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April 25, 2017

Mr. Jay Sheers, Chairman City of Beacon Planning Board 1 Municipal Center Beacon, NY 12508

Re: Infiltration and Inflow Investigation

Edgewater

22 Edgewater Place and 8 Branch Street

City of Beacon, New York

Dear Mr. Jay Sheers,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on April 21, 2017 at the existing building at 22 Edgewater Place, which consists of a two-story brick façade building; and an existing two-story colonial residence located at 8 Branch Street.

The existing building at 22 Edgewater Place faces Edgewater Place on the Northwestern side of the road. The existing residence on Branch Street, faces Branch Street, and is located on the northern side of the road.

The first phase of the study consisted of an exterior inspection of both buildings to determine the location of roof leader discharge points. The two-story building at 22 Edgewater Place has a "Hip" roof consisting of multiple hips and ridges. The eastern half of the residence has a gutter system that collects and conveys the runoff to two downspouts and then discharges it easterly (to the front of the residence) towards Edgewater Place. The southern side of the building has a gutter system that conveys water to a downspout that discharges it southerly, to the side yard. The northern side of the building has a gutter system that conveys water to two downspouts which discharge northerly towards Thompkins Avenue. Lastly, the western side of the residence does not have a gutter system, so rainwater flows off the roof and into the rear yard.

The two-story residence at 8 Branch Street also has a "Hip" roof. Rainwater from the southern hip flows into a gutter and is conveyed to two downspouts which discharge the

flow towards Branch Street, flowing downhill. The northern side of the building has a gutter system that collects rainwater and discharges it into the rear yard via one downspout. The eastern side of the residence collects rainwater in a gutter system and discharges it to the side yard on the eastern side of the building via two downspouts. Lastly, the western side of the residence collects rainwater from the hipped roof. One downspout was observed on the western side of the residence which flows to the westerly side yard over the asphalt driveway,

The second phase of the study consisted of interior inspection of both buildings in an attempt to determine if there are any illicit connections to the building sewer line from sump pumps, floor drains and the like. HLD personnel were able to observe sections of interior sanitary sewer plumbing, at the residence at 22 Edgewater Place, to the point where the piping was routed through the easterly foundation wall of the residence (located generally in the middle of the eastern side of the building). The pipe reputedly collects the wastewater from the residence and then flows southeasterly towards a sewer manhole within Bank Street. HLD observed a clean-out in the basement on the interior sanitary sewer plumbing along the eastern foundation wall of the residence. At no point along the length of the visible portion of the line did HLD personnel observe any discharges other than from the standard plumbed fixtures. In addition, there were no sump pumps or floor drains observed, nor were there any unidentified pipes that connected to the line beneath the basement floor. The residence of 8 Branch Street is built on a slab.

A sanitary sewer line from the residence was determined to flow out of the southern foundation wall, generally at the middle of the foundation wall. The sewer line was observed to flow towards Branch Street's sanitary sewer collection system. Two cleanouts were observed in the front yard of the existing residence, heading south towards Branch Street. At no point along the length of the visible portion of the line did HLD personnel observe any discharges other than from the standard plumbed fixtures. In addition, there were no sump pumps or floor drains observed, nor were there any unidentified pipes that connected to the line beneath the basement floor at the Branch Street residence.

The sewer line connections at both residences are proposed to have a three-foot section removed and then capped to prevent any flow into the municipal sewer system after the existing buildings are removed. One other sewer service line was shown on the survey of the parcel. The origin of the sewer line is reputed, but the same procedure will be followed for the reputed sewer line, as followed for the lines from 22 Edgewater Place and 8 Branch Street. All sewer lines remaining upstream from the capped line will be abandoned in place, in accordance with standard procedure.

Based on our observations, HLD does not believe that there are any illicit connections from the buildings located at 22 Edgewater Place or 8 Branch Street to the City of Beacon's sanitary sewer collection system. However, it should be noted that elimination of the existing sewer lines on site may reduce I&I into the Beacon system.

Should you have any questions or comments, please feel free to call Hudson Land Design at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E. Principal

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cc: Rodney Weber (via email <u>rodney@weberprojectsllc.com</u>)
Jon D. Bodendorf, P.E. (HLD file)

