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OFFICE OF THE CITY MANAGER

MEMORANDUM

TO: Mayor/Council
FROM: Lee Gilmour, City Manager
DATE: December 6, 2021
REFERENCE: New Haven/Stonebridge water main breaks

Following up on your request the situation of the continuing water main breaks in New Haven and Stonebridge subdivisions is:

1. In 2012-2013 the city allowed C-200 plastic pipe to be installed in subdivisions. This was based on common practice in surrounding communities. Shortly afterward the city returned to requiring C-900 plastic pipe.
2. New Haven and Stonebridge subdivisions are supplied from the Houston County water system which uses a psi of 90. The city normally pumps at a psi of 58-60.
3. The City has had to repair water main pipe breaks since 2014 as follows:

New Haven	10	main breaks
Stonebridge	4	main breaks
4. A pressure reduction valve has been installed at the New Haven subdivision which reduces the water main pressure but does not eliminate main breaks.
5. Generally, each break requires replacing 4-8 feet of water main. The break is a horizontal split of the pipe.

Options to addressing this situation are:

1. Continue the process of responding to each break and repair the effected section.
2. Install two (2) pressure reducing valves for Stonebridge subdivisions. This will help but not eliminate breaks as New Haven subdivision has shown. The estimated cost is \$ 65-75 K.
3. Convert the water supplier to the city with its reduced pressure. Estimated cost is \$ 250 K.
4. Complete looping and valving water mains through Sandie Heights subdivisions. No cost.
5. Install additions insulation valves to reduce the number of customers affected by a break repair. Cost per valve \$ 2,500.
6. Replace all the C-200 pipe. Estimated cost \$ 1.2 million.

Issues with options are:

1. Pressure reduction will impact the irrigation and home use in Stonebridge subdivision by reducing the irrigation systems operating pressure and having less water pressure flow for showers, etc.
2. Line replacement will require severe disruption in existing yards, sidewalk/driveway replacement, 1 year to complete.
3. Pressure reduction does not result in eliminating the water leaks.
4. Conversion to city supply would still leave the c-200 pipe, requires negotiations with the County, issues with lower pressure.

cc:

Mr. R. Smith
Ms. A. Fitzner
Mr. C. McMurrian
Mr. T. Falcione, ESG Operations, Inc.