



# NH ROUTE 4 SEWER & WATER EXTENSION

## Enfield, NH

### CLIENT

Town of Enfield, NH

### LOCATION

Enfield, NH

### COST

Estimated Construction Cost: \$3 Million

### DESCRIPTION

CLD was retained to undertake a feasibility study and design to explore numerous site and subsurface challenges within the service area, while providing flexible alternative designs to maximize the future sewer expansion potential.



During completion of the preliminary design, several sewer and water system layouts were produced including gravity and pumping alternatives. Designs were determined from critical elevation control points at culvert and stream crossings, analyzing sewer loading factors and anticipated flows, and utilizing design standards according to New Hampshire Department of Transportation, New Hampshire Department of Environmental Services, and Town requirements. Detailed budgetary cost estimates were also generated for each alternative.

The proposed alternative is now in the final permitting stage and consists of the construction of a municipal sewer extension along  $\pm 5,000$  feet of US Route 4 and  $\pm 500$  feet of McConnell Road. This area of Enfield has been designated under a Tax Increment Financing (TIF) District to be the intended location for much of the future growth and development in the Town. Existing homes and businesses along this corridor have either individual subsurface leaching systems or holding tanks. Results from a sanitary survey sent to the owners' shows that at least five of the existing systems are either in failure and or are in poor condition.

A stratified drift aquifer crosses the project area and supplies four gravel packed municipal wells. These wells are the primary water sources for the Town of Enfield municipal water supply. Any wastewater leaching system situated over an aquifer that supplies drinking water poses a risk to water quality. This project will eliminate the potential for contamination of the public drinking water supply and local surface waters by eliminating all of the septic systems in the project area. This benefit will be provided with the addition of a gravity collection system on Route 4 and McConnell Road. The collection system will direct sewage to a pump station near the intersection of McConnell and Route 4. The pump station will send sewage by force main to a manhole on Shedd Street where it will be sent to the Lebanon Wastewater Treatment Facility. The proposed system will allow residents with substandard wastewater systems to connect to the municipal system.

- Sewer Design
- Water System Design
- Survey
- NHDES Permitting

This project included permitting and approvals from NHDES Wetlands Bureau, NHDES Wastewater Engineering Bureau, and NHDOT. CLD created project specific technical specifications and provided the appropriate contract documents. We assisted the Town with an application for State-Aid-Grant funding through NHDES.