



Civil & Environmental Engineering Consultants
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December 31, 2019

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

Re: Infiltration and Inflow Investigation
160 Rombout Avenue: Subdivision
Tax ID: 5954-35-853796 (± 0.34 Acres Total)
City of Beacon, New York

Dear Chairman Gunn,

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 December 24, 2019 at the existing residence located at 160 Rombout Avenue, which consists of a two-story framed building.

The first phase of the study consisted of an exterior inspection of the building to determine the location of roof leader discharge points. The two-story building has a combination of a "gable" and "hipped" roof with one gable running north to south and the hip roof in the rear of the residence, along with one covered porch. The western gable collects and conveys runoff from half of the roof to one downspout and then discharges it northerly (to the rear of the residence) to the existing driveway surface. The eastern portion of the gable roof has one roof leader which collects and conveys runoff to a downspout which discharges easterly to the existing blacktop surface. The hip roof has two roof leader downspouts which split the runoff from the rear of the residence. One roof leader conveys all runoff from the eastern portion of the hip roof and discharges it to the existing grass surface to the east, while the second half of the hip roof has a roof leader that goes underground in the rear of the structure. The outlet of this roof leader could not be determined in the field. There does not appear to be storm drainage along S. Brett Street; therefore upon construction of the single-family residence on Lot 2, the underground roof leader shall be disconnected and re-routed to surface flow to prevent any potential inflow and infiltration into the City of Beacon's Sanitary Sewer System.

The second phase of the study consisted of interior inspection of the building 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 to the point where the piping was routed through the southern foundation wall of the residence (located generally in the center of the building). The pipe reputedly collects the wastewater from the residence and then flows southerly toward Rombout Avenue's sanitary sewer collection system. HLD observed a clean-out in the basement on the interior sanitary sewer plumbing along the southern 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. There were no sump pumps, floor drains, or unidentified pipes observed during the inspection.

Based on our observations, HLD does not believe that there are any illicit connections from the building located at 160 Rombout Avenue to the City of Beacon's sanitary sewer collection system, although the one downspout leading underground could potentially lead to the City's system and will be disconnected.

Should you have any questions, please feel free to call me at 845-440-6926.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel G. Koehler". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Daniel G. Koehler, P.E.

cc: Karen Cantamessa (via email)
Michael A. Bodendorf, P.E. (HLD file)

