

The City of Huntsville CIP Program And Lessons Learned Projects

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Abstract

Huntsville CIP Program

The City of Huntsville has approximately 47,000 citizens including the Texas Department of Criminal Justice (TDCJ) and Sam Houston State University (SHSU). The City of Huntsville's water system consists of approximately 290 miles of water lines ranging in size from 0.75" to 30". The City relies on treated surface water from the Trinity River Authority (TRA) Surface Water Treatment Plant and seven Groundwater Wells to provide water to its residents. There are two water plants (Palm Street and Spring Lake), four ground storage tanks and two elevated storage tanks, in the system to store and distribute safe drinking water efficiently throughout the city.

The City of Huntsville's wastewater system consists of approximately 120 miles of gravity lines ranging in size from 4" to 36". The wastewater system is divided into three (3) service areas. The three (3) treatment plants (A.J. Brown, N.B. Davidson, and Robinson Creek), and twenty-six (26) lift stations in the system service the City of Huntsville.

The 5-year 204-million-dollar CIP includes Water, Wastewater, Streets, Drainage, Sidewalks, Aviation, and General Projects categories. This 5-year 204-million-dollar Program consists of: (1) 54-million-dollars of city funds; and (2) 61-million-dollars of revenue bonds. The remaining funding will be the subject of future bond issues and/or grant applications. The 5-year City CIP Program consists of thirty-three (33) water projects, forty-nine (49) wastewater projects, twelve (12) general projects, eight (8) airport projects, six (6) sidewalk projects, twelve (12) streets projects, and eleven (11) drainage projects.

The proposed 5-year TRA CIP Program is approximately 131 million dollars which will include raw water intake, raw water transmission improvements, treatment plant update, and treated safe drinking water high service transmission improvements.

Lesson Learned

The Elkins Lake development was started in 1969, when the population of Huntsville was slightly over 17,000. During the 1960's and '70's, the Elkins Lake development and Municipal Utility District were outside the City of Huntsville city limits and had little review of individual subdivision plats and associated construction until annexed by the City of Huntsville in 1980, eleven years later. This annexation was based on a petition for annexation submitted by the residents and property owners of Elkins Lake.

The Woods at Elkins Lake subdivision plat was submitted in calendar year 2023. There was inadequate capacity, in the downstream storm sewer system from the proposed development, to allow the proposed subdivision to connect to the existing storm sewer system.

The ensuing process of evaluation of the downstream storm sewer situation with the developer, his engineer, the Planning Commission, and the City Council provided many technical and policy lessons learned in this unusual situation. The evaluation of the actual alignment and condition of the downstream stormwater system was even more revealing.