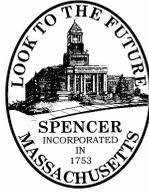


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SUPERINTENDENT

## **SANITARY SEWER SYSTEM EXTENSION AND/OR CONNECTION(S) REQUIREMENTS**

(Version 1)

### **PROJECT PLANNING PHASE**

During the Project Planning Phase (prior to commencing with the design of a proposed sewer line extension, connection or planned increase in wastewater flows to the Spencer Sanitary Sewer System), prepare and submit a written request to the Spencer Sewer Commission (SSC) complete with: prospective Sewer Permit Applicant name, address, telephone, fax e-mail address; a plan showing the location of the existing/proposed lot, existing/proposed connection(s) and/or sewer extension and proposed development; state the number of units, bedrooms, seats (apartments, residential, commercial, etc.) proposed; the type of wastewater (municipal, industrial, commercial, etc.) to be discharged; and the anticipated wastewater capacity (gallons/day and peak flow, if applicable) need or increase. Based on the information submitted, the Spencer Sewer Commission will request the prospective Sewer Permit Applicant meet with the Commission and Town Sewer Department staff to discuss the Project.

### **EXISTING SANITARY SEWER SYSTEM CAPACITY AND INFLOW AND INFILTRATION**

Toward that end, the Spencer Sewer Commission (SSC) may require a potential Sewer Permit Applicant, requesting capacity for a new sewer service extension and/or sewer system connection(s) for a development or additional capacity to an existing connection, to assist the Commission in determining the impact the additional wastewater flow from the sanitary sewer extension and/or connection(s) will have on the existing Spencer Sanitary Sewer System.

The Spencer Sewer Commission conducted a system wide Inflow/Infiltration (I/I) Study in 1990 that identified areas of minor, moderate and severe I/I. The Study also identified areas of capacity deficiencies within the sewer system and areas that needed additional investigation. Toward that end, and based on the information submitted, the SSC may require a potential Sewer Permit Applicant, requesting capacity for a new sewer service extension and/or sewer system connection(s) for a development or additional capacity to an existing connection, to assist the Commission in determining the impact the additional wastewater flow from the sanitary sewer extension and/or connection(s) will have on the existing Spencer Sanitary Sewer System.

If the Commission does request assistance, the assistance will be in the form of a field survey of a reach of the sanitary sewer system from the point(s) of the proposed sanitary sewer extension and/or connection(s) to a point on the sanitary sewer downstream identified by the SSC. The assistance will also include a fee equal to that of the SSC's Engineer's fee to conduct a limited modeling evaluation of the Spencer Sewer System to determine: the existing sewer system capacity; the adequacy of the existing sewer line to accommodate the additional wastewater flows; bottlenecks at manholes; sewer segments (sewer lines between manholes) that require correction in order to accommodate existing and proposed capacity; and locations for I/I removal and applicable I/I removal credits.

As an example of the field study, starting at the connection (assume Sta. of 0+00) and using an assumed starting elevation of 1000.00 at the closest upstream manhole, the Applicant will need to provide, within the reach specified by the SSC, the following sanitary sewer system data needs: MH rim elevation, depth to concrete/brick trough; sanitary sewer upstream and downstream invert; length of sewer line between MHs; and confirm pipe size and material. The Spencer Sewer Department has MH inspection reports with sewer system pipe sizes and material.

The Spencer Sewer Commission will need the station and elevation sent to SSC's Engineer electronically along with a .DWG CAD layout drawing of the sanitary sewer field survey. The SSC's Engineer will use the system information and infiltration data to model the system, determine system capacity and bottlenecks and areas that require correction actions in order to accommodate requested capacity. The SSC's Engineer will report their findings to the SSC.

An infiltration/inflow "Sewer Bank" has been established by the Spencer Sewer Commission to address and make needed municipal sewer system improvements to eliminate I/I. The sewer system capacity gained (credits) by implementing the rehabilitation and removal programs is accumulated in the "Sewer Bank." The Sewer Bank will be administered by the Wastewater Treatment Plant/ Sewer Department Superintendent or anyone empowered by the Commission. In general, I/I removal credits, for a new sewer service extension and/or sewer system connection(s) for a development or additional capacity to an existing connection, are calculated based on the value of the additional wastewater capacity request times 4.

Based on the results of the evaluation, the SSC's may have the prospective Sewer Permit Applicant make a cash contribution per gallon of calculated I/I removal credit to the Sewer Bank to help fund SSC sponsored I/I evaluations and rehab/removal programs. The SSC's may also request, as a condition of the Sewer Permit, the prospective Sewer Permit Applicant to provide direct assist in removing I/I by designing, bidding and constructing replacement sewers and manholes, to attached SSC's Standards, identified in the evaluation, prior to commencing with his/her private development.

Attached for your use are the following:

- Information on the **Sewer Bank** established by the Spencer Sewer Commission;

- Copies of applicable **Sewer Permit Applications/Agreements;**
- **Sanitary Sewer and Force Main Material, Construction and Testing Specifications;**
- **Sanitary Sewer Construction Inspection and Testing Forms;**  
and
- A copy of **MADEP's Sewer Connections/Extensions Forms.**