

CLINTON CITY WATER SYSTEM INFORMATION

WHAT IS THE WATER ENTERPRISE FUND?

The water utility acts as its own business through an enterprise fund and must function as a self-sufficient operation. An enterprise fund establishes a separate accounting and financial reporting for municipal services for which a fee is charged in exchange for goods or services. Enterprise funds can only be used for their designated service purpose, such as maintaining the water system. Enterprise funds may not be used for other government operations, inspections, recreation services, city celebrations, etc....

WATER SYSTEM NEEDED IMPROVEMENTS.

I. DUCTILE IRON (DI) PIPE LINE REPLACEMENTS

The needs for replacing the Ductile Iron (DI) pipe mainlines installed in 1982-83 are:

- 1) Visual inspections have revealed damage and risk
 - DI Pipe uncovered while trenching to make connections for new subdivisions or during the installation of other utilities showed corrosion and pitting. Pitting is where the pipe material has corroded and then popped out leaving holes in the pipe material but the hole does not yet go all the way through the pipe.
 - DI Pipe inspections prior to street reconstruction projects found extensive pitting and corrosion. Examples of this are (a) the 1300 N-1500 W to 2000 W Project (b) the 1300 N 3000 W Project. In both cases the lines were replaced before the street construction.
- 2) Increase in number of leaks and breaks
 - Over the past three years leaks have increased by 30%
 - Leaking service saddles and pipe sections that have been repaired are heavily pitted and corroded.
 - Occasional pressure spikes cause leaks across the system which is evidence that many areas on the system are near failure with these corroded and pitted areas.
 - Some areas on the system have experienced so many leaks and breaks that long sections have been replaced. An example of this was on the 2300 N – 1930 W Project where 800' of waterline was replaced.
- 3) Age of Pipe
 - According to Bureau of Reclamation reports, Ductile Iron Pipe in corrosive soil conditions may be expected to have a life of less than 50 years.
 - The DI Pipe Mainline Project in Clinton City occurred in 1982 making the age of the pipe 35 years old.
 - Soil conditions in Clinton appear to be corroding DI Pipe and reducing its life expectancy.
 - Since 2002 Clinton city has been using PVC pipe material which has a much longer life and is not affected by corrosive soils.

4) Delayed Roadwork

The lack of funds to replace failing waterlines is delaying reconstruction of asphalt roadways.

- Newly constructed roadways with proper maintenance are expected to last 40-50 years
- Replacing pipelines that are near the end of their expected service life before reconstructing the street above them is the most cost effective option.
- It is smart and efficient to repair failing water lines before replacing the asphalt. No one likes to see a newly paved street cut up to make repairs. The repairs are never as good as the original asphalt surface and patching reduces street life expectancies.
- The longer maintenance and upgrading is delayed, the higher the future cost will be. The materials will cost more and the process costs more.
- The replacement of ductile water mainline is scheduled over a 20-year period to keep the rates down. This also helps prevent the extra cost of patching or replacing roadways before needed.

5) Project Costs

- Project is estimated at \$7,100,000 over 20 years

II. 1800 NORTH CONSTRUCTION

- 1) UDOT is planning the widening of 1800 North, constructing a bridge over the 500 W railroad tracks, and constructing a new interchange on I-15 at 1800 N.
- 2) Construction is expected within the next five years.
- 3) One of Clinton City's main waterlines would be impacted as part of the project and needs to be relocated. This pipe is ductile iron and was installed in 1982.
- 4) It is anticipated that the relocation and replacement of the pipe during construction could cause prolonged water interruptions to Clinton City.
- 5) UDOT will be paying for the relocation of the water lines impacted by the bridge and interchange. Clinton City will be responsible for the replacement of the water line through the rest of the project.
- 6) Clinton City will be installing a additional waterline that will be placed in 2300 North to add another reliable source to the City's system and to minimize the impacts from the 1800 North project water disruptions.
- 7) Project is estimated at \$1,800,000 in 3-5 years

III. NEW CULINARY WATER WELL AND TANK

- 1) The Clinton City Water Master Plan identifies the need for a new culinary water well and tank to be located inside City boundaries.
- 2) The well and tank provide additional redundant sources of water for fire storage, emergency reserve and peak demand. It will also provide an additional source of water during UDOT's 1800 N construction.
- 3) The well and tank will also meet future growth needs of the City.
- 4) The well and tank construction costs will be paid back to the City over time with fees collected from new building construction projects (impact fees).
- 5) The well will provide another source of water that is independent from Weber Basin Water Conservancy District that supplies the City, which would be essential in case of emergencies.
- 6) Project is estimated at \$3,400,000.