

September 13, 2018

Mr. Ray Burger, Director of Planning  
Town of Dryden  
93 E. Main Street  
Dryden, NY 13053

**Re: Updated Wastewater Needs  
Townhomes at Dryden project**

Dear Mr. Burger:

Per our conference call with you and T. G. Miller on August 23, 2018, please find attached the updated wastewater and domestic water demands for the Townhomes at Dryden. As discussed and agreed, in the conference call, we will be using 76 gpd for each bedroom. The 76 gpd per bedroom is typically what T.G. Miller has been seeing as the rate for apartments in the Town of Dryden area. More specifically, this is the current rate they are seeing from the Maplewood Apartments. It was also discussed that going with the 110 gpd per bedroom, which is the apartment rate, would be too high for this project based on the nature of the uses. We also spoke with the New York State DEC and they agreed that using local rates is a better indication of the actual uses.

In addition to the residential demand, we have also added in the demand for the retail and clubhouse portions of the project. The retail is assumed to be a 40-seat coffee shop with 9 employees per day (5 for the morning shift and 4 for the evening shift). We feel this coffee shop scenario will yield the greatest possible demand of water and sewer usage for the allowed uses. For the Pool and Clubhouse, we assumed that the Clubhouse will only be used by the residences, so their demands are calculated as part of the residential demand. For a Swimming Pool, the NYSDEC only gives a demand based on the number of swimmers. The assumed maximum occupancy of the pool is 25 swimmers. Even though the pool will strictly be used by the residences, we feel this demand would be a conservative amount for general maintenance of the pool. We have also assumed 5 employees per day to manage the clubhouse and the property.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

HUNT ENGINEERS, ARCHITECTS, LAND SURVEYORS & LANDSCAPE ARCHITECT, DPC



Michael B. Keith, P.E.  
Civil Manager - Rochester

enc.

cc: Dondi Harner; T.G. Miller  
John Shields III; HUN

Calculate proposed domestic and wastewater project needs:  
 Project is comprised of Residential and Restaurant Uses

**Residential (Apartments/Townhomes) Use**

Design Unit: **per bedroom (one person per bedroom due to proposed operation model)**  
 Design Flow: **76 GPD per person (Based on information from the Town of Dryden)**

Project proposes to lease 1, 2, 3 and 4-bedroom units.

Number of Units: 219 Units  
 Number of Bedrooms: 602 Bedrooms X 76 GPD/Person = 45,752 gpd

**Restaurant Use**

Design Unit: **per table + per employees**  
 Design Flow: **25 GPD per seat (based on a fast food restaurant)**  
**15 GPD per employees**

Project proposes 40 seat coffee shop, bakery or similar use with 2-shifts of 4.5 employees each shift

Number of seats: 40 Seats X 25 GPD/seat = 1,000 gpd  
 Number of employee shifts: 9 Employees X 15 GPD/employee = 135 gpd  
**Subtotal for Retail = 1,135 gpd**

**Pool and Clubhouse**

Design Unit: **per swimmer + per employees**  
 Design Flow: **10 GPD per swimmer**  
**15 GPD per employees**

Project proposes 40 seat coffee shop, bakery or similar use with 2-shifts of 4.5 employees each.

Number of seats: 25 Swimmers X 10 GPD/swimmer = 250 gpd  
 Number of employee shifts: 5 Employee Shifts X 15 GPD/employee = 75 gpd  
**Subtotal for Retail = 325 gpd**

Calculate Total Design Average Flow for Project:

**47,212 gpd**

Calculate Design Peak Hourly Flow Rate: Assume that design flow occurs over 16 hour period.

Therefore, **TOTAL DESIGN AVG FLOW/16 hours = 2,951 gph**