

Rubin & Hays

ATTORNEYS AT LAW

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

October 16, 2008

Ms. Stephanie Stumbo
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602

RECEIVED
OCT 17 2008
PUBLIC SERVICE
COMMISSION

Re: Southside Water Association Water Project

Dear Ms. Stumbo:

2008-446

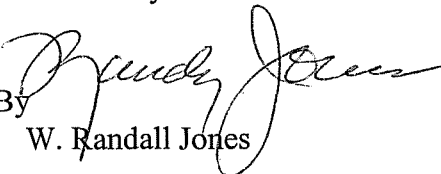
Enclosed please find the original and ten (10) copies of the Application of the Southside Water Association for an Order approving construction financing, increased water rates and issuing a Certificate of Public Convenience and Necessity pursuant to KRS 278.023.

Also enclosed are eleven (11) copies of the exhibits required pursuant to 807 KAR 5.069, and the Preliminary and Final Engineering Reports, of which two copies are enclosed.

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

Sincerely,

Rubin & Hays

By 
W. Randall Jones

WRJ:jlm
Enclosures

cc: Cole Mitcham, P.E.
Ms. Jeanne Griffith, Southside Water Association
Mr. Clay McKnight, USDA, Rural Development

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

OCT 17 2008

PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF SOUTHSIDE WATER ASSOCIATION, INC., OF LEE COUNTY, KENTUCKY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT, FINANCE AND INCREASE RATES PURSUANT TO THE PROVISIONS OF KRS 278.023))))))

NO. 2008-446

APPLICATION

This Application of the Southside Water Association, Inc., (the "Applicant") of Lee County, Kentucky, respectfully shows:

- 1. That the Applicant is a non-profit water association of Lee County, Kentucky, created and existing under and by virtue of Chapter 273 of the Kentucky Revised Statutes.
2. That the post office address of the Applicant is: Southside Water Association, Inc. c/o Mr. Eugene Barrett, President P.O. Box 1007 Beattyville, Kentucky 41311
3. That the Applicant, pursuant to the provisions of KRS 278.020 and 278.023, 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) approval of an increase in Applicant's water rates.
4. That the proposed Project includes the (i) construction of a 100,000 gallon ground storage tank; (ii) construction of a 125 GPM booster pump station; and (iii) installation of approximately 4,900 linear feet of 6-inch water line.
5. That the Applicant proposes to finance the construction of the Project through (i) issuance of a Promissory Note in the principal amount of \$344,000; and (ii) a USDA, Rural Development ("RD") grant in the amount of \$225,000. The Applicant has a commitment from RD

to purchase said \$344,000 note maturing over a 40-year period, at an interest rate of not exceeding 4.125% per annum.

6. That the Applicant does not contemplate having the Project constructed with any deviation from minimum construction standards of this Public Service Commission.

7. That the Applicant files herewith the following Exhibits pursuant to 807 KAR 5:069 in support of this Application:

- A. Copy of Applicant's Articles of Incorporation and By-Laws.
- B. RD Letter of Conditions.
- C. Copy of RD Letter of Concurrence in Bid Award.
- D. Copy of Preliminary and Final Engineering Reports.
- E. Certified statement from the President of the Applicant, based upon statements of the Engineers for the 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 proposed rates of the 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.

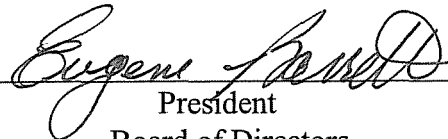
8. That Applicant has arranged for the publication, prior to or at the same time this Application is filed, of a Notice of Proposed Rate Change pursuant to Section 2 of 807 KAR 5:069, in the Beattyville Enterprise which is the newspaper of general circulation in Applicant's service area and in Lee County, Kentucky. Said Notice sets out the Applicant's current rates and proposed rates and a short description of the Project. A copy of said Notice is filed herewith as an Exhibit.

9. 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, the Applicant, the Southside Water Association, Inc., asks that the Public Service Commission of the Commonwealth of Kentucky grant to the Applicant the following:

- a. A Certificate of Public Convenience and Necessity permitting the Applicant to construct a waterworks project consisting of extensions, additions, and improvements to the existing waterworks system of the Applicant.
- b. An Order approving the financing arrangements made by the Applicant, viz., the issuance of a \$344,000 Promissory Note at an interest rate of not exceeding 4.125% per annum; and an RD grant in the amount of \$225,000.
- c. An Order approving the proposed increased rates as set out in Section 27 of the RD Letter of Conditions filed herewith as an Exhibit.

SOUTHSIDE WATER ASSOCIATION, INC.

By: 
President
Board of Directors

RUBIN & HAYS

By: 
Counsel for Applicant
Kentucky Home Trust Building
450 South Third Street
Louisville, Kentucky 40202
(502) 569-7525

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF LEE)

The undersigned, Eugene Barrett, being duly sworn, deposes and states that he is the President of the Board of Directors of the Southside Water Association, Inc., the 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.

IN TESTIMONY WHEREOF, witness the signature of the undersigned on this Sept 26, 2008.

Eugene Barrett
Eugene Barrett, President
Southside Water Association, Inc.

Subscribed, sworn and acknowledged to before me by Eugene Barrett, President of the Board of Directors of the Southside Water Association, Inc., on this Sept 26, 2008.

My Commission expires: 01-31-2011.

[Signature]
Notary Public
In and for said County and State

(Seal of Notary)

Book B 197

ARTICLES OF INCORPORATION
OF

SOUTHSIDE WATER, INC.
BEATTYVILLE, KY. 41311

We, whose names are hereto subscribed, acting as incorporators for the
purpose of forming a nonprofit corporation under the provisions of Chapter 273
of the Kentucky Statutes, assuming and claiming all powers, rights, privileges and immunities
granted or permitted by said laws, and do hereby adopt the following
Articles of Incorporation:

ARTICLE I

NAME

The name of this corporation shall be SOUTHSIDE WATER, INC.

ARTICLE II

REGISTERED OFFICE AND AGENT

The registered office of the corporation shall be at Beattyville,

Brandenburg	Beattyville, Ky. 41311
W. Combs, Jr.	Beattyville, Ky. 41311
Red Congleton	Beattyville, Ky. 41311
Ed Mays	Beattyville, Ky. 41311
Fremont Saylor	Beattyville, Ky. 41311
Sedley Stewart	Beattyville, Ky. 41311
M. Tincher	Beattyville, Ky. 41311

And the following persons shall be Officers:

President-----	Sedley Stewart
Vice President-----	E. W. Brandenburg
Secretary-----	Fremont Saylor
Treasurer-----	W.M. Tincher

5. The Board of Directors shall have their annual meeting after the annual meeting of members hereinafter provided for, at a time and place to be designated by the President, and will elect from their own number a President, Vice President, Secretary and Treasurer, However, the offices of Secretary and Treasurer may be combined into one office.

6. The Board of Directors shall have other meetings as provided in the By-Laws.

ARTICLE IX
MEETINGS

1. The annual meeting of the members of this corporation for the purpose of electing directors and transacting such other business as may properly come before it at such time, shall be held on the 1st Tuesday in April of each year at the time and place specified by the Board of Directors.

2. Special meetings of the members of this corporation may be called by the President at any time or place within the county upon giving to each of the members a notice in writing mailed to his postal address as it appears in the corporation records at least ten (10) days prior to such meeting; and such meetings shall be called by him at any time upon written demand of the majority of the directors, or of any ten (10) members, and in case of his neglect or refusal to call such meetings, which shall be the same as though called by the President. If the purpose of the meeting is to amend the articles, then the notice of meetings signed by the Secretary shall set forth the proposed amendment in substance. Articles may be amended by a two-thirds vote of the members present at such a meeting or voting by proxy.

ARTICLE X
INCORPORATORS

The names and addresses of the incorporators are:

<u>Name</u>	<u>Address</u>
W. Brandenburg	Beattyville, Kentucky 41311
Sedley Stewart	Beattyville, Kentucky 41311
Fremont Saylor	Beattyville, Kentucky 41311
M. Tincher	Beattyville, Kentucky 41311

ARTICLE XI
BY-LAWS

The corporation may make and amend By-Laws at its pleasure through its Board of Directors.

BY - LAWS
OF
SOUTHSIDE WATER, INC., NONPROFIT CORPORATION

ARTICLE I

GENERAL PURPOSES

The purpose for which this corporation is formed, and the powers which it may exercise are set forth in the Articles of Incorporation of the corporation.

ARTICLE II

NAME AND LOCATION

Section 1. The name of this corporation is Southside Water, Inc.

Section 2. The principal office of this corporation shall be located in the City of Beattyville, Lee County, Kentucky, but the corporation may maintain offices and places of business at such other places within the state as the board of directors may determine.

Section 3. The registered agent of the corporation is Buford A. Short, Beattyville, Kentucky 41311.

ARTICLE III

SEAL

Section 1. The seal of this corporation shall have inscribed thereon the name of the corporation, State of Kentucky, and corporate seal.

Section 2. The secretary of the corporation shall have custody of the seal.

willfully fails to comply with these by-laws and other requirements, the corporation, through the board of directors, may elect to purchase his membership certificate and terminate his membership upon tender to him or his heirs or legal representatives the membership fee of \$10.00 less any indebtedness then due from him to the corporation. Any member whose membership is so terminated for cause other than that of ceasing to be eligible may appeal from the action of the board of directors to a vote of the members at the next regular meeting of the members or a special meeting of the members called for such purpose.

ARTICLE VI

MEMBERSHIP CERTIFICATES

Section 1. This corporation shall not have capital stock, but its capital shall be represented by membership certificates.

Section 2. The membership certificates shall be issued to each holder of fully paid membership and shall be numbered consecutively, in accordance with the order of issue. Each membership shall bear on its face the following statements:

- A. This membership certificate, No. ____, is issued and accepted in accordance with and subject to the conditions and restrictions stipulated in the articles of incorporation and by-laws and amendments to the same of the Southside Water, Inc.
- B. Transfers of membership certificates shall be made only upon the books of the corporation, only to persons

Section 2. Notice of meetings of members of the corporation may be given by a notice mailed to each member of record, directed to the address shown upon the books of the corporation, at least ten days prior to the meeting. Such a notice shall state the nature, time, place and purpose of the meeting, but no failure or irregularity of notice of any annual meeting, regularly held, shall effect any proceedings taken thereat.

Section 3. The members present at any meeting of the members shall constitute a quorum at any meeting of the corporation for the transaction of business. The voting powers of the members of this corporation shall be equal, each member shall have one vote only, and voting by proxy shall be allowed.

Section 4. Directors of this corporation shall be elected at the annual meeting of the members.

Section 5. The order of business at the regular meetings and so far as possible at all other meetings shall be :

1. Calling to order and proof of quorum
2. Proof of notice of meeting
3. Reading and action on any unapproved minutes
4. Reports of officers and committees
5. Election of directors
6. Unfinished business
7. New business
8. Adjournment

meeting.

Section 4. If the office of any director becomes vacant by reason of death, resignation, retirement, disqualification or otherwise, except by removal from office, a majority of the remaining directors through not less than a quorum shall, by a majority vote, choose a successor who shall hold office until the next annual meeting of the members of the corporation, at which time the members shall elect a director for the unexpired term, or terms.

Section 5. A majority of the board of directors shall constitute a quorum at any meeting of the board.

Section 6. Compensation of officers may be fixed at any regular or special meeting of the members of the corporation.

Section 7. Officers and directors may be removed from office in the following manner: Any member, officer, or director may present charges against a director or officer by filing them in writing with the secretary of the corporation. If presented by a member, the charges must be accompanied by a petition signed by ten per cent of the members of the corporation. Such removal shall be voted at the next regular meeting or special meeting of the members and shall be effective if approved by a vote of a majority of the members. The directors or officer against whom such charges have been presented shall be informed, in writing, of such charges five days prior to the meeting, and shall have the opportunity at such meeting to be heard in person or by counsel and to present witnesses; and the person or persons presenting such charges against him shall have the same opportunity.

- C. To borrow from any source, money, goods or services, and to make and issue notes and other negotiable and transferable instruments, mortgages deeds of trust and trust agreements and to do every act and thing necessary to effectuate the same.
- D. To prescribe, adopt, and amend, from time to time, such equitable uniform rules and regulations as, in their discretion, may be deemed essential or convenient for the conduct of the business and affairs of the corporation and guidance and control of its officers and employees, and to prescribe adequate penalties for the breach thereof.
- E. To order, at least once a year, an audit of the books and accounts of the corporation by a qualified auditor or accountant. The report prepared by such auditor or accountant shall be submitted to the members of the corporation at their annual meeting.
- F. To fix the charges to be paid by each member for services rendered by the corporation to him, the time of payment and manner of collection.
- G. To require all officers, agents and employees charged with responsibility for the custody of any of the funds of the corporation to give adequate bonds, the costs thereof to be paid by the corporation, and it shall be mandatory upon the directors to so require.

corporation and of the board of directors and shall have general charge and supervision of the books and records of the corporation. He shall sign all the membership certificates with the president and such other papers pertaining to the corporation as he may be authorized or directed to do so by the board of directors. He shall provide a fidelity bond in an amount to cover an amount equal to the largest sum of money in his possession as Secretary-Treasurer at any one time. He shall serve all notices required by law and these by-laws and shall make a full report of all matters and business pertaining to his office and to the members at the annual meeting. He shall keep the corporate seal and membership certificates records of the corporation, complete and countersign all certificates issued and affix said corporate seal to all papers requiring seal. He shall keep a proper membership certificate record, showing the name of each member of the corporation and date of issuance, surrender, cancellation or forfeiture. He shall make all reports required by law and shall perform such other duties as may be required by law and shall perform such other duties as may be required by him by the corporation or the board of directors. Upon the election of his successor, the Secretary-Treasurer shall turn over to him all the books and other property belonging to the corporation that he may have in his possession. He shall also perform such duties with respect to the finances of the corporation as may be prescribed by the board of directors.

ARTICLE XI

BENEFITS AND DUTIES OF MEMBERS

Interfering with the delivery of water through a prior service line, then such service line shall be installed at such place as may be designated by the corporation. Each member will be required to dig or have dug a ditch for the connection of the service line or lines from the property line of the members to their dwelling or other portion of his premises and will also be required to purchase and install the portion of the service line or lines from his property line to the place of use on his premises and to maintain such portion of such service line or lines which shall be owned by the member, at his own expense, provided that the corporation may, if the board of directors so determine, purchase the pipe for and install such portion of such service line or lines, the costs of which will, however, be paid by the individual members.

Section 3. Each member shall be entitled to purchase from the corporation pursuant to such agreements as may from time to time be provided and required by the corporation, such water for domestic, livestock and other purposes as a member may desire, subject, however, to the provisions of these by-laws and to such rules and regulations as may be prescribed by the board of directors, each member shall be entitled to have delivered to him through a single service line only such water as may be necessary to supply the needs of the persons residing in a single dwelling and of the livestock owned by such persons and for such other purposes as needed. The water delivered through

of directors. The failure to pay water charges duly imposed shall result in the automatic imposition of the following penalties:

- A. Non-payment within ten days from the due date will be subject to a penalty of ten per cent of the delinquent account.
- B. Non-payment within thirty days from the due date will result in the water being shut off from the member's property.
- C. Non payment for sixty days after the original due date will result in allowing the corporation, in addition to all other rights and remedies to purchase the member's membership certificate and terminate his membership, and, in such event the member shall not be entitled to receive, nor the corporation obligated to supply, any water.
- D. In the event it becomes necessary for the corporation to shut off the water from a member's property, a fee of \$20.00 will be charged for the reconnection of the services.

Section 6. The board of directors shall be authorized to require each member to enter into water user's agreements which shall embody the principles set forth in the foregoing sections of this article.

Section 7. Membership may be cancelled and/or water service discontinued by the corporation for any violation of any rule, regulation, or condition of service and especially for any of the following reasons:

of the property and funds of the corporation or its members,
or to deprive any member of rights and privileges then existing,
or so to amend the by-laws as to effect a fundamental change in
the policies of the corporation. Notice of any amendments
to be made at a special meeting of the directors must be given
at least ten days before such a meeting and must set forth the
amendments to be considered.

Amendments to these by-laws must, and will have, prior
approval of the lending institution, if an indebtedness is owed or
outstanding, before they become effective.

IN WITNESS WHEREOF we, the Board of Directors, have
at the organization meeting on this 5th day of June, 1968, adopted
the foregoing By-Laws.

BOARD OF DIRECTORS

BY: Sedley Stewart
Sedley Stewart, President

Attest:

Fremont Saylor
Fremont Saylor, Secretary

I, FREMONT SAYLOR, Secretary of the Southside Water, Inc.,
a corporation existing under the laws of the State of Kentucky; hereby
certify that the attached is a true copy of the By-Laws, together with
all amendments thereto, as of the 6th day of June, 1968, which have been
duly adopted.

Fremont Saylor
SECRETARY



United States Department of Agriculture
Rural Development
Kentucky State Office

April 12, 2007

Mr. Eugene Barrett, President
Southside Water Association, Inc.
P.O. Box 1007
Beattyville, Kentucky 41311

Dear Mr. Barrett:

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 \$344,000 and a RUS grant not to exceed \$225,000.

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 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 592 existing water users. The Area Director will review and authenticate the number of users prior to advertising for construction bids. No cash contribution is required by the Association.

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 can 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 \$155.00 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 agreements.

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 \$1,480 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 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, 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 statistical and financial reports, quarterly and annually, in accordance with subsection 1780.47 of RUS Instruction 1780 and RUS Staff Instruction 1780-4, a copy of which is enclosed.

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 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 \$19,000.
- 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.

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.

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	\$ 436,000
Land and Rights	5,000
Legal and Administrative	2,000
Engineering	79,000
Interest	3,000
Contingencies	<u>44,000</u>
TOTAL	\$ 569,000

Financing:

RUS Loan	\$ 344,000
RUS Grant	<u>225,000</u>
TOTAL	\$ 569,000

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 @ \$	17.29 - Minimum Bill.
Next	4,000	gallons @ \$	6.55 - per 1,000 gallons.
Next	4,000	gallons @ \$	5.50 - per 1,000 gallons.
Next	15,000	gallons @ \$	4.98 - per 1,000 gallons.
Next	25,000	gallons @ \$	4.72 - per 1,000 gallons.
All Over	50,000	gallons @ \$	4.24 - 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.

31. Mitigation Measures:

- A. The project shall be in compliance with all requirements noted in the Governor's Office for Local Development letter dated January 30, 2007, from Ms. Lee Nalley.
- B. 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.
- C. The design and construction shall be in compliance with all local, state and federal environmental statutes, regulations and executive orders applicable to the project.

32. 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
Rural Development Manager – West Liberty, Kentucky
Kentucky River ADD - Hazard, Kentucky
Thomas Jones - Beattyville, Kentucky
✓ CDP Engineers - Lexington, Kentucky
PSC - ATTN: Bob Amato - Frankfort, Kentucky



OCT 15 2008

**United States Department of Agriculture
Rural Development**
Kentucky State Office


October 14, 2008

SUBJECT: Southside Water Association
Water System Improvements Project
Concurrence in Contract Award

TO: Area Director
London, Kentucky

Based on the bids received and the recommendation of the consulting engineer, Rural Development concurs in the award of the subject contract to the low bidder, Laurel Construction Co. Inc., in the amount of \$494,100.00.

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


KENNETH SLONE
State Director

cc: CDP Engineers, Inc.
Lexington, Kentucky

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).


**CERTIFICATE OF PRESIDENT OF SOUTHSIDE WATER ASSOCIATION, INC.
AS TO STATEMENT REQUIRED BY SECTION 1(5) OF 807 KAR 5:069**

I, Eugene Barrett, hereby certify that I am the duly qualified and acting President of the Southside Water Association, Inc., and that said Association is in the process of arranging to finance the construction of extensions, additions and improvements to the existing waterworks system of the Association (the "Project"), in cooperation with the Engineers for the Association, CDP Engineers, Inc., Lexington, Kentucky.

Based on information furnished to me by said Engineers for the Association, 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 proposed rates of the Association shall produce the total revenue requirements set out in the engineering reports.
4. That it is now contemplated that construction of the Project will begin on or about November 15, 2008, and will end on or about July 15, 2009.

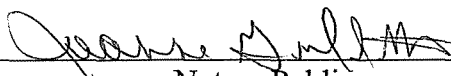
IN TESTIMONY WHEREOF, witness my signature this Sept 26, 2008.



President
Southside Water Association, Inc.

STATE OF KENTUCKY)
) SS
COUNTY OF LEE)

Subscribed and sworn to before me by Eugene Barrett, President of the Board of Directors of the Southside Water Association, Inc., on this Sept 26, 2008.



Notary Public
In and For Said State and County

(Seal of Notary)

NOTICE OF PROPOSED RATE CHANGE

In accordance with the requirements of the Kentucky Public Service Commission as set out in 807 KAR 5:069, Section 2, notice is hereby given to the customers of the Southside Water Association of a change to the Association's rate schedule as set forth herein. The proposed rate change is required by USDA, Rural Development in connection with a loan by RD to the Association in the amount of \$344,000 to be evidenced by the issuance by the Association of its Promissory Note in such amount, which RD has agreed to purchase provided the Association meets certain conditions of RD, including revising the water rates as set forth below:

Current Monthly Rates

First 2,000 gallons	\$16.47 minimum bill
Next 4,000 gallons	6.24 per 1,000 gallons
Next 4,000 gallons	5.24 per 1,000 gallons
Next 15,000 gallons	4.74 per 1,000 gallons
Next 25,000 gallons	4.49 per 1,000 gallons
All over 50,000 gallons	4.04 per 1,000 gallons

Proposed Monthly Rates

First 2,000 gallons	\$17.29 minimum bill
Next 4,000 gallons	6.55 per 1,000 gallons
Next 4,000 gallons	5.50 per 1,000 gallons
Next 15,000 gallons	4.98 per 1,000 gallons
Next 25,000 gallons	4.72 per 1,000 gallons
All over 50,000 gallons	4.24 per 1,000 gallons

The RD loan proceeds will be used in conjunction with an RD Grant in the amount of \$225,000 to finance the (i) construction of a 100,000 gallon ground storage tank; (ii) construction of a 125 GPM booster pump station; and (iii) installation of approximately 4,900 linear feet of 6-inch water line. Signed: Eugene Barrett, President, Southside Water Association, Inc., Beattyville, Kentucky.

**Final Engineering Report
Water System Improvements
Southside Water Association
Beattyville, Kentucky**

RECEIVED

OCT 17 2008

PUBLIC SERVICE
COMMISSION

September 3, 2008



Prepared by:



**CDP Engineers, Inc.
3250 Blazer Parkway
Lexington, Kentucky 40509
(859) 264-7500**

Final Project Budget
Southside Water Association
Water System Improvements

September 3, 2008

Project Costs:

Development	\$494,100.00
Contingency	\$24,705.00
Engineering Design	\$52,176.96
Construction Inspection	\$38,490.39
Legal & Administration	\$5,000.00
Interest	\$3,000.00
Preliminary Engineering Report	\$10,000.00
Additional Engineering	<u>\$5,000.00</u>
Total Project Cost	\$632,472.35

Project Funding:

U.S.D.A Rural Development Loan	\$344,000.00
U.S.D.A. Rural Development Grant	\$225,000.00
Local Funds	<u>\$63,472.35</u>
Total Project Funding	\$632,472.35

ITEM NO.	ITEM DESCRIPTION
BASE BID	
1	Mobilization
2	General Conditions
3	6-inch PVC (Class 250)
4	4-inch PVC (Class 250)
5	12-inch Steel Encasement Pipe (Bore & Jack)
6	6-inch Gate Valve Assembly
7	4-inch Gate Valve Assembly
8	4-inch Check Valve Assembly & Vault
9	Fire Hydrant Assembly
10	Reconnect Fire Hydrant
11	Air Release Valve Assembly
12	3-inch Tapping Valve and Sleeve Assembly
13	4-inch Tapping Valve and Sleeve Assembly
14	Replace Altitude Valve (Existing Tank Site)
15	Reconnect Existing Service Connections
16	Gravel Stone for Driveways
17	Bituminous Pavement Replacement
18	Booster Pump Station
19	Booster Pump Station Foundation, Building, Site Work,
20	100,000 Gallon Ground Storage Tank
21	Tank Valve Vault
22	Tank Foundation, Site Work, & Access Road
23	Telemetry System
24	Demobilization
TOTAL BASE BID	

THE ABOVE IS A TABULATION OF BIDS RECEIVED AT 2:00 P

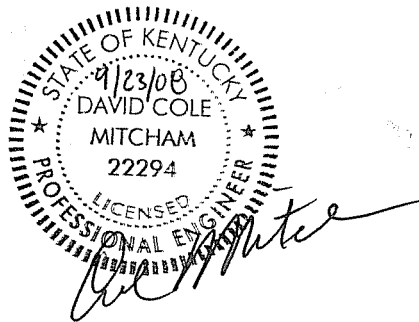
RECEIVED
OCT 17 2008
PUBLIC SERVICE
BOARD

Southside Water Association
Beattyville, Kentucky

Preliminary Engineering Report

Ground Storage Tank, Booster Pump Station, and
Water System Improvements
May 2006

Eugene Barrett, Chairman



Prepared By:
CDP Engineers, Inc.
3250 Blazer Parkway
Lexington KY 40509
Phone (859) 264-7500



Table of Contents

I.	General	1
II.	Project Planning Area	
	A. Location.....	2
	B. Environmental Resources.....	2
	C. Growth Area and Population Trends	4
III.	Existing Facilities	
	A. Location Map	5
	B. History.....	5
	C. Condition of Facilities.....	6
	D. Financial Status of Operating Central Facilities	8
IV.	Need For Project	
	A. Health and Safety.....	9
	B. System Operation & Maintenance.....	10
	C. Growth	11
V.	Alternatives Considered	
	A. Description	12
	B. Design Criteria	14
	C. Schematic Layout.....	14
	D. Environmental Impacts.....	14
	E. Land Requirements	15
	F. Construction Problems.....	15
	G. Cost Estimates	15
	1. Construction	15
	2. Other Projects.....	16
	3. Annual Operation & Maintenance	16
	H. Advantages and Disadvantages.....	17
VI.	Selection of an Alternative	
	A. Present Worth.....	17

VII.	Proposed Project (Recommended Alternate)	
A.	Project Design.....	19
1.	System Layout	19
2.	Pumping Stations	19
3.	Treatment.....	19
B.	Total Project Cost Estimate	19
C.	Annual Operating Budget.....	20
1.	Income.....	20
2.	Operation & Maintenance Costs.....	20
3.	Debt Repayments.....	21
4.	Reserve	21
VII.	Conclusions and Recommendations	21

Appendices

Appendix A	Location and Topographic Maps
Appendix B	Environmental Resources
Appendix C	Census Data and Population Projections
Appendix D	Existing Facilities Map
Appendix E	Water Purchase Agreement
Appendix F	Expenses and Revenues
Appendix G	Proposed Improvements
Appendix H	Cost Estimates

I. General

The Southside Water Association (Southside) provides water service to approximately 500 residential customers of Lee County, Kentucky. Southside purchases approximately 65,000 gpd (gallons per day) of treated water from the Beattyville Waterworks. The existing treated water supply and the legal instrument for purchase is adequate for the foreseeable future.

Southside is proposing improvements to their distribution system to address areas of low pressure and to provide finished water storage to a high-growth area within their service area. The improvements include the addition of a finished water storage tank and accompanying booster pump station, as well as installation of a supply line along KY 11. The improvements are necessary for reliable service and mitigation of low pressure areas. Southside is committed to keeping water rates affordable for their customers while ensuring that revenues are sufficient for any increased debt service requirements.

This preliminary engineering report is formatted to match the guidance and direction of the RUS Bulletin 1780-2.

II. Project Planning Area

The Southside service area is south of the city limits of Beattyville. Beattyville is a fifth-class city located in Lee County, Kentucky. Beattyville is situated at the forks of the Kentucky River and the intersection of KY 52 and KY 11. Southside's water distribution system is bounded on the north and west by the Kentucky River, on the east by the South Fork of the Kentucky River.

A. Location

Appendix A contains a portion of the Beattyville, KY, United States Geological Survey (USGS) topographic map and shows the locations of Southside's water distribution system. The map scale is 1 inch equals 2,000 feet. The topographic map illustrates legal and natural boundaries of Beattyville and Lee County, roads and highways, relief, and blue-line streams.

A portion of the Kentucky Transportation Cabinet's road map for Lee County is also included in Appendix A. The scale is 1 inch equals 1 mile. The portion of the county road map illustrates landmarks such as Southside Elementary School, South Fork and Middle Fork of the Kentucky River, and the cities of Proctor and Congleton. Southside's water main transmission main runs along KY 11 south of Beattyville with branch lines extending down various roads.

B. Environmental Resources

Appendix B contains the following information detailing environmental resources for this region:

1. Soil Conservation Service Maps;
2. Cover types of the region (physiographic area 21, Northern Cumberland Plateau);
3. Federally Threatened and Endangered Species;
4. Federal Emergency Management Agency Flood Insurance Rate Map

Soil association for the Southside area of Lee County consists of the Latham-Shelocta Gilpin association which is a sloping to steep, deep and moderately deep, moderately well drained to well drained soils on the sides and tops of ridges; and dominantly steep, deep, well-drained soils in colluvial areas as shown in Appendix B.

Cover types of the region (physiographic area 21, Northern Cumberland Plateau) are illustrated on maps provided by the National Fish and Wildlife Foundation and are included in Appendix B. The maps indicate non-forested cover of corn, soybeans, and pasture, hay and other mixed crops.

A Kentucky Fish and Wildlife Information System listing of Federally Threatened and Endangered Species and Kentucky Threatened and Endangered Species located in Lee County is included in Appendix B. No specific information was available for the Beattyville quadrangle.

A review of the Flood Insurance Rate Map from the Federal Emergency Management Agency indicates no identified flood hazard zones in the vicinity of the proposed tank or booster pump station site.

There is one site within the city limits of Beattyville, The St. Thomas Episcopal Church that is listed on the National Registry of Historic Places. The historic site will not be impacted by the proposed project. No new disturbance is proposed.

C. Growth Areas and Population Trends

The first set of data included in Appendix C shows the Kentucky State Data Center & Kentucky Population Research tables for each county in Kentucky. The population change for Lee County from 1990 to 2000 was 6.7 percent increase. Also included in Appendix C is a map illustrating four categories of predicted percent change in population from 1990 to 2020 for Kentucky counties. Lee County is in the 0.0 to 24.9 percent increase category. Results of the 2000 Census tend to confirm the earlier projections as shown in Appendix C. Additional data from the U.S. Census Bureau regarding the population change shows that Lee County dropped 1.6 percent in population from April 2000 to July 2004. Although population dropped slightly in last couple of years, we anticipate the population will trend upward.

Lee County's population increase will depend largely on the economic growth of the county. Data from the Bureau of Economic Analysis indicates Lee County's Mining and Coal Industry has been greatly reduced since 1990, but has been supplemented by substantial growth in Construction, Trucking and Warehousing, and Retail Trade. Several areas exist that can be developed south of Beattyville. If a new state road is constructed in this area, development could increase. According to the Kentucky Transportation Cabinet's 6-Year Plan, KY 11 is to be reconstructed from the southern border of Lee County north through the City of Beattyville. However, Southside Water Association is limited to growth by surrounding water district boundaries and other municipality limits.

Estimating growth beyond the current city boundaries is difficult, especially when calculating for the life of the RD loan. There is

evidence of higher than average growth in certain areas of the county. It is expected that the county as a whole will realize growth near state averages.

III. Existing Facilities

A. Location Map

A USGS topographic map with existing water lines is included in Appendix D. Line sizes are color-coded to represent the various diameters. The existing water storage tank, in-line booster pump station, and master meter are also shown.

B. History

On May 28, 1968, Southside Water Association was formed and entered into an agreement with Beattyville Waterworks to purchase treated water through a master meter located near the Kentucky River in Beattyville. The Beattyville Waterworks treats raw water from the North Fork of the Kentucky River.

Shortly after the formation of Southside, a master meter was constructed just north of the North Fork of the Kentucky River and a transmission main installed under the North Fork of the Kentucky River. Distribution lines were installed south from the master meter with the main line following KY 11.

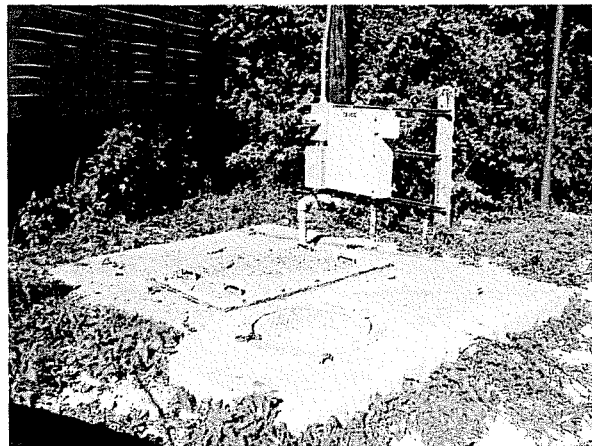
Developments along KY 11 have added new lines and customers to Southside's distribution system over the past 35 years. The utility

further increased their customer base by extending service and lines along the KY 3332 (Pine Road) area.

Southside's water system currently serves approximately 500 customers and continues to purchase treated water from Beattyville Waterworks. The current water purchase agreement is dated September 1, 2003 and has a term of 60 years. The agreement with Beattyville Waterworks is included in Appendix E. The agreement states the volume purchased from Beattyville by Southside shall not exceed 2.5 million gallons per month.

C. Condition of Facilities

Southside Water Association purchases finished water from the Beattyville Waterworks through a master meter and booster pump station located on the southern limits of Beattyville near the North Fork of the Kentucky River. Beattyville Waterworks is the only water treatment plant in Lee County. Raw water is drawn from the North Fork of the Kentucky River at Pool 14 in Lee



Master Meter/Booster Pump Station

County. The raw water is then conveyed to the treatment plant on River Drive where it is filtered, chlorinated, fluoridated, and pumped to finished water storage. Beattyville Waterworks Treatment Plant has a capacity of 1.0 million gallons per day (MGD). Currently, Southside Water Association purchases an average of 65,000 gallons

per day (GPD). The average daily purchase is approximately 75 percent of the volume allowed in the water purchase agreement.

Water purchased from Beattyville Waterworks is delivered to the master meter and booster pump station and leaves the booster pump station at a pressure of approximately 150 pounds per square inch (psi). Most of the service area is served by Southside's 125,000 gallon ground storage tank. However, the Pine Road area is dependant upon an in-line booster station for adequate pressure. Though the storage capacity of the existing tank is greater than the average daily demand (one-day storage) of the entire system, in the event of a power outage, none of the storage is effectively available for the Pine Road area.

The Pine Road in-line booster station is located near the intersection of KY 3332 (Pine Road) and Caudill Road. The station is well under-sized for future needs in this area; the 50 gallon per minute pumps boost pressure in



Pine Road Booster Pump Station

the area of Pine Road approximately 30 psi. The Pine Road area has experienced an increase in residential homes of approximately 45 percent in the past 15 years. The continued reliance on the in-line station for adequate pressures presents a health risk for the entire system and a property risk for residents of the Pine Road area.

D. Financial Status of Operating Central Facilities

Rate Schedules

The current rate schedules for water customers of Southside Water Association are listed below:

Southside Water Association Rate Schedule (All Customers)

Volume of Usage	Charge per 1,000 Gallons
First 2,000 Gallons, Minimum Bill	\$16.47
Next 4,000 Gallons	\$6.24
Next 4,000 Gallons	\$5.24
Next 15,000 Gallons	\$4.74
Next 25,000 Gallons	\$4.49
Next 50,000 Gallons	\$4.04

Southside's water rates were last revised in 1996. As indicated in the Water Purchase Agreement in Appendix E, Southside Water Association purchases water at a rate of \$3.00 per thousand gallons.

Operation and Maintenance Costs

Operation and Maintenance (O&M) costs for 2002 through 2004 are detailed in Appendix F and a summary is provided below. The costs were taken from annual audits completed by John T. Lane, PSC.

Operation and Maintenance Costs	FY 2002	FY 2003	FY 2004
Water	\$153,976	\$169,074	\$173,476

The audited numbers indicate an approximate increase in the combined water O&M costs of 9 percent from 2002 to 2003 and 3 percent from 2003 to 2004.

Water Revenue

Annual revenues for water sales are listed with O&M costs in the table included in Appendix F. Water sales decreased slightly from 2002 to 2004. The decrease in water revenue is consistent with other water utilities in central and eastern Kentucky; and can be attributed to higher volumes of summer and fall precipitation.

Reserve Accounts

Southside Water Association maintains a depreciation account for the water system. The account is reserved for repair and replacement of system facilities and, as of December 31, 2004, was funded in the amount of \$75,135. The amount of \$500 is deposited into the depreciation reserve account monthly.

Rate Study

If needed, a water rate study will be submitted under separate cover.

IV. Need For The Project

A. Health and Safety

The Kentucky Division of Water (DOW) derives its statutory authority from Chapter 224 of the Kentucky Revised Statutes. The Statutes authorize the DOW to develop regulations for water utilities in the Commonwealth, i.e., Kentucky Administrative Regulations (KAR). In addition to the specific directives in Chapter 401 of the KAR, the DOW

requires adherence to other documents incorporated by reference. Among them are the "Recommended Standards for Water Works," (10-State Standards) published by The Great Lakes Upper Mississippi River Board of State Public Health and Environmental Managers.

The proposed project will add gravity storage to the Pine Road area and eliminate the existing in-line booster station. A new booster station and waterline will be constructed to fill the proposed ground storage tank. The existing distribution lines in the Pine Road will remain for residential services. The tank will be sized to provide existing customers reliable storage and to ensure the area can support the anticipated growth in residential demand.

The addition of gravity storage will allow for fire flows even during power outages. The protection to personal property adds to the health and safety advantages of reliable pressures. Without reliable positive pressures temporary vacuum conditions can pull harmful contaminants into the potable water distribution system.

In addition to the health and safety advantages to Southside, the proposed tank could provide Owsley County with emergency water supply. Southside's water line currently extends to within a few hundred feet of the Owsley County water system.

B. System Operation & Maintenance

Water Loss

Calculated water loss for the Southside distribution system in 1997 was 6.9 percent. Calculated water loss during the 2004 calendar year dropped to 6.7 percent based on the difference between the

purchased and accounted-for water. This percent loss is phenomenal considering they are in a rural service area. The system is sound and managed very effectively.

Management Adequacy

The maintenance supervisor keeps thorough operational records on distribution system facilities and appurtenances. Every hydrant is exercised twice a year for the purpose of flow and pressure measurement. Hydrants and blow off valves are also exercised during flushing schedules. The system is small enough so that the same people observe the same hydrants every time. Noting differences in pressures or flows from the previous flushing event provides proactive troubleshooting. The maintenance supervisor also keeps complete records on control valves throughout the system. Recently, CDP Engineers mapped Southside's entire water system including valves, hydrants, and structures. Water purchase volumes are compared monthly with metered sales as a dual check of system water loss.

Although the Southside system is small, operational management is excellent. Any excess funds in the proposed project budget could be spent providing the maintenance supervisor with GIS mapping technology and software to ensure his knowledge of the system is preserved. GIS mapping software would also provide the capability of recording additions, deletions, and revisions to the system.

C. Growth

The design life associated with the proposed line improvements, booster pump station, and storage tank is assumed to be 40 years with the exception of the pumps themselves. With improved surface

preparation techniques and higher quality tank coatings the design life will likely be much longer. The goal of the tank design will be to maximize the volume while ensuring adequate turnover for water quality concerns.

We estimate the daily demand (allowing for water loss) in 2030 for the system will be approximately 80,000 gallons. The estimated volume results in an 18 percent increase from 2005. The capacity of the proposed tank will be 125,000 gallons with valving or other provisions to ensure tank turnover. This will give Southside a total of 250,000 gallons of storage.

Although no new customers are anticipated as a direct result of the proposed project, additional demand for water is anticipated. Southside anticipates additional development in the area especially if the Transportation Cabinet widens KY 11 south of the North Fork of the Kentucky River to the Lee/Owsley County line. In addition, since 1990 the number of new customers in this area has increased 45 percent and this growth is expected to continue. Also, the proposed tank could provide nearby Owsley County with emergency water supply. Southside's water line currently extends to within a few hundred feet of the Owsley County water system.

V. Alternatives Considered

A. Description

Supply

Storage and Distribution Facilities

Two alternatives exist. They are summarized as follows:

1. Build a new water storage tank and booster pump station with water line improvements;
2. Do not build.

Alternative No. 1

The proposed tank would be of sufficient size to allow peak flows to be met by the storage volume in the tank. The proposed booster pump station will be sized to fill the proposed tank only. The proposed water main connecting the new booster pump station and ground storage tank will be a dedicated water line and no service line connections will be made. Flows averaging from 150 to 200 GPM would be more than adequate to fill a 125,000 gallon tank, given the current delivery demands. Additionally, construction of a storage tank will dramatically increase the reliability of the system, and increase pressures and flows in the Pine Road (KY 3332) area and eliminate an undersized booster pump station. This area in Southside's water system is expected to grow even more in the coming years.

Alternate No. 2

The only alternative to the proposed project is the "do nothing" alternative. If nothing is done, low pressure and flows will continue and worsen with the addition of residential customers in the Pine Road area. Area residents will remain dependant upon the in-line pumps for adequate pressures. Little to no pressures will be available during power outages or maintenance problems with the in-line station. Furthermore, maintenance issues will become more and more frequent. Without the additional storage Southside will lose much needed reliability and redundancy.

B. Design Criteria

The proposed project reflects design standards and regulatory requirements stated in the following engineering resources:

- "Great Lakes Upper Mississippi River Board of State Public Health and Environmental Managers, Recommended Standards for Water Works (Ten States Standards)," 1992, Health Education Services, Albany, New York, 12224
- Recommendations/Directives on the Design of Ground Storage Tanks, Natural Resources and Environmental Protection Cabinet, Division of Water, Frankfort, Kentucky, 40601

C. Schematic Layout

A schematic layout of the proposed construction is included in Appendix G. It includes the proposed tank and booster pump station sites, the areas for line upgrades, and location of the master meter vault.

D. Environmental Impacts

The two alternatives discussed above offer no direct or indirect impacts to floodplains, wetlands, or other important land resources. An archeological study may be required for the proposed tank and booster pump station sites. We will request environmental information on the proposed booster pump station and tank sites. The areas of waterline upgrades have been previously disturbed.

E. Land Requirements

The proposed booster pump station and water tank sites are identified on a USGS topographic map included in Appendix G. The tank site has previously been donated to Southside Water Association and a plat of this property was surveyed by CDP in 2003. A copy of this plat is also included in Appendix G. However, no easements have been acquired for the water line upgrades or booster pump station. Easements will be obtained for water line routes by Southside.

F. Construction Problems

According to the United States Department of Agriculture, Soil Survey of Lee County, the soils existing on the proposed tank and booster pump station sites are deep, silt loam and silty clay loam textures and generally greater than 48 inches to bedrock. No significant or unusual construction problems are anticipated.

G. Cost Estimates

1. Construction

A detailed project cost estimate is included in a later section. The construction costs of the two alternates are estimated as follows:

Alternate No.	Title	Construction Cost
1	Build Tank and Booster Pump Station; Waterline Upgrades	\$480,000
2	"Do Nothing"	\$0

2. Other Projects

Other project costs include an additive alternate to the base construction bid. The additive alternate, replace the master meter vault will cost approximately \$75,000.

3. Annual Operation and Maintenance

Annual O&M costs can be estimated for a water storage tank and booster pump station. O&M costs for the waterline upgrades are minimal.

Alternate No.	Title	Annual O&M Costs
1	Build Tank and Booster Pump Station; Waterline Upgrades	\$6,800 [‡]
2	"Do Nothing"	\$7,000

[‡]Based on energy costs and maintenance required for the booster pump station and assuming \$50,000 is required every 18 years for inspection, blasting, and coating for the tank.

H. Advantages and Disadvantages

The following matrix rating system is offered to present the advantages and disadvantages of the two identified alternates. A value of one represents a positive score; zero is negative or not applicable.

Alternate Number	Financial & Operational Feasibility	Regulatory Compliance	Compatibility with Existing Development Plans	Public & Environmental Concerns	Total Value of Alternate
1	1	1	1	1	4
2	1	1	0	0	2

Alternate No. 1 scores the higher value of the alternates. It offers compliance, feasibility, redundancy, reliability and value for the current Southside customers. Alternate No. 2 scores only two points for feasibility and compliance and does not correspond to future plans and concerns of Southside Water Association.

VI. Selection of an Alternative

A. Present Worth

Of the two alternatives the present worth is calculated based on a 38-year period (RD loan term). The annual operation and maintenance costs are estimated based on past years' expenses and a net salvage value after 38 years is calculated based on straight line depreciation. The service life of the new storage tank and booster pump station is

estimated to be 40 years¹. A principal and interest payment will be estimated based on a 55 percent loan calculation.

$$P_t = P_i + I_{PMT}(P/A, 7\%, 38) + P_{PMT}(P/A, 7\%, 38) + O\&M(P/A, 7\%, 38) - SV(P/F, 7\%, 38)$$

Alternate No. 1 – Storage Tank and Booster Pump Station

Initial Capital Outlay	P _i	\$568,000
Annual Operation & Maintenance Cost	O&M	\$6,800
Annual Interest Payment	I _{PMT}	\$14,000
Annual Principal Payment	P _{PMT}	\$4,000
Salvage Value (38 years)	SV	\$23,000
<u>Present Worth (38 years) =</u>	PW ₃₈	\$893,439

Of the initial capital outlay, 45 percent are grant funds,
so subtracting from the PW₃₈ = \$637,839

Alternate No. 2 – "Do Nothing"

Initial Capital Outlay	P _i	\$0
Annual Operation & Maintenance Cost	O&M	\$92,355
Annual Interest Payment	I _{PMT}	\$0
Annual Principal Payment	P _{PMT}	\$0
Salvage Value (38 years)	SV	\$0
<u>Present Worth (38 years) =</u>	PW ₃₈	\$92,355

VII. Proposed Project (Recommended Alternative)

Southside Water Association proposes to pursue Alternate No. 1 – to construct a storage tank and accompanying booster pump station to

¹ For simplicity we are disregarding the pumps and motors in the service life estimate. Costs to replace the pumps and motors are relatively low compared to the design and construction cost of the station and wet well.

include approximately 4,300 linear feet of new PVC or ductile iron waterline (4-inch to 6-inch). In addition, if funds are available, an additive alternate will include reconstructing Southside's combined master meter vault and pump station.

A. Project Design

1. System Layout

The project will be located along KY 11 and Pine Road. A 125,000 gallon ground storage tank will be located near Pine Road with an accompanying booster pump station located along KY 11. In addition, approximately 4,300 linear feet of water line improvements will be constructed between the tank and booster pump station.

2. Pumping Stations

As discussed above, a booster pump station is included within this project. A hydraulic analysis of the existing system and current and future demands will be studied to properly size the pumps to fill the proposed tank. In addition, the tank design will include Red Valve™ system and/or piping features to ensure turn over as required by the regulatory agencies.

3. Treatment

This section is not applicable. See Section 1 above.

B. Total Project Cost Estimate

An itemized estimate of the probable project costs, including engineering fees, construction, contingencies, legal and administrative

fees, acquisition, interest, and equipment is included in Appendix H. The opinion of probable project cost for the proposed project is \$568,000.

C. Annual Operating Budget

Appendix F contains spreadsheets that address Southside's revenues and expenses. The spreadsheets include:

- a. Operating Revenues
- b. Operation & Maintenance Costs (Operating Expenses)
- c. Existing Debt Service
- d. Proposed Debt Service

The information contained in the spreadsheets is summarized below:

1. Income

O & M costs were developed using data for calendar years 2002-2004. Other operating revenues, forfeited deposits and service charges, are expected to remain constant. Non-operating revenues, including contributions in aid of construction (tap-on fees and interest income), are also expected to remain constant. Fund flows and projected additional revenue requirements are included in Appendix F.

2. Operation & Maintenance (O&M) Costs

O&M costs are expected to decrease somewhat due to the improvements. Projections of future expenses will be incorporated based on the trend identified from Fiscal Years

2002 to 2004, factoring in the estimated reduction of O&M with this project.

3. Debt Repayments

Currently, Southside pays no principal and interest. They have recently paid off a bond.

4. Reserves

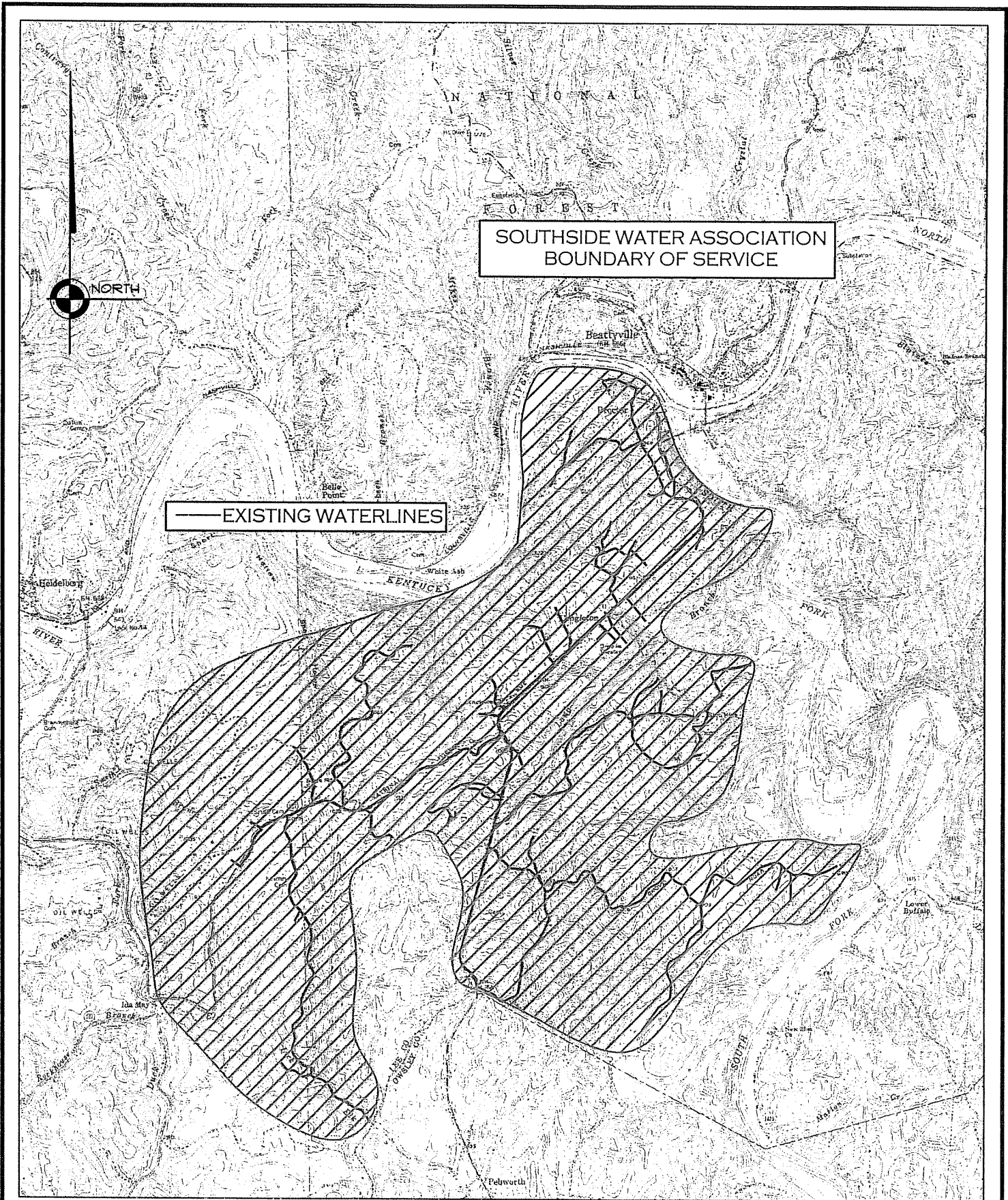
According to the Southside's auditor, all reserve requirements are fully funded. Southside has a Depreciation Reserve Fund that requires monthly transfers of \$500. Other reserve accounts will be funded including capital improvements at approximately ten percent of the audited depreciation, operation and maintenance at the average four-month cost, and replacement at the rate required to replace the single highest cost asset.

VIII. Conclusions and Recommendations

Southside Water Association owns and operates a distribution system dedicated to providing reliable potable water service to approximately 500 residential and light retail customers. Southside is dedicated to maintaining a high level of service and the lowest possible cost to the rate-payers. Though the distribution system is exceptionally maintained, the absence of effective gravity storage in the Pine Road area results in a significant risk to public health and safety. Consequently, the Pine Road area is also the area of the highest growth in the service area. A modest expenditure on infrastructure in the area could mitigate a situation requiring immediate attention and position Southside for future growth. Please consider our application for funding assistance at the earliest opportunity.

Appendix A

Location and Topographic Maps



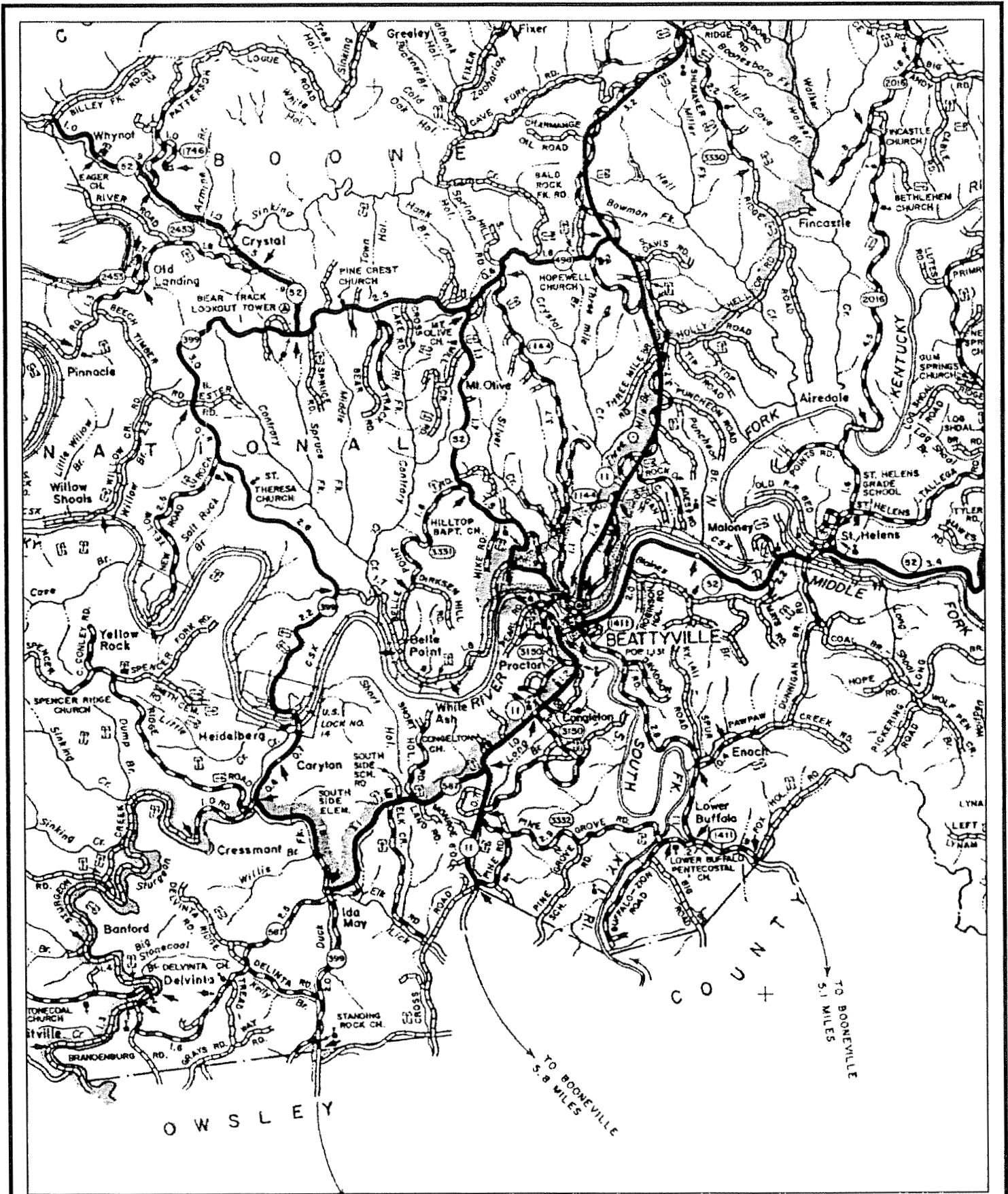
APPENDIX A
USGS TOPOGRAPHIC MAP OF
BEATTYVILLE, LEE COUNTY, KENTUCKY

CDP ENGINEERS, INC.
CARTER DIXON PARTNERS
 3250 BLAZER PARKWAY, LEXINGTON, KENTUCKY 40509
 PHONE: (859) 264-7500 FAX: (859) 264-7501

04085

DATE: 11/2005

SCALE: 1"=4000'



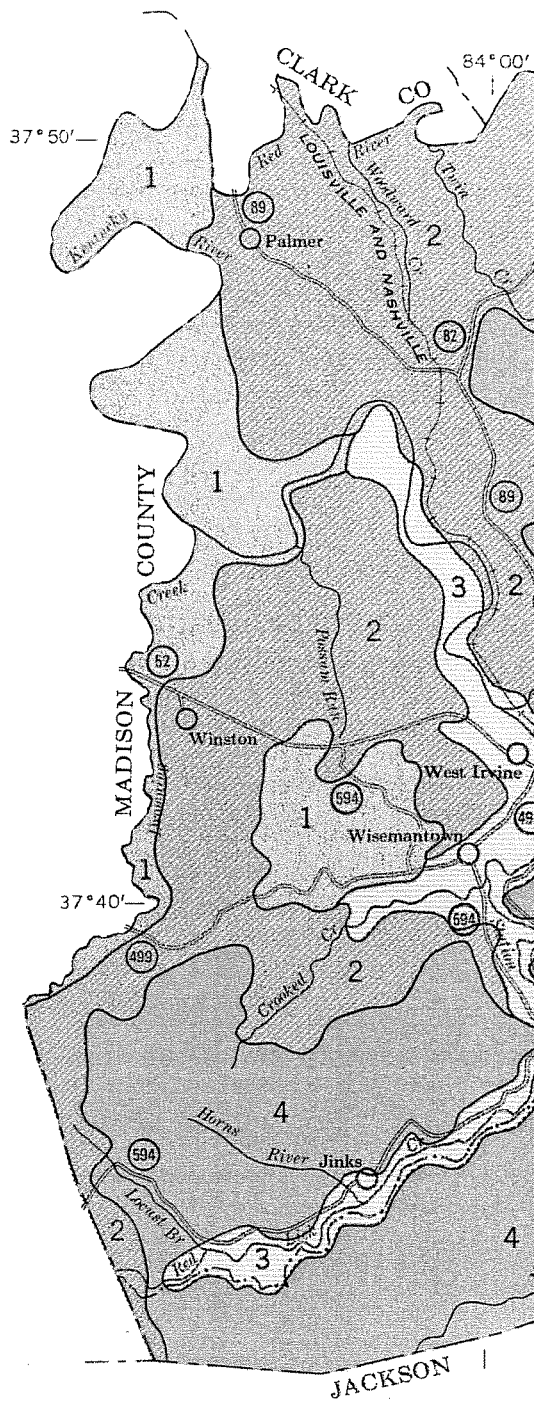
GENERAL HIGHWAY MAP
BEATTYVILLE, LEE COUNTY, KENTUCKY

CDP ENGINEERS, INC.
CARTER DIXON PARTNERS

3250 BLAZER PARKWAY, LEXINGTON, KENTUCKY 40509
 PHONE: (859) 264-7500 FAX: (859) 264-7501

Appendix B

Environmental Resources



SOIL ASSOCIATIONS

any association: Strongly sloping to steep, shallow soils on sides of deep, V-shaped valleys; and, gently sloping to steep, well-drained soils mostly on long, narrow ridges.

association: Sloping to steep, shallow and moderately sloping to steep, shallow and excessively drained soils on the sides and tops of ridges; and gently sloping to strongly sloping, deep, well-drained soils on long, narrow ridges.

association: Nearly level, well-drained and moderately sloping to steep, deep, well-drained soils on flood plains and terraces of the Kentucky River.

association: Mostly steep, deep, well-drained soils on ridge crests; and sloping to moderately steep, deep, well-drained soils on ridge crests.

association: Steep, deep, well-drained soils on long, narrow ridges; and sloping to steep, deep, moderately sloping to steep, deep, moderately sloping soils on long, narrow ridgetops.

association: Sloping to steep, deep and moderately sloping to steep, deep, well-drained soils on the sides and tops of ridges; and steep, deep, well-drained soils in colluvial areas.

Compiled 1972

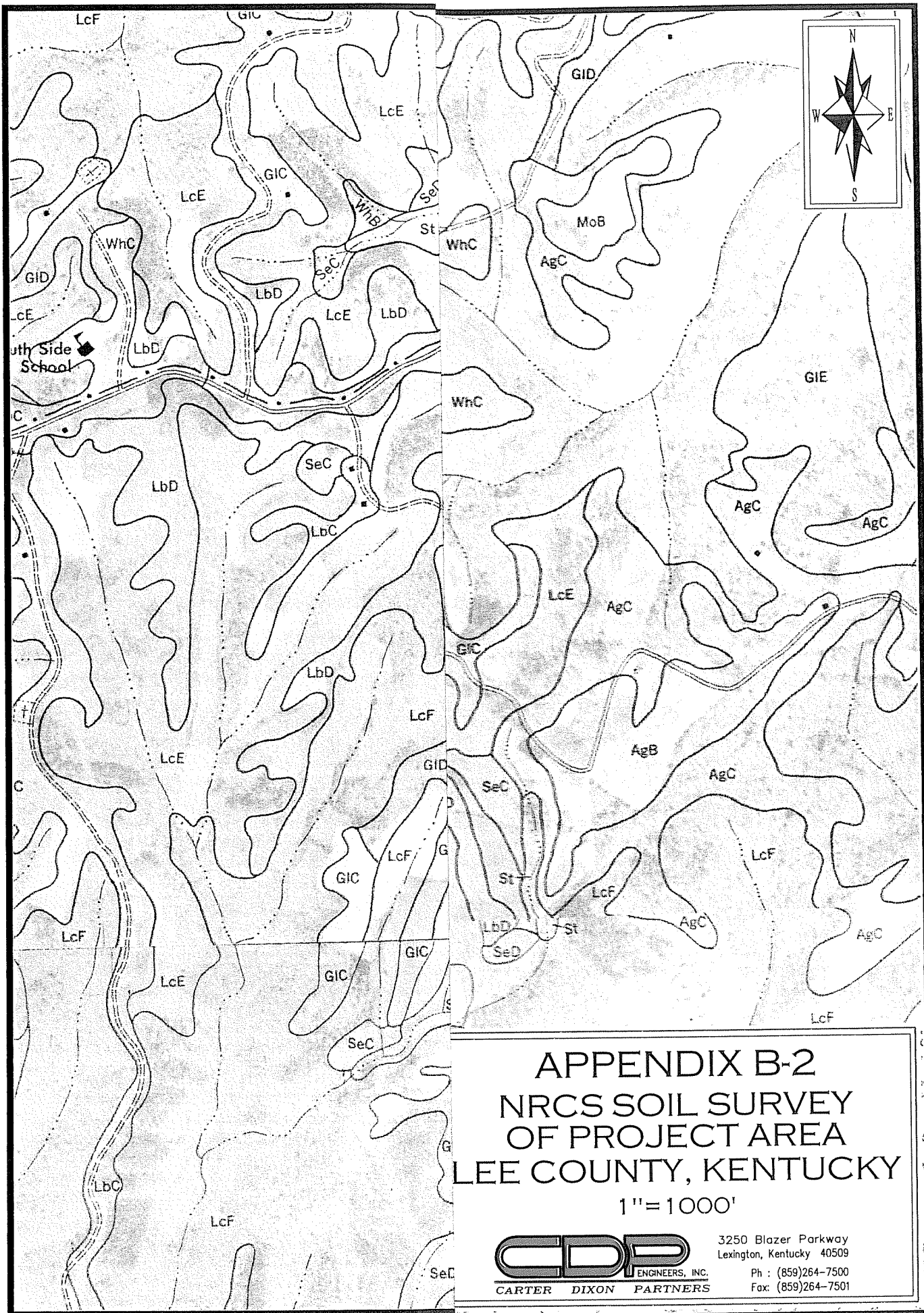
Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.



APPENDIX B-1 GENERAL SOIL MAP ESTILL AND LEE COUNTIES, KENTUCKY



3250 Blazer Parkway
Lexington, Kentucky 40509
Ph : (859)264-7500
Fax: (859)264-7501



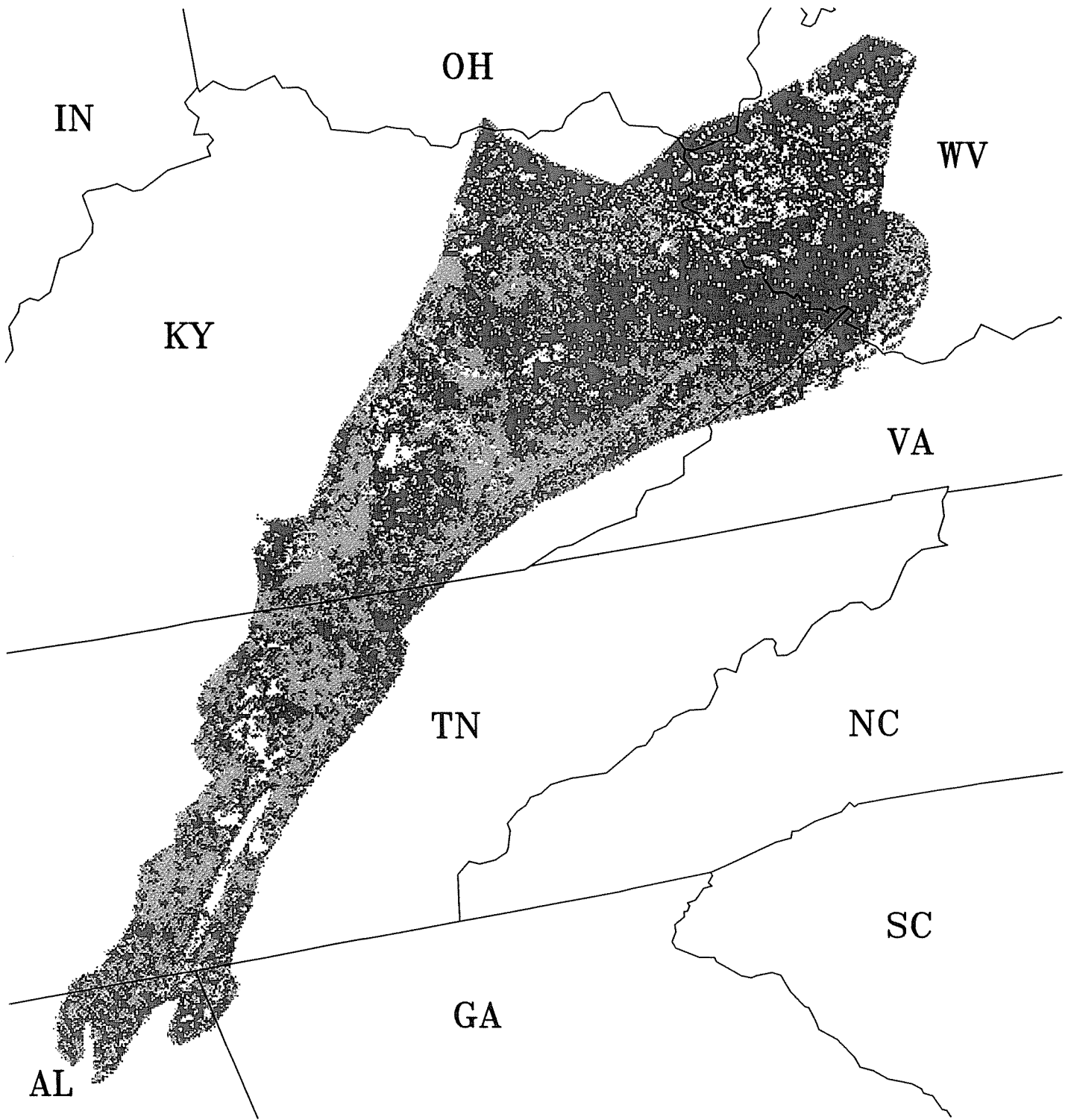
APPENDIX B-2
NRCS SOIL SURVEY
OF PROJECT AREA
LEE COUNTY, KENTUCKY









1" = 1000'



3250 Blazer Parkway
 Lexington, Kentucky 40509
 Ph : (859)264-7500
 Fax: (859)264-7501

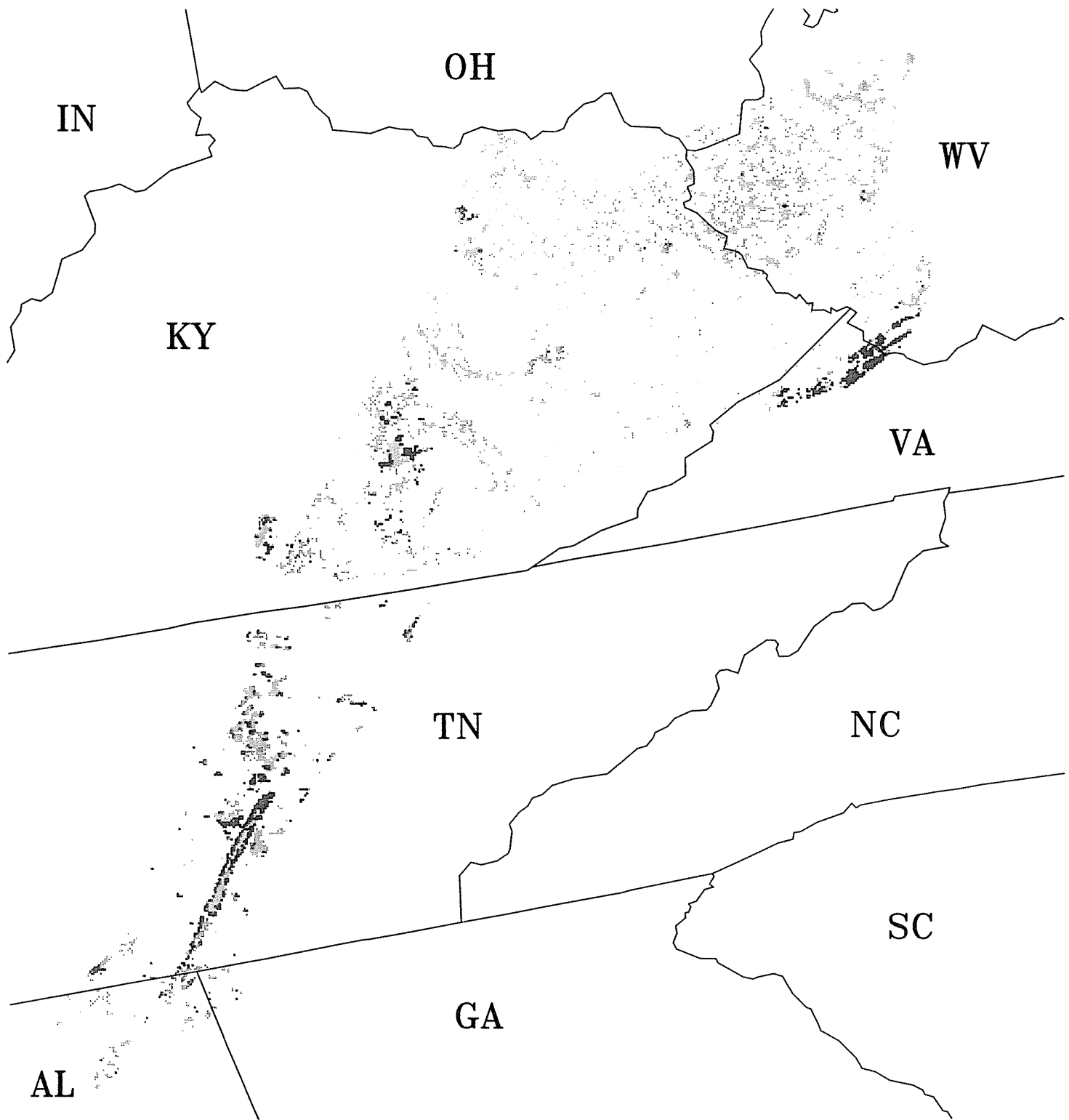
FOREST COVER TYPES IN THE NORTHERN CUMBERLAND PLATEAU, PHYSIOGRAPHIC AREA 21, FROM USFS FIA DATA.











	OAK-HICKORY FOREST		WATER
	OAK-GUM-CYPRESS, BOTTOMLAND FOREST		LOBLOLLY-SHORTLEAF PINE FOREST
	OAK PINE FOREST		ELM-ASH-COTTONWOOD FOREST
	MAPLE-BEECH-BIRCH FOREST		NON FOREST

FUNDING FOR THE PREPARATION OF THIS MAP WAS PROVIDED BY THE NATIONAL FISH AND WILDLIFE FOUNDATION, THROUGH A CHALLENGE GRANT TO THE NATURE CONSERVANCY, WINGS OF THE AMERICAS PROGRAM. MATCHING FUNDS FOR THIS GRANT WERE DONATED BY CANON U.S.A., INC.

NONFOREST COVER TYPES IN THE NORTHERN CUMBERLAND PLATEAU, PHYSIOGRAPHIC AREA 21,
 MODIFIED FROM USGS DATA.



	WHEAT, SMALL GRAIN CROPS		PASTURE, HAY MIXED CROPS
	CORN, SOYBEANS		WATER
	BLUESTEM, GRAMA, WHEATGRASS PRAIRIE		IRRIGATED AGRICULTURE
	SAGEBRUSH, GREASEWOOD, CREOSOTE		FOREST AND WATER FROM USFS FIA DATA, PLUS URBAN

FUNDING FOR THE PREPARATION OF THIS MAP WAS PROVIDED BY THE NATIONAL FISH AND WILDLIFE FOUNDATION, THROUGH A CHALLENGE GRANT TO THE NATURE CONSERVANCY, WINGS OF THE AMERICAS PROGRAM. MATCHING FUNDS FOR THIS GRANT WERE DONATED BY CANON U.S.A., INC.

Lee County, Kentucky

Federally Threatened and Endangered Species

<u>Scientific Name</u>	<u>Common Name</u>	<u>US Status</u>	<u>KY Status</u>
MYOTIS GRISESCENS	GRAY MYOTIS	LE	T
MYOTIS SODALIS	INDIANA BAT	LE	E
CORYNORHINUS TOWNSENDII VIRGINIANUS	VIRGINIA BIG- EARED BAT	LE	E

Kentucky Threatened and Endangered Species

<u>Scientific Name</u>	<u>Common Name</u>	<u>US Status</u>	<u>KY Status</u>
URSUS AMERICANUS	AMERICAN BLACK BEAR	PS	S
CRYPTOBRANCHUS ALLEGANIENSIS ALLEGANIENSIS	EASTERN HELLBENDER	N	S
MYOTIS LEIBII	EASTERN SMALL-FOOTED MYOTIS	N	T
MYOTIS GRISESCENS	GRAY MYOTIS	LE	T
MYOTIS SODALIS	INDIANA BAT	LE	E
CORYNORHINUS RAFINESQUII	RAFINESQUE'S BIG-EARED BAT	N	S
EPIOBLASMA TRIQUETRA	SNUFFBOX	N	E
MYOTIS AUSTRORIPARIUS	SOUTHEASTERN MYOTIS	N	E
CORYNORHINUS TOWNSENDII VIRGINIANUS	VIRGINIA BIG- EARED BAT	LE	E

This list was created from the Kentucky Fish and Wildlife Information System.

US Status Definitions

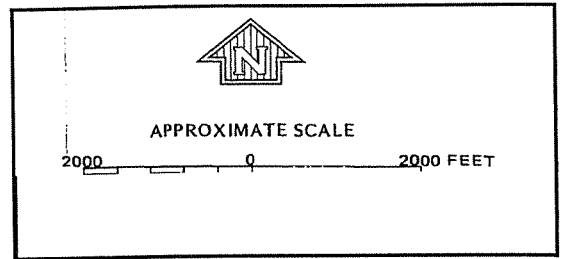
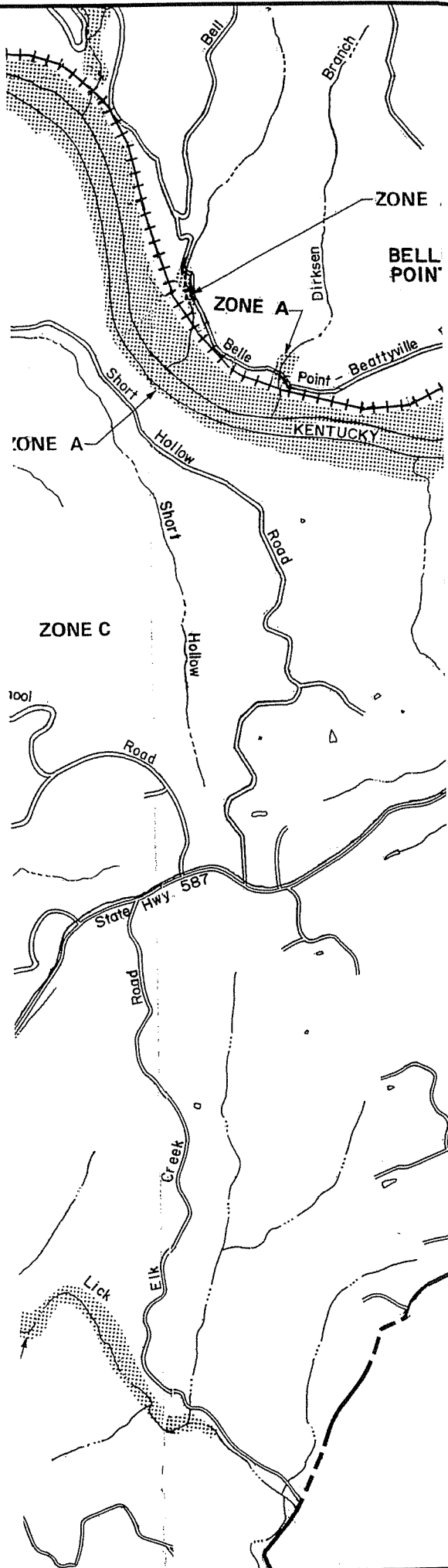
For additional information, please go to [NatureServe Explorer](#).

Abbreviation	Status Under the U.S. Endangered Species Act
LE	Listed endangered - imminent jeopardy of extinction
LT	Listed threatened - imminent jeopardy of becoming endangered
PE	Proposed endangered
PT	Proposed threatened
C	Candidate – species for which the USFWS has sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the ESA
PDL	Proposed for delisting
E(S/A) or T(S/A)	Listed endangered or threatened because of similarity of appearance
XE	Essential experimental population
XN	Nonessential experimental population
PS:	Partial status - indicating that the status applies only to a portion of the species' range.
N or Blank	Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and refresh of this website, some taxa may have a status which does not yet appear.

KY Status Definitions

For additional information, please go to [Kentucky State Nature Preserves Commission](#).

Abbreviation	Kentucky State Nature Preserves Commission status
E	Endangered – a taxon in danger of extirpation and/or extinction throughout all or a significant part of its range in Kentucky
T	Threatened – a taxon likely to become endangered within the foreseeable future throughout all or a significant part of its range in Kentucky
S	Special concern – a taxon that should be monitored because (1) it exists in a limited geographic area in Kentucky, (2) it may become threatened or endangered due to modifications or destruction of habitat, (3) certain characteristics or requirements make it especially vulnerable to specific pressures, (4) experienced researchers have identified other factors that may jeopardize it, or (5) it is thought to be rare or declining in Kentucky but insufficient information exists for assignment to the threatened or endangered status categories.
H	Historic – a taxon documented from Kentucky but not observed reliably since 1980 but is not considered extinct or extirpated.
X	Extirpated – a taxon that no longer exists in the wild in Kentucky, but exists elsewhere in the wild.
N or Blank	none



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

LEE COUNTY,
KENTUCKY
(UNINCORPORATED AREAS)

PANEL 125 OF 150

COMMUNITY-PANEL NUMBER
210135 0125 B

EFFECTIVE DATE:
SEPTEMBER 27, 1985



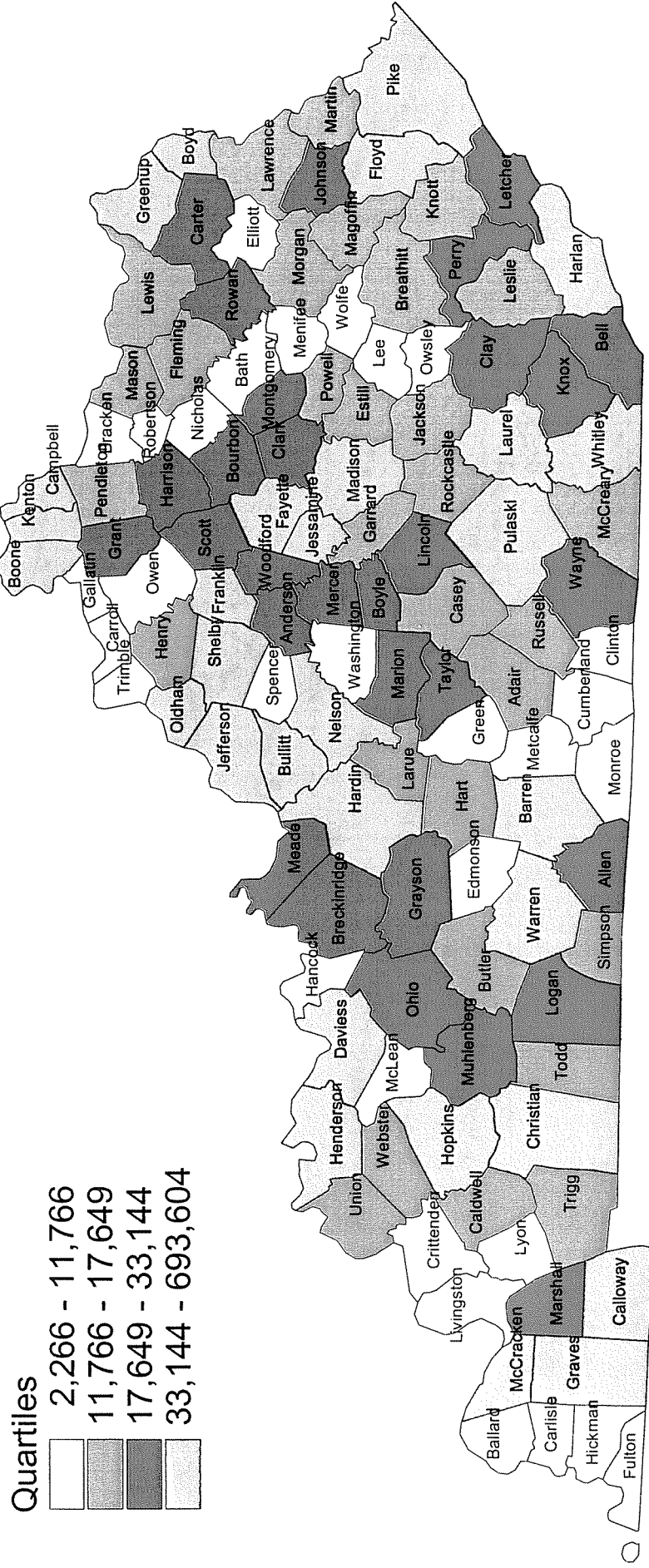
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Appendix C

Census Data and Population Projections

2000 Population Counts for Kentucky Counties



Source: 2000 Census of Population and Housing

Produced by the
Kentucky State Data Center
3/22/01



Kentucky State Data Center & Kentucky Population Research

Kentucky Counties Ranked by Population Change, 1990-2000 Census

Rank	1990 Pop.	2000 Pop.	change	Rank	1990 Pop.	2000 Pop.	change	Rank	1990 Pop.	2000 Pop.	change			
n.a.	Kentucky	3,685,296	4,041,769	356,473										
1	Fayette	225,366	260,512	35,146	41	Pendleton	12,036	14,390	2,354	81	Estill	14,614	15,307	693
2	Jefferson	664,937	693,604	28,667	42	Breckinridge	16,312	18,648	2,336	82	Wolfe	6,503	7,065	562
3	Boone	57,589	85,991	28,402	43	Morgan	11,648	13,948	2,300	83	Hancock	7,864	8,392	528
4	Warren	76,673	92,522	15,849	44	Henry	12,823	15,060	2,237	84	Muhlenberg	31,318	31,839	521
5	Bullitt	47,567	61,236	13,669	45	Trigg	10,361	12,597	2,236	85	Bracken	7,766	8,279	513
6	Madison	57,508	70,872	13,364	46	Meade	24,170	26,349	2,179	86	Clinton	9,135	9,634	499
7	Oldham	33,263	46,178	12,915	47	Logan	24,416	26,573	2,157	87	Lee	7,422	7,916	494
8	Kenton	142,031	151,464	9,433	48	Knox	29,676	31,795	2,119	88	Washington	10,441	10,916	475
9	Laurel	43,438	52,715	9,277	49	Boyle	25,641	27,697	2,056	89	Breathitt	15,703	16,100	397
10	Scott	23,867	33,061	9,194	50	Trimble	6,090	8,125	2,035	90	Hopkins	46,126	46,519	393
11	Jessamine	30,508	39,041	8,533	51	Adair	15,360	17,244	1,884	91	Ballard	7,902	8,286	384
12	Shelby	24,824	33,337	8,513	52	Ohio	21,105	22,916	1,811	92	Cumberland	6,784	7,147	363
13	Nelson	29,710	37,477	7,767	53	Henderson	43,044	44,829	1,785	93	Monroe	11,401	11,756	355
14	Pulaski	49,489	56,217	6,728	54	Taylor	21,146	22,927	1,781	94	McLean	9,628	9,938	310
15	Grant	15,737	22,384	6,647	55	Rockcastle	14,803	16,582	1,779	95	Elliott	6,455	6,748	293
16	Spencer	6,801	11,766	4,965	56	Butler	11,245	13,010	1,765	96	Magoffin	13,077	13,332	255
17	Hardin	89,240	94,174	4,934	57	Rowan	20,353	22,094	1,741	97	Johnson	23,248	23,445	197
18	Campbell	83,866	88,616	4,750	58	Harrison	16,248	17,983	1,735	98	Crittenden	9,196	9,384	188
19	Anderson	14,571	19,111	4,540	59	Marion	16,499	18,212	1,713	99	Webster	13,955	14,120	165
20	Daviess	87,189	91,545	4,356	60	Larue	11,679	13,373	1,694	100	Greenup	36,742	36,891	149
21	Barren	34,001	38,033	4,032	61	Mercer	19,148	20,817	1,669	101	Robertson	2,124	2,266	142
22	Franklin	43,781	47,687	3,906	62	Russell	14,716	16,315	1,599	102	Mason	16,666	16,800	134
23	Clark	29,496	33,144	3,648	63	Lawrence	13,998	15,569	1,571	103	Bourbon	19,236	19,360	124
24	Graves	33,550	37,028	3,478	64	Powell	11,686	13,237	1,551	104	Carlisle	5,238	5,351	113
25	Calloway	30,735	34,177	3,442	65	Jackson	11,955	13,495	1,540	105	Nicholas	6,725	6,813	88
26	Christian	68,941	72,265	3,324	66	Owen	9,035	10,547	1,512	106	Martin	12,526	12,578	52
27	Lincoln	20,045	23,361	3,316	67	Fleming	12,292	13,792	1,500	107	Caldwell	13,232	13,060	-172
28	Woodford	19,955	23,208	3,253	68	McCreary	15,603	17,080	1,477	108	Owsley	5,036	4,858	-178
29	Garrard	11,579	14,792	3,213	69	Menifee	5,092	6,556	1,464	109	Knott	17,906	17,649	-257
30	Allen	14,628	17,800	3,172	70	Lyon	6,624	8,080	1,456	110	Hickman	5,566	5,262	-304
31	Grayson	21,050	24,053	3,003	71	Bath	9,692	11,085	1,393	111	Fulton	8,271	7,752	-519
32	Montgomery	19,561	22,554	2,993	72	Edmonson	10,357	11,644	1,287	112	Perry	30,283	29,390	-893
33	Marshall	27,205	30,125	2,920	73	Simpson	15,145	16,405	1,260	113	Union	16,557	15,637	-920
34	Clay	21,746	24,556	2,810	74	Casey	14,211	15,447	1,236	114	Floyd	43,586	42,441	-1,145
35	McCracken	62,879	65,514	2,635	75	Green	10,371	11,518	1,147	115	Leslie	13,642	12,401	-1,241
36	Hart	14,890	17,445	2,555	76	Metcalfe	8,963	10,037	1,074	116	Boyd	51,150	49,752	-1,398
37	Carter	24,340	26,889	2,549	77	Lewis	13,029	14,092	1,063	117	Bell	31,506	30,060	-1,446
38	Whitley	33,326	35,865	2,539	78	Todd	10,940	11,971	1,031	118	Letcher	27,000	25,277	-1,723
39	Gallatin	5,393	7,870	2,477	79	Carroll	9,292	10,155	863	119	Harlan	36,574	33,202	-3,372
40	Wayne	17,468	19,923	2,455	80	Livingston	9,062	9,804	742	120	Pike	72,583	68,736	-3,847

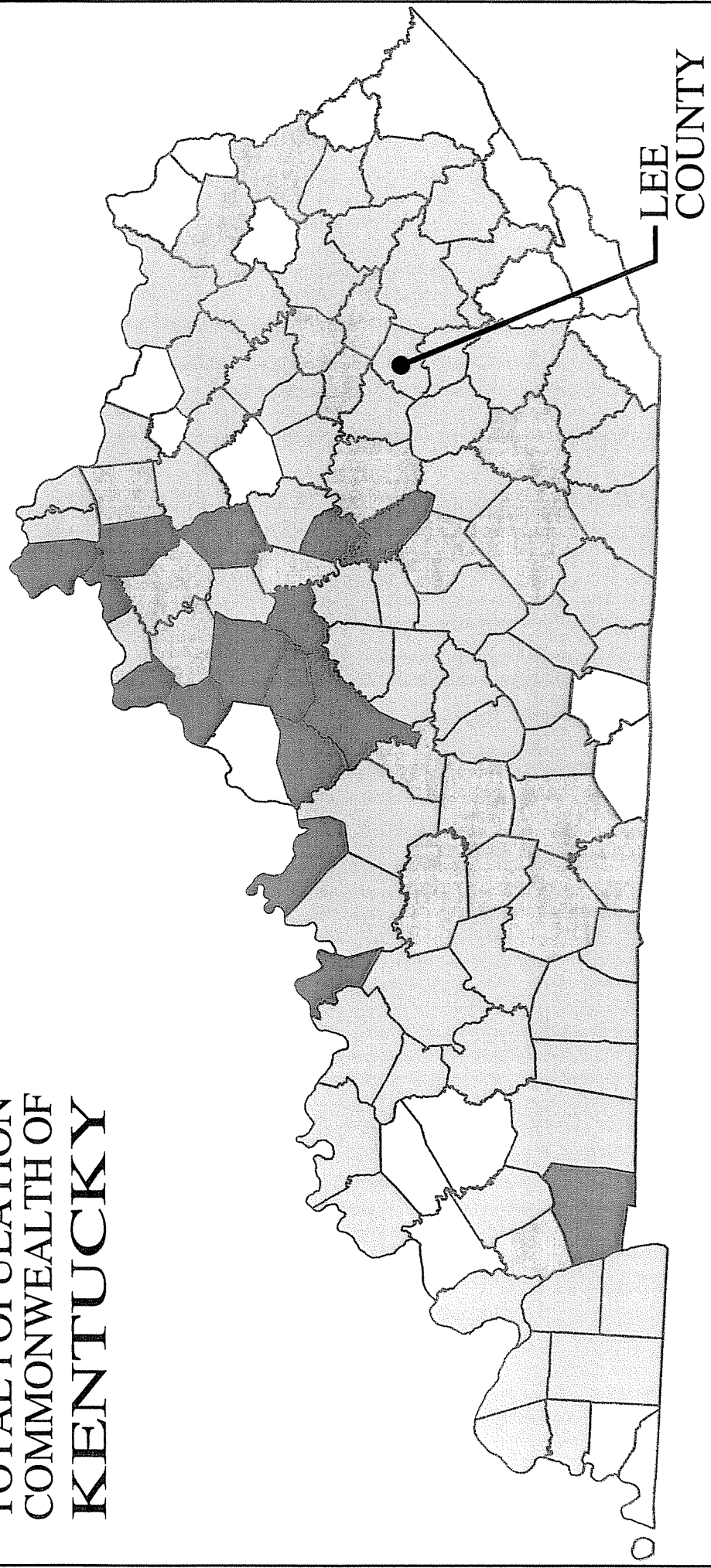


Kentucky State Data Center & Kentucky Population Research

Kentucky Counties Ranked by Total Population, 2000 Census

Rank	2000 Pop.	Rank	2000 Pop.	Rank	2000 Pop.
n.a.	Kentucky 4,041,769				
1	Jefferson 693,604	41	Meade 26,349	81	Jackson 13,495
2	Fayette 260,512	42	Letcher 25,277	82	Larue 13,373
3	Kenton 151,464	43	Clay 24,556	83	Magoffin 13,332
4	Hardin 94,174	44	Grayson 24,053	84	Powell 13,237
5	Warren 92,522	45	Johnson 23,445	85	Caldwell 13,060
6	Daviess 91,545	46	Lincoln 23,361	86	Butler 13,010
7	Campbell 88,616	47	Woodford 23,208	87	Trigg 12,597
8	Boone 85,991	48	Taylor 22,927	88	Martin 12,578
9	Christian 72,265	49	Ohio 22,916	89	Leslie 12,401
10	Madison 70,872	50	Montgomery 22,554	90	Todd 11,971
11	Pike 68,736	51	Grant 22,384	91	Spencer 11,766
12	McCracken 65,514	52	Rowan 22,094	92	Monroe 11,756
13	Bullitt 61,236	53	Mercer 20,817	93	Edmonson 11,644
14	Pulaski 56,217	54	Wayne 19,923	94	Green 11,518
15	Laurel 52,715	55	Bourbon 19,360	95	Bath 11,085
16	Boyd 49,752	56	Anderson 19,111	96	Washington 10,916
17	Franklin 47,687	57	Breckinridge 18,648	97	Owen 10,547
18	Hopkins 46,519	58	Marion 18,212	98	Carroll 10,155
19	Oldham 46,178	59	Harrison 17,983	99	Metcalfe 10,037
20	Henderson 44,829	60	Allen 17,800	100	McLean 9,938
21	Floyd 42,441	61	Knott 17,649	101	Livingston 9,804
22	Jessamine 39,041	62	Hart 17,445	102	Clinton 9,634
23	Barren 38,033	63	Adair 17,244	103	Crittenden 9,384
24	Nelson 37,477	64	McCreary 17,080	104	Hancock 8,392
25	Graves 37,028	65	Mason 16,800	105	Ballard 8,286
26	Greenup 36,891	66	Rockcastle 16,582	106	Bracken 8,279
27	Whitley 35,865	67	Simpson 16,405	107	Trimble 8,125
28	Calloway 34,177	68	Russell 16,315	108	Lyon 8,080
29	Shelby 33,337	69	Breathitt 16,100	109	Lee 7,916
30	Harlan 33,202	70	Union 15,637	110	Gallatin 7,870
31	Clark 33,144	71	Lawrence 15,569	111	Fulton 7,752
32	Scott 33,061	72	Casey 15,447	112	Cumberland 7,147
33	Muhlenberg 31,839	73	Estill 15,307	113	Wolfe 7,065
34	Knox 31,795	74	Henry 15,060	114	Nicholas 6,813
35	Marshall 30,125	75	Garrard 14,792	115	Elliott 6,748
36	Bell 30,060	76	Pendleton 14,390	116	Menifee 6,556
37	Perry 29,390	77	Webster 14,120	117	Carlisle 5,351
38	Boyle 27,697	78	Lewis 14,092	118	Hickman 5,262
39	Carter 26,889	79	Morgan 13,948	119	Owsley 4,858
40	Logan 26,573	80	Fleming 13,792	120	Robertson 2,266

TOTAL POPULATION COMMONWEALTH OF KENTUCKY



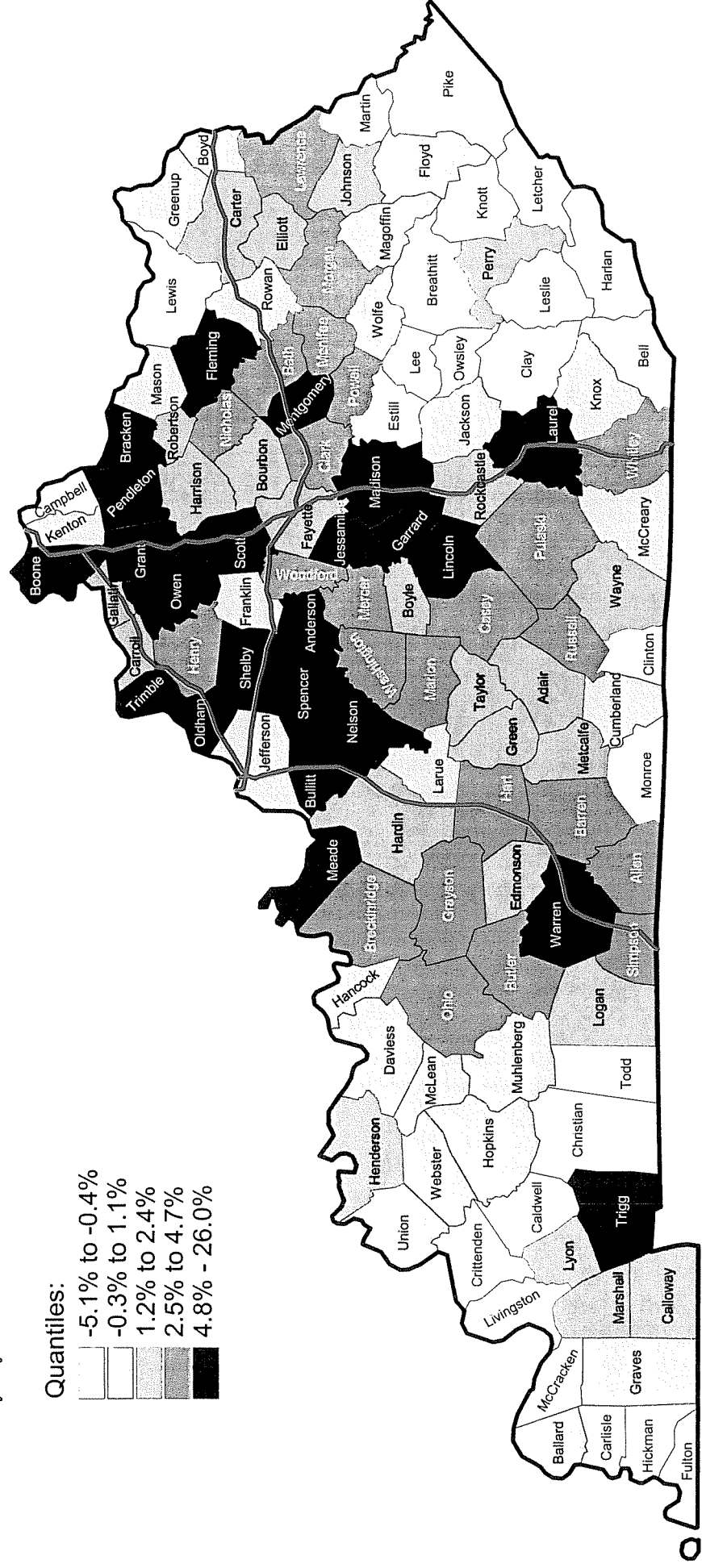
PERCENT CHANGE, 1990-2020

KENTUCKY STATE DATA CENTER
HOW MANY KENTUCKIANS, 1999 EDITION

Percentage Change in Population for Counties of Kentucky April 1, 2000 to July 1, 2004

I-64, I-65, I-71 and I-75

Kentucky: 2.6%



Quantiles:

- 5.1% to -0.4%
- 0.3% to 1.1%
- 1.2% to 2.4%
- 2.5% to 4.7%
- 4.8% - 26.0%

Annual Estimates of the Population for Counties of Kentucky:

April 1, 2000 to July 1, 2004 and Change 2000 to 2004

County	Population estimates (July 1)				April 1, 2000 Census	Change 2000 to 2004 Number	Change 2000 to 2004 Percent
	2004	2003	2002	2001			
Kentucky	4,145,922	4,118,189	4,089,985	4,067,781	4,041,769	103,637	2.6
Adair County	17,575	17,499	17,399	17,339	17,244	331	1.9
Allen County	18,541	18,292	18,150	17,956	17,821	741	4.2
Anderson County	20,099	19,806	19,560	19,525	19,111	988	5.2
Ballard County	8,295	8,252	8,134	8,189	8,286	9	0.1
Barren County	39,473	39,119	38,748	38,549	38,033	1,440	3.8
Bath County	11,538	11,451	11,419	11,294	11,085	453	4.1
Bell County	29,672	29,886	29,989	29,739	30,060	-388	-1.3
Boone County	101,354	97,161	93,596	90,280	85,991	15,363	17.9
Bourbon County	19,623	19,543	19,502	19,513	19,360	263	1.4
Boyd County	49,743	49,837	49,704	49,615	49,752	-9	0.0
Boyle County	28,241	27,887	27,697	27,600	27,697	544	2.0
Bracken County	8,707	8,512	8,455	8,368	8,279	428	5.2
Breathitt County	15,937	15,831	15,915	15,994	16,064	-163	-1.0
Breckinridge County	19,168	19,066	18,948	18,848	18,648	520	2.8
Bullitt County	66,645	65,023	63,756	62,532	61,236	5,409	8.8
Butler County	13,364	13,196	13,151	13,116	13,010	354	2.7
Caldwell County	12,879	12,893	12,878	12,911	13,060	-181	-1.4
Calloway County	34,789	34,521	34,217	34,226	34,177	612	1.8
Campbell County	87,256	87,782	88,332	88,604	88,616	-1,360	-1.5
Carlisle County	5,310	5,340	5,360	5,345	5,351	-41	-0.8
Carroll County	10,344	10,270	10,268	10,186	10,155	189	1.9
Carter County	27,459	27,318	27,107	26,886	26,889	570	2.1
Casey County	16,059	15,967	15,834	15,646	15,447	612	4.0
Christian County	70,649	71,091	71,815	72,360	72,265	-1,660	-2.3
Clark County	34,377	33,927	33,590	33,440	33,144	1,233	3.7
Clay County	24,254	24,260	24,422	24,427	24,556	-302	-1.2
Clinton County	9,558	9,600	9,633	9,634	9,634	-76	-0.8
Crittenden County	8,999	9,112	9,166	9,253	9,384	-385	-4.1
Cumberland County	7,168	7,194	7,162	7,163	7,147	21	0.3
Daviess County	92,587	92,471	91,891	91,748	91,545	1,042	1.1
Edmonson County	11,921	11,905	11,833	11,762	11,644	277	2.4

Annual Estimates of the Population for Counties of Kentucky:

April 1, 2000 to July 1, 2004 and Change 2000 to 2004

County	Population estimates (July 1)					April 1, 2000 Census	Change 2000 to 2004	
	2004	2003	2002	2001	2000		Number	Percent
Elliott County	6,835	6,889	6,792	6,745	6,774	6,748	87	1.3
Estill County	15,164	15,253	15,356	15,368	15,310	15,307	-143	-0.9
Fayette County	266,358	265,477	262,706	262,236	260,916	260,512	5,846	2.2
Fleming County	14,480	14,383	14,175	14,088	13,852	13,792	688	5.0
Floyd County	42,379	42,274	42,374	42,231	42,393	42,441	-62	-0.1
Franklin County	48,142	47,976	48,127	48,086	47,843	47,687	455	1.0
Fulton County	7,357	7,467	7,576	7,781	7,705	7,752	-395	-5.1
Gallatin County	7,979	8,021	7,818	7,929	7,859	7,870	109	1.4
Garrard County	16,163	15,918	15,625	15,174	14,887	14,792	1,371	9.3
Grant County	24,317	24,056	23,582	23,136	22,557	22,384	1,933	8.6
Graves County	37,401	37,410	37,128	37,088	37,077	37,028	373	1.0
Grayson County	25,004	24,681	24,283	24,205	24,115	24,053	951	4.0
Green County	11,667	11,783	11,680	11,665	11,544	11,518	149	1.3
Greenup County	37,274	37,069	36,830	36,985	36,842	36,891	383	1.0
Hancock County	8,459	8,445	8,451	8,432	8,426	8,392	67	0.8
Hardin County	96,066	95,636	95,317	94,964	94,305	94,174	1,896	2.0
Harlan County	31,927	32,191	32,542	32,563	33,032	33,202	-1,275	-3.8
Harrison County	18,256	18,261	18,107	18,048	18,030	17,983	273	1.5
Hart County	18,237	17,940	17,697	17,368	17,542	17,445	788	4.5
Henderson County	45,426	45,234	45,059	44,923	44,819	44,829	597	1.3
Henry County	15,771	15,546	15,329	15,216	15,099	15,060	711	4.7
Hickman County	5,172	5,190	5,237	5,221	5,248	5,262	-90	-1.7
Hopkins County	46,818	46,800	46,459	46,219	46,479	46,519	299	0.6
Jackson County	13,622	13,611	13,642	13,643	13,514	13,495	127	0.9
Jefferson County	700,030	698,394	696,068	694,916	693,872	693,604	6,426	0.9
Jessamine County	42,313	41,486	40,705	39,792	39,211	39,041	3,272	8.4
Johnson County	23,856	23,574	23,482	23,407	23,348	23,445	411	1.8
Kenton County	152,890	152,424	151,766	151,916	151,662	151,464	1,426	0.9
Knox County	17,582	17,693	17,769	17,592	17,635	17,649	-67	-0.4
Knox County	31,912	31,760	31,671	31,617	31,863	31,795	117	0.4
Larue County	13,485	13,415	13,451	13,376	13,400	13,373	112	0.8
Laurel County	55,993	55,407	54,434	53,576	52,928	52,715	3,278	6.2
Lawrence County	16,048	15,895	15,878	15,736	15,603	15,569	479	3.1

Annual Estimates of the Population for Counties of Kentucky:

April 1, 2000 to July 1, 2004 and Change 2000 to 2004

County	Population estimates (July 1)					April 1, 2000 Census	Change 2000 to 2004	
	2004	2003	2002	2001	2000		Number	Percent
Lee County	7,786	7,890	7,896	7,913	7,928	7,916	-130	-1.6
Leslie County	12,043	12,174	12,271	12,268	12,385	12,401	-358	-2.9
Letcher County	24,677	24,835	24,932	24,918	25,237	25,277	-600	-2.4
Lewis County	13,820	13,763	13,833	14,026	14,133	14,092	-272	-1.9
Lincoln County	24,821	24,543	24,154	23,833	23,472	23,361	1,460	6.2
Livingston County	9,762	9,757	9,828	9,833	9,816	9,804	-42	-0.4
Logan County	27,048	26,860	26,744	26,692	26,606	26,573	475	1.8
Lyon County	8,205	8,142	8,142	8,150	8,112	8,080	125	1.5
McCracken County	64,700	64,735	64,805	64,991	65,437	65,514	-814	-1.2
McCreary County	17,055	17,125	17,131	17,041	17,062	17,080	-25	-0.1
McLean County	9,982	9,922	9,978	9,884	9,979	9,938	44	0.4
Madison County	76,208	74,550	73,229	72,300	71,262	70,872	5,336	7.5
Magoffin County	13,456	13,358	13,323	13,193	13,327	13,332	124	0.9
Marion County	18,728	18,551	18,492	18,329	18,222	18,212	516	2.8
Marshall County	30,813	30,614	30,262	30,194	30,140	30,125	688	2.3
Martin County	12,328	12,508	12,543	12,552	12,569	12,578	-250	-2.0
Mason County	16,937	16,840	16,889	16,852	16,801	16,800	137	0.8
Meade County	28,300	27,588	27,418	26,937	26,565	26,349	1,951	7.4
Menifee County	6,766	6,687	6,718	6,662	6,604	6,556	210	3.2
Mercer County	21,493	21,296	21,086	20,919	20,841	20,817	676	3.2
Metcalfe County	10,165	10,052	10,016	10,075	10,017	10,037	128	1.3
Monroe County	11,660	11,732	11,737	11,757	11,740	11,756	-96	-0.8
Montgomery County	23,629	23,533	23,244	22,929	22,662	22,554	1,075	4.8
Morgan County	14,360	14,295	14,250	14,095	13,958	13,948	412	3.0
Muhlenberg County	31,752	31,738	31,716	31,797	31,798	31,839	-88	-0.3
Nelson County	40,406	39,662	38,960	38,346	37,689	37,477	2,929	7.8
Nicholas County	7,076	6,977	6,928	6,826	6,792	6,813	263	3.9
Ohio County	23,565	23,275	23,223	23,080	22,935	22,916	649	2.8
Oldham County	52,100	50,623	49,201	48,025	47,028	46,178	5,482	11.8
Owen County	11,300	11,098	11,015	10,759	10,575	10,547	753	7.1
Owsley County	4,749	4,727	4,765	4,808	4,859	4,858	-109	-2.2
Pendleton County	15,134	15,050	14,835	14,663	14,503	14,390	744	5.2
Perry County	29,762	29,685	29,498	29,311	29,313	29,390	340	1.2

Annual Estimates of the Population for Counties of Kentucky:

April 1, 2000 to July 1, 2004 and Change 2000 to 2004

County	Population estimates (July 1)					April 1, 2000 Census	Change 2000 to 2004	
	2004	2003	2002	2001	2000		Number	Percent
Pike County	67,080	67,529	67,821	67,754	68,539	68,736	-1,656	-2.4
Powell County	13,615	13,396	13,313	13,372	13,282	13,237	378	2.9
Pulaski County	58,727	57,992	57,353	56,758	56,322	56,217	2,510	4.5
Robertson County	2,308	2,321	2,306	2,254	2,265	2,266	42	1.9
Rockcastle County	16,782	16,725	16,720	16,604	16,634	16,582	200	1.2
Rowan County	22,176	22,286	22,251	22,284	22,074	22,094	82	0.4
Russell County	16,838	16,622	16,504	16,446	16,335	16,315	523	3.2
Scott County	38,029	36,777	35,458	34,486	33,431	33,061	4,968	15.0
Shelby County	37,219	35,990	35,027	34,203	33,566	33,337	3,882	11.6
Simpson County	16,891	16,739	16,641	16,642	16,424	16,405	486	3.0
Spencer County	14,822	14,336	13,591	12,847	12,016	11,766	3,056	26.0
Taylor County	23,479	23,413	23,273	22,934	22,912	22,927	552	2.4
Todd County	11,863	11,900	12,006	12,078	11,958	11,971	-107	-0.9
Trigg County	13,249	12,880	12,746	12,734	12,642	12,597	652	5.2
Trimble County	9,047	8,804	8,658	8,441	8,173	8,125	922	11.3
Union County	15,708	15,684	15,641	15,561	15,605	15,637	71	0.5
Warren County	97,168	95,590	94,198	93,343	92,794	92,522	4,646	5.0
Washington County	11,266	11,271	11,150	11,031	10,926	10,916	350	3.2
Wayne County	20,400	20,286	20,092	19,953	19,993	19,923	477	2.4
Webster County	14,130	14,086	14,093	14,030	14,124	14,120	10	0.1
Whitley County	37,566	37,187	36,810	36,472	35,960	35,865	1,701	4.7
Wolfe County	7,045	6,968	6,992	6,929	7,100	7,065	-20	-0.3
Woodford County	23,961	23,651	23,532	23,377	23,274	23,208	753	3.2

Dash (-) represents zero or rounds to zero. (X) Not applicable

Suggested Citation:

Table 1: Annual Estimates of the Population for Counties of Kentucky: April 1, 2000 to July 1, 2004 (CO-EST2004-01-21)

Source: Population Division, U.S. Census Bureau

Release Date: April 14, 2005

Annual Estimates of the Population for Incorporated Places in Kentucky, Listed Alphabetically: April 1, 2000 to July 1, 2004

Place	County	Population estimates						April 1, 2000		Percent Change	
		July 1, 2004	July 1, 2003	July 1, 2002	July 1, 2001	July 1, 2000	Estimates base	Census	2000-2004	2003-2004	
Adairville	Logan	927	919	918	919	920	920	920	0.9	0.9	
Albany	Clinton	2,265	2,247	2,235	2,225	2,221	2,220	2,220	0.8	0.8	
Alexandria	Campbell	8,016	8,112	8,194	8,265	8,285	8,286	8,286	-3.3	-1.2	
Allen	Floyd	150	150	150	150	150	150	150	0.0	0.0	
Anchorage	Jefferson	2,500	2,465	2,419	2,380	2,339	2,328	2,264	7.4	1.4	
Arlington	Carlisle	390	393	394	393	394	395	395	-1.3	-0.8	
Ashland	Boyd	21,586	21,706	21,709	21,754	21,897	21,967	21,981	-1.7	-0.6	
Auburn	Logan	1,483	1,473	1,467	1,457	1,447	1,444	1,444	2.7	0.7	
Audubon Park	Jefferson	1,543	1,547	1,544	1,544	1,545	1,545	1,545	-0.1	-0.3	
Augusta	Bracken	1,259	1,232	1,224	1,213	1,205	1,204	1,204	4.6	2.2	
Bancroft	Jefferson	543	543	540	538	536	536	536	1.3	0.0	
Barbourmeade	Jefferson	1,274	1,274	1,267	1,264	1,261	1,260	1,260	1.1	0.0	
Barbourville	Knox	3,515	3,511	3,513	3,531	3,588	3,589	3,589	-2.1	0.1	
Bardstown	Nelson	10,897	10,836	10,800	10,784	10,775	10,760	10,374	1.3	0.6	
Bardwell	Carlisle	790	795	798	796	798	799	799	-1.1	-0.6	
Barlow	Ballard	715	711	701	707	718	717	715	-0.3	0.6	
Beattyville	Lee	1,164	1,180	1,182	1,186	1,194	1,193	1,193	-2.4	-1.4	
Beaver Dam	Ohio	3,100	3,070	3,054	3,032	3,033	3,035	3,033	2.1	1.0	
Bedford	Trimble	743	723	712	695	675	672	677	10.6	2.8	
Beechwood Village	Jefferson	1,175	1,177	1,174	1,173	1,173	1,173	1,173	0.2	-0.2	
Bellefonte	Greenup	846	832	832	838	836	837	837	1.1	1.7	
Bellemeade	Jefferson	876	877	873	872	871	871	871	0.6	-0.1	
Bellevue	Campbell	6,091	6,206	6,304	6,396	6,466	6,480	6,480	-6.0	-1.9	
Bellewood	Jefferson	305	305	304	304	304	304	300	0.3	0.0	
Benham	Harlan	565	574	581	583	595	599	599	-5.7	-1.6	
Benton	Marshall	4,189	4,177	4,151	4,166	4,191	4,197	4,197	-0.2	0.3	
Berea	Madison	12,738	12,452	12,044	11,740	11,407	11,304	9,851	12.7	2.3	
Berry	Harrison	306	308	307	308	310	310	310	-1.3	-0.6	
Blackey	Letcher	145	147	148	149	152	153	153	-5.2	-1.4	
Blaine	Lawrence	252	249	249	247	245	245	245	2.9	1.2	
Bloomfield	Nelson	868	863	860	858	856	855	855	1.5	0.6	
Blue Ridge Manor	Jefferson	628	629	626	624	623	623	623	0.8	-0.2	
Bonnieville	Hart	364	359	356	350	355	354	354	2.8	1.4	
Booneville	Owsley	108	108	109	110	111	111	111	-2.7	0.0	
Bowling Green	Warren	51,294	50,582	49,998	49,625	49,441	49,325	49,296	4.0	1.4	
Bradfordville	Marion	316	313	311	308	304	304	304	3.9	1.0	
Brandenburg	Meade	2,193	2,161	2,149	2,123	2,071	2,049	2,049	7.0	1.5	
Bremen	Muhlenberg	365	365	364	365	365	365	365	0.0	0.0	
Briarwood	Jefferson	556	557	555	554	554	554	554	0.4	-0.2	
Brodhead	Rockcastle	1,199	1,196	Page 196	1,190	1,196	1,193	1,193	0.5	0.3	
Brock Pointe	Jefferson	297	297	296	295	294	294	294	1.0	0.0	

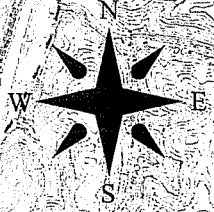
Appendix D

Existing Facilities Map

LEGEND

- 2 INCH W.L.
- 3 INCH W.L.
- 4 INCH W.L.
- 6 INCH W.L.
- 8 INCH W.L.

MASTER
METER



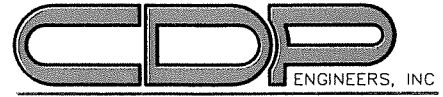
WATER TANK
125,000 GAL
STANDPIPE

BOOSTER
PUMP
STATION

APPENDIX D-1
EXISTING FACILITIES MAP
SOUTHSIDE WATER DISTRIBUTION SYSTEM
BEATTYVILLE, LEE COUNTY, KENTUCKY

SCALE: 1"=3000'

NOVEMBER 2005



CARTER DIXON PARTNERS

3250 BLAZER PARKWAY, LEXINGTON, KENTUCKY 40509
PHONE: (859) 264-7500 FAX: (859) 264-7501

04085-APPNDX_D-1.DWG

Appendix E

Water Purchase Agreement

This contract for the sale and purchase of water is entered into as of the 1st day of September 2002 between the City of Beattyville

Beattyville, Ky 41311

(Address)

hereinafter referred to as the "Seller" and the South Side Water Association, Inc.

P.O. Box 1007 Beattyville, Ky 41311

(Address)

hereinafter referred to as the "Purchaser",

WITNESSETH:

Whereas, the Purchaser is organized and established under the provisions of Statutes, KRS, Chapter 273 of the Code of Commonwealth of Ky. for the purpose of constructing and operating a water supply distribution system serving water users within the area described in plans now on file in the office of the Purchaser and to accomplish this purpose, the Purchaser will require a supply of treated water, and

Whereas, the Seller owns and operates a water supply distribution system with a capacity currently capable of serving the present customers of the Seller's system and the estimated number of water users to be served by the said Purchaser as shown in the plans of the system now on file in the office of the Purchaser, and

Whereas, by Resolution No. _____ enacted on the _____ day of _____, 19 _____, by the Seller, the sale of water to the Purchaser in accordance with the provisions of the said Resolution was approved, and the execution of this contract carrying out the said Resolution by the Mayor, City of Beattyville and attested by the Secretary, was duly authorized, and

Whereas, by Resolution of the Board of Directors, South Side Water of the Purchaser, enacted on the _____ day of _____, 19 _____ the purchase of water from the Seller in accordance with the terms set forth in the said Resolution was approved, and the execution of this contract by the Chairman and attested by the Secretary was duly authorized;

Now, therefore, in consideration of the foregoing and the mutual agreements hereinafter set forth,

A. The Seller Agrees:

1. (Quality and Quantity) To furnish the Purchaser at the point of delivery hereinafter specified, during the term of this contract or any renewal or extension thereof, potable treated water meeting applicable purity standards of the State Department of Health

in such quantity as may be required by the Purchaser not to exceed 2,500,000 gallons per month.

... (Quantity and Pressure) That water will be furnished at a reasonably constant pressure calculated

... from an existing 8" inch main supply at a point located

... of Main Street, back of Post Office

... greater pressure than that normally available at the point of delivery is required by the Purchaser, the cost of providing such greater pressure shall be borne by the Purchaser. Emergency failures of pressure or supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake or other catastrophe shall excuse the Seller from this provision for such reasonable period of time as may be necessary to restore service.

3. (Metering Equipment) To furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type for properly measuring the quantity of water delivered to the Purchaser and to calibrate such metering equipment whenever requested by the Purchaser but not more frequently than once every twelve (12) months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. The previous readings of any meter disclosed by test to be inaccurate

shall be corrected for the three (3) months previous to such test in accordance with the percentage of inaccuracy found by such tests. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller

and Purchaser shall agree upon a different amount. The metering equipment shall be read on 15th day of each month. An appropriate official of the Purchaser at all reasonable times shall have access to the meter for the purpose of verifying its readings.

4. (Billing Procedure) To furnish the Purchaser at the above address not later than the 10th day of each month, with an itemized statement of the amount of water furnished the Purchaser during the preceding month.

B. The Purchaser Agrees:

1. (Rates and Payment Date) To pay the Seller, not later than the 20th day of each month, for water delivered in accordance with the following schedule of rates:

a. \$ _____ for the first _____ gallons, which amount shall also be the minimum rate per month.

b. \$ _____ cents per 1000 gallons for water in excess of _____ gallons but less than _____ gallons.

c. \$ _____ cents per 1000 gallons for water in excess of _____ gallons.

**\$3.00 per thousand gallons

2. (Connection Fee) To pay as an agreed cost, a connection fee to connect the Seller's system with the system of the Purchaser, the sum of none dollars which shall cover any and all costs of the Seller for installation of the metering equipment and Done and paid for by the Purchaser

agreed between the Seller and the Purchaser as follows:

1. (Term of Contract) That this contract shall extend for a term of 50 years from the date of the initial delivery of any water as shown by the first bill submitted by the Seller to the Purchaser and, thereafter may be renewed or extended for such term, or terms, as may be agreed upon by the Seller and Purchaser.

2. (Delivery of Water) That ten (10) days prior to the estimated date of completion of construction of the Purchaser's water supply distribution system, the Purchaser will notify the Seller in writing the date for the initial delivery of water.

3. (Water for Testing) When requested by the Purchaser the Seller will make available to the contractor at the point of delivery, or other point reasonably close thereto, water sufficient for testing, flushing, and trench filling the system of the Purchaser during construction, irrespective of whether the metering equipment has been installed at the time, at a

flat charge of \$ 500.00 which will be paid by the contractor or, on his failure to pay, by the Purchaser.

4. (Failure to Deliver) That the Seller will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to furnish the Purchaser with quantities of water required by the Purchaser. Temporary or partial failures to deliver water shall be remedied with all possible dispatch. In the event of an extended shortage of water, or the supply of water available to the Seller is otherwise diminished over an extended period of time, the supply of water to Purchaser's consumers shall be reduced or diminished in the same ratio or proportion as the supply to Seller's consumers is reduced or diminished.

5. (Modification of Contract) That the provisions of this contract pertaining to the schedule of rates to be paid by the Purchaser for water delivered are subject to modification at the end of every ONE (1) year period. Any increase or decrease in rates shall be based on a demonstrable increase or decrease in the costs of performance hereunder, but such costs shall not include increased capitalization of the Seller's system. Other provisions of this contract may be modified or altered by mutual agreement.

6. (Regulatory Agencies) That this contract is subject to such rules, regulations, or laws as may be applicable to similar agreements in this State and the Seller and Purchaser will collaborate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

7. (Miscellaneous) That the construction of the water supply distribution system by the Purchaser is being financed by a loan made or insured by, and/or a grant from, the United States of America, acting through the Farmers Home Administration of the United States Department of Agriculture, and the provisions hereof pertaining to the undertakings of the Purchaser are conditioned upon the approval, in writing, of the State Director of the Farmers Home Administration.

8. (Successor to the Purchaser) That in the event of any occurrence rendering the Purchaser incapable of performing under this contract, any successor of the Purchaser, whether the result of legal process, assignment, or otherwise, shall succeed to the rights of the Purchaser hereunder.

* It is further agreed that both the Seller and the Purchaser shall meet and negotiate a new contract at least thirty (30) days before the expiration date of said contract.

* The new rate set forth in this contract begins with the billing and is not retroactive.

Parties hereto, acting under authority of their respective governing bodies, have caused this contract to be executed in three (3) counterparts, each of which shall constitute an original.

Seller: CITY OF BEATTYVILLE
Charles Knack Mayor

By _____

Title _____

Attest: R.P. Bassant
Secretary

Purchaser:
SOUTHSIDE WATER ASSOCIATION, INC

By [Signature]
Chairman

Attest: [Signature]
Secretary

This contract is approved on behalf of the Farmers Home Administration this _____ day of _____, 19 _____.

By _____

Title _____

Appendix F

Expenses and Revenues

Southside Water Association, Beattyville, Kentucky
Statement of Revenues and Expenses for Water Accounts
(taken from 2002 through 2004 Annual Audits by John T. Lane, PSC)

	FY 2002	Water Funds FY 2003	FY 2004
Operating Revenues			
Water Sales	\$187,279	\$181,635	\$176,835
Miscellaneous	\$0	\$882	\$6,005
Total Operating Revenues	\$187,279	\$182,517	\$182,840
Operating Expenses			
Utilities	\$3,341	\$3,844	\$4,564
Salaries	\$41,178	\$40,994	\$42,375
Taxes	\$10,018	\$11,437	\$10,823
Supplies	\$4,561	\$12,535	\$5,267
Office expense	\$3,189	\$3,141	\$2,984
Insurance	\$6,822	\$8,714	\$9,579
Water purchased	\$77,540	\$76,849	\$72,331
Outside services	\$1,325	\$2,325	\$16,706
Other	\$924	\$4,086	\$3,657
Depreciation	\$5,078	\$5,149	\$5,190
Total Operating Expenses	\$153,976	\$169,074	\$173,476
Operating Income (Loss)	\$33,303	\$13,443	\$9,364
Non-Operating Revenues (Expenses)			
Interest Revenue	\$900	\$339	\$193
Net Nonoperating Revenues (Expenses)	\$900	\$339	\$193
Net Income (Loss)	\$35,103	\$14,121	\$9,557

Southside Water Association, Beattyville, Kentucky
Estimated Future Revenues and Expenses for Water Accounts

	Estimated Water Funds				
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Operating Revenues					
Water Sales	\$182,140	\$187,604	\$193,232	\$199,029	\$205,000
Miscellaneous (other operating)	\$6,185	\$6,371	\$6,562	\$6,759	\$6,961
Total Operating Revenues	\$188,325	\$193,975	\$199,794	\$205,788	\$211,962
Operating Expenses					
Utilities	\$5,249	\$6,036	\$6,941	\$7,982	\$9,180
Salaries	\$43,858	\$45,393	\$46,982	\$48,626	\$50,328
Taxes	\$10,985	\$11,150	\$11,317	\$11,487	\$11,659
Supplies	\$5,794	\$6,373	\$7,010	\$7,711	\$8,483
Office expense	\$2,894	\$2,808	\$2,723	\$2,642	\$2,562
Insurance	\$10,824	\$12,231	\$13,822	\$15,618	\$17,649
Water purchased	\$74,501	\$76,736	\$79,038	\$81,409	\$83,851
Outside services	\$4,100	\$4,600	\$5,100	\$5,600	\$6,100
Other	\$3,291	\$2,962	\$2,666	\$2,399	\$2,159
Depreciation	\$5,242	\$5,294	\$5,347	\$17,401	\$17,575
Interest Payments				\$16,500	\$16,500
Total Operating Expenses	\$166,739	\$173,584	\$180,947	\$217,377	\$226,047
Operating Income	\$21,587	\$20,391	\$18,847	(\$11,589)	(\$14,085)
Non-Operating Revenues (Expenses)					
Interest Revenue	\$193	\$193	\$193	\$193	\$193
Total Non-Operating Revenues (Expenses)	\$193	\$193	\$193	\$193	\$193
Net Income (rounded)	\$21,780	\$20,584	\$19,040	(\$11,396)	(\$13,892)
Outstanding Principal Expenses	\$0	\$0	\$0	\$3,500	\$3,850
	\$21,780	\$20,584	\$19,040	(\$7,896)	(\$10,042)

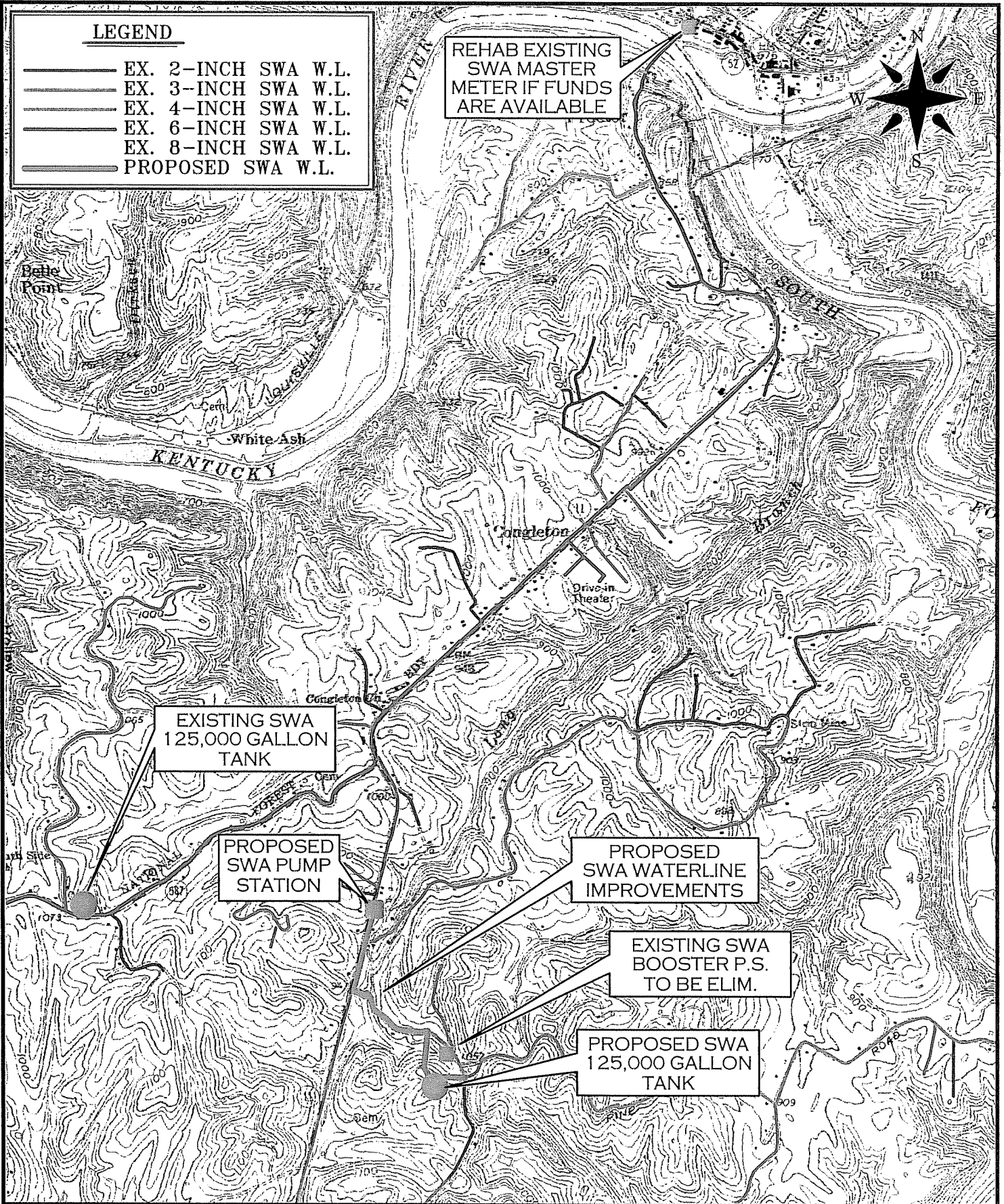
Appendix G

Proposed Improvements

LEGEND

- EX. 2-INCH SWA W.L.
- EX. 3-INCH SWA W.L.
- EX. 4-INCH SWA W.L.
- EX. 6-INCH SWA W.L.
- EX. 8-INCH SWA W.L.
- PROPOSED SWA W.L.

REHAB EXISTING
SWA MASTER
METER IF FUNDS
ARE AVAILABLE



APPENDIX G-1

**SCHEMATIC LAYOUT WITH PROPOSED IMPROVEMENTS
SOUTHSIDE WATER DISTRIBUTION SYSTEM
BEATTYVILLE, LEE COUNTY, KENTUCKY**

SCALE: 1"=2000'

NOVEMBER 2005

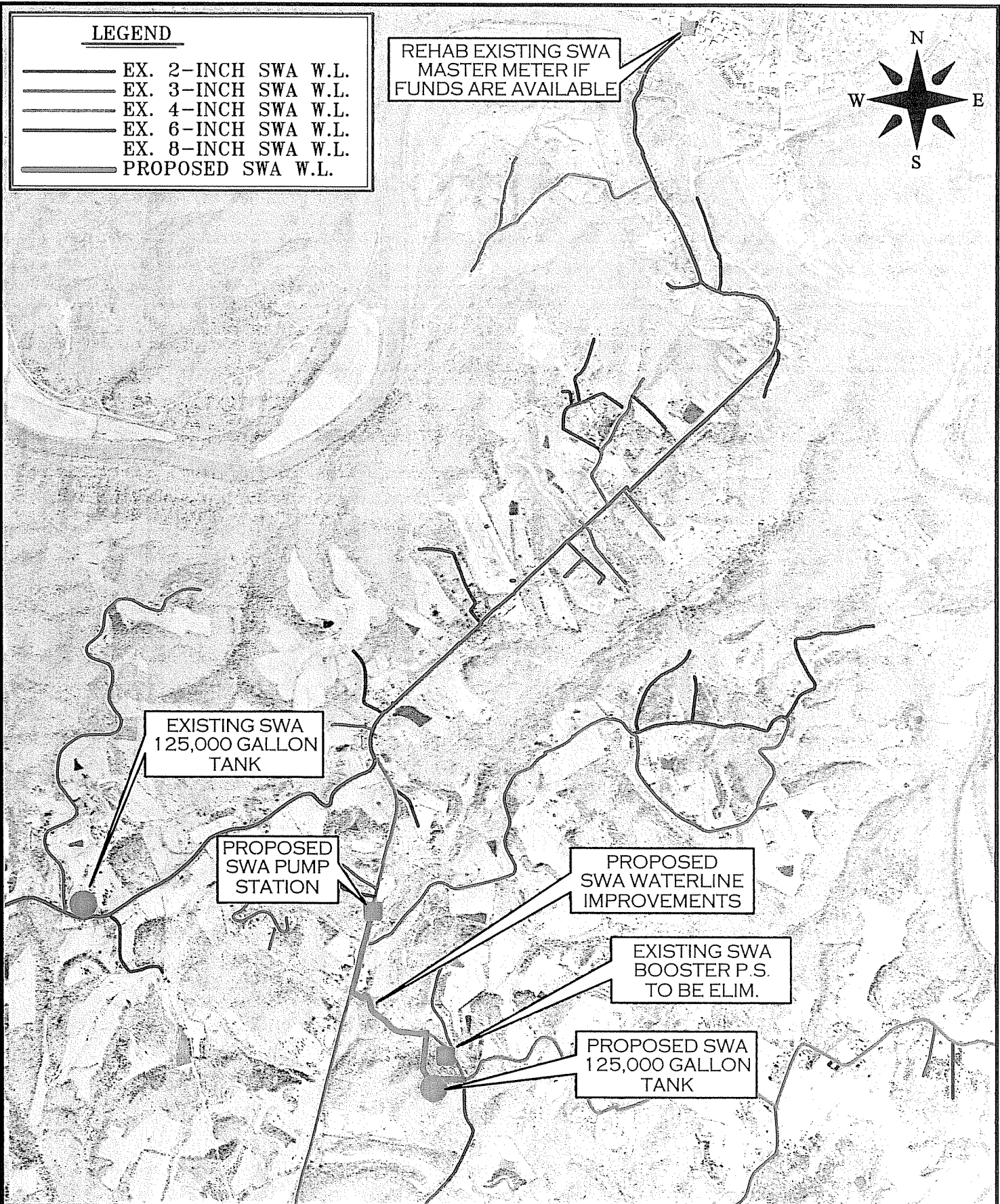
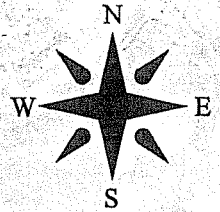


3250 BLAZER PARKWAY, LEXINGTON, KENTUCKY 40509
PHONE: (859) 264-7500 FAX: (859) 264-7501

LEGEND

- EX. 2-INCH SWA W.L.
- EX. 3-INCH SWA W.L.
- EX. 4-INCH SWA W.L.
- EX. 6-INCH SWA W.L.
- EX. 8-INCH SWA W.L.
- PROPOSED SWA W.L.

REHAB EXISTING SWA
MASTER METER IF
FUNDS ARE AVAILABLE



APPENDIX G-2

**SCHEMATIC LAYOUT WITH PROPOSED IMPROVEMENTS
SOUTHSIDE WATER DISTRIBUTION SYSTEM
BEATTYVILLE, LEE COUNTY, KENTUCKY**

SCALE: 1"=2000'

NOVEMBER 2005



3250 BLAZER PARKWAY, LEXINGTON, KENTUCKY 40509
PHONE: (859) 264-7500 FAX: (859) 264-7501

Appendix H
Cost Estimates

**Opinion of Probable Project Cost
Water Main Replacement Project
Southside Water Association
Beattyville, Kentucky**

<i>Item</i>	<i>Description</i>	<i>Qty</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Total Cost</i>
1.	Mobilization	1	LS	\$10,000	\$10,000
2.	General Conditions	1	LS	\$5,000	\$5,000
3.	6-inch PVC	3,700	LF	\$30	\$111,000
4.	4-inch PVC	600	LF	\$26	\$15,600
5.	12-inch Steel Encasement Pipe (Bore & Jack)	80	LF	\$175	\$14,000
6.	Booster Pump Station	1	LS	\$75,000	\$75,000
7.	125,000 Gallon Ground Storage Tank	1	LS	\$180,000	\$180,000
8.	Tank Foundation & Site Work	1	LS	\$20,000	\$20,000
9.	Demobilization	1	LS	\$5,000	\$5,000
	Construction Cost Opinion				\$435,600
	Contingency at 10%				\$43,560
	Total Opinion of Construction Cost (rounded)				\$480,000
	Administration				\$2,000
	Legal				\$2,000
	Land Acquisition				\$5,000
	Preliminary Engineering Report				\$10,000
	Resident Inspection			5.16%	\$23,000
	Design Engineering and Contract Administration			8.64%	\$38,000
	Additional Engineering				\$5,000
	Interest During Construction				\$3,000
	Total Opinion of Probable Project Cost				\$568,000

