

## 2400 Lake Park Drive

### Water and Sewer Impact Statement

#### *Water Impact Statement:*

This project site has access to public water service through both a 12” water main within the Cobb Parkway (US41) right-of-way and an 8” water main in the Lake Park Drive right-of-way. The estimated additional water use for the project is as follows: If one assumes 85 gallons per day per person, and the proposed development includes a total of 341 bedrooms, with an assumed average of 1.5 people per bedroom, the result is an estimated use of 43,477.50 gallons per day ( $85 \times 341 \times 1.5$ ). Per discussions with the City of Smyrna Public Works Department, the city has the capacity to serve the proposed development without issue. As the City of Smyrna purchases water from the Cobb County – Marietta Water Authority (CCMWA), which is the second largest supplier of drinking water in the state, this added use should have minimal impact on the overall water supply system.

#### *Sanitary Sewer Impact Statement:*

This project site has access to public sanitary sewer service—a 24” sewer line passes through the property. Attached is a copy of our calculations for estimated sanitary sewer use by the project, which shows that this project will add an estimated daily flow of 53,275 gallons into the sewer system, which results in an added instantaneous peak flow of 5,449 gallons per hour (92 gallons per minute) for the peak demand hour. Sewer treatment for projects in the City of Smyrna is provided by a partnership with the Cobb County Water System. Per discussions with the City of Smyrna Public Works Department, the city has the capacity to serve the proposed development without issue and this project should have little impact on the overall sanitary sewer conveyance and treatment systems.

**Kevin Hendrix, PE, LEED AP**  
**Associate Principal | Director of Civil Engineering**



**SEWER CAPACITY CALCULATIONS**

The following sewer demand calculations are for the proposed development at 2400 Lake Park Drive, Smyrna 30080. These calculations are based on Gwinnett County Gravity Sewer Design Flow Calculations Guidelines, Table A.2. The 288,376 S.F. (total gross area) proposed building will be an apartment complex with units which are studios or have one or two bedrooms. The existing office building sewage demand is not included in these calculations. An assumed peaking factor of 2.5 is used in instantaneous peak flow calculations.

## Proposed Daily Flow

- a. 1 Br. Apartments

$$213 \text{ Units} * \frac{175 \text{ GPD}}{\text{Units}} = 37,275 \text{ GPD}$$

- b. 2 Br. Apartments

$$64 \text{ Units} * \frac{250 \text{ GPD}}{\text{Units}} = 16,000 \text{ GPD.}$$

Proposed Total Usage = 53,275 GPD; Instantaneous Peak Flow = 5,449 GPH = 92 GPM

Assumed Peak Factor of (2.5)

Consequently, this project will have an estimated daily flow of 53,275 gallons and an instantaneous peak flow of 5,449 gallons per hour (92 gallons per minute) for the peak demand hour.

Please do not hesitate to contact me with any questions or concerns.



Kevin Hendrix, PE  
Director of Civil Engineering