

COMMONWEALTH OF KENTUCKY BEFORE
THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO)	
THE IMPACT OF MADISON COUNTY FISCAL)	CASE NO.
COURT'S USE OF MADISON COUNTY)	2021-00422
UTILITIES DISTRICT'S SYSTEM FOR ITS FIBER)	
OPTIC CABLE INSTALLATION PROJECT)	

RESPONSE TO POST-HEARING DATA REQUEST

COMES NOW Respondents and for their response to the Commission Staff's Post-Hearing Data Requests and states as follows:

1. Refer to the testimony of Judge Reagan Taylor. Provide the date that Judge Taylor's first conversation with the mayor of Anacortes, Washington occurred.

RESPONSE: September 15, 2020, 1:00PM EST was when Madison County held a virtual meeting with the Mayor and staff from Anacortes, Washington.

Chris Iseral

Chris Iseral

2. Provide a complete response to Commission Staff's Second Request for Information, Item 9(c) and Item 9(d).

RESPONSE: According to our counsel who has researched the "as built plans" and reviewed the recordings at the Madison County Courthouse, all easements are existing and recorded and none of the easements are by prescription.

Jared Webb

Jared Webb

3. Provide a complete response to Commission Staff's First Request for Information, Item 13. -
3- Case No. 2021-00422

RESPONSE: The calculations provide a guideline for incremental pressure headloss (i.e. water pipe without Messenger Pipe and water pipe with 16mm Messenger Pipe), the figures calculated are on the following basis, with the typical normal flow volumes per scenario, plus incremental flow due to:

- a) One hose port in operation
- b) Two hose ports in simultaneous operation
- c) The 5.25" fill port in operation
- The above all considered to be the equivalent of a fully open hole of the given size, venting to atmospheric pressure

There are three broad scenarios in Madison which relate to most segments for a given pipe diameter (previously qualified by Consulting Engineer Brandon Baxter):

- 12" pipe - nom. 'normal' velocity 1.34 ft/sec, nom. 'normal' pressure 63 psi (nom. incremental headloss with Messenger Pipe 0.069psi/mi)
- 10" pipe - nom. 'normal' velocity 1.84 ft/sec, nom. 'normal' pressure 86 psi (nom. incremental headloss with Messenger Pipe 0.25psi/mi)
- 8" pipe - nom. 'normal' velocity 2.87 ft/sec, nom. 'normal' pressure 86 psi (nom. incremental headloss with Messenger Pipe 0.75psi/mi)

12" Pipe - Hydrant Analysis

Generic increase (scenarios a/b/c above) in pressure headloss vs no Messenger Pipe - plus 6.4% on normal headloss of pipe with no Messenger Pipe

Worked example :

12" pipe with normal flow plus two hose ports in simultaneous operation - incremental headloss 0.274psi/mi (flow velocity 2.6ft/sec)

10" Pipe - Hydrant Analysis

Generic increase (scenarios a/b/c above) in pressure headloss vs no Messenger Pipe - plus 7.9% on normal headloss of pipe with no Messenger Pipe

Worked example :

10" pipe with normal flow plus two hose ports in simultaneous operation - incremental headloss 1psi/mi (flow velocity 4.2ft/sec)

8" Pipe - Hydrant Analysis

Generic increase (scenarios a/b/c above) in pressure headloss vs no Messenger Pipe - plus 10% on normal headloss of pipe with no Messenger Pipe

Worked example :

8" pipe with normal flow plus two hose ports in simultaneous operation - incremental headloss 4psi/mi (flow velocity 6.5ft/sec)

Chris Iseral

Chris Iseral

As provided by Mike Parker-Craley

4. Refer to Commission Staff's First Request for Information, Item 3a. Provide updated hydraulic analysis from Craley and HMB Professional Engineers, Inc. using the correct pipe information for the specific links listed as incorrect in the original information.

RESPONSE: See Attached titled "Wet Fiber Hydraulic Analysis revised-9-22"

Jared Webb

Jared Webb

As provided by Brandon Baxter

5. Provide the following information by link for the pipe for both the Madison District portion of the project as well as the Kirksville Water Association's (Kirksville Water) portion of the project. If the answer is not known, an estimate, identified as an estimate of the following information

- a. Age of pipe;
- b. Material of the pipe;
- c. Make and model of pipe, if known;
- d. Whether any patching of the pipe within the link has occurred; if so, describe the repairs.

RESPONSE: See Attached titled as “Sites Survey Data-Lex. Road” and “Sites Survey Data-Jolly Ridge”

Jared Webb

Jared Webb

6. Provide a list of each link of pipe in both the Madison District and Kirksville Water projects that will require the cable to be run outside, but along the water line, and the reason that decision was made for each link.

RESPONSE: See response to #5.

Jared Webb

Jared Webb

7. Refer to the testimony of Dustin Heiser. Provide all documentation supporting the estimated trenching and directional boring costs.

RESPONSE: See attached exhibits titled "quote-team Fishel" and “quote-G&W Construction, Inc.”

Jared Webb

Jared Webb

8. Provide an estimate of the number of expected service interruptions for Madison District and Kirksville Water as a result of this project and explain how the estimate was made. State the expected duration of service interruptions and number of customers expected to be affected.

RESPONSE: Until Madison County staff and Madison County Utilities staff proceed with additional training from Craley, it is not known with any degree of confidence how many service

interruptions there will be or the duration of those interruptions. This answer will be supplemented when/if the project advances and the training is completed.

Jared Webb

Jared Webb

Chris Iseral

Chris Iseral

9. Identify any redundant water lines that would prevent service interruptions. -4- Case No. 2021-00422

RESPONSE: None.

Jared Webb

Jared Webb

10. Provide a step by step design diagram specific for the Madison District project as well as the Kirksville Water project for the installation of the fiber optic cables using the messenger pipe for installation within the water line as well as the circumstance when installation within the water line is not feasible, including but not limited to the parts, materials, and composition of the materials, if applicable.

RESPONSE: See attached titled “installation guide”.

Chris Iseral

Chris Iseral

11. Confirm that Kirksville Water is a member of 811. If not, please explain why not.

RESPONSE: Yes, Kirksville is a member of 811

Mike Agee

Mike Agee, KWA

12. Confirm that Madison District is a member of 811. If not, please explain why not.

RESPONSE: Yes, Madison County Utilities District is a member of 811.

Jared Webb

Jared Webb

13. As it relates to compliance with the Kentucky Underground Facilities Damage Prevention Act,2 provide the following:

a. A detailed explanation of how Kirksville Water and Madison District will mark the water lines prior to the start of the proposed project. State whether the work will be performed by utilities' personnel or an outside contractor.

RESPONSE: 811 will be contacted to mark all areas of the project for all utilities before we started in accordance with Kentucky Law. The districts would mark their own lines under the same process that they would do for any other 811 ticket as well as any other utilities.

Chris Iseral

Chris Iseral

b. State how Kirksville Water and Madison District will provide for traceability of the water lines following the completion of the project. State whether the utilities plan to add tracer wire to any facilities to assist in future line-marking.

RESPONSE: Tracer wire will be placed in any fiber path that is outside the water line. The districts have no plans to add tracer wire to any facilities.

Chris Iseral

Chris Iseral

c. An explanation of how Kirksville Water and Madison District will mark the fiber optic lines for traceability, both within the water lines and when the fiber optics are run outside of the water lines. 2 KRS 367.4901 through KRS 367.4917.

RESPONSE: Madison and Kirksville will not mark for fiber under this project, they would only mark their water lines as they currently do. Madison County Fiscal Court will add the sections of the fiber runs that are outside of the water line to its area for marking and Madison County Fiscal Court employees will mark those when bud tickets are called in. This is for any part of the project that is not in the water line, so if it is a 3 foot underground connecting between vaults between valves then that is Madison Fiscal Courts responsibility.

Chris Iseral
Chris Iseral

d. Describe the process that Kirksville Water and Madison District will follow for compliance with KRS 367.4909, 3 including any individual names, external party names, third-party contractors, and internal processes that currently exist or will be developed following the project

RESPONSE: There will be no change in how MCUD or Kirksville Water Association comply with the law. The water lines will continue to be marked blue and where the fiber optic line is out of the water line, the fiber optic will be marked with safety alert orange.

Jared Webb
Jared Webb

Mike Agee
Mike Agee

14. For both the Madison District project and the Kirksville Water project:

a. Provide the number of vault boxes that will be able to support taps on both sides of the valves and the corresponding link information.

b. Provide the number of valves that will require two separate vault boxes to support the taps on each side of the valve and the corresponding link information.

RESPONSE: Please see answer to #5. This information is contained within the spreadsheet.

Chris Iseral

Chris Iseral

Each answer provided is true and accurate to the best knowledge and belief of the witness signing the response.

Respectfully submitted,

Jud Patterson

Jud Patterson

228A West Main Street

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