

**RULES AND REGULATIONS GOVERNING THE CONSTRUCTION
OF BUILDING SEWERS THAT CONNECT TO THE PUBLIC
SEWER SYSTEM OF THE TOWN OF NORTH BRANFORD**

In order to insure the proper operation and maintenance of public sewers, building sewers, pumping stations, and sewage treatment plants, the Sewer Authority of the Town of North Branford does hereby adopt the following rules and regulations governing the construction of building sewers that connect to the public sewer system of the Town of North Branford in accordance with the powers granted said Authority by ordinance of the Town of North Branford and the General Statutes of the State of Connecticut as amended.

Section 1 - Definitions

Unless the context specifically indicates otherwise, the meaning of terms used herein shall be as follows:

- 1.1 - The provisions and definitions of "Rules and Regulations Governing the Use of and Discharge of Substances into the Public Sewer System of the Town of North Branford" shall apply to these regulations.
- 1.2 - Water Pollution Control Authority - The Water Pollution Control Authority of the Town of North Branford as provided by ordinances of said Town of North Branford and the General Statutes of the State of Connecticut.
- 1.3 - Engineer - The Engineer for the Water Pollution Control Authority or any individual, partnership, or corporation duly appointed by the Town to undertake the duties and exercise the authority herein conferred upon the Engineer and also the representatives of said Engineer when acting within and limited by the particular duties and powers assigned to each.
- 1.4 - The Contractor - An individual, partner, or corporation or other legal entity to whom the Water Pollution Control Authority or its authorized agent shall have issued a permit as such to install and repair sewers and during the period when such license is valid and the proper agents and representatives of said contractor.
- 1.5 - Street - The entire width of a public right of way used as a highway.
- 1.6 - Road - The portion of the public right of way used for vehicular travel.
- 1.7 - Sewer - Any accepted portion of the public sewer system of the Town of North Branford.

1.8 - Building Sewer - That part of the piping of a building's drainage system starting five feet outside the inner face of the building wall to its connection with the public sewer system and conveying the sewage of one building site.

1.9 - Inspector - Any employee, agent, or officer of the Town of North Branford assigned by the Water Pollution Control Authority to examine and test material and work furnished by a contractor to observe the construction of a building sewer or any part thereof, to assist the contractor in the interpretation of specifications and methods of construction, to make measurements and keep records for the Engineer and to report to the Engineer on the performance of the contractor relative to the work, all as and only as instructed by the Engineer. No inspector shall act as assistant to, or foreman for a contractor. Inspectors shall have no power to waive specifications of these rules and regulations or to otherwise deviate from the original covenants of any agreements or contracts.

1.10 - Owner - The person or persons, firm, corporation, partnership having title to the property to be serviced by a sewer.

Section 2 - Licenses, Permits, Fees

2.1 - The Contractor must be duly licensed by the State of Connecticut to install and repair building sewers.

2.2 - A permit for any connection to sewer shall be obtained from the Water Pollution Control Authority or its authorized agent. This permit shall specify residential, commercial, apartment or industrial waste, the name and address of the owner, and the location of the sewer connection and the name and address of the contractor to whom it is issued, the permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the Engineer.

2.3 - A permit for excavating any street shall be obtained from the designated agent of the Town of North Branford and must accompany the application for a sewer connection permit. The contractor shall comply strictly with the regulations of the Town of North Branford pertaining to excavations in public highways.

2.4 - Where the State Highway Department is involved, appropriate permits shall be obtained and their provisions complied with.

2.5 - Fees for the permits, as outlined herein, shall be established from time to time by the Sewer Authority. Initially, fees shall be as follows:

Building sewer construction permits:

Commercial	\$25.00
Residential	\$25.00
Industrial	\$50.00

For more than one inspection with respect to a permit per additional inspection: \$25.00

Section 3 - Bonds and Insurance

3.1 - The Contractor shall purchase and pay all premiums for public liability insurance to be maintained while performing operations within the Town. The minimum limit of liability is \$500,000 combined bodily injury and property damage, covering contractors' operation, vehicles, and completed operation. Blasting coverage will be maintained whenever blasting is done. Said policies shall be issued by an insurance company licensed or approved by the State of Connecticut. All policies shall designate the Town of North Branford, the Water Pollution Control Authority and its agents and employees as additional insured. The Contractor shall provide Workers' Compensation insurance for statutory required benefits. Certificates of insurance shall be provided to the Authority prior to commencement of any work.

3.2 - The Contractor shall indemnify and hold harmless the Town of North Branford and the Water Pollution Control Authority from any loss, damage, claims, or judgment, including legal expense, which results from Contractor's operations or vehicles, within the Town of North Branford.

3.3 - The Contractor shall provide the Water Pollution Control Authority with a performance bond for the faithful performance of the work contemplated. This shall be issued by an approved security company licensed in the State of Connecticut. It shall be for the minimum amount of \$2,000 and may vary upwards on larger projects in the amount as required by the Engineer. This bond shall be enforced from January 1, to December 31 and shall cover any building sewer project undertaken by the Contractor until the expiration of the maintenance period for that project. The maintenance period shall be for one year from completion of the connection to the sewer.

3.4 - All costs and expenses incidental to the installation in connection of each building sewer shall be borne by the Owner. The Owner shall indemnify the Town of North Branford for any loss or damage that may indirectly or directly be occasioned by the installation of the said Owner's building sewer.

3.5 - All building sewers shall be installed by a drain layer who possesses a valid license issued under Chapter 393 of the Connecticut General Statutes.

Section 4 - General Requirements and Provisions

4.1 - The Contractor or his agent shall under no circumstances start work on a building sewer project until the provisions of Section 2 and 3 are fulfilled and required permits are obtained. These permits are to be available at the site of the work during its continuance for inspection by agents of the Water Pollution Control Authority.

4.2 - A separate, 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 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 as one building sewer.

4.3 - Old building sewers may be used in connection with new buildings only when they are found on examination and test by the Engineer to meet all requirements of this ordinance.

4.4 - No person shall make connection of roof downspout, exterior foundation drains, area way drains, or other sources of surface run off or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

4.5 - Maintenance of traffic: At least one-way traffic shall be maintained in roads at all times. Under unusual circumstances, the Town Manager or his designated official may, in writing, permit the temporary closing of a road, in which case the Contractor shall prior to such closing notify the Police and Fire Departments and the Town Manager of the Town of North Branford of the location of and approximate duration of such closing and shall again notify these departments when the road is reopened to traffic. A traffic-man or police officer as required by the Police Department shall be provided at the Contractor's expense when less

than two lanes of traffic are maintained or when necessary or advisable in the opinion of the Police Department.

- 4.6 - Adequate barricades, and when necessary in the opinion of the Engineer, Inspector, or authorized police official, lights and red flags shall be erected and maintained in the street until all work is completed.
- 4.7 - The Contractor shall schedule his hours of work so as not to allow open trench conditions on Saturdays, Sundays, or holidays, nor at any other time in excess of forty-eight hours without special permission from the Engineer.
- 4.8 - The requirements of local plumbing and building codes shall be observed with respect to piping and fixtures inside or immediately adjacent to buildings and within the area of jurisdiction of said several codes subject only to the general requirements of these rules and regulations. Pipe more than five feet outside of the inner walls of any building or similar structure shall conform to the requirements of these rules and regulations as to permits, materials, and workmanship.
- 4.9 - The Contractor shall schedule his work for a normal work day so that the work may be inspected. Arrangements shall be made in advance with the Engineer when work is to be done outside the normal work day and Contractor shall pay for any overtime inspection costs. The Contractor shall give the Engineer one day's notice before any laying of any building sewer pipe.
- 4.10 - All work performed under the provisions of these rules and regulations shall be subject to the inspection and approval of an Inspector. The Contractor shall provide safe access for each inspection.
- 4.11 - 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, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer. Duplex lift systems shall be provided for commercial and industrial buildings.
- 4.12 - No building sewer shall be constructed within 25 feet of water supply well. If a building sewer is constructed within 25-75 feet of a water supply well it shall be constructed in accordance with all applicable guidelines promulgated by the Commissioner of The Connecticut Department of Environmental Protection.

4.13 - When in the opinion of the Engineer, extraordinary conditions exist, or when a building sewer is to be installed under any structure, at a stream crossing, or in fill ground, the Owner shall submit plans for the approval of the Engineer. Suitable provisions for encasement in concrete, concrete cradles, piling, or other acceptable construction features shall be made.

Section 5 - Trench Excavations

5.1 - Work on building sewers shall in every case proceed from the sewer toward the structure involved. Any variations in this procedure shall require the written permission of the Engineer.

5.2 - Trenching shall proceed in accordance with the William Steiger Occupational Safety and Health Act of 1970 and procedures published in the latest manual on safety in construction as published by the Associated General Contractors. The trench shall be of ample width at the bottom to accommodate the pipe to be placed and any work on the structure that conditions necessitate. Tunneling under existing structures may be permitted when approved in writing by the Engineer but in no case shall any tunnel exceed ten feet in length.

5.3 - When sheeting is necessary to insure proper installation in the safety of personnel, the public, or property, the Contractor shall furnish and place such sheeting in accordance with good practice.

5.4 - Where water is encountered in a trench sufficient sump pumps shall be constructed and adequate pumping equipment made available so that the installation of any building sewer or appurtenance shall be done in the dry. In no event shall water be allowed to enter the sewer or building sewer from the trench.

5.5. - If at any time during excavation the material being excavated is in the opinion of any Inspector not suitable for backfill, such material shall immediately be removed from the site by the Contractor at his expense. Unsatisfactory material shall include, but not be limited to, boulders, clay, muck, and frozen ground. Where unsatisfactory material is removed, it shall be replaced by sand or gravel not containing pieces larger than three inches in diameter.

5.6 - When the material at the base of a trench is unsuitable as a foundation for the building sewer pipe, such materials shall be removed and replaced with crushed stone or gravel not containing pieces larger than three inches in diameter. If an excavation is deeper than the desired depth the trench shall be brought to grade

with crushed stone or gravel not containing pieces larger than three inches in diameter. In no case may loose fill from an excavation be used to bring a trench up to grade.

Section 6 - Pipes

6.1 - Pipes for apartment buildings of more than four dwelling units, commercial, or industrial buildings, the owner shall submit to the Engineer for his approval, plans of the proposed building sewer installation.

6.2 - Pipes shall be cast iron conforming to ASTM 74-69 or polyvinyl chloride (PVC) conforming TO ASTMD-3034. Cast iron pipe shall be extra heavy or service weight cast iron pipe of 6 inch inside diameter. Pipes for one, two, and three family dwellings shall be of 6 inch cast iron pipe, extra heavy or service weight. All large multiple dwellings, industrial or office complexes shall comply with the following table:

6.3 - Maximum number of fixture units that may be connected to any portion of the building sewer:

Pipe Diameter	Fall per Foot			
	1/16"	1/8"	1 1/4"	1/2"
6		700	840	1,000
8	1,400	1,600	1,920	2,300
10	2,500	2,900	3,500	4,200
12	3,900	4,600	5,600	6,700
15	7,000	8,300	10,000	12,000

6.4 - All cast iron pipe and fittings shall meet the latest specifications of the American Society of Testing Materials and the Cast Iron Pipe Institute.

6.5 - Cast iron pipe jointing method shall consist of braided or twisted hemp or oakum and hot poured lead. The oakum is to first be packed tightly into the annular space between the bell and spigot of adjoining pipe. Molten lead is then poured into this space and finally the lead is tamped or caulked to complete the joint. Neoprene Joint Gaskets may be used. Gasket ring fits into head ring of hub. Gasket lip overhangs. Lubricate both seals inside the gasket. Fittings and pipe may be driven, pulled, pushed or bounced into hub. Spigot must pass through both seals and set.

6.6 - All buried piping shall be supported throughout its entire length.

6.7 - Polyvinyl Chloride (PVC) Pipe shall be unplasticized polyvinyl chloride plastic gravity sewer pipe with integral wall bell and spigot joints for the conveyance of domestic sewage.

6.8 - Pipe and fittings shall meet extra strength minimum of SDR-35 of the requirements of ASTM Specification D3034-73 or Virgin Type 1, Grade 1, polyvinyl chloride compounds as defined and described in ASTM Specification D-1784 for "Rigid Poly (Vinyl Chloride) Compounds and Chlorinated Poly (Vinyl Chloride) Compounds. Joints shall be the Bell and spigot type are subject to the approval of the Engineer, sealed with a rubber "O" ring gasket, and when assembled must be able to withstand a hydraulic pressure internally of at least 10 p.s.i.

6.9 - Lengths and Joints - Pipe lengths shall not exceed 13 feet for 8 inch and larger pipe. Each length of pipe shall have a bell and spigot or shall have furnished with it a separate jointing sleeve or coupling with rubber rings compressed into place to make a watertight closure. The rubber rings shall consist of a molded and vulcanized rubber compound resistant to common ingredients of groundwater and sewage and which will endure permanently under the conditions likely to be imposed by this use, and shall conform to ASTM Specification D-1869 amended to date.

6.10 - Additional or substituted materials or jointing compounds must be approved by the Engineer before commencing any construction.

Section 7 - Pipe Laying

7.1 - The drain in all cases shall be first connected to the sewer and may then be extended to proceed toward the structure to be served. Pipe laying shall proceed in accordance with the best accepted practices true to line and grade.

7.2 - Wherever possible, water service and building sewer pipes shall be laid in separate trenches. Where laid in the same trench, the water pipe shall be laid on a trench shelf at least twelve (12) inches above the top of the building sewer pipe and at least eighteen (18) inches, from the side of the building sewer trench shelf.

7.3 - Where a hub location is given in a permit, such location shall be used for the location of the connection. If a deviation from the connection location indicated on the permit is desired, such

deviation shall first be requested in writing by the owner of record of the property involved and shall further be approved by the Engineer. A sewer connection location is an indication of location in the field. If a connection location as indicated is not found, a tap-in will be permitted. The Town of North Branford and the Water Pollution Control Authority assumes no liability for any inaccuracy in any town prepared map regarding the location of any connection.

- 7.4 - All pipes must be cleaned before laying. This can be accomplished by swabbing.
- 7.5 - When connections are made to hubs, only 1/8 bends shall be used to align the connection.
- 7.6 - Cleanouts must be provided at all changes in alignment and on straight runs at intervals not to exceed 75 feet. An exterior cleanout shall be required approximately 10 feet from the structure served where the inside cleanout is less than 2 feet above the lowest floor of the structure served.

Section 8 - Backfill

- 8.1 - All backfill shall be in accordance with Regulations for Street and Highway Excavation, Public Works Department, Town of North Branford and as supplemented hereto.
- 8.2 - Under no circumstances shall backfill be permitted around and over the pipe until the pipe, joints, lines, elevations and workmanship has been inspected and approved by the Engineer or his designate.
- 8.3 - In accordance with Paragraph 5.5 of the excavated material is deemed not suitable for backfill, such material shall be replaced with sand or gravel, not containing pieces larger than 3" in diameter. The furnishing and placing of satisfactory material shall be at the Contractor's expense.
- 8.4 - Backfilling of trenches within the street area shall be of suitable materials and properly placed with the approval of the Engineer or his designate.

Section 9 - Pavement, Curb, and Sidewalk Replacement

- 9.1 - When the Contractor has completely refilled a trench, such portion of the trench that is in the street limits shall be maintained in a safe condition for public travel for a period of time not to exceed 120 days or until permanent pavement is installed. The Engineer shall be the sole judge of what constitutes a condition comfortable for public travel and the Contractor shall

give his immediate attention to the correction of any settlements or bumps in the trench or area adjacent thereto. If the Contractor shall not have corrected such settlements or bumps within four (4) hours of notification, the Town of North Branford will make such repairs as the Engineer may deem necessary and the cost of such repairs will be assessed against the Contractor. A temporary patch surface will be placed immediately on the excavated portions of the road and maintained until a permanent surface is constructed. The permanent surface must be a minimum of 8" gravel, 9" processed stone, 2 12" asphalt in two layers.

Section 10 - Responsibility for Installation

10.1 - The quality of the house sewer installation shall be the responsibility of the Contractor. It shall not rest with the Inspector.

Section 11 - Scope of Rules and Regulations

11.1 - These rules and regulations shall govern the construction and installation of all building sewers connected to the public sewer system of the Town of North Branford including all building sewers constructed and installed pursuant to the orders of the Water Pollution Control Authority issued under Section 7.257 of the Connecticut General Statutes as amended. All building sewers constructed and installed pursuant to orders issued by other federal, state, or municipal authorities having jurisdiction in the premises, and all building sewers constructed and installed pursuant to federal, state, or municipal statutes, codes, rules, regulations or ordinances shall comply.

Section 12 - Enforcements and Penalties

12.1 - Failure of a Contractor to comply with any one of these rules and regulations shall be cause for revocation by the Water Pollution Control Authority of any license issued by the Water Pollution Control Authority or its agent. When such action is taken by the Water Pollution Control Authority and any building sewer work remains to be completed by the Contractor, the Water Pollution Control Authority or its agent shall be empowered to complete the work or to employ any contractor deemed competent for such completion. The cost for such completion may be claimed against the contractor and/or his performances bond.

12.2 - No person who has violated any provision of these rules and regulations, or whose license has been revoked as herein provided, or who has refused or neglected to make good to the satisfaction of the Water Pollution

Control Authority any defective or imperfect work, or who has refused or neglected to pay any fees, fines, or penalties imposed under the provisions of these rules and regulations, shall receive a renewal of his license, or be re-licensed, until all his defaults shall have been fully remedied and satisfied.

12.3 - Any person who violates any provisions of these rules and regulations shall be liable to the Town of North Branford for any expense, loss, or damage which may be caused to the public sewer system by reason of such violation.

Section 13 - Validity

13.1 - If any sections, sub-section, clause, or phrase of these rules and regulations is for any reason found to be invalid by a court of competent jurisdiction such decision shall not affect the validity of the remaining portions of these rules and regulations.

Section 14 - Design Criterion

14.1 - The Town-wide system will be designed to serve, as a matter of policy, the first floor of any building. That is, the building sewer connection which runs from the street sewer to two (2) feet beyond the curb line will serve the facilities of a particular building that are situated above the outside ground elevation, even though the grade of the building sewer is low enough to install the building connection from below the basement floor elevation.

14.2 - Any building sewer which is installed to serve a facility below the first floor elevation and cannot use gravity flow to discharge into the lateral may be subject to back-up and flooding from the Sewer System. If the owner installs such a building sewer, the owner will be responsible for any and all damage that may occur from back-ups and flooding of his property.