Conclusion/Recommendation

River & Kirtland Street Area Expansion

In the early 1980s, the Deep River Water Pollution Control Authority, in conjunction with the Deep River Inland Wetland Commission, the Deep River Planning and Zoning Commission as well as the Connecticut River Estuary Regional Planning Agency, commissioned a detailed soil survey of the Town of Deep River. This survey delineated the composition of soils in the various neighborhoods in town. From the standpoint of this presentation, it made known the suitability of the soil utilized in the post septic tank leaching area.

The soil ratings used in the survey, as determined by the U.S. Soil Conservation Service consists of 3 degrees of limitation:

Slight Limitations: Areas rated as slight have very few limitations in terms of suitability for septic tank leaching.

Moderate Limitations: In areas rated moderate, it is relatively more difficult and costly to overcome the natural limitations of the soil for septic tank leaching.

Severe Limitations: Areas having severe limitations require more costly measures as the soil may have more than one limiting characteristic i.e. high water table, clay, bedrock, nearby excessive sloping, tidal marsh influence etc.. Areas with this rating are generally not suitable for the efficient treatment of septic tank effluent.

As shown on the attached map, the River & Kirtland Street area is rated as having severe soil limitations. A theory as to why this area, that is rated severe, was not completed in the initial phase may be that the complexity of installation, due in part to high groundwater and ledge, made this area the most costly to install and was therefore pared from the initial (1988) project.

The Deep River Water Pollution Control Authority has the responsibility for the planning and implementation of water pollution control abatement. With that being said, the Authority has examined the viability of alternative solutions to meet this challenge.

Conclusion/Recommendation

River & Kirtland Street Area Expansion

Non-Sewering Alternatives: A Non-Sewering option such as rehabilitation of existing sub-surface septic systems was examined. The topography, the existence of individual residential drinking water wells; and generally small lot sizes pose public health concerns. In addition, the non-sewering alternative places an additional burden on municipal officials who would oversee the compliance of private residential wastewater treatment systems.

Low-Pressure Sewer Options: This option utilizes individual pumps at each residence or business which pump to a small diameter pipe. These systems require very installation minimal depth, resulting in much less excavation. The drawback to this system is that in the event of a pump failure or power outage, it is conceivable that a multi-level home may experience a backup of sewage on the lower levels.

Recommendation: Authority members concurred that connecting these properties via gravity to the existing gravity sanitary sewer system is the most practical solution to this challenge.