

1/23/06 - (1)

NOTE TO BOS -

Please see

pages 14 & 47

ENTIRE BYLAW

Pp. 1-28

SEWER USE REGULATIONS



ACTON BOARD OF SEWER
COMMISSIONERS
TOWN OF ACTON, MASSACHUSETTS

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SEWER USE REGULATIONS

REGULATIONS GOVERNING THE USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS, PRIVATE SEWAGE DISPOSAL, THE INSTALLATION AND CONNECTION OF BUILDING SEWERS, AND THE DISCHARGE OF WATERS AND WASTES INTO THE PUBLIC SEWER SYSTEM; AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF; IN THE TOWN OF ACTON, MIDDLESEX COUNTY, COMMONWEALTH OF MASSACHUSETTS.

Be it ordained and enacted by the Sewer Commission of the Town of Acton, Commonwealth of Massachusetts, as follows:

SECTION 1 - GENERAL

1A - APPLICABILITY & AUTHORITY

1. These specifications govern all sewer construction within dedicated public ways, "Town" easements and construction within private subdivisions, and are issued under the authority given to the "Board" under Chapter D10 Section 7 of the Town's Bylaws.
2. These specifications also apply to sewer work completed by "Town" employees, by virtue of its adoption as a standard by the "Board".
3. When so stated in the contract, these specifications shall govern the work of private contractors doing work under contract to the "Town".
4. These specifications shall govern the work of private contractors doing work within the "Town" rights-of-way and/or "easements".
5. These specifications shall govern the work of all private contractors doing work for developers, contractors, etc. in streets and easements which shall later be accepted by the "Town" as "Town" ways.
6. All sewerage system project designs shall be in accordance with MADEP and industry standards.
7. All plans for new sewerage systems, extensions and changes to existing systems must be submitted for review and approval by the Commonwealth of Massachusetts, Department of Environmental Protection and the "Town".
8. These specifications shall govern all "sewers" constructed on public or private property.
9. These specifications shall govern the installation of service connections. No service connections can be completed and approved until inspected by a duly authorized Board representative.

1B - DEFINITIONS

1. "Appendix A" shall mean Town of Acton Specifications for laying Public Sewers, Building Sewers, and Building Drains.
2. ASTM shall stand for the American Society of Testing Materials.
3. WPCF shall stand for the Water Pollution Control Federation.
4. "Board" shall mean the Sewer Commission of the Town of Acton or any agent or officer duly authorized to act in its place.
5. "Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from sanitary or approved waste inside the walls of the building and conveys it to the building sewer, ending ten (10') feet outside the inner face of the building wall.
 - i. "Building Sewer" shall mean the extension from the building drain to the public sewer or other place of disposal, also called house connection.
6. "Contract Drawings" shall be the construction drawings which have been approved by the Town Manager's appointed representative signed "approved" and on file in his office.
7. "Contractor" shall be the party doing the construction: either a private contractor or Town of Acton Employees, as the case may be.
8. "Easement" shall mean an acquired legal right for the specific use of land owned by others.
9. "Floatable Oil" is oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pre-treatment facility. A wastewater shall be considered free of floatable oil if it is properly pretreated and the wastewater does not interfere with the collection system.
10. Infiltration
11. Inflow
12. "Industrial Wastes" shall mean the wastewater from industrial processes, trade, or business as distinct from domestic or sanitary wastes.
13. "Inspector" shall be understood to be a qualified construction inspector of the Town of Acton appointed by the Town Manager.
14. "May" is permissive (See "Shall", 1.19).

15. MG/L shall stand for milligrams per liter.
16. "Person" shall mean any individual, firm, company, association, society, corporation, or group.
17. "Public Sewer" shall mean a common sewer controlled by the Town of Acton.
18. "Sanitary Sewer" shall mean a sewer that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with minor quantities of ground, storm, and surface waters that are not admitted intentionally.
19. "Sewer" - A main, pipe, lateral, or other conduit located in a street, highway, alley, right-of-way or easement that carries waste water from residences; commercial buildings; industrial plants, and institutions; equivalent to "Sanitary Sewer".
20. "Shall" is mandatory (see "May", 1.11).
21. Slug shall mean any discharge of water, sewage, or industrial wastes which, in concentration of any given constituent or in quantity of flow, exceeds for any period a duration longer than fifteen (15) minutes, more than five (5) times the average twenty-four (24) hour concentration of flows during normal operation.
22. "Superintendent" shall mean the Town Manager's appointed representative, deputy, or agent.
23. "Town" shall mean the Town of Acton, Massachusetts or any duly authorized officer, agent or representative of the Town of Acton.
24. Toxic Wastes
25. "Unpolluted Water" is water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sewers and wastewater treatment facilities provided.
26. "Wastewater or Sewage" shall mean the spent or used water of the community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and stormwater that may be present.
27. "Wastewater Facilities" shall mean the structures, equipment, and processes required to collect, transport, carry away and treat domestic and industrial wastes and dispose of the effluent.
28. "Wastewater Treatment Works" shall mean an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with

“Wastewater treatment plant” or “wastewater treatment plant” or “Water Pollution Control Plant”.

1C - BUILDING SEWERS AND CONNECTIONS

PROHIBITIONS

No unauthorized person shall uncover, make any connections with or opening into, use alter or disturb any public or private sewer or appurtenance thereof without first obtaining a written permit from the board or their duly authorized representative(s). Any person proposing a new discharge into the sewage works or a substantial change in the volume or character of pollutants that are being discharged into the sewage works shall notify the Board or its duly authorized representative at least forty-five (45) days prior to the proposed change or connection in order to obtain approval.

No person shall break, cut or remove any pipe of the public/private sanitary sewer or make or cause to be made any connection to said sewer except through the connection branches provided for that purpose unless, in another manner, approved by the Board or its duly authorized representative(s).

Building sewers shall only be installed during normal working hours of the Town. Emergency working hours may be approved in writing by the Board or its duly authorized representative(s).

CONNECTION PERMITS:

There are two classes of connections permits:

- (A) residential connection permits,
- (B) business / commercial connection permits

Applications “shall” be made on a special form furnished by the “Superintendent”. Completed applications shall be forwarded to the “Superintendent” for approval. Permit and inspection fees for connection permits “shall” be paid to the “Town” when an application is filed. The Applicant “shall” also apply for a Plumbing Inspection Permit for the purpose of having the Plumbing Inspector, or his designee, review the interior of the property to assure that all sanitary codes are in compliance, when connection to the municipal system is accomplished.

Permit Limits - For any permit, if said permit is granted, the permit shall be valid for no more than one hundred and eighty (180) calendar days from the date of issue. If the project does not commence within this time period the permit shall become invalid.

Permit Waivers – Waivers of these limits may be approved by the Board based on act of God or other hardships. These waivers will be based on a case by case basis.

CONNECTION COSTS

<u>System Development Charge</u>	<u>Cost</u>
Residential	\$100.00
Multi-Family	\$150.00
Business/ Commercial	\$150.00
Plumbing	\$10.00 per connection

A drain layer “may” not have more than three (3) connection permits outstanding without written permission from the “Superintendent”. The permit “shall” be available for inspection at the site of work. Drain layers “shall” install building sewers only during normal working hours of the “Superintendent”, Emergency working hours “may” be approved on a case by case basis by the “Superintendent”, or the “Board”.

INSTALLATION COST AND INDEMNIFICATION

Costs incidental to the connection of the “building sewer” to the “public sewer” and inspection by the “Superintendent” or “Inspector” “shall” be borne by the property owner or owner of the building. In either case, the owner “shall” indemnify the “Town” from any loss or damage that “may” directly or indirectly be caused by the installation and connection of the “building sewer”.

GREASE, OIL, SAND INTERCEPTORS

Grease, oil and sand interceptors shall be provided and maintained by the Owner (not the Town) when, in the opinion of the Board, 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 that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be a type and capacity approved by the Board and shall be located outside the building as to be readily and easily accessible for cleaning and inspection. Each restaurant, nursing home, school, hospital or other facility from which quantities of grease can be expected to be discharged must have an approved grease trap. Each gasoline station must have an approved gasoline trap. Each car wash must have an approved sand trap. Grease Traps shall comply with all the requirements of Title 5.

INDUSTRIAL WASTEWATER

Not Allowed.

SEPARATE BUILDING SEWERS REQUIRED

A separate and independent "building sewer" "shall" be provided for every building; unless otherwise approved by the "Board". In cases where one building stands at the rear of another on an interior lot and no private "sewer" is available or can be constructed to the rear building through an adjoining alley, courtyard, or driveway, the "building sewer" from the front building "may" be extended to the rear building and the whole considered one "building sewer", if approved by the "Board". The "Town" will not assume any responsibility for damages caused by any such connection.

CONNECTION TO THE BUILDING DRAIN

Whenever possible, the "building sewer" "shall" be brought to the building at an elevation which allows for four feet of cover to the top of pipe. In buildings in which the "building drain" is too low to permit gravity flow to the "public sewer", "wastewater" "shall" be lifted by an approved means and discharged to the "building sewer". Lifting devices "shall" be installed and maintained by the Owner with no liability assumed by the Town.

The "building sewer" "shall" be insulated appropriately for protection from frost if a four foot depth is not achievable. The "building sewer" "shall" be laid at uniform grade and in straight alignment insofar as possible. All changes in direction shall be made with manholes or cleanouts subject to the approval of a duly authorized Board representative(s). No building sewer shall be laid parallel to and within five (5) feet of any bearing wall. Construction and materials "shall" conform to the specifications outlined in "Appendix A".

All building connections shall have the building drain exit the building through the basement floor and connect with the building sewer at an elevation below the basement floor whenever possible.

PROHIBITED CONNECTIONS

No "person" "shall" connect roof downspouts, exterior foundation drains, sump pumps, areaway drains, or other sources of surface runoff or groundwater to a "building sewer" which discharges to a "sanitary sewer". - Upon confirming the existence of a prohibited connection the owner will be notified and given ten (10) days to secure a contractor to make the necessary repairs. Should the violator fail to follow through within the given time period, a notice by Certified mail shall be sent giving the violator a final ten (10) days to repair the failure, after which a fine maybe levied for each day thereafter.

METHOD OF PIPE INSTALLATION AND BACKFILLING

General - All pipes shall be laid in accordance with "Appendix A".

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 "Town", or the procedures set forth in current specifications of the A.S.T.M and WPCF Manual of Practice No. 9.

All pipe shall be made gas tight, watertight and laid according to Division 3 of this ordinance, sanitary sewers. No blocks or stones shall be used to support the pipe. In instances where groundwater may back up into the basement, a well compacted backfill seal may be placed around the building drain at the building. In areas where the sanitary sewer surcharges, a backflow prevention device may be installed, and maintained by the owner, to the building drain to prevent backups with no liability assumed by the Town.

When water is present in a trench a sump of crushed stone shall be constructed and water shall be pumped at all times. The trench shall be kept dry at all times during construction. At all times when pipe installation is not in progress, the open ends of the pipe shall be closed with temporary watertight plugs or by other approved means.

All joints between pipes of different materials shall be made with approved pre-molded gasket joints.

The connection of the building sewer into public/private sewer shall be made at the "Y" or "T" branch if available at a suitable location. If no branch is available, a connection may be made by tapping the existing sanitary sewer by an approved method as approved by the Board. Cutting the connection in the pip by hand is prohibited.

Backfill shall be installed as outlined in Division 2 Section 2B.

Method of Construction – The size, slope, alignment, materials of 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 Building and Plumbing Code or other applicable rules and regulations of the Town of Acton. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply, except that only the following pipe may be used.

- A. Extra heavy cast-iron soil pipe
- B. Cast-iron
- C. Ductile Iron Pipe
- D. Polyviynl chloride (PVC) sewer pipe

Note: No Bell Cast Iron Pipe is prohibited.

All joints shall be tight and waterproof. Pipes installed on fill or unusable ground shall be cast-iron or ductile iron pipe except that nonmetallic material may be accepted if laid on suitable concrete bed or cradle as approved by the Board or its duly authorized representative(s).

NOTIFICATION AND INSPECTION OF WORK

The applicant for the "building sewer" permit "shall" notify the "Superintendent" at least twenty four (24) hours prior to the start of an approved installation. The applicant must notify the "Superintendent" a second time when the "building sewer" is ready for inspection and connection to the "public sewer". The applicant "shall" connect all "sanitary sewer" discharges to the "building sewer" and that the connection to the "public sewer" "shall" be made under the supervision of the "Superintendent". All connections "shall" be made in the approved manner; no caps and/or plugs are to be removed without explicit orders, and under the direct supervision, of the "Superintendent", the existing septic tanks must be pumped, crushed and filled, then inspected by the "Superintendent" before any approval can be granted. When leaching fields are encountered the Board of Health "shall" be notified. No backfilling of any trench "shall" be made without the approval of the "Superintendent",

Changes of the "building drain" "shall" be inspected by the Plumbing Inspector or his designee, to assure compliance with all applicable plumbing code requirements.

PROTECTION OF PUBLIC AND PROPERTY

Excavations for "building sewer" installations "shall" be adequately guarded with barricades and lights, or a police detail "may" be required so by the Police Chief 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 "Town". Except in the case of an emergency, when it is necessary to close off a street, the Town's Fire Department, School Department's Transportation Office and the Police Department "shall" be notified in writing no later than twenty-four (24) hours in advance. A street opening permit "shall" be obtained from the "Town" at least 72 hours before opening the street except under emergency conditions as determined by the Town "Superintendent" and approved by the Acton Police Department.

REPORTING OF PROHIBITED SUBSTANCES FOUND IN SEWER

All representatives shall give a full written report to the Board within twenty-four (24) hours in the event that prohibited substances as defined in _____ are found in the sewer during the course of any work.

PROPER VENTING REQUIRED

No building shall be connected to a public/private sewer system unless said building has a vent line extended to a point above the roof, properly vented according to building and plumbing codes.

PERFORMANCES STANDARD FOR AGENT

All agents shall agree to perform work according to all rules, regulations and conditions of the Board prior to any work done in the Town. The agents shall be fully insured and shall indemnify the Town against any and all claims, liabilities, or actions for damages incurred in, or in any way connected with, the performance of the work on the building drain or sewer, or by reason of any acts of omission in the performance of his work. The Board reserves the right to authorize and allow only approved agents to perform work on building drains and sewers.

VARIATIONS FROM RULES AND REGULATIONS

Any variation from these rules of the Town shall receive the approval of the Board before implementation.

LICENSE FOR DRAIN LAYERS

Drain layers must obtain a license from the "Town" before performing any work. Licenses shall be issued for one calendar year commencing January 1. A \$200 annual fee will be required with the completed license application. The applicant will supervise and be responsible for all work performed under the license. Any blasting required, "shall" be done by a "person" licensed to perform blasting in the Commonwealth, and only after receiving a blasting permit from the Acton Fire Department (prior to receiving a blasting permit the applicant "shall" submit Certificates of

Insurance in the sum of \$100,000 to cover General Liability, including bodily injury, property damage and \$300,000 for XCU coverage for explosion, collapse, or underground damage). A bond, cash deposit or certified check for \$1,000 and three letters of recommendation must also be submitted. No insurance policy may be canceled without thirty (30) days prior written notice by registered mail to the the Board or duly authorized representative and the Fire Department. Such insurance shall indemnify the Town against all claims, liabilities, or actions for damages incurred in, or in any connected with, the performance of work by a drain layer and for, or by reason of, any acts of omission of said darin layer in the performance of his work. If insurance or bond is canceled or expirese the drain layers license shall become void.

A drain layer "may" not have more than three (3) connection permits outstanding without written permission from the Board or their duly authorized representative ". The permit "shall" be available for inspection at the site of work. Drain layers "may" install "building sewers" only during normal working hours of the "Superintendent". Emergency working hours "may" be approved on a case by case basis by the "Superintendent".

WASTEWATER METERING

In the event a user is not connected to the public water supply, but is connected to the "public sewer", said user "shall" install and maintain a water meter, at his expense, from which the "Town" "may" monitor the use of the "sewer". The type of meter and the method of installation "shall" be acceptable to the the Board or their duly authorized representative.

USER FEE

The "Board" "may" from time to time establish just and equitable user fees for the use of "public sewers" and the "wastewater treatment works". This user fee "shall" be paid by every "person" with a connection to the "public sewer" system. The money received "may" be applied to the costs for operation and maintenance of the "wastewater facilities" or any debt contracted for sewerage purposes.

NON-SEWER USE WATER

The "Board", after receiving a written request from a user, "may" credit the user for disposal charges associated with water that is not discharged to the "wastewater" collection system from their

property (e.g. outside watering, filling swimming pools, etc.). The volume of non-sewer use water must be measured with a second water meter, or other means that is acceptable to the the Board or their duly authorized representative The user will receive a credit on their user charge bill for non-sewer use water. All water meter and plumbing costs "shall" be borne by the user. Approved abatements will be credited during the next billing cycle. The "Board" reserves the right to enter the users property to verify the meter readings.

1D - USE OF PUBLIC/PRIVATE SEWER

CONNECTION TO PUBLIC/PRIVATE SEWER

The owners of all houses, buildings, or properties used for human occupancy, employment, recreation or other purposes, situated within the Town and abutting any street, easement, or right-of-way in which there is now located or may, in the future, be located and available may hereby be required by the Town's Board of Health (acting under Title 5, 310 CMR, SEC, 15.02) at his/her expense to connect such sanitary facilities as exist with the proper public/private sewer in accordance with the provisions of the Town of Acton.

Additionally, persons with failed cesspools or septic systems shall be required to connect to the proper public/private sewer within a period of time determined by the Board of Health.

All applicants, his heirs, devisees and assigns agree to abide by all rules and regulations, present and proposed, as set forth in this ordinance and those of the Board.

APPROVAL OF DISCHARGES

No person shall discharge or cause to be discharged any wastes, sewage, or industrial wastes in any manner or method without proper treatment subject to approval by the Board or their designees.

DISPOSAL OF UNPOLLUTED WATERS PROHIBITED

No person shall discharge, or cause to be discharged any stormwater, groundwater cellar floor drainage, roof runoff, subsurface drainage, uncontaminated cooling water, unpolluted process waters, exhaust from steam engines, or blow-off from boilers to the sanitary sewer.

DISCHARGE METHOD SPECIFIED

Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated storm sewers, or to a natural outlet approved by the Town. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Town, to a storm sewer or natural outlet.

PROHIBITED WASTES

No person shall discharge or cause to be discharged any of the following described waters or wastes to any public/private sewers:

1. Any gasoline, benzene, naphtha, fuel oil, crude oil, lubricating oils, flammable or explosive liquids, solids, or gasses, or any other oils or gasses of hydrocarbon or petroleum origin.
2. Any waters or wastes containing toxic or poisonous solids, liquids, or gasses in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant.
3. Any waters or wastes having a pH lower than 5.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.
4. Solid or viscous substances in quantity or of such a size capable of causing obstruction of the flow in public/private sewers, or other interference with the proper operation of the sewage works such as, but not limited to, ash, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, rubber, latex, underground garbage, whole blood, paunch manure, hair and fleshings, entrails, paper dishes, cups and milk containers, abrasive materials, etc., either whole or properly shredded by garbage grinders.

CONTROLLED WASTES

No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if, in the opinion of the Board or a duly authorized representative, such wastes can harm either the public/private sewers, sewage treatment process, or equipment; have an adverse effect on the receiving stream; or can otherwise endanger life, limb, public property, or constitute a

nuisance. In forming an opinion as to the acceptability of these wastes, the Board will give consideration to such factors as the quantities of subject wastes in relation to flow and velocities in the public/private sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and other pertinent factors. The controlled substances are:

1. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150°F), (65°C).
2. Any water or waste containing fats, wax, grease or oils of vegetable or animal origin, whether emulsified or not, in excess of 100 mg/l or containing other substances which may solidify or become viscous at temperatures between thirty-two degrees (32°F), and one hundred fifty degrees (150°F), (0°C and 65°C). The use of chemical or physical means (such as temperature variation, emulsifying agents, or mechanical mixers) to bypass or release fats, oils, and greases into the public/private sewer system is prohibited.
3. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric), or greater, shall be subject to the prior review and approval of the Board or their duly authorized representative.
4. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.
5. Any waters or wastes containing iron, chromium, copper, zinc, any similar objectionable or toxic substances, or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment plant exceeds the limits established by the Board or DEP for such materials.
6. Any waters or wastes containing phenols or other taste or odor producing substances, in such concentrations exceeding limits which may be established by the Board or the Authority, as necessary, after treatment of the composite sewage to meet the requirements of the State, Federal or other public agencies or jurisdiction for such discharge to the receiving waters.
7. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits which may be established by the Board in compliance with applicable State and Federal regulations.
8. Any waters or wastes having a pH in excess of 9.5.

9. 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 sulfate).
- 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 sewage treatment plant.
- d. Unusual volume of flow or concentration of wastes constituting slugs, as defined in Division 1 –Section 1B.

10. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment process employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge of the treatment plant.

DECISIONS OF THE BOARD

If any waters or wastes are discharged or are proposed to be discharged to the public/private sewers, which contain the substances or possess the characteristics enumerated in the Section entitled “Controlled Wastes” and which, in the judgement of the Board may have deteriorious effect upon the sewage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or or constitute a public nuisance, the authority may:

1. Reject the wastes.
2. Require pretreatment of an acceptabe condition for discharge to the public/private sewers.
3. Require control over the quantities and rates of discharge, and/or treatment of said fluids.
4. Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges.

If the Board permits the pretreatment or equalization of waste flow, the design and installation of the plants and equipment shall be subject to the review and approval of the Board and subject to the requirements of all applicable Federal, State and local codes, ordinances and by-laws.

MAINTENANCE OF PRETREATMENT FACILITIES

When preliminary treatment of flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

CONTROL MANHOLES

When required by the Board, the Owner of any property services by a building sewer carrying industrial wastes shall install a suitable control manhole, together with such necessary meters and other appurtenances, in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by the Board or duly authorized representative(s). The manhole shall be installed by the Owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

WASTEWATER SAMPLING

All measurements, tests, and analysis of the characteristics of water and wastewater 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 shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole shall be considered to be the nearest downstream manhole in the public/private sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of the constituents upon the sewage works and to determine the existence of hazards to life, limb and property.

MONITORING OF DISCHARGE REQUIRED

All industries discharging into a public/private sewer shall perform such monitoring of their discharges as the Board and/or other duly authorized representative may reasonably require, including installation and use of the maintenance monitoring equipment, keeping records and reporting the results of such monitoring to the Board. Such records shall be made available upon request by the Board and/or to other agencies having jurisdiction over discharges to the receiving waters.

NOTICE OF ACCIDENTAL DISCHARGE REQUIRED

Any person responsible for, or becoming aware of the discharge to public/private sewer, accidental or otherwise, of any prohibited substance or aof any sludge as defined herein, shall report same immediately by telephone to the Board or its duly authorized representative so that necessary precautions can be taken to minimize any harmful impact to the system. The event shall be followed, within 15 days of the date of occurrence, by a detailed written statement to teh Board describing the causes for the accidental discharge and the measures being taken to prevent future occurence. Such notification will not relieve users of liability for any expenses, loss or damage to the Town's sewerage system or for any fines imposed by the Town.

Users shall inform their employees of the existence of these regulations and at least one copy shall be permanently posted on the user's bulletin board. Each user shall permanently post a notice advising employees who in their organization has been designated as the responsible individual for compliance with these regulations and who should be notified of any accidental discharges in violation of these regulations.

1E – RULES AND REGULATIONS

1. Application to connect to sewer system shall be made in writing and filed at the Town Hall Board of Health, with the completed application form and support documentation.
2. All work relating to the construction and particular sewer connection shall be done by an agent approved by the Board or its duly authorized representative.
3. All particular sewer or building connections shall be of such type and size, laid at such depth and gradient, and in such location as provided by a Massachusetts Registered Professional Engineer and approved by the Board or its duly authorized representative. No particular sewer shall serve more than one (1) building without approval of the Board or their duly authorized representative.
4. All sewer connections shall be installed in separate trenches from other utilities, ten (10) feet apart and eighteen (18) inches below water pipe(s) as provided by Title V, unless submitted and approved by the Board.
5. All sewer connections shall be surrounded by six (6) inches or more of crushed stone, one (1) inch maximum diameter.

6. No trench and pipe shall be backfilled until the Board or duly authorized representative has been notified, and has inspected and approved said installation. Furthermore, only suitable backfill material shall be used in the trench as approved by the Board or their duly authorized representative.
7. Any sewer connection over one hundred (100) feet in total length shall require a clean out for individual dwellings and a manhole for multiple connections. All cleanouts or manholes must meet the Town's specifications included in this Ordinance. When cleanouts are installed, a LeBaron LA0910 or approved equal, will be used. The cover, will be brought to finished grade, will have appropriate lettering and be installed according to specifications.
8. The Board or their duly authorized representative may require, at any time, for such grease traps or ventilating pipes, to be installed as it may deem necessary for the proper maintenance of said particular sewer or common sewers. In every case where any restaurant, hotel or business of a similar nature is carried on, a suitable grease trap **MUST** be installed as approved by the Board or their duly authorized representative.
9. Garages and other establishments where gasoline is used and which are connected with the common sewer shall be supplied with a suitable trap or separator satisfactory to the Board. All traps or separators shall be kept in good condition and cleaned frequently. Whereass grease, oil or any other substance cleaned from such traps or separators shall be disposed of in a safe manner and not into the sanitary system or drainage system.
10. No surface water, groundwater, cellar floor drainage, roof drainage, gasoline, explosive fluids or any substance which may be liable to injure the sewers, interfere with any of its uses, or obstruct its flow shall be discharged into the Town sewer system.
11. All necessary easements for sewer connections shall be obtained by the property owner and recorded in the Registry of Deeds or Land Court.
12. The cost of cleaning, maintaining, repairing or replacing any particular sewer connection shall be paid by the property owners connected to said sewer system, up to the property line in a public way. The Town assumes the liability when located in the public way.
13. Whoever violates any of the provisions of these rules and regulations shall be punished according to existing Town By-Laws, State and/or Federal Laws for each offense.
14. These rules may be rescinded or modified or added to by the Board at any time when, in their opinion, such action is for the best interest of the Town of Acton.

1F - QUALITY CONTROL

INSPECTION POWERS OF THE BOARD OF SEWER COMMISSIONERS

The Board and any duly authorized representative(s) bearing proper identification, shall be permitted to enter, at reasonable times, all properties connected with the public/private sewers for the purposes of inspection, observation, measurement, sampling and testing, all in accordance with the provisions of these regulations. They may inquire into any processes, including metallurgical, chemical, oil refining, ceramic, paper, plating, or other industrial activity, that contribute waters or wastes to the public/private sewers but shall not order or demand information concerning any patented process or trade secret beyond that necessary to determine the kind, source and amount of sewage discharge from an industrial or commercial plant to the public/private sewer.

"Inspectors" "shall" be authorized by the "Representative" to inspect all construction conducted and materials furnished. Such inspection "may" extend to all or any part of the work, and to the preparation or manufacture of the materials to be used. In case of any dispute arising between the "Contractor" and the "Inspector" as to materials furnished or the manner of performing the work, the "Inspector" "shall" have the authority to reject material or suspend the work until the question at issue can be referred to and decided by the "Superintendent". The "Inspector" "shall" not be authorized to revoke, alter, enlarge, relax or release any requirements of these specifications nor to approve or accept any portion of the work, nor to issue instructions, contrary to the Plans and Specifications.

The "Inspector" "shall" in no case act as a foreman or perform other duties for the "Contractor" or interfere with the work by the "Contractor". Any advice, which the "Inspector" "may" give the "Contractor", "shall" in no circumstances be construed as binding to the "Superintendent" or the "Town" in any way,

INSPECTION OF THE WORK

The "Contractor" "shall" not bury any pipes or casings or other appurtenances except in the presence of the "Representative" or the "Inspector". To this end, proper notice "shall" be given the "Representative" by the "Contractor" of the time and place he intends to do the work. Any work which is done when the "Representative" or "Inspector" is not present or which is done contrary to the direction of the "Representative" "shall" be considered unauthorized and "shall" not be accepted.

The "Contractor" "shall" remove and replace such work to the satisfaction of the "Representative" when directed to do so. Such work satisfactorily replaced will then be accepted.

1G - SPECIAL CONTROLS

EROSION CONTROL

The "Contractor" "shall" take due precautions to minimize the run-off of pollution substances such as silt, clay, fuels, oils, bitumens, calcium chloride and any other polluting materials harmful to humans, fish or other life into the waters of the Commonwealth of Massachusetts.

DUST CONTROL

Dust control "shall" be provided when deemed necessary by the "Superintendent" so as to prevent damage and nuisance to adjacent property owners and public streets. The means of dust control "may" include the use of water, calcium chloride or other approved methods.

TRAFFIC CONTROL

When, in the opinion of the "Superintendent", public safety or convenience requires the services of the police, the "Superintendent" "may" direct the "Contractor" to request the "Town" Police Department to assign officers to direct traffic within the location of work.

Nothing contained herein "shall" be construed as relieving the "Contractor" of any of his responsibilities for protection of persons and property. Police details "shall" be paid by the "Contractor".

DIVISION 2

EARTHWORK

SECTION 2A

CLEARING AND GRUBBING

SCOPE OF WORK

Clearing and grubbing within the public way "shall" be carried out where necessary. The "Contractor" will be allowed to remove only the trees and brush that are absolutely necessary for his construction operations and the "Contractor" must abide by the Scenic Roads Bylaw. The "Contractor" "shall" be expected to save as many trees as is possible. The removal of all brush and trees, including their stumps necessary for construction purposes, "shall" be done in such a manner to meet the Tree Warden's satisfaction at the end of the work.

CLEARING

Clearing "shall" consist of felling, cutting and the satisfactory and legal disposal of trees, brush and other vegetation, down timber, and rubbish.

If landowners desire the timber or small trees, the "Contractor" "shall" cut and neatly pile it in 4-ft. lengths for removal by the landowner; otherwise, the "Contractor" "shall" dispose of it by hauling away or chipping. No burning "shall" be permitted unless the "Contractor" obtains the permission of the "Town" Fire Chief beforehand.

GRUBBING

Grubbing "shall" be carried out where trees have been felled, and "shall" consist of the removal and disposal of stumps, including all roots larger than 3-in in diameter to a depth of 18-in. below ground surface and within a 3 ft. radius of the trunk.

SECTION 2B

EARTH EXCAVATION AND BACKFILL

SCOPE OF WORK

This section includes, except as elsewhere provided, trenching for pipe laying, and appurtenances, including drainage, sheeting and bracing, backfilling, disposal of surplus material and restoration of trench surfaces in the public way or "easements".

SHEETING AND BRACING

The "Contractor" "shall" furnish, put in place, and maintain sheeting and bracing if required to support the sides of the excavation and prevent loss of ground which could damage or delay the work or endanger adjacent structures.

DRAINAGE

The "Contractor" "shall" furnish all materials and equipment and perform all incidental work required to install and maintain the drainage system he proposes for handling any ground water or surface water encountered. The "Contractor" must alter his drainage methods if, in the opinion of the "Superintendent", the trench bottom is unsatisfactory.

BACKFILLING

As soon as practicable after the pipe has been laid, jointed, properly bedded (and tested, if required) backfilling "shall" begin and thereafter be prosecuted expeditiously.

Sand or $\frac{3}{4}$ minus stone, which is free of other foreign material, "shall" be carefully placed to a depth of 1 ft. over the top of the pipe.

When the pipes are laid cross-country, the remainder of the trench "shall" be filled with approved material.

Wherever a loam or gravel surface exists prior to cross-country excavations, it "shall" be removed, conserved, and replaced to the full original depth. In some areas, it "may" be necessary to remove excess material during the cleanup process, so that the ground "may" be restored to its original level

and condition. If the "Contractor" prefers not to store loam or topsoil, he "may" replace it with loam or topsoil of equal quality and quantity.

When the pipes are laid in streets, the trench above the 1 ft. of selected material above the pipe "shall" be backfilled with suitable material in layers not to exceed 3 ft. and thoroughly compacted by mechanical equipment. The last 1 ft. "shall" be backfilled with compacted bank-run gravel unless an increase is directed by the "Superintendent".

Fragments of ledge and boulders not greater than 6 inches in. diameter "may" be used in trench backfill providing that the quantity, in the opinion of the "Superintendent", is not excessive. Rock fragments "shall" not be placed until the pipe has at least 2 ft. of earth cover. Small stones and rocks "shall" be placed in thin layers alternating with earth to insure that all voids are completely filled. Large masses of filling "shall" not be dropped into the trench in a manner to endanger the pipe.

Bituminous paving "shall" not be placed in the backfill. Frozen material "shall" not be used under any circumstances.

All road surfaces "shall" be groomed immediately after backfilling. Dust control measures "shall" be employed at all times to the satisfaction of the "Superintendent".

SECTION 2C

EXCAVATION BELOW NORMAL GRADE

SCOPE OF WORK

If, in the opinion of the "Superintendent", the material at or below the normal grade of the bottom of the trench (6" below grade of pipe bottom) is unsuitable for foundation, it "shall" be removed to the depth as directed by the "Superintendent" and replaced by screened-gravel or as specified below.

EXCAVATION AND BACKFILLING

Excavation and backfilling below grade "shall" conform to all applicable provisions under Section 2B, including the requirements for sheeting and bracing and maintaining the trench.

FILL

Normally fill "shall" be screened gravel, as specified under Section 2D, however, if the material at the level of trench bottom consists of fine sand, sand and silt or soft earth which "may" work into the screened gravel notwithstanding effective drainage, the subgrade material "shall" be removed to the extend directed and the excavation refilled with coarse sand or a mixture graded from coarse sand to fine peastone, to form a filter layer preserving the voids in the gravel bed of the pipe. The "Superintendent", before placement, "shall" approve the composition and gradation of gravel. Gravel "shall" be placed in 6-in. layers thoroughly compacted.

SECTION 2D

GRAVEL FILL

Screened gravel "shall" be used for bedding pipe, as replacement material for ordered excavation below grade and as gravel cushion in ledge excavation. Bank run gravel "may" be used for the roadway sub base under the pavement, replacement of unsuitable material and for similar uses. The "Superintendent" "may" order the use of gravel for purposes other than those specified if, in his opinion, such use is advisable.

BANK-RUN GRAVEL

Bank-run gravel "shall" consist of hard, durable stone and coarse sand, essentially free from frost, frozen lumps, loam and clay, uniformly graded and containing no stone having any dimension greater than 3-in. The grading of sizes and material "shall" be such that the gravel may be thoroughly consolidated.

25 to 70% "shall" pass the No. 4 sieve and not more than 12% of the material passing the No. 4 sieve "shall" pass the No. 200 sieve.

SCREENED GRAVEL

Screened gravel conforming to ASTM C33 stone size No. 67 "shall" consist of hard, durable, round particles of proper size and gradation, and it "shall" be free from sand, loam, clay excess fines, and deleterious materials. The size of the particles "shall" be uniformly graded gravel such that not less than 100 per cent of the particles will pass a 3/4-in sieve and not more than 5 percent will pass a No. 4 sieve. Quality and gradation "shall" be acceptable to the "Superintendent".

SECTION 2E

ROCK AND BOULDER EXCAVATION

SCOPE OF WORK

This section includes the excavation, disposal and replacement of rock and boulders.

DEFINITIONS

Rock excavation "shall" mean rock which, in the opinion of the "Superintendent", requires for its removal drilling and blasting.

Boulder excavation "shall" mean boulders exceeding 1/2 cu. yd. in volume, which can be excavated without resorting to blasting.

BLASTING

All blasting operations "shall" be conducted in full compliance with all laws of the State, local ordinances, and regulations and with all possible care to avoid injury to persons and property.

DISPOSAL AND REPLACEMENT OF ROCK

Rock and boulders exceeding 6 inches in diameter "shall" not be used for backfilling. Rock disposed of "shall" be replaced by surplus excavation or borrow.

DIVISION 3

SANITARY SEWERS

SECTION 3A

P.V.C. SEWER PIPE

POLY VINYL CHLORIDE PIPE (P.V.C.)

All P.V.C. pipe and fittings "shall" conform to the most recent requirements of ASTM Specifications for Type PSM Poly Vinyl Chloride (P.V.C.) Sewer Pipe and Fittings.

P.V.C. Pipe conforming to Designation D-3034 "shall" be SDR-35 or greater.

P.V.C. Pipe conforming to Designation F-789 "shall" be PS-46 or greater. All P.V.C. Pipe "shall" have elastomeric gasket Joints and which Joints "shall" conform to ASTM Specifications for sewer pipe Joints using Elastomeric Seals Designation D-3212. Manufacturer's certificate of compliance "shall" be furnished to the "Superintendent", prior to installation. Methods of shipping and storage on site "shall" be such as to avoid injury to the pipe. Damaged pipe "shall" be rejected and removed from the job. Solvent cement joints "shall" not be allowed.

Minimum "pipe stiffness" (F/y) at 5% deflection "shall" be 46 psi for all sizes when tested in accordance with ASTM Method of Test D-2412, "External Loading Properties of Plastic Pipe by Parallel Plate Loading".

Each length of pipe in compliance with this specification "shall" be clearly marked at intervals of 5 feet or less. Pipe conforming to designation D3034 "shall" be marked with the manufacturer's name or trademark, nominal pipe size, the P.V.C. cell classification (i.e. 12454-B), the legend "Type PSM SDR-35 P.V.C. Sewer Pipe," and "ASTM D-3034". Pipe conforming to Designation F-789 "shall" be marked with the manufacturer's name or trademark, the P.V.C. cell classification (i.e. 12164-B), Modulus Indicator (i.e. T-1, T-2, or T-3), the legend "PS-46 P.V.C. Gravity Sewer Pipe," and "ASTM F-789".

P.V.C. pipe used for force main "shall" conform to ASTM D-2241 and D-1784 (Class 12454-B) and safety factor of 2.5 "shall" be used for pressure rating determination with a standard dimension ratio (SDR) no higher than 26.

P.V.C. FITTINGS

Wye branches and bends "shall" have elastomeric gasket joints, and conform to "ASTM D-3034" (SDR-35 only) or ASTM F-789. They "shall" be manufactured and furnished by the pipe supplier (or approved equal) and have bell and spigot Joints compatible with that of the pipe.

Each fitting in compliance with this specification "shall" be clearly marked with manufacturer's name or trademark, nominal size, material designation "P.V.C.", "PSM" (for SDR-35 only), and "ASTM D-3034" or "ASTM F-789". All fittings "shall" be either SDR-35 or PS-46 and "shall" be the same as the pipe being used.

JOINTS FOR P.V.C. PIPE

Joints "shall" be of the bell and spigot type with a gasket as previously specified. No solvent joints are permissible. Manufacturer's instructions "shall" be followed.

ALLOWABLE DEFLECTION

A maximum of 7 1/2% deflection in the pipe diameter will be allowed. Deflection "shall" be measured as the reduction in the vertical diameter of the pipe.

DOUG we do not typically see communities allow reinforced concrete pipe for sewer use.

SECTION 3C

CEMENT LINED DUCTILE IRON SEWER PIPE

CEMENT LINED DUCTILE IRON PIPE

Cement lined ductile iron pipe and fittings "shall" conform to ANSI Standards A21.50 and A21.51. Cement-mortar lining "shall" be double thickness and conform to ANSI A21.4. Manufacturer's certificate of compliance "shall" be furnished to the "Superintendent", prior to installation. Methods of shipping and storage on site "shall" be such as to avoid injury to the pipe. Damaged pipe "shall" be rejected and removed from the job site.

Cement lined ductile iron pipe and fittings "shall" be Class 50, unless otherwise noted on the plans.

Each length of pipe "shall" be marked with the manufacturer, trade name, and class.

CEMENT LINED DUCTILE IRON FITTINGS

Fittings "shall" conform, to ANSI A21.11 and "shall" be of the same class and type as the pipe on which they are used.

JOINTS FOR CEMENT LINED DUCTILE IRON PIPE

Joints "shall" be rubber gasket oil resistant joints of the push-on type in conformance with ANSI AWWA C-111 (A21.11). Manufacturer's instructions "shall" be followed.