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November 27, 2018

Mr. John Gunn, Chairman  
City of Beacon Planning Board  
1 Municipal Center  
Beacon, NY 12508

Re: 234 Main Street  
Site Plan and I&I Study  
Beacon, NY

Dear Chairman Gunn:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has been retained to perform an Inflow and Infiltration (I&I) study at the above reference project in response to Lanc & Tully's November 6, 2018 comment letter, and previous comment letters with regard to water & wastewater generation rates.

The existing building formerly contained a pharmacy on the bottom floor. The gross floor area is 3,245 sqft. The proposed use will consist of retail on the bottom floor, and office space on the proposed second floor. It is anticipated that there will be eleven (11) employees within the office space. For the purpose of proposed water and wastewater generation rates, fifteen (15) employees will be used for potential future expansion. The NYS Design Standards for Intermediate Sized Wastewater Treatment Systems (2014) handbook is used for calculating existing and proposed hydraulic loading rates. The following tables show a comparison of existing water and wastewater generation rates compared to proposed rates:

Existing water and wastewater quantities for the project are based on the following:

Flow Component	# of Units	Flow Rate per Unit - gallons per day (gpd)	Total Component Flow (gpd)
Pharmacy	3,245 sqft	0.1	324.5

**Total Flow with 20% reduction for Water Saving Fixtures:**

**259.6 gpd**

2018 water and wastewater quantities for the project are based on the following:

Flow Component	# of Units	Flow Rate per Unit - gallons per day (gpd)	Total Component Flow (gpd)
Retail	3,245	0.1	324.5
Office Space	15	15	225

Total Flow: 549.5 gpd

**Total Flow with 20% Reduction for Water Saving Fixtures: 439.6 gpd**

Based upon the water and wastewater generation rate calculations, the proposed use will result in a 109.9 gpd increase of water usage and wastewater generation.

A preliminary I&I study has been conducted on the exterior of the building. No roof leaders were visible on the exterior of the building during the investigation. There are also no drainage structures within the vicinity of the building along Main Street, or within the parking lot to the east of the building. Therefore, it is assumed that the roof leaders are internal. We have not been able to access the interior of the building but expect to be able to access the building in the next day or so. This office will follow up with a full I&I report after the interior inspection is completed.

We look forward to further discussing the project with you at your next available planning board meeting. Should you have any questions or require additional information, please feel free to call me at 845-440-6926.

Sincerely,



Michael A. Bodendorf, P.E.  
Principal

cc: Aryeh Siegel, AIA  
Daniel G. Koehler, P.E. (HLD File)