

FILED³
APR 5 2007
Missouri Public
Service Commission

Exhibit No.:

Issue:

Flexible Piping for
Connecting the Water Main
to Customer Service Lines on
Big Island

Witness:

Sponsoring Party:

James T. Crowder
Folsom Ridge LLC and Big
Island Homeowners Water
and Sewer Association, Inc.

Case No.:

Case No. WO-2007-0277

Joined for hearing with

Case No. WC-2006-0082

FOLSOM RIDGE LLC
AND BIG ISLAND HOMEOWNERS WATER AND SEWER ASSOCIATION, INC.

Case No. WO-2007-0277

Joined for hearing with

Case No. WC-2006-0082

SURREBUTTAL TESTIMONY

OF

JAMES T. CROWDER

Longmont, Colorado
March, 2007

FR Exhibit No. 107
Case No(s) WC-2006-0082 et al
Date 3-30-07 Rptr KF

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of the Application of)
Folsom Ridge LLC and Big Island)
Homeowners Water and Sewer Association,)
Inc. for an order authorizing the transfer) Case No. WO-2007-0277
and Assignment of Certain Water and)
Sewer Assets to Big Island Water)
Company and Big Island Sewer)
Company, and in connection therewith)
certain other related transactions.)

AFFIDAVIT OF JAMES T. CROWDER

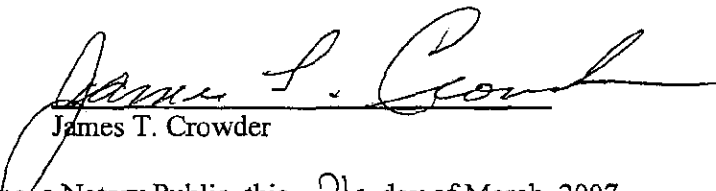
STATE OF MISSOURI)
) ss.
COUNTY OF CAMDEN)

I, James T. Crowder, of lawful age, and being duly sworn, do hereby depose and state:

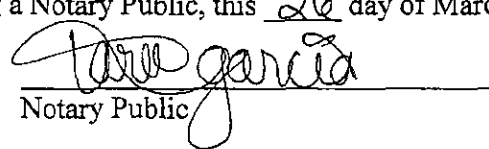
1. My name is James T. Crowder. I am presently property and construction manager for Diamond G Enterprises.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my personal knowledge, information and belief.


James T. Crowder

Subscribed and sworn to before me, a Notary Public, this 26 day of March, 2007.


Notary Public

TARA GARCIA
NOTARY PUBLIC
STATE OF COLORADO

My Commission Expires 07/17/2010

1 SURREBUTTAL TESTIMONY OF JAMES T. CROWDER

2 Q. **What is your name and business address?**

3 A. My name is James T. Crowder. My business address 2602 Clover Basin Drive, Suite B,
4 P.O. Box 54, Longmont, CO 80502.

5
6 Q. **Are you the same James Crowder who filed written direct testimony in this matter**
7 **on March 12, 2007?**

8 A. Yes, I am.

9
10 Q. **What is the purpose of your surrebuttal testimony?**

11 A. I will be responding to the rebuttal testimony of Mr. Pugh and Ms. Orler on the topic of
12 the flexible piping in Exhibit 63.

13
14 Q. **In their rebuttal testimony, Mr. Pugh and Ms. Orler seem to suggest that Folsom**
15 **Ridge was responsible for replacing the service lines extending to the residences on**
16 **the causeway. Was replacement of the customer service lines part of the water line**
17 **replacement project?**

18 A. To clarify, I was hired to monitor the contractor who was responsible for replacing the
19 water line pursuant to the Settlement Agreement. As part of that water line replacement
20 along the causeway, flexible piping was used to connect the water main to the existing
21 customer service lines that extended to the customer's home. The project did not include
22 any replacement of the customer's service lines. To help with understanding this, it

1 might be better to refer to the flexible piping as a "service connection" between the water
2 main and the customer's "service line."

3
4 **Q. One page 3 of his rebuttal Mr. Pugh questions whether bedding was placed under**
5 **the flexible pipe. Ms. Orlor also asks questions about the bedding on page 10 of her**
6 **rebuttal. As part of the process of applying cover for the flexible blue piping, did**
7 **the contractor provide bedding as well?**

8 **A.** Yes, the bedding was applied as part of the overall cover for the line. There were
9 different kinds of bedding or cover depending upon how level the flexible blue piping
10 laid in an excavation, and I must correct my earlier testimony on this matter. For
11 installations of the flexible pipe that were on relatively level grades, the bedding and
12 cover were the limestone dust I referred to in my direct testimony. A workman would be
13 positioned in the excavation and the pipe was raised so that the limestone dust could be
14 laid underneath the pipe. Then the workman would lower the pipe into the limestone
15 dust. After that, the blue pipe was covered with the limestone dust. For the lines that
16 "went up a hill" the bedding used was $\frac{3}{4}$ inch limestone base rock. This size of
17 aggregate is widely accepted for underground pipeline backfill. The base rock was used
18 for compaction and for stability. The issue on an incline, like the one on Exhibit 63, is
19 erosion around the excavation. The base rock bedding was selected to stabilize the site
20 and minimize the effects of rainfall. This type of backfill will also keep the flexible pipe
21 from moving. This difference in the cover or backfill used was not clear in my direct
22 testimony.

1 Q. On page 4, Mr. Pugh discusses what appears to be rock under the flexible piping on
2 one of the pages of Exhibit 63. After the excavation for the service connection lines
3 was backfilled, was any part of the lines resting on bare rock.

4 A. No, for a piece of flexible piping going "up a hill" the pipe would rest not on the rough
5 excavation but on the ¾ inch base rock backfill I described above. The limestone dust
6 separated the other flexible pipe service connection lines from any rock at the bottom of
7 the rough excavation.

8
9 Q. On page 2 of his rebuttal, Mr. Pugh testifies that the location of the flexible blue
10 piping is directly above the wastewater main and he again addresses adding a sleeve
11 to the water service connection line. On the causeway, do you know the depth at
12 which the wastewater main has been installed?

13 A. Yes, the line was installed at a depth of at least four feet. There is more than enough
14 separation between the water service connection lines and the wastewater main to avoid
15 contamination.

16
17 Q. Does this conclude your surrebuttal testimony?

18 A. Yes.