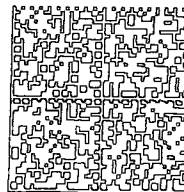


**CERTIFIED MAIL™**

Beth A. Rogers  
Doddridge County Clerk  
Room 102  
118 East Court St.  
West Union, WV 26456



7010 1670 0001 1415 5173



HASLER	015H14112420
	<b>\$6.11</b>
	08/14/13
Mailed From 26456	

US POSTAGE

*WV*

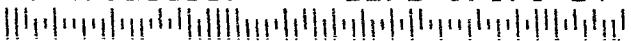
CNG TRANSMISSION/DOMINION  
TRANSMISSION  
625 LIBERTY AV MAIL DROP 1R-01  
PITTSBURG NIXIE

152 7E 1009 0008/30/13

RETURN TO SENDER  
NOT DELIVERABLE AS ADDRESSED  
UNABLE TO FORWARD

15222311  
2645601262

BC: 26456126227 \*1171-07676-14-36



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: **13-063**  
 CNG Transmission/Dominion Tran.  
 625 Liberty Av. Mail Drop 18-01  
 Pittsburgh, PA 15221

2. Article Number  
 (Transfer from service label)

7010 1670 0001 1415 5173

**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

Legal Advertisement:  
Doddridge County  
Floodplain Permit Application

Please take notice that on the 13<sup>th</sup> day of August 2013  
**EQT GATHERING LLC, PERMIT # 13-063** filed an  
application for a Floodplain Permit to develop land located at or  
about: **SURFACE OWNERS: ERIC L. GLASPELL, 47 ACRES, MCCLELLAN  
DISTRICT, DEED BOOK 244 PAGE 179, MAP 24 PARCEL 7.1**

The Application is on file with the Clerk of the County Court and  
may be inspected or copied during regular business hours.

Any interested persons who desire to comment shall present  
the same in writing by **August 20, 2013.**

Delivered to the:  
Clerk of the County Court  
118 E. Court Street, West Union, WV 26456.

Beth A Rogers, Doddridge County Clerk  
Dan Wellings, Doddridge County Flood Plain Manager

**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: **13-063**

Eric L. Glaspell  
6179 WV Rt. 23  
Salem, WV 26426

2. Article Number **7010 1670 0001 1415 5159**  
(Transfer from service label)

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Addressee  
*X E L Glaspell*

B. Received by (Printed Name) **ERIC L. GLASPELL**

C. Date of Delivery **AUG 19 2013**

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

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

4. Restricted Delivery? (Extra Fee)  Yes

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 1670 0001 1415 5166

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$ .46
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 6.11</b>

**WEST UNION WV**  
 Postmark Here **AUG 14 2013**  
 USPS 26456

Sent To **Glenn Underwood ET. AL**  
 Street, Apt. No., or PO Box No. **5860 WV RT. 23**  
 City, State, ZIP+4 **Salem WV 26426**

PS Form 3800, August 2006 See Reverse for Instructions

7010 1670 0001 1415 5159

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$ .46
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 6.11</b>

**WEST UNION WV**  
 Postmark Here **AUG 14 2013**  
 USPS 26456

Sent To **Eric L. Glaspell**  
 Street, Apt. No., or PO Box No. **6179 WV Rt. 23**  
 City, State, ZIP+4 **Salem, WV 26426**

PS Form 3800, August 2006 See Reverse for Instructions

7011 0470 0000 8523 2501

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$ .46
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 6.11</b>

**WEST UNION WV**  
 Postmark Here **AUG 14 2013**  
 USPS 26456

Sent To **Mary L. Glaspell**  
 Street, Apt. No., or PO Box No. **HC 67 Box 120**  
 City, State, ZIP+4 **West Union, WV 26456**

PS Form 3800, August 2006 See Reverse for Instructions

7010 1670 0001 1415 5178

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$ .46
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 6.11</b>

**WEST UNION WV**  
 Postmark Here **AUG 14 2013**  
 USPS 26456

Sent To **CNG Transmission/Dominion Trans.**  
 Street, Apt. No., or PO Box No. **625 Liberty Av. Mail Drop 18-0**  
 City, State, ZIP+4 **Pittsburgh, PA 15221**

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: **13-063**

Mary L. Glaspell  
 HC 67 Box 120  
 West Union, WV 26456

2. Article Number  
 (Transfer from service label)

7011 0470 0000 8523 2501

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

*Mary L. Glaspell*

- 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

UNITED STATES PO.

SERVICE

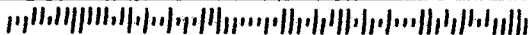


First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

AUG 19 AM 8:13

CLERK  
BETH A ROGERS  
DODDRIDGE COUNTY CLERK  
118 E. COURT ST., RM 102  
WEST UNION, WV 26456



**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: **#13-063**

Glenn Underwood Et. Al  
5860 WV Rt. 23  
Salem, WV 26426

2. Article Number  
(Transfer from service label)**7010 1670 0001 1415 5166****COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X** *Glenn G Underwood*  Agent  
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

*Glenn G Underwood* *8/19/13*

D. Is delivery address different from item 1?  Yes No

If YES, enter delivery address below:

3. Service Type

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

4. Restricted Delivery? (Extra Fee)

 Yes

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

PAID

2013 AUG 16 AM 11:20

BEVERLY BEES  
COUNTY CLERK  
DODDRIDGE COUNTY, WV

BEVERLY A ROGERS  
DODDRIDGE COUNTY CLERK  
118 E. COURT ST., RM 102  
WEST UNION, WV 26456





Doddridge County Sheriff  
Flood Plain Ordinance Fund

1062  
69-217/515


DATE September 17, 2013

PAY TO THE ORDER OF EQT GATHERING LLC

\$ 1,395.72

One Thousand Three Hundred Ninety-Five Dollars and 72/100-----

DOLLARS

 Security features included. Details on back.



*Ralph Dandridge*  
*M. Beth A. Rogers*

MEMO #13-063 (\$941.75) Refund

#13-065 (\$453.97) Refund

⑈001062⑈ ⑆051502175⑆

⑆119649⑈

MP

By: BH - MEH - AML  
Asst. Chief Tax Deputy

W. C .Underwood Jr.  
Sheriff of Doddridge County

The Person paying Money into the Treasury shall forthwith file one of these Receipts with the County Clerk

## Doddridge County, West Virginia

No. 301

Date: August 14, 2013  
\*\*\*Customer copy\*\*\*

Received: #13-063 Eqg Gathering Robinson Fork \$2,000.00

In Payment For: 318 Building Permits (LP)

For: 12-Flood Plain Ordinance #20 Fund

By: BH - MEH - AML  
Asst. Chief Tax Deputy

W. C .Underwood Jr.  
Sheriff of Doddridge County

Legal Advertisement:  
Doddridge County  
Floodplain Permit Application

Please take notice that on the 13<sup>th</sup> day of August 2013  
**EQT GATHERING LLC, PERMIT # 13-063** filed an  
application for a Floodplain Permit to develop land located at or  
about: **SURFACE OWNERS: ERIC L. GLASPELL, 47 ACRES, MCCLELLAN  
DISTRICT, DEED BOOK 244 PAGE 179, MAP 24 PARCEL 7.1**

The Application is on file with the Clerk of the County Court and  
may be inspected or copied during regular business hours.

Any interested persons who desire to comment shall present  
the same in writing by **August 20, 2013.**

*September 2, 2013*

Delivered to the:  
Clerk of the County Court  
118 E. Court Street, West Union, WV 26456.

Beth A Rogers, Doddridge County Clerk  
Dan Wellings, Doddridge County Flood Plain Manager



Legal Advertisement:  
Doddridge County  
Floodplain Permit Application

Please take notice that on the 13<sup>th</sup> day of August 2013

**EQT GATHERING LLC, PERMIT # 13-063** filed an  
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The Application is on file with the Clerk of the County Court and  
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Any interested persons who desire to comment shall present  
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Delivered to the:

Clerk of the County Court

118 E. Court Street, West Union, WV 26456.

Beth A Rogers, Doddridge County Clerk

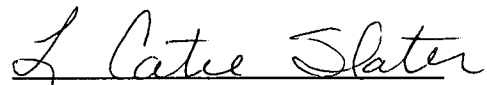
Dan Wellings, Doddridge County Flood Plain Manager

AUGUST 15, 2013

TO WHOM IT MAY CONCERN

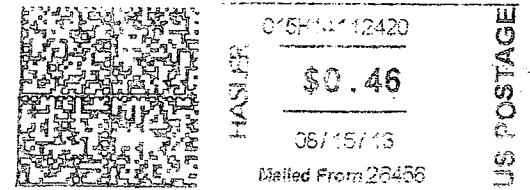
CONCERNING THE CERTIFIED LETTER YOU RECEIVED ADVISING YOU OF THE EQT GATHERING LLC,  
PERMIT #13-063. THE DATE AT THE END OF THE LETTER SHOULD READ BY SEPTEMBER 2, 2013 INSTEAD  
OF AUGUST 20, 2013. I AM VERY SORRY FOR ANY INCONVIENANCE.

SINCERELY

A handwritten signature in cursive script that reads "L. Cate Slater". The signature is written in black ink and is positioned above a horizontal line.

DEPUTY CLERK/FLOODPLAIN ASSISTANT

Beth A. Rogers  
Doddridge County Clerk  
Room 102  
118 East Court St.  
West Union, WV 26456



13-063

CNG TRANSMISSION  
DOMINION TRANS  
625 LIBERTY AV MAIL DDOR 10 01  
PITTSBURG

NIXIE 152 SE 1009 0008/31/13

RETURN TO SENDER  
NOT DELIVERABLE AS ADDRESSED  
UNABLE TO FORWARD

BC: 26456126227 \*0671-00541-16-43  
625210224224

PERMIT NO. 13-063

**DODDRIDGE COUNTY**  
**FLOODPLAIN DEVELOPMENT**  
**PERMIT**

PURPOSE FOR PERMIT: PIPELINE - WG 100

ISSUED TO EQT GATHERING, LLC

ADDRESS: PO BOX 23007, PITTSBURGH, PA  
15222

PROJECT ADDRESS: ERIC GLASPELL RT. 23  
TAX MAP 24, PARCEL 7.1

ISSUED BY: Don Wellings

DATE: 09/03/2013

THE PERMIT EXPIRES 180 DAYS FROM THIS DATE

THIS PERMIT MUST BE POSTED ON THE PREMISES IN A CONSPICUOUS PLACE SO AS TO BE CLEARLY  
VISIBLE FROM THE STREET.





5143 Stoneham Rd. Ste 100, North Canton, OH 44720 • Phone: (330) 818-9770  
E-mail: rettew@rettew.com • Web site: rettew.com

We answer to you.

Engineers  
Planners  
Surveyors  
Landscape  
Architects  
Environmental  
Consultants

August 6, 2013

Mr. Dan Wellings  
Floodplain Administrator  
Doddridge County  
118 East Court Street  
West Union, WV 26456

RE: WG-100 Pipeline  
EQT Gathering, LLC  
Floodplain Permitting – Robinson Fork  
Doddridge County, WV  
RETTEW Project No. 092612006

FILED  
2013 AUG -8 PM 3:12  
BETH A. RUFFERS  
COUNTY CLERK  
DODDRIDGE COUNTY, WV

Dear Mr. Wellings:

On behalf of EQT Gathering, LLC (EQT), please find attached a floodplain permit application for a pipeline crossing of Robinson Fork on the southwest side of State Route 23 in Doddridge County. A sealed site plan and floodplain mapping are also attached. The project is located at approx. 39°22'13.83"N and 80°36'06.56"W.

All disturbance associated with the project is temporary in nature only and the entire project site will be restored to existing grade following construction. There are no structures associated with the project and there will be no stream alteration or relocation. Given the lack of any structures within the floodplain or any changes to the cross-sectional area of the floodplain, no HEC-RAS study has been provided.

All wetland and stream crossings associated with the pipeline have been authorized under Nationwide Permit 12 as verified by the United States Army Corps of Engineers on 2/12/2013 and 5/20/2013 (File LHR-2012-00860-OHR).

Please contact me at gjonas@rettew.com or (717)-743-0313 if any additional information is needed.

Sincerely,

Griffith Jones  
Project Manager

Enclosures

copy: Stephanie Frazier, EQT Gathering, LLC (via email)  
File

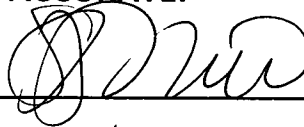


**DODDRIDGE COUNTY  
FLOODPLAIN DEVELOPMENT PERMIT APPLICATION**

**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 \_\_\_\_\_

8/7/2013

**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:** Stephanie Frazier / EQT Gathering, LLC

**ADDRESS:** PO Box 23007, Pittsburgh, PA 15222

**TELEPHONE NUMBER:** 412 – 553 - 5798

2013 AUG -8 PM 3:12  
GUTH A. ROGERS  
COUNTY CLERK  
DODDRIDGE COUNTY, WV  
FILED

**BUILDER'S NAME:** Pete Gould and Sons  
**ADDRESS:** RR1 Box 129, Smithfield, WV 26437  
**TELEPHONE NUMBER:** (304) 889-2950

**ENGINEER'S NAME:** Joel Johnson / Rettew Associates  
**ADDRESS:** 5031 Richard Lane, Mechanicsburg, PA 17055  
**TELEPHONE NUMBER:** 1-800-738-8395

**PROJECT LOCATION:** Project is a pipeline crossing of Robinson Fork. Crossing is located in McClellan District, Doddridge County, approximately 200' southwest of State Route 23 and 1200' west of the intersection with County Route 55/10. Approx. coordinates 39°22'13.83"N and 80°36'06.56"W

**NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** Eric L. Glaspell

---

**ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** 6179 WV Route 23,  
Salem, WV 26426

---

**DISTRICT:** McClellan  
**DATE/FROM WHOM PROPERTY PURCHASED:** 12/13/1999 from Arby E. & Mary L. Glaspell  
**LAND BOOK DESCRIPTION:** 47 acres Robinson Fork  
**DEED BOOK REFERENCE:** DB 253/302  
**TAX MAP REFERENCE:** Map 24 – Parcel 7.1  
**EXISTING BUILDINGS/USES OF PROPERTY:** Forested/farming  
**NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.  
**ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.

---

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 Altercation (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 (See Attached)**

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 \$ 57,355.00**

**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).

See Attached List

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.

See Attached List

#### 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): Stephanie Fragilee

SIGNATURE:  DATE: 8/7/2013

After completing SECTION 2, APPLICANT should submit form to Floodplain Administrator/Manager or his/her representative for review.

<u>Robinson Fork</u>	<u>Landowner Name</u>	<u>Address</u>	<u>Description of Land</u>	<u>Previous Owner</u>	<u>Date Purchased</u>	<u>DB/PG Reference</u>
Doddridge County, District 5, Map 24, Parcel 30	Clifford J. Smith & Shirleen Smith (surv.)	Rt 2 Box 334 Colliers, WV 26035	Big Battle 57.68 acs.	Scott Marion & Mitch Lang DBA Elite Automative Group	11/9/2002	DB 253/302
Doddridge County, District 5, Map 24, Parcel 6	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 18 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
Doddridge County, District 5, Map 24, Parcel 9	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 5.83 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
Doddridge County, District 5, Map 24, Parcel 7.1	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	47 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
Doddridge County, District 5, Map 24, Parcel 6.1	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	79 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
Doddridge County, District 5, Map 24, Parcel 9.7	Glenn Underwood et al.	5860 WV Rt 23 Salem, WV 26426	Robinson 23.10 acs.	Bonnie J. Seckman Taylor		DB 286/173
Doddridge County, District 5, Map 24, Parcel 7	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 17 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
Doddridge County, District 5, Map 24, Parcel 9.6	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 1.16 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
Doddridge County, District 5, Map 24, Parcel 9.3	Gary T. Lansinger	1 South Conkling St. Baltimore, MD 21224	41.6 acs Robinson	Edna C. Corrington, widow; Virgial D. Cummings & Bonnie E. Cummings	6/4/1990	DB 212/430

. Subject parcel highlighted

\*\* sold property in DB 302/640 recorded 9/18/2012 to Gary M. & Mary Ann Eiff (no address on record for them, because taxes still listed in Burton Neswald Sr's name.

**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 (MSL)

Unavailable

The proposed development is located in a floodway.

FBFM Panel No. \_\_\_\_\_

Dated \_\_\_\_\_

See section 4 for additional instructions.

**SIGNED** \_\_\_\_\_

**DATE** \_\_\_\_\_

**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). Not Applicable**

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.**

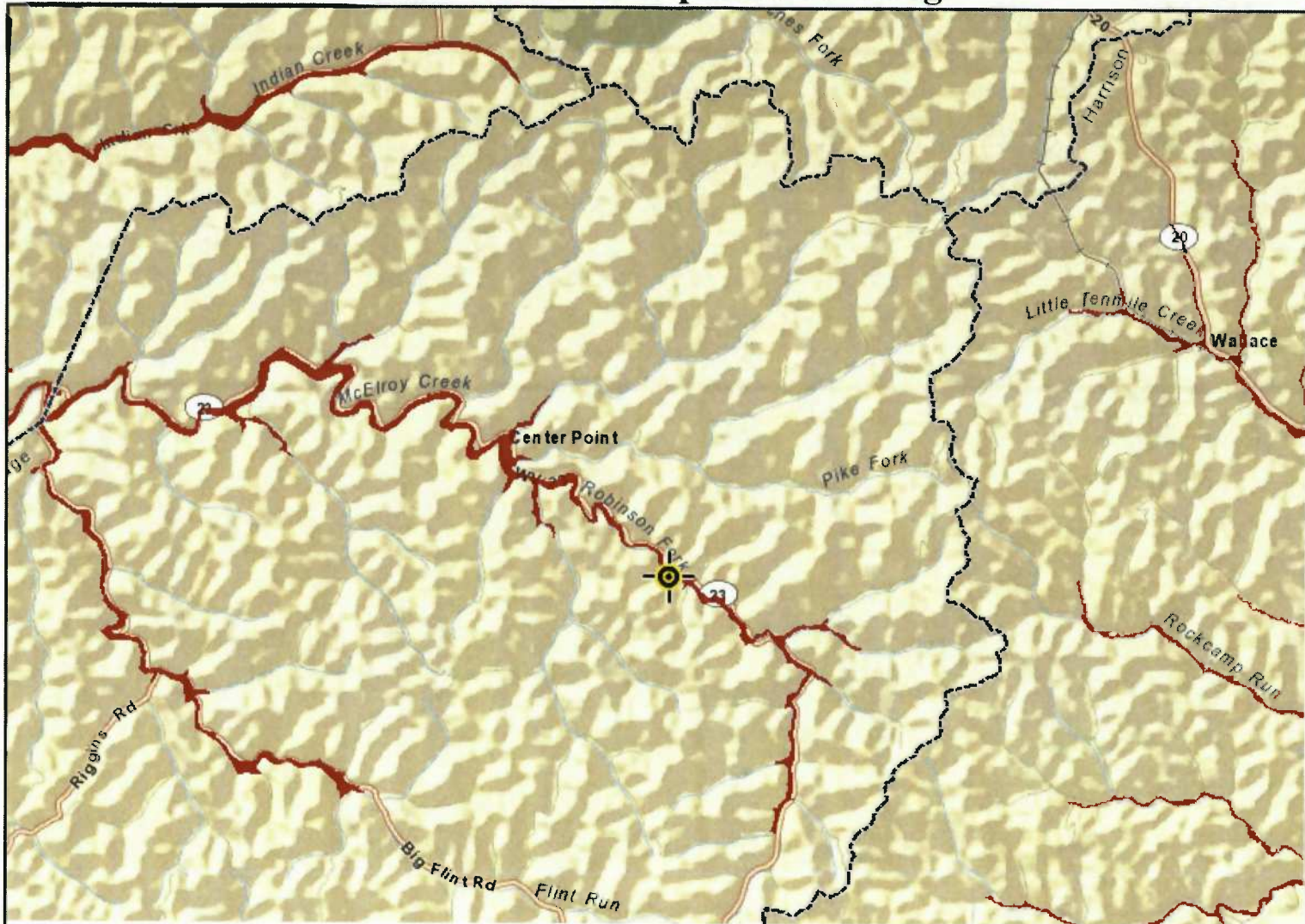
**SIGNED** \_\_\_\_\_ **DATE** \_\_\_\_\_

Cost Basis for Permit Fees

Robinson Fork Creek


<b>Cost Basis</b>	<b>Description</b>
\$ 56,355.00	pipeline cost in floodplain
\$ 57,605.00	total cost of construction
<b>\$ 1,000.00</b>	<b>Base Fee for projects less than \$100,000</b>

# Robinson Fork Pipeline Crossing



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

Map Created on 7/29/2013

 Location of the mouse click

 **Flood Hazard Zone**  
(1% annual chance floodplain)

**User Notes:**

Approximate location of EQT pipeline crossing

**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](http://www.msc.fema.gov).

WV Flood Tool is supported by FEMA, WV NFIP Office, and WV GIS Technical Center  
(<http://www.MapWV.gov/flood>)

**Flood Hazard Area:** Selected site is **WITHIN** the FEMA 100-year floodplain.

**Elevation:** About 821 feet

**Location (long, lat):** 80.602054 W, 39.370415 N

**Location (UTM 17N):** (534279, 4357959)

**FEMA Issued Flood Map:** 54017C0155C

**Contacts:** Doddridge County

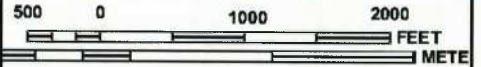
**CRS Information:** No CRS information available

**Parcel Number:**

JOINS PANEL



MAP SCALE 1" = 1000'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0155C

### FIRM

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

PANEL 155 OF 325  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	540024	0155	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.

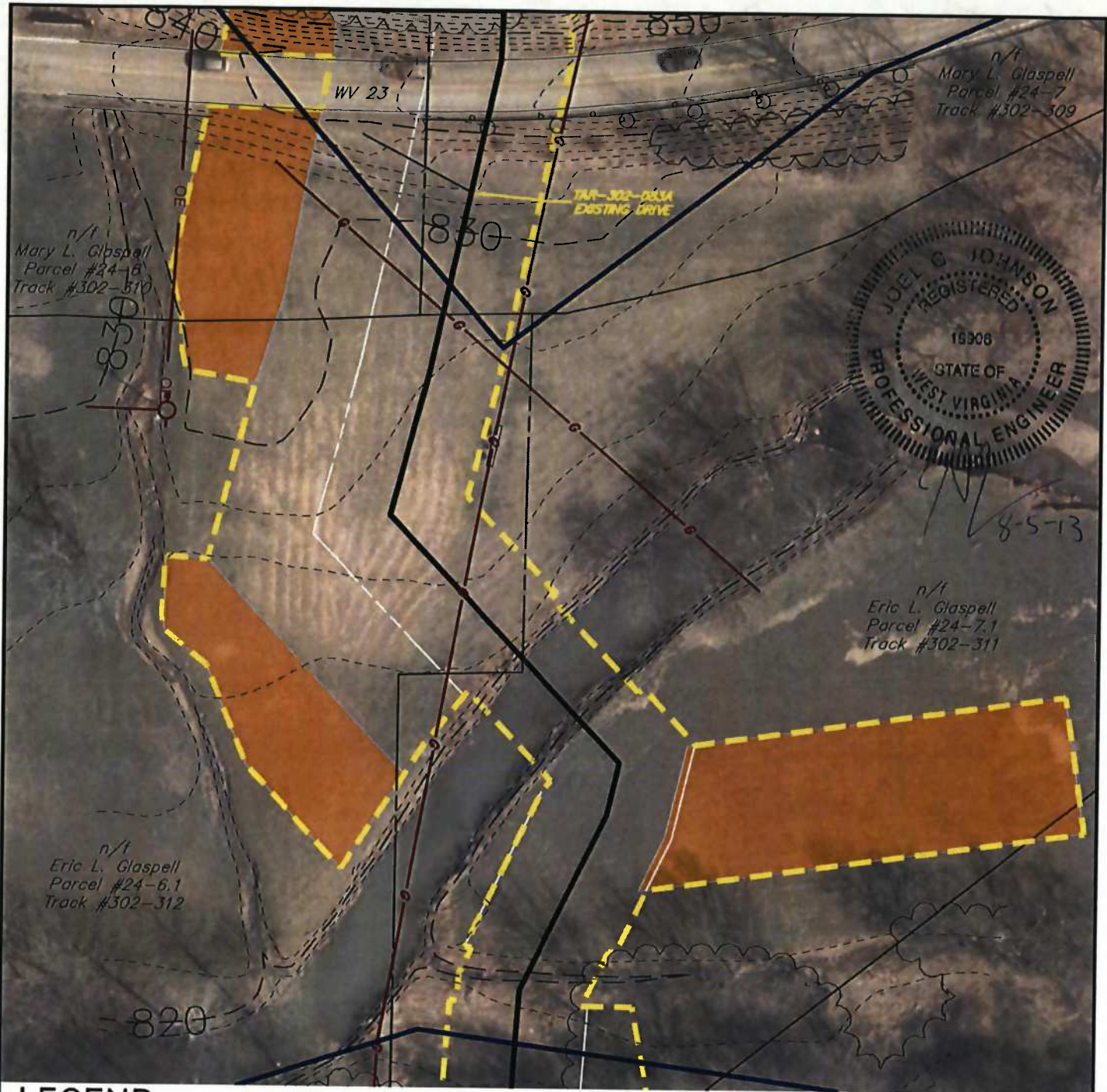


MAP NUMBER  
54017C0155C

MAP REVISED  
OCTOBER 4, 2011

Federal Emergency Management Agency

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.maf.fema.gov](http://www.maf.fema.gov)



**LEGEND**

- EXISTING PARCEL BOUNDARY
- EXISTING CONTOUR LINE
- EXISTING TREELINE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD ELECTRIC
- EXISTING GAS LINE
- EXISTING STREAM
- PROPOSED PIPELINE
- ACCESS DRIVE

- TEMPORARY WORKSPACE
- LIMITS OF DISTURBANCE
- 100-YEAR FEMA FLOODPLAIN
- PERMANENT EASEMENT



C:\\_RettewVault\WP\092612006-WG-100 Pipeline\Sheets\NS\Floodplain

FLOODPLAIN EXHIBIT – ROBINSON FORK  
FOR  
**WG-100 PIPELINE**

McCLELLAN TAX DISTRICT

DODDRIDGE COUNTY, WV

**RETTEW**  
RETTEW Associates, Inc.  
3020 Columbia Ave., Lancaster, PA 17603  
Phone (717) 394-3721 • Fax (717) 394-1063

DRAWN BY: JGJ  
DATE: 8/5/2013  
SCALE: 1" = 50'  
DWG. NO. 092612006



FILED

We answer to you.

5143 Stoneham Rd. Ste 100, North Canton, OH 44720 • Phone: (330) 818-9770  
E-mail: rettetw@rettetw.com • Web site: rettetw.com

2013 AUG 12 PM 2: 53

- Engineers
- Planners
- Surveyors
- Landscape Architects
- Environmental Consultants

August 8, 2013

REC'D - PERMITS  
COUNTY CLERK  
DODDRIDGE COUNTY, WV

Mr. Dan Wellings  
Floodplain Administrator  
Doddridge County  
118 East Court Street  
West Union, WV 26456

RE: WG-100 Pipeline  
EQT Gathering, LLC  
Floodplain Permitting – Robinson Fork  
Doddridge County, WV  
RETTEW Project No. 092612006

Dear Mr. Wellings:

On behalf of EQT Gathering, LLC (EQT), please find attached a floodplain permit application for a pipeline crossing of Robinson Fork on the southwest side of State Route 23 in Doddridge County. The associated HEC RAS study, a sealed site plan and floodplain mapping are also attached. The project is located at approx. 39°22'13.83"N and 80°36'06.56"W.

All disturbance associated with the project is temporary in nature only and the entire project site will be restored to existing grade following construction.

The Robinson Fork pipeline crossing site includes a temporary bridge located immediately adjacent to the pipeline, on the southwest side of State Route 23 in Doddridge County, WV. A study of the proposed temporary bridge crossing was completed to establish the existing and proposed 100-year Base Flood Elevations on the property using currently accepted technical concepts.

The flow utilized for this flood study was computed using the equations developed in the USGS report *Estimation of Flood-Frequency Discharges for Rural, Unregulated Streams in West Virginia*. A 100-year flow of 3,128 cfs was used for the pre and post floodplain study. The Corps of Engineers' HEC-RAS computer program, version 4.1, was utilized to establish Base Flood Elevations for the 100-year flow.

The HEC-RAS cross sections through the properties were obtained from the 2-foot contour mapping. No detailed information was available for the temporary bridge therefore it was entered into the HEC-RAS model using the best available measurements. To model the encroachment in the floodplain, the proposed grading approach and bridge was input in to HEC-RAS. The proposed condition floodplain study was run to show the increases in Base Flood Elevations will remain under 1 foot after the development is constructed.

The summary table below summarizes the Base Flood Elevations for both the existing and proposed floodplains.





13-063

**Cross Section Base Flood Elevation Summary**

Cross Section	Existing BFE	Proposed BFE	Change
6	825.25	825.44	+0.19
5	824.93	825.34	+0.41
4	825.58	825.74	+0.16
3	825.52	825.66	+0.14
2	825.44	825.58	+0.14
1	824.92	825.20	+0.28

Based upon this study, the temporary bridge will not cause any unacceptable increases in the flood heights on the subject property or any adjacent properties, block drainage from the subject property and adjacent properties, deflection of floodwaters onto adjacent existing structures, or increase stream velocity therefore initiating or exacerbating erosion problems. Further, the temporary bridge structure will be removed following installation of the pipeline and preconstruction BFE will be restored.

All wetland and stream crossings associated with the pipeline have been authorized under Nationwide Permit 12 as verified by the United States Army Corps of Engineers on 2/12/2013 and 5/20/2013 (File LHR-2012-00860-OHR).

Please contact me at [gjones@rettew.com](mailto:gjones@rettew.com) or (717)-743-0313 if any additional information is needed.

Sincerely,



Griffith Jones  
Project Manager

Eric W. Hershey, PE  
Senior Engineer



Enclosures

copy: Stephanie Frazier, EQT Gathering, LLC (via email)  
File

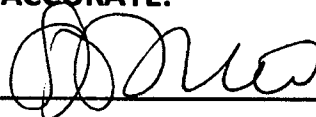
Permit # 13-063  
Robinson Fork  
Pipe Line

# 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 \_\_\_\_\_

8/9/2013

## 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:** Stephanie Frazier / EQT Gathering, LLC

**ADDRESS:** PO Box 23007, Pittsburgh, PA 15222

**TELEPHONE NUMBER:** 412 - 553 - 5798

**BUILDER'S NAME:** Pete Gould and Sons  
**ADDRESS:** RR1 Box 129, Smithfield, WV 26437  
**TELEPHONE NUMBER:** (304) 889-2950

**ENGINEER'S NAME:** Joel Johnson / Rettew Associates  
**ADDRESS:** 5031 Richard Lane, Mechanicsburg, PA 17055  
**TELEPHONE NUMBER:** 1-800-738-8395

**PROJECT LOCATION:** Project is a pipeline crossing of Robinson Fork. Crossing is located in McClellan District, Doddridge County, approximately 200' southwest of State Route 23 and 1200' west of the intersection with County Route 55/10. Approx. coordinates 39°22'13.83"N and 80°36'06.56"W

**NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** Eric L. Glaspell

---

**ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** 6179 WV Route 23,  
Salem, WV 26426

---

**DISTRICT:** McClellan

**DATE/FROM WHOM PROPERTY PURCHASED:** 12/13/1999 from Arby E. & Mary L. Glaspell

---

**LAND BOOK DESCRIPTION:** 47 acres Robinson Fork

**DEED BOOK REFERENCE:** DB 253/302

**TAX MAP REFERENCE:** Map 24 – Parcel 7.1

**EXISTING BUILDINGS/USES OF PROPERTY:** Forested/farming

**NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.

**ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.

---

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 Altercation (including dredging and channel modification)
- Drainage Improvements (including culvert work)
- Road, Street, or Bridge Construction (Temporary Bridge)
- Subdivision (including new expansion)
- Individual Water or Sewer System
- Other (please specify)
- 

**C. STANDARD SITE PLAN OR SKETCH (See Attached)**

**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 \$ 58,605.00 (see attached cost basis)**

**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).

See Attached List

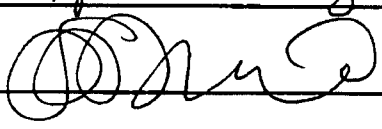
1. NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON ANY ADJACENT PROPERTY AT THE TIME THE FLOODPLAIN PERMIT APPLICATION IS FILED AND THE NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN ANY HOME ON ANY PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY.

See Attached List

**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): Stephanie Frazier  
SIGNATURE:  DATE: 8/9/2013

<u>Robinson Fork</u>	<u>Landowner Name</u>	<u>Address</u>	<u>Description of Land</u>	<u>Previous Owner</u>	<u>Date Purchased</u>	<u>DB/PG Reference</u>
Doddrige County, District 5, Map 24, Parcel 30	Clifford J. Smith & Shirleen Smith (surv.)	Rt 2 Box 334 Colliers, WV 26035	Big Battle 57.68 acs.	Scott Marion & Mitch Lang DBA Elite Automative Group	11/9/2002	DB 253/302
Doddrige County, District 5, Map 24, Parcel 6	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 18 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
Doddrige County, District 5, Map 24, Parcel 9	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 5.83 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
Doddrige County, District 5, Map 24, Parcel 7.1	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	47 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
Doddrige County, District 5, Map 24, Parcel 6.1	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	79 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
Doddrige County, District 5, Map 24, Parcel 9.7	Glenn Underwood et al.	5860 WV Rt 23 Salem, WV 26426	Robinson 23.10 acs.	Bonnie J. Seckman Taylor		DB 286/173
Doddrige County, District 5, Map 24, Parcel 7	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 17 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
Doddrige County, District 5, Map 24, Parcel 9.6	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 1.16 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
Doddrige County, District 5, Map 24, Parcel 9.3	Gary T. Lansinger	1 South Conkling St. Baltimore, MD 21224	41.6 acs Robinson	Edna C. Corrington, widow; Virgial D. Cummings & Bonnie E. Cummings	6/4/1990	DB 212/430

Subject parcel highlighted

\*\* sold property in DB 302/640 recorded 9/18/2012 to Gary M. & Mary Ann Eiff (no address on record for them, because taxes still listed in Burton Neswald Sr's name.

*TM 24 - Parcel 9.2 Dominon*

**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: \_\_\_\_\_ 155 \_\_\_\_\_  
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 \_\_\_\_\_ A \_\_\_\_\_  
100-Year flood elevation is: \_\_\_\_\_ 825.74 \_\_\_\_\_ NGVD (~~MSL~~)

Unavailable

The proposed development is located in a floodway.  
BFM Panel No. \_\_\_\_\_ Dated \_\_\_\_\_

See section 4 for additional instructions.

SIGNED *Dan Wellings* DATE 09/03/2013

**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 *Dan Welby* DATE 09/03/2013

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). Not Applicable**

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** \_\_\_\_\_

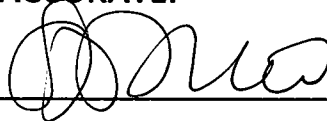
Permit 13-063  
Robinson Fork  
Pipe Line

## 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 \_\_\_\_\_

8/9/2013

### 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:** Stephanie Frazier / EQT Gathering, LLC

**ADDRESS:** PO Box 23007, Pittsburgh, PA 15222

**TELEPHONE NUMBER:** 412 - 553 - 5798

**BUILDER'S NAME:** Pete Gould and Sons  
**ADDRESS:** RR1 Box 129, Smithfield, WV 26437  
**TELEPHONE NUMBER:** (304) 889-2950

**ENGINEER'S NAME:** Joel Johnson / Rettew Associates  
**ADDRESS:** 5031 Richard Lane, Mechanicsburg, PA 17055  
**TELEPHONE NUMBER:** 1-800-738-8395

**PROJECT LOCATION:** Project is a pipeline crossing of Robinson Fork. Crossing is located in McClellan District, Doddridge County, approximately 200' southwest of State Route 23 and 1200' west of the intersection with County Route 55/10. Approx. coordinates 39°22'13.83"N and 80°36'06.56"W

**NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** Eric L. Glaspell

---

**ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT)** 6179 WV Route 23,  
Salem, WV 26426

---

**DISTRICT:** McClellan  
**DATE/FROM WHOM PROPERTY PURCHASED:** 12/13/1999 from Arby E. & Mary L. Glaspell

---

**LAND BOOK DESCRIPTION:** 47 acres Robinson Fork  
**DEED BOOK REFERENCE:** DB 253/302  
**TAX MAP REFERENCE:** Map 24 – Parcel 7.1  
**EXISTING BUILDINGS/USES OF PROPERTY:** Forested/farming  
**NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.  
**ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY:** No residence on subject parcel. Owner resides on adjacent parcel.

---

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 Altercation (including dredging and channel modification)
- Drainage Improvements (including culvert work)
- Road, Street, or Bridge Construction (Temporary Bridge)
- Subdivision (including new expansion)
- Individual Water or Sewer System
- Other (please specify)
- 

**C. STANDARD SITE PLAN OR SKETCH (See Attached)**

**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 \$ 58,605.00 (see attached cost basis)**

**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).

See Attached List

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.

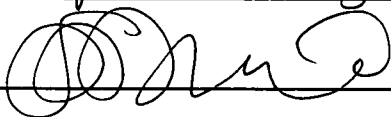
See Attached List

**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): Stephanie Frazier

SIGNATURE:  DATE: 8/9/2013

<u>Robinson Fork</u>	<u>Landowner Name</u>	<u>Address</u>	<u>Description of Land</u>	<u>Previous Owner</u>	<u>Date Purchased</u>	<u>DB/PG Reference</u>
<b>Doddridge County, District 5, Map 24, Parcel 30</b>	Clifford J. Smith & Shirleen Smith (surv.)	Rt 2 Box 334 Colliers, WV 26035	Big Battle 57.68 acs.	Scott Marion & Mitch Lang DBA Elite Automative Group	11/9/2002	DB 253/302
<b>Doddridge County, District 5, Map 24, Parcel 6</b>	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 18 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
<b>Doddridge County, District 5, Map 24, Parcel 9</b>	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 5.83 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
<b>Doddridge County, District 5, Map 24, Parcel 7.1</b>	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	47 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
<b>Doddridge County, District 5, Map 24, Parcel 6.1</b>	Eric L. Glaspell	6179 WV Rt 23 Salem, WV 26426	79 acs Robinson FK	Arby E. & Mary L. Glaspell	12/13/1999	DB 244/176
<b>Doddridge County, District 5, Map 24, Parcel 9.7</b>	Glenn Underwood et al.	5860 WV Rt 23 Salem, WV 26426	Robinson 23.10 acs.	Bonnie J. Seckman Taylor		DB 286/173
<b>Doddridge County, District 5, Map 24, Parcel 7</b>	Mary L. Glaspell	HC 67 Box 120 West Union, WV 26456	Robinson FK 17 acs.	Last Will of Arby Glaspell	11/1/1974	WB 33/513
<b>Doddridge County, District 5, Map 24, Parcel 9.6</b>	CNG Transmission/Dominon Transmission	625 Liberty AV Mail Drop 18-01 Pittsburgh, PA 15221	Robinson 1.16 acs.	Belva H. Martin & Harry C. Martin	2/14/1984	DB 193/387
<b>Doddridge County, District 5, Map 24, Parcel 9.3</b>	Gary T. Lansinger	1 South Conkling St. Baltimore, MD 21224	41.6 acs Robinson	Edna C. Corrington, widow; Virgial D. Cummings & Bonnie E. Cummings	6/4/1990	DB 212/430

Subject parcel highlighted

\*\* sold property in DB 302/640 recorded 9/18/2012 to Gary M. & Mary Ann Eiff (no address on record for them, because taxes still listed in Burton Neswald Sr's name.



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: \_\_\_\_\_

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 (MSL)

Unavailable

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

See section 4 for additional instructions.

**SIGNED** \_\_\_\_\_ **DATE** \_\_\_\_\_

**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). Not Applicable**

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** \_\_\_\_\_



**FLOODPLAIN STUDY**

FOR

**ROBINSON FORK**

DODDRIDGE COUNTY, WEST VIRGINIA  
PROJECT NO. 092612006

Prepared by:

**RETTEW ASSOCIATES, INC.**  
3020 Columbia Avenue  
Lancaster, PA 17603

August 8, 2013



Mr. Dan Wellings  
Floodplain Administrator  
Doddridge County  
118 East Court Street  
West Union, WV 26456

RE: WG-100 Pipeline  
EQT Gathering, LLC  
Floodplain Permitting – Robinson Fork  
Doddridge County, West Virginia  
RETTEW Project No. 092612006

Dear Mr. Wellings:

The Robinson Fork temporary bridge crossing site is a proposed temporary bridge located on the south side of WV 23 in Doddridge County, WV. A study of the proposed temporary bridge crossing was completed to establish the existing and proposed 100-year floodplain on the property using currently accepted technical concepts.

The flow utilized for this flood study was computed using the equations developed in the USGS report *Estimation of Flood-Frequency Discharges for Rural, Unregulated Streams in West Virginia*. A 100-year flow of 3,128 cfs was used for the pre and post floodplain study. The Corps of Engineers' HEC-RAS computer program, version 4.1, was utilized to establish water surface elevations for the 100-year flow.

The HEC-RAS cross sections through the properties were obtained from the 2-foot contour mapping. No detailed information was available for the temporary bridge therefore it was entered into the HEC-RAS model using the best available measurements. To model the encroachment in the floodplain, the proposed grading approach and bridge was input in to HEC-RAS. The proposed condition floodplain study was run to show the increases in water surfaces will remain under 1 foot after the development is constructed.

The summary table below summarizes the elevations for both the existing and proposed floodplains.

**Cross Section Water Surface Elevation Summary**

Cross Section	Existing WSE	Proposed WSE	Change
6	825.25	825.44	+0.19
5	824.93	825.34	+0.41
4	825.58	825.74	+0.16
3	825.52	825.66	+0.14
2	825.44	825.58	+0.14
1	824.92	825.20	+0.28

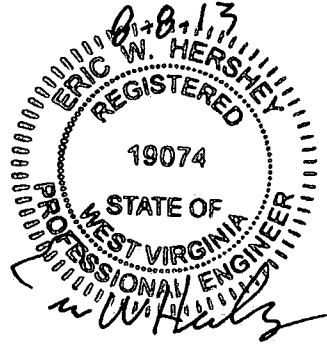




Based upon this study, the temporary bridge will not cause any unacceptable increases in the flood heights on the subject property or any adjacent properties, block drainage from the subject property and adjacent properties, deflection of floodwaters onto adjacent existing structures, or increase stream velocity therefore initiating or exacerbating erosion problems.

Sincerely,

Eric W. Hershey, PE  
Senior Engineer



\\CHOWDER\Share\Projects\09261\092612006\NS\Floodplain\Robinson Fork\2013.08.08 Report Cover Letter.docx

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**HEC-RAS OUTPUT..... 2**  
**CROSS SECTION MAP ..... 4**  
**APPENDICES**  
**FLOW CALCULATIONS**  
**EXISTING HEC-RAS OUTPUT**  
**PROPOSED HEC-RAS OUTPUT**

## **BACKGROUND**

---

The Robinson Fork temporary bridge crossing site is a proposed temporary bridge located on the south side of WV 23 in Doddridge County, WV. The purpose of this study is to establish the existing and proposed 100-year floodplain on the property in accordance with applicable local and state requirements.

## **FLOODPLAIN STUDY**

---

### **HYDROLOGY**

Robinson Fork generally flows from the southeast to the northwest of the property. The flow utilized for this flood study was computed using the equations developed in the USGS report *Estimation of Flood-Frequency Discharges for Rural, Unregulated Streams in West Virginia*. A 100-year flow of 3,128 cfs was used for the pre and post floodplain study. A watershed map showing the drainage area from the USGS mapping is included herein.

### **HYDRAULICS**

The Corps of Engineers' HEC-RAS computer program, version 4.1, was utilized to establish water surface elevations for the 100-year flow. The average starting slopes for normal depth calculations were obtained from the USGS map for the stream.

The HEC-RAS cross sections through the properties were obtained from the 2-foot contour mapping. No detailed information was available for the temporary bridge therefore it was entered into the HEC-RAS model using the best available measurements.

The proposed condition floodplain study was run to show the increases in water surfaces will remain under 1 foot after the development is constructed. To model the encroachment in the floodplain, the proposed grading approach and bridge was input in to HEC-RAS.

The HEC-RAS input and output are contained herein, and include the summary tables, and the profile and cross section plots for both the existing and proposed floodplains.

**Cross Section Water Surface Elevation Summary**

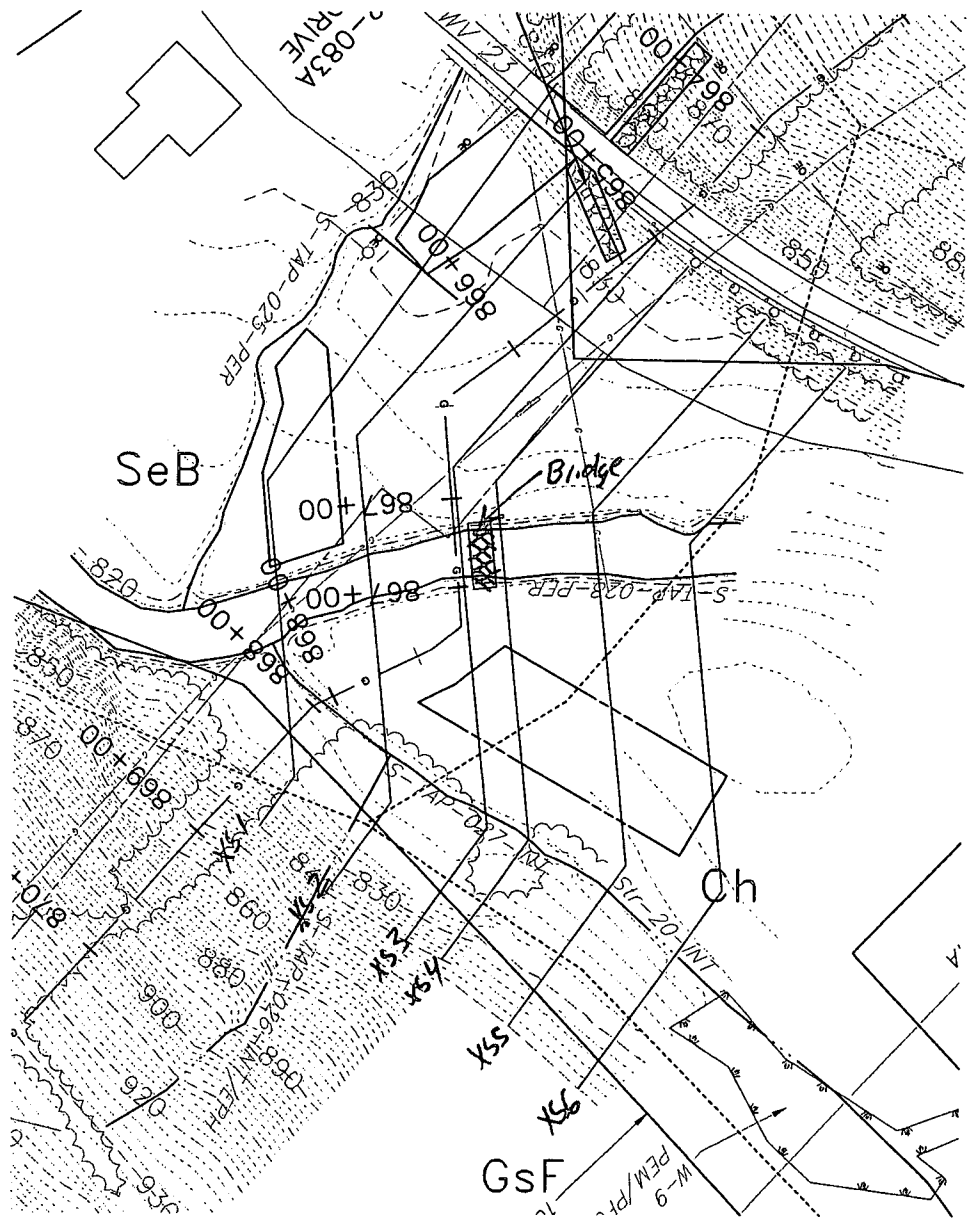
<b>Cross Section</b>	<b>Existing WSE</b>	<b>Proposed WSE</b>	<b>Change</b>
6	825.25	825.44	+0.19
5	824.93	825.34	+0.41
4	825.58	825.74	+0.16
3	825.52	825.66	+0.14
2	825.44	825.58	+0.14
1	824.92	825.20	+0.28

HEC-RAS River: robinsonfork Reach: main Profile: PF 1

Reach	River Sta	Profile	Plan	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
main	6	PF 1	exist	3128.00	818.00	825.25	823.98	826.43	0.002717	9.35	457.28	154.79	0.62
main	6	PF 1	prop	3128.00	818.00	825.44		826.44	0.003128	8.75	487.41	164.60	0.57
main	5	PF 1	exist	3128.00	817.90	824.93	824.68	826.26	0.003532	10.33	464.90	177.27	0.69
main	5	PF 1	prop	3128.00	817.90	825.34		826.25	0.003295	8.89	540.47	196.99	0.58
main	4	PF 1	exist	3128.00	817.80	825.58		825.86	0.000966	5.75	937.22	257.56	0.37
main	4	PF 1	prop	3128.00	817.80	825.74	823.86	825.96	0.000971	5.01	980.39	260.26	0.32
main	3	PF 1	exist	3128.00	817.70	825.52		825.84	0.001049	6.01	885.36	241.89	0.38
main	3	PF 1	prop	3128.00	817.70	825.66	823.86	825.91	0.001082	5.29	919.16	244.18	0.34
main	2	PF 1	exist	3128.00	817.60	825.44		825.78	0.001135	6.24	867.11	246.13	0.40
main	2	PF 1	prop	3128.00	817.60	825.58		825.85	0.001169	6.49	901.91	249.03	0.35
main	1	PF 1	exist	3128.00	817.50	824.82	824.13	825.66	0.002001	8.00	619.69	219.95	0.53
main	1	PF 1	prop	3128.00	817.50	825.20	824.09	825.74	0.002002	7.04	679.33	221.42	0.46

HEC-RAS River: robinsonfork Reach: main Profile: PF 1

Reach	River Sta	Profile	Plan	E.G. Elev (ft)	W.S. Elev (ft)	Vel Head (ft)	Frctn Loss (ft)	C & E Loss (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Top Width (ft)
main	6	PF 1	exist	826.43	825.25	1.19	0.15	0.01	366.34	2700.10	61.56	154.79
main	6	PF 1	prop	826.44	825.44	1.01	0.16	0.03	452.13	2593.19	82.68	164.60
main	5	PF 1	exist	826.26	824.93	1.33	0.08	0.31	560.05	2445.18	122.77	177.27
main	5	PF 1	prop	826.25	825.34	0.92	0.08	0.21	738.82	2225.63	163.55	196.99
main	4	PF 1	exist	825.86	825.58	0.28	0.02	0.00	1656.64	1402.51	68.85	257.56
main	4	PF 1	prop	825.96	825.74	0.22			1799.14	1249.59	79.27	260.26
main	3	PF 1	exist	825.84	825.52	0.32	0.05	0.00	1641.37	1444.57	42.06	241.89
main	3	PF 1	prop	825.91	825.66	0.25	0.06	0.01	1782.43	1296.27	49.30	244.18
main	2	PF 1	exist	825.78	825.44	0.34	0.07	0.04	1419.50	1436.92	271.59	246.13
main	2	PF 1	prop	825.85	825.58	0.27	0.08	0.03	1535.18	1288.73	304.09	249.03
main	1	PF 1	exist	825.66	824.92	0.74			500.70	2230.54	396.76	213.95
main	1	PF 1	prop	825.74	825.20	0.55			594.68	2036.59	496.73	221.42

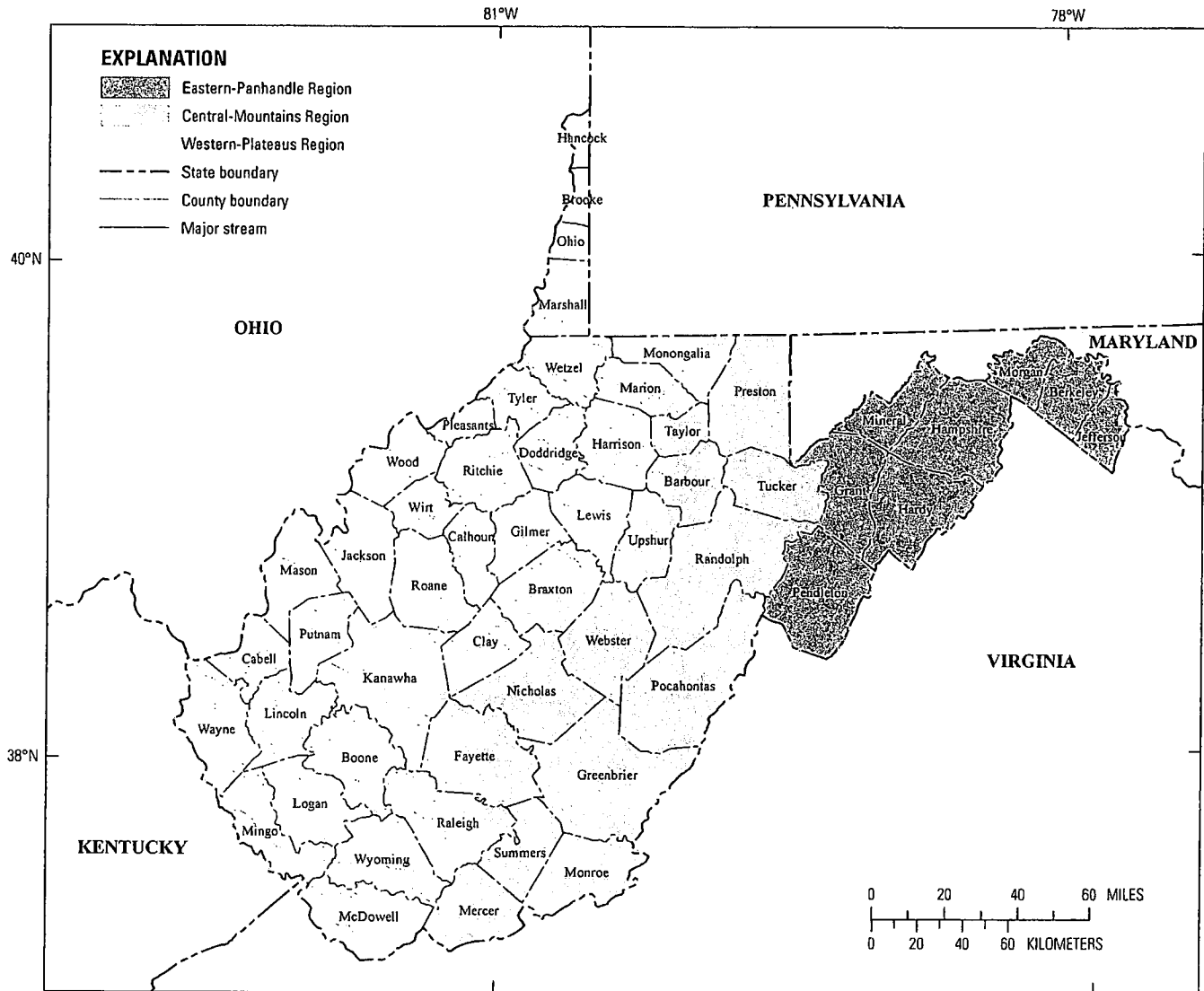


1" = 100'

## APPENDIX

## **FLOW CALCULATIONS**





Base from U.S. Geological Survey 1:100,000 digital line graphics for state boundaries and streams and from the West Virginia Department of Environmental Protection 1:24,000 digital data for county boundaries. Universal Transverse Mercator projection, zone 17, NAD 83.

**Figure 4.** The Eastern Panhandle, Central Mountains, and Western Plateaus Regions of West Virginia for which equations for estimation of flood frequency discharges were developed in this study.

**Table 4.** Equations used to estimate selected flood-frequency discharges for streams in the Eastern Panhandle, Central Mountains, and Western Plateaus Regions of West Virginia.

[PK(n,n), peak discharge in cubic feet per second for the (n,n)-year recurrence interval; PK(n), peak discharge in cubic feet per second for the (n)-year recurrence interval; %, percent; AOP, annual-occurrence probability; DRNAREA, drainage area in square miles]

Equation	Standard error of the model, in percent	Average standard error of sampling, in percent	Average prediction error, in percent	Equivalent years of record, unitless
Eastern Panhandle Region (Range in DRNAREA from 0.21 to 1,461 for 57 streamgauge stations)				
PK1_1(90%AOP) = 29.6 DRNAREA <sup>0.818</sup>	43.4	10.3	44.8	3.4
PK1_5(67%AOP) = 46.4 DRNAREA <sup>0.828</sup>	35.7	8.9	36.9	3.3
PK2(50%AOP) = 59.8 DRNAREA <sup>0.832</sup>	32.1	8.6	33.4	4.1
PK5(20%AOP) = 105 DRNAREA <sup>0.838</sup>	25.6	8.9	27.2	10.6
PK10(10%AOP) = 145 DRNAREA <sup>0.842</sup>	22.5	9.5	24.5	19.1
PK25(4%AOP) = 204 DRNAREA <sup>0.848</sup>	19.7	10.3	22.4	34.1
PK50(2%AOP) = 254 DRNAREA <sup>0.852</sup>	18.6	11.1	21.7	46.1
PK100(1%AOP) = 307 DRNAREA <sup>0.855</sup>	18.3	11.6	21.7	56.7
PK200(0.5%AOP) = 365 DRNAREA <sup>0.859</sup>	18.4	12.4	22.4	64.7
PK500(0.2%AOP) = 447 DRNAREA <sup>0.864</sup>	19.4	13.5	23.8	70.9
Central Mountains Region (Range in DRNAREA from 0.10 to 1,619 for 83 streamgauge stations)				
PK1_1(90%AOP) = 33.4 DRNAREA <sup>0.914</sup>	40.0	8.3	41.0	2.4
PK1_5(67%AOP) = 53.8 DRNAREA <sup>0.887</sup>	34.6	7.3	35.4	2.0
PK2(50%AOP) = 69.4 DRNAREA <sup>0.873</sup>	33.4	7.3	34.2	2.1
PK5(20%AOP) = 116 DRNAREA <sup>0.845</sup>	34.1	8.0	35.1	3.2
PK10(10%AOP) = 153 DRNAREA <sup>0.831</sup>	36.3	8.6	37.4	4.0
PK25(4%AOP) = 206 DRNAREA <sup>0.816</sup>	39.9	9.8	41.2	4.8
PK50(2%AOP) = 250 DRNAREA <sup>0.807</sup>	42.9	10.6	44.4	5.3
PK100(1%AOP) = 297 DRNAREA <sup>0.800</sup>	46.2	11.3	47.9	5.6
PK200(0.5%AOP) = 347 DRNAREA <sup>0.793</sup>	49.7	12.0	51.5	5.9
PK500(0.2%AOP) = 420 DRNAREA <sup>0.785</sup>	54.3	13.1	56.3	6.1
Western Plateaus Region (Range in DRNAREA from 0.13 to 1,516 for 106 streamgauge stations)				
PK1_1(90%AOP) = 56.9 DRNAREA <sup>0.763</sup>	38.2	7.6	39.1	3.8
PK1_5(67%AOP) = 97.8 DRNAREA <sup>0.741</sup>	33.4	6.5	34.1	2.8
PK2(50%AOP) = 129 DRNAREA <sup>0.730</sup>	31.6	6.1	32.2	2.8
PK5(20%AOP) = 221 DRNAREA <sup>0.710</sup>	29.3	6.5	30.0	4.4
PK10(10%AOP) = 292 DRNAREA <sup>0.699</sup>	28.9	6.5	29.7	5.9
PK25(4%AOP) = 391 DRNAREA <sup>0.688</sup>	29.4	7.3	30.3	7.9
PK50(2%AOP) = 472 DRNAREA <sup>0.681</sup>	30.2	7.6	31.3	9.1
PK100(1%AOP) = 557 DRNAREA <sup>0.674</sup>	31.4	8.0	32.5	10.1
PK200(0.5%AOP) = 647 DRNAREA <sup>0.668</sup>	32.7	8.3	33.9	10.8
PK500(0.2%AOP) = 775 DRNAREA <sup>0.661</sup>	34.8	8.9	36.1	11.4

→ 557 (12.94 sq mi)<sup>0.674</sup> = 3,128 cfs



**Prepared in cooperation with the West Virginia Department of Transportation,  
Division of Highways**

# **Estimation of Flood-Frequency Discharges for Rural, Unregulated Streams in West Virginia**

Scientific Investigations Report 2010–5033

**U.S. Department of the Interior  
U.S. Geological Survey**

# **Estimation of Flood-Frequency Discharges for Rural, Unregulated Streams in West Virginia**

By Jeffrey B. Wiley and John T. Atkins, Jr.

Prepared in cooperation with the West Virginia Department of Transportation,  
Division of Highways

Scientific Investigations Report 2010–5033

**U.S. Department of the Interior**  
**U.S. Geological Survey**

**U.S. Department of the Interior**  
KEN SALAZAR, Secretary

**U.S. Geological Survey**  
Marcia K. McNutt, Director

U.S. Geological Survey, Reston, Virginia: 2010

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Wiley, J.B., and Atkins, J.T., Jr., 2010, Estimation of flood-frequency discharges for rural, unregulated streams in West Virginia: U.S. Geological Survey Scientific Investigations Report 2010–5033, 78 p.

534°00'00"E

535°00'00"E

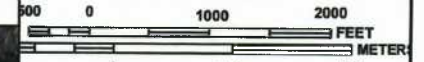
536°00'00"E

537°00'00"E

JOINS PANEL 0085



MAP SCALE 1" = 1000'



DODDRIDGE COUNTY  
UNINCORPORATED AREAS  
540024

PANEL 0155C

NATIONAL FLOOD INSURANCE PROGRAM

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

PANEL 155 OF 325  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY	NUMBER	PANEL	SHEET
DODDRIDGE COUNTY	540024	0155C	2

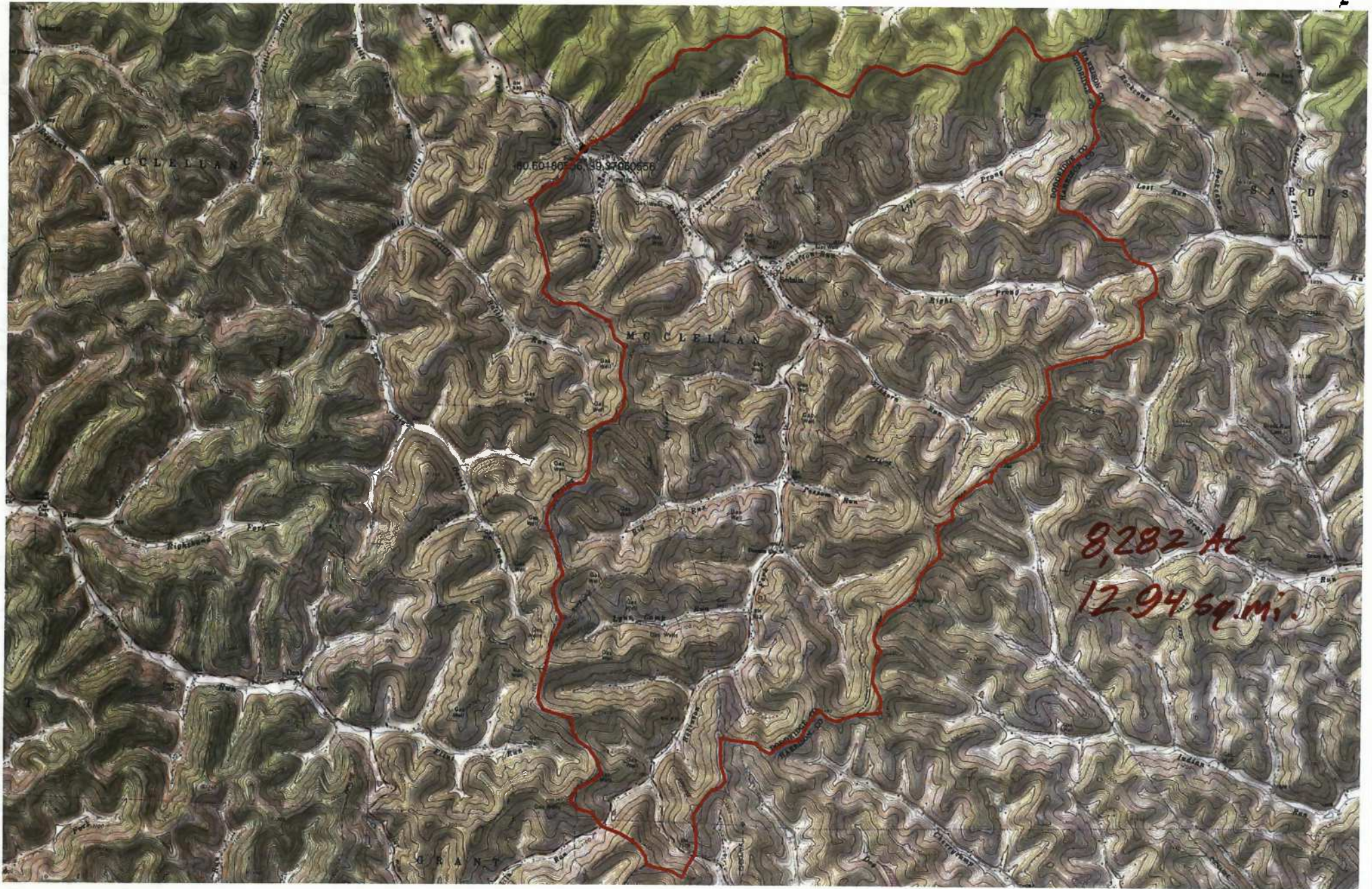
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER  
54017C0155C  
MAP REVISED  
OCTOBER 4, 2011

Federal Emergency Management Agency

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.nac.fema.gov](http://www.nac.fema.gov)



60.601965 39.370656

MCCLELLAN

MCCLELLAN

SARDIS

8,282 Ac  
12.94 sq. mi.

## **EXISTING HEC-RAS**



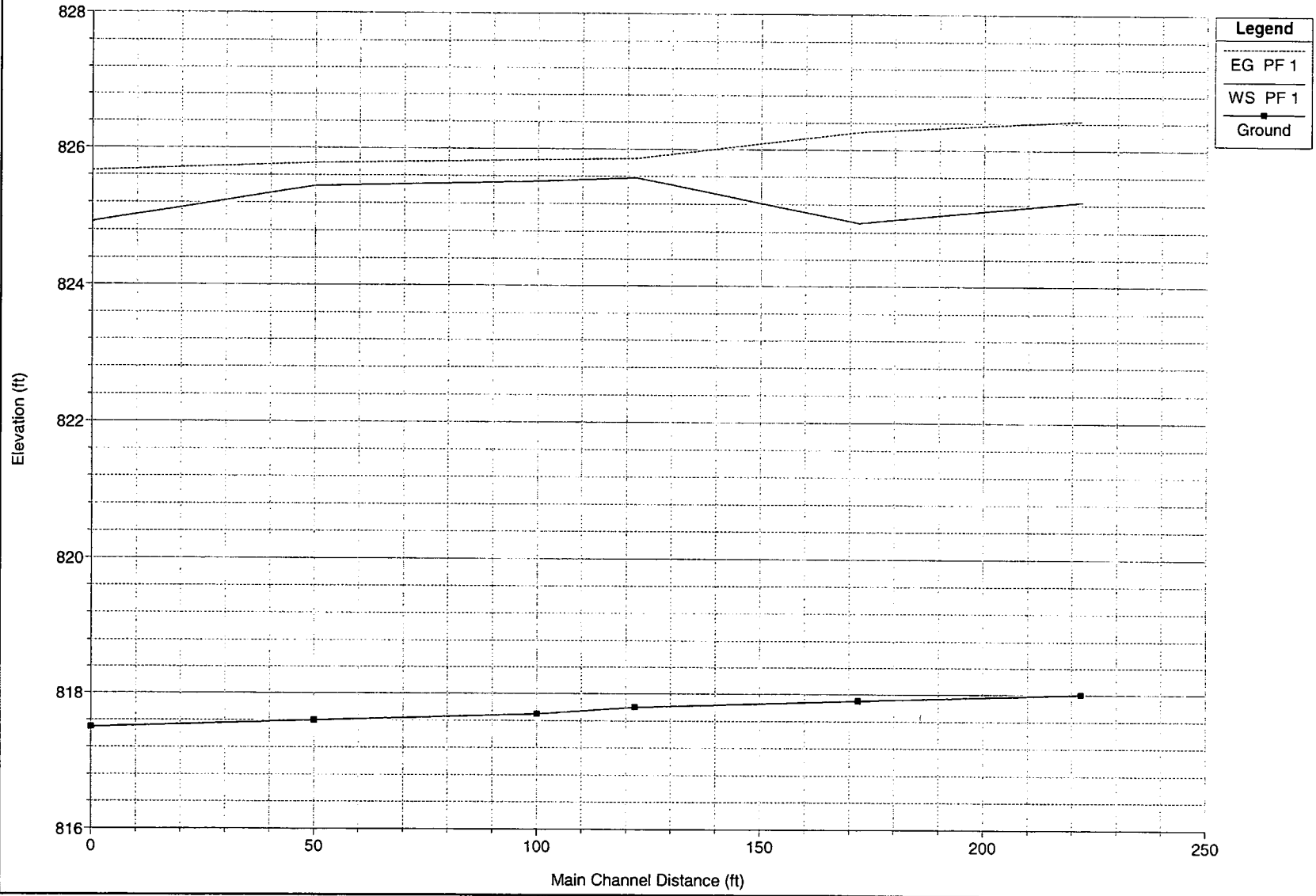
HEC-RAS Plan: exist River: robinsonfork Reach: main Profile: PF 1

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Cht
main	6	PF 1	3128.00	818.00	825.25	823.98	826.43	0.002717	9.35	457.28	154.79	0.62
main	5	PF 1	3128.00	817.90	824.93	824.68	826.26	0.003532	10.33	464.90	177.27	0.69
main	4	PF 1	3128.00	817.80	825.58		825.86	0.000966	5.75	837.22	257.56	0.37
main	3	PF 1	3128.00	817.70	825.52		825.84	0.001049	6.01	885.36	241.89	0.38
main	2	PF 1	3128.00	817.60	825.44		825.78	0.001135	6.24	867.11	246.13	0.40
main	1	PF 1	3128.00	817.50	824.92	824.13	825.66	0.002001	8.00	619.69	213.95	0.53

HEC-RAS Plan: exist River: robinsonfork Reach: main Profile: PF 1

Reach	River Sta	Profile	E.G. Elev (ft)	W.S. Elev (ft)	Vel Head (ft)	Frctn Loss (ft)	C & E Loss (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Top Width (ft)
main	6	PF 1	826.43	825.25	1.19	0.15	0.01	366.34	2700.10	61.56	154.79
main	5	PF 1	826.26	824.93	1.33	0.08	0.31	560.05	2445.18	122.77	177.27
main	4	PF 1	825.86	825.58	0.28	0.02	0.00	1656.64	1402.51	68.85	257.56
main	3	PF 1	825.84	825.52	0.32	0.05	0.00	1641.37	1444.57	42.06	241.89
main	2	PF 1	825.78	825.44	0.34	0.07	0.04	1419.50	1436.92	271.59	246.13
main	1	PF 1	825.66	824.92	0.74			500.70	2230.54	396.76	213.95

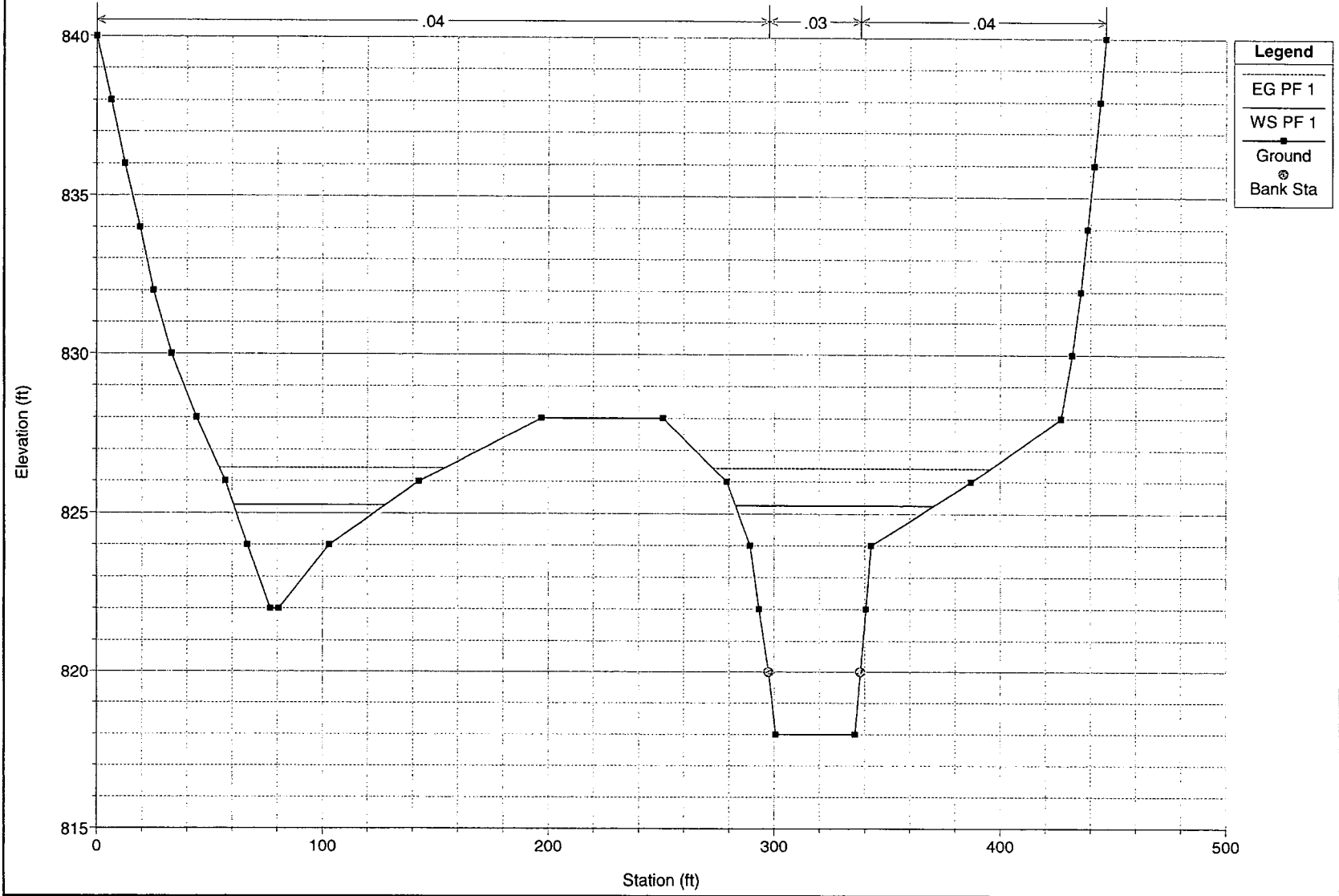
robinsonfork Plan: robinson-exist 8/8/2013  
Geom: robinson-existing Flow: robinsonfork



robinsonfork Plan: robinson-exist 8/8/2013

Geom: robinson-existing Flow: robinsonfork

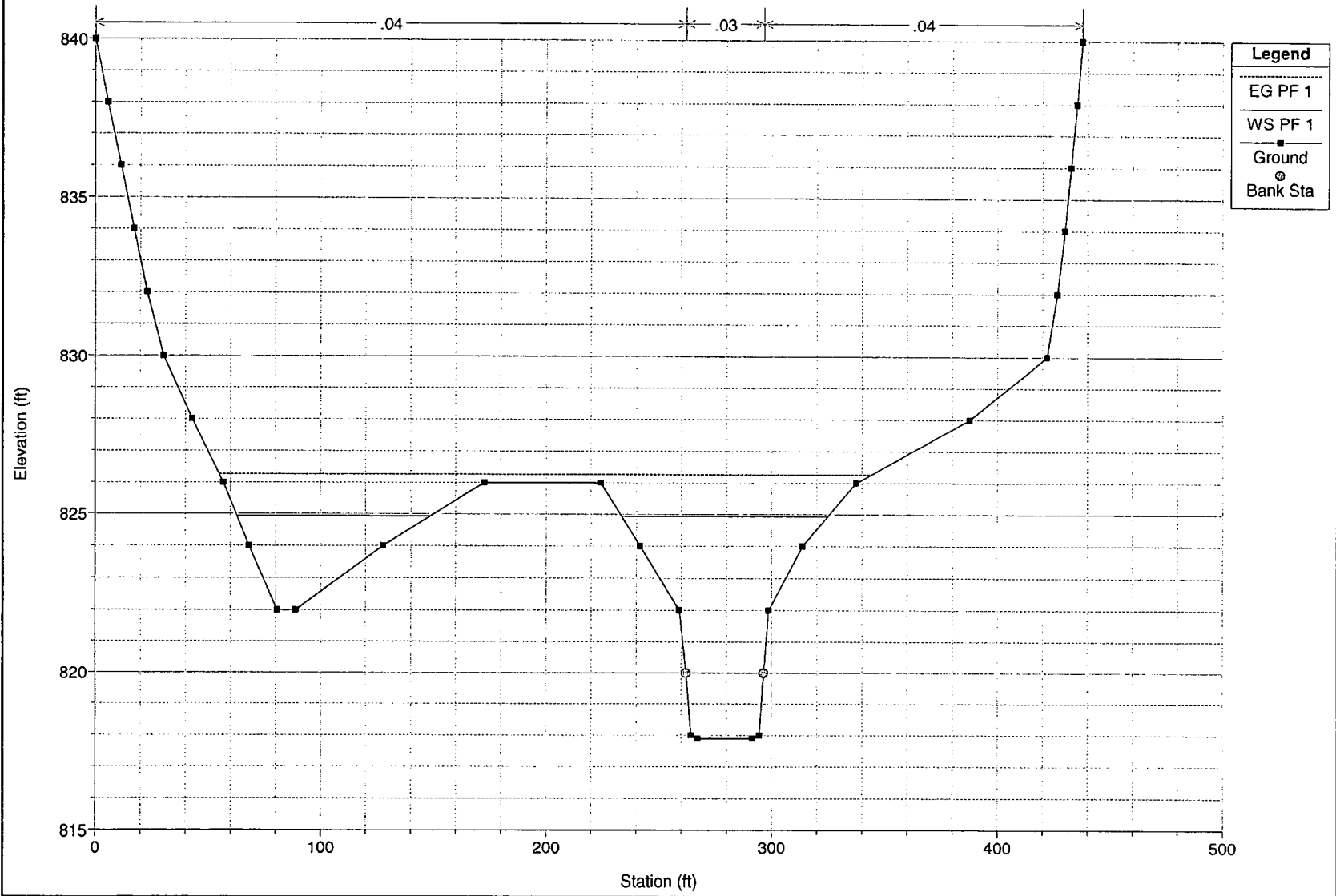
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robinsfork Plan: robinson-exist 8/8/2013

Geom: robinson-existing Flow: robinsfork

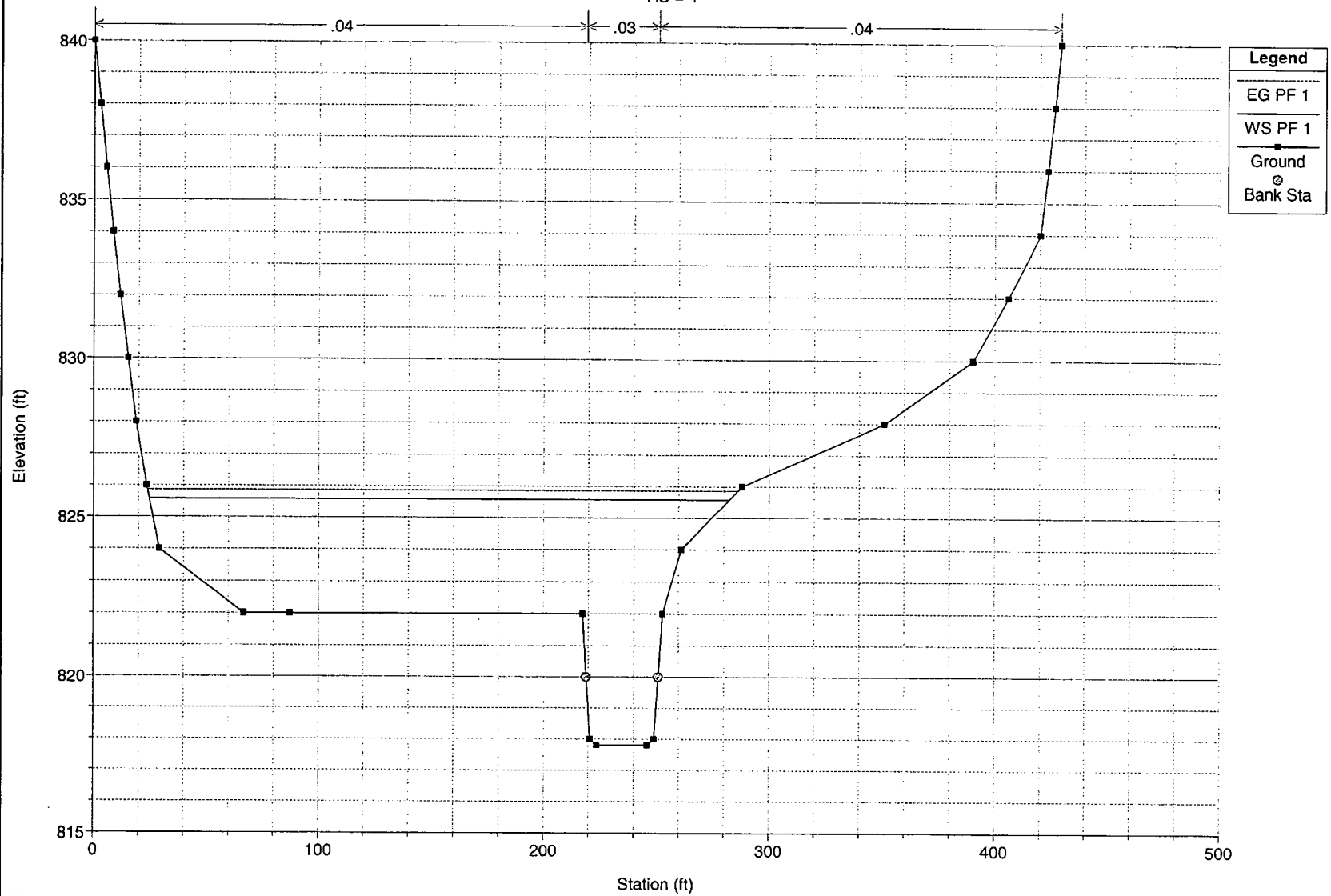
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robinsonfork Plan: robinson-exist 8/8/2013

Geom: robinson-existing Flow: robinsonfork

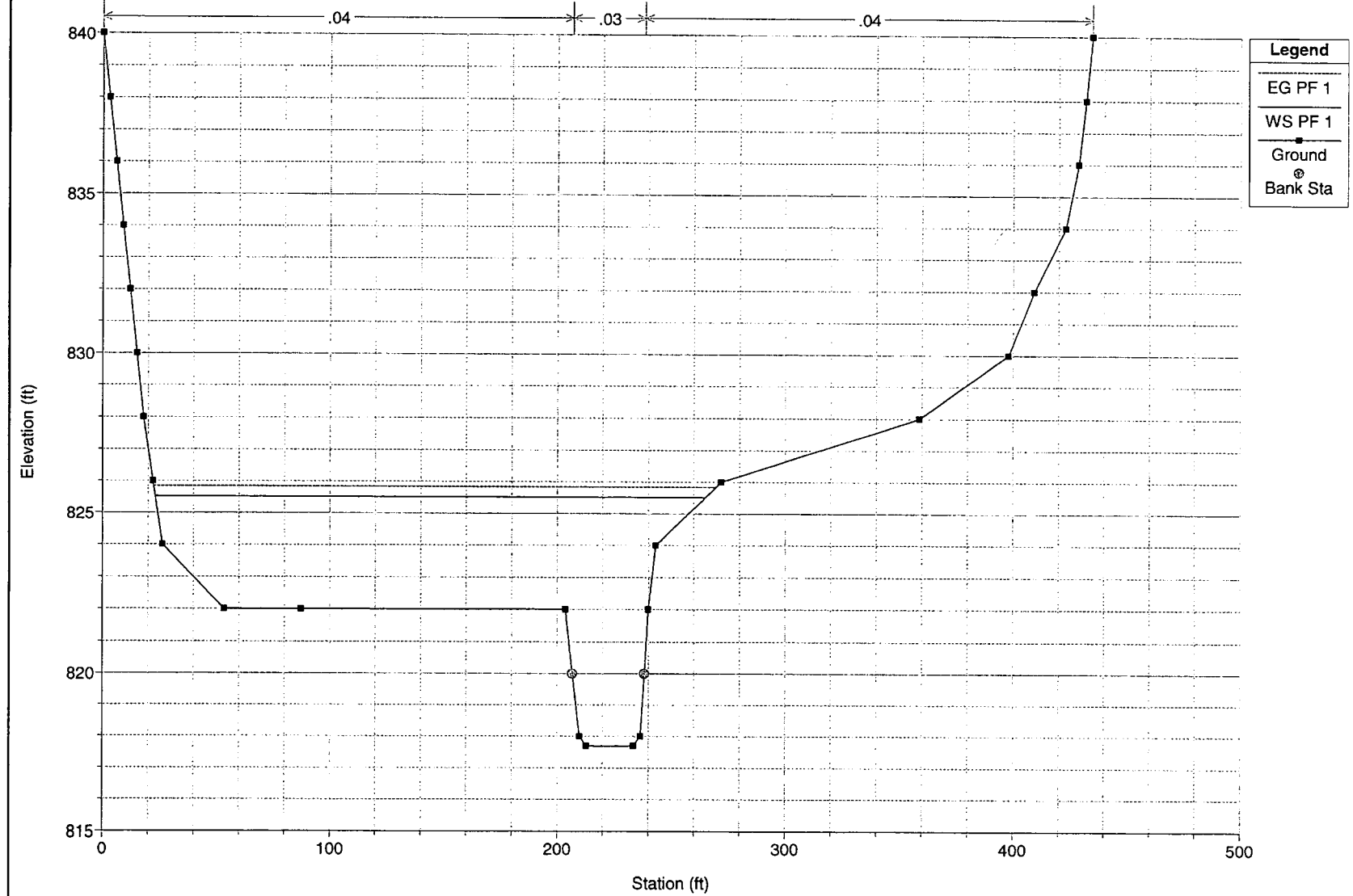
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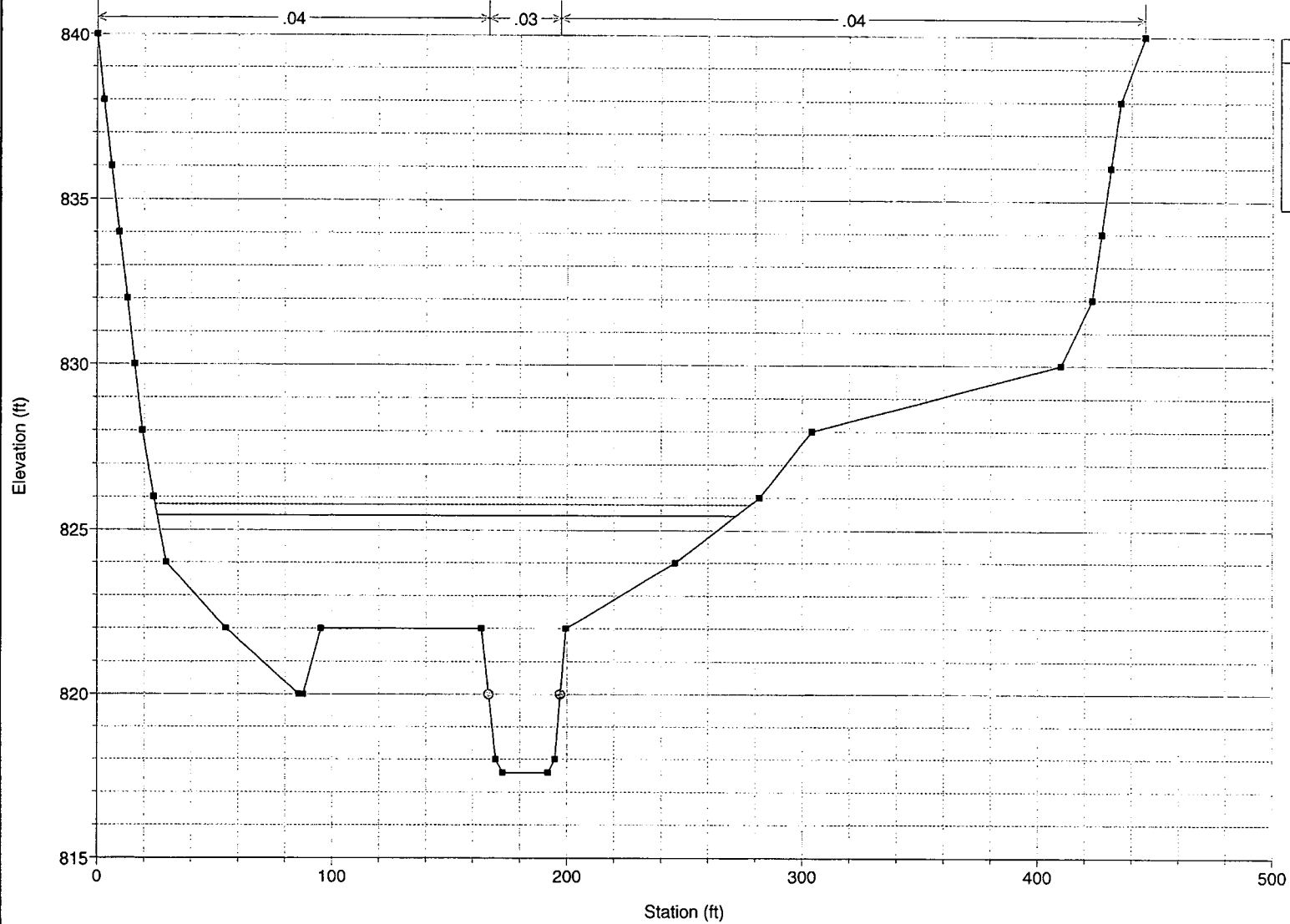
robinsonfork Plan: robinson-exist 8/8/2013

Geom: robinson-existing Flow: robinsonfork

RS = 3



robinsonfork Plan: robinson-exist 8/8/2013  
 Geom: robinson-existing Flow: robinsonfork  
 RS = 2



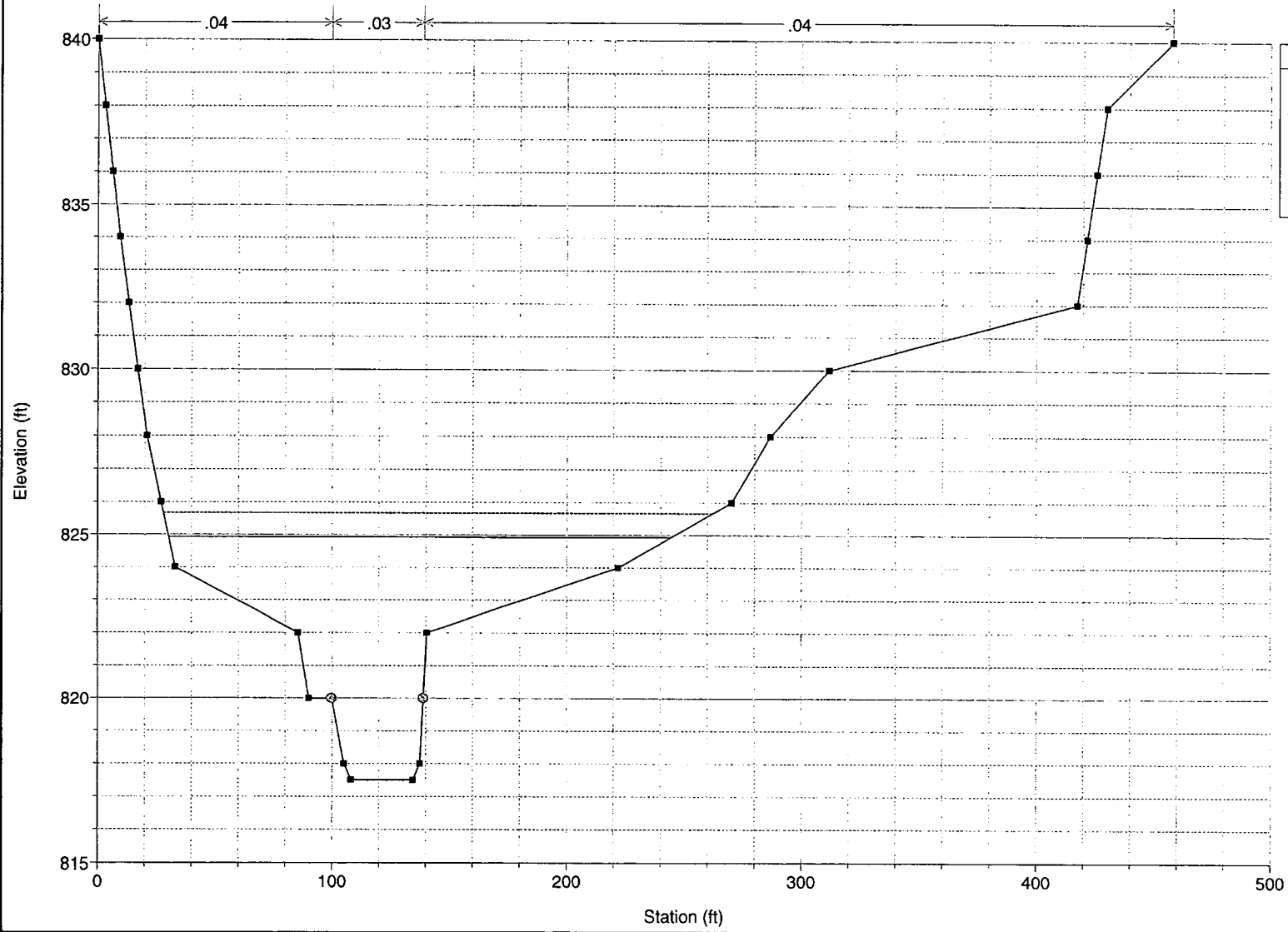
Legend	
—■—	EG PF 1
—■—	WS PF 1
—■—	Ground
⊙	Bank Sta



robinsonfork Plan: robinson-exist 8/8/2013

Geom: robinson-existing Flow: robinsonfork

RS = 1



robinsonfork.rep

HEC-RAS Version 4.1.0 Jan 2010  
U.S. Army Corps of Engineers  
Hydrologic Engineering Center  
609 Second Street  
Davis, California

```
X      X  XXXXXX      XXXX      XXXX      XX      XXXX
X      X  X          X      X      X  X      X
X      X  X          X          X  X      X  X      X
XXXXXXXX XXXX      X          XXX XXXX      XXXXXX      XXXX
X      X  X          X          X  X      X  X      X
X      X  X          X      X      X  X      X  X      X
X      X  XXXXXX      XXXX      X  X      X  X      XXXXX
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PROJECT DATA

Project Title: robinsonfork  
Project File : robinsonfork.prj  
Run Date and Time: 8/8/2013 1:48:16 PM

Project in English units

PLAN DATA

Plan Title: robinson-exist  
Plan File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.p01

Geometry Title: robinson-existing  
Geometry File : h:\Projects\09261\092612006\NS\Floodplain\Robinson  
Fork\robinsonfork.g01

Flow Title : robinsonfork  
Flow File : h:\Projects\09261\092612006\NS\Floodplain\Robinson  
Fork\robinsonfork.f01

Plan Summary Information:

Number of:	Cross Sections =	6	Multiple Openings =	0
	Culverts =	0	Inline Structures =	0
	Bridges =	0	Lateral Structures =	0

Computational Information

Water surface calculation tolerance =	0.01
Critical depth calculation tolerance =	0.01
Maximum number of iterations =	20
Maximum difference tolerance =	0.3
Flow tolerance factor =	0.001

Computation Options

Critical depth computed only where necessary	
Conveyance Calculation Method:	At breaks in n values only
Friction Slope Method:	Average Conveyance
Computational Flow Regime:	Subcritical Flow

FLOW DATA

robinsonfork.rep

Flow Title: robinsonfork

Flow File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.f01

Flow Data (cfs)

River	Reach	RS	PF 1
robinsonfork	main	6	3128

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			
robinsonfork	main	PF 1	
Normal S = 0.002			

GEOMETRY DATA

Geometry Title: robinson-existing

Geometry File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.g01

CROSS SECTION

RIVER: robinsonfork

REACH: main RS: 6

INPUT

Description:

Station Elevation Data		num=	32							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	6.4	838	12.4	836	19.2	834	25.1	832	
33.1	830	44.1	828	57	826	66.7	824	76.9	822	
80.6	822	103	824	142.8	826	197	828	250.8	828	
279	826	289.3	824	293.3	822	297.6	820	300.6	818	
335.8	818	338.2	820	340.6	822	342.9	824	387.1	826	
426.9	828	431.9	830	435.7	832	438.6	834	441.5	836	
444.2	838	446.6	840							

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.04	297.6	.03	338.2	.04

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	297.6	338.2		50	50	50		.1	.3

CROSS SECTION

RIVER: robinsonfork

REACH: main RS: 5

INPUT

Description:

robinsonfork.rep

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	5.5	838	11.4	836	17.2	834	23	832	
30.2	830	42.9	828	56.7	826	68.1	824	80.6	822	
88.9	822	127.7	824	172.7	826	224.1	826	241.7	824	
259.1	822	262.1	820	264.2	818	267.2	817.9	291.5	817.9	
294.5	818	296.4	820	298.6	822	313.7	824	337.4	826	
387.7	828	422	830	426.6	832	430	834	432.6	836	
435.3	838	437.6	840							

Manning's n Values				num=		
Sta	n Val	Sta	n Val	Sta	n Val	
0	.04	262.1	.03	296.4	.04	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	262.1	296.4		50	50		.1	.3

CROSS SECTION

RIVER: robinsonfork  
REACH: main RS: 4

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	2.8	838	5.6	836	8.5	834	11.7	832	
15.3	830	18.8	828	23.6	826	29.1	824	66.7	822	
87.3	822	217.3	822	218.9	820	220.6	818	223.6	817.8	
246	817.8	249	818	250.9	820	252.8	822	261.1	824	
288	826	351.2	828	390.5	830	406	832	420.2	834	
423.5	836	426.6	838	429.2	840					

Manning's n Values				num=		
Sta	n Val	Sta	n Val	Sta	n Val	
0	.04	218.9	.03	250.9	.04	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	218.9	250.9		22	22		.1	.3

CROSS SECTION

RIVER: robinsonfork  
REACH: main RS: 3

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	3	838	6	836	9	834	12	832	
15	830	18	828	22.1	826	26.3	824	53.5	822	
87.3	822	203.6	822	206.6	820	209.8	818	212.8	817.7	
233.5	817.7	236.5	818	238.3	820	239.9	822	243.2	824	
271.9	826	358.8	828	398	830	409.2	832	423.1	834	
428.7	836	431.9	838	434.7	840					

Manning's n Values				num=		
Sta	n Val	Sta	n Val	Sta	n Val	
0	.04	206.6	.03	238.3	.04	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.



main	1	robinsonfork.rep	.04	.03	.04
------	---	------------------	-----	-----	-----

SUMMARY OF REACH LENGTHS

River: robinsonfork

Reach	River Sta.	Left	Channel	Right
main	6	50	50	50
main	5	50	50	50
main	4	22	22	22
main	3	50	50	50
main	2	50	50	50
main	1			

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS

River: robinsonfork

Reach	River Sta.	Contr.	Expan.
main	6	.1	.3
main	5	.1	.3
main	4	.1	.3
main	3	.1	.3
main	2	.1	.3
main	1	.1	.3

**PROPOSED HEC-RAS**

HEC-RAS Plan: prop River: robinsonfork Reach: main Profile: PF 1

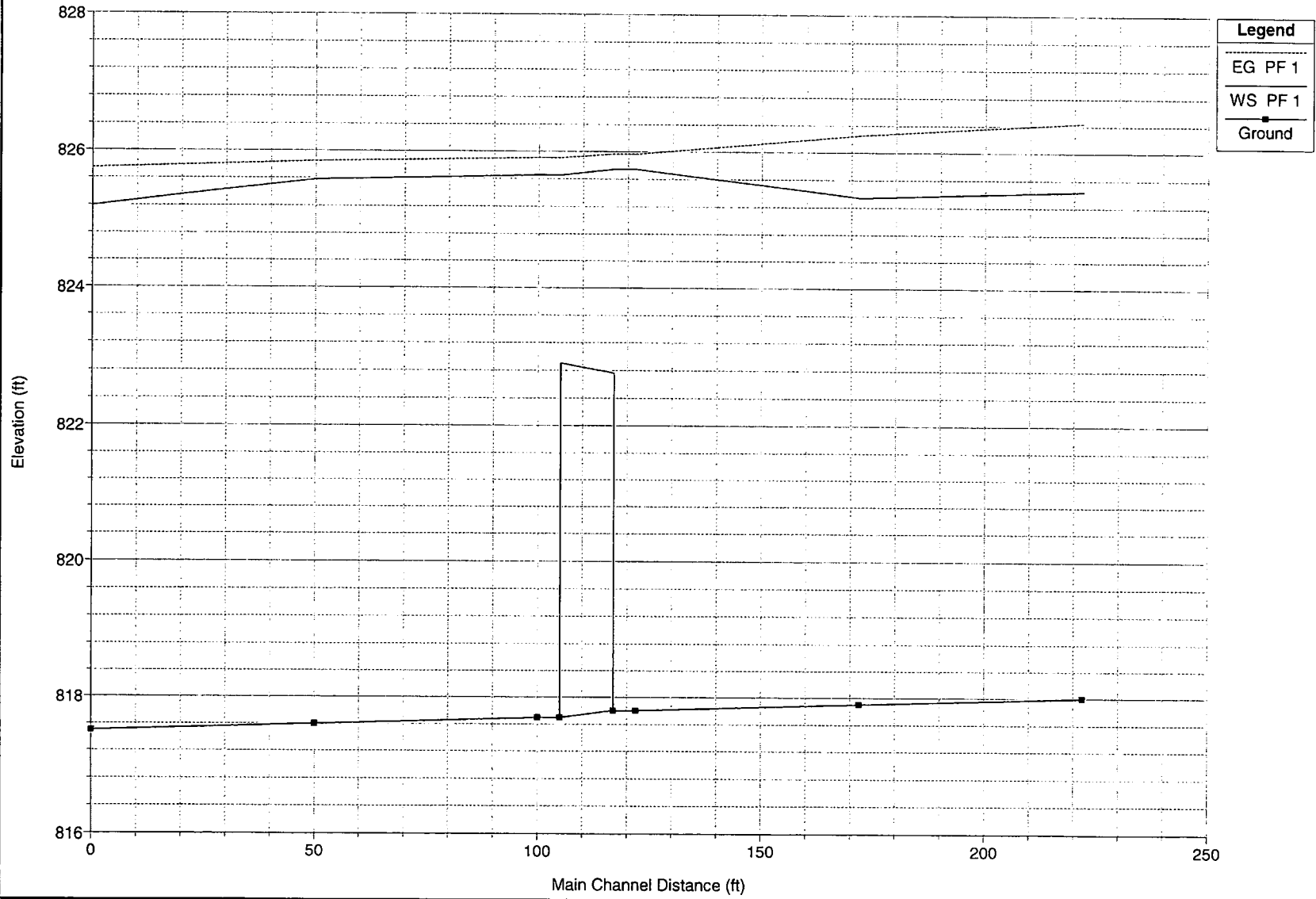
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
main	6	PF 1	3128.00	818.00	825.44		826.44	0.003126	8.75	487.41	164.60	0.57
main	5	PF 1	3128.00	817.90	825.34		826.25	0.003295	8.89	540.47	196.99	0.58
main	4	PF 1	3128.00	817.80	825.74	823.86	825.96	0.000971	5.01	980.39	260.26	0.32
main	3.5	Bridge										
main	3	PF 1	3128.00	817.70	825.66	823.86	825.91	0.001082	5.29	919.16	244.18	0.34
main	2	PF 1	3128.00	817.60	825.56		825.85	0.001169	5.49	901.91	249.03	0.35
main	1	PF 1	3128.00	817.50	825.20	824.09	825.74	0.002002	7.04	679.33	221.42	0.46



HEC-RAS Plan: prop River: robinsonfork Reach: main Profile: PF 1

Reach	River Sta	Profile	E.G. Elev (ft)	W.S. Elev (ft)	Vel Head (ft)	Frctn Loss (ft)	C & E Loss (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Top Width (ft)
main	6	PF 1	826.44	825.44	1.01	0.16	0.03	452.13	2593.19	82.68	164.60
main	5	PF 1	826.25	825.34	0.92	0.08	0.21	738.82	2225.63	163.55	196.99
main	4	PF 1	825.96	825.74	0.22			1799.14	1249.59	79.27	260.26
main	3.5	Bridge									
main	3	PF 1	825.91	825.66	0.25	0.06	0.01	1782.43	1296.27	49.30	244.18
main	2	PF 1	825.85	825.58	0.27	0.08	0.03	1535.18	1288.73	304.09	249.03
main	1	PF 1	825.74	825.20	0.55			594.68	2036.59	496.73	221.42

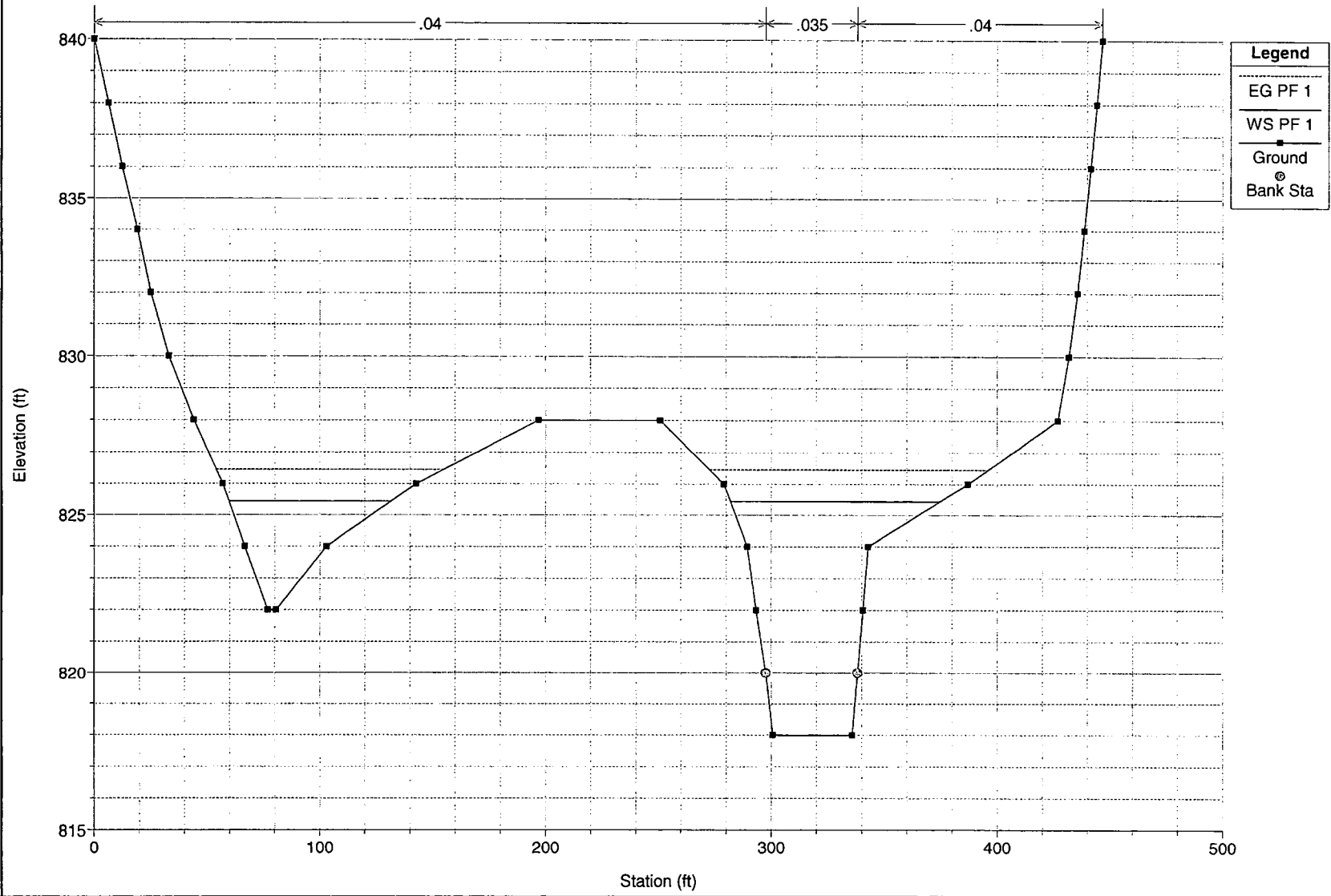
robinsonfork Plan: robinson-prop 8/8/2013  
Geom: robinson-proposed Flow: robinsonfork



robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

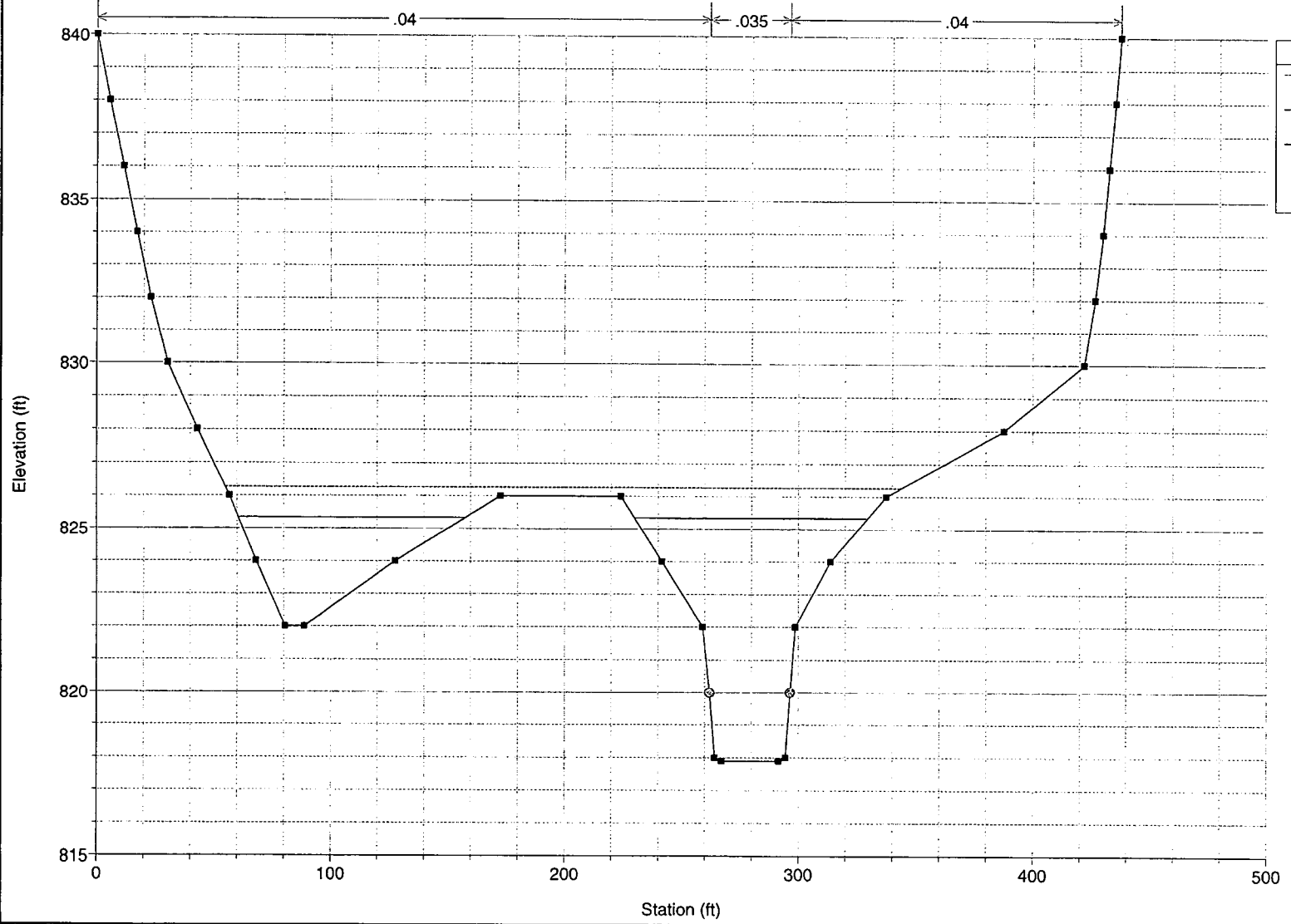
RS = 6



robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

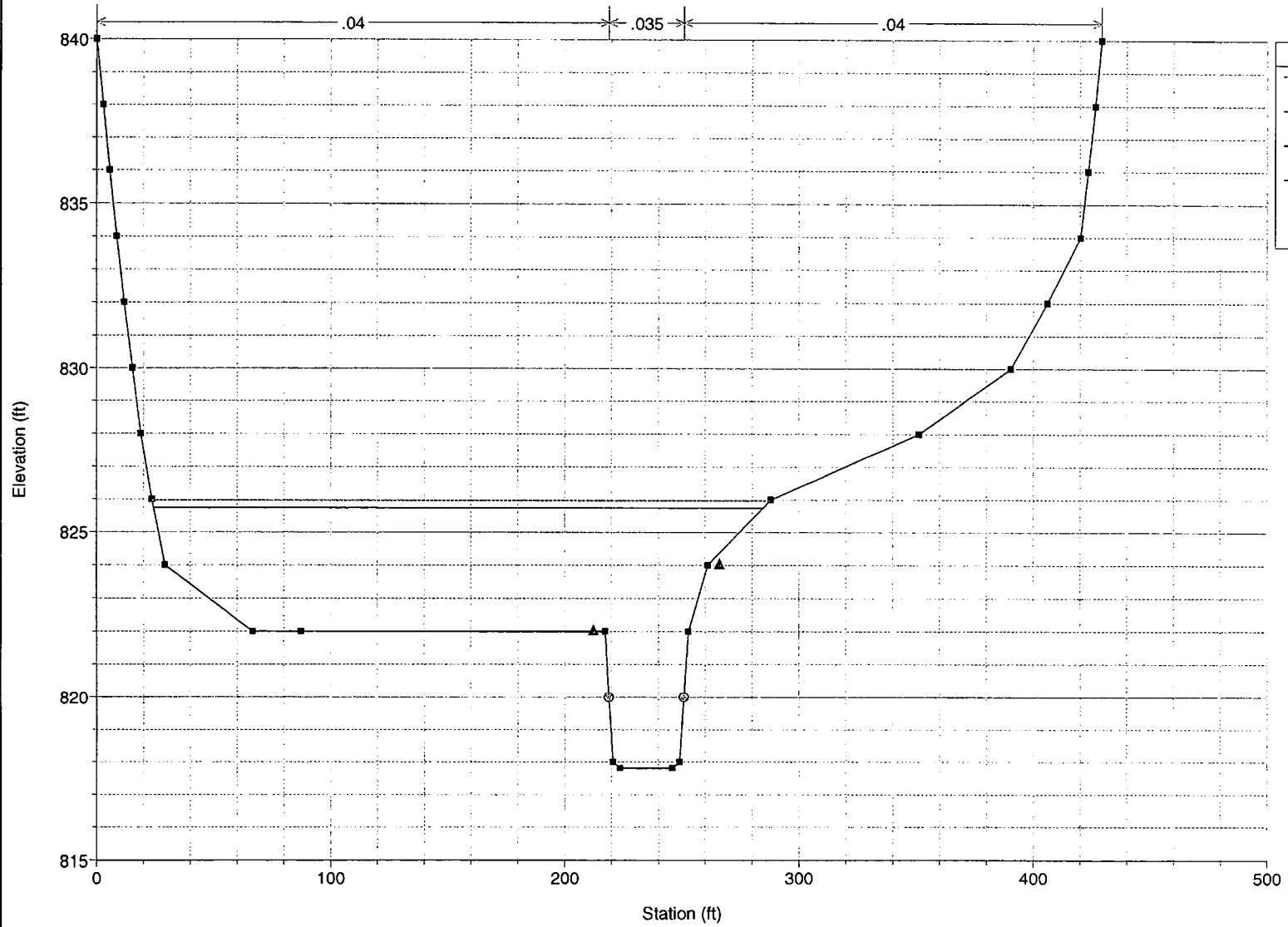
RS = 5



robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

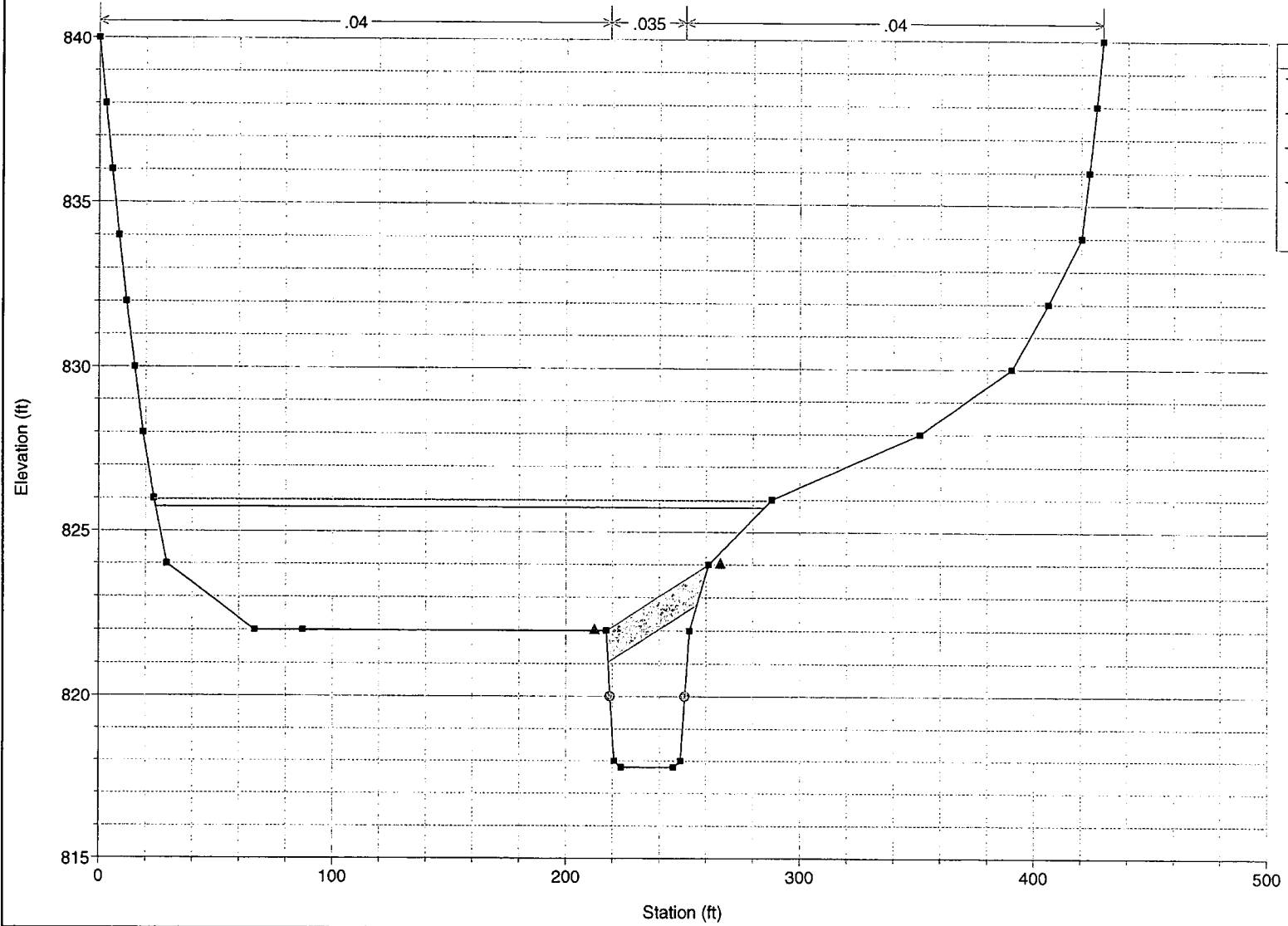
RS = 4



robinsonfork Plan: robinson-prop 8/8/2013

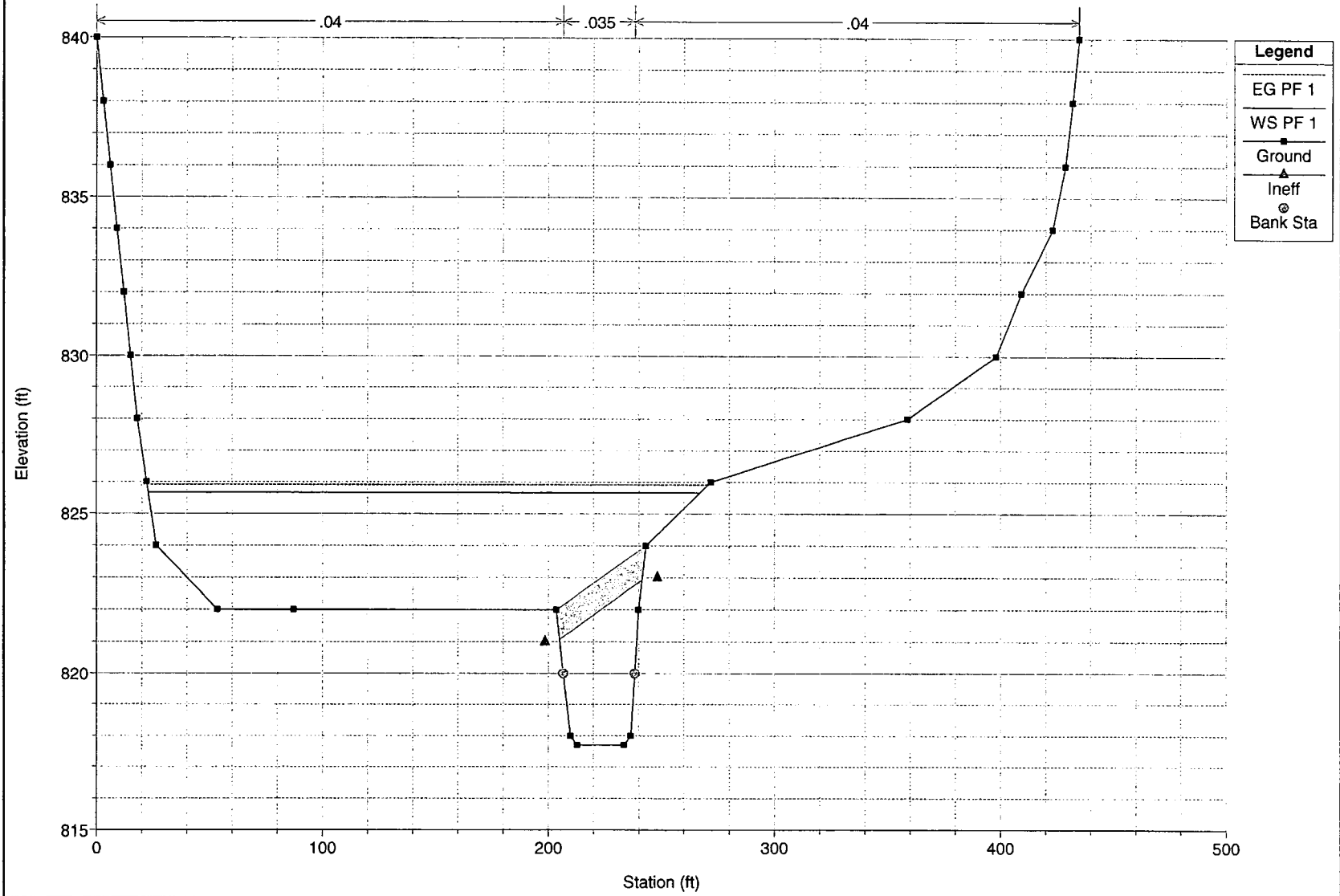
Geom: robinson-proposed Flow: robinsonfork

RS = 3.5 BR



robinsonfork Plan: robinson-prop 8/8/2013

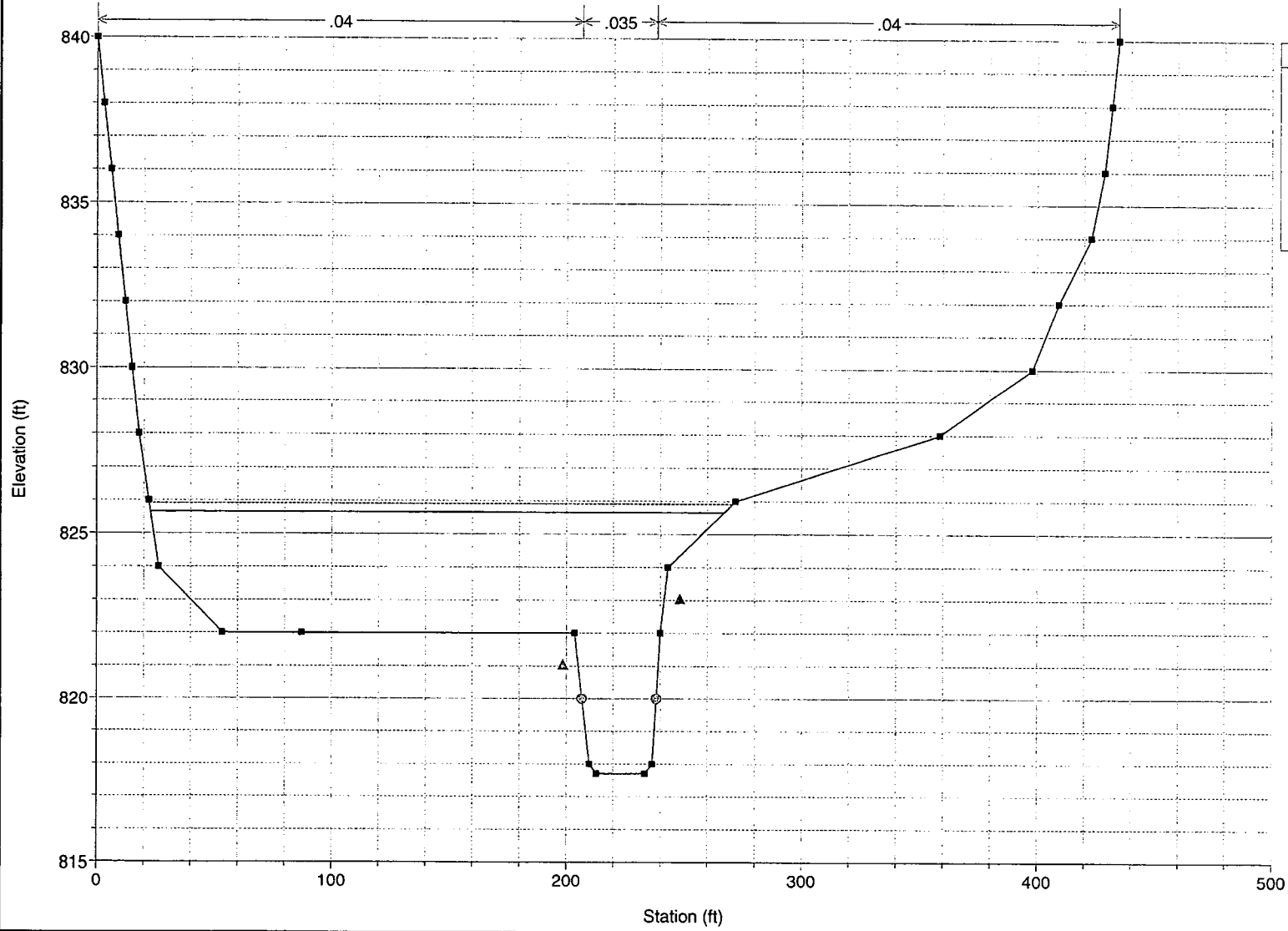
Geom: robinson-proposed Flow: robinsonfork  
RS = 3.5 BR



robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

RS = 3

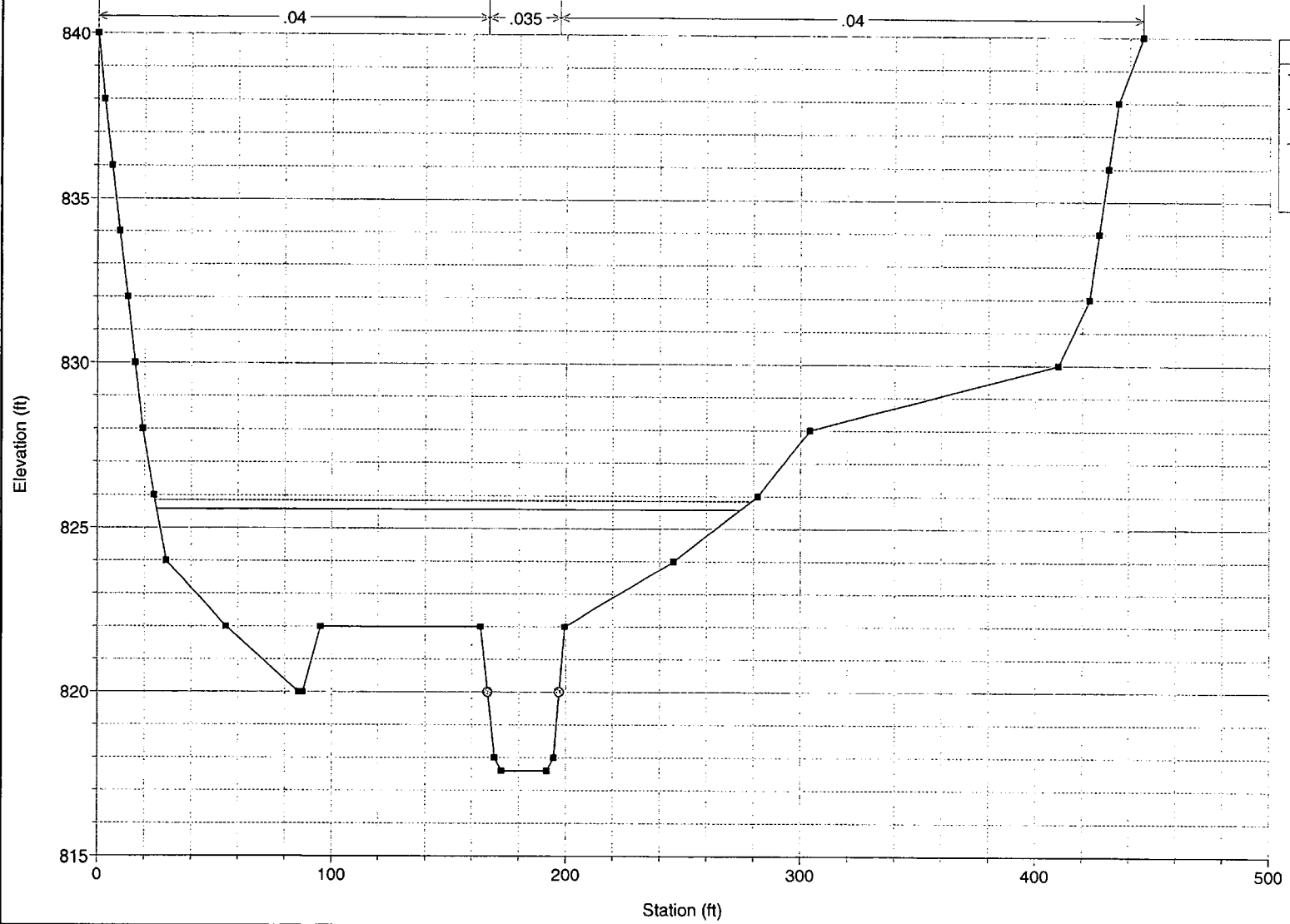




robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

RS = 2



**Legend**

EG PF 1

WS PF 1

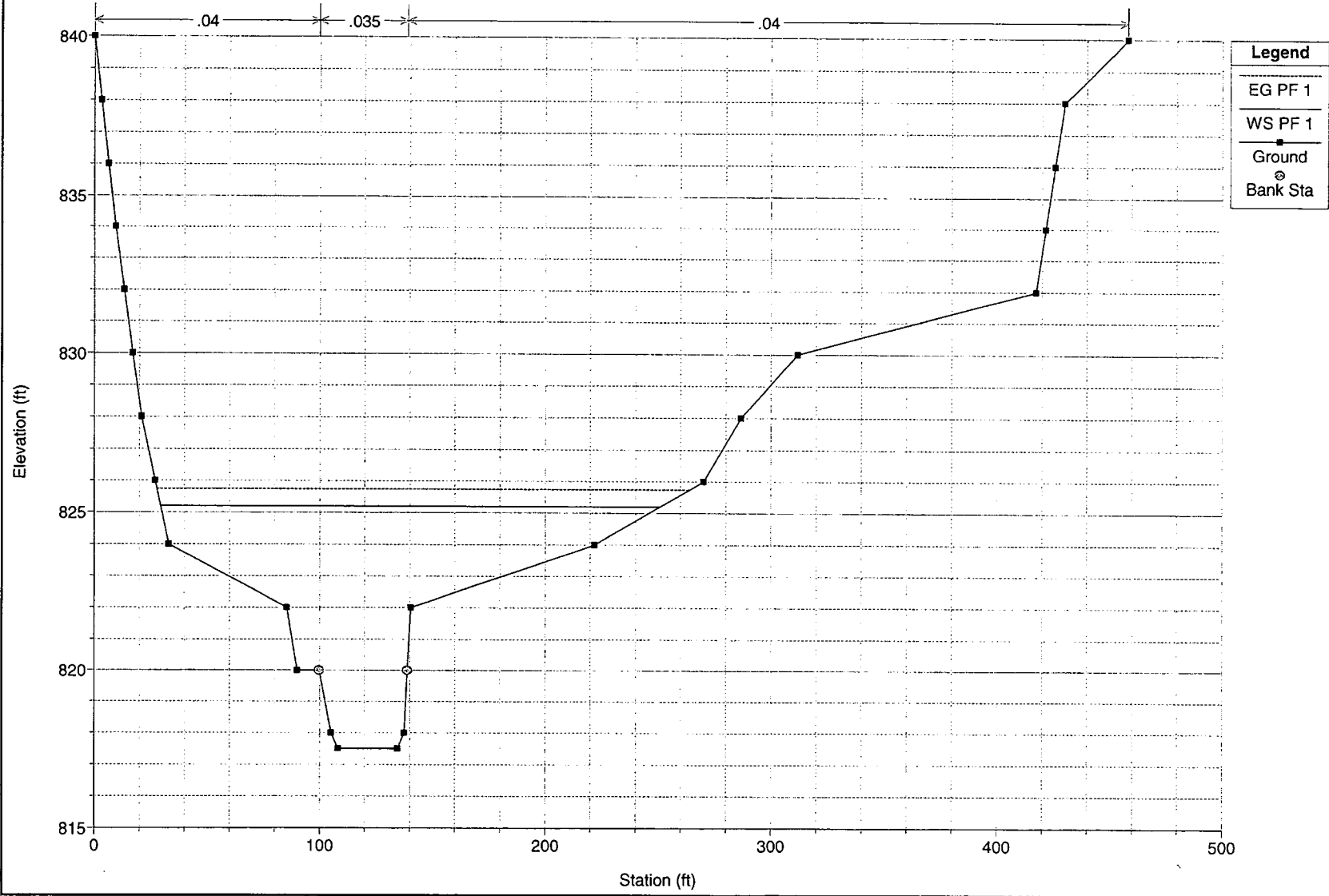
Ground

Bank Sta

robinsonfork Plan: robinson-prop 8/8/2013

Geom: robinson-proposed Flow: robinsonfork

RS = 1



robinsonfork.rep

HEC-RAS Version 4.1.0 Jan 2010  
U.S. Army Corps of Engineers  
Hydrologic Engineering Center  
609 Second Street  
Davis, California

```
X      X  XXXXXX      XXXX      XXXX      XX      XXXX
X      X  X          X      X      X  X  X      X
X      X  X          X      X      X  X  X      X
XXXXXXXX XXXX      X      XXX  XXXX      XXXXXX      XXXX
X      X  X          X      X      X  X  X          X
X      X  X          X      X      X  X  X          X
X      X  XXXXXX      XXXX      X      X      X      X      XXXXX
```

PROJECT DATA

Project Title: robinsonfork  
Project File : robinsonfork.prj  
Run Date and Time: 8/8/2013 1:50:13 PM

Project in English units

PLAN DATA

Plan Title: robinson-prop  
Plan File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.p02

Geometry Title: robinson-proposed  
Geometry File : h:\Projects\09261\092612006\NS\Floodplain\Robinson  
Fork\robinsonfork.g02

Flow Title : robinsonfork  
Flow File : h:\Projects\09261\092612006\NS\Floodplain\Robinson  
Fork\robinsonfork.f01

Plan Summary Information:

Number of:	Cross Sections =	6	Multiple Openings =	0
	Culverts =	0	Inline Structures =	0
	Bridges =	1	Lateral Structures =	0

Computational Information

Water surface calculation tolerance =	0.01
Critical depth calculation tolerance =	0.01
Maximum number of iterations =	20
Maximum difference tolerance =	0.3
Flow tolerance factor =	0.001

Computation Options

Critical depth computed only where necessary	
Conveyance Calculation Method:	At breaks in n values only
Friction Slope Method:	Average Conveyance
Computational Flow Regime:	Subcritical Flow

FLOW DATA

robinsonfork.rep

Flow Title: robinsonfork

Flow File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.f01

Flow Data (cfs)

River	Reach	RS	PF 1
robinsonfork	main	6	3128

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			
robinsonfork	main	PF 1	
Normal S = 0.002			

GEOMETRY DATA

Geometry Title: robinson-proposed

Geometry File : h:\Projects\09261\092612006\NS\Floodplain\Robinson Fork\robinsonfork.g02

CROSS SECTION

RIVER: robinsonfork

REACH: main RS: 6

INPUT

Description:

Station	Elevation	Data	num=	32						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	6.4	838	12.4	836	19.2	834	25.1	832	
33.1	830	44.1	828	57	826	66.7	824	76.9	822	
80.6	822	103	824	142.8	826	197	828	250.8	828	
279	826	289.3	824	293.3	822	297.6	820	300.6	818	
335.8	818	338.2	820	340.6	822	342.9	824	387.1	826	
426.9	828	431.9	830	435.7	832	438.6	834	441.5	836	
444.2	838	446.6	840							

Manning's n Values

Sta	n Val	Sta	num=	3	Sta	n Val
0	.04	297.6	n Val	.035	338.2	.04

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	297.6	338.2		50	50	50		.1	.3

CROSS SECTION

RIVER: robinsonfork

REACH: main RS: 5

INPUT

Description:

robinsonfork.rep

Station Elevation Data num= 32

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	840	5.5	838	11.4	836	17.2	834	23	832
30.2	830	42.9	828	56.7	826	68.1	824	80.6	822
88.9	822	127.7	824	172.7	826	224.1	826	241.7	824
259.1	822	262.1	820	264.2	818	267.2	817.9	291.5	817.9
294.5	818	296.4	820	298.6	822	313.7	824	337.4	826
387.7	828	422	830	426.6	832	430	834	432.6	836
435.3	838	437.6	840						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.04	262.1	.035	296.4	.04

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

262.1	296.4	50	50	50	.1	.3
-------	-------	----	----	----	----	----

CROSS SECTION

RIVER: robinsonfork  
REACH: main RS: 4

INPUT

Description:

Station Elevation Data num= 28

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	840	2.8	838	5.6	836	8.5	834	11.7	832
15.3	830	18.8	828	23.6	826	29.1	824	66.7	822
87.3	822	217.3	822	218.9	820	220.6	818	223.6	817.8
246	817.8	249	818	250.9	820	252.8	822	261.1	824
288	826	351.2	828	390.5	830	406	832	420.2	834
423.5	836	426.6	838	429.2	840				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.04	218.9	.035	250.9	.04

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

218.9	250.9	22	22	22	.3	.5
-------	-------	----	----	----	----	----

Ineffective Flow num= 2

Sta L	Sta R	Elev	Permanent
0	212.3	822	F
266.1	429.2	824	F

BRIDGE

RIVER: robinsonfork  
REACH: main RS: 3.5

INPUT

Description:

Distance from Upstream XS = 5  
Deck/Roadway Width = 12  
Weir Coefficient = 2.6

Upstream Deck/Roadway Coordinates

num= 2

Sta Hi	Cord Lo	Cord	Sta Hi	Cord Lo	Cord
217.3	822	821	261.1	824	823

Upstream Bridge Cross Section Data

Station Elevation Data num= 28

robinsonfork.rep

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	840	2.8	838	5.6	836	8.5	834	11.7	832
15.3	830	18.8	828	23.6	826	29.1	824	66.7	822
87.3	822	217.3	822	218.9	820	220.6	818	223.6	817.8
246	817.8	249	818	250.9	820	252.8	822	261.1	824
288	826	351.2	828	390.5	830	406	832	420.2	834
423.5	836	426.6	838	429.2	840				

Manning's n Values num= 3  
 Sta n Val Sta n Val Sta n Val  
 0 .04 218.9 .035 250.9 .04

Bank Sta: Left Right Coeff Contr. Expan.  
 218.9 250.9 .3 .5

Ineffective Flow num= 2  
 Sta L Sta R Elev Permanent  
 0 212.3 822 F  
 266.1 429.2 824 F

Downstream Deck/Roadway Coordinates num= 2  
 Sta Hi Cord Lo Cord Sta Hi Cord Lo Cord  
 203.6 822 821 243.2 824 823

Downstream Bridge Cross Section Data num= 28

Station	Elevation	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	840	3	838	6	836	9	834	12	832
15	830	18	828	22.1	826	26.3	824	53.5	822
87.3	822	203.6	822	206.6	820	209.8	818	212.8	817.7
233.5	817.7	236.5	818	238.3	820	239.9	822	243.2	824
271.9	826	358.8	828	398	830	409.2	832	423.1	834
428.7	836	431.9	838	434.7	840				

Manning's n Values num= 3  
 Sta n Val Sta n Val Sta n Val  
 0 .04 206.6 .035 238.3 .04

Bank Sta: Left Right Coeff Contr. Expan.  
 206.6 238.3 .3 .5

Ineffective Flow num= 2  
 Sta L Sta R Elev Permanent  
 0 198.6 821 F  
 248.2 434.7 823 F

Upstream Embankment side slope = 0 horiz. to 1.0 vertical  
 Downstream Embankment side slope = 0 horiz. to 1.0 vertical  
 Maximum allowable submergence for weir flow = .98  
 Elevation at which weir flow begins =  
 Energy head used in spillway design =  
 Spillway height used in design =  
 Weir crest shape = Broad Crested

Number of Bridge Coefficient Sets = 1

Low Flow Methods and Data

Energy  
 Selected Low Flow Methods = Highest Energy Answer

High Flow Method

Pressure and Weir flow  
 Submerged Inlet Cd =  
 Submerged Inlet + Outlet Cd = .8

Max Low Cord

robinsonfork.rep

=

Additional Bridge Parameters

Add Friction component to Momentum

Do not add weight component to Momentum

Class B flow critical depth computations use critical depth

inside the bridge at the upstream end

Criteria to check for pressure flow = Upstream energy grade line

BRIDGE OUTPUT Profile #PF 1

E.G. US. (ft)	825.96	Element	Inside BR US
Inside BR DS			
W.S. US. (ft)	825.74	E.G. Elev (ft)	825.96
825.91			
Q Total (cfs)	3128.00	w.s. Elev (ft)	825.74
825.66			
Q Bridge (cfs)	450.68	Crit w.s. (ft)	823.57
823.59			
Q Weir (cfs)	2677.32	Max Chl Dpth (ft)	7.94
7.96			
Weir Sta Lft (ft)	23.70	Vel Total (ft/s)	3.14
3.27			
Weir Sta Rgt (ft)	287.51	Flow Area (sq ft)	997.05
956.46			
Weir Submerg	0.96	Froude # Chl	0.21
0.23			
Weir Max Depth (ft)	3.96	Specif Force (cu ft)	2459.82
2361.36			
Min El Weir Flow (ft)	822.01	Hydr Depth (ft)	3.83
3.92			
Min El Prs (ft)	822.77	W.P. Total (ft)	339.83
320.63			
Delta EG (ft)	0.06	Conv. Total (cfs)	
Delta WS (ft)	0.09	Top Width (ft)	260.26
244.18			
BR Open Area (sq ft)	127.63	Frctn Loss (ft)	
BR Open Vel (ft/s)	3.53	C & E Loss (ft)	
Coef of Q		Shear Total (lb/sq ft)	
Br Sel Method	Press/Weir	Power Total (lb/ft s)	0.00
0.00			

Note: The downstream water surface is above the minimum elevation required for orifice flow. The orifice flow equation was used for pressure flow.

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, water surface was used.

Note: For the cross section inside the bridge at the upstream end, the water surface and energy have been projected from the upstream cross section. The selected bridge modeling method does not compute answers inside the bridge.

Note: Multiple critical depths were found at this location. The critical depth with the lowest, valid, water surface was used.

Note: For the cross section inside the bridge at the downstream end, the water surface and energy have been projected from the downstream cross section. The selected bridge modeling method does not

compute answers inside the bridge.

CROSS SECTION

RIVER: robinsonfork  
 REACH: main RS: 3

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	3	838	6	836	9	834	12	832	
15	830	18	828	22.1	826	26.3	824	53.5	822	
87.3	822	203.6	822	206.6	820	209.8	818	212.8	817.7	
233.5	817.7	236.5	818	238.3	820	239.9	822	243.2	824	
271.9	826	358.8	828	398	830	409.2	832	423.1	834	
428.7	836	431.9	838	434.7	840					

Manning's n Values				num=		
Sta	n Val	Sta	n Val	Sta	n Val	
0	.04	206.6	.035	238.3	.04	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	206.6	238.3		50	50		.3	.5
Ineffective Flow			num=					
Sta L	Sta R	Elev	Permanent					
0	198.6	821	F					
248.2	434.7	823	F					

CROSS SECTION

RIVER: robinsonfork  
 REACH: main RS: 2

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	840	2.8	838	6.1	836	9.4	834	12.8	832	
16	830	19.3	828	24.1	826	29.4	824	54.9	822	
86	820	87.8	820	95.3	822	163.7	822	166.7	820	
169.7	818	172.7	817.6	191.9	817.6	194.9	818	197.2	820	
199.6	822	245.9	824	281.8	826	304	828	409.8	830	
423.1	832	427.1	834	431.1	836	435.2	838	445.7	840	

Manning's n Values				num=		
Sta	n Val	Sta	n Val	Sta	n Val	
0	.04	166.7	.035	197.2	.04	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	166.7	197.2		50	50		.1	.3

CROSS SECTION

RIVER: robinsonfork  
 REACH: main RS: 1

INPUT

Description:

Station Elevation Data		num=			
		27			



robinsonfork.rep									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	840	3.1	838	6.2	836	9.4	834	13.1	832
17	830	20.9	828	26.9	826	33	824	85.4	822
90.1	820	99.8	820	105.1	818	108.1	817.5	134.5	817.5
137.5	818	138.9	820	140.4	822	221.8	824	270.2	826
286.7	828	311.8	830	417.4	832	421.7	834	425.8	836
430.1	838	458.2	840						

Manning's n Values					
Sta	n Val	Sta	n Val	Sta	n Val
0	.04	99.8	.035	138.9	.04

Bank Sta:	Left	Right	Coeff	Contr.	Expan.
	99.8	138.9		.1	.3

SUMMARY OF MANNING'S N VALUES

River: robinsonfork

Reach	River Sta.	n1	n2	n3
main	6	.04	.035	.04
main	5	.04	.035	.04
main	4	.04	.035	.04
main	3.5	Bridge		
main	3	.04	.035	.04
main	2	.04	.035	.04
main	1	.04	.035	.04

SUMMARY OF REACH LENGTHS

River: robinsonfork

Reach	River Sta.	Left	Channel	Right
main	6	50	50	50
main	5	50	50	50
main	4	22	22	22
main	3.5	Bridge		
main	3	50	50	50
main	2	50	50	50
main	1			

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS

River: robinsonfork

Reach	River Sta.	Contr.	Expan.
main	6	.1	.3
main	5	.1	.3
main	4	.3	.5
main	3.5	Bridge	
main	3	.3	.5
main	2	.1	.3

main

1

robinsonfork.rep  
.1 .3

COUNTY OF DODDRIDGE, TO WIT

I, Virginia Nicholson, Editor of THE HERALD RECORD, a weekly newspaper published regularly, in Doddridge County, West Virginia, Do Hereby Certify Upon Oath That the Accompanying Legal Notice Entitled:

..... Floodplain Permit .....

..... was published in said paper for .. 2 ..  
successive weeks beginning with the issue  
of .. August 20 .. 2013 and  
ending with the issue of

..... August 27 .. 2013 and

that said notice contains .. 168 ..

WORD SPACE at .. e 115 .. cents a word

amounts to the sum of \$ .. 19.32 ..

FOR FIRST PUBLICATION, SECOND PUBLICATION IS 75% OF THE FIRST PUBLICATION

\$ .. 14.49 ..  
and each publication thereafter

\$ .. 33.81 .. TOTAL

EDITOR

..... V. Nicholson .....

SWORN TO AND SUBSCRIBED

BEFORE ME THIS THE .. 29 .. DAY  
OF .. August .. 2013

NOTARY PUBLIC

..... Laura J Adams .....

Legal Advertisement  
Doddridge County  
Floodplain Permit Application  
Please take notice that on the 13<sup>th</sup> day of August, 2013 EQT GATHERING LLC, PERMIT #13-063 filed an application for a Floodplain Permit to develop land located at or about SURFACE OWNERS: ERIC L. GLASPELL, 47 ACRES, MCCLELLAN DISTRICT, DEED BOOK 244 PAGE 179, MAP 24 PARCEL 7.1. The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. Any interested persons who desire to comment shall present the same in writing by September 2, 2013.  
Delivered to the:  
Clerk of the County Court  
118 E. Court Street, West Union, WV 26456  
Beth A. Rogers, Doddridge County Clerk  
Dan Wellings, Doddridge County Flood Plain Manager  
8-20-2xb

