



To: Lisa Henty, Budget and Management Services
From: Martha Zeigler, Department of Water Management
Date: November 12, 2015
RE: 3708 Danube Proposed Annexation

OVERALL IMPACT:

The Department of Water Management sets rates and fees to recover operational costs and to provide current and future infrastructure necessary to supply water and wastewater for the City and surrounding service area. Any revenues not expended on operations and maintenance are accumulated to provide funding, including debt service, required to repair, rehabilitate, replace, and/or expand capacity of infrastructure and do not impact the General Fund or tax rates.

The operational expenditures may be considered short term operating. The long-term or life-cycle expenditures for this and any other project may be reasonably determined by contributions to capital improvement projects from both rates and one-time capital facility fees which cover not only repair and maintenance for the pipe in the ground contributed by the developer, but also include all the other connecting infrastructure as well as the treatment plants that provide water and sewer treatment services.

Any changes in short and long-term life cycle costs will be managed by adjusting rates and facility fees based on actual performance data. The anticipated impact on the Department from this annexation of one property is immaterial.

NET CONTRIBUTION TO WATER AND WASTEWATER CIP

YEAR	INSIDE	OUTSIDE
FY2015-16	\$3,241	\$3,752
FY2016-17	\$166	\$748
FY2017-18	\$183	\$768
FY2018-19	\$188	\$789
FY2019-20	\$194	\$811
FY2020-21	\$199	\$833
FY2021-22	\$204	\$856
FY2022-23	\$210	\$880
FY2023-24	\$222	\$904
FY2024-25	\$228	\$929

ADDITIONAL REVENUE:

The City would receive one-time revenues from Capital Facility Fees paid to connect to the City Water and Sewer System. These fees would be deposited into the CIP program but would not be material.

**COSTS BEYOND THE BUILDOUT TIMEFRAME:**

This property is within the Eno sanitary sewer basin where capital improvements to the sewer system need to be constructed. The preliminary cost for construction is estimated at \$11,000,000. The Department anticipates that it will be another four years before the capital project(s) are completed. However, Public Works and Water Management performed the utility impact analysis for the utility extension agreement and have determined that the existing City of Durham water and sanitary sewer mains have capacity to serve the single-family residence.

There are no other anticipated significant cost, revenue, or regulatory issues associated with this particular development or area.

METHODOLOGY AND DATA SOURCES:

To calculate revenues, the average consumption for the City's residential customers was used, along with the assumption of 5/8" meters.

The percentage of operational costs versus capital costs was estimated based on factors in the rate model used by the Department.

These calculations are based on the determination by Public Works that these properties are in a basin where the City will be providing water and sewer services.

IMPACTS ON EFFICIENCY AND EFFECTIVENESS:

As new infrastructure, the initial impact will be an increase in efficiency as there will be little repair and maintenance cost. However, this will change as the infrastructure ages. The annual recalibration of water and sewer rates based on anticipated operational and capital needs is anticipated to be able to accommodate this project without noticeable adverse impact on level of service or rates.

OTHER RELEVANT CONCERN:

None known.