

Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
- State Removed Resources
- Approximated Soil Survey Stream
- Approximated Surface Water Top Of Bank
- Approximated Stream Centerline
- Delineated Surface Water Top Of Bank
- Delineated Stream Centerline
- Approximated Surface Water
- Delineated Surface Water
- Delineated Wetland Boundary
- Approximated Wetland
- Delineated Wetland
- ▭ County Boundary

Data Sources: EOT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley PIPELINE LLC

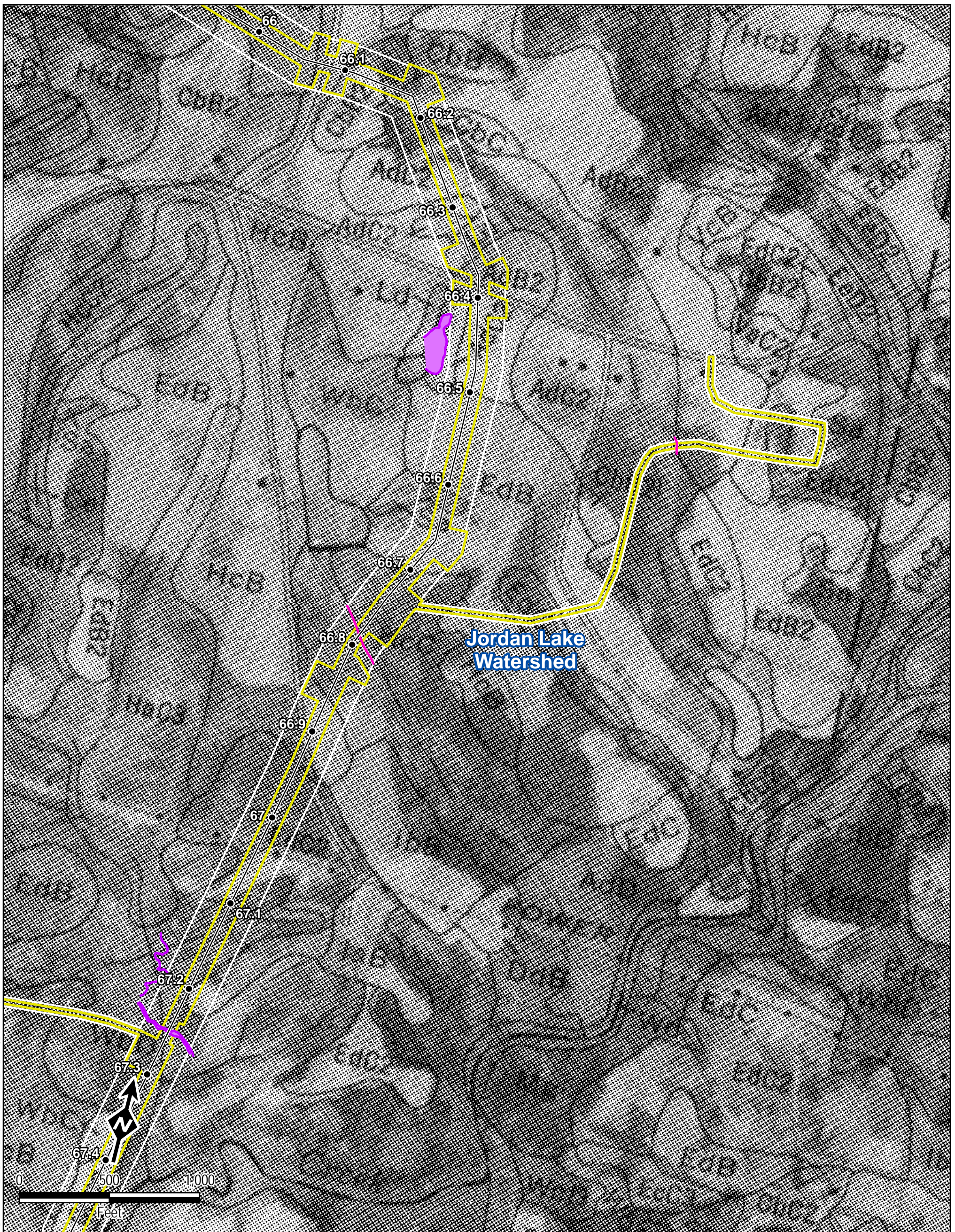
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
 Response to Additional Information

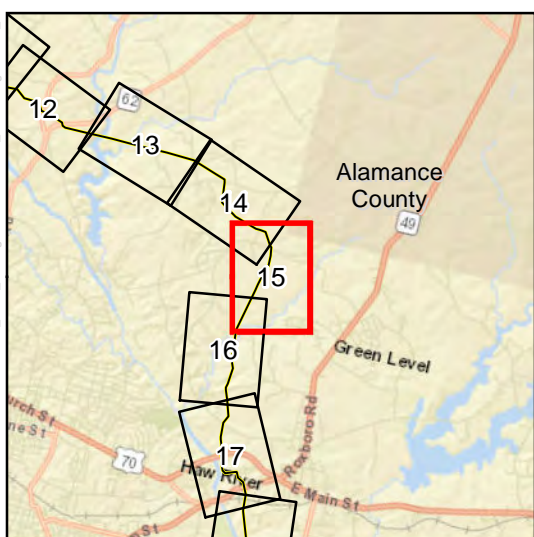
Alamance County, NC
 Sheet 14 of 22

TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019



Jordan Lake Watershed



Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
- State Removed Resources
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- ▭ Approximated Surface Water
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- ▭ Approximated Wetland
- ▭ Delineated Wetland
- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17



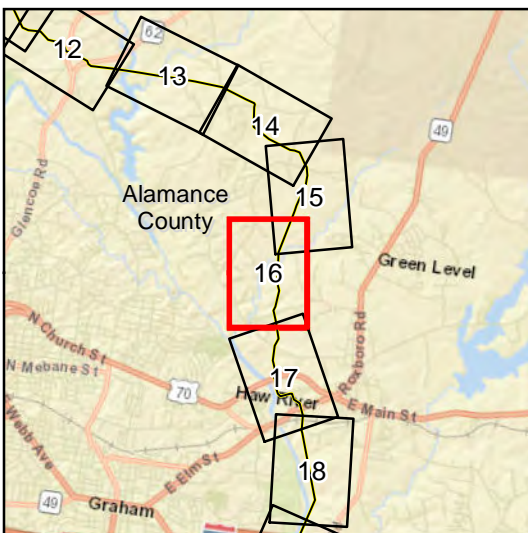
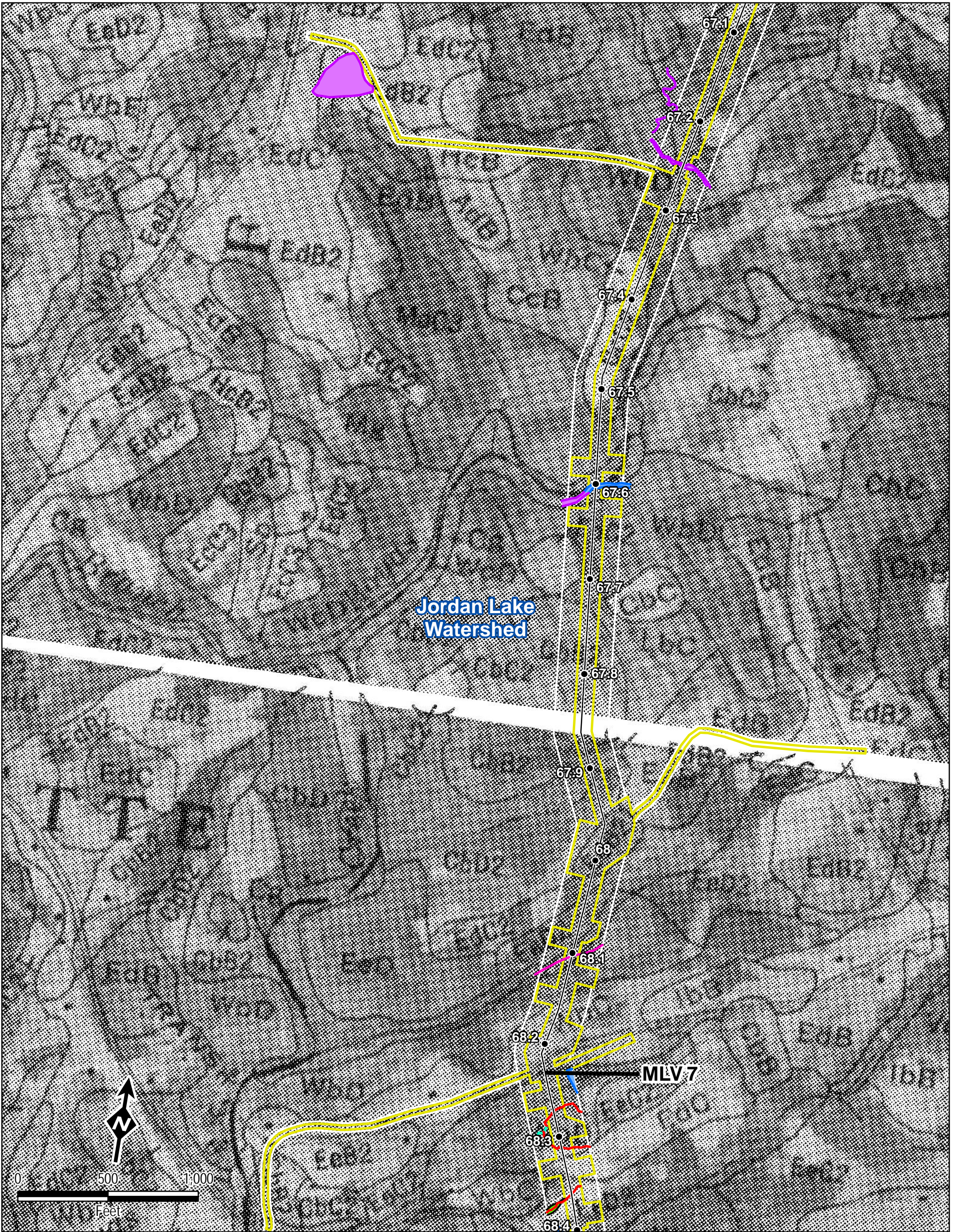
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
 Response to Additional Information

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600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019



Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
- State Removed Resources
- Approximated Soil Survey Stream
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- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley
 PIPELINE LLC

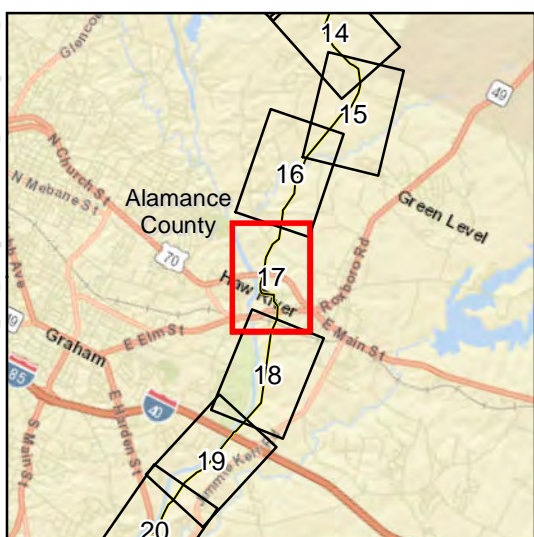
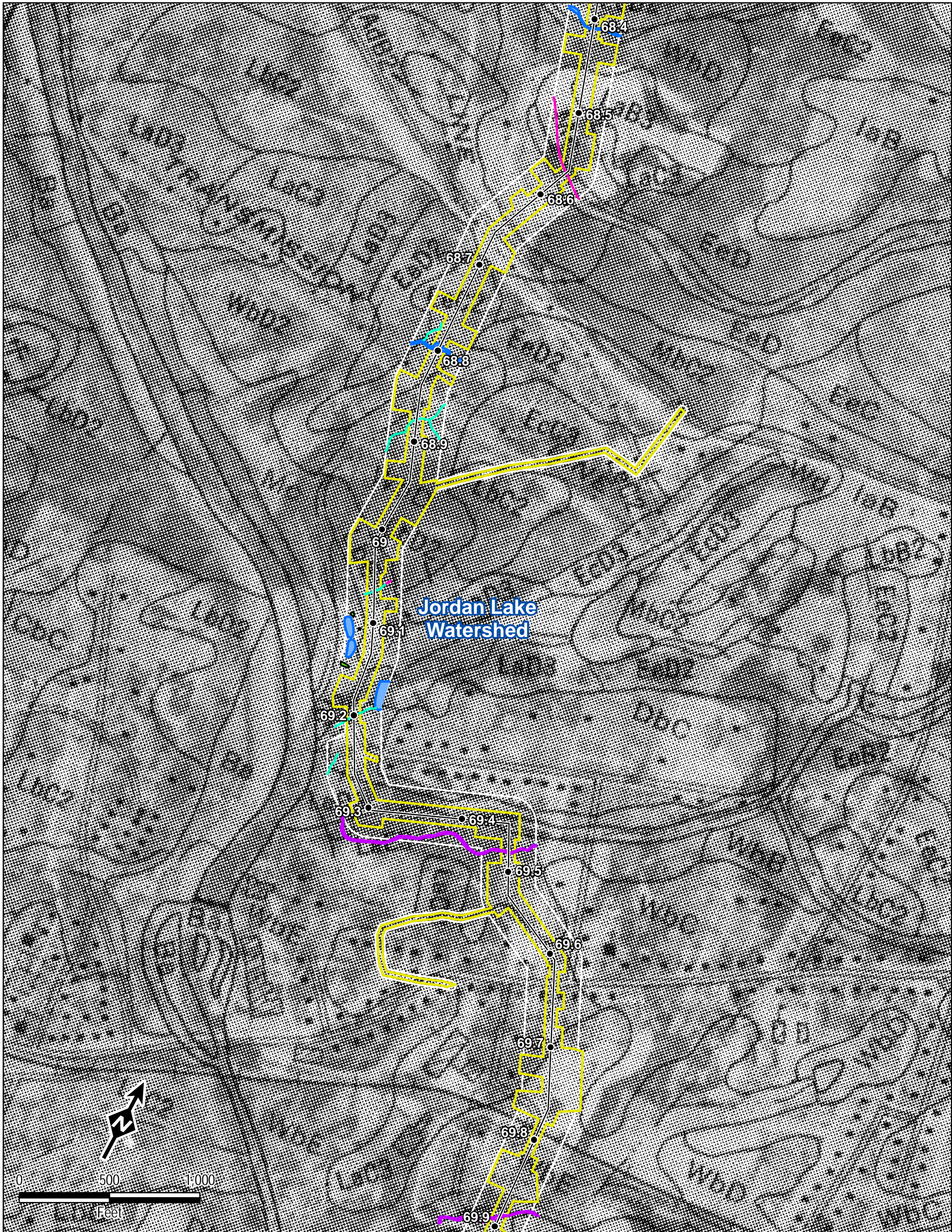
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
 Response to Additional Information

Alamance County, NC
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019



Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
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- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17



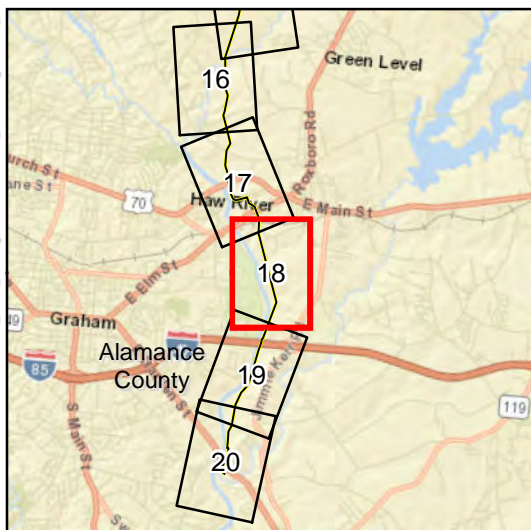
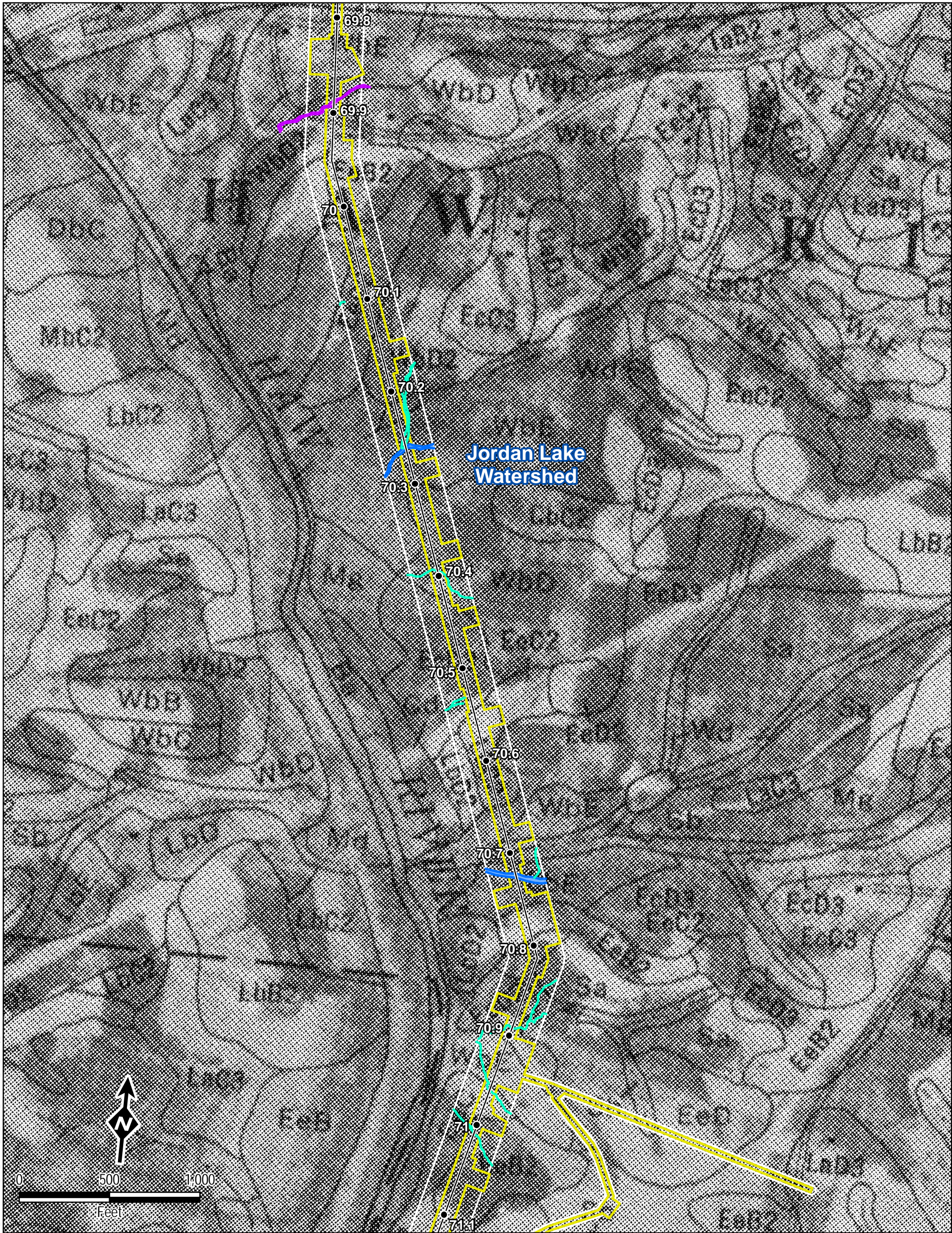
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
 Response to Additional Information

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600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019



Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
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Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley
 PIPELINE LLC

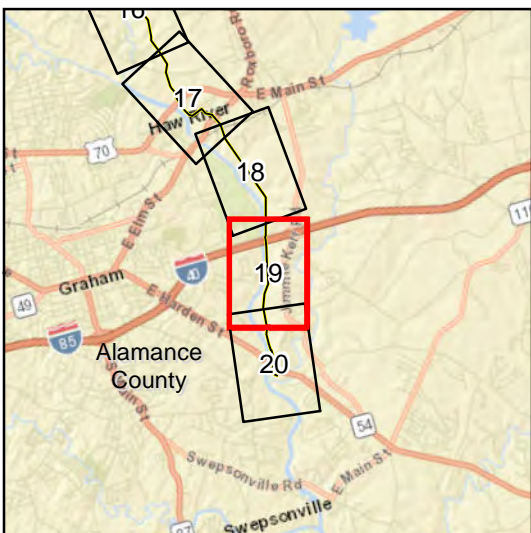
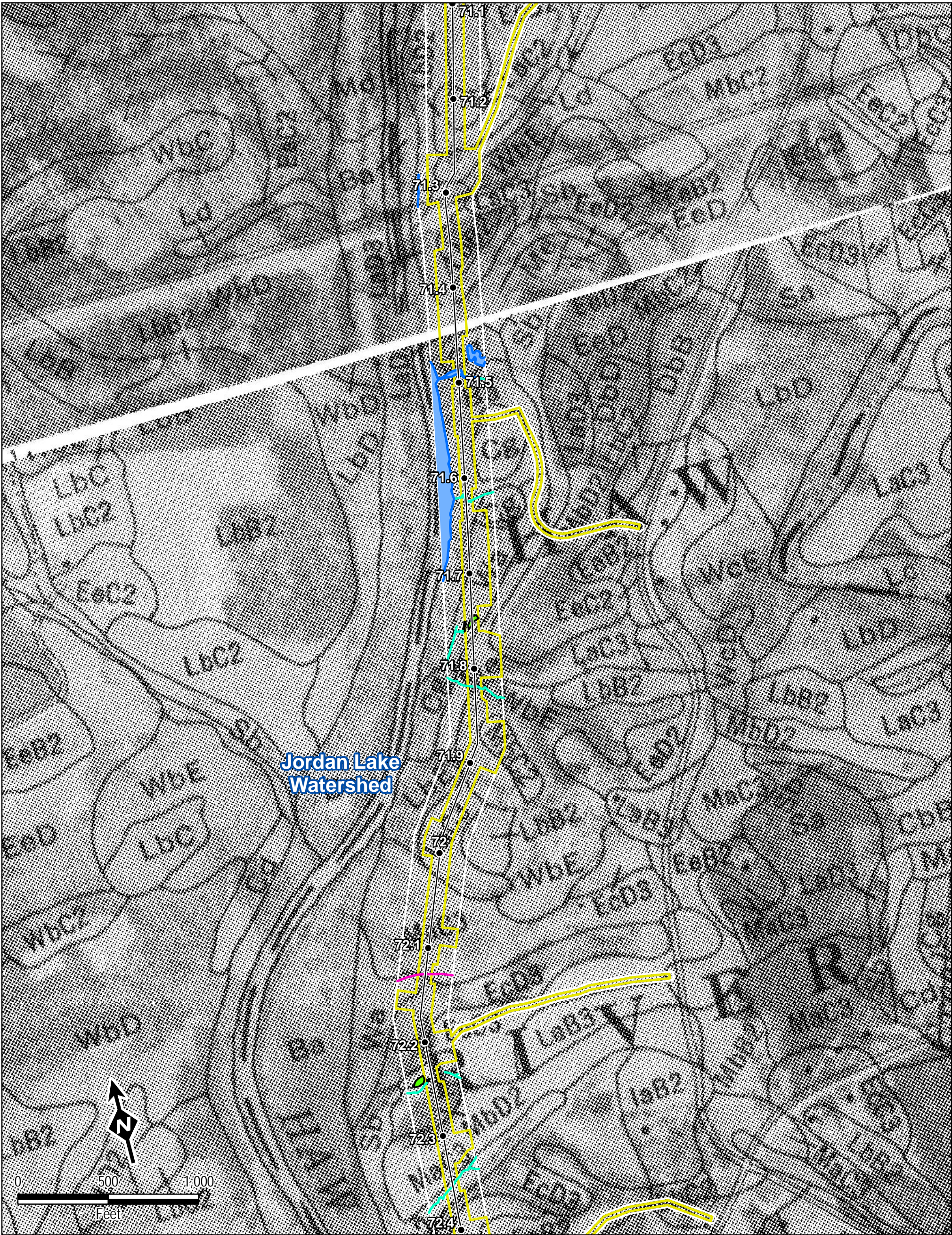
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
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Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
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- ▭ County Boundary

Data Sources: EOT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley PIPELINE LLC

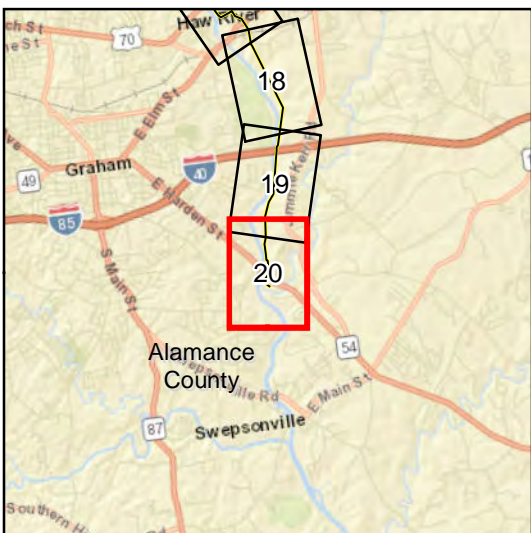
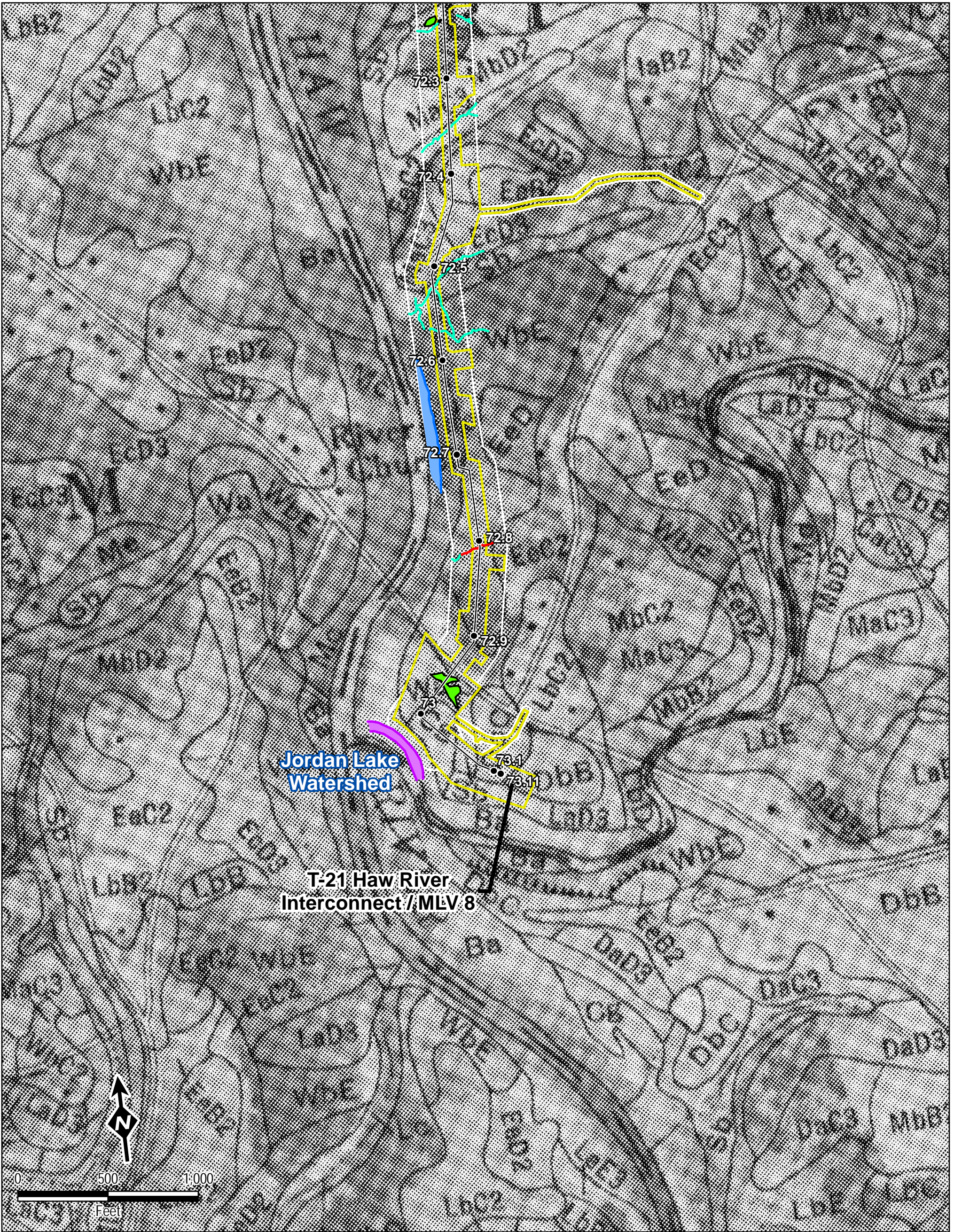
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
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Legend

- Mileposts
- H-650 Pipeline
- ▭ Limits of Construction Right-of-Way
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Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley
 PIPELINE LLC

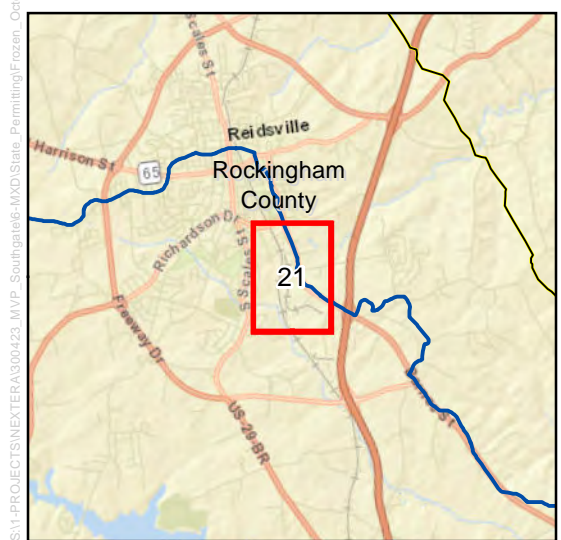
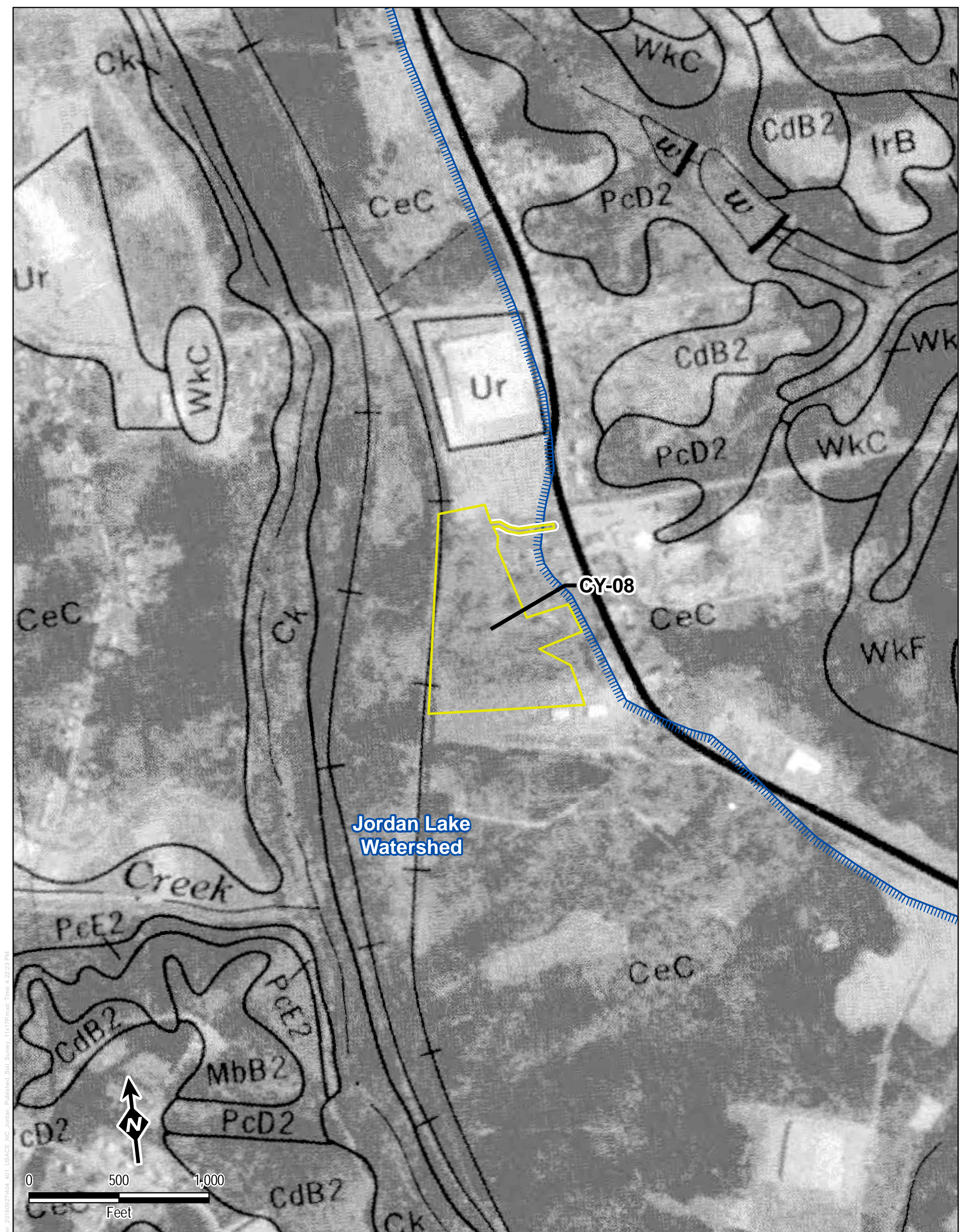
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
- State Removed Resources
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Data Sources: EOT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17

Mountain Valley
 PIPELINE LLC

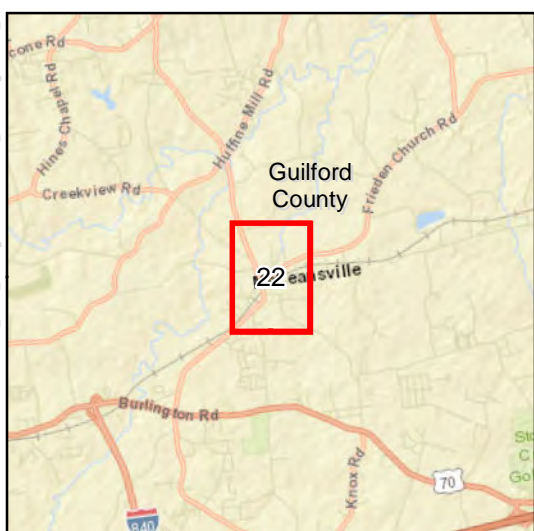
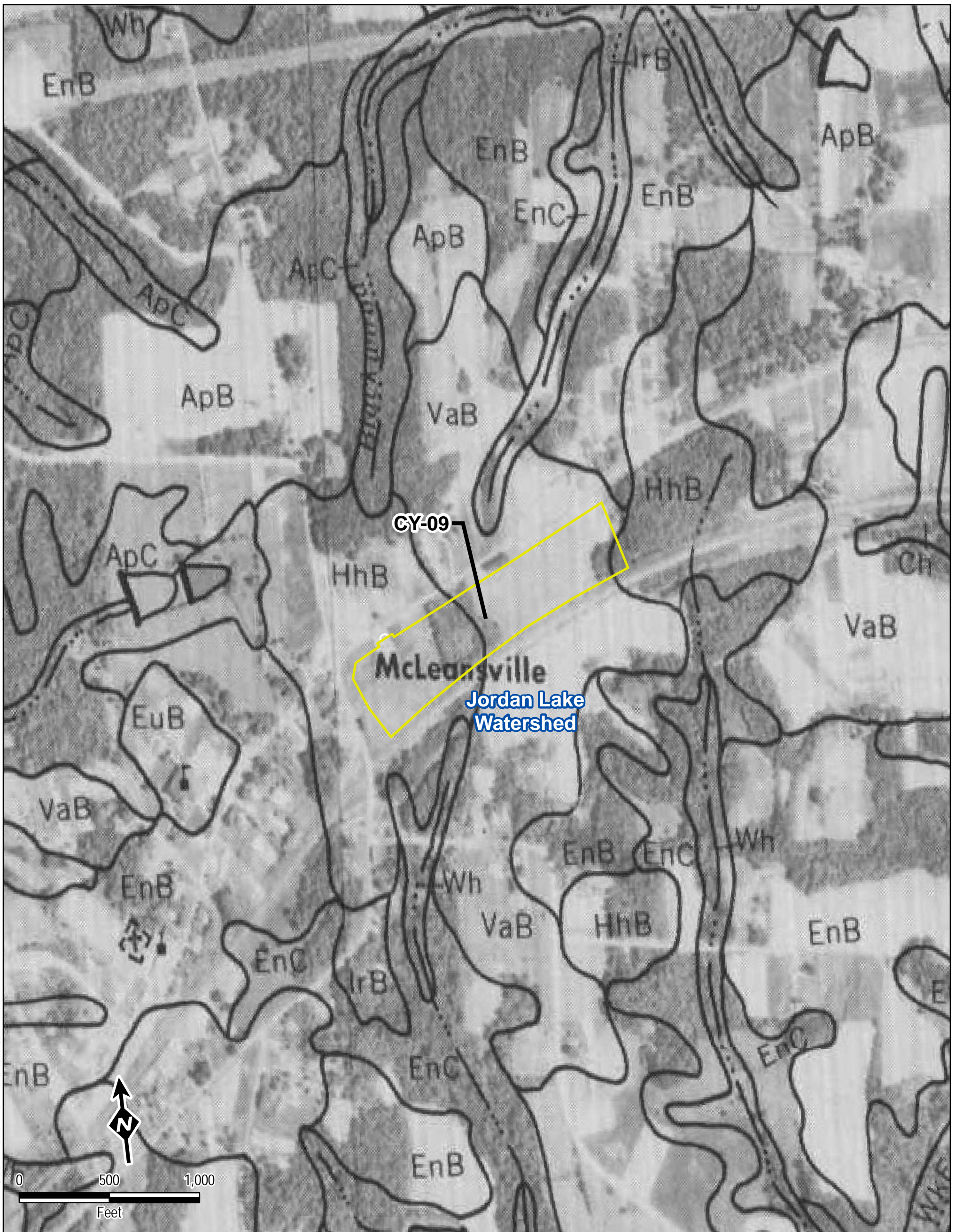
Section 404/401 Permit Application

Jordan Lake Watershed
 Published Soil Survey
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▭ Survey Area
- State Removed Resources
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- ▭ County Boundary

Data Sources: EOT, ESRI, NC OneMap, TRC, USGS
 Basemap: Published Soil Survey Maps

1 inch = 500 feet
 When Printed 11x17



Section 404/401 Permit Application
 Jordan Lake Watershed
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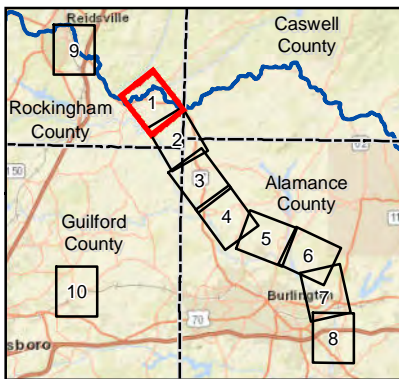
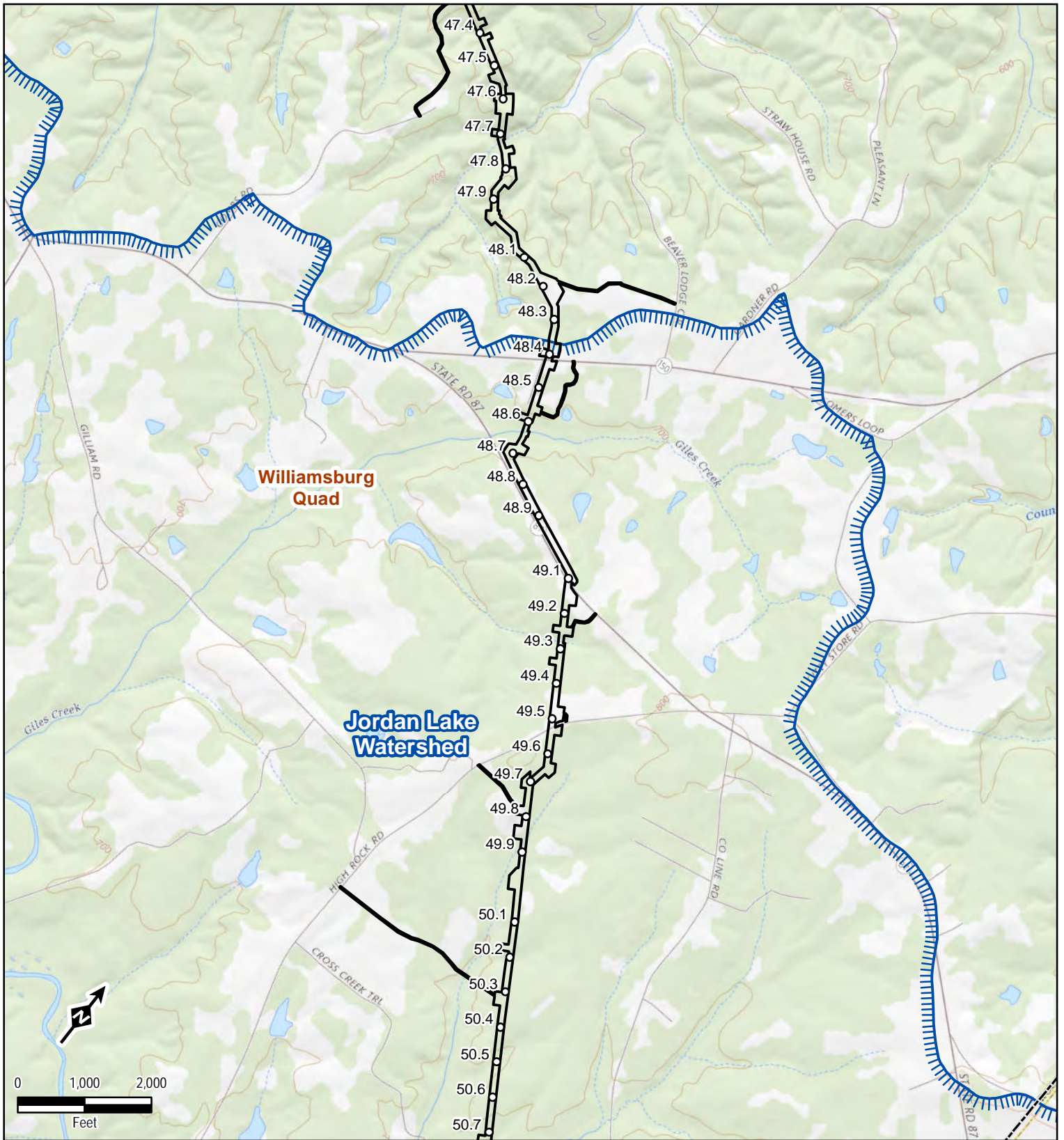


MVP Southgate Project

Attachment C Jordan Watershed USGS Topographic Maps

February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

1 inch = 2,000 feet
 When Printed 8.5x11

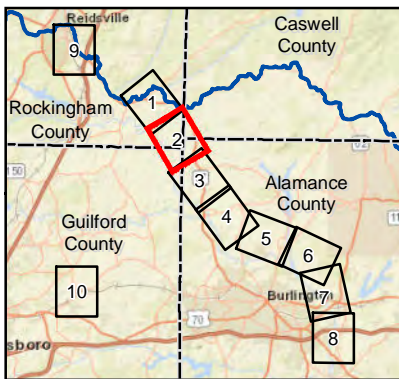
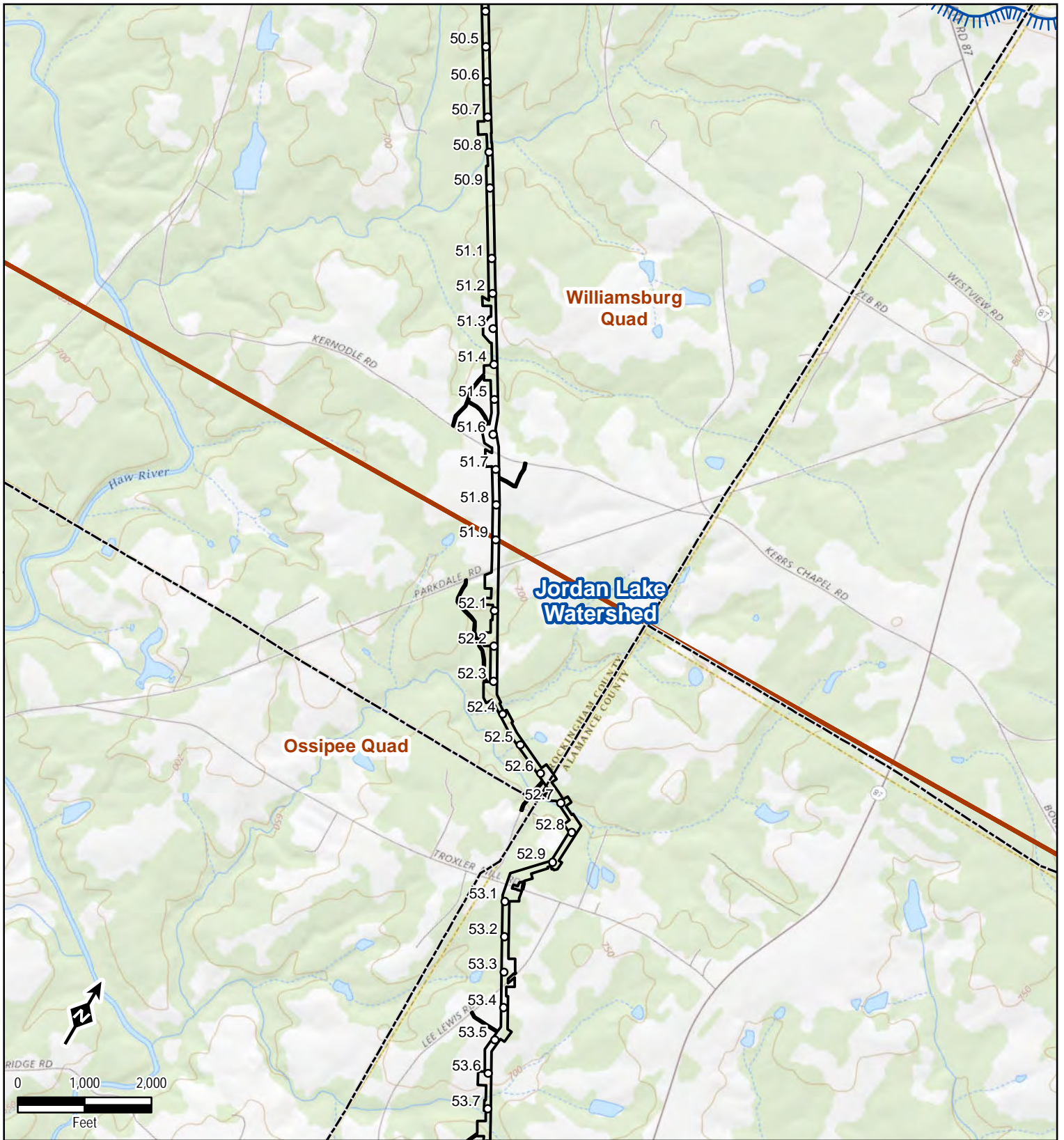
Mountain Valley
 PIPELINE LLC

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 USGS Topographic Quad Maps
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

1 inch = 2,000 feet
 When Printed 8.5x11

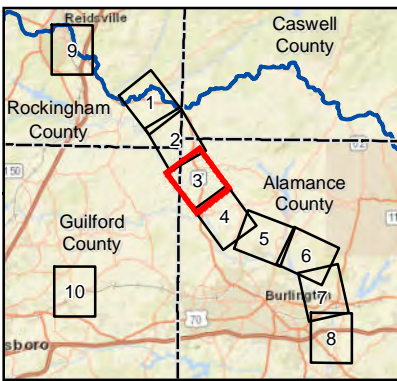
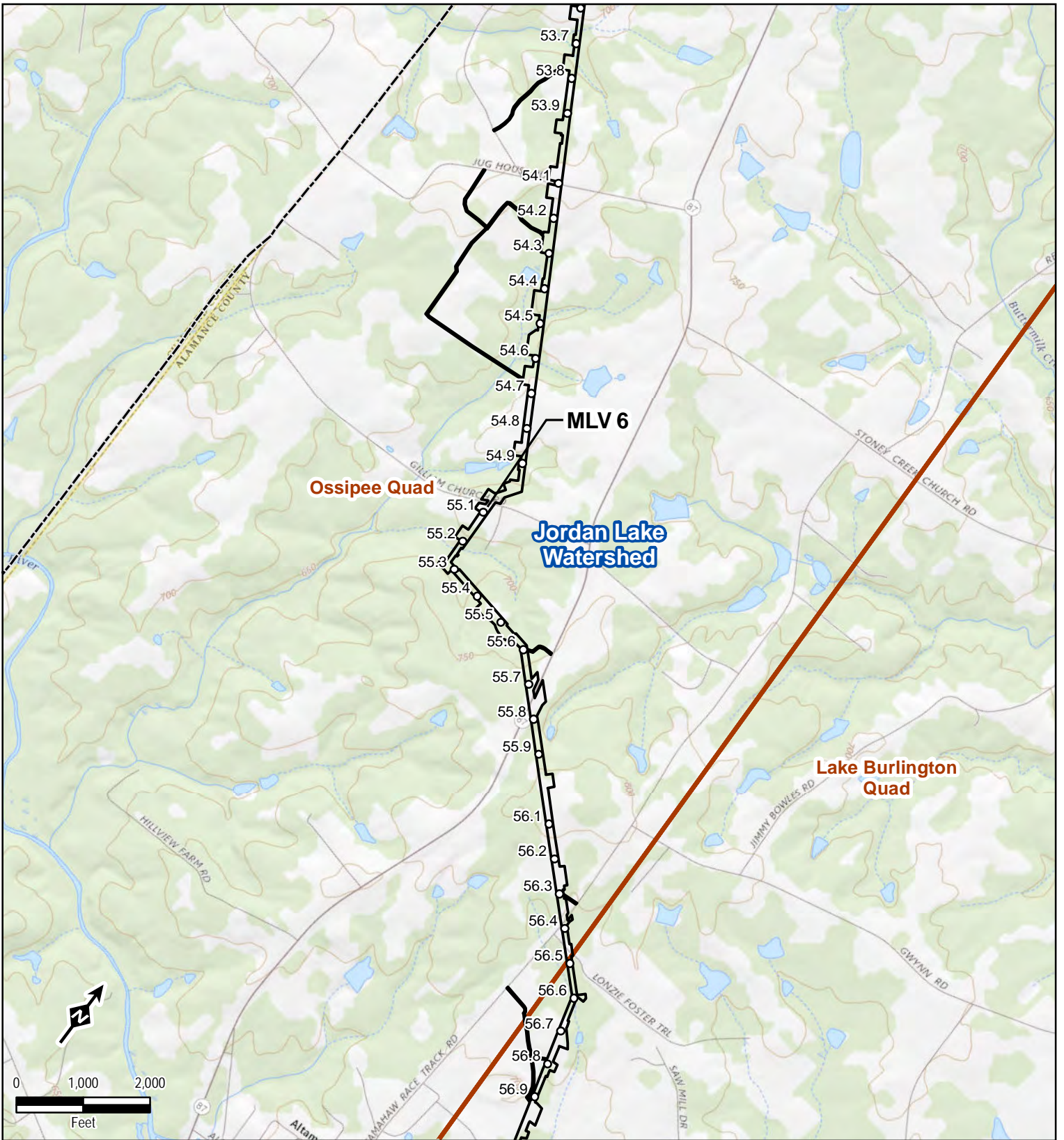
Mountain Valley PIPELINE LLC

Section 404/401 Permit Application
 Jordan Watershed
 USGS Topographic Quad Maps
 Response to Additional Information
 Rockingham, Guilford, & Alamance Counties, NC
 Sheet 2 of 10

TRC
 Resilience you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▭ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

1 inch = 2,000 feet
 When Printed 8.5x11

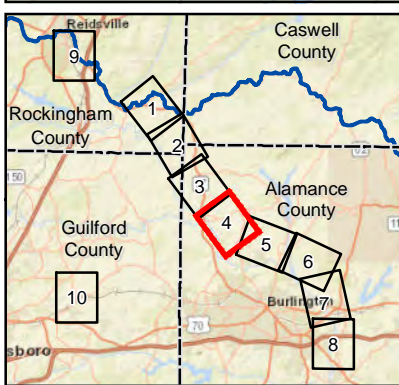
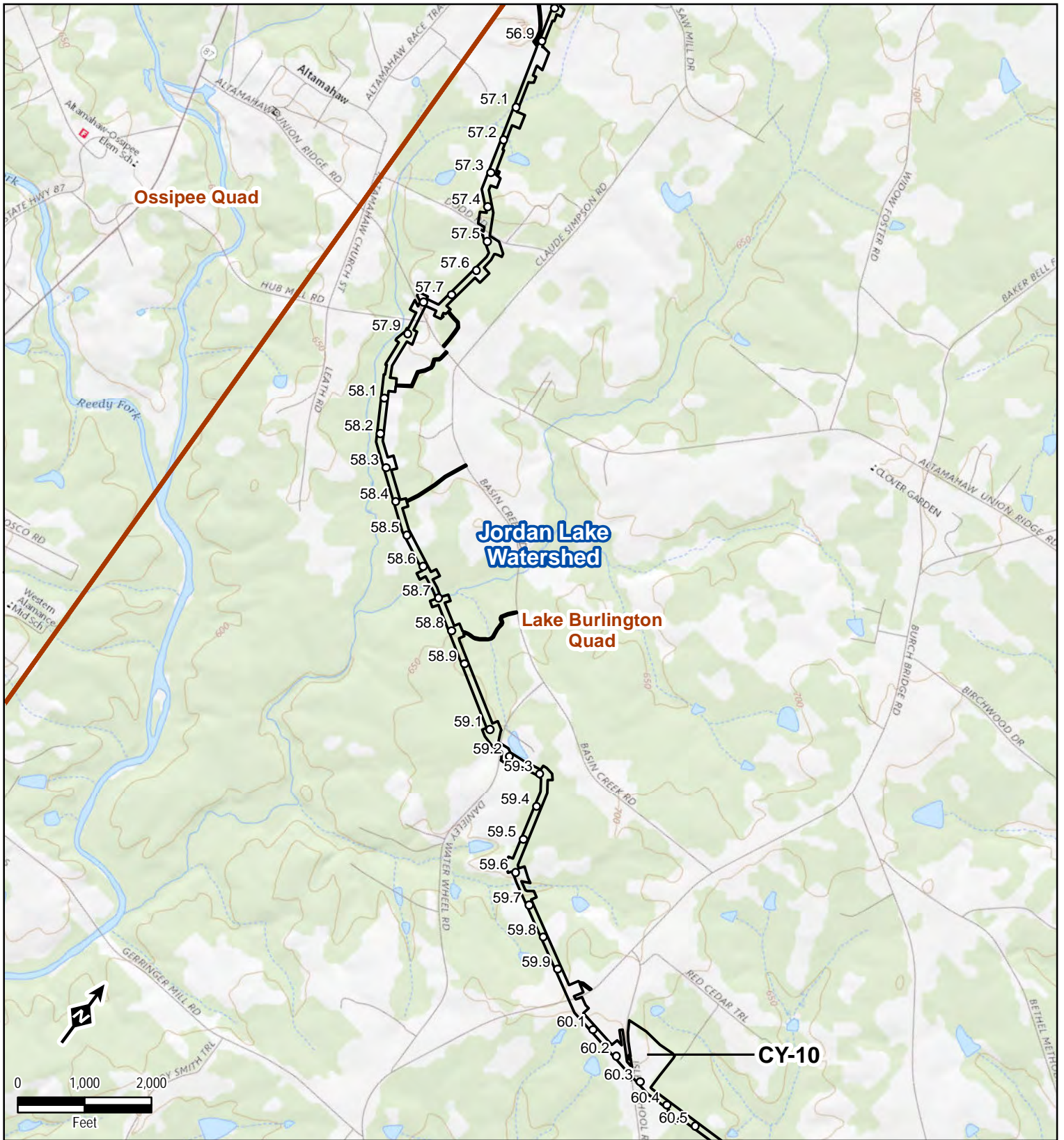
Mountain Valley
 PIPELINE, LLC

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 Jordan Watershed
 USGS Topographic Quad Maps
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TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▭ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

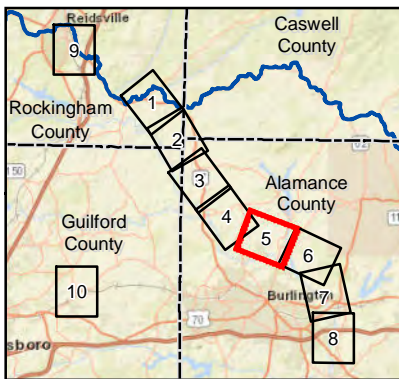
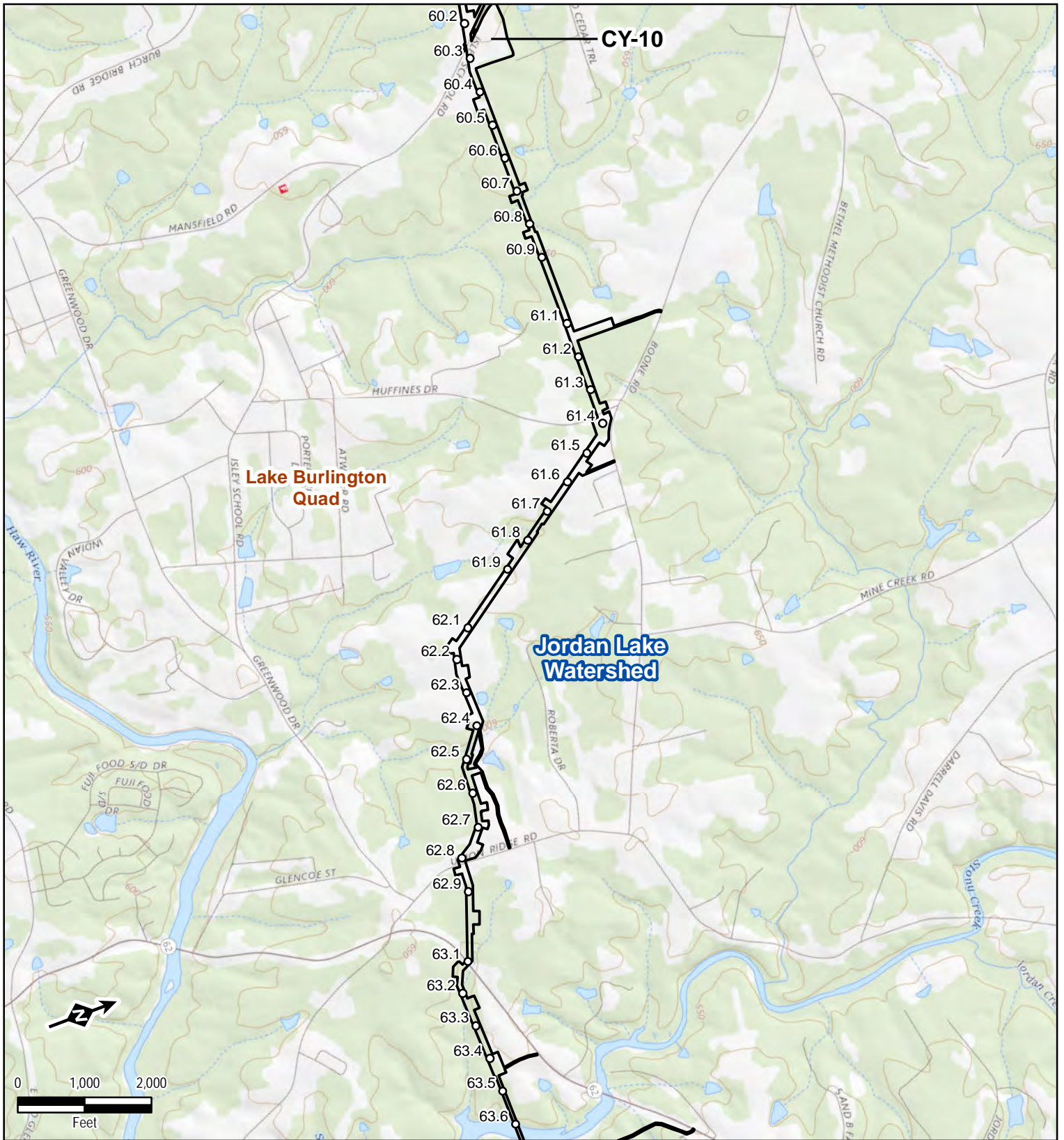
1 inch = 2,000 feet
 When Printed 8.5x11

Mountain Valley PIPELINE LLC

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 Jordan Watershed
 USGS Topographic Quad Maps
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 Alamance County, NC
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TRC Results you can rely on
 600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

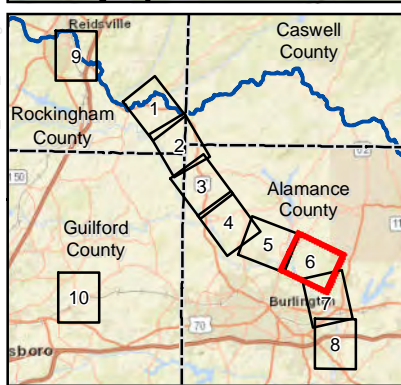
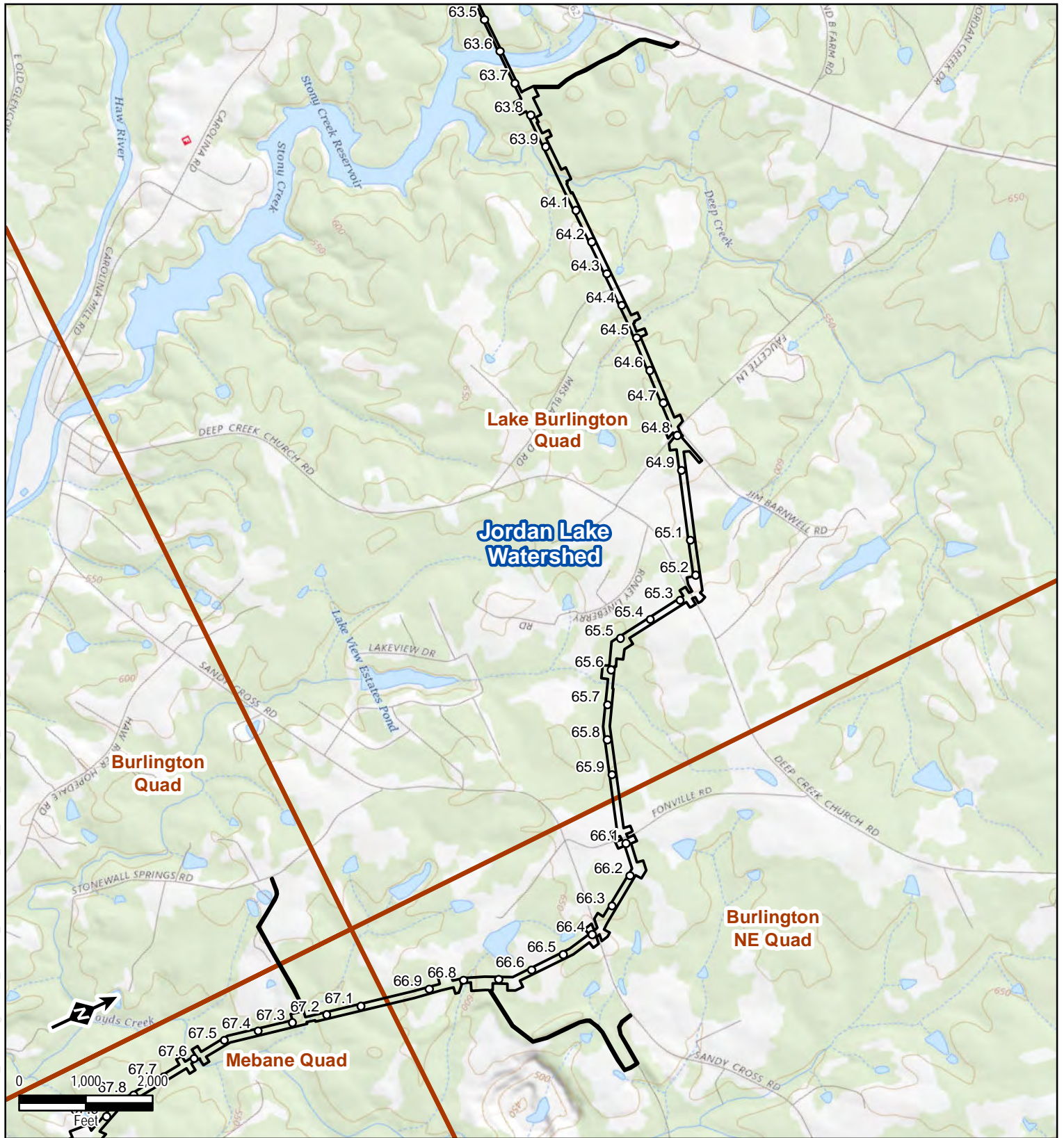
1 inch = 2,000 feet
 When Printed 8.5x11

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 Alamance County, NC
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TRC Resilience you can rely on
 600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

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Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

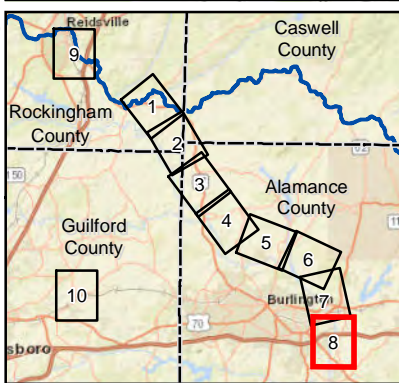
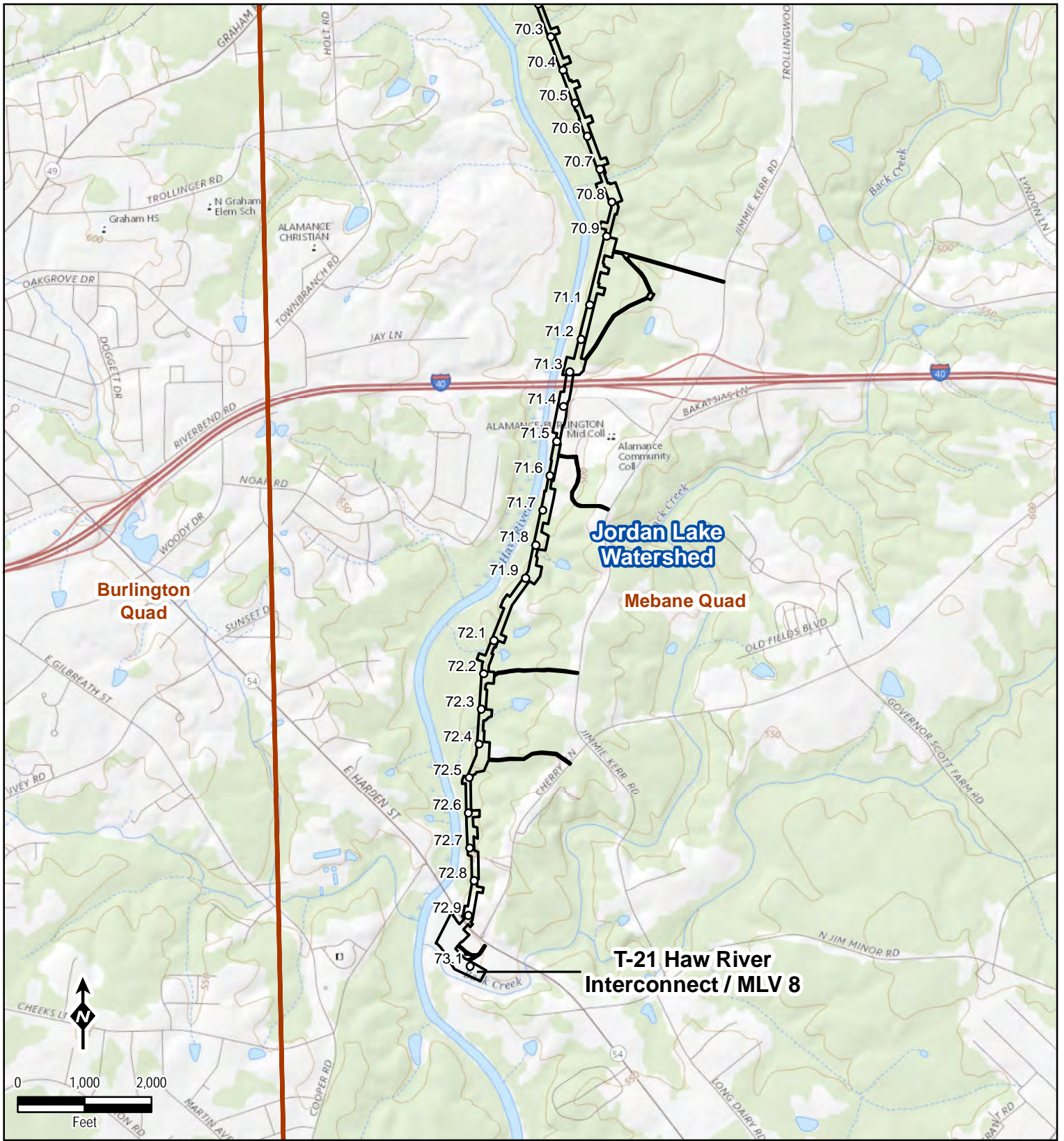
1 inch = 2,000 feet
 When Printed 8.5x11

Mountain Valley PIPELINE LLC

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 Jordan Watershed
 USGS Topographic Quad Maps
 Response to Additional Information
 Alamance County, NC
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TRC
 600 Willowbrook Ln
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 Date: February 2019

SM-PROJECTS\NEXT\ERA\300423_MVP_Southgate\6-MXD\State_Permitt\Frozen_October_2018\0927\404_401_USGS_Quad_NC_Jordan_8x11P.mxd; Time: 4:30:32 PM



Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- ▭ County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

1 inch = 2,000 feet
 When Printed 8.5x11

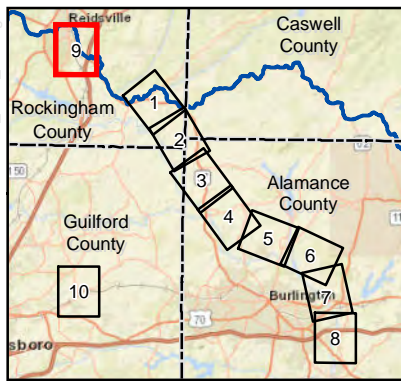
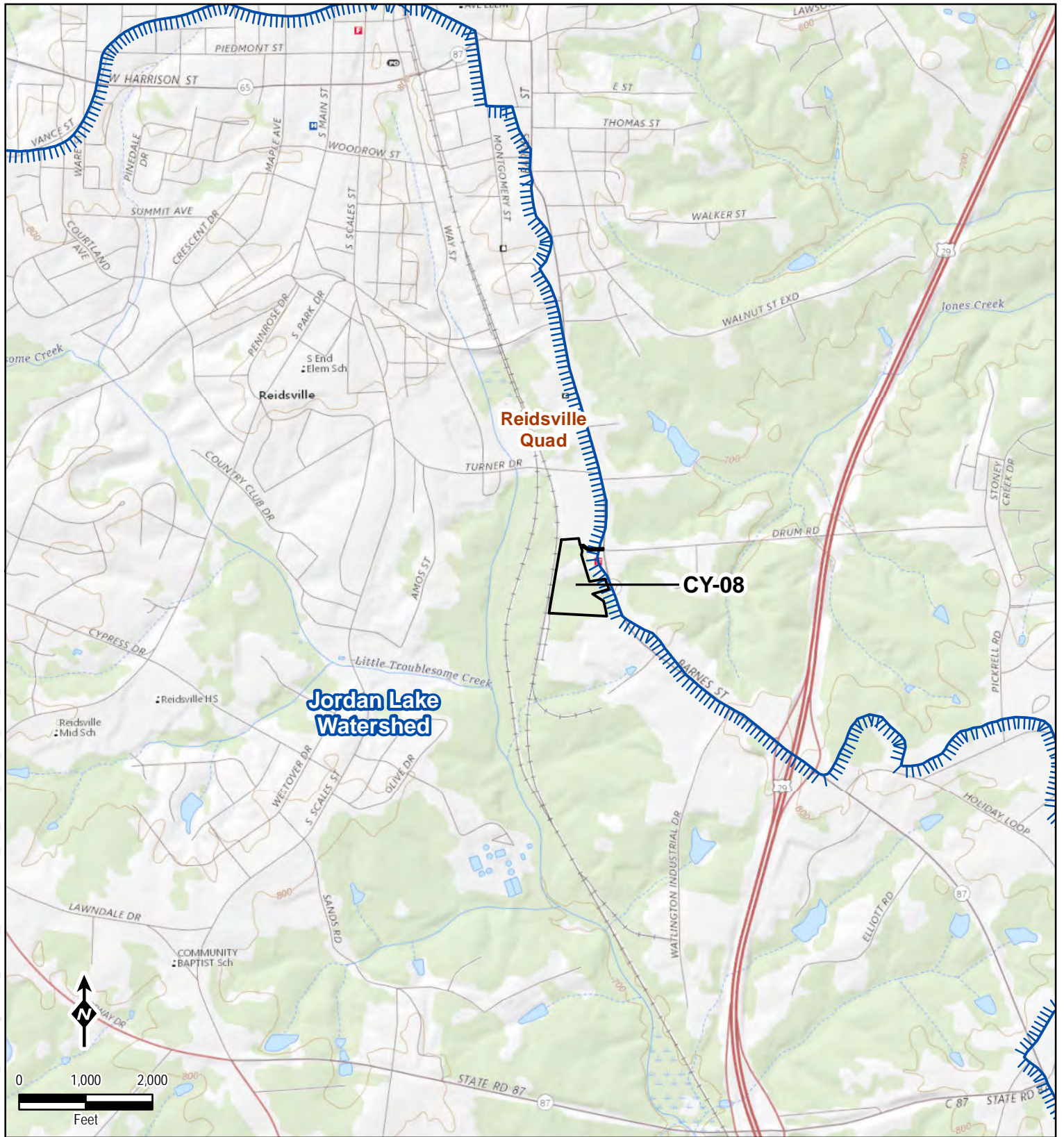
Mountain Valley
 PIPELINE, LLC

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 Jordan Watershed
 USGS Topographic Quad Maps
 Response to Additional Information
 Alamance County, NC
 Sheet 8 of 10

TRC
 Results you can rely on

600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

SM-PROJECTS\NEXT\ERA\300423_MVP_Southgate\6-MXD\State_Permittin\Frozen_October_2019\0927\404_401_USGS_Quad_NC_Jordan_8x11P.mxd; Time: 4:30:35 PM



Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

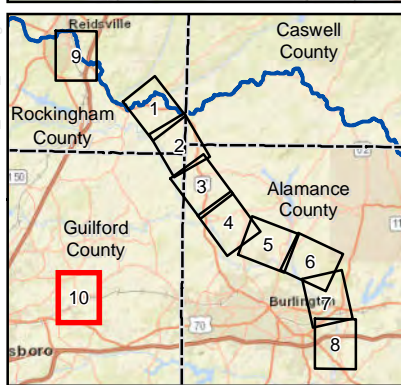
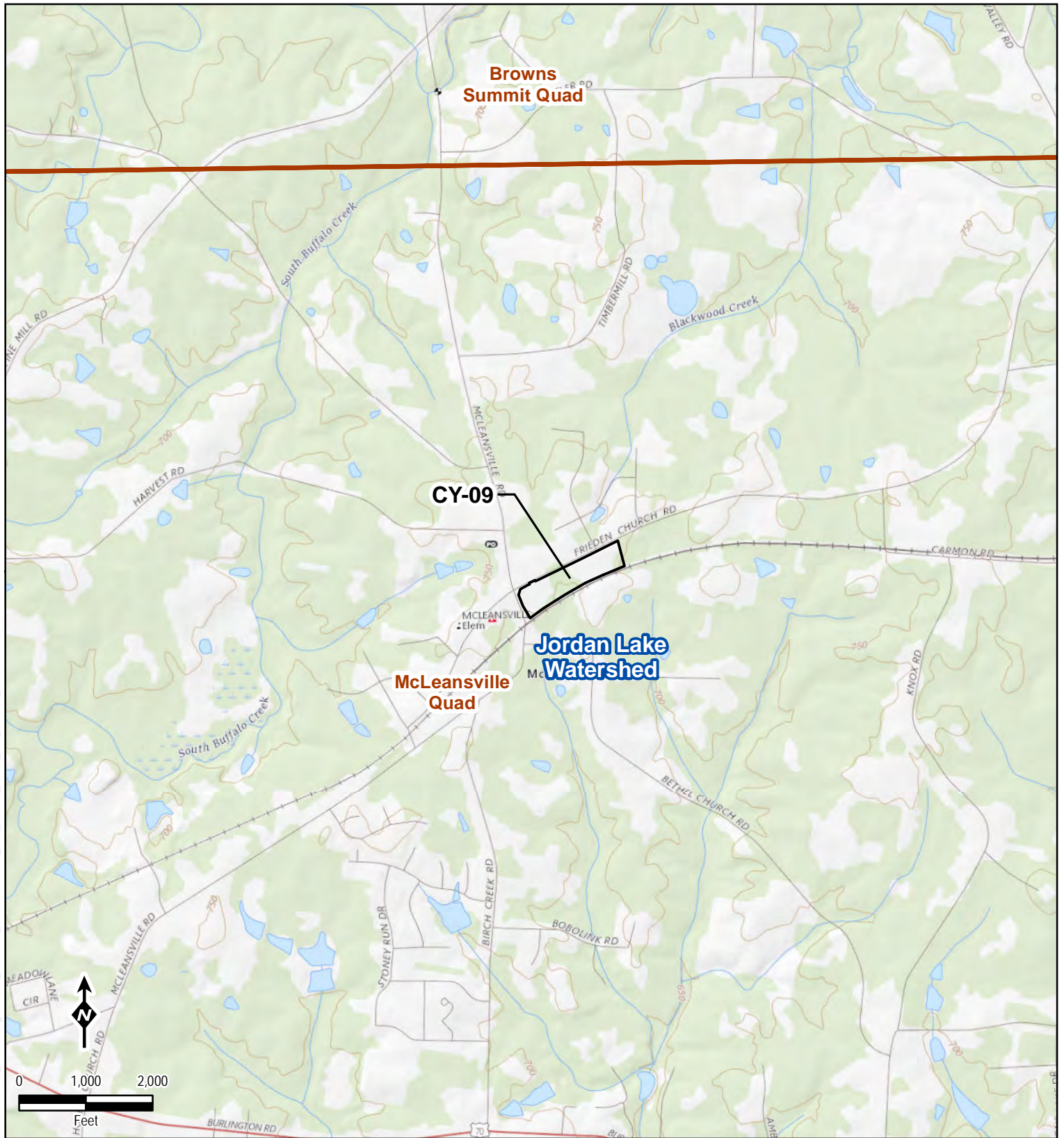
1 inch = 2,000 feet
 When Printed 8.5x11

Mountain Valley PIPELINE LLC

Section 404/401 Permit Application
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 USGS Topographic Quad Maps
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 Rockingham County, NC
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 600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019

SM-PROJECTS\NEXT ERA\300423_MVP_Southgate\6-MXD\State_Permitting\Frozen_October_2018\927404_401_USGS_Quad_NC_Jordan_8x11P.mxd; Time: 4:30:37 PM



Legend

- Mileposts
- ▭ Limits of Construction Right-of-Way
- ▨ Jordan Lake Watershed
- ▭ USGS Topo Quad Boundary
- - - County Boundary

Data Sources: EQT, ESRI, NC OneMap, TRC, USGS
 Basemap: USGS

1 inch = 2,000 feet
 When Printed 8.5x11

Mountain Valley
 PIPELINE LLC

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 USGS Topographic Quad Maps
 Response to Additional Information
 Guilford County, NC
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600 Willowbrook Ln
 West Chester, PA 19382
 Date: February 2019



MVP Southgate Project

Attachment D Mitigation Reserve Letters



Riparian Buffer Credits Statement of Availability
Cape Fear 02 Jordan Lake - *Haw River Subwatershed*

January 31, 2019

Mountain Valley Pipeline LLC
Attn: Matthew Raffenberg
700 Universe Blvd
Juno Beach, FL 33408

RE: Availability of Riparian Buffer Credits for the “MVP Southgate, Rockingham and Alamance Counties, NC” project
Bank Name: UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank
Bank Sponsor: Wildlands Holdings, IV, LLC
DWR Project Number: 2017-0886v2
Permittee: Mountain Valley Pipeline LLC
Riparian Buffer Credits Requested: 11.48 acres (500,000 sq. ft.)
Riparian Buffer Credits Available: 3.31 acres (144,074 sq. ft.)
Cape Fear 03030002 River Basin

Dear Mr. Raffenberg:

Wildlands Holdings IV, LLC currently has sufficient riparian Buffer credits from the **UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank** to satisfy a large portion of the riparian buffer mitigation requirements related to the above-mentioned project (including the attached South Fork SOA). The project is located within the service area (HUC **03030002**) of the Bank.

Please note: In the next several months, Wildlands Holdings IV, LLC anticipates receiving an additional **165,441 sq. ft** in forthcoming credit releases for the UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank, which in addition to the attached South Fork SOA should provide enough credits to meet the entire need of this project.

This letter is simply a statement of availability of credits as of the date written. Although current inventory is high, the letter is not a guarantee of availability as credits will be sold on a first come, first serve basis. An invoice for this transaction will be sent upon your request and we will formally reserve both the credits and price quoted for a period of 30 days from the invoice at no cost.

Final transfer of the credits will be made upon receipt of a copy of the 401 Water Quality Certification Authorization Certificate from the NC Department of Environmental Quality approving the Riparian Buffer mitigation purchase from the Bank and upon receipt of your payment to Wildlands Holding III,



LLC. We will then issue a credit transfer certificate verifying your credit purchase to the North Carolina Division of Water Resources and to you for your records

We appreciate the opportunity to assist you with your mitigation requirements. Please contact me at 205-807-0800 or ihazelhoff@wildlandseng.com if you have any questions or need any additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ian M. Hazelhoff".

Ian M. Hazelhoff
Wildlands Engineering, Inc.
Land Acquisition
ihazelhoff@wildlandseng.com
O: (704) 332-7754 ex. 120
M: (205) 807-0800

Cc: Kevin Martin, Soil and Environmental Consultants, PA



**Riparian Buffer Credits Statement of Availability
Cape Fear 02 Jordan Lake - *Haw River Subwatershed***

January 31, 2019

Mountain Valley Pipeline LLC
Attn: Matthew Raffenberg
700 Universe Blvd
Juno Beach, FL 33408

RE: Availability of Riparian Buffer Credits for the “MVP Southgate, Rockingham and Alamance Counties, NC” project
Bank Name: UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank
Bank Sponsor: Wildlands Holdings, IV, LLC
DWR Project Number: 2017-0886v2
Permittee: Mountain Valley Pipeline LLC
Riparian Buffer Credits Requested: 11.48 acres (500,000 sq. ft.)
Riparian Buffer Credits Available: 3.31 acres (144,074 sq. ft.)
Cape Fear 03030002 River Basin

Dear Mr. Raffenberg:

Wildlands Holdings IV, LLC currently has sufficient riparian Buffer credits from the **UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank** to satisfy a large portion of the riparian buffer mitigation requirements related to the above-mentioned project (including the attached South Fork SOA). The project is located within the service area (HUC **03030002**) of the Bank.

Please note: In the next several months, Wildlands Holdings IV, LLC anticipates receiving an additional **165,441 sq. ft** in forthcoming credit releases for the UT to Pine Hill Branch Nutrient Offset & Buffer Mitigation Bank, which in addition to the attached South Fork SOA should provide enough credits to meet the entire need of this project.

This letter is simply a statement of availability of credits as of the date written. Although current inventory is high, the letter is not a guarantee of availability as credits will be sold on a first come, first serve basis. An invoice for this transaction will be sent upon your request and we will formally reserve both the credits and price quoted for a period of 30 days from the invoice at no cost.

Final transfer of the credits will be made upon receipt of a copy of the 401 Water Quality Certification Authorization Certificate from the NC Department of Environmental Quality approving the Riparian Buffer mitigation purchase from the Bank and upon receipt of your payment to Wildlands Holding III,



LLC. We will then issue a credit transfer certificate verifying your credit purchase to the North Carolina Division of Water Resources and to you for your records

We appreciate the opportunity to assist you with your mitigation requirements. Please contact me at 205-807-0800 or ihazelhoff@wildlandseng.com if you have any questions or need any additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ian M. Hazelhoff".

Ian M. Hazelhoff
Wildlands Engineering, Inc.
Land Acquisition
ihazelhoff@wildlandseng.com
O: (704) 332-7754 ex. 120
M: (205) 807-0800

Cc: Kevin Martin, Soil and Environmental Consultants, PA



Statement of Mitigation Credit Availability

February 1, 2019

Division of Water Resources

Re: Availability of Compensatory Riparian Buffer Credits
Project: MVP Southgate Project – Rockingham & Alamance Counties, NC

We are providing this letter in accordance with 33 CFR §332.8(r), to confirm that the below table of **Riparian Buffer Mitigation Credits** (Credits) from the listed banks (Banks) are currently available and may be used, once transferred, for compensatory mitigation relative to the **MVP Southgate** project, and as proposed by **Mountain Valley Pipeline, LLC** (Applicant).

Bank Name	Amount of Credits
Bass Mountain	91,388.00
Benton Branch	77,568.42
Motes Creek	183,520.44
Orphan Creek	63,943.40
Rocky Top	54,353.93
TOTAL	470,774.19

The Applicant may ultimately purchase the Credits, if they are available, following Permit issuance. Should the Applicant purchase the Credits at that time, we will complete and execute the Compensatory Mitigation Responsibility Transfer Form (Transfer Form) within five (5) days of receipt of the full purchase price.

We will additionally provide copies of the completed and executed Transfer Form to the Applicant and, if needed, other regulatory agencies. Transaction information in the updated Bank Ledger will include relevant Permit and Applicant information as well as the number and resource type of the debited Credits.

Should your office have any questions, please contact me at 919.334.9123.

Sincerely,

Tiffani Bylow
Restoration Systems, LLC

Hamberg, Alexis

From: Miller, Alex
Sent: Thursday, January 3, 2019 12:37 PM
To: sue.white@ncdenr.gov
Subject: MVP Southgate Route
Attachments: MVP_Southgate_FERC Filing Route_11.6.2018.kmz

Hello Ms. White,

Thank you for reaching out to me this afternoon. Attached is a kmz file so you can review the currently proposed route of the MVP Southgate Project. This is FERC regulated project so they will ultimately decide the pipeline route if the project is approved. I will add you to our stakeholder list so that you will be updated with project changes. The only reservoir that we currently go under is Stony Creek Reservoir around MP 63. Additional information can be found on our website: www.mvpsouthgate.com.

Please confirm you were able to load the route and feel free to reach out to me again with any questions you might have.

Regards,

Alex V. Miller

Environmental Permitting Lead
on behalf of Mountain Valley Pipeline, LLC
713-374-1599



From: Homewood, Sue [<mailto:sue.homewood@ncdenr.gov>]
Sent: Tuesday, December 11, 2018 11:20 AM
To: Kevin Martin <kmartin@sandec.com>
Cc: Higgins, Karen <karen.higgins@ncdenr.gov>
Subject: RE: [External] perpendicular

Hello Kevin,

That's an accurate representation of how I've calculated the angle for "perpendicular crossings" for utility lines and transportation facilities.

Thanks,

Sue Homewood
Division of Water Resources, Winston Salem Regional Office Department of
Environmental Quality

336 776 9693 office
336 813 1863 mobile
Sue.Homewood@ncdenr.gov

450 W. Hanes Mill Rd, Suite 300
Winston Salem NC 27105

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-----Original Message-----

From: Kevin Martin <kmartin@sandec.com>
Sent: Monday, December 10, 2018 5:13 PM
To: Homewood, Sue <sue.homewood@ncdenr.gov>
Subject: [External] perpendicular

From: Homewood, Sue [<mailto:sue.homewood@ncdenr.gov>]
Sent: Thursday, January 3, 2019 8:22 AM
To: Kevin Martin <kmartin@sandec.com>
Cc: Higgins, Karen <karen.higgins@ncdenr.gov>
Subject: RE: [External] variance exhibits for variance

Hello Kevin,

We agree.

Thanks,

Sue Homewood
Division of Water Resources, Winston Salem Regional Office
Department of Environmental Quality

336 776 9693 office
336 813 1863 mobile
Sue.Homewood@ncdenr.gov

450 W. Hanes Mill Rd, Suite 300
Winston Salem NC 27105

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From: Kevin Martin <kmartin@sandec.com>
Sent: Wednesday, January 2, 2019 3:48 PM
To: Homewood, Sue <sue.homewood@ncdenr.gov>; Higgins, Karen <karen.higgins@ncdenr.gov>
Subject: [External] variance exhibits for variance

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Do you all agree that for the variance MVP Southgate, only the crossings that require a variance should be submitted for the variance package (not all the others)? If all are shown I am afraid it will cause confusion. They will show all crossings on an overall map that individually indicates the ones that are before the EMC for a variance. thanks

Kevin C. Martin
Principal
Soil & Environmental Consultants, PA
North Quarter Office Park

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Sue, does this sketch appear to demonstrate the approach you have used when determining if a crossing is perpendicular (between 75 and 105 degrees)? I think so just want to be sure I understood correctly. Thanks

Kevin C. Martin
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Contact Report for Sue Homewood

Contact ID 594	
Contact Status	Completed
Priority Level	Medium
Contact Date	01/10/2019
Type of Contact	Email
Type of Issue	No Issues were indentified with this contact
Issue Comments	<p>Hi Karen and Sue, Do you have time to discuss with a few of us our understanding of the Jordan variance process and application next week? We are currently running through some different scenarios and need some clarification on our interpretations. Please let me know if there is an hour next week that we can get together via Skype and look at some mapping. Thank you for your time, Alex Alex V. Miller Environmental Permitting Lead on behalf of Mountain Valley Pipeline, LLC 713-374-1599 [MVP Southgate Official Image - re-sized]</p>
Contacted By	N/A
Attachments	There are no files attached to this contact.
There are no followups for this contact.	

Hamberg, Alexis

From: Miller, Alex
Sent: Friday, February 1, 2019 3:14 PM
To: Hamberg, Alexis
Subject: FW: [External] Jordan buffer question

Please log

From: Homewood, Sue [<mailto:sue.homewood@ncdenr.gov>]
Sent: Wednesday, January 30, 2019 4:37 PM
To: Kevin Martin <kmartin@sandec.com>
Cc: Higgins, Karen <karen.higgins@ncdenr.gov>
Subject: RE: [External] Jordan buffer question

Hello Kevin,

Good catch, for some reason I had thought that Session Law was specific to sewer lines but it appears to apply to gas utility lines in Zone 2 also. Also, In reading Footnote #4 again, since it states that *"If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the local government, as defined in Item (11) of this Rule."* We do not believe that Footnote 4 would require a variance. So only Zone 1 impacts that cannot meet Footnote #1 would trigger the variance.

Thanks,

Sue Homewood

Division of Water Resources, Winston Salem Regional Office
Department of Environmental Quality

336 776 9693 office

336 813 1863 mobile

Sue.Homewood@ncdenr.gov

450 W. Hanes Mill Rd, Suite 300

Winston Salem NC 27105

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From: Kevin Martin <kmartin@sandec.com>
Sent: Wednesday, January 30, 2019 11:47 AM
To: Homewood, Sue <sue.homewood@ncdenr.gov>
Cc: Higgins, Karen <karen.higgins@ncdenr.gov>
Subject: [External] Jordan buffer question

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Karen and Sue, more info on my zone 2 no mitigation and not requiring a variance question, in addition to the rules it is also based on the Jordan Lake Rules session law that states:

SECTION 2.(b) Protection of Existing Riparian Buffers Rule. – Until the effective date of the revised permanent rule that the Commission is required to adopt pursuant to Section 2(d) of this act, the Commission and the Department shall implement the Protection of Existing Riparian Buffers Rule as provided in Section 2(c) of this act. SECTION 2.(c) Implementation. – The Protection of Existing Riparian Buffers Rule shall be implemented as follows: (1) Notwithstanding the Table of Uses set out in subdivision (9) of the Protection of Existing Riparian Buffers Rule, **utility, nonelectric, other than perpendicular crossings that have impacts only in Zone Two shall be categorized as exempt**

Kevin C. Martin

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From: Kevin Martin

Sent: Wednesday, January 30, 2019 6:58 AM

To: Homewood, Sue <sue.homewood@ncdenr.gov>

Cc: Higgins, Karen <karen.higgins@ncdenr.gov>

Subject: Jordan buffer question

Sue sorry but I am still confused, did you agree nonperpendicular zone 2 only crossings do not require a variance and do not require mitigation? Because I realize that the #4 footnote applies to all non perpendicular crossings but from a practical point I thought footnote 4 only applied to how you worked in Zone one since it specifically says

4

Provided that, **in Zone One**, all of the following BMPs for underground utility lines are used. If all

of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the local government, as defined in Item (11) of this Rule.

.

Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.

.

Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench where trees are cut.

.

Underground cables shall be installed by vibratory plow or trenching.

.

The trench shall be backfilled with the excavated soil material immediately following cable installation.

.

No fertilizer shall be used other than a one-time application to re-establish vegetation.

.

Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.

.

Measures shall be taken upon completion of construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.

.

In wetlands, mats shall be utilized to minimize soil disturbance.

Kevin C. Martin

Principal

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From: Homewood, Sue [<mailto:sue.homewood@ncdenr.gov>]

Sent: Tuesday, January 29, 2019 9:06 PM

To: Kevin Martin <kmartin@sandec.com>

Cc: Higgins, Karen <karen.higgins@ncdenr.gov>

Subject: Re: [External] Jordan buffer question

Footnote 4 applies to all "other than perpendicular crossings". Footnote 1 applies to zone 1 only impacts.

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Kevin Martin <kmartin@sandec.com>

Date: 1/29/19 5:55 PM (GMT-05:00)

To: "Homewood, Sue" <sue.homewood@ncdenr.gov>

Cc: "Higgins, Karen" <karen.higgins@ncdenr.gov>

Subject: RE: [External] Jordan buffer question

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Thanks for the quick reply, so to be sure I am following this, a parallel impact in zone 2 is "Allowable" and does not require a variance or mitigation since the footnotes triggering the variance apply to what is happening in Zone 1. But a parallel impact in Zone 1 does require a variance because we have been told the proposed pipeline project cannot comply with all the conditions in footnote 4, Correct?

Kevin C. Martin

Principal

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From: Homewood, Sue [<mailto:sue.homewood@ncdenr.gov>]

Sent: Tuesday, January 29, 2019 5:32 PM

To: Kevin Martin <kmartin@sandec.com>

Cc: Higgins, Karen <karen.higgins@ncdenr.gov>

Subject: RE: [External] Jordan buffer question

Kevin,

Please see our response below in **red text**.

Thanks,

Sue Homewood

Division of Water Resources, Winston Salem Regional Office

Department of Environmental Quality

336 776 9693 office

336 813 1863 mobile

Sue.Homewood@ncdenr.gov

450 W. Hanes Mill Rd, Suite 300

Winston Salem NC 27105

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From: Kevin Martin <kmartin@sandec.com>

Sent: Tuesday, January 29, 2019 4:04 PM

To: Homewood, Sue <sue.homewood@ncdenr.gov>; Higgins, Karen <karen.higgins@ncdenr.gov>

Subject: [External] Jordan buffer question

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Sue & Karen, I am dealing with a few crossings on the MVP project and want to be sure how to deal with a couple situations where there is no crossing of the stream but there is a parallel impact to the stream buffer, so here is my take please advise if you agree. I understand, like everything else you may have to run this by others.

If impacts just zone 2 and the area is revegetated I think it is exempt and should not require mitigation since it is clearing and grading in Zone 2,

This question has come up before and where a specific use is called out in the Table of Uses then the activity would fall under that use. In this case, gas line activities fall under the “utility, non-electric” category within the Table of Uses, not just clearing and grading in Zone 2. The allowances within Zone 1 and Zone 2 are spelled out specifically under this use.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this Rule ^{3,5} : <ul style="list-style-type: none"> • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of riparian buffer 	X	X	X
Utility, non-electric, other than perpendicular crossings ^{4,5} : <ul style="list-style-type: none"> • Impacts in Zone Two • Impacts in Zone One¹ 		X	X

But for Zone 1 in my experience, some agents of the state say any impact to the Zone 1 buffer even if you do not cross the stream is a crossing while others contend if it does not cross the stream it is not a crossing.

Perpendicular crossings are defined within the Table of Uses (footnote 5).

⁵ Perpendicular crossings are those that intersect the surface water at an angle between 75 and 105 degrees.

All other utility, non-electric impacts would fall under “other than perpendicular crossings”. This is different than some of the other buffer rules that list out “perpendicular” and “parallel”; Jordan lists “perpendicular” and “non-perpendicular”.

Bottom line in either interpretation it would either not qualify with the footnotes for zone 1 impacts if it is a crossing and if it is not a crossing, parallel impacts to Zone 1 do not appear in the table of uses so it is prohibited and requires a variance. Thanks again for your help

Kevin C. Martin

Principal

Soil & Environmental Consultants, PA

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