

LETTER OF TRANSMITTAL



HMB Professional Engineers, Inc.
 3 HMB Circle, US 460
 Frankfort, KY 40601
 Phone: 502/695-9800
 Fax: 502/695-9810

<small>DATE</small>	4/17/2009	<small>JOB NO</small>	4132
<small>ATTENTION</small>			
<small>RE:</small>	Fleming 2008 Water Project		
	Fleming County Water Association		

TO Public Service
211 Sower Blvd.
Frankfort, KY 40602

WE ARE SENDING YOU Attached Under Separate Cover Via: _____ the following items:

Shop Drawings Prints Plans Samples Specifications

Copy of Letter Change Order _____

COPIES	DATE	NO.	DESCRIPTION
3			PSC Application
10			Prelim. Engineering Report
10			Exhibit A - DOW Approval
10			Exhibit 1 - USDA / RD Letter of Conditions
2			Exhibit 2 - Plans and Specifications
10			Exhibit 3 - Final Engineering Report and Bid Tabulation
10			Exhibit 4 - RD Letter of Concurrence

RECEIVED

APR 17 2009

PUBLIC SERVICE
COMMISSION

THESE ARE TRANSMITTED as checked below:

- | | | |
|---|---|---|
| <input type="checkbox"/> For Approval | <input type="checkbox"/> Approved as Submitted | <input type="checkbox"/> Approved as Submitted |
| <input type="checkbox"/> For Your Use | <input type="checkbox"/> Approved as Noted | <input type="checkbox"/> Approved as Noted |
| <input type="checkbox"/> As Requested | <input type="checkbox"/> Returned for Corrections | <input type="checkbox"/> Returned for Corrections |
| <input type="checkbox"/> For Review and Comment | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> FOR BIDS DUE _____ | <input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US | |

REMARKS

If you have any questions or need additional information, please call.

COPY TO _____

SIGNED: Jeff Reynolds, P.E.

If enclosures are not as noted, kindly notify us at once

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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

APR 17 2009
PUBLIC SERVICE
COMMISSION

In the Matter of:

THE APPLICATION OF FLEMING COUNTY WATER
ASSOCIATION, INC. of FLEMINGSBURG, KY. FOR
(1) A CERTIFICATE OF PUBLIC CONVENIENCE AND
NECESSITY (2) APPROVAL OF THE PROPOSED PLAN
OF FINANCING SAID PROJECT (3) AN ORDER APPROVING
THE ADJUSTMENT OF RATES

NO.2009-00163

APPLICATION

This Application of Fleming County Water Association, Inc. (The "Applicant") of Flemingsburg, Kentucky respectfully shows:

1. That the Applicant is a nonprofit water association in Fleming County, Kentucky, created and existing under and by virtue of Chapter 273 of the Kentucky Revised Statutes, duly incorporated, with Articles of Incorporation filed in Book 2, Page 275, in the office of the Fleming County Clerk (and copies have been filed earlier with this Commission in Case No. 5378).

2. That the Post Office address of the Applicant is:

Fleming County Water Association, Inc.
2772 Morehead Road
P.O.Box 327
Flemingsburg, Ky. 41041

3. That the Applicant, pursuant to the provision of KRS 278.020, 278.023 and 278.030, seeks (i) a Certificate of Public Convenience and Necessity, permitting the Applicant to construct a waterworks construction project, consisting of extensions, additions and improvements (the "Project") to the existing waterworks system of the Applicant; (ii) approval of the proposed plan of financing said Project and (iii) an Order approving the proposed adjustments of rates to all its members.

4. That the Applicant desires to construct the Project in order to enable the Applicant to adequately serve residents in Fleming, Mason and Lewis Counties. The Project consists of the installation of a water line extensions and upsizing of some of its existing lines.

5. That the residences, farms, churches and businesses embraced in the service area of the Fleming County Water Association, Inc. were formerly served by private wells, cisterns and tank water, with no treatment facilities. There was no public water supply available for domestic consumption, and existing water

supply services were completely inadequate to serve their needs. That the proposed new construction will therefore clearly serve the public convenience and necessity of the citizens and residents to be served by the Applicant.

6. That the waterworks systems located nearest said area served by the Applicant are those owned by the City of Flemingsburg, Kentucky, Western-Fleming County Water District, Ewing, Fleming County, Kentucky, and Rowan Water, Inc., Morehead, Kentucky, and the new Greater Fleming County Regional Water Commission..

7. That the Applicant proposes to finance the construction of said project by a loan in the amount of \$375,000.00 from the Farmers Home Administration/RUS, secured by a lien on the association's fiscal assets and evidenced by the association's promissory note in the amount of \$375,000.00 to be repaid over a period of forty (40) years with interest at the rate of Five (5%) Per Cent Per Annum, or at such interest rate as may be prevailing at the time of loan closing and a grant from United States Department of Agriculture acting through the Rural Utilities Service in the amount of \$271,695.00.

A copy of the USDA/RD letter of conditions dated August 8, 2008 is filed herewith as Exhibit "1".

8. That the Applicant has observed the appropriate legal procedure in employing Haworth, Meyer & Boleyn, Inc., Engineers, Frankfort, Kentucky, to prepare the plans and specifications as to said project, both preliminary and final, which are submitted herewith as Exhibit "2". Said plans have been approved by the appropriate agencies of the Commonwealth of Kentucky as submitted herewith as Exhibits "A". Said plans have also been approved by the Rural Utilities Service of the United States Department of Agriculture. The association has advertised for bids and received same on March 19, 2009, which are filed herewith as Exhibit "3". A copy of the RD letter of concurrence in bid award is filed herewith as Exhibit "4".

Construction is to begin within -10- days of the bid award and is to be completed within 150 days thereafter.

9. The Applicant obtains its water supply primarily from the Greater Fleming County Regional Water Commission and from other connections from the suppliers listed above in Paragraph 6.

10. The Applicant proposes to adjust its rates in the entire area in which it serves, in accordance with the Letter Of Conditions from RUS dated August 8, 2008, Paragraph numbered "27", increasing them generally from the current rates being charged and collected and which are on file with this Commission and shown on attached Rate Exhibit A, to proposed rates which are shown on the attached Rate Exhibit B.

These rates shall produce the total revenue requirements set out in the engineering reports.

11. The reason for applying for these increases in rates is that our operation costs have increased gradually since the last rate increase of June 14, 2004 in Case No.2004-00192. The increase in rates for which approval is sought will supply approximately the amount of additional revenue to the association necessary to offset the additional costs of wholesale water and the increased general operating costs. The rates herein sought will be fair, just and reasonable for the service to be rendered by the association to all members and no class of members will be subsidized by any other members.

12. Notice to members has been given in conformance with 807 KAR 5:069 Sec. 4, by publishing the notice in a newspaper of general circulation in its local service area. Copy of Notice is attached as Rate Exhibit C.

13. The Applicant at its regular meeting held at Flemingsburg, Kentucky, on April 15, 2009, by resolution adopted the proposed new rate schedule, a copy of which is filed herewith as Rate Exhibit D.

14. With the signing of this application, J. E. Smith, Jr., President of Fleming County Water Association, Inc. hereby certifies:

That the proposed plans and specifications for the project have been designed to meet the minimum construction and operating requirements set out in 807 KAR 5:066, Section 5(3) and (4), Section 6(1), Sections 7 and 8, Section 9(1) through (3), Section 10(1) and Section 11.

15. Statements Concerning Financial Exhibit

- (1) No stock was authorized.
- (2) No stock was issued.
- (3) No preferred stock was issued.
- (4) The association has executed to USDA/Farmers Home Administration/RECD/RUS mortgages on its mains, distribution lines, meters, easements, storage tanks and tank sites on the dates and notes in the stated amounts as follows:

January 12, 1971	-	\$561,000.00
February 12, 1981	-	260,000.00
July 26, 1985	-	105,000.00-Paid in 1996
December 13, 1988	-	300,000.00
July 14, 1992	-	493,000.00
October 13, 1994	-	185,600.00
October 13, 1994	-	700,000.00
April 23, 1997	-	529,500.00
April 22, 2000	-	284,780.00
August 18, 2004	-	544,000.00

All mortgages are of record in the Fleming County Clerk's Office.

- (5) No bonds have been authorized or issued.
- (6) Notes are to USDA/Farmer Home Administration/
Rural Utilities Service

Date of Issue	Amount	Maturity Date	Interest Rate
Aug. 18, 2004	\$544,000	Aug. 18, 2044	4 ½%
Nov. 22, 2000	284,780	Nov. 22, 2040	5%
April 23, 1997	529,500	Apr. 23, 2037	5%
Oct. 13, 1994	\$700,000	Oct. 13, 2034	4 1/2%
Oct. 13, 1994	185,600	Oct. 13, 2034	4 1/2%
July 14, 1992	493,000	July 14, 2032	5%
Dec. 13, 1988	300,000	Dec. 13, 2028	5.75%
July 26, 1985	105,000	July 26, 2025	5% -Paid in 1996
Feb. 12, 1981	260,000	Feb. 12, 2021	5%
Jan. 12, 1971	561,000	Jan. 12, 2011	5%

(7) The association has no additional indebtedness other than ordinary monthly expenses.

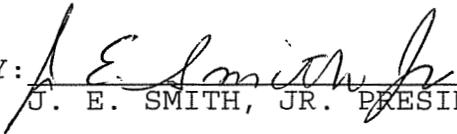
(8) The association has not paid any dividends because there is no capital stock.

WHEREFORE, Applicant, the Fleming County Water Association, Inc. prays that the Public Service Commission of Kentucky grant to the Applicant the following:

- A. A certificate of Public Convenience and Necessity permitting the Applicant to construct the necessary additional distribution system and lines needed to serve water to said new association members.
- B. An Order approving the financing arrangements made by the Association, viz., the obtaining of a loan in the amount of \$375,000.00 at an interest rate of 5% per annum or the prevailing interest rate at the time of loan closing, and the issuance, execution and delivery of the association's lien note to the Rural Utilities Service-United States Department of Agriculture.
- C. On Order approving the adjustment of the Applicant's rates as proposed herein and to put such revised rates into effect as soon as permitted by the Commission's Order.

DATED this 15 day of April, 2009, at Flemingsburg, Kentucky.

FLEMING COUNTY WATER ASSOC., INC.

BY: 
J. E. SMITH, JR. PRESIDENT

ATTEST:


WAYNE CRAFT, SECRETARY


MARVIN W. SUIT
Suit, McCartney, Price, Price
and Ruark, PLLC
Attorney at Law
207 Court Square
Flemingsburg, Ky. 41041
606-849-2338

Rate Exhibit ``A''

CURRENT MONTHLY RATES OF SERVICE
All CUSTOMERS

First	2,000 Gallons-	\$13.15	Minimum Bill
Next	8,000 Gallons-	5.75	Per 1,000 Gallons
Next	40,000 Gallons-	4.05	Per 1,000 Gallons
Over	50,000 Gallons-	3.10	Per 1,000 Gallons

Rate Exhibit ``B''

PROPOSED MONTHLY RATES OF SERVICE
ALL CUSTOMERS

First	2,000 Gallons	\$17.00	Minimum Bill
Next	8,000 Gallons	6.60	Per 1,000 Gallons
Next	40,000 Gallons	5.14	Per 1,000 Gallons
Over	50,000 Gallons	3.95	Per 1,000 Gallons

FLEMING COUNTY WATER ASSOC., INC.

NOTICE OF PROPOSED RATE INCREASE

Notice is hereby given by the Fleming County Water Association, Inc. of the filing of their Application with the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Ky. 40601 for permission to adjust their rates in accordance with the rate schedule below.

First	2,000 Gallons-	\$13.15 to	\$17.00	Minimum Bill
Next	8,000 Gallons-	5.75 to	6.60	per thousand gallons
Next	40,000 Gallons-	4.05 to	5.14	per thousand gallons
Over	50,000 Gallons-	3.10 to	3.95	per thousand gallons

This notice is given pursuant to 807 KAR 5:001 Sec.10(3)&(4)

The rates contained in this notice are the rates proposed by Fleming County Water Association. However, the Public Service Commission may order rates to be charged that differ from these proposed rates. Such action may result in rates for members other than the rates in this notice. At any rate, it is anticipated that the rate increases will become effective on June 1, 2009

J. E. Smith, Jr., President
Fleming County Water Association, Inc.
P. O. Box 327
Flemingsburg, Ky. 41041

Rate Exhibit "C"

RESOLUTION

WHEREAS, the Fleming County Water Assoc., Inc. of 2772 Morehead Road, P.O. Box 327, Flemingsburg, Kentucky 41041 is filing an Application with the Public Service Commission of Kentucky for matters including AN ORDER APPROVING THE ADJUSTMENT OF RATES, and

WHEREAS, Fleming County Water Association, Inc. has not had an increase in water rates since 2004 and purchased water costs and general operating expenses have gradually increased;

NOW THEREFORE, the following proposed rates for members are hereby adopted:

First	2,000 Gallons-	\$17.00	Minimum Bill
Next	8,000 Gallons-	6.60	Per 1,000 gallons
Next	40,000 Gallons-	5.14	Per 1,000 gallons
Over	50,000 Gallons-	3.95	Per 1,000 gallons

I hereby certify that the foregoing resolution was adopted by the Board of Directors of the Fleming County Water Assoc., Inc. at its regular meeting on April 15, 2009.

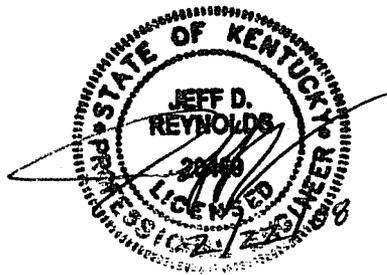


WAYNE CRAFT, SECRETARY

Rate Exhibit "D"

PRELIMINARY ENGINEERING REPORT

**FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY**



February 2008

Prepared By:



3 HMB Circle
Frankfort, Kentucky 40601
(502) 695-9800
(502) 695-9810 Fax

Table of Contents

Introduction	2
Need for Project	2
Proposed Project	2
Cost Summary	3
Project Funding	4
Recommendation	4
Appendix A – Project Maps	Figure 1 Figure 2

INTRODUCTION

The Fleming County Water Association (FCWA) is currently pursuing funding to upgrade approximately 3.6 miles of 4-inch water line to 6-inch water line along Wallingford Road and extend a 3-inch water line along Story Branch Road. It is estimated that the proposed project will have a construction cost of \$250,000 and a project cost of \$360,000. Proposed financing for this project shall be in the form of a Rural Development Loan and Grant.

NEED FOR PROJECT

Wallingford Road Water Line Upgrade

Currently, water is supplied to the Wallingford pump station through a 4-inch water line along Wallingford Road (See Figure 1 of Appendix A). This 4-inch water line acts as a restriction because it is not adequately sized to provide water to the pump station when it is called to run. When the pumps are called to run, many customers suffer from low pressure. The FCWA, in an effort to correct this problem, has partially closed the valves at the pump station. This causes the pumps to work harder and for longer periods of time. This results in an increase in electrical costs and maintenance cost. It will also result in having to replace the pumps more often due to a shorter pump life. By upgrading the existing water line to a 6-inch, the customers would not suffer from low pressure when the pumps are called to run. A 6-inch water line would also allow the valves at the pump station to be opened and pumps to run as they were designed.

Story Branch Road Loop

Customers located near the end of a dead end water line often experience stagnant water. This is a result of very little turn over of the water caused by low demand. This happens to be the case along Story Branch Road (See Figure 2 of Appendix A). To prevent stagnant water, FCWA must continually flush the dead end lines. Flushing lines costs FCWA time and money.

PROPOSED PROJECT

Wallingford Road Water Line Upgrade

The FCWA proposes to upgrade the existing 4-inch water line by installing a 6-inch water line on the opposite side of the road. This will allow both the 4-inch and the 6-inch water lines to supply water to the pump station and the customers. This should eliminate low pressures when the pumps are called to run and allow the valves at the pump station to be fully opened and let the pump station operate as it was designed. This should allow the pumps to operate more efficiently and extend the life of the pumps. This in turn should save FCWA time and money.

Story Branch Road Loop

To eliminate stagnant water at the end of the dead end lines, FCWA proposes to connect the two dead end water lines with approximately one mile of 3-inch water line, thereby creating a loop. By creating a loop, water will continually pass through the water lines resulting in fresher water. This will also reduce the amount of flushing required by FCWA.

COST SUMMARY

The following Table summarizes the proposed project cost.

FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
PROJECT COST SUMMARY
FEBRUARY 2008

1. PUBLIC FACILITIES

a.	Estimated Construction Cost	\$250,000
b.	Engineering	
1.	Preliminary Engineering	\$15,000
2.	Engineering Design	\$29,000
3.	Construction Inspection	\$24,000
4.	Environmental Assessment	\$2,000
5.	PSC	<u>\$2,000</u>
		\$72,000
c.	Other Public Facilities	
1.	Legal/Admin.	\$10,000
2.	Land & Rights	\$3,000
	TOTAL PUBLIC FACILITIES	\$335,000
2.	CONTINGENCIES	\$25,000
3.	TOTAL PROJECT COST	\$360,000

PROJECT FUNDING

The proposed funding for this project shall be made available by the following:

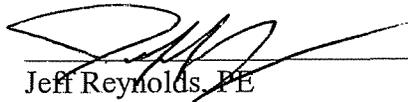
- Rural Development Grant \$50,000
- Rural Development Loan \$310,000
- Total Funding \$360,000

RECOMMENDATION

It is recommended that the proposed project be funded as soon as possible and allow design to begin immediately.

Prepared By:

HMB PROFESSIONAL ENGINEERS, INC



Jeff Reynolds, PE
Project Manager

APPENDIX A
PROJECT MAPS

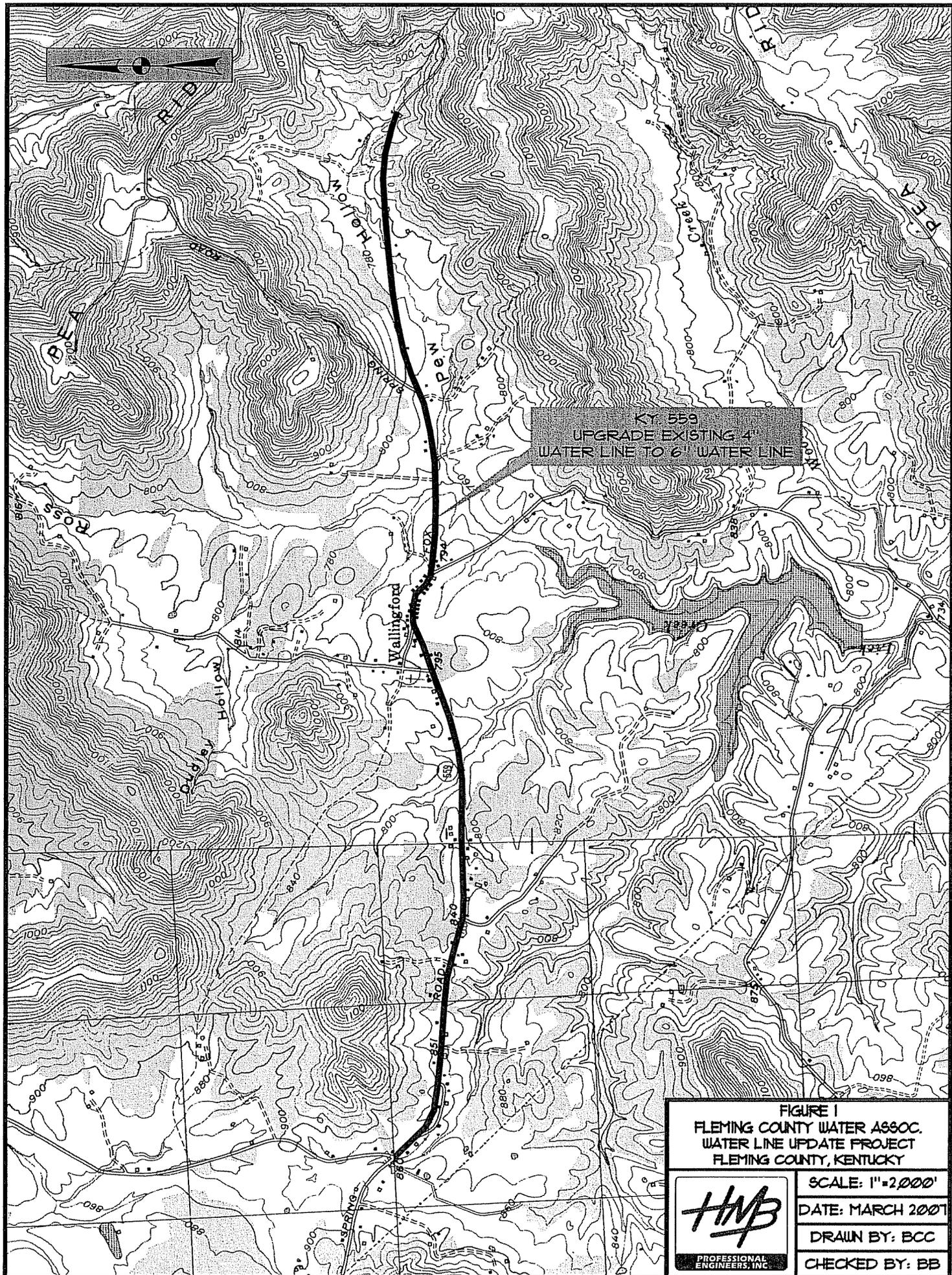


FIGURE I
FLEMING COUNTY WATER ASSOC.
WATER LINE UPGRADE PROJECT
FLEMING COUNTY, KENTUCKY



SCALE: 1"=2,000'
DATE: MARCH 2007
DRAWN BY: BCC
CHECKED BY: BB

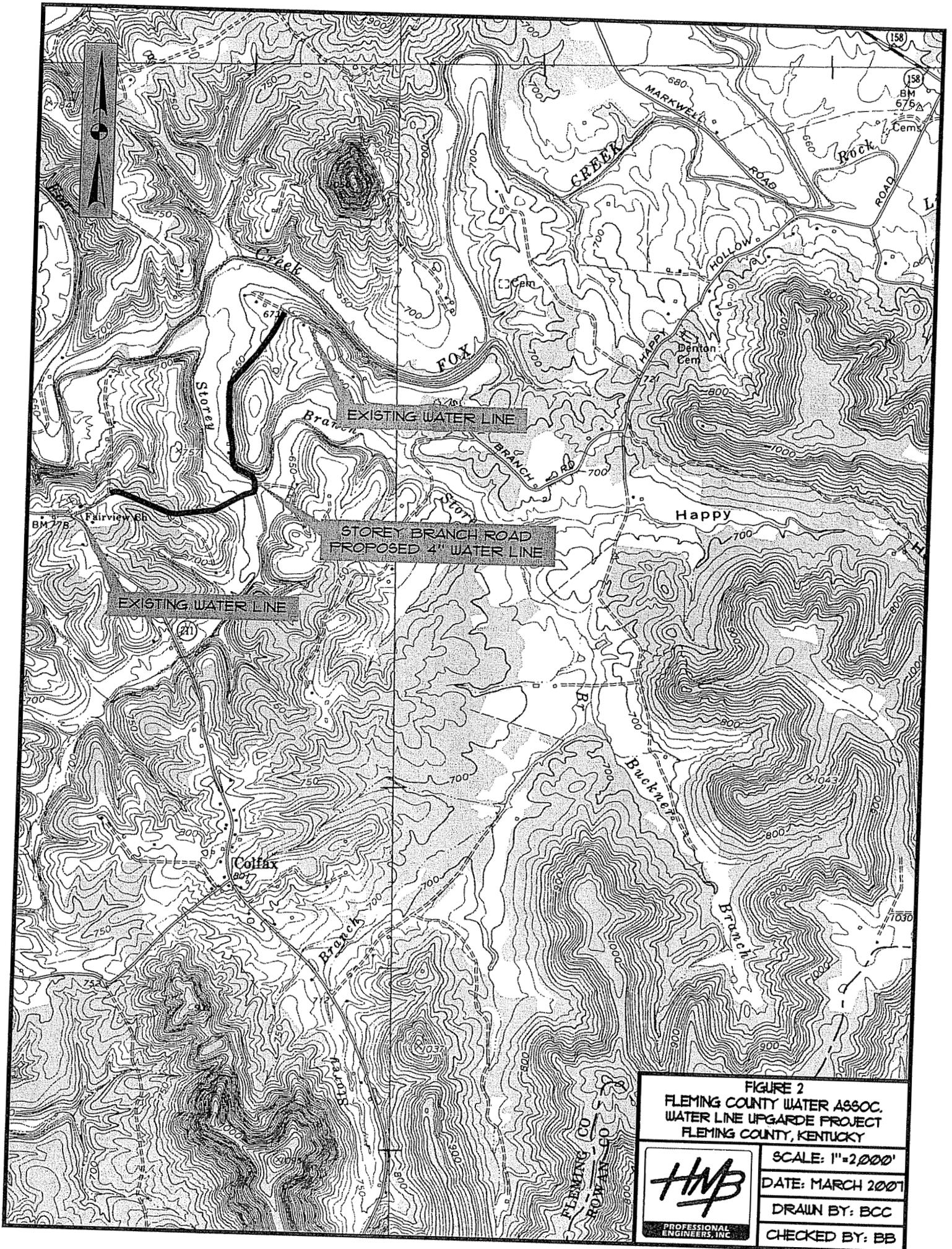


FIGURE 2
FLEMING COUNTY WATER ASSOC.
WATER LINE UPGRADE PROJECT
FLEMING COUNTY, KENTUCKY

SCALE: 1"=2,000'
DATE: MARCH 2001
DRAWN BY: BCC
CHECKED BY: BB

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PROFESSIONAL
ENGINEERS, INC.

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**PUBLIC SERVICE
COMMISSION**

EXHIBIT A

DIVISION OF WATER APPROVAL LETTER



STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS, 4TH FLOOR
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

4110.
JDR
CAS
File

October 2, 2008

OCT 8 2008
HMB Professional
Engineers, Inc.

Eugene Jett, Manager
Fleming Co Water Association
PO Box 327
Flemingsburg, KY 41041

RE: Fleming Co Water Association
AI # 33873, APE20080001
PWSID # 0350133-08-001
Fleming 2008 Water Project
Fleming County, KY

Dear Mr. Jett:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If you have any questions concerning this project, please contact George Partridge at 502-564-8158 extension 545.

Sincerely,

James M. (Mike) Riley, PE
Acting Supervisor, Engineering Section
Water Infrastructure Branch
Division of Water

JMR: GP

Enclosures

C: HMB Professional Engineers Inc
Fleming County Health Department
Public Service Commission
Division of Plumbing
Water Quality
Water Resources

Distribution-Major Construction

Fleming Co Water Association

Subject Item Inventory

Activity ID No.: APE20080001

Subject Item Inventory:

ID	Designation	Description
AIOO33873		
PORT3	Water Line	21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC

Subject Item Groups:

ID	Description	Components
GACT5	21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC	PORT3 21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC

KEY

ACTV = Activity

AREA = Area

EQPT = Equipment

PERS = Personnel

STOR = Storage

TRMT = Treatment

AIOO = Agency Interest

COMB = Combustion

MNPT = Monitoring Point

PORT = Transport

STRC = Structure

Distribution-Major Construction

Fleming Co Water Association
Facility Requirements

Activity ID No.: APE20080001

Page 1 of 8

GACT5 (Fleming 2008 Water Proj.) 21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new or relocated water line(s). Take samples at connection points to existing lines, at 1 mile intervals, and at dead ends without omitting any branch of the new or relocated water line. Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:100 Section 1(7), 401 KAR 8:150 Section 4, Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Submittal/Action Requirements:

Coliform:

Condition No.	Condition
S-1	Coliform For new construction projects, the distribution system, using the most expedient method, shall submit Coliform test results to the Cabinet: Due immediately following disinfection and flushing. [401 KAR 8:150 Section 4(2)]

Condition No.	Condition
S-2	For proposed changes to the approved plan, submit information: Due prior to any modification to the Cabinet for approval. Changes to the approved plan shall not be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]
S-3	The person who presented the plans shall submit the professional engineer's certification: Due when construction is complete to the Division of Water. The certification shall be signed by a registered professional engineer and state that the water project has been constructed and tested in accordance with the approved plans, specifications, and requirements. [401 KAR 8:100 Section 1(8)]

Distribution-Major Construction

Fleming Co Water Association

Facility Requirements

Activity ID No.: APE20080001

Page 3 of 8

PORT3 (Water Line) 21,300 ft of 8" PVC; 7,400 ft of 6" PVC; 7,010 ft of 4" PVC:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Depth	A continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench shall be removed for a Depth ≥ 6 in below the bottom of the pipe. [Recommended Standards for Water Works 8.5.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-2	Depth	All water lines shall be covered to a Depth ≥ 30 in to prevent freezing. [Recommended Standards for Water Works 8.5.3, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-3	Diameter	All water lines shall have Diameter ≥ 3 in. [Recommended Standards for Water Works 8.1.4] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Diameter	Water lines with Diameter < 6 in shall not have fire hydrants. [Recommended Standards for Water Works 8.1.5] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Diameter	All new and existing water lines serving fire hydrants or where fire protection is provided shall have Diameter ≥ 6 in. [Recommended Standards for Water Works 8.1.2] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-6	Distance	Water lines shall have a sufficient quantity of valves so that inconvenience and sanitary hazards will be minimized during repairs. A valve spacing Distance ≤ 1.0 mi should be utilized. [Recommended Standards for Water Works 8.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-7	Distance	Hydrant drains shall not be connected to sanitary sewers or storm drains and shall be located a Distance > 10 ft from sanitary sewers and storm drains. [Recommended Standards for Water Works 8.3.4] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-8	Distance	Except when not practical, water lines shall be laid a horizontal Distance ≥ 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

Distribution-Major Construction

Fleming Co Water Association
Facility Requirements

Activity ID No.: APE20080001

Page 5 of 8

PORT3 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-14	Velocity	<p>Except in underserved areas, each blow-off, fire hydrant, or flush hydrant shall be sized so that Velocity \geq 2.5 ft/sec can be achieved in the water main served by the blow-off or hydrant during flushing.</p> <p>Based on the hydraulic analysis/data submitted, the areas served by the following extension(s) are considered to be underserved:</p> <p>a) Storey Branch</p> <p>This designation indicates that without improvements to the existing infrastructure, future extensions may not be able to provide the required minimum pressure of 30 psi on the discharge side of customers' meters. Without improvements to the infrastructure, future extensions may be denied. The underserved designation may be used to help prioritize areas under the Governor's 2020 plan for funding future infrastructure improvements. [Recommended Standards for Water Works 8.1.6.b, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	leaks	<p>The presence or absence of leaks monitored by physical testing as needed shall be determined in all types of installed pipe. Pressure testing and leakage testing shall be in accordance with the latest edition of AWWA Standard C600. [Recommended Standards for Water Works 8.5.5] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.</p>

Distribution-Major Construction

Fleming Co Water Association
Facility Requirements

Activity ID No.: APE20080001

Page 7 of 8

PORT3 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-7	<p>Additional Limitations: No flushing device, blow-off, or air relief valve shall be directly connected to any sewer. Chambers, pits or manholes containing valves, blow-offs, meters, or other such appurtenances shall not be directly connected to any storm drain or sanitary sewer. Such chambers, pits or manholes shall be drained to absorptions pits underground or to the surface of the ground where they are not subject to flooding by surface water. [Recommended Standards for Water Works 8.1.6, Recommended Standards for Water Works 8.4.3]</p>
T-8	<p>Additional Limitations: If water lines are installed or replaced in areas of organic contamination or in areas within 200 ft of underground or petroleum storage tanks, ductile iron or other nonpermeable materials shall be used in all portions of the water line installation or replacement. [401 KAR 8:100 Section 1(5)(d)6, Recommended Standards for Water Works 8.0.2]</p>
T-9	<p>Additional Limitations: No water pipe shall pass through or come in contact with any part of a sewer manhole. [Recommended Standards for Water Works 8.6.6]</p>
T-10	<p>Additional Limitations: If a fire sprinkler system is to be installed, a double check detector assembly approved for backflow prevention shall be utilized. The double check detector assembly of the system shall be accessible for testing. [401 KAR 8:100 Section 1(7)]</p>
T-11	<p>Additional Limitations: If water lines cross a stream or wetland, the provisions in the attached Water Quality Certification shall apply. If you have any questions please contact the Water Quality Certification Supervisor of the Water Quality Branch at (502) 564-2225. [401 KAR 8:100 Section 1(7)]</p>

RECEIVED

APR 17 2009

**PUBLIC SERVICE
COMMISSION**

EXHIBIT 1

USDA / RD LETTER OF CONDITIONS



United States Department of Agriculture
Rural Development
Kentucky State Office

HMB Professional
Engineers, Inc.

CAS (aug)
JDR (aug)
file

August 8, 2008

4132

AUG 13 2008

J.E. Smith, President
Fleming County Water Association, Inc.
PO Box 327
Flemingsburg, Kentucky 41041

Dear Mr. Smith:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The loan and grant will be administered on behalf of the Rural Utilities Service (RUS) by the State and Area office staff of USDA Rural Development. Any changes in project cost, source of funds, scope of services or any other significant changes in the project or applicant must be reported to and approved by USDA Rural Development, by written amendment to this letter. Any changes not approved by Rural Development shall be cause for discontinuing processing of the application. It should also be understood that Rural Development is under no obligation to provide additional funds to meet an overrun in construction costs.

This letter is not to be considered as loan and grant approval or as a representation as to the availability of funds. The docket may be completed on the basis of a RUS loan not to exceed \$375,000; a RUS grant not to exceed \$271,695.

If Rural Development makes the loan, the interest rate will be the lower of the rate in effect at the time of loan approval or the rate in effect at the time of loan closing, unless the applicant otherwise chooses. The loan will be considered approved on the date a signed copy of Form RD 1940-1, "Request for Obligation of Funds," is mailed to you.

Please complete and return the attached Form RD 1942-46, "Letter of Intent to Meet Conditions," if you desire that further consideration be given to your application.

The "Letter of Intent to Meet Conditions" must be executed within three weeks from the date of this letter or it becomes invalid unless a time extension is granted by Rural Development.

If the conditions set forth in this letter are not met within 240 days from the date hereof, Rural Development reserves the right to discontinue the processing of the application.

In signing Form RD 1942-46, "Letter of Intent to Meet Conditions," you are agreeing to complete the following as expeditiously as possible:

771 Corporate Drive • Suite 200 • Lexington, KY 40503
Phone: (859) 224-7336 • Fax: (859) 224-7444 • TDD: (859) 224-7422 • Web: <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities

"USDA is an equal opportunity provider, employer and lender."
To file a complaint of discrimination write USDA, Director, Office of Civil Rights,
1400 Independence Avenue, SW, Washington, DC 20250-9410
or call (800) 795-3272 (voice) or (202) 720-6382 (TDD)

1. Number of Users and Their Contribution:

There shall be 3,852 existing water users. The Area Director will review and authenticate the number of users and amount of connection fees prior to advertising for construction bids.

2. Grant Agreement:

Attached is a copy of RUS Bulletin 1780-12, "Water and Waste System Grant Agreement," for your review. You will be required to execute a completed form at the time of grant closing.

3. Drug-Free Work Place:

Prior to grant closing, the Association will be required to execute Form AD-1049, "Certification Regarding Drug-Free Workplace Requirements (Grants) Alternative I - For Grantees Other Than Individuals."

4. Repayment Period:

The loan will be scheduled for repayment over a period not to exceed 40 years from the date of the Promissory Note. Principal payment will not be deferred for a period in excess of two years from the date of the Promissory Note. The Association may be required to adopt a supplemental payment agreement providing for monthly payments of principal and interest so long as the Promissory Note is held or insured by RUS. Monthly payments will be approximate amortized installments.

5. Recommended Repayment Method:

Payments on this loan shall be made using the Preauthorized Debit (PAD) payment method. This procedure eliminates the need for paper checks and ensures timely receipt of RD loan payments. To initiate PAD payments, Form SF 5510, "Authorization Agreement for Preauthorized Payments," should be signed by the Association to authorize the electronic withdrawal of funds from your designated bank account on the exact installment payment due date. The Area Director will furnish the necessary forms and further guidance on the PAD procedure.

6. Reserve Accounts:

Reserves must be properly budgeted to maintain the financial viability of any operation. Reserves are important to fund unanticipated emergency maintenance, pay for repairs, and assist with debt service should the need arise.

The Association will be required to deposit \$155 per month into a "Funded Depreciation Reserve Account" until the account reaches \$18,600. The deposits are to be resumed any time the account falls below the \$18,600.

The required monthly deposits to the Reserve Account and required Reserve Account levels are in addition to the requirements of the Association's prior loan resolutions.

The monthly deposits to the Reserve Account are required to commence with the first month of the first full fiscal year after the facility becomes operational.

The Association also needs to fund an account for short-lived assets by depositing a sum of \$3,740 monthly to the account. The funds in the short-lived asset account may be used by the Association as needed to replace or add short-lived assets in the Association's water system.

7. Security Requirements:

The loan will be secured by a real estate mortgage, a financing statement, and a pledge of gross water revenue, in the Loan Resolution and Financing Statement.

8. Land Rights and Real Property:

The Association will be required to furnish satisfactory title, easements, etc., necessary to install, maintain and operate the facility to serve the intended users. The pipelines will be on private rights-of-way where feasible. Easements and options are to be secured prior to advertising for construction bids.

9. Organization:

The Association will be legally organized under applicable KRS, which will permit them to perform this service, borrow and repay money.

10. Business Operations:

The Association will be required to operate the system under a well-established set of resolutions, rules and regulations. A budget must be established annually and adopted by the Association after review by Rural Development. At no later than loan pre-closing, the Association will be required to furnish a prior approved management plan to include, as a minimum, provisions for management, maintenance, meter reading, miscellaneous services, billing, collecting, delayed payment penalties, disconnect/reconnect fees, bookkeeping, making and delivering required reports and audits.

11. Accounts, Records and Audits:

The Association will be required to maintain adequate records and accounts and submit annual budgets and year-end reports (annual audits) in accordance with subsection 1780.47 of RUS Instruction 1780.

The enclosed audit booklet will be used as a guide for preparation of audits. The Association shall be required to submit a copy of its audit agreement for review and concurrence by Rural Development prior to pre-closing the loan.

12. Accomplish Audits for Years in Which Federal Financial Assistance is Received:

The Association will accomplish audits in accordance with OMB Circular A-133, during the years in which federal funds are received. The Association will provide copies of the audits to

the Area Office and the appropriate Federal cognizant agency as designated by OMB Circular A-133.

13. Insurance and Bonding:

The following insurance and bonding will be required:

- A. Adequate Liability and Property Damage Insurance including vehicular coverage, if applicable, must be obtained and maintained by the Association. The Association should obtain amounts of coverage as recommended by its attorney, consulting engineer and/or insurance provider.
- B. Worker's Compensation - The Association will carry worker's compensation insurance for employees in accordance with applicable state laws.
- C. Fidelity Bond - The Association will provide Fidelity Bond Coverage for all persons who have access to funds. Coverage may be provided either for all individual positions or persons, or through "blanket" coverage providing protection for all appropriate employees and/or officials. The amount of coverage required for all RUS loans is \$250,000.
- D. Real Property Insurance - The Association will obtain and maintain adequate fire and extended coverage on all structures including major items of equipment or machinery located in the structures. The amounts of coverage should be based on recommendations obtained by the Association from its attorney, consulting engineer and/or insurance provider. Subsurface lift stations do not have to be covered except for the value of electrical and pumping equipment therein.
- E. Flood Insurance - The Association will obtain and maintain adequate coverage on any facilities located in special flood and mudslide prone areas.

14. Planning and Performing Development:

- A. The engineer should not be authorized to commence work on final plans and specifications until a determination has been made that the project can be planned and constructed within the estimated cost shown in paragraph "24" of this letter. The engineer may then proceed to develop final plans and specifications to be completed no later than 210 days from this date, and prepare bid documents. The Area Director is prepared to furnish the necessary guide to follow so as to keep the project plans and documents within our guidelines and requirements. The project should not be advertised for construction bids until all easements and enforceable options have been obtained, and total funds are committed or available for the project.
- B. The following documents will be submitted to Rural Development for review and must be concurred in by Rural Development prior to advertisement for construction bids:
 - 1. Final plans, specifications and bid documents.

2. Applicant's letter on efforts to encourage small business and minority - owned business participation.
3. Legal Service Agreements.
4. Engineering Agreements.

Revision in these documents will be subject to Rural Development concurrence. Any agreements, contracts, etc. not reviewed and approved by Rural Development will not be eligible for payment from project funds or revenues from facilities financed by this Agency.

15. Civil Rights & Equal Opportunity:

You should be aware of and will be required to comply with other federal statute requirements including but not limited to:

A. Section 504 of the Rehabilitation Act of 1973:

Under Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), no handicapped individual in the United States shall, solely by reason of their handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Rural Development financial assistance.

B. Civil Rights Act of 1964:

All borrowers are subject to, and facilities must be operated in accordance with, Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and Subpart E of Part 1901 of this Title, particularly as it relates to conducting and reporting of compliance reviews. Instruments of conveyance for loans and/or grants subject to the Act must contain the covenant required by paragraph 1901.202(e) of this Title.

C. The Americans with Disabilities Act (ADA) of 1990:

This Act (42 U.S.C. 12101 et seq.) prohibits discrimination on the basis of disability in employment, state and local government services, public transportation, public accommodations, facilities, and telecommunications. Title II of the Act applies to facilities operated by state and local public entities that provide services, programs, and activities. Title III of the Act applies to facilities owned, leased, or operated by private entities that accommodate the public.

D. Age Discrimination Act of 1975:

This Act (42 U.S.C. 6101 et seq.) provides that no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Rural Development financial programs must be extended without regard to race, color, religion, sex, national origin, marital status, age, or physical or mental handicap.

16. Closing Instructions:

The Office of General Counsel, our Regional Attorney, will be required to write closing instructions in connection with this loan. Conditions listed therein must be met by the Association.

17. Compliance with Special Laws and Regulations:

The Association will be required to conform to any and all state and local laws and regulations affecting this type project.

18. System Operator:

The Association is reminded that the system operator must have an Operator's Certificate issued by the State.

19. Prior to Pre-Closing the Loan, the Association Will Be Required to Adopt:

- A. Form RD 1942-8, "Resolution of Members or Stockholders."
- B. Form RUS Bulletin 1780-28, "Loan Resolution Security Agreement."
- C. Form RD 400-1, "Equal Opportunity Agreement."
- D. Form RD 400-4, "Assurance Agreement."
- E. Form AD-1047, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transaction."
- F. Form RD 1910-11, "Applicant Certification Federal Collection Policies for Consumer or Commercial Debts."
- G. RD Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants and Loans."
- H. RUS Bulletin 1780-22, "Eligibility Certification."

20. Refinancing and Graduation Requirements:

The Association is reminded that if at any time it shall appear to the Government that the Association is able to refinance the amount of the RUS indebtedness then outstanding, in whole or in part, by obtaining a loan from commercial sources at reasonable rates and terms, upon the request of the Government, the Association will apply for and accept such loan in sufficient amount to repay the Government.

21. Commercial Interim Financing:

The Association will be required to use commercial interim financing for the project during construction for the RUS loan portion of the financing, if available at reasonable rates and terms.

Before the loan is closed, the Association will be required to provide Rural Development with statements from the contractor, engineer and attorneys that they have been paid to date in accordance with their contract or other agreements and, in the case of the contractor, that he has paid his suppliers and sub-contractors.

22. Disbursement of Project Funds:

A construction account for the purpose of disbursement of project funds (RUS) will be established by the Association prior to start of construction. The position of officials entrusted with the receipt and disbursement of RUS project funds will be covered by a "Fidelity Bond," with USDA Rural Development as Co-Obligee, in the amount of construction funds on hand at any one time during the construction phase.

For each "construction account" as established, if the amount of RUS loan and grant funds plus any applicant contributions or funds from other sources to be deposited into the account are expected to exceed \$100,000 at any time, the financial institution will secure the amount in excess of \$100,000 by pledging collateral with the Federal Reserve Bank in an amount not less than the excess in accordance with 7 CFR, 1902.7(a).

During construction, the Association shall disburse project funds in a manner consistent with subsection 1780.76 (e) of RUS Instruction 1780. Form RD 1924-18, "Partial Payment Estimate," or similar form approved by Rural Development, shall be used for the purpose of documenting periodic construction estimates, and shall be submitted to Rural Development for review and acceptance. Prior to disbursement of funds by the Association, the Board of Directors shall review and approve each payment estimate. All bills and vouchers must be approved by Rural Development prior to payment by the Association.

Form RD 440-11, "Estimate of Funds Needed for 30-Day Period Commencing _____," will be prepared by the Association and submitted to Rural Development in order that a periodic advance of federal cash may be requested.

Borrowers receiving federal loan and/or grant funds by EFT will have funds directly deposited to a specified account at a financial institution with funds being available to the recipient on the date of payment. The borrower should complete Form SF-3881, "Electronic Funds Transfer Payment Enrollment Form," for each account where funds will be electronically received. The completed form(s) must be received by Rural Development at least thirty (30) days prior to the first advance of funds.

Monthly audits of the Association's construction account records shall be made by Rural Development.

23. Disbursement of Grant Funds:

The RUS funds will be advanced as they are needed in the amount(s) necessary to cover the RUS proportionate share of obligations due and payable by the Association. Grant funds, upon receipt, must be deposited in an interest bearing account in accordance with 7 CFR part 3019 (as applicable). Interest earned on grant funds in excess of \$250 (as applicable) per year will be submitted to RUS at least quarterly.

24. Cost of Facility:

Breakdown of Costs:

Development	\$ 499,560
Land and Rights	3,000
Legal and Administrative	8,000
Engineering	80,000
Interest	14,000
Contingencies	<u>42,135</u>
TOTAL	\$ 646,695

Financing:

RUS Loan	\$ 375,000
RUS Grant	<u>271,695</u>
TOTAL	\$ 646,695

25. Use of Remaining Project Funds:

After providing for all authorized costs, any remaining project funds will be considered to be RUS grant funds and refunded to RUS. If the amount of unused project funds exceeds the grant, that part would be RUS loan funds.

26. Proposed Operating Budget:

You will be required to submit to Rural Development a copy of your proposed annual operating budget that supports the proposed loan repayment prior to this agency giving you written authorization to proceed with the bidding phase. The operating budget should be based on a typical year cash flow, subject to completion of this project in the first full year of operation. Form RD 442-7, Operating Budget, or similar form may be utilized for this purpose.

27. Rates and Charges:

Rates and charges for facilities and services rendered by the Association must be at least adequate to meet cost of maintaining, repairing and operating the water system and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least:

First	2,000	gallons @ \$	17.00. - Minimum Bill.
Next	8,000	gallons @ \$	6.60. - per 1,000 gallons.
Next	40,000	gallons @ \$	5.14. - per 1,000 gallons.
All Over	50,000	gallons @ \$	3.95. - per 1,000 gallons.

28. Water Purchase Contract:

The Association will submit a Water Purchase Contract for approval by Rural Development before advertising for construction bids. If the contract is not on Form RD 442-30, "Water Purchase Contract," the contract will require approval by our Regional Attorney. The contract must meet the requirements of subsection 1780.62 of RUS Instruction 1780.

29. Compliance with the Bioterrorism Act:

Prior to pre-closing the loan, the Association will provide a certification they have completed a Vulnerability Assessment (VA) and prepared an emergency response plan (ERP) as required by the Safe Drinking Water Act (SDWA).

30. Floodplain Construction:

The Association will be required to pass and adopt a Resolution or amend its By-Laws whereby the Association will deny any water service to any future customer wishing to build on or develop property located within a designated floodplain. If a customer or developer requests service for construction in a designated floodplain, the customer or developer must provide evidence and a justification for approval by the Association and Rural Development officials that there are no other alternatives to construction or development within the designated floodplain. The community must be a participant in the National Flood Insurance Program (NFIP) and the customer or developer must obtain the required permits prior to the tap on restrictions being waived.

35. Mitigation Measures:

- A. The project shall be in compliance with all requirements noted in the Governor's Office for Local Development letter dated March 25, 2008, from Ms. Lee Nalley.
- B. The design and construction shall be in compliance with the requirements of the U.S. Fish and Wildlife Service as requested by letter dated July 21, 2008, and signed by Mindi Lawson.
- C. The line design and construction shall be accomplished in a way that will leave flood plains and farmland without effect after construction is complete. The Army Corps of Engineers Nationwide Permit No. 12 applies to all floodplain and wetland utility line construction.
- D. Any excavation by Contractor that uncovers a historical or archaeological artifact shall be immediately reported to Owner and a representative of Agency.

Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the State Historic Preservation Officer (SHPO).

- E. The design and construction shall be in compliance with all local, state and federal environmental statutes, regulations and executive orders applicable to the project.
- F. Best Management Practices shall be incorporated into the project design, construction, and maintenance.

36. Final Approval Conditions:

Final approval of this assistance will depend on your willingness, with the assistance of all your co-workers, to meet the conditions of this letter in an orderly and systematic manner. Then too, final approval will depend on funds being available.

If you desire to proceed with your application, the Area Director will allot a reasonable portion of time to provide guidance in application processing.

Sincerely,


KENNETH SLONE
State Director

Enclosures

- cc: Area Director - Morehead, Kentucky
Buffalo Trace ADD - Maysville, Kentucky
Marvin Suit - Flemingsburg, Kentucky
HMB Engineering - Frankfort, Kentucky
PSC - ATTN: Dennis Jones - Frankfort, Kentucky

RECEIVED

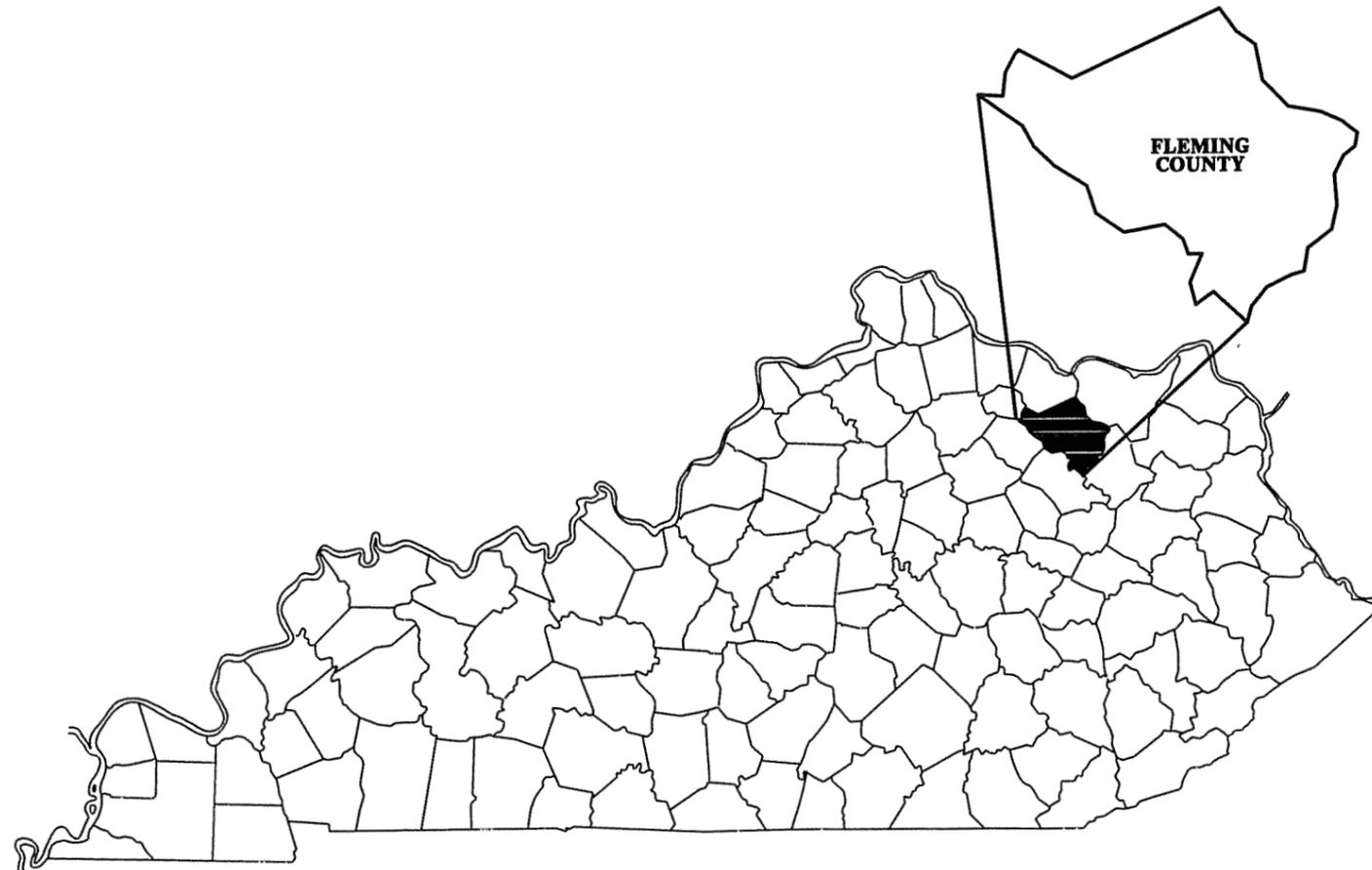
APR 17 2009

**PUBLIC SERVICE
COMMISSION**

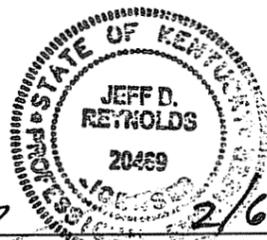
EXHIBIT 2

PLANS AND SPECIFICATIONS

FLEMING 2008 WATER PROJECT FLEMING COUNTY WATER ASSOCIATION FLEMING COUNTY, KENTUCKY



FEBRUARY 2009



JEFF D. REYNOLDS, P.E.
KENTUCKY REGISTRATION NO. 20469

RECEIVED

APR 17 2009

PUBLIC SERVICE
COMMISSION

Plans Prepared By:



3 HMB Circle (502)895-9800
Frankfort, Kentucky Fax (502)895-9810

GENERAL NOTES

UNLESS OTHERWISE NOTED, A SEPARATE BID ITEM HAS NOT BEEN ESTABLISHED FOR FITTINGS. THE FITTINGS INVOLVED, BUT NOT LIMITED TO, TEES, BENDS, PLUGS, REDUCERS, SADDLES, CROSSES,

COUPLINGS, ETC. CONTRACTOR SHALL INCLUDE THE COST OF THESE ITEMS IN THE UNIT PRICE FOR THE PIPE.

NO SEPARATE PAY ITEM HAS BEEN ESTABLISHED FOR CONNECTION TO EXISTING LINES. THE COST FOR CONNECTING TO EXISTING LINES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PIPE.

NO PAY ITEM FOR EXTRA TRENCH DEPTH HAS BEEN SET UP. CONTRACTOR SHALL INCLUDE THE COST OF THE ADDITIONAL DEPTH IN HIS UNIT PRICE WHEN THE WATER PIPE CROSSES UNDER AN EXISTING UTILITY, CULVERT OR DRAINAGE DITCH.

FINAL LOCATION OF SERVICES, GATE VALVES AND OTHER APPURTENANCES ARE TO BE FIELD LOCATED DURING CONSTRUCTION AND APPROVED BY THE ENGINEER.

EXISTING UTILITIES, ESPECIALLY GAS LINES AND OIL LINES, MAY BE CATHODICALLY PROTECTED, THEREFORE, DUCTILE IRON PIPE, FITTINGS GATE VALVES, AND/OR BOXES LAID WITHIN 100' OF THESE LINES WITH CATHODIC PROTECTION SHALL MEET THE REQUIREMENTS OF AWWA C-105, LATEST REVISION. A SEPARATE PAY ITEM HAS NOT BEEN ESTABLISHED. ALL COSTS FOR LABOR AND MATERIALS MUST BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

ALL DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION ACTIVITY TO THE AREA WITHIN THE EXISTING EASEMENTS AND CONSTRUCTION LIMITS, UNLESS OTHERWISE APPROVED IN WRITING BY THE OWNER.

THE CONTRACTOR WILL BE SOLELY LIABLE FOR ANY WORK HE PERFORMS OUTSIDE OF LEGAL EASEMENTS OR CONSTRUCTION LIMITS.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ASCERTAIN THE LOCATIONS OF ANY AND ALL UTILITIES ENCOUNTERED BY THE FINAL ALIGNMENT OF WATERLINE. THE CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING AND SHALL TAKE THE NECESSARY MEASURES TO PROTECT THE EXISTING UTILITIES TO KEEP THEM IN SERVICE. IF UTILITIES ARE SHOWN, THE INFORMATION IS GENERAL IN NATURE AND NOT TO BE TAKEN AS AS-BUILTS. CONTRACTOR SHALL CONTACT REPRESENTATIVES OF LOCAL UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING WORK ON THE PROJECT.

ALL WATER MAINS SHALL BE PVC CLASS 200 SDR 21 UNLESS OTHERWISE NOTED ON THE PLANS.

AT THE CONTRACTORS OPTION, CLASS 350 DUCTILE IRON PIPE MAY BE SUBSTITUTED FOR ANY PIPE PARTICULARLY SPECIFIED, BUT AT NO ADDITIONAL COST TO THE OWNER.

PROVIDE 40" MINIMUM COVER FOR ALL WATER MAINS PLACED WITHIN UNPAVED COUNTY ROADS OR IN DITCH LINES.

THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS PRIOR TO PERFORMING DRIVEWAY CUTS IN ORDER TO PROVIDE PROPERTY OWNER ACCESS TO THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL INSTALL THESE DRIVEWAY CROSSINGS WITH EXPEDIENCE AND SHALL RESTORE THE DRIVEWAY AS SOON AS POSSIBLE.

ALL PAVED AND CONCRETE SURFACES, INCLUDING DRIVEWAYS, CROSSED BY THE PROPOSED WATER MAINS SHALL BE BORED AND JACKED (UNCASED).

ALL TEES AND BENDS SHALL BE THRUST BLOCKED AS DETAILED ON THE THRUST BLOCK DETAIL SHEET. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

SEPTIC SYSTEMS NOTED WHERE PROPERTY OWNER NOTIFIED US. ALL MAY NOT BE SHOWN. CONTRACTOR TO USE CAUTION IN THESE AREAS. WATER MAIN TO BE ENCASED IN CONCRETE WHEN LAID WITHIN 10' OF DRAIN LINES OR FIELD. SEE DETAIL AND NOTE ON STANDARD DETAIL SHEET.

UNLESS OTHERWISE NOTED, A SEPARATE BID ITEM HAS NOT BEEN ESTABLISHED FOR CONNECTIONS TO EXISTING SYSTEM. CONTRACTOR SHALL INCLUDE COST OF CONNECTIONS TO EXISTING SYSTEM IN THE UNIT PRICE FOR THE PIPE.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN IMMEDIATELY AFTER INSTALLING WATER LINE WHERE MAIN IS TO BE LAID ON STATE RIGHT-OF-WAY.

GRIP RING RESTRAINTS SHALL BE USED ON ALL M.J. FITTINGS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

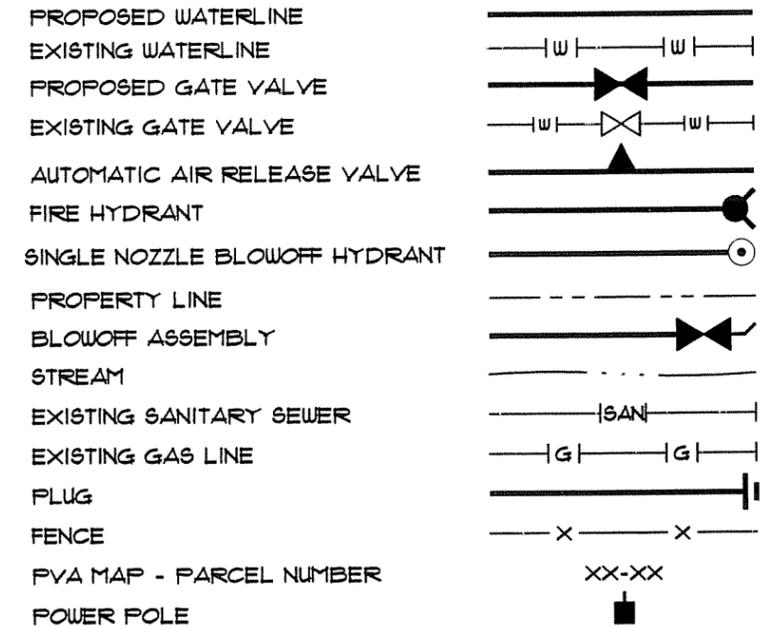
THE FOLLOWING GENERAL NOTES ARE REQUIREMENTS OF THE COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET PERMIT ENGINEERS. THESE NOTES APPLY WHEN LAYING WATER LINE IN STATE RIGHT-OF-WAY:

ALL WATER LINES BEING PLACED ABOVE CROSS DRAINS NEED TO HAVE AT LEAST ONE (1) FOOT OF SOIL MATERIAL AS A CUSHION BETWEEN LINE AND THE CROSS DRAIN CULVERT. SEE UTILITY CROSSING DETAIL.

ALL PROPOSED WATER LINES TO BE PLACED BEHIND ALL PRIVATE AND COMMERCIAL ENTRANCE CULVERTS.

ALL PROPOSED WATER LINES TO BE PLACED AT BACK OF DITCH LINE IN TIGHT AREAS.

LEGEND



SHEET INDEX

GNI	GENERAL NOTES/LEGEND/SHEET INDEX
I	INDEX MAP
II	INDEX MAP
1.	KY. 559 - STA. 0+00 TO STA. 10+00
2.	KY. 559 - STA. 10+00 TO STA. 24+00
3.	KY. 559 - STA. 24+00 TO STA. 38+00
4.	KY. 559 - STA. 38+00 TO STA. 52+00
5.	KY. 559 - STA. 52+00 TO STA. 66+00
6.	KY. 559 - STA. 66+00 TO STA. 80+00
7.	KY. 559 - STA. 80+00 TO STA. 93+00
8.	KY. 559 - STA. 93+00 TO STA. 108+00
9.	KY. 559 - STA. 108+00 TO STA. 121+00
10.	KY. 559 - STA. 121+00 TO STA. 135+00
11.	KY. 559 - STA. 135+00 TO STA. 148+00
12.	KY. 559 - STA. 148+00 TO STA. 162+00
13.	KY. 559 - STA. 162+00 TO STA. 172+30
14.	STOREY BRANCH ROAD - STA. 0+00 TO STA. 8+00
15.	STOREY BRANCH ROAD - STA. 8+00 TO STA. 21+00
16.	STOREY BRANCH ROAD - STA. 21+00 TO STA. 34+00
17.	STOREY BRANCH ROAD - STA. 34+00 TO STA. 47+00
18.	STOREY BRANCH ROAD - STA. 47+00 TO STA. 50+25
19.	MARKWELL ROAD - STA. 0+00 TO STA. 13+00
20.	MARKWELL ROAD - STA. 13+00 TO STA. 20+00
21.	KY. III - STA. 0+00 TO STA. 13+00
22.	KY. III - STA. 13+00 TO STA. 27+00
23.	KY. III - STA. 27+00 TO STA. 41+00
24.	KY. III - STA. 41+00 TO STA. 54+00
25.	KY. III - STA. 54+00 TO STA. 68+00
26.	KY. III - STA. 68+00 TO STA. 82+00
27.	KY. III - STA. 82+00 TO STA. 96+00
28.	KY. III - STA. 96+00 TO STA. 110+00
29.	KY. III - STA. 110+00 TO STA. 115+50
30.	KY. 158 - STA. 0+00 TO STA. 5+30
SD1	STANDARD DETAILS
SD2	STANDARD DETAILS
SD3	STANDARD DETAILS
	STANDARD DETAILS

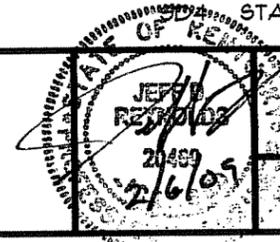
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PROJECT: 4132.00	DATE: 3/19/08
SCALE: AS NOTED	
DESIGNED BY	JDR
DRAWN BY	JH
CHECKED BY	JDR
RECORD DRG.	

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

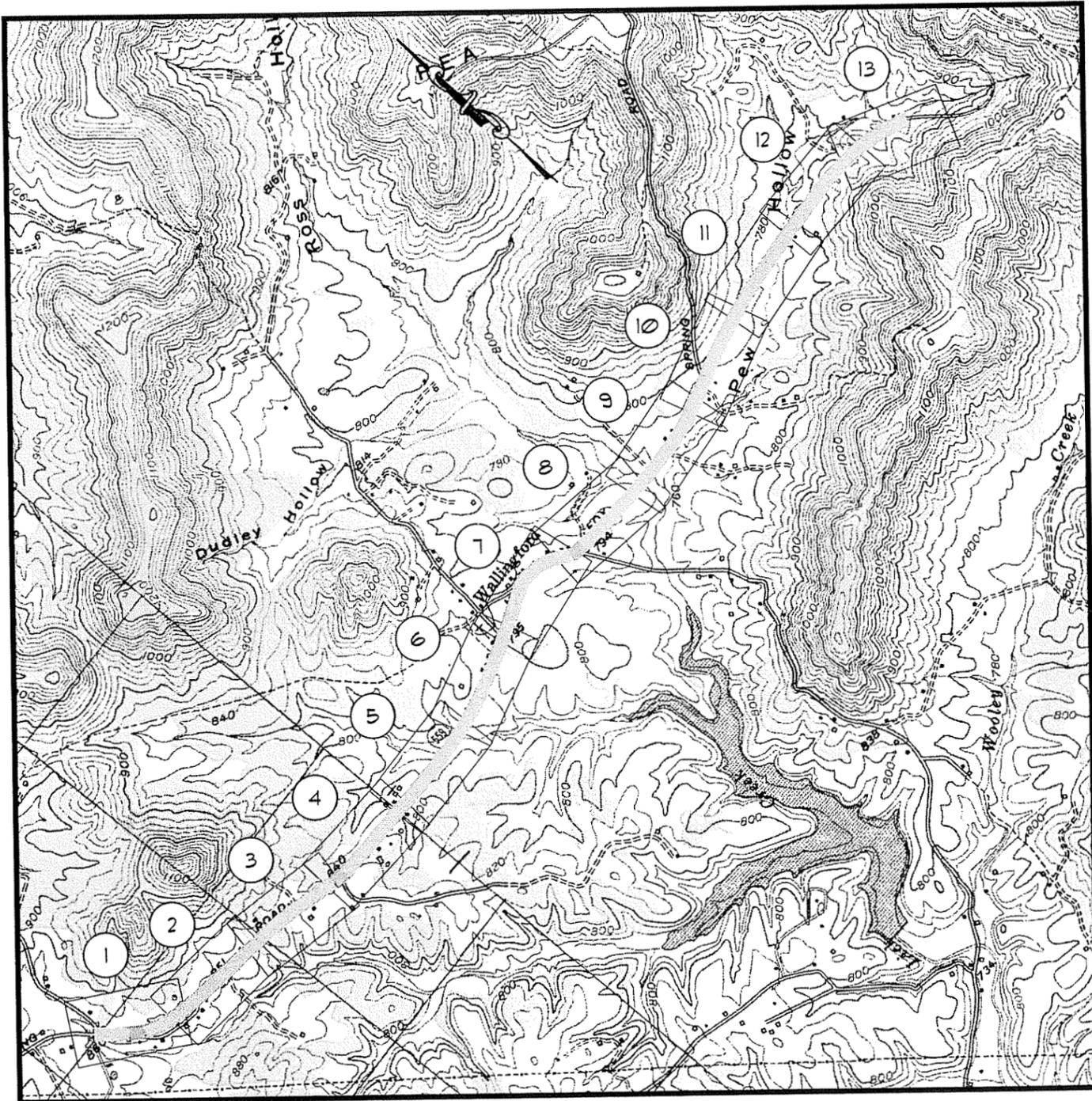


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

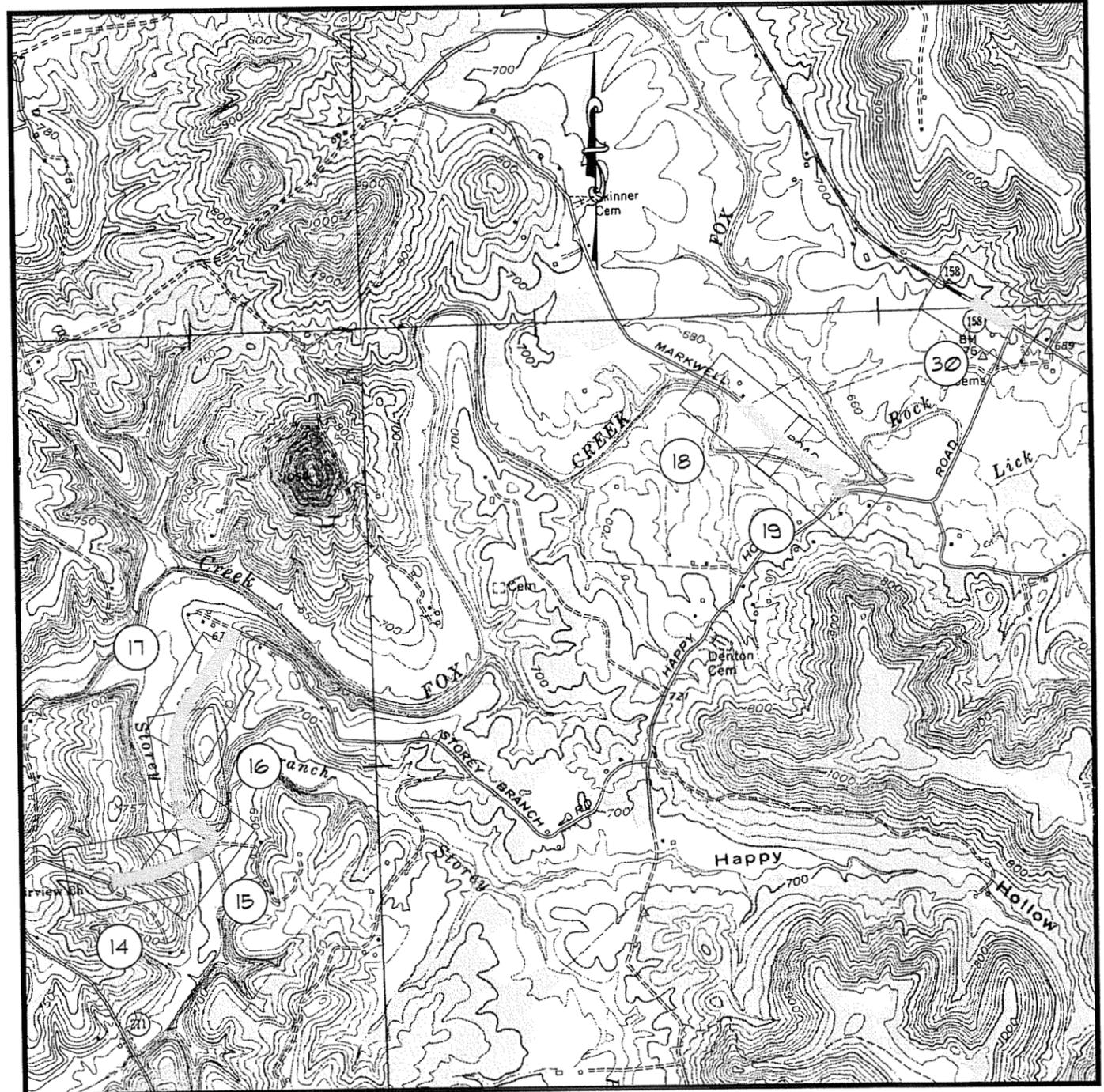
GENERAL NOTES / LEGEND / SHEET INDEX

SHEET
GNI
OF
GNI

P:\engr\env\4132\CAD\IndexSht.dwg, 10/23/2008 2:47:46 PM, env_prt on HMB



VICINITY MAP - KY. 589
SCALE: 1"=2000'



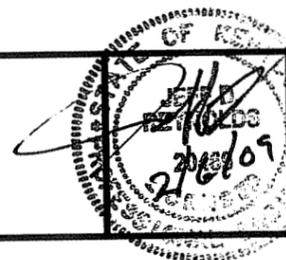
VICINITY MAP - STOREY BRANCH ROAD,
MARKWELL ROAD & KY. 158
SCALE: 1"=2000'

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 3/19/08		
SCALE: AS NOTED		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DUGS.	JDR	



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

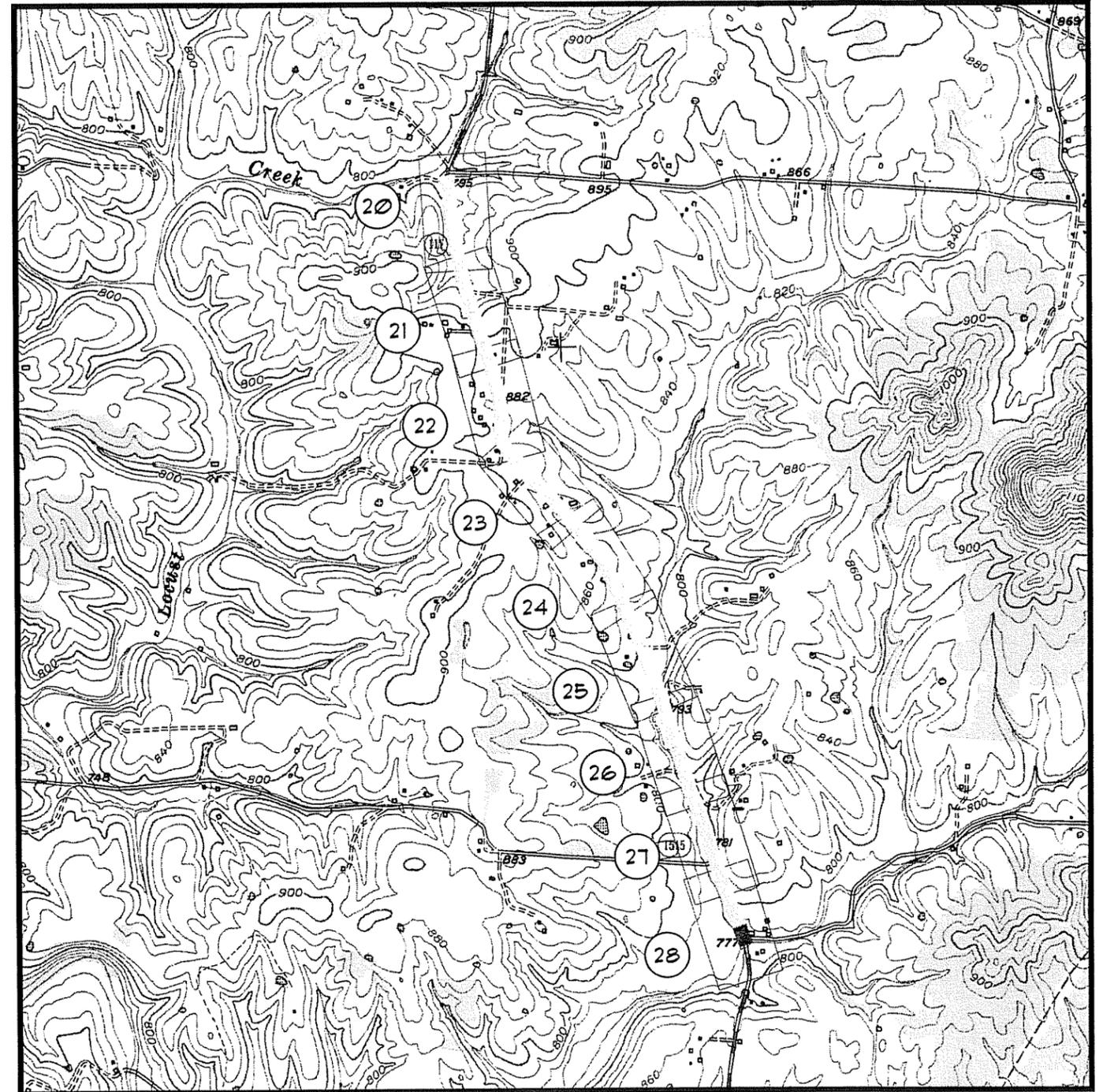


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

INDEX MAP

SHEET
I
OF
II

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VICINITY MAP - KY. III

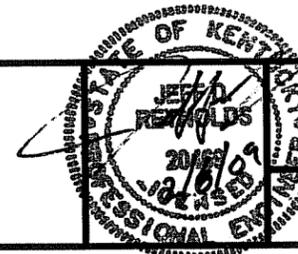
SCALE: 1"=2000'

PROJECT: 413200 DATE: 3/19/08
SCALE: AS NOTED

DESIGNED BY	NAME	DATE
JDR	JDR	
JH	JH	
JDR	JDR	
JDR	JDR	



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



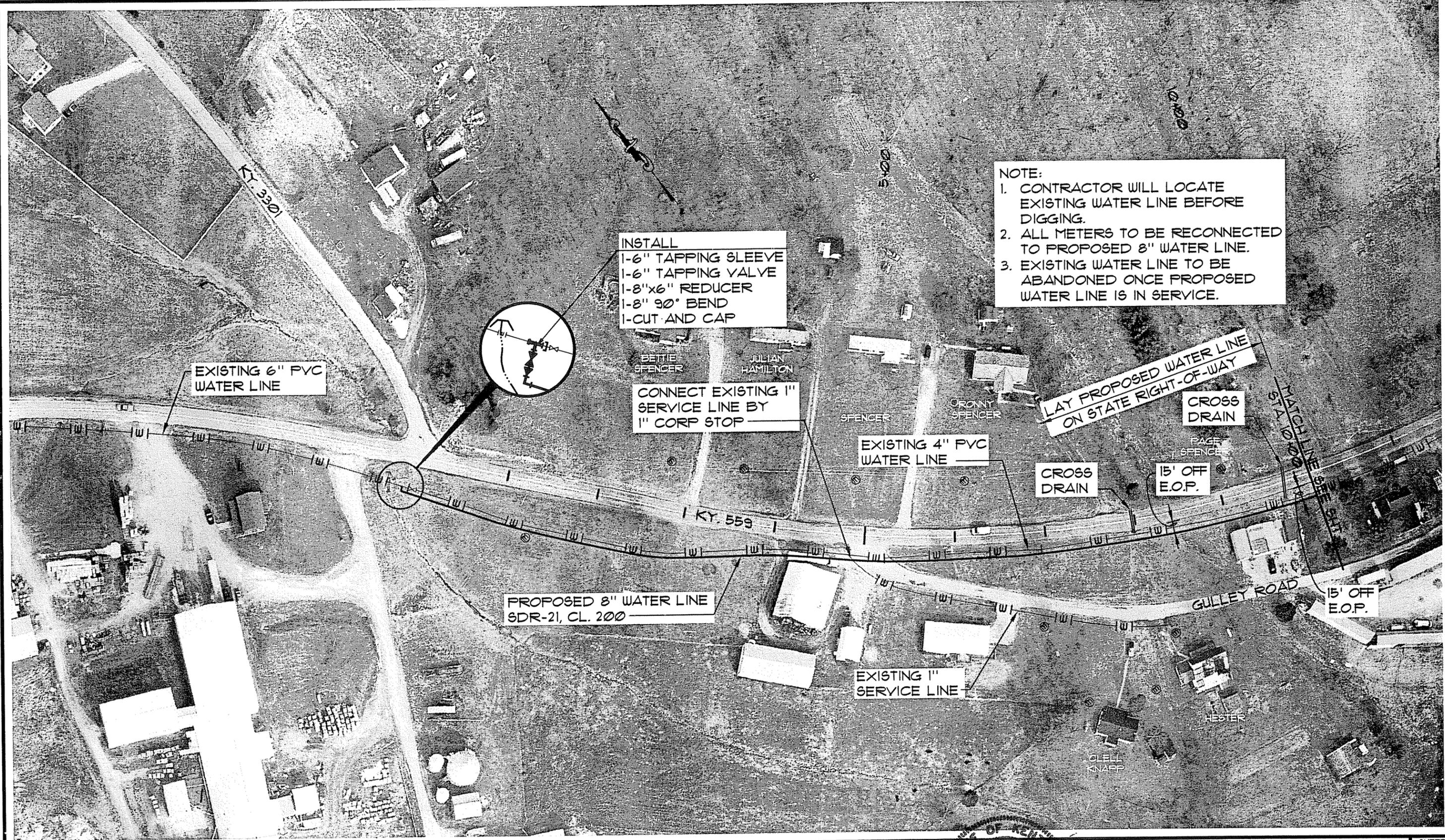
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

INDEX MAP

SHEET
II
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II

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

INSTALL
 1-6" TAPPING SLEEVE
 1-6" TAPPING VALVE
 1-8"x6" REDUCER
 1-8" 90° BEND
 1-CUT AND CAP

CONNECT EXISTING 1" SERVICE LINE BY 1" CORP STOP

EXISTING 4" PVC WATER LINE

PROPOSED 8" WATER LINE SDR-21, CL. 200

EXISTING 1" SERVICE LINE

LAY PROPOSED WATER LINE ON STATE RIGHT-OF-WAY

CROSS DRAIN

15' OFF E.O.P.

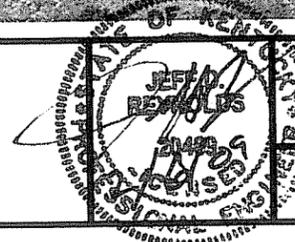
15' OFF E.O.P.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 6/3/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DRG.		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX

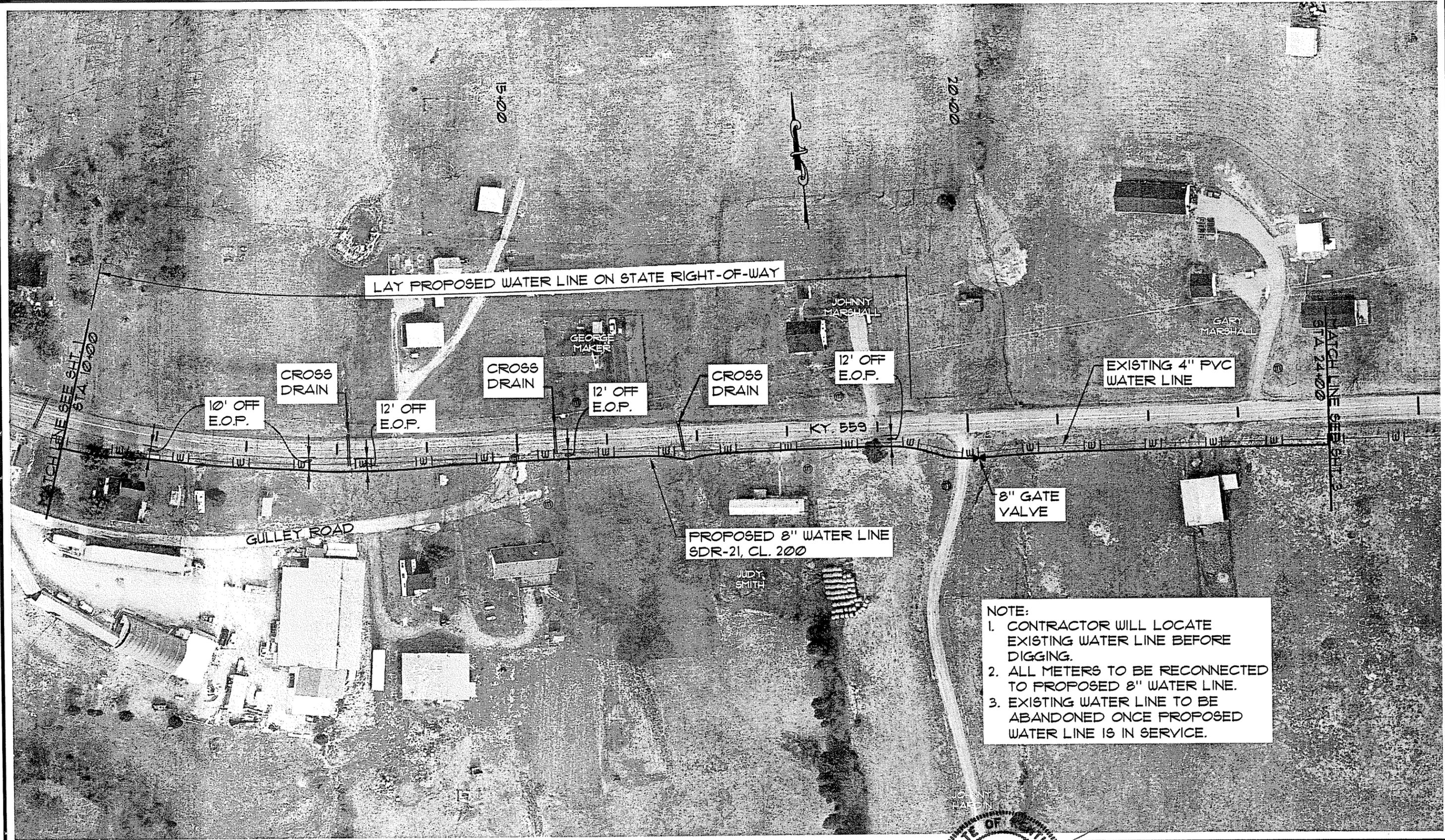


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 0+00 TO STA. 10+00

SHEET
 1
 OF

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NOTE:

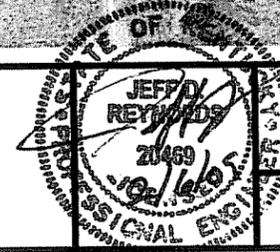
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 3/18/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
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(502) 695-9810 FAX

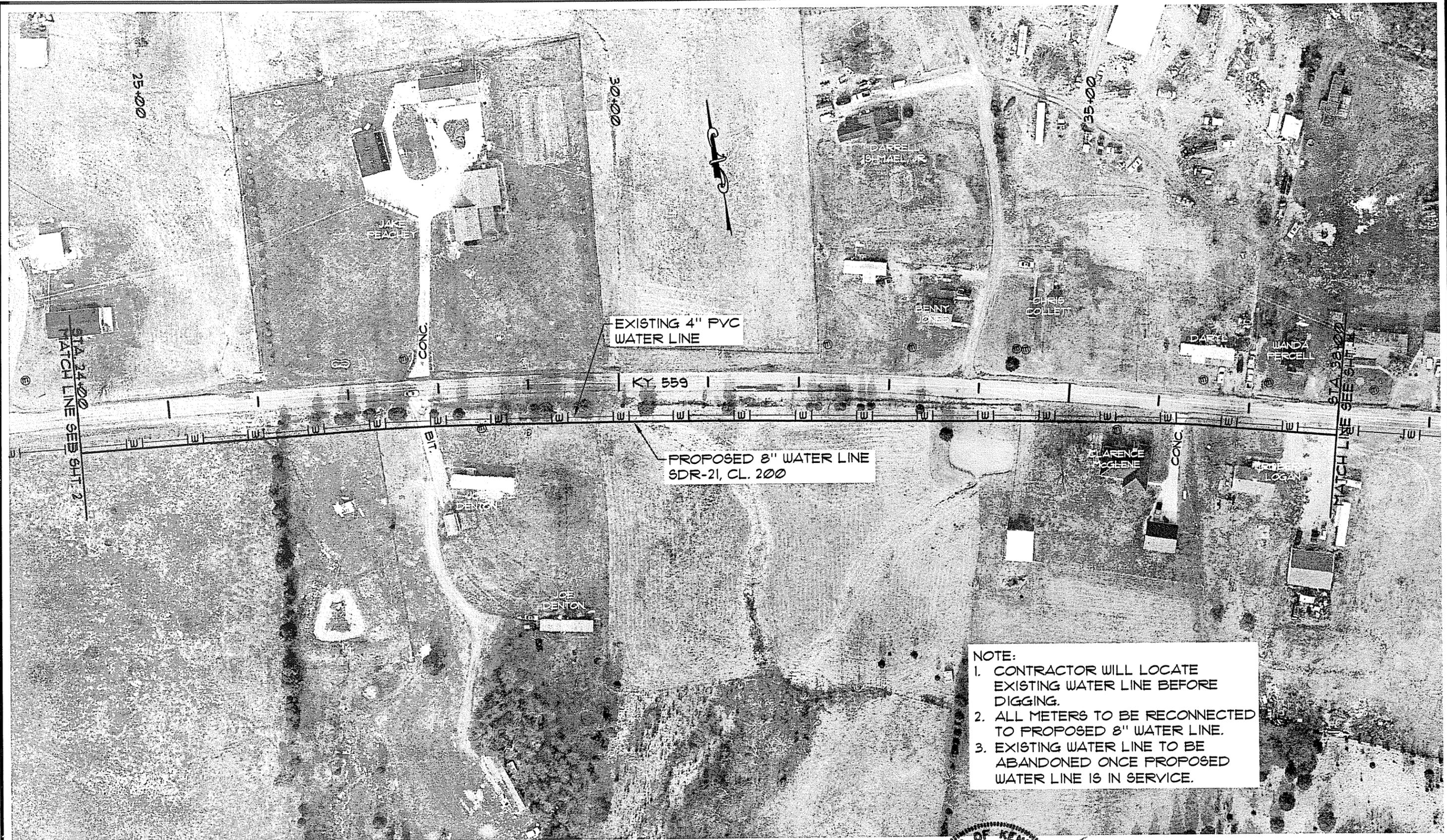


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 10+00 TO STA. 24+00

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2
OF

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NOTE:

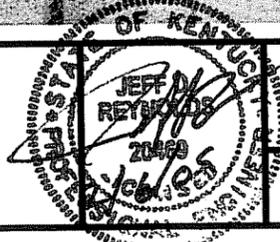
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413200	DATE: 3/18/08	
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAIN BY	JH	
CHECKED BY	JDR	
RECORD DWGS.		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
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(502) 695-9810 FAX

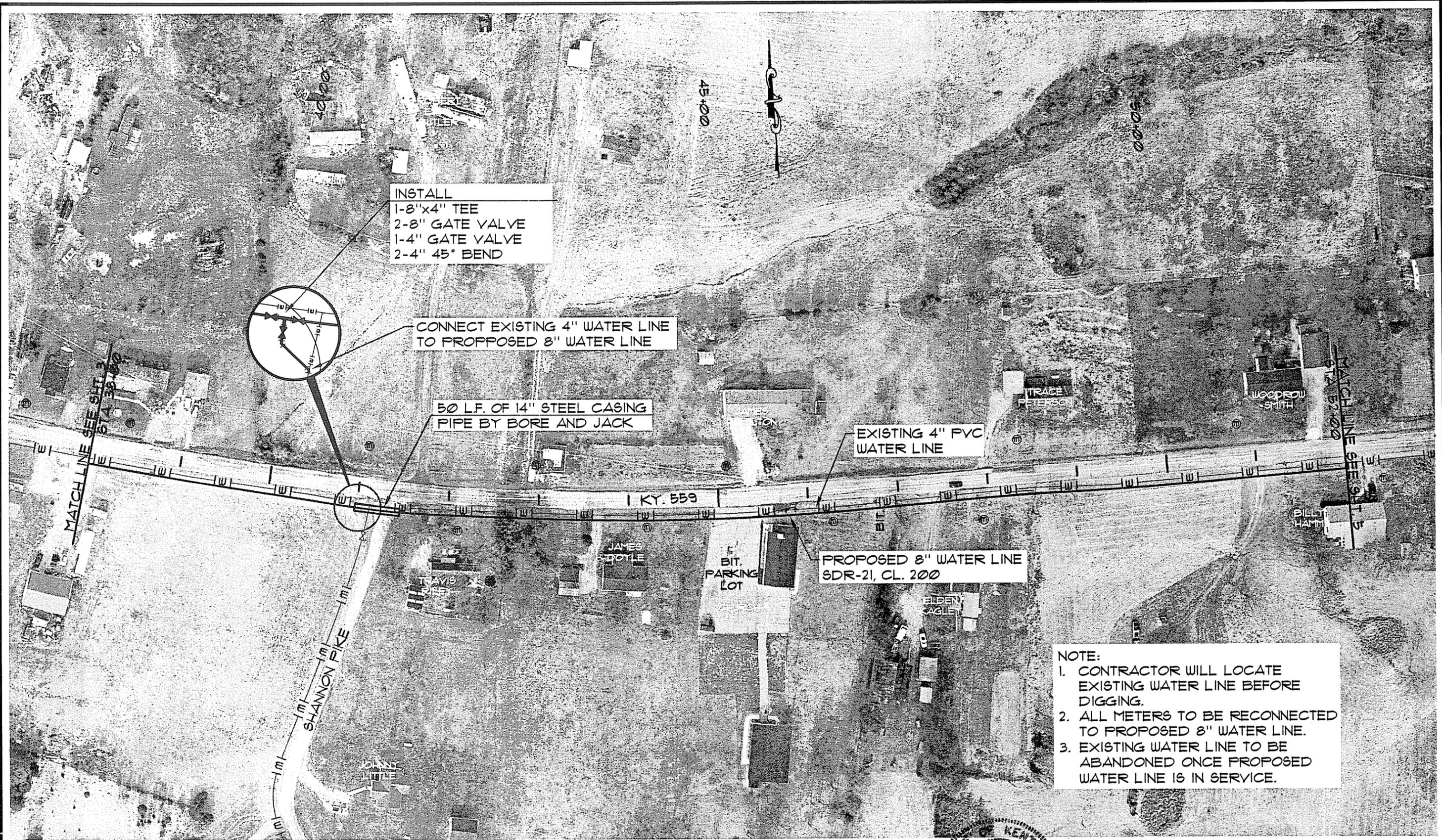


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 24+00 TO STA. 38+00

SHEET
3
OF

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NOTE:

1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

PROJECT: 4132.00		DATE: 6/3/08	
SCALE: 1"=100'			
DESIGNED BY	NAME	DATE	
DRAWN BY	JDR		
CHECKED BY	JH		
RECORD DUGS.	JDR		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



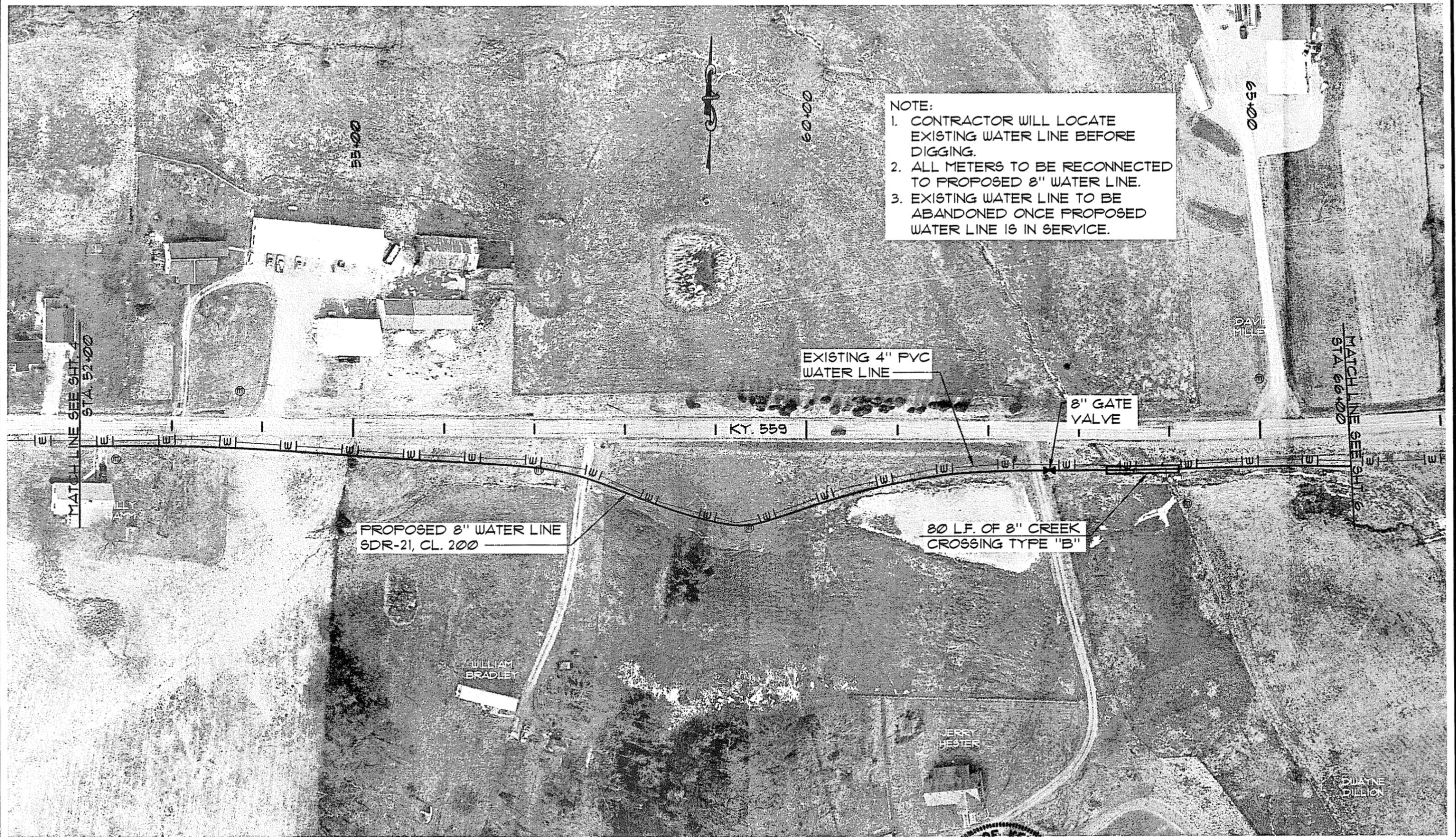
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 38+00 TO STA. 52+00

SHEET
4
OF

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

EXISTING 4" PVC WATER LINE

8" GATE VALVE

PROPOSED 8" WATER LINE
 SDR-21, CL. 200

80 LF. OF 8" CREEK
 CROSSING TYPE "B"

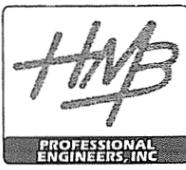
WILLIAM BRADLEY

JERRY HESTER

DAYNE DILLON

PROJECT: 413200 DATE: 6/3/08
 SCALE: 1"=100'

DESIGNED BY	NAME	DATE
JDR	JDR	
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX



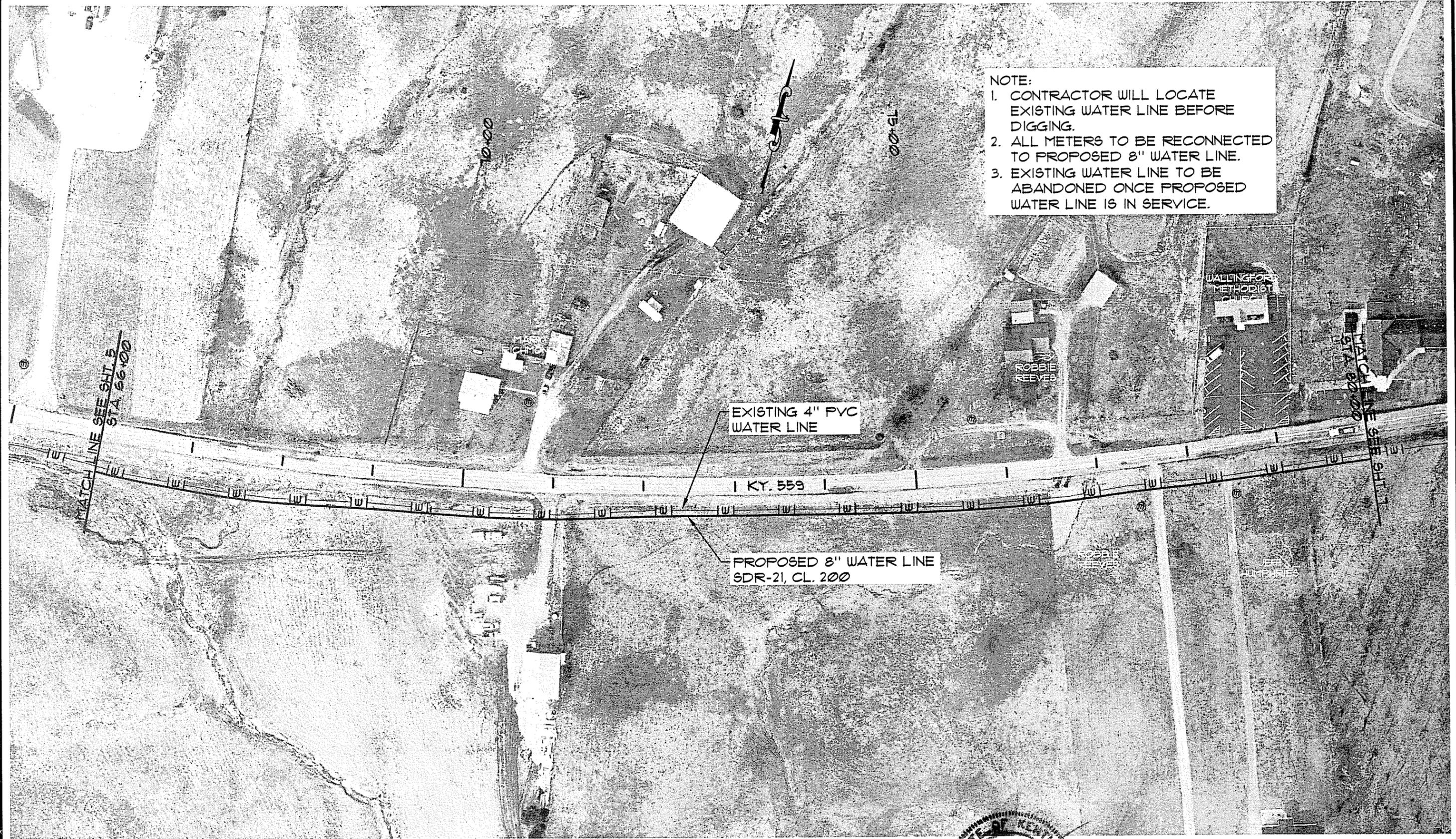
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 52+00 TO STA. 66+00

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

SHEET
 5
 OF

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 6/8/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DRG.		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-3800
 (502) 695-9810 FAX

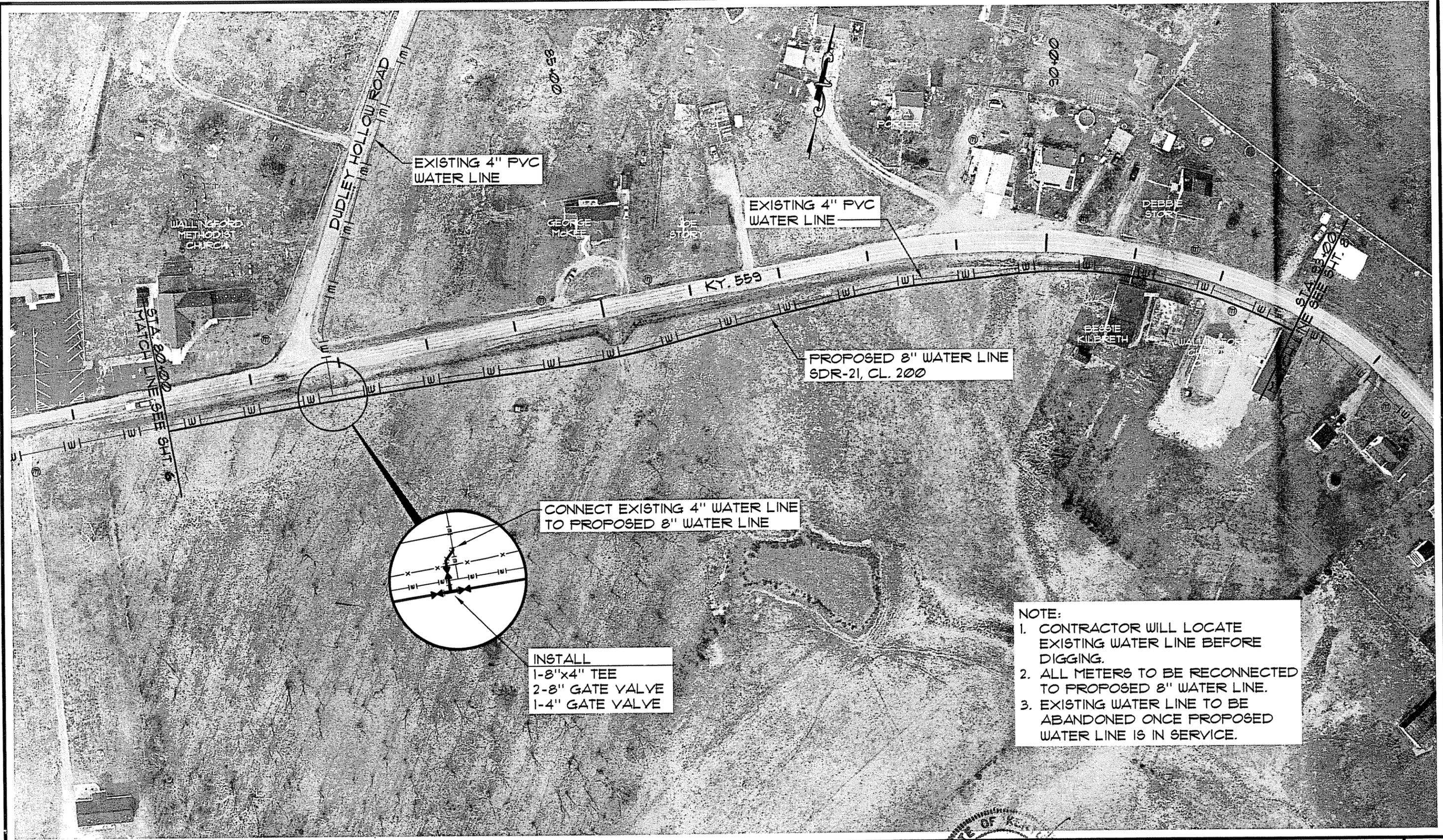


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

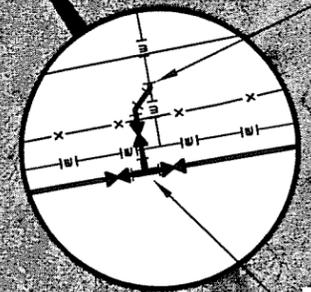
KY. 559 - STA. 66+00 TO STA. 80+00

SHEET
 6
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CONNECT EXISTING 4" WATER LINE TO PROPOSED 8" WATER LINE



INSTALL
1-8"x4" TEE
2-8" GATE VALVE
1-4" GATE VALVE

NOTE:
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 3/18/08	
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGG.		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

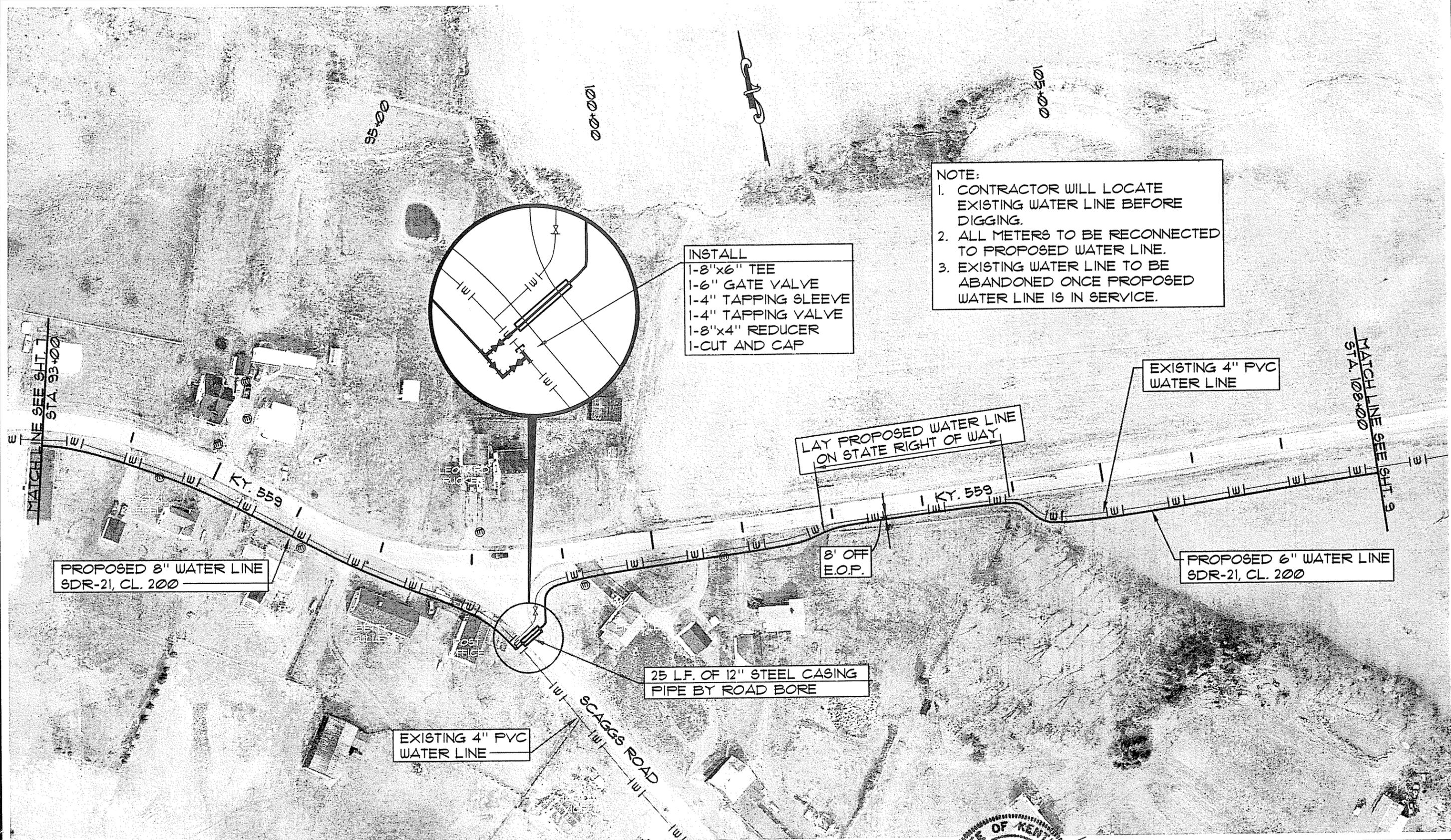


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 80+00 TO STA. 93+00

SHEET
7
OF

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

INSTALL
 1-8"x6" TEE
 1-6" GATE VALVE
 1-4" TAPPING SLEEVE
 1-4" TAPPING VALVE
 1-8"x4" REDUCER
 1-CUT AND CAP

PROPOSED 8" WATER LINE
 SDR-21, CL. 200

LAY PROPOSED WATER LINE
 ON STATE RIGHT OF WAY

EXISTING 4" PVC
 WATER LINE

PROPOSED 6" WATER LINE
 SDR-21, CL. 200

25 L.F. OF 12" STEEL CASING
 PIPE BY ROAD BORE

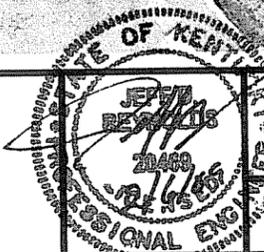
EXISTING 4" PVC
 WATER LINE

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 6/4/08	
SCALE: 1"=100'		
DESIGNED BY	JDR	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DRG.		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX

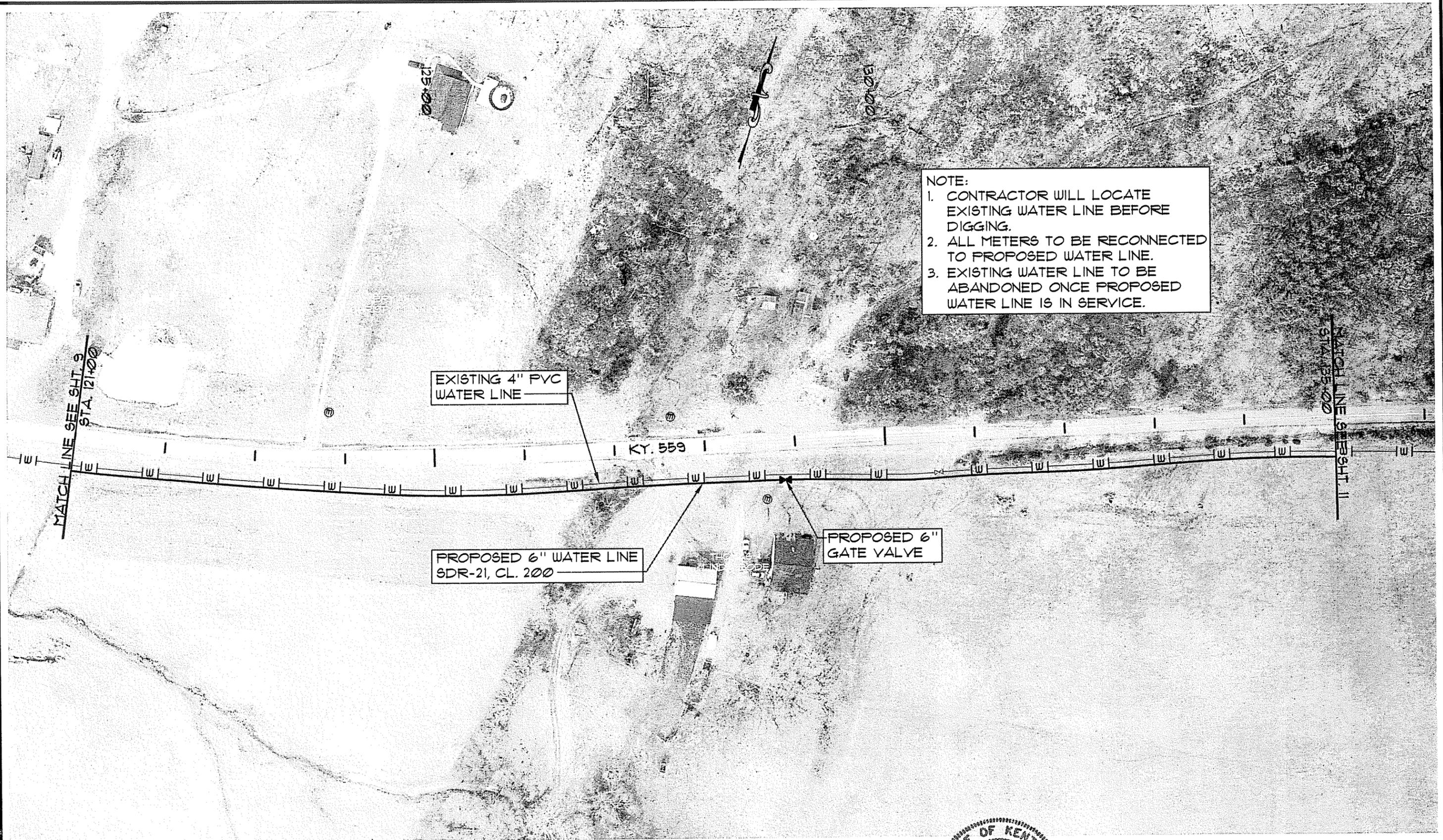


FLEMING 2008 WATER PROJECT
 FLEMING COUNTY WATER ASSOCIATION
 FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 93+00 TO STA. 108+00

SHEET
 8
 OF

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

EXISTING 4" PVC WATER LINE

PROPOSED 6" WATER LINE SDR-21, CL. 200

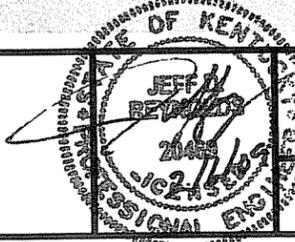
PROPOSED 6" GATE VALVE

NO.	DATE	REVISIONS	CHKD	APPR'D	DATE

PROJECT: 4132.00		DATE: 6/4/08
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DRG.		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX

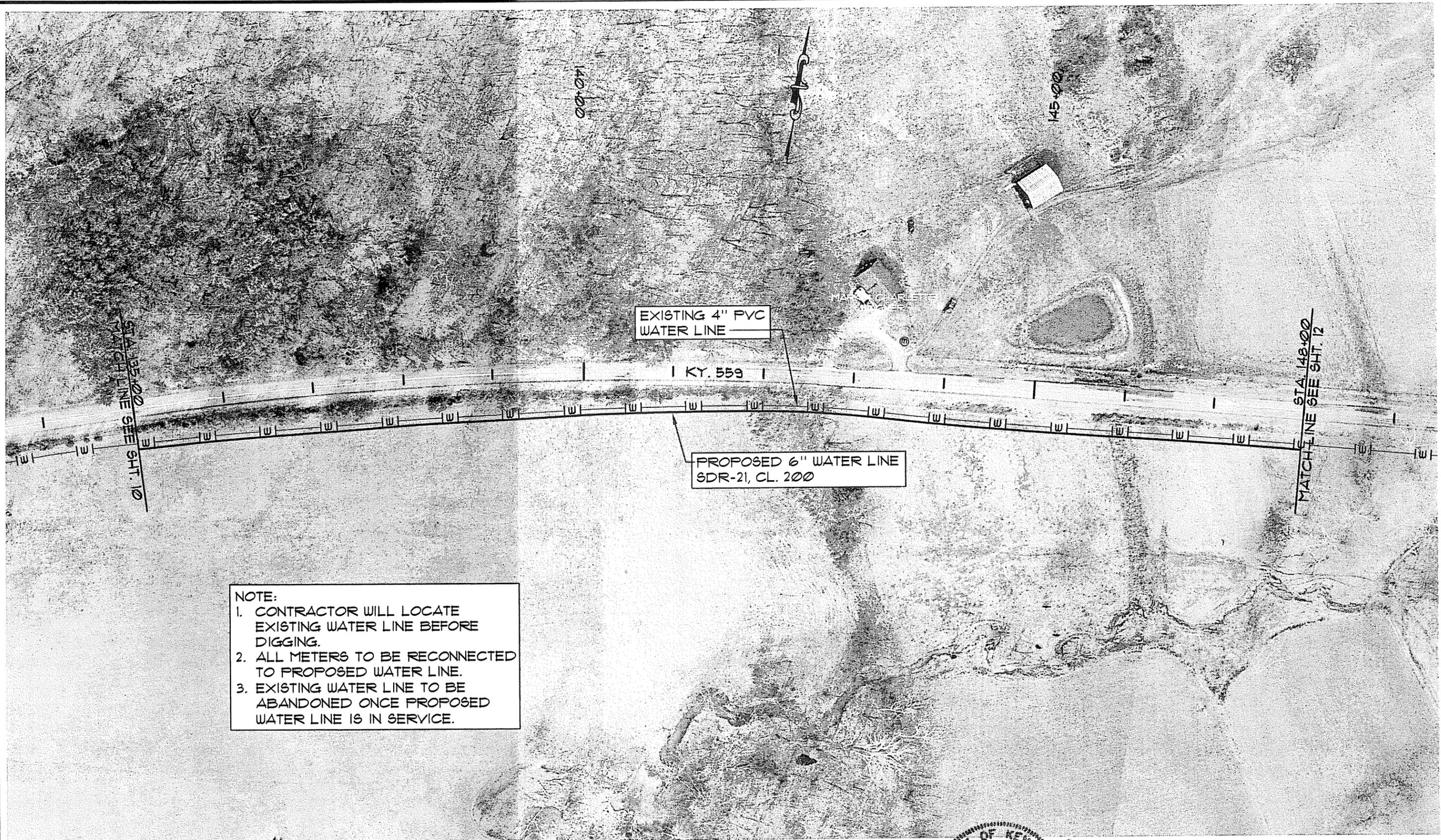


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 121+00 TO STA. 135+00

SHEET
 10
 OF

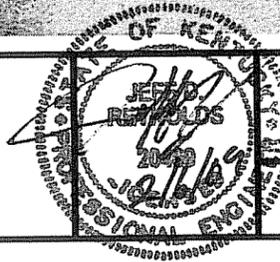
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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

PROJECT: 413200		DATE: 6/14/08	
SCALE: 1"=100'			
DESIGNED BY	NAME	DATE	
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DRG.			

HMB
 PROFESSIONAL ENGINEERS, INC.
 3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX



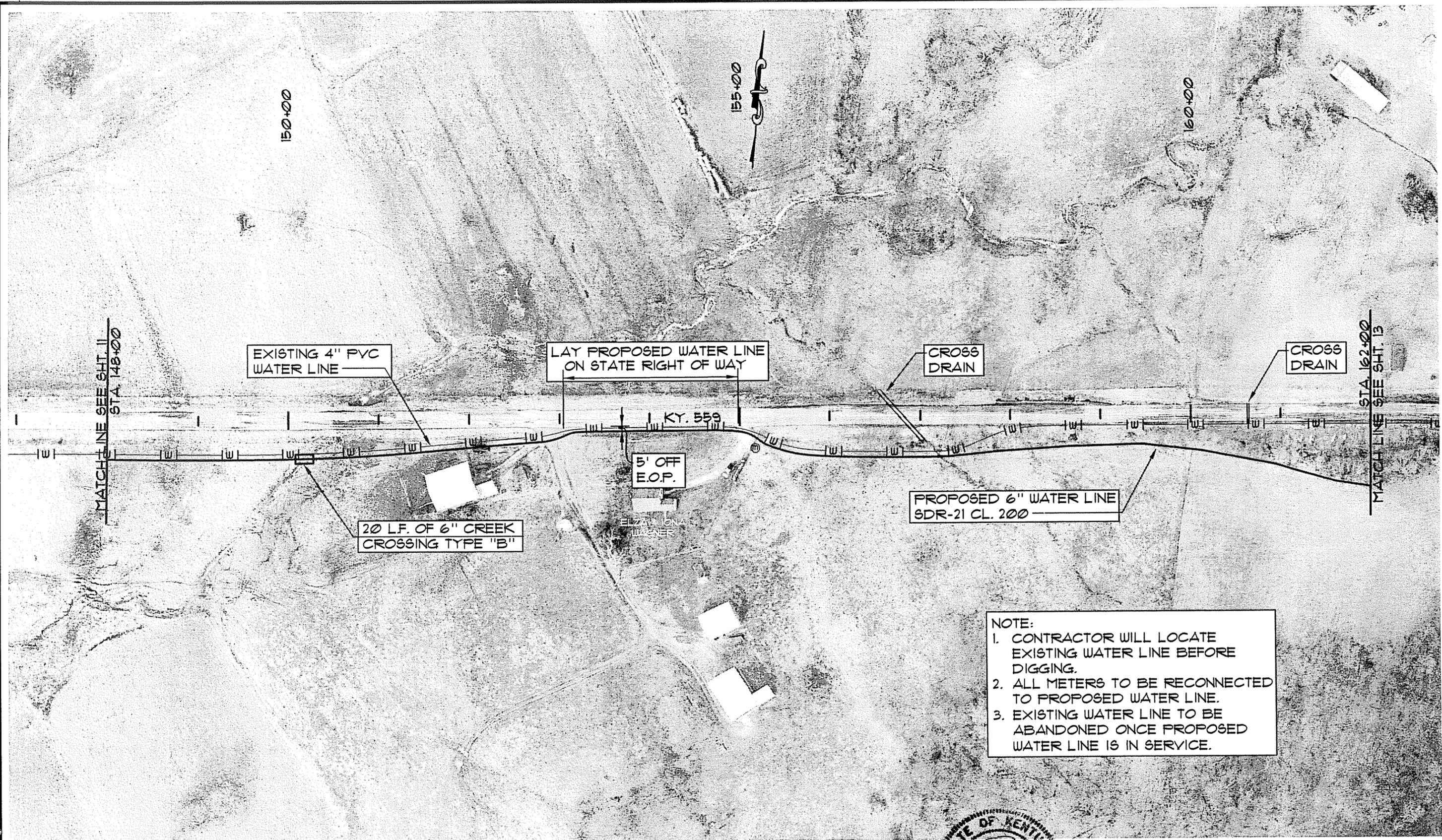
**FLEMING 2008 WATER PROJECT
 FLEMING COUNTY WATER ASSOCIATION
 FLEMING COUNTY, KENTUCKY**

KY. 559 STA. 135+00 TO STA. 148+00

SHEET
 11
 OF

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

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NOTE:

1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

PROJECT: 4132.00		DATE: 3/18/08	
SCALE: 1"=100'			
DESIGNED BY	NAME	DATE	
DRAWN BY	JDR		
CHECKED BY	JH		
RECORD DUGS.	JDR		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



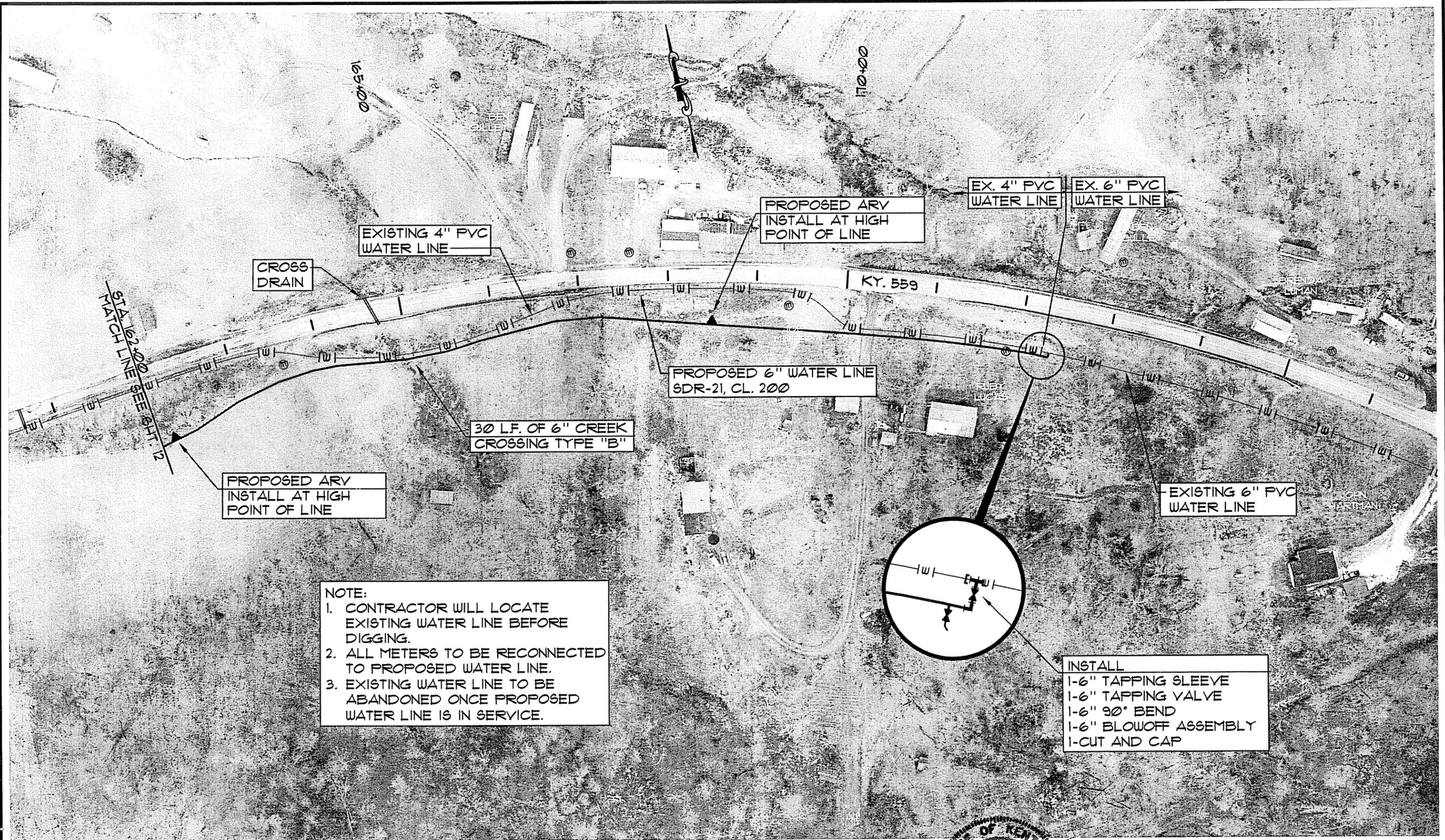
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 148+00 TO STA. 162+00

SHEET
12
OF

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

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NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

INSTALL
 1-6" TAPPING SLEEVE
 1-6" TAPPING VALVE
 1-6" 90° BEND
 1-6" BLOWOFF ASSEMBLY
 1-CUT AND CAP

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413200		DATE: 3/10/08	
SCALE: 1"=100'			
DESIGNED BY	JDR	NAME	DATE
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DUGS.			



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9800
 (502) 695-9810 FAX

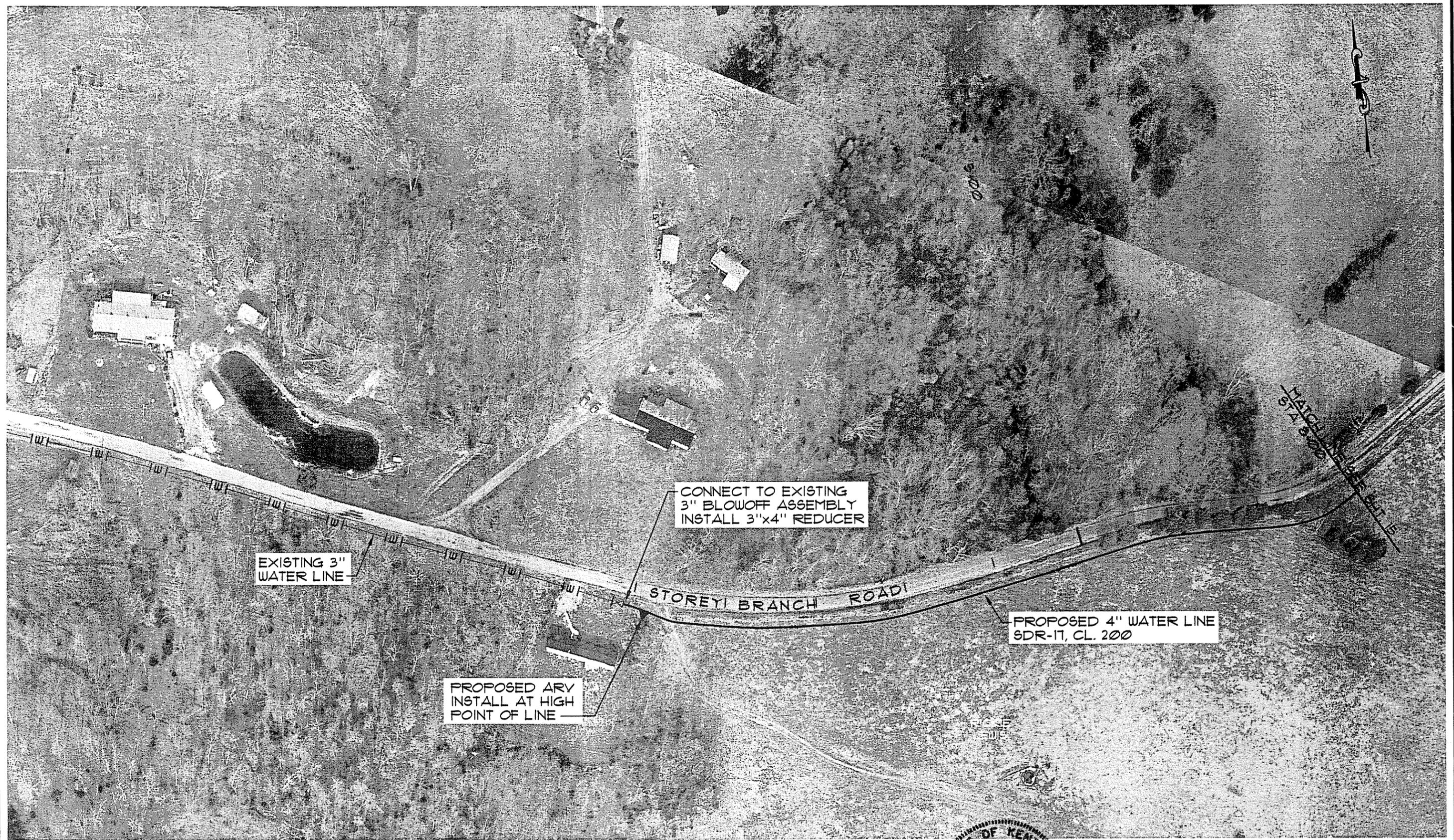


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 559 - STA. 162+00 TO STA. 172+30

SHEET
 13
 OF

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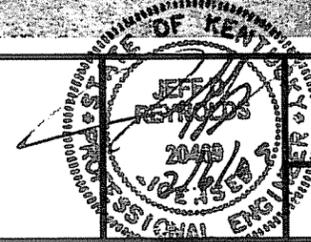


NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00		DATE: 3/19/08
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DWSG.	JDR	



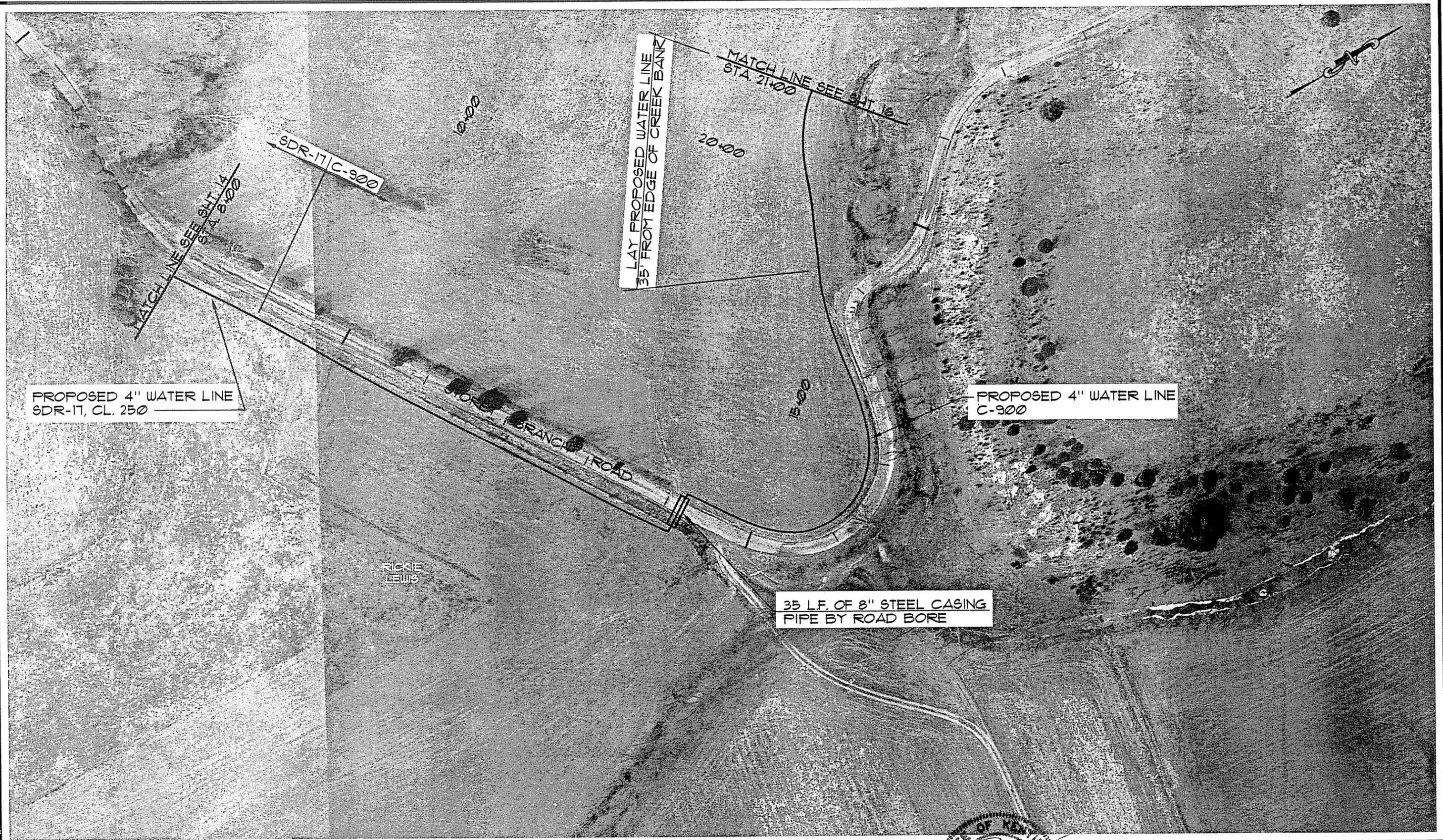
3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY
STOREY BRANCH ROAD - STA. 0+00 TO STA. 8+00

SHEET
14
OF

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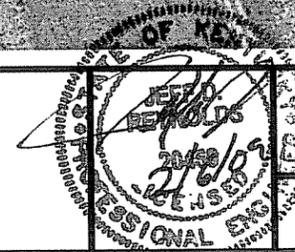


NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00		DATE: 3/19/08	
SCALE: 1"=100'			
DESIGNED BY	JDR	NAME	DATE
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DUGS.			



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

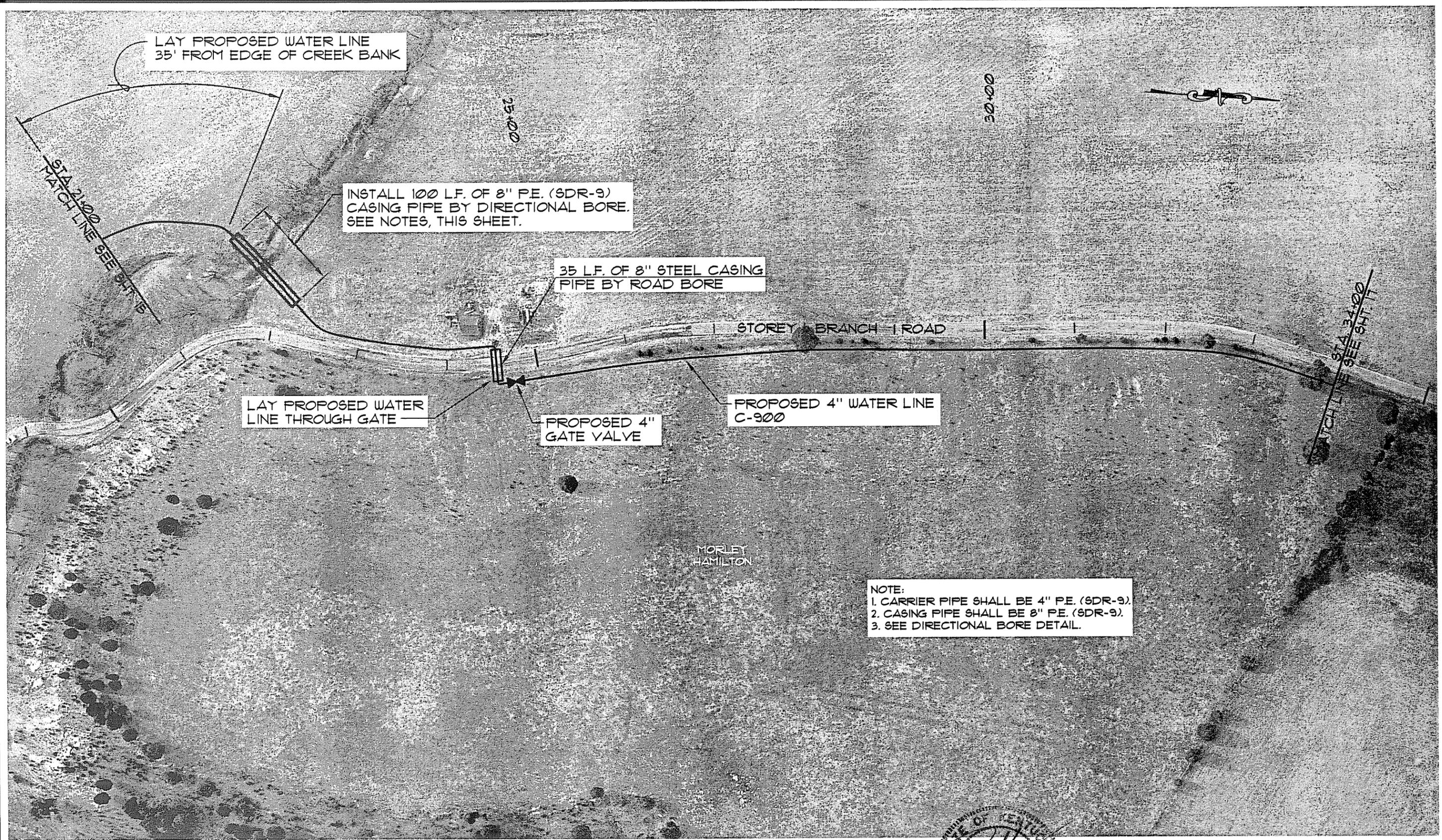


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STOREY BRANCH ROAD - STA. 8+00 TO STA. 21+00

SHEET
15
OF

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LAY PROPOSED WATER LINE THROUGH GATE

PROPOSED 4" GATE VALVE

PROPOSED 4" WATER LINE C-900

35 LF. OF 8" STEEL CASING PIPE BY ROAD BORE

INSTALL 100 LF. OF 8" P.E. (SDR-9) CASING PIPE BY DIRECTIONAL BORE. SEE NOTES, THIS SHEET.

LAY PROPOSED WATER LINE 35' FROM EDGE OF CREEK BANK

NOTE:
 1. CARRIER PIPE SHALL BE 4" P.E. (SDR-9).
 2. CASING PIPE SHALL BE 8" P.E. (SDR-9).
 3. SEE DIRECTIONAL BORE DETAIL.

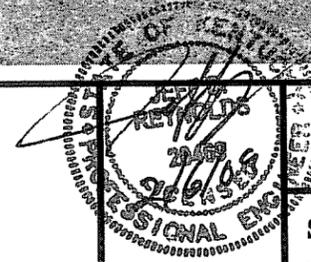
MORLEY HAMILTON

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00		DATE: 3/13/08
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DWSG.	JDR	



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 635-9800
 (502) 635-9810 FAX



FLEMING 2008 WATER PROJECT
 FLEMING COUNTY WATER ASSOCIATION
 FLEMING COUNTY, KENTUCKY

STOREY BRANCH ROAD - STA. 21+00 TO STA. 34+00

SHEET
 16
 OF

P:\engr\4132\CAD\STOREY_BRACH_ROAD.dwg, 12/16/2008 3:38:52 PM, env_prt on HMB



PROPOSED 4" WATER LINE
C-900

STOREY BRANCH ROAD

MORLEY HAMILTON

STA 34+00
MATCHLINE SEE SH. 16

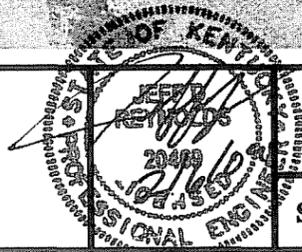
STA 47+00
MATCHLINE SEE SH. 18

PROJECT: 413200 DATE: 3/19/08
SCALE: 1"=100'

DESIGNED BY	NAME	DATE
JDR	JDR	
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 635-9800
(502) 635-9810 FAX



FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STOREY BRANCH ROAD - STA. 34+00 TO STA. 47+00

SHEET
17
OF

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

P:\engr\env\4132\CAD\STOREY_BRACH_ROAD.dwg, 12/16/2008 3:42:01 PM, env_prt on HMB



NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 3/19/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DRGGS.	JDR	



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

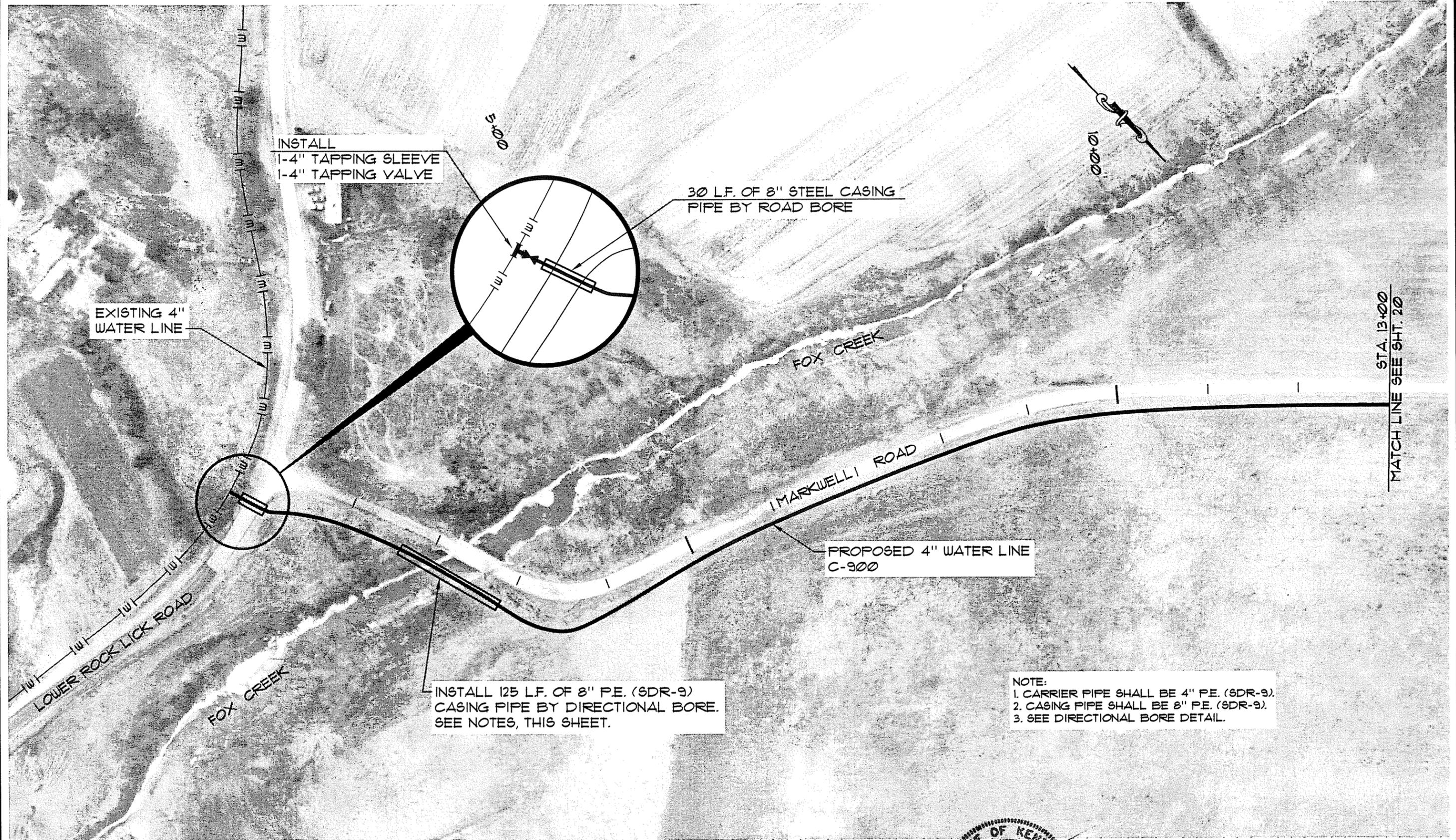


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STOREY BRANCH ROAD - STA. 47+00 TO STA. 50+25

SHEET
18
OF

P:\engrenv\4132\CAD\MARKWELL_ROAD.dwg, 12/16/2008 3:54:40 PM, env_prt on HMB



INSTALL 125 L.F. OF 8" P.E. (SDR-9)
CASING PIPE BY DIRECTIONAL BORE.
SEE NOTES, THIS SHEET.

30 L.F. OF 8" STEEL CASING
PIPE BY ROAD BORE

INSTALL
1-4" TAPPING SLEEVE
1-4" TAPPING VALVE

PROPOSED 4" WATER LINE
C-900

NOTE:
1. CARRIER PIPE SHALL BE 4" P.E. (SDR-9).
2. CASING PIPE SHALL BE 8" P.E. (SDR-9).
3. SEE DIRECTIONAL BORE DETAIL.

STA. 13+00
MATCH LINE SEE SHT. 20

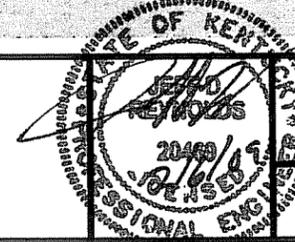
PROJECT: 413200 DATE: 6/11/08
SCALE: 1"=100'

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

DESIGNED BY	NAME	DATE
JDR	JDR	
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

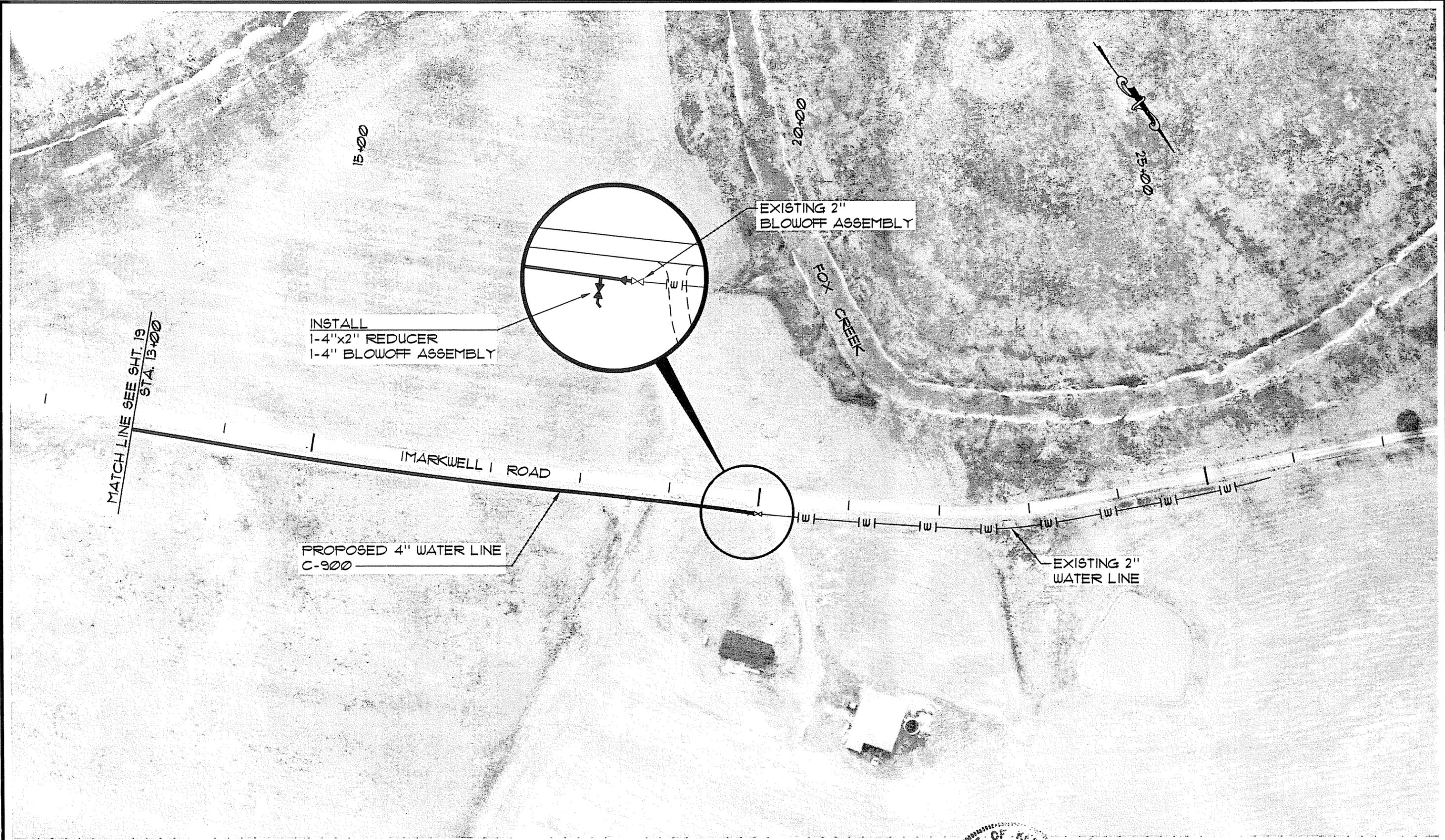


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

MARKWELL ROAD - STA. 0+00 TO STA. 13+00

SHEET
19
OF

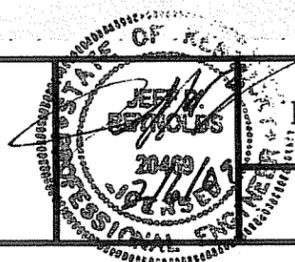
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NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413200 DATE: 6/1/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DWSG.		

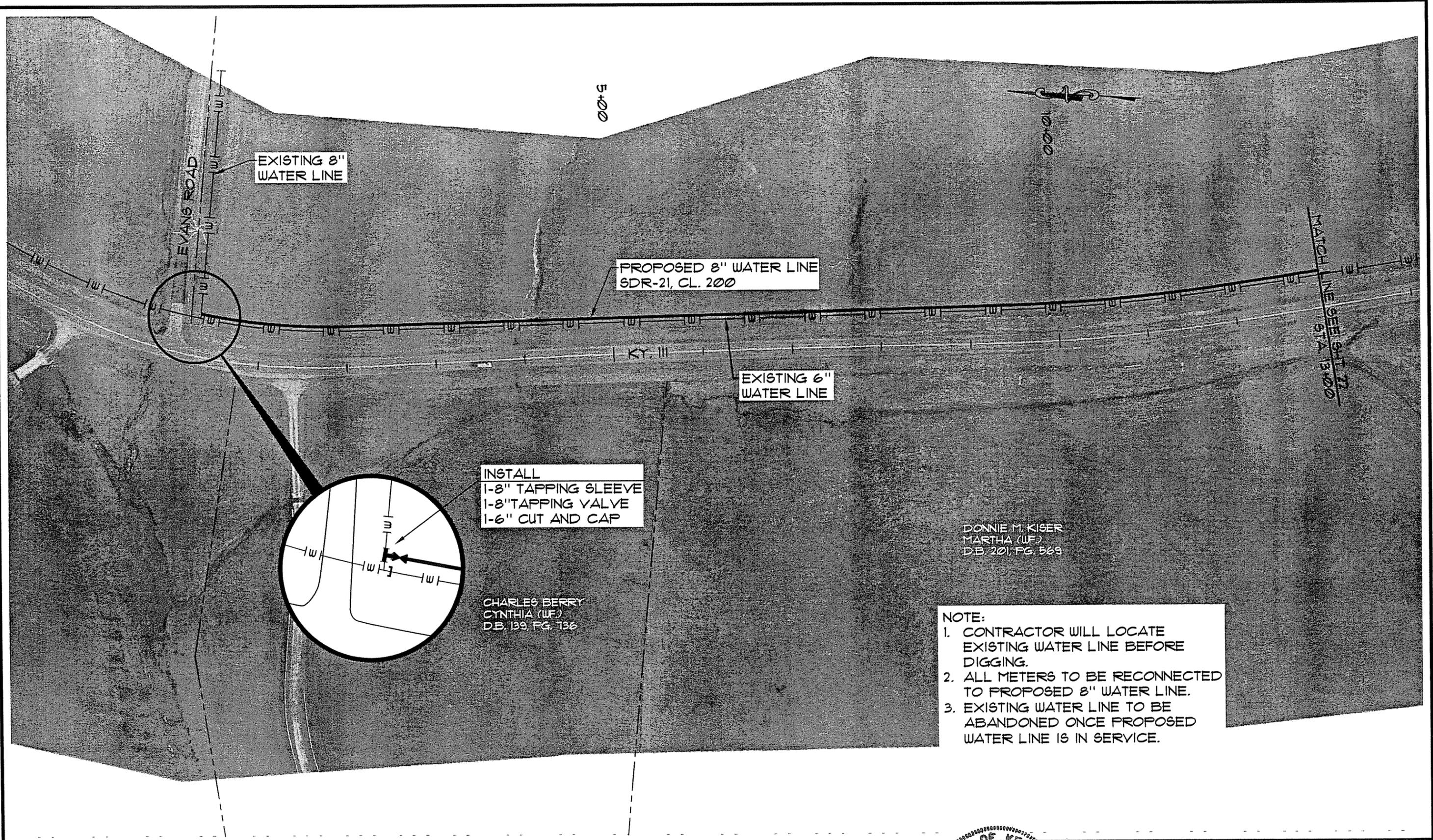
HMB
 3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 695-9900
 (502) 695-9910 FAX
 PROFESSIONAL ENGINEERS, INC.



FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY
 MARKWELL ROAD - STA. 13+00 TO STA. 20+00

SHEET
 20
 OF

P:\engr\env\4132\CAD\KY.111.dwg, 12/16/2008 4:02:55 PM, env_prt on HMB



EXISTING 8" WATER LINE

PROPOSED 8" WATER LINE
SDR-21, CL. 200

EXISTING 6" WATER LINE

INSTALL
1-8" TAPPING SLEEVE
1-8" TAPPING VALVE
1-6" CUT AND CAP

CHARLES BERRY
CYNTHIA (UF)
D.B. 139, P.G. 136

DONNIE M. KISER
MARTHA (UF)
D.B. 201, P.G. 563

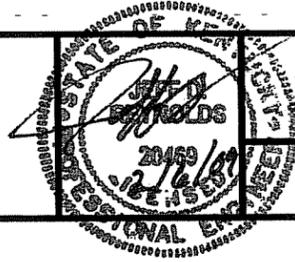
NOTE:
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 1/1/08		
SCALE: 1"=100'			
DESIGNED BY	JDR	NAME	DATE
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DUGG.			



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

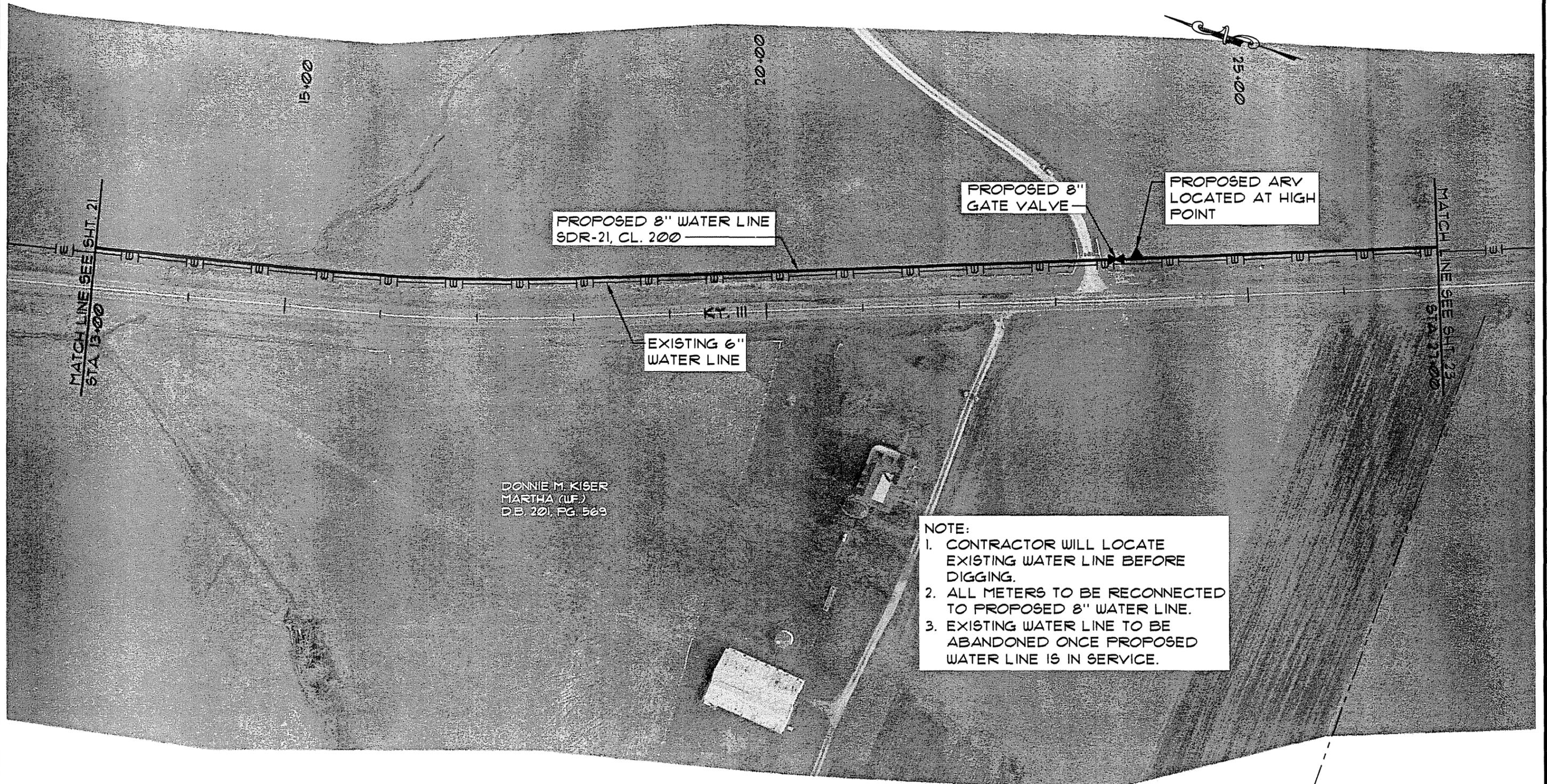


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 0+00 TO STA. 13+00

SHEET
21
OF

P:\engr\env\4132\CAD\KY.111.dwg, 12/16/2008 4:04:59 PM, env_prt on HMB



PROPOSED 8" WATER LINE
SDR-21, CL. 200

PROPOSED 8"
GATE VALVE

PROPOSED ARV
LOCATED AT HIGH
POINT

EXISTING 6"
WATER LINE

DONNIE M. KISER
MARTHA (W.F.)
D.B. 201, PG. 563

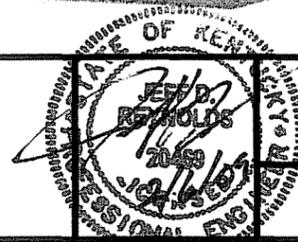
NOTE:
1. CONTRACTOR WILL LOCATE
EXISTING WATER LINE BEFORE
DIGGING.
2. ALL METERS TO BE RECONNECTED
TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE
ABANDONED ONCE PROPOSED
WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4138.00 DATE: 1/17/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DUGS.	JDR	



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

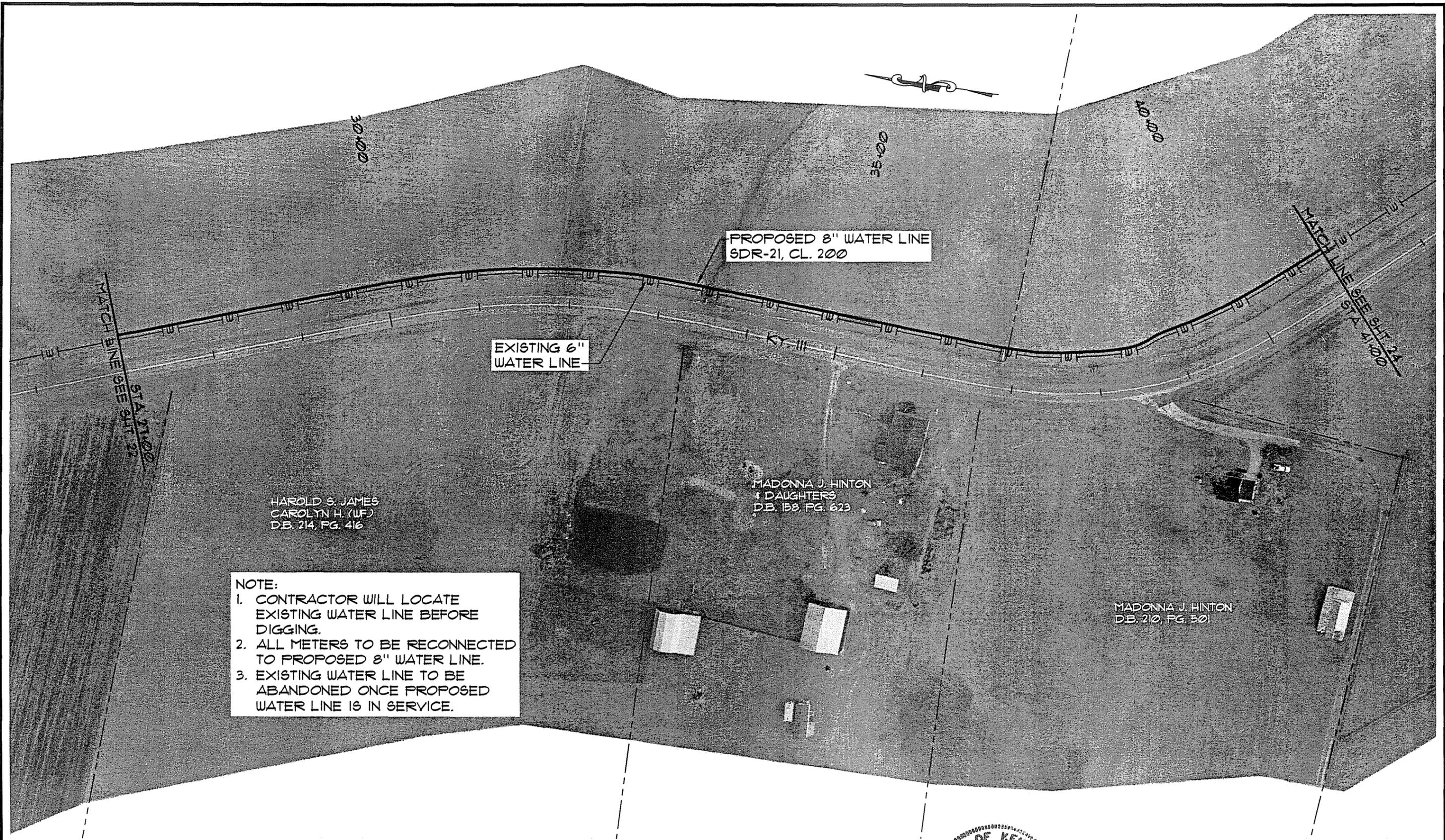


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 13+00 TO STA. 27+00

SHEET
22
OF

P:\engr\env\4132\CAD\KY.111.dwg, 12/16/2008 4:15:28 PM, env_prt on HMB

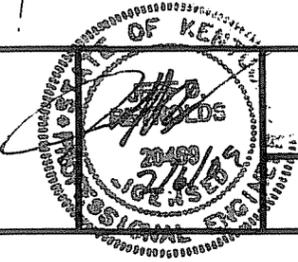


NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

PROJECT: 4132.00		DATE: 1/11/08	
SCALE: 1"=100'			
DESIGNED BY	NAME	DATE	
DRAWN BY	JDR		
CHECKED BY	JH		
RECORD DRGS.	JDR		



3 HMB CIRCLE
 FRANKFORT, KENTUCKY
 (502) 635-9900
 (502) 635-9910 FAX

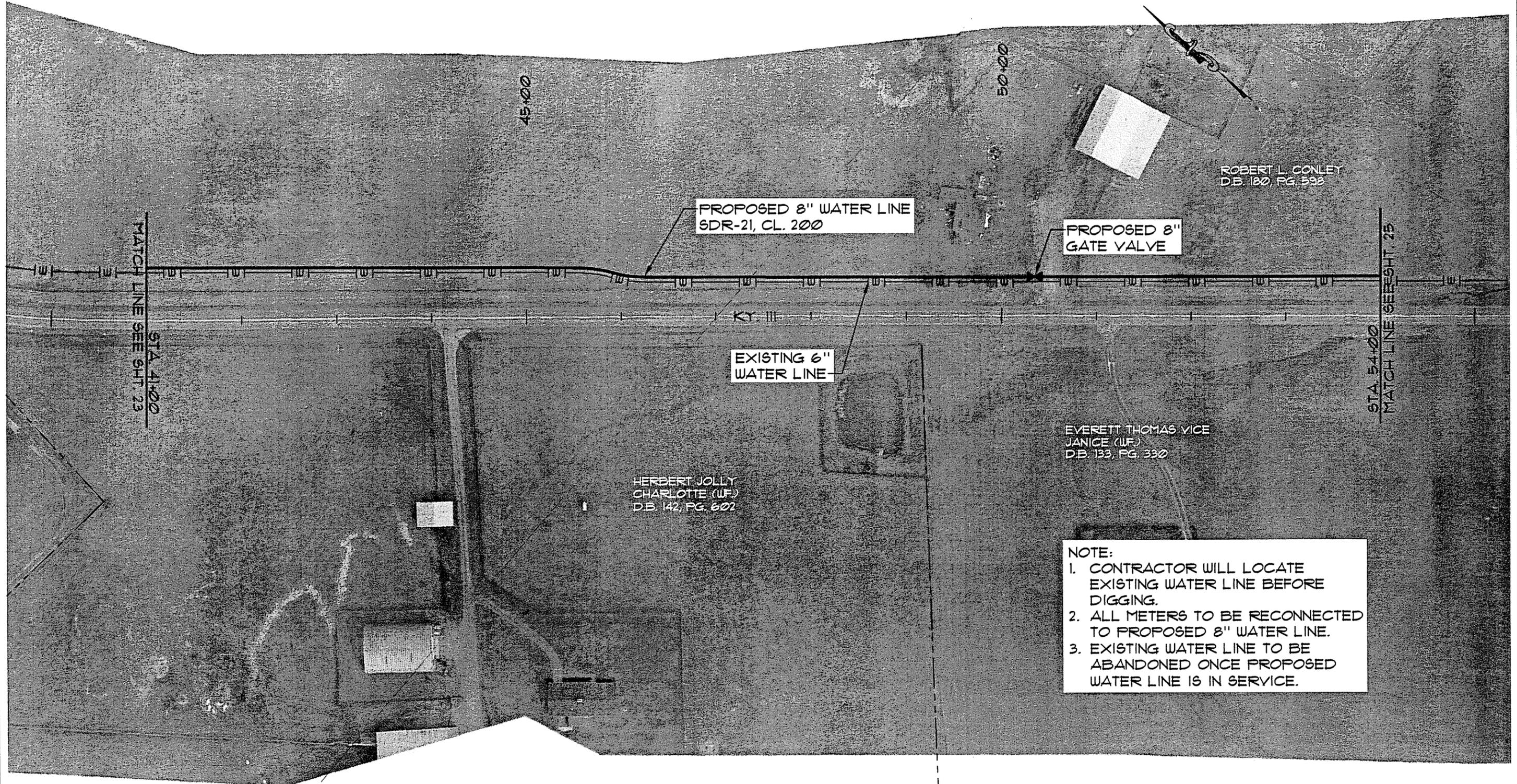


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 27+00 TO STA. 41+00

SHEET
 23
 OF

P:\engr\env\4132\CAD\KY.111.dwg, 12/16/2008 4:14:32 PM, env_prt on HMB



NOTE:

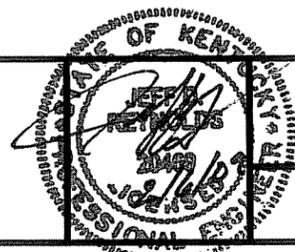
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413200 DATE: 7/1/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAIN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		



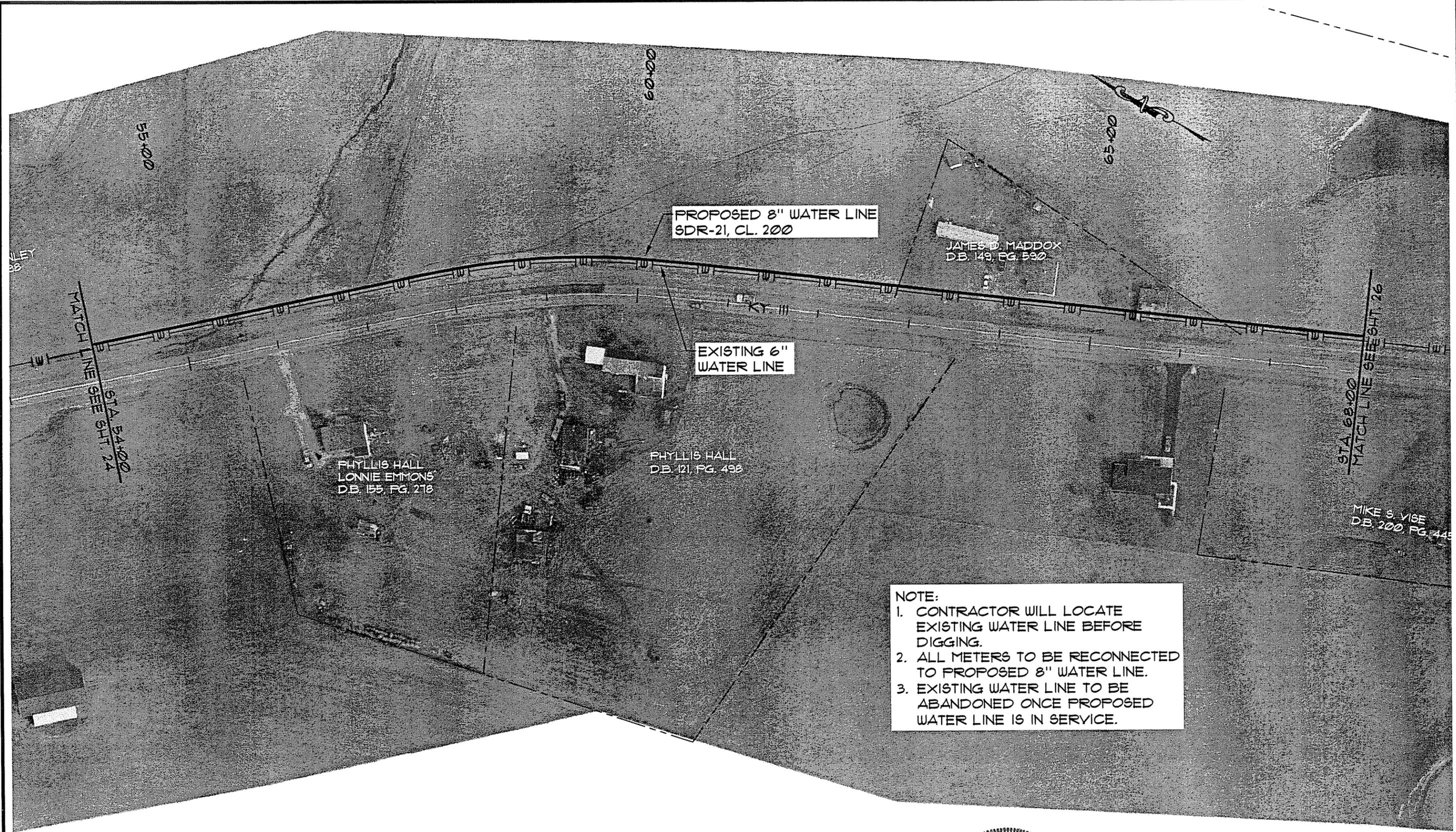
3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 41+00 TO STA. 54+00

SHEET
24
OF



NOTE:

1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

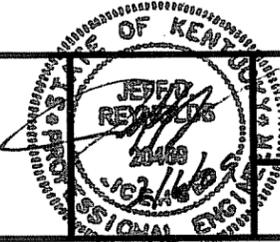
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NO.	DATE	REVISIONS	CHK'D	APP'D	DATE

PROJECT: 4132.00		DATE: 7/1/08
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JDR	
CHECKED BY	JH	
RECORD DWSG.	JDR	



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

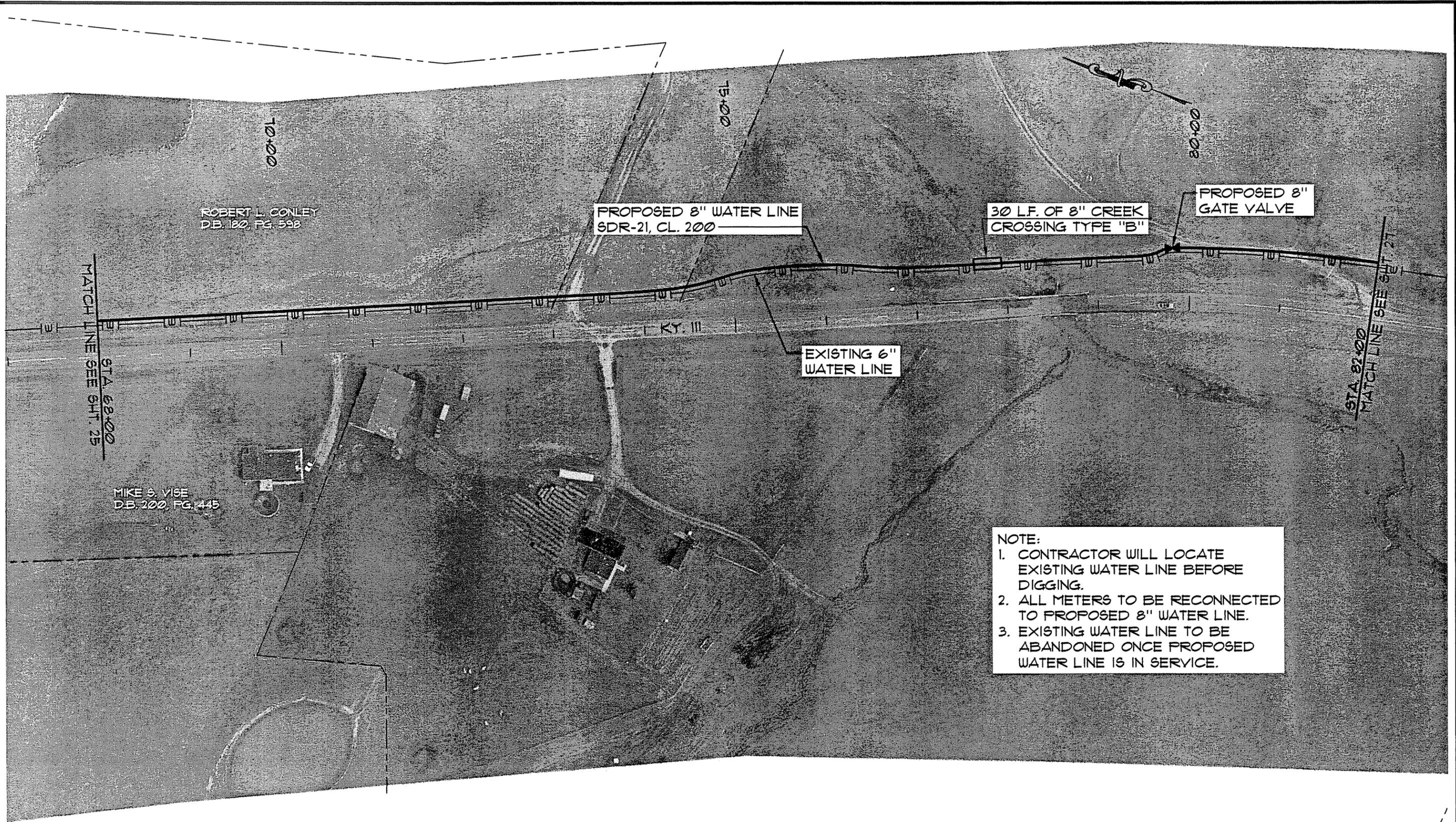


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 54+00 TO STA. 68+00

SHEET
25
OF

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ROBERT L. CONLEY
D.B. 180, PG. 598

PROPOSED 8" WATER LINE
SDR-21, CL. 200

30 L.F. OF 8" CREEK
CROSSING TYPE "B"

PROPOSED 8"
GATE VALVE

EXISTING 6"
WATER LINE

MATCH LINE SEE SH. 25
STA. 68+00

STA. 82+00
MATCH LINE SEE SH. 27

MIKE S. VISE
D.B. 200, PG. 445

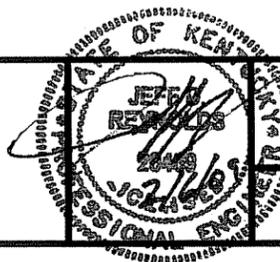
NOTE:
1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00 DATE: 7/1/08		
SCALE: 1"=100'		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		



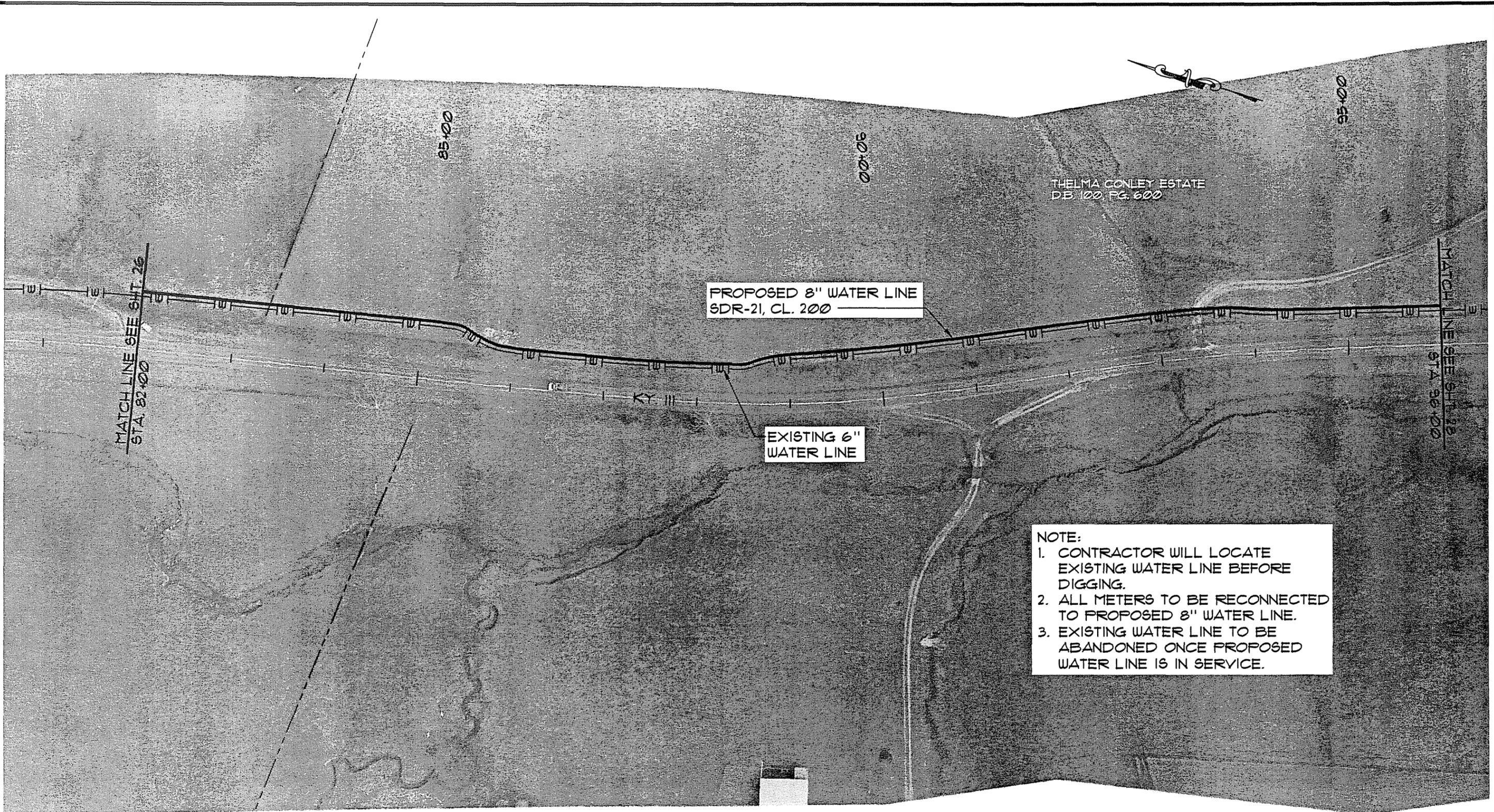
3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 68+00 TO STA. 82+00

SHEET
26
OF



PROPOSED 8" WATER LINE
SDR-21, CL. 200

EXISTING 6"
WATER LINE

NOTE:
 1. CONTRACTOR WILL LOCATE EXISTING WATER LINE BEFORE DIGGING.
 2. ALL METERS TO BE RECONNECTED TO PROPOSED 8" WATER LINE.
 3. EXISTING WATER LINE TO BE ABANDONED ONCE PROPOSED WATER LINE IS IN SERVICE.

MATCH LINE SEE SH. 26
STA. 82+00

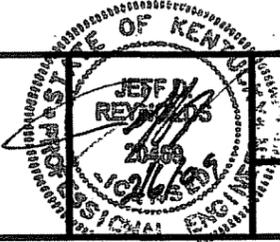
MATCH LINE SEE SH. 27
STA. 96+00

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PROJECT: 4132.00		DATE: 1/1/08	
SCALE: 1"=100'			
DESIGNED BY	NAME	DATE	
DRAWN BY	JDR		
CHECKED BY	JH		
RECORD DUGS.	JDR		



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 635-9200
(502) 635-9210 FAX



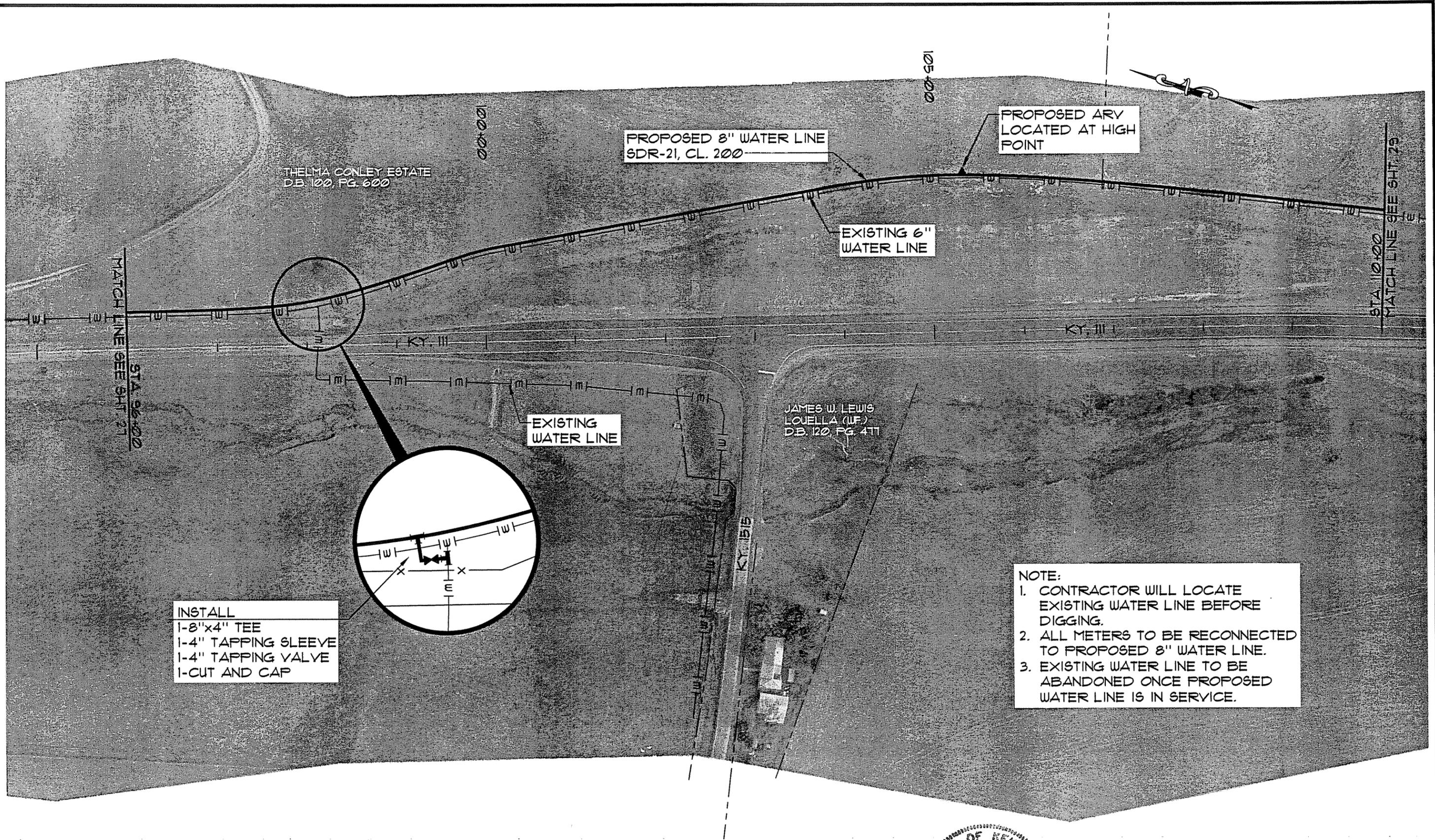
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 82+00 TO STA. 96+00

SHEET
27
OF

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

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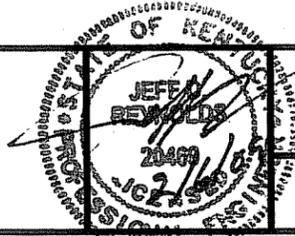


NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 7/1/08	
SCALE: 1"=100'		
DESIGNED BY	JDR	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DRG.		

HMB
PROFESSIONAL ENGINEERS, INC.

3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

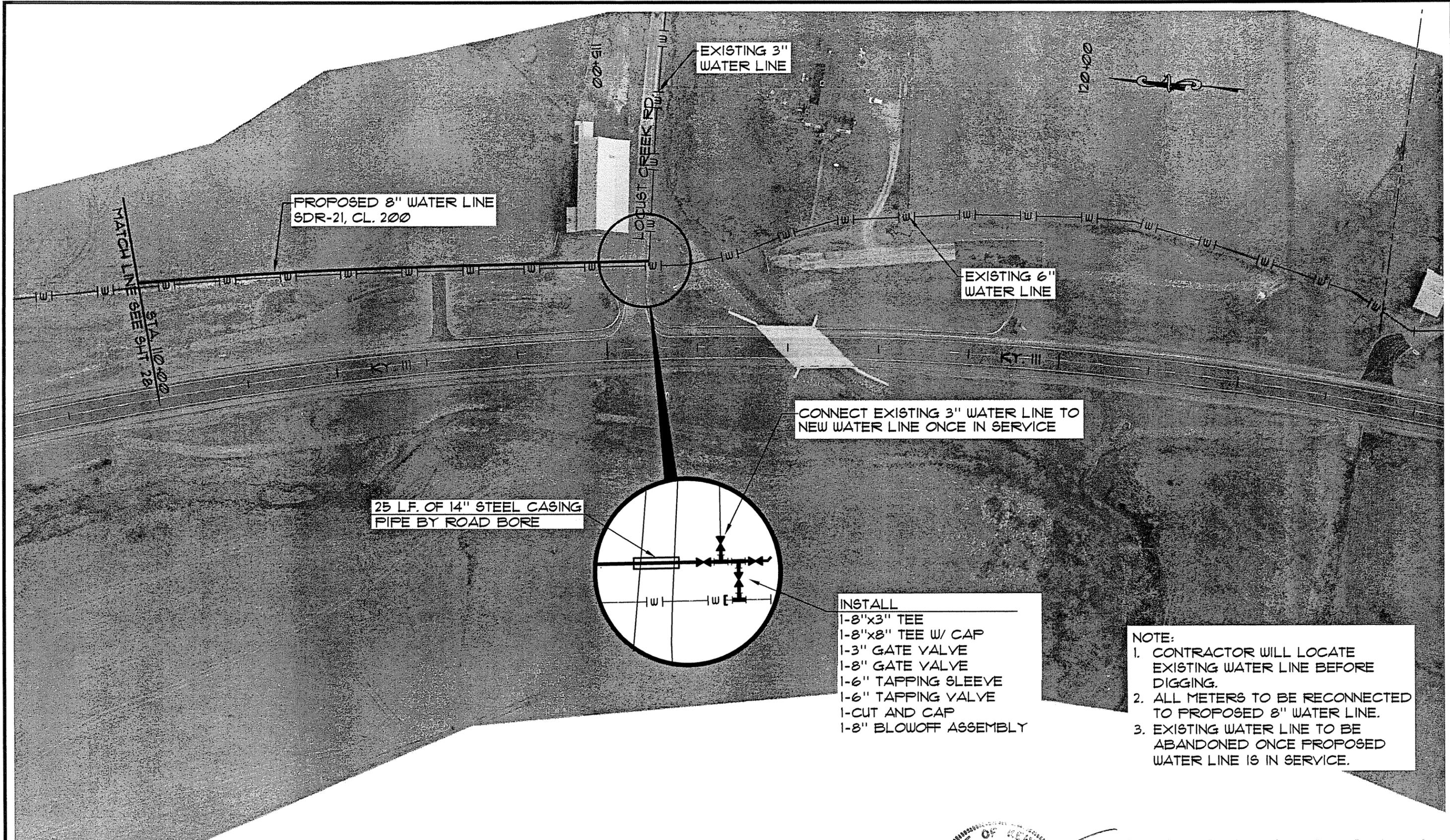


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 96+00 TO STA. 110+00

SHEET
28
OF

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PROPOSED 8" WATER LINE
SDR-21, CL. 200

EXISTING 3"
WATER LINE

EXISTING 6"
WATER LINE

CONNECT EXISTING 3" WATER LINE TO
NEW WATER LINE ONCE IN SERVICE

25 LF. OF 14" STEEL CASING
PIPE BY ROAD BORE

INSTALL
1-8"x3" TEE
1-8"x8" TEE W/ CAP
1-3" GATE VALVE
1-8" GATE VALVE
1-6" TAPPING SLEEVE
1-6" TAPPING VALVE
1-CUT AND CAP
1-8" BLOWOFF ASSEMBLY

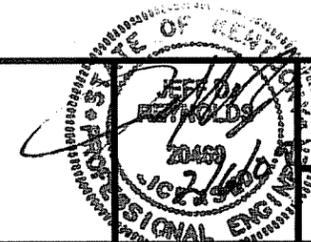
NOTE:
1. CONTRACTOR WILL LOCATE
EXISTING WATER LINE BEFORE
DIGGING.
2. ALL METERS TO BE RECONNECTED
TO PROPOSED 8" WATER LINE.
3. EXISTING WATER LINE TO BE
ABANDONED ONCE PROPOSED
WATER LINE IS IN SERVICE.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413800		DATE: 1/11/08	
SCALE: 1"=100'			
DESIGNED BY	JDR	NAME	DATE
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DUGS.			



3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX

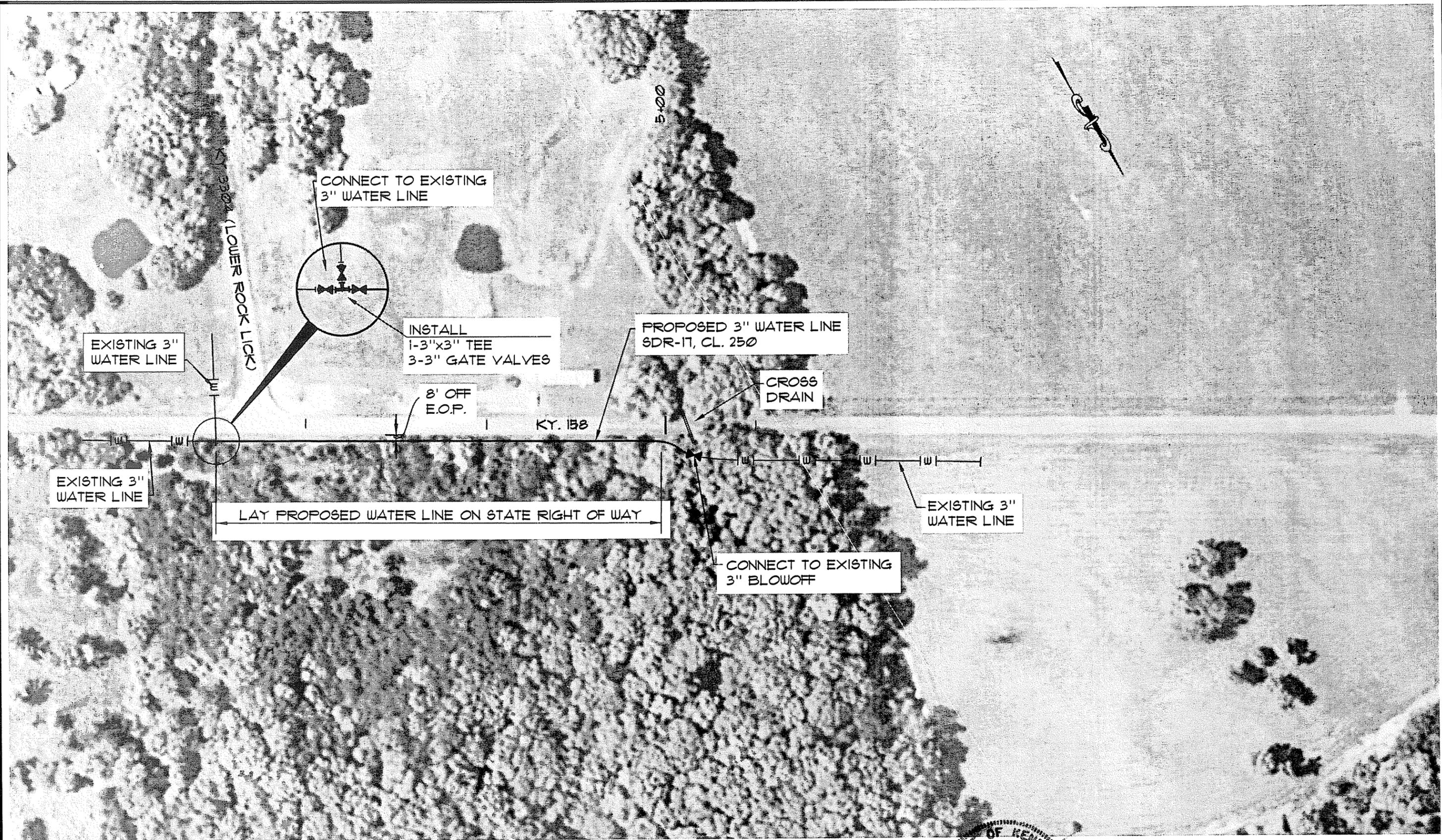


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 111 - STA. 110+00 TO STA. 115+50

SHEET
29
OF

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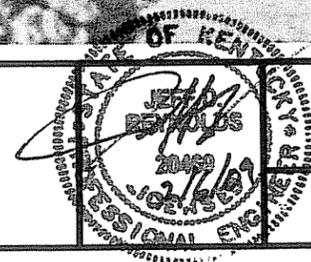


NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 10/15/08		
SCALE: 1"=100'			
DESIGNED BY	JDR	NAME	DATE
DRAWN BY	JH		
CHECKED BY	JDR		
RECORD DWGS.			



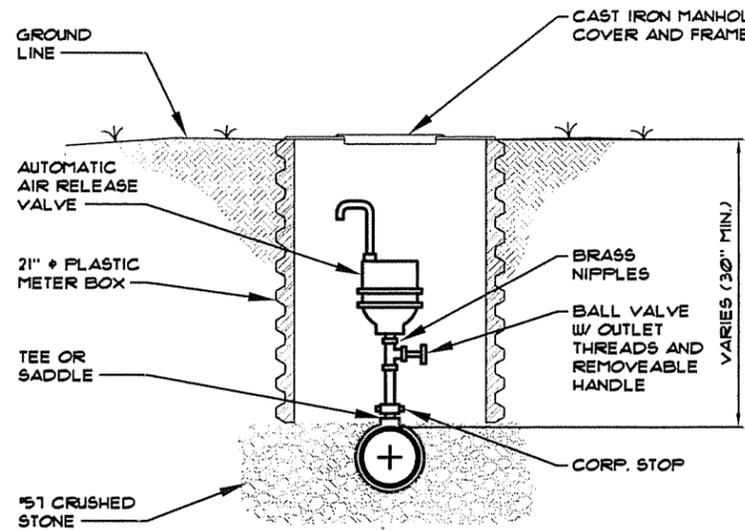
3 HMB CIRCLE
FRANKFORT, KENTUCKY
(502) 695-9800
(502) 695-9810 FAX



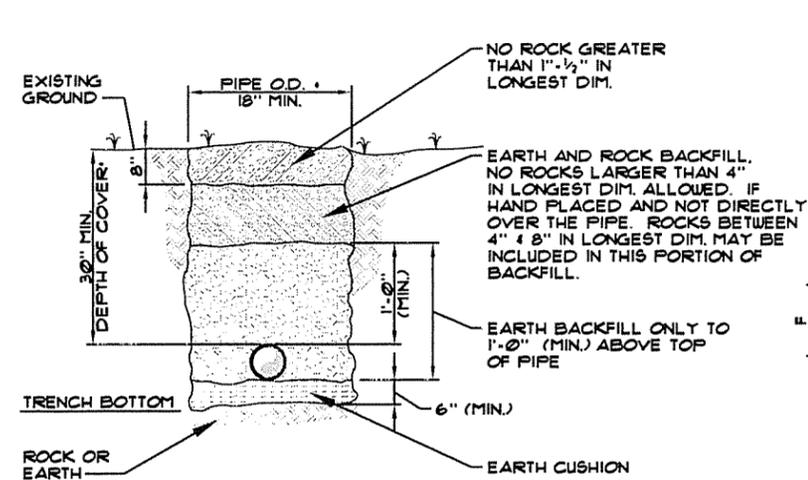
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

KY. 158 - STA. 0+00 TO STA. 5+30

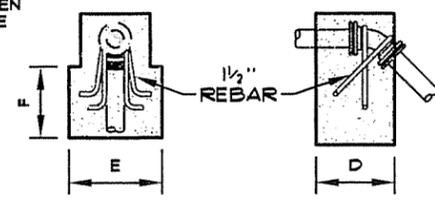
SHEET
30
OF



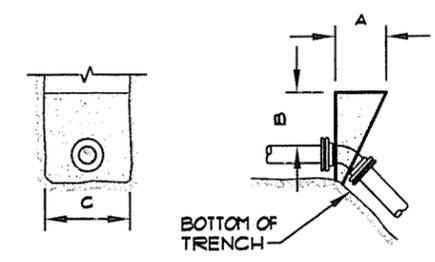
AUTOMATIC AIR RELEASE VALVE
SCALE: N.T.S.



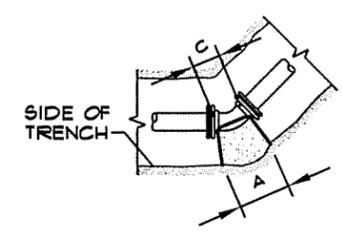
BEDDING/BACKFILL
SCALE: N.T.S.



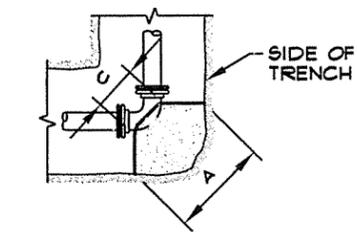
45° VERTICAL BEND



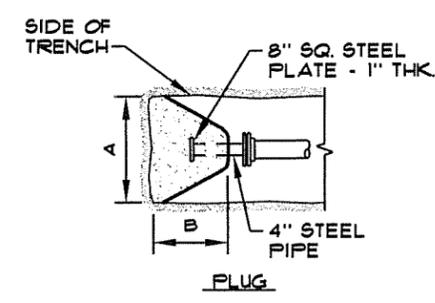
45° VERTICAL BEND



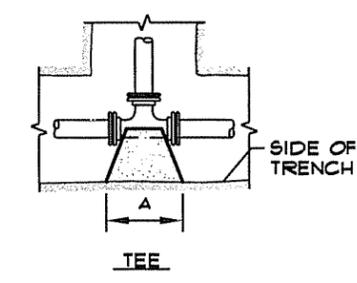
45° 22 1/2° & 11 1/4° BEND



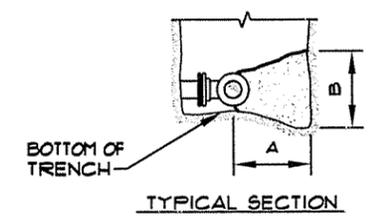
90° BEND



PLUG



TEE



TYPICAL SECTION

NOTES:

1. THRUST BLOCKS DESIGNED FOR 100 PSI PRESSURE AND 1000 PSF SOIL BEARING. FOR GREATER PRESSURE OR LESS SOIL BEARING, QUANTITIES WILL HAVE TO BE RECALCULATED.
2. THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
3. IF EXACT SIZE PIPE BLOCKING IS NOT SHOWN, USE NEXT LARGER SIZE.
4. THRUST BLOCKING TO BE POURED IN PLACE CLASS B CONCRETE.

90° BEND

SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	12	6.4	5.0	4.0	3.3	2.6	1.6	1.6
B	12	6.4	5.0	4.0	3.3	2.4	1.6	1.6
C	32	3.0	1.6	1.5	1.2	1.2	0.9	0.9
D	36	3.2	2.5	2.0	1.6	1.2	0.8	0.9

45° BEND

SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	5.4	4.8	3.7	3.1	2.4	1.8	1.2	1.2
B	5.4	4.8	3.7	3.1	2.4	1.8	1.2	1.2
C	1.6	1.5	1.6	1.4	1.2	1.2	0.8	0.8
D	2.5	2.2	1.8	1.5	1.2	0.9	0.6	0.6

22 1/2° BEND

SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	3.8	3.4	2.6	2.3	1.8	1.3	0.9	0.9
B	3.8	3.4	2.6	2.3	1.8	1.3	0.9	0.9
C	1.6	1.5	1.6	1.4	1.2	1.0	0.8	0.8
D	1.8	1.6	1.3	1.1	0.9	0.6	0.4	0.4

11 1/4° BEND

SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	2.7	2.4	1.8	1.6	1.3	1.1	0.9	0.9
B	2.7	2.4	1.8	1.6	1.3	1.1	0.9	0.9
C	1.6	1.5	1.6	1.4	1.2	1.0	0.8	0.8
D	1.4	1.2	0.9	0.8	0.6	0.5	0.4	0.4

PLUG

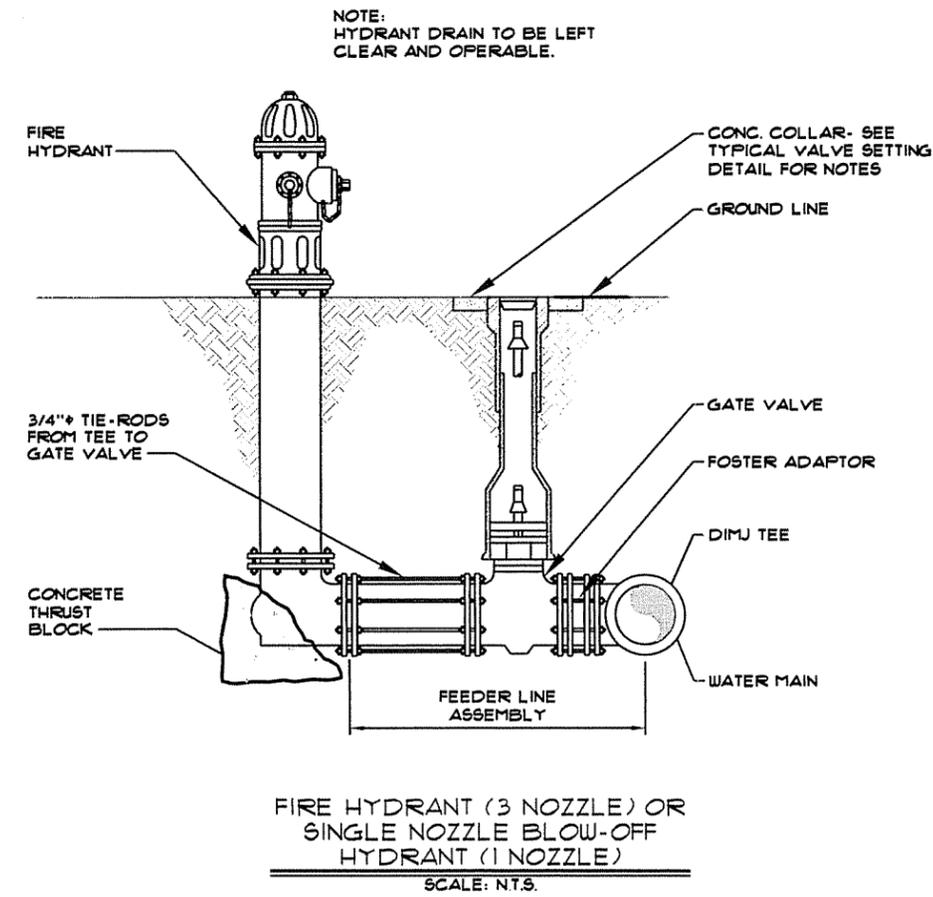
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	6.0	5.4	5.2	4.3	3.4	2.6	2.6	2.6
B	6.0	5.4	5.2	4.3	3.4	2.6	2.6	2.6
C	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
D	5.4	4.4	3.2	2.2	1.5	1.1	1.1	1.1

TEE

SIZE	PLAN BRANCH	18"	16"	12"	10"	8"	6"	4"	2"
A	18"	6.0	5.4	5.2	4.7	3.6	2.6	2.6	2.6
B	16"	6.0	5.4	5.2	4.3	3.4	2.6	2.6	2.6
C	12"	3.2	3.0	1.2	1.2	1.2	1.2	1.2	1.2
D	10"	3.6	3.0	2.6	2.1	1.3	2.1	1.3	1.3

DIMENSIONS ARE IN INCHES

THRUST BLOCKS
SCALE: N.T.S.



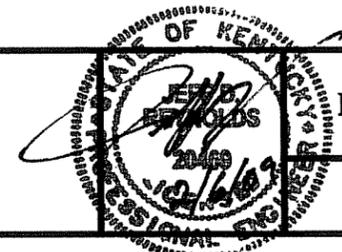
FIRE HYDRANT (3 NOZZLE) OR SINGLE NOZZLE BLOW-OFF HYDRANT (1 NOZZLE)
SCALE: N.T.S.

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT:	413200	DATE:	8/25/08
SCALE:	AS NOTED	DESIGNED BY:	JDR
		DRAWN BY:	JH
		CHECKED BY:	JDR
		RECORD DRGS.	



3 HMB CIRCLE
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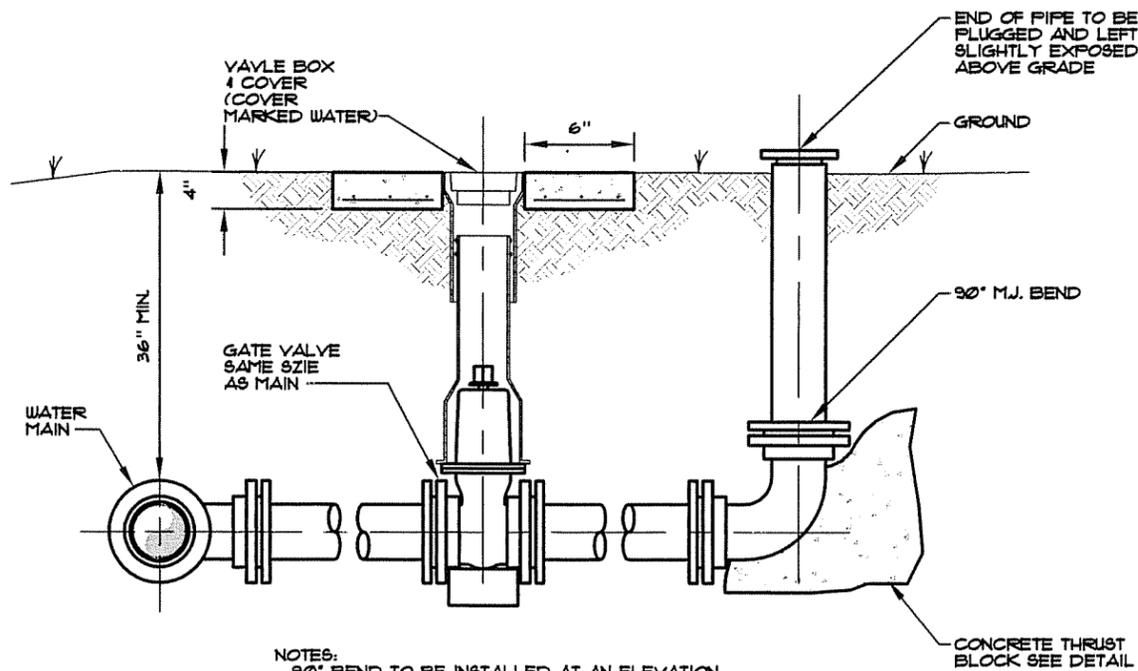
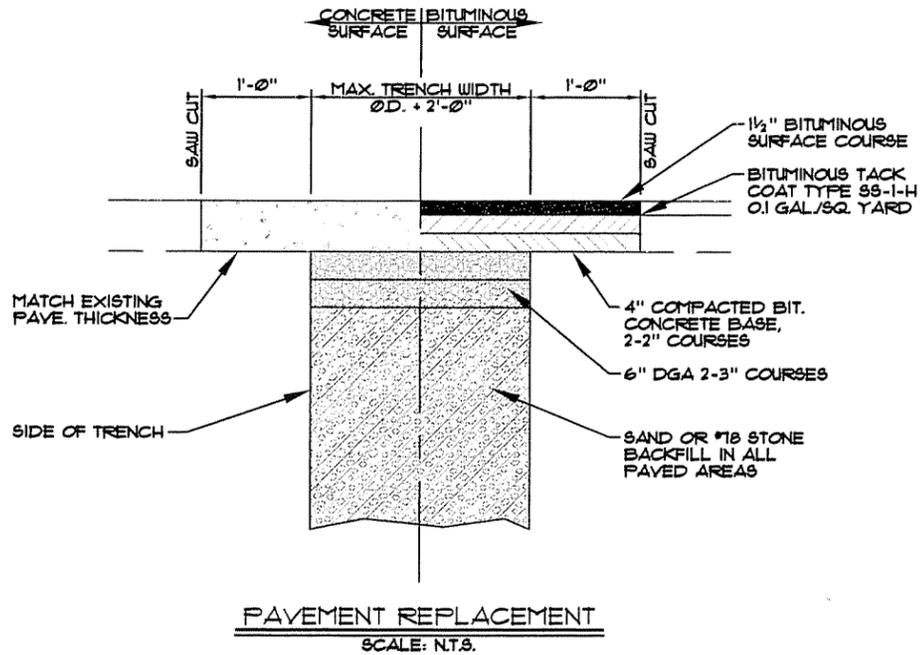


FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STANDARD DETAILS

SHEET
SD1
OF
SD4

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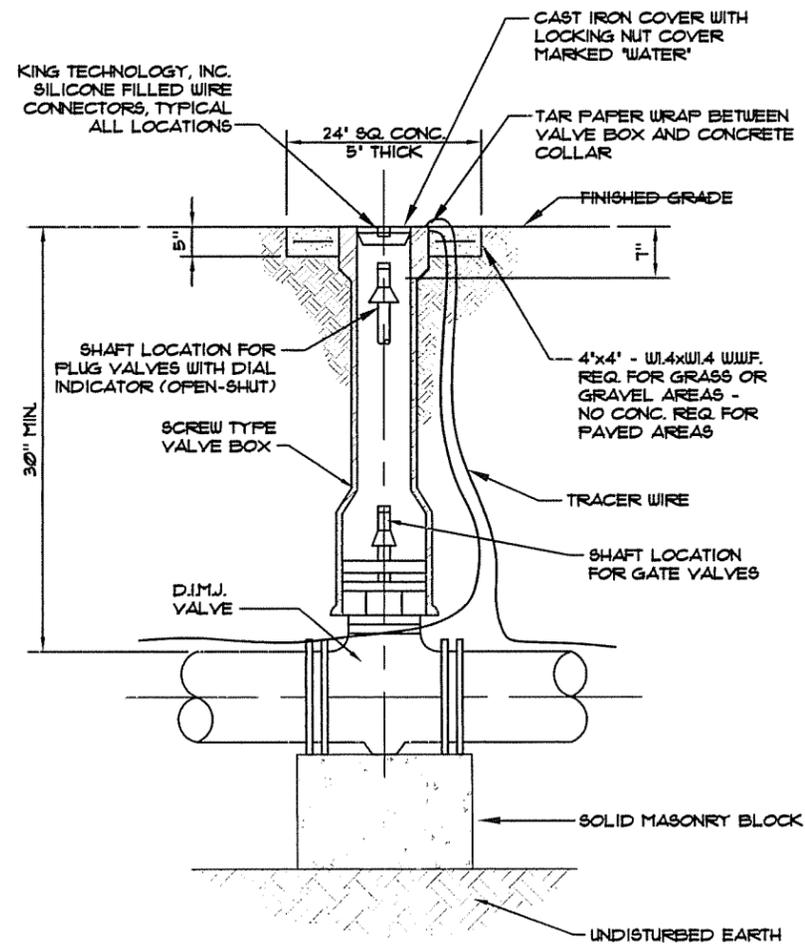


NOTES:
90° BEND TO BE INSTALLED AT AN ELEVATION LOWER THAN THE MAIN LINE TO FACILITATE DRAINAGE. PROVIDE WEEP HOLES IN 90° ELBOW. DO NOT ALLOW WEEP HOLES TO BE CLOGGED WHEN POURING THRUST BLOCK.

GATE VALVE SHALL BE RESTRAINED TO TEE OR THE END OF THE LINE.

GATE VALVE, FITTING, PIPE, ETC. SHALL BE INCLUDED IN UNIT PRICE BID FOR BLOW-OFF ASSEMBLY.

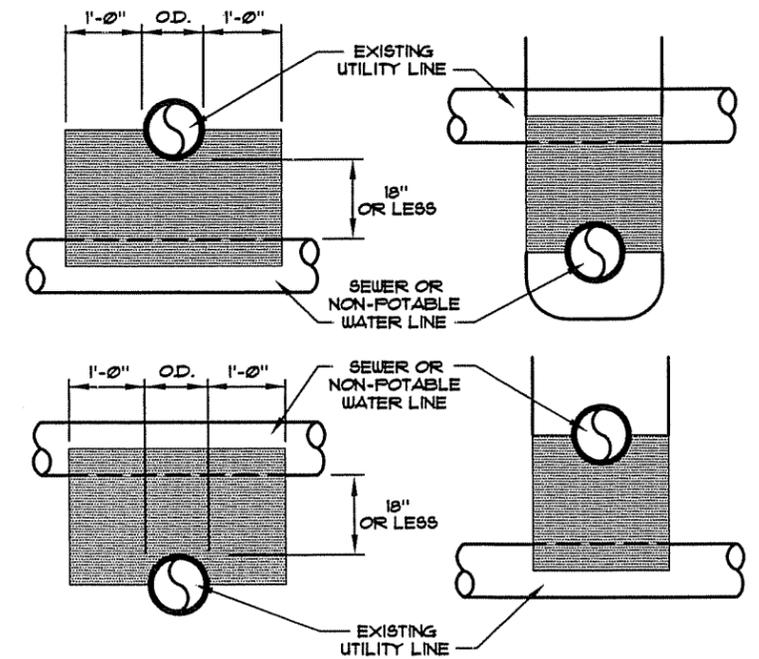
BLOWOFF ASSEMBLY
SCALE: N.T.S.



VALVE & VALVE BOX
SCALE: N.T.S.

NOTES :

1. CONCRETE ENCASEMENT SHALL BE USED WHEN CLEARANCE BETWEEN SEWER OR NON-POTABLE WATER LINE AND UTILITY LINE IS 18" OR LESS.
2. WHEN ENCOUNTERING UTILITY LINE WITH SEPARATION LESS THAN 18" VERTICAL OR 10'-0" HORIZONTAL, CONCRETE ENCASEMENT SHALL BE USED. FULL SECTION OF SEWER OR NON-POTABLE WATER LINE SHALL BE CENTERED UNDER UTILITY LINE TO ACHIEVE MAXIMUM JOINT DISPLACEMENT.
3. CONCRETE ENCASEMENT IS NOT A SEPARATE PAY ITEM.



SIDE VIEW

END VIEW

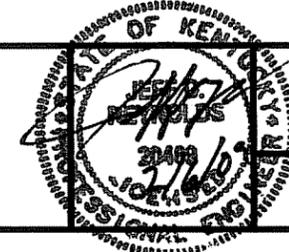
UTILITY CROSSING / ENCASEMENT
SCALE: N.T.S.

PROJECT: 4132.00 DATE: 8/25/08
SCALE: AS NOTED

DESIGNED BY	NAME	DATE
JDR	JDR	
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DWGS.		



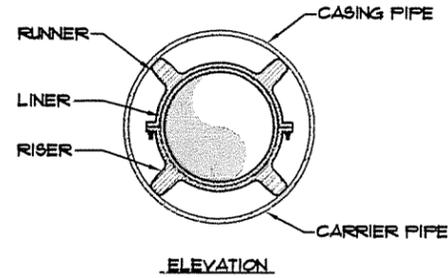
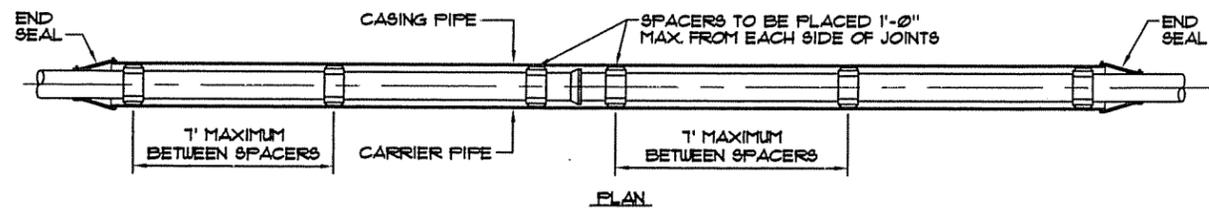
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FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STANDARD DETAILS

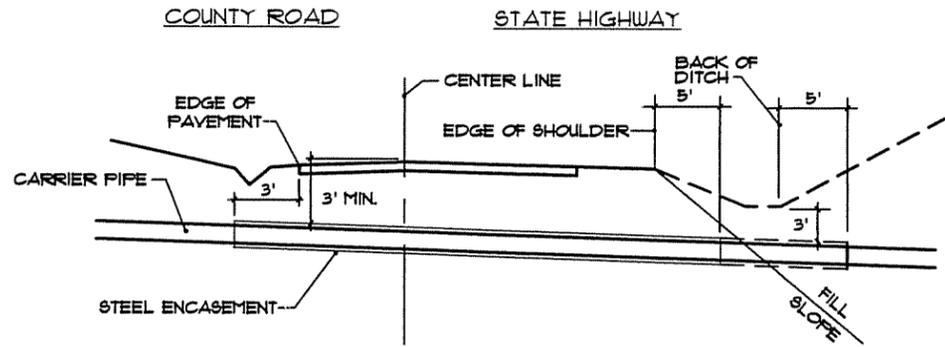
SHEET
SD2
OF
SD4



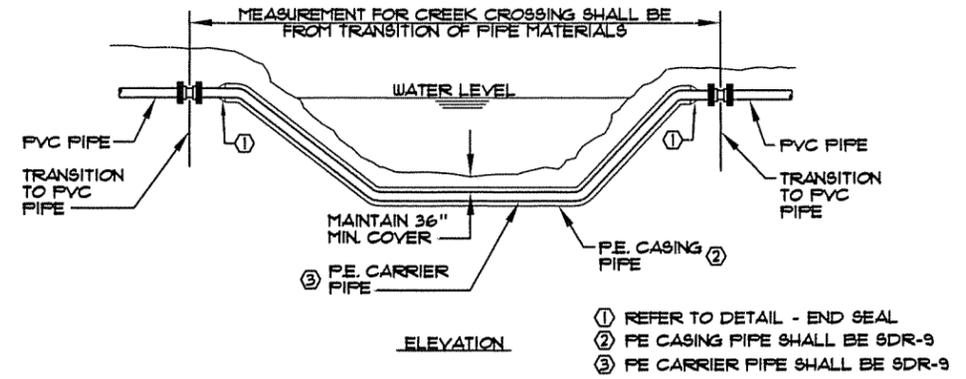
- TYPICAL ROAD CROSSING NOTES:**
1. ALL JOINTS SHALL BE SOLIDLY WELDED. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. MINIMUM DEPTHS MAY INCREASE IN AREA WHICH REQUIRE MINIMUM SEPARATION WITH OTHER FACILITIES.
 3. OPEN TRENCH NO CLOSER THAN THE DITCH LINE OR TOE OF FILL FROM THE EDGE OF THE PAVEMENT OR AS DIRECTED BY STATE, COUNTY OR MUNICIPAL SPECIFICATIONS.
 4. HIGHWAY CROSSINGS SHALL UTILIZE STEEL CASING PIPE. STEEL CASING PIPES 4" AND LESS SHALL BE NEW SCHEDULE 40. STEEL CASING PIPES LARGER THE 4" SHALL HAVE MINIMUM WALL THICKNESS OF 0.25". ALL BORED AND JACKED ENCASEMENT PIPE SHALL BE INSTALLED IN BORE HOLES NO LARGER THAN THE OUTSIDE DIAMETER OF THE ENCASEMENT PIPE.

- TYPICAL STREAM CROSSING NOTES:**
1. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. CONCRETE CAP SHALL END A MINIMUM OF ONE FOOT FROM EDGE OF CASING PIPE.
 3. STREAM CROSSINGS SHALL UTILIZE PVC SDR-35 CASING PIPE.

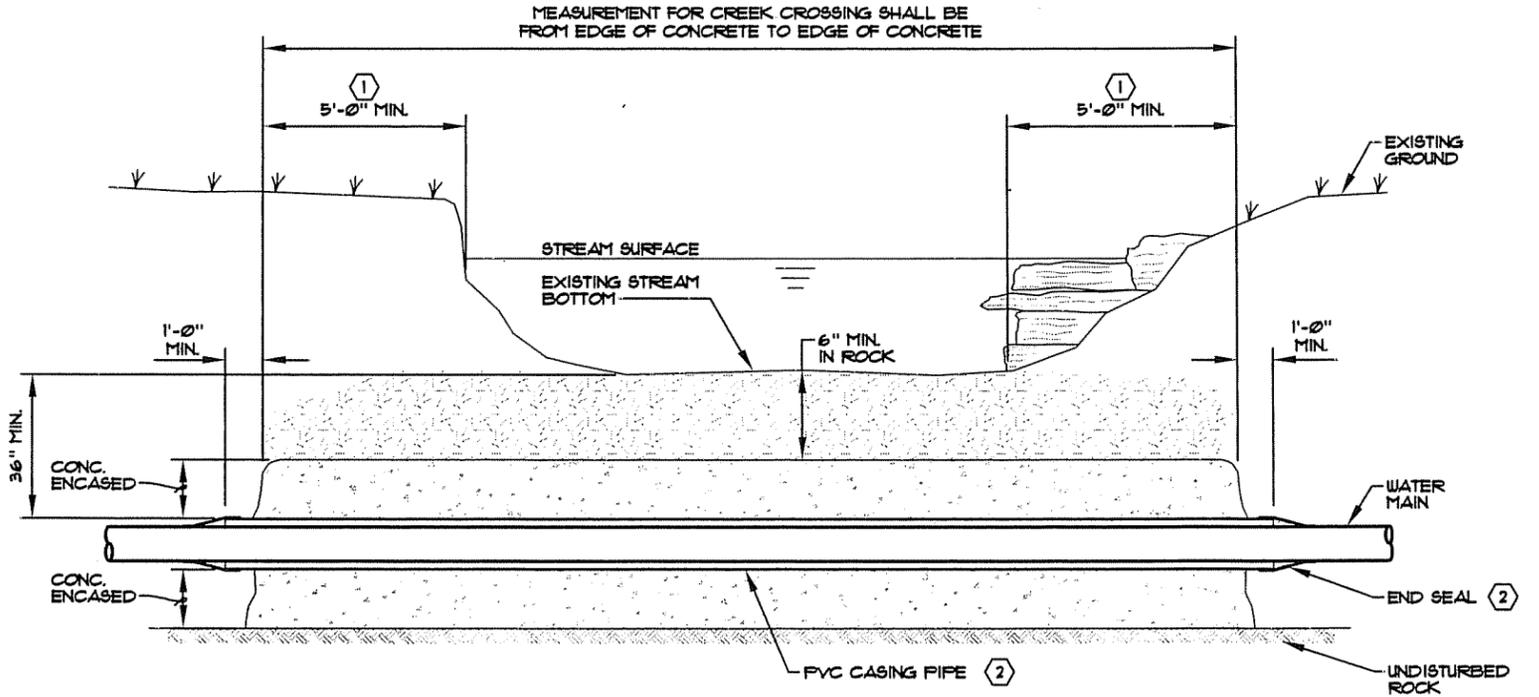
ENCASEMENT PIPE SPACER
SCALE: N.T.S.



TYPICAL ROAD CROSSING
SCALE: N.T.S.



DIRECTIONAL BORE CREEK CROSSING
SCALE: N.T.S.



- NOTES:**
- 1 CONCRETE TO EXTEND 5'-0" @ BEGINNING POINT OF BANK
 - 2 REFER TO DETAIL - ENCASEMENT PIPE SPACER

TYPE "B" STREAM CROSSING
SOLID ROCK BOTTOM WITH CONCRETE CAP
SCALE: N.T.S.

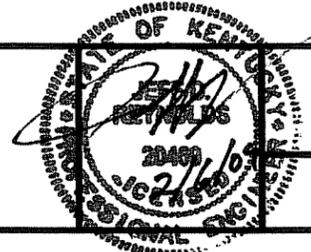
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NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 4132.00	DATE: 8/25/08	
SCALE: AS NOTED		
DESIGNED BY	JDR	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DUGS.		

HMB
PROFESSIONAL ENGINEERS, INC.

3 HMB CIRCLE
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(502) 695-9800
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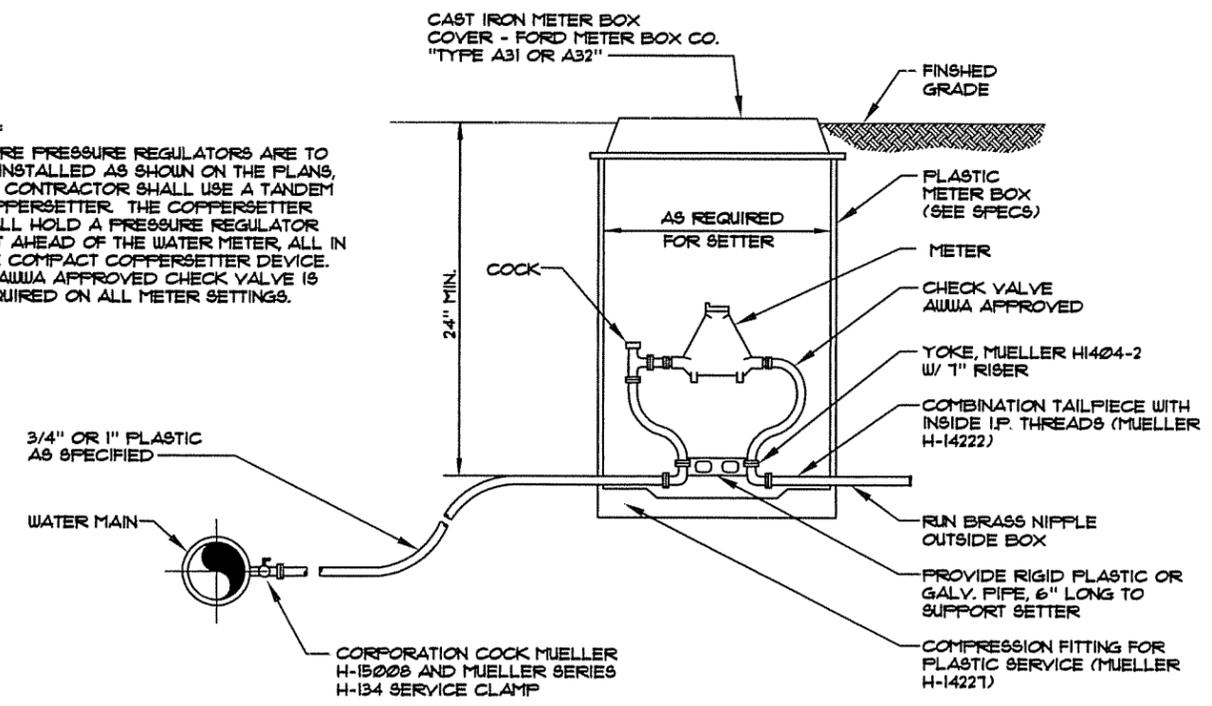
FLEMING 2008 WATER PROJECT
FLEMING COUNTY WATER ASSOCIATION
FLEMING COUNTY, KENTUCKY

STANDARD DETAILS

SHEET
SD3
OF
SD4

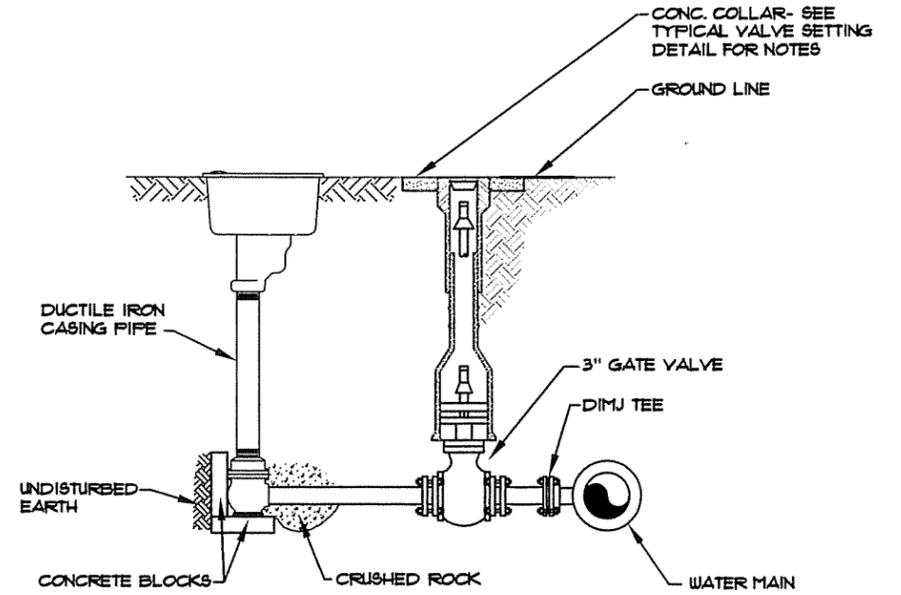
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- NOTES:
1. WHERE PRESSURE REGULATORS ARE TO BE INSTALLED AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL USE A TANDEM COPPERSETTER. THE COPPERSETTER SHALL HOLD A PRESSURE REGULATOR JUST AHEAD OF THE WATER METER, ALL IN ONE COMPACT COPPERSETTER DEVICE.
 2. AN AWWA APPROVED CHECK VALVE IS REQUIRED ON ALL METER SETTINGS.



TYPICAL METER SETTING
 $\frac{5}{8}$ " x $\frac{3}{4}$ " & 1" SERVICES
 SCALE: N.T.S.

* REFER TO SPECIAL CONDITIONS FOR A LIST OF REQUIRED MATERIALS.



BELOW GROUND BLOWOFF HYDRANT
 SCALE: N.T.S.

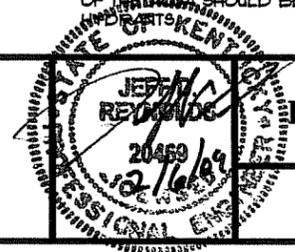
- NOTES :
- BLOW-OFF HYDRANTS SHALL BE ECLIPSE No. 85 BOX HYDRANT AS MANUFACTURED BY JOHN C. KUPFERLE FOUNDRY CO., ST. LOUIS, MO.
 - HYDRANTS SHALL BE SELF-DRAINING, NON-FREEZING, COMPRESSION TYPE WITH A 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 3" M.J. HYDRANT, GATE VALVE AND TEE SHALL BE RESTRAINED WITH ANCHOR COUPLINGS.
 - HYDRANT SHALL HAVE A CAST IRON BOX, LOCKING LID AND 3" DUCTILE IRON RISER PIPE. PRINCIPAL INTERIOR OPERATING PARTS SHALL BE BRASS AND REMOVABLE FROM HYDRANT FOR SERVICING WITHOUT EXCAVATING THE HYDRANT.
 - HYDRANTS SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE OF THE HYDRANT. RECOMMENDATIONS OF THE AWWA SHOULD BE FOLLOWED FOR INSTALLATION OF THE

NO.	DATE	REVISIONS	CHK'D	APPR'D	DATE

PROJECT: 413200	DATE: 8/25/08	
SCALE: AS NOTED		
DESIGNED BY	NAME	DATE
DRAWN BY	JH	
CHECKED BY	JDR	
RECORD DWGS.		



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FLEMING 2008 WATER PROJECT
 FLEMING COUNTY WATER ASSOCIATION
 FLEMING COUNTY, KENTUCKY

STANDARD DETAILS

SHEET SD4
 OF SD4

RECEIVED

APR 17 2009

**PUBLIC SERVICE
COMMISSION**

EXHIBIT 3

**FINAL ENGINEERING REPORT
AND
BID TABULATION**



3 HMB Circle
 U.S. 460
 Frankfort, KY 40601
 Office: (502) 695-9800
 Fax: (502) 695-9810
 www.hmbpe.com

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- Environmental Planning
- Abandoned Mine Lands
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- Project Management
- Cost Estimation
- Stream Restoration
- Construction Inspection
- Aviation Services
- Environmental Remediation

March 26, 2009

Elwood Howe
 Rural Development
 220 West First Street
 Morehead, Ky 40351

Re: Final Engineering Report
 Fleming 2008 Water Project
 Fleming County Water Association
 HMB #4132

Dear Mr. Howe:

As you are aware, the above referenced project was bid March 19, 2009. The low bidder was Staton's Construction Co. from Salt Lick, Kentucky. There bid was \$451,921.

Following is a summary of the financing and budget for this project:

<u>Project Budget</u>	<u>Letter of Conditions</u>	<u>As Bid</u>
Development	\$499,560	\$451,921
Land and Rights	\$3,000	\$3,000
Legal & Administration	\$8,000	\$8,000
Engineering	\$80,000	\$96,200
Interest	\$14,000	\$14,000
<u>Contingencies</u>	<u>\$42,135</u>	<u>\$73,574</u>
Total Project Cost	\$646,695	\$646,695

Financing:

<u>Funding Source</u>	<u>Letter of Conditions</u>
RUS Loan	\$375,000
<u>RUS Grant</u>	<u>\$271,695</u>
Total Project Cost	\$646,695

It appears the project can be completed within the available funding; therefore, we recommend this contract be approved and allowed to go forward. Please contact us if there are any questions.

Attached please find a copy of the Bid Tabulation for the project.



If you have any questions or need additional information, please call.

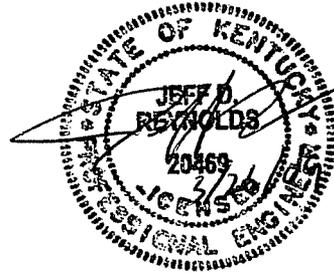
Sincerely,

HMB Professional Engineers, Inc.

A handwritten signature in black ink, appearing to read 'Jeff Reynolds', is written over a horizontal line.

Jeff Reynolds, P.E.

cc: Gene Jett, FCWA
Marvin Suit, Attorney



Bid Tabulation
 Fleming 2008 Water Project
 Fleming County Water Association
 Bid Date: March 19, 2009
 HMB #4132.00

ITEM	QUANTITY	UNITS	Staton's Construction		Beauty Ridge		Tilton Excavating		DF Bailey		Johnny Robinson		Little Creek Construction		Fox Valley Pipeline		B.P. Pipeline		Unger Construction	
			UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1 8" PVC Class 200 Pipe, SDR 21, Furnishing, Trenching, Laying and Backfilling (Unclassified Excavation)	22,400	LF.	\$6.90	\$154,560.00	\$7.95	\$178,080.00	\$8.60	\$192,640.00	\$7.52	\$168,448.00	\$8.65	\$193,760.00	\$8.60	\$192,640.00	\$7.99	\$178,976.00	\$7.61	\$170,464.00	\$11.09	\$248,416.00
2 6" PVC, Class 200 Pipe, SDR-21 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	7,500	LF.	\$4.65	\$34,875.00	\$5.90	\$44,250.00	\$6.00	\$45,000.00	\$5.60	\$42,000.00	\$6.75	\$50,625.00	\$7.25	\$54,375.00	\$5.82	\$43,650.00	\$5.65	\$42,375.00	\$7.50	\$56,250.00
3 4" PVC, Class 200 Pipe, DR-14, AWWA C-900 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	6,400	LF.	\$4.45	\$28,480.00	\$4.80	\$30,720.00	\$5.25	\$33,600.00	\$4.65	\$29,760.00	\$6.35	\$40,640.00	\$5.60	\$35,840.00	\$6.65	\$42,560.00	\$5.50	\$35,200.00	\$6.00	\$38,400.00
4 4" PVC, Class 250 Pipe, SDR-17 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	900	LF.	\$3.90	\$3,510.00	\$4.75	\$4,275.00	\$5.50	\$4,950.00	\$3.99	\$3,591.00	\$6.60	\$5,940.00	\$5.10	\$4,590.00	\$16.25	\$14,625.00	\$5.00	\$4,500.00	\$5.30	\$4,770.00
5 3" PVC, Class 200 Pipe, SDR-21 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	550	LF.	\$3.80	\$2,090.00	\$4.00	\$2,200.00	\$4.25	\$2,337.50	\$3.63	\$1,996.50	\$5.00	\$2,750.00	\$5.00	\$2,750.00	\$5.85	\$3,217.50	\$4.50	\$2,475.00	\$8.00	\$4,400.00
6 14" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	75	LF.	\$74.20	\$5,565.00	\$99.00	\$7,425.00	\$90.00	\$6,750.00	\$117.01	\$8,775.75	\$70.00	\$5,250.00	\$84.00	\$6,300.00	\$96.00	\$7,200.00	\$50.00	\$3,750.00	\$115.25	\$8,643.75
7 12" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	25	LF.	\$71.00	\$1,775.00	\$88.00	\$2,200.00	\$85.00	\$2,125.00	\$104.79	\$2,619.75	\$60.00	\$1,500.00	\$80.00	\$2,000.00	\$96.00	\$2,400.00	\$45.00	\$1,125.00	\$113.00	\$2,825.00
8 8" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	100	LF.	\$65.70	\$6,570.00	\$72.00	\$7,200.00	\$75.00	\$7,500.00	\$82.13	\$8,213.00	\$50.00	\$5,000.00	\$70.00	\$7,000.00	\$80.00	\$8,000.00	\$45.00	\$4,500.00	\$87.00	\$8,700.00
9 8" Unclassified Bore and/or Jack under improved surfaces, including driveways, no casing required (Water Pipe Not Included)	60	LF.	\$50.00	\$3,000.00	\$45.00	\$2,700.00	\$45.00	\$2,700.00	\$47.08	\$2,824.80	\$20.00	\$1,200.00	\$50.00	\$3,000.00	\$50.00	\$3,000.00	\$45.00	\$2,700.00	\$52.25	\$3,135.00
10 6" Unclassified Bore and/or Jack under improved surfaces, including driveways, no casing required (Water Pipe Not Included)	40	LF.	\$50.00	\$2,000.00	\$40.00	\$1,600.00	\$45.00	\$1,800.00	\$41.20	\$1,648.00	\$20.00	\$800.00	\$30.00	\$1,200.00	\$50.00	\$2,000.00	\$40.00	\$1,600.00	\$52.25	\$2,090.00
11 8" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	11	Ea.	\$1,089.00	\$11,979.00	\$980.00	\$10,780.00	\$900.00	\$9,900.00	\$920.25	\$10,122.75	\$1,000.00	\$11,000.00	\$900.00	\$9,900.00	\$915.00	\$10,065.00	\$800.00	\$8,800.00	\$900.00	\$9,900.00
12 6" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	2	Ea.	\$715.00	\$1,430.00	\$705.00	\$1,410.00	\$600.00	\$1,200.00	\$634.04	\$1,268.08	\$660.00	\$1,320.00	\$700.00	\$1,400.00	\$635.00	\$1,270.00	\$600.00	\$1,200.00	\$644.50	\$1,289.00
13 4" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	3	Ea.	\$615.00	\$1,845.00	\$590.00	\$1,770.00	\$500.00	\$1,500.00	\$513.22	\$1,539.66	\$500.00	\$1,500.00	\$500.00	\$1,500.00	\$520.00	\$1,560.00	\$400.00	\$1,200.00	\$519.00	\$1,557.00
14 3" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	4	Ea.	\$590.00	\$2,360.00	\$480.00	\$1,920.00	\$500.00	\$2,000.00	\$473.30	\$1,893.20	\$460.00	\$1,840.00	\$400.00	\$1,600.00	\$495.00	\$1,980.00	\$350.00	\$1,400.00	\$473.00	\$1,892.00
15 Furnish and Install 8" Tapping Tee and Valve	1	Ea.	\$2,500.00	\$2,500.00	\$2,400.00	\$2,400.00	\$2,500.00	\$2,500.00	\$2,587.59	\$2,587.59	\$2,400.00	\$2,400.00	\$2,100.00	\$2,100.00	\$2,950.00	\$2,950.00	\$1,500.00	\$1,500.00	\$2,006.00	\$2,006.00
16 Furnish and Install 6" Tapping Tee and Valve	3	Ea.	\$1,950.00	\$5,850.00	\$2,000.00	\$6,000.00	\$2,000.00	\$6,000.00	\$2,064.03	\$6,192.09	\$2,000.00	\$6,000.00	\$1,600.00	\$4,800.00	\$1,989.00	\$5,967.00	\$1,500.00	\$4,500.00	\$1,554.69	\$4,664.07
17 Furnish and Install 4" Tapping Tee and Valve	2	Ea.	\$1,855.00	\$3,710.00	\$1,750.00	\$3,500.00	\$2,000.00	\$4,000.00	\$1,820.02	\$3,640.04	\$1,500.00	\$3,000.00	\$1,350.00	\$2,700.00	\$1,805.00	\$3,610.00	\$1,200.00	\$2,400.00	\$1,303.06	\$2,606.12
18 Cut and Cap Existing Water Line, All Sizes	6	Ea.	\$250.00	\$1,500.00	\$200.00	\$1,200.00	\$500.00	\$3,000.00	\$545.69	\$3,274.14	\$400.00	\$2,400.00	\$400.00	\$2,400.00	\$385.00	\$2,310.00	\$300.00	\$1,800.00	\$400.00	\$2,400.00
19 Replace Existing Customer Service with 5/8" meter, Pressure Regulator, Tandem Copper Setter, Meter Box, Lid, 20 feet service tubing (maximum)	120	Ea.	\$700.00	\$84,000.00	\$770.00	\$92,400.00	\$750.00	\$90,000.00	\$797.19	\$95,662.80	\$660.00	\$79,200.00	\$600.00	\$72,000.00	\$727.00	\$87,240.00	\$600.00	\$72,000.00	\$517.65	\$62,118.00
20 Replace Existing Service Line Under Road from Water Line to Meter, 50 feet service tubing (maximum)	25	Ea.	\$100.00	\$2,500.00	\$300.00	\$7,500.00	\$200.00	\$5,000.00	\$205.86	\$5,146.50	\$250.00	\$6,250.00	\$300.00	\$7,500.00	\$450.00	\$11,250.00	\$500.00	\$12,500.00	\$435.00	\$10,875.00
21 Additional 1" P.E. Service Tubing, Furnishing, Laying, Trenching and Backfilling where required in Addition to Maximum lengths Included 19 through 20	250	LF.	\$5.00	\$1,250.00	\$3.50	\$875.00	\$4.00	\$1,000.00	\$4.53	\$1,132.50	\$3.50	\$875.00	\$4.00	\$1,000.00	\$4.25	\$1,062.50	\$400.00	\$100,000.00	\$3.50	\$875.00

	ITEM	QUANTITY	UNITS	Staton's Construction		Beauty Ridge		Tilton Excavating		DF Bailey		Johnny Robinson		Little Creek Construction		Fox Valley Pipeline		B.P. Pipeline		Unger Construction	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
22	8" Type "B" Creek Crossing Including Fittings, Concrete Casing, Casing Pipe, Complete in Place as shown on the detail sheet	110	L.F.	\$85.00	\$9,350.00	\$30.00	\$3,300.00	\$60.00	\$6,600.00	\$47.86	\$5,264.60	\$45.00	\$4,950.00	\$45.00	\$4,950.00	\$71.00	\$7,810.00	\$50.00	\$5,500.00	\$52.50	\$5,775.00
23	6" Type "B" Creek Crossing Including Fittings, Concrete Casing, Casing Pipe, Complete in Place as shown on the detail sheet	40	L.F.	\$85.00	\$3,400.00	\$25.00	\$1,000.00	\$60.00	\$2,400.00	\$45.46	\$1,818.40	\$40.00	\$1,600.00	\$42.00	\$1,680.00	\$68.00	\$2,720.00	\$50.00	\$2,000.00	\$48.00	\$1,920.00
24	8" Directional Bore Creek Crossing, Including 8" PE SDR-9 Casing Pipe, 4" PE SDR-9 Carrier Pipe and Fittings.	225	L.F.	\$120.00	\$27,000.00	\$75.00	\$16,875.00	\$90.00	\$20,250.00	\$123.27	\$27,735.75	\$70.00	\$15,750.00	\$150.00	\$33,750.00	\$137.50	\$30,937.50	\$100.00	\$22,500.00	\$78.00	\$17,550.00
25	8" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	1	Ea.	\$1,135.00	\$1,135.00	\$1,725.00	\$1,725.00	\$1,500.00	\$1,500.00	\$1,615.96	\$1,615.96	\$1,500.00	\$1,500.00	\$1,700.00	\$1,700.00	\$1,690.00	\$1,690.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
26	6" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	1	Ea.	\$827.00	\$827.00	\$1,475.00	\$1,475.00	\$1,200.00	\$1,200.00	\$1,132.40	\$1,132.40	\$1,400.00	\$1,400.00	\$1,500.00	\$1,500.00	\$1,450.00	\$1,450.00	\$1,500.00	\$1,500.00	\$1,150.00	\$1,150.00
27	4" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	2	Ea.	\$700.00	\$1,400.00	\$1,000.00	\$2,000.00	\$850.00	\$1,700.00	\$862.59	\$1,725.18	\$1,000.00	\$2,000.00	\$9.00	\$18.00	\$1,360.00	\$2,720.00	\$1,000.00	\$2,000.00	\$985.00	\$1,970.00
28	Below Ground Blowoff Hydrant, including Hydrant, Valve, Valve Box, Restraints, Pipe, and Fittings	10	Ea.	\$1,550.00	\$15,500.00	\$1,500.00	\$15,000.00	\$1,200.00	\$12,000.00	\$1,570.81	\$15,708.10	\$1,500.00	\$15,000.00	\$1,500.00	\$15,000.00	\$1,465.00	\$14,650.00	\$1,500.00	\$15,000.00	\$1,472.00	\$14,720.00
29	Automatic Air Release Valve Assembly and Box, Complete in Place	3	Ea.	\$470.00	\$1,410.00	\$490.00	\$1,470.00	\$500.00	\$1,500.00	\$358.35	\$1,075.05	\$400.00	\$1,200.00	\$550.00	\$1,650.00	\$800.00	\$2,400.00	\$600.00	\$1,800.00	\$426.00	\$1,278.00
30	Crushed Stone on trench, full depth On driveways, roadway crossings and streets	2,500	L.F.	\$5.50	\$13,750.00	\$5.00	\$12,500.00	\$4.00	\$10,000.00	\$8.83	\$22,075.00	\$7.00	\$17,500.00	\$8.00	\$20,000.00	\$9.00	\$22,500.00	\$2.00	\$5,000.00	\$8.70	\$21,750.00
31	Bituminous Paving Replacement on State maintained roads, streets, and Driveways. Including gravel backfill	250	L.F.	\$20.00	\$5,000.00	\$20.00	\$5,000.00	\$25.00	\$6,250.00	\$33.70	\$8,425.00	\$25.00	\$6,250.00	\$40.00	\$10,000.00	\$42.00	\$10,500.00	\$30.00	\$7,500.00	\$43.00	\$10,750.00
32	Concrete Paving Replacement, 6" Thick, including gravel backfill	100	L.F.	\$70.00	\$7,000.00	\$20.00	\$2,000.00	\$30.00	\$3,000.00	\$30.65	\$3,065.00	\$30.00	\$3,000.00	\$50.00	\$5,000.00	\$27.00	\$2,700.00	\$30.00	\$3,000.00	\$43.00	\$4,300.00
33	"Inspector 07" Utility Locator as manufactured By Subsurface Instruments Inc.	1	Ea.	\$4,800.00	\$4,800.00	\$5,850.00	\$5,850.00	\$5,000.00	\$5,000.00	\$5,800.66	\$5,800.66	\$6,000.00	\$6,000.00	\$6,500.00	\$6,500.00	\$6,325.00	\$6,325.00	\$6,000.00	\$6,000.00	\$5,060.00	\$5,060.00
TOTAL BID PRICE					\$451,921.00		\$478,600.00		\$496,902.50		\$497,777.25		\$499,400.00		\$518,343.00		\$541,295.50		\$549,289.00		\$565,534.94

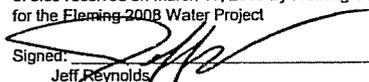
Bid Tabulation
 Fleming 2008 Water Project
 Fleming County Water Association
 Bid Date: March 19, 2009
 HMB #4132.00

	ITEM	QUANTITY	UNITS	Southern Backhoe		ConnHurst LLC.		Kenney, Inc.		Garrison Construction		ASL Excavating	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	8" PVC Class 200 Pipe, SDR 21, Furnishing, Trenching, Laying and Backfilling (Unclassified Excavation)	22,400	LF.	\$10.25	\$229,600.00	\$10.75	\$240,800.00	\$11.15	\$249,760.00	\$10.85	\$243,040.00	\$16.12	\$361,088.00
2	6" PVC, Class 200 Pipe, SDR-21 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	7,500	LF.	\$8.00	\$60,000.00	\$9.00	\$67,500.00	\$9.00	\$67,500.00	\$9.07	\$68,025.00	\$14.38	\$107,850.00
3	4" PVC, Class 200 Pipe, DR-14, AWWA C-900 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	6,400	LF.	\$6.50	\$41,600.00	\$8.50	\$54,400.00	\$7.50	\$48,000.00	\$8.55	\$54,720.00	\$13.14	\$84,096.00
4	4" PVC, Class 250 Pipe, SDR-17 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	900	LF.	\$6.50	\$5,850.00	\$8.50	\$7,650.00	\$7.00	\$6,300.00	\$7.83	\$7,047.00	\$12.61	\$11,349.00
5	3" PVC, Class 200 Pipe, SDR-21 Furnishing, Trenching, Laying, and Backfilling. (Unclassified Excavation)	550	LF.	\$6.50	\$3,575.00	\$8.00	\$4,400.00	\$6.30	\$3,465.00	\$7.30	\$4,015.00	\$10.24	\$5,632.00
6	14" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	75	LF.	\$100.00	\$7,500.00	\$130.00	\$9,750.00	\$130.00	\$9,750.00	\$160.40	\$12,030.00	\$154.40	\$11,580.00
7	12" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	25	LF.	\$90.00	\$2,250.00	\$120.00	\$3,000.00	\$18.00	\$450.00	\$158.07	\$3,951.75	\$167.80	\$4,195.00
8	8" Steel Cover Pipe, Furnishing and Installing Under State and County Maintained Roads, including Unclassified Boring and/or Jacking (Water Pipe Not Included)	100	LF.	\$90.00	\$9,000.00	\$100.00	\$10,000.00	\$108.00	\$10,800.00	\$127.22	\$12,722.00	\$127.95	\$12,795.00
9	8" Unclassified Bore and/or Jack under improved surfaces, including driveways, no casing required (Water Pipe Not Included)	60	LF.	\$50.00	\$3,000.00	\$60.00	\$3,600.00	\$54.00	\$3,240.00	\$88.00	\$5,280.00	\$107.00	\$6,420.00
10	6" Unclassified Bore and/or Jack under improved surfaces, including driveways, no casing required (Water Pipe Not Included)	40	LF.	\$50.00	\$2,000.00	\$60.00	\$2,400.00	\$54.00	\$2,160.00	\$88.00	\$3,520.00	\$100.00	\$4,000.00
11	8" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	11	Ea.	\$950.00	\$10,450.00	\$1,150.00	\$12,650.00	\$872.00	\$10,692.00	\$942.70	\$10,369.70	\$1,185.50	\$13,040.50
12	6" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	2	Ea.	\$675.00	\$1,350.00	\$775.00	\$1,550.00	\$713.00	\$1,426.00	\$641.14	\$1,282.28	\$1,033.70	\$2,067.40
13	4" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	3	Ea.	\$575.00	\$1,725.00	\$625.00	\$1,875.00	\$595.00	\$1,785.00	\$520.30	\$1,560.90	\$921.00	\$2,763.00
14	3" C.I AWWA N.R.S. Gate Valve and Box, Conc. Pad, Complete in Place	4	Ea.	\$525.00	\$2,100.00	\$570.00	\$2,280.00	\$540.00	\$2,160.00	\$469.37	\$1,877.48	\$873.00	\$3,492.00
15	Furnish and Install 8" Tapping Tee and Valve	1	Ea.	\$2,200.00	\$2,200.00	\$2,500.00	\$2,500.00	\$2,376.00	\$2,376.00	\$2,552.00	\$2,552.00	\$3,082.00	\$3,082.00
16	Furnish and Install 6" Tapping Tee and Valve	3	Ea.	\$1,550.00	\$4,650.00	\$2,000.00	\$6,000.00	\$1,944.00	\$5,832.00	\$2,053.70	\$6,161.10	\$2,515.00	\$7,545.00
17	Furnish and Install 4" Tapping Tee and Valve	2	Ea.	\$1,100.00	\$2,200.00	\$1,800.00	\$3,600.00	\$1,782.00	\$3,564.00	\$1,804.00	\$3,608.00	\$1,752.00	\$3,504.00
18	Cut and Cap Existing Water Line, All Sizes	6	Ea.	\$500.00	\$3,000.00	\$540.00	\$3,240.00	\$648.00	\$3,888.00	\$715.00	\$4,290.00	\$601.00	\$3,606.00
19	Replace Existing Customer Service with 5/8" meter, Pressure Regulator, Tandem Copper Setter, Meter Box, Lid, 20 feet service tubing (maximum)	120	Ea.	\$750.00	\$90,000.00	\$525.00	\$63,000.00	\$729.00	\$87,480.00	\$854.70	\$102,564.00	\$835.00	\$100,200.00
20	Replace Existing Service Line Under Road from Water Line to Meter, 50 feet service tubing (maximum)	25	Ea.	\$400.00	\$10,000.00	\$285.00	\$7,125.00	\$108.00	\$2,700.00	\$550.00	\$13,750.00	\$2,074.00	\$51,850.00
21	Additional 1" P.E. Service Tubing, Furnishing, Laying, Trenching and Backfilling where required in Addition to Maximum lengths Included 19 through 20	250	LF.	\$5.00	\$1,250.00	\$23.50	\$5,875.00	\$6.00	\$1,500.00	\$11.00	\$2,750.00	\$19.00	\$4,750.00

	ITEM	QUANTITY	UNITS	Southern Backhoe		ConnHurst LLC.		Kenney, Inc.		Garrison Construction		ASL Excavating	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
22	8" Type "B" Creek Crossing Including Fittings, Concrete Casing, Casing Pipe, Complete in Place as shown on the detail sheet	110	L.F.	\$100.00	\$11,000.00	\$55.00	\$6,050.00	\$49.00	\$5,390.00	\$93.50	\$10,285.00	\$110.00	\$12,100.00
23	6" Type "B" Creek Crossing Including Fittings, Concrete Casing, Casing Pipe, Complete in Place as shown on the detail sheet	40	L.F.	\$100.00	\$4,000.00	\$50.00	\$2,000.00	\$49.00	\$1,960.00	\$93.50	\$3,740.00	\$105.00	\$4,200.00
24	8" Directional Bore Creek Crossing, Including 8" PE SDR-9 Casing Pipe, 4" PE SDR-9 Carrier Pipe and Fittings.	225	L.F.	\$150.00	\$33,750.00	\$50.00	\$11,250.00	\$125.00	\$28,125.00	\$139.70	\$31,432.50	\$148.00	\$33,300.00
25	8" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	1	Ea.	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,405.00	\$1,405.00	\$1,578.50	\$1,578.50	\$2,227.00	\$2,227.00
26	6" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	1	Ea.	\$1,000.00	\$1,000.00	\$1,025.00	\$1,025.00	\$1,188.00	\$1,188.00	\$1,239.70	\$1,239.70	\$2,047.00	\$2,047.00
27	4" Blowoff Assembly, Including Valve, Valve Box, Restraints, Concrete, Pipe and Fittings	2	Ea.	\$850.00	\$1,700.00	\$825.00	\$1,650.00	\$972.00	\$1,944.00	\$1,095.60	\$2,191.20	\$1,811.00	\$3,622.00
28	Below Ground Blowoff Hydrant, Including Hydrant, Valve, Valve Box, Restraints, Pipe, and Fittings	10	Ea.	\$1,500.00	\$15,000.00	\$1,650.00	\$16,500.00	\$1,728.00	\$17,280.00	\$1,688.50	\$16,885.00	\$1,641.50	\$16,415.00
29	Automatic Air Release Valve Assembly and Box, Complete in Place	3	Ea.	\$350.00	\$1,050.00	\$350.00	\$1,050.00	\$594.00	\$1,782.00	\$579.70	\$1,739.10	\$720.00	\$2,160.00
30	Crushed Stone on trench, full depth On driveways, roadway crossings and streets	2,500	L.F.	\$5.00	\$12,500.00	\$10.50	\$26,250.00	\$9.75	\$24,375.00	\$11.00	\$27,500.00	\$17.86	\$44,650.00
31	Bituminous Paving Replacement on State maintained roads, streets, and Driveways. Including gravel backfill	250	L.F.	\$30.00	\$7,500.00	\$27.00	\$6,750.00	\$24.00	\$6,000.00	\$24.20	\$6,050.00	\$26.10	\$6,525.00
32	Concrete Paving Replacement, 6" Thick, including gravel backfill	100	L.F.	\$20.00	\$2,000.00	\$40.00	\$4,000.00	\$24.00	\$2,400.00	\$88.00	\$8,800.00	\$58.25	\$5,825.00
33	*Innspector 07" Utility Locator as manufactured By Subsurface Instruments Inc.	1	Ea.	\$6,000.00	\$6,000.00	\$5,000.00	\$5,000.00	\$5,940.00	\$5,940.00	\$6,033.50	\$6,033.50	\$5,050.00	\$5,050.00
	TOTAL BID PRICE				\$590,300.00		\$596,220.00		\$622,617.00		\$682,590.71		\$943,025.90

This is to state that the above is an accurate tabulation of bids received on March 19, 2009 by Fleming County Water Association for the Fleming 2008 Water Project

Indicates an error in the bid.

Signed:

 Jeff Reynolds
 Kentucky PE No. 20469

RECEIVED

APR 17 2009

**PUBLIC SERVICE
COMMISSION**

EXHIBIT 4

RD LETTER OF CONCURRENCE



United States Department of Agriculture
Rural Development
Kentucky State Office

April 7, 2009

SUBJECT: Fleming County Water Association
2008 Water Project
Contract Award Concurrence

TO: Area Director
Morehead, Kentucky

Based on the bids received and the recommendation of the consulting engineer, Rural Development concurs in the award of subject contract to the low bidder, Staton's Construction Company, Inc., in the amount of \$451,921.00.

If you have any questions, please contact Julie Anderson, State Engineer, at (859) 224-7348.

Vernon Brown
VERNON BROWN
Acting State Director
Rural Development

cc: HMB Engineers, Inc.
Frankfort, Kentucky