



**CITY OF WOONSOCKET
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**



SEWER POLICY

Revised February 26, 2007
Revised July 29, 2013
Revised February 1, 2016



POLICY STATEMENT
BUILDING SEWER CONNECTIONS
AND
SEWER MAIN INSTALLATIONS

1. **DEFINITIONS:**

Director - Director of Public Works of the City of Woonsocket, Rhode Island, or his/her authorized representative.

Engineer- City of Woonsocket, Rhode Island, City Engineer, or his/her authorized representative.

Master Plumber - Master Plumber licensed by the State of Rhode Island.

Plan - A drawing prepared, stamped, and signed by a State of Rhode Island Professional Engineer.

Sketch - A drawing prepared by the Rhode Island licensed Master Plumber or Underground Utility Contractor.

U. U. C. - Underground Utility Contractor licensed by the State of Rhode Island.

2. All applicable sections of the City of Woonsocket, Department of Public Works, Engineering Division Permit Manual apply to this Sewer Policy. A copy of which can be found on the World Wide Web at www.ci.woonsocket.us/perm_sched.htm

3. All applicable sections of the City of Woonsocket, Code of Ordinances, Section 13, Article III Drainlayers have been superseded by the Rhode Island Underground Utility Contractors Licensing Law, R.I.G.L. 5-65.3.

4. All applicable sections of the City of Woonsocket, Code of Ordinances, Section 18, WATER AND SEWERS AND SEWAGE DISPOSAL apply to this Sewer Policy.

5. **INSURANCE REQUIREMENTS**

A Permittee applying for a permit to work within City highways, City property or private property shall furnish to the City, prior to the issuance of the permit, certificates of minimum insurance including automobile, property damage liability, bodily injury liability, and workmen's compensation insurance in the amounts determined by the Director. Insurance coverage shall be reviewed and updated periodically by the City. These certificates shall contain a provision that the insurance company will notify the City as the certificate holder, by registered mail, at least 15 days in advance of any cancellation or material change.

The following are the minimum insurance requirements:

| | | | | |
|------------------------------|-------------|---|--------|-------|
| Workmen's Compensation | Statutory | | | |
| Employers Liability | \$ 100,000 | Each Accident | | |
| | \$ 500,000 | Disease-Policy Limit | | |
| | \$ 100,000 | Disease-Each Employee | | |
| Automobile Liability | \$1,000,000 | Combined | Single | Limit |
| Commercial General Liability | \$2,000,000 | General Aggregate | | |
| | \$2,000,000 | Products & Completed Operations Aggregate | | |
| | \$1,000,000 | Personal & Advertising Injury | | |
| | \$1,000,000 | Each Occurrence | | |
| | \$ 100,000 | Fire Damage (Any one fire) | | |
| | \$ 5,000 | Medical Expense Limit | | |
| | | (Any one person) | | |

The City reserves the right to require these amounts to be higher based on the requested permitted work.

6. **LICENSE REQUIREMENTS**

- Permittee shall provide a 'Competent Person', as defined by the US Department of Labor Occupational Safety & Health Administration (OSHA), for the location of the proposed work. All equipment operators and workers performing work at the proposed location shall hold the appropriate State of Rhode Island licenses for their responsibilities.
- Sewer and storm water installation and/or repairs shall be performed under the direct supervision of a licensed Rhode Island Master Plumber or an Underground Utility Contractor.
- All equipment operators and workers performing work at the proposed location hold the appropriate licenses for their responsibility.
- All required licenses and/or certificates for work being performed shall be copied and supplied to the Engineering Division upon submitting a 'Permit Application'. All required licenses and/or certificates for work being performed shall be in the possession of the person(s) while performing the work.
- Water main and/or service repair work shall be performed under the direct supervision of a licensed Rhode Island Master Plumber with a proper permit.

7. The **PETITION FOR PERMISSION TO CONNECT TO THE WOONSOCKET REGIONAL WASTEWATER SYSTEM** form is located in the Woonsocket Engineering Division. The petition must be completed and signed by the property owner(s) or their authorized agent.

- a. For permission to install a sewer main a plan must accompany the petition.
- b. For permission to connect a sewer lateral a sketch must accompany the petition. The City Engineer reserves the right to request a plan instead of a sketch.

This petition is then reviewed for approval by the City Engineer, Director of Planning and Development and the Director of Public Works. There is no fee for this petition.

8. An **APPLICATION FOR A PERMIT** must be filed with the City before preliminary investigation will be made for permit issue. Standard application forms for this permit may be secured from the Engineering Division. Each application form shall be completed and delivered to the Engineering Division.

An explanation of the application and sketch shall be made either in the space provided on the application form or a separate sheet, which the Permittee shall attach to the application. Such diagrams or sketches shall show the location of the work to be done in relation to the outstanding features of the road, such as property lines, intersections, pavement lines, sidewalks, trees, drainage structures, and utility poles by number, and the character and extent of the work.

The Permittee will be required to disclose the methods and materials to be used. In the event the Permittee discovers that additional work or repairs not designated in the original permit must be done in the same location, the Permittee must make application to the City for a permit to authorize the additional work in the same manner as the first permit. When the work proposed includes excavating in the public way the sketch will show the proposed cut lines including dimensions and the relation to existing buildings or other features.

Each contractor and/or subcontractor involved with the proposed work shall submit an application and be issued a permit.

All subcontractors must be approved by the Engineering Division.

Plans and Specifications

When applications are made for a permit involving work of major scope, plans certified by a Rhode Island Professional Engineer and a Rhode Island Professional Land Surveyor must be submitted with the application. They should be detailed so that the exact location of the various parts of the work, the risk of injury to road users, and the probability of damage to underground utilities, trees, highway structures, and private property can be ascertained. The office requires four (4) copies of any plans submitted for review. The plans must be approved by the Director prior to the Permittee obtaining a permit. Attached herein are the Engineering Division Plan Requirements.

Utility, street line and property line research may be conducted by appointment between the hours of 8:30 am to 3:30 pm. Call (401) 767-9213 to schedule a time.

Rejection of Application

When it appears that the work called for in an application would not conform to City regulations, or cause substantial or needless damage to a highway, or create excessive disturbances to traffic, or exceptionally dangerous conditions not commensurate with the benefits to the Permittee, the request for permit will be denied.

The Director may refuse to issue a permit to any person or utility when, in his opinion, work performed under a previous permit issued to the Permittee has not been properly executed or completed. The permit may also not be issued if said Permittee has failed to reimburse the City for recoverable charges billed under terms governing any previous work.

9. The **APPLICATION FOR A SEWER CONNECTION, or SEWER APPLICATION** for both building connections and sewer main installations along with the appropriate fee(s), must be filed with the Engineering Division, 3rd floor of City Hall. The application must be filled out completely and signed by the property owner and the designated Rhode Island Master Plumber or Underground Utility Contractor.

There are no sewer connection fees for any structure built before 1985 unless there is a change in use for the structure, see Sewer Assessments and Connection Fees section 18-34, f (5), attached. For any structure built after 1985 the sewer connection fee schedule is as follows:

| | |
|----------------------------|-----------------|
| Single-family residences - | \$600.00 |
| Multi-family residences- | \$600.00/unit |
| Commercial- | \$1000.00 |
| Industrial- | \$1000.00 |
| Out of City Connection- | \$3,700.00/unit |

Sewer connection fees and permit fees must be paid on separate checks.

10. The Rhode Island Master Plumber or Underground Utility Contractor will allow 3-4 days for processing of the sewer application (longer for industrial). The Rhode Island Master Plumber or Underground Utility Contractor is advised to call the Engineering Division at (401) 767-9213 after that time, to check on its status. When the sewer application has been processed and found acceptable, the Rhode Island Master Plumber or Underground Utility Contractor shall pick up the necessary permits in the Engineering Division at 169 Main Street on the 3rd floor of Woonsocket City Hall.
11. **A PERMIT TO OCCUPY AND EXCAVATE THE PUBLIC RIGHT-OF-WAY, or REPAIR UTILITIES ON PRIVATE PROPERTY,** for sewer connection or sewer repair shall be issued by the Engineering Division to the Rhode Island Master Plumber or Underground Utility Contractor. Any sewer pipe that is accidentally damaged during any excavation work must be permitted for the necessary repair work.

Sewer Repair-

-Permit fee schedule is \$50.00

-Any sewer repair in excess of 12' in length shall be assessed the per foot price for additional pipe work.

Each separate contractor involved in the utility work needs to submit a 'Permit Application'.

-Permit fee schedule for each additional contractor is \$10.00

NOTE: A separate permit must be filed for each location.

This permit and fee is required for all work on a sewer main and/or lateral, regardless of purpose of repair.

12. The **PERMIT TO MAKE A SEWER CONNECTION** will be issued by the Engineering

Division, to the designated Rhode Island Master Plumber or Underground Utility Contractor. The same permit is issued for all sewer repairs.

The sewer permit fee schedule for new installations is as follows:

| | |
|---|----------|
| Single-family residences | \$20.00 |
| Multi-family residences | \$30.00 |
| Commercial | \$30.00 |
| Industrial (producing only sanitary sewage) | \$30.00 |
| Industrial (other industrial sewage) | \$100.00 |

Sewer Main Installation fee schedule is as follows:

For All Main Installations (8" or larger in size) - \$10.00 plus \$5.60/linear foot

Sewer Lateral Installation fee schedule is as follows:

For All Lateral Installations (up to 6" in size) - \$10.00 plus \$3.20/linear foot

13. A 24-hour notice shall be given to the Engineering Division prior to commencement of work. The Rhode Island Master Plumber or Underground Utility Contractor will verify that the Engineering Division can accommodate their notice of work. The work must be inspected and approved by the Engineering Division. Said Division is the only Division responsible for inspection of the building sewer installation from the sanitary sewer main to the foundation of the building, and for all sewer main installations.

The excavating contractor is responsible to obtain a 'Dig Safe' number prior to obtaining a permit. The 'Dig Safe' number shall be provided to the Engineering Division.

Emergency sewer work:

It is understood that sewer emergencies do arise and a 24-hour notice cannot be given. It is the contractor's responsibility to contact the Engineering Division to notify them of the emergency. Permit application(s) and applicable fees can be filed upon completion of the required work.

Failure to properly schedule work in advance is not an emergency and will not be treated as such. Falsifying an emergency will result in 'Dig Safe' being notified for appropriate action to be taken under State law.

14. Location of the wye connection will be marked in the field by the Engineering Division only after an Excavation Permit has been obtained. **Said location of Wye is not guaranteed** but is based on available information on file in the Woonsocket Engineering Division.
15. **INSTALLATION** - All sewer installations must meet the following specifications:

The contractor(s) performing the sewer work shall furnish all labor, tools, equipment, pipe and fittings, adapters, couplings, stoppers and/or plugs, jointing materials, crushed stone, and suitable backfill materials required to handle, lay and joint pipe for sanitary sewers,

including wye connections and pipe for chimneys. The contractor(s) is responsible for locating, maintaining and connecting all existing connections that are affected by his work. The contractor(s) shall not discharge sewage onto roadways, into storm sewers or surface water bodies during the progress of his work.

A: General:

All sewer installations, mains and/or laterals must follow the plan or sketch that was originally approved by the Engineering Division. Any deviation from the approved plan or sketch must be approved by the Engineer.

The City Engineer will appoint an inspector for the work, or, at his option, an inspector for each section of the work, who shall perform their duties under the direction of the City Engineer. The contractor shall execute his/her work under the presence of an inspector and shall afford every facility for inspecting the materials and work at all times. The presence of the inspector shall not lessen the responsibility of the contractor. The contractor is fully responsible for all aspects of the work and its satisfactory completion. All pipes are to be laid under the supervision of an inspector and no pipe is to be covered until it has been examined by the inspector and authorization is given to backfill the pipe. Any building sewer connections backfilled **before inspection by the Engineering Division** shall be re-excavated for proper inspection.

The trench shall be excavated to the required depth using sheeting, bracing, and drainage, as per plan or as deemed necessary by the Engineer. The trench bottom must be dry and true to grade. The barrel of the pipe must be laid on a firm compacted crushed stone base or other materials as required by the Engineer.

- The minimum pitch allowed for a four-inch (4") pipe for a building connection shall be 1/4" per foot.
- The minimum pitch allowed for a six –inch (6") pipe for a building connection shall be 1/8" per foot.

The building sewer connection shall be laid from the public sewer main to the building at a uniform grade throughout.

Sewer mains are to be installed in the center line of the right-of-way, maintaining a horizontal distance of ten feet (10') from the water main. See SEWER LINE/WATER MAIN SEPARATION POLICY FOR DESIGN OF SANITARY SEWERS.

Sewer mains and/or laterals are to be installed at a horizontal distance of ten feet (10') feet from any water service. Where feasible, sewer mains and/or laterals must pass under water mains, minimum separation of twenty-four inches (24"). A sewer main and/or lateral may be allowed to pass over a water main only if glued connections are used with Pressure Rated SCH 40 pipe, and/or the sewer pipe is encased in a larger PVC pipe sleeve extending ten feet (10')

on either side of the crossing. Said sleeve is to be sealed at both ends. See SEWER LINE/WATER MAIN SEPARATION POLICY FOR DESIGN OF SANITARY SEWERS.

Cleanouts must be installed at the following intervals:

| <u>Pipe Size</u> | <u>Cleanout Every</u> |
|------------------|---|
| 4" | 50' |
| 6" | 100' (and/or at each change of direction greater than 22 1/2 degrees) |

If a lateral consists of both 6" and 4" pipe sizes then the cleanout interval will follow the 4" pipe requirements.

Backwater valves: A Backwater valve is required to be installed within five (5') feet of the outside of the building foundation. This requirement is for all new connections as well as repairs to existing connections. If the repair of the existing building sewer takes place further than five feet from the building, the backwater valve is to be installed at the point of repair closest to the building. The backwater valve must be installed upstream of and in close proximity to the first exterior cleanout. Please refer to the City's Typical Sewer Connection Detail. If it is impractical to install the backwater valve on the exterior, one may be installed inside the building. This type of valve will be subject to permitting and inspection by the City's Building Inspection Division. Every effort shall be made by the Underground Utility Contractor or Rhode Island Master Plumber to make the building owner aware of the backwater valve and to inform them of its purpose and maintenance.

Sewer Manholes:

Manholes must be installed at the following intervals:

- Every three hundred feet (300')
- Every change of direction
- Every change in elevation (meaning - the elevation out must be consistent with the slope of the run(s) into the manhole).

All sewers, culverts, drains or basins met with and rendered unnecessary, or becoming disused by the construction of the work must be filled in or properly bulk headed.

Backfill material must be approved by the Engineering Division. Material must be compacted in 12" layers to the top of the trench or as directed by the Engineer. A temporary asphalt patch in the street and/or sidewalk area must be installed over the excavation by the Rhode Island Master Plumber or Underground Utility Contractor immediately after completion of backfill. The Rhode Island Master Plumber or Underground Utility Contractor will be responsible for maintaining this patch until a permanent patch has been installed. The temporary asphalt patch shall remain in place for ninety (90) days following completion of the sewer connection or for a time period approved by the Engineering Division.

If conditions arise which are not covered by these specifications, the Engineering Division must approve every phase of such installation.

B. Material:

1)

- a) **Mains:** Minimum size of the pipe shall be eight (8") inch, PVC-SDR 35 (Pressure Rated SCH 40 at water crossings). Testing is required for newly installed mains.

Sewer mains shall be bedded in ¾" crushed stone.

- b) **Laterals:** Minimum size of the pipe shall be four (4") inch. Four-inch pipe can be PVC-SDR 35 (Pressure Rated SCH 40 at water crossings).

The section of the lateral located in the right-of-way shall be PVC-SCH 40 with a minimum size of six (6") inches.

The pipe material five (5') feet outside the foundation of the building the pipe shall be PVC-SCH 40.

Sewer laterals (new and repairs) shall be bedded in ¾" crushed stone. A clay dam maybe required to prevent water from flowing from the lateral into the foundation of the building.

- c) **Cleanouts:** Minimum size of the pipe shall be four (4") inch, and of same material as the lateral. Pipe shall be installed vertically and perpendicular to the lateral. See detail.

If the cleanout location is in an asphalt or concrete area then a 6" cast iron road box shall be used. The road box cover will be labeled 'SEWER'.

Whenever possible the cleanout(s) shall not be located in the public right-of-way.

Drop Cleanouts: If the slope of the sewer lateral exceeds 15% then the use of a drop cleanout is required. The drop shall be constructed of straight pipe and 45 degree fittings. If the drop cleanout is located in an asphalt or concrete area then the section of pipe which drops down to the channel shall be encased with cement, by use of an eighteen-inch (18 ") cylindrical cardboard concrete form. See attached detail.

- d) **Fittings:** SDR 35 pipe fittings will be bell and spigot type. A double bell or double spigot is acceptable. SCH 40 pipe fittings shall be of a glued type. Fittings which tie pipe to pipe five (5.0') feet from the building shall be of a glued type for PVC pipe, or rubber coupling type for existing cast iron or VC pipes only.

C. Bends (change in direction):

- 1) **Mains:** NO bends (change in direction) will be allowed. Pipe must be laid in a straight line and straight grade from manhole to manhole.
- 2) **Laterals:** A bend (change in direction) greater than 45 degrees will not be allowed. Any bend greater than 22 ½ degrees will require a cleanout.
- 3) **Cleanouts:** In no case shall a bend exceed 90 degrees.

D. Reducers:

- 1) **Mains:** NO reducers will be allowed on a sewer main.
- 2) **Laterals:** The reducer used going from a 6" to a 4" shall be eccentric. Inverts of pipes shall be installed at the same elevation.
- 3) **Cleanouts:** Reducer may be concentric.

E. Wyes: Tees are only permitted for use in constructing chimneys.

- 1) **Mains:** Wye must be installed at 45 degree angle off midpoint of the main pipe.
 - a) **Existing Main:** Wye may be of saddle type made of PVC or rubber coupling fastened with stainless steel clamps. The Engineer may require concrete to be placed around the wye connection.
 - b) **New Mains:** Wye shall be bell and spigot type. Saddle type wyes will not allowed.
- 2) **Laterals:** A wye connection can only be installed on the lateral for the use of a cleanout, not for the use of another building, unless already approved by the Engineer.
- 3) **Cleanouts:** A wye shall be used, and the cleanout located in a downstream alignment.

F. Chimneys: Installed onto sewer mains only.

- 1) Installing a Chimney onto an existing main:

Cut the VC or the PVC to fit a saddle type 'TEE'. Install straight pipe, either SDR 35 or SCH 40, to the elevation where the lateral is to run into the property. At this point a 'WYE' must be used. Straight pipe must continue up from the 'WYE' to a point two feet (2') from the road grade. The top is capped with a slip type cap. The whole chimney is then encased in concrete by using an eighteen inch (18") cylindrical cardboard concrete form.

- 2) Installing a chimney along a new sewer main:

A 'TEE' fitting can be used on a new sewer main and is installed at the same time as the main pipe. Saddle type 'TEE' is not acceptable on a new main.

Install straight pipe, either SDR 35 or SCH 40, to the elevation where the lateral is to run into the property. At this point a 'WYE' must be used. Straight pipe must continue up from the 'WYE' to a point two feet (2') from the road grade. The top is capped with a slip type cap. The whole chimney is then encased in concrete by using an eighteen inch (18") cylindrical cardboard concrete form.

G. Doughnuts: Doughnuts are NOT permitted in the use of connecting two different pipe sizes together, unless used in a sleeving procedure.

H. Manholes: Manholes are to be made of pre-cast concrete with a bituminous coating on the exterior. Manholes are to be a minimum of 4'-0" in diameter. A minimum of 6" of 3/4" stone will be placed in the trench before the manhole is lowered into position.

- 1) **Frames and Covers:** Shall be constructed from cast iron, measuring 6-1/4" high, 35-1/2" diameter. Courses of brick will be placed between the manhole cone and the frame for adjustment purposes (12" max.)

Covers shall be labeled as follows:

WOONSOCKET (1-1/2" letters)

SEWER (3" letters)

(Two 3/4" vent holes are required)

- 2) **Steps:** Are required for all manholes. Steps shall be constructed from plastic coated steel, installed 12" on center.
- 3) **Invert and Table:** Constructed of dense hard burnt brick, installed at 1/4" per foot from the channel to the manhole side. See attached detail.
- 4) **Drop Manholes:** Inside drops are not permitted. Outside drops are acceptable. The drop shall be constructed of straight pipe and 45 degree fittings. The section of pipe which drops down to the channel shall be encased with cement, by use of an eighteen-inch (18 ") cylindrical cardboard concrete form. See attached detail.

NOTE: Any material not listed shall be reviewed by the Engineer for approval, before being installed.

All 'dead end' manholes shall have a short stub of pipe (minimum of 5') extended out of the 'dead end' portion of the manhole with an invert and table constructed between the pipes. Said stub shall be of the same material and size as the active line.

I. Force Mains/Laterals:

- 1) A plan must be submitted for review.
- 2) Pressure Rated pipe must be used; PVC SCH 40 glued connections, or class 52 Ductile Iron. Continuous pipe with glued or welded connections may be used.
- 3) Pressure rated pipe shall be bedded in sand. A clay dam may be required to prevent water from flowing from the lateral into the foundation of the building.
- 4) Use of Environment One Pumps (E-One Sewer System) is required. Installation of the pump shall conform to the manufactures recommendations.
- 5) After installation of the pipe, testing will be required.

J. Brick: The brick shall be good, sound, hard, and uniformly burned brick, regular and uniform in shape and size, of compact texture and satisfactory to the Engineer. Brick shall be Grade SA conforming to the ASTM Standard Specifications for Sewer Brick (made of clay or shale),

Designation C 32.

- K. Mortar for Brickwork:** The mortar shall be composed of Portland cement and sand, in which the volume of sand shall not exceed three (3) times the sum of the volume of cement and lime. The proportions of cement and lime shall be 1-1/4.

Cement shall be Type II.

The sand shall conform to the ASTM Standard Specifications for Aggregate for Masonry Mortar, Designation C 144.

L. Laying the brick:

Bricks shall be clean when laid.

Each brick shall be laid in full bed and joint of mortar without requiring subsequent grouting, flushing or filling and shall be thoroughly bonded.

- M. Cleaning:** All new manholes and sewer lines shall be thoroughly cleaned of all silt, debris and foreign matter of any kind, prior to final inspection.

16. **TESTING NEW MAINS:**

All testing shall be observed by the Engineer. All testing equipment shall be approved by the Engineer prior to testing.

A. Gravity Mains:

1) Pressure Testing:

- a) Low pressure air test will be used. The air test procedures shall conform to the Uni-Bell Recommended Practice for Low Pressure Air Testing of Installed Sewer Pipe, UNI-B-6. The minimum duration permitted for the prescribed low-pressure air exfiltration pressure drop between two consecutive manholes shall not be less than provided in attached Table 1.
- b) The sewers shall be tested after building connections are installed to the property line.
- c) Should any section under test fail to meet the requirements, the contractor shall do all work of locating and repairing leaks and retesting. A plan of the method of repairing any leaks that are found shall be submitted to the Engineer for approval.

2) Pipe Deflection Measurement:

- a) No less than thirty (30) days after completion of the sewer pipe installation, the contractor shall test the pipeline for deflection using a "go no-go" deflection mandrel having a minimum of nine (9) evenly spaced arms or prongs. The "go no-go" gauge shall be hand pulled through all sections of the pipeline by the contractor. The contractor shall submit drawings of the "go no-go" gauge to the engineer for approval prior to testing. Complete dimensions of the gauge for each diameter of the pipe to be tested shall be in accordance with ASTM D3034.

- b) Any section of pipe found to equal or exceed 7.5 percent deflection shall be deemed a failed pipe and shall be excavated and replaced by the contractor.

3) Manhole Vacuum Test:

Vacuum testing shall be for new construction only.

The vacuum test shall be conducted in accordance with ASTM C1244.

- a) All lift holes shall be plugged with a non-shrinking mortar. The contractor shall plug the pipe openings, taking care to securely brace the plugs and the pipe to prevent the plugs from being drawn into the manhole. A vacuum of 10 inches Hg (4.9 psi) shall be drawn and the vacuum shut off. See Table 2 for minimum test times for various manhole diameters.
- b) If the manhole fails the initial test, the contractor shall locate the leaks and make proper repairs. Leaks may be filled with a wet slurry of accepted quick-setting material, and then the manhole may be retested.

4) Force Main Testing:

- a) The section of pipe to be tested shall be filled with water, and all air shall be expelled from the pipe. The section under test shall be maintained full of water for a period of 24 hours prior to the combined pressure and leakage test being applied.
- b) The pressure test shall be measured in pounds per square inch (psi). Pressure shall be held at 150 psi for a period of two hours (2 hrs). Allowable loss for this period of time shall not exceed 10 psi. If a loss of greater than 10 psi is measured then the section of pipe being tested shall be considered as having failed to pass the pressure test.
- c) Following the pressure test a leakage test shall be performed. If the average leakage during a two hour period exceeds a rate of 11.6 gallons per inch of diameter per 24 hours per mile of pipeline, the section shall be considered as having failed the leakage test.
- d) If the section fails either the pressure or leakage test, the contractor shall do everything necessary to locate, uncover, and repair or replace the defective pipe, fitting, and/or joint. All repairs or replacements shall be done in the presence of the Engineer.

17. **REPAIRS:**

A. Mains: Repairs must be made with pipe sized to match the existing pipe. The repair pipe invert must be installed at the same elevation as the existing pipe invert.

Material for a sewer main repair can consist of either of the following:

- 1) Extra strong vitrified clay pipe (EVC), connecting onto an existing bell or spigot, or by use of rubber couplings. Clay pipe may be used to repair existing clay mains only.
- 2) PVC SDR 35 or Pressure Rated SCH 40 depending on location of repair. Pipe can be connected to an existing bell and spigot, or by use of a rubber coupling ('FERNCO'). PVC pipe can be used to repair EVC.

B. Laterals: EVC pipe can be repaired with PVC SDR 35 or SCH 40, depending on the location of the repair. Pipe can be connected to an existing bell or spigot, or by use of rubber couplings. Unless the lateral is being reduced from the area of repair to the building foundation, the pipe must be sized to match the existing pipe.

The process of 'SLEEVING' a 4" pipe into an existing 6" pipe is still acceptable. This process is

only allowed to be used once at any given location. If the lateral continues to have problems then it will have to be replaced.

C. Sleeving Procedure: Must be approved by the Engineer before a permit is issued. The Engineer must be on-site as the 4" pipe is being installed into the existing 6" pipe. The 4" pipe will be pushed to a point which is either the wye or a bend, then pulled back two feet (2'). The 4" pipe will be secured into the 6" pipe by use of a rubber coupling or a 'DOUGHNUT' fitting, then cement will be poured around the connection.

Due to the fact that it is impossible to inspect the 6" sleeved pipe and the 4" pipe after being installed, the City of Woonsocket, Engineering Division takes no responsibility for allowing the 'SLEEVING' procedure.

18. Before any work will be considered as having been completed the sewer, surface water drains, streets, roads, sidewalks, buildings and all places affected by the work, are to be thoroughly cleared and left clean, free, and in good order and fit for travel and other proper use.
19. Upon completion of the connection, the DRAINLAYER'S RETURN (lower half of sewer connection permit) must be completely and properly filled out, signed, and returned to the Engineering Division by the Rhode Island Master Plumber or Underground Utility Contractor. A copy will be provided for the Rhode Island Master Plumber or Underground Utility Contractor records after final approval by the Engineering Division.
20. After the time period for the temporary patch has expired, the Rhode Island Master Plumber or Underground Utility Contractor will remove the temporary asphalt and compact the gravel sub-base. The Rhode Island Master Plumber or Underground Utility Contractor will proceed to permanently patch said excavation, to a depth as required by the Engineer on the permit patch slip. Permanent patching must be performed in the presence of the Engineer or his designee. Any permanent asphalt patch installed without benefit of inspection by the Engineering Division shall be removed and reinstalled as required by these regulations.

The permanent repair of the street and/or sidewalk surface is the responsibility of the Rhode Island Master Plumber or Underground Utility Contractor, and shall be guaranteed for a period of one (1) year from the date of installation.

21. The above is a policy set forth by the Department of Public Works, Engineering Division. Changes may be made to said policy at any time by the Engineering Division only. All changes will be updated on the official copy of the policy made available on the City of Woonsocket web site and in the Division office at 169 Main Street. It is recommended that all Rhode Island Master Plumbers and Underground Utility Contractors assure themselves that they have the most up to date Sewer Policy document upon taking out permits to install sewer main and/or sewer laterals.

**City of Woonsocket
Code of Ordinances
Chapter 18 – Water and Sewers and Sewage Disposal
Article III. Sewers and Sewage Disposal**

Sec. 18-22. Definitions.

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

(1) BOD (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty degrees (20°) centigrade, expressed in milligrams per liter.

(2) 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 extending to a point five (5) feet outside the inner face of the building wall and thereat connects to the building sewer.

(3) Building sewer shall mean the extension from the building drain to the public sewer.

(4) The word City, or any other word in common usage designating a legally constituted unit of local government, shall mean the City of Woonsocket, Rhode Island.

(5) Director shall mean the director of Public Works of the City of Woonsocket, or his authorized agent or representative.

(6) Director of health shall mean the director of health of the State of Rhode Island, or his authorized agent or representative.

(7) Domestic wastewater shall mean wastewater discharged from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings or institutions. It may not contain groundwater, surface water, or stormwater.

(8) Dwelling unit shall mean a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants: Have either (1) direct access from the outside of the building or through a common hall, or (2) complete kitchen facilities for the exclusive use of the occupants. The occupants may be a single family, one person living alone, two (2) or more

families living together, or any other group of related or unrelated persons who share living arrangements.

(9) Easement shall mean an acquired legal right for the specific use of land owned by others.

(10) Environmental protection agency shall mean the municipal facilities branch of the Environmental Protection Agency, Region I, Boston, Massachusetts.

(11) Equivalent dwelling unit is an industrial, commercial or institutional building which contributes to the sewerage system an amount of domestic wastes equal or less than that of a dwelling unit.

(12) 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 pretreatment facility. A wastewater shall be considered free of floatable fat if it is properly pretreated prior to entry into the collection system and the wastewater does not interfere with the collection system.

(13) Garbage shall mean animal and vegetable wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage, and sale of produce.

(14) Industrial wastes shall mean the liquid wastewaters from industrial manufacturing processes, trade, or business as distinct from domestic sanitary wastes.

(15) Inspection division shall mean the director of public safety and/or his authorized agent or representative.

(16) Natural outlet shall mean any outlet into a watercourse, pond, ditch, lake, or other body or surface of water.

(17) Person shall mean any individual, firm, company, association, society, corporation or group.

(18) pH shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

(19) Plumbing inspector shall mean the plumbing inspector of the City of Woonsocket, Rhode Island.

(20) Properly shredded garbage shall mean the wastes from the preparation, cooking and

dispensing of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch in any dimension.

(21) Public sewer shall mean a sewer to which all owners of abutting properties have equal rights, and is controlled by public authority.

(22) Rhode Island Department of Health shall mean the Rhode Island Department of Health, Division of Water Pollution Control, Providence, Rhode Island.

(23) Sanitary sewer shall mean a sewer which carries only sewage to which storm, surface and ground waters are not intentionally admitted or allowed.

(24) Sewage shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments. The preferred term is "wastewater".

(25) Sewage treatment plant shall mean any arrangement of devices and structures used for treating sewage. The preferred term is "wastewater treatment works", subparagraph (38).

(26) Sewage works shall mean all public facilities for collecting, pumping, treating and disposing of the effluent. The preferred term is "wastewater facilities".

(27) Sewer shall mean a pipe or conduit for carrying wastewater or drainage water.

(28) Shall is mandatory; "may" is permissive.

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

(30) Storm drain (sometimes termed "storm sewer") shall mean a sewer or drain which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.

(31) Suspended solids shall mean solids that either float on the surface, or are in suspension in water, sewage, or other liquids, and which are removable by laboratory filtering.

(32) Superintendent shall mean the "superintendent of wastewater facilities, and/or of wastewater treatment works, and/or of water pollution control" of the City of Woonsocket, or

[his/her] authorized deputy, agent or representative.

(33) 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 sanitary sewers and wastewater treatment facilities provided. See section 18-26 (i) for test procedure.

(34) User shall mean that individual or property owner whose property is connected to the sewage works and/or capable of connection when a public sewer is in proximity to the property.

(35) Watercourse shall mean a natural or artificial channel for the passage of water either continuously or intermittently.

(36) Wastewater shall mean the spent water of a 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.

(37) Wastewater facilities shall mean the structures, equipment and processes required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent.

(38) Wastewater treatment works shall mean an arrangement of devices and structures for treating wastewater, industrial wastes and sludge. Sometimes used as synonymous with "waste treatment plant" or "wastewater treatment plant", or "wastewater pollution control plant".

(39) Billing period shall mean that period of time coinciding with the City of Woonsocket fiscal year. (Ch. No. 3455, Sec. 1, 1-16-78)

Sec. 18-23. Use of public sewers required.

(a) Unlawful deposits of wastes. It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the City of Woonsocket, or in any area under the jurisdiction of said City, any human or animal excrement, garbage, or other objectionable waste.

(b) Unlawful discharges. It shall be unlawful to discharge to any natural outlet within the City of Woonsocket, or any area under the jurisdiction of said City, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this article.

(c) Required installation of toilet facilities. The owner of all houses, buildings or properties used for human occupancy, employment, recreation, or other purposes, situated within the City and abutting on any street, alley or right-of-way, in which there is now located or in the future may be located a public sanitary sewer of said town, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this article, within ninety (90) days after the date of official notice from the City to do so, provided that said public sewer is determined to be accessible and available by the director. An accessible public sewer shall mean one that physically abuts a property.

(d) Appeal of service charges. Individual users may appeal the reasonableness of the service charges imposed upon them. A prerequisite to any appeal shall be the payment under protest of the full service charge. The appeal procedure shall include the following: A three (3) part appeal hierarchy in ascending order of:

- (1) Division Engineer;
- (2) Director of Public Works;
- (3) Mayor

A letter of appeal shall be received by the City by the date the payment is due. The first, and each following, appeal shall be held within fifteen (15) days and a ruling provided within fifteen (15) days.

(e) Plats of streets. The director of Public Works shall cause a detailed plat to be made of all the streets or parts of streets in which drains and sewers have been or shall be ordered to be constructed by the City council, together with the land of the abutters thereon liable to assessment, which plat shall also show the location of the drains and sewers in the respective street or streets, the diameter thereof, and such other information connected therewith as he may deem proper, and all said plats shall be properly arranged, indexed, and carefully preserved in the office of the director of Public Works, and shall be open to the examination of all the taxpaying citizens of the City at all reasonable times.

(f) Reports. The director of Public Works shall make a full report quarterly to the City council of all important matters relative to his department, and shall make further report thereof as aforesaid at all other times when he may deem it necessary or shall be thereto requested by the City council, or by either branch thereof. Such special reports shall, as far as may be, cover all matters mentioned in the request therefore, and said quarterly report shall contain, among other matters appropriate thereto, a detailed statement of:

(1) All work begun, prosecuted or finished in the construction or preparation of main drains and common sewers since the last report, and in what street or streets the same has been done;

(2) A general statement of all sewer assessments made since the last report, the amount thereof, and the street and streets upon which the assessed estates abut;

(3) All recommendations of the extension of the sewer system of the City which they shall think to be necessary and also all information respecting said sewer system, its operation and the extent of its use which they may deem to be of general interest to the taxpayers of the City.

(g) Control of sewers. All existing public main drains and common sewers shall be under the control of said Director of Public Works, who is hereby authorized to make use of the same in connection with the general system to sewers whenever advisable and practicable.

(h) Acquiring property. Said Director of Public Works is hereby authorized and directed to confer with the owner or owners of any tract of land or any estate, right of interest therein necessary to be acquired in establishing a system of sewerage in this City, to ascertain the lowest price for which the same can be acquired, and to report in writing as soon as possible with their recommendation to the City Council. (Ch. No. 3455, Sec. 1, 1-16-78)

Sec. 18-24. Private sewage disposal.

(a) Connection to public sewer. When a public sewer becomes available, the building sewer from a private on-site sewage disposal system shall be connected to said public sewer and the private sewage disposal system shall be cleaned of sludge and filled with clean bank-run gravel or dirt within sixty (60) days, or such other time as specified by the inspection division.

(b) Private disposal systems. Where a public sanitary sewer is not accessible under the provisions of section 18-23(c), the building sewer shall be connected to a private wastewater disposal system complying with the requirements of the City of Woonsocket and the Rhode Island Department of Health.

(c) Permits for private disposal systems. Before commencement of construction of a private wastewater disposal system the owner(s) shall first obtain a written permit signed by the inspection division. The application for such permit shall be made on a form furnished by the City, which the applicant shall supplement by any plans, specifications, and other information as are deemed necessary by the inspection division. A permit and inspection fee shall be paid

to the City at the time the application is filed. (See also section 18-25(a).)

(d) Inspection of private disposal systems. A permit for a private wastewater disposal system shall not become effective until the installation is completed to the satisfaction of the inspection division. The inspection division shall be allowed to inspect the work at any stage of construction, and, in any event, the applicant for the permit shall notify the inspection division when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within forty-eight (48) hours of the receipt of notice by the inspection division.

(e) Type, capacities, etc., of private disposal systems. The type, capacities, location, and layout of a private wastewater disposal system shall comply with all requirements of the Rhode Island Department of Health.

(f) Operation of private disposal systems. The owner(s) shall operate and maintain the private wastewater disposal facilities in a sanitary manner at all times, at all times, at no expense to the City.

(g) Additional requirements of department of health. No statement contained in this article shall be construed to interfere with any additional requirements that may be imposed by the Rhode Island Department of Health. (Ch. No. 3455, Sec. 1, 1-16-78)

Sec. 18-25. Building sewers and connections.

(a) Permit fees. No unauthorized person shall uncover, make any connection with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first receiving permission from the City council by ordinance. The owner or his agent shall make application for a permit on a special form furnished by the City. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the director. A permit and inspection fee of fifteen dollars (\$15.00) for a single-family residence; and twenty-five dollars (\$25.00) for a commercial, multifamily or industrial building producing only sanitary sewage; and one hundred dollars (\$100.00) for other industrial buildings, shall be charged. Sewer permit fees shall be paid to the City at the time application is filed. One (1) copy of the permit shall be available for inspection at all times at the site of the work.

(b) Directors' power to adopt rules and regulations. The director is hereby empowered to make and adopt such written rules and regulations as may be necessary for the proper enforcement of the provisions of this article, to establish a procedure for the application and issuance of permits to make sewer connections, to protect and indemnify the City from damages and loss, to interpret and to secure the intent of this article.

(c) Expenses for building sewers. All costs and expenses incident to the installation, maintenance, use and connection of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(d) Building sewer connections. A separate and independent building sewer shall be provided for each and every building to be connected. The director may, upon written approval, allow more than one (1) building on one (1) estate to utilize one (1) connection. Buildings on separate estates, regardless of ownership, not connected independently must make application, complete all necessary changes and be in conformance with this section prior to the time of the next sale of each and every building. Where there are existing easements for sewer connections across abutting properties, the director of Public Works may waive the requirement of separate and independent sewer lines upon a finding of a valid existing easement and that the existing sewer line was approved by the department of Public Works at the time of its construction. The City does not and will not assume any obligations or responsibility for damages caused by or resulting from any such single connection aforementioned.

(e) Construction of building sewers. 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 City. (See paragraphs (g) and (h) of this section.)

(f) Connection to building sewer. 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 a means approved by the inspection division and discharged to the building sewer.

(g) Building drains. Building drains shall not be less than four (4) inches in diameter. The grade shall be at least one-quarter (1/4) inch per foot for four (4) inch sewers, and shall not be less than one-eighth (1/8) inch per foot for larger sizes. Building sewers which do not have a cleanout in the direct line of the pipe to the street sewer will not be allowed to discharge. Pipe material for such building drains shall be in accordance with the City building code.

(h) Building sewers. The following materials and sizes shall be allowed for building sewers: six-inch (minimum) diameter, extra strength vitrified clay pipe, ASTM Specification C700 (or as amended) with compression neoprene joints, ASTM Specification C425 (or as amended); four-inch (minimum) diameter, extra-heavy cast-iron soil pipe, ASTM Specification A74 (or as

amended) with rubber gasket joints, ASTM Specification C564 (or as amended); four-inch (minimum) diameter, ductile iron sewer pipe, ASTM Specification A746 (or as amended) with rubber gasket joints, ASTM Specification C564 (or as amended); or four-inch (minimum) diameter by twelve-and one-half foot (maximum) lengths, installed at a minimum depth of three (3) feet, type PSM, PVC (polyvinyl chloride) sewer pipe, ASTM Specification D3034 (or as amended) and (standard dimension ratio) SDR-35 with joints using a rubber sealing ring, ASTM Specification D1869. The joint at the "building drain" shall be caulked and leaded or an equivalent joint as accepted by the inspection division. The property owner(s) shall be responsible for determining the suitability of any of the above for their application.

(i) Surface runoff connection. No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which, in turn, is connected directly or indirectly to a public sanitary sewer. All such existing connections shall be removed at once at the owner's expense.

(j) Connection of building sewer to public sewer. The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rule and regulations of the City. All such connections shall be made gastight and watertight.

(k) Building sewer inspection. The applicant for the building sewer permit shall notify the director when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the director.

(l) Excavation for building sewers. 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 after issuance of a permit to occupy or excavate the public right-of-way shall be restored in a manner satisfactory to the City.

(m) Sample application forms. A sample application form, sewer permit form, and permit to occupy public right-of-way for the classes of permits for sewer service are [on file and available for public inspection in the office of the City clerk.] These forms must be filed with the department of Public Works, engineering division.

(n) Sewer taxes. Whenever a sewer main shall be constructed or extended in any street or highway in the City under a joint participation agreement between the Public Works department of the City and the owner or owners of any or all estates abutting upon that portion of such street or highway in which such sewer shall be constructed or extended, whereby such

abutting owner or owners shall at his or their own expense perform or engage a private contractor to perform a portion of the work required in such construction or extension, then and in such case, the sewer tax shall be abated to the extent of the fair value of the work performed by such abutting estate's owner or owners on that portion of such street or highway which abuts such estate or estates. In all such cases, the director of Public Works shall compute the fair value of such work, taking into consideration the cost records in the department of Public Works, together with prevailing rates of contractors in this area for the performance of the type of work involved, and he shall certify the amount so computed to the finance director, who is hereby authorized and empowered to make such abatement; provided, however, that nothing herein contained shall be construed as to authorize any payment by the City to any estate owner or owners performing work under the provisions of this section, the fair value of which exceeds the amount of such assessment; and, it is further provided that the provisions of this section shall apply to any estate owner or owners who heretofore have performed such work under such an agreement upon presentation of proper proof of such performance to the director of Public Works, and in such case, the director of Public Works shall compute the fair value of such work as herein provided, and shall certify such amounts to the finance director, who is hereby authorized and empowered to abate or rebate any sewer tax assessed against such estate owner or owners.

(o) Damages resulting from connections. When any assessment shall be made upon any land for the expense of constructing any sewer, the owner of the land so assessed shall have the right to connect such land with such sewer under such general rules and regulations as the City council, by ordinance, shall prescribe, upon executing to the City a release of all damages which may at any time happen to such estate in any way resulting from such connection.

(p) Liability insurance. No permit under this article shall be issued unless a certificate of property damage and bodily injury liability insurance is on file or presented to the director. Said liability insurance shall indemnify and hold harmless the City for an amount not less than one hundred thousand dollars (\$100,000.00) for each occurrence, and three hundred thousand dollars (\$300,000.00) aggregate.

(q) All contractors installing sewer connections and/or mains into and through City parks and other publicly owned buildings are hereby required to have all underground lines, connections, meters, and related equipment inspected and approved by a representative of the director of the department of Public Works prior to backfilling. Failure to do so will result in the contractor being required to excavate, at the contractor's expense, all covered lines and elements to ensure approval and adherence to department installation requirements.

Sec. 18-33. Extension of City sewerage system beyond City limits.

(a) Legislative sanction. All future extensions and connections of the sanitary sewer facilities of the City to service properties located outside the corporate limits of the City shall require individual legislative sanction of the City council.

(b) Requirements. Each applicant for such sanitary sewer extension or connection to service property located outside the corporate limits of the City shall comply with the following requirements:

(1) Obtain written authority from the City or town in which the extension or connection is to be made to excavate the highway and obtain permanent rights for the City of Woonsocket to maintain the extended sewer line.

(2) All expenses for construction and connecting to the municipal sewerage system shall be paid for by the applicant.

(3) The contractor retained for any such construction work must first be approved by the director of Public Works.

(4) The construction work for the same shall be subject to inspection before connection or extension to the municipal sewerage system is made, and must be done in accordance with regulations and procedures established herein by the director of Public Works.

(5) The applicant and all other abutting property owners connecting with extensions shall first enter into an agreement with the City of Woonsocket for the payment of the annual user charge as provided for in section 18-30 for the use of such municipal sewer.

In addition, any industrial cost recovery shall be paid to the City as provided in section 18-31.

(6) The applicant and all abutting property owners (in nonparticipating communities) connecting with extensions, shall also enter into an agreement with the City of Woonsocket for the payment of the yearly minimum assessment for the use of such municipal sewer as provided for by this section, as follows:

| | |
|---------------------------|----------|
| One-family dwelling unit | \$100.00 |
| Two-family dwelling units | \$160.00 |

this section, the balance of which shall be paid to the City prior to making a new or utilizing the existing connection to the City's sanitary sewer system. There shall be no negative value fee at any time. Should the City council terminate service, any previously paid fee(s) shall not be refunded.

Sec. 18-34. Sewer assessments and connection fee.

(a) Authorization to direct. The City council, pursuant to state law, hereby authorizes and directs the director of Public Works of the City to make assessments upon all estates abutting upon that portion of any street or highway in which any sewer has been or shall be constructed by or at the expense of the City of Woonsocket at the rate of fifty cents (\$0.50) for each front foot of such estate, upon such street or highway, and three-quarters of one cent (\$0.0075) for each square foot of such estate between such street or highway and a line not exceeding one hundred twenty (120) feet distant from and parallel with the line of such street or highway; provided, however, that whenever any estate is situated between two (2) streets or highways, the area upon which such assessment of three-quarters of one cent (\$0.0075) a square foot is made shall not extend to more than one-half the distance between such streets or highways; provided also, that when any estate is situated at the corner of two (2) streets or highways, or otherwise so situated as to be assessed for the expense of making a sewer in one of such streets or highways, that portion of such estate assessed for a sewer in one of such streets or highways, shall not be liable to be assessed upon its area for the cost of constructing a sewer in the other of such streets or highways, but only for its frontage upon such street or highway, and provided, also, that no estate or portion thereof shall be assessed for the construction of any sewer unless such estate or portion thereof shall abut or be bounded upon the street or highway on which such sewer shall have been constructed or unless such estate has a right of access to such street or highway.

(b) Appeal. Individual abutting owners may appeal the reasonableness of assessments imposed upon them. The appeal procedure shall be as outlined in section 18-23 (d).

(c) Lines. All assessments made under the authority of this article shall be a lien upon the estate upon which they are made from the date upon which they are certified by the director of Public Works to the City treasurer for collection, and shall be due and payable one year after the certification thereof as aforesaid; provided, however, that payment of any such assessments may be made to the City treasurer in installments in manner and under the conditions following, namely: One-fifth (1/5) thereof in one year, one-fifth (1/5) in two (2) years, one-fifth (1/5) thereof in three (3) years, one-fifth (1/5) thereof in four (4) years, one-fifth (1/5) thereof in five (5) years after the certification aforesaid. At the time when each of such

installments shall become due and payable as aforesaid, one year's interest on the unpaid balance of such assessment, at the rate of five (5) per cent per annum shall be due and payable. In the case of default in the payment of any of such installments when it becomes due together with the interest on the unpaid balance as aforesaid, the whole of such assessments or the unpaid balance thereof, as the case may be, shall be due and payable, and shall thereafter bear interest at the rate of six (6) per cent per annum, which assessment or the unpaid balance thereof, as the case may be, shall be due and payable, and shall thereafter bear interest at the rate of six (6) per cent per annum, which assessment or the unpaid balance thereof, together with interest as aforesaid and all expenses incurred for the collection thereof, if any there be, shall be collected as the ordinary taxes of the City are collected.

(d) Discount. Any person paying the whole of such assessments made upon any estate as aforesaid, before the expiration of one year after the same shall have been certified to the City treasurer, shall be entitled to receive and may receive a discount thereon at the rate of five (5) per centum per annum to the time such assessment is due and payable, as first aforesaid; but, if not paid when due and payable, as aforesaid, shall bear interest at the rate of six (6) per centum per annum, which assessment, together with the interest thereon as aforesaid, and all expenses incurred in the collection thereof, if any there be, shall be collected as the ordinary taxes of the City are collected.

(e) Publication of assessments due. The City treasurer, upon the receipt of the certification of any assessment by the director of Public Works, shall give notice when such assessment is due and payable, by publication four (4) times, once a week, in the Woonsocket Call.

(f) Notwithstanding the above and upon approval to connect to the sanitary sewer system in accordance with section 18-25, a connection fee shall be paid to the City prior to making the connection. The connection fee shall be as follows;

(1) Residential buildings (one-family): Six hundred dollars (\$600.00);

(2) Residential buildings (two-family and over or cluster development): Six hundred dollars (\$600.00) per unit;

(3) Commercial buildings: One thousand dollars (\$1000.00);

(4) Industrial buildings: One thousand dollars (\$1000.00);

(5) Change of use or number of units: If at any time the use or number of units of a building(s) changes, the new applicable fee shall be calculated based on the foregoing,

deducting any connection fee previously paid under paragraph (f) of this section, the balance of which shall be paid to the City prior to making a new or utilizing the existing connection to the City's sanitary sewer system. There shall be no negative value fee at any time. Should service be terminated, any previously paid fee(s) shall not be refunded.

(6) Certificate of occupancy: The building inspector of the City of Woonsocket shall not issue a certificate of occupancy to any new building or to any existing building, the use or number of units which has changed, until all the requirements of paragraph (f) of this section have been met.

(7) Exceptions; new construction; existing connections. Except for a change of use as provided in subsection (5) above, the provisions of this subsection (f) shall apply to new construction and shall not apply, as of April 26, 1985, to:

- a. Any existing connection which may require modification, change or reconnection;
- b. Any building which existed on April 26, 1985;
- c. Any land the owners of which shall have made provisions to connect to the sewer system by providing said connection on his property as of April 26, 1985.

It is further provided that any paid connection fee which is hereby exempted shall be refunded.



**CITY OF WOONSOCKET
ENGINEERING DIVISION
APPLICATION FOR PERMIT**

| | |
|-----------------------|-----------------|
| For Official Use Only | |
| Date paid | _____ |
| Ck# | _____ Amt _____ |
| Cash Amount | _____ |
| Rec'd by | _____ |

The Engineering Division will review the application and call the contractor upon approval or rejection. If approved the contractor may pick up and pay for the permits needed to perform the proposed work. At this time the contractor may schedule an inspection. Note that a 24-hour notice is required prior to commencing work. If rejected then the contractor will be instructed as to what needs to be addressed for approval.

DATE: _____

CONTRACTOR'S COMPANY NAME: _____

CONTRACTOR'S ADDRESS: _____

CONTRACTOR'S TELEPHONE NUMBER: _____

SIGNATURE OF CONTRACTOR'S REPRESENTATIVE: _____

TITLE OF CONTRACTOR'S REPRESENTATIVE: _____

ESTIMATED COST OF MATERIALS AND LABOR: \$ _____ DIGSAFE # _____

For work requiring excavation:

- 1) I _____ am familiar with the Local, State and Federal safety codes that pertain to the scope of the proposed work and will adhere to all. I also understand that the Department of Public Works, Engineering Division may, for any safety reason, shut the job site down if safety concerns are not immediately addressed. INITIALS of COMPETENT PERSON _____
- 2) All equipment operators and workers performing work at the proposed location hold the appropriate licenses for their responsibility. INITIALS of COMPETENT PERSON _____
- 3) If the Engineering Division does not already have a copy of the equipment operators license than provide a copy of licenses for those employees that will or may operate equipment.
- 4) I have read and understand the requirements of the permit that will be issued, which are as follows:
 - Notify the Engineering Division twenty-four (24) hours prior to commencing any work under this permit at (401) 767-9213. Working hours are Monday – Friday 7:30 am to 12 pm, 12:30 pm – 4 pm (Holidays excluded).
 - Indemnify and save harmless the City of Woonsocket and its employees and agents from all personal injuries, deaths, property damage and claims arising out of the work or operations under this permit.
 - Erect or install, at permittee expense, proper barricades, signs and lights, as required, for the safety of the public by the Woonsocket Department of Public Safety.
 - Conform to the Woonsocket Department of Public Works Standards and Polices and Permit Manual.
 - Maintain excavations and backfills at all times and install and maintain a temporary asphalt patch on all streets, which are paved, for a minimum of ninety (90) days. Temporary paving shall be installed immediately after backfilling and maintained continuously until permanent patch is installed.
 - Make arrangements with a qualified, City acceptable, contractor to saw-cut clean edges around the excavation and to permanently patch streets and sidewalks according to the standards as set forth by the City of Woonsocket, Department of Public Works.
 - Be responsible for proper maintenance of the permanent patch, including replacement if necessary, for a minimum of twelve (12) months after the permanent patch has been placed or as required by the Director of Public Works. INITIALS _____

LOCATION OF PROPOSED WORK: _____

PROPERTY OWNER'S NAME: _____

PROPERTY OWNER'S MAILING ADDRESS: _____

PROPERTY OWNER'S TELEPHONE NUMBER: _____

PROPERTY OWNER'S SIGNATURE: _____

PROPOSED SCOPE OF WORK: _____

HAVE PLANS BEEN SUBMITTED TO THE ENGINEERING DIVISION? YES NO
(IF NO, PLEASE USE THE BACK OF THIS APPLICATION FOR A SKETCH OF THE PROPOSED WORK)

----NOTICE----

**ALL EXCAVATION PERMITEE'S ARE REQUIRED TO SCHEDULE
A POLICE DETAIL OFFICER BY LOGGING ONTO
HTTP://WWW.WOONPOLICEDETAILS.COM
FOR ANY & ALL WORK BEING DONE IN THE PUBLIC RIGHT-OF-WAY**

NOT COMPLYING WITH THIS NOTICE CAN RESULT IN THE SUSPENSION OF THE WORK

SKETCH OF PROPOSED WORK

OFFICIAL USE ONLY

APPLICATION REVIEW DATE: _____ APPLICATION REVIEWED BY: _____

Permission to: Excavate the Public Right of Way__ or Repair Utilities on Private Property__ for:

Water Service__ Water Main Extension__ Building Sewer Connection__ Sewer Main Extension__ Gas Service__ Gas Main
Extension__ Underground Telephone__

Underground Electrical__ Utility Pole__ Driveway Entrance__

Miscellaneous _____

Or Occupy the Public Right of Way to:

Erect Sign or Utility Pole__ Service Sign or Utility Pole__ Paint or Repair Building__ Temporary Dumpster__

Miscellaneous _____

PERMIT FEE(S): _____

REQUIRED BOND AMOUNT: _____

APPROVED

REJECTED

Engineering Division

Director of Public Works

City of Woonsocket
Department of Public Works
Engineering Division
SEWER LINE/WATER MAIN SEPARATION POLICY
FOR DESIGN OF SANITARY SEWERS

A. Lateral placement of sewers and water mains

Sewers shall be laid at least ten feet (10') horizontally from any existing or proposed water main. The distance shall be measured edge-to-edge. There is no minimum vertical separation required provided the ten (10) foot horizontal separation is maintained.

In cases where it is not possible to maintain a ten (10) foot horizontal separation, the Division may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the sewer closer to a water main, provided that:

1. The sewer and water main are laid in separate trenches or,
2. The sewer and water main may be installed in the same trench with the water main placed on a bench of undisturbed earth, and
3. In either case, the crown of the sewer shall be at least twenty-four (24) inches below the invert of the water main.

In situations where it is impossible to obtain proper horizontal and vertical separation as stipulated above, the following protection shall be provided:

1. Encasement of the sewer pipe in concrete (min. six (6) inch thickness) or a carrier pipe for at least ten (10) feet either side of the area not complying with the minimum horizontal and vertical separation, or
2. Design and construction of the sewer equal to water main pipe (cement-lined ductile iron or other AWWA-approved material for potable water conveyance), and pressure tested in accordance with AWWA specifications.

B. Sewers crossing water mains

Sewers crossing over water mains should be avoided, but if conditions warrant this situation, then adequate structural support shall be provided for the sewer to maintain line and grade. Sewers crossing under water mains shall be laid to provide a minimum vertical separation of twenty-four (24) inches between the invert of the water main and the crown of the sewer. Relocation of an existing water main may be necessary to achieve this vertical separation. Relocated water main shall be constructed of an AWWA-approved material for potable water conveyance and designed for the required water service pressure for a distance of ten (10) feet on each side of the crossing, measured perpendicular to the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints.

Where conditions prevent a twenty-four (24) inch vertical separation from being maintained, the following methods shall be specified:

1. The sewer shall be designed and constructed equal to water main pipe (cement-lined ductile iron pipe, PVC or other AWWA-approved material for potable water conveyance) for a distance of ten (10) feet on each side of the crossing, measured perpendicular to the water main and pressure tested in accordance with AWWA specifications, or
2. Either the water main or the sewer may be encased in concrete (min six (6) inch thickness) or a carrier pipe for a distance of ten (10) feet on each side of the crossing, measured perpendicular to the water main. The carrier pipe shall be designed and constructed of materials which are satisfactory to the Division, or
3. Any other methods, if supported by data from the design engineer, which ensure adequate water tightness and are satisfactory in the Division.

4.



**CITY OF WOONSOCKET, RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**

APPLICATION FOR A SEWER CONNECTION

Sewer Permit No. _____

TO THE DIRECTOR OF PUBLIC WORKS:

The undersigned, owner of the estate at No. _____, hereby makes application for permission to connect said estate with public sewer in _____.

The undersigned agrees to strictly conform to all existing ordinances, rules and regulations, and to all ordinances, rules and regulations relating to the use of the public sewers and the making and using of all connections with said sewers, which may hereafter be enacted by the City Council or by the Director and approved by the City Council.

The undersigned further agrees that no claim for damages that may be occasioned to said estate or any property thereon in any manner by the construction, existence or use of said connection shall be made against the City of Woonsocket, Rhode Island.

The undersigned further agrees that the Director shall have access at all reasonable hours to the premises to see that all ordinances, rules and regulations relating to the public sewers and all connections therewith are being complied with.

All connections shall be of such size and material, and laid to such grade and depth as the Director may determine.

All work of making connections shall be under the supervision of the Director.

All repair work to the public right-of-way, necessitated by this excavation, shall be the sole responsibility of the homeowner. The actual cost of the repair will be billed to the homeowner. The actual cost of the repair will be billed to the homeowner through the plumber to whom the excavation permit was issued.

USER CLASSIFICATION

(To be completed by Applicant)

(Check appropriate item(s))

Residential – No. of Dwelling Units _____

Commercial _____

Industrial* _____

Miscellaneous; explain _____

(Signature of Owner)

Date

(Signature of Drain Layer
or Master Plumber)

Date

(Insurance Certificate No. & Date)

Sewer Connection Fee Paid: \$ _____ Date: _____ Not Applicable: _____
(Property Owner) (Amount) (Explain) _____

Sewer Permit Fee Paid: \$ _____ Date: _____ Sewer Permit Issue Date: _____
(Amount) Return Date: _____

*If industrial application is made, Owner must provide the following to the Director on the reverse side application.

**City of Woonsocket
 Department of Public Works
 Engineering Division
 Utility Permit Site Plan Completion
 Check List**

Plan Title:

Checked By :

Plan Date:

Review Date:

TITLE BLOCK REQUIREMENTS

- | | |
|--|--|
| <input type="checkbox"/> Type of Plan | <input type="checkbox"/> Date (note revisions, if any) |
| <input type="checkbox"/> Assessor's Plat and Lot | <input type="checkbox"/> Scale and Graphic Scale Bar |
| <input type="checkbox"/> Zoning District | <input type="checkbox"/> Firm or Surveyor's Name and Address |
| <input type="checkbox"/> Street Name, Town and State | |

PLAN REQUIREMENTS

UTILITIES WORK -

- Existing Location and size of existing overhead and underground utilities based on the best available physical and/or record evidence, including but not limited to water, sewer, storm drain, gas, etc. wherever applicable.
- Proposed Location and size of proposed overhead and underground utilities based on the best available physical and/or record evidence, including but not limited to water, sewer, storm drain (drywells), gas, etc. wherever applicable. A Rhode Island Professional Engineer's (P.E.) stamp is required to certify the conformance of the following items:
 - Materials Size Utility Connections
 - Details Depth Other [see attached]
- Sewer service invert elevations at foundation and at sewer main, as well as elevations of the inverts and rims of existing manholes upstream and downstream from the proposed connection. Use existing "wye" connection wherever available.

SITE WORK -

- Location of existing or proposed buildings, including their sill elevation and usage.
- Bench mark and Datum used. (Woonsocket Sewer Datum).
- Existing and proposed contours lines at a minimum of two (2') intervals with ten (10') contours lines to be highlighted, neat and easy to discern.
- Minimum lettering size shall be 1/8" high to insure legibility when reproduced.
- North Arrow and Reference (true, grid, magnetic, assumed, etc.)
- Evidence of occupation, if any (i.e. shrubs, fences, etc.)
- Legend with all abbreviations explained.
- Street names, easements and usage, width, status (i.e. public, platted, unclassified)
- Highway or Railroad stationing, plat or plan reference and date (where applicable)
- Property boundaries shall be clearly defined and a Classification Statement of the plan and survey as defined by the State of Rhode Island.
- Stamp and signature of the surveyor and/or engineer. (Plans seeking Zoning Board of Appeals approval must be prepared by a Professional Land Surveyor)
- Vicinity Map or approximate distance to nearest intersection
- Area of the parcel defined
- Erosion control
- Woonsocket details (such as - trench detail, road patching detail, drywell detail, utility detail, etc.)

- NOTE! The foregoing checklist is for review purposes only and additional information may be required by the Engineering Division as conditions dictate.
- Professional Engineers and Professional Land Surveyors are always encouraged to contact the Woonsocket Engineering Division at (401) 767-9213 to discuss potential other requirements for their particular site based on existing conditions or proposed use(s).
- Professional Land Surveyors shall comply with Procedural and Technical Standards for the Practice of Land Surveying in the State of Rhode Island, latest revision.