R | S | A ROSS, SINCLAIRE & ASSOCIATES

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40602

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INVESTMENT BANKING

FINANCIAL ADVISORY

PUBLIC FINANCE

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Cincinnati, OH
45202

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fax: 513/381-0124

1219 Assembly Street
Suite 202
Columbia, SC
29201

803/765-1004
fax: 803/765-1088

1900 Envoy Circle
Suite 1920
Louisville, KY
40299

502/491-3939
fax: 502/491-9979

5217 Maryland Way
Suite 302
Brentwood, TN
37027

615/370-6262
fax: 615/370-9669

SIPC

NASD MEMBER FINRA

July 8, 2005

Ms. Beth A. O'Donnell, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
PO Box 615
Frankfort, Kentucky 40602-0615

Case 2005-00291

RE: Boone County, Kentucky - Certificate of Convenience and Necessity

Dear Ms. O'Donnell:

I am enclosing herewith one (1) original and 10 copies of an application, with accompanying exhibits, requesting that the Public Service Commission grant a Certificate of Convenience and Necessity to the County of Boone, Kentucky as it relates to their plans to finance, construct, operate and maintain a public water distribution system to an unserved area in southern and western Boone County to be known as the Subdistrict B area. This application is quite unique in the fact that the existing customer base in the rural area of this portion of the County is not sufficient to service the debt. Therefore, the County has agreed to issue and assume all liability for the Bonds. The County will enter into an agreement with the Boone County Water District to operate and maintain the system.

This project has been in the planning stages for some time and we would appreciate an Order be issued granting approval to the County pursuant to the Petition in their favor no later than August 15, 2005. Thank you in advance for your assistance. Please feel free to contact me or Jim Parsons at the County should you have any questions concerning the project or the application.

Yours truly,

Vince Gabbert
Attorney-at-Law

Enclosures

cc: Distribution List

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF THE COUNTY OF BOONE, KENTUCKY TO THE KENTUCKY PUBLIC SERVICE COMMISSION REQUESTING THAT THEY GRANT A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF A PUBLIC WATER DISTRIBUTION SYSTEM IN AN UNSERVED AREA OF SOUTHERN AND WESTERN BOONE COUNTY.	)	CASE NO. 2005-

PETITION

The County of Boone, Kentucky (the "County"), pursuant to KRS Chapter 278 and 807 KAR 5:001, petitions the Commission for an order authorizing the construction of a water distribution system to serve an area to be known as Subdistrict B, financing of the project and for approval of the rates and charges for the customers to be serviced by these waterline extensions. The following information is filed in accordance with the Commission's regulations:

1. The County's address is P.O. Box 900, Burlington, KY 41005. The County is a political subdivision of the State of Kentucky. The County is governed by a fiscal court consisting of one publically elected county Judge/Executive and three publically elected commissioners. The current members of the County's fiscal court is shown herein under Exhibit A.

2. The County is a political subdivision of the State of Kentucky established by an act of the Kentucky General Assembly and as such has no separate articles of incorporation or by-laws.

3. The County has heretofore issued $5,286,736 in Revenue Bonds to finance the costs of construction and implementation of the Subdistrict A project area, a previously unserved area of the County. The Revenue Bonds issued for the Subdistrict A project were issued in 2002 with a final maturity of 2027, with the Project being owned by the County under the existing Operating and Maintenance Agreement by and between the County and the Boone County Water District ("BCWD").

4. A portion of the County is now served by the City of Florence, Kentucky ("Florence"), the BCWD and the Bullock Pen Water District ("BPWD"). Exhibit B is a map that shows the area now served by Florence, the BCWD, the BPWD and the area served by the County representing Subdistrict A and the proposed area to be served by the County to be known as "Subdistrict B." The areas proposed to be served by the Subdistrict B project is not within the existing service area of the BPWD or the City of Florence, Kentucky. To the best of our knowledge, the Subdistrict B project is within the area of the BCWD.

The County has met on numerous occasions and discussed at length the possibility of the BCWD serving the Subdistrict B area without the County's involvement. At the onset, the County and the BCWD worked closely together in the design and planning for the project. The County used the same design standards for the Subdistrict B project as all other BCWD projects. Their engineer was consulted on the tap-on, valve, flows and hydraulics for the Subdistrict B system. It was mutually decided and agreed upon by both parties that the Subdistrict B project should be financed by the County, because:

i) the project cash flows show that there are not a sufficient number of customers to support the Project costs, including the long-term debt;

ii) there are other areas of the County that the BCWD should focus on serving from its limited resources where the customers can support those expansion and improvement costs;

iii) due to the additional debt that has been or is to be issued by the BCWD, primarily due to the service and storage connections associated with the City of Cincinnati contract as supplier to the BCWD, it was determined that the Subdistrict B debt could detrimentally affect the BCWD bond rating.

The County did not discuss with Florence their serving this area since it was determined that it was in the County's best interest to have those customers now and in the future having some oversight as to rates and tariffs that would be imposed on them, and the City of Florence has a long-standing policy that they will not extend utility services to an unserved area unless that area is annexed and made a part of the City.

No discussions were held with the BPWD. However, it was generally understood that they would not undertake a project that was not economically feasible.

Please find enclosed herewith as Exhibit C, various materials and information that was collected and discussed at meetings held between the BCWD and the County.

5. The County plans to issue its bonds to pay for all the costs of constructing the Subdistrict B water system. Exhibit D is the most current audit of the County.

The County did consider issuing the bonds and entering into a capital lease with BCWD but rather than use the term "capital lease," legal counsel advised the County and the BCWD to issue the debt under the existing Operation and Maintenance Agreement. Any sublease or capital lease agreement would have negatively effected the credit of the BCWD due to the short and long-term obligation of the lease.

6. The proposed project is necessary to provide a potable supply of water to an unserved area of the County where it is not currently economically feasible to extend a public water supply without a subsidy by the County to meet the scheduled principal and interest requirements of the bonds.

7. It is in the best interest of the County and the customers of Subdistrict B that the County issue the bonds to finance the project. It is expected that the rates and the other charges paid by the customers of the Subdistrict B Project area will not be adequate to meet the debt service of the bonds and that the County will need to subsidize the Project in order that there is no default of the bonds. The County is financially sound as shown in its most recent audit and has the financial capability to meet all or a portion of the debt payments due on the project bonds and that said payment will not jeopardize other county services and projects. The County has a "Aa2" rating from Moody's Investors Service, which rating is in the highest rating that is assigned to any county in Kentucky by this nationally recognized rating agency. See Exhibit E for an analysis of the County's underlying bond rating by Moody's Investors Service.

8. Due to previous rulings by the PSC, it is the County's understanding that it qualifies as a "utility" as that term is defined in KRS 278.010 and is subject to all the provisions of KRS Chapter 278, including KRS 278.300. As the record will show, the County, through its legal counsel, requested an opinion from the PSC as to whether previous projects would be regulated as a "utility." The PSC concluded in its August 7, 2001 ruling that the prior project was a utility and would fall within its jurisdiction as to construction and rate setting. Therefore, it is the belief of the PSC that the current Kentucky Revised Statutes define this project to be a "utility" project pursuant to KRS 278.010 and that as such it will be subject to all the provisions of KRS Chapter 278.

9. The total estimated cost of the project, not including bond finance charges, is shown in the schedule enclosed herewith under Exhibit F.

10. Easements are being obtained and finalized for the facilities.

11. This service will not compete with any other utility in the area.

12. The County believes that it is in the public interest that this certificate be granted.

13. The County proposes that the customers of Subdistrict B pay the same rates as are being paid by the customers of the Boone County Water District, which rates and charges are shown herein under Exhibit G. It is also requested that at the same time there is an increase in the rate tariff charges by the BCWD to their customers that are approved by the PSC, that those rate tariffs be the same at all times as the Subdistrict B customers.

14. The County proposes that it will issue in its name approximately $2,750,000 of bonds or bond anticipation notes, which notes or bonds will mature serially over a period of thirty (30) years. The revenue from Subdistrict B is expected to consist of the following customer revenues (the "Project Revenues"):

i) the consumption and use of water based on the approved tariffs for the Subdistrict B area;

ii) the normal and customary meter charges and installation fees charged by the BCWD;

iii) an additional charge of $25 each month to be added to each customers bill.

Collectively, i, ii and iii are referred to in the Operation and Maintenance Agreement between the BCWD and the County as the "District Charges." The BCWD, by agreement with the County (see Exhibit H herein for a copy of the Operation and Maintenance Agreement), will read the meters to measure the customer consumption of water and then bill, collect and account for all the Project Revenues as does its own customers. The BCWD will deduct from the District Charges its cost of the treated water and its cost of operating and maintenance ("O&M") of the Subdistrict B waterworks system, computed by multiplying the total gallons used by the Subdistrict B system times

the O&M cost per 1,000 gallons (the "Adjusted Gross Project Revenues"). The O&M cost shall be adjusted each calendar year based on the then most recent audited O&M cost for the prior calendar year as reported to the Kentucky Public Service Commission by the BCWD in its annual report. The Adjusted Gross Project Revenues will be paid to the County, or to the Paying Agent bank as agent for the County, to be used exclusively for meeting the scheduled principal and interest payment of the Bonds.

If the Adjusted Gross Project Revenues are not adequate in any fiscal year (ending June 30) to meet the scheduled principal and interest payments of the bonds, the County has covenanted to make up any shortfall in payment (the "County Subsidy Payment"). The County will accrete, without interest, and keep an accounting of all the County Subsidy Payments made in support of the Project through the last maturing bond. The Adjusted Gross Project Revenues, when and as received, shall be used by the County in this priority and order:

i) to meet the scheduled interest payment of the bonds;

ii) to meet the scheduled principal payment of the bonds;

iii) to repay the County for any accreted amount owing of its County Subsidy Payments;

iv) to redeem bonds earlier than their scheduled maturity as is provided in the trust indenture or bond ordinance that secures the payment of the bonds.

The County has covenanted that when all the bonds are redeemed, whether by scheduled maturity or earlier redemption, the County will convey, without any costs, to the BCWD the Subdistrict B waterworks system.

15. The following information is provided in response to 807 KAR 5:001(8):

a. Articles of Incorporation - None, County is a statutorily created county by Kentucky's General Assembly as provided under Kentucky's Constitution;

16. The following information is supplied pursuant to 807 KAR 5:001(9):

a. The County has determined through public meetings and public surveys that the Project is in the best interest of the public since:

i) the area is not served by any public water supply;

ii) the persons and businesses residing in the Subdistrict B area must rely on cistern and well water or truck transported haul water that may contain contaminants;

iii) the cost of truck transported water is substantially more costly to the public, especially the elderly and disabled that may be on fixed incomes; and,

iv) the current supply of water is usually not adequate to meet the needs of families and businesses that reside in the Project area.

b. There were no formal public hearings concerning the specifics of the projects, but there have been numerous presentations to the Fiscal Court. Also, the County has received a very positive response from the public through calls to their offices from businesses and families expressing a desire to tap onto the water system once it is constructed. The County reportedly receives five to ten calls per week from individuals wanting to know when the system will be constructed.

c. No new franchises are required. Copies of the DOW permits are attached as Exhibit I.

c. Diagrams of the proposed construction and construction specifications, description of the location, route, description of facilities, manner of construction are all included in the preliminary and final engineering reports attached as Exhibit J.

d. Maps of the area showing location of the proposed facilities are in Exhibit B.

e. The construction costs will be funded by the issuance of general obligation bonds

of the County. The Plan of Financing and sources and uses of the bond funds are shown herein under Exhibit K.

f. Additional operating costs for operation and maintenance are minimal due to the scope of the Project and its being new construction. Additionally, the Operation and Maintenance Agreement between the BCWD and the County provides for an annual adjustment in the O&M costs based on prior years actual O&M expenditures.

g. There is no existing waterworks system in the Subdistrict B project area. Exhibit L shows a current hydraulic analysis of the Project area.

17. The following information is provided as required by 807 KAR 5:001(11):

a. A general description of the property is contained under Exhibit M;

b. Financing and sources of funds for the project are described in Exhibit K;

c. All funds are to be used for the construction of the proposed water distribution system as described in Exhibit J;

d. The property to be constructed is described in Exhibit M;

e. The funds are not for refunding or refinancing existing debt;

f. There are no trust deeds or mortgages;

g. No property is to be acquired;

h. No stock has been or will be issued;

i. There are no existing bonds or notes of the Subdistrict B system;

j. The are no outstanding notes of the Subdistrict B system;

k. There is no other indebtedness of the Subdistrict B system;

l. No dividends have been paid or will accrue;

m. There is no balance sheet and income statement of the Subdistrict B system.

18. Notice of the proposed project and surcharge is attached as Exhibit N

19. At the time the Bonds are redeemed in full, title and ownership will be transferred to BCWD and if any accreted amounts of payments are still owed to the County, those amounts with interest accreted thereon will be forgiven at the time of the transfer. Section 20 of the Operation and Maintenance Agreement states: "Upon payment in full of the Bonds, the County, so long as no event of default by the District hereunder has occurred and is continuing, will immediately transfer all of its right, title and interest in and to the Project to the District."

20. A copy of this petition has been served on the Attorney General.

The County requests that it be granted an order prior to July 1, 2005 authorizing:

i) construction of the Subdistriet B waterworks distribution system;

ii) the issuance of approximately $2,750,000 of bonds scheduled to mature for a period not to exceed thirty (30) years from their date of issue, which amount may initially be issued in the form of five (5) year bond anticipation notes and renewal five year notes; and

iii) a schedule of rates that are the same rates charged the customers of the Boone County Water District, plus a surcharge be paid by each customer equal to $25.00 for each 10,000 gallons or any portion thereof of water consumed each month.

IN WITNESS WHEREOF, the County has caused this Petition to be executed in their name by their duly authorized officer and a copy of this Petition served on the parties listed below.

BOONE COUNTY, KENTUCKY

Gary W. Moore

County Judge/Executive

Copies:

Greg Stumbo
Attorney General

Marilyn K. Rouse
County Clerk

Boone County Water District
2005 Filing of Certificate of Convenience and Necessity
Case No. 2005-

List of Attached Exhibits -

Exhibit A - Current members of the Boone County Fiscal Court

Exhibit B - Map that shows the area now served by Florence, the BCWD and the Bullock Pen Water District, and the proposed area to be served by the County to be know as Subdistrict B

Exhibit C - Materials and information collected and discussed at meetings held between the BCWD and the County as part of the Engineering Report

Exhibit D - Most current audit of the County

Exhibit E - Analysis of the County's underlying bond rating by Moody's.

Exhibit F - Total estimated cost of the project, not including bond finance charges.

Exhibit G - BCWD customer rates and charges for Subdistrict B

Exhibit H - Operation and Maintenance Agreement b/t the County and BCWD

Exhibit I - Copies of the DOW permits

Exhibit J - Preliminary and Final engineering reports

Exhibit K - Plan of financing and sources and uses of bond funds

Exhibit L - Current hydraulic analysis of the Project area

Exhibit M - General description of the property

Exhibit N - Notice of the proposed project and surcharge

EXHIBIT A

CURRENT MEMBERS OF THE BOONE COUNTY FISCAL COURT

Members of the Boone County Fiscal Court

Gary Moore, County Judge/Executive
2950 Burlington Pike
PO Box 900
Burlington, KY 41005
859-334-2242

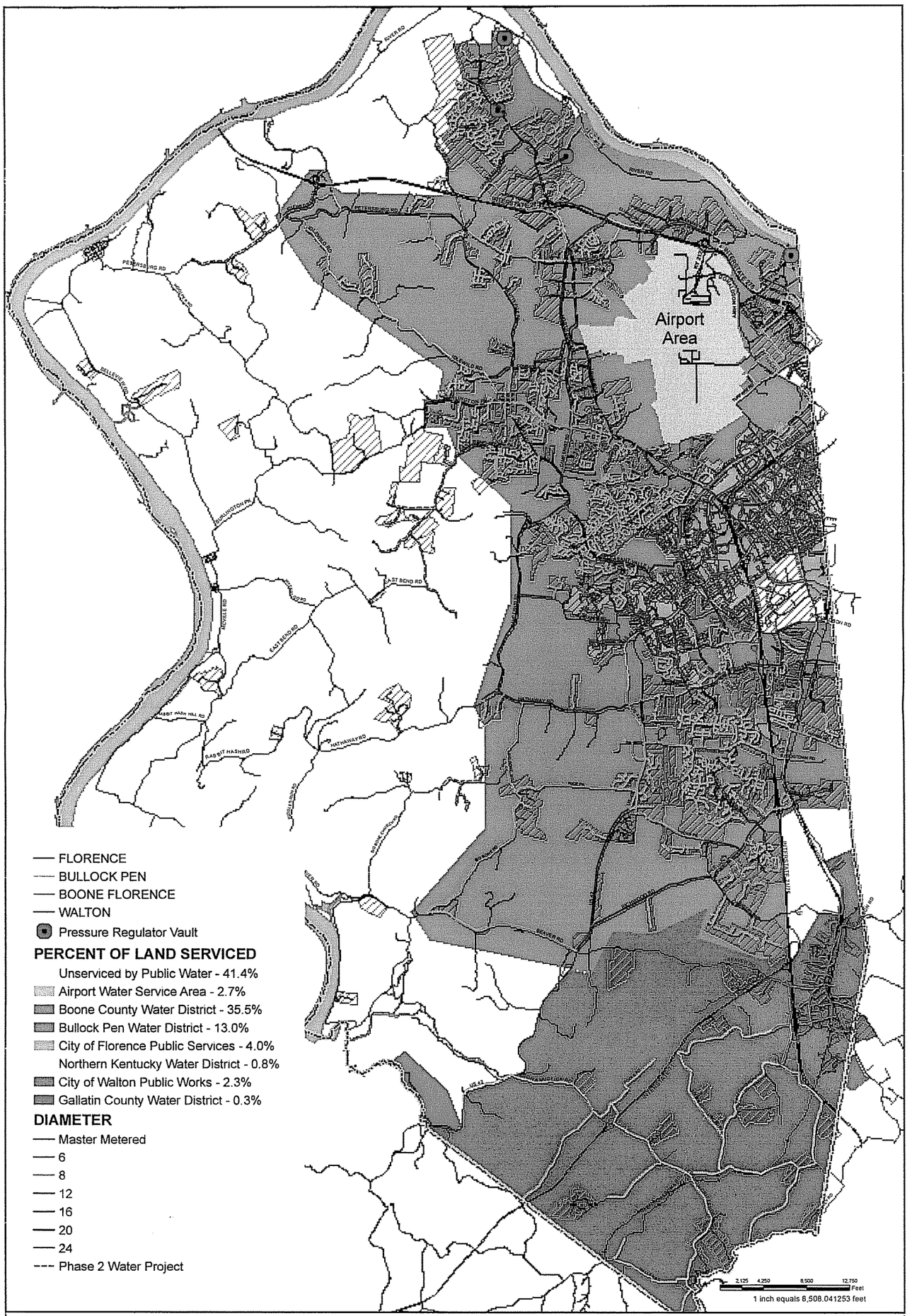
Cathy Hudson Flaig, Commissioner
4072 Limaburg Road
Hebron, KY 41048
859-689-4255

Terri Moore, Commissioner
10447 Jason's Bluff
Florence, KY 41042
859-283-9338

Charles Kenner, Commissioner
10673 Bridlepath Lane
Union, KY 41091
859-334-2281

EXHIBIT B

MAP ILLUSTRATING AREA OF SERVICE FOR BOONE COUNTY WATER DISTRICT



Boone County
Water Service Distribution

Produced by the Boone County Planning Commission GIS Services Division

For questions please contact (859) 334-2195 or visit www.boonecountyky.com

EXHIBIT C

MATERIALS AND INFORMATION FROM PUBLIC MEETINGS

TETRA TECH, INC.

July 1, 2005

Mr. James Parsons, County Administrator
Boone County Fiscal Court
2950 Washington Square
Burlington, Ky. 41005

Re: Boone County Rural Water Project
Engineering Report

Tetra Tech, Inc. has prepared this engineering report for the Boone County Fiscal Court, which describes the Boone County Rural Water Project. This report was prepared as a part of the Phase II planning and design for this project. The report outlines the program objectives of the County and the planning and public participation involved in developing the project and the final scope of the Phase II project. This report will also be utilized to support the funding application and Public Service Commission application for the implementation of the project.

BACKGROUND

The Boone County Fiscal Court has initiated a water system program to extend water service to the rural areas of Boone County. This program is to address the concerns that Boone County has significantly less water service available to County residents than the other Kentucky Counties. The overall objective of the program was to allow many of the County rural areas to have the opportunity for public water service.

This program began in 2000 with initial planning for extending water service throughout the County. The initial effort, Phase I of the project has been designed and constructed. The Phase I project, identified as "Sub-district A" provides service to the following areas:

1A: Big Bone Rd/Rice Pike/Beaver Rd./U.S. 42
1C: Idlewild Rd./ Idlewild by-pass to I-275-Ky. 20/Bullitsburg Church Rd.
Side Streets: Idlebrook Subv./ Blackberry Hill/Rasberry Ct.
1D: Bullittsville Rd./Fawn Ln.
1C: Idlewild Side Streets; Feeley Rd./Eason Ln./ Akin Ln.

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The construction of the Phase I project was initiated in July 2002. The work included some 140,900 feet (26.7 miles) of 8" and 12" water main with appurtenances for a total construction cost of approximately $4,595,000. Construction was substantially completed for the transmission main areas in October 2003 and in the remaining Idlewild Road side street areas by December 2004.

The Phase II program, referred to as "Sub-district B", was initiated in March of 2003 to assess further extension of the water mains to the rural area customers. The Phase II program is more fully described in this report.

Rural Program Planning

The overall rural water program plan was initially prepared for the Boone County Fiscal Court in July 2000. This plan included extension of the water mains to the Phase I area and to the west and south sections of the County to the following areas:

Ky. 20 from Idlewild Rd to Petersburg to Belleview to Ky 18 to loop and along Ky. 18 back to Burlington (existing water system)

Ky. 338-East Bend Rd to Waterloo to McVille and to Ky 18 proposed main as noted above. This would provide a 12 " water main loop in central Boone County

From Big Bone Church Rd to Beaver Rd to loop with the existing Big Bone Rd water main

Water mains on side streets along these water main routes with significant residents/potential customers

Water mains in the communities of Petersburg and Belleview/McVille

This service area and original plan would include some 220,000 feet (41 miles) of water main at a construction cost of some $10,000,000. The new water service would provide service to some 1,110 existing residents. In addition to the water mains, additional water storage and pressure reducing valves would have to be provided to extend the water service to the western most areas of the County.

A more detailed evaluation of the customer counts and locations was performed relative to the proposed water mains. To address the feasibility the customer density was determined, which is defined as the number of customers per mile. The feasibility point utilized for determining the potential water main extension was a minimum of 17 customers/mile. Customer counts were estimated utilizing the existing Boone County GIS mapping initially, but site visits were conducted to confirm the final estimates. Utilizing this criteria the next phase of the water program (Phase II) was defined as

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shown in the attached Figure Phase I & II Location Map. The following project areas were defined and the project descriptions are provided as follows:

Phase 2A – Big Bone Church Road to Gum Branch Rd.

The Phase 2A Project consists of extending the water main from Big Bone Rd. approximately 8,200 feet of 8" ductile iron water main along Big Bone Church Road to Gum Branch Rd.. In addition, water mains are proposed for side streets including Michelle Dr., Brian Ct., Kirby Ln., and Forest View Dr. (approx. 6,500 feet). The water mains will be constructed along the County roadways, primarily within the road right of way. There are 2 properties that require easements on private property which would be acquired. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection.. This water main would potentially provide service to some 60 existing homes in this service area. The estimated construction cost for the Phase 2A water main extension is $665,000.

PHASE 2B AND PHASE 2D – EAST BEND RD. (SR338) TO LOCUST GROVE RD. (PHASE 2B) AND SIDE STREETS (PHASE 2D).

The Phase 2B and 2D Projects consists of installation of approximately 21,500 feet of 12" water main along East Bend Rd from Burlington to Locust Grove Rd (Phase 2B). In addition, 8" water mains are proposed on side streets including, Emerald Dr., Possum Path, Kirby Dr., Wolfe Rd., and Locust Grove Rd (17,000 feet-Phase 2D). The water mains will be constructed mainly along the State and County roadways, primarily within the road right of way. There are 2 properties on Phase 2D that require easements on private property. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would potentially provide service to approximately 270 existing homes in this area. The estimated construction cost for Phase 2B and 2D combined is approximately $2,000,000.

PHASE 2C – PETERSBURG RD. (KY 20) FROM IDLEWILD RD. WEST .

The Phase 2C Project consists of installation of approximately 10,500 feet of 8" water main along Ky 20/Petersburg Rd. west of Idlewild Rd. to approximately 2000 feet west of Ashby Fork Rd. In addition, 8" water mains are proposed on side streets including, Anson Ln., Brewer Ln., and Caribou Dr. (6,900 feet). The water mains will be constructed mainly along the State, County, and private roadways, primarily within the road right of way/edge of road. There is one property owner (2 parcels) where an easement is required and an agreement with the Homeowner Association for access along the private drive. The construction will mainly be open cut excavation as shown in the

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plans. The project will extend water service to rural areas and provide fire protection. This water main would provide service to approximately 70 existing homes in this area. The estimated construction cost for Phase 2C is approximately $770,000.

A summary table for the proposed Phase II project indicating the potential customers, density, and estimated construction and project cost is shown in Figure II. The total estimated project cost for Phase II is approximately $4,000,000 including a 10% contingency and engineering, legal, and finance costs. The estimated potential customers for Phase II as described above is some 400 residents.

Public Meetings and Customer Commitments

The Boone County Fiscal Court conducted public meetings to solicit interest and general commitment and support of the proposed water main project. A general public meeting was held in 2004 at Burlington Elementary School to outline the overall plan for the Phase II system.. Descriptions of the project areas and maps and preliminary plans of the proposed project was presented. A sign up sheet for those interested in connecting was provided as a preliminary indication of interest. The County reviewed this information and other comments received during and after the meeting and the proposed project was adjusted to the location plan as presented above and in the attached Figure (Phase I & II Location Plan). A proposed water main on Ky. 18 and Woolper Rd was eliminated as were some streets off East Bend Rd. due to the comments received at these meetings.

Final public meetings were held on the project in March 2005. Three meetings were held to solicit final comments and commitments from the residents along the water main routes. The three meetings covered separately the 2A area, 2B and 2D area, and the 2C area of the project locations. At the meeting the residents were advised of the project scope, plans and specifications, cost estimate, schedule, and proposed user fees.

They were requested to indicate their commitment by paying the tap in fee ($625). Based on these commitments the final project scope and limits will be determined. Boone County has received commitments for over 50% of the residents to tap into the water main through June 2005 and are proceeding to finalize the project for bidding and construction.

Design Plans/Specifications/Permits

Tetra Tech, Inc. prepared the final design plans and specifications for the Phase II project for the locations approved by the County. The detailed plans/specs were coordinated with the Boone County Water District and submitted to the Kentucky Division of Water (KDOW) for approval. As a part of the KDOW permit, a hydraulic model of the proposed water system was provided. Originally a system wide model for the entire Boone County system was developed by CDM as a subcontract to Tetra Tech. This model was initially completed in September 2003 and then finalized for Boone County in

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November 2004. This system wide model was provided to KDOW and the Public Service Commission. Tetra Tech completed a hydraulic analysis of the Phase II project areas to address the main routes and side streets as part of the KDOW permit submission.

In addition, the plans were submitted to the Kentucky Division of Highways and the Boone County Public Works Department for an Encroachment permit and approvals. These permits were approved in June 2005 and have been incorporated into the project requirements.

Financing Plan

The Boone County Fiscal Court plans to finance this $4.0 million project through the Kentucky Infrastructure Authority (KIA) with a low interest loan. In addition, the County has received a grant for the project engineering and construction for $1,000,000. The projected loan amount would be approximately $3.0 million with a 2.73% interest rate subject to final approval of the loan by KIA. The proposed user charge would be the same as for the Phase I project. The customers would pay the normal Boone County Water District base rate for usage and tap fees. A surcharge of $25.00/month will be added to the monthly bill to pay back the Phase II project cost/debt. A financing plan was prepared by RSA, the financial consultant to Boone County for this project. This is also included in the Public Service Commission (PSC) application documentation as part of the approval for the project and user charges.

Operations Plan/Agreements

The water system is being constructed by the Boone County Fiscal Court who is paying for the project related costs. The system will be operated by the Boone County Water District in accordance with an Agreement with the Boone County Fiscal Court. This Agreement identifies specific requirements for the water supply from the Boone-Florence Water Commission, who provides the water supply from Cincinnati Water Works. It also includes Boone County Water District's responsibilities for operation, maintenance, meter reading, user charge collections, and customer service for these water mains. Upon repayment of the loan/debt for the Phase II project costs, the water mains and ownership will be turned over to the Boone County Water District per the terms of the Agreement. The proposed Agreement regarding this Operations plan are included in the PSC application for this project as well.

Proposed Project Schedule

A preliminary schedule for implementation of the project has been prepared based on assumptions that the timely approvals from PSC will be received. The anticipated schedule for the project and milestone completion dates are summarized as follows:

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Approval of Permits KDOW		June 2005
Complete/Submit PSC Application		July 15, 2005
Easement Acquisition (6 properties)		August 15, 2005
Application for KIA funding		July 2005
Approval PSC/Authorization to Award		September 1, 2005
Bid Projects:	Contract 2C	September 1, 2005
	Contract 2B	November 1, 2005
	Contract 2D	January 1, 2006
	Contract 2A	March 1, 2006

The schedule from bidding to the award of the construction contract to the selected Contractor is estimated to take approximately 60 days. This may be impacted by approvals related to the KIA loan requirements. The project is phased to allow additional commitments from residents to tap in. However, the County may modify the schedule to increase or decrease the overall time frame based on final commitments and needs. Construction completion time for each contract is estimated as follows based on the bid and award date assumptions as noted above:

Complete Construction	Contract 2C	(6 months)	May 2006
	Contract 2B	(7 months)	August 2006
	Contract 2D	(6 months)	September 2006
	Contract 2A	(5 months)	October 2006

Tetra Tech appreciates the opportunity to work with Boone County on this important project. Should you have any questions on this project, please advise.

Sincerely,

Dennis P. Huber, P.E.
Principal

Attachments:

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EXHIBIT D

CURRENT BOONE COUNTY AUDIT

REPORT OF THE AUDIT OF THE BOONE COUNTY CLERK

For The Year Ended
December 31, 2003

CRIT LUALLEN
AUDITOR OF PUBLIC ACCOUNTS
www.auditor.ky.gov

105 SEA HERO ROAD, SUITE 2
FRANKFORT, KY 40601-5404
TELEPHONE (502) 573-0050
FACSIMILE (502) 573-0067

EXECUTIVE SUMMARY

AUDIT EXAMINATION OF THE BOONE COUNTY CLERK

For The Year Ended December 31, 2003

The Auditor of Public Accounts has completed the Boone County Clerk's audit for the year ended December 31, 2003. Based upon the audit work performed, the financial statements present fairly in all material respects, the revenues and expenditures of the County Clerk and the revenues, expenditures, and fund balances of the County Clerk's operating fund and county fund with the State Treasurer in conformity with the regulatory basis of accounting described in Note 1.

Financial Condition:

Net revenues totaling $2,098,358 were deposited in the 75% fund and net revenues totaling $672,087 were deposited into the 25% fund as of December 31, 2003.

The financial statement of the Boone County Clerk's 75% fund reflects a zero beginning balance, receipts of $2,098,358, and disbursements of $1,847,356 resulting in a fund balance of $251,002 as of December 31, 2003. The 25% county government fund had receipts and disbursements of $672,087 resulting in a zero fund balance as of December 31, 2003.

Leases:

Commitments to the following lease agreements as of December 31, 2003 are:

Item Purchased	Monthly Payment	Beginning Date	Ending Date	Principal and Interest Balance December 31, 2003
Software Licenses	$ 3,948	2/15/03	5/14/06	$ 110,544
Computer Hardware	16,928	2/15/03	5/14/06	473,984
Totals	$ 20,876			$ 584,528

Deposits:

The County Clerk's deposits were insured and collateralized by bank securities or bonds.

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CRIT LUALLEN
AUDITOR OF PUBLIC ACCOUNTS

The Honorable Gary W. Moore, County Judge/Executive
The Honorable Marilyn K. Rouse, Boone County Clerk
Members of the Boone County Fiscal Court

Independent Auditor's Report

We have audited the accompanying statement of revenues and expenditures - regulatory basis of the County Clerk of Boone County, Kentucky, and the statement of revenues, expenditures, and fund balances of the County Clerk's operating fund and county fund with the State Treasurer - regulatory basis for the year ended December 31, 2003. These financial statements are the responsibility of the County Clerk. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, and the Audit Guide for County Fee Officials issued by the Auditor of Public Accounts, Commonwealth of Kentucky. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 1, the County Clerk prepares the financial statements on a regulatory basis of accounting that demonstrates compliance with the laws of Kentucky, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the revenues, expenditures, and fund balances of the County Clerk's operating fund and county fund with the State Treasurer for the year ended December 31, 2003, in conformity with the regulatory basis of accounting.

In accordance with Government Auditing Standards, we have also issued our report dated July 23, 2004, on our consideration of the County Clerk's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

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The Honorable Gary W. Moore, County Judge/Executive
The Honorable Marilyn K. Rouse, Boone County Clerk
Members of the Boone County Fiscal Court

This report is intended solely for the information and use of the County Clerk and Fiscal Court of Boone County, Kentucky, and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties.

Respectfully submitted,

Crit Luallen
Auditor of Public Accounts

Audit fieldwork completed -
July 23, 2004

BOONE COUNTY
MARILYN K. ROUSE, COUNTY CLERK
STATEMENT OF REVENUES AND EXPENDITURES - REGULATORY BASIS

For The Year Ended December 31, 2003

Revenues		
State Grant (Note 5)		$ 92
State Fees For Services		29,363
Fiscal Court		20,284
Licenses and Taxes:		
Motor Vehicle-		
Licenses and Transfers	$ 2,422,325	
Usage Tax	13,750,301	
Tangible Personal Property Tax	8,138,063	
Licenses-		
Marriage	25,288	
Beer and Liquor	60,251	
Deed Transfer Tax	975,920	
Delinquent Taxes	970,894	26,343,042
Fees Collected for Services:		
Recordings-		
Deeds, Easements, and Contracts	$ 86,470	
Real Estate Mortgages	617,895	
Chattel Mortgages and Financing Statements	386,015	
Powers of Attorney	5,375	
Notary	11,112	
All Other Recordings	197,650	
Charges for Other Services-		
Candidate Filing Fees	220	
Copywork	50,054	
Postage	11,184	
Miscellaneous	42,046	1,408,021
Interest Earned		4,854
Total Revenues		$ 27,805,656

The accompanying notes are an integral part of the financial statements.

BOONE COUNTY
MARILYN K. ROUSE, COUNTY CLERK
STATEMENT OF REVENUES AND EXPENDITURES - REGULATORY BASIS
For The Year Ended December 31, 2003
(Continued)

Expenditures			
Payments to State:			
Motor Vehicle-			
Licenses and Transfers	$ 1,850,252		
Usage Tax	13,331,924		
Tangible Personal Property Tax	2,972,642		
Licenses, Taxes, and Fees-			
Delinquent Tax	133,847		
Legal Process Tax	131,664		
Candidate Filing Fees	120	$ 18,420,449	
Payments to Fiscal Court:			
Tangible Personal Property Tax	$ 900,060		
Delinquent Tax	89,710		
Deed Transfer Tax	927,124		
Beer and Liquor Licenses	57,110	1,974,004	
Payments to Other Districts:			
Tangible Personal Property Tax	$ 3,938,929		
Delinquent Tax	538,398	4,477,327	
Payments to Sheriff		4,271	
Payments to County Attorney		131,814	
Operating Expenditures:			
Library and Archives Grant (Note 5)		92	
Other Charges-			
Bank Service Charges	$ 20,945		
Miscellaneous	6,309	27,254	
Total Allowable Expenditures			$ 25,035,211
Net Revenues			$ 2,770,445
Payments to State Treasurer:			
75% Operating Fund		$ 2,098,358	
25% County Fund		672,087	2,770,445
Balance Due at Completion of Audit			$ 0

The accompanying notes are an integral part of the financial statements.

BOONE COUNTY
MARILYN K. ROUSE, COUNTY CLERK
STATEMENT OF REVENUES, EXPENDITURES, AND
FUND BALANCES OF THE COUNTY CLERK'S OPERATING FUND
AND COUNTY FUND WITH THE STATE TREASURER - REGULATORY BASIS

For The Year Ended December 31, 2003

	75% Operating Fund	25% County Fund	Totals
Fund Balance - January 1, 2003	$	$	$
Revenues			
Fees Paid to State - Operating Funds (75%)	2,098,358		2,098,358
Fees Paid to State - County Funds (25%)		672,087	672,087
Total Funds Available	$ 2,098,358	$ 672,087	$ 2,770,445
Expenditures			
Boone County Fiscal Court	$	$ 672,087	$ 672,087
Personal Services-			
Official's Statutory Maximum	86,522		86,522
Official's Training Incentive	3,036		3,036
Official's Expense Allowance	3,600		3,600
Deputies' Salaries	878,676		878,676
Part-Time Salaries	47,155		47,155
Overtime	12,214		12,214
Employee Benefits-			
Employer's Share Social Security	73,624		73,624
Employer's Share Retirement	65,772		65,772
Employer's Paid Health Insurance	173,614		173,614
Contracted Services-			
Microfilming	131,000		131,000
Materials and Supplies-			
Office Supplies	29,757		29,757

The accompanying notes are an integral part of the financial statements.

BOONE COUNTY
MARILYN K. ROUSE, COUNTY CLERK
STATEMENT OF REVENUES, EXPENDITURES, AND
FUND BALANCES OF THE COUNTY CLERK'S OPERATING FUND
AND COUNTY FUND WITH THE STATE TREASURER - REGULATORY BASIS
For The Year Ended December 31, 2003
(Continued)

	75% Operating Fund	25% County Fund	Totals
Expenditures (Continued)			
Other Charges			
Conventions and Travel	$ 4,159	$	$ 4,159
Dues	3,970		3,970
Postage	27,181		27,181
Election Expense	1,366		1,366
Maintenance and Repairs	1,627		1,627
Office Furnishings	6,124		6,124
Office Renovation/Upkeep	3,306		3,306
Indexing Books, Maps	28,935		28,935
Preparing Tax Bills	10,784		10,784
Insurance	680		680
Miscellaneous	16,979		16,979
Debt Service:			
Lease Purchases - Computer Equipment	237,275		237,275
Total Expenditures	$ 1,847,356	$ 672,087	$ 2,519,443
Fund Balance - December 31, 2003	$ 251,002	$ 0	$ 251,002

The accompanying notes are an integral part of the financial statements.

BOONE COUNTY
MARILYN K. ROUSE, COUNTY CLERK
NOTES TO FINANCIAL STATEMENTS

December 31, 2003

Note 1. Summary of Significant Accounting Policies

A. Fund Accounting

A fee official uses a fund to report on the results of operations. A fund is a separate accounting entity with a self-balancing set of accounts. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities.

A fee official uses a fund for fees to account for activities for which the government desires periodic determination of the excess of revenues over expenditures to facilitate management control, accountability, and compliance with laws.

B. Basis of Accounting

KRS 64.820 directs the fiscal court to collect any amount due from the County Clerk as determined by the audit.

KRS 64.350 establishes that a fee official in counties with a population over 70,000 has two funds with the State Treasurer for the deposit of fees collected. Seventy-five percent (75%) of the fees collected is deposited in a County Clerk's operating fund and used for office expenses of the fee official. The remaining twenty-five percent (25%) of fees collected is deposited to the county fiscal court fund and paid to the fiscal courts, urban-county governments, or consolidated local governments of the respective counties quarterly no later than April 15, July 15, October 15, and January 15. These funds are closed at the end of each official term by paying the balances to the respective county government.

The financial statements have been prepared on a regulatory basis of accounting, which demonstrates compliance with the laws of Kentucky and is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America. Under this regulatory basis of accounting, revenues and expenditures are generally recognized when cash is received or disbursed with the exception of accrual of the following items (not all-inclusive), at December 31:

- Interest receivable
- Collection on accounts due from others for 2003 services
- Reimbursements for 2003 activities
- Payments due other governmental entities for December tax and fee collections
- Payroll expenditures incurred but not paid
- Payments due vendors for goods or services provided in 2003

The Attorney General issued a letter which stated that some revenues of the fee official offices could be considered reimbursed expenses. All reimbursed expenses are recognized as revenues in the 75 percent fund.

Note 1. Summary of Significant Accounting Policies (Continued)

C. Cash and Investments

At the direction of the fiscal court, KRS 66.480 authorizes the County Clerk's office to invest in the following, including but not limited to, obligations of the United States and of its agencies and instrumentalities, obligations and contracts for future delivery or purchase of obligations backed by the full faith and credit of the United States, obligations of any corporation of the United States government, bonds or certificates of indebtedness of this state, and certificates of deposit issued by or other interest-bearing accounts of any bank or savings and loan institution which are insured by the Federal Deposit Insurance Corporation (FDIC) or which are collateralized, to the extent uninsured, by any obligation permitted by KRS 41.240(4).

Note 2. Employee Retirement System

The county officials and employees have elected to participate in the County Employees Retirement System (CERS), pursuant to KRS 78.530 administered by the Board of Trustees of the Kentucky Retirement Systems. This is a multiple-employer public retirement system that covers all eligible full-time employees. Benefit contributions and provisions are established by statute. Nonhazardous covered employees are required to contribute 5.0 percent of their salary to the plan. The county's contribution rate for nonhazardous employees was 6.34 percent for the first six months and 7.34 percent for the last six months of the year.

Benefits fully vest on reaching five years of service for nonhazardous employees. Aspects of benefits for nonhazardous employees include retirement after 27 years of service or age 65. Aspects of benefits for hazardous employees include retirement after 20 years of service or age 55.

Historical trend information pertaining to CERS' progress in accumulating sufficient assets to pay benefits when due is presented in the Kentucky Retirement Systems' annual financial report which is a matter of public record.

Note 3. Deposits

The County Clerk maintained deposits of public funds with depository institutions insured by the Federal Deposit Insurance Corporation (FDIC). According to KRS 66.480(1)(d) and KRS 41.240(4), the depository institution should pledge or provide sufficient collateral which, together with FDIC insurance, equals or exceeds the amount of public funds on deposit at all times. In order to be valid against the FDIC in the event of failure or insolvency of the depository institution, this pledge or provision of collateral should be evidenced by an agreement between the County Clerk and the depository institution, signed by both parties, that is (a) in writing, (b) approved by the board of directors of the depository institution or its loan committee, which approval must be reflected in the minutes of the board or committee, and (c) an official record of the depository institution. These requirements were met, and as of December 31, 2003, the County Clerk's deposits were fully insured or collateralized at a 100% level with collateral of either pledged securities held by the County Clerk's agent in the County Clerk's name, or provided surety bonds which named the County Clerk as beneficiary/obligee on the bonds.

BOONE COUNTY
NOTES TO FINANCIAL STATEMENTS
December 31, 2003
(Continued)

Note 4. Leases

Commitments to the following lease agreements as of December 31, 2003 are:

Item Purchased	Monthly Payment	Beginning Date	Ending Date	Principal and Interest Balance December 31, 2003
Software Licenses	$ 3,948	2/15/03	5/14/06	$ 110,544
Computer Hardware	16,928	2/15/03	5/14/06	473,984
Totals	$ 20,876			$ 584,528

The above lease agreements represent a consolidation or revision of several agreements from the prior year and addendums that were entered into during the calendar year 2003. There is no interest balance on the lease for software licenses.

Note 5. Library and Archives Grant

The County Clerk received a local records microfilming grant from the Kentucky Department for Libraries and Archives in the amount of $24,708. The unexpended grant balance as of January 1, 2003 was $97. The grant account earned less than $1 in interest during calendar year 2003. Funds totaling $92 were expended during calendar year 2003, leaving an unexpended grant balance of $6 as of December 31, 2003.

Note 6. Mechanic's Lien Account

On September 3, 2003 the County Clerk opened up a bank account for mechanic's liens with a deposit of $450. When a mechanic's lien is filed, funds can be deposited into this account until the dispute has been settled. No funds were expended during 2003 leaving an unexpended balance as of $450 at December 31, 2003.

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REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF THE FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

CRIT LUALLEN
AUDITOR OF PUBLIC ACCOUNTS

The Honorable Gary W. Moore, County Judge/Executive
The Honorable Marilyn K. Rouse, Boone County Clerk
Members of the Boone County Fiscal Court

Report On Compliance And On Internal Control
Over Financial Reporting Based On An Audit Of The Financial
Statements Performed In Accordance With Government Auditing Standards

We have audited the financial statements - regulatory basis of the Boone County Clerk for the year ended December 31, 2003, and have issued our report thereon dated July 23, 2004. This was a special report on the County Clerk's financial statements prepared in accordance with a basis of accounting other than generally accepted accounting principles. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether the Boone County Clerk's financial statements as of December 31, 2003, are free of material misstatement, we performed tests of compliance with certain provisions of laws, regulations, contracts, and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Boone County Clerk's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

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Report On Compliance And On Internal Control
Over Financial Reporting Based On An Audit Of The Financial
Statements Performed In Accordance With Government Auditing Standards
(Continued)

This report is intended solely for the information and use of management and is not intended to be and should not be used by anyone other than the specified parties.

Respectfully submitted,

Crit Luallen
Auditor of Public Accounts

Audit fieldwork completed -
July 23, 2004

EXHIBIT E

ANALYSIS OF BOONE COUNTY UNDERLYING BOND RATING

Boone County, Kentucky, currently has an underlying rating provided by Moody's Investor Service of Aa2. As noted by Moody's rating service, municipal issuers in the Aa category demonstrate very strong creditworthiness relative to other US municipal or tax-exempt issuers. The numerical modifier to the rating category indicates a mid-range ranking within the Aa underlying rating category.

Municipal Ratings are opinions of the investment quality of issuers and issues in the United States municipal and tax-exempt markets. These ratings incorporate Moody's assessment of the default probability and loss severity of these issues and issuers. Municipal Ratings are based upon the analysis of four primary factors relating to municipal finance: economy, debt, finances, and administration/management strategies. Each of the factors is evaluated individually and for its effect on the other factors in the context of the municipality's ability to repay its debt.

EXHIBIT F

TOTAL ESTIMATED COST OF THE PROJECT,
NOT INCLUDING BOND FINANCE CHARGES

Boone County Rural Water - Phase II Water Main Extension
Design Cost and Total Project Costs
Preliminary Engineer's Construction Cost Estimate

Description	Cost
Basic Desing	$200,000
Survey	$55,000
Easements	$10,000
Modeling	$18,000
PSC Support	$5,000
Geotechinal Services	$11,500
Misc. Expenses	$5,000
Total Design	**$304,500**

Item	Cost	
Design	$304,500	
Contract 2A	$695,244	
Contract 2B	$1,244,045	
Contract 2C	$824,307	
Contract 2D	$791,681	
Total Project Cost	**$3,859,777**	**Total Construction Cost Budget**

Proposed Phase II - Year 2005								
					Number of Customers Potential	Density Cust/Mile	Footage	Estimated Budget Cost
Contract 2A	A-Big Bone Church Rd. to Gum Branch Rd.				36	23.0	8,250	$ 354,740
	Michelle Drive/Brian Court				6	14.8	2,138	$ 91,915
	Kirby Lane/Forest View Drive				23	28.2	4,312	$ 185,385
				Subtotal	65	23.3	14,700	$ 632,040
Contract 2B East Bend Rd, Ky 338 to Locust Grove					187	45.9	21,500	$ 1,130,950
Contract 2D Side Streets off East Bend Road								
	Emerald Road				17	33.9	2,650	$ 112,225
	Possum Patch/Kirby Drive				23	17.1	7,120	$ 301,390
	Wolfe Road				10	30.5	1,730	$ 73,230
	Locust Grove Road				33	31.7	5,500	$ 232,865
				Subtotal	83	25.8	17,000	$ 719,710
Contract 2C - Petersburg Road, Ky 20 to Caribou					41	20.6	10,500	$ 452,230
	Anson Lane (Pvt)/Brewer Lane (Pvt)				18	20.1	4,740	$ 204,140
	Caribou Drive				12	29.3	2,160	$ 93,000
				Subtotal	71	21.5	17,400	$ 749,370
				Total	**406**	**30.4**	**70,600**	**$ 3,232,070**
							Contingencies @ 10%	**$ 323,207**
							Engineering, Legal, Finance @ 15%	**$ 533,292**
Ave cost/unit	**$ 10,070**						**Estimated Project Cost**	**$ 4,088,569**

Note: Excludes grant funding provided by the Commonwealth of Kentucky

Project Schedule:

Public Meetings	3/17, 3/24 and 3/28/05
Final Design	5/1/2005
Permits/ Approval	7/15/2005
PSC Approval	9/1/05 Est.
Bid Project	9/1/2005
	Likely bid in multiple phases subject to customer commitments
Construction	6-12 months
	Subject to phasing of contracts

Boone County Rural Water - Phase II Water Main Extension
Contract 2A - Big Bone Church Road
Construction Cost Estimate

Item	Description	Quantity	Unit	Unit Price	Cost
1	8" DIP w/Polywrap	14700	LF	$33.00	$485,100
2	6" Fire Hydnt Assembly Complete	26	EA	$2,200.00	$57,200
3	6" Fire Hydrant Stub	4	EA	$850.00	$3,400
4	8" Valve w/ Box	20	EA	$800.00	$16,000
5	6" Valve w/ Box	3	EA	$780.00	$2,340
6	Connection to Existing System	1	EA	$1,200.00	$1,200
7	Contrld Low Strngth Matls (CLSM)	625	LF	$10.00	$6,250
8	Concrete Encasement	25	LF	$70.00	$1,750
9	Restoration/ESC (Sts, Drives, Yds)	14700	LF	$4.00	$58,800
				Subtotal	$632,040
				10% Contingency	$63,204
				Total	**$695,244**
				Cost/LF	**$47.30**

Boone County Rural Water - Phase II Water Main Extension
Contract 2B - East Bend Road
Engineer's Construction Cost Estimate

Item	Description	Quantity	Unit	Unit Price	Cost
1	12" DIP w/Polywrap	21500	LF	$37.00	$795,500
2	6" Fire Hydnt Assembly Complete	33	EA	$2,200.00	$72,600
3	6" Fire Hydrant Stub	9	EA	$850.00	$7,650
4	12" Valve w/ Box	23	EA	$800.00	$18,400
5	8" Valve w/ Box	10	EA	$780.00	$7,800
6	8" DIP w/Polywrap	100	LF	$33.00	$3,300
7	Jack and Bore	300	LF	$375.00	$112,500
8	Connection to Existing System	1	EA	$1,200.00	$1,200
9	Contrld Low Strngth Matls (CLSM)	2600	LF	$10.00	$26,000
10	Restoration/ESC (Sts, Drives, Yds)	21500	LF	$4.00	$86,000
				Subtotal	$1,130,950
				10% Contingency	$113,095
				Total	**$1,244,045**
				Cost/LF	**$57.86**

Boone County Rural Water - Phase II Water Main Extension
Contract 2C - KY 20, Petersburg Road
Engineer's Construction Cost Estimate

Item	Description	Quantity	Unit	Unit Price	Cost
1	8" DIP w/Polywrap	17400	LF	$33.00	$574,200
2	6" Fire Hydnt Assembly Complete	29	EA	$2,200.00	$63,800
3	6" Fire Hydrant Stub	4	EA	$850.00	$3,400
4	8" Valve w/ Box	22	EA	$780.00	$17,160
5	12" Tees/Bends/Reducers	2	LF	$630.00	$1,260
6	Jack and Bore	50	LF	$375.00	$18,750
7	Connection to Existing System	1	EA	$1,200.00	$1,200
8	Restoration/ESC (Sts, Drives, Yds)	17400	LF	$4.00	$69,600
			Subtotal		$749,370
			10% Contingency		$74,937
				Total	**$824,307**
				Cost/LF	**$47.37**

Boone County Rural Water - Phase II Water Main Extension
Contract 2D - side streets to East Bend Road
Engineer's Construction Cost Estimate

Item	Description	Quantity	Unit	Unit Price	Cost
1	8" DIP w/Polywrap	17000	LF	$33.00	$561,000
2	6" Fire Hydnt Assembly Complete	33	EA	$2,200.00	$72,600
3	6" Fire Hydrant Stub	1	EA	$850.00	$850
4	8" Valve w/ Box	7	EA	$780.00	$5,460
5	Connection to Existing System	4	EA	$1,200.00	$4,800
6	Contrld Low Strngth Matls (CLSM)	700	LF	$10.00	$7,000
7	Restoration/ESC (Sts, Drives, Yds)	17000	LF	$4.00	$68,000
			Subtotal		$719,710
			10% Contingency		$71,971
				Total	**$791,681**
				Cost/LF	**$46.57**

EXHIBIT G

BOONE COUNTY WATER DISTRICT CUSTOMER RATES AND CHARGES FOR SUBDISTRICT B

Tap In Fees:

3/4" meter	$625.00
1" meter	$825.00
2" meter	Actual Cost – $1,500.00

Deposit required. Customer will be refunded any difference in cost less than deposit and billed for any cost over deposit amount. All meters, over 2" will be installed by applicant with District supervision.

Reconnect Fee: Reconnect during normal business hours (8:00 am to 4:30 pm) $25.00

Reconnect after normal business hours $37.50

Return Check Charge: For any check returned to the District as uncollectible $20.00

Wholesale/ Tank Sales: $3.60 per 1,000 gallons

Monthly Usage Rates

Schedule A: All customers except multiple occupancy buildings and mobile home parks.

First 3,000 gallons:	$15.45 minimum charge
Next 2,000 gallons:	$4.65 per 1,000 gallons
Next 5,000 gallons:	$4.40 per 1,000 gallons
All over 10,000 gallons:	$3.65 per 1,000 gallons

Schedule B: Multiple occupancy buildings and mobile home parks.

First 3,000 gallons:	$15.45 minimum charge
Next 2,000 gallons:	$5.15 per 1,000 gallons
Next 5,000 gallons:	$4.65 per 1,000 gallons
Next 140,000 gallons:	$4.40 per 1,000 gallons
Next 150,000 gallons:	$3.65 per 1,000 gallons

Monthly Minimum Charge by Meter Size

5/8" - 3/4" meter	3,000 gallons
1" meter	5,000 gallons
1½" meter	9,000 gallons
2" meter	11,000 gallons
3" meter	21,000 gallons
4" meter	29,000 gallons
6" meter	100,000 gallons
Over 6" meter	100,000 gallons

Meter Size	Schedule A	Schedule B
5/8" - 3/4"	$15.45	$15.45
1"	$24.75	$25.75
1½"	$42.35	$44.35
2"	$50.40	$53.40
3"	$86.90	$97.40
4"	$116.10	$132.60
6"	$375.23	$445.00
Over 6"	$375.23	$445.00

Monthly Surcharge

Each costumer of Subdistrict A will pay a surcharge of $25.00 for each 10,000 gallons or any portion thereof of water consumed each month.

EXHIBIT H

OPERATION AND MAINTENANCE AGREEMENT BETWEEN BOONE COUNTY AND BCWD

OPERATION AND MAINTENANCE AGREEMENT

THIS OPERATION AND MAINTENANCE AGREEMENT (the "Agreement"), dated for reference purposes as of June 1, 2005, to be effective June 21st, 2005, by and between the COUNTY OF BOONE, KENTUCKY, (hereinafter called the "County") and the BOONE COUNTY WATER DISTRICT, a water district created pursuant to Chapter 74 of the Kentucky Revised Statutes (hereinafter called the "District");

WITNESSETH

WHEREAS, the County has determined to issue its General Obligation Public Project Bonds, Series 2005 (Subdistrict B Water Line Project) (the "Bonds") in the principal amount of $2,750,000, and to use the proceeds thereof to construct and install certain water lines and appurtenant facilities as more fully described in Exhibit A attached hereto (the "Project"); and

WHEREAS, in order to provide for the continued operation and maintenance of the Project and to provide for the payment of a portion of the debt service on the Bonds from a source other than the County's general fund, the District has determined to operate and maintain the Project and to make certain annual payments to the County as set forth herein.

NOW, THEREFORE, IT IS AGREED BETWEEN THE PARTIES HERETO AS FOLLOWS:

Section 1. The County agrees to issue its general obligation bonds in a principal amount of $2,750,000 and to use the proceeds thereof to construct and install the Project, to be used only for public purposes. Such bonds shall mature no later than 30 years, as determined by the County, from the date of issuance

Section 2. The District agrees to operate and maintain the Project, to be used only for public purposes, for the period commencing June ___, 2005 and ending June 30, 2006 or such earlier date as hereinafter provided. Unless and until terminated as provided herein, this Agreement shall continue in effect from fiscal year to fiscal year. The obligations of the County and the District under this Agreement shall be subject to either party's annual right to terminate and no obligation hereunder shall constitute an obligation in any future year. If either party determines, for any reason, to exercise its annual right to terminate this Agreement, effective on any June 30, such party must give written notice thereof to the other party not later than the preceding May 31. In addition, either party hereto may terminate this Agreement at any time by providing written notice thereof to the other party at least ninety days prior to the termination date set forth in such notice. Upon termination of this Agreement, any amounts required to be paid hereunder shall accrue until the date of termination, at which time all such obligations shall cease to accrue.

The County agrees to set and the District agrees to collect rates and charges (collectively, the "Project Revenues") for customers using the Project, as follows:

(a) The District's water service rates applicable to other customers of the District that are not users of the Project (the "Service Charges"); plus

(b) such dollar amount as may be established from time to time by the County and communicated to the District in writing (the "Surcharge");

(c) The District shall charge and collect its Tap Fee.

The Project Revenues shall be allocated as follows:

(a) The District shall deduct from the District Charges its cost of treated water and its cost of operation and maintenance* ("O&M") of the District and the Project (cost of operation and maintenance of the Project to be computed by multiplying the total gallons used by customers of the Project times the O&M cost per 1,000 gallons) (the "Adjusted Gross District Charges"): and

(b) The District shall remit the Adjusted Gross District Charges to the County which shall be used by the County as follows:

(i) to pay interest on the Bonds as scheduled;
(ii) to pay principal on the Bonds as scheduled;
(iii) to reimburse the County for its accrued County Subsidy Payments (as hereinafter defined);
(iv) to redeem Bonds earlier than their scheduled maturity as is permitted by the ordinance authorizing the Bonds.

*The O&M cost shall be adjusted each calendar year base on the then most recent audited O&M cost for the prior calendar year as reported to the Kentucky Public Service Commission (the "PSC") by the District in its annual report to the PSC.

Amounts payable by the District to the County shall be paid within thirty (30) days of receipt thereof by the District

Notwithstanding that this Agreement is between the District and the County, all payments due hereunder shall, if so requested by the County in writing, be made directly to the paying agent bank for the Bonds (the "Paying Agent") for deposit in the Bond Payment Fund established in the Ordinance authorizing the Bonds.

The County agrees that, if during any fiscal year (ending June 30) the Adjusted Gross District Charges are not sufficient to meet the scheduled principal and interest payments on the

Bonds, the County will cover the deficiency with funds of the County (the "County Subsidy Payment").

Section 3. The Project referred to in this Agreement is located in Boone County, Kentucky, and is more particularly described in Exhibit A attached hereto.

Section 4. The District represents and warrants that:

(a) It is a water district duly organized, validly existing, and in good standing under the laws of the Commonwealth of Kentucky.

(b) It has the power and has been duly authorized to enter into this Agreement and perform all of its obligations hereunder.

(c) The District is not subject to any contractual or other limitation or provision of any nature whatsoever which in any way limits, restricts or prevents the District from entering into this Agreement, or performing any of its obligations hereunder or thereunder; and the execution and delivery of this Agreement, the consummation of the transactions contemplated hereby, and the fulfillment of or compliance with the terms and conditions of this Agreement will not conflict with or result in a breach of the terms, conditions or provisions of any restriction, agreement or instrument to which the District is a party or by which it is bound, or constitute a default under any of the foregoing, and will not violate any provision of law or regulation applicable to the District or any court or administrative order or decree.

Section 5. The County represents and covenants that it has full power to execute and perform this Agreement and the covenants and promises contained herein.

Section 6. The District hereby accepts the Project, as is, and the County makes no warranty or representation, either express or implied, as to the value, design, condition, fitness for particular purpose or fitness for use of any of the Project.

Section 7. The District will operate and maintain the Project in a manner substantially consistent with the laws of the Commonwealth of Kentucky regarding water distribution Projects and in a manner which will substantially effectuate the public purposes of Chapters 74 and 96 of the Kentucky Revised Statutes.

Section 8. The District covenants and agrees with the County that the District shall during the term of this Agreement keep and maintain the Project and all parts thereof in good condition and repair, ordinary wear and tear excepted, including, but not limited to, the furnishing of all parts, mechanisms and devices required to keep the Project in good mechanical and working order. The District shall keep the Project in substantial compliance with all applicable governmental regulations and requirements, and in each case the District shall make all replacements and repairs necessary in connection therewith.

Section 9. The District shall have and is hereby given the right, at its sole cost and expense, to make such additions, improvements, changes and alterations in and to any part of the Project as the District from time to time may deem necessary or advisable; provided, however, that the District shall not make any addition, change or alteration which would change the character of the Project as a water distribution Project. All additions, changes and alterations made by the District pursuant to the authority of this Section shall (a) be made in a workmanlike manner and in substantial compliance with all laws and ordinances or resolutions applicable thereto, (b) when commenced, be prosecuted to completion with due diligence without delay or abatement in the District's payments due hereunder, and (c) when completed, be deemed a part of the District's Water System (the "System").

Section 10. The District shall neither do nor permit others under its control to do any work in or about the Project or related to any repair, rebuilding, restoration, replacement, alteration of or addition to the Project, or any part thereof, unless District shall have first procured and paid for all requisite municipal and other governmental permits and authorizations. All such work shall be done in a good and workmanlike manner and in substantial compliance with all applicable building, zoning, and other laws, ordinances, governmental regulations and requirements and in accordance with the requirements, rules and regulations of all insurers under the policies required to be carried under Section 13 hereof.

Section 11. Except as provided in Section 2 hereof, the District shall be responsible for establishing fees and charges (including any surcharge to customers of the District using the Project) for the use by the public of the System (including the Project), subject to any limitations provided by law.

Section 12. Notwithstanding anything herein to the contrary, the District, for the benefit of the County and each holder of the Bonds, hereby represents that it has not taken, or permitted to be taken on its behalf, and agrees that it will not take or permit to be taken on its behalf, any action which would adversely affect the excludability from gross income of the interest on the Bonds for federal income tax purposes, and that it will make and take, or require to be made and taken, such acts and filings as may from time to time be required under the Internal Revenue Code of 1986, as amended, to maintain such excludability from gross income.

Section 13. The County shall have reasonable access and the right to inspect, examine and make copies of the books, records, accounts, tax returns and other such financial information of the District.

Section 14. The District shall obtain insurance with respect to the Project issued by an insurer or insurers and on policy forms in such amounts which are customary with the District for facilities which are similar to the Project, against loss or damage from theft, fire, vandalism and other events covered by uniform standard extended coverage endorsements approved by the insurance regulatory authority in the Commonwealth of Kentucky. The District may alternatively

insure such property under a blanket insurance policy or policies which cover not only such property but other properties.

Each insurance policy provided for in the preceding and following paragraphs shall contain a provision to the effect that the insurance company shall not cancel the same without first giving written notice thereof to the County at least thirty (30) days in advance of such cancellation.

The District shall also carry public liability insurance with reference to the Project with one or more reputable insurance companies duly qualified to do business in Kentucky, for death or bodily injury and property damage in amounts which are customarily carried for water districts which are similar to the District. The County shall be made an additional insured under such policies. Such public liability insurance may be by blanket insurance policy or policies.

The parties hereto recognize that continued inflation, the emergence of new risks, and various other factors foreseeable or unforeseeable may at some future time cause the insurance coverages required by this Agreement to become inadequate in face amount or the type of risks insured against. The District hereby covenants with the County that throughout the life of this Agreement the District shall keep the Project continuously insured against such risks as are customarily insured against by the District, and in such amounts as would be customarily maintained, by businesses of like size and type.

Section 15. If the Project is destroyed (in whole or in part) or is damaged by fire or other casualty, the District shall promptly replace, repair, rebuild or restore the property damaged or destroyed to substantially the same condition as existed prior to the event causing such damage or destruction, with such changes, alterations and modifications including the substitution and addition of other property as may be desired by the District and as will not impair the operation of the Project or change its character and the District will apply for such purpose so much as may be necessary of any net proceeds of insurance resulting from claims for losses, under the insurance policies required to be carried herein, resulting from such damage.

Section 16. The County and its duly authorized representatives and agents, reserve the right to enter the Project at all reasonable times during the term of this Agreement for the purpose of (a) examining and inspecting the same, including the construction, installation and equipping thereof and (b) performing such work in and about the Project made necessary by reason of the District's default under any of the provisions of this Agreement. The County shall also have the right at all reasonable times to examine the books and records of the District.

Section 17. This Agreement is made on condition that if (each of the following events being deemed an "Event of Default" under the provisions of this Agreement):

(a) the District fails to punctually make any payment required hereunder as the same becomes due; or

(b) the District fails to observe, keep or perform any other covenant or obligation herein contained on the District's part to be observed, kept or performed, and the District fails to remedy the same within thirty (30) days after the County has given the District written notice specifying such failure and requesting that it be remedied; or

(c) the District vacates or abandons the Project; or

(d) any representation or warranty by the District contained in this Agreement or in any certificate or instrument delivered by the District pursuant to this Agreement is false or misleading in any material respect;

then the County may at its election then or at any time thereafter, and while such default shall continue, give the District written notice of intention to terminate this Agreement on a date specified therein, which date shall not be earlier than ten (10) days after such notice is given, and, if all defaults have not then been cured, on the date so specified, the District's rights to operation of the Project shall cease and this Agreement shall thereupon be terminated, and the County may re-enter and take possession of the Project.

Section 18. If the District shall fail to keep or perform any of its obligations as provided in this Agreement in respect of (a) maintenance of insurance, (b) payments required hereunder, (c) repairs and maintenance of the Project, (d) substantial compliance with legal or insurance requirements hereunder, (e) keeping the Project lien free, or in the making of any other payment or performance of any other obligation so to do) upon the continuance of such failure on the District's part for thirty (30) days after written notice of such failure is given to the District by the County and without waiving or releasing the District from any obligation hereunder, as an additional but not exclusive remedy, the County may make any such payment or perform any such obligation, and all sums so paid by the County and all necessary incidental costs and expenses incurred by the County in performing such obligation shall be deemed additional amounts due and payable by the District and shall be paid to the County, and if not so paid by the District, the County shall have the same rights and remedies as provided for in the case of default by the District in the payment of amounts due under Section 2 hereof.

Section 19. The District shall indemnify and hold the County, its officers, directors, agents and employees harmless against and from all claims by or on behalf of any person, firm or corporation arising from the conduct or management of, or from any work or thing done on the Project during the term of this Agreement, and against and from all claims arising during the term of this Agreement from (a) any condition of the Project caused by the District, (b) any breach or default on the part of the District in the performance of any of its obligations under this Agreement, (c) any act of negligence of the District or of any of its agents, contractors, servants, employees or licensees, and (d) any act of negligence of any agents, contractors, servants, employees or licensees of the District in connection with the construction, installation, furnishing, equipping, management or operation of the Project during the term of this Agreement. Any indemnified party seeking to enforce the above indemnity shall give the District written notice of and the opportunity to defend

any claims with respect to which indemnity is sought to be enforced hereunder, in which event the District shall either (i) employ counsel reasonably acceptable to such party to defend such claims and pay all costs and expenses in connection with such defense, or (ii) permit such party to defend such claims itself through counsel of its own choosing in which event the District shall indemnify and hold such party harmless from and against all reasonable costs and expenses incurred in or in connection with any action or proceeding brought with respect to such claims. Upon notice from such party in any such action or proceeding, if the District fails or refuses to proceed under option (i) above, the District shall be deemed to have agreed that such party may proceed under option (ii) above.

Section 20. Upon payment in full of the Bonds, the County, so long as no event of default by the District hereunder has occurred and is continuing, will immediately transfer all of its right, title and interest in and to the Project to the District.

IN TESTIMONY WHEREOF, the District has caused this instrument to be executed for and on its behalf by its Chairman and attested by its Secretary and the County has caused this instrument to be executed for an on its behalf by its Judge/Executive and attested by its Fiscal Court Clerk, as of the date first above written.

COUNTY OF BOONE, KENTUCKY

Judge/Executive

ATTEST:

Fiscal Court Clerk

BOONE COUNTY WATER DISTRICT

Chairman

ATTEST:

Secretary

EXHIBIT I

COPIES OF THE DEPARTMENT OF WATER PERMITS

ERNIE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601-1190
www.kentucky.gov

LAJUANA S. WILCHER
SECRETARY

June 20, 2005

PWS 06/22/05

Mr. Keith Feldhaus, Project Coordinator
Boone Co Water District
2475 Burlington Pike
Burlington, KY 41005-0018

RE: Boone Co Water District, PWS--33787
DW #0080034-05-012
Fiscal Court Phase II 2A-D WLE
Activity ID # APE20050012
Boone County, KY

Dear Mr. Feldhaus:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 48,933 feet of 8-inch and 21,500 feet of 12-inch DI water line. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the enclosed waterline extension construction permit.

If you have any questions regarding this decision, please contact Sarah Tucker at 502/564-2225, extension 482.

Sincerely,

for Donna Marlin, Branch Manager
Drinking Water Branch
Division of Water

DSM: SAT

C: Tetra Tech, Inc.
Boone County H.D.
Public Service Commission
Division of Plumbing

Distribution-Major Construction

Boone Co Water District

Subject Item Inventory

Activity ID No.: APE20050012

Subject Item Inventory:

ID	Designation	Description
AIOO33787		
PORT46	Water Line	21,500 feet of 12-inch & 48,933 feet of 8-inch DI

Subject Item Groups:

ID	Description	Components
GACT44	21,500 feet of 12-inch & 48,933 feet of 8-inch DI	PORT46 21,500 feet of 12-inch & 48,933 feet of 8-inch DI

KEY

ACTV = Activity
AIOO = Agency Interest
AREA = Area
COMB = Combustion
EQPT = Equipment
MNPT = Monitoring Point
PERS = Personnel
PORT = Transport
STOR = Storage
STRC = Structure
TRMT = Treatment

Distribution-Major Construction

Boone Co Water District

Facility Requirements

Activity ID No.: APE20050012

GACT44 (Fiscal Court-PhII 2A-D) 21,500 feet of 12-inch & 48,933 feet of 8-inch DI:

Monitoring Requirements:

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

Submittal/Action Requirements:

Coliform:

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

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

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: Chlorinated water resulting from disinfection of project components shall be disposed in a manner which will not violate 401 KAR 5:031. [401 KAR 8:020 Section 2(20)]

Condition No.	Condition
T-2	This project has been permitted under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies. Further, this permit does not address the authority of the permittee to provide service to the area to be served. [401 KAR 8:100 Section 1(7)]
T-3	Unless construction of this project is begun within 1 year from the issuance date of this permit, the permit shall expire. If requested prior to the permit expiration, an official extension from the Division of Water may be granted. If this permit expires, the original plans and specifications may be resubmitted for a new comprehensive review. If you have any questions concerning this project, please contact the Drinking Water Branch at 502/564-3410. [401 KAR 8:100 Section 1(9)]
T-4	During construction, a set of approved plans and specification shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 1(7)(a)]

PORT46 (Water Line) 21,500 feet of 12-inch & 48,933 feet of 8-inch DI:

Limitation Requirements:

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

Limitation Requirements:

Condition No.	Parameter	Condition
L-7	Distance	When water lines and sewers cross, 1) water lines shall be laid such that either a) the the top of the water line is a vertical Distance >= 18 in below the bottom of the sewer line or b) the bottom of the water line is a vertical Distance >= 18 in above the top of the sewer line, 2) 1 full length of the water pipe shall be located so that both joints of the water pipe will be as far from the sewer as possible, and 3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6.3] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-8	Distance	The open end of an air relief pipe from automatic valves shall be extended a Distance >= 1.0 ft above grade and provided with a screened, downward-facing elbow. The pipe from a manually operated valve shall be extended to the top of the pit. Use of manual air relief valves is recommended wherever possible. [Recommended Standards for Water Works 8.4.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-9	Pressure	Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure >= 20 psi under all conditions of flow. [Recommended Standards for Water Works 8.1.1] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-10	Pressure	Pressure >= 30 psi must be available on the discharge side of all meters. [401 KAR 8:100 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.
L-11	Residual Disinfection	New or relocated water lines shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completion of construction and before being placed into service. To disinfect the new or relocated lines use chlorine or chlorine compounds in such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection >= 25 ppm at the end of 24 hours. Follow the line disinfection with thorough flushing and place the lines into service if, and only if, Coliform monitoring applicable to the line does not show the presence of Coliform. If Coliform is detected, repeat flushing of the line and Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the line has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [401 KAR 8:150 Section 4(1), Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-12	Velocity	Each blow-off or fire hydrant shall be sized so that Velocity >= 2.5 ft/sec can be achieved in the water main served by the blow-off or hydrant during flushing. [Recommended Standards for Water Works 8.1.6.b, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.

Monitoring Requirements:

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

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]
T-2	Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). [Recommended Standards for Water Works 8.0.1]
T-3	Additional Limitations: At high points in water lines, where air can accumulate, provisions shall be made to remove the air by means of hydrants or air relief valves. Automatic air relief valves shall not be used in situations where manhole or chamber flooding may occur. [Recommended Standards for Water Works 8.4.1]
T-4	Additional Limitations: All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.5.4]
T-5	Additional Limitations: A fire hydrant or blow-off shall be required at the end of each dead end line. [Recommended Standards for Water Works 8.1.6]
T-6	Additional Limitations: For each fire hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]

Narrative Requirements:

Additional Limitations:

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

EXHIBIT J

PRELIMINARY AND FINAL ENGINEERING PLANS AND SPECIFICATIONS

TETRA TECH, INC.

July 1, 2005

Mr. James Parsons, County Administrator
Boone County Fiscal Court
2950 Washington Square
Burlington, Ky. 41005

Re: Boone County Rural Water Project
Engineering Report

Tetra Tech, Inc. has prepared this engineering report for the Boone County Fiscal Court, which describes the Boone County Rural Water Project. This report was prepared as a part of the Phase II planning and design for this project. The report outlines the program objectives of the County and the planning and public participation involved in developing the project and the final scope of the Phase II project. This report will also be utilized to support the funding application and Public Service Commission application for the implementation of the project.

BACKGROUND

The Boone County Fiscal Court has initiated a water system program to extend water service to the rural areas of Boone County. This program is to address the concerns that Boone County has significantly less water service available to County residents than the other Kentucky Counties. The overall objective of the program was to allow many of the County rural areas to have the opportunity for public water service.

This program began in 2000 with initial planning for extending water service throughout the County. The initial effort, Phase I of the project has been designed and constructed. The Phase I project, identified as "Sub-district A" provides service to the following areas:

1A: Big Bone Rd/Rice Pike/Beaver Rd./U.S. 42
1C: Idlewild Rd./ Idlewild by-pass to I-275-Ky. 20/Bullitsburg Church Rd.
Side Streets: Idlebrook Subv./ Blackberry Hill/Rasberry Ct.
1D: Bullittsville Rd./Fawn Ln.
1C: Idlewild Side Streets; Feeley Rd./Eason Ln./ Akin Ln.

11156 Canal Road Suite A Cincinnati OH 45241
Tel 513 772 4660 Fax 513 772 4790
www.tetratech.com

The construction of the Phase I project was initiated in July 2002. The work included some 140,900 feet (26.7 miles) of 8" and 12" water main with appurtenances for a total construction cost of approximately $4,595,000. Construction was substantially completed for the transmission main areas in October 2003 and in the remaining Idlewild Road side street areas by December 2004.

The Phase II program, referred to as "Sub-district B", was initiated in March of 2003 to assess further extension of the water mains to the rural area customers. The Phase II program is more fully described in this report.

Rural Program Planning

The overall rural water program plan was initially prepared for the Boone County Fiscal Court in July 2000. This plan included extension of the water mains to the Phase I area and to the west and south sections of the County to the following areas:

Ky. 20 from Idlewild Rd to Petersburg to Belleview to Ky 18 to loop and along Ky. 18 back to Burlington (existing water system)

Ky. 338-East Bend Rd to Waterloo to McVille and to Ky 18 proposed main as noted above. This would provide a 12 " water main loop in central Boone County

From Big Bone Church Rd to Beaver Rd to loop with the existing Big Bone Rd water main

Water mains on side streets along these water main routes with significant residents/potential customers

Water mains in the communities of Petersburg and Belleview/McVille

This service area and original plan would include some 220,000 feet (41 miles) of water main at a construction cost of some $10,000,000. The new water service would provide service to some 1,110 existing residents. In addition to the water mains, additional water storage and pressure reducing valves would have to be provided to extend the water service to the western most areas of the County.

A more detailed evaluation of the customer counts and locations was performed relative to the proposed water mains. To address the feasibility the customer density was determined, which is defined as the number of customers per mile. The feasibility point utilized for determining the potential water main extension was a minimum of 17 customers/mile. Customer counts were estimated utilizing the existing Boone County GIS mapping initially, but site visits were conducted to confirm the final estimates. Utilizing this criteria the next phase of the water program (Phase II) was defined as

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shown in the attached Figure Phase I & II Location Map. The following project areas were defined and the project descriptions are provided as follows:

Phase 2A – Big Bone Church Road to Gum Branch Rd.

The Phase 2A Project consists of extending the water main from Big Bone Rd. approximately 8,200 feet of 8" ductile iron water main along Big Bone Church Road to Gum Branch Rd.. In addition, water mains are proposed for side streets including Michelle Dr., Brian Ct., Kirby Ln., and Forest View Dr. (approx. 6,500 feet). The water mains will be constructed along the County roadways, primarily within the road right of way. There are 2 properties that require easements on private property which would be acquired. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection.. This water main would potentially provide service to some 60 existing homes in this service area. The estimated construction cost for the Phase 2A water main extension is $665,000.

PHASE 2B AND PHASE 2D – EAST BEND RD. (SR338) TO LOCUST GROVE RD. (PHASE 2B) AND SIDE STREETS (PHASE 2D).

The Phase 2B and 2D Projects consists of installation of approximately 21,500 feet of 12" water main along East Bend Rd from Burlington to Locust Grove Rd (Phase 2B). In addition, 8" water mains are proposed on side streets including, Emerald Dr., Possum Path, Kirby Dr., Wolfe Rd., and Locust Grove Rd (17,000 feet-Phase 2D). The water mains will be constructed mainly along the State and County roadways, primarily within the road right of way. There are 2 properties on Phase 2D that require easements on private property. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would potentially provide service to approximately 270 existing homes in this area. The estimated construction cost for Phase 2B and 2D combined is approximately $2,000,000.

PHASE 2C – PETERSBURG RD. (KY 20) FROM IDLEWILD RD. WEST .

The Phase 2C Project consists of installation of approximately 10,500 feet of 8" water main along Ky 20/Petersburg Rd. west of Idlewild Rd. to approximately 2000 feet west of Ashby Fork Rd. In addition, 8" water mains are proposed on side streets including, Anson Ln., Brewer Ln., and Caribou Dr. (6,900 feet). The water mains will be constructed mainly along the State, County, and private roadways, primarily within the road right of way/edge of road. There is one property owner (2 parcels) where an easement is required and an agreement with the Homeowner Association for access along the private drive. The construction will mainly be open cut excavation as shown in the

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plans. The project will extend water service to rural areas and provide fire protection. This water main would provide service to approximately 70 existing homes in this area. The estimated construction cost for Phase 2C is approximately $770,000.

A summary table for the proposed Phase II project indicating the potential customers, density, and estimated construction and project cost is shown in Figure II. The total estimated project cost for Phase II is approximately $4,000,000 including a 10% contingency and engineering, legal, and finance costs. The estimated potential customers for Phase II as described above is some 400 residents.

Public Meetings and Customer Commitments

The Boone County Fiscal Court conducted public meetings to solicit interest and general commitment and support of the proposed water main project. A general public meeting was held in 2004 at Burlington Elementary School to outline the overall plan for the Phase II system.. Descriptions of the project areas and maps and preliminary plans of the proposed project was presented. A sign up sheet for those interested in connecting was provided as a preliminary indication of interest. The County reviewed this information and other comments received during and after the meeting and the proposed project was adjusted to the location plan as presented above and in the attached Figure (Phase I & II Location Plan). A proposed water main on Ky. 18 and Woolper Rd was eliminated as were some streets off East Bend Rd. due to the comments received at these meetings.

Final public meetings were held on the project in March 2005. Three meetings were held to solicit final comments and commitments from the residents along the water main routes. The three meetings covered separately the 2A area, 2B and 2D area, and the 2C area of the project locations. At the meeting the residents were advised of the project scope, plans and specifications, cost estimate, schedule, and proposed user fees.

They were requested to indicate their commitment by paying the tap in fee ($625). Based on these commitments the final project scope and limits will be determined. Boone County has received commitments for over 50% of the residents to tap into the water main through June 2005 and are proceeding to finalize the project for bidding and construction.

Design Plans/Specifications/Permits

Tetra Tech, Inc. prepared the final design plans and specifications for the Phase II project for the locations approved by the County. The detailed plans/specs were coordinated with the Boone County Water District and submitted to the Kentucky Division of Water (KDOW) for approval. As a part of the KDOW permit, a hydraulic model of the proposed water system was provided. Originally a system wide model for the entire Boone County system was developed by CDM as a subcontract to Tetra Tech. This model was initially completed in September 2003 and then finalized for Boone County in

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November 2004. This system wide model was provided to KDOW and the Public Service Commission. Tetra Tech completed a hydraulic analysis of the Phase II project areas to address the main routes and side streets as part of the KDOW permit submission.

In addition, the plans were submitted to the Kentucky Division of Highways and the Boone County Public Works Department for an Encroachment permit and approvals. These permits were approved in June 2005 and have been incorporated into the project requirements.

Financing Plan

The Boone County Fiscal Court plans to finance this $4.0 million project through the Kentucky Infrastructure Authority (KIA) with a low interest loan. In addition, the County has received a grant for the project engineering and construction for $1,000,000. The projected loan amount would be approximately $3.0 million with a 2.73% interest rate subject to final approval of the loan by KIA. The proposed user charge would be the same as for the Phase I project. The customers would pay the normal Boone County Water District base rate for usage and tap fees. A surcharge of $25.00/month will be added to the monthly bill to pay back the Phase II project cost/debt. A financing plan was prepared by RSA, the financial consultant to Boone County for this project. This is also included in the Public Service Commission (PSC) application documentation as part of the approval for the project and user charges.

Operations Plan/Agreements

The water system is being constructed by the Boone County Fiscal Court who is paying for the project related costs. The system will be operated by the Boone County Water District in accordance with an Agreement with the Boone County Fiscal Court. This Agreement identifies specific requirements for the water supply from the Boone-Florence Water Commission, who provides the water supply from Cincinnati Water Works. It also includes Boone County Water District's responsibilities for operation, maintenance, meter reading, user charge collections, and customer service for these water mains. Upon repayment of the loan/debt for the Phase II project costs, the water mains and ownership will be turned over to the Boone County Water District per the terms of the Agreement. The proposed Agreement regarding this Operations plan are included in the PSC application for this project as well.

Proposed Project Schedule

A preliminary schedule for implementation of the project has been prepared based on assumptions that the timely approvals from PSC will be received. The anticipated schedule for the project and milestone completion dates are summarized as follows:

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Approval of Permits KDOW		June 2005
Complete/Submit PSC Application		July 15, 2005
Easement Acquisition (6 properties)		August 15, 2005
Application for KIA funding		July 2005
Approval PSC/Authorization to Award		September 1, 2005
Bid Projects:	Contract 2C	September 1, 2005
	Contract 2B	November 1, 2005
	Contract 2D	January 1, 2006
	Contract 2A	March 1, 2006

The schedule from bidding to the award of the construction contract to the selected Contractor is estimated to take approximately 60 days. This may be impacted by approvals related to the KIA loan requirements. The project is phased to allow additional commitments from residents to tap in. However, the County may modify the schedule to increase or decrease the overall time frame based on final commitments and needs. Construction completion time for each contract is estimated as follows based on the bid and award date assumptions as noted above:

Complete Construction	Contract 2C	(6 months)	May 2006
	Contract 2B	(7 months)	August 2006
	Contract 2D	(6 months)	September 2006
	Contract 2A	(5 months)	October 2006

Tetra Tech appreciates the opportunity to work with Boone County on this important project. Should you have any questions on this project, please advise.

Sincerely,

Dennis P. Huber, P.E.
Principal

Attachments:

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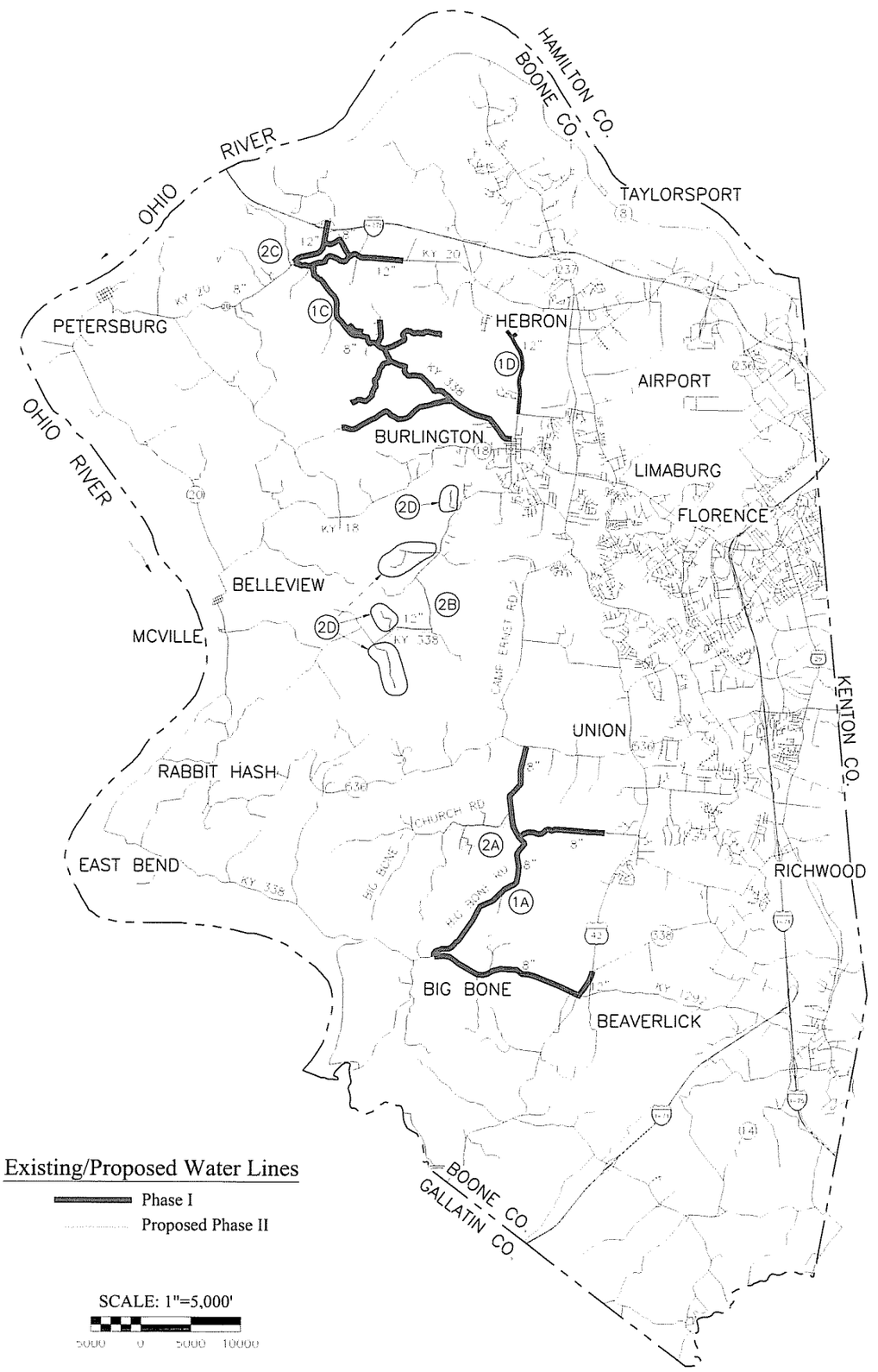
FIGURE II

Proposed Phase II Project Summary

			Number of Customers Potential	Density Cust/Mile	Footage	Estimated Budget Cost
Contract 2A	A-Big Bone Church Rd. to Gum Branch Rd.		36	23.0	8,250	$ 354,740
	Michelle Drive/Brian Court		6	14.8	2,138	$ 91,915
	Kirby Lane/Forest View Drive		23	28.2	4,312	$ 185,385
		Subtotal	65	23.3	14,700	$ 632,040
Contract 2B	East Bend Rd, Ky 338 to Locust Grove		187	45.9	21,500	$ 1,130,950
Contract 2D	Side Streets off East Bend Road					
	Emerald Road		17	33.9	2,650	$ 112,225
	Possum Patch/Kirby Drive		23	17.1	7,120	$ 301,390
	Wolfe Road		10	30.5	1,730	$ 73,230
	Locust Grove Road		33	31.7	5,500	$ 232,865
		Subtotal	83	25.8	17,000	$ 719,710
Contract 2C	Petersburg Road, Ky 20 to Caribou		41	20.6	10,500	$ 452,230
	Anson Lane (Pvt)/Brewer Lane (Pvt)		18	20.1	4,740	$ 204,140
	Caribou Drive		12	29.3	2,160	$ 93,000
		Subtotal	71	21.5	17,400	$ 749,370
		Total	**406**	**30.4**	**70,600**	**$ 3,232,070**
				Contingencies @ 10%		**$ 323,207**
		Engineering, Legal, Finance @ 15%				**$ 533,292**
Ave cost/unit	**$ 10,070**	**Estimated Project Cost**				**$ 4,088,569**



Existing/Proposed Water Lines

Phase I

Proposed Phase II

SCALE: 1"=5,000'

5000 0 5000 10000

Boone County Rural Water Project
Water System Expansion
Phase I & II Location Map

TETRA TECH, INC.

4/15/04

EXHIBIT K

PLAN OF FINANCING AND SOURCES AND USES OF BOND FUNDS

Boone County Rural Water District Project

Projected Phase III Financing Considerations

Date: *21-Mar-05*
Time: *11:21:53 AM*

BOONE COUNTY WATER SUBDISTRICT B (PHASE III)
PROJECTED REVENUE FUND FLOW - LOW GROWTH

Bond Sizing:	
Total Project Costs	$3,548,148
Less Grant Funds	($1,000,000)
Add Capitalized Interest	$115,841
Add COI (UD, Legal, FA)	$86,011
Amount Financed	$2,750,000
Term (yrs)	30
Avg Rate	4.450%

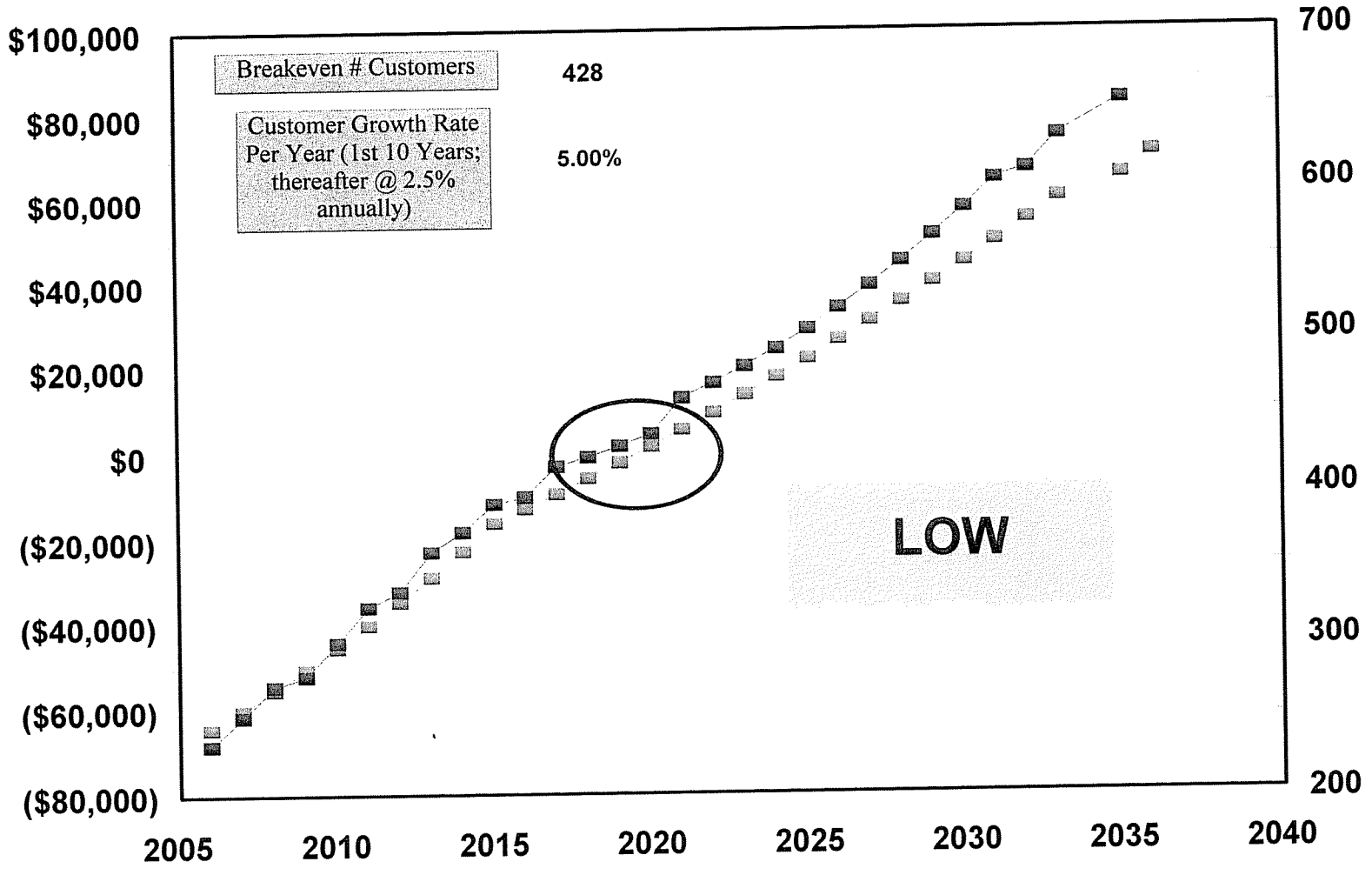
RESIDENTIAL CUSTOMER HISTORY	
1998 # Customers	11,166
1998 # Customers	13,506
1998 # Gallons Sold	1,587,231,177
% Customer Growth	20.96%
Average Monthly Usage (gallons)	7,745
Cost of Water / 1,000 gallons	$2.65
Administrative & Servicing Cost	$.75/1,000 gallons

VARIABLES - RESIDENTIAL RATES		
Expected # of New Customers	406	
Annual % Customer Growth	**5.00%**	1st 10 years; thereafter @ 2.5%/yr
Avg monthly usage per Customer (gallons)	6,000	
Customer tarriff increase expected by BCWD		
Monthly Surcharge Proposed, if any	$25.00	

	Current BCWD	*Avg Customer Monthly Bill*
First 3,000 Gallons (Minimum)	$15.45	$15.45
Next 2,000 Gallons*	$4.65	$9.30
Next 5,000 Gallons*	$4.40	$4.40
Over 10,000 Gallons*	$3.65	
Avg Customer Assessment & Surcharge		$25.00
Avg Customer Monthly Bill	$29.15	$54.15

Operating Year	*Number of Customers*	*Tap on Fee Assessment Revenue*	*Avg Customer Monthly Bill*	*Annual Customer Billing Revenue*	*Total Revenue Receipts*	----- Paid to Boone County WD ----- *Less Cost of Water*	*Less O&M Fees*	*Net Available to Service Debt*	*Annual Payments Bonds*	*Surplus (+) Shortfall (-) Flows*	*Cumulative Flow*
2006	244		$54.15	$158,291	$158,291	$46,479	$13,154	$98,658		$98,658	$98,658
2007	256		$54.15	$166,206	$166,206	$48,803	$13,812	$103,591	$171,709	($68,118)	$30,540
2008	269		$54.15	$174,516	$174,516	$51,243	$14,503	$108,770	$170,213	($61,442)	($30,902)
2009	282		$54.15	$183,242	$183,242	$53,805	$15,228	$114,209	$168,623	($54,414)	($85,316)
2010	296		$54.15	$192,404	$192,404	$56,495	$15,989	$119,919	$171,940	($52,021)	($137,336)
2011	311		$54.15	$202,024	$202,024	$59,320	$16,789	$125,915	$170,002	($44,087)	($181,423)
2012	326		$54.15	$212,125	$212,125	$62,286	$17,628	$132,211	$167,962	($35,751)	($217,174)
2013	343		$54.15	$222,732	$222,732	$65,400	$18,510	$138,822	$170,832	($32,010)	($249,184)
2014	360		$54.15	$233,868	$233,868	$68,670	$19,435	$145,763	$168,440	($22,677)	($271,861)
2015	378		$54.15	$245,562	$245,562	$72,104	$20,407	$153,051	$170,990	($17,939)	($289,800)
2016	387		$54.15	$251,701	$251,701	$73,907	$20,917	$156,877	$168,288	($11,410)	($301,210)
2017	397		$54.15	$257,993	$257,993	$75,754	$21,440	$160,799	$170,530	($9,730)	($310,940)
2018	407		$54.15	$264,443	$264,443	$77,648	$21,976	$164,819	$167,522	($2,703)	($313,643)
2019	417		$54.15	$271,054	$271,054	$79,589	$22,525	$168,940	$169,470	($530)	($314,173)
2020	428		$54.15	$277,831	$277,831	$81,579	$23,088	$173,163	$171,166	$1,998	($312,176)
2021	438		$54.15	$284,776	$284,776	$83,619	$23,666	$177,492	$172,604	$4,888	($307,287)
2022	449		$54.15	$291,896	$291,896	$85,709	$24,257	$181,929	$168,779	$13,150	($294,137)
2023	460		$54.15	$299,193	$299,193	$87,852	$24,864	$186,478	$169,900	$16,578	($277,559)
2024	472		$54.15	$306,673	$306,673	$90,048	$25,485	$191,140	$170,758	$20,382	($257,178)
2025	484		$54.15	$314,340	$314,340	$92,299	$26,122	$195,918	$171,348	$24,570	($232,607)
2026	496		$54.15	$322,198	$322,198	$94,607	$26,775	$200,816	$171,665	$29,151	($203,456)
2027	508		$54.15	$330,253	$330,253	$96,972	$27,445	$205,836	$171,737	$34,099	($169,357)
2028	521		$54.15	$338,510	$338,510	$99,396	$28,131	$210,982	$171,551	$39,432	($129,925)
2029	534		$54.15	$346,972	$346,972	$101,881	$28,834	$216,257	$171,103	$45,154	($84,771)
2030	547		$54.15	$355,647	$355,647	$104,428	$29,555	$221,663	$170,390	$51,273	($33,497)
2031	561		$54.15	$364,538	$364,538	$107,039	$30,294	$227,205	$169,410	$57,795	$24,298
2032	575		$54.15	$373,651	$373,651	$109,715	$31,051	$232,885	$168,133	$64,753	$89,050
2033	589		$54.15	$382,992	$382,992	$112,458	$31,828	$238,707	$171,623	$67,085	$156,135
2035	604		$54.15	$392,567	$392,567	$115,269	$32,623	$244,675	$169,648	$75,027	$231,163
2036	619		$54.15	$402,381	$402,381	$118,151	$33,439	$250,792	$167,440	$83,352	$314,514
Totals:				$8,420,581	$8,420,581	$2,472,525	$699,771	$5,248,284	$4,933,770	$314,514	

Boone County - Phase III
Rural Water Program



BOONE COUNTY WATER SUBDISTRICT B (PHASE III)
PROJECTED REVENUE FUND FLOW - MODERATE GROWTH

Bond Sizing:	
Total Project Costs	$3,548,148
Less Grant Funds	($1,000,000)
Add Capitalized Interest	$115,841
Add COI (UD, Legal, FA)	$86,011
Amount Financed	$2,750,000
Term (yrs)	30
Avg Rate	4.450%
RESIDENTIAL CUSTOMER HISTORY	
1998 # Customers	11,166
1998 # Customers	13,506
1998 # Gallons Sold	1,587,231,177
% Customer Growth	20.96%
Average Monthly Usage (gallons)	7,745
Cost of Water / 1,000 gallons	$2.65
Administrative & Servicing Cost	$.75/1,000 gallons

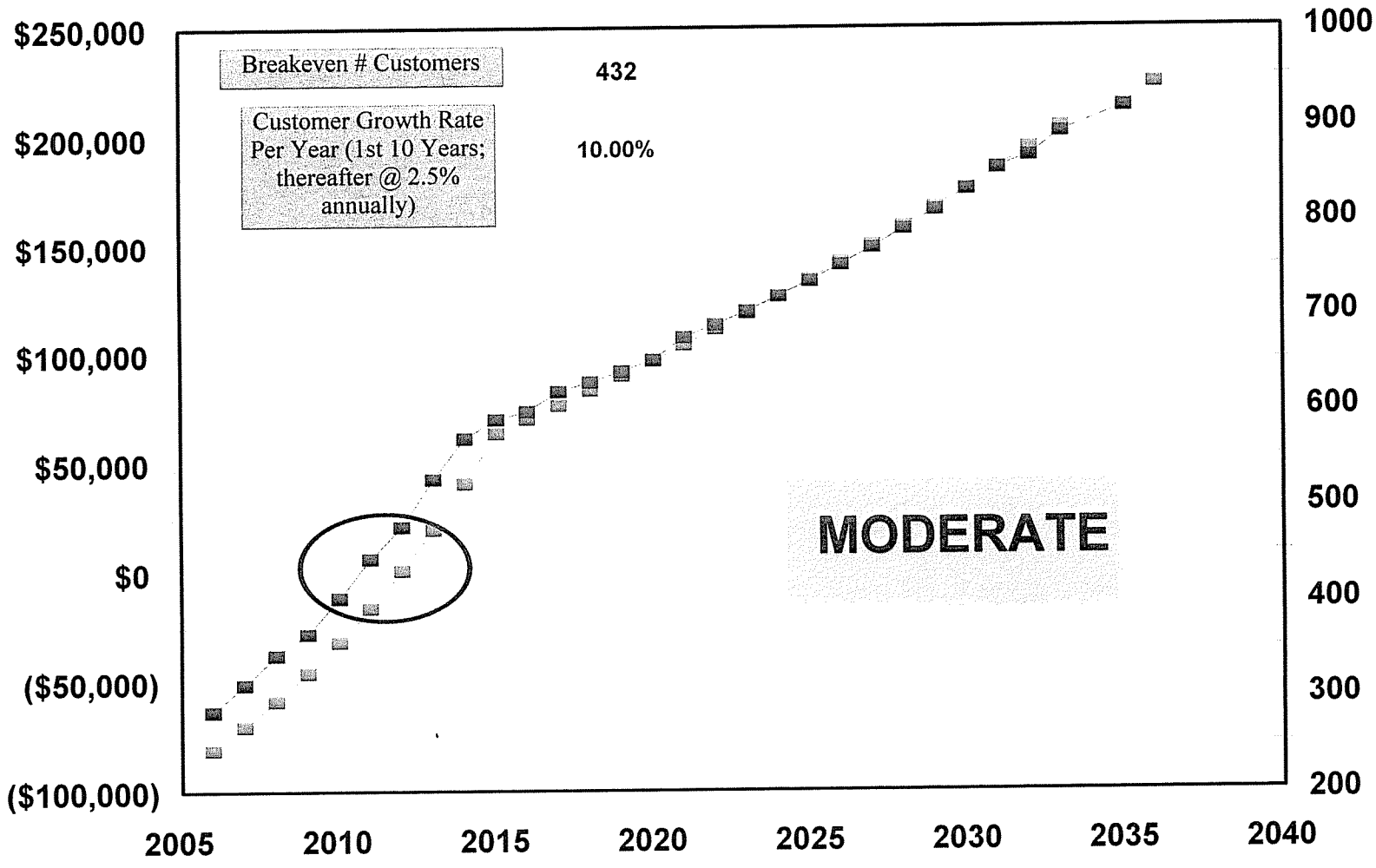
VARIABLES - RESIDENTIAL RATES

Expected # of New Customers	406	
Annual % Customer Growth	**10.00%**	1st 10 years; thereafter @ 2.5%/yr
Avg monthly usage per Customer (gallons)	6,000	
Customer tariff increase expected by BCWD		
Monthly Surcharge Proposed, if any	$25.00	

	Current BCWD	*Avg Customer Monthly Bill*
First 3,000 Gallons (Minimum)	$15.45	$15.45
Next 2,000 Gallons*	$4.65	$9.30
Next 5,000 Gallons*	$4.40	$4.40
Over 10,000 Gallons*	$3.65	
Avg Customer Assessment & Surcharge		$25.00
Avg Customer Monthly Bill	$29.15	$54.15

Operating Year	*Number of Customers*	*Tap on Fee Assessment Revenue*	*Avg Customer Monthly Bill*	*Annual Customer Billing Revenue*	*Total Revenue Receipts*	----- Paid to Boone County WD ----- *Less Cost of Water*	*Less O&M Fees*	*Net Available to Service Debt*	*Annual Payments Bonds*	*Surplus (+) Shortfall (-) Flows*	*Cumulative Flow*
2006	244		$54.15	$158,291	$158,291	$46,479	$13,154	$98,658		$98,658	$98,658
2007	268		$54.15	$174,120	$174,120	$51,127	$14,470	$108,524	$171,709	($63,185)	$35,473
2008	295		$54.15	$191,532	$191,532	$56,239	$15,917	$119,376	$170,213	($50,836)	($15,363)
2009	324		$54.15	$210,686	$210,686	$61,863	$17,509	$131,314	$168,623	($37,309)	($52,672)
2010	357		$54.15	$231,754	$231,754	$68,050	$19,259	$144,445	$171,940	($27,495)	($80,167)
2011	392		$54.15	$254,930	$254,930	$74,855	$21,185	$158,890	$170,002	($11,112)	($91,279)
2012	432		$54.15	$280,423	$280,423	$82,340	$23,304	$174,779	$167,962	$6,817	($84,463)
2013	475		$54.15	$308,465	$308,465	$90,574	$25,634	$192,257	$170,832	$21,425	($63,038)
2014	522		$54.15	$339,311	$339,311	$99,632	$28,198	$211,482	$168,440	$43,042	($19,996)
2015	574		$54.15	$373,243	$373,243	$109,595	$31,017	$232,630	$170,990	$61,641	$41,645
2016	589		$54.15	$382,574	$382,574	$112,335	$31,793	$238,446	$168,288	$70,159	$111,804
2017	603		$54.15	$392,138	$392,138	$115,143	$32,588	$244,407	$170,530	$73,878	$185,681
2018	619		$54.15	$401,941	$401,941	$118,022	$33,402	$250,518	$167,522	$82,996	$268,677
2019	634		$54.15	$411,990	$411,990	$120,972	$34,237	$256,780	$169,470	$87,311	$355,988
2020	650		$54.15	$422,290	$422,290	$123,996	$35,093	$263,200	$171,166	$92,034	$448,022
2021	666		$54.15	$432,847	$432,847	$127,096	$35,971	$269,780	$172,604	$97,176	$545,198
2022	683		$54.15	$443,668	$443,668	$130,274	$36,870	$276,524	$168,779	$107,745	$652,944
2023	700		$54.15	$454,760	$454,760	$133,531	$37,792	$283,438	$169,900	$113,538	$766,481
2024	717		$54.15	$466,129	$466,129	$136,869	$38,736	$290,523	$170,758	$119,765	$886,247
2025	735		$54.15	$477,782	$477,782	$140,291	$39,705	$297,787	$171,348	$126,439	$1,012,685
2026	754		$54.15	$489,727	$489,727	$143,798	$40,697	$305,231	$171,665	$133,566	$1,146,252
2027	772		$54.15	$501,970	$501,970	$147,393	$41,715	$312,862	$171,737	$141,125	$1,287,377
2028	792		$54.15	$514,519	$514,519	$151,078	$42,758	$320,684	$171,551	$149,133	$1,436,510
2029	812		$54.15	$527,382	$527,382	$154,855	$43,827	$328,701	$171,103	$157,598	$1,594,108
2030	832		$54.15	$540,567	$540,567	$158,726	$44,922	$336,918	$170,390	$166,528	$1,760,636
2031	853		$54.15	$554,081	$554,081	$162,694	$46,045	$345,341	$169,410	$175,931	$1,936,567
2032	874		$54.15	$567,933	$567,933	$166,761	$47,197	$353,975	$168,133	$185,842	$2,122,409
2033	896		$54.15	$582,131	$582,131	$170,930	$48,377	$362,824	$171,623	$191,202	$2,313,611
2035	918		$54.15	$596,684	$596,684	$175,204	$49,586	$371,895	$169,648	$202,247	$2,515,858
2036	941		$54.15	$611,601	$611,601	$179,584	$50,826	$381,192	$167,440	$213,752	$2,729,610
Totals:				$12,295,468	$12,295,468	$3,610,303	$1,021,784	$7,663,380	$4,933,770	$2,729,610	

Boone County - Phase III
Rural Water Program



BOONE COUNTY WATER SUBDISTRICT B (PHASE III)
PROJECTED REVENUE FUND FLOW - HIGH GROWTH

Bond Sizing:	
Total Project Costs	$3,548,148
Less Grant Funds	($1,000,000)
Add Capitalized Interest	$115,841
Add COI (UD, Legal, FA)	$86,011
Amount Financed	$2,750,000
Term (yrs)	30
Avg Rate	4.450%
RESIDENTIAL CUSTOMER HISTORY	
1998 # Customers	11,166
1998 # Customers	13,506
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% Customer Growth	20.96%
Average Monthly Usage (gallons)	7,745
Cost of Water / 1,000 gallons	$2.65
Administrative & Servicing Cost	$.75/1,000 gallons

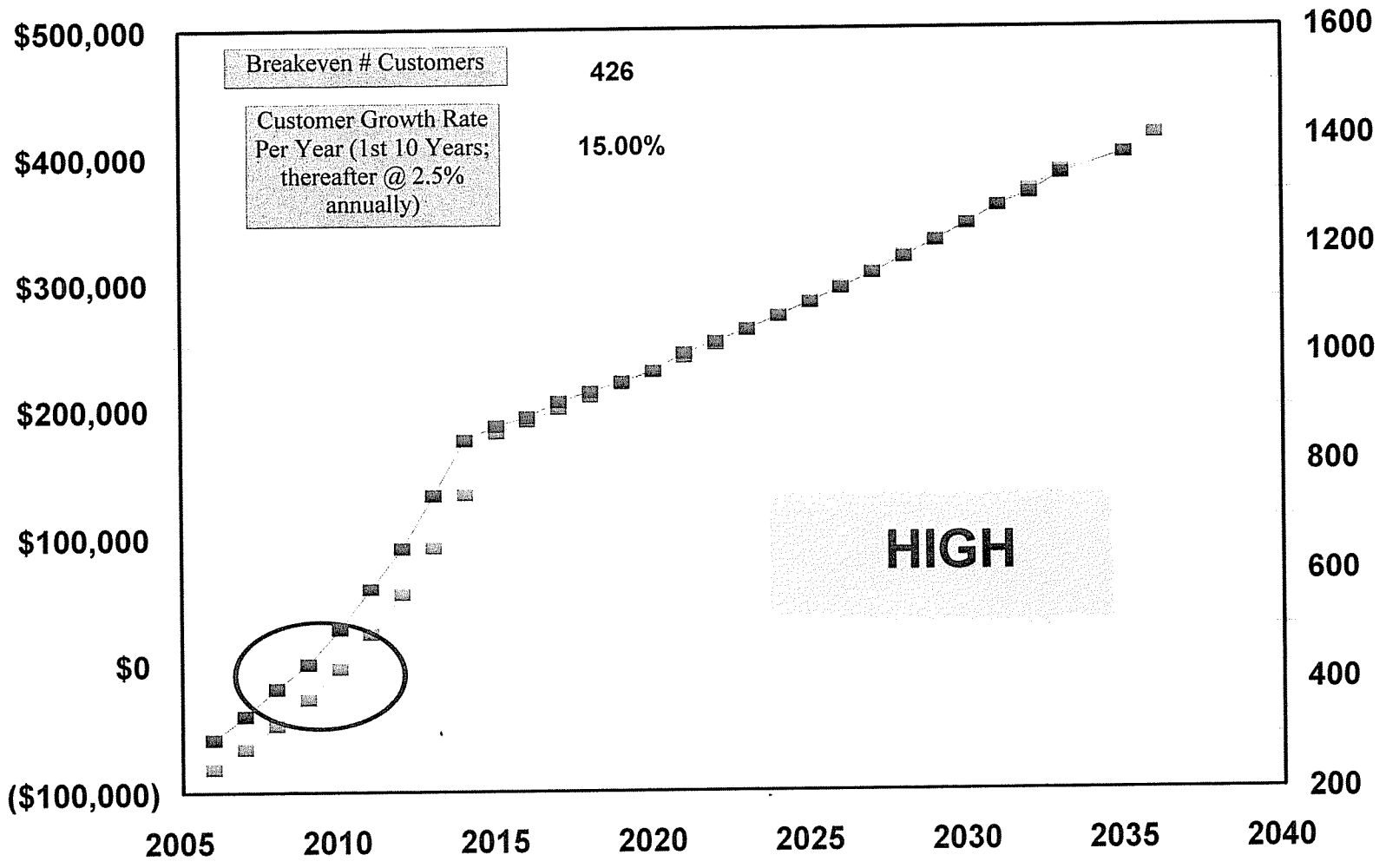
VARIABLES - RESIDENTIAL RATES

Expected # of New Customers	406	
Annual % Customer Growth	**15.00%**	1st 10 years; thereafter @ 2.5%/yr
Avg monthly usage per Customer (gallons)	6,000	
Customer tarriff increase expected by BCWD		
Monthly Surcharge Proposed, if any	$25.00	

	Current BCWD	*Avg Customer Monthly Bill*
First 3,000 Gallons (Minimum)	$15.45	$15.45
Next 2,000 Gallons*	$4.65	$9.30
Next 5,000 Gallons*	$4.40	$4.40
Over 10,000 Gallons*	$3.65	
Avg Customer Assessment & Surcharge		$25.00
Avg Customer Monthly Bill	$29.15	$54.15

Operating Year	*Number of Customers*	*Tap on Fee Assessment Revenue*	*Avg Customer Monthly Bill*	*Annual Customer Billing Revenue*	*Total Revenue Receipts*	----- Paid to Boone County WD ----- *Less Cost of Water*	*Less O&M Fees*	*Net Available to Service Debt*	*Annual Payments Bonds*	*Surplus (+) Shortfall (-) Flows*	*Cumulative Flow*
2006	244		$54.15	$158,291	$158,291	$46,479	$13,154	$98,658		$98,658	$98,658
2007	280		$54.15	$182,035	$182,035	$53,451	$15,128	$113,457	$171,709	($58,252)	$40,406
2008	322		$54.15	$209,340	$209,340	$61,468	$17,397	$130,475	$170,213	($39,737)	$669
2009	370		$54.15	$240,741	$240,741	$70,689	$20,006	$150,046	$168,623	($18,577)	($17,908)
2010	426		$54.15	$276,852	$276,852	$81,292	$23,007	$172,553	$171,940	$613	($17,294)
2011	490		$54.15	$318,380	$318,380	$93,486	$26,458	$198,436	$170,002	$28,434	$11,140
2012	563		$54.15	$366,137	$366,137	$107,508	$30,427	$228,202	$167,962	$60,240	$71,380
2013	648		$54.15	$421,058	$421,058	$123,635	$34,991	$262,432	$170,832	$91,600	$162,981
2014	745		$54.15	$484,217	$484,217	$142,180	$40,240	$301,797	$168,440	$133,357	$296,338
2015	857		$54.15	$556,849	$556,849	$163,507	$46,276	$347,067	$170,990	$176,077	$472,415
2016	878		$54.15	$570,770	$570,770	$167,595	$47,432	$355,743	$168,288	$187,456	$659,871
2017	900		$54.15	$585,040	$585,040	$171,784	$48,618	$364,637	$170,530	$194,107	$853,978
2018	923		$54.15	$599,666	$599,666	$176,079	$49,834	$373,753	$167,522	$206,231	$1,060,209
2019	946		$54.15	$614,657	$614,657	$180,481	$51,080	$383,097	$169,470	$213,627	$1,273,836
2020	970		$54.15	$630,024	$630,024	$184,993	$52,357	$392,674	$171,166	$221,509	$1,495,344
2021	994		$54.15	$645,774	$645,774	$189,618	$53,665	$402,491	$172,604	$229,887	$1,725,231
2022	1,019		$54.15	$661,919	$661,919	$194,358	$55,007	$412,553	$168,779	$243,774	$1,969,005
2023	1,044		$54.15	$678,467	$678,467	$199,217	$56,382	$422,867	$169,900	$252,967	$2,221,972
2024	1,070		$54.15	$695,428	$695,428	$204,198	$57,792	$433,439	$170,758	$262,681	$2,484,653
2025	1,097		$54.15	$712,814	$712,814	$209,303	$59,237	$444,275	$171,348	$272,927	$2,757,580
2026	1,124		$54.15	$730,634	$730,634	$214,535	$60,718	$455,382	$171,665	$283,717	$3,041,296
2027	1,153		$54.15	$748,900	$748,900	$219,899	$62,235	$466,766	$171,737	$295,029	$3,336,325
2028	1,181		$54.15	$767,623	$767,623	$225,396	$63,791	$478,435	$171,551	$306,885	$3,643,210
2029	1,211		$54.15	$786,813	$786,813	$231,031	$65,386	$490,396	$171,103	$319,294	$3,962,504
2030	1,241		$54.15	$806,484	$806,484	$236,807	$67,021	$502,656	$170,390	$332,266	$4,294,770
2031	1,272		$54.15	$826,646	$826,646	$242,727	$68,696	$515,222	$169,410	$345,812	$4,640,582
2032	1,304		$54.15	$847,312	$847,312	$248,795	$70,414	$528,103	$168,133	$359,970	$5,000,552
2033	1,337		$54.15	$868,495	$868,495	$255,015	$72,174	$541,306	$171,623	$369,683	$5,370,235
2035	1,370		$54.15	$890,207	$890,207	$261,390	$73,978	$554,838	$169,648	$385,191	$5,755,426
2036	1,404		$54.15	$912,462	$912,462	$267,925	$75,828	$568,709	$167,440	$401,269	$6,156,695
Totals:				$17,794,035	$17,794,035	$5,224,841	$1,478,729	$11,090,465	$4,933,770	$6,156,695	

Boone County - Phase III
Rural Water Program



County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Sources and Uses of Funds

Delivery Date: 6/ 1/ 5

Sources of Funds

Par Amount of Bonds	$2,750,000.00	
+Premium /-Discount	$0.00	
Bond Proceeds		2,750,000.00
State Grant		1,000,000.00
		$3,750,000.00

Uses of Funds

Deposit to Construction Fund		3,548,148.00
Cost of Issuance	(1.000000%)	27,500.00
Underwriters Discount	(2.000000%)	55,000.00
Capitalized Interest		115,841.15
Contingency		3,510.85
		$3,750,000.00

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Debt Service Schedule

Date	Principal	Coupon	Interest	Period Total	Fiscal Total
12/ 1/ 5			58,354.25	58,354.25	
6/ 1/ 6			58,354.25	58,354.25	116,708.50
12/ 1/ 6			58,354.25	58,354.25	
6/ 1/ 7	55,000.00	2.720000	58,354.25	113,354.25	171,708.50
12/ 1/ 7			57,606.25	57,606.25	
6/ 1/ 8	55,000.00	2.890000	57,606.25	112,606.25	170,212.50
12/ 1/ 8			56,811.50	56,811.50	
6/ 1/ 9	55,000.00	3.060000	56,811.50	111,811.50	168,623.00
12/ 1/ 9			55,970.00	55,970.00	
6/ 1/10	60,000.00	3.230000	55,970.00	115,970.00	171,940.00
12/ 1/10			55,001.00	55,001.00	
6/ 1/11	60,000.00	3.400000	55,001.00	115,001.00	170,002.00
12/ 1/11			53,981.00	53,981.00	
6/ 1/12	60,000.00	3.550000	53,981.00	113,981.00	167,962.00
12/ 1/12			52,916.00	52,916.00	
6/ 1/13	65,000.00	3.680000	52,916.00	117,916.00	170,832.00
12/ 1/13			51,720.00	51,720.00	
6/ 1/14	65,000.00	3.770000	51,720.00	116,720.00	168,440.00
12/ 1/14			50,494.75	50,494.75	
6/ 1/15	70,000.00	3.860000	50,494.75	120,494.75	170,989.50
12/ 1/15			49,143.75	49,143.75	
6/ 1/16	70,000.00	3.940000	49,143.75	119,143.75	168,287.50
12/ 1/16			47,764.75	47,764.75	
6/ 1/17	75,000.00	4.010000	47,764.75	122,764.75	170,529.50
12/ 1/17			46,261.00	46,261.00	
6/ 1/18	75,000.00	4.070000	46,261.00	121,261.00	167,522.00
12/ 1/18			44,734.75	44,734.75	
6/ 1/19	80,000.00	4.130000	44,734.75	124,734.75	169,469.50
12/ 1/19			43,082.75	43,082.75	
6/ 1/20	85,000.00	4.190000	43,082.75	128,082.75	171,165.50
12/ 1/20			41,302.00	41,302.00	
6/ 1/21	90,000.00	4.250000	41,302.00	131,302.00	172,604.00
12/ 1/21			39,389.50	39,389.50	
6/ 1/22	90,000.00	4.310000	39,389.50	129,389.50	168,779.00
12/ 1/22			37,450.00	37,450.00	
6/ 1/23	95,000.00	4.360000	37,450.00	132,450.00	169,900.00
12/ 1/23			35,379.00	35,379.00	
6/ 1/24	100,000.00	4.410000	35,379.00	135,379.00	170,758.00

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Debt Service Schedule

Date	Principal	Coupon	Interest	Period Total	Fiscal Total
12/ 1/24			33,174.00	33,174.00	
6/ 1/25	105,000.00	4.460000	33,174.00	138,174.00	171,348.00
12/ 1/25			30,832.50	30,832.50	
6/ 1/26	110,000.00	4.480000	30,832.50	140,832.50	171,665.00
12/ 1/26			28,368.50	28,368.50	
6/ 1/27	115,000.00	4.510000	28,368.50	143,368.50	171,737.00
12/ 1/27			25,775.25	25,775.25	
6/ 1/28	120,000.00	4.540000	25,775.25	145,775.25	171,550.50
12/ 1/28			23,051.25	23,051.25	
6/ 1/29	125,000.00	4.570000	23,051.25	148,051.25	171,102.50
12/ 1/29			20,195.00	20,195.00	
6/ 1/30	130,000.00	4.600000	20,195.00	150,195.00	170,390.00
12/ 1/30			17,205.00	17,205.00	
6/ 1/31	135,000.00	4.650000	17,205.00	152,205.00	169,410.00
12/ 1/31			14,066.25	14,066.25	
6/ 1/32	140,000.00	4.650000	14,066.25	154,066.25	168,132.50
12/ 1/32			10,811.25	10,811.25	
6/ 1/33	150,000.00	4.650000	10,811.25	160,811.25	171,622.50
12/ 1/33			7,323.75	7,323.75	
6/ 1/34	155,000.00	4.650000	7,323.75	162,323.75	169,647.50
12/ 1/34			3,720.00	3,720.00	
6/ 1/35	160,000.00	4.650000	3,720.00	163,720.00	167,440.00
	2,750,000.00		2,300,478.50	5,050,478.50	
ACCRUED					
	2,750,000.00		2,300,478.50	5,050,478.50	

Dated 6/ 1/ 5 with Delivery of 6/ 1/ 5

Bond Years	51,735.000	
Average Coupon	4.446658	
Average Life	18.812727	
N I C %	4.552969 %	Using 98.0000000
T I C %	4.575779 %	From Delivery Date
Arbitrage Yield	4.408238 %	

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Net Debt Service Requirements

Delivery Date: 6/ 1/ 5

Period Ending	Principal	Coupon	Interest	Total Debt Service	Constr. Fund Earnings	Debt Svc. Res. + Cap. Int.	Net Debt Service	Surplus Funds Remaining
12/ 1/ 5			58,354.25	58,354.25		116,418.91		58,064.66
6/ 1/ 6			58,354.25	58,354.25		289.60		0.01
12/ 1/ 6			58,354.25	58,354.25			58,354.24	
6/ 1/ 7	55,000.00	2.720000	58,354.25	113,354.25			113,354.25	
12/ 1/ 7			57,606.25	57,606.25			57,606.25	
6/ 1/ 8	55,000.00	2.890000	57,606.25	112,606.25			112,606.25	
12/ 1/ 8			56,811.50	56,811.50			56,811.50	
6/ 1/ 9	55,000.00	3.060000	56,811.50	111,811.50			111,811.50	
12/ 1/ 9			55,970.00	55,970.00			55,970.00	
6/ 1/10	60,000.00	3.230000	55,970.00	115,970.00			115,970.00	
12/ 1/10			55,001.00	55,001.00			55,001.00	
6/ 1/11	60,000.00	3.400000	55,001.00	115,001.00			115,001.00	
12/ 1/11			53,981.00	53,981.00			53,981.00	
6/ 1/12	60,000.00	3.550000	53,981.00	113,981.00			113,981.00	
12/ 1/12			52,916.00	52,916.00			52,916.00	
6/ 1/13	65,000.00	3.680000	52,916.00	117,916.00			117,916.00	
12/ 1/13			51,720.00	51,720.00			51,720.00	
6/ 1/14	65,000.00	3.770000	51,720.00	116,720.00			116,720.00	
12/ 1/14			50,494.75	50,494.75			50,494.75	
6/ 1/15	70,000.00	3.860000	50,494.75	120,494.75			120,494.75	
12/ 1/15			49,143.75	49,143.75			49,143.75	
6/ 1/16	70,000.00	3.940000	49,143.75	119,143.75			119,143.75	
12/ 1/16			47,764.75	47,764.75			47,764.75	
6/ 1/17	75,000.00	4.010000	47,764.75	122,764.75			122,764.75	
12/ 1/17			46,261.00	46,261.00			46,261.00	
6/ 1/18	75,000.00	4.070000	46,261.00	121,261.00			121,261.00	
12/ 1/18			44,734.75	44,734.75			44,734.75	
6/ 1/19	80,000.00	4.130000	44,734.75	124,734.75			124,734.75	
12/ 1/19			43,082.75	43,082.75			43,082.75	
6/ 1/20	85,000.00	4.190000	43,082.75	128,082.75			128,082.75	
12/ 1/20			41,302.00	41,302.00			41,302.00	
6/ 1/21	90,000.00	4.250000	41,302.00	131,302.00			131,302.00	
12/ 1/21			39,389.50	39,389.50			39,389.50	
6/ 1/22	90,000.00	4.310000	39,389.50	129,389.50			129,389.50	
12/ 1/22			37,450.00	37,450.00			37,450.00	
6/ 1/23	95,000.00	4.360000	37,450.00	132,450.00			132,450.00	
12/ 1/23			35,379.00	35,379.00			35,379.00	
6/ 1/24	100,000.00	4.410000	35,379.00	135,379.00			135,379.00	

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Net Debt Service Requirements

Delivery Date: 6/ 1/ 5

Period Ending	Principal	Coupon	Interest	Total Debt Service	Constr. Fund Earnings	Debt Svc. Res. + Cap. Int.	Net Debt Service	Surplus Funds Remaining
12/ 1/24			33,174.00	33,174.00			33,174.00	
6/ 1/25	105,000.00	4.460000	33,174.00	138,174.00			138,174.00	
12/ 1/25			30,832.50	30,832.50			30,832.50	
6/ 1/26	110,000.00	4.480000	30,832.50	140,832.50			140,832.50	
12/ 1/26			28,368.50	28,368.50			28,368.50	
6/ 1/27	115,000.00	4.510000	28,368.50	143,368.50			143,368.50	
12/ 1/27			25,775.25	25,775.25			25,775.25	
6/ 1/28	120,000.00	4.540000	25,775.25	145,775.25			145,775.25	
12/ 1/28			23,051.25	23,051.25			23,051.25	
6/ 1/29	125,000.00	4.570000	23,051.25	148,051.25			148,051.25	
12/ 1/29			20,195.00	20,195.00			20,195.00	
6/ 1/30	130,000.00	4.600000	20,195.00	150,195.00			150,195.00	
12/ 1/30			17,205.00	17,205.00			17,205.00	
6/ 1/31	135,000.00	4.650000	17,205.00	152,205.00			152,205.00	
12/ 1/31			14,066.25	14,066.25			14,066.25	
6/ 1/32	140,000.00	4.650000	14,066.25	154,066.25			154,066.25	
12/ 1/32			10,811.25	10,811.25			10,811.25	
6/ 1/33	150,000.00	4.650000	10,811.25	160,811.25			160,811.25	
12/ 1/33			7,323.75	7,323.75			7,323.75	
6/ 1/34	155,000.00	4.650000	7,323.75	162,323.75			162,323.75	
12/ 1/34			3,720.00	3,720.00			3,720.00	
6/ 1/35	160,000.00	4.650000	3,720.00	163,720.00			163,720.00	
	2,750,000.00		2,300,478.50	5,050,478.50		116,708.51	4,933,769.99	

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

County of Boone, Kentucky General Obligation Water Revenue
Bonds (Projected)
Based on A/E Numbers dated 2/4/05

Net Debt Service Requirements

Delivery Date: 6/ 1/ 5

Dated 6/ 1/ 5 with Delivery of 6/ 1/ 5

Bond Years	51,735.000		
Average Coupon	4.446658		
Average Life	18.812727		
N I C %	4.552969 %	Using	98.0000000
T I C %	4.575779 %	From Delivery Date	
Arbitrage Yield	4.408238 %		

Ross Sinclaire - T. Ross

Date: 03-21-2005 @ 10:04:53 Filename: BOONE Key: PHASEIII

R | S | A

P.O. Box 398
Frankfort, KY
40602

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fax: 502/695-2897
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fax: 803/765-1088

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Suite 1920
Louisville, KY
40299

502/491-3939
fax: 502/491-9979

5217 Maryland Way
Suite 302
Brentwood, TN
37027

615/370-6262
fax: 615/370-9669

SIPC

NASD
MEMBER FIRM

March 21, 2005

VIA UPS Delivery
Mr. Jim Parson
Boone County Administration Building
2950 Washington Square
Burlington, KY 41005

RE: Phase III - Rural Water District Expansion Project

Dear Jim:

Enclosed herewith are three scenarios as to the projected cash flows and the annual bond subsidy payment, if any, requirement of the County in order to finance the Phase III project based upon the engineers estimates dated February 4, 2005. Please note on page seven (7) of the schedules that I offset the total amount of Bonds to be issued by the $1,000,000 grant. I figured everything as a traditional bond issue, but if KIA does fund the project, assume that the rate that I have used would be high in comparison to their rate. I have also included a capitalized interest account to pay the debt service for one year during the construction of the lines.

Using these assumptions, the total bonds to be issued would be $2,750,000. Page one (1) and two (2) are the projections using a 5% growth figure for low growth, a 10% growth figure for moderate growth and 15% growth representing a high rate. Please note that the growth rates are only during the first 10 years, and thereafter were ran at 2.5% per year. Using the existing customer rates of the Boone County Water District and adding $25.00 as a surcharge, you can see the maximum liability under any of the scenarios to the County is about $65,000-$70,000 per year and the customer break even point is about 430 customers. I started with 60% of the 406 customers as you indicated I should use in your email.

If you have any questions of the schedules or need further numbers ran, please feel free to contact me. Please be advised that we would be glad to serve as the financial advisor of a traditional bond issue or to simply monitor and make sure that the KIA loan funding is economically better for the County.

Yours truly,

Terrell Ross

TR\klr
Enclosures

EXHIBIT L

HYDRAULIC ANALYSIS OF THE PROJECT AREA

TETRA TECH, INC.

May 5, 2005

Distribution Section, Drinking Water Branch, Division of Water
Department For Environmental Protection
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601

RE: **03247 – Boone County Rural Water – Phase II**
Contract 2A – Big Bone Church Road – and Side Streets
Contract 2B – East Bend Road – KY 338
Contract 2C – Petersburg Road – KY 20 – and Side Streets
Contract 2D – Side Streets off East Bend Road
KDOW Permit – Hydraulic Analysis

Ladies and Gentlemen:

On behalf of the Boone County Fiscal Court, we have prepared the enclosed hydraulic analysis information for each water main Contract using Haestad Methods, Inc. WaterCAD. Please note that Contracts 2B and 2D cover one of three (3) project areas. The other project areas are 2A and 2C.

Project Location Map.
Hydraulic Analysis Node and Pipe Map.
Hydraulic Analysis of Peak Hour Demand
Hydraulic Analysis of Maximum Day Demand
Velocity Analysis of all proposed side streets

The hydraulic analysis for project area 2A begins at J-2007, which is an existing Boone County Water District elevated storage tank. The overflow elevation of this tank is 1045. The starting Hydraulic Grade Lines (HGL) are based on the operation of the entire Boone County water distribution system.

The velocity analysis was produced by reducing the pressure to 20 psi (or as near to 20 psi as possible without lowering pressure below 20 psi at other nodes) at nodes J-122, J-126, J-129 and J-130. The results are as follows:

Big B C Rd	8" pipe	Flow = 828 gpm	Velocity = 5.28 fps	HGL = 851.0.
Kirby Lane	8" pipe	Flow = 759 gpm	Velocity = 4.84 fps	HGL = 879.1.
Forest Vw Dr	8" pipe	Flow = 728 gpm	Velocity = 4.65 fps	HGL = 872.6.
Mich/Brian Ct	8" pipe	Flow = 806 gpm	Velocity = 5.14 fps	HGL = 898.1.

11156 Canal Road, Suite A, Cincinnati, OH 45241
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TETRA TECH

The hydraulic analysis for project areas 2B and 2D begins at J-2011, which is an existing Boone County Water District elevated storage tank. The overflow elevation of this tank is 1080. The starting Hydraulic Grade Lines (HGL) are based on the operation of the entire Boone County water distribution system.

The velocity analysis was produced by reducing the pressure to 20 psi at nodes J-43, J-88, J-94, and J-102. The results are as follows:

Emerald Dr	8" pipe	Flow = 1,082 gpm	Velocity = 6.91 fps	HGL = 876.5.
Kirby Drive	8" pipe	Flow = 829 gpm	Velocity = 5.29 fps	HGL = 870.2.
Wolfe Road	8" pipe	Flow = 902 gpm	Velocity = 5.76 fps	HGL = 906.2.
Locust Gr Rd	8" pipe	Flow = 780 gpm	Velocity = 4.98 fps	HGL = 896.1.

The hydraulic analysis for project area 2C begins at J-2011, which is an existing Boone County Water District elevated storage tank. The overflow elevation of this tank is 1080. The starting Hydraulic Grade Lines (HGL) are based on the operation of the entire Boone County water distribution system.

The velocity analysis was produced by reducing the pressure to 20 psi (or as near to 20 psi as possible without lowering pressure below 20 psi at other nodes) at nodes J-22, J-24, J-26, and J-131. The results are as follows:

Anson Lane	8" pipe	Flow = 1,513 gpm	Velocity = 9.66 fps	HGL = 814.0.
Brewer Lane	8" pipe	Flow = 1,393 gpm	Velocity = 8.89 fps	HGL = 866.2.
Caribou Dr	8" pipe	Flow = 1,214 gpm	Velocity = 7.75 fps	HGL = 816.4.
Petersburg Rd	8" pipe	Flow = 1,051 gpm	Velocity = 4.81 fps	HGL = 874.6.

Please review this information for approval and advise Tetra Tech, Inc. of any questions or comments you may have on this project.

Sincerely,

Paul G. Trepaney, P.E.
Senior Project Engineer

Cc Jim Parsons
Robin Curry
Phil Trzop
Dennis Huber

Attachments

Scenario: STD23 - Peak Hour Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	98.74	227.75	1,000.75
J-108	0.00	756.00	106.08	244.70	1,000.70
J-109	0.00	774.00	98.28	226.71	1,000.71
J-122	3.00	804.00	85.27	196.70	1,000.70
J-126	3.00	829.00	74.43	171.70	1,000.70
J-127	0.00	828.00	74.87	172.70	1,000.70
J-128	0.00	848.00	66.20	152.70	1,000.70
J-129	6.00	800.00	87.00	200.69	1,000.69
J-130	6.00	852.00	64.47	148.71	1,000.71
J-2007	0.00	950.00	39.88	91.98	1,041.98
J-2008	0.00	950.00	39.73	91.64	1,041.64
J-2135	397.64	860.00	75.64	174.49	1,034.49
J-2136	533.75	900.00	48.22	111.22	1,011.22
J-2137	812.78	830.00	89.49	206.42	1,036.42
J-2138	288.75	920.00	50.41	116.28	1,036.28
J-2156	160.42	910.00	48.81	112.59	1,022.59
J-2157	81.67	920.00	44.59	102.86	1,022.86
J-2158	61.25	920.00	47.05	108.53	1,028.53
J-2160	43.75	900.00	50.85	117.29	1,017.29
J-2161	7.78	846.00	70.09	161.68	1,007.68
J-2162	43.75	900.00	47.25	108.98	1,008.98
J-2163	78.75	840.00	71.32	164.51	1,004.51
J-2190	7.78	780.00	94.88	218.85	998.85
J-2191	418.42	820.00	74.93	172.84	992.84

WT

Contract 2A

Scenario: STD38 - Max Day Pumps Off Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	108.11	249.37	1,022.37
J-108	0.00	756.00	115.47	266.35	1,022.35
J-109	0.00	774.00	107.66	248.35	1,022.35
J-122	2.00	804.00	94.66	218.35	1,022.35
J-126	2.00	829.00	83.82	193.34	1,022.34
J-127	0.00	828.00	84.25	194.34	1,022.34
J-128	0.00	848.00	75.58	174.34	1,022.34
J-129	4.00	800.00	96.39	222.34	1,022.34
J-130	4.00	852.00	73.85	170.35	1,022.35
J-2007	0.00	950.00	39.88	92.00	1,042.00
J-2008	0.00	950.00	39.85	91.93	1,041.93
J-2135	284.03	860.00	78.32	180.65	1,040.65
J-2136	381.25	900.00	55.53	128.08	1,028.08
J-2137	580.56	830.00	92.25	212.80	1,042.80
J-2138	206.25	920.00	53.29	122.92	1,042.92
J-2156	114.58	910.00	53.84	124.19	1,034.19
J-2157	58.33	920.00	49.61	114.43	1,034.43
J-2158	43.75	920.00	51.13	117.95	1,037.95
J-2160	31.25	900.00	56.95	131.36	1,031.36
J-2161	5.56	846.00	78.09	180.12	1,026.12
J-2162	31.25	900.00	55.00	126.87	1,026.87
J-2163	56.25	840.00	79.96	184.45	1,024.45
J-2190	5.56	780.00	104.61	241.30	1,021.30
J-2191	298.87	820.00	85.85	198.03	1,018.03

WT

2

Scenario: MDD Phases I, II, and III with Flush @ J-122
Steady State Analysis
Junction Report

Big Bone Church Rd

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	85.90	198.14	971.14
J-108	0.00	756.00	59.89	138.14	894.14
J-109	0.00	774.00	62.58	144.36	918.36
J-122	828.00	804.00	20.66	47.65	851.65
J-126	2.00	829.00	28.24	65.14	894.14
J-127	0.00	828.00	28.67	66.14	894.14
J-128	0.00	848.00	20.00	46.14	894.14
J-129	4.00	800.00	40.81	94.14	894.14
J-130	4.00	852.00	28.77	66.36	918.36
J-2007	0.00	950.00	39.88	91.99	1,041.99
J-2008	0.00	950.00	39.83	91.88	1,041.88
J-2135	284.03	860.00	77.70	179.22	1,039.22
J-2136	381.25	900.00	53.72	123.91	1,023.91
J-2137	580.56	830.00	91.59	211.28	1,041.28
J-2138	206.25	920.00	52.72	121.61	1,041.61
J-2156	114.58	910.00	50.94	117.50	1,027.50
J-2157	58.33	920.00	46.60	107.48	1,027.48
J-2158	43.75	920.00	49.17	113.43	1,033.43
J-2160	31.25	900.00	55.23	127.39	1,027.39
J-2161	5.56	846.00	69.99	161.44	1,007.44
J-2162	31.25	900.00	53.12	122.54	1,022.54
J-2163	56.25	840.00	78.61	181.34	1,021.34
J-2190	5.56	780.00	90.43	208.60	988.60
J-2191	298.87	820.00	67.38	155.42	975.42

PRESSURE AT NODE 128 GETS REDUCED TO 20 PSI WHEN FLUSHING DEMAND IS APPLIED AT J-122

WT

Pressure Reduced to 20.66psi @ node J-122

Flow at J-122 = 828 gpm

Velocity in P-109 = 5.28 fps

8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-122
Steady State Analysis
Pipe Report

Big Bone Church Road

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-106	J-108	J-109	-834.00	5.32	1,600.00	8	59.89	62.58
P-107	J-109	J-103	-838.00	5.35	3,456.00	8	62.58	85.90
P-109	J-122	J-108	-828.00	5.28	2,845.00	8	20.66	59.89
P-114	J-108	J-127	6.00	0.04	1,331.00	8	59.89	28.67
P-119	J-127	J-126	2.00	0.01	1,197.00	8	28.67	28.24
P-124	J-127	J-128	4.00	0.03	634.00	8	28.67	20.00
P-133	J-128	J-129	4.00	0.03	1,989.00	8	20.00	40.81
P-134	J-109	J-130	4.00	0.03	1,774.00	8	62.58	28.77
P-775a	J-2008	T-12a	0.00	0.00	50.00	16	39.83	17.34
P-775b	J-2008	T-12b	0.00	0.00	50.00	16	39.83	17.34
P-776	SR-7	J-2007	1,679.10	1.71	10.00	20	0.00	39.88
P-2008	J-2008	J-2007	-1,679.10	2.68	50.00	16	39.83	39.88
P-2166	J-2008	J-2135	123.22	0.79	5,168.00	8	39.83	77.70
P-2167	J-2135	J-2160	312.28	1.99	4,820.00	8	77.70	55.23
P-2168	J-2135	J-2137	-110.09	0.70	4,127.00	8	77.70	91.59
P-2170	J-2137	J-2138	-38.32	0.24	4,640.00	8	91.59	52.72
P-2171	J-2138	J-2159	-244.57	1.56	3,290.00	8	52.72	64.51
P-2213	J-2156	J-2157	37.32	0.11	2,757.00	12	50.94	46.60
P-2214	J-2157	J-2158	-614.66	1.74	4,979.00	12	46.60	49.17
P-2215	J-2158	J-2137	-658.41	1.87	5,792.00	12	49.17	91.59
P-2218	J-2161	J-2160	-422.72	2.70	4,640.00	8	69.99	55.23
P-2219	J-2136	J-2160	-252.30	1.61	2,102.00	8	53.72	55.23
P-2220	J-2162	J-2136	-409.66	1.16	2,445.00	12	53.12	53.72
P-2221	J-2163	J-2136	-136.57	0.87	4,863.00	8	78.61	53.72
P-2251	J-2182	J-2137	2,771.95	2.83	5,814.00	20	108.67	91.59
P-2252	J-2184	J-2163	-80.32	0.23	4,378.00	12	95.90	78.61
P-2261	J-2190	J-2161	-417.16	2.66	4,489.00	8	90.43	69.99
P-2262	J-2191	J-2190	-411.60	2.63	3,220.00	8	67.38	90.43
P-2263a	J-2157	J-103	593.64	3.79	6,987.00	8	46.60	85.90
P-2263b	J-103	J-2191	-244.36	1.56	2,751.00	8	85.90	67.38
P-2286	J-2137	J-2135	1,461.23	1.49	4,177.00	20	91.59	77.70
P-2287	J-2135	J-2160	1,921.70	3.07	4,874.00	16	77.70	55.23
P-2288	J-2008	J-2135	823.48	1.31	5,270.00	16	39.83	77.70
P-2293	J-2160	J-2136	1,527.72	2.44	2,190.00	16	55.23	53.72
P-2294	J-2136	J-2162	852.54	1.36	2,555.00	16	53.72	53.12
P-2670a	J-7	J-2191	131.63	0.84	14,813.00	8	208.85	67.38

4

Scenario: MDD Phases I, II, and III with Flush @ J-126
Steady State Analysis
Junction Report

Kirby Lane

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	88.45	204.02	977.02
J-108	0.00	756.00	67.36	155.37	911.37
J-109	0.00	774.00	68.50	158.01	932.01
J-122	2.00	804.00	46.55	107.37	911.37
J-126	759.00	829.00	21.71	50.07	879.07
J-127	0.00	828.00	28.74	66.29	894.29
J-128	0.00	848.00	20.07	46.28	894.28
J-129	4.00	800.00	40.87	94.28	894.28
J-130	4.00	852.00	34.69	80.01	932.01
J-2007	0.00	950.00	39.88	91.99	1,041.99
J-2008	0.00	950.00	39.84	91.89	1,041.89
J-2135	284.03	860.00	77.77	179.38	1,039.38
J-2136	381.25	900.00	53.89	124.31	1,024.31
J-2137	580.56	830.00	91.67	211.46	1,041.46
J-2138	206.25	920.00	52.78	121.76	1,041.76
J-2156	114.58	910.00	51.27	118.26	1,028.26
J-2157	58.33	920.00	46.93	108.25	1,028.25
J-2158	43.75	920.00	49.39	113.93	1,033.93
J-2160	31.25	900.00	55.39	127.78	1,027.78
J-2161	5.56	846.00	70.86	163.46	1,009.46
J-2162	31.25	900.00	53.30	122.95	1,022.95
J-2163	56.25	840.00	78.74	181.63	1,021.63
J-2190	5.56	780.00	91.99	212.19	992.19
J-2191	298.87	820.00	69.42	160.12	980.12

PRESSURE AT J-128 APPROACHES 20 PSI AS FLUSHING DEMAND IS APPLIED AT J-126

WT

Pressure Reduced to 21.71 psi at node J-126

Flow at J-126 = 759 gpm

Velocity at P-119 = 4.84 fps

8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-126
Steady State Analysis
Pipe Report

Kirby Lane

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-106	J-108	J-109	-765.00	4.88	1,600.00	8	67.36	68.50
P-107	J-109	J-103	-769.00	4.91	3,456.00	8	68.50	88.45
P-109	J-122	J-108	-2.00	0.01	2,845.00	8	46.55	67.36
P-114	J-108	J-127	763.00	4.87	1,331.00	8	67.36	28.74
P-119	J-127	J-126	759.00	4.84	1,197.00	8	28.74	21.71
P-124	J-127	J-128	4.00	0.03	634.00	8	28.74	20.07
P-133	J-128	J-129	4.00	0.03	1,989.00	8	20.07	40.87
P-134	J-109	J-130	4.00	0.03	1,774.00	8	68.50	34.69
P-775a	J-2008	T-12a	0.00	0.00	50.00	16	39.84	17.34
P-775b	J-2008	T-12b	0.00	0.00	50.00	16	39.84	17.34
P-776	SR-7	J-2007	1,640.51	1.68	10.00	20	0.00	39.88
P-2008	J-2008	J-2007	-1,640.51	2.62	50.00	16	39.84	39.88
P-2166	J-2008	J-2135	119.28	0.76	5,168.00	8	39.84	77.77
P-2167	J-2135	J-2160	309.06	1.97	4,820.00	8	77.77	55.39
P-2168	J-2135	J-2137	-110.59	0.71	4,127.00	8	77.77	91.67
P-2170	J-2137	J-2138	-36.52	0.23	4,640.00	8	91.67	52.78
P-2171	J-2138	J-2159	-242.77	1.55	3,290.00	8	52.78	64.53
P-2213	J-2156	J-2157	22.37	0.06	2,757.00	12	51.27	46.93
P-2214	J-2157	J-2158	-599.84	1.70	4,979.00	12	46.93	49.39
P-2215	J-2158	J-2137	-643.59	1.83	5,792.00	12	49.39	91.67
P-2218	J-2161	J-2160	-403.61	2.58	4,640.00	8	70.86	55.39
P-2219	J-2136	J-2160	-251.74	1.61	2,102.00	8	53.89	55.39
P-2220	J-2162	J-2136	-407.44	1.16	2,445.00	12	53.30	53.89
P-2221	J-2163	J-2136	-139.49	0.89	4,863.00	8	78.74	53.89
P-2251	J-2182	J-2137	2,766.18	2.82	5,814.00	20	108.73	91.67
P-2261	J-2190	J-2161	-398.06	2.54	4,489.00	8	91.99	70.86
P-2262	J-2191	J-2190	-392.50	2.51	3,220.00	8	69.42	91.99
P-2263a	J-2157	J-103	563.87	3.60	6,987.00	8	46.93	88.45
P-2263b	J-103	J-2191	-205.13	1.31	2,751.00	8	88.45	69.42
P-2286	J-2137	J-2135	1,467.97	1.50	4,177.00	20	91.67	77.77
P-2287	J-2135	J-2160	1,901.88	3.03	4,874.00	16	77.77	55.39
P-2288	J-2008	J-2135	797.13	1.27	5,270.00	16	39.84	77.77
P-2293	J-2160	J-2136	1,524.34	2.43	2,190.00	16	55.39	53.89
P-2294	J-2136	J-2162	847.90	1.35	2,555.00	16	53.89	53.30
P-2670a	J-7	J-2191	111.50	0.71	14,813.00	8	210.16	69.42

Scenario: MDD Phases I, II, and III with Flush @ J-129
Steady State Analysis
Junction Report

Forest View Drive

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	89.61	206.71	979.71
J-108	0.00	756.00	70.74	163.19	919.19
J-109	0.00	774.00	71.19	164.21	938.21
J-122	2.00	804.00	49.94	115.19	919.19
J-126	2.00	829.00	32.27	74.44	903.44
J-127	0.00	828.00	32.71	75.44	903.44
J-128	0.00	848.00	20.80	47.98	895.98
J-129	728.00	800.00	31.46	72.58	872.58
J-130	4.00	852.00	37.37	86.21	938.21
J-2007	0.00	950.00	39.88	91.99	1,041.99
J-2008	0.00	950.00	39.84	91.89	1,041.89
J-2135	284.03	860.00	77.80	179.46	1,039.46
J-2136	381.25	900.00	53.96	124.48	1,024.48
J-2137	580.56	830.00	91.71	211.54	1,041.54
J-2138	206.25	920.00	52.82	121.83	1,041.83
J-2156	114.58	910.00	51.42	118.61	1,028.61
J-2157	58.33	920.00	47.08	108.61	1,028.61
J-2158	43.75	920.00	49.49	114.16	1,034.16
J-2160	31.25	900.00	55.46	127.94	1,027.94
J-2161	5.56	846.00	71.27	164.39	1,010.39
J-2162	31.25	900.00	53.38	123.13	1,023.13
J-2163	56.25	840.00	78.83	181.84	1,021.84
J-2190	5.56	780.00	92.71	213.85	993.85
J-2191	298.87	820.00	70.36	162.30	982.30

PRESSURE AT J-128 APPROACHES 20 PSI AS FLUSHING DEMAND IS APPLIED AT J-129

WJ

Pressure Reduced to 31.46 psi at node J-129

Flow at J-129 = 728 gpm

Velocity at P-133 = 4.65 fps

8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-129
Steady State Analysis
Pipe Report

Forest View Drive

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-106	J-108	J-109	-732.00	4.67	1,600.00	8	70.74	71.19
P-107	J-109	J-103	-736.00	4.70	3,456.00	8	71.19	89.61
P-109	J-122	J-108	-2.00	0.01	2,845.00	8	49.94	70.74
P-114	J-108	J-127	730.00	4.66	1,331.00	8	70.74	32.71
P-119	J-127	J-126	2.00	0.01	1,197.00	8	32.71	32.27
P-124	J-127	J-128	728.00	4.65	634.00	8	32.71	20.80
P-133	J-128	J-129	728.00	4.65	1,989.00	8	20.80	31.46
P-134	J-109	J-130	4.00	0.03	1,774.00	8	71.19	37.37
P-775a	J-2008	T-12a	0.00	0.00	50.00	16	39.84	17.34
P-775b	J-2008	T-12b	0.00	0.00	50.00	16	39.84	17.34
P-776	SR-7	J-2007	1,622.72	1.66	10.00	20	0.00	39.88
P-2008	J-2008	J-2007	-1,622.72	2.59	50.00	16	39.84	39.88
P-2166	J-2008	J-2135	117.52	0.75	5,168.00	8	39.84	77.80
P-2167	J-2135	J-2160	307.86	1.96	4,820.00	8	77.80	55.46
P-2168	J-2135	J-2137	-111.13	0.71	4,127.00	8	77.80	91.71
P-2170	J-2137	J-2138	-35.81	0.23	4,640.00	8	91.71	52.82
P-2171	J-2138	J-2159	-242.06	1.55	3,290.00	8	52.82	64.55
P-2213	J-2156	J-2157	15.39	0.04	2,757.00	12	51.42	47.08
P-2214	J-2157	J-2158	-592.83	1.68	4,979.00	12	47.08	49.49
P-2215	J-2158	J-2137	-636.58	1.81	5,792.00	12	49.49	91.71
P-2218	J-2161	J-2160	-394.44	2.52	4,640.00	8	71.27	55.46
P-2219	J-2136	J-2160	-251.82	1.61	2,102.00	8	53.96	55.46
P-2220	J-2162	J-2136	-405.58	1.15	2,445.00	12	53.38	53.96
P-2221	J-2163	J-2136	-145.75	0.93	4,863.00	8	78.83	53.96
P-2251	J-2182	J-2137	2,763.16	2.82	5,814.00	20	108.75	91.71
P-2261	J-2190	J-2161	-388.88	2.48	4,489.00	8	92.71	71.27
P-2262	J-2191	J-2190	-383.33	2.45	3,220.00	8	70.36	92.71
P-2263a	J-2157	J-103	549.88	3.51	6,987.00	8	47.08	89.61
P-2263b	J-103	J-2191	-186.12	1.19	2,751.00	8	89.61	70.36
P-2286	J-2137	J-2135	1,470.70	1.50	4,177.00	20	91.71	77.80
P-2287	J-2135	J-2160	1,894.45	3.02	4,874.00	16	77.80	55.46
P-2288	J-2008	J-2135	786.98	1.26	5,270.00	16	39.84	77.80
P-2293	J-2160	J-2136	1,524.81	2.43	2,190.00	16	55.46	53.96
P-2294	J-2136	J-2162	844.04	1.35	2,555.00	16	53.96	53.38
P-2670a	J-7	J-2191	101.66	0.65	14,813.00	8	210.79	70.36

8

Scenario: MDD Phases I, II, and III with Flush @ J-130
Steady State Analysis
Junction Report

Michelle Dr / Brian Court

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-103	0.00	773.00	86.82	200.27	973.27
J-108	0.00	756.00	72.53	167.31	923.31
J-109	0.00	774.00	64.73	149.31	923.31
J-122	2.00	804.00	51.72	119.31	923.31
J-126	2.00	829.00	40.88	94.31	923.31
J-127	0.00	828.00	41.32	95.31	923.31
J-128	0.00	848.00	32.65	75.31	923.31
J-129	4.00	800.00	53.46	123.30	923.30
J-130	805.50	852.00	20.00	46.14	898.14
J-2007	0.00	950.00	39.88	91.99	1,041.99
J-2008	0.00	950.00	39.83	91.88	1,041.88
J-2135	284.03	860.00	77.72	179.28	1,039.28
J-2136	381.25	900.00	53.78	124.06	1,024.06
J-2137	580.56	830.00	91.62	211.34	1,041.34
J-2138	206.25	920.00	52.74	121.66	1,041.66
J-2156	114.58	910.00	51.06	117.78	1,027.78
J-2157	58.33	920.00	46.72	107.76	1,027.76
J-2158	43.75	920.00	49.25	113.61	1,033.61
J-2160	31.25	900.00	55.29	127.53	1,027.53
J-2161	5.56	846.00	70.30	162.17	1,008.17
J-2162	31.25	900.00	53.19	122.69	1,022.69
J-2163	56.25	840.00	78.66	181.44	1,021.44
J-2190	5.56	780.00	90.99	209.90	989.90
J-2191	298.87	820.00	68.11	157.12	977.12

WT

Pressure Reduced to 20.0 psi at node J-130

Flow J-130 = 805.50 gpm

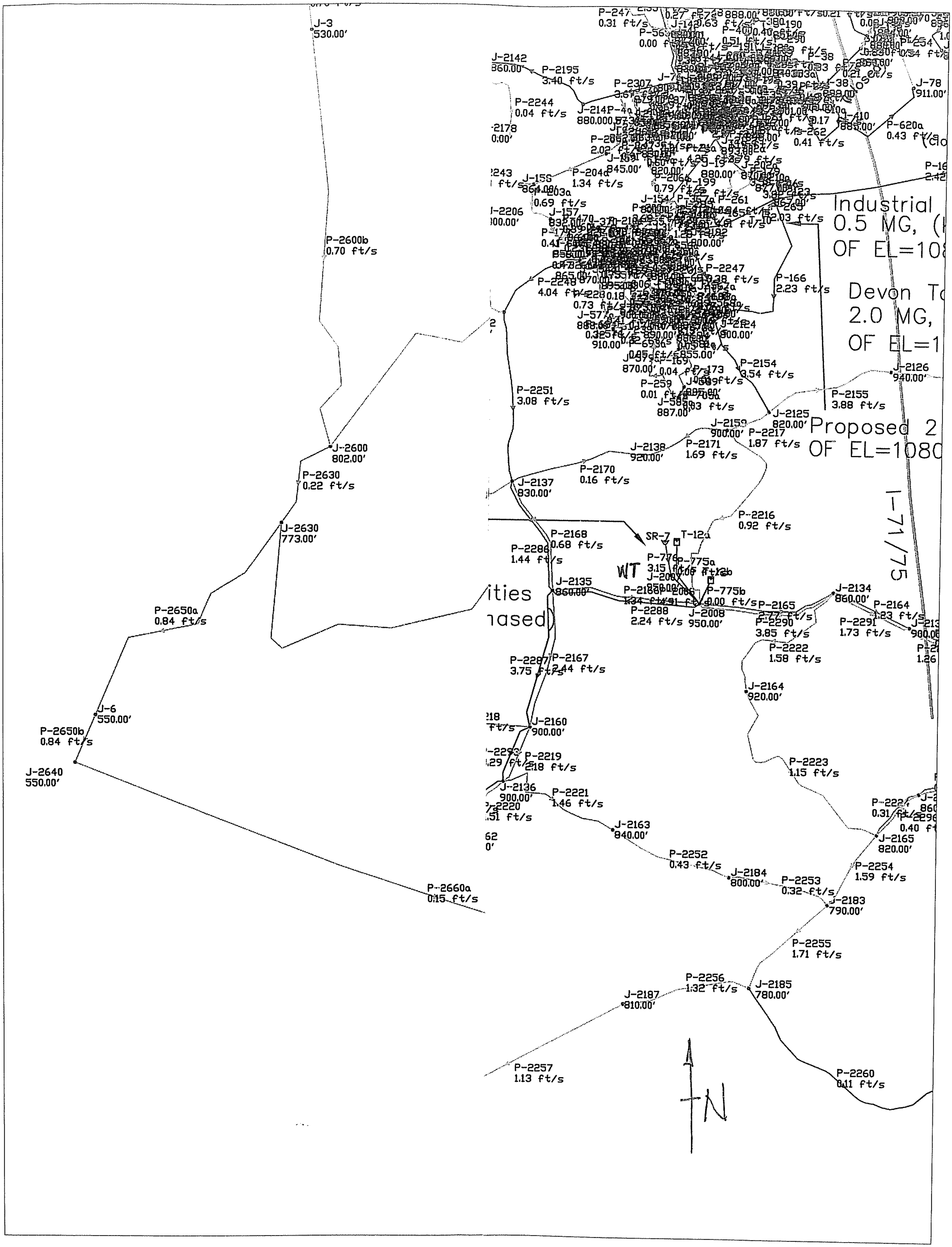
Velocity P-134 = 5.14 fps

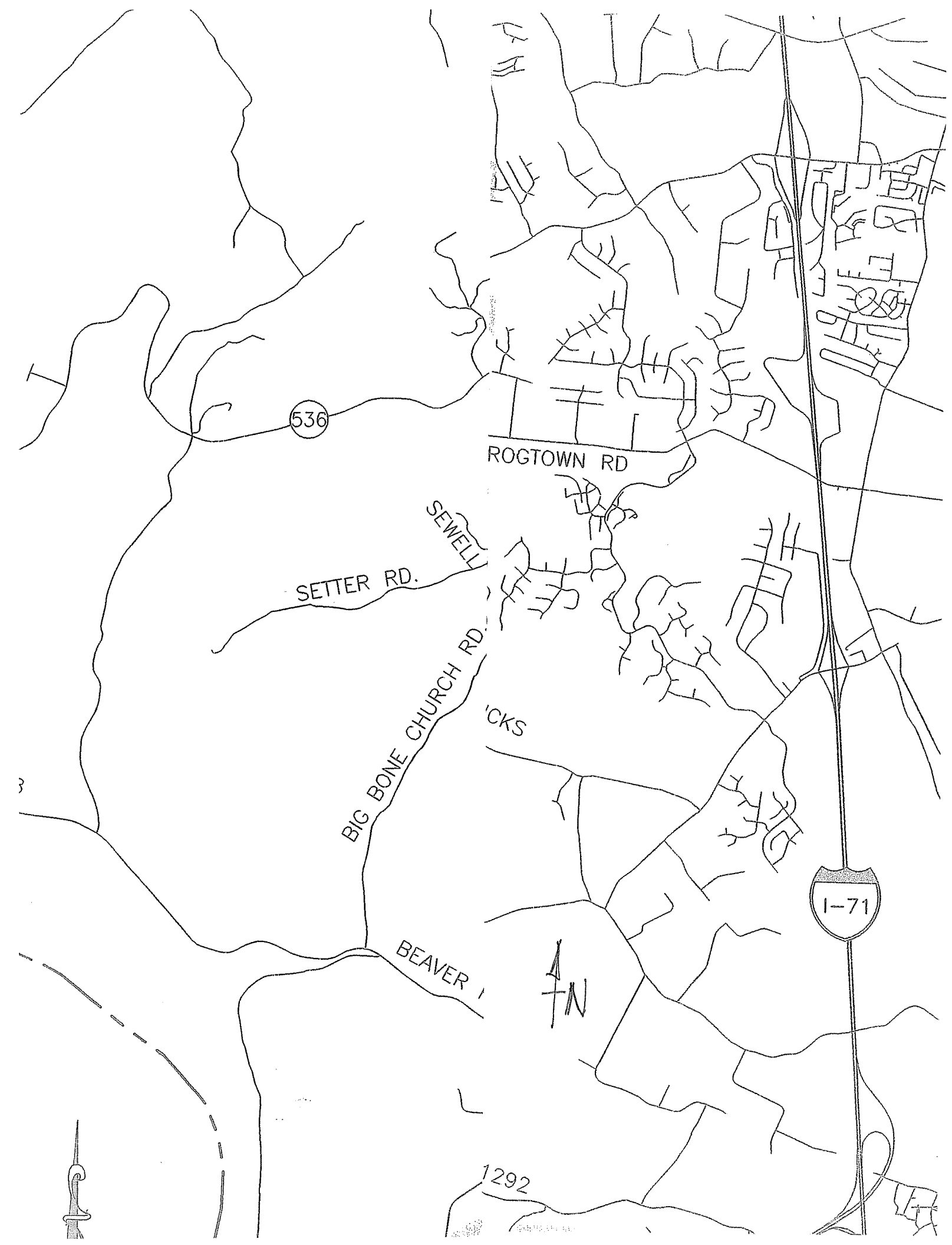
8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-130
Steady State Analysis
Pipe Report

Michelle Dr / Brian Court

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-106	J-108	J-109	-8.00	0.05	1,600.00	8	72.53	64.73
P-107	J-109	J-103	-813.50	5.19	3,456.00	8	64.73	86.82
P-109	J-122	J-108	-2.00	0.01	2,845.00	8	51.72	72.53
P-114	J-108	J-127	6.00	0.04	1,331.00	8	72.53	41.32
P-119	J-127	J-126	2.00	0.01	1,197.00	8	41.32	40.88
P-124	J-127	J-128	4.00	0.03	634.00	8	41.32	32.65
P-133	J-128	J-129	4.00	0.03	1,989.00	8	32.65	53.46
P-134	J-109	J-130	805.50	5.14	1,774.00	8	64.73	20.00
P-775a	J-2008	T-12a	0.00	0.00	50.00	16	39.83	17.34
P-775b	J-2008	T-12b	0.00	0.00	50.00	16	39.83	17.34
P-776	SR-7	J-2007	1,665.38	1.70	10.00	20	0.00	39.88
P-2008	J-2008	J-2007	-1,665.38	2.66	50.00	16	39.83	39.88
P-2166	J-2008	J-2135	121.82	0.78	5,168.00	8	39.83	77.72
P-2167	J-2135	J-2160	311.14	1.99	4,820.00	8	77.72	55.29
P-2168	J-2135	J-2137	-110.27	0.70	4,127.00	8	77.72	91.62
P-2170	J-2137	J-2138	-37.67	0.24	4,640.00	8	91.62	52.74
P-2171	J-2138	J-2159	-243.92	1.56	3,290.00	8	52.74	64.52
P-2213	J-2156	J-2157	32.03	0.09	2,757.00	12	51.06	46.72
P-2214	J-2157	J-2158	-609.31	1.73	4,979.00	12	46.72	49.25
P-2215	J-2158	J-2137	-653.06	1.85	5,792.00	12	49.25	91.62
P-2218	J-2161	J-2160	-415.92	2.65	4,640.00	8	70.30	55.29
P-2219	J-2136	J-2160	-252.11	1.61	2,102.00	8	53.78	55.29
P-2220	J-2162	J-2136	-408.88	1.16	2,445.00	12	53.19	53.78
P-2221	J-2163	J-2136	-137.62	0.88	4,863.00	8	78.66	53.78
P-2251	J-2182	J-2137	2,769.87	2.83	5,814.00	20	108.69	91.62
P-2261	J-2190	J-2161	-410.36	2.62	4,489.00	8	90.99	70.30
P-2262	J-2191	J-2190	-404.81	2.58	3,220.00	8	68.11	90.99
P-2263a	J-2157	J-103	583.00	3.72	6,987.00	8	46.72	86.82
P-2263b	J-103	J-2191	-230.50	1.47	2,751.00	8	86.82	68.11
P-2286	J-2137	J-2135	1,463.66	1.49	4,177.00	20	91.62	77.72
P-2287	J-2135	J-2160	1,914.69	3.06	4,874.00	16	77.72	55.29
P-2288	J-2008	J-2135	814.11	1.30	5,270.00	16	39.83	77.72
P-2293	J-2160	J-2136	1,526.56	2.44	2,190.00	16	55.29	53.78
P-2294	J-2136	J-2162	850.91	1.36	2,555.00	16	53.78	53.19
P-2670a	J-7	J-2191	124.56	0.80	14,813.00	8	209.32	68.11


J-3
530.00'
P-2600b
0.70 ft/s
J-2600
802.00'
P-2630
0.22 ft/s
J-2630
773.00'
P-2650a
0.84 ft/s
J-6
550.00'
P-2650b
0.84 ft/s
J-2640
550.00'
P-2660a
0.15 ft/s
J-2142
860.00'
P-2195
3.40 ft/s
P-2244
0.04 ft/s
P-2204a
1.34 ft/s
P-2248
4.04 ft/s
P-2251
3.08 ft/s
Industrial
0.5 MG,
OF EL=108
Devon To
2.0 MG,
OF EL=1
P-166
2.23 ft/s
P-2247
P-2154
3.54 ft/s
J-2126
940.00'
P-2155
3.88 ft/s
J-2125
820.00'
Proposed 2
OF EL=1080
J-2159
900.00'
P-2217
1.87 ft/s
J-2138
920.00'
P-2171
1.69 ft/s
P-2170
0.16 ft/s
J-2137
830.00'
P-2216
0.92 ft/s
I-71/75
P-2168
0.68 ft/s
P-2286
1.44 ft/s
SR-7
T-12a
WT
J-2135
860.00'
P-2288
2.24 ft/s
J-2008
950.00'
P-775b
J-2134
860.00'
P-2164
P-2290
3.85 ft/s
P-2291
1.73 ft/s
P-2222
1.58 ft/s
ities
ased
P-2287
3.75 ft/s
P-2167
2.44 ft/s
J-2164
920.00'
J-2160
900.00'
P-2219
2.18 ft/s
P-2223
1.15 ft/s
J-2136
900.00'
P-2221
1.46 ft/s
J-2163
840.00'
J-2165
820.00'
P-2252
0.43 ft/s
J-2184
800.00'
P-2253
0.32 ft/s
P-2254
1.59 ft/s
J-2183
790.00'
P-2255
1.71 ft/s
P-2256
1.32 ft/s
J-2185
780.00'
J-2187
810.00'
P-2257
1.13 ft/s
P-2260
0.11 ft/s
N


536
ROGTOWN RD
SEWELL
SETTER RD.
BIG BONE CHURCH RD.
'CKS
I-71
BEAVER
N
1292

Scenario: STD23 - Peak Hour Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-5	0.00	745.00	111.42	257.02	1,002.02
J-27	0.00	860.00	54.39	125.47	985.47
J-43	6.00	830.00	67.40	155.46	985.46
J-44	0.00	870.00	49.87	115.03	985.03
J-53	0.00	830.00	66.88	154.28	984.28
J-79	0.00	842.00	61.68	142.28	984.28
J-85	0.00	832.00	66.33	153.01	985.01
J-88	12.00	824.00	69.80	161.00	985.00
J-94	6.00	860.00	53.88	124.27	984.27
J-95	0.00	860.00	53.88	124.27	984.27
J-102	12.00	850.00	58.20	134.25	984.25
J-2009	0.00	920.00	69.21	159.64	1,079.64
J-2011	0.00	920.00	69.21	159.65	1,079.65
J-2102	558.06	870.00	90.50	208.75	1,078.75
J-2103	75.83	840.00	95.08	219.31	1,059.31
J-2106	78.75	900.00	72.45	167.11	1,067.11
J-2107	90.42	890.00	72.54	167.33	1,057.33
J-2108	284.86	890.00	68.72	158.52	1,048.52
J-2110	117.64	880.00	72.27	166.71	1,046.71
J-2111	70.97	870.00	73.06	168.54	1,038.54
J-2112	1,428.19	850.00	66.90	154.32	1,004.32
J-2113	187.64	880.00	69.78	160.96	1,040.96
J-2114	188.61	850.00	72.65	167.59	1,017.59
J-2147	51.53	890.00	65.08	150.11	1,040.11
J-2148	0.00	884.00	67.11	154.80	1,038.80
J-2149	105.00	850.00	59.46	137.15	987.15
J-2150	35.97	871.00	61.88	142.74	1,013.74
J-2155	314.03	900.00	53.86	124.24	1,024.24
J-2174	69.03	740.00	112.86	260.33	1,000.33
J-2175	80.69	750.00	107.26	247.41	997.41
J-2176	105.00	850.00	58.73	135.47	985.47
J-2570	282.94	850.00	63.37	146.17	996.17
J-2610	177.94	834.00	65.15	150.27	984.27

WT

Contract 2B - Main Line

Contract 2D - Side Streets

/

Scenario: STD38 - Max Day Pumps Off Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-5	0.00	745.00	119.63	275.95	1,020.95
J-13	0.00	845.00	74.94	172.86	1,017.86
J-27	0.00	860.00	66.14	152.57	1,012.57
J-43	4.00	830.00	79.15	182.57	1,012.57
J-44	0.00	870.00	61.72	142.36	1,012.36
J-53	0.00	830.00	78.90	182.01	1,012.01
J-79	0.00	842.00	73.70	170.01	1,012.01
J-85	0.00	832.00	78.18	180.35	1,012.35
J-88	8.00	824.00	81.65	188.35	1,012.35
J-94	4.00	860.00	65.90	152.01	1,012.01
J-95	0.00	860.00	65.90	152.01	1,012.01
J-102	8.00	850.00	70.23	162.00	1,012.00
J-2009	0.00	920.00	62.69	144.60	1,064.60
J-2011	0.00	920.00	62.93	145.16	1,065.16
J-2102	398.61	870.00	83.26	192.05	1,062.05
J-2103	54.17	840.00	91.59	211.27	1,051.27
J-2104	125.00	770.00	117.84	271.81	1,041.81
J-2106	56.25	900.00	67.34	155.32	1,055.32
J-2107	64.58	890.00	69.20	159.63	1,049.63
J-2108	203.47	890.00	66.96	154.46	1,044.46
J-2110	84.03	880.00	70.99	163.76	1,043.76
J-2111	50.69	870.00	73.69	169.98	1,039.98
J-2112	1,020.14	850.00	74.62	172.13	1,022.13
J-2113	134.03	880.00	69.66	160.69	1,040.69
J-2147	36.81	890.00	65.50	151.09	1,041.09
J-2148	0.00	884.00	67.70	156.17	1,040.17
J-2149	75.00	850.00	70.84	163.41	1,013.41
J-2155	224.31	900.00	58.44	134.80	1,034.80
J-2174	49.31	740.00	121.42	280.08	1,020.08
J-2175	57.64	750.00	116.44	268.58	1,018.58
J-2176	75.00	850.00	70.48	162.57	1,012.57
J-2570	202.10	850.00	72.77	167.85	1,017.85
J-2610	127.10	834.00	77.17	178.00	1,012.00

WT

2

Scenario: MDD Phases I, II, and III with Flush @ J-43 EMERALD DR
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-5	0.00	745.00	112.48	259.46	1,004.46
J-13	0.00	845.00	69.93	161.30	1,006.30
J-27	0.00	860.00	25.12	57.94	917.94
J-43	1,082.00	830.00	20.14	46.46	876.46
J-44	0.00	870.00	30.12	69.47	939.47
J-53	0.00	830.00	51.65	119.15	949.15
J-79	0.00	842.00	47.31	109.13	951.13
J-85	0.00	832.00	46.58	107.46	939.46
J-88	8.00	824.00	50.05	115.45	939.45
J-94	4.00	860.00	38.65	89.15	949.15
J-95	0.00	860.00	39.50	91.13	951.13
J-102	8.00	850.00	43.84	101.12	951.12
J-2009	0.00	920.00	63.61	146.73	1,066.73
J-2011	0.00	920.00	63.82	147.21	1,067.21
J-2102	398.61	870.00	84.19	194.21	1,064.21
J-2103	54.17	840.00	91.58	211.24	1,051.24
J-2104	125.00	770.00	117.13	270.17	1,040.17
J-2106	56.25	900.00	67.70	156.16	1,056.16
J-2107	64.58	890.00	69.04	159.26	1,049.26
J-2108	203.47	890.00	66.27	152.86	1,042.86
J-2110	84.03	880.00	70.14	161.79	1,041.79
J-2111	50.69	870.00	72.22	166.60	1,036.60
J-2112	1,020.14	850.00	68.19	157.29	1,007.29
J-2113	134.03	880.00	68.24	157.41	1,037.41
J-2114	134.72	850.00	73.73	170.08	1,020.08
J-2147	36.81	890.00	64.53	148.86	1,038.86
J-2148	0.00	884.00	66.32	152.98	1,036.98
J-2149	75.00	850.00	41.51	95.75	945.75
J-2150	25.69	871.00	63.03	145.40	1,016.40
J-2155	224.31	900.00	56.49	130.30	1,030.30
J-2174	49.31	740.00	113.75	262.38	1,002.38
J-2175	57.64	750.00	107.68	248.38	998.38
J-2176	75.00	850.00	37.63	86.79	936.79
J-2570	202.10	850.00	67.56	155.83	1,005.83
J-2610	127.10	834.00	48.13	111.01	945.01

Pressure Reduced to 20psi
Flow J-43 = 1,082 gpm
Velocity Pipe 63 = 6.91 fps
8" Pipe

WT

3

Scenario: MDD Phases I, II, and III with Flush @ J-43 EMERALD DR.
Steady State Analysis
Pipe Report

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-26	J-13	J-15	8.00	0.05	12,555.00	8	69.93	195.20
P-57	J-2176	J-27	1,082.00	6.91	769.00	8	37.63	25.12
P-63	J-27	J-43	1,082.00	6.91	1,692.00	8	25.12	20.14
P-82	J-44	J-85	8.00	0.05	4,921.00	8	30.12	46.58
P-83	J-85	J-88	8.00	0.05	1,185.00	8	46.58	50.05
P-85	J-53	J-94	4.00	0.03	2,814.00	8	51.65	38.65
P-86	J-79	J-95	8.00	0.05	1,562.00	8	47.31	39.50
P-87	J-95	J-102	8.00	0.05	3,768.00	8	39.50	43.84
P-307	J-2113	J-2110	-527.09	1.50	6,483.00	12	68.24	70.14
P-308	J-2110	J-2103	-622.24	1.77	10,301.00	12	70.14	91.58
P-385	J-2011	T-16	-3,715.84	5.93	1,554.00	16	63.82	17.34
P-2009	J-2009	J-2011	-3,715.84	5.93	50.00	16	63.61	63.82
P-2130	J-2103	J-2102	-1,322.83	3.75	2,628.00	12	91.58	84.19
P-2131	J-2104	J-2103	-646.41	1.83	8,447.00	12	117.13	91.58
P-2132	J-2009	J-2105	213.62	1.36	5,858.00	8	63.61	69.19
P-2133	J-2102	J-2009	-2,389.51	2.44	1,464.00	20	84.19	63.61
P-2134	J-2102	J-2106	806.61	2.29	3,469.00	12	84.19	67.70
P-2135	J-2106	J-2107	750.36	2.13	3,401.00	12	67.70	69.04
P-2136	J-2107	J-2108	685.78	1.95	3,726.00	12	69.04	66.27
P-2137	J-2110	J-2108	-398.12	1.13	2,017.00	12	70.14	66.27
P-2138	J-2111	J-2110	-409.25	1.16	6,586.00	12	72.22	70.14
P-2141	J-2113	J-2112	431.14	2.75	6,753.00	8	68.24	68.19
P-2142	J-2114	J-2113	-181.43	2.06	4,756.00	6	73.73	68.24
P-2202	J-2104	J-2147	273.57	0.78	4,942.00	12	117.13	64.53
P-2204	J-2112	J-2149	772.92	4.93	4,681.00	8	68.19	41.51
P-2205	J-2150	J-2114	-103.12	1.17	2,871.00	6	63.03	73.73
P-2229	J-2147	J-2148	236.76	0.67	9,180.00	12	64.53	66.32
P-2230	J-2168	J-2104	558.33	1.58	3,484.00	12	83.95	117.13
P-2235a	J-2112	J-5	558.08	1.58	2,839.00	12	68.19	112.48
P-2235b	J-5	J-2174	558.08	1.58	2,086.00	12	112.48	113.75
P-2236	J-2174	J-2175	508.77	1.44	4,750.00	12	113.75	107.68
P-2237	J-2112	J-2150	-1,431.01	2.28	6,477.00	16	68.19	63.03
P-2238	J-2149	J-2176	697.92	1.98	5,930.00	12	41.51	37.63
P-2283	J-2111	J-2112	595.32	3.80	3,615.00	8	72.22	68.19
P-2284	J-2150	J-2114	-1,353.59	2.16	2,898.00	16	63.03	73.73
P-2301	J-2148	J-2111	236.76	0.67	2,184.00	12	66.32	72.22
P-2310	J-2102	J-2105	932.56	1.49	7,234.00	16	84.19	69.19
P-2570c	J-2570	J-13	-95.77	0.61	1,947.00	8	67.56	69.93
P-2580	J-2112	J-2570	106.33	0.68	5,070.00	8	68.19	67.56
P-2610a	J-53	J-2610	594.18	1.69	4,280.00	12	51.65	48.13
P-2610b	J-79	J-53	598.18	1.70	2,024.00	12	47.31	51.65
P-2620a	J-44	J-2176	459.08	1.30	4,464.00	12	30.12	37.63
P-2620b	J-2610	J-44	467.08	1.32	8,958.00	12	48.13	30.12

Scenario: MDD Phases I, II, and III with Flush @ J-88 KIRBY DRIVE
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-5	0.00	745.00	114.84	264.90	1,009.90
J-13	0.00	845.00	71.79	165.61	1,010.61
J-27	0.00	860.00	45.28	104.45	964.45
J-43	4.00	830.00	58.28	134.45	964.45
J-44	0.00	870.00	39.71	91.59	961.59
J-53	0.00	830.00	59.70	137.70	967.70
J-79	0.00	842.00	55.08	127.04	969.04
J-85	0.00	832.00	24.25	55.93	887.93
J-88	829.00	824.00	20.03	46.19	870.19
J-94	4.00	860.00	46.69	107.70	967.70
J-95	0.00	860.00	47.27	109.04	969.04
J-102	8.00	850.00	51.60	119.03	969.03
J-2009	0.00	920.00	63.78	147.11	1,067.11
J-2011	0.00	920.00	63.98	147.58	1,067.58
J-2102	398.61	870.00	84.40	194.67	1,064.67
J-2103	54.17	840.00	92.01	212.25	1,052.25
J-2104	125.00	770.00	117.72	271.54	1,041.54
J-2106	56.25	900.00	68.05	156.97	1,056.97
J-2107	64.58	890.00	69.53	160.38	1,050.38
J-2108	203.47	890.00	66.89	154.30	1,044.30
J-2110	84.03	880.00	70.80	163.32	1,043.32
J-2111	50.69	870.00	73.04	168.49	1,038.49
J-2112	1,020.14	850.00	70.38	162.35	1,012.35
J-2113	134.03	880.00	69.06	159.30	1,039.30
J-2114	134.72	850.00	75.20	173.47	1,023.47
J-2147	36.81	890.00	65.20	150.40	1,040.40
J-2148	0.00	884.00	67.12	154.82	1,038.82
J-2149	75.00	850.00	52.15	120.29	970.29
J-2150	25.69	871.00	64.71	149.27	1,020.27
J-2155	224.31	900.00	57.11	131.75	1,031.75
J-2174	49.31	740.00	116.23	268.10	1,008.10
J-2175	57.64	750.00	110.42	254.70	1,004.70
J-2176	75.00	850.00	49.62	114.45	964.45
J-2570	202.10	850.00	69.50	160.32	1,010.32
J-2610	127.10	834.00	56.75	130.91	964.91

← Pressure Reduced to 20 psi
Flow J-88 = 829 gpm
Velocity P-83 = 5.29 fps
8" pipe

← WT

5

Scenario: MDD Phases I, II, and III with Flush @ J-88
Steady State Analysis
Pipe Report

KIRBY DR.

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-57	J-2176	J-27	4.00	0.03	769.00	8	49.62	45.28
P-63	J-27	J-43	4.00	0.03	1,692.00	8	45.28	58.28
P-82	J-44	J-85	829.00	5.29	4,921.00	8	39.71	24.25
P-83	J-85	J-88	829.00	5.29	1,185.00	8	24.25	20.03
P-85	J-53	J-94	4.00	0.03	2,814.00	8	59.70	46.69
P-86	J-79	J-95	8.00	0.05	1,562.00	8	55.08	47.27
P-87	J-95	J-102	8.00	0.05	3,768.00	8	47.27	51.60
P-307	J-2113	J-2110	-503.82	1.43	6,483.00	12	69.06	70.80
P-308	J-2110	J-2103	-603.29	1.71	10,301.00	12	70.80	92.01
P-385	J-2011	T-16	-3,657.25	5.84	1,554.00	16	63.98	17.34
P-2009	J-2009	J-2011	-3,657.25	5.84	50.00	16	63.78	63.98
P-2130	J-2103	J-2102	-1,292.47	3.67	2,628.00	12	92.01	84.40
P-2131	J-2104	J-2103	-635.02	1.80	8,447.00	12	117.72	92.01
P-2132	J-2009	J-2105	210.42	1.34	5,858.00	8	63.78	69.45
P-2133	J-2102	J-2009	-2,348.75	2.40	1,464.00	20	84.40	63.78
P-2134	J-2102	J-2106	787.92	2.24	3,469.00	12	84.40	68.05
P-2135	J-2106	J-2107	731.67	2.08	3,401.00	12	68.05	69.53
P-2136	J-2107	J-2108	667.09	1.89	3,726.00	12	69.53	66.89
P-2137	J-2110	J-2108	-378.50	1.07	2,017.00	12	70.80	66.89
P-2138	J-2111	J-2110	-393.94	1.12	6,586.00	12	73.04	70.80
P-2141	J-2113	J-2112	406.02	2.59	6,753.00	8	69.06	70.38
P-2142	J-2114	J-2113	-172.75	1.96	4,756.00	6	75.20	69.06
P-2202	J-2104	J-2147	253.23	0.72	4,942.00	12	117.72	65.20
P-2204	J-2112	J-2149	629.31	4.02	4,681.00	8	70.38	52.15
P-2205	J-2150	J-2114	-95.74	1.09	2,871.00	6	64.71	75.20
P-2229	J-2147	J-2148	216.43	0.61	9,180.00	12	65.20	67.12
P-2230	J-2168	J-2104	536.02	1.52	3,484.00	12	84.44	117.72
P-2235a	J-2112	J-5	515.76	1.46	2,839.00	12	70.38	114.84
P-2235b	J-5	J-2174	515.76	1.46	2,086.00	12	114.84	116.23
P-2236	J-2174	J-2175	466.46	1.32	4,750.00	12	116.23	110.42
P-2237	J-2112	J-2150	-1,326.78	2.12	6,477.00	16	70.38	64.71
P-2238	J-2149	J-2176	554.31	1.57	5,930.00	12	52.15	49.62
P-2283	J-2111	J-2112	559.67	3.57	3,615.00	8	73.04	70.38
P-2284	J-2150	J-2114	-1,256.74	2.01	2,898.00	16	64.71	75.20
P-2301	J-2148	J-2111	216.43	0.61	2,184.00	12	67.12	73.04
P-2310	J-2102	J-2105	919.66	1.47	7,234.00	16	84.40	69.45
P-2510a	J-2104	J-1	792.80	2.25	1,539.00	12	117.72	110.12
P-2570c	J-2570	J-13	-74.84	0.48	1,947.00	8	69.50	71.79
P-2580	J-2112	J-2570	127.26	0.81	5,070.00	8	70.38	69.50
P-2610a	J-53	J-2610	480.79	1.36	4,280.00	12	59.70	56.75
P-2610b	J-79	J-53	484.79	1.38	2,024.00	12	55.08	59.70
P-2620a	J-44	J-2176	-475.31	1.35	4,464.00	12	39.71	49.62
P-2620b	J-2610	J-44	353.69	1.00	8,958.00	12	56.75	39.71

Scenario: MDD Phases I, II, and III with Flush @ J-94 WOLFE RD
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	109.95	253.63	1,038.63
J-5	0.00	745.00	114.25	263.55	1,008.55
J-13	0.00	845.00	71.41	164.72	1,009.72
J-27	0.00	860.00	45.47	104.88	964.88
J-43	4.00	830.00	58.47	134.88	964.88
J-44	0.00	870.00	39.94	92.14	962.14
J-53	0.00	830.00	54.37	125.41	955.41
J-79	0.00	842.00	49.96	115.23	957.23
J-85	0.00	832.00	56.41	130.13	962.13
J-88	8.00	824.00	59.88	138.12	962.12
J-94	902.00	860.00	20.01	46.16	906.16
J-95	0.00	860.00	42.15	97.23	957.23
J-102	8.00	850.00	46.48	107.22	957.22
J-2009	0.00	920.00	63.73	147.02	1,067.02
J-2011	0.00	920.00	63.94	147.49	1,067.49
J-2102	398.61	870.00	84.35	194.56	1,064.56
J-2103	54.17	840.00	91.91	212.01	1,052.01
J-2104	125.00	770.00	117.57	271.19	1,041.19
J-2106	56.25	900.00	67.97	156.79	1,056.79
J-2107	64.58	890.00	69.42	160.13	1,050.13
J-2108	203.47	890.00	66.76	153.99	1,043.99
J-2110	84.03	880.00	70.66	162.99	1,042.99
J-2111	50.69	870.00	72.86	168.07	1,038.07
J-2112	1,020.14	850.00	69.96	161.38	1,011.38
J-2113	134.03	880.00	68.89	158.90	1,038.90
J-2114	134.72	850.00	74.90	172.78	1,022.78
J-2147	36.81	890.00	65.04	150.03	1,040.03
J-2148	0.00	884.00	66.94	154.40	1,038.40
J-2149	75.00	850.00	52.25	120.54	970.54
J-2150	25.69	871.00	64.38	148.50	1,019.50
J-2155	224.31	900.00	56.89	131.22	1,031.22
J-2174	49.31	740.00	115.52	266.47	1,006.47
J-2175	57.64	750.00	109.46	252.49	1,002.49
J-2176	75.00	850.00	49.80	114.88	964.88
J-2570	202.10	850.00	69.11	159.41	1,009.41
J-2610	127.10	834.00	53.24	122.81	956.81

← Pressure Reduced to 20psi

Flow J-94 = 902 gpm

WT

Velocity P85 = 5.76 fps

8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-94
Steady State Analysis
Pipe Report

WOLFE RD.

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-57	J-2176	J-27	4.00	0.03	769.00	8	49.80	45.47
P-63	J-27	J-43	4.00	0.03	1,692.00	8	45.47	58.47
P-82	J-44	J-85	8.00	0.05	4,921.00	8	39.94	56.41
P-83	J-85	J-88	8.00	0.05	1,185.00	8	56.41	59.88
P-85	J-53	J-94	902.00	5.76	2,814.00	8	54.37	20.01
P-86	J-79	J-95	8.00	0.05	1,562.00	8	49.96	42.15
P-87	J-95	J-102	8.00	0.05	3,768.00	8	42.15	46.48
P-307	J-2113	J-2110	-508.09	1.44	6,483.00	12	68.89	70.66
P-308	J-2110	J-2103	-606.84	1.72	10,301.00	12	70.66	91.91
P-385	J-2011	T-16	-3,671.78	5.86	1,554.00	16	63.94	17.34
P-2009	J-2009	J-2011	-3,671.78	5.86	50.00	16	63.73	63.94
P-2130	J-2103	J-2102	-1,299.53	3.69	2,628.00	12	91.91	84.35
P-2131	J-2104	J-2103	-638.52	1.81	8,447.00	12	117.57	91.91
P-2132	J-2009	J-2105	211.30	1.35	5,858.00	8	63.73	69.38
P-2133	J-2102	J-2009	-2,358.33	2.41	1,464.00	20	84.35	63.73
P-2134	J-2102	J-2106	791.84	2.25	3,469.00	12	84.35	67.97
P-2135	J-2106	J-2107	735.59	2.09	3,401.00	12	67.97	69.42
P-2136	J-2107	J-2108	671.01	1.90	3,726.00	12	69.42	66.76
P-2137	J-2110	J-2108	-382.79	1.09	2,017.00	12	70.66	66.76
P-2138	J-2111	J-2110	-397.51	1.13	6,586.00	12	72.86	70.66
P-2141	J-2113	J-2112	410.65	2.62	6,753.00	8	68.89	69.96
P-2142	J-2114	J-2113	-174.43	1.98	4,756.00	6	74.90	68.89
P-2202	J-2104	J-2147	256.03	0.73	4,942.00	12	117.57	65.04
P-2204	J-2112	J-2149	619.41	3.95	4,681.00	8	69.96	52.25
P-2205	J-2150	J-2114	-97.04	1.10	2,871.00	6	64.38	74.90
P-2212	J-2155	J-2156	145.69	0.41	10,291.00	12	56.89	52.19
P-2229	J-2147	J-2148	219.23	0.62	9,180.00	12	65.04	66.94
P-2230	J-2168	J-2104	540.36	1.53	3,484.00	12	84.31	117.57
P-2235a	J-2112	J-5	557.43	1.58	2,839.00	12	69.96	114.25
P-2235b	J-5	J-2174	557.43	1.58	2,086.00	12	114.25	115.52
P-2236	J-2174	J-2175	508.12	1.44	4,750.00	12	115.52	109.46
P-2237	J-2112	J-2150	-1,345.15	2.15	6,477.00	16	69.96	64.38
P-2238	J-2149	J-2176	544.41	1.54	5,930.00	12	52.25	49.80
P-2283	J-2111	J-2112	566.04	3.61	3,615.00	8	72.86	69.96
P-2284	J-2150	J-2114	-1,273.81	2.03	2,898.00	16	64.38	74.90
P-2301	J-2148	J-2111	219.23	0.62	2,184.00	12	66.94	72.86
P-2310	J-2102	J-2105	923.59	1.47	7,234.00	16	84.35	69.38
P-2510a	J-2104	J-1	797.85	2.26	1,539.00	12	117.57	109.95
P-2570c	J-2570	J-13	-77.23	0.49	1,947.00	8	69.11	71.41
P-2580	J-2112	J-2570	124.87	0.80	5,070.00	8	69.96	69.11
P-2610a	J-53	J-2610	-330.31	0.94	4,280.00	12	54.37	53.24
P-2610b	J-79	J-53	571.69	1.62	2,024.00	12	49.96	54.37
P-2620a	J-44	J-2176	-465.41	1.32	4,464.00	12	39.94	49.80
P-2620b	J-2610	J-44	-457.41	1.30	8,958.00	12	53.24	39.94

Scenario: MDD Phases I, II, and III with Flush @ J-102
Steady State Analysis
Junction Report

LOCUST GROVE TRD

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-5	0.00	745.00	115.34	266.06	1,011.06
J-13	0.00	845.00	72.24	166.63	1,011.63
J-27	0.00	860.00	49.89	115.09	975.09
J-43	4.00	830.00	62.90	145.09	975.09
J-44	0.00	870.00	44.63	102.95	972.95
J-53	0.00	830.00	59.76	137.84	967.84
J-79	0.00	842.00	54.36	125.40	967.40
J-85	0.00	832.00	61.10	140.94	972.94
J-88	8.00	824.00	64.57	148.93	972.93
J-94	4.00	860.00	46.75	107.84	967.84
J-95	0.00	860.00	37.50	86.51	946.51
J-102	780.00	850.00	20.00	46.13	896.13
J-2009	0.00	920.00	63.81	147.20	1,067.20
J-2011	0.00	920.00	64.01	147.66	1,067.66
J-2102	398.61	870.00	84.44	194.78	1,064.78
J-2103	54.17	840.00	92.11	212.48	1,052.48
J-2104	125.00	770.00	117.85	271.84	1,041.84
J-2106	56.25	900.00	68.13	157.16	1,057.16
J-2107	64.58	890.00	69.64	160.65	1,050.65
J-2108	203.47	890.00	67.04	154.65	1,044.65
J-2110	84.03	880.00	70.96	163.69	1,043.69
J-2111	50.69	870.00	73.24	168.94	1,038.94
J-2112	1,020.14	850.00	70.94	163.64	1,013.64
J-2113	134.03	880.00	69.26	159.76	1,039.76
J-2114	134.72	850.00	75.56	174.29	1,024.29
J-2147	36.81	890.00	65.35	150.75	1,040.75
J-2148	0.00	884.00	67.30	155.24	1,039.24
J-2149	75.00	850.00	56.21	129.67	979.67
J-2150	25.69	871.00	65.12	150.22	1,021.22
J-2155	224.31	900.00	57.23	132.01	1,032.01
J-2174	49.31	740.00	116.69	269.17	1,009.17
J-2175	57.64	750.00	110.79	255.57	1,005.57
J-2176	75.00	850.00	54.23	125.09	975.09
J-2570	202.10	850.00	69.97	161.39	1,011.39
J-2610	127.10	834.00	58.44	134.81	968.81

Pressure Reduced to 20psi

WT Flow J-102 = 780 gpm

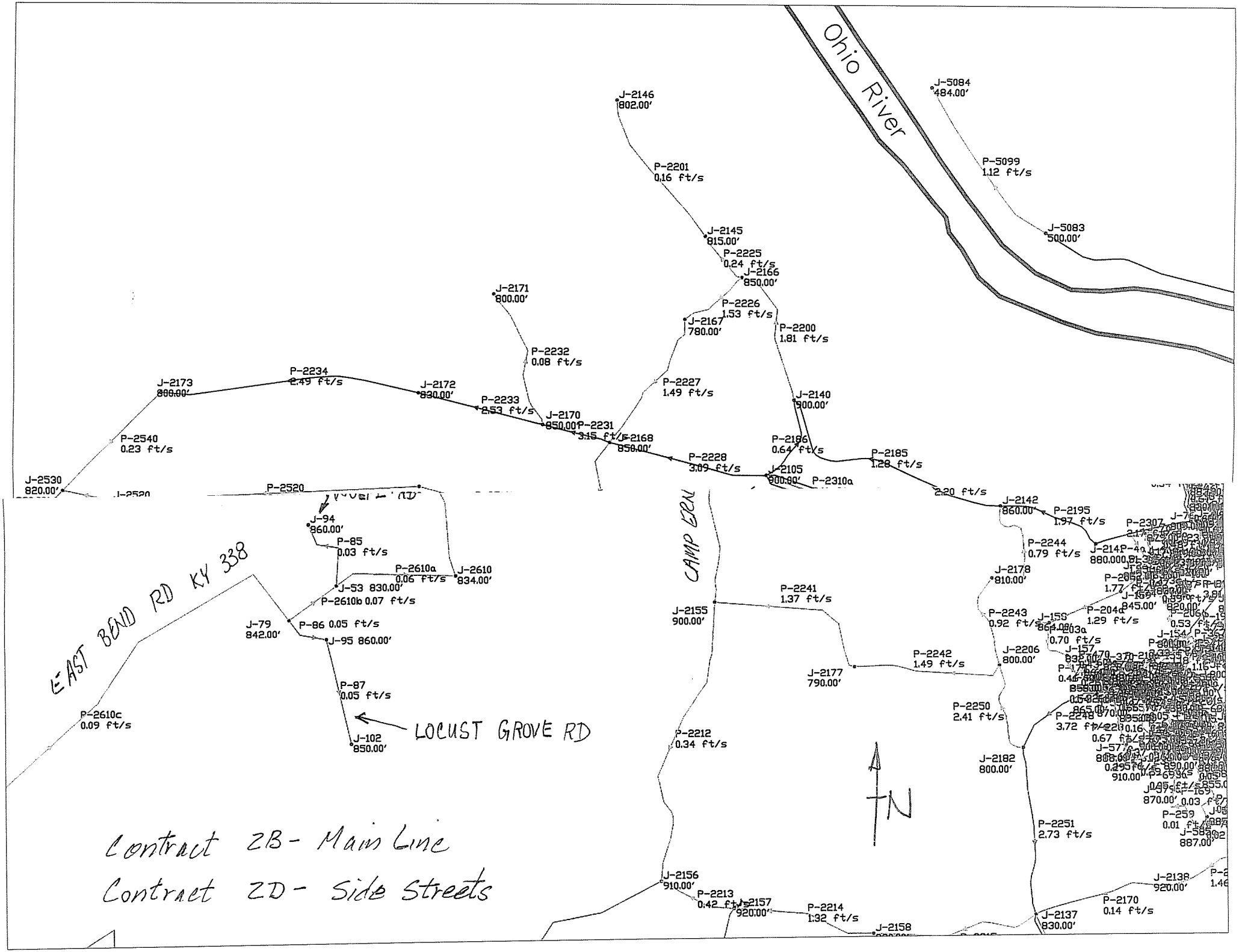
Velocity P-87 = 4.98 fps

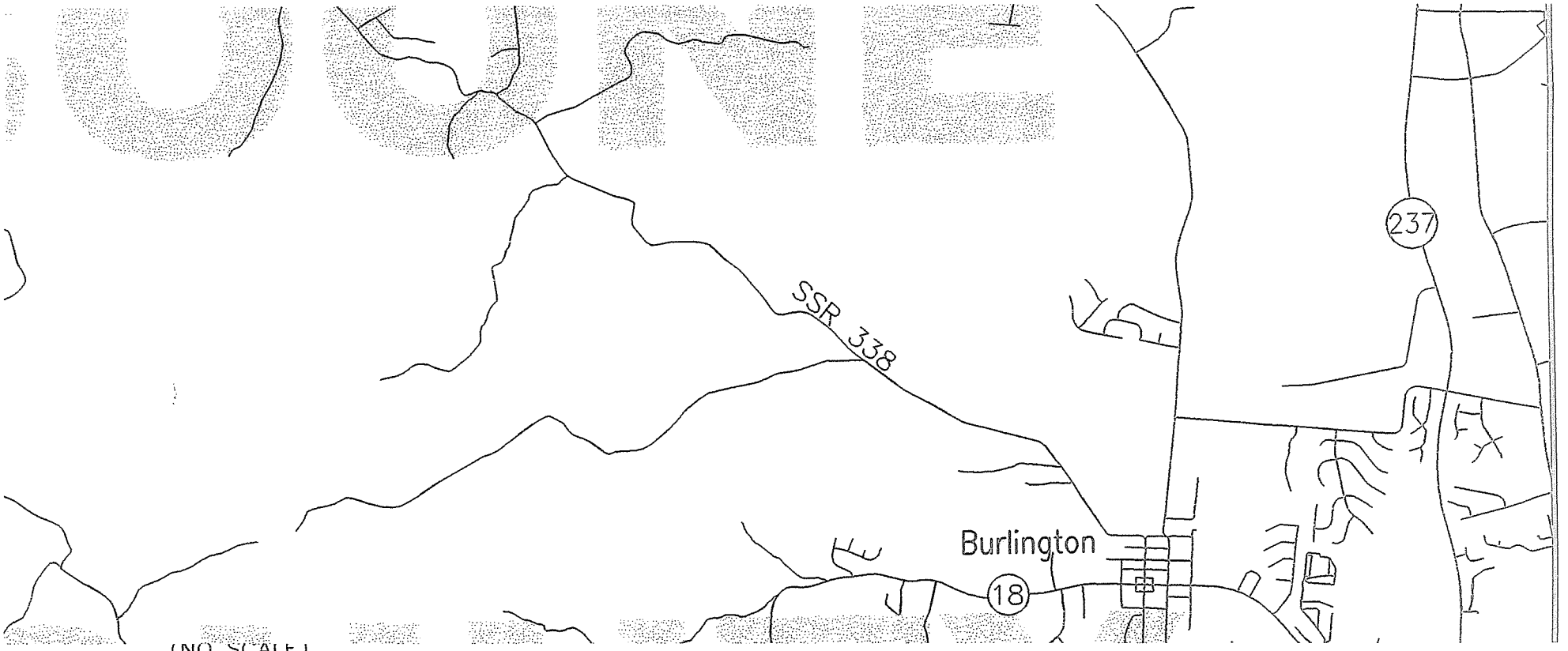
8" pipe

Scenario: MDD Phases I, II, and III with Flush @ J-102
Steady State Analysis
Pipe Report

LOCUST GROVE RD

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-57	J-2176	J-27	4.00	0.03	769.00	8	54.23	49.89
P-63	J-27	J-43	4.00	0.03	1,692.00	8	49.89	62.90
P-82	J-44	J-85	8.00	0.05	4,921.00	8	44.63	61.10
P-83	J-85	J-88	8.00	0.05	1,185.00	8	61.10	64.57
P-85	J-53	J-94	4.00	0.03	2,814.00	8	59.76	46.75
P-86	J-79	J-95	780.00	4.98	1,562.00	8	54.36	37.50
P-87	J-95	J-102	780.00	4.98	3,768.00	8	37.50	20.00
P-307	J-2113	J-2110	-497.59	1.41	6,483.00	12	69.26	70.96
P-308	J-2110	J-2103	-598.30	1.70	10,301.00	12	70.96	92.11
P-385	J-2011	T-16	-3,644.23	5.82	1,554.00	16	64.01	17.34
P-2009	J-2009	J-2011	-3,644.23	5.82	50.00	16	63.81	64.01
P-2130	J-2103	J-2102	-1,285.37	3.65	2,628.00	12	92.11	84.44
P-2131	J-2104	J-2103	-632.91	1.80	8,447.00	12	117.85	92.11
P-2132	J-2009	J-2105	209.77	1.34	5,858.00	8	63.81	69.50
P-2133	J-2102	J-2009	-2,339.32	2.39	1,464.00	20	84.44	63.81
P-2134	J-2102	J-2106	783.28	2.22	3,469.00	12	84.44	68.13
P-2135	J-2106	J-2107	727.03	2.06	3,401.00	12	68.13	69.64
P-2136	J-2107	J-2108	662.45	1.88	3,726.00	12	69.64	67.04
P-2137	J-2110	J-2108	-373.67	1.06	2,017.00	12	70.96	67.04
P-2138	J-2111	J-2110	-390.35	1.11	6,586.00	12	73.24	70.96
P-2141	J-2113	J-2112	399.20	2.55	6,753.00	8	69.26	70.94
P-2142	J-2114	J-2113	-170.56	1.94	4,756.00	6	75.56	69.26
P-2184	J-2139	J-2009	-411.76	1.17	4,811.00	12	114.65	63.81
P-2202	J-2104	J-2147	247.01	0.70	4,942.00	12	117.85	65.35
P-2204	J-2112	J-2149	560.78	3.58	4,681.00	8	70.94	56.21
P-2205	J-2150	J-2114	-93.59	1.06	2,871.00	6	65.12	75.56
P-2212	J-2155	J-2156	146.89	0.42	10,291.00	12	57.23	52.52
P-2229	J-2147	J-2148	210.20	0.60	9,180.00	12	65.35	67.30
P-2230	J-2168	J-2104	530.13	1.50	3,484.00	12	84.54	117.85
P-2235a	J-2112	J-5	530.27	1.50	2,839.00	12	70.94	115.34
P-2235b	J-5	J-2174	530.27	1.50	2,086.00	12	115.34	116.69
P-2236	J-2174	J-2175	480.96	1.36	4,750.00	12	116.69	110.79
P-2237	J-2112	J-2150	-1,296.43	2.07	6,477.00	16	70.94	65.12
P-2238	J-2149	J-2176	485.78	1.38	5,930.00	12	56.21	54.23
P-2283	J-2111	J-2112	549.86	3.51	3,615.00	8	73.24	70.94
P-2284	J-2150	J-2114	-1,228.54	1.96	2,898.00	16	65.12	75.56
P-2301	J-2148	J-2111	210.20	0.60	2,184.00	12	67.30	73.24
P-2310	J-2102	J-2105	917.27	1.46	7,234.00	16	84.44	69.50
P-2510a	J-2104	J-1	791.03	2.24	1,539.00	12	117.85	110.25
P-2570c	J-2570	J-13	-67.79	0.43	1,947.00	8	69.97	72.24
P-2580	J-2112	J-2570	134.31	0.86	5,070.00	8	70.94	69.97
P-2610a	J-53	J-2610	-271.68	0.77	4,280.00	12	59.76	58.44
P-2610b	J-79	J-53	-267.68	0.76	2,024.00	12	54.36	59.76
P-2620a	J-44	J-2176	-406.78	1.15	4,464.00	12	44.63	54.23
P-2620b	J-2610	J-44	-398.78	1.13	8,958.00	12	58.44	44.63


Ohio River
J-5084
484.00'
P-5099
1.12 ft/s
J-5083
500.00'
J-2146
802.00'
P-2201
0.16 ft/s
J-2145
815.00'
P-2225
0.24 ft/s
J-2166
850.00'
J-2171
800.00'
P-2226
1.53 ft/s
J-2167
780.00'
P-2200
1.81 ft/s
P-2232
0.08 ft/s
P-2227
1.49 ft/s
J-2140
900.00'
J-2173
800.00'
P-2234
2.49 ft/s
J-2172
830.00'
P-2233
2.53 ft/s
J-2170
850.00'
P-2231
3.15 ft/s
J-2168
858.00'
P-2540
0.23 ft/s
P-2186
0.64 ft/s
P-2185
1.28 ft/s
P-2228
3.09 ft/s
J-2105
900.00'
P-2310a
J-2530
820.00'
P-2520
2.20 ft/s
J-2142
860.00'
P-2195
1.97 ft/s
J-94
860.00'
P-85
0.03 ft/s
P-2244
0.79 ft/s
J-214
880.00'
P-2610a
0.06 ft/s
J-2610
834.00'
J-2178
810.00'
J-53 830.00'
P-2610b 0.07 ft/s
P-2241
1.37 ft/s
J-2155
900.00'
P-2243
0.92 ft/s
P-2048
1.29 ft/s
J-79
842.00'
P-86 0.05 ft/s
J-95 860.00'
P-2242
1.49 ft/s
J-2206
800.00'
J-2177
790.00'
P-87
0.05 ft/s
P-2610c
0.09 ft/s
P-2250
2.41 ft/s
P-2248
3.72 ft/s
J-102
850.00'
P-2212
0.34 ft/s
J-2182
800.00'
P-2251
2.73 ft/s
J-2156
910.00'
P-2213
0.42 ft/s
J-2157
920.00'
P-2214
1.32 ft/s
J-2158
J-2138
920.00'
P-2170
0.14 ft/s
J-2137
830.00'
EAST BEND RD KY 338
CAMP ERN
LOCUST GROVE RD
N
Contract 2B - Main Line
Contract 2D - Side Streets



(NO SCALE)

Contract 2B

PHASE 2B

N

Scenario: STD23 - Peak Hour Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	109.23	251.97	1,036.97
J-2	0.00	510.00	207.51	478.67	988.67
J-21	0.00	804.00	82.22	189.65	993.65
J-22	3.00	745.00	107.79	248.65	993.65
J-23	0.00	820.00	75.28	173.65	993.65
J-24	3.00	820.00	75.28	173.65	993.65
J-25	0.00	812.00	78.17	180.32	992.32
J-26	6.00	770.00	96.38	222.31	992.31
J-131	0.00	828.00	70.67	163.01	991.01
J-2009	0.00	920.00	69.21	159.64	1,079.64
J-2011	0.00	920.00	69.21	159.65	1,079.65
J-2102	558.06	870.00	90.50	208.75	1,078.75
J-2103	75.83	840.00	95.08	219.31	1,059.31
J-2104	175.00	770.00	117.57	271.20	1,041.20
J-2105	76.81	900.00	73.87	170.40	1,070.40
J-2140	791.39	900.00	73.75	170.12	1,070.12
J-2147	51.53	890.00	65.08	150.11	1,040.11
J-2168	20.42	850.00	84.73	195.45	1,045.45
J-2170	506.53	850.00	79.74	183.94	1,033.94
J-2172	38.89	830.00	82.30	189.83	1,019.83
J-2173	2,065.84	800.00	84.46	194.83	994.83
J-2510	0.00	800.00	98.07	226.22	1,026.22
J-2520	282.94	657.00	147.39	339.98	996.98
J-2530	714.56	820.00	75.70	174.62	994.62

WT

Contract 2C

1.

Scenario: STD38 - Max Day Pumps Off Phases I, II, and III
Steady State Analysis
Junction Report

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	110.36	254.57	1,039.57
J-2	0.00	510.00	218.56	504.14	1,014.14
J-21	0.00	804.00	92.17	212.60	1,016.60
J-22	2.00	745.00	117.74	271.60	1,016.60
J-23	0.00	820.00	85.23	196.60	1,016.60
J-24	2.00	820.00	85.23	196.60	1,016.60
J-25	0.00	812.00	88.41	203.94	1,015.94
J-26	4.00	770.00	106.62	245.94	1,015.94
J-131	0.00	828.00	81.20	187.30	1,015.30
J-2009	0.00	920.00	62.69	144.60	1,064.60
J-2011	0.00	920.00	62.93	145.16	1,065.16
J-2102	398.61	870.00	83.26	192.05	1,062.05
J-2103	54.17	840.00	91.59	211.27	1,051.27
J-2104	125.00	770.00	117.84	271.81	1,041.81
J-2105	54.86	900.00	68.52	158.05	1,058.05
J-2140	565.28	900.00	68.38	157.74	1,057.74
J-2147	36.81	890.00	65.50	151.09	1,041.09
J-2168	14.58	850.00	84.26	194.36	1,044.36
J-2170	361.81	850.00	81.58	188.18	1,038.18
J-2172	27.78	830.00	86.97	200.61	1,030.61
J-2173	1,475.60	800.00	94.16	217.19	1,017.19
J-2510	0.00	800.00	101.38	233.86	1,033.86
J-2520	202.10	657.00	156.64	361.32	1,018.32
J-2530	510.40	820.00	85.44	197.08	1,017.08

WT

2

Scenario: MDD Phases I, II, and III with Flush @ J-22

ANSON LANE

Steady State Analysis

Junction Report

FLOW J-22 = 1513 gpm

VELOCITY P-33 = 9.66 fps

8" pipe

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	104.85	241.85	1,026.85
J-21	0.00	804.00	41.13	94.88	898.88
J-22	1,513.00	745.00	29.91	69.00	814.00
J-23	0.00	820.00	20.06	46.27	866.27
J-24	2.00	820.00	20.06	46.27	866.27
J-25	0.00	812.00	39.84	91.91	903.91
J-26	4.00	770.00	58.05	133.90	903.90
J-2009	0.00	920.00	62.83	144.94	1,064.94
J-2011	0.00	920.00	63.07	145.49	1,065.49
J-2102	398.61	870.00	83.31	192.17	1,062.17
J-2103	54.17	840.00	89.92	207.41	1,047.41
J-2104	125.00	770.00	113.40	261.57	1,031.57
J-2105	54.86	900.00	67.65	156.06	1,056.06
J-2140	565.28	900.00	67.54	155.79	1,055.79
J-2147	36.81	890.00	61.33	141.47	1,031.47
J-2168	14.58	850.00	80.02	184.58	1,034.58
J-2170	361.81	850.00	75.48	174.11	1,024.11
J-2172	27.78	830.00	77.94	179.79	1,009.79
J-2173	1,475.60	800.00	79.84	184.17	984.17
J-2510	0.00	800.00	93.14	214.85	1,014.85
J-2520	202.10	657.00	140.99	325.21	982.21
J-2530	510.40	820.00	68.23	157.38	977.38

PRESSURE AT NODES 23 & 24 GETS REDUCED TO ~20 PSI WHEN FLUSHING DEMAND IS APPLIED AT J-22

WT

WT

Scenario: MDD Phases I, II, and III with Flush @ J-22
Steady State Analysis
Pipe Report

ANSON LANE

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-32	J-21	J-23	1,515.00	9.67	713.00	8	41.13	20.06
P-33	J-23	J-22	1,513.00	9.66	1,146.00	8	20.06	29.91
P-40	J-23	J-24	2.00	0.01	502.00	8	20.06	20.06
P-56	J-25	J-26	4.00	0.03	2,100.00	8	39.84	58.05
P-385	J-2011	T-16	-3,977.93	6.35	1,554.00	16	63.07	17.34
P-2009	J-2009	J-2011	-3,977.93	6.35	50.00	16	62.83	63.07
P-2130	J-2103	J-2102	-1,418.48	4.02	2,628.00	12	89.92	83.31
P-2131	J-2104	J-2103	-784.55	2.23	8,447.00	12	113.40	89.92
P-2132	J-2009	J-2105	240.77	1.54	5,858.00	8	62.83	67.65
P-2133	J-2102	J-2009	-2,516.20	2.57	1,464.00	20	83.31	62.83
P-2186	J-2140	J-2105	-366.72	0.59	3,110.00	16	67.54	67.65
P-2202	J-2104	J-2147	67.27	0.19	4,942.00	12	113.40	61.33
P-2227	J-2167	J-2168	689.31	1.96	5,171.00	12	113.67	80.02
P-2228	J-2105	J-2168	2,467.01	3.94	5,572.00	16	67.65	80.02
P-2230	J-2168	J-2104	516.08	1.46	3,484.00	12	80.02	113.40
P-2231	J-2168	J-2170	2,625.66	4.19	2,420.00	16	80.02	75.48
P-2233	J-2170	J-2172	2,236.08	3.57	4,456.00	16	75.48	77.94
P-2234	J-2172	J-2173	2,208.30	3.52	8,160.00	16	77.94	79.84
P-2310	J-2102	J-2105	1,087.29	1.73	7,234.00	16	83.31	67.65
P-2310a	J-2009	J-2105	1,560.52	2.49	6,241.00	16	62.83	67.65
P-2510a	J-2104	J-1	1,108.35	3.14	1,539.00	12	113.40	104.85
P-2510b	J-1	J-2510	1,108.35	3.14	3,914.00	12	104.85	93.14
P-2520	J-2510	J-2520	1,108.35	3.14	10,642.00	12	93.14	140.99
P-2530	J-2520	J-2530	1,059.92	3.01	1,713.00	12	140.99	68.23
P-2540	J-2530	J-2173	-732.70	2.08	4,766.00	12	68.23	79.84
P-2550a	J-21	J-2530	-1,282.22	8.18	2,712.00	8	41.13	68.23
P-2550c	J-25	J-21	232.78	1.49	4,095.00	8	39.84	41.13
P-2570	J-11	J-2520	153.66	0.98	12,131.00	8	77.65	140.99

P-33

Scenario: MDD Phases I, II, and III with Flush @ J-24 BREWER LANE

Steady State Analysis

Junction Report

FLOW J-24 = 1393 gpm
VELOCITY P-40 = 8.89 fps
8" pipe

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	105.49	243.33	1,028.33
J-21	0.00	804.00	47.62	109.85	913.85
J-22	2.00	745.00	61.07	140.87	885.87
J-23	0.00	820.00	28.56	65.87	885.87
J-24	1,393.00	820.00	20.04	46.22	866.22
J-25	0.00	812.00	45.97	106.03	918.03
J-26	4.00	770.00	64.17	148.03	918.03
J-2009	0.00	920.00	62.96	145.22	1,065.22
J-2011	0.00	920.00	63.19	145.76	1,065.76
J-2102	398.61	870.00	83.45	192.50	1,062.50
J-2103	54.17	840.00	90.21	208.08	1,048.08
J-2104	125.00	770.00	113.93	262.80	1,032.80
J-2105	54.86	900.00	67.87	156.57	1,056.57
J-2140	565.28	900.00	67.76	156.30	1,056.30
J-2147	36.81	890.00	61.85	142.66	1,032.66
J-2168	14.58	850.00	80.54	185.78	1,035.78
J-2170	361.81	850.00	76.17	175.70	1,025.70
J-2172	27.78	830.00	78.90	182.01	1,012.01
J-2173	1,475.60	800.00	81.30	187.52	987.52
J-2510	0.00	800.00	94.06	216.97	1,016.97
J-2520	202.10	657.00	142.67	329.09	986.09
J-2530	510.40	820.00	70.07	161.62	981.62

← Pressure Reduced to 20psi.

← WT

Scenario: MDD Phases I, II, and III with Flush @ J-24
Steady State Analysis
Pipe Report

BREWER LANE

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-32	J-21	J-23	1,395.00	8.90	713.00	8	47.62	28.56
P-33	J-23	J-22	2.00	0.01	1,146.00	8	28.56	61.07
P-40	J-23	J-24	1,393.00	8.89	502.00	8	28.56	20.04
P-56	J-25	J-26	4.00	0.03	2,100.00	8	45.97	64.17
P-385	J-2011	T-16	-3,937.24	6.28	1,554.00	16	63.19	17.34
P-2009	J-2009	J-2011	-3,937.24	6.28	50.00	16	62.96	63.19
P-2130	J-2103	J-2102	-1,400.98	3.97	2,628.00	12	90.21	83.45
P-2131	J-2104	J-2103	-769.39	2.18	8,447.00	12	113.93	90.21
P-2132	J-2009	J-2105	237.46	1.52	5,858.00	8	62.96	67.87
P-2133	J-2102	J-2009	-2,492.83	2.55	1,464.00	20	83.45	62.96
P-2186	J-2140	J-2105	-367.88	0.59	3,110.00	16	67.76	67.87
P-2202	J-2104	J-2147	81.85	0.23	4,942.00	12	113.93	61.85
P-2227	J-2167	J-2168	676.18	1.92	5,171.00	12	114.08	80.54
P-2228	J-2105	J-2168	2,423.88	3.87	5,572.00	16	67.87	80.54
P-2230	J-2168	J-2104	513.30	1.46	3,484.00	12	80.54	113.93
P-2231	J-2168	J-2170	2,572.18	4.10	2,420.00	16	80.54	76.17
P-2233	J-2170	J-2172	2,182.59	3.48	4,456.00	16	76.17	78.90
P-2234	J-2172	J-2173	2,154.81	3.44	8,160.00	16	78.90	81.30
P-2310	J-2102	J-2105	1,070.12	1.71	7,234.00	16	83.45	67.87
P-2310a	J-2009	J-2105	1,539.04	2.46	6,241.00	16	62.96	67.87
P-2510a	J-2104	J-1	1,075.84	3.05	1,539.00	12	113.93	105.49
P-2510b	J-1	J-2510	1,075.84	3.05	3,914.00	12	105.49	94.06
P-2520	J-2510	J-2520	1,075.84	3.05	10,642.00	12	94.06	142.67
P-2530	J-2520	J-2530	1,015.55	2.88	1,713.00	12	142.67	70.07
P-2540	J-2530	J-2173	-679.21	1.93	4,766.00	12	70.07	81.30
P-2550a	J-21	J-2530	-1,184.37	7.56	2,712.00	8	47.62	70.07
P-2550c	J-25	J-21	210.63	1.34	4,095.00	8	45.97	47.62
P-2570	J-11	J-2520	141.82	0.91	12,131.00	8	78.92	142.67

Scenario: MDD Phases I, II, and III with Flush @ J-26 CARIBOU DR

Steady State Analysis

Junction Report

FLOW J-26 = 1214 gpm
VELOCITY P56 = 7.75 fps
8" Pipe

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)
J-1	0.00	785.00	106.80	246.35	1,031.35
J-21	0.00	804.00	61.81	142.57	946.57
J-22	2.00	745.00	87.38	201.57	946.57
J-23	0.00	820.00	54.87	126.57	946.57
J-24	2.00	820.00	54.87	126.57	946.57
J-25	0.00	812.00	29.51	68.08	880.08
J-26	1,214.00	770.00	20.10	46.37	816.37
J-2009	0.00	920.00	63.19	145.76	1,065.76
J-2011	0.00	920.00	63.42	146.28	1,066.28
J-2102	398.61	870.00	83.72	193.13	1,063.13
J-2103	54.17	840.00	90.73	209.29	1,049.29
J-2104	125.00	770.00	114.99	265.24	1,035.24
J-2105	54.86	900.00	68.31	157.58	1,057.58
J-2140	565.28	900.00	68.20	157.31	1,057.31
J-2147	36.81	890.00	62.82	144.91	1,034.91
J-2168	14.58	850.00	81.62	188.27	1,038.27
J-2170	361.81	850.00	77.64	179.09	1,029.09
J-2172	27.78	830.00	81.00	186.84	1,016.84
J-2173	1,475.60	800.00	84.52	194.97	994.97
J-2510	0.00	800.00	96.00	221.45	1,021.45
J-2520	202.10	657.00	146.33	337.53	994.53
J-2530	510.40	820.00	74.11	170.95	990.95

← Pressure Reduced to 20 psi.

← WT

Scenario: MDD Phases I, II, and III with Flush @ J-26
Steady State Analysis
Pipe Report

CARIBO DR

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-32	J-21	J-23	4.00	0.03	713.00	8	61.81	54.87
P-33	J-23	J-22	2.00	0.01	1,146.00	8	54.87	87.38
P-40	J-23	J-24	2.00	0.01	502.00	8	54.87	54.87
P-56	J-25	J-26	1,214.00	7.75	2,100.00	8	29.51	20.10
P-385	J-2011	T-16	-3,858.99	6.16	1,554.00	16	63.42	17.34
P-2009	J-2009	J-2011	-3,858.99	6.16	50.00	16	63.19	63.42
P-2130	J-2103	J-2102	-1,369.61	3.89	2,628.00	12	90.73	83.72
P-2131	J-2104	J-2103	-735.40	2.09	8,447.00	12	114.99	90.73
P-2132	J-2009	J-2105	230.33	1.47	5,858.00	8	63.19	68.31
P-2133	J-2102	J-2009	-2,451.02	2.50	1,464.00	20	83.72	63.19
P-2186	J-2140	J-2105	-370.19	0.59	3,110.00	16	68.20	68.31
P-2202	J-2104	J-2147	129.04	0.37	4,942.00	12	114.99	62.82
P-2227	J-2167	J-2168	647.45	1.84	5,171.00	12	114.91	81.62
P-2228	J-2105	J-2168	2,329.56	3.72	5,572.00	16	68.31	81.62
P-2230	J-2168	J-2104	517.55	1.47	3,484.00	12	81.62	114.99
P-2231	J-2168	J-2170	2,444.88	3.90	2,420.00	16	81.62	77.64
P-2233	J-2170	J-2172	2,055.30	3.28	4,456.00	16	77.64	81.00
P-2234	J-2172	J-2173	2,027.52	3.24	8,160.00	16	81.00	84.52
P-2310	J-2102	J-2105	1,031.44	1.65	7,234.00	16	83.72	68.31
P-2310a	J-2009	J-2105	1,492.84	2.38	6,241.00	16	63.19	68.31
P-2510a	J-2104	J-1	998.90	2.83	1,539.00	12	114.99	106.80
P-2510b	J-1	J-2510	998.90	2.83	3,914.00	12	106.80	96.00
P-2520	J-2510	J-2520	998.90	2.83	10,642.00	12	96.00	146.33
P-2530	J-2520	J-2530	900.86	2.56	1,713.00	12	146.33	74.11
P-2540	J-2530	J-2173	-551.92	1.57	4,766.00	12	74.11	84.52
P-2550a	J-21	J-2530	-942.38	6.02	2,712.00	8	61.81	74.11
P-2550c	J-25	J-21	-938.38	5.99	4,095.00	8	29.51	61.81
P-2570	J-11	J-2520	104.06	0.66	12,131.00	8	81.45	146.33

Scenario: MDD Phases I, II, and III with Flush @ J-131 PETERSBURG RD KY2

Steady State Analysis

Junction Report

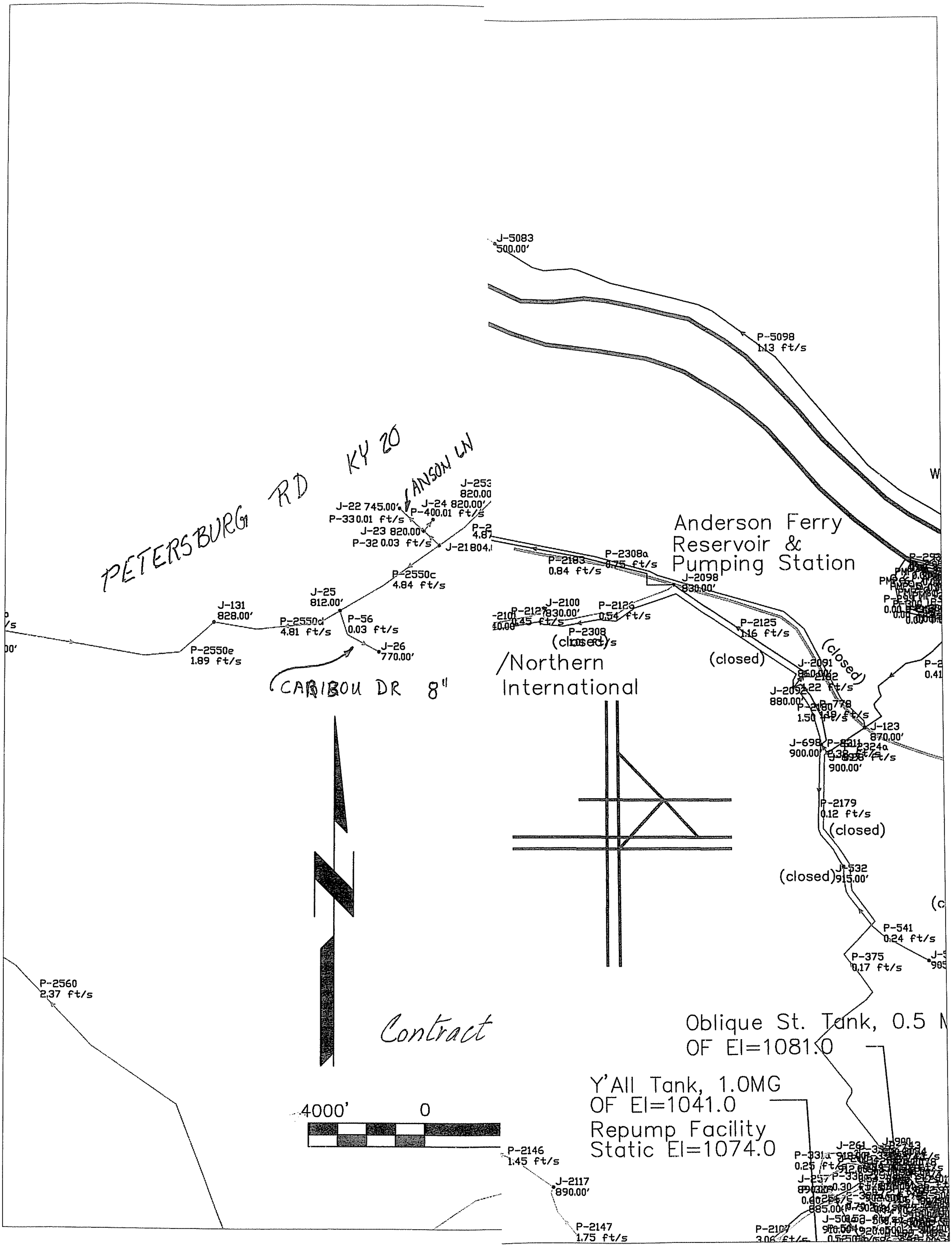
FLOW J-131 = 1051 gpm
VELOCITY P 2550d = 4.81 fps
8" Pipe

Label	Demand (Calculated) (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)	Calculated Hydraulic Grade (ft)	
J-1	0.00	785.00	107.79	248.63	1,033.63	
J-2	0.00	510.00	164.70	379.91	889.91	
J-21	0.00	804.00	70.91	163.58	967.58	
J-22	2.00	745.00	96.49	222.58	967.58	
J-23	0.00	820.00	63.98	147.58	967.58	
J-24	2.00	820.00	63.98	147.58	967.58	
J-25	0.00	812.00	48.02	110.77	922.77	
J-26	4.00	770.00	66.23	152.77	922.77	
J-131	1,051.00	828.00	20.19	46.56	874.56	← Pressure Reduced to 20 psi
J-2009	0.00	920.00	63.37	146.19	1,066.19	
J-2011	0.00	920.00	63.59	146.69	1,066.69	← NT
J-2102	398.61	870.00	83.94	193.62	1,063.62	
J-2103	54.17	840.00	91.15	210.26	1,050.26	
J-2104	125.00	770.00	115.81	267.13	1,037.13	
J-2105	54.86	900.00	68.65	158.36	1,058.36	
J-2140	565.28	900.00	68.54	158.09	1,058.09	
J-2147	36.81	890.00	63.58	146.66	1,036.66	
J-2168	14.58	850.00	82.44	190.15	1,040.15	
J-2170	361.81	850.00	78.74	181.63	1,031.63	
J-2172	27.78	830.00	82.54	190.40	1,020.40	
J-2173	1,475.60	800.00	86.87	200.38	1,000.38	
J-2510	0.00	800.00	97.42	224.73	1,024.73	
J-2520	202.10	657.00	148.92	343.52	1,000.52	
J-2530	510.40	820.00	76.97	177.54	997.54	

Scenario: MDD Phases I, II, and III with Flush @ J-131
Steady State Analysis
Pipe Report

PETERSBURG ROAD

Label	From Node	To Node	Discharge (gpm)	Velocity (ft/s)	Length (ft)	Diameter (in)	Upstream Calculated Pressure (psi)	Downstream Calculated Pressure (psi)
P-32	J-21	J-23	4.00	0.03	713.00	8	70.91	63.98
P-33	J-23	J-22	2.00	0.01	1,146.00	8	63.98	96.49
P-40	J-23	J-24	2.00	0.01	502.00	8	63.98	63.98
P-56	J-25	J-26	4.00	0.03	2,100.00	8	48.02	66.23
P-385	J-2011	T-16	-3,796.59	6.06	1,554.00	16	63.59	17.34
P-2009	J-2009	J-2011	-3,796.59	6.06	50.00	16	63.37	63.59
P-2130	J-2103	J-2102	-1,343.93	3.81	2,628.00	12	91.15	83.94
P-2131	J-2104	J-2103	-708.83	2.01	8,447.00	12	115.81	91.15
P-2132	J-2009	J-2105	224.80	1.43	5,858.00	8	63.37	68.65
P-2133	J-2102	J-2009	-2,416.87	2.47	1,464.00	20	83.94	63.37
P-2186	J-2140	J-2105	-371.99	0.59	3,110.00	16	68.54	68.65
P-2202	J-2104	J-2147	157.50	0.45	4,942.00	12	115.81	63.58
P-2227	J-2167	J-2168	625.24	1.77	5,171.00	12	115.54	82.44
P-2228	J-2105	J-2168	2,256.67	3.60	5,572.00	16	68.65	82.44
P-2230	J-2168	J-2104	517.02	1.47	3,484.00	12	82.44	115.81
P-2231	J-2168	J-2170	2,350.31	3.75	2,420.00	16	82.44	78.74
P-2233	J-2170	J-2172	1,960.72	3.13	4,456.00	16	78.74	82.54
P-2234	J-2172	J-2173	1,932.95	3.08	8,160.00	16	82.54	86.87
P-2310	J-2102	J-2105	1,001.71	1.60	7,234.00	16	83.94	68.65
P-2310a	J-2009	J-2105	1,457.00	2.32	6,241.00	16	63.37	68.65
P-2510a	J-2104	J-1	943.35	2.68	1,539.00	12	115.81	107.79
P-2510b	J-1	J-2510	943.35	2.68	3,914.00	12	107.79	97.42
P-2520	J-2510	J-2520	943.35	2.68	10,642.00	12	97.42	148.92
P-2530	J-2520	J-2530	815.34	2.31	1,713.00	12	148.92	76.97
P-2540	J-2530	J-2173	-457.35	1.30	4,766.00	12	76.97	86.87
P-2550a	J-21	J-2530	-762.29	4.87	2,712.00	8	70.91	76.97
P-2550c	J-25	J-21	-758.29	4.84	4,095.00	8	48.02	70.91
P-2550d	J-131	J-25	-754.29	4.81	4,449.00	8	20.19	48.02
P-2550e	J-2	J-131	296.71	1.89	7,971.00	8	164.70	20.19
P-2570	J-11	J-2520	74.09	0.47	12,131.00	8	83.37	148.92


PETERSBURG RD
KY 20
LANSON LN
CARIBOU DR 8"
Contract
J-5083
500.00'
P-5098
1.13 ft/s
Anderson Ferry
Reservoir &
Pumping Station
P-2183
0.84 ft/s
P-2308a
0.75 ft/s
J-2098
830.00'
J-2100
830.00'
P-2126
0.54 ft/s
P-2125
1.16 ft/s
(closed)
/Northern
International
J-22 745.00'
J-24 820.00'
J-23 820.00'
P-32 0.03 ft/s
P-2550c
4.84 ft/s
J-25
812.00'
P-56
0.03 ft/s
J-26
770.00'
J-131
828.00'
P-2550d
4.81 ft/s
P-2550e
1.89 ft/s
J-2092
880.00'
J-123
870.00'
J-698
900.00'
P-2179
0.12 ft/s
J-532
915.00'
P-541
0.24 ft/s
P-375
0.17 ft/s
P-2560
2.37 ft/s
Oblique St. Tank, 0.5 M
OF El=1081.0
Y'All Tank, 1.0MG
OF El=1041.0
Repump Facility
Static El=1074.0
4000'
0
P-2146
1.45 ft/s
J-2117
890.00'
P-2147
1.75 ft/s

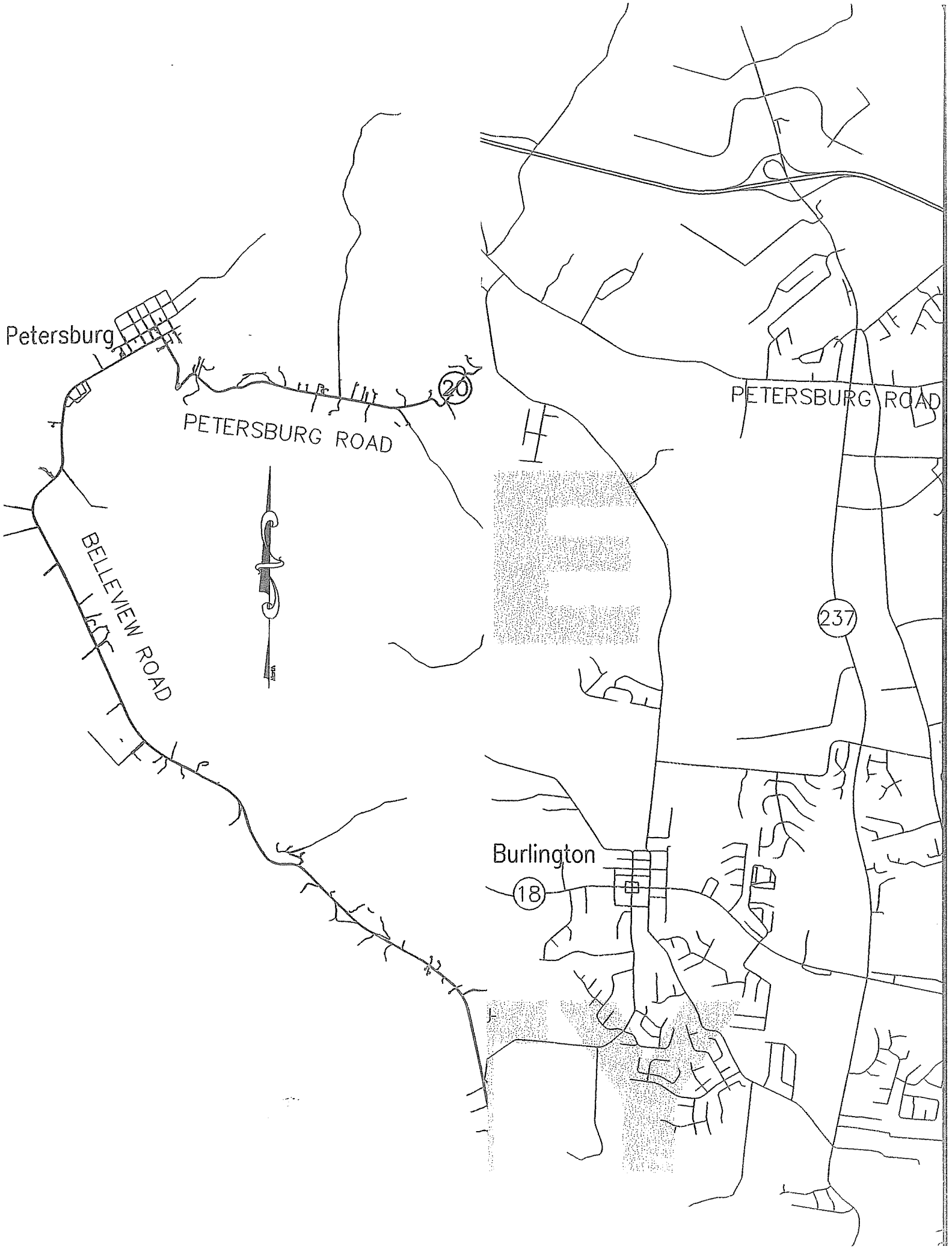

Petersburg
20
PETERSBURG ROAD
PETERSBURG ROAD
BELLEVIEW ROAD
237
Burlington
18

EXHIBIT M

GENERAL DESCRIPTION OF THE PROJECT

Boone County Rural Water Project
Phase II- Sub-district B
Project Description

The following is a project description for the various sections of the Phase II Rural water project. These new project extends the existing water service from the Phase I area (Sub-district A).

Phase 2A – Big Bone Church Road to Gum Branch Rd.

The Phase 2A Project consists of extending the water main from Big Bone Rd. approximately 8,200 feet of 8" ductile iron water main along Big Bone Church Road to Gum Branch Rd.. In addition, water mains are proposed for side streets including Michelle Dr., Brian Ct., Kirby Ln., and Forest View Dr. (approx. 6,500 feet). The water mains will be constructed along the County roadways, primarily within the road right of way. There are 2 properties that require easements on private property which would be acquired. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would potentially provide service to some 60 existing homes in this service area. The estimated construction cost for the Phase 2A water main extension is $665,000.

PHASE 2B AND PHASE 2D – EAST BEND RD. (SR338) TO LOCUST GROVE RD. (PHASE 2B) AND SIDE STREETS (PHASE 2D).

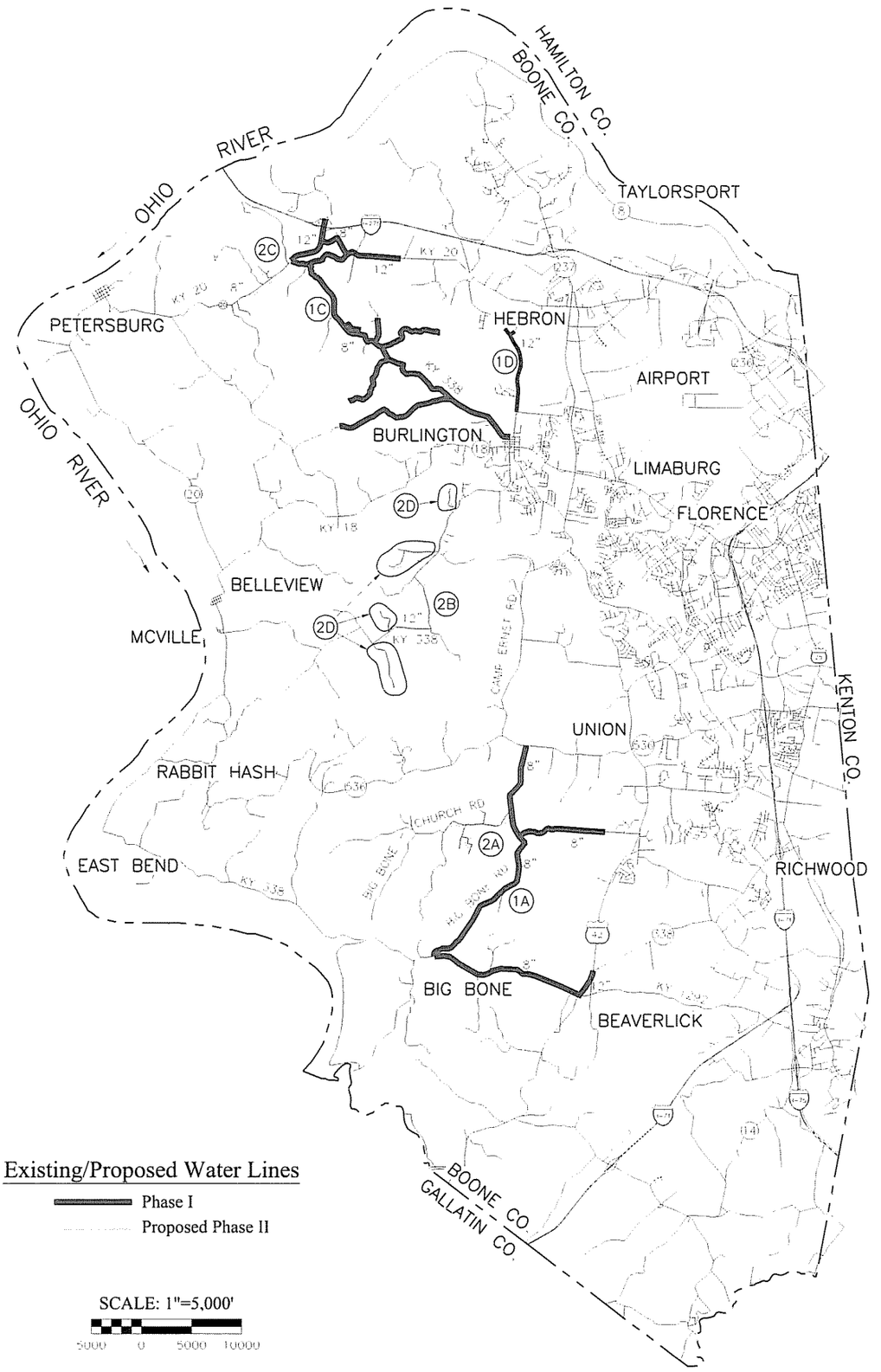
The Phase 2B and 2D Projects consists of installation of approximately 21,500 feet of 12" water main along East Bend Rd from Burlington to Locust Grove Rd (Phase 2B). In addition, 8" water mains are proposed on side streets including, Emerald Dr., Possum Path, Kirby Dr., Wolfe Rd., and Locust Grove Rd (17,000 feet-Phase 2D). The water mains will be constructed mainly along the State and County roadways, primarily within the road right of way. There are 2 properties on Phase 2D that require easements on private property. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would potentially provide service to approximately 270 existing homes in this area. The estimated construction cost for Phase 2B and 2D combined is approximately $2,000,000.

PHASE 2C – PETERSBURG RD. (KY 20) FROM IDLEWILD RD. WEST .

The Phase 2C Project consists of installation of approximately 10,500 feet of 8" water main along Ky 20/Petersburg Rd. west of Idlewild Rd. to approximately 2000 feet west of Ashby Fork Rd. In addition, 8" water mains are proposed on side streets including,

Anson Ln., Brewer Ln., and Caribou Dr. (6,900 feet). The water mains will be constructed mainly along the State, County, and private roadways, primarily within the road right of way/edge of road. There is one property owner (2 parcels) where an easement is required and an agreement with the Homeowner Association for access along the private drive. The construction will mainly be open cut excavation as shown in the plans. The project will extend water service to rural areas and provide fire protection. This water main would provide service to approximately 70 existing homes in this area. The estimated construction cost for Phase 2C is approximately $770,000.

The proposed Phase II project is shown in the attached Figure. The Figure also indicates the Phase I project that has been previously completed. The total estimated project cost for Phase II is approximately $4,000,000 including a 10% contingency and engineering, legal, and finance costs. The estimated potential customers is some 400 for this Phase.



Boone County Rural Water Project
Water System Expansion
Phase I & II Location Map

TETRA TECH, INC.

4/15/04

EXHIBIT N

NOTICE OF THE PROPOSED PROJECT AND SURCHARGE

Exhibit N

BOONE COUNTY, KENTUCKY

NOTICE TO CUSTOMERS

PETITION TO ESTABLISH WATER RATES AND ISSUE BONDS
PUBLIC SERVICE COMMISSION

Pursuant to the Regulations of the Kentucky Public Service Commission (Commission), Boone County, Kentucky (the "County") hereby gives Notice that it has filed a Petition with the Commission for a certificate of convenience and necessity to construct and finance a public water system in certain unserved areas of the County (the Subdistrict B service area") and a rate tariff schedule that will apply to each customer of the Subdistrict A service area. The County has proposed the rates and charges listed below to be effective July 1, 2005. Further information may be obtained from the Commission or the County. The rates proposed in this Notice may be modified by the Commission. Such action by the Commission may result in the rates being higher or lower than those proposed by the County.

Any corporation, association, body politic or person may by timely motion, within 30 days of this Notice, request intervention in this case. Intervention beyond the 30 day period may be granted for good cause shown. The Motion must be submitted to the Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602 and should state the grounds for the request, including the interest and status of the party. Interveners may obtain copies of the Application and any testimony filed by contacting the County at the address below. A copy of the Application is available for public review at the office of the County and at the Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601, (502) 564-3940.

Mr. James E. Parsons
County Administrator
P.O. Box 900
2950 Washington Square
Burlington, KY 41005
(859) 334-2240

Proposed Rates:

Tap In Fees:	3/4" meter	$625.00
	1" meter	$825.00
	2" meter	Actual Cost – $1,500.00

Deposit required. Customer will be refunded any difference in cost less than deposit and billed for any cost over deposit amount. All meters, over 2" will be installed by applicant with District supervision.

Reconnect Fee:	Reconnect during normal business hours (8:00 am to 4:30 pm) $25.00
	Reconnect after normal business hours $37.50
Return Check Charge:	For any check returned to the District as uncollectible $20.00
Wholesale/ Tank Sales:	$3.60 per 1,000 gallons

Monthly Usage Rates

Schedule A: All customers except multiple occupancy buildings and mobile home parks.

First 3,000 gallons:	$15.45 minimum charge
Next 2,000 gallons:	$4.65 per 1,000 gallons
Next 5,000 gallons:	$4.40 per 1,000 gallons
All over 10,000 gallons:	$3.65 per 1,000 gallons

Schedule B: Multiple occupancy buildings and mobile home parks.

First 3,000 gallons:	$15.45 minimum charge
Next 2,000 gallons:	$5.15 per 1,000 gallons
Next 5,000 gallons:	$4.65 per 1,000 gallons
Next 140,000 gallons:	$4.40 per 1,000 gallons
Next 150,000 gallons:	$3.65 per 1,000 gallons

Monthly Minimum Charge by Meter Size

5/8" - 3/4" meter	3,000 gallons
1" meter	5,000 gallons
1½" meter	9,000 gallons
2" meter	11,000 gallons
3" meter	21,000 gallons
4" meter	29,000 gallons
6" meter	100,000 gallons
Over 6" meter	100,000 gallons

Meter Size	Schedule A	Schedule B
5/8" - 3/4"	$15.45	$15.45
1"	$24.75	$25.75
1½"	$42.35	$44.35
2"	$50.40	$53.40
3"	$86.90	$97.40
4"	$116.10	$132.60
6"	$375.23	$445.00
Over 6"	$375.23	$445.00

Monthly Surcharge

Each costumer of Subdistrict A will pay a surcharge of $25.00 for each 10,000 gallons or any portion thereof of water consumed each month.