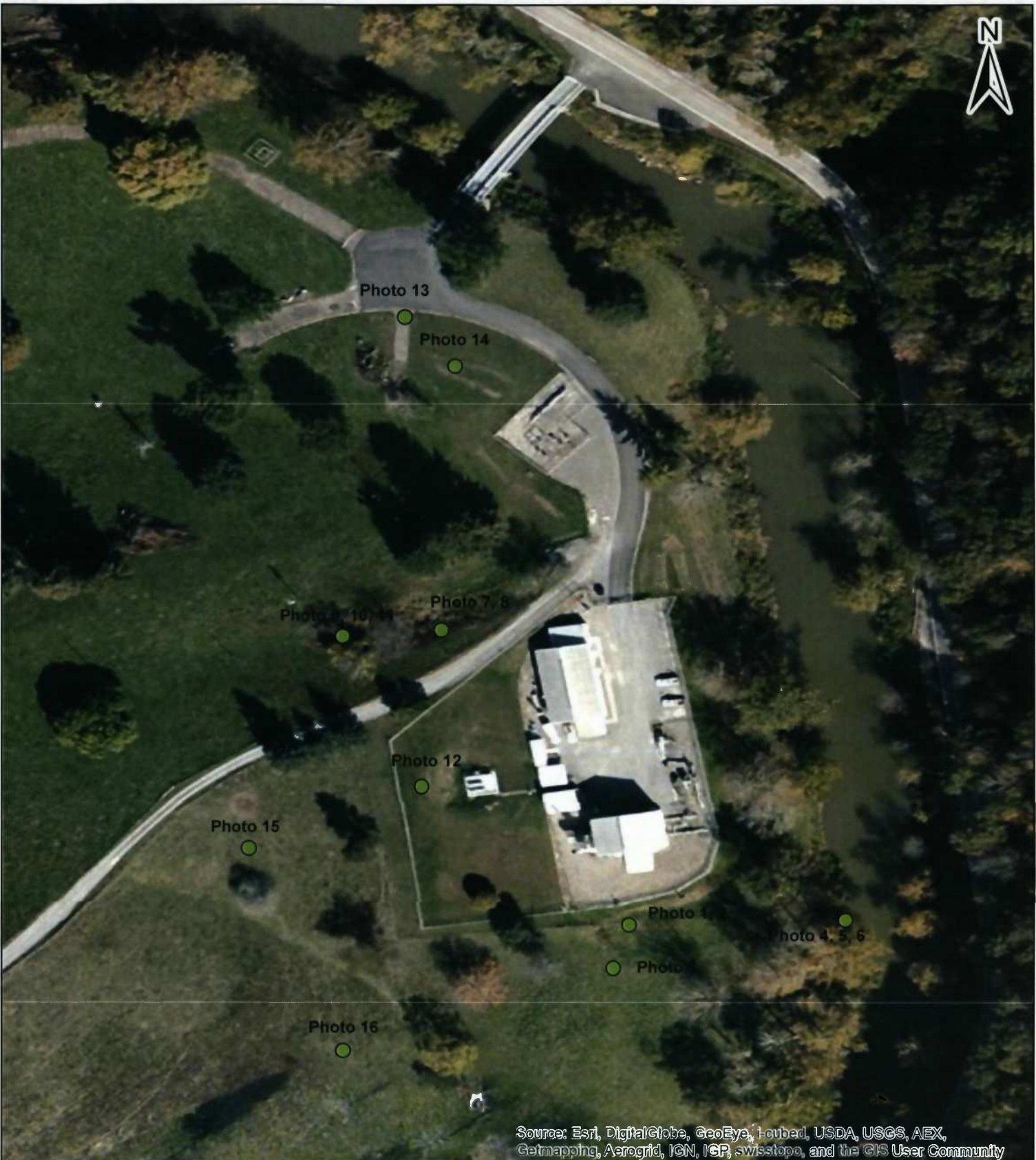
0 1 inch = 2,000 feet 4,000
 2,000 Feet Source: ESRI 2014



AECOM

Figure 1

Date: July 2014



Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Dominion
 Monroe to Cornwell Project - L.L. Tonkin CS
 West Union, Doddridge County
 7.5 Minute USGS Topographic Map
 Photo Location Map

Photo

0 0.0125 0.025 0.05 Miles




Figure 2

Date: July 2015



Photo 1. W-DO-001 Sample point: PEM W-DO-001-WET1. Direction: West Date: 7/08/2014



Photo 2. W-DO-001. Sample point: PEM W-DO-001-WET1, Direction: Northwest, Date: 7/08/2014



Photo 3. W-DO-001, PEM. Sample point: W-DO-001-UPL1, Direction: East, Date: 7/08/2014



Photo 4. S-DO-001. Direction: East, Date: 7/08/2014



Photo 5. S-DO-001. Direction: North, Date: 7/08/2014



Photo 6. S-DO-001. Direction: South, Date: 7/08/2014



Photo 7. W-DO-002 Sample point: PEM W-DO-002-WET1. Direction: Southwest Date: 7/08/2014



Photo 8. W-DO-002, PEM. Sample point: W-DO-002-UPL1, Direction: Northwest, Date: 7/08/2014



Photo 9. S-DO-002. Direction: Southwest, Date: 7/08/2014



Photo 10. S-DO-002. Direction: Northeast, Date: 7/08/2014



Photo 11. S-DO-002. Direction: South, Date: 7/08/2014



Photo 12. L.L. Tonkin Compressor Station. Direction: East, Date: 7/08/2014



Photo 13. Tonkin Compressor Station. Direction: South, Date: 7/08/2014



Photo 14. Tonkin Compressor Station. Direction: Southwest, Date: 7/08/2014



Photo 15. Tonkin Compressor Station. Direction: Northeast, Date: 7/08/2014



Photo 16. Tonkin Compressor Station. Direction: North, Date: 7/08/2014

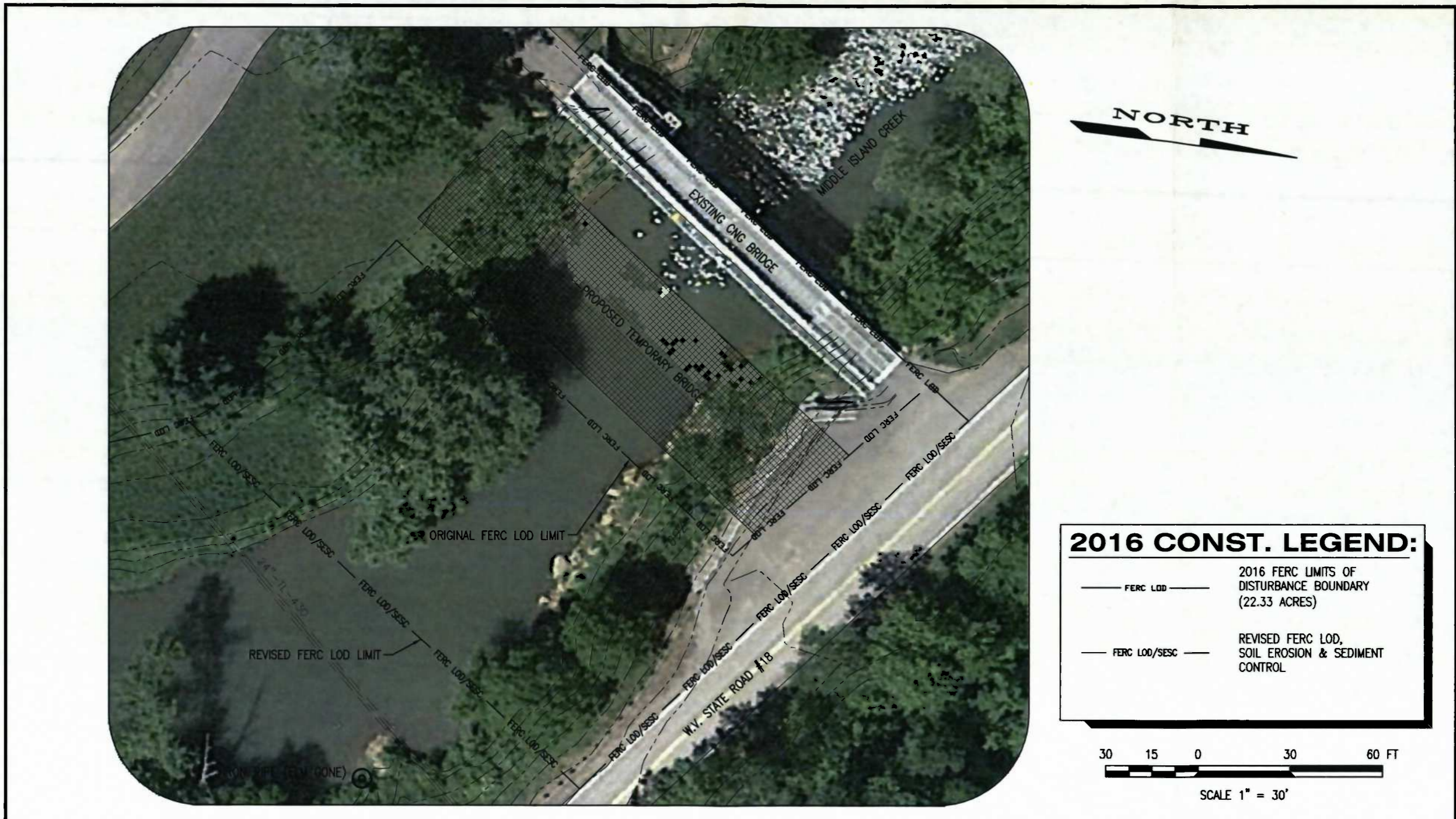
SECTION 6.0



Dominion

SECTION 6

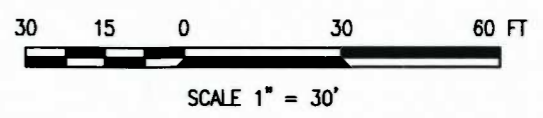
SIGNED/SEALED SITE PLAN



2016 CONST. LEGEND:

— FERC LOD — 2016 FERC LIMITS OF DISTURBANCE BOUNDARY (22.33 ACRES)

— FERC LOD/SESC — REVISED FERC LOD, SOIL EROSION & SEDIMENT CONTROL



SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	DATE
						1" = 30'	
						DRAWN	3/9/15
						CHECKED	
						APP. FOR BID	
2	3/13/15	RWH	ADDED NORTH ARROW AND SCALE BAR	63297.1.3		APP. FOR CONST.	
1	3/11/15	RWH	ADDED AERIAL PHOTO	63297.1.3		TOWN:	COUNTY: DODDRIDGE, WV

Dominion Transmission, Inc.
 445 West Main St. Clarksburg, West Virginia 26301 / Phone: (304) 623-8000

FOR: **MONROE TO CORNWELL PROJECT**

TITLE: **PLOT PLAN - LL TONKIN STATION ENLARGED DETAIL FOR BRIDGE AREA**

DIR:	GROUP	DWG. NO.	REV.
FILE:	PRJ/TSK: 63297.1.3	PD X6213DA	2

SECTION 7.0



Dominion™

SECTION 7

SIGNED/SEALED HECRAS REPORT

HYDROLOGY AND HYDRAULICS REPORT FOR FLOODPLAIN IMPACT

FOR

Dominion Transmission, Inc.

**MONROE TO CORNWELL PROJECT
– L.L. TONKIN STATION**

**WEST UNION
DODDRIDGE COUNTY, WEST VIRGINIA**

July 2015

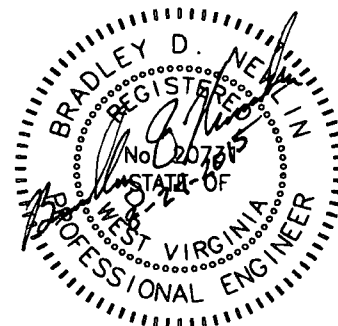
**Submitted for:
Dominion Transmission, Inc.
445 West Main St.
Clarksburg, West Virginia 26301**

Prepared By:

AECOM

**FOSTER PLAZA 6
681 ANDERSEN DRIVE, SUITE 400
PITTSBURGH, PA 15220**

Job # 60327471



HYDROLOGY & HYDRAULICS REPORT

TABLE OF CONTENTS

	<u>Page</u>
1.0 PROJECT OVERVIEW	1
2.0 TECHNICAL APPROACH.....	1
3.0 ANALYSIS RESULTS.....	3

APPENDICES

Appendix A. Figures

Figure 1 – Location Map

Figure 2 – FEMA Firmette

Figure 3 – Hydrology & Hydraulics Plan

Appendix B. Photos

Appendix C. Hydrology Calculations

Appendix D. Hydraulics Calculations

HYDROLOGY & HYDRAULICS REPORT FOR L.L. TONKIN STATION

1.0 PROJECT OVERVIEW

Dominion Transmission, Inc. has proposed expansion of an existing natural gas compressor station in West Union, Doddridge County. Upon completion of construction activities, proposed compressor station facilities and grading will remain.

The proposed project is located in the Middle Island Creek watershed. The proposed grading for the compressor station expansion is located within the FEMA Flood Zone AE (with no FEMA-determined floodways) along Middle Island Creek.

1.1 Existing Conditions

The stream and floodplain were surveyed by I3 Engineering and Consulting LLC during a site investigation. A site investigation of the project area identified the bottom width of the existing stream at the project location to be approximately seventy feet (70') and the overall depth of the channel to be approximately thirteen feet (13'). Channel side slopes range from approximately 1.5H:1V to steeper than 1H:1V and the channel top width is approximately eighty feet (80'). The flow depth was observed to be five and a half feet (5.5'). There is an existing road crossing approximately 830 feet downstream of the proposed grading.

The existing road crossing consists of a steel bridge with concrete piers and abutments. The existing crossing is proposed to remain in place. The drainage area for this project is approximately 123 square miles. See **Appendix A** for figures.

1.2 Proposed Conditions

Proposed grading activities will take place to expand the existing L.L. Tonkin compressor station and will involve fill material being placed within the 100-year floodplain. See **Appendix A** for a figure of the site.

2.0 TECHNICAL APPROACH

The proposed facilities were analyzed for their impacts to the existing stream. A hydrology and hydraulics analysis was completed for the existing conditions and the proposed conditions. The effective FEMA Flood Insurance Study (FIS) for this project is "Doddridge County West Virginia and Incorporated Areas," effective October 4, 2011; this study was created as a digital conversion of the initial Countywide FIS. Since the project is located in a FEMA detailed study zone AE, data from the FIS was used in the hydraulic and hydrologic analyses.

2.1 Precipitation Data

The peak discharge calculated in the FEMA Flood Insurance Study (FIS) was used; therefore, no precipitation data was obtained.

2.2 Hydrology Analysis

The results of the hydrologic analyses in the FIS show a drainage area of 134.78 square miles, with a peak discharge 1-percent-annual-chance of 15,200 cubic feet per second (cfs) on the nearest downstream cross section on Middle Island Creek. This discharge from the FIS was used as the 100-year design flow, providing a conservative design flow. A summary of the runoff results is contained in Table 1 below.

TABLE 1.

Summary of Design Flows (cfs)	
	100-Year Design Flow
Middle Island Creek	15,200

The detailed input parameters and runoff results are contained in the hydrology calculations included in **Appendix C**.

2.3 Hydraulic Analysis

Hydraulic calculations were performed to analyze the anticipated impacts of constructing the proposed facilities. This analysis was completed to determine whether the proposed activity complied with Section 4.3 of the Doddridge County Floodplain Ordinance.

HEC-RAS Version 4.1.0 was used for the hydraulic calculations. Both an existing and proposed geometry were created. The data for the cross-sections and existing bridge came from surveyed points (vertical datum NAVD 88). Points were taken across the floodplain and surrounding area, and nine cross sections were taken along the stream. Three-dimensional surfaces were created in AutoCAD Civil 3D from this data and additional cross sections were cut from this surface. The proposed geometry uses blocked obstructions in the locations of proposed fill.

The Manning's "n" values used for Middle Island Creek in the FIS ranged from 0.040 to 0.045 in the channel and 0.050 to 0.070 in the overbank. Our analysis used a value of 0.040 in the channel, corresponding to a clean, winding channel with some pools and shoals. Values in the overbank ranged between 0.050 and 0.070, depending on the amount of vegetation and debris at a particular location.

Expansion and contraction coefficients of 0.3 and 0.1, respectively, were used at all cross sections, except the two bounding cross sections of the existing bridge (River Stations 826.02 and 769.3), where values of 0.5 and 0.3 were used.

The bridge modeling approach was Energy (Standard Step) for the Low Flow method and Energy Only (Standard Step) for the High Flow method, though the bridge is not submerged in the 100-year design storm.

Both the existing and proposed condition use the same steady flow data and are run using a subcritical flow regime. The boundary condition is a known downstream water surface elevation. The water surface elevation 767.8 feet, was obtained from the water surface profile in plate 22P of the FIS, which also uses the vertical datum NAVD 88. The discharge used in the model is described in Section 2.2 of this report, and shown in Table 1. Table 2 provides a summary of water surface elevations in the Project area.

TABLE 2.

Summary of Water Surface Elevations			
River Station	Existing 100-year	Proposed 100-year	Difference in WSE
2304.58	771.16	771.20	0.04
1970.3	770.82	770.86	0.04
1900	770.72	770.78	0.06
1800	770.08	770.13	0.05
1700	769.80	769.80	0.00
1636.04	769.76	769.77	0.01
1600	769.78	769.79	0.01
1500	769.72	769.72	0.00
1422.55	769.68	769.68	0.00
916.96	768.89	768.89	0.00
868.08	768.86	768.86	0.00
826.02	768.86	768.86	0.00
769.3	768.60	768.60	0.00
721.29	768.60	768.60	0.00
289.25	767.80	767.80	0.00

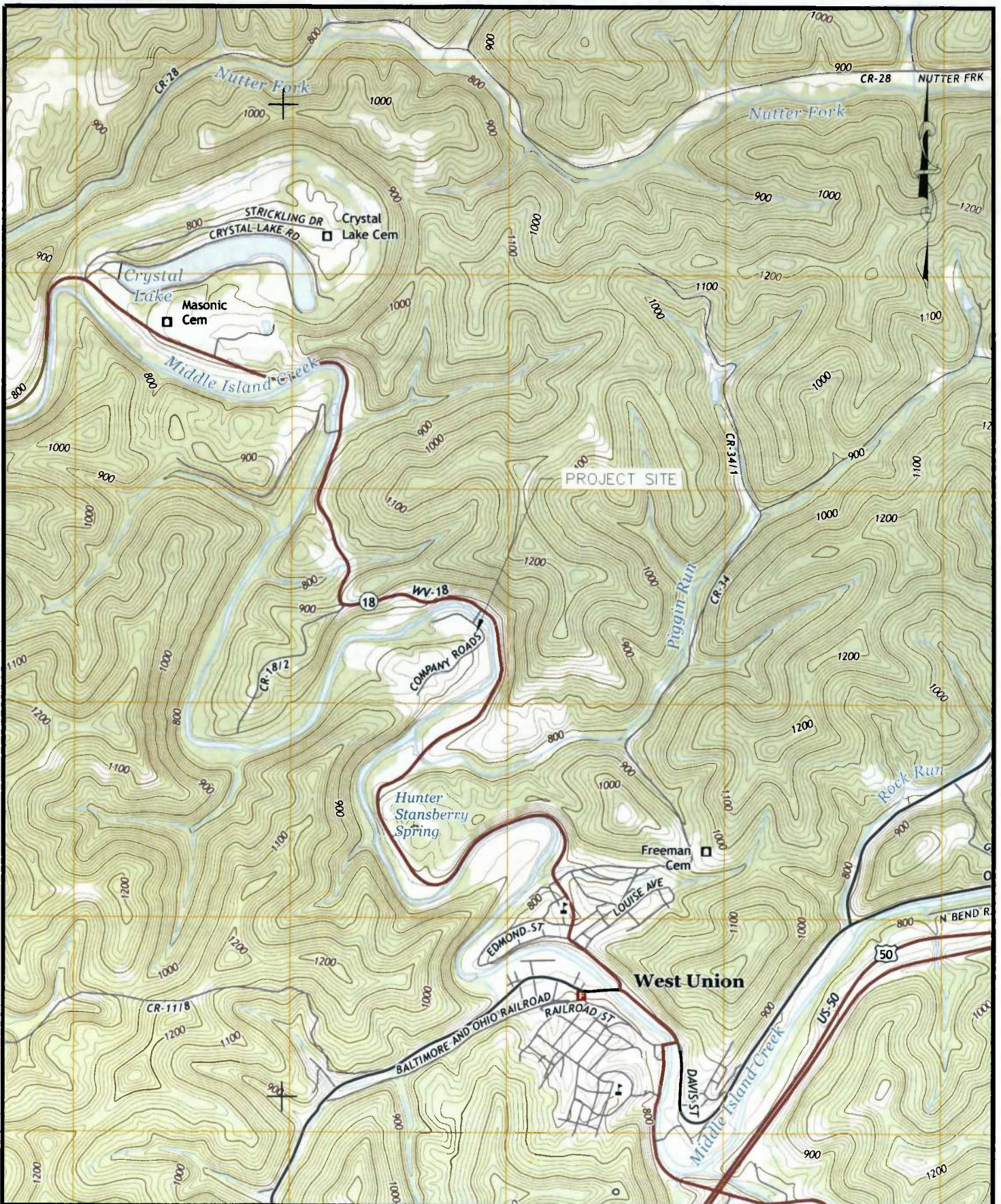
The design input parameters and analysis results are contained in the hydraulic calculations included in **Appendix D**.

3.0 ANALYSIS RESULTS

A comparison of the existing and proposed conditions shows that the proposed structure will have virtually no impact on the flow characteristics of the stream that were analyzed or on adjacent properties. These calculations also show that proposed construction does not increase tailwater velocity. Further analysis shows that the existing bridge structure is able to safely convey the 100-year design flow without overtopping the existing road crossing. Refer to **Appendix D** for detailed results of the analysis.

APPENDIX A

FIGURES



AECOM

FOSTER PLAZA 6
681 ANDERSEN DRIVE, SUITE 400
PITTSBURGH, PA 15220

DOMINION TRANSMISSION, INC.

445 WEST MAIN ST.
CLARKSBURG, WV 26301

PREPARED BY:
KRD

CHECKED BY:
BDN

APPROVED BY:
BDN

DATE:
07/22/2015

REV. DATE:

SCALE:
1"=2000'

PROJECT NO.
60327471

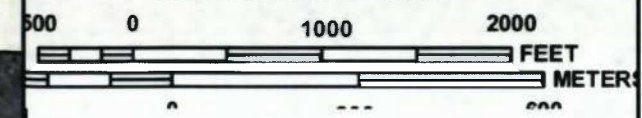
DRAWING NO.

FIGURE 1
L.L. TONKIN STATION
SITE LOCATION MAP

COMPANY ROAD,
WEST UNION, WV



MAP SCALE 1" = 1000'



PANEL 0120C

FIRM
 FLOOD INSURANCE RATE MAP
 DODDRIDGE COUNTY,
 WEST VIRGINIA
 AND INCORPORATED AREAS

PANEL 120 OF 325
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	540024	0120	C
WEST UNION TOWN OF	540025	0120	C

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
 54017C0120C
MAP REVISED
 OCTOBER 4, 2011
 Federal Emergency Management Agency

FIGURE 2

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



LEGEND:

EXISTING FEATURES:	
	MAJOR CONTOUR (10' INTERVAL)
	MINOR CONTOUR (2' INTERVAL)
	PROPERTY LINE
	EDGE OF ROADWAY
	EXISTING 100-YEAR WATER FLOODPLAIN
	MIDDLE ISLAND CREEK CENTERLINE
	STREAM FLOW DIRECTION

PROPOSED FEATURES

	MAJOR CONTOUR (10' INTERVAL)
	MINOR CONTOUR (2' INTERVAL)
	PROPOSED 100-YEAR FLOODPLAIN
	HEC-RAS CROSS SECTION

REVISIONS		
DATE	DESCRIPTION	APPROVED

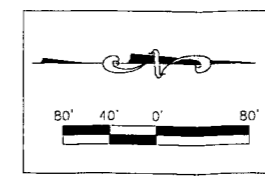
PREPARED FOR: DOMINION TRANSMISSION, INC 445 WEST MAIN ST. CLARKSBURG, WV 26301 PHONE: (304) 623-8000	PREPARED BY: AECOM FOSTER PLAZA 6 681 ANDERSEN DRIVE, SUITE 400 PITTSBURGH, PA 15220 PHONE: (412) 503-4700 FAX: (412) 503-4701
--------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------

MONROE TO CORNWELL PROJECT
 LL TONKIN STATION
 WEST UNION
 DODDRIDGE COUNTY, WEST VIRGINIA

HORIZONTAL SCALE: AS SHOWN

DRAWN BY:	KRD	07-22-2015
DETAIL CK:	BDN	07-23-2015
ITR:	XXX	XX-XX-XXX
ENVIRONMENTAL CK:	XXX	XX-XX-XXX
CONSTRUCTION CK:	XXX	XX-XX-XXX

AECOM PROJECT NO.:	60327471
SHEET:	FIGURE 3
DRAWING DESC.:	HYDROLOGY & HYDRAULICS PLAN
REV.:	0



1. MONROE TO CORNWELL PROJECT, WEST UNION, WEST VIRGINIA. DATE: 07/23/2015. 10:11 AM.

APPENDIX B

PHOTOS



PHOTO 1
Existing compressor station.



PHOTO 2
Typical stream section.

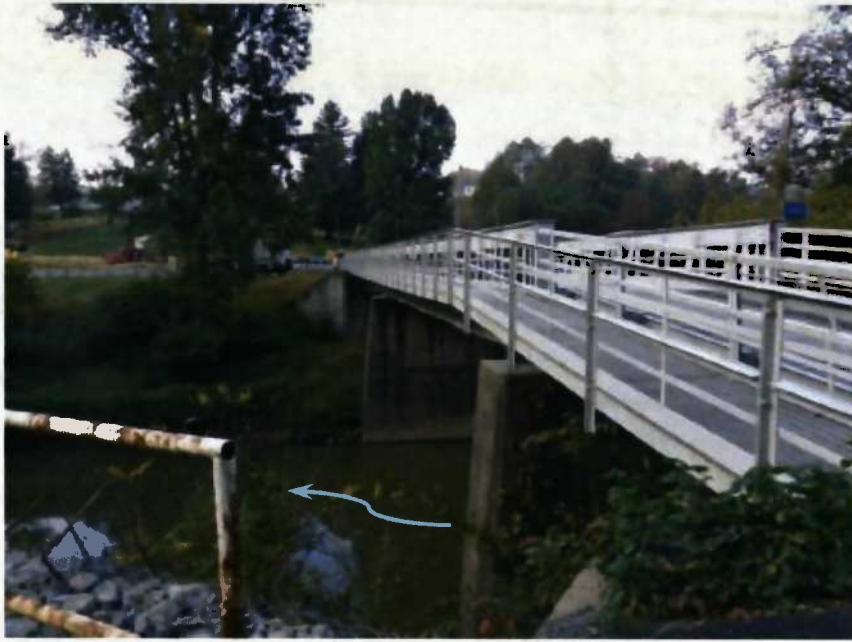


PHOTO 3
Existing bridge (downstream side).

APPENDIX C
HYDROLOGY CALCULATIONS

EXCERPT FROM DODDRIDGE COUNTY FIS

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for each flooding source studied in detail affecting the county.

Discharge-frequency curves were developed on a regional basis that applies to West Virginia (References 3 and 4). For the streams studied by detailed methods, 1-percent-annual-chance flood elevations were determined through discharge-frequency relations and the Manning equation. Within the Town of West Union, flood elevations were determined through streamflow-station data relationships and the Manning's equation.

Peak discharge-drainage area relationships for each stream studied by detailed methods are presented in Table 2, "Summary of Discharges".

Table 2 – Summary of Discharges

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (SQ. MILES)</u>	<u>PEAK DISCHARGE (CFS) 1-PERCENT-ANNUAL-CHANCE</u>
MIDDLE ISLAND CREEK		
Upstream of Doddridge-Tyler County boundary	(134.78)	(15,200)
Approximately 0.1 mile downstream of confluence of Piggin Run	120.06	13,080
BUCKEYE CREEK		
At confluence with Middle Island Creek	38.62	7,350
Downstream of confluence of Long Run	22.62	5,150
Upstream of confluence of Greenbrier Creek	9.41	3,050
Downstream of confluence of Traugh Fork	1.52	1,310
MEATHOUSE FORK		
At confluence with Middle Island Creek	66.84	9,600
Downstream of confluence of Toms Fork	50.47	8,200
Downstream of confluence of Brushy Fork	29.87	6,050
Downstream of confluence of Laurel Run and Big Isaac Creek	3.76	2,230
MCELROY CREEK		
Upstream of confluence of Flint Run	61.95	9,250
Upstream of confluence of Rigging Run	51.23	8,300
Downstream of confluence of Talkington Fork	39.18	7,100
Downstream of confluence of Robinson Fork and Big Battle Run	20.75	4,900

APPENDIX D
HYDRAULIC CALCULATIONS

EXCERPT FROM DODDRIDGE COUNTY FIS

using the USACE HEC-2 step-backwater computer program, and the results were published in a special flood hazard information report (References 5 and 6). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

Channel roughness factors (Manning's "n") used in the hydraulic computations were assigned on the basis of field surveys of the stream and floodplain areas. For Middle Island Creek, channel "n" values range from 0.040 to 0.045 and overbank "n" values range from 0.050 to 0.070. For Buckeye Creek and Meathouse Fork, channel "n" values range from 0.055 to 0.080.

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

Qualifying benchmarks within a given jurisdiction that are catalogued by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS) as First or Second Order Vertical and have a vertical stability classification of A, B or C are shown and labeled on the FIRM with their 6-character NSRS Permanent Identifier.

Benchmarks catalogued by the NGS and entered into the NSRS vary widely in vertical stability classification. NSRS vertical stability classifications are as follows:

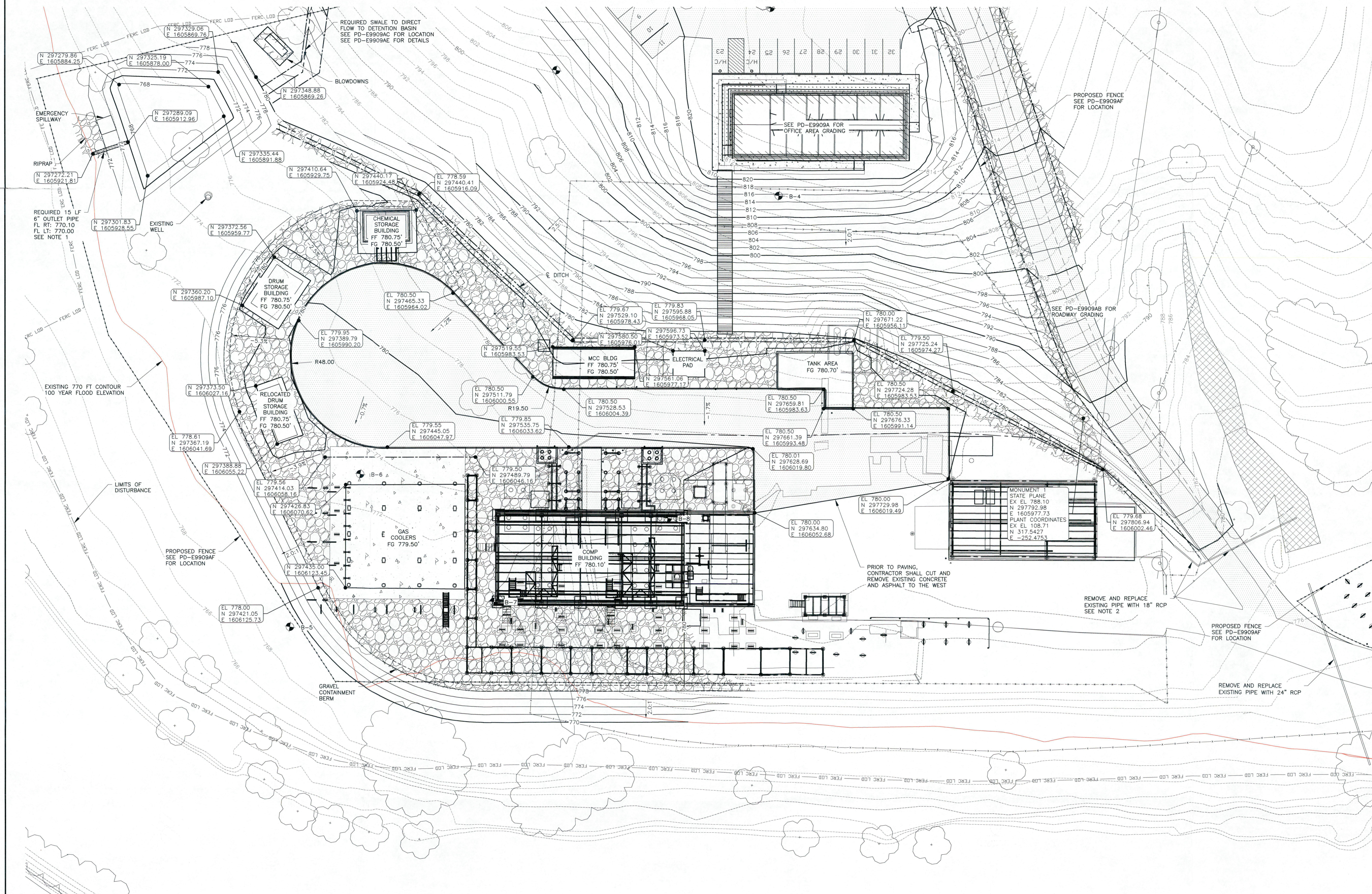
- Stability A: Monuments of the most reliable nature, expected to hold position/elevation (e.g. mounted in bedrock)
- Stability B: Monuments which generally hold their position/elevation (e.g. concrete bridge abutment)
- Stability C: Monuments which may be affected by surface ground movements (e.g. concrete monument below frost line)
- Stability D: Mark of questionable or unknown vertical stability (e.g. concrete monument above frost line, or steel witness post)

In addition to NSRS benchmarks, the FIRM may also show vertical control monuments established by a local jurisdiction; these monuments will be shown on the FIRM with the appropriate designations. Local monuments will only be placed on the FIRM if the community has requested that they be included, and if the monuments meet the aforementioned NSRS inclusion criteria.

To obtain current elevation, description, and/or location information for benchmarks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their Web site at www.ngs.noaa.gov.

It is important to note that temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the Technical Support Data Notebook associated with the FIS report and FIRM for this community. Interested individuals may contact FEMA to access these data.

NORTH



LEGEND	
	PROPOSED ASPHALT ROAD
	POWER POLE
	VALVE
	LIGHT POLE
	SOIL BORING
	GUY WIRE
	TEMPORARY WORKSPACE
	PROPERTY LINE
	EXISTING 770 FT CONTOUR 100 YEAR FLOOD ELEVATION
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FENCE
	EXISTING OVER HEAD UTILITY LINES
	EXISTING GAS LINE
	DITCH
	PROPOSED FENCE

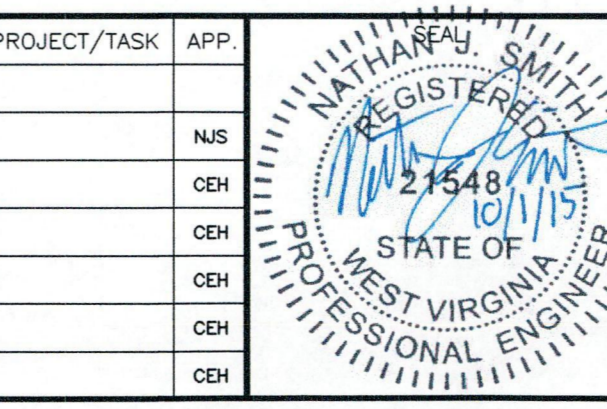
MIDDLE ISLAND CREEK

GENERAL NOTES AND COMMENTS:
 NOTE:
 1. CONTRACTOR SHALL CONVERT PROPOSED SEDIMENT TRAP AT THE END OF CONSTRUCTION TO A PERMANENT DETENTION POND. REQUIRED DETENTION VOLUME IS 579 CF WITH RELEASE RATE OF 0.38 CFS.
 2. CONTRACTOR SHALL VERIFY WITH DTI THAT CONTAINMENT IN THIS AREA IS NO LONGER REQUIRED BEFORE REPLACEMENT OF EXISTING PIPING.

FOR APPROVAL
 DATE: 9/28/15
 - NOT FOR CONSTRUCTION -



SYM.	DATE	BY	REVISION INFORMATION	PROJECT/TASK	APP.
△	8/28/15	TC	VARIOUS UPDATES		
△	8/14/15	TC	ADDED STORMWATER CONTROLS		
△	8/26/15	TC	PRELIMINARY ISSUE FOR BID		
△	8/5/15	TC	ISSUED FOR APPROVAL		
△	7/14/15	TC	ISSUED FOR REVIEW AND COMMENT		
△	7/8/15	TC	ISSUED FOR REVIEW AND COMMENT		



ORIGINAL CONSTRUCTION INFORMATION	
PROJECT/TASK:	
DRAWN:	TC 6/22/15
CHECKED:	CEH 7/8/15
APP. FOR BID:	
APP. FOR CONST.:	
SCALE:	1" = 20'-0"

Dominion Transmission, Inc. 445 West Main St. Clarksburg, West Virginia 26301 / Phone: (304) 823-8000	
FOR:	LL TONKIN STATION
TITLE:	COMPRESSOR AREA GRADING PLAN DODDRIDGE COUNTY FLOODPLAIN PERMIT
TOWN:	DODDRIDGE
COUNTY:	DODDRIDGE
DIR./FILE:	PD E9909AA F