Littleton Water Department
SEWER USE RULES AND REGULATIONS
Adopted June 30, 2021

TOWN OF LITTLETON

SEWER USE RULES AND REGULATIONS

Pursuant to provisions of Massachusetts General Laws Chapter 83, Section 10, the Town of Littleton hereby establishes the following sewer use rules and regulations (Regulations) governing the use of the wastewater collection system of the Town of Littleton.

Be it enacted by the Board of Water Commissioners acting in their role as the Board of Sewer Commissioners of the Town of Littleton, Commonwealth of Massachusetts as follows:

Table of Contents

Appendices

Article 1 – General Provisions

Section 1 – Purpose

The purpose of these Rules and Regulations are:

1. To establish the technical and administrative procedures for making connections to the sanitary sewer system including standards of materials and design;

2. To establish requirements, restrictions, and controls on the quantities and quality of what may be discharged to the sanitary sewer system; including discharges that may:

    a. Interfere with the operation of the sewer system, pumping station or publicly owned treatment works ("POTW") in any way;

    b. Pass through the POTW, to the groundwaters, inadequately treated effluent that may cause contravention of standards for these waters or surface waters or cause violation of the POTW's Groundwater Discharge Permit ("GWDP") or negatively impact the watershed into which treated effluent is recharged;

    c. Reduce the opportunity to reclaim or recycle treated wastewater and/or sludge from the system; or

    d. Endanger municipal employees or the public

3. To prevent new sources of inflow and infiltration ("I/I") and eliminate private source inflow;

4. To provide for equitable distribution to all users of the POTW, all costs associated with the collection, conveyance, treatment, recharge and residuals disposal, and to provide for the collection of such costs; and

5. To provide for the orderly planning of the sewer, treatment and recharge systems as necessary for the public health and convenience, and to improve the environment and economic quality of the Town's resources.

Section 2 - Authority

These Rules and Regulations are adopted pursuant to the provisions of Chapter 279 of the Acts of 2020 of the Commonwealth of Massachusetts (copy included in Appendix B), "An Act Establishing the Littleton Common Smart Sewer District in the Town of Littleton (the "Smart Sewer Act")". Under the Smart Sewer Act, the Littleton Board of Water Commissions shall function as the Littleton Sewer Commissioners (the "Board of Commissioners") under M.G.L. c. 83, subject to the provisions of the Smart Sewer Act, and shall adopt rules and regulations for access to and use of the wastewater system, among other things, including establishing fees for betterments, sewer connection fees, user fees, and other charges, which system shall be placed under the supervision of the General Manager of the Littleton Water Department.

Section 3 - Definitions

Unless the context specifically indicates otherwise, the meaning of terms used in these Rules and Regulations shall be as follows:

Section 3.1

The "Act" shall mean the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251, *et seq*., and the regulations promulgated thereunder, as amended from time to time.

Section 3.2

"Applicant" shall mean any person requesting approval to discharge wastewaters into a public sewer or POTW.

Section 3.3

"As-Built Drawings" shall mean detailed drawings prepared upon completion of the Public Sewer sealed by the Design Engineer if requested, which show actual construction and field dimensions, elevations, details, changes made to the construction drawings by modification, details which were not included on the construction drawings, and horizontal and vertical locations of underground utilities, which have been impacted by the utility installation. A photograph (preferably digital), of the site, is to be submitted with the drawings.

Section 3.4

"A.S.T.M." shall mean the American Society for Testing and Materials.

Section 3.5

"Board of Commissioners" shall mean the Littleton Board of Water Commissioners serving as the Littleton Sewer Commissioners.

Section 3.6

"BOD" (Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures in five (5) days at 20 degrees centigrade, expressed in milligrams per liter (mg/l). It is a measure used to assess the strength of wastewater.

Section 3.7

"Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer. The building drain ends at the building sewer which begins five feet (5') or one and one-half (1.5) meters outside the inner face of the building's wall.

Section 3.8

"Building Sewer" shall mean the extension from the building drain, five feet (5') or one and one-half (1.5) meters outside the inner face of the building's wall, to the public sewer or other place of disposal.

Section 3.9

"Chapter 279 of the Acts of 2020" establishes the sewer system known as the Littleton common smart sewer division. The division shall be under the supervision and control of the board of water commissioners, who shall be the sewer commissioners of the town of Littleton.

Section 3.10

"COD" Chemical Oxygen Demand shall mean a quantitative measure of the amount of oxygen required for the chemical oxidation of carbonaceous (organic) matter in wastewater using inorganic dichromate or permanganate salts as oxidants in a two (2) hour test.

Section 3.11

"Combined Sewer" shall mean a sewer receiving both surface runoff water and sanitary sewerage.

Section 3.12

"Common Sewer Connection" shall mean a sewer connection that serves two or more properties, all of which are eligible for service.

Section 3.13

"Department of Environmental Protection", or "DEP" shall mean the Massachusetts Department of Environmental Protection or, where appropriate, a duly authorized official of said agency.

Section 3.14

"Domestic Source" shall mean any residence, building, structure, facility, or installation from which there is or may be discharged to the POTW only sanitary sewage, in an amount less than two thousand (2,000) gallons per day, as determined in accordance with the Sewage Flow Estimates published at 314 C.M.R. §7.15, which are incorporated herein by reference.

Section 3.15

"Domestic Wastes" shall mean the liquid wastes (A) from the non-commercial preparation, cooling and handling of food or (B) containing human excrement and similar matter from the sanitary conveniences of dwellings, commercial buildings, industrial facilities and/or institutions.

Section 3.16

"Environmental Protection Agency", or "EPA" shall mean the United States Environmental Protection Agency, or, where appropriate, the Administrator or other duly authorized official of said Agency.

Section 3.17

"Excessive" shall mean amounts or concentrations of a constituent of wastewater which in the judgment of the Board of Commissioners (A) will cause damage to any Town facility; (B) will be harmful to a wastewater treatment process; (C) cannot be removed in the POTW to the degree required to meet the discharge permit; (D) may otherwise endanger public health or safety or public or private property; or (E) may be contrary to the public convenience and necessity.

Section 3.18

"Garbage" shall mean solid wastes from the domestic or commercial handling, storage, preparation, cooking, and dispensing or sale of produce.

Section 3.19

"General Manager" shall mean the General Manager of the Littleton Water Department who is responsible for supervision of the Sewer Division or a person appointed by the General Manager who is vested with the authority and responsibility for the implementation and enforcement of these rules and regulations or his authorized deputy, agent, or representative.

Section 3.20

"Grab Sample" shall mean an individual sample, which is taken from a waste stream on a one-time basis without regard to the flow in the waste stream and without consideration of time.

Section 3.21

"Hauler" shall mean any person who contracts for the pumping, transport, and disposal of septage.

Section 3.22

"Indirect Discharge" shall mean the discharge or the introduction into the POTW of pollutants from any source, other than a Domestic Source.

Section 3.23

"Industrial User" shall mean a source of Indirect Discharge, and any source which discharges two thousand (2,000) or more gallons per day of sanitary sewage to the POTW.

Section 3.24

"Industrial Wastes" shall mean any water carried or liquid wastes resulting from any process or industrial manufacturing processes, trade, business, or activity listed in 310 CMR 15.004.

Section 3.25

"Infiltration" shall mean the water other than wastewater entering a sewer system, including service connections, from the ground or a water body, through such means as, but not limited to, defective pipes, pipe joint connections or manhole walls.

Section 3.26

"Inflow" shall mean the water other than wastewater that enters a sewer system, including service connections, from such sources as, but not limited to, swimming pools, roof leaders, sump pumps, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm drains and combined sewers, catch basins, storm waters, surface runoff, or drainage.

Section 3.27

"Interference" shall mean A discharge which, alone or in conjunction with discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge

processes, use or disposal and which is a cause of a violation of any requirement of the Littleton Water Department's NPDES Permit (including an increase in the magnitude or duration of a violation), or of the prevention of sewage sludge use or disposal by the POTW in accordance with applicable federal, state, or local statutes and regulations or permits issued thereunder, as set forth in 40 C.F.R. §403.3(i).

Section 3.28

"Licensed Utility Installer" or "L.U.I." shall mean a person who upon submitting a License and Permit Bond, Certificate of Insurance, and pays the Utility Installer's License fee, all of which are approved by the General Manager , is permitted to perform the installation of Sanitary Sewers or Building Sewers.

Section 3.29

"Local Discharge Limit" shall mean a specific discharge limit developed and enforced by the Littleton Water Department upon industrial and commercial facilities to implement the general and specific discharge prohibition listed in Article 3 of these Rules and Regulations.

Section 3.30

"Natural Outlet" shall mean any outlet into a watercourse, pond, lake, or other body of surface ground water.

Section 3.31

"NPDES" shall mean National Pollutant Discharge Elimination System.

Section 3.32

"Pass Through" shall mean the discharge of pollutants through the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the Town's NPDES Permit (including an increase in the magnitude or duration of a violation).

Section 3.33

"Person" shall mean any individual, partnership, co-partnership, firm, company, corporation, association, joint venture, joint stock company, trust, estate, governmental entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

Section 3.34

"pH" shall mean the logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

Section 3.35

"Plumbing Code" shall mean the existing rules and regulations enforced through the Littleton plumbing inspector. Such rules and regulations shall conform to the Commonwealth of Massachusetts Regulations (248 CMR) concerning Fuel Gas and Plumbing Codes.

Section 3.36

"Pretreatment"shall mean the reduction in the amount of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW. The reduction or alteration can be obtained by physical, chemical or biological processes, process changes or by other means.

Section 3.37

"Pretreatment Standards or Requirements" shall mean any substantive or procedural requirement related to pretreatment, other than a National Pretreatment Standard, imposed on an Industrial User.

Section 3.38

"Private Wastewater Collection, Treatment, and Disposal Facilities" or "Private Sewer" shall mean any system, not owned and/or controlled by the Littleton Water Department , used for the collection, treatment, and disposal of wastewater from one or more properties.

Section 3.39

"Properly Shredded Garbage" shall mean the wastes from the preparation, cooking, and dispensing and sale of food that has been shredded to such a degree that all particles will be carried freely under the conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.

Section 3.40

"Public property" shall mean land, right-of way, or easement owned or controlled by the Town, the Commonwealth of Massachusetts or any department, district or political subdivision thereof, or the United States..

Section 3.41

"Public Sewer" shall mean the system of common sewers in public or private ways, pumping stations, force mains, smart sewer technology and other components.

Section 3.42

"Publicly Owned Treatment Works or POTW" shall mean the Town-owned wastewater treatment plant which also includes all piping and facilities associated with the recharge/disposal of treated effluent and sewerage sludge.

Section 3.43

"Road Opening Permit" shall mean a permit for work performed within public way issued by the Department of Public Works.

Section 3.44

"Rules and Regulations" shall mean the latest edition of the Town of Littleton Sewer Use Rules and Regulations.

Section 3.45

“Septage” shall mean the liquid and solid wastes of sanitary sewage origin that are removed from a cesspool, septic tank or similar on-site wastewater disposal system.

Section 3.46

“Sewerage” shall mean a combination of the water-carrying wastes from residences, business buildings, institutions, and industrial establishments, together with such materials, surface waters, and storm waters as may be present. The preferred term is wastewater.

Section 3.47

“Slug” shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds, for any period of duration, longer than fifteen (15) minutes, more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

Section 3.48

“Standard Methods” shall mean an assembly of analytical techniques and descriptions commonly accepted in water and wastewater treatment as found in the most recent edition of "Standard Methods for the Examination of Water and Wastewater," published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation.

Section 3.49

“Storm Drain” shall mean a sewer which carries storm, surface, and drainage waters, but excludes wastewater and industrial wastes, other than unpolluted cooling water.

Section 3.50

“Suspended Solids” shall mean solids that either float on the surface of, or are in suspension in water, wastewater, or other liquids, and which are removable by laboratory filtering.

Section 3.51

“Title 5 Flow” shall mean the design flow of sanitary sewerage from a building or buildings as defined by 310 CMR 15.00, Title 5: Minimum Requirements for the Subsurface Disposal of Sanitary Sewage.

Section 3.52

“Town” shall mean the Town of Littleton, Massachusetts.

Section 3.53

“User” **s**hall mean any Person owning or operating a facility discharging sanitary sewerage, septage or industrial wastewater directly or indirectly into a Town sanitary sewer.

Section 3.54

“Wastewater” shall mean the liquid and water-carried industrial, non-domestic or domestic wastes, including sewerage, industrial wastes, other wastes, or any combination thereof, from

dwellings, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water and stormwater that may be present.

Section 3.55

"Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.

Section 3.56

Abbreviations:

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
COD	Carbonaceous Oxygen Demand
DEP	Department of Environmental Protection
EPA	Environmental Protection Agency
TSS	Total Suspended Solids

Article 2 - Use of Public Sewers

Section 1 – Discharge of Unpolluted Water Prohibited

No Person shall discharge or cause to be discharged any stormwater, surface water, ground water, roof runoff water, subsurface drainage water, uncontaminated cooling water or unpolluted industrial waters to any Public Sewer.

Section 2 – Drainage of Stormwater

Stormwater and all other unpolluted drainage waters shall be discharged to such systems as are specifically designated as storm drains or to a natural outlet as approved by the Town Conservation Commission, Director of the Department of Public Works, and/or the DEP or EPA. Any such discharge may be subject also to an NPDES permit. It shall be the responsibility of the originator of the discharge to obtain all required permits.

Section 3 – Owner Responsibility

Cleaning, maintaining, and repairing of building sewers, from the building to the property line at the street, shall be done at the expense of the owner, provided there is a manhole or cleanout at the property line. If there is no manhole or cleanout at the property line, the owner shall be responsible for the building sewer from the building to the Public Sewer.

Section 4 – Decisions of the Board

If any waters or wastes are discharged, or are proposed to be discharged to the Public Sewers, which contain the substances or possess the characteristics enumerated in Section 2 of Article 3, and which in the judgment of the General Manager may have a deleterious effect upon the POTW, processes, equipment, or receiving waters or which otherwise pose a threat to public health, safety or property or are contrary to the public convenience and necessity, the General Manager may:

1. Reject the wastes.

1. Require pretreatment to an acceptable condition before discharge to the Public Sewers.

2. Require control over the quantities and rates of discharge and/or

3. Require payment of fees to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges.

If the General Manager permits the pretreatment or equalization of waste flows, the design and installation of the pretreatment facility and equipment shall be subject to the review and approval of the General Manager and subject to the requirements of all applicable laws and regulations.

Section 5 – Grease, Oil and Sand Interceptors

Grease, oil, and sand interceptors shall be provided when, in the opinion of the General Manager they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of the type and capacity approved by the General Manager and shall be located as to be readily and easily accessible for cleaning and inspection. Grease interceptors shall be installed in the building sewer serving restaurants or hotels, boarding houses that prepare and serve food or business of a similar nature. Maintenance, operation, and repair of all installed interceptors shall be at the expense of the owner and subject to the inspection by the General Manager or other duly authorized representatives of the Littleton Water Department.

Grease traps may be inspected monthly, for the months in use, by the Littleton Water Department. However, the owner shall submit on a quarterly basis to the Littleton Water Department reports that the grease traps are being inspected at least monthly as part of a regular maintenance program and pumped regularly based on usage. As a minimum, grease traps shall be cleaned by a licensed septage hauler whenever the level of grease is 25% of the effective depth of the trap or at least every three months whichever is sooner. Facility owners/operators are responsible for all associated costs of pumping and maintaining their grease traps. This also includes costs associate with any system blockages that result from a grease trap not being properly maintained. Facility owners/operators shall be responsible for notifying the Littleton Water Department of extended periods of time (one [1] month or more) when the grease trap is not in use (i.e., the facility will be closed) to avoid being inspected and billed for those months.

Following pumping of a grease trap, the grease trap shall be filled with water to a point above the discharge pipe.

Section 6 – Control Manhole

The owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances, as determined by the General Manager, in the building sewer to facilitate observation, sampling, and measurement of wastes. Such manhole shall be accessible and safely located, and shall be constructed in accordance with plans approved by the General Manager. The manhole shall be installed by the owner at the owner's expense and shall be maintained by the owner so as to be safe and accessible at all times to the Littleton Water Department.

Section 7 – Sampling

All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association and the provisions of 40 CFR, Part 136, and shall be determined from suitable samples taken at the control manholes provided. In the event that no special manhole has been provided, the control manhole shall be determined by the General Manager. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the POTW and to determine the existence of hazards to health and property. (The particular analyses

involved will determine whether a twenty-four (24) hour composite of all discharges of a premise is appropriate or whether a grab sample for samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all discharges, whereas pH's are determined from periodic grab samples or continuous monitors).

Section 8 – Agreement between Littleton Water Department and Industry

No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the Littleton Water Department and any industrial operation whereby any waste of unusual strength or character may be accepted by the Littleton Water Department for treatment, subject to payment therefore, provided that such agreements do not contravene any requirements of existing federal, state, or local laws and/or regulations, and are compatible with any user charge and industrial cost recovery system in effect.

Article 3 - Regulation of Wastewater Discharges

Section 1 – General Discharge Prohibitions

No Person may introduce into the POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in Section 2 of this Article apply to each Person introducing pollutants into the POTW, whether or not the Person is subject to other National Pretreatment Standards or any national, state, or local Pretreatment Requirements.

Section 2 – Specific Discharge Prohibitions

Supplementing the provisions of Section 1, above, and not by way of limitation, the following discharges to the POTW are specifically prohibited:

1. Ground, storm, and surface waters, roof runoff, sump pump discharges, subsurface drainage, uncontaminated cooling water, and uncontaminated industrial process waters.

2. Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to create a fire or explosion hazard or be injurious in any other way to the POTW or to the operation of the POTW. Pollutants which may create a fire or explosion hazard include, but are not limited to, waste streams with a closed cup flash-point of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 C.F.R. §261.21. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, fuel oil, crude oil, lubricating oils, any other oils or greases of hydrocarbon or petroleum origin, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, and any other substances which the Littleton Water Department, the General Manager, the DEP or the EPA has notified the Person is a fire hazard or a hazard to the system.

3. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in the Public Sewer or other interference with the proper operation of the POTW such as, but not limited to: grease, garbage with particles greater than one-half inch (1/2") in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, disinfection wipes, spent grains, spent hops, waste paper, wood, plastics, rubber, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud, glass grinding or polishing wastes, fish processing wastes, or fish scales.

4. Any wastewater having a pH less than 6.0 or greater than 8.0, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the POTW.

5. Any waters or wastes containing toxic, poisonous or objectionable pollutants in sufficient quantity or concentration, either singly or by interaction with other pollutants, to injure or interfere with any POTW process, to constitute a hazard to humans or animals, to create a toxic effect in the receiving waters of the POTW, or to exceed the limitations set forth in a National Categorical Pretreatment Standard, the Local Discharge Limitations prescribed herein at Section 5 of this Article, or an Industrial Discharge Permit issued pursuant to these Regulations.

6. Any substances which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity or concentration that may threaten worker health and safety.

7. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges, or scums, to be unsuitable for disposal in a permitted landfill or for reclamation and reuse, or to interfere with the reclamation and reuse, or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria, guidelines, or regulations developed under Section 405 of the Act; or with any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Resource Conservation and Recovery Act, the Clean Air Act, or state law applicable to the sludge management method being used.

8. Any pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which may cause Interference to the POTW.

9. Any Slug Discharge.

10. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.

11. Any wastewater having a temperature which may inhibit biological activity in the POTW resulting in Interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40ºC (104ºF), unless the DEP, upon request of the Littleton Water Department, approves alternate temperature limits.

12. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits necessary to comply with applicable state or federal laws and/or regulations.

13. Any sludges or deposited solids resulting from an industrial pretreatment process, or any inert suspended solids or slurries.

14. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in quantities or concentrations that will cause Interference or Pass Through.

15. Any trucked or hauled pollutants, except at discharge points designated by the General Manager.

16. Any water or waste containing fats, wax, grease, or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150) degrees Farenheit ("F") (0 and 65 degrees Celsius ("C")).

17. Any garbage that has not been properly shredded to a maximum of one half of an inch (1/2"), 1.27 centimeters, in any dimension. The installation and operation of any garbage grinder equipped with a motor three-fourths (3/4) horsepower or greater shall be subject to the review and approval of the General Manager.

18. Any waters or wastes containing phenols or other odor-producing substances in quantities or concentrations exceeding limits, established by the General Manager, as necessary, after treatment of the composite sewerage to meet the requirements of state, federal, or other local public agencies having jurisdiction over POTW's discharge to receiving waters.

19. Any solid, liquid, vapor, or gas having temperature higher than one hundred fifty (150) degrees F (sixty-five (65) degrees C): however, such materials shall not cause the POTW influent temperature to be greater than one hundred four (104) degrees F (forty (40) degrees C). The General Manager reserves the right to prohibit or limit the discharge of wastes whose maximum temperatures are lower than one hundred fifty (150) degrees F (sixty-five (65) degrees C).

20. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.

21. Any waters or wastes containing iron chromium, copper, zinc, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewerage at the POTW exceeds any limits established by EPA or DEP for such material.

22. Materials which exert or cause:

    a. Unusual concentrations of inert suspended solids, such as, but not limited to: fullers earth, lime slurries, and lime residues or of dissolved solids, such as, but not limited to: sodium chloride and sodium sulphate.

    b. Excessive discoloration (such as, but not limited to: dye wastes and vegetable-tanning solutions).

    c. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the POTW.

    d. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein under Article 1, Definitions.

    e. Unusual concentrations of quaternary ammonium compounds or "quats" that can be found in several household products and disinfection products that are used to kill germs.

23. Waters or wastes containing substances which are not amenable to treatment or reduction by the POTW processes employed, or are amenable to treatment only to such degree that the POTW's effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

24. Due to the special nature and environmental needs of the Town and the surface and groundwaters of the Town, no Person shall discharge or cause to be discharged wastewater containing nitrogen and/or phosphorus compounds in a concentration greater than 50 mg/L. Any non-domestic discharges having concentration greater than 50 mg/L shall require a permit from the General Manager. Said permit may include sampling, flow measurement, pretreatment, and/or fees as a condition of permit issuance. Any non-domestic discharge having a BOD or TSS concentration greater than 300 mg/L shall require a special permit from the General Manager. Said permit may include sampling, flow measurement, pretreatment, and/or special fees as a condition of permit issuance.

25. Concentration and/or mass-based limits - No Person shall discharge, directly or indirectly, into the Public Sewer, wastewater containing any of the following substances in concentrations exceeding those specified below on either a daily basis or an instantaneous basis, except by permit. Limits are applicable at the point of exit from a property to the Public Sewer.

POLLUTANT	CONCENTRATION: PARTS PER MILLION (mg/L)
Arsenic as As	0.05
Barium as Ba	5.0
Boron as B	5.0
Cyanides as Cn (amenable)	0.1
Fluoride as F	20
Chromium (total)	1.0
Chromium (Cr+6)	0.1
Magnesium as Mg	100
Manganese as Mn	5.0
Copper as Cu	1.0
Zinc as Zn	1.0
Cadmium	0.07
Lead	0.1

Tin	2.0
Silver	0.1
Mercury	0.01
Nickel	1.0

Note: All metals are to be measured as total metals.

Section 3 – National Categorical Pretreatment Standards

Upon the promulgation of National Categorical Pretreatment Standards for a particular industrial subcategory, the Pretreatment Standard, if more stringent than limitations imposed under these Regulations, shall immediately supersede the limitations imposed under these Regulations for Industrial Users in that subcategory. The General Manager shall attempt to notify all affected Industrial Users of the applicable requirements under the Act; 314 C.M.R. §§2.00, 7.00 and 12.00; and subtitles C and D of the Resource Conservation and Recovery Act, but the failure to provide such notice shall not relieve any Industrial User of its obligations to meet applicable Pretreatment Standards.

Section 4 – Local Discharge Limitations

No Person shall discharge wastewater containing any pollutant specified in this Article 3, Section 2 in excess of the limitations specified for each of said pollutants. An Industrial User's compliance with the provisions of this Section 2 shall be assessed on the basis of samples of the Industrial User's wastewater discharge collected at each point of connection between the Industrial User's building, structure, facility or installation and the POTW. If a National Categorical Pretreatment Standard establishes limitations for Industrial Users in a particular industrial subcategory which are more stringent than the limitations specified in these Rules and Regulations, those more stringent limitations shall immediately apply to those Industrial Users subject to that National Categorical Pretreatment Standard. Compliance with National Categorical Pretreatment Standard limitations shall be assessed in accordance with the requirements set forth at 40 C.F.R §403.12(b)(5).

Section 5 – State Requirements

Requirements and limitations on discharges set by the DEP shall apply in any case where they are more stringent than federal requirements and limitations or those contained in these Rules and Regulations. The individual responsible for operating an Industrial User's Pretreatment System that discharges directly or indirectly to the POTW shall possess the proper operator's license(s) as required by law, including 257 C.M.R. 2.00. No person shall connect to the POTW or construct, effect, modify, or maintain a sewer extension or connection to the POTW, without a sewer connection or extension permit issued by DEP pursuant to M.G.L. c. 21, §43 and 314 C.M.R. 7.00, where such a permit is required. Any Person who must obtain a sewer connection or extension permit from DEP for a connection or extension that will include a discharge of industrial waste to the Public Sewer shall submit a copy of the DEP permit application to the General Manager when he submits the application to DEP.

Section 6 – Dilution Prohibited in Absence of Treatment

Except where expressly authorized to do so by an applicable National Pretreatment Standard or Requirement, no Industrial User shall ever increase the use of process water or in any other way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in any National Pretreatment Standard or Requirement.

Section 7 – Industrial User Pretreatment

Each Industrial User shall provide necessary wastewater treatment as required to comply with these Rules and Regulations, including the Local Discharge Limitations set forth in this Article, and shall achieve compliance with all applicable National Categorical Pretreatment Standards within the time limitations specified by said Standards. Any facilities required to pretreat wastewater to a level which will achieve compliance with these Rules and Regulations shall be provided, operated, and maintained at the Industrial User's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be submitted to the General Manager for review and shall be approved by the General Manager before construction of the facility. Any subsequent changes in the pretreatment facilities or operating procedures shall be reported to the General Manager, and shall be approved by the General Manager, prior to the Industrial User's initiation of the changes. Review and approval of such plans and operating procedures shall not relieve the Industrial User from the responsibility of modifying the facility as necessary to produce an effluent which complies with the provisions of these Rules and Regulations, or from liability for compliance with Pretreatment Standards or Requirements and these Rules and Regulations.

The Littleton Water Department may require any Person that discharges wastewater to the public sewer to complete an Industrial Waste Survey (Appendix C.6) to ensure that proper pretreatment is being done prior to discharge.

Section 8 – Public Participation: Lists of Industrial Users in Significant Noncompliance

All records relating to compliance with applicable Pretreatment Standards and Requirements shall be made available to the General Manager and officials of the EPA or DEP upon request. In addition, pursuant to the public participation requirement of 40 C.F.R Part 25, the Littleton Water Department shall annually publish in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW, a list of Industrial Users which, at any time during the preceding 12 months, were in significant noncompliance with applicable Pretreatment Standards or Requirements.

For purposes of this Section, an Industrial User (or any Industrial User which violates paragraphs (1), (4) or (8) below) is in significant noncompliance if its violation meets one or more of the following criteria:

1. Chronic violations of wastewater discharge limits, defined as those in which 66 percent or more of all measurements taken during a 6-month period exceed (by any magnitude)

a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 40 CFR 403.3(1);

2. Technical Review Criteria (TRC) violations, defined as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 40 CFR 403.3 (1) multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);

3. Any other violation of a pretreatment Standard or Requirement as defined by 40 CFR 403.3(1) (daily maximum, long-term average, instantaneous limit, or narrative standard) that the General Manager determines has caused, alone or in combination with other discharges, Interference or Pass Through (including endangering the health of the POTW personnel or the general public);

4. Any discharge or pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority to halt or prevent such discharge;

5. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in an enforcement order or other requirement for starting construction, completing construction, or attaining final compliance;

6. Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance schedules;

7. Failure to accurately report noncompliance; or

8. Any other violation or group of violations, which may include a violation of Best Management Practices, which the General Manager determines will adversely affect the operation or implementation of the local pretreatment program.

Section 9 – Industrial User Accidental Discharges

Section 9.1 – Plans and Procedures

Each Industrial User shall provide protection from accidental discharge of prohibited materials or other substances regulated by these Rules and Regulations. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or Industrial User's sole expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the General Manager for review, and shall be approved by the General Manager, before construction of any such Industrial User's facility.

All existing Industrial Users shall submit such a plan within ninety (90) days of the effective date of these Rules and Regulations. No Industrial User who commences discharging into the POTW after the effective date of these Rules and Regulations shall introduce pollutants into the system until accidental discharge procedures have been approved by the General Manager. Review and

approval of such plans and operating procedures shall not relieve an Industrial User from the responsibility to modify the Industrial User's facility as necessary to meet the requirements of these Rules and Regulations.

Section 9.2 - Immediate Telephone Notice

In the case of an accidental discharge, the Industrial User shall telephone immediately and notify the General Manager and the POTW of the incident. The notification shall include location of discharge, type of waste, concentration and volume, and any and all corrective actions.

Section 9.3 - Written Notice

Within five (5) days following an accidental discharge, the Industrial User shall submit a detailed written report to the General Manager describing the cause of the discharge and the measures which have been and will be taken by the Industrial User to prevent similar occurrences.

Section 9.4 - Notice to Employees

Each Industrial User shall permanently post a notice on the Industrial User's bulletin board or other prominent place on its premises advising employees whom to call in the event of a dangerous discharge. Employers shall ensure that all employees who may cause or suffer such a dangerous discharge to occur, or who may know or have reason to know thereof, are advised of the emergency notification procedures.

Notification under this regulation shall not relieve the Industrial User of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, fish kills, or any other damage to persons, animals or property; nor shall such notification relieve the Industrial User of any fines, civil penalties, or other liability which may be imposed by these Rules and Regulations or other applicable laws or regulations; nor shall such notification relieve the Industrial User of any obligation to provide notice to other regulatory agencies with jurisdiction under other federal, state, or local laws, regulations, or emergency reporting plans.

Section 10 – Slug Discharge Plans

An Industrial User shall prepare, submit and comply with the provisions of any such Slug Discharge plan which the General Manager determines to be necessary. A Slug Discharge plan shall include, without limitation:

1. a description of discharge practices, including non-routine batch discharges;
2. a description of stored chemicals;
3. procedures for immediately notifying the General Manager of Slug Discharges, including any discharge that would violate a prohibition under 40 C.F.R. §403.5(b), with procedures for follow-up written notification;
4. if necessary, procedures to prevent adverse impact from accidental spills, including those provisions set forth in 40 C.F.R. §403.8(f)(2)(v)(D).

Article 4 – Building Sewers and Connections

Section 1 – Prohibitions

No unauthorized Person shall uncover, make any connections with or opening into, use, alter or disturb any Public Sewer or appurtenance thereof without first obtaining a written permit from the General Manager. Any Person proposing a new discharge into the Public Sewer or a substantial change in the volume or character of pollutants that are being discharged into the Public Sewer shall notify the General Manager in writing, and receive the General Managers' written approval at least ninety (90) days prior to the proposed change in discharge or sewer connection.

No floor drains per Town bylaws shall be tied into the Public Sewer.

Section 2 - Permits

There shall be three (3) classes of Building Sewer permits for: (a) residential and commercial service, (b) service to establishments producing industrial wastes and (c) Private Sewer service. In either case, the owner or his agent shall make application on a special form furnished by the Littleton Water Department. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the General Manager. A permit and all related connection and inspection fees shall be paid at the time the application is filed.

Section 3 – Design and Installation Cost Borne by the Owner

All costs and expenses incident to the design and installation of the connection of the building to the Public Sewer shall be borne by the owner. The owner shall indemnify the Littleton Water Department from any loss or damage that may occur either directly or indirectly or occasioned by the installation or repair of the building sewer.

The connection from the owner's building to the Public Sewer requires plans and specifications to be prepared by either a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian as provided for in 310 C.M.R. 15.220 (1).

Construction of all building sewers shall be performed only by a Licensed Utility Installer approved by the Littleton Water Department.

Any property that has not opted out per Chapter 279 of the Acts of 2020 (Appendix B) and is generating wastewater, where a Public Sewer is available for connection, shall be connected to the Public Sewer within two years of written notification from the Board of Commissioners that the sewer is available, unless the Board of Commissioners determines a different connection schedule following a public hearing. For new construction on a property that has not opted out per Chapter 279 of the Acts of 2020, connection to the Public Sewer shall be completed prior to the issuance of a Certificate of Occupancy issued by the building inspector.

Section 4 – Separate Sewer Connections

A separate and independent Building Sewer shall be provided for every building; except where one building stands at the rear of another on an interior lot and no Private or Public Sewer is available or can be constructed to the rear building through any of the following: an adjoining alley, courtyard, driveway, or easement. If these conditions exist, the Building Sewer from the front building may be extended to the rear building and the whole considered as one Building Sewer.

Section 5 – Existing Sewer Reconnection

Existing Building Sewers may be used to connect new buildings only when they are found, on examination and test, to meet all requirements of these Rules and Regulations and are approved by the General Manager.

Properties with building sewers that will be connected to the Public Sewer from a septic system, a portion of the existing pipe may be used as part of the building lateral to a Public Sewer or to a pumping system only if it meets the requirements in the previous paragraph.

Section 6 – Common Sewer Connection

Common sewer connections should be avoided when possible and should only be utilized when approved by the General Manager. This type of connection would serve two or more properties eligible for connection to the Public Sewer.

Commercial or industrial connections are not eligible for a common sewer connection unless authorized by the General Manager. The owner or owners must demonstrate adequate provisions for the long-term operation and maintenance of the proposed common sewer connection and shall submit a plan indicating such.

The applicant for a common sewer connection shall grant the Littleton Water Department a permanent easement, in a form satisfactory to the Littleton Water Department, and recorded in the Registry of Deeds, giving the Littleton Water Department rights to enter onto the property or properties, and to access, maintain, and repair the sewer connection, and any related equipment including force mains and pumps; and including an obligation running with the land requiring the owner or owners to indemnify the Littleton Water Department for its costs of accessing, maintaining, or repairing the sewer connection and related equipment. Owner(s) and/or applicant shall submit within forty-five (45) days of acceptance of a Common Sewer Connection by the General Manager, the approved easement plan. Approval to begin construction will only be granted upon acceptance of the plan by the General Manager. Should accepted easement plan not be submitted within the noted timeframe, then applicant will be required to reapply and be responsible for all associated fees.

Section 7 – Private Sewer Connection

All proposed and existing Private Sewer extensions connected and discharging to the Public Sewer as of the adoption date of these Rules and Regulations by the Board shall file an Application for Private Sewer to Discharge into the Littleton Water Department's POTW permit (Appendix C.2). Existing Building Sewers shall not be used in connection with new Building

Sewer construction, except by written permission of the General Manager. New Building Sewers shall be connected to the Public Sewer in accordance with 314 CMR 7.00 and the Water Environment Federation (WEF) Manual of Practice No. FD-5. New Building Sewers including all components of the Private Sewer shall be constructed, tested, and accepted by the Board of Commissioners or its authorized representative, in accordance with the requirements of these Rules and Regulations and other applicable Littleton Water Department requirements.

Owners and/or operators of existing Private Sewers that discharge waste to the Public Sewer as of the date of these Rules and Regulations are adopted, will be required to submit the application in Appendix C.2 within 180 days of adoption of these Rules and Regulations. Failure to comply with this requirement may render the owner and/or operator in violation of these Rules and Regulations and subject to penalties and enforcement procedures set forth in Article 8 .

The applicant for a new Private Sewer connection shall demonstrate to the Littleton Water Department adequate provisions for the long-term operations and maintenance of the proposed Private Sewer extension and shall submit an operations and maintenance plan to the General Manager for approval. All costs associated with the operation and maintenance of the Private Sewer shall be the responsibility of the property owner's up until the connection to the Public Sewer.

The applicant of a new or existing Private Sewer shall provide to the General Manager a contact phone number and address for the licensed wastewater operator or firm responsible for operation and/or maintenance. Contact shall be available 24-hours per day in the event of an emergency.

The applicant for a Private Sewer extension connection shall grant to the Littleton Water Department, in a form satisfactory to the Littleton Water Department, rights to enter onto property or properties, and to access the Private Sewer, and any related equipment including force mains and pumping stations.

New Building Sewers that discharge to Private Sewer extensions that will include or may include residential/commercial/non-significant industrial connections, significant industrial users and/or food handling establishments shall complete and submit the applicable required application(s) to connect to the Public Sewer prior to discharge to the Private Sewer extension, in accordance with Section 2 in this Article.

Filing of this permit application and adherence to the requirements stipulated within these Rules and Regulations are required for compliance with the permit in order to discharge or to continue discharging to the Public Sewer. A permit, inspection, and other required fee as determined by the General Manager shall be paid to the Littleton Water Department at the time the application is filed in accordance with the recommended fee schedule presented in Appendix A of these Rules and Regulations.

The owner of the Private Sewer connection shall establish an Immediate Repair and Replacement Account whereby the owner is required to fund and maintain financial assurance via an escrow agreement., for the purpose of funding immediate repair and/or replacement of major mechanical components of a Private Sewer system. The amount to be placed into the account

shall be equal to 25 percent of the estimated construction cost of the major mechanical components as determined by the General Manager (examples include pumping stations, standby power generators, etc.) of the Private Sewer. Documentation that this account is being maintained and the amount in the account shall be provided annually to the Littleton Water Department by January 15th of each year. After a minimum of 10 years connected to the Public Sewer, the owner may seek a reduction from the Littleton Water Department in the amount being maintained in the account. The General Manager shall have the authority to approve or deny the request after reviewing the operation and maintenance history and age of the facilities for that Private Sewer system. The form of escrow agreement that will be required to be executed is attached hereto as Appendix C.7

Section 8 – Licensed Utility Installer (LUI)

Applicants for licenses as Public Sewer or Building Sewer installers shall annually obtain a license from the Littleton Water Department via the application found in Appendix C.5, and shall post a construction bond as defined in Appendix A and show proof of required insurance. Approved LUIs will renew their licenses by January 1st of each year. All LUI licenses expire at midnight on December 31st of each year.

A LUI listed on the approved sewer connection permit shall notify the Littleton Water Department a minimum of 72 hours before the Building Sewer is ready for connection to the Public Sewer. The General Manager will schedule the time and date when an inspector will be available to perform the required inspection as such connection can only be made under the supervision of said inspector or other General Manager designated representative.

The LUI shall pay all debts for labor and materials contracted for or by him on account of the work and shall assume the defense of and indemnify and save harmless the Littleton Water Department and its officers and agents from any claims relating to labor or alleged infringement of inventions, patents, or from injuries to any person or corporation caused by the acts of negligence of the LUI, any of his agents or employees, or any subcontractor, in doing the work or in consequence of any improper materials, implements, or labor used therein.

All Public Sewer extensions or connections shall require inspection by an inspector designated by the General Manager to act on behalf of the Littleton Water Department. The General Manager may determine that a Building Sewer installation or repair will require full-time inspection by a qualified inspector who will monitor and inspect ongoing progress of the work. The costs for the services of a full-time inspector designated by the General Manager shall be paid by the developer or owner to the Littleton Water Department. Flows will not be permitted to be discharged from any service connection until a certificate of compliance is submitted by the designated inspector.

After completion on any Building Sewer's repairs or connection to the Public Sewer, the LUI shall fill out a sewer connection tie card, on a form supplied by the Littleton Water Department office for each Building Sewer the LUI has performed work on. The tie card shall be completed before the final inspection and prior to any backfilling of the connection to the Public Sewer.

The LUI shall be responsible for obtaining any Road Opening Permits as needed to complete their work.

Article 5 – Protection from Damage

Section 1 – Prohibited Acts

No Person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance or equipment which is a part of the POTW. Any Person violating this provision shall face civil and criminal liability for such actions.

Article 6 – Permits

Section 1 – Application and Permit for Sewer Connection

Section 1.1

Any User proposing to connect to or discharge into the Public Sewer shall obtain a Sewer Connection Application for Residential, Commercial & Industrial Buildings (Appendix C.1) at least sixty (60) days prior to the proposed connection or discharge to the Public Sewer.

Section 1.2

Existing Users connected to the Public Sewer as of the effective date of these Rules and Regulations, who have not received a Sewer Connection Permit for Residential, Commercial & Industrial Buildings, shall file a Sewer Connection Application (Appendix C.1) within thirty (30) days following the effective date of these Rule and Regulations.

Section 1.3

Pursuant to the provisions of this Section, any Person who proposes to sell or transfer ownership of a structure, property, or use for which a Sewer Connection Permit for Residential, Commercial & Industrial Buildings has been issued, or who proposes a change in the nature, characteristics or constituents of its wastewater, or who proposes to increase its discharge so that the daily volume, strength, or rate of its discharge is at least ten percent (10%) greater than its existing and/or currently-permitted discharge, shall, no less than thirty (30) days prior to the proposed sale, transfer, change or increase, file a Sewer Connection Application for Residential, Commercial & Industrial Buildings (Appendix C.1) with the General Manager or, if applicable, for a modification of its existing Sewer Connection Application for Residential, Commercial & Industrial Buildings (Appendix C.1).

Section 1.4

All Users required to obtain a Sewer Connection Permit for Residential, Commercial & Industrial Buildings (Appendix C.1) shall complete and file an Application for such with the General Manager accompanied by the appropriate fee as indicated on the fee schedule annexed hereto as Appendix A.

Section 2 – Industrial Discharge Permits

In addition to obtaining the Sewer Connection Permit for Residential, Commercial & Industrial Buildings (Appendix C.1) prescribed in Section 1 of this Article, all Industrial Users shall obtain a Sewer Connection Permit for Industrial Users (Appendix C.3) from the Littleton Water Department for discharges to the Public Sewer. All existing Industrial Users connected to or discharging into the Public Sewer, who have not obtained an Industrial Discharge Permit, shall apply to the General Manager for an Industrial Discharge Permit within sixty (60) days after the effective date of these Rules and Regulations. All Industrial Users proposing to connect to or discharge into the Public Sewer, including any Domestic Source which proposes to commence discharging Industrial Wastes or greater than 2,000 gallons per day of sanitary wastewater to the Public Sewer, shall file a Sewer Connection Application for Industrial Users as appended

(Appendix C.3) with the General Manager at least ninety (90) days prior to the proposed connection or discharge to the Public Sewer. The General Manager may deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the Public Sewer by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the POTW to violate its Groundwater Discharge permit.

Section 3 – Industrial Discharge Permit Application Fee and Requirements

An Industrial User required to obtain an Industrial Discharge Permit shall complete and file with the General Manager an application in the form prescribed by the General Manager and accompanied by the appropriate fee as indicated on the fee schedule annexed hereto as Appendix A. In support of the application for an Industrial Discharge Permit, the Industrial User shall submit, in units and terms appropriate for evaluation, the following information:

1. Identifying information. The Industrial User shall submit the name and address of its facility, including the name of the operator and owners.

2. Permit List. The Industrial User shall submit a list of any environmental control permits held by or for the facility.

3. Description of operations. The Industrial User shall submit a brief description of the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by such Industrial User. This description shall include a schematic process diagram which indicates points of discharge to the facility from the regulated processes.

4. Flow measurement. The Industrial User shall submit information showing the measured average daily and maximum daily flow, in gallons per day, to the facility from each of the following:

    a. Regulated process streams; and

    b. Other streams as necessary to allow use of the combined waste stream formula of 40 C.F.R. §403.6(e).

    The Littleton Water Department may allow for verifiable estimates of these flows where justified by cost or feasibility considerations.

5. Measurement of pollutants.

    a. The Industrial User shall identify the Pretreatment Standards applicable to each regulated process.

    b. In addition, the Industrial User shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the Standard or Littleton Water Department) of regulated pollutants in the

discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) will be reported. The sample will be representative of daily operations.

c. A minimum of four (4) Grab Samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques where feasible. The Littleton Water Department may waive flow-proportional composite sampling for any Industrial User which demonstrates that flow-proportional sampling is infeasible. In such cases, samples may be obtained through time-proportional composite sampling techniques or through a minimum of four (4) Grab Samples where the Industrial User demonstrates that this will provide a representative sample of the effluent being discharged.

d. The Industrial User shall take a minimum of one representative sample to compile the data necessary to comply with the requirements of this paragraph.

e. Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment, the Industrial User shall measure the flows and concentrations necessary to allow use of the combined wastewater formula of 40 C.F.R. §403.6(e) in order to evaluate compliance with the Pretreatment Standards. Where an alternate concentration or mass limit has been calculated in accordance with 40 C.F.R. §403.6(e), this adjusted limit, along with supporting data, shall be submitted to the Littleton Water Department.

f. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 C.F.R. Part 136 and amendments thereto. Where 40 C.F.R. Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis will be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the Littleton Water Department or other parties, approved by the EPA;

g. The Littleton Water Department may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures.

h. The baseline report shall indicate the time, date, and place of sampling, and methods of analysis and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the facility.

6. Certification. A statement, reviewed by an authorized representative of the Industrial User and certified to by a qualified professional, must be submitted, indicating whether Pretreatment Standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required for the Industrial User to meet the Pretreatment Standards and Requirements.

7. Compliance schedule. If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, then the shortest schedule by which the Industrial User will provide such additional pretreatment and/or O&M shall be provided. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard.

8. Other information. Any other information as may be deemed by the General Manager to be necessary to evaluate the permit application shall be submitted by the Industrial User.

The General Manager will evaluate the data furnished by the Industrial User and will decide whether additional information is required. After evaluation and acceptance of the data furnished, the General Manager may issue an Industrial Discharge Permit subject to terms and conditions provided therein.

Section 4 – Permit Conditions

Sewer Connection Permits and Industrial Discharge Permits shall be expressly subject to all provisions of these Regulations and all other applicable laws and regulations, User charges, and fees established by the Littleton Water Department. In addition, Industrial Discharge Permits shall contain the following:

1. The unit charge or schedule of User charges and fees for the wastewater to be discharged to the Public Sewer;

2. Limits on average and maximum wastewater constituents and characteristics, including those determined in accordance with the limits specified in Article 3, Section 5;

3. Limits on average and maximum rate and time of discharge or requirements for flow regulation and equalization;

4. Requirements for installation and maintenance of inspection and sampling facilities;

5. Specifications for monitoring programs which may include sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule;

6. Compliance schedules (but in no event may compliance deadline in a Permit be later than a National Categorical Pretreatment Standard compliance deadline);

7. Requirements for submission of technical reports or discharge reports;

8. Requirements for maintenance and retention of records relating to wastewater discharges as specified by the Littleton Water Department, and affording the Littleton Water Department access thereto;

9. Requirements for advance notification to the Littleton Water Department of any change in operations, and for advance approval by the General Manager of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater disposal system;

10. Requirements for notification to the General Manager of Slug discharges;

11. A statement of Permit duration in accordance with Section 6 hereof, which shall in no case be more than two (2) years;

12. A statement of Permit transferability in accordance with Section 7 hereof;

13. A statement of applicable penalties for violation of Pretreatment Standards and Requirements, and any applicable compliance schedule, in accordance with Section 7 hereof; and

14. Other conditions as deemed appropriate by the Littleton Water Department to ensure compliance with these Rules and Regulations.

Section 5 – Industrial Discharge Permit Modifications

Section 5. 1

Within ninety (90) days of the promulgation of a National Categorical Pretreatment Standard, the Industrial Discharge Permit of Industrial Users who are subject to such Standards shall be revised to require compliance with such Standard within the time frame prescribed by such Standard. An Industrial User with an existing Industrial Discharge Permit shall submit to the General Manager within one hundred eighty (180) days after the effective date of an applicable National Categorical Pretreatment Standard the information required in Section 3 paragraphs (6) and (7).

Section 5.2

An Industrial User who proposes to introduce a change in the nature, characteristics or constituents of its wastewater, or who proposes to increase its discharge so that the daily volume, strength, or rate of its discharge is at least ten percent (10%) greater than its permitted discharge shall, no less than thirty (30) days prior to said proposed change or increase, apply, on a form prescribed by the General Manager, for a modification to its Industrial Discharge Permit. After evaluation and acceptance of the data furnished, the General Manager may modify the Industrial User's Industrial Discharge Permit, subject to the terms and conditions provided herein.

Section 5.3

The terms and conditions of an Industrial Discharge Permit issued hereunder may be subject to modification by the General Manager during the duration of the Permit as the limitations or requirements of these Rules and Regulations are modified or amended, or as the limitations or

requirements of the Littleton Water Department's Groundwater Discharge permit are modified or amended. The Industrial User shall be notified of any proposed modifications or amendments to its Industrial Discharge Permit at least thirty (30) days prior to the proposed effective date of such modification. Any modifications or amendments to the Industrial Discharge Permit shall include a reasonable time schedule for compliance therewith, but no compliance deadline therein shall be later than the deadline for compliance with an applicable National Categorical Pretreatment Standard.

Section 6 – Duration of Industrial Discharge Permits

Industrial Discharge Permits shall be issued for a specified time period not to exceed two (2) years. An Industrial Discharge Permit may be issued for a period less than one (1) year or may be stated to expire on a specific date. An Industrial User shall apply for Industrial Discharge Permit reissuance, on a form prescribed by the General Manager, at least ninety (90) days prior to the expiration of the Industrial User's existing Permit.

Section 7 – Industrial Discharge Permit Transfer

Industrial Discharge Permits are issued to a specific Industrial User for a specific operation. An Industrial Discharge Permit shall not be reassigned or transferred or sold to another Person, including a new owner, new Industrial User, different premises, or a new or changed operation without the approval of the General Manager, which must be obtained at least thirty (30) days in advance of the proposed transfer date. No such approval shall be granted absent submission to the General Manager of a written agreement between the existing and proposed new permittee which sets forth the date for and terms of the transfer of the Industrial Discharge Permit and all responsibilities, obligations, and liabilities thereunder. Any successor thereto shall comply with the terms and conditions of the existing Industrial Discharge Permit and all of the terms and requirements of these Regulations.

Section 8 – Industrial Discharge Permit Decisions

The General Manager shall provide all interested Persons with notice of final decisions concerning Industrial Discharge Permit issuance and transfer. Any Person, including the Industrial User to whom the Industrial Discharge Permit was issued, may appeal to the Board of Commissioners for review of the Industrial Discharge Permit issuance, modification, or transfer decision within thirty (30) days of the date on which the decision was issued. Failure to submit a timely petition for review shall be deemed to be a waiver of Industrial Discharge Permit review.

A petition for review must set forth the Industrial Discharge Permit provisions or decision objected to, the reasons for the objection, and the alternative provisions, if any, which the petitioner seeks to have included in the Industrial Discharge Permit. The Board of Commissioners shall conduct the Permit review in accordance with the procedures set forth at Article 8, Section 5.6 of these Rules and Regulations. The effectiveness of an Industrial Discharge Permit shall not be stayed pending the Board of Commissioner's review, but the Industrial Discharge Permit provisions objected to (other than those relating to achievement of compliance deadlines established under National Pretreatment Standards, Nation Prohibited Discharge Standards, and Local Discharge Limitations) shall be stayed pending such review. The decision of

the Board of Commissioners concerning the petition for review shall be considered a final administrative action, subject to appeal pursuant to the provisions of M.G.L. c 30A, § 14.

Section 9 – Sewer Service Connections

All Users required to obtain a Sewer Connection Permit for Residential, Commercial & Industrial Buildings (Appendix C.1) from the General Manager pursuant to Section 1 hereof shall be subject to the following requirements:

1. No unauthorized Person shall uncover, make any connections with or opening into, use, alter, or disturb any Public Sewer or appurtenance thereof without first obtaining approval of a Sewer Connection Permit for Residential, Commercial & Industrial Buildings (Appendix C.1) from the General Manager. Any Person proposing a new discharge or a substantial change in volume or character of pollutants that are being discharged into the Public Sewer, or a new owner of an existing connection, shall file a Sewer Connection Application for Residential, Commercial & Industrial Buildings as appended (Appendix C.1) with the General Manager.

2. There shall be two (2) classes of building sewer connections: (1) for residential and commercial service, and (2) for service to establishments producing industrial wastes. In either case, the owner or his agent shall file a Sewer Connection Application for Residential, Commercial & Industrial Buildings as appended (Appendix C.1), which shall be supplemented by plans, specifications, or other information considered relevant, in the judgment of the General Manager, for his review of the application. A permit and inspection fee shall be paid to the Littleton Water Department at the time the application is filed. Existing Users connected to the Public Sewer, who have not obtained a Sewer Connection Permit, shall file an Application for Sewer Connection within thirty (30) days after the effective date of these Rules and Regulations, and proposed new Users shall apply at least ninety (90) days prior to connecting to the Public Sewer . Sewer Connection Permits for Industrial Users shall be issued for a specified time period, not to exceed five (5) years. An Industrial Sewer Connection Permit may be issued for a period of less than one (1) year or may be stated to expire on a specific date. The user shall apply for a Sewer Connection Permit reissuance a minimum of one hundred eighty (180) days prior to the expiration of the User's existing Sewer Connection Permit. The terms and conditions of the Sewer Connection Permit may be subject to modification by the General Manager during the term of the permit as discharge standards or requirements are modified or other just cause exists. The User shall be informed of any proposed changes in his Sewer Connection Permit at least thirty (30) days prior to the effective date of change. Any changes or new conditions in the Sewer Connection Permit shall include a reasonable time schedule for compliance. Sewer Connection Permits are issued to a specific User for a specific operation. A Sewer Connection Permit shall not be assigned or transferred or sold to a new owner, new User, different premises, or a new or changed operation without the written approval of the General Manager. Any succeeding owner or User shall also comply with all terms and conditions of the existing Sewer Connection Permit, if said permit is approved by the General Manager for the succeeding owner or User.

3. All owners of buildings located on land abutting a public or private way in which there is a Public Sewer may have the opportunity to connect to the Public Sewer and become part of the Littleton Water Department's POTW, as determined by the Board of Commissioners in accordance with Section 5 of Chapter 279 of the Acts of 2020 (Appendix B). All commercial and industrial properties that abut the Public Sewer shall be required to connect and become part of the Public Sewer. Single and 2-family residential properties and properties owned by a tax-exempt organization that abut a Public Sewer shall have the opportunity to permanently opt out of connecting to or making use of the Public Sewer. If the property owner opts out, then that property shall not be permitted to rejoin the Public Sewer without approval of the Board of Commissioners.

4. A separate and independent Building Sewer shall be provided for every building. However, where one building stands at the rear of another on an interior lot, both buildings are located within Littleton, and no Private Sewer is available or can be constructed to the rear of the building through an adjoining alley, court, yard, or driveway, the Building Sewer from the front building may be extended to the rear building and the whole considered as one Building Sewer.

5. Existing Building Sewers may be used in connection with new buildings only when they are found, on examination and test by the General Manager, to meet all requirements of these Rules and Regulations.

6. The size, slope, alignment, materials or construction of a Building Sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the Massachusetts Building and Plumbing codes and/or other applicable Rules and Regulations of the Littleton Water Department. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.E.F. Manual of Practice No. 9 shall apply. A cleanout connection shall be installed on the service pipe outside the building foundation.

7. Whenever possible, the Building Sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the Public Sewer, wastewater carried by such building drain shall be lifted by an approved means and discharged to the Building Sewer.

8. No Person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a Building Sewer or building drain which in turn is connected directly or indirectly to a Public Sewer.

9. The connection of the Building Sewer into the Public Sewer shall conform to the requirements of the Building and Plumbing code or other applicable Rules and Regulations of the Littleton Water Department, or the procedures set forth in appropriate specifications of the A.S.T.M. and the W.E.F. Manual of Practice No. 9. A Licensed Utility Installer shall be required for the installation of the sewer service connection. All such connections shall be made gas tight and watertight. Any deviation

from the prescribed procedures and materials must be approved by the General Manager before installation.

10. All sewer service connections shall be installed under the supervision of the General Manager or his representative. The owner or his authorized representative shall so arrange his work to require the service of the General Manager or his representative for as short a time as practicable. No trench shall be filled in until the pipe laid therein has been inspected and approved by the General Manager or his representative. A minimum notice of forty-eight (48) hours prior to beginning construction is required to schedule such an inspection.

11. All excavations for Building Sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the Littleton Water Department.

12. All costs and expenses incidental to the installation and connection of the Building Sewer shall be borne by the owner. The owner shall indemnify the Littleton Water Department from any loss or damage that may directly or indirectly be occasioned by the installation of the Building Sewer.

13. In the event a well is a source of an owner's water and the owner is connected to the Public Sewer, said owner shall install and connect a meter on the well water supply, approved by the General Manager, at the owner's expense, from which the Littleton Water Department may monitor the use of the sewer and determine the volume of water for preparing sewer use charges.

14. All sewer service connections from the house or building to the Public Sewer shall be built, repaired and maintained under the direction of the General Manager, and shall be paid for by the owner of the property. The portion of the sewer service connection between the street line and the sewer on public ways shall be repaired and maintained by the Littleton Water Department. The portion of the sewer service connection between the street line and the sewer on a private way, and the service connection between all street lines and houses or buildings, are to be repaired and maintained by the owner of the property.

15. Sewer service connections shall be laid at such depth and gradient and in such locations as the General Manager may determine. The minimum gradient allowable shall be one quarter (1/4) inch per foot. No sewer service connection shall service more than one building except by permission of the General Manager. Sewer service connections shall be constructed of first quality polyvinyl chloride (PVC), cast iron sewer pipe, or other pipe approved by the General Manager, and jointed and installed with the standard methods of sewer construction, as approved by the General Manager. When completed the inside of a sewer service shall be left smooth and clean. No alteration in or connection with any service connection shall be made until application is made to and approved by the General Manager.

16. The applicant for the Sewer Connection Permit shall notify the General Manager when the Building Sewer is ready for inspection and connection to the Public Sewer, forty-eight (48) hours prior to proposed connection. The connection shall be made under the supervision of the General Manager or his representative.

17. If any sewer service connection becomes obstructed or otherwise fails to work properly, notice must be given promptly to the General Manager by the owner or his duly authorized agent. If maintenance work is required between the street line and the house or building, the cost of such maintenance work shall be paid by the structure's owner.

Article 7 – Power and Authority of Inspection

Section 1 – Inspection

The General Manager and other duly authorized employees of the Littleton Water Department, bearing proper credentials and identification, shall be permitted to enter all properties for the purpose of inspection, observation, measuring, sampling, and testing in accordance with the provisions of these Rules and Regulation.

Section 2 – Accessibility of Easements

The General Manager, and other duly authorized representatives of the Littleton Water Department, displaying Littleton Water Department identification, shall be permitted to enter all properties for which the Littleton Water Department holds an easement, for the Littleton Water Department purposes, including: operation, inspection, observation, measuring, sampling, repairing, and maintenance of any portion of the sewerage works within said easement, in accordance with the terms of thereof.

Article 8 – Penalties and Enforcement Procedures

Section 1 – Written Notice of Violation

Any Person found to be violating any provision of these Rules and Regulations shall be served by the General Manager or his representative with written notice stating the nature of the violation and providing a reasonable time for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

Section 2 – Sewer Charges to Constitute Lien upon Real Estate

Sewer charges shall constitute a lien upon the real estate in accordance with the applicable provisions of the Massachusetts General Laws . Littleton Water Department shall attempt to collect such charges when they become due, and all such charges remaining unpaid thirty days after they are due, shall be collected forthwith by the Littleton Water Department in accordance with statutory municipal lien procedures.

Section 3 – Penalties

Whenever the General Manager determines any person to be violating any provision of these Rules and Regulations, the Littleton Water Department may take any or all of the following actions:

1. Issue a notice of violation (NOV), an order to cease and desist any such violation and/or impose a fine in accordance with this Article;
2. Issue an implementation schedule ordering specific actions to be taken, together with time schedule requirements;
3. Take any action available to it under applicable laws or regulations.

Any person violating any of the provision of the Rules and Regulations shall be subject to a fine in accordance with the latest Fine Schedule Table in Appendix A. Fines shall be included with sewer bills and, if not paid, will result in a lien on the property in accordance with Section 2 of this Article. Violations may result in the revocation of permits. This provision may be enforced through non-criminal disposition. Each day a violation continues shall be deemed a separate offense.

All penalties, fines or fees related to these Rules and Regulations, shall be collected as described in Section 2 of this Article. Any and all fines, fees and penalties collected shall be directed to the Littleton Water Department fund.

All penalties, fines and fees related to the Rules and Regulations shall be in addition to any remediation charges, as described in Section 5 below, required to abate or remediate pollution or issues related to the violation.

Section 4 – Liability

Any Person violating the provisions of these Rules and Regulations shall become liable to the Littleton Water Department for any expense, loss, or damage incurred by the Littleton Water Department by reasons of such violation, including but not limited to any fines, charges, or assessments made or imposed on the Littleton Water Department by virtue of any applicable law.

Section 5 – Enforcement Procedures

Failure of any Person to comply with the requirements of these Rules and Regulations or any Permit or order issued thereunder shall be subject to each of the enforcement procedures set forth in this Article.

Section 5.1 Compliance Schedule

When the General Manager or his representative finds that a Person or User has violated or continues to violate these Rules and Regulations, or a Permit or order issued thereunder, the Board of Commissioners may issue an order to the Person or User responsible for the violation directing that, following a specified time period, sewer service or drain service shall be discontinued unless adequate facilities, devices, or other related appurtenances have been installed and are properly operated to remedy the violation and ensure compliance with this Regulation. Orders may contain such other requirements as might be reasonably necessary and appropriate to address the violation or noncompliance, including: installation of pretreatment technology; performance of additional monitoring, analysis, reporting and management practices; removal of inflow source to the Public Sewer or discharge of pollutants to the Public Sewer or drain system; elimination of illicit connections or discharges to the Public Sewer; that unlawful discharges, practices, or operations shall cease and desist; and remediation of contamination in connection therewith. The foregoing is intended to be illustrative rather than all-inclusive.

If the General Manager determines that abatement or remediation of contamination is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator fail to abate or perform remediation within the specified deadline, the Board of Commissioners may, at its option, undertake such work, and expenses thereof shall be charged to the violator.

Section 5.2 Permit Revocation

The following conditions may result in the revocation of a Sewer Connection Permit:

1. Violation of any condition of a permit or order or any provision of these Rules and Regulations.
2. Failure to accurately and fully report the wastewater volume, constituents, and characteristics of its discharge.
3. Failure to report significant changes in wastewater volume, constituents, or characteristics.
4. Failure to allow Littleton Water Department personnel statutorily authorized access for the purpose of inspection or monitoring.

5. Failure to pay any and all costs, fees or fines.
6. Failure to correct violations that have already resulted in the suspension of the permit.
7. Failure to adhere to compliance schedule or order.

Section 5.3 Enforcement Costs

The Person or User who is found to have violated the terms of a permit or order or these Rules and Regulations shall reimburse the Littleton Water Department for the cost of enforcing such, including reasonable attorney's fees.

Within thirty (30) days after completing all measures to abate the violation or to perform remediation, the Person or User responsible for the violation will be notified of all costs incurred by the Littleton Water Department, including administrative costs. Such Person or User may file a written protest objecting to the amount or basis of costs with the Board of Commissioners within thirty (30) days of receipt of notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Board of Commissioners affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall then become a special assessment against the property and shall constitute a lien on the Person or User's property in the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in M.G.L.c. 59, § 57 after the thirty-first (31) day at which the costs first became due.

Section 5.4 Damage to Facilities

The Person or User agrees to indemnify and hold harmless the Littleton Water Department from and against any liability, loss, cost, expense or damages to persons or property (including reasonable attorney's and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) arising from the Person or User's violation of any permit, order or provision of these Rules and Regulations.

Section 5.5 Suspension of Discharge

The General Manager may suspend the wastewater service, or a Sewer Connection Permit when such suspension is necessary, in the opinion of the General Manager, in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the public health or welfare, property, or the environment, cause interference to the POTW, or cause the Littleton Water Department to violate any condition of its Groundwater Discharge Permit.

Any user notified of a suspension of wastewater service or a Sewer Connection Permit shall immediately stop or eliminate their contribution to the POTW. In the event of a failure of the Person to comply voluntarily with the suspension order, the General Manager shall take such steps as he deems necessary including immediate severance of the sewer connection, to prevent or minimize damage to the POTW or endangerment to any other Persons, property or the environment. The General Manager shall reinstate the wastewater discharge or the wastewater service upon proof of the elimination of the non-complying discharge. Reinstatement of the service shall be at the expense of the Person or User causing the noncompliance. A detailed

written statement submitted by the User describing the causes of the harmful contribution and the measures taken to prevent any further occurrence shall be submitted to the General Manager within fifteen (15) days of the date of occurrence.

If a Person or User violates the provisions of these Rules and Regulations, permit, notice, or order issued thereunder, the General Manager may seek injunctive relief in a court of competent jurisdiction restraining any and all activities that would create further violations or compelling the Person or User to perform abatement or remediation of the violation.

Section 5.6 Show-Cause Hearing

If a violation is not corrected within the timeframe mandated by the General Manager, the General Manager may order any Person who causes or allows an unauthorized discharge to show cause before the Board of Commissioners, why service should not be terminated. A notice shall be served on the offending party, specifying the time and place of a hearing to be held by the Board of Commissioners regarding the violation and directing the offending party to appear before the Board of Commissioners and explain why an order should not be made directing the termination of service. The notice of the hearing shall be delivered in person to the address at which the violation is occurring, or by registered or certified mail (return receipt requested) at least ten (10) days before the date set for hearing. The Board of Commissioners shall conduct the hearing and shall:

1. Issue notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relating to any matter involved in such hearings;

2. Take the evidence and proceed to conduct the hearing as it may deem just and proper and in accordance with Massachusetts General Laws.

At any public hearing, testimony taken before the hearing authority or any person designated by it, must be under oath and recorded stenographically, digitally, or by video. The transcript, so recorded, will be made available to any member of the public upon payment of the usual charges established by the Board of Commissioners.

After the Board of Commissioners has reviewed the evidence, it may issue an order to the Person or User responsible for the discharge directing that, following a specified time period to be determined at the hearing, the sewer service shall be discontinued unless adequate pretreatment facilities, devices or other related appurtenances are properly operated, and may issue such further orders and directives as are necessary and appropriate.

An order issued by the Board of Commissioners or any action taken thereon, shall not be construed to limit or restrict the right of the aggrieved party to apply to a court of competent jurisdiction for relief from any decision, fine or penalty issued by the Board of Commissioners pursuant to M.G.L. c. 30A, § 14, which appeal or relief sought shall be taken within ten (10) days of the issuance of the Board of Commissioner's order.

Section 5.7 Legal Action.

Any discharge in violation of the provisions of these Rules and Regulations or an order or permit issued thereunder shall be considered a public nuisance. If any Person discharges sewerage,

industrial wastes or other wastes into the Public Sewer contrary to the provisions of these Rules and Regulations or any order or permit issued thereunder, the Littleton Water Department may commence an action for appropriate legal and/or equitable relief in a court of appropriate jurisdiction.

Section 5.8 Report of Violators.

The General Manager may publish an annual list of violators in the local newspaper and on the Town website, Littleton Water Department website, and/or other appropriate local periodicals that may be available at the time of publishing.

Article 9 - Validity

Section 1 – Repeal of Conflicting Regulations

All Littleton Water Department regulations or portions thereof that conflict with these Rules and Regulations are hereby repealed.

Section 2 – Invalidation of Sections

In the event that any one or more provisions of these Rules and Regulations are, for any reason, held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect the remaining provisions of these Rules and Regulations, and the invalid, illegal or unenforceable provision(s) shall be deemed invalidated, if in the opinion of the Board of Commissioners, operation of the remaining provisions can be given effect without such invalidated provision(s)..

Article 10 –Variance Procedures

Section 1 – Steps

Any Person who is unable to comply with, or disagrees with an interpretation of these Rules and Regulations may pursue a variance or relief therefrom as follows:

1. Step 1 – Person shall have a preapplication meeting with the General Manager to discuss the proposed variance.

2. Step 2 – The issue shall be submitted to the General Manager in writing using the prescribed Littleton Water Department forms, documenting the time and/or dates of the circumstances and reasons for a variance request or requested relief. The General Manager will endeavor to issue a reply within thirty (30) days of receipt of the completed form. If no decision is made by the General Manager within thirty (30) days of receipt of the completed form, the request shall be considered denied.

3. Step 3 – Should the issue not be resolved with the response from the General Manager, or if no response is received within thirty (30) days, then the aggrieved Person may appeal the issue to the Board of Commissioners. Such appeal shall include copies of all written documentation of the variance request or relief sought, with a description of actions or inactions taken to date and a copy of the General Manager's decision, if any. The Board of Commissioners will endeavor to hold a hearing within forty-five (45) days of receipt of a submission, and shall render a decision within forty-five (45) days after the hearing. If no decision is rendered within forty-five (45) days after the hearing, the appeal shall be considered denied.

Article 11 – Sewer Collection Fees

Section 1 – Charges and Fees

These Rules and Regulations provide for the recovery of costs from Users of the POTW in order to implement the programs established herein. The Littleton Water Department may adopt charges and fees including for:

1. Reimbursement of the costs of setting up and operating the pretreatment program;
2. Monitoring, sampling, inspections, and surveillance procedures;
3. Reviewing accidental discharge procedures and construction;
4. Permit applications and modifications;
5. Consistent removal by the Littleton Water Department of pollutants otherwise subject to National Categorical Pretreatment Standards;
6. Sludge disposal;
7. Use of the POTW of the Littleton Water Department; and
8. Other fees as the Board may deem necessary to carry out the requirements contained herein.

Section 2 – Assessment of Charges and Fees

The applicable charges or fees for the items enumerated in Section 1, above, shall be set from time to time by the Board of Commissioners and shall be assessed on a fee-for-specific-service basis and in accordance with a schedule duly adopted by the Littleton Water Department and annexed hereto as Appendix A, which may be amended from time to time.

Once the Board of Commissioners adopts the schedule of fees they shall be in full force upon publication as provided by law. Such publication shall be maintained and available for inspection at the Littleton Water Department.

Section 3 – Lien for Overdue Charges

By operation of law, a municipal lien may be placed upon any property or premises for which sewer use or service charges are due and owing. Notwithstanding such lien, the Littleton Water Department may also terminate or suspend services including sewer connections until such time as overdue charges are paid in full..

Article 12 – Effective Date

Section 1 – Effective Date

These Rules and Regulations shall be in full force and effect from and after their approval as provided by law, and as may be amended or revised from time to time.

Adopted by vote of the Littleton Water Department Commissioners acting as the Sewer Department Board of Commissioners on the 30th day of June, 2021.

Board of Commissioners

Revision Dates:

Appendix A – Schedule of Fees and Fines

Section 1 – Purpose

The following fees are applicable as of the date of adoption of these Rules and Regulations The Board of Commissioners may revise such fees as it deems appropriate.

The fee(s) associated with each required application or inspection, as determined by the Board of Commissioners, shall be paid to the Littleton Water Department at the time the applications are filed in accordance with the most recent recommended fee schedule presented in this Appendix.

Penalties for noncompliance with these Rules and Regulations are summarized herein.

Section 2 – Licensed Utility Installer Annual Permit

The annual permit application fee to become a Licensed Utility Installer (LUI) for the Littleton Water Department: $100

The annual fee must be paid by January 1st of each year.

The annual permit Bond value which must be posted: $5,000

The Certificate of Insurance to be provided must cover:

A) General Liability: $500,000 – Property Damage

$500,000 - $1,000,000 Bodily Injury

B) Automotive: $500,000 – Property Damage

$500,000 - $1,000,000 Bodily Injury

C) Workman's Compensation and Employer's Liability as required under Massachusetts General Laws.

D) Insurance shall include coverage for collapse and underground structures.

E) Insurance shall include coverage for projects completed operations.

All of the above insurance coverage shall remain in full force and effect for a period of one (1) year from the date of acceptance by the Littleton Water Department of the last service connection installed by the LUI. The LUI shall take all responsibility for the work and take all precaution for preventing injuries to persons and property in or around the work.

The permit bond shall be duly executed by the Principal of the LUI and by a Surety Company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the General Manager.

Section 3 – Residential or Commercial Sewer Connection Application

This section applies to all proposed residential or commercial sewer connections and those wishing to reconstruct or replace an existing residential or commercial sewer connection to the Public Sewer. The application fee and processing fee are due at the time of application submittal to the Littleton Water Department.

Application Fee (Appendix C.1):	$100
Processing Fee:	$50
Reconnection or replacement of an existing service Fee:	$125
Additional Inspection Fee:	$50

If the General Manager determines that full-time inspection is required, then that cost is over and above the fees noted herein.

Each individual lot connecting to a common sewer connection, when allowed by the General Manager, shall be subject to the above recommended fees.

Applicable sewer betterments or sewer tie-in fees are in addition to the above fees.

Section 4 – Private Sewer Connection Application

This section applies to a proposed private sewer system connection to the POTW. For proposed private sewer connections, the application fee and processing fee are due at the time of application submittal to the Littleton Water Department . The private sewer system owner is responsible for each individual lot (existing or new) that intends to connect to the private sewer system and is required to file the applicable application(s) at the time of connection for said lot and is responsible for all associated application fees depending on the type of connection.

Application Fee (Appendix C.2):	$100
Processing Fee:	$250
Additional Inspection Fee:	$50

If the General Manager determines that full-time inspection is required, then that cost is over and above the fees noted herein.

Applicable sewer betterments or sewer tie-in fees are in addition to the above fees.

Section 5 – Industrial Facility Connection Application

This section applies to non-significant Industrial Users, categorical Industrial Users, and significant Industrial Users that propose to connect or are currently connected to the public sewer system. This section also applies to those industrial facilities wishing to reconnect or replace an existing service that currently discharges to the Public Sewer. The application fee, initial screening fee, and processing fee are due at the time of application submittal to the Littleton Water Department. If determined by the General Manager that such user is a significant Industrial User or categorical Industrial User, then the applicant is also responsible for permit fee, annual inspection fee and permit renewal fee. For existing establishments submitting an Industrial Waste Survey Form, all fees are waived except if the survey results in the establishment being classified as a significant Industrial User or categorical Industrial User in which case the establishment is responsible for the permit fee, processing fee, annual inspection fee, and permit renewal fee. Non-significant, categorical, and significant Industrial Users that are currently food handling facilities or are proposed to be a food handling facility will be subject to the appropriate fees as determined by the General Manager.

Once an establishment is classified as a significant Industrial User or categorical Industrial User, such establishment shall be subject to an annual inspection fee per discharge location and upon renewal, a permit renewal fee.

Application Fee (Appendix C.3):	$200
Initial Screening Fee (Appendix C.6):	$250
Processing Fee:	$500
Reconnection or replacement of an existing service:	$125
Permit Fee (Appendix C.3):	$1,000 minimum
Annual Inspection Fee:	$1,000 per discharge point
Permit Renewal Fee:	$1,000 per discharge point due at the time of significant industrial user discharge permit renewal.

Plan review costs and all other costs associated with reviews shall be paid for by the applicant.

If the General Manager determines that full-time inspection is required, then that cost is over and above the fees noted herein.

Applicable sewer betterments or sewer tie-in fees are in addition to the above fees.

Section 6 – Food Handling Facility Connection Application

This section applies to commercial Users that propose to connect or are currently connected to the Public Sewer that intend to operate a food handling facility, and non-significant Industrial Users, significant Industrial Users and/or categorical Industrial Users that also operate a food

handling facility that propose to connect or are currently connected to the Public Sewer. This section also applies to those facilities wishing to reconnect or replace an existing service that currently discharges to the Public Sewer. The application fee, food handling facility application fee, processing fee are due at the time of application submittal to the Littleton Water Department. If determined by the General Manager that such User is a food handling facility, then the applicant is also responsible for an annual inspection fee. A food handling facility application fee and processing fee are not required for those submitting an application for reconnection or replacement of an existing service. For existing establishments submitting a food handling facility application, all fees are waived except the annual inspection fee. Non-significant, categorical, and significant Industrial Users that are currently a food handling facility or are proposed to be a food handling facility will be subject to the appropriate fees as determined by the General Manager.

A food handling facility shall be subject to annual inspections. The User is responsible for the annual inspection fees for each pretreatment device installed within the food handling facility.

Food Handling Facility Application Fee (Appendix C.4):	$100
Processing Fee:	$250
Annual Inspection Fee:	$250 per each grease trap $500 per each grease interceptor

Applicable sewer betterments or sewer tie-in fees are in addition to the above fees.

Section 7 – Applicants Filing Multiple Applications

There may be instances when an applicant is required to file multiple permit applications depending on the type of establishment that is proposed. In that case, the applicant is required to pay any and all costs associated within each permit and/or annual inspection fees and is required to comply with any and all regulations outlined within these Rules and Regulation, and local, state and federal requirements. If applicable, the applicant is exempt from multiple tie-in fees (unless otherwise stated).

Section 8 – Schedule of Fines

The latest schedule of fines related to Article 8 of the Sewer Use Rules and Regulations is below:

Fine Schedule Table

Offense	Fine
First	None
Second	$100.00
Third	$400.00
Fourth	$800.00
Subsequent Violation	Fine Doubles

A violator will be allowed to receive one Notice of Violation (First Offense) without penalty (e.g., minor/inconsequential violations of this Regulation). A second violation will constitute a $100 fine, a third violation a $400 fine, fourth violation a $800 fine, etc., outlined in the Fine Schedule Table. With each subsequent violation, the fine will double.

In addition, and not in lieu of a fine, any Person violating any of the provisions of these Rules and Regulations shall be subject to a civil penalty of up to $5,000 for each violation as provided by M.G.L c. 83 §10. Each day a violation continues shall be deemed a separate offense.

Schedule of Fees and Fines Effective Date

These fees and fines shall be in full force and effect after approval and publication by the Board of Commissioners.

Approved this 30th day of June ,2021

Chair, Board of Commissioners

ATTEST:

Schedule of Fees original adoption date: June 30th, 2021

Appendix B
Chapter 279 of the Acts of 2020

Acts (2020)

Chapter 279

AN ACT ESTABLISHING THE LITTLETON COMMON SMART SEWER DISTRICT IN THE TOWN OF LITTLETON

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Notwithstanding any general or special law to the contrary, but subject to sections 26 to 53, inclusive, of chapter 21 of the General Laws and section 40 of chapter 131 of the General Laws, the town of Littleton may lay out, construct, maintain and operate a system of common sewers and drains in public or private ways for that part of its territory as it deems necessary for the public convenience or public health with such connections and other works as may be required for a system of sewerage and drainage and sewage treatment and disposal. The resulting sewer system shall be known as the Littleton common smart sewer division. The division shall be under the supervision and control of the board of water commissioners, who shall be the sewer commissioners of the town of Littleton. The sewer system shall initially be laid out as depicted in the plan entitled, "Littleton Common Smart Service Area" dated April 2019, which is on file with the town clerk and the properties that may be initially included within the division are described in section 9 by assessor's

map and lot number. The sewer system and division may be expanded by a vote of the board of water commissioners; provided, however, that the process for including or excluding properties in the division shall conform to sections 3 and 4. The division shall be organized, governed and modified as set forth in this act. All land and buildings on the properties included in the division shall be served by the town of Littleton's smart sewer system, as well as all sewer pipelines, pump stations and treatment and disposal facilities included in the Littleton common smart sewer project. The treatment and disposal facilities and associated infrastructure may be located either inside or outside of the division. Project phasing may limit the timing of sewer service to a subset of the properties included in the division, to be determined by the town of Littleton based, in part, on the relative need for sewer service and decisions by residential and tax-exempt property owners to opt in or out of the division.

SECTION 2. The board of water commissioners, in their capacity as sewer commissioners, shall have all the powers and perform all the duties of sewer commissioners under chapter 83 of the General Laws, subject to this act. The board of water commissioners shall have the authority to adopt rules and regulations for access to and use of the wastewater system, as well as for the establishment of sewer betterment assessments, sewer connection fees, user fees and other fees that shall be paid by every person who may in the future be served by or connects to the sewer system, as appropriate. Fees established by the board shall be reasonably related to the capital and operational costs of the sewer system. Supervision of the operation of the Littleton common smart sewer division shall be the responsibility of the general manager of the town of Littleton water department.

SECTION 3. Properties that are abutting a private or public way in which a common sewer will be laid may have the opportunity to connect to the sewer system and become part of the Littleton common smart sewer division, as determined by the board of water commissioners in accordance with section 5. All commercial and industrial properties that are given access to the sewer system shall be required to connect and become part of the division. Single and 2-family residential properties and properties owned by a tax-exempt organization that are given access to the sewer system shall have the opportunity to permanently opt out of connecting to or making use of the sewer system. If a property owner opts out of the Littleton common smart sewer division, that property shall not be permitted to rejoin the division without approval of the board of water commissioners and town meeting. Sufficient time shall be allowed for the owners of improved eligible properties to determine whether to opt out of the connection to or use of the Littleton common smart sewer division. The town of Littleton shall develop, adopt and enforce policies and procedures to provide the option to opt out of the Littleton common smart sewer division. Such policies and procedures shall include, but not be limited to, the following requirements that shall be met before a property can opt out of the Littleton common smart sewer division:

(i) the property owner shall demonstrate that the subject property is eligible to opt out because the property:

(A) has a functioning on-site wastewater treatment and disposal system in acceptable condition that is operating in compliance with the state environmental code, promulgated by the commissioner of environmental protection pursuant to section 13 of chapter 21A of the

General Laws, as evidenced in the manner required by said code; provided, however, that lot line setback requirements for septic tank or leaching systems shall not disqualify a property;

(B) has a functioning on-site wastewater treatment and disposal system as evidenced by: (1) documentation that demonstrates that the existing on-site wastewater treatment and disposal system or repair of the same was installed after December 31, 2017; and (2) that the existing on-site wastewater treatment and disposal system is operating and in acceptable condition; or

(C) is devoid of structures, has no on-site wastewater treatment and disposal system and is prevented from future development through a legally enforceable recorded restriction on any such future development in perpetuity or has been previously deemed unbuildable by the building inspector of the town of Littleton, with or without access or connection to the sewer system, as demonstrated by documentation establishing these facts; and

(ii) a property owner's decision to opt out shall be in writing and shall acknowledge that the property owner understands that by opting out of the Littleton common smart sewer division, the property shall not be able to connect to or make use of the sewer system, except by permission of the board of water commissioners and town meeting.

SECTION 4. Notwithstanding sections 14 and 15 of chapter 83 of the General Laws, the board of water commissioners may establish policies and procedures relative to assessments for sewer betterments to all properties that are located within the Littleton common smart sewer division.

SECTION 5. The board of water commissioners shall have the sole discretion to determine which property owners shall be added to

the Littleton common smart sewer division and the amount of wastewater treatment system capacity allocated to each user of the system. Applications for connecting to the system shall be reviewed by a representative of the board of health, a representative of the planning board and the general manager of the town of Littleton water department, or their designees, who shall present a recommendation to the board of water commissioners regarding the application. In making the recommendation, the representatives and general manager, or their designees, shall consider the overall existing use of the property as represented in the application and, but for a change in the use of the property, the economic benefit afforded by approval of the application, the amount of available wastewater treatment capacity and such other factors as the representatives and general manager, or their designees, shall deem appropriate or as may be directed by the board of water commissioners.

SECTION 6. Prior to or upon the start of construction of the sewer system, properties that have been given access to the sewer system and have not opted out of the Littleton common smart sewer division pursuant to section 3, shall be required, by the board of water commissioners or other duly authorized officer having charge of the maintenance and repair of the sewer system, to connect to the sewer system not later than 2 years after the sewer is approved for use and a notice of sewer availability has been issued by the board of water commissioners, or other duly authorized officer, and received by the property owner. No property owner may postpone their connection to the sewer system later than the date specified in this section unless an application to postpone such a connection has been approved by the board of water commissioners in accordance with section 7.

The approved postponement shall delay connection to the public sewer but shall not entitle the property owner to defer any payment for a sewer betterment assessment approved by the town of Littleton.

SECTION 7. Postponements for connection to the sewer system may be allowed if: (i) the property is part of the Littleton common smart sewer division; and (ii) the property owner has submitted to the board of water commissioners a signed and notarized application for a sewer connection postponement citing 1 or more of the following reasons: (A) the property owner has an existing on-site sewage treatment and disposal system operating and in acceptable condition, as demonstrated in a report issued within the previous 60 days, evidencing compliance with the state environmental code, promulgated by the commissioner of environmental protection pursuant to section 13 of chapter 21A of the General Laws, which shall be submitted with the application for sewer connection postponement; or (B) the property has an existing on-site sewage treatment and disposal system that was installed after December 31, 2017 in compliance with all state environmental code requirements and required no variances, except for septic tanks or leaching facilities lot line setback requirements, as demonstrated by documentation from the board of health of the town of Littleton or the Nashoba associated boards of health that demonstrates that the date of installation and certification of the system or system repair meets such requirements and states further that the system meets all such requirements. The board of water commissioners shall develop policies and procedures within 180 days of the effective date of this act, including procedures to apply for sewer connection postponement and all additional requirements to permit such applications.

SECTION 8. The board of water commissioners may enter into a payment deferral and recovery agreement on behalf of the town of Littleton with the owner of a property that meets the qualifications in this section and has been assessed a sewer betterment. To qualify for the deferral and recovery agreement, the property shall have an existing on-site sewage treatment system that is fully compliant with state regulations and meets the requirements established in section 3 relative to the on-site sewage treatment systems.

The deferral and recovery agreement shall: (i) provide the deferral term, which shall not exceed 10 years; (ii) provide that the agreement shall terminate and the assessment shall be due before the agreed term if: (A) title to the property is conveyed; (B) the septic system is determined to be a failed system by the board of health of the town of Littleton; or (C) the property is connected to the sewer system; (iii) provide that the property owner shall pay interest annually upon the assessment from the time said assessment was made; and (iv) include the written approval of any joint owner or mortgagee on the property.

The deferral and recovery agreement shall be recorded in the registry of deeds and shall constitute a lien upon the property.

SECTION 9. The following parcels, as shown in the plan identified in section 1 and described below by map and lot number on the town of Littleton's assessor's map, may be initially included within the division: U10 30 0; U10 28 0; U10 27 0; U10 26 0; U10 2 0; U10 25 0; U10 3 0; U10 24 0; U10 4 0; U10 23 0; U10 5 0; U10 22 0; U10 21 0; U10 6 0; U10 20 0; U10 7 0; U10 19 0; U10 8 0; U10 18 0; U10 9 0; U10 17 0; U10 10 0; U10 16 0; U10 11 0; U10 15 0; U10 12 0; U10 29 0; U43 2 0; R15 21 0; R18 14 7; R18 14 11; U10 14 0; U10 13 0; U10 45 0; U07 2 1; U07 2 9; U07 2 8; U07 2 7; U07 2 2;

U07 2 3; U07 2 4; U07 2 5; U20 9 0; U10 71 0; U10 35 0; U10 70 0; U10 69 0; U10 36 0; U10 68 0; U10 37 0; U10 67 0; U10 66 0; U10 38 0; U10 65 0; U10 39 0; U10 64 0; U10 63 0; U10 40 0; U10 62 0; U10 41 0; U10 42 0; U10 61 0; U10 43 0; U10 44 0; U10 50 0; U09 29 2; U09 29 0; U06 4 3; U06 4 1; U06 4 2; U11 4 3; U06 1 0; U07 28 0; U07 29 0; U07 30 0; U07 27 0; U07 26 0; U07 25 0; U07 32 0; U07 33 0; U07 34 0; U07 35 0; U07 24 0; U07 23 0; U07 36 0; U07 37 0; U07 38 0; U07 22 0; U07 39 0; U07 40 0; U07 41 0; U07 11 0; U07 12 0; U07 13 1; U09 28 0; R18 4 0; R18 5 0; R18 6 0; R18 8 0; R18 8 1; R18 12 1; R18 12 2; R18 12 3; R18 12 4; R18 14 4; R18 14 3; R18 14 5; R18 14 10; R18 14 9; R18 14 6; R18 14 0; R18 14 2; U11 4 4; U09 10 10; U09 10 11; U09 19 0; U09 17 0; U09 15 0; U09 16 0; U09 18 0; U09 10 0; U09 10 3; U09 10 2; U09 10 6; U09 10 4; U09 10 8; U09 10 5; U10 109 A; U10 74 A; U10 109 0; U10 75 0; U10 108 0; U10 76 0; U10 107 0; U10 77 0; U10 106 0; U10 78 0; U10 79 0; U10 89 0; U10 80 0; U10 88 0; U10 81 0; U10 87 0; U10 82 0; U10 86 0; U10 85 0; U07 2 19; U08 18 0; U08 17 A; U07 2 A; U07 3 0; U07 4 0; U07 6 0; U07 7 0; U08 7 0; U08 6 0; U08 5 0; U10 72 0; U10 73 0; U10 74 0; U10 110 0; U10 111 0; U10 112 0; U09 27 0; U09 26 0; U09 25 0; U09 24 0; U09 23 0; U09 22 0; U09 21 0; U09 20 0; U09 5 0; U10 112 1; U10 113 0; U10 115 0; U10 116 0; U18 15 0; U10 114 0; U18 100 0; U18 13 0; U18 101 0; U18 12 0; U18 102 0; U18 11 0; U18 103 0; U18 10 0; U18 9 0; U18 104 0; U18 105 0; U18 8 0; U18 106 0; U18 107 0; U18 108 1; U18 109 0; U19 38 1; U19 38 0; U19 37 0; U42 5 0; U07 8 1; U10 60 0; U10 59 0; U10 84 0; U07 10 1; U07 9 06; U07 10 0; U43 1 0; U07 1 1; U07 1 2; U07 1 3; U07 1 4; U07 1 5; U07 14 0; U07 15 0; U07 16 0; U07 17 0; U07 18 0; U07 19 1; U07 19 2; U07 20 0; U07 43 0; U07 44 0; U07 45 0; U07 46 0; U07

19 3; U07 19 4; U07 47 0; U20 1 0; U19 21 0; R18 2 0; R18 2 A; R17 1 0; R18 3 1; R18 3 2; R18 3 3; R18 3 4; R18 3 5; R18 3 6; R18 3 7; R18 3 8; R18 3 9; R18 3 10; R18 3 11; R18 3 12; R18 3 13; R18 3 14; R18 3 15; R18 3 16; R18 3 17; R18 3 18; R18 3 19; R18 2 1; U09 4 0; U09 3 B; U09 3 1; U09 3 0; U09 3 2; U09 3 A; U18 14 0; U18 1 0; U18 2 0; U18 3 0; U09 2 0; U18 4 0; U09 1 0; U18 5 0; U18 6 0; U10 31 0; U10 32 0; U10 34 0; U07 5 1; U07 6 1; U07 6 2; U07 5 0; U09 7 0; U09 8 0; U09 9 0; U09 4 2; U09 29 1; U09 13 0; U09 11 0; and U09 12 0.

SECTION 10. Every decision by the board of water commissioners or duly authorized officer having charge of the sewer system, permitting or denying a connection to the sewer system shall be made in writing. Any person aggrieved by such a decision may appeal the decision within 30 days of issuance pursuant to section 14 of chapter 30A of the General Laws.

SECTION 11. The board of water commissioners may: (i) take by eminent domain pursuant to chapter 79 or chapter 80A of the General Laws or acquire by lease, purchase or otherwise, any lands, sewer rights and public or private rights of way or easements located within or outside of the division and necessary for accomplishing any purpose described in this act; (ii) construct such main drains and sewers under or over any bridge, railroad, railway, boulevard or other public or private way or within the location of any railroad; (iii) enter upon and dig up any private land, public or private way or railroad location for the purpose of laying such drains and sewers and of maintaining and repairing the same; and (iv) do any other thing proper or necessary for the purposes of this act; provided, however, that the board of water commissioners shall not enter upon or construct any

drain or sewer within the location of any railroad corporation except at such time and in such manner as they may agree upon with such corporation or, in the case of failure to agree, as may be approved by the department of public utilities and the manner in which all things done upon any way shall be subject to the applicable by-laws and regulations of the town of Littleton. The board of water commissioners, or its employees or agents acting on behalf of the town of Littleton, may enter upon any land for the purpose of making surveys, test wells or test pits and borings and may take or otherwise acquire the right to temporarily occupy any lands necessary for the construction of any work or for any other purpose authorized by this act; provided, however, that notice is given and property is restored.

SECTION 12. All land taken or acquired under this act shall be managed, improved and controlled by the board of water commissioners in a manner the board considers to be in the best interest of the town of Littleton in the operation of the sewer system.

SECTION 13. The town of Littleton shall be deemed to have accepted section 13B of chapter 80 of the General Laws and sections 16A to 16E, inclusive, and section 16G of chapter 83 of the General Laws. Applications for abatements in accordance with said section 16E of said chapter 83 shall be made to the board of water commissioners within 30 days after the date of the demand.

SECTION 14. In carrying out this act, the town of Littleton shall not discriminate against any person on the grounds of race, color, marital status, physical disability, age, sex, sexual orientation, religion, ancestry, national origin or in any other manner prohibited by the laws of the United States, the commonwealth or the town of Littleton.

SECTION 15. Insofar as the provisions of this act are inconsistent

with any general or special law, administrative order, regulation or any by-law, rule, regulation or code of the town of Littleton, except rules and regulations or orders of the board of health or by-laws of the town that require homes or facilities to be connected to the Littleton common smart sewer division sewer system involuntarily, this act shall control.

SECTION 16. This act shall take effect upon its passage.

Approved, January 6, 2020.

Appendix C.1

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 - 2222

SEWER CONNECTION APPLICATION FOR RESIDENTIAL, COMMERCIAL & INDUSTRIAL BUILDINGS

(SEWERS TO SERVE SINGLE PROPERTY & COMMON SEWER CONNECTION)

To the LITTLETON WATER DEPARTMENT,

		Yes	No
Recommended for Connection by:	Board of Health	☐	☐
	Planning Board	☐	☐
	General Manager	☐	☐

I _____ hereby request a permit to install and connect:
(Applicant) (Property Owner)

A. A sewer to serve a single property located at _____
(Number) (Street)

_____

to the Public Sewer within the town of Littleton. This property is a

_____ establishment; or
(Residence) (Commercial) (Industrial) (etc.)

B. A common sewer connection that will serve the following property/properties (attach additional sheets if necessary) located at

_____
(Number) (Street)

_____
(Number) (Street)

to the Public Sewer within the town of Littleton. These properties are a

_____ establishment.
(Residence) (Commercial Building) (Industrial Building) (etc.)

C. Is property eligible for opt-in or opt-out? yes ☐ no ☐

If property is eligible for opt-out, has a written decision been filed with the Littleton Water Department? yes ☐ no ☐

If property has previously opted-out, have the Board of Commissioners and Littleton Town Meeting both approved for it to now opt-in? yes ☐ no ☐

Sewer Account # _____

LITTLETON WATER DEPARTMENT

SEWER CONNECTION APPLICATION (RESIDENTIAL, COMMERCIAL & INDUSTRIAL)

1. If a residence(s), how many family living units in total will use the sewer connection? _____

2. If a commercial or industrial building(s), list the type of business and the square footage of the proposed building(s) that will use the sewer connection: _____

3. Based on *State Envrionmental Code, Title 5, 310 CMR 15.203, System Sewage Flow Design Criteria* , what is the estimated flow from this facility in gallons per day? _____

4. Will industrial wastes be discharged to the Public Sewer? yes* ☐ no ☐
   *If yes, applicant is required to complete Attachment L

5. Is the commercial/industrial establishment a Food Handling Facility? yes* ☐ no ☐
   *If yes, applicant is required to complete Attachment G

6. Number of bedrooms: _____ toilets _____

7. The name, address, and license number of the person or firm who will performed the proposed work is: _____

8. Applicant intends to discharge to the sewer by: gravity ☐ pressure sewer* ☐
   *Approval of the General Manager required

9. This application is for reconnection or replacement of existing sewer: yes ☐ no ☐

10. Plans and specifications for the proposed building sewer are attached hereto as Exhibit "A".

11. A fee for $ _____ is attached to this application.

12. Property owner is responsible for obtaining any additional permits that may be required for the sewer connection, such as from the Massachusetts Department of Environmental Protection (DEP). (Note: An individual single family residence does not require an additional DEP permit).
    Attach DEP permit, or permit application with date filed, to this application.

13. Operation and maintenance plans and provisions for long-term maintenance of Common Sewer Connection.

Sewer Account # _____

LITTLETON WATER DEPARTMENT
SEWER CONNECTION APPLICATION (RESIDENTIAL, COMMERCIAL & INDUSTRIAL)

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED PROPERTY OWNER AGREES:

1. To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department, and all other pertinent rules and regulations that may be adopted in the future.

2. To pay all the costs of said building sewer and its connection to the Public Sewer in said street, including all labor and materials or other expenses incurred necessary for the proper construction of said building sewer as determined by the Littleton Water Department.

3. To maintain the private owned building sewer at no expense to the Littleton Water Department. Provide for the long-term maintenance of the Common Sewer Connection.

4. That the Littleton Water Department shall have access at all reasonable hours, to said premises, to see that all laws, by-laws, ordinances, rules and regulations relating to the sewer are complied with.

5. For a Common Sewer Connection, upon acceptance of application and prior to the start of construction, Owner has 45 days to submit an approved easement plan to the Littleton Water Department in accordance with Article 4, Section 6. Owner is responsible for all costs associated with preparing easement plans and associated Registry of Deed fees.

Sewer Account # _____

LITTLETON WATER DEPARTMENT

SEWER CONNECTION APPLICATION (RESIDENTIAL, COMMERCIAL & INDUSTRIAL)

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED LICENSED UTILITY INSTALLER AGREES:

1. To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department.

2. To notify the General Manager when the building sewer is ready for inspection and connection to the public sewer, but before any portion of the work is covered.

3. That construction of the sewer connection will be completed within sixty (60) days of issuance of this permit

4. Construction of the building sewer and connection to the Public Sewer shall comply with the plans and specifications attached hereto at Exhibit "A".

Date _____ Signed _____
(Applicant) (Property Owner)

Date _____ Signed _____
(L.U.I)

Application approved and permit granted

GENERAL MANAGER

Date _____ By _____

Sewer Account # _____

Appendix C.2

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 - 2222

APPLICATION FOR PRIVATE SEWER TO DISCHARGE INTO LITTLETON WATER DEPARTMENT SEWER SYSTEM

To the Littleton Water Department

		Yes	No
Recommended for Connection by:	Board of Health	☐	☐
	Planning Board	☐	☐
	General Manager	☐	☐

I _____ hereby request a permit to operate a
(Applicant) (Property Owner)

private sewer extension located at _____
(Streets)

and connect to the Public Sewer within the Town of Littleton. The sewer extension serves or will serve the following properties (List all that apply. Attach separate sheet if required):

_____
(list all Map and Parcel numbers)

_____
(list all Map and Parcel numbers)

1. Total number of sewer connections: ____ Residences ____ Food Handling Establishment
   ____ Commercial/Industrial ____ Industrial Waste Discharges
   ____ Total

   Number currently connected: ____ (attach list of properties currently connected)

2. Describe method of determining or allocating future locations:

   _____

   _____

3. The name, address, e-mail, and telephone number of the licensed wastewater operator who will operate the system is:

   _____

   24-hour phone number and e-mail for the person is _____

   Backup emergency contact name, e-mail, and telephone number is _____

   _____

LITTLETON WATER DEPARTMENT

PRIVATE SEWER TO DISCHARGE INTO LWD SEWER SYSTEM

APPLICATION

4. Are there any mechanical components (pumping stations, standby power generators, etc.) in the proposed private sewer system? If yes, please document their construction cost. _____

_____

5. An application fee for $ _____ is attached to this application.

6. Plans and specifications for the private sewers, building sewers, pumping stations, and standby generators are attached hereto as Exhibit "A" and in accordance with Littleton Water Department Design Standards.

7. Operations and Maintenance Plan are attached hereto as Exhibit "B".

8. Applicant and property owner(s) are responsible for obtaining any additional permits that may be required for the sewer connection, such as from the Massachusetts Department of Environmental Protection (DEP). Attached DEP permit, or permit application with date filed, to this application.

A. APPROVALS

1. Applicant plans and specifications for proposed private sewer connection are approved

_____
(Date)

2. Applicant operations and maintenance plan for proposed private sewer connection is approved

_____
(Date)

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED SEWER EXTENSION AGREES:

1. To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department, and all other pertinent rules and regulations that may be adopted in the future.

2. To maintain the sewer(s) at no expense to the Littleton Water Department.

3. That the Littleton Water Department shall have access at all reasonable hours, to said premises, to see that all laws, by-laws, ordinances, rules and regulations relating to the sewer are complied with.

4. To obtain any permit required from Massachusetts DEP and abide by any regulations, federal, or state, concerning the operation and maintenance of a sewer.

5. For each location that connects to the private sewer, such location shall file his/her individual application depending on the type of establishment. Such establishment is responsible for all application fees.

6. Maintain an Immediate Repair and Replacement Account as required.

This permit is non-transferable. If the private sewer is sold or transferred, the new owner(s) must apply for a discharge permit. If the contact person and/or telephone number change, the owner must notify the Littleton Water Department in writing with new information.

Date _____ Signed _____
(Applicant) (Property Owner)

Application approved and permit granted
GENERAL MANAGER

Date _____ By _____

Appendix C.3

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 - 2222

SEWER CONNECTION APPLICATION FOR INDUSTRIAL USER

		Yes	No
Recommended for Connection by:	Board of Health	☐	☐
	Planning Board	☐	☐
	General Manager	☐	☐

Does this application pertain to:

An existing establishment ☐ **A new establishment** ☐

A process change/change in discharge ☐

SECTION 1: INDUSTRY & CONTACT GENERAL INFORMATION

INDUSTRY LOCATION AND CONTACT INFORMATION	
Industry Name & Permit Number:	
Address:	
Mailing Address:	
Phone Number:	
E-mail:	

CONTACT INFORMATION: CHIEF EXECUTIVE OFFICER	
Chief Executive Officer:	
Title:	
Mailing Address: (if different from location)	
Business Phone Number:	
Home Phone Number:	
Cell Number:	
Email:	
Signature:	

LITTLETON WATER DEPARTMENT
SEWER CONNECTION APPLICATION FOR INDUSTRIAL USER

CONTACT INFORMATION AUTHORIZED REPRESENTATIVE FOR WASTEWATER DISCHARGE	
Licensed Wastewater Operator: (responsible for wastewater discharge)	
Title:	
Mailing Address: (if different from location)	
Business Phone Number:	
Business Fax Number:	
Home Phone Number:	
Cell Phone Number:	
Email:	
Signature:	

CONTACT INFORMATION AUTHORIZED REPRESENTATIVE FOR WASTEWATER DISCHARGE	
Authorized Representative: (responsible for wastewater discharge)	
Title:	
Mailing Address: (if different from location)	
Business Phone Number:	
Business Fax Number:	
Home Phone Number:	
Pager/Cell Phone Number:	
Email:	
Signature:	

LITTLETON WATER DEPARTMENT
SEWER CONNECTION APPLICATION FOR INDUSTRIAL USER

CONTACT INFORMATION AUTHORIZED REPRESENTATIVE FOR WASTEWATER DISCHARGE	
Authorized Representative: **(responsible for wastewater discharge)**	
Title:	
Mailing Address: **(if different from location)**	
Business Phone Number:	
Business Fax Number:	
Home Phone Number:	
Cell Phone Number:	
Email:	
Signature:	

CONTACT INFORMATION PROPERTY OWNER	
Property Owner:	
Mailing Address:	
Phone Number:	
FAX Number:	
Signature:	

SECTION 2: FACILITY OPERATIONS & APPLIED CATEGORICAL STANDARDS

A. Provide a detailed description of the manufacturing processes, facilities or service activities that occur on the premises, *specifically* those processes which involve process wastewater or hazardous materials. Please indicate the use of any pretreatment processes employed or monitoring equipment used. Use additional sheets if necessary.

LITTLETON WATER DEPARTMENT
SEWER CONNECTION APPLICATION FOR INDUSTRIAL USER

B. List all products manufactured or services provided by your facility and the corresponding SIC (Standard Industrial Code) Number. Attach additional sheets if necessary.

PRODUCT OR SERVICE PROVIDED	SIC

C. Please provide the following information regarding your facility's operating schedule and number of employees.

	S	M	TU	W	TH	F	S
NUMBER OF EMPLOYEES - FIRST SHIFT							
NUMBER OF EMPLOYEES - SECOND SHIFT							
NUMBER OF EMPLOYEES - THIRD SHIFT							

D. Is your facility subject to Federal Categorical Pretreatment standards as per 40 CFR 403? If yes, please include the categorical classification(s).

	No - The facility is not subject to Federal Categorical Pretreatment Standards.

	Yes - The facility is subject to Federal Categorical Pretreatment Standards including:

SECTION 3: RAW MATERIAL/CHEMICAL LISTING, STORAGE AND DISPOSAL PRACTICES

A. Provide a comprehensive list of the principal raw materials and chemical compounds used on site at the facility. Include in the list, the quantity stored, as well as the storage practices observed for all of the identified materials and chemicals.

B. If your facility uses, or disposes of, an of the priority pollutants listed in the table below, please mark accordingly. Please note that a pollutant may have more than one use/disposal code.

Use/Disposal Code	Description
U	Item is used on site at the facility.
DT	Item is disposed of, after treatment, to the sewer collection system.
DW	Item is disposed of, without treatment, to the sewer collection system.
DO	Item is disposed of, off site, after being used and or generated.
TU	Item is totally used in production, therefore no waste product is left.
VU	Item is totally vaporized in use, therefore no waste product is left.

Use/Disposal Code(s)	Priority Pollutant	Use/Disposal Code(s)	Priority Pollutant
	Antimony		Chlorobenzene
	Arsenic		1,2,4-trichlorobenzene
	Beryllium		Hexachlorobenzene
	Cadmium		1,2-dichloroethane
	Chromium		1,1,1-trichloroethane
	Copper		Hexachloroethane
	Cyanide		1,1-dichloroethane
	Lead		1,1,2- trichloroethane
	Mercury		1,1,2,2- tetrachloroethane
	Nickel		Chloroethane
	Selenium		Bis(2-chloroethyl)ether
	Silver		2-chloroethyl vinyl ether
	Thallium		2-chloronaphthalene
	Zinc		2,4,6-trichlorophenol
	Acenaphthene		Parachlorometa cresol
	Acrolein		Chloroform

Use/Disposal Code(s)	Priority Pollutant	Use/Disposal Code(s)	Priority Pollutant
	Acrylonitrile		2-chlorophenol
	Benzene		1,2-dichlorobenzene
	Benzidine		1,3-dichlorobenzene
	Carbon tetrachloride		1,4-dichlorobenzene
	3,3-dichlorobenzidine		2,4-dinitrophenol
	1,1-dichloroethylene		4,6-dinitro-o-cresol
	1,2-trans-dichloroethylene		N-nitrosodimethylamine
	2,4-dichlorophenol		N-nitrosodiphenylamine
	1,2-dichloropropane		N-nitrosodi-n-propylamine
	1,3-dichloropropylene		Pentachlorophenol
	2,4-dimethylphenol		Phenol
	2,4-dinitrotoluene		Bis(2-ethylhexyl)phthalate
	2,6-dinitrotoluene		Betyl benzyl phthalate
	1,2-diphenylhydrazine		Di-n-butyl phthalate
	Ethylbenzene		Di-n-octyl phthalate
	Fluoranthene		Diethyl phthalate
	4-chlorophenyl phenyl ether		Dimethyl phthalate
	4-bromophenyl phenyl ether		1,2-benzanthracene
	Bis(2-chloroisopropyl)ether		3,4-benzofluoranthene
	Bis(2-chloroethoxy)methane		Benzo(a)pyrene
	Methylene chloride		11,12-benzofluoranthene
	Methyl chloride		Chrysene
	Methyl bromide		Acenaphthylene
	Bromoform		Anthracene
	Dichlorobromomethane		11,12-benzoperylene
	Chlorodibromomethane		Fluorene
	Hexachlorobutadiene		Phenanthrene
	Hexachlorocyclopentadiene		1,2,5,6-dibenzanthracene
	Isophorone		Indeno(1,2,3-cd)pyrene
	Naphthalene		Pyrene

Use/Disposal Code(s)	Priority Pollutant	Use/Disposal Code(s)	Priority Pollutant
	Nitrobenzene		Tetrachloroethylene
	2-nitrophenol		Toluene
	4-nitrophenol		Trichloroethylene
	Vinyl chloride		Alpha-BHC
	Aldrin		Beta-BHC
	Dieldrin		Gamma-BHC
	Chlorodane		Delta-BHC
	4,4-DDT		PCB-1242 (Arochlor 1242)
	4,4-DDE		PCB-1252 (Arochlor 1252)
	4,4-DDD		PCB-1221 (Arochlor 1221)
	Alpha-endosulfan		PCB-1232 (Arochlor 1232)
	Beta-endosulfan		PCB-1248 (Arochlor 1248)
	Endosulfan sulfate		PCB-1260 (Arochlor 1260)
	Endrin		PCB-1016 (Arochlor 1016)
	Endrin aldehyde		Toxaphene
	Heptachlor		2,3,7,8-tetrachlorodibenzo-p-dioxin
	Heptachlor epoxide		Asbestos

*** If your industrial wastewater discharges any of the pollutants above, please complete Section 4.**

SECTION 4: WATER USAGE AND DISCHARGE INFORMATION

A. List the intake water sources and daily average volumes. Blanks have been provided for additional entries.

Source	Volume (gallons per day)	Estimated or Measured	Indicate meter location(s) within facility
Municipal Water System			
Private Well			
Surface Water			

B. List the average daily volume of water discharged or consumed by process (attach sheets if needed).

Source	Volume (gallons per day)	Estimated or Measured	Indicate meter location(s) within facility
Town Sewer System			
Natural Outlet (NPDES)			
Waste Hauler			
Evaporation			
Contained in Product			
Landscaping			

C. Break down the water discharged to the sewer system into the following categories. Blanks have been provided for additional entries.

Source	Description	Volume (gpd)	Estimated or Measured	Meter Location (if measured)
Process Wastestream #1				
Process Wastestream #2				
Process Wastestream #3				
Process Wastestream #4				
Process Wastestream #5				
Contact Cooling Water				
Non-contact Cooling Water				
Boiler Blowdown				
Sanitary				
Wet Air Scrubbers				
Housekeeping				

For the above listed waste discharged; state any unknown characteristics (i.e. pH, oil & grease, BOD, suspended solids, etc.). Attach copy of wastewater analyses if available.

D. Which wastestreams identified in Section-4C are continuous, which are batch?

Continuous Discharge	Batch Discharge

E. If batch discharges are indeed used, please answer the following (attach sheets if needed):

Description of Batch Discharge (#1)	
What is the frequency of occurrence?	
What is the average volume of each batch?	
What is the maximum volume of each batch discharge?	

Description of Batch Discharge (#2)	
What is the frequency of occurrence?	
What is the average volume of each batch?	
What is the maximum volume of each batch discharge?	

F. Attach hereunto as Exhibit "A" a plumbing/floor plan of your facility which identifies the following:

- **Plumbing and drains, identify floor drains as “active” or “inactive”; NOTE: "Active" floor drains are prohibited from being connected to the sewer per town bylaws.**
- **Plant flows identified in Section-4C and their point(s) of entry into the sewer system;**
- **Pretreatment system location(s);**
- **Effluent monitoring (i.e., pH) and sample collection location(s); and,**
- **Chemical and waste storage location(s).**

SECTION 5 - PRETREATMENT PROCESSES AND REQUIRED EQUIPMENT

A. Provide a comprehensive list of all wastewater treatment processes currently employed by your facility and the treatment equipment required for these processes. Attach additional sheets if needed.

Wastewater Treatment Process	Required Equipment
1.)	
2.)	
3.)	
4.)	
5.)	
6.)	
7.)	
8.)	
9.)	
10.)	

B. **Is your facility presently considering any pretreatment system and/or process modifications/additions? If yes, please provide a detailed description of the work to be done and the anticipated time schedule for submittal of your proposal to the Littleton Water Department for review. Changes in your facility processes/pretreatment system must be reviewed and approved by the Littleton Water Department prior to implementation. Plans and specifications covering any work proposed to be performed under this permit shall be attached hereunto as Exhibit "B".**

C. Does your facility have a certified pretreatment (wastewater) operator on staff?

☐ **Yes**

☐ **No**

If yes, please provide the name and certification number for the operator.

Name:	
Certification Number:	

If no, please provide name of person responsible for pretreatment program compliance and their certification equivalent qualifications.

Name:	
Qualifications:	

D. Does your facility procure the services of a consultant to assist in maintaining your pretreatment system?

☐ **Yes**

☐ **No**

If yes, please supply the following consultant information.

Name of Company:	
Address:	
Company Contact:	
Phone Number:	

E. Does your facility have equipment operation and maintenance manuals or standard operating procedures (SOP) readily available for employee use?

☐ **Yes**

☐ **No**

If yes, please provide the location(s) where manuals/SOP's are stored.

F. Does your facility have spare parts available for on-site maintenance and repair of your pretreatment equipment?

☐ **Yes**

☐ **No**

If yes, please use the space provided to identify the type(s) of maintenance your staff performs and the frequency of these activities. Attach additional sheets if needed.

Maintenance Activity	Frequency
1.)	
2.)	
3.)	
4.)	
5.)	
6.)	
7.)	
8.)	

SECTION 6 - WASTE DISPOSAL

A. Does your facility dispose of any chemicals, solvents, sludges and/or hazardous materials as a results of your company's processes?

☐ **Yes**

☐ **No**

If yes, provide your facility's EPA Hazardous Waste Identification Number.

EPA Identification Number:	

B. Does your facility use an outside contractor(s) to haul sludges/residuals?

☐ **Yes**

☐ **No**

If yes, provide the name(s) of the contractor(s) and EPA Identification Number(s).

Name:	
EPA Identification Number:	

Name:	
EPA Identification Number:	

C. Does your facility maintain records of all wastes hauled off-site for treatment?

☐ **Yes**

☐ **No**

If yes, provide location(s) where these records are stored.

D. Please provide a description of each material and residual disposed of, including, the name of the material, composition, the annual quantity (please identify units) and the means of disposal. Attach additional sheets as necessary.

Material/Composition	Disposal	Annual Quantity

SECTION 7 - SLUG DISCHARGE PREVENTION AND CONTROL

A. Does your facility have a Slug Discharge Prevention and Control Plan filed with the Littleton Water Department?

☐ **Yes**

☐ **No**

If yes, please provide the date of your most recent submittal.

Date:	

B. Is your Slug Discharge Prevention and Control Plan current?

☐ **Yes**

☐ **No**

If no, what parts of the Plan require revision?

C. Does your facility have a Solvent Management Plan?

☐ **Yes**

☐ **No**

If yes, please provide a copy of the plan with this report submittal.

SECTION 8 - WASTEWATER CHARACTERISTICS & MONITORING

A. List your facility's permitted wastewater sampling location(s) and the pollutant analyses required for the location(s).

Sampling Location(s)	Pollutant(s)
1.)	
2.)	
3.)	
4.)	

B. Are the pollutants identified in Section - 8A inclusive of all pollutants which may potentially be present in your wastestream(s)?

☐ **Yes**

☐ **No**

If no, what additional pollutants may be present in your wastestream(s)?

C. Are self-monitoring samples collected by staff or by contacted personnel?

☐ **Staff collect the samples which are analyzed by a Massachusetts Certified Lab.**

☐ **Consultant collects the samples which are analyzed by a Certified Lab.**

☐ **Contracted Certified Lab collects and analyzes samples.**

D. Please complete the following with regard to your Certified Laboratory:

Name of Laboratory:	
Address:	
Phone Number:	
Laboratory ID:	

E. Does your facility maintain records of their self-monitoring events?

☐ **Yes**

☐ **No**

If yes, please provide the date of your most recent submittal.

F. How many years of monitoring records are maintained in storage?

Number of Years of Records:	

SECTION 9: APPLICANT AGREEMENT

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED COMPANY OWNER AGREES

1. **To obtain any additional permits that may be required for the sewer connection, such as from the Massachusetts Department of Environmental Protection (DEP). Attach DEP permit, or permit application with date filed, to this application.**
2. **To furnish any additional information relating to the installation or use of the industrial sewer for which this permit is sought as may be requested by the General Manager.**
3. **To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the LWD, including fines and penalties and of all other pertinent rules that may be adopted in the future.**
4. **To operate and maintain any waste pretreatment facilities, as may be required as a condition of the acceptance into the Public Sewer of the industrial waste involved, in an efficient manner at all times, and at the applicant's expense.**
5. **To cooperate at all times with the LWD, and its representatives in their inspection, sampling, and study of the industrial wastes, and any wastes or process waters not covered by this permit.**
6. **To notify the General Manager immediately in case of any accident, negligence, or any other occurrence that occasions discharge to the Public Sewer of any wastes or process waters not covered by this permit.**
7. **For himself, his heirs, devisees and assigns, that the LWD shall have access at all reasonable hours, to said premises, to see that all laws, by-laws, Ordinances, rules and regulations relating to the sewer are complied with.**
8. **An application fee for $_____ is attached to this application.**
9. **The information provided in this Permit that identifies the nature and frequency of the discharge shall be available to the public without restrictions. Requests for confidentiality shall be requested at the time of submission.**
10. **This is to be signed by an authorized official of your firm after adequate completion of this form and review of the information by the signing official.**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Printed Name of (Property Owner) (Applicant)	**Title**
Signature of (Property Owner) (Applicant)	**Date**

(Seal if applicable)

LITTLETON WATER DEPARTMENT
SEWER CONNECTION APPLICATION FOR INDUSTRIAL USER

SECTION 10: LICENSED UTILITY INSTALLER AGREEMENT (NEW CONNECTION)

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED LICENSED UTILITY INSTALLER AGREES

1. **To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department.**
2. **To notify the General Manager when the building sewer is ready for inspection and connection to the Public Sewer, but before any portion of the work is covered.**
3. **That construction of the sewer connection will be completed within sixty (60) days of issuance of this permit.**
4. **Construction of the building sewer and connection to the Public Sewer shall comply with the plans and specifications attached hereto at Exhibit "B"**

Printed Name of (Licensed Utility Installer)	**Title**
Signature of (Licensed Utility Installer)	**Date**

SECTION 11: COMPLIANCE (EXISTING CONNECTION)

This is to certify that the undersigned board member agrees that the existing industrial facility is either in consistent compliance or non-compliance with the terms and conditions specified herein.

Compliance Status: ____ **CC = Consistent Compliance, NC = Noncompliance**

Application approved and permit granted
GENERAL MANAGER

By	**Date**

Appendix C.4

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 - 2222

SEWER CONNECTION APPLICATION FOR FOOD HANDLING FACILITY USER

		Yes	No
Recommended for Connection by:	Board of Health	☐	☐
	Planning Board	☐	☐
	General Manager	☐	☐

Does this application pertain to:

An existing establishment ☐

A new or remodel establishment ☐

SECTION 1: FOOD PREPARER/PROCESSOR GENERAL INFORMATION

BUSINESS LOCATION AND CONTACT INFORMATION	
Company Name:	
Address:	
Mailing Address:	
Phone Number:	
E-mail:	

CONTACT INFORMATION: PROPERTY OWNER	
Property Owner:	
Mailing Address:	
Phone Number:	
FAX Number:	
E-mail Address:	
Signature:	

LITTLETON WATER DEPARTMENT
FOG PRETREATMENT PROGRAM
SEWER CONNECTION APPLICATION FOR FOOD HANDLING FACILITY

SECTION 2: TYPE OF SERVICE & FACILITY OPERATIONS

A. Provide a detailed description of the type of service the facility provides, the food handling processes, and the type of food prepared/processed. Use additional sheets if necessary.

LITTLETON WATER DEPARTMENT
FOG PRETREATMENT PROGRAM
SEWER CONNECTION APPLICATION FOR FOOD HANDLING FACILITY

SECTION 3: FACILITY DESIGN AND EQUIPMENT

A. Provide with this application submittal, copies of the facility floor plan, plumbing plan and site plan. Where plans are unavailable for submission, drawings depicting the facility layout and kitchen flow(s) as well as a site drawing indicating the location of the existing grease trap or grease interceptor shall suffice.

B. Indicate which of the following equipment can be found at your business location below:

☐ 3-Bay Sink	☐ Dishwasher	☐ Floor Drains
☐ Garbage Disposal Units	☐ Pre-rinse Station	☐ Fryer
☐ Mop Sinks	☐ Vegetable Wash Sinks	☐ Kitchen Exhaust Units
☐ Soup Sinks	☐ Hand Sinks	☐ Recycling receptacles

SECTION 4: FOOD VOLUME AND BUSINESS HOURS

A. Indicate which days of the week your company will be open for business and which types of meals will be served (i.e., breakfast, lunch, dinner):

Open Days of Week	Meals Served		
	Breakfast	Lunch	Dinner
Monday ☐	☐	☐	☐
Tuesday ☐	☐	☐	☐
Wednesday ☐	☐	☐	☐
Thursday ☐	☐	☐	☐
Friday ☐	☐	☐	☐
Saturday ☐	☐	☐	☐
Sunday ☐	☐	☐	☐

B. Indicate the work hours that your company will be open for business (open-close) below:

BUSINESS WORK HOURS			
Monday:		**Friday:**	
Tuesday:		**Saturday:**	
Wednesday:		**Sunday:**	
Thursday:			

C. Indicate the number of seats in the following sections of your business:

BUSINESS SEATS	
Dining Room:	
Lounge:	
Bar:	
Total:	

Is food served in the lounge area? _____

Is food served in the bar area? _____

SECTION 5: <u>FATS, OILS & GREASE (FOG) PRETREATMENT PROGRAM</u>

A. All food handling facilities which discharge fats, oils and grease to the public sewer system are required, at the user's expense, to install and maintain an automatic grease trap or grease interceptor as set for in LWD Sewer Divison's Sewer Use Regulations. Also, flow monitoring and sampling and analyses, the enforcement of Best Management Practices (BMPs) and the setting of inspection, enforcement procedures and penalties for non-compliance are required as set forth in the Littleton Water Department Sewer Division's Sewer Use Regulations.

B. Provide a detailed description of the type of FOG pretreatment equipment device (grease trap or grease interceptor), the age of the device(s), the number of units, and the size of unit(s) below:

LITTLETON WATER DEPARTMENT
FOG PRETREATMENT PROGRAM
SEWER CONNECTION APPLICATION FOR FOOD HANDLING FACILITY

C. The daily sewage flow of the food handling facility, the size of the FOG pretreatment equipment device, and the type of FOG pretreatment equipment device shall be determined by a certified plumber, a registered professional engineer in the Commonwealth of Massachusetts or registered architect in the Commonwealth of Massachusetts. Provide with this application submittal, a certified and signed letter stating that the FOG pretreatment equipment device in use or proposed meets or exceeds the specifications set forth in Article 2 of the Sewer Use Rules and Regulations and all signed and stamped calculations used to determine the daily sewage flow of the food handling facility.

Also, provide copies of all design documents, specifications, and the location of the FOG pretreatment equipment device to the LWD. If there is an existing FOG pretreatment equipment device already in operation prior to submittal of this application, the user must provide all design documents, specifications, and the location of the device to the LWD for approval as well. The existing FOG pretreatment equipment device shall comply with the specifications set forth in the Littleton Water Department's Sewer Use Rules and Regulations.

D. Indicate if biodegration products are/will be added in the FOG pretreatment equipment device below:

☐ **Yes** ☐ **No**

If yes, provide the names of the manufacturer and the product in the spaces below. Also, attach a copy of the product's Material Safety Data Sheet (MSDS) to this application submittal.

Manufacturer Name:	
Product Name:	

E. All FOG pretreatment equipment device shall be adequately maintained such that the device is in proper working condition at all times. The device shall be completely cleaned/pumped by a licensed and permitted waste hauler when twenty-five (25) percent of the operating depth of the device is occupied by solids or a minimum of once every three (3) months, whichever is more frequent. Indicate below which permitted waste hauler will be cleaning/pumping the device:

Permitted Waste Hauler Name:	
Address:	
Phone Number:	
Anticipated Frequency of Cleaning:	

F. All FOG from the automatic grease traps shall be stored properly in recycling barrels, drums or bins with closed covers, stored out of reach of vermin and maintained appropriately to ensure they do not leak and enter the Town's storm water collection system by direct discharge. The extracted FOG shall be disposed of by a licensed and permitted waste hauler and disposed of at a regional FOG Disposal Facility permitted by the Commonwealth of Massachusetts or other applicable regulatory agencies to receive such waste.

LITTLETON WATER DEPARTMENT
FOG PRETREATMENT PROGRAM
SEWER CONNECTION APPLICATION FOR FOOD HANDLING FACILITY

SECTION 6: APPLICANT AGREEMENT

IN CONSIDERATION OF THE GRANTING OF THIS PERMIT, THE UNDERSIGNED COMPANY OWNER

1. **To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department, including fines and penalties for non-compliance and of all other pertinent rules that may be adopted in the future.**
2. **To furnish any additional information relating to the installation or use of the grease trap/grease interceptor for which this permit is sought as may be requested by the General Manager.**
3. **To cooperate at all time with the Littleton Water Department, and its representatives in their inspection, sampling, and study of the wastes, and any wastes or process waters not covered by this permit. Inspections will be completed on a quarter-annual basis.**
4. **To notify the General Manager immediately in case of any accident, negligence, or any other occurrence that occasions discharge to the public sewer of any wastes or process waters not covered by this permit.**
5. **For himself, his heirs, devisees and assigns, that the Littleton Water Department shall have access at all reasonable hours, to said premises, to see that all laws, by-laws, Ordinances, rules and regulations relating to the sewer are complied with.**
6. **For existing food handling establishment deemed non-compliant, that the required improvements will be completed in the time as stipulated in the Ordinance.**
7. **An application fee for $_____ is attached to this application.**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Printed Name of (Property Owner) (Applicant)	**Title**
Signature of (Property Owner) (Applicant)	**Date**

SECTION 7: COMPLIANCE

This is to certify that the undersigned board member agrees that the food handling facility is either in consistent compliance or non-compliance with the terms and conditions specified herein and in the LWD's Sewer Use Rules and Regulations.

Compliance Status: ____ **CC = Consistent Compliance, NC = Noncompliance**

Application approved and permit granted
GENERAL MANAGER

By	**Date**

Appendix C.5

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 - 2222

LICENSED UTILITY INSTALLER APPLICATION

To the Littleton Water Department,

1. Company Name _____

2. Address _____

_____

3. Telephone No. _____

4. E-mail _____

5. The following items must be submitted to the General Manager with this application:
    a. List of all communities currently licensed in as a Licensed Utility Installer
    b. Reference list of municipal officials (in licensed communities) familiar with your work. Include name, address and telephone number.
    c. Last ten (10) installations with contact references.
    d. List of construction equipment currently owned.
    e. Number of employees.
    f. Average number of installations performed annually.
    g. Any additional information that may be appropriate for consideration by the General Manager.

6. Applicant previously approved by Littleton Water Department? yes ☐ no ☐

7. Application fee accompanies this application.

Littleton Water Department

LICENSED UTILITY INSTALLER APPLICATION

IN CONSIDERATION OF THE GRANTING OF THIS LICENSE, THE UNDERSIGNED LICENSED UTILITY INSTALLER AGREES:

1. To accept and abide by all provisions of the Rules and Regulations governing the use of sewers of the Littleton Water Department.

2. To notify the General Manager when the building sewer is ready for inspection and connection to the public sewer, but before any portion of the work is covered.

3. To supervise and be responsible for all work performed under this license.

4. An appropriate deposit amount shall be paid by each licensee to the Littleton Water Department. Upon notification by the General Manager that deficiencies exist for any work undertaken during the immediately preceding 18-month period, failure by the licensee to remedy said deficiencies within twenty-four (24) hours of notification by the General Manager, shall result in the General Manager authorizing others to remedy the deficiencies. The amount incurred to make corrections to address the deficiencies shall be deducted from the deposit and forfeited by the licensee. The remaining balance of any such deposits shall be refunded to the licensee one (1) year from the time of LWD acceptance of the installation.

5. Any violation of the conditions of this license or of the Rules and Regulations governing the use of sewers of the Littleton Water Department by the Licensed Utility Installer shall subject the license to a one (1) year license suspension. In addition, general penalties provided for the violation of these regulations may also apply.

Date _____ Signed _____
(Licensed Utility Installer)

Application approved and permit granted

GENERAL MANAGER

Date _____ By _____

Authorized License No. _____

Littleton Water Department
39 Ayer Road, P.O. Box 2406, Littleton MA 01460
(978) 540 – 2222

INDUSTRIAL WASTE SURVEY

Your company has been selected to complete this Industrial Waste Survey because it discharges its wastewater to the Littleton Wastewater Treatment Plant. Environmental regulations require the Littleton Water Department to periodically identify and locate all possible Industrial Users

Please answer completely all questions that are applicable. Falsification of information on this form may be grounds for termination of service.

Note to signing official: *Information and data provided in this survey which identifies the nature and frequency of discharge shall be available to the Public without restriction. Requests for confidential treatment of other information must be asserted at the time of submittal.*

PLEASE TYPE OR PRINT

1. GENERAL INFORMATION

Company Name _____

Mailing Address

Street/ PO Box _____

City _____ **State** _____ **Zip** _____

Facility Name _____

Facility Address

Street/ PO Box _____

City _____ **State** _____ **Zip** _____

Address of Corporate Headquarters (if applicable):

Corporate Address

Street/ PO Box _____

City _____ **State** _____ **Zip** _____

Person to whom any further inquiries should be directed:

Name _____

Title _____

Phone (_____)_____ **FAX** (_____)_____

E-mail _____

Authorized Representative of Company:

Name _____

Title _____

Phone (_____)_____ **FAX** (_____)_____

E-mail _____

2. DESCRIPTION OF OPERATION

- Principal products or service: _____

  _____

  Briefly describe the manufacturing or service activities conducted on the premises:

  _____

  _____

  _____

  _____

  _____

  _____

- If known, give the 1987 Standard Industrial Classification (SIC) Code (4-digit Code(s) for all activities:

_____ _____ _____ _____ _____ _____ _____ _____

- If production/operation is seasonal, indicate time(s) of peak production/operation, low production/operation and scheduled shutdowns: _____

  _____

  _____

- Average number of employees per shift: 1st _____ 2nd _____ 3rd _____

- Starting times of each shift : 1st _____ 2nd _____ 3rd _____

- Shifts normally worked each day (check appropriate shifts):

Shift	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1st							
2nd							
3rd							

- Describe anticipated future industrial expansion: _____

_____

_____

3. WATER SUPPLY

- List water supply sources in the table below: (Note: One cubic foot equals 7.48 gallons)

Source	Estimated *Annual* Quantity (cubic feet)
Purchased from a Water Utility	=
Pumped from a Private Well	=
Stream Water	=
Other Source :	=
Total Cubic Feet	=

- Water Account Number(s) (from water bill): _____

_____

- Do you have a separate meter for non-contact cooling water ? ☐ Yes ☐ No
- Do you have a sewer meter ? ☐ Yes ☐ No
- Describe any supply water treatment process used. Include chemicals used in treatment. _____

_____

_____

_____

- This facility operates a food handling facility? ☐ Yes ☐ No

4. WATER USE

- List water uses in the table below:

Uses	Estimated *Annual* Quantity (cubic feet)
Water used in any processes (i.e., rinses, product, solutions)	=
Non-Contact Cooling Water (see Sewer Use Ordinance for definition)	=
Contact Cooling Water (see Sewer Use Ordinance for definition)	=
Boiler Blow-down	=
Deionizer, or other water treatment backwash	=
Evaporation	=
Sludges	=
Domestic	=
Other Use :	=
Total Cubic Feet	=

5. WASTEWATER DISCHARGE

- ☐ Check this box and stop here if the answer to the following question is YES and **all** wastewater discharged is domestic (toilets, sinks, showers, etc.).
  If *any* wastewater *other than domestic* is discharged, please continue.

- Is (100%) of your wastewater discharged into the Public Sewer? ☐ **YES** ☐ **NO**

- If **NO**, indicate the quantity discharged in cubic feet per year.

Discharge Point	Estimated *Annual* Quantity (cubic feet)
Public Sewer	=
Storm Sewer (e.g. - non-contact cooling water)	=
Direct Discharge to Stream (e.g. - non-contact cooling water)	=
Septic Waste Hauler / Scavenger / Recycler	=
Other :	=
Other :	=
Total Cubic Feet	=

Does your company have a National Pollutant Discharge Elimination System (NPDES) Permit ? ☐ **YES** ☐ **NO**

If **YES**, describe the details. _____

_____

Is your company currently subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N? ☐ **YES** ☐ **NO**

Does your company have a written plan to prevent, contain, and enact countermeasures to any potential of a Spill, Leak, or "Slug" discharge? ☐ YES ☐ NO

If **YES**, attach a copy.

Does your company have a Resource Conservation and Recovery Act (RCRA) ID number ? ☐ YES ☐ NO

If **YES**, what is the number ? _____

6. GENERAL WASTEWATER CHARACTERISTICS

Place a checkmark in the box next to the substances contained in your wastewater.

☐ acids and acidic wastes
☐ alkali and caustic wastes
☐ pickling wastes
☐ other metal cleaning and preparation wastes
☐ plating wastes
☐ electrocoating wastes
☐ paints
☐ pigments
☐ inks
☐ dyes, coloring agents
☐ organic solvents, thinners ---------- List each solvent below:
☐ latex wastes _____
☐ resins, monomers _____
☐ waxes _____
☐ phenol containing wastes _____
☐ alcohols _____

- ☐ ethers
- ☐ aldehydes, ketones
- ☐ organic acids
- ☐ soaps, surfactants, detergents
- ☐ oils
- ☐ fats, grease
- ☐ benzene, and benzene derivatives
- ☐ chlorinated organic compounds
- ☐ brominated organic compounds
- ☐ hot wastes
- ☐ radioactive wastes
- ☐ phthalate esters
- ☐ cadmium containing wastes
- ☐ chromium containing wastes
- ☐ copper containing wastes
- ☐ lead containing wastes
- ☐ nickel containing wastes
- ☐ zinc containing wastes
- ☐ mercury containing wastes
- ☐ molybdenum containing wastes
- ☐ arsenic containing wastes
- ☐ selenium containing wastes
- ☐ siloxane containing wastes

7. SPECIFIC COMPANY ACTIVITIES

Does your company conduct any of the following activities ? If Yes, place a checkmark in the box next to all activities that apply.

- ☐ Dairy products processing
- ☐ Feedlot operation
- ☐ Fruits or vegetables canning or preservation
- ☐ Grain mill operation
- ☐ Leather tanning
- ☐ Meat products processing
- ☐ Seafood canning or preservation
- ☐ Sugar processing
- ☐ Textile mill operation
- ☐ Timber products processing

- ☐ Asbestos manufacturing
- ☐ Asphalt concrete manufacturing
- ☐ Asphalt paving and roofing emulsions manufacturing
- ☐ Asphalt roofing materials manufacturing
- ☐ Builders paper manufacturing
- ☐ Cement manufacturing
- ☐ Linoleum floor coverings manufacturing
- ☐ Petroleum products refining
- ☐ Printed asphalt felt floor coverings manufacturing
- ☐ Roofing felt manufacturing

- ☐ Glass manufacturing
- ☐ Plastics forming or molding
- ☐ Plastics manufacturing
- ☐ Rubber & rubber products manufacturing

- ☐ Batteries manufacturing
- ☐ Cathode ray tubes manufacturing
- ☐ Electric power by steam generation

- ☐ Aluminum forming
- ☐ Anodizing
- ☐ Chemical etching or milling
- ☐ Chromating
- ☐ Coil Coating
- ☐ Copper forming
- ☐ Electroless plating
- ☐ Electroplating
- ☐ Ferroalloys smelting
- ☐ Iron or steel manufacturing
- ☐ Metal coloring
- ☐ Metal molding or casting
- ☐ Metal parts forming from metal powder
- ☐ Metal powder production -- mechanically
- ☐ Nonferrous metals forming
- ☐ Nonferrous metals manufacturing
- ☐ Phosphating or phosphatizing
- ☐ Printed circuit board manufacturing

- ☐ Carbon black manufacturing
- ☐ Explosives manufacturing
- ☐ Fertilizer manufacturing
- ☐ Explosives manufacturing
- ☐ Ink manufacturing
- ☐ Inorganic chemicals manufacturing
- ☐ Organic chemicals manufacturing
- ☐ Paint manufacturing
- ☐ Pesticides manufacturing
- ☐ Pharmaceuticals manufacturing
- ☐ Phosphate manufacturing

☐ Electronic crystals manufacturing
☐ Luminescent materials manufacturing
☐ Semiconductors manufacturing
☐ Soap or detergent manufacturing
☐ Synthetic fibers manufacturing

8. OTHER COMPANY ACTIVITIES

Does your company **manufacture, maintain or rebuild "finished" metal parts, products or machines** corresponding to the following Standard Industrial Classification (SIC) Codes or descriptions ? The term **"finished"** means metal parts, products or machines not specifically covered by one of the existing regulations for manufacturing such as: Iron & steel, Nonferrous metals, Ferroalloys, Batteries manufacturing, or for Plastic molding and forming, Metal molding and casting, Coil coating, Porcelain enameling, Aluminum forming, Copper forming, Electrical and electronic components, Nonferrous metals forming and metal powders.

Place a checkmark in the box for all that apply.

SIC	Description of SIC
☐ 3563	Air & Gas Compressors
☐ 3724	Aircraft Engines & Engine Parts
☐ 3721	Aircraft Frames Manufacturing
☐ 3728	Aircraft Parts & Equipment
☐ 4581	Airports, Flying Fields, & Services
☐ 3483	Ammunition
☐ 3446	Architectural & Ornamental Metal Work
☐ 3581	Automatic Vending Machines
☐ 3562	Ball & Roller Bearings
☐ 3564	Blowers & Exhaust & Ventilation Fans
☐ 3452	Bolts, Nuts, Screws, Rivets & Washers
☐ 3582	Commercial Laundry Equipment
☐ 3669	Communications Equipment
☐ 3678	Connectors for Electronic Applications
☐ 3531	Construction Machinery & Equipment
☐ 3535	Conveyors & Conveying Equipment
☐ 3466	Crowns & Closures -- bottle caps, jar tops, etc.
☐ 3421	Cutlery -- razors, razor blades, scissors, shears, cutlery without metal handles, etc.
☐ 3914	Cutlery of precious metal and metal handles
☐ 3629	Electric Industrial Apparatus
☐ 3641	Electric Lamps
☐ 3671	Electron Tubes
☐ 3675	Electronic Capacitors
☐ 3677	Electronic Coils & Transformers
☐ 3679	Electronic Components
☐ 3534	Elevators & Moving Stairways
☐ 7359	Equipment Rental & Leasing
☐ 3499	Fabricated Metal Products
☐ 3498	Fabricated Pipe & Fabricated Pipe Fittings
☐ 3443	Fabricated Plate Work (Boiler Shops)
☐ 3441	Fabricated Structural Metal
☐ 3523	Farm Machinery & Equipment
☐ 3965	Fasteners, Buttons, Needles & Pins
☐ 3593	Fluid Power Cylinders & Actuators
☐ 3594	Fluid Power Pumps & Motors
☐ 3492	Fluid Power Valves & Hose Fittings
☐ 3556	Food Product Machinery
☐ 3524	Garden Tractors & Lawn & Garden Equipment
☐ 3569	General Industrial Machinery
☐ 3761	Guided Missiles & Space Vehicle

SIC	Description of SIC
☐ 3764	Guided Missiles & Space Vehicle Propulsion
☐ 3423	Hand & Edge Tools
☐ 3425	Hand Saws & Saw Blades
☐ 3429	Hardware
☐ 3585	Heating Equipment, Except Electric
☐ 7353	Heavy Construction Equipment Rental
☐ 3536	Hoist, Industrial Cranes & Monorails
☐ 3567	Industrial Furnaces & Ovens
☐ 3599	Industrial Machinery
☐ 3543	Industrial Patterns
☐ 3567	Industrial Process Furnaces & Ovens
☐ 3537	Industrial Trucks, Tractors, Trailers
☐ 3519	Internal Combustion Engines
☐ 3312	Iron & Steel Forgings
☐ 3462	Iron & Steel Forgings
☐ 3545	Machine Tool Accessories & Measuring Devices
☐ 3541	Machine Tools, Metal Cutting Types
☐ 3542	Machine Tools, Metal Forming Types
☐ 3586	Measuring & Dispensing Pumps
☐ 3568	Mechanical Power Transmission Equipment
☐ 3412	Metal Shipping Barrels, Drums, Kegs, Pails
☐ 3469	Metal Stampings
☐ 3549	Metal Working Machinery
☐ 3532	Mining Machinery & Equipment, Except Oil Field
☐ 3496	Miscellaneous Fabricated Wire Products
☐ 3449	Miscellaneous Metal Work
☐ 3621	Motors & Generators
☐ 3533	Oil Field Machinery & Equipment
☐ 3769	Other Space Vehicle & Missile Parts
☐ 3565	Packaging Machinery
☐ 3554	Paper Industries Machinery
☐ 3546	Power Driven Hand Tools
☐ 3448	Prefabricated Metal Buildings & Components
☐ 3555	Printing Trades Machinery & Equipment
☐ 3561	Pumps & Pumping Equipment
☐ 3663	Radio & TV Communications Equipment
☐ 3585	Refrigeration & Air & Heating Equipment
☐ 3625	Relays & Industrial Controls
☐ 3547	Rolling Mill Machinery & Equipment
☐ 3596	Scales & Balances, Except Laboratory
☐ 3451	Screw Machine Products
☐ 3589	Service Industry Machines
☐ 3444	Sheet Metal Work
☐ 3484	Small Arms
☐ 3482	Small Arms Ammunition
☐ 3489	Small Arms Ordnance & Accessories
☐ 3544	Special Dies & Tools, Die Sets, Jigs, Etc.
☐ 3559	Special Industry Machinery
☐ 3566	Speed Changers, High Speed Drivers & Gears
☐ 3511	Steam, Gas, Hydraulic Turbines, Generator Units
☐ 3493	Steel Springs
☐ 3613	Switchgear & Switchboard Apparatus
☐ 3795	Tanks & Tank Components
☐ 3661	Telephone & Telegraph Apparatus

SIC	Description of SIC
☐ 3552	Textile Machinery
☐ 3612	Transformers
☐ 3494	Valves & Pipe Fittings
☐ 3548	Welding Apparatus
☐ 3495	Wire Springs
☐ 3553	Woodworking Machinery

9. ADDITIONAL COMMENTS

Please provide below any additional comments or information not specifically addressed in this survey, or attach comments as necessary.

10. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Signature: _____
(Property Owner) (Applicant)

Printed Name: _____

Printed Title: _____

Date: _____

For Town Use Only:

SIC	FLOW	CAT	PERMIT REQUIRED
			☐ Yes ☐ No

Appendix C.7

Escrow Agreement Template

ESCROW AGREEMENT
FOR THE IMMEDIATE REPAIR AND/OR REPLACEMENT ACCOUNT
LITTLETON WATER DEPARTMENT

This Escrow Agreement ("Escrow Agreement") is entered into by and between the Littleton Water Department ("LWD") having a principal office located at 39 Ayer Road, Littleton, Massachusetts 01460, and

_____,
Permittee Name (hereinafter the "Permittee")

having a principal place of business located at:

_____
Street Address

_____ _____ _____;
City/Town State Zip Code

and _____, having a principal place of business located at:
Escrow Agent Name

_____
Street Address

_____.
City/Town, State, Zip Code (hereinafter the "Escrow Agent").

The LWD, the Permittee, and the Escrow Agent are hereinafter collectively referred to as the "Parties."

Recitals

WHEREAS, on (date) the LWD issued to the Permittee a Private Sewer Permit ("Permit");

WHEREAS, the Permit authorizes the Permittee to connect to the Public Sewer at a location described as

_____

in accordance with the terms and conditions set forth in the Littleton Water Department Sewer Use Rules and Regulations and in the Permit (the "Private Sewer System");

WHEREAS, the Permit requires the Permittee to use a LWD approved form to establish and maintain a financial assurance mechanism that provides for an immediate repair and replacement account to assure that funds will be available when needed for the immediate repair and/or replacement of major mechanical components of the Private Sewer System;

WHEREAS, this Escrow Agreement is the LWD approved form to establish and maintain a financial assurance mechanism that provides for the immediate repair and replacement account required by the Permit and defines the terms and conditions under which the immediate repair and replacement account will be held and disbursed;

WHEREAS, the Permit and the Littleton Water Department Sewer Use Rules and Regulations, Article 4, Section 7 require that funds equal to 25% of the estimated construction cost of the defined major mechanical components of the Private Sewer System be deposited in an interest-bearing repair and replacement escrow account;

WHEREAS, the Parties agree that the estimated construction cost of the major mechanical components of the Private Sewer System, is $;

WHEREAS, the amount required to be placed in the immediate repair and replacement escrow account is $ ("Required Escrow Amount"); and

WHEREAS, the Escrow Agent agrees to accept, hold, and disburse the escrow account funds and the earnings thereon in accordance with the terms of this Escrow Agreement.

NOW, THEREFORE, in consideration of the recitals above, the covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

Escrow Account

1. Permittee shall deliver to the Escrow Agent, an independent third-party acting in a fiduciary capacity, the Required Escrow Amount of $ at least thirty (30) calendar days prior to .

date of connection to Public Sewer is expected to commence for new facilities

Permittee may obtain additional time to establish the account if a request is submitted to the LWD providing sufficient justification for the extension and if the LWD General Manager approves the request in writing.

2. Within two (2) business days of receipt of the Required Escrow Amount or additional funds pursuant to Paragraph 3 below, the Escrow Agent shall place the Required Escrow Amount in interest-bearing account ("Escrow Account") at

Name of Institution/Bank

located at , Massachusetts ("Depository Bank").

All funds delivered by the Permittee to the Escrow Agent shall be deposited and held by the Escrow Agent in the Escrow Account, who shall provide account number to LWD.

3. Within forty-five (45) calendar days of any disbursement from the Escrow Account, the Permittee shall deliver additional funds to the Escrow Agent so that the amount available in the Escrow Account shall be no less than the Required Escrow Amount, provided that at no time may the Escrow Account incur a negative balance. An applicant or permittee may obtain additional time to replenish the account, if a request is submitted to the LWD providing sufficient justification for the extension and if the LWD General Manager approves the request in writing.

4. The Depository Bank shall be entitled to charge the Escrow Account for services related to maintenance of the Escrow Account at a rate not exceeding the Depository Bank's standard charges to other customers for similar services.

5. The Escrow Account shall be opened with the signature of the Escrow Agent indicating that checks drawn against the Escrow Account shall be signed by the Escrow Agent or its duly appointed successor and by no other person. Disbursements shall be made from the Escrow Account only in accordance with the terms of this Escrow Agreement.

6. The Escrow Agent shall maintain a record of all deposits, income, disbursements, and other transactions concerning the Escrow Account. On or before January 15th of each year, the Escrow Agent shall provide to each of the other Parties a written accounting of the initial and current balance as well as of all transactions that occurred during the prior calendar year. Upon request, the other Parties shall have the right to inspect, at reasonable times, all books and records of the Escrow Agent relating to the Escrow Account, including, without limitation, all accounting and bank statements, checks, receipts, and disbursements. The Escrow Agent shall send a copy of such books and records to a Party within thirty (30) calendar days of a request.

7. The Escrow Agent shall keep in its possession all book(s) and records relating to the Escrow Account until such time as they are delivered to a successor Escrow Agent pursuant to Paragraph 16 below or to the Permittee and the LWD pursuant to Paragraph 29 below.

Disbursements

8. The Escrow Agent shall make disbursements of the Escrow Account funds including any accrued interest only as follows:

(a) Within seven (7) business days following receipt of a joint written direction signed by the Permittee and the LWD stating that funds held in the Escrow Account are required to pay for the immediate repair and/or replacement of the mechanical components of the Private Sewer system or any related components. The written direction shall include invoice(s) evidencing the expenditures to be made and the Escrow Agent shall disburse such funds in accordance with the written direction.

(b) The Escrow Agent shall disburse all funds in the Escrow Account to the Permittee within five (5) business days of receipt of a joint written direction from the LWD and the Permittee stating that the Escrow Account funds are no longer required to fund the immediate repair and/or replacement of the mechanical components of the Private Sewer System or related components.

(c) Notwithstanding Paragraphs 8(a) and (b) above, the Escrow Agent shall disburse the Escrow Account funds to the Permittee or the LWD in accordance with any final order, judgment, or decree of a court of competent jurisdiction from which the Parties do not appeal or from which no further right of appeal exists.

(d) The Escrow Agent shall disburse funds to itself for services rendered in accordance with Paragraph 12 below.

Duties and Liabilities of Escrow Agent

9. The Escrow Agent shall have no liability or obligation with respect to the Escrow Account funds except for the Escrow Agent's willful misconduct, bad faith or gross negligence. The Escrow Agent shall be under no duty to: (a) pass upon the adequacy of any documents; (b) determine whether any of the Parties are complying with the terms and provisions of this Escrow Agreement; or (c) determine the identity or authority of any person purporting to be a signatory authorized by the Permittee or the LWD.

10. The Escrow Agent may conclusively rely upon, and shall be protected in acting on, a statement, certificate, notice, requisition, order, approval, or other document believed by the Escrow Agent to be genuine and to have been given, signed and presented by a duly authorized agent of the Permittee or LWD. The Escrow Agent shall have no duty or liability to verify any statement, certificate, notice, requisition, order, approval or other document and its sole responsibility shall be to act only as expressly set forth in this Escrow Agreement. The Escrow Agent shall not incur liability for following the instructions contemplated by this Escrow Agreement or expressly provided for in this Escrow Agreement. The Escrow Agent shall be under no obligation to institute or defend any action, suit, or proceeding in connection with this Escrow Agreement, unless first indemnified to its satisfaction. The Escrow Agent may consult with counsel of its choice including shareholders, directors and employees of the Escrow Agent, with respect to any question arising under or in connection with this Escrow Agreement.

11. The Escrow Agent may refrain from taking any action, other than keeping all property held by it in escrow if the Escrow Agent: (a) is uncertain about its duties or rights under this Escrow Agreement; or (b) receives instructions that, in its opinion, are in conflict with any of the terms and provisions of this Escrow Agreement, until it has resolved the conflict to its satisfaction, received a final judgment by a court of competent jurisdiction (if it seems such action necessary or advisable), or received instructions executed by both the LWD and the Permittee.

Escrow Agent's Fee

12. Permittee shall pay the Escrow Agent for its services under this Escrow Agreement in accordance with the fee schedule attached to this Escrow Agreement as Exhibit A. Fees invoiced in accordance with the attached fee schedule constitutes full compensation to the Escrow Agent for services contemplated by this Escrow Agreement. The Escrow Agent is authorized to compensate itself from Escrow Account funds in accordance with the attached schedule following thirty (30) calendar days prior written notice to Permittee and the LWD. The Escrow Account shall be replenished by the Permittee as required by Paragraph 3 above.

Investment Risk

13. In no event shall the Escrow Agent have any liability as a result of any loss occasioned by the financial difficulty or failure of any institution, including Depository Bank, or for failure of any banking institution, including Depository Bank, to follow the instructions of the Escrow Agent. Without limiting the generality of the foregoing, in no event shall the Escrow Agent incur any liability as the result of any claim or allegation that the Escrow Agent should have invested the escrow funds in United States Treasury Bills rather than hold same on deposit at the Depository Bank, or vice versa.

Notices

14. All notices, certifications, authorizations, requests, or other communications permitted or required under this Escrow Agreement shall be in writing and shall be deemed duly provided when deposited in the United States mail, postage prepaid, certified or registered mail, return receipt requested to the other Parties at the addresses set forth in Paragraph 15 below. In addition, the Parties may provide notice utilizing the alternate methods of hand delivery, Federal Express, or other recognized overnight courier. Notices provided by hand delivery, Federal Express or other recognized overnight courier shall be deemed duly provided when received at the addresses set forth in Paragraph 15 below.

15. All notices, certifications, authorizations, requests, or other communications permitted or required shall be delivered as follows:

To the LWD:

_____

_____

_____

To the Permittee:

_____

_____

_____

To the Escrow Agent:

_____

_____

_____

or to such other place or to the attention of such other individual as a Party from time to time may designate by written notice to all other Parties.

Resignation, Removal and Successor Escrow Agent

16. If, for any reason, the Escrow Agent is unable or unwilling to continue to act as Escrow Agent, then it shall give written notice to the other Parties of its intent to resign as Escrow Agent. Within ten (10) business days following receipt of such notice, the Parties shall agree upon a successor escrow agent, formally appoint the successor escrow agent and provide written notification to the Escrow Agent of the subsequent appointment. Upon appointment, such successor escrow agent shall execute and deliver to its predecessor and to the Parties an instrument in writing accepting such appointment. Thereupon, without further action, such successor escrow agent shall be fully vested with all the rights, immunities, and powers, and shall be subject to all the duties and obligations of its predecessor. The predecessor Escrow Agent shall, within three (3) business days following receipt of the written acceptance of subsequent appointment, deliver to the Escrow Agent's successor all books and records, funds, and other property held by the Escrow Agent under the Escrow Agreement. Upon such delivery, all obligations of the Escrow Agent under this Escrow Agreement shall automatically terminate. If no successor Escrow Agent is designated within the prescribed ten (10) business day period, or if written acceptance of subsequent appointment is not received within such period, then the Escrow Agent's obligations under this Escrow Agreement shall continue unless otherwise agreed to by the Parties.

17. The Escrow Agent may be removed at any time by a written instrument or concurrent written instruments signed by the LWD and the Permittee and delivered to the Escrow Agent.

18. If at any time the Escrow Agent shall resign, be removed, be dissolved, or otherwise become incapable of acting, or the position of the Escrow Agent shall become vacant for any reason, the Parties shall promptly appoint a successor Escrow Agent.

Interest

19. All interest income accrued on funds in the Escrow Account shall become part of the Escrow Account and shall remain in the Escrow Account. The Permittee shall be solely responsible for the payment of all federal and state taxes on accrued Escrow Account interest.

Miscellaneous

20. This Escrow Agreement constitutes the entire agreement between the Parties relating to the holding, investment, and disbursement of the Escrow Account funds, but not relating to the extension of the establishment of funds covered by Paragraph 1 and the extension of the replenishment of funds covered by paragraph 3 above.

21. This Escrow Agreement shall be binding upon, and shall inure to the benefit of the Parties hereto and their successors and assigns.

22. This Escrow Agreement shall be governed by and be construed and interpreted in accordance with the laws of the Commonwealth of Massachusetts without giving effect to the conflict of laws principles thereof.

23. This Escrow Agreement shall be interpreted as an instrument under seal.

24. This Escrow Agreement may be executed in any number of counterparts each of which shall constitute an original and all counterparts shall constitute one Agreement.

25. This Escrow Agreement may not be assigned, amended, altered, or modified except by written instrument duly executed by all the Parties.

26. The Permittee shall not transfer the Permit, and the LWD shall not approve said transfer, unless and until the proposed new permittee establishes a new financial assurance mechanism that meets the requirements of said permit and/or the Permittee, the proposed new permittee, the LWD and the Escrow Agent agree to modify this Escrow Agreement to substitute the proposed new permittee for the Permittee.

27. In the event that any Party to this Escrow Agreement commences a lawsuit or other proceeding relating to or arising from this Escrow Agreement, the Parties agree that the courts of the Commonwealth of Massachusetts, excluding any federal court sitting therein, shall have the sole and exclusive jurisdiction over any such proceeding. The Parties agree to: (a) waive any objection to such venue; (b) submit to the jurisdiction of the courts so specified; and (c) accept service of process to vest personal jurisdiction over them in these courts.

28. To the extent any provision of this Escrow Agreement is prohibited by or held invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Escrow Agreement.

29. This Escrow Agreement shall terminate, and the Escrow Agent shall be relieved of all liability, after: (a) all funds in the Escrow Account have been properly disbursed in accordance with the terms and conditions of this Agreement; (b) the Escrow Agent has provided a final accounting of all transactions hereunder to the Parties; and (c) a copy of all books and records relating to the Escrow Account has been delivered to the Permittee and the LWD.

Effective Date

30. This Agreement shall take effect on the latest date of execution by the LWD, Permittee or Escrow Agent.

IN WITNESS WHEREOF, the Parties have caused this Escrow Agreement to be duly executed as set forth below.

FOR THE LITTLETON WATER DEPARTMENT:

By _____ _____
Signature Date

_____
Printed Name

_____
Title

FOR THE PERMITTEE

By _____ _____

Signature Date

_____

Printed Name

_____

Title

FOR THE ESCROW AGENT

By _____ _____

Signature Date

_____

Printed Name

_____

Title

EXHIBIT A

Escrow Agent's Fee Schedule

_____ Fees - $ /hour

_____ Fees - $ /hour

To be adjusted every two (2) years.

Appendix D – Design Standards

Littleton Water Department

June 2021

Section 1

Wastewater collection systems shall be designed separately from stormwater systems. Wastewater collection systems shall not allow for the introduction of rain water, noncontract cooling water, and groundwater from foundation drains, sump pumps, surface drainage or any other source of inflow. Overflows from Wastewater collection systems shall also not be permitted.

New Public Sewers and all extensions to Public Sewers owned and operated by the Littleton Water Department shall be either gravity sewers or low pressure sewers in accordance with the Littleton Water Department's approved Wastewater program, and shall be designed by either a Professional Engineer licensed to practice in the Commonwealth of Massachusetts or a Registered Sanitarian in Massachusetts, in accordance with the Guides for the Design of Wastewater Treatment Works (TR-16), and in strict accordance with applicable Massachusetts codes. Plans and specifications shall be submitted to and approved by the General Manager before initiating any construction. The design shall anticipate and allow for flows from all possible future extensions or development within the immediate drainage area in conformance with Town planning documents.

Section 2

Building Sewers shall be constructed of such materials and shall be a minimum four (4") inch diameter pipe for single family residential connections and six (6") inch diameter pipe for multi-family, commercial or industrial connections or as the General Manager may determine. Sewer pipe shall be made from: ductile iron with the outside coated with extra heavy bituminous coating approved for buried utilities and the inside cement lined, minimum schedule 35 P.V.C. or acceptable substitute approved by the General Manager. The Building Sewer shall be laid straight in line and grade.

Single family residential Building Sewers must have watertight wye cleanouts, with H-20 rated valve frame and cover box, with the word "SEWER" in raised lettering, at all locations where pipe size, slope or direction changes and at or near the property line. Additional cleanouts may be required for runs of 100 feet or more, or at the discretion of the General Manager. The cleanout shall be brought to within four (4") inches below final grade, except for paved surfaces, (bituminous concrete, concrete, paving blocks, etc.) the cover shall be flush with the finished surface. Cleanouts in pressure sewers shall be located and constructed per the manufacturer's recommendation.

For multi-family, commercial or industrial sewer connections manholes shall be used at all locations where pipe size, slope or directions changes. Commercial or industrial sewer connections shall include a sampling station, to be used for discharge sampling, located in the

road layout at the property line. The sampling station shall consist of a precast manhole with approved frame & cover.

Section 2.1 Pressure Sewer Laterals

If a building is to be connected to a low pressure sewer or requires a pump to lift wastewater to a gravity sewer, the gravity portion of the installation shall meet the requirements of the previous paragraph. The pressure pipe shall be minimum 1-1/4 inch diameter if a grinder pump is used and 2-inch diameter if a grinder pump is not used or other such larger size if the Wastewater flow and characteristics differ from a single-family residence.

Section 2.2 Materials

Polyethylene for 1-1/4 –inch pipe through 4 inch pressure pipe with material conforming to ASTM D3350, Type PE-4710 HDPE pressure Class PC 200, SDR-11. Fittings for use with polyethylene pipe and tubing shall be manufactured and furnished by the pipe supplier and in conformance with AWWA C901 requirements. Joints for polyethylene pipe shall be jointed by the butt fusion method in a manner recommended by the pipe manufacturer.

Polyvinyl Chloride (PVC) Pipe- ASTM D2241 PVC pressure pipe material conforming to ASTM D1784, minimum class SDR 21 for pipe 1-1/4-inch through 4-inch, push-on joint conforming to ASTM D3139 with flexible elastomeric gaskets conforming to ASTM F477.

A ball valve with curb stop and check valve shall be installed on all low pressure and force mains, as close as feasible to a property line. Ball valves for low pressure sewers shall be true union type constructed from PVC Type I cell classification with EPDM O-rings. All valve components shall be replaceable. Ball valves 2 inch and smaller shall be pressure rated to 235 psi, while valves larger than 2 inches shall be rated to 150 psi. Ball valves shall have a Safe-T-Block seal carrier to stop flow in either direction, allowing safe removal of the downstream union nut for system service or modification. Ball valves shall be true union ball valves as manufactured by Spears Manufacturing Company, or equal. Check valves for low pressure sewer laterals shall be made of stainless steel or fabric-reinforced synthetic elastomer to allow for a positive seal with minimum backpressure. Check valves shall be true union ball check valves.

Curb stop valves shall be of brass or bronze construction and two rubberized O-ring seals to provide pressure-tight seal. Curb stop valves shall be figure H-15204 as manufactured by Mueller-Oriseal, B22 as manufactured by Ford Meter Box Company, Hayes, Nueseal, or equal. Curb boxes shall be 2-1/2 inch shaft size two-piece screw type. They shall be adjustable from 48-inch to 72-inch. Curb boxes shall be constructed of cast iron and thoroughly coated with two coats of asphaltum varnish. Curb box shall be stainless steel supplied with a hole in the “U” portion for the insertion of a stainless steel pin. Pins shall be supplied and shall be made of stainless steel. Curb boxes shall be as manufactured by Ford Meter Box Company, Mueller Company, or equal.

Gravity or low pressure pipe shall have magnetic marking tape 2 inches wide with the words “SANITARY SEWER BELOW,” installed not more than two (2’) feet below finished grade on all mainline and service laterals.

Section 3

Whenever possible, the Building Sewer shall be brought to the building at an elevation below the basement floor. All buildings in which any building drain is too low to permit gravity flow to the Public Sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the Building Sewer or Public Sewer**,** as specified by the General Manager.

Section 3.1 Low Pressure Grinder Pumps or Lift Pumps:

Each property serviced by a low pressure sewer shall have a dedicated pre-manufactured pumping station suitable for the flow, pressure and other conditions defined by the property and the Public Sewer. The wastewater pumping station shall include an in-ground self contained unit with submersible motor, level controls, sensors, alarms, and an emergency generator plug-in connection. Properties whose Wastewater quantities and characteristics are equivalent to four or more families shall install a duplex pump. Refer to further requirements in Section 23 of this Appendix.

Section 4

No Person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a Building Sewer or Building Drain which is connected directly or indirectly to a Public Sewer.

Section 5

Exhaust from engines, blowoff from boilers, drainage of gasoline or any explosive liquor, liquids, or other flammable substances shall not be permitted to be discharged into any Building Sewer which is connected directly or indirectly to a Public Sewer.

At the time a connection is made to the Public Sewer, the interior plumbing shall be inspected to ensure that no connections to roof drains, yard drains, foundation drains, sump pumps, or other sources of drainage water is connected to the Public Sewer.

Section 6

The connection of the Building Drain into the Building Sewer shall conform to the requirements of the building and plumbing code or other applicable policies, rules and regulations of the Littleton Water Department.

Section 7

The L.U.I. listed on the approved sewer connection permit shall notify theLittleton Water Department a minimum of 72 hours before the Building Sewer will be ready for connection to the Public Sewer. The General Manager will schedule the time and date when he or his representative will be available to perform an inspection of the Building Sewer's connection to the Public Sewer, connection shall be made only under the supervision of the General Manager or his representative.

Section 8

All excavations for Building Sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property and/or private property disturbed in the course of the work shall be restored in a manner satisfactory to the General Manager.

Section 9a

Plumbers and private contractors who have paid the required filing fees, as stated in Section 9b, and have provided the required license and permit bonds, as stated in Section 9c, and have submitted a Certificate of Insurance with required coverage, as stated in Section 9d, may be approved by the General Manager as a L.U.I..

Applicants for licenses for installing sewer main and sewer services shall attend a training seminar on the installation of low pressure pumps that is conducted by the manufacturer, and the applicant shall show evidence of course completion.

Note: The installation of grinder pumps may require other permits such as, but not limited to: electrical and plumbing.

Section 9b

Applicants for licenses as L.U.I.s are required to pay a filing fee set by the Board of Commissioners (see rates and fees schedule in Appendix A).

Section 9c

Applicants for licenses as Public Sewer and building sewer installers (Licensed Utility Installer) shall obtain a License and Permit Bond in the amount of Five Thousand ($5,000.00) Dollars or an amount equal to 100% of the construction cost of any proposed sewer connection located within or on public property or an amount approved by the General Manager, whichever is greater. Said License and Permit bond shall remain in full force and effect for a period of one (1) year from date of acceptance by the Littleton Water Department of the L.U.I.'s last sewer connection. This bond will guarantee that the L.U.I. will comply with applicable laws and these Rules and Regulations. The License and Permit bond shall be duly executed by the Principal of the L.U.I. and by a Surety Company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the General Manager.

Section 9d

The L.U.I. shall pay all debts for labor and materials contracted for or by him on account of the work he performs and shall indemnify and hold harmless the Town and the Littleton Water Department, its officer, board members, employees, agents and assigns from all claims arising from or relating to in any way the work undertaken by the L.U.I. any of his agents or employees, or any subcontractor.

Section 9e

Before the L.U.I.'s License and Permit Bond or any coverage listed in the L.U.I.'s Certificate of Insurance expires, the L.U.I.'s shall send a revised License and Permit Bond or Certificate of Insurance to the Littleton Water Department showing that the bond or insurance coverage, is still in place. The Licensed Utility Installer shall NOT perform any work in, on, under or around streets, sidewalks and property belonging to the Town if his License and Permit Bond or any coverage listed in their Certificate of Insurance has elapsed.

Section 9f

Approved L.U.I.s their Licenses by submitting a revised License and Permit Bond, Certificate of Insurance, and License Fee by January 1st of each year. All L.U.I. Licenses expire at Midnight, December 31st of each year.

Section 10

All Public Sewer extensions shall require inspection by a qualified inspector determined by the General Manager who may determine that a Building Sewer installation or repair will require full time inspection by a qualified inspector. In either case the General Manager will designate the qualified inspector as the Littleton Water Department Inspector who shall represent the interest of the Littleton Water Department during construction of any Public Sewer extension or Building Sewer installation or repair, and will monitor and inspect the ongoing progress of the work, full-time observation is required. The costs for the services performed by said Littleton Water Department Inspector shall be paid by the developer or owner, through the Littleton Water Department. Flows will not be permitted to be discharged from any service connection until a Certificate of Compliance is submitted by the Sewer Inspector and the report is approved by the General Manager.

Section 11

After the completion of any Building Sewer's repairs or connection to the Public Sewer, the L.U.I. shall fill out a sewer connection tie card, on the forms provided by the Littleton Water Department, for each building sewer the L.U.I. has performed work on. The tie-card shall be completed before the inspection of the L.U.I.'s work, and before the L.U.I. backfills the Building Sewer and connection to the Public Sewer.

Section 12

After completion and before the final inspection of any Public Sewer connection or Building Sewer connection for residential dwellings with four (4) or more dwelling units, industrial connections, commercial connections with five (5) or more water closets, commercial connection with industrial water or waste, connections of a Private Sewer or whenever the General Manager requires, the L.U.I., developer or owner will furnish a reproducible mylar "as-built" drawing (1" = 20') to the General Manager. The as-built drawing(s) shall contain a plot plan(s) with building(s) and highway layouts, sewer layouts with profiles, force mains, force main gates, pumping station(s), pumping station(s) details, and descriptions of each building sewer showing the depth of all connections, pipes, and manholes, using buildings or other permanent markers as reference

points. The as-built drawing (s) shall contain any other information deemed necessary by the General Manager.

Section 13 - Alternative Sewer Collection Systems

Sewer collection systems not stated in these Rules and Regulations shall only be permitted with the General Manager's approval.

Section 14 - Design Capacity and Design Flow

Section 14.1 Design Factors

1. Peak hourly sewage flow
1. Additional peak flows of industrial and commercial wastes
2. Maximum groundwater infiltration
3. Topography of the immediate area
4. Difficulty of installation

Section 14.2 Design Period

Wastewater collection systems shall be designed for a life span of 50 years, and interceptor sewers shall be designed to handle the maximum capacity of uses in the drainage area as determined by the General Manager.

Section 14.3 Design Flow

Submit a detailed description of the procedures used for calculating sewer design flow to the General Manager.

310 CMR 15.000 of the Massachusetts Code of Environmental Regulations ("Title 5"), shall be used for calculating the design flow for sewers. If the does not have a flow rate for the proposed use, the following methods may be used with the approval of the General Manager:

1. Title 5 Flow Related to Water Consumption
    a. When available, use existing Wastewater flow and/or consumption data as a basis for sewer design. If such data are not available, using flow data from a similar community or users.
2. Per Capita Title 5 Flow
    a. Where actual flow data cannot be obtained, base residential flows from new collection systems on an average daily per capita flow of not less than 70 gallons per day (0.27 m3/day). Add an appropriate allowance for infiltration to this flow.

In all cases, add a minimum allowance of 250-500 gpd/in. diam/mile of sewer (0.24-0.48 m3/cm of pipe diam/km/day) for infiltration to the water consumption, per capita flow or any other calculation method required by the General Manager.

Section 15 - Details of Gravity Sewer Pipe Design and Construction

Section 15.1 - Minimum Sewer Pipe Size

No gravity sewer shall be less than 8 inches in diameter (20 cm).

Section 15.2 - Depth

In general, sewers shall be deep enough to drain basement fixtures and to prevent freezing. Water tight insulation shall be provided for sewers that cannot be placed deep enough to prevent freezing.

For house connections chimneys (vertical pipe) preformed block units shall be used when the sewer main is greater than or equal to 12 feet deep.

Section 15.3 - Buoyancy

Where high groundwater conditions are anticipated, the buoyancy of sewers shall be considered, and the floatation of pipe shall be prevented with appropriate design and construction of the sewer.

Section 15. 4 - Slope

Minimum Slopes

All sewers shall be designed and constructed to give a velocity (when flowing full) of not less than 2.0 feet per second (0.61 m/s) based on Manning's formula using an "n" value of 0.013. The General Manager may permit the use of other "n" values if deemed justified on the basis of research or field data. The following minimum slopes shall only be used if absolutely necessary because of grade restrictions; however, greater slopes are desirable.

Sewer Size	Minimum Slope in Feet per 100 Feet (m/100m)
8 inches (203 mm)	0.40
10 inches (254 mm)	0.28
12 inches (305 mm)	0.22
14 inches (356 mm)	0.17
15 inches (381 mm)	0.15
16 inches (406 mm)	0.14
18 inches (457 mm)	0.12
21 inches (533 mm)	0.10
24 inches (610 mm)	0.08
27 inches (686 mm)	0.067
30 inches (762 mm)	0.058
36 inches (914 mm)	0.046
42 inches (1067 mm)	0.037

The use of oversized sewers in order to justify flatter slopes is not permitted.

Slope Between Manholes

Sewers shall be laid out with uniform slope between manholes.

Section 15.5 - High Velocity Protection

Velocities greater than 12 feet per second (3.7 m/s) shall not be permitted under any flow conditions, unless the General Manager approves special provisions that will protect against pipe erosion and impact.

Section 15.6 - Steep Slope Protection

Securely anchor sewers on 15 percent slopes, or greater, to prevent displacement.

Section 15.7 - Impervious Dams

Impervious dams shall be installed every 300 feet to control the flow of groundwater within the pipe bedding material, when:

1. The surrounding native material is considerably less impervious than the pipe bedding material;
2. The pipe bedding could produce a hydraulic head of 25 feet on the pipe gaskets and joints during periods of high groundwater flow; and/or
3. The sewer is constructed downstream of a waterway or wetland crossings.

Section 15. 7 - Alignment

Sewers shall be laid out in a straight line and alignment, and shall be checked with a laser beam.

Section 15.8 - Sewer Pipe Material

Sewer pipe material shall be as specified in Section 35.12 of this Appendix.

Section 15.9 - Sewer Pipe Inspection and Testing

The specifications shall include deflection and leakage testing of sewer pipes, as stated in Section 35.19 and 35.20 of this Appendix.

Section 16 - Details of Sewer Manhole and Cleanout Design and Construction

Manholes and cleanouts shall be as specified in Section 35.15 of this Appendix. The specifications shall include a requirement for the inspection and testing of manholes for leaks or damage as specified in Section 35.23 of this Appendix.

Section 17 - Inverted Siphons (Depressed Sewers)

Inverted siphons shall only be allowed if there is no other option and it is approved by the General Manager. Depressed sewers shall have no less than two barrels with a minimum pipe size of 6 inches (15 cm) and shall be provided with necessary appurtenances for convenient

flushing and maintenance. Manholes shall have adequate clearances for cleaning equipment and for inspection and flushing. The design shall provide for sufficient heads and pipe sizes to secure velocities of at least 3.0 feet per second (0.92 m/s) for average flows under initial conditions. The inlet and outlet details shall be arranged so that the normal flow is diverted to one barrel and so that either barrel may be taken out of service for maintenance. A hose connection shall be provided to the siphon for flushing purposes.

Section 18 - Aerial Crossings

Aerial crossings shall only be allowed if there is no other option, and it is approved by the General Manager. All aerial crossings shall provide appropriate support for all joints and pipes used for aerial crossing. The supports shall withstand frost heaves as well as overturning, settlement, flooding, thermal expansion, vibrations, and other loads that may act against the piping. Precautions against freezing shall be provided (e.g., insulation and increased slope). Expansion joints between above-ground and below-ground sewers shall be provided. Where buried sewers change to aerial sewers, special construction techniques to minimize damage from frost heaves shall be used. Ductile iron pipe with restrained mechanical joints are required. The bottom of the pipe shall be no lower than one (1') foot above the 100 year flood elevation level.

Section 19 - Location of Sewers in Streams

Sewers shall be designed to minimize the number of stream crossings. Further, it is the responsibility of any applicant to comply with all other applicable Massachusetts laws and regulations pertaining to stream crossings.

Section 19.1 - Cover Depth

The top of all sewers entering or crossing a stream shall be sufficiently below the natural bottom of the stream bed to protect the sewer line. The following cover requirements shall be met:

1. 1 foot (305 mm) of cover where the sewer is located in rock.
2. 3 feet (914 mm) of cover in other material. In major streams, more than 3 feet (914 mm) of cover shall be required.
3. In paved stream channels, the top of the sewer line shall be at least 1 foot (305 mm) below the channel pavement.

Section 19.2 - Horizontal Location

Sewers located along streams shall be located sufficiently outside of the stream bed to allow for stream widening in the future and for the prevention of siltation during construction.

Section 19.3 - Structures

Locate sewer manholes or other structures outside of streams whenever possible. Where structures must be located in a stream, they shall not interfere with the free discharge of flood flows or navigation in the stream. The manholes' covers shall be no lower than one (1') above the 100-year flood elevation level.

Section 19.4 - Alignment

Sewers shall cross streams perpendicular to the flow without a change in grade.

Section 19.5 - Materials

Sewers entering or crossing streams shall be watertight and free from changes in alignment or grade. Joints shall be restrained in order to prevent movement from stream forces. Ball-and-socket or restrained joints designed for hard service applications shall be provided.

Backfill materials shall be stone, coarse aggregate, washed gravel, or other materials that will not readily erode, cause siltation, damage pipe during backfill, or corrode the pipe and shall be approved by the General Manager. In large stream crossings, where required by the General Manager, place riprap over the sewer pipe for stability and to prevent erosion.

Section 19.6 - Siltation and Erosion

The design engineer or L.U.I. shall include construction methods that will minimize siltation and erosion in the project specifications the construction methods for sewers in or near streams. Such methods shall control siltation and erosion by limiting unnecessary excavation, including disturbing or uprooting of trees and vegetation, dumping of soil or debris, or pumping silt-laden water into the stream. Specifications shall require cleanup, grading, planting, and restoration of all work areas to begin immediately.

Section 20. Protection of Water Supplies

Section 20.1 - Cross Connections

No physical connection shall exist between a public or private potable water supply system and a sewer or any appurtenance that would permit the passage of wastewater or polluted water into the potable supply. No sewer shall come into contact with a water pipe and no water pipe shall pass through any part of a sewer manhole or any part of the Public Sewer.

Section 20.2 - Relation to Water Works Structures

Sewers shall be located as far as possible from public water supply wells or other potable water supply sources and structures.

Engineering plans shall show all existing waterworks units, such as treatment facilities, basins, pipes, wells, or other waterworks units that are within 50 feet of the proposed sewer or to within the minimum distances required by the General Manager.

Section 20.3 - Water Main Horizontal Separation

Whenever possible, sewers shall be laid out at least 10 feet (3.0 m) from any existing or proposed water main. If local conditions prevent a lateral separation of 10 feet, the General Manager may make an exception on a case-by-case basis when supported by data from the design engineer or L.U.I. Such an exception may allow the sewer to be installed closer than 10 feet to a water main, provided that it is laid out in a separate trench with the top (crown) of the sewer at least 18 inches (46 cm) below the bottom (invert) of the water main or is encased in a water-tight sleeve.

Section 20.4 – Water Main Vertical Separation:

Whenever sewers must cross water mains, the sewer shall be laid out so that the top of the sewer is at least 18 inches (46 cm) below the bottom of the water main. The sewer joints should be equidistant and located as far away as possible from the water main joints. When the sewer cannot meet the above requirements, the water main must be relocated to provide for this separation or it shall be reconstructed with mechanical-joint pipe for a distance of 10 feet (3.0 m) on each side of the sewer. One full-length (twenty feet) water main pipe shall be centered over the sewer so that both joints will be as far from the sewer as possible.

Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade.

When it is impossible to achieve horizontal and/or vertical separation as stipulated above, both the water main and sewer shall be constructed of mechanical-joint cement-lined ductile iron pipe or another equivalent that is watertight and structurally sound. Both pipes shall be pressure tested to 150 psi to ensure that they are watertight, and one of the pipes shall be installed in a water tight sleeve for a horizontal perpendicular distance of 10 feet (3.0) on each side of the other pipe. Any joints in the watertight sleeve shall be as far as possible from the water main's intersection with the sewer.

Section 21. Details of Low Pressure Sewer Design and Construction

Section 21.1 – Layout

The branched configuration of a pressure sewer is required. Looped piping shall not be permitted. Pipe routing shall include long radius sweeps no less than those recommended by the pipe manufacturer.

Pressure pipes shall be designed and installed so that a minimum of five (5) feet of cover material exists over the crown of the pipe at all times. Appurtenances such as isolation valves, air release valves, and clean-outs shall be provided as required by the General Manager.

Section 21.2 – Pipe Size

The diameter of the pressure sewer shall be calculated so that it provides a cleansing velocity based on the average daily flow of the system. Force Mains shall have a minimum velocity of three feet per second, 3ft/sec.

Minimum low pressure sewer pipe sizes shall be as follows (unless there is a significant change in grade).

Number of Homes or Equivalent	Minimum Pipe Size
1-3	1.5
4-9	2
10-18	2.5
19-30	3 (model recommended)
>30	Must be modeled

Section 21. 3 – Isolation Valves

Isolation valves shall be required to allow isolation of individual girder units, system expansion, and at key locations such as at the property line.

Ball valves for low pressure sewer manholes shall be true union type constructed from PVC Type I cell CLASSIFICATION WITH EPDM O-RINGS. All valve components shall be replaceable. Ball valves 2 inches and smaller shall be pressure rated to 235 psi, while valves larger than 2 inches shall be rated to 150 psi. Ball valves shall have a Safe-T-Block seal carrier to stop flow in either direction, allowing safe removal of the downstream union nut for system service or modification. Ball valve ends shall be as needed to connect to Schedule 430 PVC pipe in low pressure sewer manholes. Ball valves shall be true union ball valves as manufactured by Spears Manufacturing or equal.

Section 21.4 - Curb Stop Valve

Curb stop valves shall be located at the property line of the street or easement of the sewer main. Curb stop valves shall be of brass or bronze construction and two rubberized O-ring seals to provide pressure-tight seal. Curb stop valves shall be figure H-15204 as manufactured by Mueller-Oriseal, B22 as manufactured by Ford Meter Box Company, Hayes, Nuseal, or equal. Curb boxes shall be 2-1/2-inch shaft size two-piece screw type. They shall be adjustable from 48-inch to 72-inch. Curb boxes shall be constructed of cast iron and thoroughly coated with two coats of asphaltum varnish. Curb box rods shall be stainless steel supplied with a hole in the "U" portion for the insertion of a stainless steel pin. Pins shall be supplied and shall be made of stainless steel. Curb boxes shall be as manufactured by Ford Meter Box Company, Mueller Company, or equal.

Section 21.5 - Air Release Valves

Air and vacuum valves shall be installed on low pressure mains. The air and vacuum valves shall be designed to release air from the main when the main is being filled and/or air becomes entrapped in the main, and to admit air into the sewer main when pumps are stopped and the main is being drained by gravity. The body and cover of air and vacuum valve shall be cast iron, floats of stainless steel, protective hood of steel, seats of Buna-N, and miscellaneous internal parts of stainless steel, Manufacturer-Crispin, or equal. Air and vacuum valves shall be located in a manhole or structure with a diameter of 60 inches to allow access for repairs and maintenance.

Section 21.6 - Cleanout Connections

Cleanouts shall be installed on the pressure mains at sags and other locations where debris can accumulate and clog the lines, and proper valving to conduct required maintenance shall be provided.

Section 21.7 - Miscellaneous

Magnetic marking tape two (2) inches wide with the words "SANITARY SEWER BELOW," shall be installed not more than 2 feet below finished grade on all mainline and service laterals.

Section 22. Force Mains

Section 22.1 - Minimum Size

Force mains shall have a minimum velocity of three feet per second, 3ft/sec.

Section 22.2 - Force Main Pipe Material

Force main pipe material shall as specified Section 35.16 of this Appendix.

Section 22.3 - Velocity

At design average flow, velocity in excess of 3 feet per second (0.91m/s) shall be maintained.

When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the Wastewater shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

Section 22.4 - Variable Terrain

As far as possible, the alignment and depth of a force main should provide a constant upgrade profile. All force mains shall be designed and installed so that a minimum of five (5') feet of cover material is over the crown (top) of the pipe at all times.

Section 22.5 - Air Relief Valve

An automatic air relief valve shall be placed at all relative high points in the force main and at 400 feet intervals on level force main runs. All air relief valves shall be protected from freezing.

Section 22.6 - Drain Valves

Drain valves at all relative low points in the force main shall be provided. These valves shall be connected to gravity sewers or provided with connections for vacuum pumper trucks. All drain valves shall be protected from freezing.

Section 22.7 - Termination

Force mains shall enter the gravity sewer at a point not more than 2 feet (0.61 m) above the flow line of the receiving manhole.

Section 22.8 - Testing

Leakage Testing shall be as specified in Sections 35.19 and 35.20 of this Appendix.

Section 23. Grinder Pump Systems

Pumping equipment shall include an integral grinder capable of handling a reasonable quantity of foreign objects that may find their way into a building's sewerage system. The grinder pump shall be capable of processing foreign objects without jamming, stalling, or overloading, and without making undue noise. The grinder shall provide a positive flow of solids into the grinding zone. Grinder pump stations shall be of the wetwell type.

A list of suitable manufacturers will be available from the General Manager. Properties whose sewage quantities and characteristics are equivalent to four or more dwelling units shall install a duplex pump.

Section 23.1 - Access

Outside installation shall be designed with the service manhole constructed of the same material, and at least as thick as the tank. The manhole shall have an opening at the surface with a minimum inside diameter of 30 inches (76 cm); its cover shall be securely lockable. The size of the manhole shall allow for the performance of maintenance and repair functions.

Section 23.2 - Tank

Each tank shall be constructed of concrete or custom-molded, fiberglass reinforced polyester resin using a filament wound process, layup and spray technique, or other approved process that will ensure a smooth and resin rich interior surface that is designed for two times the maximum loading.

The basin shall be concrete, fiberglass-reinforced polyester resin, or other material meeting the minimum strength specifications herein. The basin shall be furnished with one PVC closet flange or one flexible inlet flange suitable for connection to the household gravity line. At a minimum, the basin wall and bottom shall withstand two times the anticipated maximum pressure exerted on the basin, either from soil loadings or buoyancy forces. All station components must function normally when exposed to these loadings. All seals and joints shall pass factory tests to ensure that they are water tight.

Section 23.3 - Electrical Equipment

Wiring and electrical connections shall be NEMA rated for the environment in which they are to be placed. System shall include an emergency generator plug-in connection.

Section 23.4 - Pumps

The grinder pump shall be readily removable without the need for manual disconnection of piping.

The grinder shall be positioned immediately below the pumping elements, securely fastened to the pump motor shaft, and driven directly by the same motor. The grinder shall be a rotating type with a stationary hardened and ground stainless steel shredding ring that carries stainless steel cutter bars. This assembly shall be dynamically balanced and run without objectionable noises or vibrations over the entire range of recommended operating pressures.

The grinder shall be capable of reducing all components in normal domestic sewage or the sewage to be discharged from the building drain, including a reasonable amount of foreign objects (e.g., paper, wood, plastic, glass, and rubber). Objects shall be reduced to finely divided particles that will pass through the passages of the pump and a minimum 1.25 inch (3.2 cm) diameter discharging pipe.

The grinder shall be positioned so that solids are fed into it from the bottom in an upward flow, reducing the possibility of overloading or jamming. In addition, sufficient turbulence shall be created to keep the tank bottom free of permanent deposits or sludge banks.

Section 23.5 - Check Valve

The grinder pump shall be equipped with a check valve that is installed in a horizontal position on the discharge pipe. This valve shall provide a full- ported passageway when open.

Section 23.6 - Ventilation

Adequate ventilation shall be provided in accordance with local and national codes.

Section 23.7 - Controls

Sensing devices to detect wastewater levels for initiating pump operation and to detect high water levels shall be installed. Level sensing devices shall only be used and shall not be located near flows entering the well.

Section 24. Pumping Station

Section 24. 1 - Design Capacity

A sewage pumping station shall handle the projected peak sewage flows of its tributary Public Sewers. As recommended by TR-16, Guides for the Design of Wastewater Treatment Works (Technical Report #16) and the Hydraulic Institute's Recommended Standards for Pumping Stations. This information may be included in the Wastewater Needs Assessment dated December 2020 or other engineering report and any applicable updates or amendments. Pumping stations shall accommodate future expansion, when in the opinion of the General Manager it is appropriate.

Section 24.2 - Site Layout

Stations shall be readily accessible to personnel and service vehicles during all weather conditions.

Section 24.3 - Flood Protection

Wastewater pumping stations shall be protected from physical damage by the 100-year flood elevation and shall remain fully operational and accessible during the 100-year flood. All entrances and/or unsealable openings of the station shall be a minimum of one (1') foot above the 100-year flood elevation. These flood elevations shall be determined from the Federal Emergency Management Agency, and U.S. Army Corps of Engineers, and from the local regulations and ordinances.

Section 24.4 - Environmental Considerations

Wastewater pumping stations shall be sensitive to the environmental conditions of the site. Visual impacts, architectural style, security, noise levels, odor control, and landscaping shall be considered carefully in station design and shall be reviewed and approved by the General Manager.

Section 24.5 - Types of Stations

Wastewater pumping stations fall into three categories: wetwell/drywell, submersible, or suction lift. The preferred type of station is the submersible type. The General Manager may approve other types under certain circumstances.

Section 24.6 - Structural Design

Earthquake Loads and Uplift Forces

Stations shall withstand earthquake loads and uplift forces from high groundwater conditions.

Separation

Wet and drywells, including their superstructure, shall be completely separated. Common walls shall be sealed against gas leaks.

Equipment Removal

Provisions shall be made for removing all equipment (i.e., pumps, motors, mechanical screens, motor control centers, etc.) from the station. Access openings, hatches, and/or skylights shall be sized accordingly. Permanent hoisting devices shall be provided as necessary.

Substructure

Station substructures shall be constructed of reinforced concrete, either cast-in-place or precast. Small, prefabricated stations may be constructed of steel plate or fiberglass with the approval of the General Manager.

Access

The designer shall minimize the confined spaces and shall indicate which spaces meet the definition of confined space on the drawings. Suitable, safe, and separate means of access shall be provided for dry and wetwells. Stairways and/or steps are required for drywells and wetwells containing either bar screens or mechanical equipment that requires inspection or maintenance. A landing with railings shall be provided for stairways or ladders for every 10 vertical feet. Local, state and federal safety codes shall govern in all cases.

Section 24.7 - Pumps

Number of Pumps

As a minimum, two pumps shall be provided, with each pump being capable of handling peak design flows. Where three or more pumps are provided, the overall station capacity shall be capable of handling peak design flow when any one pump is out of service.

Design

Pumps shall be designed specifically for wastewater use and shall be non-clogging and as allowed by the General Manager.

Incoming Wastewater and Rate Discharge

Pumping stations shall balance the rate of incoming wastewater with the rate discharged. Each pump shall have an individual intake valve. Pump suction and discharge openings shall be a minimum of 4 inches in diameter.

Centrifugal Pumps

Centrifugal pumps shall be used in the drywell/wetwell pumping stations. The pump casing and suction elbow shall be provided with a clean-out access port. Impellers shall be enclosed or semi-open. To ensure primed pump conditions, the wetwell level shall not drop below the centerline of the pump impeller under normal operating conditions.

Submersible Pumps

Submersible pumping stations may be used when, in the opinion of the General Manager, circumstances warrant. It shall be possible to remove and replace the submersible pumps without dewatering the wetwell or disconnecting the piping. Pumps shall be of the pull-up design, using a lifting cable and guides for pump removal. The pump shall be connected to the fixed discharge piping with a self-locking coupling. Shaft seal failure or potential seal failure detection alarms shall be provided. Submersible pumps may also be used in a wetwell/drywell configuration, with the General Manager's approval.

Suction Lift Pumps

Suction pumps shall be self- or vacuum-priming.

The pump equipment compartment shall be above grade or offset, and shall be isolated from the wetwell to prevent humid and corrosive sewer atmospheres form entering the equipment compartment. Access to the wetwell shall not be located in the equipment compartment. Valves shall not be located in the wetwell.

Self-priming Pumps

Self –priming pumps shall be capable of rapid priming at the lead pump-on elevation. Such self-priming and repriming shall be accomplished automatically under design operating conditions. Suction piping shall not exceed the size of the pump suction and shall not exceed 25 feet (7.6 meters) in total length. Priming lift at the lead pump on elevation shall include a safety factor of at least 4 feet (1.2 meters) from the maximum allowable priming lift for the specific equipment at design operating conditions. The combined total of dynamic suction lift at the pump-off elevation and required net positive suction head at design operating conditions shall not exceed 22 feet (6.7meters).

Vacuum-priming Pumps

Vacuum-priming pump stations shall be equipped with dual vacuum pumps capable of automatically removing all air from the suction lift pump. The vacuum pumps shall be adequately protected from sewage damage. The combined total of dynamic suction lift at the pump-off elevation and required net positive suction head at design operating conditions shall not exceed 22 feet (6.7 meters).

Section 24.8 - Wetwells

Divided Wells

The wetwell shall be divided into two sections that are properly interconnected and gated to facilitate repair and cleaning.

Storage Capacity

The effective storage capacity of the wetwell shall be based upon the recommended number of pump starts per hour and the design filling time. The effective volume of the wetwell shall be based on a filling time of 30 minutes under design average-daily-flow rates. To determine the frequency of starts used for design, refer to the pump manufacturer's warranty.

Where tributary wastewater flows are anticipated to be significantly less than the design average flow, provisions should be made so that the filling time under initial conditions does not exceed 30 minutes

(i.e., providing a divided wetwell or shortening the wetwell operation range) and the duration of storage in the pump station and force main does not result in septic conditions in the system or the release of objectionable odors to the environment.

Pump Protection

Pumps shall be protected from large solids by readily accessible mechanically cleaned bar racks (screen) or combination device located at the wetwell influent. Bar racks should have clear opening not exceeding 1.25 inches (3.1 cm) unless pneumatic ejectors are used or special devices are installed to protect the pumps from clogging or damage.

Floor Slope

The wetwell floor shall have a minimum slope of 1-to-1 to the hopper bottom. The horizontal area of the hopper bottom shall be no greater than is needed for proper installation and function of the wetwell inlet.

Vortexes

The wetwell and suction inlets of dry-pit pumps shall eliminate the possibility of vortexes. The required submergence of the intake valves shall be determined for the day-pit pump's location. Intake valves should be flared, with the inlet opening facing down. Flow rotation in the wetwell shall be minimized.

Sewage Channels

Sewage channels located in wetwells shall be covered with nonskid, corrosion-resistant grating. They shall be installed flush with a floor, and capable of supporting anticipated loads. All channels shall be drained when not in use. Where the side meets the floor of the channel, fillets shall be provided.

Inlet Sewers

Sewer piping entering the wetwell shall not have air in the pump suction line.

Section 24.9 - Drywells

Automatic heating and dehumidification equipment shall be provided in all drywells. The electrical requirements shall meet those outlined in subsequent paragraphs of this section.

A sump pump shall be provided in the drywell to remove extraneous water. The discharge pipe of the sump pump shall be equipped with dual check valves and shall be pumped from the drywell into the wetwell above the high water level. Water ejectors connected to a potable water supply shall not be permitted. All floor and walkway surfaces shall slope to a point of drainage. Pump seal leakage shall be piped or channeled directly to the sump.

Valves

Suitable shutoff valves shall be placed on the suction lines and on the discharge lines of each pump (except on submersible and vacuum-primed pumps). A suitable check valve shall be placed on a horizontal section of each discharge line between the shutoff valve and the pump.

Unless adequate space is available in a dry pit pump room, valves on the discharge piping (including flow meters, if required) shall be in a separate underground precast concrete vault.;

Every pump station shall include appropriate valves and quick disconnects to allow the Littleton Water Department to bypass the existing pumping equipment and valves. The piping shall allow the Littleton Water Department to install temporary piping into the wet well, and discharge to a location downstream of the check and shutoff valves.

Valves shall not be located in wetwells.

Section 25 - Controls

All pumping stations, grinder pumping stations, vacuum sewer stations, and other sewer handling facilities required by the General Manager shall be connected to the Littleton Water Department's Supervisory Control and Data Acquisition (SCADA) System.

All sensing, alarm, and SCADA system devices shall be of the same type, configuration, and function as that used by the Littleton Water Department. Each pumping station shall have its own screen display, processor logic controller (PLC), and communications equipment for the SCADA system and shall also display the required monitoring controls and alarm on the SCADA system screens of the Public Sewer.

Section 25.1 - Level Sensing Devices

Level sensing devices shall not be affected by flows entering the wetwell or by the suction of the pumps. All wall penetrations between the wet and drywells shall withstand gas leaks and be located as high as possible to prevent overflow from the wetwell to the drywell. The pumps shall be automatically alternated. Running-time meters shall be installed at all pumping stations for each pump.

Section 25.2 - Alarm Systems

Alarm systems shall be provided for all pumping stations. At a minimum, the alarm system shall be activated in any one of the following cases:

1. High water in the wetwell;
2. Low water in the wetwell;
3. Loss of one or more phases of power supply;
4. High water level in the pump room sump;
5. Loss of the alarm transmission or communications;
6. Loss of air pressure in the bubbler tube system/level sensing trouble or failure;
7. Standby power failure or malfunction of the pump;
8. Flooding of building or drywell;
9. Smoke/fire alarms;
10. Low temperature;
11. Surge suppressor failure;
12. PLC processor failed;
13. PLC low battery;
14. Intrusion; and
15. Three spare connections.

Section 26. Pumping Station Ventilation

Section 26.1 - General

Adequate ventilation shall be provided for all pumping stations. Where the pump pit is below the ground surface, mechanical ventilation is required, especially when screens or mechanical equipment requiring maintenance or inspection are located in the wetwell. The wet and dry well ventilation systems shall not be connected. In pits more than 15 feet (4.6 m) deep, multiple inlets and outlets shall be installed. Switches for the operation of ventilation equipment shall be marked and located conveniently. If odors are a problem, an odor control system shall be installed.

Section 26.2 - Wetwells

Ventilation may be either continuous or intermittent. For continuous ventilation, at least 12 air changes per hour shall be provided. For intermittent ventilation, at least 30 air changed per hour shall be provided. Heating shall be installed where needed.

Section 26. 3 - Drywells

Ventilation shall be continuous. Heating and dehumidification is required. At least 6 complete air changes per hour shall be provided.

Section 27. Flow Measurement

Suitable devices, as approved by the General Manager, for measuring wastewater flow and power consumption shall be installed in all pump stations.

Section 28. Pump Station Water Supply

Water under pressure shall be provided for cleanup at the pumping station. If a public water supply is used, a Reduced Pressure Zone (RPZ) backflow preventer or other approved device shall be installed on the water service entering the station. No other potable water supply and other piping systems or fixtures shall be connected to the systems supplied by the public water supply.

Section 29. Electrical

Section 29.1 - Electric Equipment

Electrical systems shall be designed and installed in strict conformance with the latest edition of the National Electrical Code. Electrical equipment in enclosed places where gas may accumulate shall be noncorrosive and in compliance with the National Electrical Code requirements for Class I Group D, Division I locations.

Section 29.2 - Submersible Pump Motors

Electrical supply and control circuits shall allow disconnection at a junction box located at or accessible from outside the wetwell. Terminals and connectors shall have watertight seals located outside of the wetwell and shall be protected by separate strain relief.

The motor control center shall be located outside of the wetwell and protected by a conduit seal or other appropriate sealing method meeting the requirements of the National Electrical Code for Class 1. Division 2 locations.

The pump motor shall meet the requirements or the National Electrical Code for Class 1. Division 2 locations.

Submersible pump motors that are totally submerged during the pumping cycle are not required to protect against explosions.

Power cords for pump motor shall be flexible and serviceable under conditions of extra hard use. Ground fault interruption protection shall deenergize the circuit in the event of any failure in the electrical integrity of the cable.

Power cord terminal fittings shall be provided with strain relief appurtenances, and shall facilitate field connecting.

Section 30. Emergency Operations

When the General Manager deems it is necessary, an independent natural gas or propane engine-generator type source of electric power shall be provided for electrically driven pumps. This source shall be automatically activated when or if any phase of the power supply fails or upon any

fluctuation in voltage. Installation shall comply with all applicable requirements of the National Electrical Code.

Small Pumping Stations: When the General Manager agrees that a small pump station does not require a permanent alternative power supply, electrical connections for portable standby generator or pneumatic connection for portable air compressor shall be installed as approved by the General Manager

Section 30.1 - Controls:

Provisions shall be made for automatic and manual startup and cut-in. The controls shall be such that upon automatic startup under emergency conditions, shutdown can be accomplished only manually, except in conditions that would damage the generator or engine.

Section 30.2 - Size:

Unit size shall be sufficient to start up and run all pumps needed to handle peak flows as well as lighting, ventilation, pump controls, and the sump pump.

Section 30.3 - Exerciser:

The engine controls shall be equipped with an automatic exerciser that may be set on any selected schedule to start the generator, to run it under no-load conditions, and to shut it off without activating the alarm system.

Section 30.4 - Noise Attenuation:

Noise attenuation components must be incorporated in the design to comply with applicable noise laws and regulations.

Section 31. Safety

Adequate provisions shall be made to protect the operator and visitors from hazards. The design and construction of pumping stations shall meet all prescribed local, state, and federal safety laws and codes. Safety provisions shall include the following:

1. Handrails at openings, stairways, and other hazardous areas;
2. Guards around the belt drives, gears, rotating shafts, and moving equipment;
3. Warning signs as appropriate;
4. Provisions for power lockout controls at all pumps and equipment;
5. Eye wash stations where chemicals are used;
6. Adequate lighting in all areas of the pumping station;
7. Provisions for confined space entry in accordance with OSHA and regulatory agency requirements;
8. First aid equipment; and
9. Fire extinguisher.

Section 32. Overflows and Bypasses

Overflows and bypasses shall not be allowed on pumping stations serving Public Sewers.

Section 33. Site Protection and Aesthetics

The General Manager will review the design and location of the pump stations and may determine that fencing, aesthetics vegetation plantings, intrusion alarms, and aesthetics superstructures style or any other site conditions may warrant site protection and/or aesthetics.

Section 34. Odor Control

Odor control equipment may be required by the General Manager, depending on the sitting of the pumping station and force main discharge point.

Section 35 – Construction Technical Specifications

The owner of the property, the developer, and/or L.U.I. shall construct and install all Public Sewers and all Building Sewers in accordance with the following rules and regulations:

Section 35.1

The owner, developer, or L.U.I. shall submit to the General Manager (for his approval) plans and profiles of the proposed Public Sewer extensions and/or Building Sewer connections.

Section 35.2

The owner, developer or L.U.I. of a subdivision shall submit to the General Manager, a subdivision plan approved by the Littleton Planning Board along with the plans and profiles of the proposed Public Sewer extension.

Section 35.3

The Contractor doing all the work shall be approved by the General Manager as a L.U.I. as described in Sections 9a through 9g of this Appendix.

Section 35.4

All materials, including pipe and manhole structures, shall be of the same make and quality used by the Littleton Water Department and approved by the General Manager.

Section 35.5

Public sewers and building sewers shall be laid using a transit or laser level. All sewer pipes shall be laid on a bed of crushed stone of at least six inches (6”) in depth under the pipe and crushed stone shall extend at least halfway up the side of the pipe. Approved gravel, with no stones larger than two inches (2”) in any dimension, shall be used to cover pipe to one foot above pipe. The rest of the backfill material must be approved by the General Manager, Massachusetts Highway Department or Littleton Department of Public Works. The approved backfill material shall be placed in mechanically compacted lifts of no more than six inches (6”) deep or as specified by the Littleton Department of Public Works, Massachusetts Highway Department, or other

specifications more stringent than the above. The approved backfill material above the gravel shall contain no stones greater than 6 inches in any dimension.

Section 35.6

Impervious dams shall be considered every 300 feet to control the flow of groundwater within the pipe bedding material when:

1. The surrounding native material is considerably less impervious than the pipe bedding material;
2. The pipe bedding could produce a hydraulic head of 25 feet on the pipe gaskets and joints during periods of high groundwater flow; and/or
3. The sewer being constructed is downstream of any waterway and wetland crossings.

Section 35.7

Sewers may be deep enough to drain basement fixtures, and shall be deep enough to prevent freezing. Watertight insulation shall be provided for sewers that cannot be placed deep enough to prevent freezing.

House connections chimneys (vertical pipe) preformed block shall be used when the sewer main is greater than or equal to 12 feet deep.

Section 35.8

Where high groundwater conditions are anticipated, the buoyancy of sewers shall be considered, and the floatation pipe of pipe shall be prevented with appropriate design and construction of the sewer.

Section 35.9

No mud, gravel or debris shall be allowed to enter the sewer pipes at any time. All pipes shall be capped at end of day's laying and water shall be pumped out of excavation prior to removing the cap.

Section 35.10

Building Sewer connection to the Public Sewer shall have a wye branch fitting, as approved by the General Manager, made of the same type of materials as the Public Sewer main being tapped.

Section 35.11

Minimum size of gravity Public Sewer pipe diameter shall be eight (8") inches and building sewer pipes shall not be less than four (4") inches in diameter. Minimum sizes of low pressure sewer mains shall be in accordance with Section 21 of this Appendix.

Section 35.12

Sewer pipe and building sewer pipe material shall be:

1. Reinforced Concrete Pipe shall meet the following specification:

a. Portland cement shall conform to ASTM C-150 Type II;

b. The pipe and its appurtenances shall conform to ASTM Specification C-76;

c. The reinforcing wire cage shall conform to ASTM Specification A 15, A 82, or A 185, as appropriate;

d. Entrained air shall be 5.0% to 9.0% by ASTM C-890;

e. Water absorption and three-edge bearing tests shall conform to ASTM Specification C-497; and

f. Gaskets shall conform to Sections 3.3 and 3.4 of AWWA Specification C-302.

Note: non-reinforced concrete pipe shall not be used.

2. Extra Heavy Cast Iron Pipe shall meet the following specifications:

a. Pipe, fittings, and appurtenances shall conform to the requirements of ASTM Specification A-74 or ANSI A-21.11 and gaskets shall conform to ASTM Specification C-564.

3. Heavy Wall Polyvinyl Chloride (PVC) Pipe shall meet the following specifications:

a. Pipe shall be made from Class 12454-B materials or better in accordance with ANSI/ASTM Specification D-1784, and shall ultraviolet light (UV) protected.

b. The pipe and accessories shall conform to the requirements of the following, with a minimum pipe stiffness of 46 PSI at a maximum deflection of five percent (5%):

ANSI/ASTM	D 3034	(4" – 15")
ASTM	F 679 Type I	(18" – 27").

4. Ductile Iron Pipe shall meet the following specifications:

a. Pipe, fittings, and appurtenances shall be manufactured in accordance with ASTM Specification A-746;

b. Pipe shall have a minimum thickness of Class 50;

c. Fittings shall conform to ANSI Specification A-21.11 and have a minimum pressure class rating of 150 PSI;

d. All pipe and fittings shall be cement mortar lined in accordance with ANSI Specification A-21.4 at twice the specified thickness, and have an internal and external bituminous seal coating and closure pieces shall be jointed by means of a mechanical coupling of the cast sleeve type.

5. Extra Strength Vitrified Clay Pipe shall meet the following specifications:

a. Pipe shall conform to the current requirements of NCPI Specification ER 3300 – 67 and meet the requirements of ASTM Specification C 700.

Note: standard strength vitrified clay pipe shall not be used.

6. Acrylonitrile – Butadiene – Styrnee (ABS) Pipe shall meet the following specifications:

    a. Pipe and fittings shall conform to the requirements of ASTM Specification D 2661.

7. Plastic Pipe, sizes 4 inches through 12 inches, shall be ANSI/ASTM D3034, SDR-35 Type PSM Poly (Vinyl Chloride) (PVC) material; minimum pipe stiffness (F/^Y) is 46 psi; bell and spigot style and rubber gasket conforming to ASTM F477.

8. Low Pressure Mains and Services for 1-1/4-inch pipe through 4-inch pressure pipe shall be polyethylene pipe with material conforming to ASTM D3350, Type PE-3408 pressure Class PC 160, SDR-11. Fittings for use with polyethylene pipe and tubing shall be manufactured and furnished by the pipe supplier and in conformance with AWWA C901 requirements. Joints for polyethylene pipe shall be jointed by the butt fusion method in a manner recommended by the pipe manufacturer.

9. Pipe sizes 1-1/4 inches through 4 inches shall be Polyvinyl Chloride (PVC) pipe ASTM D2241 PVC pressure pipe material conforming to ASTM D1784, minimum class SDR 21 for pipe 1-1/4-inch, push-on joint conforming to ASTM D3139 with flexible elastomeric gaskets conforming to ASTM F477.

    a. Fittings for use on PVC pressure pipe of 4-inch nominal inside diameter or greater shall be ductile iron with mechanical joints as described in ANSI 21.10/AWWAC110. The coatings and linings of the fittings shall be as specified for ductile iron pipe.

10. Other pipe materials:

    a. Other pipe materials shall requires prior written approval of the General Manager before being installed.

Materials for sewer construction shall be appropriate for local conditions, including the character of industrial wastes, septicity, soil characteristics, external loadings, and problems such as abrasion and corrosion.

All sewers shall be able to withstand damage from superimposed loads. Proper allowances for soil and potential groundwater conditions, as well as the width and depth of the trench shall be used. Where necessary, special bedding, haunching and initial backfill, concrete cradles, or other special construction elements shall be used.

The minimum internal pipe diameter shall be eight (8) inches for gravity sewers.

Joints for the selected pipe shall be designed and manufactured such that “O” ring gaskets of the “snap-on” type are used.

Gaskets shall be continuous, solid, natural or synthetic rubber, and shall provide a positive compression seal in the assembled joint.

Joint preparation and assembly shall be in accordance with the manufacturer's recommendations.

Wye branch fittings, as approved by the General Manager, shall be installed for connection of laterals.

Section 35.13 - Bedding, Haunching, and Initial Backfill

Based on the bedding support of the type of soil and potential groundwater conditions, use the following for the anticipated loads:

1. Bedding classes A, B, and C, or crushed stone as described in the American Society of Testing Materials standard ASTM C 12, should be used for all rigid pipe, or
2. Materials for bedding, haunching, and initial backfill, or classes I, II, or III as described in ASTM D 2321, should be used for all flexible pipe.

Section 35.14 - Safety and Load Factors

Selection of pipe class shall be predicated on the following criteria:

1. Safety factor: 1.5
2. Load factor: 1.7
3. Weight of soil: 120 lbs/cu.ft.
4. Wheel loading: H-20

Section 35.15 - Manholes and Cleanouts

Cleanouts

Cleanouts shall be constructed of the same material as the Building Sewer. The size of the cleanout shall be the same size as the building sewer up to six (6") inches in diameter, for Building Sewers larger than six (6") inches in diameter manholes shall be used. Cleanouts shall be sealed with removable, re-useable threaded screw-in plug or screw-on cap.

Manholes

Manholes shall be minimum of four (4') feet in diameter with a minimum access diameter of 30 inches (76 cm). Larger diameter manholes may be required by the General Manager. A minimum drop of 0.10 foot shall be used between entrance and exit inverts.

Location

Manholes and cleanouts shall be installed at the end of each line; at all changes in grade, size, or alignment; and at all intersections. Distances shall not be greater than 300 feet for sewers measuring 15 inches (38 cm) or less in diameter, or 400 feet for sewers 18-30 inches (46-76 cm) in diameter. Greater distances may be permitted for larger sewers or for those carrying a settled effluent, but only with prior approval of the General Manager. The top of the manhole cover shall

be no lower than one (1') foot above the 100-year flood elevation level. Junction manholes on low pressure sewers shall be installed at all intersections

Drop Type

A drop pipe for a sewer pipe with an invert entering a manhole of more than 24 inches (61 cm) above the manhole invert shall be provided. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches (61 cm), the invert shall be filleted to prevent solids deposition.

Drop manholes shall be constructed with an outside drop connection. Outside drop connections shall be encased in concrete and shall provide access for cleaning as the sewer enters the manhole at the top of the drop connection.

Inside drop connections may be used provided the manhole has the area to facilitate safe access into the manhole with the inside drop in place, and shall be approved by the General Manager. The inside drop connection shall be secured to the interior wall of the manhole, and shall provide access for cleaning as it enters the manhole at the top. Internal drop pipes and fittings shall be PVC plastic sewer pipe in compliance with ASTM D2241. Corrosion resistant anchors shall be used to attach the drop pipe to the inside surface of the manhole barrel.

Structural Base

Manhole bases shall be constructed or placed on a minimum of twelve (12) inches of crusher run with a maximum stone diameter in all directions of one half ½ inch and free of organic materials.

Diameter

The manhole's minimum diameter shall be 48 inches (122 cm) for standard manholes and 60 inches (153 cm) for inside drop manholes. A minimum access diameter of 30 inches (76 cm) shall be provided. Larger openings shall be provided for manholes that house equipment, as specified by the General Manager.

Materials

Manholes shall be precast concrete with barrel sections, cones, and bases, manufactured in compliance with ASTM C 478, and shall have an O-ring or bituminous-based gasketed joints. "Precast concrete walls shall be made up using straight, circular barrel sections and eccentric cone sections if manhole steps are required, and concentric cone sections where no steps are require. Manholes can also be poured-in-place concrete. Other types are allowed subject to the approval of the General Manager.

All tongue-and-grove (or male and female joints in the precast wall, including the joint at the top of the base), shall be made up using the "Snap-On" type O-ring gasket, and shall conform to ASTM C443; except that joint taper shall not exceed 3-1/2 degrees. The precast sections shall be provided with a special groove (cast into the male end) to receive and hold the gasket in position during joint assembly. After joint assembly, the gap between sections shall be packed on the inside and outside with Anti-Hydro "Azpandcretes," Masterflow 713 by Master Builders; or Five Star Grout by U.S. Grout Corp., or equal and shall be troweled smooth so that no projections remain on the inside.

Manhole bases shall be constructed of 4,000 psi (28 day) concrete 8 inches thick, or shall be precast bases properly bedded in the excavation. Field constructed bases shall be monolithic, properly reinforced, and extend at least 6 inches beyond the outside walls of lower manhole sections. Precast manhole bases shall extend at least 6 inches beyond the outside walls of lower manhole sections.

Manholes shall be constructed using minimum 4 foot diameter, precast concrete manhole barrel sections, and an eccentric top section, conforming to ASTM Specification C-478, with the following exceptions on wall thickness:

Manhole Diameter (ft)	Wall Thickness (in)
4	5
5	6
6	7
6-1/2	7-1/2
7	8
8	9

All sections shall be cast solid, without lifting holes. Flat top slabs shall be a minimum of 8 inches thick and shall be capable of supporting a H-20 wheel loading.

All joints between sections shall be sealed with "O" ring rubber gasket, meeting the same specifications as pipe joint gaskets, or butyl joint sealant completely filling the joint.

All joints shall be sealed against infiltration. All metal parts shall be thickly coated with bitumastic or elastomeric compound to prevent corrosion.

No holes shall be cut into the manhole sections closer than 6 inches from joint surfaces.

Manholes which extend above grade shall not have an eccentric top section. The top plate shall be large enough to accommodate the cover lifting device and the cover.

Manhole Covers

The elevation of the top section shall be such that the cover frame top elevation is three (3) foot above the 100-year flood elevation (in a field), 0.5 foot above a lawn elevation, or at finished road or sidewalk grade.

When located in a traveled area (road or sidewalk), the manhole frame and cover shall be heavy duty cast iron. When located in a lawn or in a field, the manhole frame and cover may be light duty cast iron. The cover shall provide a minimum access diameter of 30 inches (76 cm). The mating surfaces shall be machined, and painted with tar pitch varnish. The cover shall not rock in the frame. Infiltration between the cover and frame shall be prevented by proper design and construction. Covers shall have "Sewer" cast into them. Covers shall be designed so that infiltration is prevented.

Manhole frames, installed at grade, shall be set in a full bed of mortar with no less than two nor more than four courses of brick underneath to allow for later elevation adjustment. In lieu of brick, grade rings may be used for elevation adjustment. Grade rings shall not exceed 6 inches in

depth. The total number of grade rings shall not exceed 12 inches in height, however, in no event shall more than 3 grade rings be used.

Manholes which extend above grade, shall have the frames cast into the manhole top plate. The top plate shall be securely anchored to the manhole barrel, by a minimum of six, ½ inch diameter, corrosion resistant anchor bolts, to prevent overturning when the cover is removed. The anchor bolts shall be electrically isolated from the manhole frame and cover.

Ladders

Manhole steps are to be provided in manholes. Steps are to be cast in or grouted solid into the precast units at intervals of 12 inches. Steps shall be in conformance with OSHA requirements having drop front or equivalent. Bolted-on type is not acceptable. Manhole steps to be M.A. Industries, Inc. or equal copylymer polypropylene reinforced with ½-inch steel rod or equal.

Flow Channel or Invert

The flow channel through the manholes shall conform in shape and slope to that of the sewers entering and leaving the manholes. Construct the top of the flow channel so that the flow will remain in the channel under peak conditions. Form or shape the channel walls to the full height of the crown of the outlet sewer and so as not to obstruct maintenance, inspection, or flow in the sewers. When curved flow channels are required, including branch inlets, increase minimum slopes to maintain acceptable velocities. Provide a minimum 0.1-foot drop through the manhole.

Bench or Shelf

Provide a bench on each side of every manhole channel. The bench should have a slope of no less than 0.1 inch per foot or no greater than 0.5 inch per foot. No lateral sewer, service connection, or drop manhole pipe should discharge onto the surface of the bench.

Manhole Inverts

Manhole inverts shall be constructed by laying sewer bricks on their long side with their water structured face up, in straight line or sweeping arch to from the bottom of the invert, from pipe to pipe. Additional sewer bricks will fan out with their water structure facing towards the center of the invert from the invert brick. The invert's width will be the same diameter of the effluent pipe of the manhole. The minimum height of the shelf shall be equal to the crown of the manhole's effluent pipe and it shall be constructed from sewer brick with their water structured face up.

Buoyancy

Where high groundwater conditions are anticipated, the manholes shall be designed and constructed to prevent floatation.

Watertightness

Solid or watertight manhole covers shall be used in areas subject to flooding. All manhole lift holes and grade adjustment rings shall be sealed with a nonshrinking mortar or other material approved by the General Manager. A bituminous coating shall also be used on the exterior. Inlet and outlet pipes shall be joined to the manhole with a gasketed, flexible watertight connection or with another watertight connection arrangement that allows for differential settlement of the pipe and the manhole.

The Contractor shall furnish manholes waterproofed over the entire exterior surface that will be below finished grade. The water proofing shall not mar or interfere with the specified exterior finish for these structures. Waterproofing shall be accomplished prior to structure installation for precast sections, and shall be applied to dry surfaces under proper weather conditions.

Waterproofing shall consist of a two-coat application of coal tar compound as manufactured by Koppers Bitumastic Super Service Black; Tnemec Heavy Duty Black 46-449; Preco Nitroproof 600; or equal, and shall be applied according to manufacturer's specification. Total thickness of the two-coat application shall no be less than 16 mils.

Pipe Connections

Pipes being connected to new manholes shall be connected to the manhole with cast-in-place rubber boot with clamp around gasket. Pipes being connected to existing manholes shall be core drill opening and seal with link seal water stop between pipe and manhole wall.

Section 35.16 - Force Main Pipe

Force main pipe material shall be one of the following:

1. Ductile Iron
    a. Pipe shall conform to ANSI A21.51;
    b. The minimum wall thickness shall be Class 52 (ANSI A21.50);
    c. The pipe shall be clearly marked with either "D" or "DUCTILE";
    d. Fittings shall conform to ANSI A21.10;
    e. Pipe shall be furnished with push-on joints and fittings shall be furnished with mechanical joints. Both conforming to ANSI A21.11; and
    f. Pipe and fittings shall be cement mortar lined and have an internal and external bituminous seal coating.
2. Polyvinyl Chloride (PVC) Plastic Pipe
    a. Pipe shall conform to ASTM D2241;
    b. Materials used in the manufacturer of PVC pipe shall meet ASTM C1784; and be ultraviolet light (UV) protected;
    c. The minimum wall thickness shall be SDR-21;
    d. Fittings shall conform to ASTM D2241; and
    e. Joints and gaskets shall conform to ASTM D2241, D1869, and F477.
3. Other pipe materials shall require prior written approval of the General Manager before being installed.

Trenching, bedding, and backfilling shall be as approved by the authority having jurisdiction over the property, such as but not limited to: the Massachusetts Highway Department, Littleton Department of Public Works or Littleton Wastewater Department General Manager.

Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.

Anchorages, concrete blocking, and/or mechanical restraint shall be provided when there is a change of direction of 7-1/2 degrees or greater.

When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

The force main shall terminate, in the receiving manhole, at a PVC plastic sewer pipe "T". The vertical arms of the "T" shall be twice the diameter of the force main. The upper arm shall be at least 4 feet long; the lower arm shall terminate in a PVC plastic sewer pipe 90 degree elbow in a flow channel directed to the manhole exit pipe. The "T" and its arms shall be securely fastened to the inside surface of the manhole wall using corrosion resistant anchors.

Force mains shall have a minimum velocity of three feet per second, 3ft/Sec.

Section 35.17

No Public Sewer pipe shall be left open into an unfinished house or cellar hole. All pipes must be capped to prevent the flow of surface water or debris from entering the Public Sewer.

Section 35.18

All sewer works located in the flood plain district area, established under the zoning by-law, shall require that new and replacement sewer works be designed and constructed to minimize or eliminate infiltration of flood waters into the system or discharge sewerage from the system into the floodwater.

Section 35.19 - Sewer Pipe Testing

General

The L.U.I. shall test the first section of pipeline as soon as it is installed to demonstrate that the work conforms to these specifications. The initial section shall not be less than five hundred (500) feet and not more than one thousand (1000) feet of pipeline. Testing of pipe shall closely follow pipe laying.

For all sewer pipe tests, the L.U.I. shall furnish an air or water test pump, an air or water meter, and suitable pressure gauge. The L.U.I. shall also furnish all labor and materials required to install suitable temporary testing plugs or caps for the pipeline and perform the test. The meter and gauge shall be installed by the L.U.I. in such a manner that all air or water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests.

The scheduling of deflection and pressure and leakage tests shall be as approved and attended by the Littleton Water Department or their designated inspector.

Before accepting any sewer segment, the L.U.I. shall provide a television tape of the entire sewer including point of connection an existing sewer or pumping station. Television inspection shall be performed by a firm specializing in this work and shall produce the following information:

1. A continuous videotape recording of the entire length of pipe being inspected. The tape shall include location of each section, direction of camera travel, a commentary of the pipe's condition, and various irregularities found and lateral connections.
2. The section of pipe being televised shall be identified at least once every 50 ft.
3. Documentation on television logs and voice recorded on tape shall consist of the following information:
    a. Distance from the numbered manhole point of beginning on each sewer section to the location of the specific condition being inspected.
    b. Angular orientation of all above conditions inside pipe (i.e., leak at 10:00, service connection at 3:00).
    c. Sewer size, material, and joint spacing.

Deflection

Deflection tests shall be performed on all flexible pipes. The tests shall be conducted after the final backfill has been in place at least 30 days to permit stabilization of the pipe system.

No pipe shall exceed a deflection of 5 percent. If deflection exceeds 5 percent , the pipe shall be replaced.

The rigid ball or mandrel used for the deflection test shall have a diameter of not less than 95 percent of the base inside diameter or the average inside diameter of the pipe as specified by ASTM D 2122 Standard Test Method of Determining Dimensions of Thermoplastic Pipe and Fittings. The tests shall be performed without mechanical pulling devices.

Air Testing

The Littleton Water Department requires air testing in lieu of the exfiltration or infiltration tests. The L.U.I. shall submit his proposed method of air testing to the General Manager for approval. All air testing shall be performed in accordance with the procedures described in ASTM C828-86 for Clay Pipe or ASTM C924 for or Concrete Pipe or those procedures approved by the General Manager, and shall be specifically designed and manufactured for testing pipelines with low-pressure air and shall be provided with an air regulator valve or air safety valve set to prevent the air pressure in the pipeline from exceeding ten (10) psi. If the results of the air test are unsatisfactory, the L.U.I. shall repair the sewer pipe and perform the air tests until the sewer pipe passes the air test. If site conditions are not conducive to air test, as determined by the General Manager, the L.U.I. will be required to perform an exfiltration and/or an infiltration test as outlined below.

Low pressure air tests shall conform to ASTM Specification C 828. All sections to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. Air shall be added until the internal pressure of the test section is raised to approximately 4.0 PSIG. The air pressure test shall be based on the time, measured in seconds, for the air pressure to drop from 3.5 PSIG. Acceptance is based on limits tabulated in the "Specification Time Required for a 1.0 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

Before pressure is applied to the line all connections shall be firmly plugged. Before the test period starts, the air shall be given sufficient time to cool to ambient temperature in the test section.

If the test section is below groundwater, the test pressure shall be increased by an amount sufficient to compensate for groundwater hydrostatic pressure, however, the test pressure shall not exceed 10 PSI.

The pressure test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the General Manager prior to testing.

Exfiltration Test

If for any reason air testing cannot be performed, the General Manager shall require exfiltration testing. Leakage tests by exfiltration shall be made before or after backfilling at the discretion and under the supervision of the designated inspector. The length of pipe to be tested shall not exceed 1,000 feet and be such that the head over the crown at the upstream pipe is not less than two (2) feet and the head over the downstream pipe crown is not more than six (6) feet. The pipe shall be plugged, by pneumatic bags or mechanical plugs, in such a manner that the air can be released from the pipe while it is being filled with water. Before any measurements are made, the pipe shall be kept full of water long enough to allow absorption of water and the escape of any trapped air. Following this, a test period of at least two hours shall begin. Provisions shall be made for measuring the amount of water required to maintain the water at a constant level during the minimum two (2) hours test period. If any joint shows an appreciable amount of leakage, the joining material shall be removed and replaced. If the water required to maintain a constant level in the pipe does not exceed twenty-five (25) gallons per nominal diameter, in inches, per 24 hours per mile of pipe and if all leakage is not confined to a few joints, workmanship shall be considered satisfactory. If the amount of leakage indicates defective joints or broken pipes, they shall be corrected or replaced.

Infiltration Test

If for any reason air testing and exfiltration testing cannot be performed, the General Manager shall require infiltration testing be performed. Pipe shall be tested for infiltration after backfill has been placed and the ground water allowed to return to normal elevation. Infiltration tests shall be made only under the supervision of the Littleton Water Department designated Inspector, and the length of line to be tested shall be not less than the length between adjacent manholes and not more than the total length or each size pipe and shall not exceed 1000 feet. The allowable infiltration shall be twenty-five (25) gallons per nominal diameter, in inches, per 24 hours per mile of pipe in each section tested as determined by means of V-Notch weirs, pipe

spigots, or by plugs in the end of the pipe to be furnished and installed by the L.U.I., in an approved manner, and at such times and locations as may be directed by the designated inspector.

There shall be no gushing or spurting leaks. If an inspection of the completed sewer or any part thereof shows pipes or joints which allow noticeable infiltration of water, the defective work or material shall be replaced or repaired.

Section 35.20 - Sewer Force Main Testing

The sewer force main pipe shall be given pressure and leakage tests in sections of approved length as approved by the General Manager. For these tests, the L.U.I. shall furnish a water test pump, water meter, and a pressure gauge. The L.U.I. shall also furnish all labor and equipment to install suitable temporary testing plugs or caps for the pipeline and to perform the tests. The meter and gauge shall be installed by the L.U.I. in such a manner that all water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests.

The scheduling of pressure and leakage tests shall be as approved and attended by the Littleton Water Department designated inspector.

The section of pipe to be tested shall be filled with water by pumping water into it and opening the air release valves and expelling all air from the pipe. If air release assemblies are not available at high points for releasing air, the L.U.I. shall perform: all excavation(s); make the necessary tap(s) at such highpoint(s); plug said holes of the tapping saddles after completion of the test with brass or bronze plug(s); and backfill the excavation(s).

The L.U.I. shall make a leakage test by metering the flow of water into the pipe while maintaining (in the section being tested) a pressure equal to 1.5 times the highest pressure to which the pipe will be subjected under normal conditions of service or 150 psi, whichever is greater. This shall be done by placing the section under pressure by pumping.

The lengths of joint to be used in determining the allowable leakage shall be based on the nominal diameter of the pipe. The allowable leakage shall be less than 11.65 gallons per inch diameter per day per mile of force main tested, maintaining a pressure within 5 psi for a minimum of two (2) hours duration. If the section shall fail to pass the pressure test, the L.U.I. shall locate and repair or replace the defective pipe, fitting, or joint, at the L.U.I.'s own expense.

If, in the judgment of the General Manager, it is impracticable to follow the foregoing procedure exactly, modifications in the procedures may be made if approved by the General Manager, but in any event the L.U.I. shall be responsible for the ultimate tightness of the line within the above leakage requirements with no allowances for leakage from valves.

Section 35.21 - Low Pressure Sewer Testing

The sewer low pressure pipe shall be given pressure and leakage tests in sections of approved length as approved by the General Manager. For these tests, the L.U.I. shall furnish a water test pump, water meter, and suitable pressure gage. The L.U.I. shall also furnish all labor and equipment required to install suitable temporary testing plugs or caps for the pipeline and

perform the test. The meter and gage shall be installed by the L.U.I. in such a manner that all water entering the section under the test will be measured and the pressure in the section indicated and they shall be kept in use throughout all tests
The scheduling of pressure and leakage tests shall be as approved and attended by the designated inspector.

The section of pipe to be tested shall be filled with water by pumping water into it and opening the air release valves and expelling all air from the pipe. If air release assemblies are not available at high points for releasing air, the L.U.I. shall perform: all excavation(s); make necessary tap(s) at such highpoint(s); plug said holes of the tapping saddles after completion of the test with brass or bronze plug(s); and backfill the excavation(s).

The L.U.I. shall make a leakage test by metering the flow of water into the pipe while maintaining (in the section being tested) a pressure equal to 1.5 times the highest pressure to which the pipe will be subjected under normal conditions of service or 150 psi whichever is greater. This shall be done by placing the section under pressure by pumping.

The lengths of joint to be used in determining the allowable leakage shall be based on the nominal diameter or the pipe. The allowable leakage shall be less than 11.65 gallons per inch diameter per day per mile of pipe tested, maintaining a pressure within 5 psi for a minimum of two (2) hours duration. If the section shall fail to pass the pressure test, the L.U.I. shall locate and repair or replace the defective pipe, fitting, or joint at the L.U.I.'s own expense.

If, in the judgment of the General Manager, it is impracticable to follow the foregoing procedure exactly, modifications in the procedures may be made if approved by the General Manager, but in any event the L.U.I. shall be responsible for the ultimate tightness of the line within the above leakage requirements with no allowances for leakage from valves.

Section 35.22 - Cleaning Sewer Lines

At the conclusion of the work, the L.U.I. shall thoroughly clean all pipelines by washing with water or other means to remove all dirt, stones, pieces of wood, or other material which may have entered the pipes during the construction period. Debris cleaned from the lines shall be removed from the low end of the pipeline by installing a screening device that will prevent any debris from entering the Public Sewer. If after this cleaning, obstructions remain, they shall be removed. After the pipelines are cleaned and if the groundwater level is above the pipe or following a heavy rain, the designated inspector will examine the pipes for leaks. If any defective pipes or joints are discovered, they shall be repaired or replaced as directed by the designated inspector.

Section 35.23- Sewer Manhole Leakage Tests

Leakage tests shall be made and observed by the designated inspector on each manhole. The test shall be the exfiltration test or vacuum test as described below.

For these tests, the L.U.I. shall furnish an air or water test pump, an air or water meter, and suitable pressure gage. The L.U.I. shall also furnish all labor and materials required to install suitable temporary testing plugs or caps for the pipeline, and perform the test. The meter and gage shall be installed by the L.U.I. in such a manner that all air or water entering the manhole

under the test will be measured and the pressure in the manhole indicated and they shall be kept in use throughout all tests.

After the manhole has been assembled in place, all lifting holes and exterior joints surface shall be filled and pointed with an approved non-shrinking mortar. The test shall be made prior to placing the shelf and invert and before filling and pointing the interior horizontal joints. If the groundwater table has been allowed to rise above the bottom of the manhole, it shall be lowered for the duration of the test. All pipes and other openings into the manhole shall be suitable plugged and the plugs braced to prevent blow out.

Exfiltration Testing

The manhole shall then be filled with water to the top of the cone section. If the excavation has not been backfilled and observation indicates no visible leakage that is, no water visible moving down the outside surface of the manhole, the manhole may be considered to be satisfactory water-tight. If the test, as described is unsatisfactory, as determined by the designated inspector or if the manhole excavation has been backfilled, the test shall be continued. A period of time may be permitted, if the L.U.I. so wishes, to allow for absorption. At the end of this period the manhole shall be refilled to the top of the cone and the measuring time of at least two (2) hours shall begin. This amount shall be extrapolated to a 24 hour rate and the leakage determined on the basis of depth. The leakage for each manhole shall not exceed one (1) gallon per vertical foot per day, a twenty-four (24) hour period shall equal one day. If the manhole fails this requirement, but the leakage does not exceed three (3) gallons per vertical foot per day, repairs by approved methods may be directed by the designated inspector to bring the leakage within the allowable rate of one (1) gallon per foot per day. Leakage due to a defective section or joint or exceeding the three (3) gallon vertical foot per day, shall be the cause for the rejection of the manhole. It shall be the L.U.I.'s responsibility to uncover the manhole, as necessary, and to disassemble, reconstruct, or replace it as directed by the designated inspector. The manhole shall then be retested and, if satisfactory, interior joints shall be filled and pointed and the invert constructed.

No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc., it will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete. Furthermore, the L.U.I. shall take any steps necessary to assure the designated inspector that the water table is below the bottom of the manhole throughout the test.

If the groundwater table is above the highest joint in the manhole, and there is no leakage into the manhole, as determined by the inspector, such a test can be used to evaluate the water-tightness of the manhole. However, if the inspector is not satisfied, the L.U.I. shall lower the water table and carry out the test as described hereinbefore.

Vacuum Testing

The vacuum test shall be based on the time, measured in seconds, for the vacuum to decrease from 10 inches of mercury to 9 inches of mercury for manholes.

Acceptance of manholes is based on the following:

Manhole	Manhole Diameter	Time to Drop 1" Hg (10" to 9")

10 ft or less	4 ft	120 seconds
10 ft to 15 ft	4 ft	150 seconds
15 ft to 25 ft	4 ft	180 seconds

NOTE: For 5 ft diameter manholes, add 30 seconds to the times above.
For 6ft diameter manholes, add 60 seconds to the times above.

The vacuum test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the General Manager prior to testing.

If the test on the manhole fails (the allowable gallons or the time is less than that tabulated above), necessary repairs shall be made and the vacuum test repeated, until the manhole passes the test.

Section 35.24 - Manhole Cleaning

All new manholes shall be thoroughly cleaned of all silt, debris and foreign matter of any kind, prior to final inspection.

Appendix E.1

Top Ten List of the Worst Things to Put in Your Sewer System

Littleton Water Department

39 Ayer Road, P.O. Box 2406, Littleton MA 01460

(978) 540 – 2222

Top Ten List of the Worst Things to Put in the Public Sewer

- Grease/Cooking Oils
- Flammable Liquids
- Disposable Diapers
- Feminine Hygiene Products
- Dental Floss
- Reusable/Disposable Cleaning Cloths
- Paint
- Garbage
- Cat Litter
- Rainwater from Illegally Connected Sump Pumps

The illegal discharge of rainwater from sump pumps to your sewer line adds thousands of dollars in additional treatment costs. Discharging these other substances and items into the Public Sewer is not only against the law it can cause problems adding thousands of dollars to the costs associated with the operation and maintenance of the Public Sewer and POTW.

You can have a significant effect on helping to keep the operation and maintenance costs down by following some simple regulations. Please do your part to help us keep costs down. Thank you.

For a full list of prohibited substances go to www.lelwd.com/sewer-department Sewer Use Rules and Regulations.

Appendix E.2

No Flush Flyer

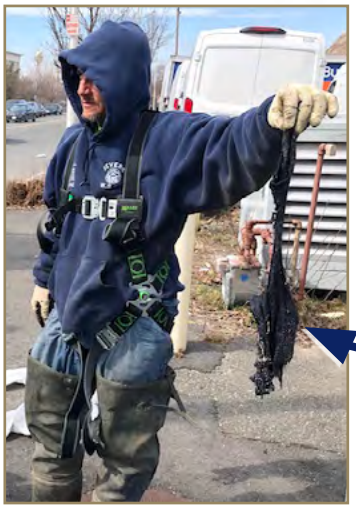
Preventing Backups

Help maintain a healthy sewer system in our community

With the increased use of wipes ("flushable", wet, baby, anti-bacterial, disinfectant) and paper towels, we are reminding all residents to ***PLEASE* make sure you put these items IN THE TRASH and DO NOT FLUSH them down the toilet!**

DO NOT FLUSH:

- **Wet wipes**
- **Baby wipes**
- **Anti-bacterial wipes**
- **Disinfectant wipes**
- **Paper towels**



YOU CAN HELP

Do your part to prevent costly and time consuming equipment blockages or breakdowns and aid in preventing sewer backups.

QUESTIONS: Contact Us at the Littleton Water Department

Littleton Water Department
978-540-2222
39 Ayer Road, Littleton, MA 01460
www.lelwd.com/sewer-department/

Corey Godfrey
Superintendent
978-540-2282
cgodfrey@lelwd.com

Matt Silverman
Environmental Analyst
978-540-2260
msilverman@lelwd.com

CDM Smith

What Not To Flush

Help maintain a healthy sewer system

With the increased use of wipes ("flushable", wet, baby, anti-bacterial, disinfectant) and paper towels, we are reminding all residents to *PLEASE* make sure you put these items IN THE TRASH and DO NOT FLUSH them down the toilet!

Safely flush human waste and toilet paper which easily dissolves in water!

DO NOT FLUSH:

- **Wet wipes**
- **Baby wipes**
- **Anti-bacterial wipes**
- **Disinfectant wipes**
- **Paper towels**

THE "FLUSHABLE" WIPES MYTH

- Flushable wipes are often marketed as an alternative to toilet paper and claim to be "flushable" and "sewer safe."
- These wipes DO NOT break down when flushed in both private household plumbing and the public sewer system.
- Serious blockages resulting in septic and sewer backups may occur.
- Disposable wipes, even those labeled 'flushable' should be disposed of in the trash, not flushed down the toilet.

QUESTIONS: Contact Us at the Littleton Water Department

Littleton Water Department
978-540-2222
39 Ayer Road, Littleton, MA 01460
www.lelwd.com/sewer-department/

Corey Godfrey
Superintendent
978-540-2282
cgodfrey@lelwd.com

Matt Silverman
Environmental Analyst
978-540-2260
msilverman@lelwd.com

CDM Smith