LUXON & PATTERSON

Attorneys at Law
507 HAMPTON WAY
P.O. BOX 825
RICHMOND, KENTUCKY 40476-0825
Telephone: 859/623-6233
Fax: 859/623-6977

Susan Dabney Luxon
J. Judson Patterson

email: Susan@luxonpatterson.com
email: Jud@luxonpatterson.com

April 3, 2014

Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

Re: Madison County Utility District Application for a Certificate of Public Convenience

Dear Sir or Madam:

Enclosed please find original and four copies of a completed Application for a Certificate of Public Convenience for the Madison County Utilities District.

Please let me know if you need any additional information.

Very truly yours,

Jud Patterson
Counsel for Madison County Utilities

JP/dp
Enclosures

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE MADISON COUNTY UTILITIES DISTRICT FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT AND FINANCE A WATER LINES REPLACEMENT PROJECT	)))))	**CASE NO. 2014-_____**

APPLICATION

Comes now Madison County Utilities District ("District"), by and through its Chairman, Jim Carr, and respectfully submits its Application for a Certificate of Public Convenience and Necessity and approval of financing for water lines replacement project:

1. The District is a water district created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes.

2. The post office address of the District is:

Madison County Utilities District
Attn: John Clark, Manager
P.O. Box 670
Richmond, KY 40476

3. The District is a non-profit water district and has no separate Articles of Incorporation or By-laws.

4. A description of the District's water system and its property stated at its original cost by accounts is contained in its 2012 Annual Report which is incorporated herein by reference pursuant to 807 KAR 5:001 et seq. All required financial schedules and other data are contained in the 2012 Annual Report.

5. The District services approximately 9,656 Residential customers and 630 Commercial customers, 24 Government customers, and 4 Industrial customers in Madison County.

6. The Phase 4 Improvement Project ("Project") consist of the following:

Cedar View Hills Subdivision – construction of 0.53 mile of 6" PVC water line to replace an existing 3" DI water line that is under pavement and has had numerous leaks due to acidic soil and to loop two dead end lines.

Charlie Norris Road – construction of 2.80 miles of 8" PVC water line to replace existing 6" DI water line that has had numerous leaks due to acidic soil and to loop two dead end lines.

Bumstark Road – construction of 0.49 mile of 6" PVC water line to replace an existing 4" DI line that has had numerous leaks due to acidic soil.

Hacket Pike – construction of 0.9 mile of 6" PVC water line to replace existing 4" and 3" DI water line which has had numerous leaks due to acidic soil. The water line serves Cedar Hills Subdivision.

Wild Goose Subdivision – construction of 0.04 mile of 4" PVC water line to loop two dead end water lines to improve water flow.

Hi-Lane Water Line Replacement – construction of 0.06 mile of 2" galvanized water line with 6" water line to serve 5 commercial customers. Existing water line is not large enough to provide adequate service and due to age is a maintenance problem.

7. The Project is in the public's best interest and is required to reduce water line breaks, reduce water loss, loop existing dead end water lines and replace 50 years old ductile iron and galvanized pipe which has been damaged due to highly acidic clay in the water line area. This project does not contemplate servicing new additional customers. The Project will improve water service to customers in the Waco, Bybee, Union City and Richmond areas of Madison County.

8. The total cost of the Project is approximately $962,181 as set forth in the Final Project Cost Estimate (Exhibit "B").

9. The proposed Project will not compete with any other utility in the area.

10. Based upon the following facts, the District believes that it is in the public's best interest that a Certificate of Public Convenience and necessity be granted:

A. The Project will improve water service in the Waco, Union City, Richmond and Bybee's area of Madison County.

B. The Project will reduce the number of leaks in 50 years old ductile iron pipe damaged by highly acidic soil and galvanized tubing.

C. The Project will reduce the District's water loss due to replacement of damage pipe.

D. The Project will loop five dead end water lines to provide better flow and reduce the amount of flushing.

E. The Project will be financed under terms which will not require a rate increase.

11. Copies of the certified bid tabulations for the Project are contained in the Final Engineering Report (Exhibit "C").

12. The District incorporates herein its 2012 Annual Report, a copy of which is on file with the PSC. The 2012 Annual Report provides financial data for the 12 month period ending December 31, 2012. To the extent that the financial data contained in a 2012 Annual Report does not contain financial data for the period ending with 90 days of the filing of this Application, the District would request and move for a deviation from 807 KAR 5:001 et seq. The District states that there has been no change that is material in nature regarding the financial condition or operation of the District since December 31, 2012. The financial data contained in the 2012 Annual Report is the most recent published financial data available to the District.

13. The District has bid the Project and is under a 90 days bid-hold period by the contractors. The bid-hold period ends May, 26, 2014. As such, is imperative that the Project be approved as quickly as possible in order to avoid the loss of favorable bids received by the District.

14. The Project will be financed as follows:

(a) The District has received a $856,528.00 loan from Kentucky Infrastructure Authority (DSWRF). See KIA Conditional Commitment Letter (Exhibit D).

(b) The District will contribute $105,653 to this project.

(c) The District will not need a rate increase to fund the proposed project.

(d) The estimate cost of operation of the Project will not increase due to the water lines in this project replacing existing water lines.

15. The District does not plan to support the Application with prepared testimony.

16. The District has received all permits necessary to construct the Project, copies of which are attached hereto as Exhibit "E".

WHEREFORE, the District requests that the Public Service Commission grant to the Applicant the following:

A. A Certificate of Public Convenience and necessity permitting the District to construct the Phase 4 Improvements;

B. An Order approving the financing arrangements made by the District, via, (1) the borrowing of $856,528.00 from Kentucky Infrastructure Authority.

MADISON COUNTY UTILITIES DISTRICT

BY: _____
JIM CARR, CHAIRMAN

COMMONWEALTH OF KENTUCKY

COUNTY OF MADISON

The undersigned Jim Carr, Chairman of the MADISON COUNTY UTILITIES DISTRICT, being duly sworn states and deposes that he is the Chairman of the Board of Commissioners of the Madison County Utilities District. The undersign states that he had read the foregoing Application and has noted the contents thereof and that they are true and correct to the best of his knowledge and belief.

IN TESTIMONY WHEREOF, witness the signature of the undersigned this 2nd day of April, 2014.

NOTARY PUBLIC State at Large Ky
MY COMMISSION EXPIRES: 11/19/14

LUXON & PATTERSON

JUD PATTERSON
507 HAMPTON WAY
P.O. BOX 825
RICHMOND, KY 40475
(859) 623-6233
ATTORNEY FOR MADISON COUNTY UTILITY DISTRICT

Exhibit A

Preliminary Engineering Report

Preliminary Engineering Report

Madison County Utilities District Phase 4 Improvements

Madison County

Madison County Utilities District

By

CMW, Inc.
400 East Vine Street
Suite 400
Lexington, Kentucky 40507

December, 2010

November, 2011

TABLE OF CONTENTS

ESTIMATED PROJECT COST

MADISON COUNTY UTILITIES DISTRICT IMPROVEMENTS PHASE 4

MADISON COUNTY UTILITIES DISTRICT

December 20, 2010

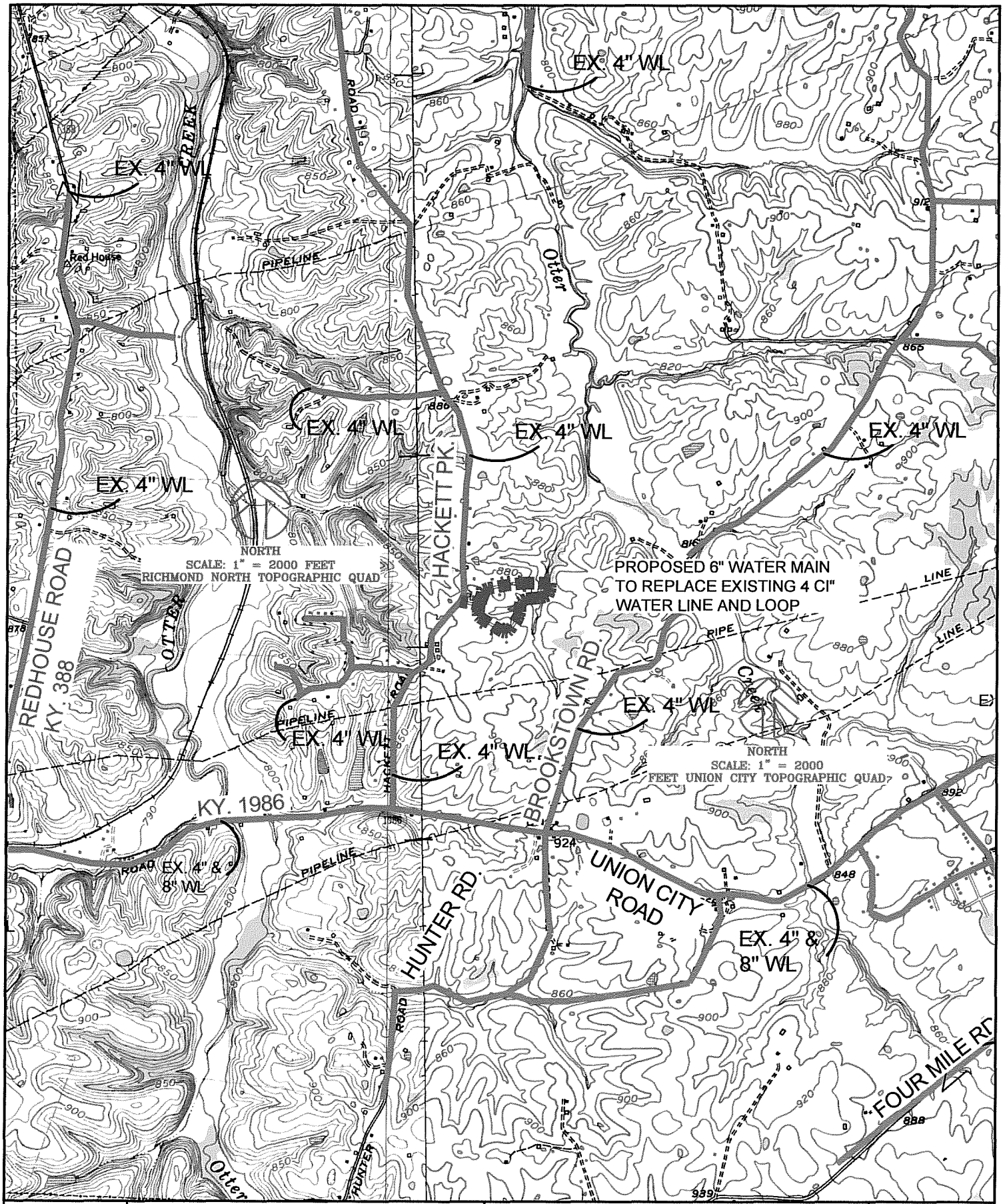
1. Construction Cost	$ 498,000.00
2. Legal	$ 12,000.00
3. Easements	$ 10,000.00
4. Preliminary Engineering	$ 5,000.00
5. Engineering Design	$ 51,344.00
6. Resident Inspection	$ 36,902.00
7. Environmental	$ 10,000.00
8. PSC Submittal	$ 15,000.00
9. Contingencies	$ 49,750.00
TOTAL ESTIMATED PROJECT COST	**$ 688,000.00**

Opinion of Probable Construction Cost
Madison County Utilities District Improvements, Phase 4
Madison County Utilities District
December 20, 2010

A.	Cedar View Hills	
1.	6" PVC Water Line 2,800 LF @ $11/LF	$30,800.00
2.	Connection to Existing Water Line (Wet Tap) 1 Ea @ $2,500	$2,500.00
3.	6" Gate Valves 4 Ea @ $770/Ea	$3,080.00
4.	Fire Hydrant 3 Ea @ $3,500/Ea	$10,500.00
5.	Road Bore w/Steel Encasement 30 LF @ $100/LF	$3,000.00
6.	Meter Reconnection w/ Service Piping 19 Ea @ $800/Ea	$15,200.00
	Subtotal Cedar View Hills	**$65,080.00**
B.	Charlie Norris WL (Box Ankle to Hwy 52)	
1.	8" PVC Waterline 14,800 LF @ $13/LF	$192,400.00
2.	Connection to Existing Water Line (Wet Tap) 6 Ea @ $3,000 /Ea	$18,000.00
3.	8" Gate Valves 30 Ea @ $925 /Ea	$27,750.00
4.	Fire Hydrants 15 Ea @ $3500 /Ea	$52,500.00
5.	Road Bores w/Steel Encasement 210 LF @ $110 /LF	$23,100.00
6.	Freebores 200 LF @ $60 /LF	$12,000.00
7.	Meter Reconnection w/ Service Piping 62 Ea @ $800 /Ea	$49,600.00
	Subtotal Charlie Norris Water Line	**$375,350.00**

C. Bumstark Road Water Line

1.	6" PVC Water Line 2600 LF @ $11/LF	$28,600.00
2.	Connection to Existing Water Line (Wet Tap) 2 Ea $2500 /Ea	$5,000.00
3.	6" Gate Valves 1 Ea @ $770 /Ea	$770.00
4.	Fire Hydrant 2 Ea @ $3500 /Ea	$7,000.00
5.	Road Bore w/ Steel Encasement 50 LF @ $100/LF	$5,000.00
6.	Meter Reconnection w/Service Piping 14 Ea @ $800 /Ea	$11,200.00
	Subtotal Bumstark Water Line	$57,570.00
	Total Construction Cost	**$498,000.00**



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW, Inc.
1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

CEDARVIEW ROAD

MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

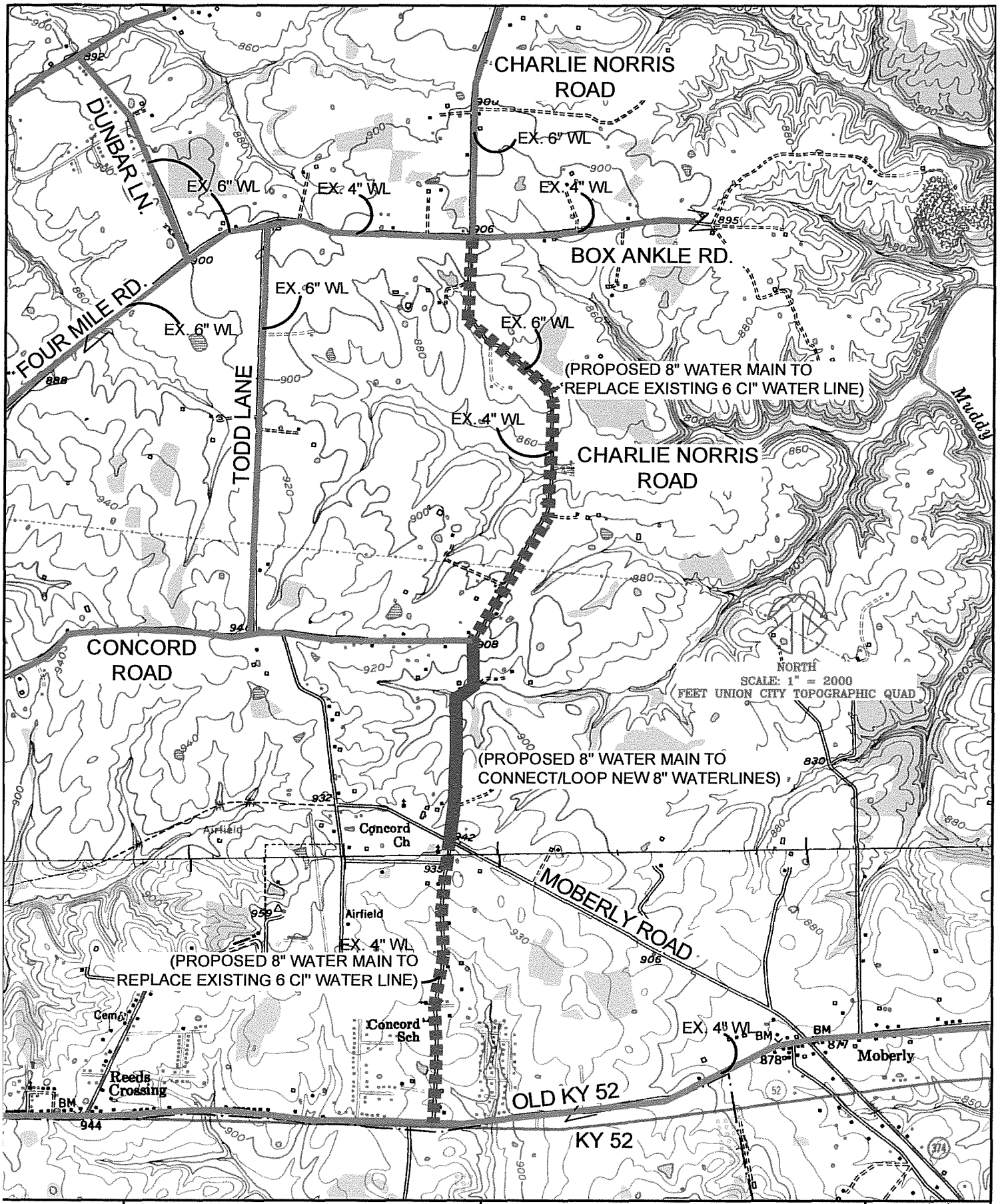
Dwg: MCUD PH4\DWG\USGS_PH4

Project Number
XXXXX.XX

1

Plot Date: 12/20/2010

XRefs:



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM THEIR FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW, Inc.
1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

CHARLIE NORRIS RD. WL LOOP

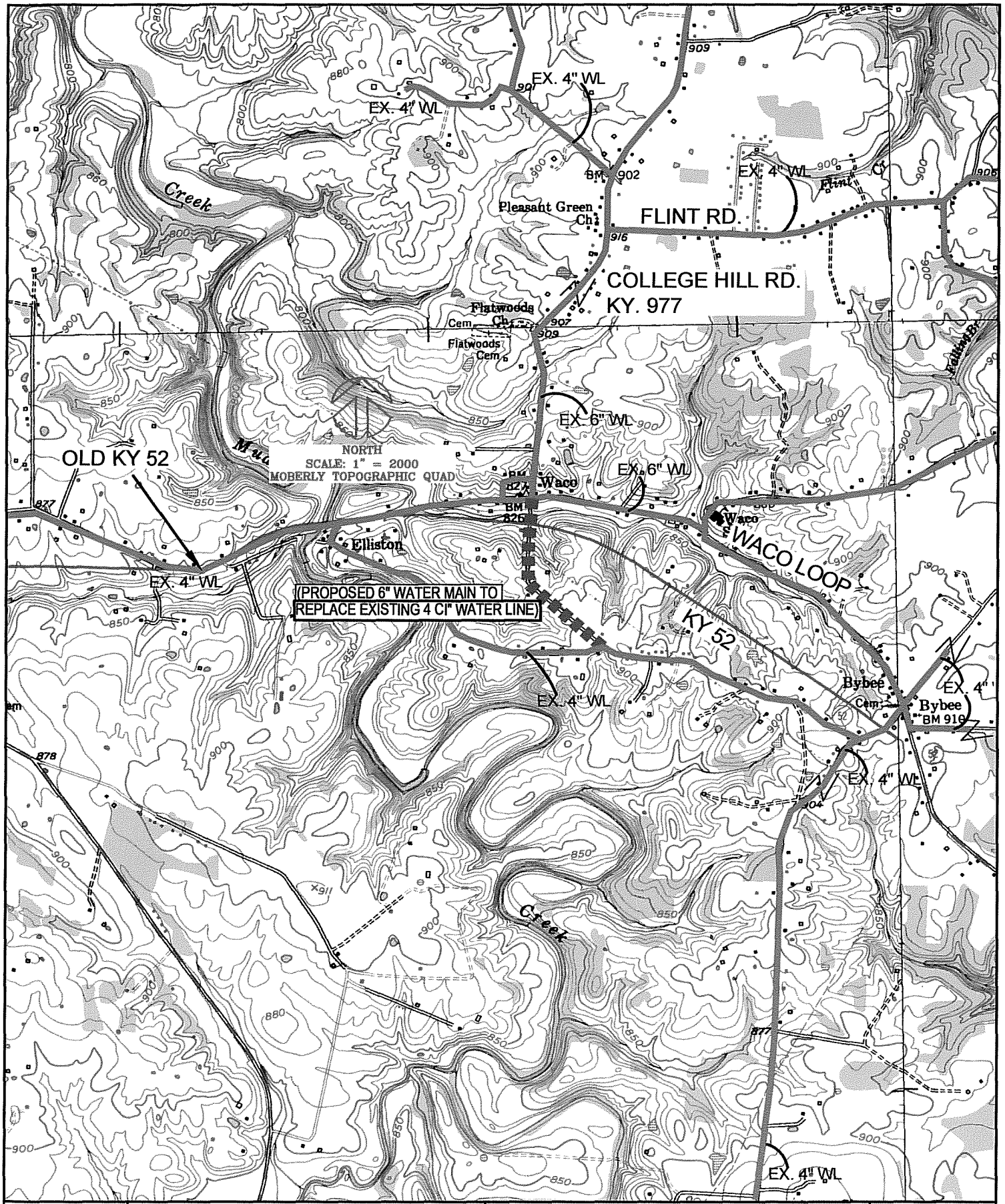
MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

Dwg: MCUD PH4\DWG\USGS_PH4

Project Number
XXXXX.XX

1

Plot Date: 12/20/2010



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW, Inc.

1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

BAUMSTARK ROAD

MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

Dwg: MCUD PH4\DWG\USGS_PH4

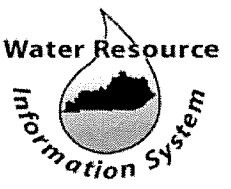
Project Number
XXXXX.XX

1

Plot Date: 12/20/2010

XRefs:

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

NARRATIVE

* Legal Applicant: Madison County Utilities District

* Project Schedule: 0-2 YEARS

* Primary County: MADISON

* Project Description

Cedar View Hills Subdivision - Construction of 0.53 mile of 6" PVC water line to replace an existing 4" DI water line that is under pavement and has had numerous leaks due to acidic soil and to loop two dead end lines.

Charlie Norris Road - Construction of 2.80 miles of 8" PVC water line to replace an existing 6" DI water line that has had numerous leaks due to acidic soil and to loop two dead end lines.

Bumstark Road - Construction of 0.49 miles of 6" PVC water line to replace an existing 4" DI line that has had numerous leaks due to acidic soil.

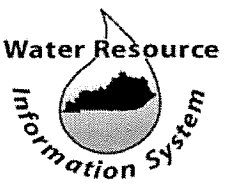
* Regulatory Framework Relevance Statement

The existing DI water lines were constructed in the 1960s and have had numerous leaks due to the reaction with acidic soil. Cedar View Hills water line is in a residential subdivision and the looping will connect two dead end lines to improve quality of water and reduce the amount of flushing required. Charlie Norris water line is part of the main feed line north of HWY 52 and the looping and increase to 8" will improve flow and pressure especially during peak usage. The looping will also eliminate two dead end lines. The Bumstark water line will increase to 6" to improve flow and pressure to area south oh Hwy 52.

Project Alternatives

* Alternative A	* Alternative B	* Alternative C
Replace only the existing lines	Replace only the looping lines	Do nothing

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

APPLICANT

* Legal Applicant: Madison County Utilities District

Contact

* First Name: John MI: * Last Name: Clark

Title: Manager

* Phone: 859 624 1735 Ext:

EMail: madisoncountyuti@bellsouth.net

Authorized Official

* First Name: John MI: * Last Name: Clark

Title: Manager

* Phone: 859 624 1735 Ext:

EMail: madisoncountyuti@bellsouth.net

ADMINISTRATION

Project Administrator

* First Name: Kerry MI: S * Last Name: Odle

Title: Principal/Vice President

Organization: CMW Inc.

Address Line 1: 400 E. Vine Street

Address Line 2: Suite 400

City: Lexington

State: KY Zip: 40507

* Phone: 859 254 6623 Ext: 104 Fax: 859 259 1877

EMail: kodle@cmwaec.com

Project Engineer

* First Name: Kerry MI: S * Last Name: Odle

* Phone: 859 254 6623 Ext: 104 Fax: 859 259 1877

EMail: kodle@cmwaec.com

* License #: 12497

Drinking Water Project Profile Pre-Application

* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

BUDGET AND SCHEDULE

Project Cost Classification

Administrative Expenses:	
Legal Expenses:	$12,000
Land, Appraisals, Easements:	$10,000
Relocation Expense & Payments:	
Planning:	$5,000
Engineering Fees - Design:	$51,344
Engineering Fees - Construction:	
Engineering Fees - Inspection:	$36,902
Engineering Fees - Other:	$10,000
Construction:	$498,000
Equipment:	
Miscellaneous:	$15,000
Contingencies:	$49,750
*** Total Project Cost:**	**$688,000**

Construction Cost Categories

Treatment:	
Transmission and Distribution:	$498,000
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized Cost:	
Total Construction Cost:	**$498,000**

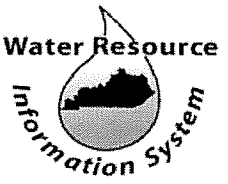
Project Funding Sources

FUNDING SOURCE	AMOUNT	STATUS	APPLICABLE DATE
KIA SRF Fund F Loan (DW)	$688,000	Applied For	

Detailed Project Schedule

Environmental Review Documents Date:	Jan 14, 2011
Construction Permit Application Date:	Jan 14, 2011
Estimated Bid Date:	Feb 15, 2011
Estimated Construction Start Date:	Mar 14, 2011

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

IMPACTS

The following systems are beneficiaries of this project

DOW PERMIT ID	SYSTEM NAME
KY0760224	Madison County Utilities District

Plans and Specifications

☐ Plans and specs have been sent to DOW.

Date:

☐ Plans and specs have been sent to PSC.

Date:

☐ Plans and specs have been reviewed by DOW.

Date:

☐ Plans and specs have been reviewed by PSC.

Date:

Economic Impacts

Jobs Created:

Jobs Retained:

DW Specific Impacts

☐ This project relates to a public health emergency.

☐ This project will assist a non-compliant system to achieve compliance.

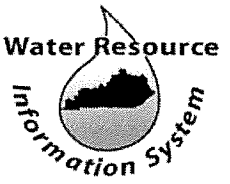
☒ This project will assist a compliant system to maintain compliance.

☐ This project will assist a compliant system to meet future requirements.

☐ This project will provide assistance not compliance related.

☐ This project will assist a system operating under an Agreed Order or other enforcement action.

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS

Administrative Components

☒ Planning
☒ Construction
☒ Design
☐ Management

Regionalization Components

Public Water Systems Eliminated

☐ This project includes the elimination of public water system(s) through merger or acquisition.

DOW PERMIT ID	SYSTEM NAME

Water Treatment Plants Eliminated

☐ This project includes the elimination of water treatment plant(s) through interconnect(s).

DOW PERMIT ID	SYSTEM NAME / FACILITY NAME

Supplementation of Raw Water Supply

☐ This project includes supplementing the existing raw water supply.

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to EXTENSION - RAW WATER INTERCONNECT

SOURCE NAME

Drinking Water Project Profile Pre-Application

* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 5)

Regionalization Components (continued)

Supplementation of Potable Water Supply

☐ This project includes supplementing the existing potable water supply.

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to EXTENSION - FINISHED WATER INTERCONNECT

DOW PERMIT ID	SYSTEM NAME

Emergency Only Water Supply

☐ This project provides emergency only water supply.

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to EXTENSION - EMERGENCY ONLY INTERCONNECT

DOW PERMIT ID	SYSTEM NAME

Water Source Protection

☐ This project includes land acquisition for water source protection.

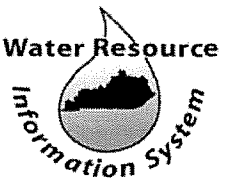
Acres to be purchased:

Cost per acre:

Land Use Control:

(GIS) - Must have mapping for proposed point(s) and set TYPE to SOURCE WATER PROTECTION and set PURPOSE to SOURCE WATER PROTECTION - LAND ACQUISITION

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 6)

Water Treatment Components

☐ This project includes water treatment components.

Treatment Activities

☐ This project includes a new water treatment plant.

Proposed design capacity (MGD):

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TREATMENT PLANT, STATUS to NEW, and set PROPOSED CAPACITY

☐ This project includes an expansion of an existing plant.

Current design capacity (MGD):

Proposed design capacity (MGD):

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TREATMENT PLANT, STATUS to WTP - EXPANSION, and set EXISTING CAPACITY & PROPOSED CAPACITY

☐ This project includes rehabilitation of an existing plant.

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TREATMENT PLANT and STATUS to REHAB

☐ This project includes upgrades to an existing plant.

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TREATMENT PLANT and STATUS to WTP - UPGRADE

☐ This project includes redundant treatment processes and/or emergency power generators.

Number of units provided:

(GIS) - Must have mapping for proposed point(s) and set TYPE to GENERATOR and set PURPOSE to GENERATOR - WATER TREATMENT PLANT

Acute Public Health Risk

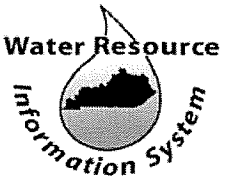
☐ This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements

Explanation of how Cryptosporidium removal/inactivation will be achieved:

☐ This project includes infrastructure options to meet CT inactivation requirements.

Explanation of how CT inactivation will be achieved:

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 7)

Water Treatment Components (continued)

Chronic Public Health Risk

☐ This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.

Explanation of how Disinfection treatment modifications will be achieved:

☐ This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Explanation of how OC/Radionuclides treatment modifications will be achieved:

Secondary Contaminants

☐ This project includes treatment modifications to address Secondary Contaminants.

Explanation of how Secondary Contaminants treatment modifications will be achieved:

Security

☐ This project includes security components for water treatment facilities.

Treatment facility security is achieved as follows:

(GIS) - Must have mapping for proposed point(s) and set TYPE to SECURITY and set PURPOSE to SECURITY - WATER TREATMENT PLANT or SECURITY - BOTH WTP & DISTRIBUTION SYSTEM

Drinking Water Project Profile Pre-Application

* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 8)

Water Distribution and Storage

☒ This project includes water distribution and/or storage components.

Water Line Extensions

☒ This project includes water line extension(s).

Length of extensions (LF): 3,430

Number of new connections: 0

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to EXTENSION or EXTENSION - FINISHED WATER INTERCONNECT or EXTENSION - RAW WATER INTERCONNECT or EXTENSION - EMERGENCY ONLY INTERCONNECT

Redundancy Components

☐ This project includes redundant distribution equipment and/or emergency power generators.

Number of units provided:

(GIS) - Must have mapping for proposed point(s) and set TYPE to GENERATOR and set PURPOSE to GENERATOR - DISTRIBUTION SYSTEM

Finished Water Quality

☒ This project includes infrastructure to address inadequate water turnover.

Inadequate turnover is addressed as follows:

Looping of two sets of water lines

☒ This project includes infrastructure to address inability to maintain disinfection residual.

Disinfectant residual is addressed as follows:

Looping of two sets of water lines

Drinking Water Project Profile Pre-Application

* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 9)

Water Distribution and Storage (continued)

Water Line Replacement

☒ This project replaces problem water lines (breaks, leaks, or restrictive flows due to age).

Total length of problem line replacement (LF): 16,740

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to REHAB - REPLACE PROBLEM LINES

Roads Serviced by Problem Line Replacements

ROAD NAME	LF SERVICED
Cedar View Hills Subdivision	2,000
Charlie Norris Road	12,150
Bumstark Road	2,590

☐ This project replaces water lines consisting of lead and/or asbestos-cement (AC).

Total length of lead and/or AC line replacement (LF):

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to REHAB - REPLACE LEAD AND/OR ASBESTOS-CEMENT LINES

Roads Serviced by Lead and/or Asbestos-Cement Line Replacements

ROAD NAME	LF SERVICED

☒ This project replaces inadequately sized water lines.

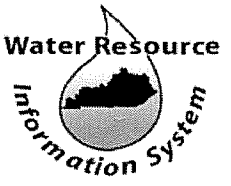
Total length of inadequately sized line replacement (LF): 16,740

(GIS) - Must have mapping for proposed line(s) and set ACTIVITY to REHAB - REPLACE UNDERSIZED LINES

Roads Serviced by Undersized Line Replacements

ROAD NAME	LF SERVICED
Cedar View Hills Subdivision	2,000
Charlie Norris Road	12,150
Bumstark Road	2,590

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

COMPONENTS (continued from Page 10)

Water Distribution and Storage (continued)

Water Storage and Pressure Components

☐ This project includes the construction of new water tank(s).

Number of new tank(s):

Existing storage capacity of tank(s) being decommissioned (GALLONS):

Proposed storage capacity of new tank(s) (GALLONS):

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TANK, set STATUS to NEW, and set EXISTING CAPACITY (if applicable) & PROPOSED CAPACITY

Reason for increased storage:

☐ This project includes the rehabilitation of existing water tank(s).

Number of rehabilitated tanks:

(GIS) - Must have mapping for proposed point(s) and set TYPE to WATER TANK and set STATUS to REHAB

☐ This project includes the construction of new pump station(s).

Number of new pump stations:

(GIS) - Must have mapping for proposed point(s) and set TYPE to PUMP STATION and set STATUS to NEW

☐ This project includes new pump stations for boosting pressure.

(GIS) - Must have mapping for proposed point(s) and set TYPE to PUMP STATION, set STATUS to NEW, and set PURPOSE to PUMP - BOOST PRESSURE

☐ This project includes new pump stations for filling water tanks.

(GIS) - Must have mapping for proposed point(s) and set TYPE to PUMP STATION, set STATUS to NEW, and set PURPOSE to PUMP - FILL TANK

☐ This project includes the rehabilitation of existing pump station(s).

Number of rehabilitated pump stations:

(GIS) - Must have mapping for proposed point(s) and set TYPE to PUMP STATION and set STATUS to REHAB

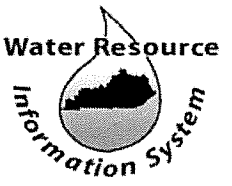
Security

☐ This project includes security components for water distribution infrastructure.

Distribution infrastructure security is achieved as follows:

(GIS) - Must have mapping for proposed point(s) and set TYPE to SECURITY, and set PURPOSE to SECURITY - DISTRIBUTION SYSTEM or SECURITY - BOTH WTP & DISTRIBUTION SYSTEM

Drinking Water Project Profile Pre-Application



* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

GREEN

Does this project incorporate Sustainable Infrastructure/Green Initiatives categories/components?

NOTE: The following four categories are considered incentives. Projects that incorporate components from any of the categories will receive bonus points on the SRF project priority ranking for drinking water projects. If a category is selected, the applicant must provide proof to substantiate claims. Please place a check next to the category if it is a component of the project.

Energy Efficiency

☐ This project reduces energy costs and consumption by replacing, reducing and/or controlling high-use operations used in treatment, pumping, storage, and support systems (e.g. lighting and HVAC).

☐ This project utilizes a SCADA (Supervisory Control And Data Acquisition) system, which performs data collection and control at the supervisory level that is placed on top of a real-time control system (multiple Programmable Logic Controls [PLCs] to reduce energy consumption and enhance process control.

☐ Facility site planning includes facilities and building components designed to maximize energy efficiency.

☐ This project or included system(s) has conducted an energy audit and/or energy reduction plan.

Water Efficiency / Green Infrastructure:

☒ This project includes the use of improved technologies and practices to deliver equal or better services with less water.

☐ This project includes implementation of a water conservation plan.

☐ This project includes the implementation of infrastructure practices that provide pollutant removal benefits for both surface and groundwater sources.

☐ This project includes low impact construction technology to minimize impacts to the existing surface.

☐ This project includes environmentally innovative or other related technologies.

Asset Management / Full-Cost Pricing

☐ The system(s) involved in this project have mapped their treatment, distribution/collection, and storage infrastructure and analyzed conditions, including risks of failure, expected dates of renewals and ultimate replacements, and sources and amounts of revenues needed to finance operations, maintenance, and capital needs (e.g., Capital Improvement Plan).

☒ The system(s) involved in this project have developed appropriate rate structures to build, operate, and maintain.

☒ The system(s) involved in this project have specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure..

Green Component Costs

Water Efficiency Costs

COMPONENT	AMOUNT
All water lines due to replacement of leaking lines and eliminating dead end lines	$688,000

Total Water Efficiency Costs:

Drinking Water Project Profile Pre-Application

* Project Title: MCUD Improvements Phase 4

☐ This project is a REVISION of a previous submitted Project Profile.

Previously assigned WX #:

GREEN (continued from Page 7)

Green Component Costs (continued)

Energy Efficiency Costs

COMPONENT	AMOUNT

Total Energy Efficiency Costs:

Green Infrastructure Costs

COMPONENT	AMOUNT

Total Green Infrastructure Costs:

Environmentally Innovative Activities Costs

COMPONENT	AMOUNT

Total Environmentally Innovative Activities Costs:

ESTIMATED PROJECT COST

MADISON COUNTY UTILITIES DISTRICT IMPROVEMENTS PHASE 4

MADISON COUNTY UTILITIES DISTRICT

November 11, 2011

1.	Construction Cost	$ 620,722.00
2.	Legal	$ 12,000.00
3.	Easements	$ 20,000.00
4.	Preliminary Engineering	$ 5,000.00
5.	Engineering Design	$ 60,024.00
6.	Resident Inspection	$ 41,713.00
7.	Environmental	$ 10,000.00
8.	Grant Administration	$ 20,000.00
9.	Archelogical Study	$ 5,000.00
10.	Biological Study	$ 5,000.00
11.	PSC Submittal	$ 15,000.00
12.	Contingencies	$ 62,069.00
TOTAL ESTIMATED PROJECT COST		$ 876,528

Opinion of Probable Construction Cost
Madison County Utilities District Improvements, Phase 4
Madison County Utilities District
November 11, 2011

A.	Cedar View Hills		
	1.	6" PVC Water Line 2,800 LF @ $11/LF	$30,800.00
	2.	Connection to Existing Water Line (Wet Tap) 1 Ea @ $2,500	$2,500.00
	3.	6" Gate Valves 4 Ea @ $770/Ea	$3,080.00
	4.	Fire Hydrant 3 Ea @ $3,500/Ea	$10,500.00
	5.	Road Bore w/Steel Encasement 30 LF @ $100/LF	$3,000.00
	6.	Meter Reconnecting w/ Service Piping 19 Ea @ $800/Ea	$15,200.00
		Subtotal Cedar View Hills	**$65,080.00**
B.	Charlie Norris WL (Boy Ankle to Hwy 52)		
	1.	8" PVC Waterline 14,800 LF @ $13/LF	$192,400.00
	2.	Connection to Existing Water Line (Wet Top) 6 Ea @ $3,000 /Ea	$18,000.00
	3.	8" Gate Valves 30 Ea @ $925 /Ea	$27,750.00
	4.	Fire Hydrants 15 Ea @ $3500 /Ea	$52,500.00
	5.	Road Bores w/Steel Encasement 210 LF @ $110 /LF	$23,100.00
	6.	Freebores 200 LF @ $60 /LF	$12,000.00
	7.	Meter Reconnection w/ Service Piping 62 Ea @ $800 /Ea	$49,600.00
		Subtotal Charlie Norris Water Line	**$375,350.00**

C. Bumstark Road Water Line

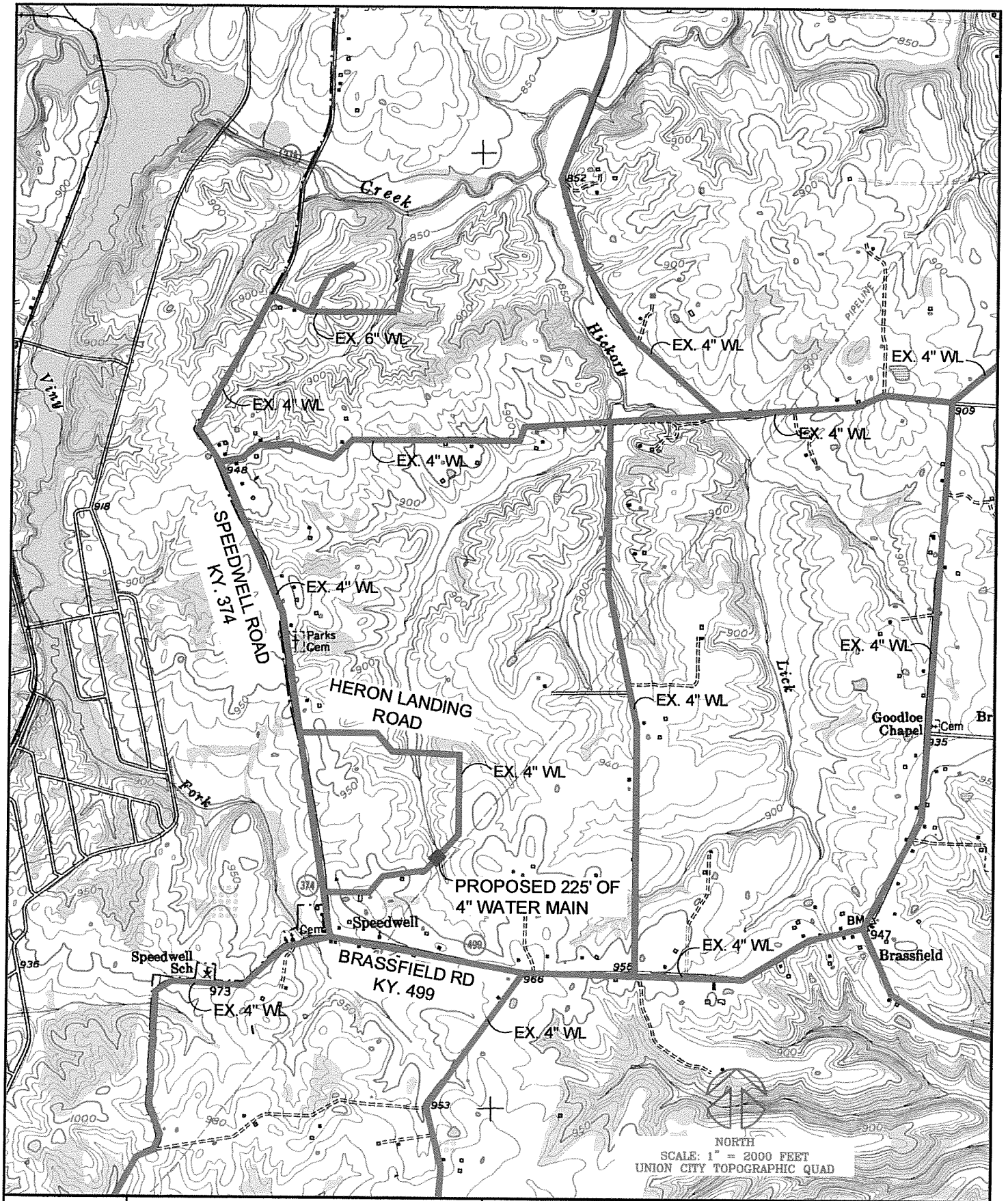
1.	6" PVC Water Line 2600 LF @ $11/LF	$28,600.00
2.	Connection to Existing Water Line (Wet Top) 2 Ea $2500 /LF	$5,000.00
3.	6" Gate Valves 1 Ea @ $770 /Ea	$770.00
4.	Fire Hydrant 2 Ea @ $3500 /Ea	$7,000.00
5.	Road Bore w/ Steel Encasement 50 LF @ $100/LF	$5,000.00
6.	Meter Reconnection w/Service Piping 14 Ea @ $800/Ea	$11,200.00
	Subtotal Bumstark Water Line	**$57,570.00**

D. Hackett Pike

1.	6" PVC Water Main 4,750 LF @ $11/LF	$52,272.00
2.	Connection to Existing Water Line (wet Tap) 3 Ea $3,000/Ea	$ 9,000.00
3.	6" Gate Valve 4 Ea @ $770/Ea	$ 3,080.00
4.	Fire Hydrant 5 Ea @ $3500/Ea	$17,500.00
5.	Road Bores w/Steel Encasement 60 LF @ $10/LF	$ 6,000.00
6.	Free Bores 150 LF @ $50/EA	$ 7,500.00
7.	Meter Reconnection w/Service Piping 22 Ea @ $800/Ea	$17,600.00
	Subtotal Hackett Pike	**$112,952.00**

E. Wild Goose Subdivision

1.	4" PVC Water Main 225 LF @ $10/LF	$2,250.00
2.	Connection to Ex Water Line (Dry top) 2 Ea @ $1500/Ea	$3,000.00
3.	4" Gate Valve 1 Ea @ $660/Ea	$ 660.00
4.	4" Gate Valve w/Bypass Meter 1 Ea @ $1060	$1,060.00
5.	End of Line Blow-off 1 Ea @ $1000/Ea	$1,000.00
6.	Creek Crossing 30 LF @ $60/LF	$1,800.00
	Subtotal Wild Goose Subdivision	**$ 9,722.00**
	TOTAL CONSTRUCTION COST	**$620,722.00**



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL WARNS ME AND ALL DISCRETIONARY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW MORE CLOSELY SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW inc.

1400 East Vine St., Ste 400, Lexington, KY 40514

WILD GOOSE ISLAND SUBDIVISION

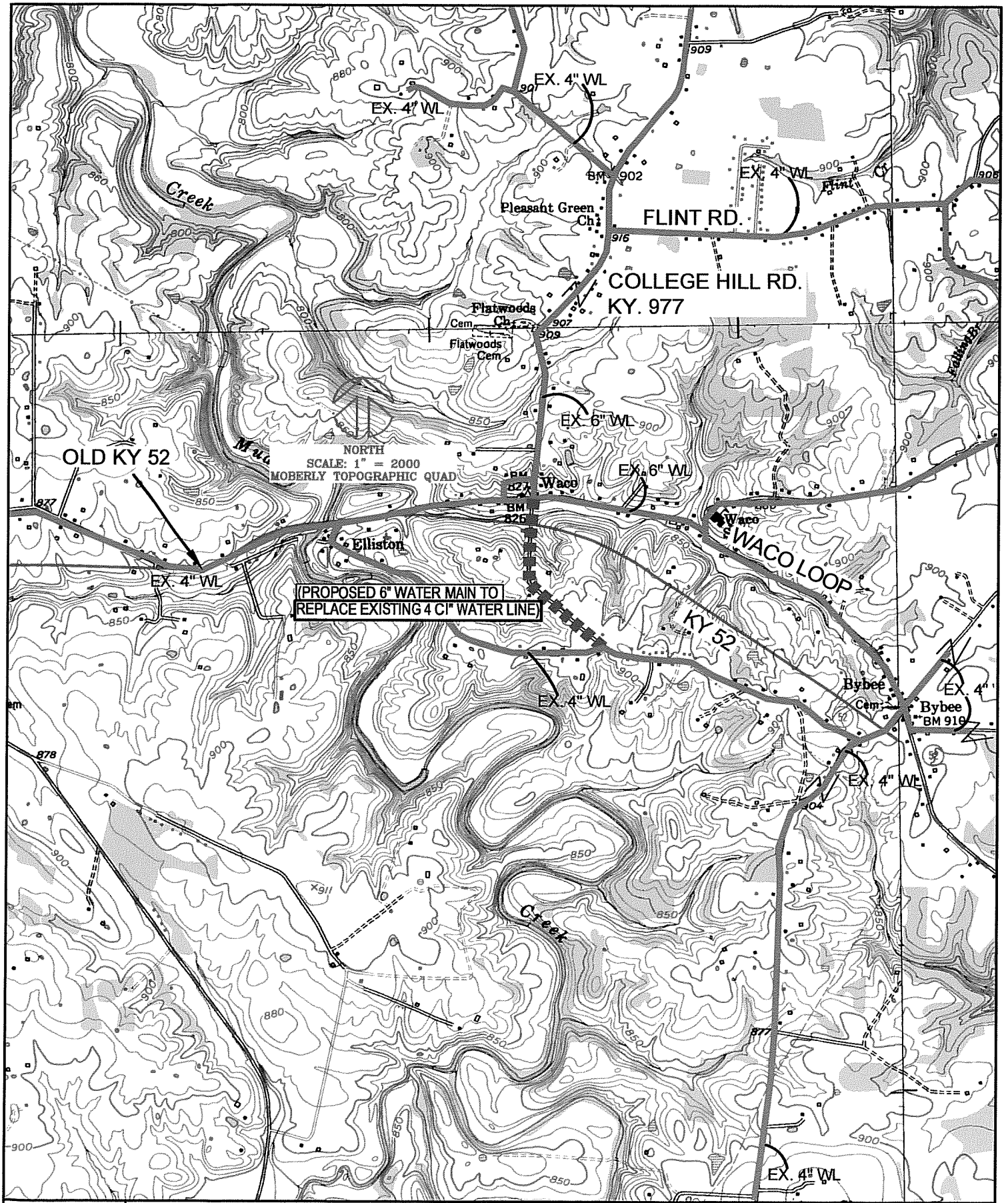
MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

Dwg: MCUD PH4\DWG\USGS_PH4

Project Number XXXXX.XX

USGS

Plot Date: 11/14/2011



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL SHARES NOT ANY LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW inc.
1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

BAUMSTARK ROAD

MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

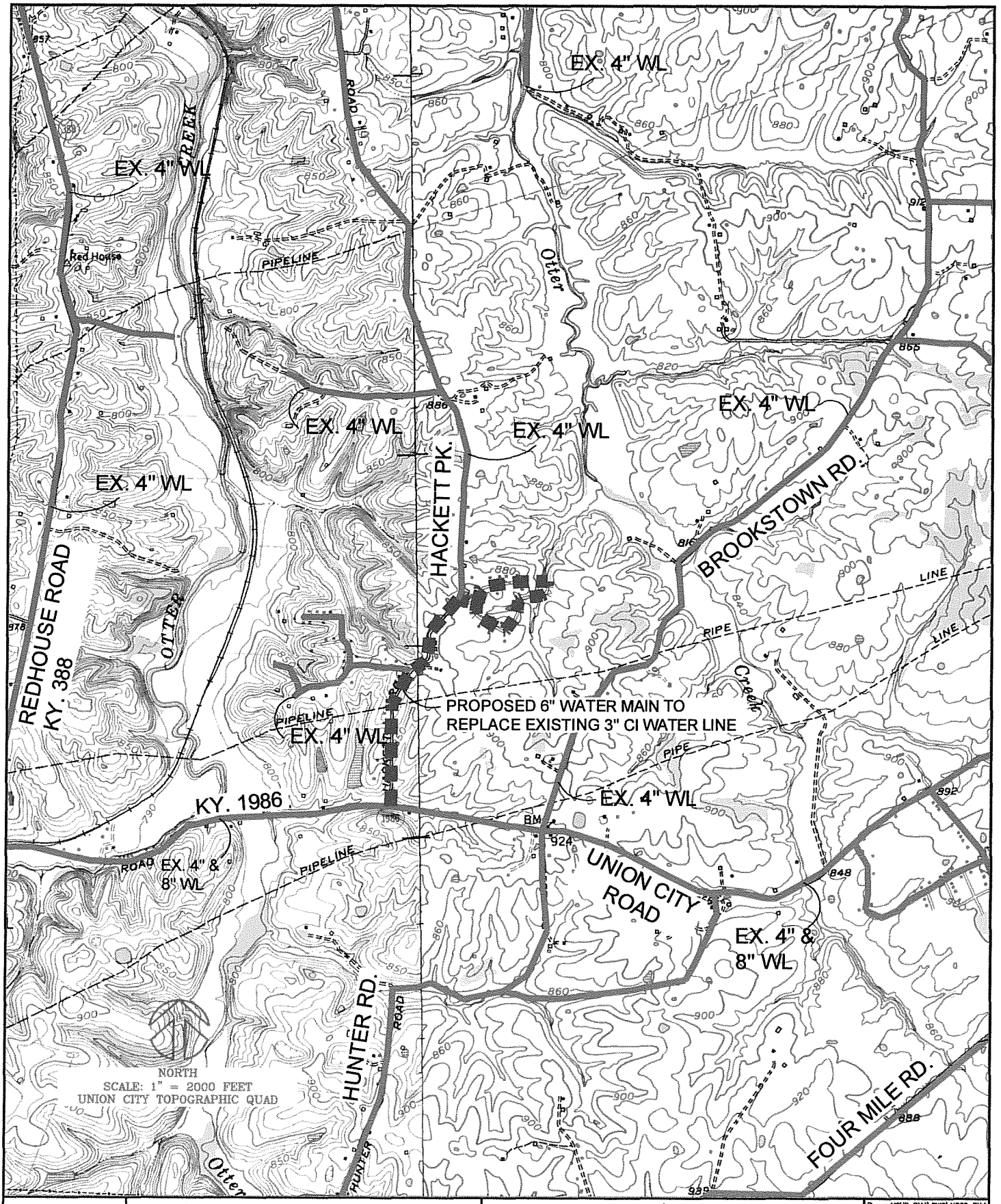
Dwg: MCUD PH4\DWG\USGS_PH4

Project Number
XXXXX.XX

1

Plot Date: 12/20/2010

XRefs:



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIRY PROFESSIONAL MAKES NO WARRANTY OR REPRESENTATION, AND DISCLAIMS ANY RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES AND THE DESIGN INTENT THEY CONVEY. IT IS FOR CONTRACTORS, BIDDERS, AND FABRICATORS TO CAREFULLY REVIEW AND FOLLOW THE DESIGN DOCUMENTS AND PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW inc.

1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

HACKETT PIKE / CEDARVIEW ROAD

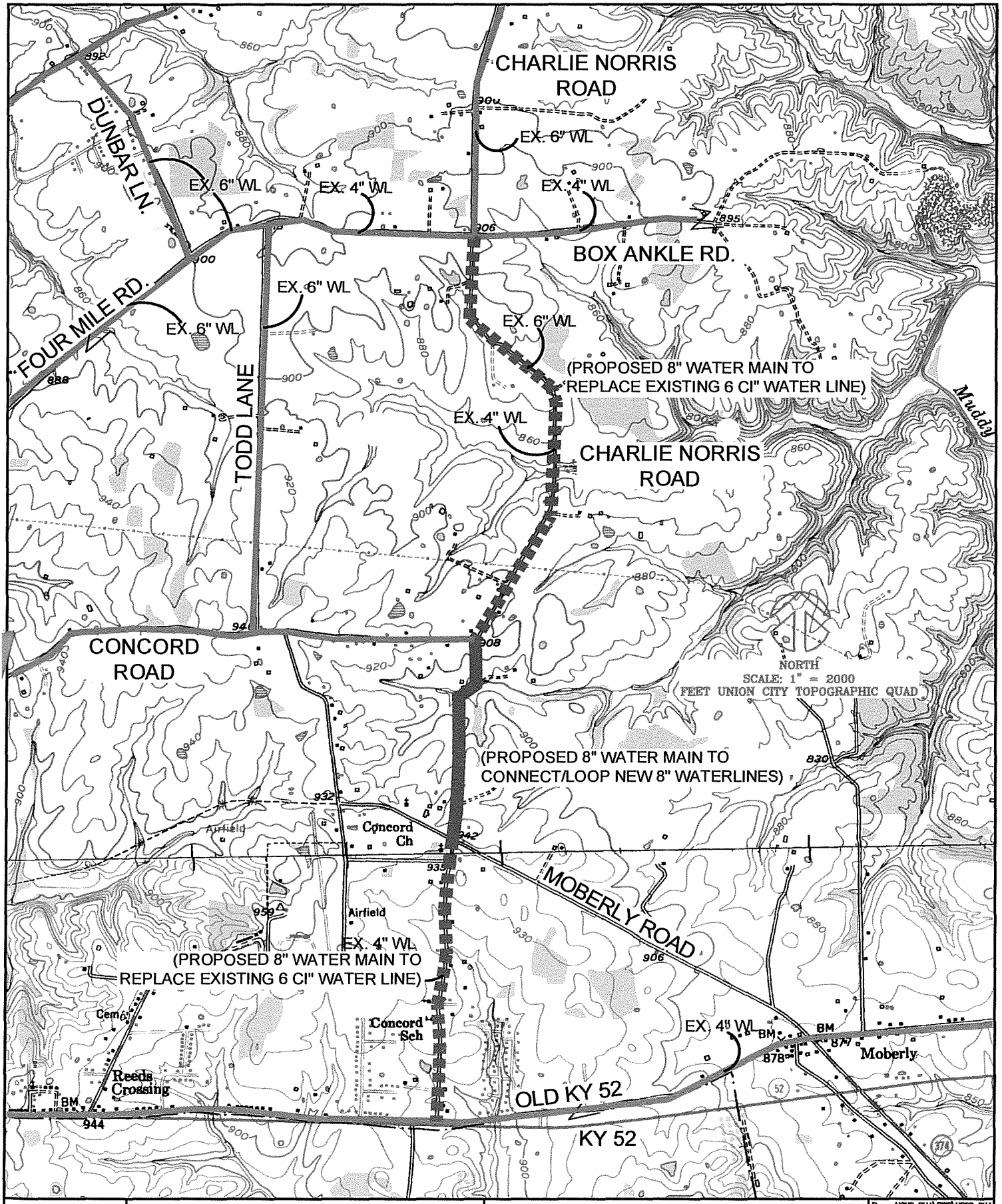
MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

Dwg: MCUD PH4\DWG\USGS_PH4

Project Number
XXXXX.XX

USGS

Plot Date: 11/14/2011



FAILURE TO ABIDE BY DESIGN DOCUMENTS OR TO OBTAIN GUIDANCE

THE DESIGN PROFESSIONAL SHALL NOT BE LIABLE FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CMW inc.
1400 East Vine St., Ste 400, Lexington, KY 40514
Voice 859.254.6623 Fax 859.259.1877

CHARLIE NORRIS RD. WL LOOP

MADISON COUNTY UTILITIES DISTRICT
PHASE 4 IMPROVEMENTS
MADISON COUNTY – KENTUCKY

Dwg: MCUD PH4\DWG\USGS_PH4

Project Number
XXXXX.XX

1

Plot Date: 12/20/2010

Drinking Water Project Profile

Legal Applicant:	**Madison County Utilities District**		
Project Title:	**MCUD Improvements Phase 4**		
Project Number:	**WX21151051** View Map	Submitted By:	**BGADD**
Funding Status:	**Partially Funded**	Primary County:	**Madison**
Project Status:	**Approved**	Planning Unit:	**Unit 7**
Project Schedule:	**0-2 Years**	Multi-County:	**No**
E-Clearinghouse SAI:		ECH Status:	
Applicant Entity Type:	**Water District (KRS 74)**		
Date Approved (AWMPC):	**07-31-2011**		

Project Description:

Cedar View hills subdivision - construction of 0.53 mile of 6" PVC water line to replace an existing 3" di water line that is under pavement and has had numerous leaks due to acidic soil and to loop two dead end lines.

Charlie Norris Road - construction of 2.80 miles of 8" PVC water line to replace an existing 6" di water line that has had numerous leaks due to acidic soil and to loop two dead end lines.

Bumstark Road - construction of 0.49 miles of 6" PVC water line to replace an existing 4" di line that has had numerous leaks due to acidic soil.

Hacket Pike - construction of 0.9 miles of 6' PVC waterline to replace existing 4" and 3" di waterline which has had numerous leaks due to acidic soil. The waterline serves cedar View hills subdivision.

Wild Goose Subdivision - construction of 0.04 miles of 4" PVC waterline to loop two dead end waterlines to improve waterflow.

Need for Project:
Briefly describe how this project promotes public health or achieves and/or maintains compliance with the Clean Water Act or Safe Drinking Water Act:

The existing di water lines were constructed in the 1960S and have had numerous leaks due to the reaction with acidic soil. Cedar View hills water line and wild goose waterline are is in a residential subdivisions and the looping will connect two dead end lines to improve Quality of water.

Project Alternatives:

Alternate A:

Replace only the existing lines

Alternate B:

Replace only the looping lines

Alternate C:

Do nothing

Drinking Water Project Profile

WX21151051 - Madison County Utilities District
MCUD Improvements Phase 4

Legal Applicant:

Entity Type:	**Water District (KRS 74)**	PSC Group ID:	**7000100**
Entity Name:	**Madison County Utilities District**		
Web URL:			
Office EMail:	**madisoncountyuti@bellsouth.net**		
Office Phone:	**859-623-8220** Toll Free:	Fax:	
Mail Address Line 1:	**PO Box 670**	Phys Address Line 1:	**297 Michelle Dr.**
Mail Address Line 2:		Phys Address Line 2:	
Mail City, State Zip:	**Richmond, KY 40476**	Phys City, State Zip:	**Richmond, KY 40475**
Contact:	**John C. Clark**	Manager:	**John Clark**
Contact Title:	**Manager**	Manager Title:	**Manager**
Contact EMail:	**jclark@madisoncountyutilities.com**	Manager EMail:	**jclark@madisoncountyutilities.com**
Contact Phone:	**859-624-1735**	Manager Phone:	**859-624-1735**
Contact Cell:	**859-582-2406**	Manager Cell:	**859-582-2406**
Authorized Official:	**James Carr**		
Auth. Official Title:	**Chairmand**		
Auth. Official EMail:			
Auth. Official Phone:	**859-624-1735**	Auth. Official Cell:	
Data Source:	**KENTUCKY INFRASTRUCTURE AUTHORITY**		Date Last Modified: **12.01.2011**

Drinking Water Project Profile

WX21151051 - Madison County Utilities District
MCUD Improvements Phase 4

Project Administrator (PA) Information

Name: **Kerry S Odle**
Title: **Cmw, Inc.**
Organization: **CMW**
Address Line 1: **400 E. Vine St**
Address Line 2: **Suite 400**
City: **Lexington** State: **KY** Zip: **40507**
Phone: **859-254-6623 Ext. 104** Fax: **859-259-1877**

Applicant Contact (AC) Information

Name: **Kerry S Odle**
Title: **Cmw, Inc.**
Organization: **CMW**
Address Line 1: **400 E. Vine St**
Address Line 2: **Suite 400**
City: **Lexington** State: **KY** Zip: **40507**
Phone: **859-254-6623 Ext. 104** Fax: **859-259-1877**

Project Engineer (PE) Information:

☒ This project requires a licensed Professional Engineer.

License No: **PE 12497**
PE Name: **Kerry Stuart Odle**
Phone: **859-254-6623** Fax: **859-259-1877**
E-Mail: **kodle@cmwaec.com**
Firm Name: **CMW, Inc.**
Addr Line 1: **CMW Inc**
Addr Line 2: **400 E. Vine St., Suite 400**
Addr Line 3:
City: **Lexington** State: **KY** Zip: **40507**
Status: **Current** Disciplinary Actions: **NO**
Issued: **07-22-1981** Expires: **06-30-2014**

Engineering Firm Information:

Permit No: **128**
Firm Name: **CMW, Inc.**
Phone: **859-254-6623** Fax: **859-259-1877**
Web URL:
EMail: **kreeves@cmwaec.com**
Addr Line 1: **400 E. Vine St., Ste. 400**
Addr Line 2:
City: **Lexington** State: **KY** Zip: **40507**
Status: **Current** Disciplinary Actions: **NO**
Issued: **03-16-1993** Expires: **12-31-2012**

Drinking Water Project Profile

WX21151051 - Madison County Utilities District
MCUD Improvements Phase 4

Project Cost Classification:

Administrative Exp.:	**$ 20,000**
Legal Exp.:	**$ 12,000**
Land, Appraisals, Easements:	**$ 20,000**
Relocation Exp. & Payments:	
Planning:	**$ 5,000**
Engineering Fees - Design:	**$ 60,024**
Engineering Fees - Construction:	
Engineering Fees - Inspection:	**$ 41,713**
Engineering Fees - Other:	**$ 10,000**
Construction:	**$ 620,722**
Equipment:	
Miscellaneous:	**$ 25,000**
Contingencies:	**$ 62,069**
Total Project Cost:	**$ 876,528**

Construction Cost Categories:

Treatment:	
Transmission & Distribution:	**$ 620,722**
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisision:	
Non-Catagorized:	
Total Construction:	**$ 620,722**

Total Sustainable Infrastructure Costs:

Note: Total Sustainability Infrastructure Costs are included within construction and other costs reported in this section. This breakout is provided for SRF review purposes.

Project Funding Sources:

Total Project Cost: **$876,528**

Total Committed Funding: **$20,000**

Funding Gap: **$856,528 (Partially Funded)**

☐ This project will be requesting SRF funding for Federal FY 2014.

Funding Source	Amount	Funding Status	Applicable Date
Local	$20,000	Committed	1/1/2011
KIA SRF Fund F Loan (DW)	$856,528	Unknown	N/A
Total:	$876,528		

Detailed Project Schedule:

Environmental Review Status:

RD Approval Date:

CDBG Approval Date:

No approval, but Cross-Cutter Scoping Completed:

Construction Permit Application Date:	**04-01-2012**
Construction Permit Application Status:	**Submitted**
Estimated Bid Date:	**06-01-2012**
Estimated Construction Start Date:	**09-01-2012**

The following systems are beneficiaries of this project:

DOW PERMIT ID	System Name
KY0760224	Madison County Utilities District

Project Ranking by AWMPC:

Regional Ranking(s):

Planning Unit Ranking:

Total Points:

Plans and Specifications:

- ☐ Plans and specs have been sent to DOW.
- ☐ Plans and specs have been reviewed by DOW.
- ☐ Plans and specs have been sent to PSC.
- ☐ Plans and specs have been reviewed by PSC.

Demographic Impacts:

	For Project Area	For Included Systems(s)
Serviceable Population	**2,788**	**24,795**
Serviceable households	**1,168**	**10,286**
Med. Household Income	**$44,152**	**$43,245**

New or Improved Service:

	Survey Based	GIS Census Overlay
To Unserved Households		**399**
To Underserved Households		**1,105**
To Total Households		**1,504**

Economic Impacts:

Jobs Created

Jobs Retained

DW Specific Impacts:

- ☐ This project relates to a public health emergency.
- ☐ This project will assist a non-compliant system to achieve compliance.
- ☑ This project will assist a compliant system to meet future requirements
- ☑ This project will provide assistance not compliance related.
- ☐ This project will address the terms of the Court Order and/or Agreed Order.
- ☐ The system(s) involved with this project have achieved voluntary compliance with violations before being referred for an enforcement case.

Project Inventory (Mapped Features):

Line Features:

DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
KY 0760224	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	4.00	PVC	201
KY 0760224	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	6.00	PVC	687
KY 0760224	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	6.00	PVC	5,818
KY 0760224	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	8.00	PVC	3,234
KY 0760224	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	8.00	PVC	14,627
					Total Length	24,567

Administrative Components:

☑ Planning ☑ Design ☑ Construction ☐ Management

Regionalization Components:

Public Water Systems Eliminated:

☐ this project includes the elimination of public water system(s) through merger or acquisition.

Water Treatment Plants Eliminated:

☐ This project includes the elimination of water treatment plant(s) through interconnect(s).

Supplementation of Raw Water Supply:

☐ This project includes supplementing the existing raw water supply.

Supplementation of Potable Water Supply:

☐ This project includes supplementing the existing potable water supply.

Emergency Only Water Supply:

☐ This project provides emergency only water supply.

Water Source Protection:

☐ This project includes land acquisition for water source protection.

Water Treatment Components:

☐ This project includes water treatment components

Treatment Activities:

☐ This project includes a new water treatment plant.

☐ This project includes an expansion of an existing water treatment plant.

☐ This project includes rehabilitation of an existing water treatment plant.

☐ This project includes upgrades to an existing water treatment plant.

☐ This project includes emergency power generators for treatment activities.

☐ This project includes redundant treatment processes.

Acute Public Health Risk:

☐ This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.

☐ This project includes infrastructure options to meet CT inactivation requirements.

Chronic Public Health Risk:

☐ This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.

☐ This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Secondary Contaminants:

☐ This project includes treatment modifications to address Secondary Contaminants.

Security:

☐ This project includes security components for water treatment facilities.

Water Distribution and Storage:

☑ This project includes water distribution and/or storage components.

Water Line Extensions:

☑ This project includes water line extension(s).

Length of extensions: **4,122 LF**

Number of new connections:

Redundancy Components:

☐ This project includes emergency power generators for distribution and/or storage activities.

Number of units provided: **0**

☐ This project includes redundant distribution and/or storage processes.

Finished Water Quality:

☑ This project includes infrastructure to address inadequate water turnover and disinfection byproducts (DBPs).

Number of loops created:

☐ This project includes a tank mixing system.

Looping of two sets of water lines.

☑ This project includes infrastructure to address inability to maintain disinfection residual.

Looping of two sets of water lines.

Water Line Replacement:

☑ This project replaces problem water lines (breaks, leaks, or restrictive flows due to age), water lines consisting of lead and/or asbestos-cement (AC), and/or inadequately sized water lines.

Total length of line replacement: **20,445**

Roads Serviced by Line Replacements:

Road Name	LF Serviced
Bumstark Road	2,899
CEDARVIEW DR	1,575
Charlie Norris Road	14,962
HACKETT PKE	4,930
HERON LANDING PL	201
Total	24,567

Water Storage and Pressure Components:

☐ This project includes the construction of new water tank(s).

☐ This project includes the replacement of existing water tank(s).

☐ This project includes the rehabilitation of existing water tank(s).

Number of rehabilitated tanks: **0**

☐ This project includes the construction of new pump station(s).

Number of new pump stations: **0**

☐ This project includes the rehabilitation of existing pump station(s).

Number of rehabilitated pump stations: **0**

Security:

☐ This project includes security components for water distribution infrastructure.

Sustainable Infrastructure - Green Infrastructure:

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site and neighborhood-specific practices, such as:

Component	Cost
☐ Bioretention	
☐ Trees	
☐ Green Roofs	
☐ Permeable Pavement	
☐ Cisterns	
Total Green Infrastructure Cost:	**$0**

There are no Green Infrastructure components specified for this project.

Sustainable Infrastructure - Water Efficiency:

The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:

Component	Cost
☐ Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	
☐ Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	
☐ Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	
☐ Retrofitting/adding AMR capabilities or leak equipment to existing meters.	
☐ Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.	
☐ Developing conservation plans/programs reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment.	
☐ Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse).	
☐ Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	
☐ Water meter replacement with traditional water meters.*	
☒ Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	**$773,623**
☐ Storage tank replacement/rehabilitation to reduce water loss.*	
☐ New water efficient landscape irrigation system, where there currently is not one.*	
Total Water Efficiency Cost:	**$773,623**

** Indicates a business case may be required for this item.*

Replacement of old pipes in areas were there are frequent water main breaks.

Sustainable Infrastructure - Energy Efficiency:

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:

	Component	Cost
☐	Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provides power to a utility.	
☐	Utility-owned or publicly-owned renewable energy projects.	
☐	Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	
☐	Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs).*	
☐	Pump refurbishment to optimize pump efficiency.*	
☐	Projects that result from an energy efficient related assessment.*	
☐	Projects that cost effectively eliminate pumps or pumping stations.*	
☐	Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	
☐	Upgrade of lighting to energy efficient sources.*	
☐	Automated and remote control systems (SCADA) that achieve substantial energy savings.*	
	Total Energy Efficiency Cost:	**$0**

** Indicates a business case may be required for this item.*

There are no Energy Efficiency components specified for this project.

Sustainable Infrastructure - Environmentally Innovative:

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include:

	Component	Cost
☐	Total integrated water resources management planning, or other planning framework where project life cycle costs are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.	
☐	Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	
☐	Source water protection planning (delineation, monitoring, modeling).	
☐	Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	
☐	Utility sustainability plan consistent with EPA's sustainability policy.	
☐	Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry as long as it is being done for an SRF eligible facility.	
☐	Construction of US Building Council LEED certified buildings, or renovation of an existing building.	
☐	Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	
☐	Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals.*	
☐	Trenchless or low impact construction technology.*	
☐	Using recycled materials or re-using materials on-site.*	
☐	Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	
☐	Projects that achieve the goals/objectives of utility asset management plans.*	
	Total Environmentally Innovative Cost:	**$0**

** Indicates a business case may be required for this item.*

There are no Environmentally Innovative components specified for this project.

Sustainable Infrastructure - Asset Management:

If a category is selected, the applicant must provide proof to substantiate claims. The documents must be submitted to Amanda Yeary (Amanda.Yeary@ky.gov)for DW projects.

Component

- ☐ The system(s) has a Capital Improvement Plan or similar planning document.
- ☐ The system(s) involved in this project have developed appropriate rate structures to build, operate, and maintain.
- ☐ The system(s) involved in this project have specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.

Rates adjusted as required to meet O&M and capital needs. Rates were last increased in July 2009 and rank 9th out of 35 for water utilies in the Bluegrass ADD region (based on 4,000 average bill).

The District maintains a fund which was required in their refinancing bond issue. They also received a rate increase from the PSC which was higher than what they requested. The money from both of these sources is being saved to be used to replace aging and deteriorating infrastructure.

Project Status: Approved Date Approved: 07-31-2011 Date Revised:

Exhibit B

Final Project Cost Estimate

Drinking Water SRF Project Cost Summary

Project Title: MCUD Improvements, Phase 4 **WRIS#:** WX21151051

Project Budget: Estimated 10/23/2012 (enter date) **As Bid** 2/26/2014 (enter date) **Revised** (enter date)

	Cost Classification	DWSRF KIA Loan	Funding Source 1	Funding Source 2	Funding Source 3	Funding Source 4	Funding Source 5	Local Funds	Unfunded Costs	Total
1	Administrative Expenses	10,000								10,000
2	Legal Expenses	2,000								2,000
3	Land, Appraisals, Easements							30,000		30,000
4	Relocation Expenses & Payments									
5	Planning	5,000								5,000
6	Engineering Fees – Design	23,299						46,371		69,670
7	Engineering Fees – Construction									
8	Engineering Fees – Inspection	46,397								46,397
9	Engineering Fees – Other	10,000								10,000
10	Construction	745,932								745,932
11	Equipment									
12	Miscellaneous	13,900								13,900
13	Contingencies							29,282		29,282
	Total	**856,528**						**105,653**		**962,181**

	Funding Sources	Amount	Date Committed
1			
2			
3			
4			
5			
	Total		

	Local Funding Sources	Amount	Date Committed
1		105,653	2/27/14
2			
3			
	Total		

Total Funding 962,181

Cost Categories	Funding Source	Total Cost
Treatment		
Transmission and Distribution	DWSRF/MC	932,181
Source		
Storage		
Purchase of Systems		
Restructuring		
Land Acquisition	MCUD	30,000
Total Costs		**962,181**

Exhibit C

Final Engineering Report

Final Engineering Report

Madison County Utilities District Phase 4 Improvements

Madison County Utilities District

By

CMW, Inc.
400 East Vine Street
Suite 400
Lexington, Kentucky 40507

March, 2012

TABLE OF CONTENTS

ADVERTISEMENT FOR BIDS

Madison County Utilities District

Separate sealed BIDS for Madison County Utilities District Phase 4 Improvements, will be received by the Owner at the office of Madison County Utilities District, 297 Michelle Drive, Richmond, Kentucky, until 11:00 a.m. on Tuesday, February 25, 2014 and then publicly opened and read aloud.

Construction shall consist of 15,550 LF of 8" water line, 10,705 LF of 6" water line, 300 LF of 4" water line, water main, 13 connections to existing water line, 31 gate valves, 7 air relief valves, 14 fire hydrants, 510 LF of road bore with steel encasement, 676 LF of freebores, 350 LF of directional bores, 4,100 LF of service piping, 1,400 LF of 2" road bore with PVC encasement, 122 reconnection of meters and all other necessary appurtenances.

The CONTRACT DOCUMENTS may be examined at the following locations:

- CMW, Inc., 400 East Vine Street, Suite 400, Lexington, KY
- Madison County Utilities District, 297 Michelle Drive, Richmond, KY
- AGC/McCraw Hill Construction/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, Kentucky
- Reed Construction Data, 30 Technology Parkway South, Suite 100, Norcross, GA www.reedbusiness.com
- Builders Exchange, 1035 Strader Drive, Suite 100, Lexington, Kentucky
- Builders Exchange, 2300 Meadow Drive, Louisville, Kentucky

Printed copies of the Procurement and Contract Documents may be obtained by contacting Lynn Imaging, 328 Old Vine Street, Lexington, KY 40507-1537, (859) 255-1021, http://www.lynnimaging.com . Only complete sets of documents will be issued. Bidders and any non-Bidders shall pay non-refundable costs for Documents and shall pay for any additional shipping charges that apply.

The Owner reserves the right to waive any informalities or to reject any or all bids.
Each bidder must deposit with his bid, security in the amount, form and subject to the conditions provided in the Information for Bidders.

No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

Award will be made to the lowest responsive, responsible Bidder unless all bids are rejected.

Each bidder agrees to abide with Tittle VI of the Civil Rights Act of 1964, the Anti-Kickback Act, the Contract Work Hours Standard Act, and 40CFR 31.36L (3, 4, & 6).

Each bidder must comply with the President's Executive Order No. 11246 as amended which prohibits discrimination in employment regarding race, creed, color, sex or national origin and must certify compliance of any previous work under President's Executive Order No. 11246 as amended. The contractor/subcontractor will comply with 41 CFR 60-4 in regard to affirmative action, to insure equal opportunity to females and minorities and will apply the timetable and goal set forth in 41 CRF 60-4.

Each bidder will make positive efforts to use small, minority, woman owned and disadvantaged businesses.

This contract is being funded in part with the Kentucky Infrastructure Authority Federally Assisted Drinking Water Revolving Fund Loan and procurement will be subject to DOW Procurement Guidelines including the Davis-Bacon Act.

February 6, 2014
Date

MADISON COUNTY UTILITIES DISTRICT
RICHMOND, KENTUCKY

CMW, INC.
400 EAST VINE STREET
SUITE 400
LEXINGTON, KENTUCKY 40507

CMW, Inc.

400 EAST VINE STREET
LEXINGTON, KENTUCKY 40507

PROJECT: Madison County Utiliity District - Phase 4 Improvements

Engineers Estimate $781,904

BID DATE: 11:00 AM EDT on Tuesday

GENERAL CONTRACTOR	BID BOND	ADDENDUM #1	TOTAL BASE BID	NOTES
BP Pipeline				No Bid
Clay Pipeline Inc	X	X	$745,932.00	
ConnHurst LLC	X	X	$773,771.50	
Cumberland Pipeline LLC	X	X	$1,042,388.30	
Dakota Meyer Ent. Inc	X	X	$1,285,280.00	
Grimes Construction	X	X	$989,080.00	
Kenney Inc	X	X	$913,490.20	
Stotts Construction Co Inc				No Bid
Twin States Utilties Inc	X	X	$917,350.00	
United Pipeline Inc	X	X	$786,140.00	
Sturgeon Creek Construction, Inc				No Bid

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF THE BIDS RECEIVED FOR THIS PROJECT ON THE DATE LISTED ABOVE.

CMW, INC.

TO: Mr. Jim Carr, Chairman
Madison County Utilities District

FROM: Kerry Odle
CMW, Inc. KSO

Re: Madison County Utilities District
Phase 4 Improvements

SUBJECT: Bid Opening Minutes

Bids were accepted by Madison County Utilities District until 11:00 a.m. on Tuesday, February 25, 2014. At 11:00 a.m., Kerry Odle, Project Engineer, stated that no further bids will be accepted. Mr. Odle thanked all bidders for their bids and introduced John Clark, Manager of Madison County Utilities District.

Mr. Odle opened and read aloud the bids shown on the attached "Bid Tabulation". The apparent low bidder was announced as Clay Pipeline, Inc. with a bid of $745,932.00. The Engineer Estimate was announced as $781,904.

Attached is a list of attendees who were present at the bid opening. With no further business, the bid opening was complete.

Respectfully Submitted,

Kerry S. Odle, PE
Project Engineer

Attachment

c: File w/a

Architecture • Engineering • Interior Design • Landscape Architecture
a: 400 E. Vine Street, Lexington, Kentucky 40507
o: 859-254-6623 **f:** 859-259-1877 **w:** www.cmwaec.com

CMW, Inc.
400 EAST VINE STREET
LEXINGTON, KENTUCKY 40507

PROJECT: Madison County Utiliity District - Phase 4 Improvements

Engineers Estimate $781,904

BID DATE: 11:00 AM EDT on Tuesday

GENERAL CONTRACTOR	BID BOND	ADDENDUM #1	TOTAL BASE BID	NOTES
BP Pipeline				No Bid
Clay Pipeline Inc	X	X	$745,932.00	
ConnHurst LLC	X	X	$773,771.50	
Cumberland Pipeline LLC	X	X	$1,042,388.30	
Dakota Meyer Ent. Inc	X	X	$1,285,280.00	
Grimes Construction	X	X	$989,080.00	
Kenney Inc	X	X	$913,490.20	
Stotts Construction Co Inc				No Bid
Twin States Utilties Inc	X	X	$917,350.00	
United Pipeline Inc	X	X	$786,140.00	
Sturgeon Creek Construction, Inc				No Bid

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF THE BIDS RECEIVED FOR THIS PROJECT ON THE DATE LISTED ABOVE.

CMW, INC.

CMW Inc.

BID OPENING - Sign-in Sheet

DATE: FEBRUARY 25, 2014 11:00 AM EDT

PROJECT: MADISON COUNTY UTILITY DISTRICT - PHASE 4 IMPROVEMENTS

PROJECT NO. 12068.02

Name	Company / Organization	Address	Phone & Fax	Email
Timothy Gilliam	DME	9719 New Columbia Rd		
Ron Jones	Kenney, Inc.	Mt. Sterling KY		Projectmanagement@kenneyinc.net
Janet Saylor	Clay Pipeline	70 Fox Hollow Rd manchester, KY 40962	606-598-6239	Kay.garrison@yahoo.com
Chris Webb	Ferguson Wtr	611 South Keeneland Dr.		Christopher.Webb@ferguson.com
Gene Cruse	Twin States	120 norton Drive Richmond	859-358-2693	
Aaron Manning	CI Thornbury	725 Enterprise Rd Lex. KY	859-255-0852	
Matthew Grimes	Grimes Construction Co Inc	298 Keller Rd London KY	606 864 4263	harold.grimes3@windstream.net
Tom McKenzie	Hayes Pipe	300 Colt II Dr	806-2933	TMckenzie@hayespipe.com
Justin Conn	Connhurst LLC	3534 st Hwy 1626	606-286-6263	connhurst@hotmail.com
Kerry Odle	CMW Inc	400 E. Vine, Lexington ky	859-254-6623	KOdle@cmwaec.com
John Clark	MCUD, Manager			

February 27, 2014

Mr. Jim Carr, Chairman
Madison County Utilities District
P.O. Box 670
Richmond, Kentucky 40476-0670

Re: Phase 4 Improvements
Madison County Utilities District

Dear Jim:

I have reviewed all bids and found no errors. The low bidder was Clay Pipeline, Inc. with a Total Bid of $745,932.00. Clay Pipeline, Inc. has done several projects for me, but it has been over ten years ago. I only had some problems on one project. They were the contractors on the Clay Lane Water Line Project which went well. I have talked to the Engineers on the three most recent projects and was told that they were doing an adequate to good job. The Engineer's estimate was $781,904.00.

I recommend that the bid be awarded to Clay Pipeline, Inc. for the bid price of $745,932. Attached is a bid tabulation for this project.

Attached is a revised budget for this project and the funding options to discuss at today's meeting.

If you have any questions or need any additional information, please feel free to give me a call.

Sincerely,

Kerry S. Odle, PE

Attachments

c: File w/a

Architecture • Engineering • Interior Design • Landscape Architecture
a: 400 E. Vine Street, Lexington, Kentucky 40507
o: 859-254-6623 **f:** 859-259-1877 **w:** www.cmwaec.com

CMW inc.
400 EAST VINE STREET
LEXINGTON, KENTUCKY 40507

PROJECT: Madison County Utiliity District - Phase 4 Improvements

Engineers Estimate $781,904

BID DATE: 11:00 AM EDT on Tuesday

GENERAL CONTRACTOR	BID BOND	ADDENDUM #1	TOTAL BASE BID	NOTES
BP Pipeline				No Bid
Clay Pipeline Inc	X	X	$745,932.00	
ConnHurst LLC	X	X	$773,771.50	
Cumberland Pipeline LLC	X	X	$1,042,388.30	
Dakota Meyer Ent. Inc	X	X	$1,285,280.00	
Grimes Construction	X	X	$989,080.00	
Kenney Inc	X	X	$913,490.20	
Stotts Construction Co Inc				No Bid
Twin States Utilties Inc	X	X	$917,350.00	
United Pipeline Inc	X	X	$786,140.00	
Sturgeon Creek Construction, Inc				No Bid

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF THE BIDS RECEIVED FOR THIS PROJECT ON THE DATE LISTED ABOVE.

CMW, INC.

Drinking Water SRF Project Cost Summary

Project Title: MCUD Improvements, Phase 4 **WRIS#:** WX21151051

Project Budget: Estimated 10/23/2012 (enter date) **As Bid** 2/26/2014 (enter date) **Revised** (enter date)

	Cost Classification	DWSRF KIA Loan	Funding Source 1	Funding Source 2	Funding Source 3	Funding Source 4	Funding Source 5	Local Funds	Unfunded Costs	Total
1	Administrative Expenses	10,000								10,000
2	Legal Expenses	2,000								2,000
3	Land, Appraisals, Easements							30,000		30,000
4	Relocation Expenses & Payments									
5	Planning	5,000								5,000
6	Engineering Fees – Design	23,299						46,371		69,670
7	Engineering Fees – Construction									
8	Engineering Fees – Inspection	46,397								46,397
9	Engineering Fees – Other	10,000								10,000
10	Construction	745,932								745,932
11	Equipment									
12	Miscellaneous	13,900								13,900
13	Contingencies							29,282		29,282
	Total	**856,528**						**105,653**		**962,181**

	Funding Sources	Amount	Date Committed
1			
2			
3			
4			
5			
	Total		

	Local Funding Sources	Amount	Date Committed
1		105,653	2/27/14
2			
3			
	Total		

Total Funding 962,181

Cost Categories	Funding Source	Total Cost
Treatment		
Transmission and Distribution	DWSRF/MC	932,181
Source		
Storage		
Purchase of Systems		
Restructuring		
Land Acquisition	MCUD	30,000
Total Costs		**962,181**

FUNDING OPTIONS

MCUD PHASE 4 IMPROVEMENTS

OPTIONS	KIA	MCUD
Original	$856,528	$20,000
Increase KIA Loan	$932,181	$30,000
Increase MCUD Contribution	$856,528	$105,653

BID

MADISON COUNTY UTILITIES DISTRICT PHASE 4 IMPROVEMENTS
MADISON COUNTY UTILITIES DISTRICT

Proposal of Clay Pipeline, Inc. (hereinafter called "BIDDER"), a corporation organized and existing under the laws of the State of Kentucky doing business as a Corporation *.

To the Madison County Utilities District (hereinafter called "OWNER"). ,,

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Madison County Utilities District Phase 4 Improvments, and in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, the BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the project within 120 consecutive calendar days. BIDDER further agrees to pay as liquidated damages, the sum of $500 for each consecutive calendar day thereafter as hereinafter provided in Section 15 of the General Conditions.

* Insert "a corporation", "a partnership", or "an individual" as applicable.

BIDDER acknowledges receipt of the following ADDENDUM:

No. 1 Dated February 19, 2014 No. _____ Dated _____

No. _____ Dated _____ No. _____ Dated _____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

NOTE: (1) BIDS shall include sales tax and all other applicable taxes and fees.

(2) Breakdown of work is for general information. Any work shown on Drawings and/or specified but not listed below shall be included in total base bid. Cost of items of work not specifically described below may be added to related bid item(s) at bidder's discretion.

BID SCHEDULE

Part I. Base Bid

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	8" PVC Water Main Class 200	15,260	LF	$ 13.90	$ 212,114.00
2.	8" HDPE DR 11	290	LF	$ 29.70	$ 8,613.00
3.	6" PVC Water Main Class 200	9,820	LF	$ 11.75	$ 115,385.00
4.	6" DI Water Main w/polyethylene sleeve	475	LF	$ 35.00	$ 16,625.00
5.	6" HDPE DR 11	410	LF	$ 21.60	$ 8,856.00
6.	4" PVC Water Main Class 200	180	LF	$ 12.60	$ 2,268.00
7.	4" HDPE DR11	120	LF	$ 16.60	$ 1,992.00
8.	6" Connection to Existing Water Line (Dry Tap)	1	EA	$ 395.00	$ 395.00
9.	Connection to Existing 8" Water Line (Wet Tap)	1	EA	$ 1,740.00	$ 1,740.00
10.	Connection to Existing 6" Water Line (Wet Tap)	7	EA	$ 1,745.00	$ 12,215.00
11.	Connection to Existing 4" Water Line (Wet Tap)	3	EA	$ 1,475.00	$ 4,425.00
12.	Connection to Existing 3" Water Line (Wet Top)	1	EA	$ 1,410.00	$ 1,410.00

13.	8" MJ Gate Valve, Complete with Box and Cover	12	EA	$ 1,450.00	$ 17,400.00
14.	6" MJ Gate Valve, Complete with Box and Cover	14	EA	$ 1,090.00	$ 15,260.00
15.	8" Gate Valve with Leak Detector	2	EA	$ 1,810.00	$ 3,620.00
16.	6" Gate Valve with Leak Detector	2	EA	$ 1,410.00	$ 2,820.00
17.	4" Gate Valve w/Leak Detector Meter	1	EA	$ 1,275.00	$ 1,275.00
18.	Fire Hydrant, Complete with Gate Valve	14	EA	$ 3,735.00	$ 52,290.00
19.	Flushing Hydrant	1	EA	$ 1,645.00	$ 1,645.00
20.	Air Relief Valve	7	EA	$ 1,100.00	$ 7,700.00
21.	6" Dead Cap	6	EA	$ 380.00	$ 2,280.00
22.	4" Dead Cap	2	EA	$ 360.00	$ 720.00
23.	3" Dead Cap	3	EA	$ 360.00	$ 1,080.00
24.	2" Dead Cap	1	EA	$ 360.00	$ 360.00
25.	Remove to Ex. Fire Hydrant	3	EA	$ 500.00	$ 1,500.00
26.	Jack and Bore with Steel Encasement Pipe for 8" Water Line	310	LF	$ 105.00	$ 32,550.00
27.	Jack and Bore with Steel Encasement Pipe for 6" Water Line	240	LF	$ 96.50	$ 23,160.00
28.	Freebore for 8" Water Line	410	LF	$ 25.00	$ 10,250.00
29.	Freebore for 6" Water Line	226	LF	$ 25.00	$ 5,650.00
30.	Open Cut with Steel Encasement for 6" Water Line	50	LF	$ 43.00	$ 2,150.00
31.	Creek Crossing for 8" Water Line with PVC Encasement and Concrete	42	LF	$ 48.00	$ 2,016.00

32.	Creek Crossing for 6" Water Line with PVC Encasement Concrete	28	LF	$ 38.00	$ 1,064.00
33.	Creek Crossing for 4" Water Line with PVC Encasement and Concrete	14	LF	$ 35.00	$ 490.00
34.	Directional Bore with 8" PE Carrier Pipe	250	LF	$ 100.00	$ 25,000.00
35.	Directional Bore with 6" PE Carrier Pipe	100	LF	$ 82.00	$ 8,200.00
36.	Open Cut with PVC Encasement for 8" Water Line	62	LF	$ 42.00	$ 2,604.00
37.	Concrete Encasement	40	CY	$ 131.00	$ 5,240.00
38.	Extra Crushed Stone Bedding	200	TONS	$ 20.00	$ 4,000.00
39.	3/4" PE Service Line	800	LF	$ 8.00	$ 6,400.00
40.	3/4" Cooper Service Line	20	LF	$ 13.50	$ 270.00
41.	1" PE Service Line	3,450	LF	$ 8.40	$ 28,980.00
42.	1" Cooper Service Line	45	LF	$ 12.00	$ 540.00
43.	Road Bore for 1" SL with 2" PVC Encasement Pipe	1,500	LF	$ 10.50	$ 15,750.00
44.	Reconnect Meters	104	EA	$ 415.00	$ 43,160.00
45.	Relocate Meters	23	EA	$ 450.00	$ 10,350.00
45.	Pavement Repair	670	LF	$ 36.00	$ 24,120.00

Total Part I. Base Bid: $ 745,932.00
(USE FIGURES)

Seven hundred forty five thousand, nine hundred thirty two dollars.
(USE WORDS)

TOTAL AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT AS WRITTEN IN WORDS SHALL GOVERN.

The above price shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the General Conditions.

Award of the Contract will be based on the lowest and best Total Bid for Part I: Base Bid.

The Bidder agrees that the Owner reserves the right to delete the whole or any part of the project from the Contract.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of ninety (90) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract attached within ten (10) days and deliver a surety bond or bonds as required by Article 22 of the General Conditions.

Respectfully submitted:

Clay Pipeline, Inc.
(Name of Contracting Firm)

BY: Kay Manner

TITLE: President

ADDRESS: 70 Fox Hollow Road
Manchester, KY 40962

DATE: 2-25-2014

License No. (if applicable)

Seal (If Bid by Corporation)
Attest: Janet Taylor

END BID FORM

Drinking Water SRF Project Cost Summary

Project Title: MCUD Improvements, Phase 4 **WRIS#:** WX21151051

Project Budget: Estimated 10/23/2012 (enter date) **As Bid** 2/26/2014 (enter date) **Revised** (enter date)

	Cost Classification	DWSRF KIA Loan	Funding Source 1	Funding Source 2	Funding Source 3	Funding Source 4	Funding Source 5	Local Funds	Unfunded Costs	Total
1	Administrative Expenses	10,000								10,000
2	Legal Expenses	2,000								2,000
3	Land, Appraisals, Easements							30,000		30,000
4	Relocation Expenses & Payments									
5	Planning	5,000								5,000
6	Engineering Fees – Design	23,299						46,371		69,670
7	Engineering Fees – Construction									
8	Engineering Fees – Inspection	46,397								46,397
9	Engineering Fees – Other	10,000								10,000
10	Construction	745,932								745,932
11	Equipment									
12	Miscellaneous	13,900								13,900
13	Contingencies							29,282		29,282
	Total	**856,528**						**105,653**		**962,181**

	Funding Sources	Amount	Date Committed
1			
2			
3			
4			
5			
	Total		

	Local Funding Sources	Amount	Date Committed
1		105,653	2/27/14
2			
3			
	Total		

Total Funding **962,181**

Cost Categories	Funding Source	Total Cost
Treatment		
Transmission and Distribution	DWSRF/MC	932,181
Source		
Storage		
Purchase of Systems		
Restructuring		
Land Acquisition	MCUD	30,000
Total Costs		**962,181**

Exhibit D

KIA Conditional Commitment Letter

KENTUCKY INFRASTRUCTURE AUTHORITY
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
Phone (502) 573-0260
Fax (502) 573-0157
http://kia.ky.gov

Steven L. Beshear
Governor

John E. Covington III
Executive Director

February 8, 2013

Mr. James Carr, Chairman
Madison County Utility District
PO Box 670
Richmond, Kentucky 40477-0670

KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND
CONDITIONAL COMMITMENT LETTER (F13-023)

Dear Chairman Carr:

The Kentucky Infrastructure Authority ("the Authority") commends your efforts to improve public service facilities in your community. On February 8, 2013, the Authority approved your loan for the Madison County Utility District Improvements, Phase 4 project subject to the conditions stated below. The total cost of the project shall not exceed $876,528 of which the Authority loan shall provide $856,528 of the funding. The final loan amount will be equal to the Authority's portion of estimated project cost applied to the actual project cost. Attachment A incorporated herein by reference fully describes the project.

An Assistance Agreement will be executed between the Authority and the Madison County Utility District upon satisfactory performance of the conditions set forth in this letter. A period of twelve months from the date of this letter (2/8/2014) will be allowed for you to meet the conditions set forth in this letter and enter into an Assistance Agreement. A one-time extension of up to six months may be granted for applicants that experience extenuating circumstances. Funds will be available for disbursement only after execution of the Assistance Agreement.

The Assistance Agreement and this commitment shall be subject, but not limited to, the following terms:

1. The Authority project loan shall not exceed $856,528.

2. The loan shall bear interest at the rate of 2.75% per annum commencing with the first draw of funds.

3. The loan shall be repaid over a period not to exceed 20 years from the date the loan is closed.

4. Interest shall be payable on the amount of actual funds received. The first payment shall be due on June 1 or December 1 immediately succeeding the date of the initial draw of funds, provided that if such June 1 or December 1 shall be less than three months since the date of the initial draw of funds, then the first interest payment date shall be the June 1 or December 1 which is at least six months from the date of the initial draw of funds. Interest payments will be due each six months thereafter until the loan is repaid.

5. Full principal payments will commence on the appropriate June 1 or December 1 within twelve months from initiation of operation. Full payments will be due each six months thereafter until the loan is repaid.

6. A loan servicing fee of 0.25% of the annual outstanding loan balance shall be payable to the Authority as a part of each interest payment.

7. Loan funds will be disbursed after execution of the Assistance Agreement as project costs are incurred.

8. The Authority loan funds must be expended within six months of the official date of initiation of operation.

9. Fund "F" loan funds are considered to be federal funds. OMB Circular A-133, "Audits of States, Local Governments and Non-Profit Organizations, requires that all recipients and subrecipients **expending $500,000 or more in a year in federal awards must have a single or program-specific audit conducted for that year** in accordance with the Circular. If the federal amount expended plus all other federal funds expended exceeds the threshold, you are required to arrange for an A-133 audit to be performed by an independent, licensed CPA, or in special cases, the Auditor of Public Accounts of the Commonwealth of Kentucky. The Authority requires an annual audit to be performed for the life of the loan.

The following is a list of the standard conditions to be satisfied prior to execution of the Assistance Agreement or incorporated in the Assistance Agreement. Any required documentation must be submitted to the party designated.

1. The Authority to Award (bid) package must be submitted to the Division of Water for approval within 14 days of bid opening.

2. The Assistance Agreement must be executed within six (6) months from bid opening.

3. The Borrower must agree to expend all Authority loan funds within six months of the date of initiation of operation.

4. Documentation of final funding commitments from all parties other than the Authority as reflected in the credit analysis shall be provided prior to preparation of the Assistance Agreement and disbursement of the loan monies. Rejections of any anticipated project funding shall be immediately reported and may cause this loan to be subject to further consideration.

5. The loan must undergo review by the Capital Projects and Bond Oversight Committee of the Kentucky Legislature prior to the state's execution of the Assistance Agreement. The committee meets monthly on the third Tuesday. At this time we know of no further submission required for their review; however, they may request information as needed.

6. Any required adjustment in utility service rates shall be adopted by ordinance, municipal order or resolution by the appropriate governing body of the Borrower. Public hearings as required by law shall be held prior to the adoption of the service rate ordinance, order, or resolution. Any required approvals by the Kentucky Public Service Commission shall be obtained.

7. All easements or purchases of land shall be completed prior to commencement of construction. Certification of all land or easement acquisitions shall be provided to the Division of Water.

8. The Borrower must complete and return to the Authority the attached "Authorization For Electronic Deposit of Vendor Payment" Form.

9. The Authority to Award Package documentation shall be submitted to and approved by DOW.

10. An environmental review shall be conducted by the Division of Water for all construction projects receiving DWSRF funds, within the term of this binding commitment and prior to project bid.

11. Technical plans and specifications and a complete DWSRF specifications checklist shall be approved by the Division of Water prior to project bid.

12. A clear site certificate shall be obtained and DOW representatives shall be notified for attendance of the pre-construction conference.

13. Project changes or additions shall require a complete environmental and change order review before they can be included in the DWSRF loan project.

The following is a list of additional conditions to be satisfied prior to execution of the Assistance Agreement or incorporated in the Assistance Agreement. Any required documentation must be submitted to the party designated.

1. The Borrower shall require all contractors to pay wages pursuant to applicable prevailing wage rates (federal or state) for all work relating to the subject Project. The Borrower shall, if applicable, comply with all Davis Bacon related monitoring and reporting.

2. The project shall comply with the reporting requirements of the Transparency Act, and shall complete the attached Transparency Act Reporting Information Form and provide to the Authority no later than 30 days after the KIA Board approval date of your loan.

3. If the project has a "Green Reserve" component, the Borrower must submit a Business Case, if required.

Any special conditions listed below and/or stated in Attachment A must be resolved.

Please inform the Authority of any changes in your financing plan as soon as possible. We wish you every success for this project which will benefit both your community and the Commonwealth as a whole.

Sincerely,

John LeFevre
Financial Analyst

Attachments

cc: John Clark, Manager, Madison County Utility District
Kerry Odle, CMW Inc.
Division of Water
Dirk Bedarff, Peck, Shaffer & Williams LLP
State Local Debt Office, DLG
Borrower File - Madison County Utility District - F13-023

Please sign and return a copy of this letter indicating your acceptance of this commitment and its terms. Also attach the completed "Authorization For Electronic Deposit of Vendor Payment" Form.

_____ _____

Accepted Date

AUTHORIZATION FOR ELECTRONIC DEPOSIT
OF BORROWER PAYMENT
KENTUCKY INFRASTRUCTURE AUTHORITY
(FUND F13-023)

Borrower Information:

Name:_____

Address:_____

City: _____ State: KY Zip:_____

Telephone: _____ Contact:_____

Federal I.D. # _____

Financial Institution Information:

Bank Name:_____

Branch: _____ Phone No:_____

City: _____ State: ____ Zip:_____

Transit / ABA No.:_____

Account Name:_____

Account Number:_____

I, the undersigned, authorize payments directly to the account indicated above and to correct any errors which may occur from the transactions. I also authorize the Financial Institution to post these transactions to that account.

Signature: _____ Date:_____

Name Printed: _____ Job Title:_____

Please return completed form to:

Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601
phone: 502-573-0260
fax: 502-573-0157

TRANSPARENCY ACT REPORTING INFORMATION FORM

CLEAN WATER STATE REVOLVING FUND
AND
DRINKING WATER STATE REVOLVING FUND

This form is required for projects funded in whole or in part from the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund. This form is to be completed and returned with the signed Conditional Commitment Letter from the Kentucky Infrastructure Authority.

Borrower Information:

Name:	Madison County Utility District
Data Universal Numbering system (DUNS) No.*:	
KIA Loan Number:	F13-023
Street Address	
City, State and Zip (Zip must include 4 digit extension)	
Federal Congressional District(s) of Borrower Utility Service Area:	

*If the DUNS No. provided above is registered under a different name than the recipient of funding, please provide the registration name below:

DUNS Name	

*If the recipient has not yet obtained a DUNS Number, please do so no later than 30 days after the KIA Board approval date of your loan request and provide notification to KIA of the number once issued. For instructions on DUNS registration, please contact sandy.williams@ky.gov.

Physical Location of Project (Primary Place of Performance)

Street Address	
City, State and Zip (Zip must include 4 digit extension)	
Federal Congressional District(s) of Project Location	

Reliance upon Federal Assistance (please answer the below questions Yes or No):

Did recipient receive 80% or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards) during the last fiscal year?	
Did recipient receive $25 million or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards) during the last fiscal year?	
Does the public have access to compensation of senior executives of the recipient through periodic reports filed under Section 13A or 15D of the Securities Exchange Act of 1934 or Section 6104 of the Internal Revenue Code of 1986?	

DUNS Registration Information: http://fedgov.dnb.com/webform OR 1-866-705-5711

Registration can be completed over the phone or via the web. Phone registration requests take approximately 10 minutes and are free. Internet requests are fulfilled within 24 hours.

ATTACHMENT A

Madison County Utility District
F13-023

EXECUTIVE SUMMARY
KENTUCKY INFRASTRUCTURE AUTHORITY
FUND F, FEDERALLY ASSISTED DRINKING WATER
REVOLVING LOAN FUND

Reviewer	John LeFevre
Date	February 7, 2013
KIA Loan Number	F13-023
WRIS Number	WX21151051

BORROWER	MADISON COUNTY UTILITY DISTRICT MADISON COUNTY

BRIEF DESCRIPTION

This project is for various waterline improvements throughout the Madison County Utility District. Approximately 24,500 feet of ductile iron lines will be replaced with larger diameter PVC lines . This will fix numerous leaks and service outages and reduce the number of boil water advisories. The project will also loop a dead end line in one location to improve water flow. The affected by this request include the Cedar View Hills Subdivision, Charles Norris Road, Bumstark Road, Hacket Pike, and Wild Goose Subdivision.

PROJECT FINANCING		PROJECT BUDGET	RD Fee %	Actual %	
Fund F Loan	$856,528	Administrative Expenses			$20,000
Local Funds	20,000	Legal Expenses			12,000
		Land, Easements			20,000
		Planning			5,000
		Eng - Design	9.5%	8.8%	60,024
		Eng - Constr / Insp	6.5%	6.1%	41,713
		Eng - Other			10,000
		Construction			620,722
		Contingency			62,069
		Other			25,000
TOTAL	$876,528	TOTAL			$876,528

REPAYMENT	Rate	2.75%	Est. Annual Payment	$58,106
	Term	20 years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	CMW Inc.		
	Bond Counsel	Peck, Shaffer, & Williams		
PROJECT SCHEDULE	Bid Opening	May-13		
	Construction Start	Sep-13		
	Construction Stop	Feb-14		
DEBT PER CUSTOMER	Existing	$621		
	Proposed	$670		
OTHER DEBT		See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS		See Attached		

RESIDENTIAL RATES		Users	Avg. Bill	
	Current	10,256	$27.85	(for 4,000 gallons)
	Additional	0	$27.85	(for 4,000 gallons)

REGIONAL COORDINATION This project is consistent with regional planning recommendations.

CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2009	807,100	522,383	284,717	1.5
Audited 2010	1,003,188	733,087	270,101	1.4
Audited 2011	1,032,366	702,846	329,520	1.5
Projected 2012	995,009	576,946	418,063	1.7
Projected 2013	1,019,487	604,518	414,969	1.7
Projected 2014	1,015,491	664,744	350,747	1.5
Projected 2015	1,036,386	694,196	342,190	1.5
Projected 2016	1,049,013	694,197	354,816	1.5
Projected 2017	1,046,265	693,796	352,469	1.5

Reviewer: John LeFevre
Date: February 7, 2013
Loan Number: F13-023

KENTUCKY INFRASTRUCTURE AUTHORITY
DRINKING WATER STATE REVOLVING FUND (FUND "F")
MADISON COUNTY UTILITY DISTRICT, MADISON COUNTY
PROJECT REVIEW
WX21151051

I. PROJECT DESCRIPTION

The Madison County Utility District (MCUD) is requesting $856,528 in Drinking Water SRF funds for various waterline improvements. Approximately 24,500 linear feet of older three and four inch ductile iron lines will be replaced with six and eight inch PVC lines. This will fix numerous leaks and service outages and will substantially reduce the number of boil water advisories the district issues. The project will also loop a dead end line in one location to improve water flow. The areas affected by this request include the Cedar View Hills Subdivision, Charles Norris Road, Bumstark Road, Hacket Pike, and Wild Goose Subdivision.

The District is regulated by the Public Service Commission and serves approximately 10,000 customers. All finished water is purchased from Richmond Utilities at $2.99 per thousand gallons.

II. PROJECT BUDGET

	Total	
Administrative Expenses	$	20,000
Legal Expenses		12,000
Land, Easements		20,000
Planning		5,000
Engineering Fees - Design		60,024
Engineering Fees - Const / Inspection		41,713
Engineering Fees - Other		10,000
Construction		620,722
Contingency		62,069
Other		25,000
Total	**$**	**876,528**

III. PROJECT FUNDING

	Amount		%
Fund F Loan	$	856,528	98%
Local Funds		20,000	2%
Total	**$**	**876,528**	**100%**

IV. KIA DEBT SERVICE

Construction Loan	$	856,528
Amortized Loan Amount	$	856,528
Interest Rate		2.75%
Loan Term (Years)		20
Estimated Annual Debt Service	$	55,964
Administrative Fee (0.25%)		2,141
Total Estimated Annual Debt Service	**$**	**58,106**

V. PROJECT SCHEDULE

Bid Opening	May 2013
Construction Start	September 2013
Construction Stop	February 2014

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

Customers	Current
Residential	9,560
Commercial	692
Industrial	4
Total	10,256

B) Rates

Date of Last Rate Increase	Current 07/01/2012	Prior 07/01/2009
First 280 cu. ft. (min. bill)	$15.47	$15.17
Next 720 cu. ft.	4.86	4.75
Next 3,000 cu. ft.	4.64	4.53
Next 8,000 cu. ft.	4.45	4.34
Next 88,000 cu. ft.	4.26	4.15
Over 100,000 cu. ft.	3.95	3.84
Cost for 4,000 gallons	$27.85	$27.27
Increase %	2.1%	16.4%
Affordability Index (Rate/MHI)	0.8%	0.8%

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate

2006-2010, the County's population was 81,580 with a Median Household Income (MHI) of $41,894. The median household income for the Commonwealth is $41,576. The project will qualify for a 2.75% interest rate.

VIII. 2012 CAPITALIZATION GRANT EQUIVALENCIES

1) Green Project Reserve - The 2012 Drinking Water capitalization grant does not contain a "green" requirement.

2) Additional Subsidization – This project does not qualify for additional subsidization.

IX. FINANCIAL ANALYSIS (See Exhibit 1)

Financial information was obtained from the audited financial statements for the years ended December 31, 2009 through 2011. Amounts for the current year are estimated. Information of water purchase and sale quantities was obtained from PSC filings.

HISTORY

Revenues increased 9% from $3.9 million in 2009 to $4.2 million in 2012. A rate increase of 16% in 2009 and customer growth of 11% was offset by a reduction in gallons sold on a per customer basis. From 2009 to 2011 average gallons sold per customer per month declined 8% from 4,700 gallons in 2009 to 4,300 in 2011. Operating expenses were flat at about $1.1 million each year. Cash available for debt service ranged from $807 thousand to $1 million, while debt service ranged from $522 thousand to $733 thousand for the same period. The debt coverage ratio ranged from a low of 1.4 in 2010 to a high of 1.7 in 2012.

The balance sheet reflects a current ratio of 4.5 and a debt to equity ratio of 0.6. The collection period is approximately one month and the number of months of operating expenses in unrestricted cash is just under five.

PROJECTIONS

1. Revenues are projected to increase 0.5% each year for growth
2. Expenses are projected to increase 2% annually for growth and inflation.
3. Water loss in the areas affected is expected to be reduced from 27% to 10% and will save about $25,000 per year.

Based on the above assumptions, the District will meet the required cash flow through the projected years with a debt coverage ratio 1.5 beginning in 2015 which is the first full year of principal and interest payments.

Based on the proforma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

REPLACEMENT RESERVE

The annual replacement cost is $2,100. This amount should be added to the replacement account each December 1 until the balance reaches $21,000 and maintained for the life of the loan.

X. DEBT OBLIGATIONS

	Outstanding	Maturity
KIA (F02-07)	$ 2,298,820	Jun-25
KIA (F07-06)	1,004,168	Dec-29
2008 Utility Revenue Bonds	2,960,000	2022
KIA (F10-04, i/a/o $940,225)	0	TBD
Total	**$ 6,262,988**	

XI. OTHER STATE OR FEDERAL FUNDING IN PAST FIVE YEARS

Project Title	Funding Source	Amount	Type
Water System Improvements Phase II	HB380	500,000	Grant
Improvements Phase II	HB608	250,000	Grant

XII. CONTACTS

Legal Applicant	
Name	Madison County Utility District
Address	PO Box 670
	Richmond, Kentucky 40477-0670
County	Madison
Authorized Official	John Clark (Manager)
Phone	859-624-1735
Email	jclark@madisoncountyutilities.com

Project Contact - Applicant	
Name	Kerry Odle
Representing	CMW Inc.
Address	400 East Vine Street, Suite 400
	Lexington, KY 40507
Phone	859-254-6623
Email	kodle@cmwaec.com

Project Administrator	
Name	Project Engineer
Address	400 East Vine Street, Suite 400
	Lexington, KY 40507
Contact	Kerry Odle
Phone	859-254-6623
Email	kodle@cmwaec.com

Consulting Engineer	
Name	Kerry Odle
Firm	CMW Inc.
Address	400 East Vine Street, Suite 400
	Lexington, KY 40507
Phone	859-254-6623
Email	kodle@cmwaec.com

XIII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

MADISON COUNTY UTILITY DISTRICT
BALANCE SHEETS (DECEMBER YEAR END)

ASSETS	Audited 2009	Audited 2010	Audited 2011	Projected 2012	Upon Completion 2014
Current Assets					
Cash	879,975	965,641	1,177,096	1,301,587	1,509,468
Accounts Receivable	320,090	344,817	336,832	336,832	345,625
Inventory	130,749	433,902	375,675	350,000	350,000
Prepaid	52,179	21,609	22,928	23,000	23,000
Other Current Assets					
Total Current Assets	1,382,993	1,765,969	1,912,531	2,011,419	2,228,093
Total Restricted Assets	832,278	875,161	981,517	1,000,000	1,000,000
Utility Plant					
Land, System, Building and Equipment	20,956,001	21,225,558	22,105,063	22,842,116	23,901,811
Less Accumulated Depreciation ( )	(6,165,512)	(6,641,899)	(7,147,890)	(7,667,890)	(8,727,499)
Net Fixed Assets	14,790,489	14,583,659	14,957,173	15,174,226	15,174,312
Other Assets					
Notes Receivable					
Unamortized Bond Costs and Discount, Net	125,157	112,941	103,100	92,000	80,000
Total Other Assets	125,157	112,941	103,100	92,000	80,000
Total Assets	17,130,917	17,337,730	17,954,321	18,277,645	18,482,405
LIABILITIES					
Current Liabilities					
Accounts Payable	255,632	246,873	366,448	350,000	350,000
Customer Deposits	99,840	95,075	95,155	95,500	95,500
Total Current Liabilities	355,472	341,948	461,603	445,500	445,500
Liabilities Payable - Restricted Assets					
Notes and Bonds Payable	406,885	548,959	431,054	438,170	462,465
Accrued Interest Payable	62,817	61,516	52,655	50,000	40,000
Total Liabilities Payable - Restricted Assets	469,702	610,475	483,709	488,170	502,465
Long Term Liabilities					
Long Term Debt	6,681,948	6,262,989	5,831,935	5,393,765	4,480,992
Premium on Bonds Payable	63,952	58,876	53,800	48,724	87,296
KIA (F10-04)	0	0	0	349,343	940,225
Proposed KIA Loan	0	0	0	0	856,523
Total Long Term Liabilities	6,745,900	6,321,865	5,885,735	5,791,832	6,365,036
Total Liabilities	7,571,074	7,274,288	6,831,047	6,725,502	7,313,001
Retained Earnings:					
Invested in Capital Assets Net of Related Debt	7,701,656	7,771,711	8,694,184	8,944,224	8,346,811
Restricted	832,278	875,161	981,517	1,000,000	1,000,000
Unrestricted	1,025,909	1,416,570	1,447,573	1,607,919	1,822,593
Total Retained Earnings	9,559,843	10,063,442	11,123,274	11,552,143	11,169,404
Total Liabilities and Equities	17,130,917	17,337,730	17,954,321	18,277,645	18,482,405
Balance Sheet Analysis					
Current Ratio	3.9	5.2	4.1	4.5	5.0
Debt to Equity	0.8	0.7	0.6	0.6	0.7
Days Sales in Accounts Receivable	30.0	29.9	28.9	28.9	28.9

EXHIBIT 1
MADISON COUNTY UTILITY DISTRICT
CASH FLOW ANALYSIS (DECEMBER YEAR END)

	Audited	%	Audited	%	Audited	%	Projected	Projected	Projected	Projected	Projected	Projected
Operating Revenues	**2009**	**Change**	**2010**	**Change**	**2011**	**Change**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Charges for Services	3,691,765	8%	3,982,911	1%	4,007,954	0%	4,007,954	4,092,121	4,112,582	4,133,145	4,153,811	4,174,580
Late Charges	66,976	1%	67,918	5%	71,638	0%	71,638	73,142	73,508	73,876	74,245	74,616
Miscellaneous	136,924	11%	151,916	11%	168,602	0%	168,602	172,143	173,004	173,869	174,738	175,612
Total Revenues	3,895,665	8%	4,202,745	1%	4,248,194	0%	4,248,194	4,337,406	4,359,094	4,380,890	4,402,794	4,424,808
Operating Expenses												
Purchased Water Cost	1,958,644	6%	2,081,412	1%	2,092,855	0%	2,092,855	2,134,712	2,134,712	2,109,712	2,109,712	2,109,712
Operating Expenses	1,142,231	-2%	1,114,602	1%	1,121,402	2%	1,143,830	1,166,707	1,190,041	1,213,842	1,238,119	1,262,881
Depreciation	478,233	6%	508,602	1%	515,832	1%	520,000	522,500	537,109	566,327	595,545	624,763
Replacement Reserve	15,000		40,000		40,000		40,000	40,000	42,350	44,450	29,450	29,450
Total Expenses	3,594,108	4%	3,744,616	1%	3,770,089	1%	3,796,685	3,863,919	3,904,212	3,934,331	3,972,826	4,026,806
Net Operating Income	301,557	52%	458,129	4%	478,105	-6%	451,509	473,487	454,882	446,559	429,968	398,002
Non-Operating Income and Expenses												
Interest Income	19,393	37%	26,552	-34%	17,611	-23%	13,500	13,500	13,500	13,500	13,500	13,500
Other	7,917	25%	9,905	110%	20,818	-52%	10,000	10,000	10,000	10,000	10,000	10,000
Total Non-Operating Income & Expenses	27,310	33%	36,457	5%	38,429	-39%	23,500	23,500	23,500	23,500	23,500	23,500
Add Non-Cash Expenses												
Depreciation	478,233	6%	508,602	1%	515,832	1%	520,000	522,500	537,109	566,327	595,545	624,763
Cash Available for Debt Service	**807,100**	**24%**	**1,003,188**	**3%**	**1,032,366**	**-4%**	**995,009**	**1,019,487**	**1,015,491**	**1,036,386**	**1,049,013**	**1,046,265**
Debt Service (enter as positive #'s)												
Existing Principal	350,158		556,885		548,959		431,055	438,170	450,308	462,465	474,646	486,848
Existing Interest	172,225		176,202		153,887		145,891	136,538	125,762	114,004	101,824	89,221
Open Loans (KIA F10-04)	0		0		0		0	29,810	59,621	59,621	59,621	59,621
Proposed KIA Loan	0		0		0		0	0	29,053	58,106	58,106	58,106
Total Debt Service	522,383		733,087		702,846		576,946	604,518	664,744	694,196	694,197	693,796
Income After Debt Service	284,717		270,101		329,520		418,063	414,969	350,747	342,190	354,816	352,469
Debt Coverage Ratio	1.5		1.4		1.5		1.7	1.7	1.5	1.5	1.5	1.5

Exhibit E

Division of Water Approval Letter

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

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

January 16, 2014

Mr. John Clark
Madison County Utilities District
P. O. Box 670
Richmond, KY 40476

RE: Phase 4 Improvements
DWL13005, F13-023
Madison County Utility District--34008
Activity ID: FGL20130007

Dear Mr. Clark:

The Kentucky Division of Water (DOW) has reviewed for completeness and adequacy the construction plans and specifications submitted for the above referenced contract. The DOW now approves these plans and specifications with respect to sanitary features of design in accordance with the requirements contained in the attached construction permit. These plans consist of 14,920 linear feet of 8 inch PVC, 10,474 linear feet of 6 inch PVC, 284 linear feet of 4 inch PVC, 250 linear feet of 8 inch PE, and 120 linear feet of 6 inch PE water lines. The approval conditions and a list of eligible/ineligible items are enclosed. Please note that ineligible items cannot be funded using State Revolving Fund (SRF) monies, and must be paid by other funding sources.

We are enclosing one (1) set of approved plans and specifications. An identical set should be made available at the project site at all times. If modifications are made to these plans and specifications before bidding, four (4) complete sets of as-bid plans and specifications must be submitted to the DOW for approval. A second DOW construction approval must be issued by separate correspondence before proceeding with advertising for bids. Any red line changes that were made by DOW personnel on the approved plans shall be incorporated into the bid set plans unless an alternative is approved.

You may now advertise for bids on the construction of this project. In addition to other notifications, this project must be advertised in the newspaper of the largest daily circulation in the project area.

You are cautioned not to advertise unless you have a proper wage decision. The Federal Davis-Bacon wage rates and Kentucky prevailing wage rates are applicable for this project. Please contact all other funding sources for their requirements pertaining to federal or state wage rates.

You are reminded that the construction contracts are subject to the equal employment opportunity requirements contained in Executive Order 11246. Equal employment opportunity affirmative action by the prime contractors and all subcontractors is mandated throughout the duration of the contract. Documentation of efforts to comply with Executive Order 11246, Equal Employment Opportunity is required to be kept by the borrower.

Review the attached Project Review and Cost Summary form for details of the information to be collected and retained in your files or to be submitted to DOW for review and approval. This form must be completed, signed by the recipient, and with the necessary information be then forwarded to the DOW. This signature will certify that all the information to be retained by the recipient has been secured and is available for review by the Division at the pre-construction conference. The required information must be approved by the DOW before executing any contracts.

Along with the Project Review and Cost Summary form, the following items must be submitted to the DOW for review and approval before executing any contracts:

- The bid advertisement
- Revised Project Budget
- Certified bid tabulation
- Documentation of compliance with DBE Good Faith Effort in accordance with 40 CFR 33.301

These items will be reviewed as a part of the Authority to Award process. The DOW will authorize you to award the contracts once these documents are approved

After the Notice to Proceed is signed, the DOW will need a copy of the executed contract documents, including plans and specifications.

Changes orders will require approval from the DOW before payment can be authorized from the State Revolving Fund. Submission of plans and specifications may be required for change order work.

Upon completion of the project, as-built drawings shall be provided to the DOW. As-builts shall be stamped, signed and dated by a professional engineer. A written certification stating that the project was constructed according to the approved plans shall be provided to the DOW by a professional engineer.

The construction permit included in this letter has been issued under the provisions of KRS Chapter 224 and the regulations promulgated pursuant thereto. Issuance of this approval 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.

You are cautioned that the advertisement and award of this contract will be subject to the laws and regulations that govern the State Revolving Fund (SRF) and to the conditions of your loan

agreement. If we can be of further assistance, please call Daniel Kulik, Project Engineer, at (502) 564-3410, extension 4828.

Sincerely,

Mark Rasche

Mark Rasche, P.E.
Supervisor, Engineering Section
Water Infrastructure Branch
Division of Water

MR:DK

Enclosures

Eligible List, Ineligible List, Approval Conditions
Project Review and Cost Summary Form
1 set plans and specification

C: CMW, Inc. (Kerry Odle)
Kentucky Infrastructure Authority
Cabinet for Economic Development
Madison County Health Department
Division of Plumbing (by e-mail only)

DWL13005, F13-023

SRF ELIGIBLE ITEMS:

Contract: These plans consist of 14,920 linear feet of 8 inch PVC, 10,474 linear feet of 6 inch PVC, 284 linear feet of 4 inch PVC, 250 linear feet of 8 inch PE, and 120 linear feet of 6 inch PE water lines. The approval conditions and a list of eligible/ineligible items are enclosed.

SRF INELIGIBLE ITEMS:

N/A

APPROVAL CONDITIONS:

CLEAN WATER SRF ☐ DRINKING WATER SRF ☐
EPA GRANT ☐

PROJECT REVIEW AND COST SUMMARY

THIS QUESTIONNAIRE/CHECK SHEET IS FURNISHED AS AN ADMINISTRATIVE AID AND IS REQUIRED FOR USE IN SUPPLYING INFORMATION AND DOCUMENTS, REPORTING MINOR CHANGES AND PROJECT STATUS. THE INFORMATION AND DOCUMENTS SHOULD BE SUBMITTED TO DOW AS SOON AS POSSIBLE AFTER BID OPENING.

SECTION 1.

1. **Project Name** _____ **Project Number** _____

2. **Changes: Have there been any changes in the project since DOW's approval of the plans and specifications?**

☐ Yes ☐ No Construction Drawings. If yes, submit revised drawings and addenda. **See Note***

☐ Yes ☐ No Specifications. If yes, submit addenda. **See Note***

***Note:** **Prior approval is required for changes in design, scope, type of treatment, size, capacity, time to complete the project, etc. Changes, which result in increase in the amount of a contract, must be procured in accordance with state and federal requirements, as applicable.**

☐ Yes ☐ No Site Changes. If so, new Clear Site Certificates are required prior to start of construction.

☐ Yes ☐ No Authorized Representative (Mayor, City Manager, etc.). If so, provide name and title.

SECTION 2.

Date Bids Opened: _____ **Date Bids Expire:** _____

1. The following items should be submitted to DOW after bid opening:
   - A. Executed Project Review & Cost Summary Form (this form).
   - B. Original bid advertisement or copy of advertisement with affidavit of publication.
   - C. Revised Budget (copies attached, use appropriate form).
   - D. Certified Bid Tabulations with engineer's seal.
   - E. DBE Documentation (See Attachment No. 12 of the Supplemental General Conditions (SGC)):
     - Disadvantaged Business Enterprise Participation Policy from the successful low bidder with DBE certifications and executed subcontracts with DBEs or letters of intent signed by both parties; and documentation on the level of effort taken to obtain DBEs including copies of correspondence with DBE contractors, requesting quotes and copies of any advertisements

soliciting DBE contractors, copies of returned envelopes and certified mail receipts, telephone log, etc.
- Bidder's List Form from recipient and successful bidder.
- EPA Form 6100-3 from DBE subcontractors.
- EPA Form 6100-4 from successful bidder.

2. The following items must be submitted to DOW at the Pre-construction Meeting:

A. Executed Contract Documents (once contract is signed).
B. Notice of Award, Notice To Proceed, Bid Bond, Payment Bond, and Performance Bond.
C. Contractor's Certification Regarding Lobbying (See Attachment No. 11 in the SGC).
D. Contractor's Debarred Firm Certification (See Attachment No. 10 in the SGC).

3. A copy of the items identified in Section 2.1 and Section 2.2, above, and the following must be retained by the owner. This documentation is subject for review, by DOW, at the time of the pre-construction conference.

A. Name and qualifications of the proposed resident inspector(s).
B. Proposal of the successful bidder(s).
C. EEO documentation required by Executive Order 11246 as amended. Items 1 through 11 (See Attachment No. 7 in the SGC), is required for all contracts over $10,000 except supplier contracts. Supplier contracts require:
    1. Name, address, and telephone number.
    2. Materials to be supplied and dollar value.

   For contracts below $10,000, the same information required for supplier contracts must be submitted.
D. Engineer's letter to the loan recipient recommending award of the contract. Letter must include a description of work, dollar amount, and name of the low bidder. If award is recommended to be made to other than the low bidder, a justification indicating why the low bidder is not responsive or responsible.
E. Contractor project construction schedule and payment schedule.
F. Applicable wage rate determination letter.
G. Tentative Award Resolution.

4. Comments: _____

_____

I hereby certify that all documentation outlined in Section 2.1, 2.2 and 2.3 will be retained in our project files and all documentation outlined in Section 2.1 has been submitted to DOW and all documentation outlined in Section 2.2 will be submitted to DOW during the Pre-con meeting.

_____ **Date:** _____

Signature of Authorized Representative

_____

Name and Title

Attachment

Drinking Water SRF Project Cost Summary

Project Title: _____ WRIS#: WX _____

Project Budget: Estimated [ ] enter date As Bid [ ] enter date Revised [ ] enter date

	Cost Classification	DWSRF KIA Loan	Funding Source 1	Funding Source 2	Funding Source 3	Funding Source 4	Funding Source 5	Local Funds	Unfunded Costs	Total
1	Administrative Expenses									
2	Legal Expenses									
3	Land, Appraisals, Easements									
4	Relocation Expenses & Payments									
5	Planning									
6	Engineering Fees – Design									
7	Engineering Fees – Construction									
8	Engineering Fees – Inspection									
9	Engineering Fees – Other									
10	Construction									
11	Equipment									
12	Miscellaneous									
13	Contingencies									
	Total									

	Funding Sources	Amount	Date Committed
1			
2			
3			
4			
5			
	Total		

	Local Funding Sources	Amount	Date Committed
1			
2			
3			
	Total		

Total Funding _____

Cost Categories	Funding Source	Total Cost
Treatment		
Transmission and Distribution		
Source		
Storage		
Purchase of Systems		
Restructuring		
Land Acquisition		
Total Costs		

GACT0000000046 (Phase 4 Improvements) 14,920 linear feet of 8 inch PVC; 10,474 linear feet of 6 inch PVC; 284 linear feet of 4 inch PVC; 250 linear feet of 8 inch PE; 120 linear feet of 6 inch PE water lines:

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)]

GACT0000000046 (continued):

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 2 years from the issuance date of this permit, the permit shall expire. 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 Engineering Section at 502/564-3410. [401 KAR 8:100 Section 1(9)]
T-4	Final approval of facility. Upon completion of construction, the person who presented the plans shall certify in writing that the project has been completed in accordance with the "approved" plans and specifications. The public water supply shall operate the facility consistent with the approved plans and specifications. Any proposed change to the approved plan shall be submitted to the cabinet for approval. The public water supply shall not implement any change to the approved plan without the prior written approval of the cabinet. [401 KAR 8:100 Section 401 KAR 8:100(1)(8)]
T-5	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)]

PORT0000000048 (Water Line) 14,920 linear feet of 8 inch PVC; 10,474 linear feet of 6 inch PVC; 284 linear feet of 4 inch PVC; 250 linear feet 8 inch PE; 120 linear feet of 6 inch PE water lines:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Depth	A continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench shall be removed for a Depth >= 6 in below the bottom of the pipe. [Recommended Standards for Water Works 8.5.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-2	Depth	All water lines shall be covered to a Depth >= 30 in to prevent freezing. [Recommended Standards for Water Works 8.5.3, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-3	Diameter	All water lines shall have Diameter >= 3 in. [Recommended Standards for Water Works 8.1.4] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Diameter	Water lines with Diameter < 6 in shall not have fire hydrants. [Recommended Standards for Water Works 8.1.5] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Diameter	All new and existing water lines serving fire hydrants or where fire protection is provided shall have Diameter >= 6 in. [Recommended Standards for Water Works 8.1.2] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-6	Distance	Water lines shall have a sufficient quantity of valves so that inconvenience and sanitary hazards will be minimized during repairs. A valve spacing Distance <= 1.0 mi should be utilized. [Recommended Standards for Water Works 8.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-7	Distance	Hydrant drains shall not be connected to sanitary sewers or storm drains and shall be located a Distance > 10 ft from sanitary sewers and storm drains. [Recommended Standards for Water Works 8.3.4] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

ORT0000000048 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-8	Distance	Except when not practical, water lines shall be laid a horizontal Distance >= 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-9	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-10	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-11	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-12	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.

PORT0000000048 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-13	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-14	Velocity	Each blow-off, fire hydrant, or flush 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.

ORT0000000048 (continued):

Narrative Requirements:

Asbestos (Friable):

Condition No.	Condition
T-1	Asbestos (Friable): If the existing water line to be tapped is asbestos concrete, then the contractor shall conform to OSHA regulations governing the handling of hazardous waste during the process of tapping the asbestos concrete line. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill. [401 KAR 8:100 Section 1(7)]

Additional Limitations:

Condition No.	Condition
T-2	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]
T-3	Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must be certified to ANSI/NSF Standard 61. [Recommended Standards for Water Works 8.0.1]
T-4	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-5	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-6	Additional Limitations: For lines that dead end, a fire hydrant or blow-off shall be required at the end of each 6 inch or larger diameter line and a flush hydrant or blow-off shall be required at the end of each line that is less than 6 inches in diameter. [Recommended Standards for Water Works 8.1.6]
T-7	Additional Limitations: For each fire or flush hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]

PORT0000000048 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-8	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-9	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-10	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-11	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)]
T-12	Additional Limitations: If water lines cross a stream or wetland, the provisions in the attached Water Quality Certification shall apply. If you have any questions please contact the Water Quality Certification Supervisor of the Water Quality Branch at (502) 564-2225. [401 KAR 8:100 Section 1(7)]

PORT0000000048 (continued):

Narrative Requirements:

Subfluvial Pipe Crossings:

Condition No.	Condition
T-13	Subfluvial Pipe Crossings: For subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 if the following requirements of 401 KAR 4:050 Section 2 are met. 1) No material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc. during construction of pipe crossings. 2) Crossing trenches shall be backfilled as closely as possible to the original contour. 3) All excess material resulting from construction displacement in a crossing trench shall be disposed of outside the flood plain. 4) For erodible channels, there shall be at least 30 inches of backfill on top of all pipe or conduit points in the crossing. 5) For nonerodible channels, pipes or conduits in the crossing shall be encased on all sides by at least 6 inches of concrete with all pipe or conduit points in the crossing at least 6 inches below the original contour of the channel. [401 KAR 8:100 Section 1(7)]
T-14	Subfluvial Pipe Crossings: For subfluvial pipe crossings greater than 15 feet in width, 1) the pipe shall be of special construction, having flexible, restrained, or welded watertight joints, and 2) valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair. Valves shall a) be easily accessible, b) not be subject to flooding, and c) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and for sampling purposes. [Recommended Standards for Water Works 8.7.2]