



# CITY OF SALEM

## Engineering Department

98 Washington Street, 2<sup>nd</sup> floor

Salem, MA 01970

Phone: (978) 619-5673

**Kimberley Driscoll**

**Mayor**

David H. Knowlton, P.E.  
City Engineer/DPS Director

November 26, 2021

## REGULATIONS FOR LICENSED DRAINLAYERS

In accordance with City Council Ordinance section 46-116, It is necessary to apply for a Drain Layers License each year. This application, (including a \$5,000.00 Bond) is due in November/December and costs \$100.00. Applications and instructions are available at the Engineering Department, at the above address and online at <https://www.salem.com/city-engineer>. This License ONLY allows you to work in the City for one year starting January 1<sup>st</sup> and ending December 31<sup>st</sup>. This License is not a "Street Opening Permit" (requirements are detailed in Section 38, Article IV and Section 46).

The undersigned hereby represents a working knowledge and agrees to comply with all attachment to this regulation and all pertinent City Ordinance; including, but not limited to, Section 38, Article IV, Section 46 and Section 24-27, which references MGL Chapter 82A Section 2.

**EVERY** excavation in a sidewalk, street, or City property, including rights-of way and easements require a "Street Opening Permit". This includes, but is not limited to, excavation for connections to water, sewer, drain, gas, electric and telecommunications conduits, and includes paving or surface constructions or reconstruction for sidewalks or driveway aprons.

Permits are issued at the above address to Licensed Drain Layers for each excavation for a fee based on the scope of work to be done. In order to obtain this permit, prior to starting a Project, the licensed drainlayer must present the following at least 7 days prior to the work start date:

1. A sketch of reasonable scale and detail acceptable to the City Engineer showing proposed work.
2. A plan, of reasonable scale and stamped by a Registered Professional Civil Engineer may be required, if deemed necessary, by the City Engineer, showing ALL existing and proposed structures, utilities, and trees showing limits of drip line, in the area of work.
3. If work has been approved by other City Department prior to submitting the permit application, the approved plans and conditions shall be submitted with the permit application.

At the time of issuance of the permit, the City Engineer may require, as a condition of granting the permit, that an as-built drawing, of reasonable scale and stamped by a Registered Professional Civil Engineer, be submitted upon completion of the permitted work. Failure to provide the as-built may result in the loss of the drainlayers license.

Failure to obtain a "Street opening and trench permit" prior to starting work may result in the loss of your drainlayers license. All excavations must be inspected prior to backfilling.

No permit shall be issued, nor excavations allowed, in the downtown area, or major access roads into, or out of, the City (e.g. North, Bridge, Boston, Essex, or Lafayette Street or Highland or Loring Avenue) for the entire month of October, due to Haunted Happenings, without specific permission from the City Engineer.

No permit shall be issued, nor excavations allowed, between the dates of November 30<sup>th</sup> and April 1<sup>st</sup>, without specific permission from the City Engineer.

All applications submitted by a Licensed Drainlayer need sufficient time for plan review, comments and revisions prior to any permit being granted. In no case will plan review by the Department be less than one week, unless specific permission is granted by the City Engineer in advance.

The City is not a member of DigSafe and therefore, the Salem Water and Sewer Operation Division (W&S Operations) of the Department of Public Services (DPS), under the direction of the Public Services Director, located at 5 Jefferson Avenue (978-744-3302) must be contacted for mark-out of City utilities, (water, sewer & drain), independent of calls to DigSafe. Calls will be handled on a first come, first serve basis. Requests are to be made at least 72 business hours in advance of any work to be done. Normal DPS business hours are from 7 AM to 3 PM, Monday through Friday, excluding holidays.

Salem W&S Operations may perform the water taps, for a fee based on the scope of work to be done, unless otherwise directed by the City Engineer. The Licensed Drainlayer is responsible for supplying all parts as specified by the W&S Operations. All work to be performed by the W&S Operations, including inspections, is to be coordinated and scheduled in advance with Public Services at 978-744-3302, Monday through Friday 7 AM to 3 PM or through our online permitting system. **ALLOW A MINIMUM OF 16 BUSINESS HOURS, IN ADVANCE, TO SCHEDULE DPS OPERATIONS WORK. The DPS performs many duties with finite resources during the course of each day and lack of planning on your part does NOT constitute or justify an emergency response by the DPS. PLEASE PLAN AHEAD.**

All questions regarding this regulation should be directed to the City Engineer, prior to starting a Project.

The following documents are attached and part of this regulation:

1. Water, Sewer, and Drainage Requirements regarding the Demolition of Structures within the City of Salem dated November 26, 2021, or latest revisions.
2. Permit/ Plan Approval Policy dated November 26, 2021, or latest revisions.
3. Street Opening Rules & Regulations dated November 26, 2021, or latest revisions.
4. Check List for Tie Cards dated September 30, 2020, or latest revisions.

**Approved by:**

David H. Knowlton, P.E.  
City Engineer/ DPS Director

# **ATTACHMENTS**



**Kimberley Driscoll**  
**Mayor**

David H. Knowlton, P.E.  
City Engineer/DPS Director

# **CITY OF SALEM**

## **Engineering Department**

98 Washington Street, 2<sup>nd</sup> floor

Salem, MA 01970

Phone: (978) 619-5673

**November 26, 2021**

### **Water, Sewer and Drainage Requirements Regarding the Demolition of Structures within the City of Salem**

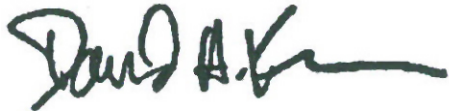
In accordance with the provisions of the General Laws of the Commonwealth of Massachusetts and the Salem Water and Sewer Department, the following regulations governing the demolition of structures within the City of Salem shall be followed.

This regulation is made in the interest of protecting the city's water, sewer, drainage and public way infrastructure at each connection located within the City of Salem, as well as to prevent conditions which may cause danger to public safety, result in water loss, or damage to city or private property due to water or sewer loss or back-ups, or cause pollution of the city's storm water receiving waters.

- I. Prior to demolition of a structure, a licensed plumber shall ascertain where all water, sewer and drainage lines are located entering and leaving said structure. The plumber shall make a determination of existing or prior use of each line, including, but not limited to domestic, commercial or industrial use; irrigation; fire suppression; sewer, storm drain or septic system; roof drain; or sump pump. After all lines have been located, the plumber shall make a formal written report with plans of all lines found to the City Engineer.
2. Once the plumber's report has been reviewed and approved by the City Engineer, a Registered Professional Civil Engineer (hereinafter referred to as "the Engineer") shall make a determination of the point of origin or discharge on each city main, for each line identified in the plumber's report. The Engineer shall also ascertain the location, use, and point of origin or discharge of any other lines on the property that may or may not be affected by the demolition or connected to the structure. The Engineer shall provide the City Engineer, for review and approval, a stamped plan of the property and adjacent City utilities, indicating the results of his investigations.
3. A request to the Department of Public Services, for assistance in shutting down any water main, prior to cutting and capping it, shall be made only after the City Engineer has approved the written reports and plans described above.

4. Prior to demolition of the structure and immediately following item #3 above, a City of Salem Licensed Drainlayer shall cut and cap the water, sewer and drainage lines at the city main and arrange for an inspection by the Department of Public Services prior to backfill. Backfill, compaction, temporary and permanent paving will follow to current city standards.
5. In the event that the lines will be used immediately after demolition, a set of plans and/or drawings, stamped by a Registered Professional Engineer, describing the lines to be used during construction, must be provided to the City Engineer for review and approval, prior to obtaining a building demolition permit. Prior to receiving approval to re-use any lines, the lines shall be inspected for condition and capacity. Sewer and drain lines proposed for re-use shall be inspected by a Licensed Drainlayer with closed circuit television equipment and a copy of the resulting DVD shall be submitted to the City Engineer for review. Water lines proposed for re-use shall be inspected by a Licensed Plumber and a written report shall be submitted to the City Engineer for review. Any other lines identified shall be abandoned as described herein.
6. A demolition permit shall not be issued until the items above have been completed and the Department of Public Services has conducted an inspection and signed off on the water and sewer portion of the Building Department prerequisite Utility Disconnections Required Form.

Approved By:

A handwritten signature in black ink, appearing to read "David H. Knowlton", with a long horizontal flourish extending to the right.

David H. Knowlton, P.E.  
City Engineer/ DPW Director



**Kimberley Driscoll**  
**Mayor**

David H. Knowlton, P.E.  
City Engineer/DPS Director

# CITY OF SALEM

## Engineering Department

98 Washington Street, 2<sup>nd</sup> floor

Salem, MA 01970

Phone: (978) 619-5673

RE: Permit/Plan Approval Policy

FROM: David H. Knowlton, P.E., City Engineer/ DPS Director

DATE: November 16, 2021

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The Following Policy will be followed for all new construction. Approvals for replacement of existing utilities will be handled on a case-by-case basis.

Request for engineering review or permit approvals must be accompanied by a design drawing showing all existing conditions and utilities as well as the proposed work with design details as needed. The design drawing must have the stamp and signature of a Massachusetts Registered Professional Engineer. The Engineering Department will complete the review in a timely manner. However, the actual time for review depends on the thoroughness of the information submitted, the complexity of the proposed work, and existing workload. The City Engineer may request a meeting with the project proponent and the design engineer to discuss design issues. Depending on the extent of the proposed development the City Engineer may require review by an independent consultant, paid for by the applicant.

Once the review is complete a Licensed Drainlayer may apply for a Street Opening Permit with a check, to the City of Salem, for the fees required. Inspection of the work by the City's DPS or Clerk of the Work for the project is required prior to back filling any work.

Once the work is completed, and prior to a sign off for occupancy by the City Engineer, the following must be submitted:

- An as built drawing stamped by the design engineer showing any changes to the design drawing and the actual work completed, this as-built drawing shall be in electronic file format (PDF & CAD) suitable for the City's access and use;
- A completed tie card, a blank (copy is available through this Department).
- A certification letter stamped and signed by the design engineer, stating that the work was completed in substantial compliance with the design drawing, including any deviations from the design drawings with an explanation of why the deviation was implemented, as well as any subsequent requirements by the City Engineer.



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City Engineer/DPS Director

Updated November 26, 2021

## **Street Opening Rules & Regulations**

**\*\*Disclaimer: Please note this document is subject to change at the City's discretion and even though every effort has been made to create a comprehensive list of requirements; the Engineering Department may require additional information or services not included in this document \*\***

### **General Requirements and Restrictions**

1. Permits will only be issued to City of Salem Licensed Drainlayers except in the case of private utilities and work on private property.
2. Complete permit application shall be submitted a minimum 7 days prior to scheduled work but only if the work is ready to move forward, except in case of an emergency. Include all permits necessary to start work with application (environmental, state, etc.). A petition for grant of location through the City Council is required for all relocations, size increase or new electrical and telecommunications conduits within the City right-of-way.
3. Incomplete permit applications submitted will be denied and a new application required. All permit applicants will be charged the appropriate City fees. If a permit that has been previously denied is resubmitted, appropriate fees will be charged.
4. Permit work shall commence within 30 days from date of issuance. The City requires confirmation that work is completed prior to permit expiration or a new permit will be required. Applicants will be charged the same fee when renewing permits unless determined otherwise by City Engineer.
5. Any work that will take 3 or more days to be completed, shall submit a weekly 2 week look ahead to the Engineering Department.
6. While working in downtown Salem, staging of material or equipment on City right of way may be limited and other locations may need to be found. Also, when no parking is necessary to complete the work and those affected spaces are metered, the contractor shall contact the parking department to have the meters bagged for the duration of the project and pay the daily rate for the spaces affected by this work.
7. Except in emergencies, work shall be limited to the hours of 7:00 AM to 3:00 PM, unless approved by the City Engineer. No noise-making activities are allowed before 7:00 AM.
8. For emergency repairs - contact Giovanna Recinos (cell 978-596-8164) during regular business hours; and the Salem Police Department after hours, Salem PD will contact DPS; a permit application for the work is required by the next business day, at the latest.
9. Without prior approval of City Engineer, no work shall be allowed on Saturdays, Sundays and legal holidays. In addition, no new work associated with city utilities shall commence on Fridays.
10. No street opening permits shall be issued between December 1 and April 1, except in case of emergency, or as determined by the City Engineer.



11. If the proposed work requires a water shutdown, the contractor shall prepare a notice, to be reviewed and approved by the Engineering Department. Contractor shall coordinate with DPS to determine the area to be affected by the shutdown. Contractors will be responsible to hand-deliver the approved notice to the abutters impacted at least 24 hours prior to the scheduled shutdown. If the shutdown will affect any food establishment, the notice shall be hand – delivered at least 48 hours prior to shutdown.
12. Permit application for new fire suppression services shall include the fire sprinkler design to confirm the appropriate service size required for the system is proposed.
13. Water pipe material shall be copper Type K (1 to 2 inch services) or CLDI class 52 (4 inch and above)
14. Water taps shall be completed using a saddle to ensure a tight connection.
15. A minimum of 4 feet separation shall be maintained between domestic and fire services.
16. Length of water service connection shall be minimized and connected directly from the main to the building perpendicularly.
17. Sewer pipe material shall be PVC SDR 35.
18. Individual domestic water, fire sprinkler and sewer services per building are required.
19. All work associated with City utilities (water/sewer/drain) must be inspected by the City DPS personal before backfilling the trench. Inspections shall be scheduled through the online permitting system at least 24 hours in advance, but not later than noon the day before.
20. All structures to be installed in public right of way (including sidewalks) shall be H-20 rated.
21. Any trench more than 100 feet measured longitudinally shall require a rodent control plan for the duration of the work. A letter from the rodent control company, stating that they have been contacted for the project, shall be submitted with the permit application. Once the trench permit is issued, a signed contract and plan showing control area shall be submitted to the City from the rodent control company. The rodent control contractor shall conduct initial baiting/extermination prior to the beginning any excavation. Frequency of reports are determined by the City's Health Department.
22. Public tree removal - tree ordinance requirements Chapter 43, Article III.
23. Excavation within the drip line of the canopy of a public shade tree requires a permit. Refer to City Ordinance Chapter 43: Trees. Permit application available on the Tree Commission's webpage of the City of Salem's Website <https://www.salem.com/tree-commission>. Additionally, refer to City Ordinance Chapter 43: Trees, Article IV. – Protected Tree Preservation for "Protected Tree" definition and permitting requirements associated with this classification of tree. Permit application for Protected Tree(s) also available on the Tree Commission's webpage."
24. City Engineer may require a MUTCD Traffic Management Plan (TMP) for any work. If unsure whether a TMP is required, contact the Engineering Department prior to submitting the permit application.
25. Street Paving Restrictions:
  - a. No permanent street paving after December 1 or before April 1. Trench patching is allowed.
  - b. At the time of installation, pavement surface or base shall be free of signs of free moisture (film of water).
  - c. Temperature shall be 40 degrees Fahrenheit & rising.
26. Trenches shall be backfilled and paved before the end of each working day or protected with pinned plates. No trenches shall be left unpaved for more than 24 hours. No plates are allowed in road during winter months, unless recessed in pavement and approved by City Engineer.
27. Trench backfill shall be compacted in six-inch lifts. 95% compaction is required.
28. Sidewalks that have been affected by any excavation shall be replaced in kind. For concrete sidewalks, full panel replacement is required.
29. Except in emergencies or approved otherwise by City Engineer, no openings shall be allowed during first full year on newly constructed/paved roads. A hardship letter may be required to allow the work.

30. If a street opening permit is requested after the first full year but within 2-5 years of a newly constructed/paved road, at a minimum, the following items will be required:
  - a. Temporary trench patch shall match existing Pavement Thickness (see attached detail D-1).
  - b. Trench shall be allowed to settle for 90 days.
  - c. After 90 days, complete curb to curb 2" pavement mill and overlay one foot beyond the width of the trench on either side, unless approved otherwise by City Engineer.
  - d. Special paving conditions may still apply to roads older than 5 years at the discretion of the City Engineer.
31. On all other roadways, the following items will be required:
  - a. Contractor shall repair with a temporary trench patch.
  - b. Trench shall be allowed to settle for 90 days.
  - c. After 90 days, City Engineer may allow temporary patch to remain. Otherwise, contractor will be required to repair with a permanent trench patch (see attached detail D-2).
32. If the road patch starts to fail, the contractor must respond and repair the pavement within twenty-four (24) hours of notification, unless a safety hazard exists. If a safety hazard exists, the contractor must respond within four (4) hours of notification. If the contractor fails to respond within the required time, the Department of Public Services may repair the trench and bill the contractor for such repair. Failure to adhere to these time frames may be grounds for revocation of drain layer license. If failure occurs when asphalt plants are not accessible, other means to mitigate the hazard will be allowed with approval of City Engineer.
33. Should it be determined by the City Engineer that work of an emergency nature must be accomplished by the Department of Public Services personnel, the total cost of labor and materials shall be charged to the permit holder.
34. All existing drainage facilities including, brooks, streams, canals, channels, ditches, culverts, catch basins, and piping, shall be adequately safeguarded so as not to impede drainage or to cause siltation of downstream areas. Damages or impacts to any public utilities shall be repaired within the same day by a licensed drainlayer. City can provide record plans upon request and if plans are available.
35. Access to private driveways and fire hydrants must be maintained during construction operations at all times. If access cannot be maintained, residents impacted must be notified a minimum 24 hours in advance.
36. The contractor shall be responsible for obtaining all permits required for equipment, work force, or particular operations (such as blasting) in the performance of the work.
37. In granting any permit, the City Engineer may attach such other conditions thereto as may be reasonably necessary to prevent damage to public or private property or to prevent operation from being conducted in a manner hazardous to life or property or in a manner likely to create a nuisance. Such conditions may include but shall not be limited to:
  - a. limitations on the time of the day, or time of year, in which the work may be performed;
  - b. restrictions to the size and type of equipment, which work within the right of way;
  - c. routes upon which materials and equipment may be transported;
  - d. location and manner of disposal of excavated materials;
  - e. requirements for dust control, street cleaning, noise prevention, or other activities that may be considered a nuisance; and
  - f. regulation as to the use of streets during the course of the work.

David H. Knowlton, P.E.  
City Engineer/ DPW Director



**Kimberley Driscoll**  
**Mayor**

# **CITY OF SALEM**

## **Engineering Department**

98 Washington Street, 2<sup>nd</sup> floor

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Phone: (978) 619-5673

David H. Knowlton, P.E.  
City Engineer/DPS Director

*Updated September 30, 2020*

## **Checklist for Water & Sewer** **Tie cards**

- ☐ Individual tie cards are required for each utility (domestic water service, fire service & sewer)
- ☐ Shall include size, material and length of each service from the main into the building
- ☐ Building shall be drawn to match the as-built condition of the building and identify the building's address (proper shape)
- ☐ Shall include the install date, install by and date the ties were taken
- ☐ Shall include ties (distance) from at least 2 different points (corners of the building, poles, manhole structures, etc.) to the water shut off valves, sewer clean outs, bends in the sewer and to the connection at the City's main for both water and sewer
- ☐ Shall identify the location of the shut off valve and any sewer clean outs or bends (sidewalk, street, etc)
- ☐ Shall include the size of the main and material if known

David H. Knowlton, P.E.  
City Engineer/ DPW Director

### **\*\*\*Disclaimers:**

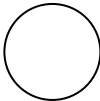
1. Every effort has been made to create a comprehensive list of requirements; however, the Engineering Department may require additional information or services not included in this checklist.
2. This document is subject to change at the City's discretion.



City of Salem, Massachusetts

SERVICE ADDRESS \_\_\_\_\_

WATER Service Card

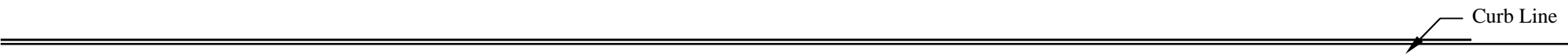
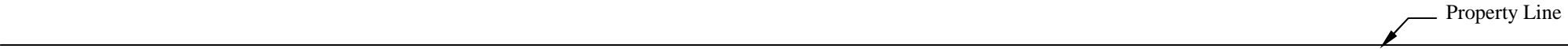


Install Date: \_\_\_\_\_

Install By: \_\_\_\_\_

Ties taken by: \_\_\_\_\_

North Arrow



\_\_\_\_\_ Street in which the main is located



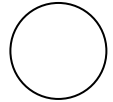
City of Salem, Massachusetts

SERVICE ADDRESS \_\_\_\_\_

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## SEWER Service Card





Install Date: \_\_\_\_\_


Install By: \_\_\_\_\_

Ties taken by: \_\_\_\_\_

**North Arrow**

Property Line  


Curb Line  


Sewer Main  


\_\_\_\_\_ Street in which the main is located