



Preliminary Water and Sewer Capacity Analysis

Alta Smyrna Rezoning_
3200 Highland Parkway

Date: 5-7-2025

The project site has access to public water and sanitary sewer service. Per the Cobb County Water Service. Water service is available through an existing 8-inch water main that runs along Highlands Parkway. The sanitary sewer service is available in one of two locations: at the northwest corner of the site or at the southwest corner of the site along Highlands Parkway.

The total proposed unit count for apartments is 250 units with a preliminary distribution of 40% 1-bedroom, 55% 2-bedroom and 15% 3-bedroom units. Additionally, the ground floor will contain 2,500 SF of retail space.

Preliminary calculations indicate that the residential will generate 55,900 Gallons Per Day (GPD) with a peak flow (3.0 peaking factor) of 116.5 Gallons Per Minute (GPM). The retail is calculated to generate 275 GPD with a peak flow of 34.4 GPM. Water demand for the development will be roughly 56,000 GPD.

Attached to this letter are preliminary calculations for water and sewer demand based on residential unit count and proposed retail size. These numbers will be finalized and submitted to the Cobb County Water System and City of Smyrna for capacity approval prior to submitting a land disturbance permit.

Sincerely,

Neil Schaap, P.E., CFM

Planners and Engineers Collaborative

350 Research Court, Peachtree Corners, GA 30092

Main Office: 770-451-2741 | Direct Line: 678-684-6248 | Fax: 770-451-3915

Sanitary Sewer Capacity Calculations

Residential Homes/Apartments: 175 GPD / 250 GPD/ 325 GPD per Unit

1. Proposed Average Daily Flow Calculations:

250 Townhome Units

Residential

a. 1 Bedroom Units

$$\begin{aligned} & \mathbf{100} \text{ Units} \times 175 \text{ GPD/Unit} \\ & = \mathbf{17,500 \text{ GPD}} \end{aligned}$$

b. 2 Bedroom Units

$$\begin{aligned} & \mathbf{138} \text{ Units} \times 250 \text{ GPD/Unit} \\ & = \mathbf{34,500 \text{ GPD}} \end{aligned}$$

c. 3 Bedroom Units

$$\begin{aligned} & \mathbf{12} \text{ Units} \times 325 \text{ GPD/Unit} \\ & = \mathbf{3,900 \text{ GPD}} \end{aligned}$$

d. 4 Bedroom Units

$$\begin{aligned} & \mathbf{0} \text{ Units} \times 250 \text{ GPD/Unit} \\ & = \mathbf{0 \text{ GPD}} \end{aligned}$$

$$\text{Proposed Average Daily Flow} = \frac{55,900 \text{ GPD}}{= 38.82 \text{ GPM}}$$

2. Proposed Peak Flow Calculations:

3.00 Peaking Factor

$$\begin{aligned} & 55,900 \text{ GPD} \times 3.00 \\ & = \mathbf{167,700 \text{ GPD}} \end{aligned}$$

Proposed

$$\text{Peak Flow} = \frac{167,700 \text{ GPD}}{= 116.46 \text{ GPM}}$$

6987.50 GPH

Sanitary Sewer Capacity Calculations

Retail/Shopping/Mercantile: 100 GPD/1,000 SF

1. Proposed Average Daily Flow Calculations:

2500 Retail

Retail

$$2,500 \text{ SF} \times 110 \text{ GPD}/1000 \text{ SF}$$

$$= 275 \text{ GPD}$$

$$= 0.19 \text{ GPM}$$

$$\text{Proposed Average Daily Flow} = \underline{275 \text{ GPD}}$$

2. Proposed Peak Flow Calculations:

3.00 Peaking Factor

$$275 \text{ GPD} \times 3.00$$

$$= 825 \text{ GPD}$$

$$\text{Proposed Peak Flow} = \underline{825 \text{ GPD}}$$

$$= 34.38 \text{ GPH}$$



COBB COUNTY WATER SYSTEM

Customer Services Facility
660 South Cobb Drive
Marietta, Georgia 30060-3105
770-423-1000
www.cobbwater.org

Judy B. Jones, P.E.
Director

Divisions
Business Services
Customer Services
Engineering & Records
Stormwater Management
System Maintenance
Water Protection

May 7, 2025

Re: Proposed 250-unit multifamily development
+/- 6.73 acres, Land Lot 681, 17th District
Nickajack Creek Basin, South Cobb WRF

To Whom It May Concern:

Current Cobb County policy is to provide wastewater treatment capacity for approved zonings. CCWS will be able to provide capacity for your approved zoning classification with the following stipulations as set forth by the Cobb County Board of Commissioners:

→The developer has 150 days from this date to present plans for review and approval. Water and sewer fees must be paid and construction started within 90 days after plan approval.

→Should you fail to meet this stipulation, this letter of allocation is invalid and you must reapply to this department for capacity. No preference will be given and your request will be placed at the bottom of the request list.

→This letter is only valid for the project referenced. It is non-renewable, non-transferable, non-extendible and does not guarantee that sewer lines are at the site. Upgrades to existing water distribution and wastewater collection facilities may be required of the Developer if the demands of this proposal exceed the capacity limits of our existing or proposed facilities.

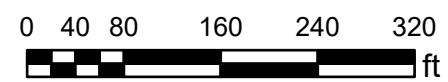
Water is available via an existing 8-inch water main on Highlands Pkwy. A passing fire flow test will be required prior to approval of construction plans by this department.

Sincerely,

COBB COUNTY WATER SYSTEM

Chris Duggan

Christopher Duggan
Plan Review Engineer
Engineering & Records Division



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