

1. Brief History & Timeline of the Chelmsford Sewer Project

Initial awareness of wastewater disposal issues in Chelmsford dates back to the 1960s. Between 1966 and 1980, the town was cited numerous times for violations of the Clean Water Act, culminating in a March 11, 1980 Consent Judgement establishing an implementation schedule for completion of a Facilities Plan for Wastewater Management. The initial plan was completed in 1986, establishing a phased program to sewer "targeted needs areas" of the town.

Sewer construction commenced in 1987 and the first public sewers were approved for use in 1989. Finally, the residents of Chelmsford were witnessing the beginning of a process designed to:

1. Eliminate ground water and surface water pollution;
2. Protect our drinking water supply;
3. Eliminate severe septic system problems due to shallow bedrock, poor soils, and/or high ground water conditions; and
4. Provide sewers to homes with septic systems that can't be repaired to meet minimum state and local requirements.

The summer of 1999 marked the start of construction for the final phase of the initial project. The originally envisioned project (1986) was to provide sewer service to approximately 68% of Chelmsford. This work comprised Phases 1-3. When construction commenced in East Chelmsford in late 1998, the originally envisioned project was nearing completion. However, triggered by changes to the state sanitary code (Title 5) in 1995, Chelmsford voters subsequently approved Phase 4 to serve the remaining 32% of Chelmsford. By the end of the calendar year 2010, the entire town will be fronted by active sewer lines, thereby providing all properties with the ability to connect to the municipal system.

Overall Sewer System Description

The final constructed system will include the following:

Pipe Length:	190 miles (including gravity, force main, and low-pressure sewers)
Pipe Diameter:	2 to 27 inches
Pump Stations:	41 (Including two main custom pump stations – one at Katrina Road and one at Southwell Field)
Residential	550

Grinder Pumps:	
Construction Contracts:	41
Properties Fronted:	11,800
Design Flow:	2.66 mgd (average daily)
Treatment Facility:	Lowell Regional Wastewater Utility

Project Costs/Funding

Total Costs:	\$165,000,000
Grants Received:	\$20M
Total Local Share:	\$145M
Low Interest SRF Loans:	\$72M
Total Tax Rate Debt:	\$98M
Total Betterments Collected:	\$26M
Debt Recovered with User Rates:	\$21M

2. History of Support for the Project

In 1984, 1987, 1989, and 1996, the town of Chelmsford approved town meeting articles and separate referendum ballot questions that authorized funding for various portions of the town-wide sewer project. In 2003, 2004, and 2008 the Town authorized the transfer of a certain amount of funds from the Sewer Betterment Special Revenue Account to pay for the capital cost of constructing sewers. The 2008 vote also authorized the use of funds accumulated in the Sewer Enterprise Fund through an increase to the Sewer User Charges.

Town Meeting Votes

Town Meeting	Article	Amount	Approval
May 1984	30	\$1.0M	YES – 361 NO - 16
May 1984	31	\$8.9M	YES Unanimous
May 1987	21	\$7.1M	YES Unanimous
November 1987	8	\$3.9M	YES Unanimous
April 1989	8	\$39.0M	YES Unanimous
April 1996	15	\$49.0m	YES – 147 NO -

			2
October 2003	13	\$5.0M	YES Show of Hands 2/3's vote rule
October 2004	11	\$16.5M	YES Show of Hands 2/3's vote rule
June 2008	1	\$16M	YES Show of Hands 2/3's vote rule
	TOTAL	\$146.4M	

As you will note from the above table, support for the project has been overwhelming. The first town meeting article in 1984 passed 361 to 16. Every subsequent vote through 1989 passed unanimously, including the large appropriation in 1989 of \$39 million. The town meeting article in 1996 for \$49 million passed 147 to 2. The 2003, 2004, and 2008 articles for the transfer of funds from the Sewer Betterment Special Revenue Account to pay for the capital cost of constructing sewers passed easily by a show of hands with an obvious 2/3's vote rule and no need for a hand count.

Support for the project was further solidified when Chelmsford voters went to the polls. On four separate occasions, Chelmsford voters authorized Proposition 2 ½ exemptions. The voters consistently supported the sewer project by approximately 2 to 1 margins in 1984, 1987, and 1989. In 1996, voters supported the sewer project by more than a 3 to 1 margin.

3. State/Federal Funding & Measures to Minimize Local Costs

Since the early 1980's when the Commission began planning for this project, the highest priority was to minimize local costs by aggressively pursuing, and then maximizing, all possible state and/or federal aid available. Through aggressive lobbying, and through submission of stacks of documentation justifying "Need" each fiscal year, Chelmsford has been extremely successful in obtaining assistance. More than 50% of the \$165 million construction costs have been funded through state or federal grant/loan programs, the majority of which has come through the State Revolving Loan Fund Program (SRF), thereby reducing overall project costs. Most recently, the town qualified for stimulus funding through the SRF program under the American Recovery and Reinvestment Act of 2009. This resulted in approximately \$1.5M in grants and a \$12M SRF low interest loan for the final two contracts on the project.

Other Methods to Minimize Local Costs

Maximizing available funding is not the only method being used to reduce the local costs. We have entered into agreements with private developers to extend sewerage to areas at no cost to the tax payers. As an example, over two miles of sewers were extended on Littleton Road, serving that corridor, and eliminating the septic system

problems and water quality problems in the Chelmsford Trailer Park. This project would have cost the town approximately \$2 million. In addition, each home and business that is fronted by the sewer must pay a betterment assessment to offset the capital cost of construction, thereby reducing the tax burden.

4. Revenue Sources

There are two main sources of our revenues. The first is Betterments and Privilege Fees. The second is License Fees, Connection Permit Fees, and User Fees.

Betterments or Privilege Fees are assessed to properties that have been "improved" by municipal sewerage. The single-family residential betterment is currently \$6,000. This assessment can be paid in full or may be apportioned over 20 years.

A Privilege Fee is assessed to those properties that can't be assessed a Betterment but still are "improved," usually because they extended sewers on their own to reach the municipal sewer system. The Betterment and Privilege Fees collected are used to assist in retiring the local share debt of the sewer project.

The remaining fees are administered through the sewer enterprise fund and are used to pay for the operation and maintenance costs of the system. The current user fee is \$3.42 per 1,000 gallons.

5. Impact on Tax Rate

The overall project costs not covered by State or Federal assistance or Betterments and Privilege Fees are covered through taxes. As we stated earlier, these costs are exempt from Proposition 2 ½ as a result of four separate ballot questions.

The average tax increase has varied over the course of the entire project but at no point has it exceeded the agreed upon cap of \$2.10 per \$1,000 valuation.

6. In Closing

The residents of Chelmsford have made a unified commitment to protect our groundwater and drinking water supply and to clean the waters of the Commonwealth. We are aware of the frustrations some residents have felt and the inconveniences many residents have tolerated, and continue to tolerate, from sewer construction operations. We ask these residents to be patient. Please remember, we are here to work with you, and the long-term benefits of this project are what is most important. We hope this information is helpful, and we will continue our commitment to the tax payers of Chelmsford to complete the project while minimizing local costs.

Betterments:

A sewer betterment assessment is a tax that can be assessed by municipalities to properties that have been "bettered" by the construction of a public sewer. Service by a public sewer is an improvement over on-site wastewater disposal (i.e. septic systems, etc.). Therefore, when a municipality constructs public sewers, the value of those properties abutting the sewer line are said to have been improved or "bettered".

In Massachusetts, sewer betterments are governed by Chapters 80 and 83 (excluding Sections 1 and 2 of Chapter 80) and are under the jurisdiction of the Department of Revenue. Local rules and regulations must be formally adopted by a community through a vote of Town Meeting (See Article 3, Special Town Meeting September, 1986). Sewer betterment assessments are monies intended to pay back all or a portion of the debt service of the "local share" of the sewer construction and associated engineering capital costs. There are two (2) basic methods for calculating sewer betterment assessments the "fixed uniform rate" method and the "uniform unit" method.

Chelmsford approved the "uniform unit" method which defines each property as a number of "sewer units" and divided the assessment costs by the total number of sewer units included in the project. A "sewer unit" is defined as a single family residence. Therefore, a two-family residence would be equal to two (2) sewer units, three-family to three (3) sewer units, etc. Commercial, industrial and vacant properties are calculated into "single family equivalents" to include them in the assessment. Typically, this is done by calculating average water usage for developed properties and by determining intensity of future use, zoning and developable area for undeveloped properties. For example, a sewer unit for non-residential, developed properties are defined as being equivalent to 300 gallons per day of average water consumption. Therefore, a commercial property which historically has an average meter use of 600 gpd would be calculated as 2 sewer units. An acceptable method of converting undeveloped property into sewer units would be to calculate the number of potential developable dwelling units based on zoning and available lot area.

The sewer betterment assessment is a one time tax that can be paid in one lump sum or apportioned up to a maximum of twenty (20) years. The assessing body can establish a set period of time for the apportionment (which may simplify the billing process over allowing the property owners to choose a time period) Apportioned assessments can be charged interest at one rate of five (5) percent per year or up to two (2) percent higher than the rate of borrowing used to fund the sewer project. Chelmsford's interest rate is presently 5%.

The initial billing is sent by the Assessors in a notice separate from the property tax bill. Each property owner shall be given thirty (30) days in which to pay in full with no interest. Those property owners who do not pay within this time can have their assessments apportioned with interest added each year on the unpaid balance. The annual apportionments are added to the property tax bill. A lien is placed on the properties electing to apportion the assessment over time. A lien is created by recording the listing

of unpaid betterments at the Middlesex North District Registry of Deeds. This filing entitles the Town with the appropriate mechanism to assess and collect the sewer betterment. The lien is discharged when the assessment is paid in full or will expire automatically two years after the final payment is made.

The sewer betterment assessments for the first phase of sewerage in Chelmsford were levied in August of 1989 and the cost per sewer unit was \$1,250.00. After forty subsequent contracts of the Sewer Project have been levied, the most recent per unit cost is set at \$6,000.00. The town-wide sewerage project is designed to protect the public drinking water supply for the entire town and therefore a portion of the sewer project costs are added to the general tax rate. The sewer betterment program is administered by the Chelmsford Sewer Commission.

The timing of the assessment of betterments usually coincides with the project's completion. However, sewers do not necessarily have to be on line prior to issuing the assessments. Once the costs to be included are known and the construction is complete enough that the improvement is imminent, sewer betterments can be issued. The Massachusetts Department of Revenue states "a sewer is a public work of such permanent character that its discontinuance is unlikely and therefore, it is the construction of the sewer and the potential for sewer service that increases the value or use of abutting or nearby properties, not the actual connection'.

Sewer "betterments" are only assessed to properties abutting public sewer lines. There are other properties that may also receive benefit from these facilities' for example, developments connecting through private easements or through private sewer extensions. Chelmsford has established provision in their local rules and regulations to include these properties in the calculation for capital cost recoupment. This is accomplished by imposing privilege fees and compensatory privilege fees. These fees are calculated as the sewer betterments would have been if the property abutted the public sewer line. Payment of these fees is required at the time of connection to the public sewer system and is generally not apportioned.

Abatements and Deferrals under Massachusetts General Laws (Chapter 80, Section 5) establish a timetable within which grievances and requests for abatements must be filed. A property owner must file a petition for abatement within six (6) months after the assessment notices have been sent. The Sewer Commission has four (4) months to act on the petition and then must notify the owner within ten (10) days of making their decision whether the request was granted or denied. A Deferral of betterment principal and interest can be granted to eligible property owners who are receiving deferral of their property taxes Under Chapter 59, Section 5, Clause 41A from the Chelmsford Board of Assessors. When a complete deferral is granted, the sewer betterment assessment is postponed until property ownership is transferred, at which time, the original principal, plus interest, is due and payable in full. Another type of deferral is allowed on vacant, undeveloped property. If this deferral is granted, the property owner must pay a 4% interest charge annually and pay the principal, in full, within 3 months after the land is built on.

Impact of Title V:

In March of 1995, changes to the State Sanitary Code (Title V) require each homeowner to have his/her septic system inspected when they sell their house. In 1995, the Chelmsford septic system inspection failure rate was 35% and the average septic system repair cost was \$20,000.00.

Advantages of connection to public sewer system:

Average cost of connection to sewer system is approximately \$2,500 - \$4,000 for connection.

- ♦ Drinking water protection...Failing and inadequate septic systems allow partially or untreated wastewater to reach our groundwater which is the source of 100% of our drinking water.
- ♦ Surface water protection...Those same failing and inadequate septic systems pollute our streams and ponds and contribute nutrients that choke ponds and lakes with weeds.
- ♦ Relief from costly Title 5 Septic System Repairs.
- ♦ Sustained Property Values...According to Chelmsford Realtors a home is worth more and is easier to sell if it has the availability of public sewers.
- ♦ Incentive for economic growth...In the 1990's multiple businesses relocated to Chelmsford and the commercial/industrial vacancy rate has steadily declined to below 10%. Many of these industries were attracted by the availability of public sewers. The resulting economic and tax benefits for the town, although difficult to quantify, have been significant.
- ♦ High bond ratings...The sewer project's substantial, yet stable debt retirement schedule, combined with an efficient betterment assessment revenue program, has made Chelmsford municipal bonds attractive to investors. As a result, Chelmsford has benefited from excellent bond ratings and lower borrowing costs.

HOW TO CONNECT TO THE PUBLIC SEWER

A 6-inch sewer stub has be left for each property serviced by the public sewer line (a copy of the stub location is available at the Sewer Commission Office. It is the reponsibility of the homeowner to make the connection to the line installed in the street. Once you have been notified that the sewer line in front of your property has been approved to accept flow, you may start the following procedures to connect to the line.

SAFETY PLUMBING INSPECTION

Please call (978) 250-5262 to schedule an appointment.

Once the Safety Plumbing Inspection is completed you should hire a Sewer Installer from the list of approved contractors.

[LICENSED SEWER INSTALLER](#)

Safety Plumbing Inspections:

A SAFETY PLUMBING INSPECTION must be done of the property before any connection to the sewer system. This inspection is done by the Town's Safety Plumbing Inspector, Jack Kobelenz. The inspector must make a home inspection to determine if the plumbing for the existing septic system and washing machine drywell can be connected to the sewer line without any plumbing changes to the property. The inspector is also checking the property for any plumbing code violations. If any violations are discovered, they must be corrected before connection. External water, such as sump pumps, etc. are not allowed to be connected to the public sewer

To schedule a SAFETY PLUMBING INSPECTION, please call (978) 244-3362

INSPECTION FEES: INCLUDED IN SEWER PERMIT FEE, UNLESS OTHERWISE SPECIFIED.

SEWER USER RATE INCREASE IN CHELMSFORD

Effective July 1, 2010

Fiscal 2011 Sewer Rates
(Per \$1,000 gallons)

Residential - \$3.02

Commercial - \$3.63

Industrial - \$3.96

Capital Construction Fee
\$1.05 cents per thousand gallons

Minimum bill - \$40.50

Well water rate - \$94.60

Sewer User Fees are billed every six (6) months. The usage is based on water reading obtained from the East, North and Center Water Districts.

If you have a question regarding your bill, please call the Sewer Office at 978-250-5233.