Rubin & Hays

Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202-1410 Telephone (502) 569-7525 Telefax (502) 569-7555 www.rubinhays.com

CHARLES S. MUSSON W. RANDALL JONES CHRISTIAN L. JUCKETT

July 24, 2012

RECEIVED

JUL 26 2012

PUBLIC SERVICE COMMISSION

Mr. Jeff Derouen Executive Director Public Service Commission P.O. Box 615 Frankfort, Kentucky 40602

Re:

Henderson County Water District - Public Service Commission Application for the

Water System Improvements Project

Dear Mr. Derouen:

Enclosed please find the original and ten (10) copies of the Application of the Henderson County Water District for a Certificate of Public Convenience and Necessity to construct and finance a water improvement project pursuant to KRS 278.023.

Also enclosed are eleven (11) copies of the exhibits required, with the exception of the Preliminary and Final Engineering Reports two (2) are enclosed.

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

W. Randall Jones

WRJ:jlm Enclosures

cc:

Distribution List

DISTRIBUTION LIST

Re: Henderson County Water District Waterworks Revenue Bonds, Series 2013, in the principal amount of \$1,695,000

Mr. Thomas G. Fern

State Director

USDA, Rural Development

771 Corporate Drive, Suite 200

Lexington, Kentucky 40503-5477 Telephone: (859) 224-7336

Mr. Joseph Geffert

USDA, Rural Development

1095 National Mine Drive Telephone: (270) 821-4430

Madisonville, Kentucky 42431 Fax: (270) 825-3120

Mr. David W. Moore, Superintendent

Henderson County Water District

P.O. Box 655 Telephone: (270) 826-9802

Henderson, Kentucky 42420 Fax: (270) 826-9808

Mr. Bob Sturdivant

HDR, Inc.

2517 Sir Barton Way Telephone: (859) 223-3755

Lexington, Kentucky 40509 Fax: (859) 223-3150

J. Christopher Hopgood, Esq.

Attorney at Law

318 Second Street Phone: (270) 826-3965

Henderson, Kentucky 42420 Fax: (270) 826-6672

W. Randall Jones, Esq.

Rubin & Hays

Kentucky Home Trust Building

450 South Third Street Telephone: (502) 569-7534

Louisville, Kentucky 40202 Fax: (502) 569-7555



COMMONWEALTH OF KENTUCKY

JUL 2 6 2012
PUBLIC SERVICE

COMMISSION

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| THE APPLICATION OF THE HENDERSON |) | | |
|-----------------------------------|---|-----------------|--|
| COUNTY WATER DISTRICT FOR A |) | | |
| CERTIFICATE OF PUBLIC CONVENIENCE |) | Case No. 2012 - | |
| AND NECESSITY TO CONSTRUCT AND |) | | |
| FINANCE PURSUANT TO KRS 278.023. |) | | |

APPLICATION

This Application of the Henderson County Water District ("Applicant") of Henderson County, Kentucky, respectfully shows:

- 1. That Applicant is a water district of Henderson County, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes.
 - 2. That the post office address of Applicant is:

Henderson County Water District c/o Mr. David W. Moore, Superintendent P.O. Box 655 Henderson, Kentucky 42419

- 3. That Applicant, pursuant to the provisions of KRS 278.020 and 278.023, seeks (i) a Certificate of Public Convenience and Necessity permitting Applicant to construct a water project, consisting of extensions, additions, and improvements (the "Project") to the existing water system of Applicant; and (ii) an Order approving the proposed plan of financing said Project.
- 4. That the Project consists of the replacement of approximately 49,000 linear feet of 8-inch water main with new 10-inch PVC water main and appurtenances along U.S. 60 East in Henderson County, and the replacement/relocation of an existing pump station on U.S. 60 West.
- 5. That Applicant proposes to finance the construction of the Project through (i) the issuance of \$1,695,000 of its Waterworks Revenue Bonds; and (ii) a contribution from the Applicant in the amount of \$51,965. Applicant has a commitment from USDA, Rural Development ("RD") to purchase said \$1,695,000 of bonds maturing over a 40-year period, at an interest rate of not exceeding 3.75% per annum, as set out in the RD Letter of Conditions filed herewith as an Exhibit.

- 6. That Applicant does not contemplate having the Project constructed with any deviation from minimum construction standards of this Public Service Commission.
- 7. That Applicant files herewith the following Exhibits pursuant to 807 KAR 5:069 in support of this Application:
 - A. Copy of RD Letter of Conditions.
 - B. Copy of RD Letter of Concurrence in Contract Award.
 - C. Copy of Preliminary and Final Engineering Reports.
 - D. Certified statement from the Chairman of Applicant, based upon statements of the Engineers for Applicant, concerning the following:
 - (1) 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 4(3) and (4); Section 5(1); Sections 6 and 7; Section 8(1) through (3); Section 9(1) and Section 10;
 - (2) All other state approvals or permits have already been obtained;
 - (3) The existing rates of Applicant shall produce the total revenue requirements set out in the engineering reports; and
 - (4) Setting out the dates when it is anticipated that construction will begin and end.
- 8. That the foregoing constitutes the documents necessary to obtain the approval of the Kentucky Public Service Commission in accordance with Section 278.023 of the Kentucky Revised Statutes and in accordance with the "Filing Requirements" specified in 807 KAR 5:069, Section 1.

WHEREFORE, Applicant, the Henderson County Water District, asks that the Public Service Commission of the Commonwealth of Kentucky grant to Applicant the following:

- a. A Certificate of Public Convenience and Necessity permitting Applicant to construct a water improvements project consisting of extensions, additions, and improvements to the water system of Applicant.
- b. An Order approving the financing arrangements made by Applicant, viz., the issuance of (i) \$1,695,000 of Henderson County Water District Waterworks Revenue Bonds at an interest rate of not exceeding 3.75% per annum; and (ii) a contribution from the Applicant in the amount of \$51,965.

HENDERSON COUNTY WATER DISTRICT

Chairman

Board of Water Commissioners

W. RANDALL JONES, ESQ.

RUBIN & HAYS

Counsel for Applicant

Kentucky Home Trust Building

450 South Third Street

Louisville, Kentucky 40202

(502) 569-7525

| COMMONWEALTH OF KENTUCKY |) |
|--------------------------|-------|
| |) SS: |
| COUNTY OF HENDERSON |) |

The undersigned, David Spainhoward, being duly sworn, deposes and states that he is the Chairman of the Board of Commissioners of the Henderson County Water District, Applicant, in the above proceedings; that he has read the foregoing Application and has noted the contents thereof; that the same is true of his own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, he believes same to be true.

David Spainhoward, Chairman
Henderson County Water District

Subscribed and sworn to before me by David Spainhoward, Chairman of the Board of Commissioners of the Henderson County Water District, on this July 17, 2012.

My Commission expires: 5-3-2014.

Notary Public

In and for said County and State

John Christopher Hopgood, Notary Public My Commission expires: 5-3-2014 ID#417911





United States Department of Agriculture Rural Development

Kentucky State Office

December 16, 2010

David Spainhoward, Chairman Henderson County Water District PO Box 655 Henderson, Kentucky 42420

Dear Mr. Spainhoward:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The loan 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 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 \$1,695,000.

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 210 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:

1. Number of Users and Their Contribution:

There shall be 6,312 water users, of which all are existing users. The Area Director will review and authenticate the number of users prior to advertising for construction bids.

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

2. Drug-Free Work Place:

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

3. Repayment Period:

The loan will be scheduled for repayment over a period not to exceed 40 years from the date of the Bond. Principal payment will not be deferred for a period in excess of two years from the date of the Bond. Payments will be in accordance with applicable KRS, which requires interest to be paid semi-annually (January 1st and July 1st) and principal will be due on or before the first of January. Rural Development may require the District to adopt a supplemental payment agreement providing for monthly payments of principal and interest so long as the bond is held or insured by RUS. Monthly payments will be approximate amortized installments.

4. 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 RD 3550-28, "Authorization Agreement for Preauthorized Payments," should be signed by the District 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.

5. 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 District will be required to deposit \$705 per month into a "Funded Debt Reserve Account" until the account reaches \$84,600. The deposits are to be resumed any time the account falls below the \$84,600.

The required monthly deposits to the Reserve Account and required Reserve Account levels are in addition to the requirements of the District's prior bond 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 District also needs to fund an account for short-lived assets by depositing a sum of \$1,090 monthly into the account. The funds in the short-lived asset account may be used by the District as needed to replace or add short-lived assets in the District's water system. This short-lived asset reserve amount replaces any previous short-lived assets requirements previously set with any prior RUS loan.

6. <u>Security Requirements</u>:

A pledge of gross water revenue will be provided in the Bond Resolution. Bonds shall rank on a parity with existing bonds, if possible.

If this is not possible, the bond will be subordinate and junior to the existing bonds, in which case the District will be required to abrogate its right to issue additional bonds ranking on a parity with the existing bonds, so long as any unpaid indebtedness remains on this bond issue.

7. Land Rights and Real Property:

The District 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.

8. <u>Organization</u>:

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

9. <u>Business Operations</u>:

The District 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 District after review by Rural Development. At no later than loan pre-closing, the District 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.

10. Accounts, Records and Audits:

The District will be required to maintain adequate records and accounts and submit annual budgets and year-end reports (annual audits)/statistical and financial reports, quarterly and annually, 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 District shall be required to submit a copy of its audit agreement for review and concurrence by Rural Development prior to pre-closing the loan.

Annual audits, budgets, and reports will be submitted to Rural Development.

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

The District will accomplish audits in accordance with OMB Circular A-133, during the years in which federal funds are received. The District will provide copies of the audits to the Area Office and the appropriate Federal cognizant agency as designated by OMB Circular A-133.

12. 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 District. The District should obtain amounts of coverage as recommended by its attorney, consulting engineer and/or insurance provider.
- B. Worker's Compensation The District will carry worker's compensation insurance for employees in accordance with applicable state laws.
- C. Fidelity Bond The District 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 \$85,000.
- D. Real Property Insurance The District 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 District 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 District will obtain and maintain adequate coverage on any facilities located in a special flood and mudslide prone areas.

13. 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 "23" of this letter. The engineer may then proceed to develop final plans and specifications to be completed no later than 160 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 minorityowned 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.

Prior to receipt of an authorization to advertise for construction bids, the District will obtain advance clearance from Bond Counsel regarding compliance with KRS 424 pertaining to publishing of the advertisement for construction bids in local newspapers and the period of time the notice is required to be published.

14. 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. <u>Civil Rights Act of 1964</u>:

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.

15. 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 District.

16. Compliance with Special Laws and Regulations:

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

17. System Operator:

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

18. Prior to Pre-Closing the Loan, the District Will Be Required to Adopt:

- A. Form RUS Bulletin 1780-27, "Loan Resolution (Public Bodies)."
- B. Form RD 400-1, "Equal Opportunity Agreement."
- C. Form RD 400-4, "Assurance Agreement."
- D. Form AD-1047, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transaction."
- E. Form RD 1910-11, "Applicant Certification Federal Collection Policies for Consumer or Commercial Debts."
- F. RD Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants and Loans."
- G. RUS Bulletin 1780-22, "Eligibility Certification."

19. Refinancing and Graduation Requirements:

The District is reminded that if at any time it shall appear to the Government that the District 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 District will apply for and accept such loan in sufficient amount to repay the Government.

20. Commercial Interim Financing:

The District 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 District 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.

21. Disbursement of Project Funds:

A construction account for the purpose of disbursement of project funds (RUS) will be established by the District 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 \$250,000 at any time, the financial institution will secure the amount in excess of \$250,000 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 District 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 District, 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 District.

Form RD 440-11, "Estimate of Funds Needed for 30-Day Period Commencing ______," will be prepared by the District 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 District's construction account records shall be made by Rural Development.

22. 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 District. Grant funds, upon receipt, must be deposited in an interest bearing account in accordance with 7 CFR part 3016 (as applicable). Interest earned on grant funds in excess of \$100 (as applicable) per year will be submitted to RUS at least quarterly.

23. Cost of Facility:

Breakdown of Costs:

| Development | | \$ 1,337,000 |
|--------------------------|-------|----------------|
| Land and Rights | | 10,000 |
| Legal and Administrative | | 10,000 |
| Engineering | | 183,345 |
| Interest | | 15,000 |
| Other | | 5,955 |
| Contingencies | | <u>133,700</u> |
| | TOTAL | \$ 1,695,000 |

Financing:

| RUS Loan | | \$ 1,695,000 |
|----------|-------|-----------------|
| | TOTAL | \$ 1,695,000 |

24. 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.

25. Rates and Charges:

Rates and charges for facilities and services rendered by the District 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:

5/8" X 3/4" Meter:

| First | 2,000 | gallons @\$ | 15.81 Minimum Bill. |
|----------|--------|-------------|-------------------------|
| Next | 8,000 | gallons @\$ | 5.54 per 1,000 gallons. |
| Next | 20,000 | gallons @\$ | 5.07 per 1,000 gallons. |
| All Over | 30,000 | gallons @\$ | 4.61 per 1,000 gallons. |

1 Inch Meter:

| First | 5,000 | gallons @ \$ | 32.43 Minimum Bill. |
|----------|--------|--------------|-------------------------|
| Next | 5,000 | gallons @\$ | 5.54 per 1,000 gallons. |
| Next | 20,000 | gallons @\$ | 5.07 per 1,000 gallons. |
| All Over | 30,000 | gallons @\$ | 4.61 per 1,000 gallons. |

2 Inch Meter:

| First | 16,000 | gallons @ \$ | 90.55 Minimum Bill. |
|----------|--------|--------------|-------------------------|
| Next | 14,000 | gallons @\$ | 5.07 per 1,000 gallons. |
| All Over | 30,000 | gallons @\$ | 4.61 per 1,000 gallons. |

3 Inch Meter:

| First | 30,000 | gallons @ \$ | 161.53 Minimum Bill. |
|----------|--------|--------------|-------------------------|
| All Over | 30,000 | gallons @\$ | 4.61 per 1,000 gallons. |

4 Inch Meter:

```
First 50,000 gallons @ $ 253.73. - Minimum Bill. All Over 50,000 gallons @ $ 4.61. - per 1,000 gallons.
```

6 Inch Meter:

```
First 100,000 gallons @ $ 484.23. - Minimum Bill.
All Over 100,000 gallons @ $ 4.61. - per 1,000 gallons.
```

26. Water Purchase Contract:

The District 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.

27. Compliance with the Bioterrorism Act:

Prior to pre-closing the loan, the District 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).

28. Floodplain Construction:

The District will be required to pass and adopt a Resolution or amend its By-Laws whereby the District 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 District 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.

29. <u>Mitigation Measures</u>:

- A. The project shall be in compliance with all requirements noted in the Governor's Office for Local Development letter dated June 21, 2010, 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 August 5, 2010, and signed by Virgil Lee Andrews, Jr., Field Supervisor. The Service and the HCWD must enter into an MOA concerning the bat habitat.
- 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.

30. 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,

State Director

Enclosures

cc: Area Director - Madisonville, Kentucky
Green River ADD - Owensboro, Kentucky

Rubin & Hays - Louisville, Kentucky Frank King - Henderson, Kentucky

HDR - Lexington, Kentucky

PSC - ATTN: Dennis Jones - Frankfort, Kentucky



United States Department of Agriculture Rural Development

Kentucky State Office

July 24, 2012

SUBJECT: Henderson County Water District

Water System Improvements Contract Award Concurrence

TO:

Area Director

Madisonville, 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 on Contract A and B, Twin States Utility, Inc., in the amount of \$1,163,270.00, and the low bidder on Contract C, Cleary Construction, in the amount of \$298,500.00.

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

HOMAS G. FERN

State Director

Rural Development

cc:

HDR

Lexington, Kentucky

Randy Jones Rubin and Hays Louisville, Kentucky

771 Corporate Drive • Suite 200 • Lexington, KY 40503
Phone: (859) 224-7300 • Fax: (859) 224-7425 • TDD: (859) 224-7422 • Web: http://www.rurdev.usda.gov/ky

Committed to the future of rural communities.

| | | | N. |
|--|--|--|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

CERTIFICATE OF CHAIRMAN OF THE HENDERSON COUNTY WATER DISTRICT AS TO STATEMENT REQUIRED BY SECTION 1(5) OF 807 KAR 5:069

I, David Spainhoward, hereby certify that I am the duly qualified and acting Chairman of the Henderson County Water District, and that said District is in the process of arranging to finance the construction of extensions, additions and improvements to the water system of the District (the "Project"), in cooperation with HDR, Inc., Lexington, Kentucky, the Engineers for the District (the "Engineers").

Based on information furnished to me by said Engineers for the District, I hereby certify as follows:

- 1. 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 4(3) and (4); Section 5(1); Sections 6 and 7; Section 8(1) through (3); Section 9(1) and Section 10.
 - 2. That all other state approvals and/or permits have already been obtained.
- 3. That the existing rates of the District are contemplated to produce total revenue requirements set out in the Engineering Reports prepared by such Engineers and filed with the Public Service Commission.
- 4. That it is now contemplated that construction of the Project will begin on or about August 6, 2012, and will end on or about February 1, 2013.

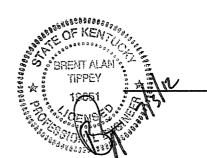
IN TESTIMONY WHEREOF, witness my signature this July // 2012.

| | David Aspainhowal |
|---------------------|---------------------------------|
| | Chairman |
| | Henderson County Water District |
| STATE OF KENTUCKY |) |
| |) SS |
| COUNTY OF HENDERSON |) |

Subscribed and sworn to before me by David Spainhoward, Chairman of the Board of Commissioners of the Henderson County Water District, on this July 17⁴, 2012.

In and For Said State and County

John Christopher Hopgood, Notary Public My Commission expires: 5-3-2014



Preliminary Engineering Report US 60 East Water Main Replacement Project Henderson County Water District

Introduction and Background

This report covers the project that will replace the existing waterline along US 60 East and the US 60 West booster pumping station for the Henderson County Water District (HCWD) in Henderson, Kentucky. HCWD plans to apply to USDA-Rural Development for funding assistance in order to install approximately 49,000 linear feet of 10" PVC waterline, a booster station, together with related valving and appurtenances. The basis of design for each of the proposed improvements is detailed herein.

The HCWD serves approximately 6,100 water customers in Henderson and Webster Counties in Kentucky. The HCWD service area includes predominantly rural areas as well as the communities of Corydon, Robards, Spottsville, Geneva and Reed. The general location of the HCWD service area is shown on Figure 1.

HCWD purchases 100% of its potable water from the Henderson Water Utility. The average daily purchase by HCWD during 2009 was 1.51 million gallons per day (MGD). This purchase is accomplished at six wholesale metering locations. These locations are identified below.

- US 60 West
- US 60 near Country Club Estates
- US 41A
- US 41 South near Anthoston
- US 41 South near Sebree
- KY 351 near Graham Hill

Existing Conditions

HCWD is a well operated system that consists entirely of distribution facilities. The details of the distribution system are provided in Table 1.

RECEIVED

JUL 26 2012

PUBLIC SERVICE COMMISSION

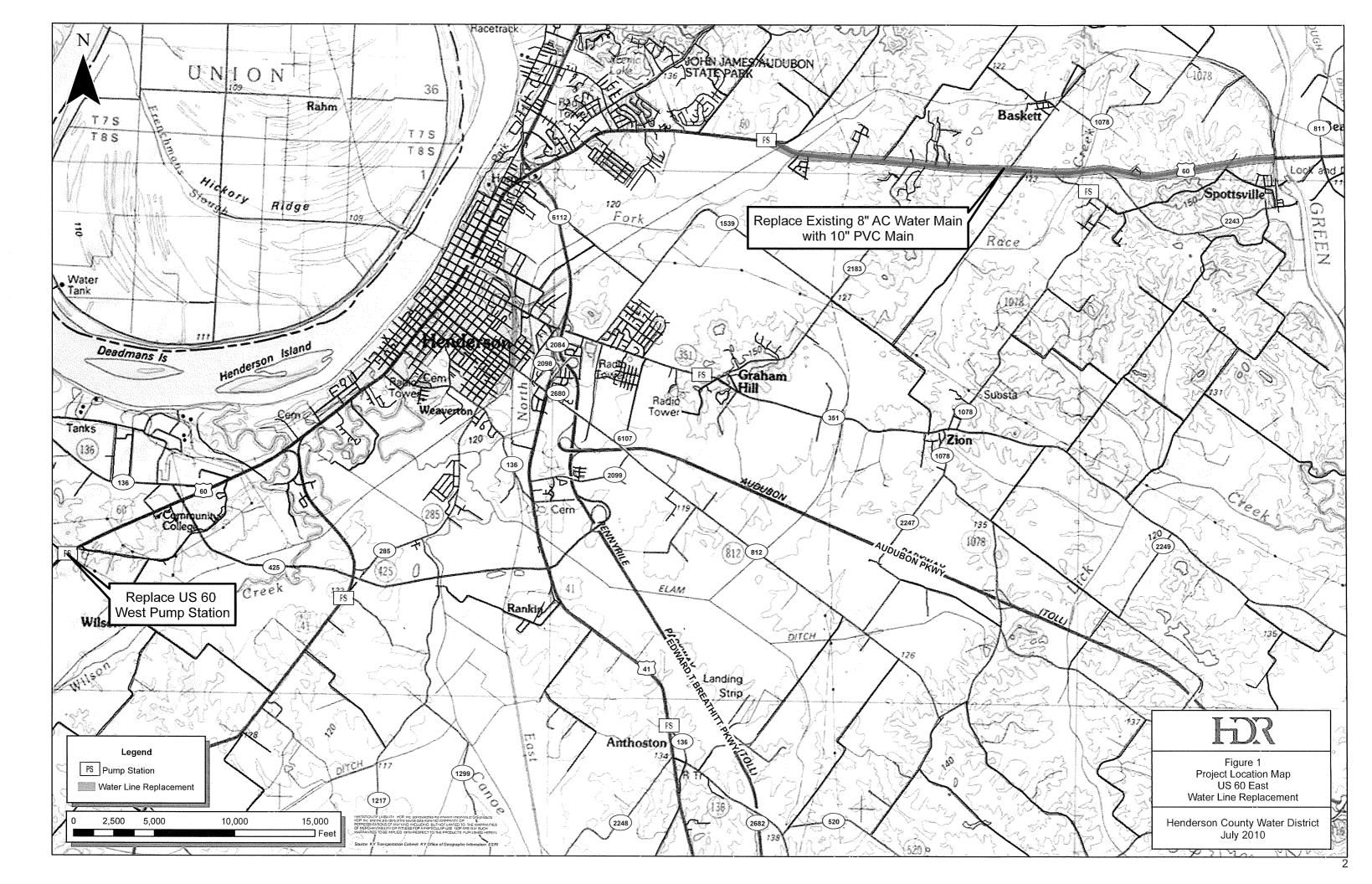


Table 1 <u>Water System Details</u> Henderson County Water District

| <i>Item</i> | Quantity |
|----------------------------------|---------------------|
| 12-inch PVC | 65,000 LF |
| 10-inch PVC/Transite | 38,000/28,500 LF |
| 8-inch PVC/Transite | 420,250/152,600 LF |
| 6-inch PVC/Transite | 130,400/606,675 LF |
| 4-inch PVC/Transite | 284,500/4,200 LF |
| 3-inch or less | 373,300 LF |
| Water Storage Tanks/Total Volume | 7/1,550,000 gallons |
| Booster Pump Stations | 7 |

Note: ¹PVC = polyvinyl chloride, AC = asbestos cement

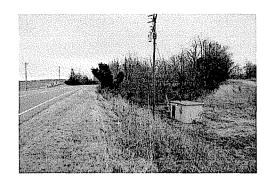
The HCWD system has no persistant issues with disinfection byproducts (DBPs), low chlorine residual or line pressure. It does have some challenges with unaccounted for water and facility accessibility. The water loss has been partially attributed to the piping materials used in the early development of the water district. As detailed above, HCWD has over 790,000 linear feet (approximately 150 miles) of transite pipe. The use of this material was discontinued in the mid 1970s. In recent years, many utilities have recognized that transite has the following undesirable characteristics:

- Significantly greater frequency of breakage than comparable piping materials
- Greater difficulty in repairing transite due to its brittle nature which often leads to further pipe damage during the repair attempt
- Non-metallic material makes the pipe harder to find in the field
- Interaction of employees with an asbestos-cement product and potential health hazards

The line along US 60 east is one of the most important in the HCWD system. It provides most of the flow to the communities of Reed, Spottsville and Basket along with a significant number of rural customers. This line is an 8" transite main with a history of breaks and suspected leakage. For all the reasons identified above, HCWD plans to replace it as part of this proposed project.

The second element of the proposed project is the replacement of the US 60 West booster Pumping station (BPS). This station currently has poor accessibility and is located beneath an embankment which serves as a dam for a small reservoir. This location inhibits maintenance and creates substantial risk to operations and employees. HCWD plans to relocate this pump station as part of this project. Photographs of the pumping station are provided below.





Proposed Improvements

The project that is being proposed to remedy the previously described problems consists of two elements as shown on Figure 1. The first project element is the replacement of the existing 8" transite pipe with 10" PVC SDR 21 waterline. This waterline is capable of handling up to 135 pounds per square inch (PSI) of working pressure. This area typically operates near this pressure. The replacement of the line will be done with sensitivity to the proximity of the existing watermain. It may not be feasible to lay the new line adjacent to the existing main or within the same easement due to concerns about rupturing the transite main. As described before, the US 60 East corridor is a key supply to many customers and disruption of that supply, especially on a frequent basis, could create health impacts. As such, new easements and encroachment permits may be required.

The replacement of the existing 8" line (C=110) with a 10" PVC line (C=140) should improve the efficiency of the delivery of the water. The 10" PVC creates a 75% reduction in dynamic headloss when compared to the existing 8" line. This will translate to lower operating pressures, less pump run time and lower annual power costs.

The second element of the project is the replacement of the US 60 West BPS. The replacement of this station consists of moving the BPS to another location adjacent to the existing site that is above the reservoir level and would not be impacted by an embankment failure. In addition, the new BPS will be located in an accessible area with features that assist in facility maintenance. It is believed that the new BPS can be located on the same property and that the property owner is agreeable to this. Therefore, property acquisition may not be a significant portion of this element. The new site may require environmental and geotechnical reviews to confirm design conditions.

The equipment that would be furnished as part of the new BPS includes, but is not limited to, the following items:

- Vertical turbine can type pumps (300 gallons per minute @ 170' of discharge head) (2)
- Electric pump control valves (2)
- Surge Anticipation Valve (1)
- Isolation Gate Valves (2)
- Totalizing Flow Meter (1)
- Motor Control Center
- SCADA Interface
- HVAC system for heating

Environmental Requirements Related to Project

The proposed project is not expected to produce any significant impact on the local environment. The waterline replacement will generally occur along US 60 within existing easements or public highway right-of-way. The proposed project does include some stream crossings which will require a KDOW permit.

The contractor will be responsible for obtaining a KPDES stormwater general permit, and for using best management practices to control soil erosion and prevent the flow of sediment from construction areas.

As part of the State Clearinghouse review process, the project areas will be evaluated for impacts to archaeological and historic resources by the Kentucky Heritage Council. The project areas will also be evaluated for impacts to wetlands and federally listed endangered or threatened wildlife by the U.S. Fish and Wildlife Service.

Project Alternatives

The alternatives to the proposed project were very limited. Those considered included a "No Action" alternative for both project elements as well as a limited replacement of the existing water line and service connections. Due to the impact of water loss on the HCWD's operations, a "No Action" alternative is not considered to be acceptable or in conformance with best management practices of the system.

The decision to replace the line in its entirety is primarily due to the difficulty in connecting with the transite pipe. As previously described, the brittle nature of asbestos cement pipe creates a significant risk for leakage at any reconnection point. This would clearly defeat the point of the project.

No other alternates were considered for the BPS portion of the project. The risk associated with embankment failure and the inaccessibility for maintenance provide the reasoning for performing the project. The location of

the new BPS is the only issue that remains to be addressed. The local property owner's willingness to provide another site will be explored fully during the design phase.

Opinion of Probable Construction Cost

The opinion of probable construction cost for the US 60 East Water Main Replacement Project is \$1,337,000, as detailed in Table 2.

Table 2

<u>Preliminary Opinion of Probable Construction Cost</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| | | | | Prelimina | ry Estimate |
|------|-------------------------------------|------|---------|------------|-------------|
| Item | | | Approx. | | Total Item |
| No. | Description | Unit | Qty. | Unit Price | Amount |
| 11 | Mobilization/General Conditions | LS | 1 | \$10,000 | \$10,000 |
| 2 | Excavation/Regrade/Paving | LS | 1 | \$10,000 | \$10,000 |
| 3 | Connection to Existing Utilities | EA | 4 | \$2,500 | \$10,000 |
| 4 | 10-inch PVC SDR 21 Piping | LF | 49,000 | \$15 | \$735,000 |
| 5 | 10-inch Gate Valves | EA | 16 | \$2,750 | \$44,000 |
| 6 | 18-inch Steel Casing Pipe, Bored | LF | 300 | \$120 | \$36,000 |
| 7 | 18-inch Steel Casing Pipe, Open Cut | LF | 300 | \$100 | \$30,000 |
| 8 | Stream Crossing | LF | 300 | \$100 | \$30,000 |
| 9 | Flush Hydrant Assembly | EA | 5 | \$1,500 | \$7,500 |
| 10 | Fire Hydrant Assembly | EA | 10 | \$3,000 | \$30,000 |
| 11 | Leak Detection Assembly | EA | 5 | \$1,500 | \$7,500 |
| 12 | Reconnect Existing Meters | EA | 50 | \$750 | \$37,500 |
| 13 | Vertical Turbine Can Pump | EA | 2 | \$25,000 | \$50,000 |
| 14 | Variable Frequency Drives for Pumps | EA | 2 | \$12,000 | \$24,000 |
| 15 | Pump Control Valves | EA | 2 | \$7,500 | \$15,000 |
| 16 | Pump Isolation Valves | EA | 2 | \$2,500 | \$5,000 |
| 17 | Flow Meter | LS | 1 | \$5,000 | \$5,000 |
| 18 | Telemetry | LS | 1 | \$15,000 | \$15,000 |
| 19 | Block/Brick Structure | SF | 700 | 100 | \$70,000 |
| 20 | Roof | SF | 700 | 20 | \$14,000 |
| 21 | Doors/Windows | LS | 1 | \$2,500 | \$2,500 |
| 22 | HVAC/Mechanical | LS | 1 | \$7,500 | \$7,500 |
| 23 | Electrical Service/Equipment | LS | 1 | \$15,000 | \$15,000 |
| 24 | Demobilization | LS | 1 | \$5,000 | \$5,000 |
| 25 | Miscellaneous Construction | LS | 1 | \$121,500 | \$121,50 |
| OP | INION OF PROBABLE CONSTRUCTION COST | | | | \$1,337,000 |

Current Project Budget

The estimated total project cost and current project budget is \$1,694,045 as detailed in Table 3. The anticipated funding source is a USDA – Rural Development loan. The project will be advertised for bids after funding is secured and all regulatory approvals and the necessary easements have been obtained. Construction is expected to begin in the summer of 2011.

Table 3

<u>Preliminary Project Budget</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| <i>Item</i> | Budget Amount |
|-------------------------------------|---------------|
| Construction | \$1,337,000 |
| Legal/Admin | \$10,000 |
| Land, Easements | \$10,000 |
| Engineering / Surveying | \$112,980 |
| Inspection | \$70,365 |
| Geotechnical Investigation | \$5,000 |
| Misc - Interest During Construction | \$15,000 |
| Contingency | \$133,700 |
| TOTAL PROJECT BUDGET | \$1,694,045 |

Project Financing

The proposed financing for the project is shown in Table 4. The need for a rate increase will be investigated during the preparation of the summary addendum.

Table 4

<u>Project Funding</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| TOTAL PROJECT COST | \$1,694,045 |
|---------------------------------|-------------|
| USDA – Rural Development (Loan) | \$1,694,045 |
| Agency | Amount |

Financial Capacity/Rate Impact

The impact of the proposed project on the utility and the customers is primarily related to the debt service incurred on the improvements. This is an asset management project and no new customers are expected. It is likely that HCWD will see some modest electrical savings associated with the new booster pumping station but that will not be included as part of the system financial review. The operating expenses and revenues from 2009 are provided below:

Table 5

<u>2009 Preliminary Operating Revenues/Expenses</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| Item | 2009 Amount |
|--------------------------------------|--------------------|
| 2009 Revenues | |
| Metered Water Sales | \$2,299,255 |
| Miscellaneous Services | \$90,694 |
| Other Revenue | \$2,425 |
| Total 2009 Revenues | <i>\$2,392,374</i> |
| 2009 Operating Expenses | |
| Salaries & Wages - Employees | \$336,489 |
| Salaries & Wages - Officers | \$7,560 |
| Employee Benefits | \$158,625 |
| Purchased Water | \$946,339 |
| Purchased Power | \$41,463 |
| Materials & Supplies | \$177,510 |
| Contractual Services - Acct | \$16,635 |
| Contractual Services - Legal | \$2,657 |
| Contractual Services – Water Testing | \$667 |
| Rental of Equipment | \$95 |
| Transportation | \$38,009 |
| Vehicle Insurance | \$7,447 |
| Workmans Comp | \$22,342 |
| Insurance Other | \$8,627 |
| Advertising | \$227 |
| Bad Debt | \$11,707 |
| Miscellaneous | \$8,090 |
| Total 2009 Operating Expenses | <i>\$1,785,008</i> |
| 2009 Debt Service (P&I) | \$486,310 |
| Total 2009 Expenses | \$2,271,318 |

Based on the requested UDSA- Rural Development loan amount of \$1,694,045, the annual debt service will be approximately \$87,467 (based on a 4.0% loan with a 38 year term). After adding a 10% coverage factor, the total revenue requirement associated with the project is \$96,213. To cover this new debt, the existing rates would need to be increased by approximately 5%. No increase in operating expenses is expected as this project replaces existing line and pump station infrastructure.



Final Engineering Report US 60 East Water Main Replacement Project

Henderson County Water District

Introduction and Background

This report covers the project that will replace the existing waterline along US 60 East and the US 60 West booster pumping station for the Henderson County Water District (HCWD) in Henderson, Kentucky. HCWD plans to apply to USDA-Rural Development for funding assistance in order to install approximately 32,000 linear feet of 10" PVC waterline, a booster station, together with related valving and appurtenances. The basis of design for each of the proposed improvements is detailed herein.

The HCWD serves approximately 6,100 water customers in Henderson and Webster Counties in Kentucky. The HCWD service area includes predominantly rural areas as well as the communities of Corydon, Robards, Spottsville, Geneva and Reed. The general location of the HCWD service area is shown on Figure 1.

HCWD purchases 100% of its potable water from the Henderson Water Utility. The average daily purchase by HCWD during 2009 was 1.51 million gallons per day (MGD). This purchase is accomplished at six wholesale metering locations. These locations are identified below.

- US 60 West
- US 60 near Country Club Estates
- US 41A
- US 41 South near Anthoston
- US 41 South near Sebree
- KY 351 near Graham Hill

Existing Conditions

HCWD is a well operated system that consists entirely of distribution facilities. The details of the distribution system are provided in Table 1.

JUL 26 2012

PUBLIC SERVICE
COMMISSION

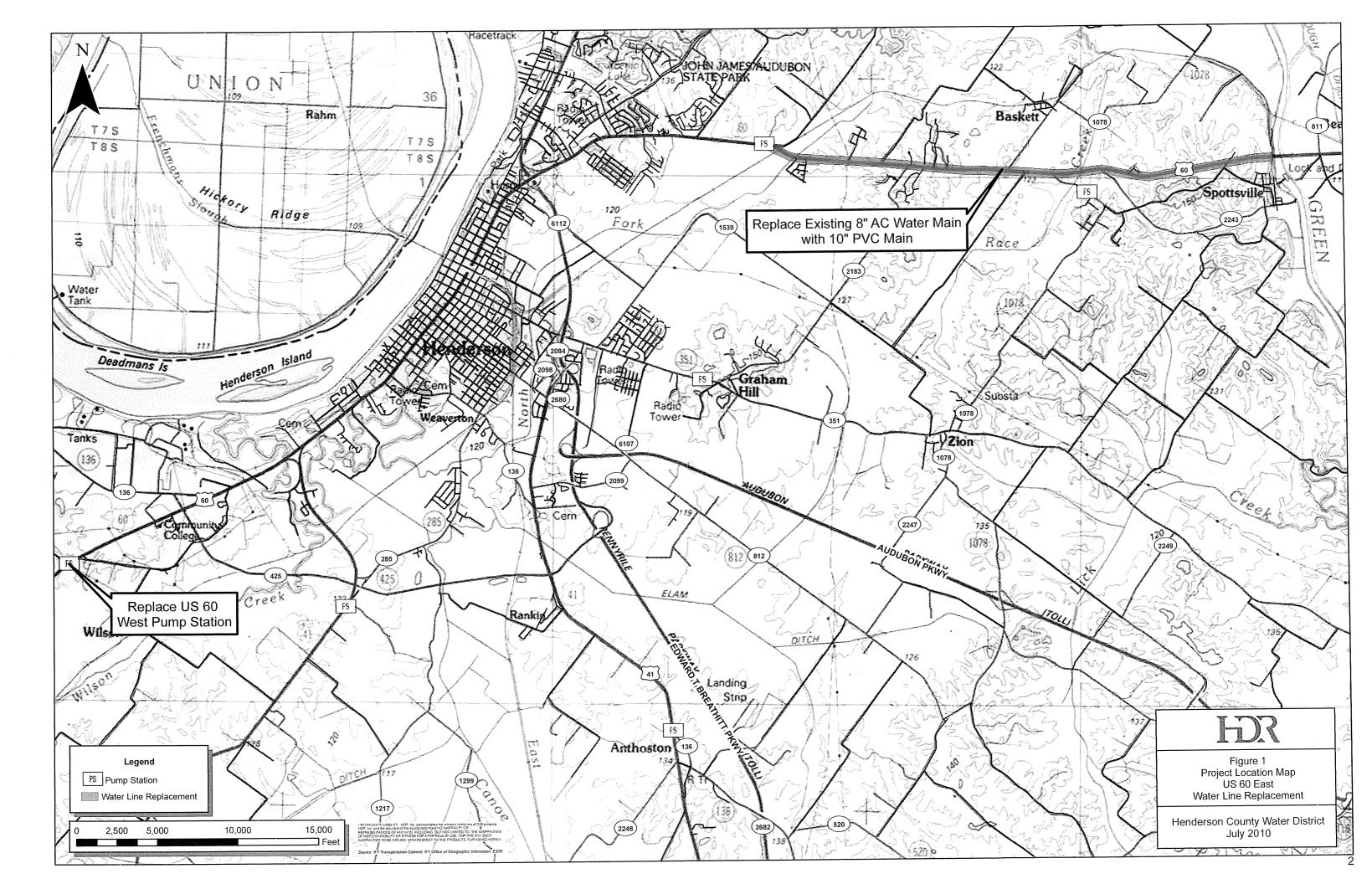


Table 1
<u>Water System Details</u>
Henderson County Water District

| <u>Item</u> | Quantity |
|----------------------------------|---------------------|
| 12-inch PVC | 65,000 LF |
| 10-inch PVC/Transite | 38,000/28,500 LF |
| 8-inch PVC/Transite | 420,250/152,600 LF |
| 6-inch PVC/Transite | 130,400/606,675 LF |
| 4-inch PVC/Transite | 284,500/4,200 LF |
| 3-inch or less | 373,300 LF |
| Water Storage Tanks/Total Volume | 7/1,550,000 gallons |
| Booster Pump Stations | 7 |

Note: ¹PVC = polyvinyl chloride, AC = asbestos cement

The HCWD system has no persistant issues with disinfection byproducts (DBPs), low chlorine residual or line pressure. It does have some challenges with unaccounted for water and facility accessibility. The water loss has been partially attributed to the piping materials used in the early development of the water district. As detailed above, HCWD has over 790,000 linear feet (approximately 150 miles) of transite pipe. The use of this material was discontinued in the mid 1970s. In recent years, many utilities have recognized that transite has the following undesirable characteristics:

- Significantly greater frequency of breakage than comparable piping materials
- Greater difficulty in repairing transite due to its brittle nature which often leads to further pipe damage during the repair attempt
- Non-metallic material makes the pipe harder to find in the field
- Interaction of employees with an asbestos-cement product and potential health hazards

The line along US 60 east is one of the most important in the HCWD system. It provides most of the flow to the communities of Reed, Spottsville and Basket along with a significant number of rural customers. This line is an 8" transite main with a history of breaks and suspected leakage. For all the reasons identified above, HCWD plans to replace it as part of this proposed project.

The second element of the proposed project is the replacement of the US 60 West booster Pumping station (BPS). This station currently has poor accessibility and is located beneath an embankment which serves as a dam for a small reservoir. This location inhibits maintenance and creates substantial risk to operations and employees. HCWD plans to relocate this pump station as part of this project. Photographs of the pumping station are provided below.





Proposed Improvements

The project that is being proposed to remedy the previously described problems consists of two elements as shown on Figure 1. The first project element is the replacement of the existing 8" transite pipe with 10" PVC SDR 21 waterline. This waterline is capable of handling up to 135 pounds per square inch (PSI) of working pressure. This area typically operates near this pressure. The replacement of the line will be done with sensitivity to the proximity of the existing watermain. It may not be feasible to lay the new line adjacent to the existing main or within the same easement due to concerns about rupturing the transite main. As described before, the US 60 East corridor is a key supply to many customers and disruption of that supply, especially on a frequent basis, could create health impacts. As such, new easements and encroachment permits may be required.

The replacement of the existing 8" line (C=110) with a 10" PVC line (C=140) should improve the efficiency of the delivery of the water. The 10" PVC creates a 75% reduction in dynamic headloss when compared to the existing 8" line. This will translate to lower operating pressures, less pump run time and lower annual power costs.

The second element of the project is the replacement of the US 60 West BPS. The replacement of this station consists of moving the BPS to another location adjacent to the existing site that is above the reservoir level and would not be impacted by an embankment failure. In addition, the new BPS will be located in an accessible area with features that assist in facility maintenance. The BPS can be located on the same property and that the property owner is agreeable to this.

The equipment that would be furnished as part of the new BPS includes, but is not limited to, the following items:

- Vertical turbine can type pumps (300 gallons per minute @ 170' of discharge head) (2)
- Electric pump control valves (2)

- Surge Anticipation Valve (1)
- Isolation Gate Valves (2)
- Totalizing Flow Meter (1)
- Motor Control Center
- SCADA Interface
- HVAC system for heating

Environmental Requirements Related to Project

The proposed project is not expected to produce any significant impact on the local environment. The waterline replacement will generally occur along US 60 within existing easements or public highway right-of-way. The proposed project does include some stream crossings which will require a KDOW permit.

The contractor will be responsible for obtaining a KPDES stormwater general permit, and for using best management practices to control soil erosion and prevent the flow of sediment from construction areas.

As part of the State Clearinghouse review process, the project areas were evaluated for impacts to archaeological and historic resources by the Kentucky Heritage Council. The project areas were also evaluated for impacts to wetlands and federally listed endangered or threatened wildlife by the U.S. Fish and Wildlife Service. USDA-Rural Development has completed/approved environmental review documents.

Project Alternatives

The alternatives to the proposed project were very limited. Those considered included a "No Action" alternative for both project elements as well as a limited replacement of the existing water line and service connections. Due to the impact of water loss on the HCWD's operations, a "No Action" alternative is not considered to be acceptable or in conformance with best management practices of the system.

The decision to replace the line in its entirety is primarily due to the difficulty in connecting with the transite pipe. As previously described, the brittle nature of asbestos cement pipe creates a significant risk for leakage at any reconnection point. This would clearly defeat the point of the project.

No other alternates were considered for the BPS portion of the project. The risk associated with embankment failure and the inaccessibility for maintenance provide the reasoning for performing the project. The location of the new BPS was moved to a different location on the same property and is not subject to flooding hazards.

Bids Received - Construction Cost

Bids were received on June 27, 2012. The bid packages were split up between the BPS work and the line work. A total of 3 bidders submitted and the costs were very competitive. On the line work the low bidder was Twin States Utilities & Excavation, Inc., with the second lowest bidder being only 2.9% higher. The BPS low bidder was Cleary Construction, Inc., with the second lowest price 17% higher. The construction cost is detailed in Table 2. Twin States Utilities & Excavation, Inc and Cleary Construction, Inc. have both successfully completed numerous projects designed by HDR. Both contractors' bids have been recommended for approval.

Table 2

<u>As- Bid Construction Cost</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| | | | | Prelimina | ry Estimate |
|-------------|---|------|-----------------|------------|----------------------|
| Item No. | Description | Unit | Approx. Qty. | Unit Price | Total Item Amount |
| 1 | Mobilization | LS | 1 | \$ 10,000 | \$ 10,000 |
| 2 | Bonds and Insurance | LS | 1 | \$ 25,000 | \$ 25,000 |
| 3 | General Requirements | LS | 1 | \$ 15,000 | \$ 15,000 |
| 4 | 10-inch PVC SDR 21 Water Main | LF | 31,000 | \$ 24.65 | \$ 764,150 |
| 5 | 10-inch Gate Valve | EA | 25 | \$ 2,000 | \$ 50,000 |
| 6 | 8-inch Gate Valve | EA | 1 | \$ 1,200 | \$ 1,200 |
| 7 | 6-inch Gate Valve | EA | 9 | \$ 1,000 | \$ 9,000 |
| 8 | 4-inch Gate Valve | EA | 2 | \$ 900 | \$ 1,800 |
| 9 | 3-inch Gate Valve | EA | 1 | \$ 800 | \$ 800 |
| 10 | 2-inch Gate Valve | EA | 3 | \$ 700 | \$ 2,100 |
| 11 | Fire Hydrant Assembly | EA | 15 | \$ 3,500 | \$ 52,500 |
| 12 | Stream Crossing | LF | 440 | \$ 150 | \$ 66,000 |
| 13 | Jack and Bore – 18 inch Dia. Steel Encasement | LF | 180 | \$ 200 | \$ 36,000 |
| 14 | Jack and Bore – 10 inch Water Main | LF | 190 | \$ 45 | \$ 8,550 |
| 15 | Connect to Existing Water Main | EA | 17 | \$ 2,000 | \$ 34,000 |
| 16 | Bituminous Pavement Replacement | LF | 275 | \$ 20 | \$ 5,500 |
| 17 | Concrete Pavement Replacement | LF | 65 | \$ 30 | \$ 1,950 |
| 18 | Copper Service Pipe | LF | 5,280 | \$ 14 | \$ 73,920 |
| 19 | Line Marker | EA | 20 | \$ 40 | \$ 800 |
| 20 | Demobilization | LS | 1 | \$ 5,000 | \$ 5,000 |
| 21 | Booster Pump Station and related piping | LS | 1 | 298,500 | 298,500 |
| CO | NSTRUCTION COST | | | | \$1,461,770 |

Current Project Budget

The estimated total project cost and current project budget is \$1,746,965 as detailed in Table 3. The anticipated funding sources are USDA – Rural Development loan and local funds. The project was advertised for bids on June 27, 2012. Construction is expected to begin in August of 2012.

Table 3

<u>Final Project Budget</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| <i>Item</i> | Budget Amount |
|-------------------------------------|---------------|
| Construction | \$1,461,770 |
| Legal/Admin | \$ 10,000 |
| Land, Easements | \$ 10,000 |
| Engineering / Surveying | \$ 112,980 |
| Inspection | \$ 70,365 |
| Misc - Interest During Construction | \$ 15,000 |
| 5% Contingency | \$ 66,850 |
| TOTAL PROJECT BUDGET | \$1,746,965 |

Project Financing

The financing for the project is shown in Table 4.

Table 4

<u>Project Funding</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| Agency | Amount |
|---------------------------------|-------------|
| USDA – Rural Development (Loan) | \$1,695,000 |
| Local Funds | \$ 51,965 |
| TOTAL PROJECT COST | \$1,746,965 |

Financial Capacity/Rate Impact

The impact of the proposed project on the utility and the customers is primarily related to the debt service incurred on the improvements. This is an asset management project and no new customers are expected. It is likely that HCWD will see some modest electrical savings associated with the new booster pumping station but that is not included as part of the system financial review. The HCWD operating expenses and revenues from 2011 are provided on the next page:

Table 5

<u>2011 Operating Revenues/Expenses</u>

<u>US 60 East Water Main Replacement Project</u>

Henderson County Water District

| Item | 2011 Amount |
|--------------------------------------|--------------------|
| 2011 Revenues | |
| Metered Water Sales | \$2,484,511 |
| Miscellaneous Services | \$92,736 |
| Other Revenue | \$5,079 |
| Total 2011 Revenues | <i>\$2,582,326</i> |
| 2011 Operating Expenses | |
| Salaries & Wages - Employees | \$346,138 |
| Salaries & Wages - Officers | \$8,700 |
| Employee Benefits | \$182,467 |
| Purchased Water | \$982,029 |
| Purchased Power | \$52,741 |
| Materials & Supplies | \$190,437 |
| Contractual Services - Acct | \$17,830 |
| Contractual Services - Legal | \$8,563 |
| Contractual Services – Water Testing | \$9,800 |
| Rental of Equipment | \$0 |
| Transportation | \$56,813 |
| Vehicle Insurance | \$6,984 |
| Workmans Comp | \$9,714 |
| Insurance Other | \$20,904 |
| Advertising | \$435 |
| Bad Debt | \$10,160 |
| Miscellaneous | \$9,266 |
| Total 2011 Operating Expenses | \$1,913,210 |
| 2011 Debt Service (P&I) | \$447,720 |
| Total 2011 Expenses | \$2,360,930 |

Based on the requested UDSA- Rural Development loan amount of \$1,695,000, the annual debt service will be approximately \$84,400 (based on a 3.75% loan with a 38 year term). After adding a 10% coverage factor, the total revenue requirement associated with the project is \$92,860. To cover this new debt, a rate increase will not be required.