VERIFICATION

COMMONWEALTH OF KENTUCKY)

) SS:

)

COUNTY OF FRANKLIN

The undersigned, KENNETH D. TAYLOR, P.E., being duly sworn, deposes and states he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Kennether Laylow PE

KENNETH D. TAYLOR, Ø.E.

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of November 2023.

(Seal)

Notary Public

My Commission Expires: 10/17/24

Notary ID: KYNP15902

WHITLEY COUNTY WATER DISTRICT #1

RESPONSE TO COMMISSON STAFF'S FIRST REQUEST FOR INFORMATION

CASE NO. 2023-00083

QUESTION NO. 1

Responding Witness: Kenneth D. Taylor, PE

Q-1. Refer to Section 2.0 of the July2023 Infrastructure Improvement Plan filed August 9, 2023. Provide the estimated cost to purchase and install:

- a. The proposed five internal master meters;
- b. A portable flow meter;
- c. Additional by-pass meters; and
- d. Gate valve replacement.

Response:

1.a. The internal master meters are estimated to cost approximately \$20,000 each including installation.

1.b. The portable flow meter is estimated to cost approximately \$6,000.

1.c. The additional bypass meters are estimated to cost approximately \$5,000 each including installation.

1.d. The gate valve replacements including installation are estimated to range from a low of \$1,000 each to a high of \$8,050 depending on the size of the valve and the installation method. On the low end would be a 3" valve installed in conjunction with a leak repair and the high end would be for an 8" insert-a-valve.

CASE NO. 2023-00083

QUESTION NO. 2

Responding Witness: Kenneth D. Taylor, PE

Q-2. State where the portable flow meter will be placed and how it will be used to reduce water loss.

Response:

2. The portable flow meter will be stored at the WCWD office and attached to the distribution system as needed to further segment the distribution system as needed to help pin point leaks that cannot be readily located through other means. The quicker a leak can be found and repaired; the less water will be lost.

CASE NO. 2023-00083

QUESTION NO. 3

Responding Witness: Kenneth D. Taylor, PE

Q-3. State how many by-pass meters will be installed and where they will be located on the system. Explain how they will be used to reduce water loss.

Response:

3. It is anticipated a least 12 bypass meters will be installed at the following intersections:

- a. Proctor Hollow and Black Oak Roads
- b. Keswick Road and Fayette Lane
- c. KY 1804 and Ancil Leach Hollow Road
- d. US 25W and Kensee Hollow Road
- e. Little Wolfe Creek and Wolfe Creek Roads
- f. US 25W and Emlyn Cemetery Road
- g. KY 1064 and Upper Mulberry Road
- h. KY 92E and Deep Branch Road
- i. Browns Creek and Phoebe Fork Roads
- j. Alsile Road and Jellico Creek Church North Spur
- k. KY26 and KY 511
- I. KY 1064 and McNeil Corn Creek Road

The bypass meters will help pin point leaks that cannot be readily located through other means. The quicker a leak can be found and repaired; the less water will be lost.

RESPONSE TO COMMISSON STAFF'S FIRST REQUEST FOR INFORMATION CASE NO. 2023-00083

QUESTION NO. 4

Responding Witness: Kenneth D. Taylor, PE

Q-4. State how many gate valve replacements will be made and the location of each. Explain how the gate valve replacements will be used to reduce water loss.

Response:

4. The number and locations of the replacement valves are not yet known. These will be determined as leaks are repaired and the bypass meters are installed and existing valves are found to not close completely.

CASE NO. 2023-00083

QUESTION NO. 5

Responding Witness: Kenneth D. Taylor, PE

Q-5. Refer to section 3.0 of the July 2023 Infrastructure Improvement Plan filed August 9, 2023.

- a. State how many customers will be added as a result of the project.
- b. State whether an application for a Certificate of Public Convenience and Necessity (CPCN) will be filed for the proposed project and if so when.
- c. If no CPCN application is planned, state why not.
- d. Provide a breakdown of the length of replacement mains and the length of extension mains.
- e. Provide information to explain in detail how this project will reduce water loss, including any evidence or data on the historical number of main breaks on the existing mains to be replaced and any computation of water loss amounts on each of the mains to be replaced. If any service lines will be replaced, identify how many and the same evidence or data on historical service line leaks and computation of water loss on the service lines.

Response:

5.a. Water service will be made available to four residences on Steel Hollow Road, five residences of Underwood Cemetery Road, three residences on Lloyd Hale Road, and seven residences on Clarence Powers Road.

5.b. Once full funding and construction bids are received, WCWD will file an Application to Issue and Evidence of Indebtedness and for a CPCN to construct the facilities. This date has not yet been set.

5.c. Not applicable

5.d. Replacement Mains

- 1. Emby Moses Road approximately 2,000 LF;
- 2. Cane Creek approximately 15,300 LF of 4" and 1,000 LF of 3";
- 3. US 25W approximately 3,000 LF of 6";
- 4. KY 904 approximately 800 LF;
- 5. Wofford Church Road approximately 2,400 LF;
- 6. New Zion Church Road approximately 1,200 LF;

- 7. Arthur Tuggle Road approximately1,600 LF;
- 8. New Zion Road approximately 11,200 LF; and
- 9. Ted Ball Road approximately 3,600 LF.

Extension Mains

- 1. Steel Hollow Road approximately 2,200 LF of 3-inch.
- 2. Underwood Cemetery Road approximately 1,500 LF of 3-inch.
- 3. Lloyd Hale Road approximately 1,800 LF of 3-inch.
- 4. Clarence Powers Road approximately 800 LF of 4-inch and 2,270 LF of 3-inch.
- 5. The extension along Old Mt. Ash & Harptown Lane has been dropped due to a lack of interest expressed by the vast majority of the residents of the area.

5.e. The water lines to be replaced with this proposed project were selected after consultation with the long-term field employees of Whitley District #1, who have first knowledge of the history and condition of these lines. According to these employees, these are some of the lines they most often find leaking. Some of the lines were installed by the local residents across country and in some cases thru swampy areas. Therefore it is very difficult to spot leaks on them. Relaying the lines along roadways, out of the swampy areas, will allow leaks to be found and repaired quicker, thus reducing water loss. Whitley District #1 is currently still in the process of gps mapping its system and no historical data has yet been tabulated on the water loss from these mains.

CASE NO. 2023-00083

QUESTION NO. 6

Responding Witness: Kenneth D. Taylor, PE

Q-6. Provide a map of Whitley District #1's system and identify the areas in which new customers will be added.

<u>Response</u>

6. See Exhibit 1 to this Response.

CASE NO. 2023-00083

QUESTION NO. 7

Responding Witness: Kenneth D. Taylor, PE

Q-7. State the size and material of the pipe that will be used to extend service to currently unserved areas.

<u>Response</u>

7.a. Steel Hollow Road approximately 2,200 LF of 3-inch PVC.

b. Underwood Cemetery Road approximately 1,400 LF of 3-inch PVC plus approximately 100 LF of PE at a creek bore.

c. Lloyd Hale Road approximately 1,700 LF of 3-inch PVC plus approximately 100 LF of PE at a creek bore.

d. Clarence Powers Road approximately 800 LF of 4-inch PVC and 2,270 LF of 3-inch PVC.

CASE NO. 2023-00083

QUESTION NO. 8

Responding Witness: Kenneth D. Taylor, PE

Q-8. Explain whether Whitley District #1 expects to need to flush the lines in the areas where it proposes to extend service, or whether Whitley District #1 expects sufficient usage in the new extension to avoid additional flushing.

Response

8. Customer usage on these lines is expected to provide sufficient turnover to maintain the required chlorine level. The lines will have to be included in the routine annual flushing program to prevent sediment buildup in the lines.

RESPONSE TO COMMISSON STAFF'S FIRST REQUEST FOR INFORMATION CASE NO. 2023-00083

QUESTION NO. 9

Responding Witness: Kenneth D. Taylor, PE

Q-9. State whether the extensions will result in any dead ends, and if so, state where.

<u>Response</u>

9. None of the four proposed extensions will be looped and thus will terminate in a dead end at the end of the extension. All will be equipped with an appropriately sized blow-off assembly.

CASE NO. 2023-00083

QUESTION NO. 10

Responding Witness: Kenneth D. Taylor, PE

Q-10. Regarding the proposed water main extension between the city of Williamsburg's system and the Whitley District #1 system, explain how this new main will decrease water loss.

Response

10. The Jellico Creek/Ryans Creek/Alsile Road portion of the Whitley District #1's distribution system is currently being served via a master meter at the McCreary – Whitley County line. This point is several miles from the McCreary County Water District water treatment plant and the water often has minimal chlorine residual as a result. This results in extensive flushing of the lines to provide potable water Whitley District #1's customers in this area. The Williamsburg Water Treatment Plant/Distribution System is much closer and will thus reduce the amount of water having to be flushed out of the system.