

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: June 22, 2021

Item Details

Presenter(s): Michael Deaton, Water Resources Director

Department(s): Water Resources

Requested Motion

Motion to approve Capital Project Ordinance Amendment 2021-18 utilizing funds in the FY 2020-2021 operating budget for Water & Sewer Capital Projects

Approval Recommended?

Yes

Item Details

Funding comes from a transfer from Capital Outlay in the FY 2020-2021 operating budget for the following projects:

Inflow and Infiltration Sewer Rehab Project - \$500,000

Infiltration is groundwater that enters sanitary sewer systems through cracks and/or leaks in the sanitary sewer pipes. Cracks or leaks in sanitary sewer pipes or manholes may be caused by age related deterioration, loose joints, poor design, installation or maintenance errors, damage or root infiltration. Apex has approximately 18,000 LF of Clay pipe left in the system that has not been relined, 123 manholes in need of some form of rehabilitation, and 600 sewer services to replace or rehab. Infiltration/Inflow (I/I) causes dilution in sanitary sewers. Dilution of sewage decreases the efficiency of treatment, and may cause sewage volumes to exceed design capacity.

James Street Sewer - \$230,000

During a recent sidewalk extension project, it was found that the existing sewer along James Street near Markham Street was only a 4-inch pipe (minimum size by regulation is 8-inch) and was buried mere inches below the ground surface. The sewer pipe, if left alone, would be in the middle of the concrete for the new sidewalk. The pipe in question is near a dead end and only has two existing sewer services on it. Multiple options were evaluated to relocate the existing sewer, with the only viable route being to run south along the creek, parallel to Markham Street and connect to the existing sewer near the Apex Mobile Home Park. Survey and Environmental consultants were contracted to perform appropriate work in the area so that the sewer relocation could be designed in-house.

Dogwood Ridge Stream Stabilization - \$250,000

During a recent inspection of the sanitary sewer easement running behind Pendula Path and Big Leaf Loop in the Dogwood Ridge subdivision, it was discovered that the existing stream channel has left its original banks and is eroding a new channel directly on top of the existing sanitary sewer line. The new channel is approximately 4' deep in some areas and is about 1' from exposing the existing PVC pipe. The active erosion is +/- 300' in length and is progressing towards the existing manhole. Excessive rain events this winter and spring have accelerated the erosion process. An on-site meeting with the US Army Corps of Engineers determined that the new channel is considered to be a perennial stream. A consultant was contracted for survey, permitting, and stream stabilization design in order to properly stabilize the new stream channel to ultimately protect the sanitary sewer line from exposure and damage.

Attachments

- Capital Project Ordinance Amendment 2021-18

