



## CITY COUNCIL MEMORANDUM

**FROM:** The Office of the City Manager   **DATE:** December 10, 2018  
**SUBJECT:** Approve the emergency purchase of construction services by Circle C Construction Company for sewer repairs in the amount of \$104,900.00, and approve the associated budget revision.  
**PRESENTER:** Caroline Waggoner, Director of Public Works

### **SUMMARY:**

Authorize the City Manager to execute a contract with Circle C Construction Company in the amount of \$104,900.00 for the emergency repair of the 24" Big Fossil Sanitary Sewer trunk main, and approve the associated budget revision.

### **GENERAL DESCRIPTION:**

In mid-October during the heavy rains, Public Works became aware of two sanitary sewer line collapses in the far south end of town near Onyx Drive South and Big Fossil Creek Park. The line experiencing issues is a 24" trunk main carrying flow from roughly 1,300 acres of NRH into Fort Worth's system. City crews established an extensive bypass pumping operation to ensure uninterrupted service to local residents and prevent a potential overflow. During repair of the line it became evident that the pipe itself is in critical condition with the top of pipe deteriorated to the point that there was virtually nothing left in some areas. In these locations the heavy flow surcharged the lines, scouring the exposed dirt and structurally collapsing the pipe. This type of failure is caused by sewer gases corroding the concrete gradually over time. Immediately following the repairs, the line was cleaned and a video was taken to identify other locations in need of immediate attention. This investigation revealed multiple additional acute points in the immediate vicinity of the first collapse, all within the side and backyard of 3617 Holland Drive. Note that this line segment is extremely close to the existing residences on Holland, complicating the construction and making it that much more important to address quickly.

Staff investigated two options:

1. Option 1 includes the emergency open cut repair of the existing 24" line. This fix would be permanent, meaning that when we tackle the remainder of the Big Fossil trunk line, this would not need to be part of the scope. The existing concrete pipe would be removed and replaced with PVC, and the two manholes at each end would also be replaced. This option costs roughly \$105,000.00

2. Option 2 involves trenchless technology to repair the points along the line where the top of pipe is broken or missing. These are spot repairs, 4' in length that would stabilize this segment so that we could come back with a CIP project to either rehabilitate or reconstruct this pipe segment, potentially as part of a larger project to address more than this segment alone. Option 2 had a higher overall cost at roughly \$150,000.00, but would be phased to allow the immediate expense to be lower.

It was determined that Option 1 provided the most cost-effective and reliable solution to the immediate problem. Because of the depth and size of the line and the need for an expedited repair, we needed to utilize external forces to perform the work. City staff reached out to three contractors capable of completing the project. Two of the three firms were not available to take on the work in a reasonable timeline. The third firm, Circle C Construction, came recommended by the City of Fort Worth. In fact, they are under contract with Fort Worth to repair large diameter pipes on an ongoing basis. Work began on November 19, with the bulk of the effort anticipated to be complete by December 4.

While it is unusual to request approval of an expense of this amount after the fact, Local Government Code Section 252.022(A), allows for: "A procurement made because of a public calamity that requires the immediate appropriation of money to relieve the necessity of the municipality's residents or to preserve the property of the municipality."

A revision to the FY 2018-19 Capital Projects Budget is requested to move identified savings in Small Water Mains Project (UT1803) into the Miscellaneous Water/Sewer Main Replacements Project (UT1802) to provide the needed funds for the work.

**RECOMMENDATION:**

Approve the emergency purchase of construction services by Circle C Construction Company for sewer repairs in the amount of \$104,900.00, and approve the associated budget revision.