

CODE ENFORCEMENT OFFICER  
Town of Cape Vincent

July 27, 2021

Edward Bender  
Town of Cape Vincent, Supervisor

Dear Supervisor Bender,

As you may know New York State establishes minimum standards for the design and construction of private, on-site septic systems. These standards have been compiled in the New York Code of Rules and Regulations, specifically at 10 NYCRR, Chapter 2, Part 75 entitled Standards for Individual Water Supply and Individual Sewage Treatment Systems. The regulations, among other things, establish (1) the minimum size for septic absorption (leach) fields [§75-A.8], (2) minimum separation distances for the various septic system components from lot lines and wetlands, bodies of water and waterways [§75-A.4(b)], and (3) minimum separation distances between the various septic system components and dwellings, other structures and private, on-site wells [§75-A.4(b)]. The size and design of absorption fields are based primarily on the number of bedrooms contained in the dwelling and the percolation rate of the soils on the property. Other considerations that can and do constrain the design and siting of septic systems are the locations of the structures, driveways and trees on the parcels and the topography. Considering the aforementioned requirements, the average single family household requires approximately 0.25 acres to construct a properly installed private system.

I have recently reviewed Town assessment records relating to properties within the service area for the proposed Town of Cape Vincent Sanitary Sewer District Project. Although I am well acquainted with the area and know that it contains many small lots; a review of the lot dimensions contained in the assessment records enabled me to quantify the number of small parcels within the service area. Based on my findings, I was able to determine that approximately 36 percent of the total number of parcels in the proposed Town of Cape Vincent Sanitary Sewer District are situated on lots that are so small (<0.25 acres) that the septic systems serving these parcels do not meet the minimum standards for septic systems set forth in 10 NYCRR, Chapter 2, Part 75. In most of these cases, the lots are too small to accommodate a septic system designed to current standards and still satisfy the setback minimum requirements from lot lines and/or the embayment. The septic systems serving these properties are therefore deficient. In addition, many of the lots in this area would not be able to accommodate an expansion of an existing leach field that would be necessary to repair the on-site septic systems.

I have also coordinated with the Town's engineering firm Barton & Loguidice, D.P.C. (B&L) to evaluate the soils present within the proposed sewer district, as well as the existing surface water features. B&L's analysis found that the overwhelming majority of the proposed sewer district area is comprised of hydrologic soils in Groups C/D and D, which are known poorly draining soils. These soils generally do not allow adequate percolation and absorption rates for a properly functioning absorption field. Furthermore, the analysis concluded that large portions of the proposed sewer district area is occupied by water surface features (streams, lakes, wetlands, etc.) with a 100-foot buffer applied around all features. To meet separation requirements as identified in 10 NYCRR, Chapter 2, Part 75, absorption

fields must be at least 100-feet from any surface water features. The abundance of surface water features in the proposed sewer district makes it increasingly difficult to install an on-site private septic system to appropriately protect surface water features, which includes and ultimately reach the St. Lawrence River. B&L has prepared a series of figures to graphically represent the abundance of restrictive soils and presence of surface water features throughout the proposed sewer district.

In view of the small lots, 10 NYCRR, Chapter 2, Part 75 standards requirements, and presence of poorly draining soils and abundant surface water features throughout the proposed sewer district area, the only means for the safe disposal of human waste in the proposed sewer district is through the construction of a public sewer system. A public sewer system constructed to serve this area would effectively eliminate the existing deficiencies and would help protect the public health of area residents.

Please let me know if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Cody Higgins". The signature is fluid and cursive, with a prominent initial "C" and a long, sweeping tail.

Town of Cape Vincent, Code Enforcement Officer  
Cody Higgins  
315-654-3795

