

2015

ECONOMIC FEASIBILITY STUDY

**RIDGE CREEK WATER SYSTEM, LLC
PULASKI COUNTY, MISSOURI**

SYSTEM ID: MO4031631



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Appendix 3



ECONOMIC FEASIBILITY STUDY

FOR

RIDGE CREEK WATER SYSTEM, LLC

PULASKI COUNTY, MISSOURI

SYSTEM ID: MO4031631

Prepared For:
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Prepared By:
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Date Prepared: July, 2015

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ECONOMIC FEASIBILITY STUDY

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Introduction

This Economic Feasibility Study is prepared to support an application by Ridge Creek Water System, LLC (Ridge Creek) to the Public Service Commission (PSC) for a Certification of Convenience and Necessity (CCN).

The PSC has published a guideline of Recommendations Regarding Information to be Included in Economic Feasibility Studies which the PSC provided to Ridge Creek.

In this report, the Consultant, David Krehbiel, has utilized this guideline as an outline for providing responses and information supporting the application.

Description of Company, Objectives, Area Served

Michael and Denise Stoner purchased acreage north of St. Robert, Missouri, in Pulaski County a little over 10 years ago with the purpose of developing a residential subdivision.

Ridge Creek Development, LLC was formed by the Stoner's as the company responsible for the development. Ridge Creek was developed in 4 phases, with Plats 1, 2, 3, and 4 being filed in the Pulaski County Recorder's Office. Plat 3 is separated from the other subdivisions by approximately one-half mile.

The PSC has suggested that the certificated area be separated into two separate parcels. The Consultant and Ridge Creek have discussed this with PSC staff and concur with the PSC in their outline of the two parcels.

A general plat of the area and a plat of the area, prepared by staff, is enclosed as Exhibit A in this report.

Plan/Plat of Proposed System and Estimate of Costs

There are no plats or plans of the existing water supply and distribution system.

Residential meters are installed at each connection. In some cases, dual meters are installed in one meter pit. Many of the meters are installed along the back property lines rather than the common placement along right-of-ways.

There are also 22 separate, independent systems.

In order to best identify the location of the distribution lines, the Consultant has recommended that Ridge Creek have a surveyor to GPS the well and meter locations. With these locations, the Consultant believes that the location of the distribution lines can be platted with a reasonable degree of accuracy.

Description of Existing Facilities and Costs

With the locations of the water lines, the Consultant can complete the estimate of costs.

Description of Proposed Facilities and Estimate of Cost

The only proposed facilities at this time are the installation of 22 master meters within six (6) months after the effective date of an order approving a CCN. This is noted on Page 10 of 11 of the PSC Staff's Recommendations under Paragraph (e).

The Consultant concurs with the staff's recommendation.

The unknown facilities that might be required are those that the Department of Natural Resources (DNR) may require under Ridge Creek's Administrative Order on Consent.

The Consultant is of the opinion that some work will be required each of the next three years but is unable to predict what those might be, or the cost.

Description of Proposed Facilities to be Constructed in Each of the Next Three Years and Estimate of Cost

In accordance with the previous paragraph, Ridge Creek will be installing in the first six (6) months of the first year 22 master meters.

The cost of each master meter is estimated to be \$600 plus fittings at \$100. The labor for each master meter installation is estimated at \$700.00.

Meters and Fittings @ \$700 X 22 =	\$15,400.00
Labor @ \$700 X 22 =	\$15,400.00
Total Cost	\$30,800.00

No estimate can be made for the unpredictable costs associated with the DNR Administrative Order on Consent for the first year and succeeding 2 years.

Type of Existing Dwelling Units, Population and Water Used

Of the 136 existing service connections, 130 are single family residential. Three units are duplexes with each duplex unit being two single family residences.

No commercial customers are connected, nor are any anticipated.

The individual meters aren't being read and there are no master meters. The Consultant cannot supply a figure other than that assumed by the PSC staff. The Consultant would concur with the staff's figure having made the best estimate possible.

Type of Dwelling Units and Population Estimated to be Added in Each of the Next Three Years and Estimates of Water Usage

No additions are anticipated in the next three years.

Proposed and Existing Rates, Connection Fees and Other Charges

The proposed rates are as follows:

Based on Ridge Creek projections of expenses, using a return on equity ("ROE") of 8.090% is \$71,707.00. Ridge Creek recommends that the Commission approve monthly residential rates of \$18.50 as a customer charge and a commodity charge of \$4.54 per 1,000 gallons, which would result in a monthly bill of \$43.02 plus 26 cents for the DNR Primacy Fees for a customer using 5,400 gallons per month. Ridge Creek believes that a flat rate of \$43.00 per month should be used temporarily for up to three months for any existing customers that do not presently have working meters.

Ridge Creek would accept the Staff's Recommendations on Page 10 of 11, May 22, 2015, Paragraph (d.) which include a late charge of \$25.00 and a trip charge of \$15.00 for turn-on and turn-off activity or emergency calls that involve customer responsibility.

The above proposed rates were developed as follows:

The figures in Exhibit B were broken down on a customer charge vs a commodity charge. The customer charge being 43 percent of the total and commodity charge being 57 percent.

Forty three percent was multiplied times the Total Operating Expenses, then divided by 136 customers and divided again by 12 months to arrive at a monthly customer charge.

Fifty seven percent was multiplied by the Total Operating Expenses, then divided by 136 customers and divided again by 12 to establish a monthly figure. This figure was divided once again by 5.4 to get a per 1000 gallonage charge.

The Consultant accepted the 5400 gallon monthly average figure estimated by the PSC staff and used in their calculations.

Existing rates are a flat fee of \$33.00 per month per customer.

Statement of Current Income from Any Existing Facilities

The estimated current income from the existing facilities is \$53,856.00. This is based on \$33.00 flat rate per month and that all 136 customers pay their bill.

Detailed Estimate of Income per Year for Each of the Next Three Years from Water Sales and Other Proposed Charges

The estimate is \$71,707.00 per year for each of the next three years.

Statement of Operating Expenses in Connection with Existing Facilities

The Consultant was unable to determine this figure.

Detailed Estimate of Operating Expenses for Each of the Next Three Years

See Exhibit B.

Plans for Financing and Proposed Capital Structure of Company

When the PSC staff reviewed the Ridge Creek operation, along with the books and records, they observed the availability of credit and equity reserves. The Consultant, based on the staff's comments (Staff's Recommendations, Page 7 of 11, May 22, 2015, Paragraph title "Financial Capacity") and the Consultant's review of those documents, concurs with the staff's assessment, but would caution that those funds are limited.

Plans for Protection of the Financial Integrity of the Utility during the Development Years

Since Ridge Creek is a recently established company, it has limited cash resources. It is important that the rates be established to cover expenses.

The Consultant would emphasize that it is important that the rates established cover expenses.

The PSC staff in the Staff's Recommendation (Page 11 of 11, May 22, 2015, Paragraph (k.) suggests that staff perform a rate review within 12 to 18 months after rates become effective for the Company in this case. The Consultant would recommend that rate review within 12 months.

Name of the Professional Operator and Qualifications, or Operation-Management Firm to be Responsible for Operation and Maintenance of the Facilities

DNR requires a licensed DS-II to operate this system.

It is anticipated that a licensed operator will be required on a part time basis and that these services will be contracted on a monthly fee basis.

Ridge Creek is currently contacting operators that provide this service and anticipates contracting for the operation of the facility.

Name of the Person or Management Firm to be Responsible for Managing the Utility's Business Activities, and Contact Person for Customer Inquiries

Mrs. Denise Stoner, owner of Ridge Creek, will be responsible for the management of the utility and will be the contact person.

Copy of Proposed Management Contracts

There are no proposed management contracts.

Succession Plan for Future Ownership of the Company and the Utility Assets

Ridge Creek's plan is to sell the system to another entity either private or public.

Efforts to set up a homeowner's association a number of years ago by Ridge Creek were unsuccessful.

Ridge Creek has been contacted recently by one private company but there has been no follow up on behalf of the private company.

The two adjoining municipalities of St. Robert and Waynesville have expressed an interest in the system and there is a current engineering study being done by the City of Waynesville with a DNR funded grant to determine the feasibility of the City of Waynesville purchasing the system.

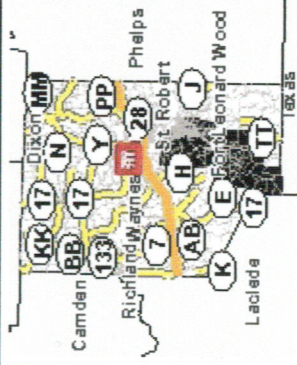
Respectfully submitted,

A handwritten signature in black ink, appearing to read "David Krehbiel", written in a cursive style.

David Krehbiel, PE, PLS

EXHIBIT A

Pulaski County, MO



Legend

- Interstate
- State Highway
- Road
- Corporate Limit
- Parcel
- Section
- County Boundary
- FT_LEONARD_BLACKOUT_F

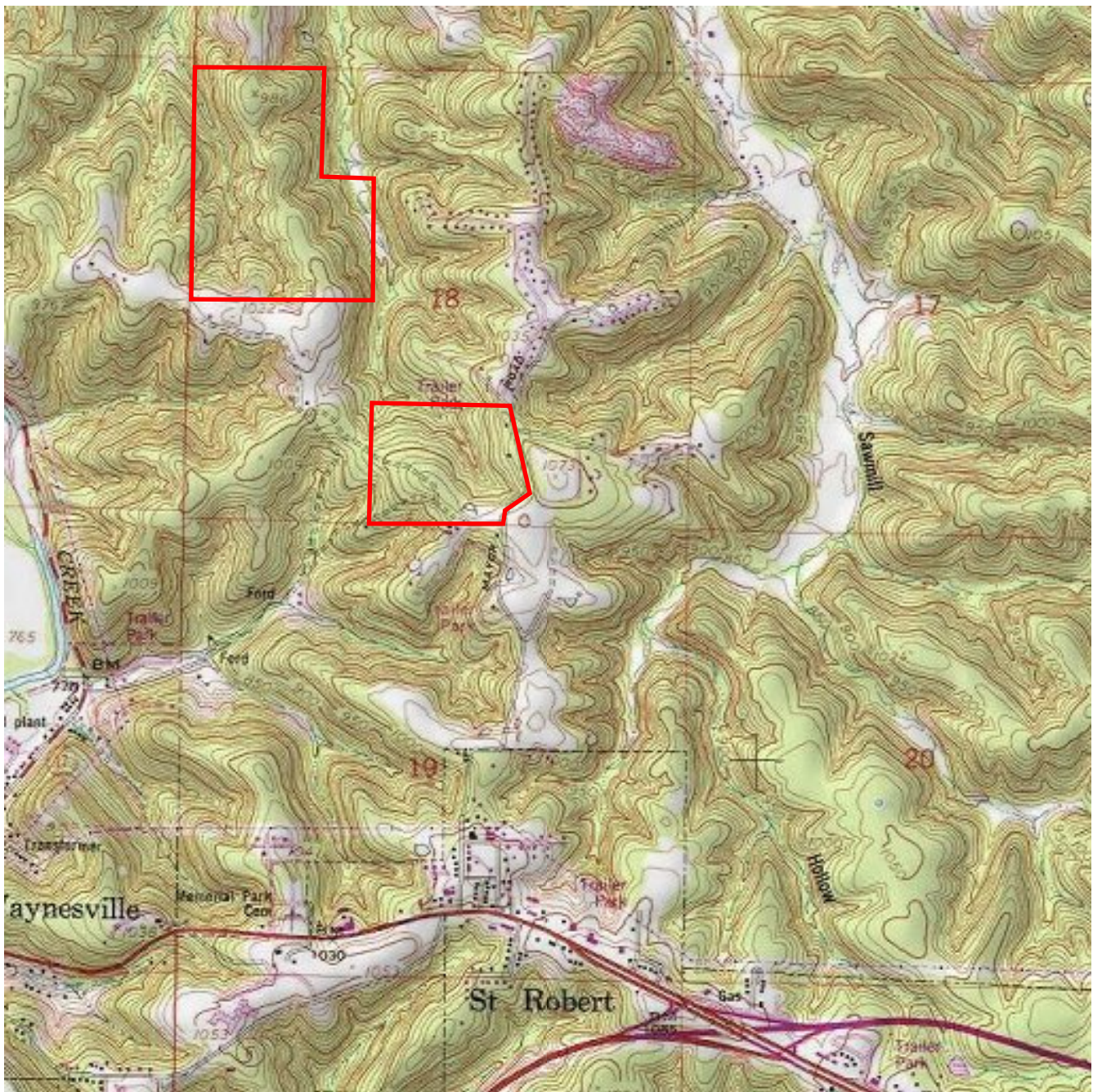


1: 21,709

3,618.2 0 1,809.12 3,618.2 Feet

Notes

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION



An area that includes Ridge Creek Plats 1,2, and 4 –
the W $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 18, t36n, r11w;
the W $\frac{1}{2}$ of the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of said Section 18.
Also, an area that includes Ridge Creek Plat 3 -
the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of said Section 18;
the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of said Section 18 that lies west of Laramie Road.

	<u>Yearly Projections</u>
1 OPERATIONS EXPENSES	
2 Management Salary	\$5,600.00
3 Operators Salary/Contractor Services	\$13,100.00 ¹
4 Electricity	\$10,876.00
7 TOTAL OPERATIONS EXPENSES	<u>\$29,576.00</u>
8 MAINTENANCE EXPENSES	
9 Outside Services Employed	\$6,000.00
10 System Repairs & Maintenance	\$3,000.00
11 Lab & Testing Fees	\$200.00 ²
12 Supplies Expense	\$0.00
13 TOTAL MAINTENANCE EXPENSES	<u>\$9,200.00</u>
14 CUSTOMER ACCOUNT EXPENSE	
15 Meter Reading	\$5,400.00
16 Billing & Collections	\$3,264.00
17 Office Supplies	\$0.00
18 Postage Expense	\$0.00
19 Uncollectable Accounts	\$0.00
20 TOTAL CUSTOMER ACCOUNT EXPENSES	<u>\$8,664.00</u>
21 ADMINISTRATIVE & GENERAL EXPENSES	
22 Administrative & General Salaries	\$0.00
23 Accounting Fees (Tax Preparation)	\$800.00
24 Legal Fees	\$500.00
25 Engineering Fees	\$10,000.00
26 Telephone	\$1,644.00
27 Office Utilities (phone)	\$0.00
28 Vehicle Expense	\$0.00
29 Vehicle Insurance	\$0.00
30 Medical Insurance	\$0.00
31 Property & Liability Insurance	\$0.00
32 Rent	\$600.00
33 Other Misc. Expenses	\$0.00
39 TOTAL ADMINISTRATIVE & GENERAL EXPENSES	<u>\$13,544.00</u>
40 OTHER OPERATING EXPENSES	
41 MO DNR Fees (Primacy Fees)	\$421.20 ³
42 PSC Assessment	\$672.00
43 Corporate Registration	\$20.00
44 CIAC Amortization Expense	-\$11,188.00
45 Depreciation	\$14,785.00
46 Rate of Return	\$2,505.00
47 Interest	\$1,528.00
48 License and Permit Fees	\$24.00
49 TOTAL OTHER OPERATING EXPENSES	<u>\$8,346.00</u>

50 TAXES OTHER THAN INCOME	
51 Real & Personal Property Taxes	\$1,215.00
52 Sales Tax	\$0.00
53 Payroll Taxes	\$0.00
54 TOTAL TAXES OTHER THAN INCOME	<hr/> \$1,215.00
55 INCOME TAXES	\$1,162.00
TOTAL OPERATING EXPENSE	<hr/> \$71,707.00

¹ The operator's salary may have to be adjusted to include the collection of samples from 22 wells.

²Refer to Thais Folta email 7/9/2015 to Mark Comley.

³The Primacy Fee of \$421.20 will be collected by the Company as a separate line item on the customer's bill.

A question remains about the statement in the referenced email, "except lead and copper samples", as to whether additional charges will be assessed Ridge Creek by DNR.

NARRATIVE IN SUPPORT OF THE FIGURES SUPPLIED IN EXHIBIT B

NOTE: A document in much the same format as this was supplied to the Commission as a "Narrative in Response to Staff Data Request Number 3". The reviewer of this document will note that some of the narrative and figures have been changed.

Line Item 2, Management Salary

The management salary was calculated at 8% of \$70,000.00. The \$70,000.00 represents the approximate anticipated income for Ridge Creek.

Result:

\$5,600.00

Line Item 3, Operators Salary / Contractor Services

This project requires a level DS-II operator. I am familiar with DS-II operators that are charging from \$1,100.00 – 1,500.00 per client per month.

I could not find a DS-II operator that would quote services on the basis of minutes per well approach as Staff has estimated. The only charges that I could find were on a fixed fee monthly basis.

I could find no other system like the Ridge Creek system which could be used as a comparison to estimated operator's salary/contractor services. The monthly billings that I saw ranged from \$1,100 to \$1,500 per month and were for one and two well systems.

I have discussed this subject with two licensed operators (DS-II), Chad Stout and Joshua Duncan. Mr. Stout is the contract operator for multiple systems including the Osage Water Company with is under the Receivership of Mr. Gary Cover. Mr. Duncan is the operator for PWSD No. 4, Camden County. Although Mr. Duncan is not the operator for other systems, he is familiar with private operators and what they are charging.

Result:

\$1,100.00 X 12 months = \$13,100.00

Line Item 4, Electricity

I concur with the figure included in the Staff's Recommendation and their use of the normalized level approach for this project.

Line Item 9, Outside Services

Ridge Creek Development (Ridge Creek) contracted recently with Lebanon Pump to install replacement electrical line and bladder pressure tanks. These invoices have been submitted to Mr. Archer. These invoices included \$2,300.00 in labor costs.

Based on the make-up of the system, 22 wells and 44 bladder pressure tanks, I estimated 3 similar occurrences per year.

Results:

3 occurrences X \$2,000.00 = \$6,000.00

Line Item 10, System Repairs & Maintenance

Estimated at 6 occurrences per year at \$500.00 labor and equipment rental to repair lines and valves.

Results:

6 occurrences X \$500.00 = \$3,000.00

The PSC staff provided no figure for this item. The most cost effective approach for repairing water line breaks and valve malfunctions would be to hire a local person with a backhoe to make these repairs. I have estimated these occurrences to be approximately once every two months.

Line Item 11, Lab & Testing Fees

This figure has been revised in accordance with Ms. Folta's email.

Line Item 15, Meter Reading

Computations are shown on the attached sheet.

Time to read the meters was determined from the following factors:

- Uncover and read and record meter reading and verify.
- Travel from water company office to system site.
- Clear some meter pits so meter can be read.
- Reread some meters because of errors in readings.
- Read some meters in back yards with customer consent.
- Have customer unlock gates to back yards.

Line Item 23, Accounting Fees

Actual figure supplied by Ridge Creek.

Result:

\$795.04

Line Item 25, Engineering Fees

There are two primary factors that will control the amount of engineering services in the coming year(s):

- The very nature of the systems with 22 wells and 44 bladder pressure tanks.
- The Administrative Order on Consent with DNR.

In 50 years of consulting engineering private practice on water supply, storage and distribution systems, I know of no other comparable project where I, or another consultant, have been engaged.

The system, in most part, is 10 years old. The Owner is under an Administrative Order on Consent with the Department of Natural Resources and I am familiar with the conditions of that Order. In my 50 years of private practice, I have worked with, and under, DNR regulations the past 40 years, and prior to the reorganization, the Department of Health for 10 years.

It is my professional judgment, based on my personal experience; the engineering fee of \$10,000 per year is a conservative figure.

Line Item 26, Telephone

Actual figure supplied by Ridge Creek.

Result:

$\$137.00 \text{ per month} \times 12 = \$1,644.00.$

Line Item 42, PSC Assessment

Adjusted for increase in projected rate design schedule.

Result:

Estimate = \$672.00