



Canton Pipeline to Chestnut Well Pad Project (Chestnut Pipeline)

Doddridge County, West Virginia

Antero Resources Corporation is proposing to install a 16-inch diameter steel, natural gas pipeline near the town of West Union in Doddridge County, West Virginia at coordinates Lat: N 39.362249 & Long: W 80.728390 for the start of the line and Lat: N 39.363544 & Long: W 80.721569 for the end of the line. The proposed Canton Pipeline to Chestnut Well Pad Project (Chestnut Pipeline) would tie into the Canton Pipeline to the west and the Chestnut Well Pad to the east. The proposed pipeline will be approximately 0.40 miles in length and will be buried below the ground surface using conventional open cut pipeline construction methods. Existing access roads will be utilized to construct the proposed pipeline.

Kleinfelder East, Inc. (Kleinfelder) conducted stream and wetland investigations on December 18, 2013 to identify streams and wetlands within the area of interest (AOI). In addition, the area was previously delineated by AllStar Ecology, LLC on June 27, 2012, August 2 and 28, 2012 and January 17, 2013. During the site reviews, no aquatic features were identified within the proposed AOI.

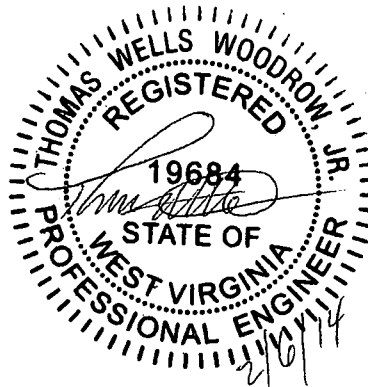
Based on the engineered construction design prepared by Kleinfelder, the Chestnut Pipeline will not require impacts to any aquatic features as none were identified within the AOI.

No part of the Chestnut Pipeline and access road(s) for construction will cross a designated Federal Emergency Management Administration regulated flood zone according to FIRM Map #54017C0130C. Following completion of construction activities, the right-of-way will be restored to pre-construction contours.

Directions to the Site: From West Union, WV: Head north on Neely Avenue toward Marle Street/Old U.S. 50 E. Take the first right onto Marle Street/Old U.S. 50E. Continue to follow Old U.S. 50 E for 0.4 miles. Continue onto Smithton Road for 1 mile. Turn left onto County Route 5/Rock Run Road and continue for 2.8 miles. Turn left onto County Route 28/Nutter Fork. Make a slight right onto County Route 14/Little Flint Run Road. Continue for 2.4 miles, the entrance to the western terminus of the pipeline will be on the right.

Engineer of Record

Kleinfelder East, Inc.
Thomas W. Woodrow, PE #19684
230 Executive Drive, Suite 122
Cranberry Township, PA 16066
P: 724-772-7072
F: 724-772-7079





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Doddridge County, West Virginia

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Kleinfelder East, Inc. (Kleinfelder) conducted stream and wetland investigations on December 18, 2013 to identify streams and wetlands within the area of interest (AOI). In addition, the area was previously delineated by AllStar Ecology, LLC (ASE) on June 27, 2012, August 2 and 28, 2012 and January 17, 2013. During the site reviews, no aquatic features were identified within the proposed AOI.

Based on the engineered construction design prepared by Kleinfelder, the Chestnut Pipeline will not require impacts to any aquatic features as none were identified within the AOI.

The Chestnut Pipeline is not located within a Federal Emergency Management Administration regulated flood zone. Following completion of construction activities, the right-of-way will be restored to pre-construction contours.

Directions to the Site: From West Union, WV: Head north on Neely Avenue toward Marle Street/Old U.S. 50 E. Take the first right onto Marle Street/Old U.S. 50E. Continue to follow Old U.S. 50 E for 0.4 miles. Continue onto Smithton Road for 1 mile. Turn left onto County Route 5/Rock Run Road and continue for 2.8 miles. Turn left onto County Route 28/Nutter Fork. Make a slight right onto County Route 14/Little Flint Run Road. Continue for 2.4 miles, the entrance to the western terminus of the pipeline will be on the right.

FILED

2014 FEB -5 PM 1:46

BETH A. ROGERS
COUNTY CLERK
DODDRIDGE COUNTY, WV



Antero Resources
1625 17th Street
Denver, Colorado 80202
Office 303.357.7310
Fax 303.357.7315

February 4, 2014

Doddridge County Commission
Attn: Dan Wellings, Doddridge County Floodplain Manager
118 East Court Street, Room 102
West Union, WV 26456

*NOT IN
FLOODPLAIN*

Dear Mr. Wellings:

Per the Doddridge County Ordinance, Antero Resources Corporation (Antero) would like to submit the floodplain determination for the Chestnut Pipeline which is **NOT** located in the floodplain as shown on the enclosed design page and FIRM map.

If you have any questions please feel free to contact me at (303) 357-6412.

Sincerely,

Shaye Marshall

Shaye Marshall
Permit Representative
Antero Resources Corporation

*Kleinfelder
Engineers*

Enclosures

FILED

2014 FEB -5 PM 1:46 **DODDRIDGE COUNTY FLOODPLAIN DEVELOPMENT PERMIT APPLICATION**
BETH A. ROBERTS
COUNTY CLERK
DODDRIDGE COUNTY, WV

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 February 4, 2014

SECTION 2: PROPOSE 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: Kevin Kilstrom - VP of Production
ADDRESS: 1625 17th Street, Denver, CO 80202
TELEPHONE NUMBER: Contact Shauna DeMattee: 303-357-6820

BUILDER'S NAME: Antero Resources Corporation

ADDRESS: 1625 17th Street, Denver, CO 80202

TELEPHONE NUMBER: (303) 357-7310

ENGINEER'S NAME: Kleinfelder

ADDRESS: 230 Executive Dr, Suite 122

TELEPHONE NUMBER: 724-772-7072

PROJECT LOCATION:

NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) _____

Please See Exhibit A

ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) _____

Please See Exhibit A

DISTRICT: Grant

DATE/FROM WHOM PROPERTY

PURCHASED: N/A

LAND BOOK DESCRIPTION: _____

DEED BOOK REFERENCE: Please See Exhibit A

TAX MAP REFERENCE: Please See Exhibit A

EXISTING BUILDINGS/USES OF PROPERTY: N/A

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY N/A

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY N/A

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

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURAL TYPE

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

B. OTHER DEVELOPMENT ACTIVITIES:

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

C. STANDARD SITE PLAN OR SKETCH

- 1. SUBMIT ALL STANDARD SITE PLANS, IF ANY HAVE BEEN PREPARED.**
- 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 IRRESPECTIVE OF WHETHER ALL OR ANY PART OF THE SUBJECT PROPOSED CONSTRUCTION PROJECT IS WITHIN THE FLOODPLAIN \$ N/A - Location is not within the floodplain

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: _____ N/A-No properties sharing an
ADDRESS: _____ immediate and common boundary
 _____ up or down stream due to the
 _____ location not being in floodplain

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

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: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
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.

EXHIBIT A

Canton Pipeline to Chestnut Well Pad Project (Chestnut Pipeline)

Property Owner Name	Mailing Address	Tax Map	Deed Book Reference	Land Book Description
HOST PROPERTIES - OUTSIDE FLOODPLAIN				
CHESTNUT GROVE TRUSTEES	RT 5 SMITHBURG WV 26436	3-5-30	183-581	65.159 AC BIG FLINT
CHESTNUT GROVE TRUSTEES	RT 5 SMITHBURG WV 26436	3-5-30.1	183-581	28.25 AC BIG FLINT

- (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): Kevin Kilstrom

SIGNATURE: [Signature] DATE: 2/4/14

After completing SECTION 2, APPLICANT should submit form to Floodplain Administrator/Manager 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: 132
 Dated: 10/04/2011

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 (MSL)

Unavailable

The proposed development is located in a floodway.
 FBFM Panel No. _____ Dated _____

See section 4 for additional instructions.

SIGNED *Dan Wellins*

DATE 02/06/2014

SECTION 4: ADDITIONAL INFORMATION REQUIRED (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, lot dimensions 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 proffing 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 50 lots or 5 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 (MSL).
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 floodplain 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 complete an appealing process below.

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 (MSL)
- 2 Actual (As Built) elevation of floodproofing is _____ FT. NGVD (MSL)

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: _____

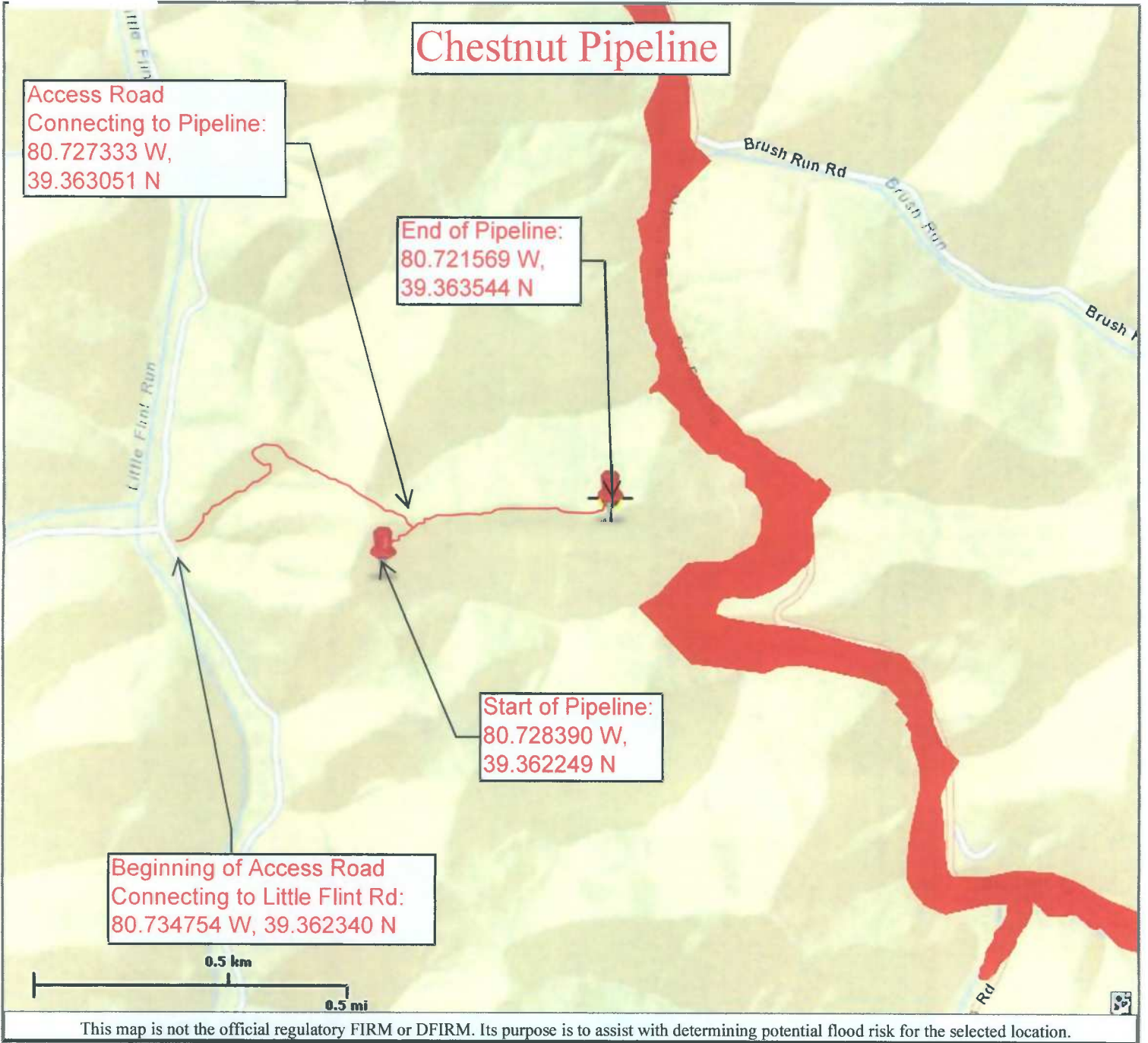
**THE FOLLOWING MUST BE COMPLETED BY THE FLOODPLAIN
ADMINISTRATOR/MANAGER OR HIS/HER AGENT.**

**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** _____

WV Flood Map

Chestnut Pipeline



Map Created on 2/6/2014



Location of the mouse click



Flood Hazard Zone
(1% annual chance floodplain)

User Notes:

Disclaimer:

The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. To obtain more detailed information in areas where Base Flood Elevations have been determined, users are encouraged to consult the latest Flood Profile data contained in the official flood insurance study. These studies are available online at www.msc.fema.gov.

WV Flood Tool is supported by FEMA, WV NFIP Office, and WV GIS Technical Center

Flood Hazard Area: Selected site is NOT WITHIN any identified flood hazard area. Unmapped flood hazard areas may be present.

Elevation: About 1127 feet

Location (long, lat): 80.721569 W, 39.363544 N

Location (UTM 17N): (523986, 4357158)

FEMA Issued Flood Map: 54017C0130C

Contacts: Doddridge County

CRS Information: No CRS information available

Parcel Number:

14-125



Dan Wellings <wellingsd8@gmail.com>

CHESTNUT PIPELINE DC FLOODPLAIN APP.

1 message

Dan Wellings <wellingsd8@gmail.com>

Wed, Feb 5, 2014 at 5:16 PM

To: smarshall@anteroresources.com

Shaye,

Could you have the licensed engineer at Kleinfelder in charge of the Chestnut Pipeline project submit a cover page stating the location, scope of the project, methods to be used, that no part of the pipeline & access road for construction will cross a designated FEMA floodplain, and what FIRM panel/panels project is located on with the said engineer's seal and signature. Submit the location of the pipeline from start to finish and access road for construction on a copy of the WV Flood Tool which can be found on the WV state FEMA website.

The Doddridge County Floodplain Ordinance requires two copies of a floodplain application. One can be electronic.

Dan Wellings, PS
Doddridge County Floodplain Manager

NOT IN FLOODPLAIN
DQW

FILED

2014 FEB -5 PM 1:46

BETH A. ROGERS
COUNTY CLERK
DODDRIDGE COUNTY, WV



Antero Resources
1625 17th Street
Denver, Colorado 80202
Office 303.357.7310
Fax 303.357.7315

February 4, 2014

Doddridge County Commission
Attn: Dan Wellings, Doddridge County Floodplain Manager
118 East Court Street, Room 102
West Union, WV 26456

Dear Mr. Wellings:

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If you have any questions please feel free to contact me at (303) 357-6412.

Sincerely,

Shaye Marshall

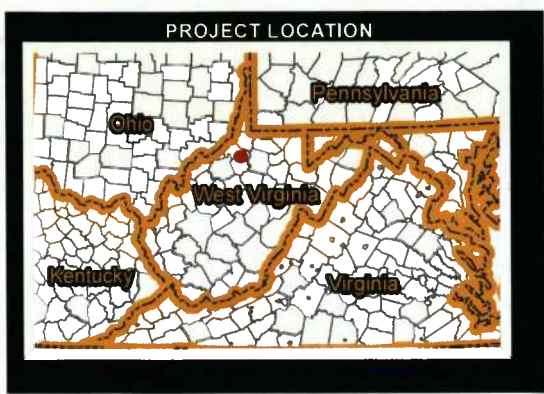
Shaye Marshall
Permit Representative
Antero Resources Corporation

Enclosures

- ① Cover signed & sealed
Kleinfelder
Engineers
- ② 2 copies of permit app.
- ③ locate on
Flood Tool
WU

14-125

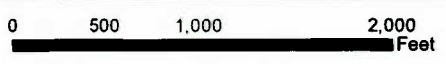
**CHESTNUT PIPELINE
FEMA FIRM 54017C0130C
ANTERO RESOURCES CORPORATION**



SITE LOCATIONS NAD 83		
Eastern Terminus (UTM Meters)	N=494741.8 m	E=96575.0m
Western Terminus (UTM Meters)	N=494155.3 m	E=96441.5 m
	LATITUDE	LONGITUDE
Eastern Terminus	39.363468	-80.721452
Western Terminus	39.332694	-80.728237

**GRANT DISTRICT, DODDRIDGE COUNTY, WV
LITTLE MUSRINGUM-MIDDLE ISLAND WATERSHED**

FLOODPLAIN CONDITIONS	
DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOODPLAIN:	NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR:	NO
HEC-RAS STUDY COMPLETED:	N/A
FLOODPLAIN SHOWN ON DRAWINGS:	YES
FIRM MAP NUMBER (S) FOR SITE:	54017C0130C
ACREAGE OF CONSTRUCTION IN FLOODPLAIN:	N/A



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Base Map: ESRI Online Map;
USGS 7.5' Smithburg Quadrangle

Legend

- Chestnut Pipeline (0.40 mi)
- FEMA Floodplain



PROJECT NO.	135730	Antero Resources Corporation	FIGURE 1
DRAWN:	2/4/2014		
DRAWN BY:	A.Leonard	Chestnut Pipeline Doddridge County, West Virginia Flood Insurance Rate Map	
CHECKED BY:	N.Peace		
FILE NAME:	ChestnutPL_FEMA_v1.mxd		