



HAVERHILL

Permit issued by Engineering Division
4 Summer Street, Room 300
Haverhill, MA 01830
Phone (978) 374-2335
Fax (978) 373-8475

RIGHT-OF-WAY & TRENCH PERMIT MANUAL **June 2018**

Permits Fee Structure

National Grid (Administration fee only per Federal Guidelines)	\$100.00
Obstruction, Driveway or Boring/Well	\$140.00
Excavation only or Trench only	\$180.00
Excavation and Trench	\$220.00
Final Repair (applicable to Excavations in sidewalk or roadway)	\$400.00*

*The City will use these funds as it deems appropriate, such as for infrared treatment, grinding, or toward paving operations, etc. If multiple services of any utility are required from a structure, this \$400.00 value shall be multiplied appropriately (e.g. if two sewer services and/or two water services are to be installed the \$400.00 fee would be multiplied times two). When the project/work consists of or includes an excavation extending over 100-feet in length, this \$400.00 fee will be replaced with a value determined appropriate by the City Engineer. This value will typically represent the projected cost of resurfacing curb to centerline when only one lane is being disturbed, or curb to curb when work extends across the centerline. Please note that associated Occupancy Permits will not be issued until this work is fully completed or an escrow account has been established to cover the value of the remaining work.

A \$25,000.00 Performance Bond is required to be on file with the City Clerk's Office, for any work activity to be performed within the City's right-of-way, to cover the cost of restoration or repairs that may be required.

A \$1,000,000.00 Contractor Liability Insurance policy that includes Workman's Compensation coverage is also required to be on file with the City Clerk's Office, for any work activity to be performed within the City's right-of-way.

All vehicles, machinery and equipment used on-site must be legally licensed, insured and be in full compliance with all applicable Federal, State and City requirements. All such

operators of the above shall possess the necessary license or certification to operate that respective item.

Notifications required for any and all proposed “excavation” (as defined in the “State Of Massachusettes Dig Safe Rules, 220 C.M.R. 99.02):

- Dig-Safe, 72-hour advanced notification; Tel. 811 or (888-DIG-SAFE). The issued Dig-Safe number will be required for the repective Right-Of-Way & Trench permit.
- Haverhill Water Division, 72-hour advanced notification; Tel. (978-374-2368).
- Haverhill Engineering Division, 72-hour advanced notification; Tel. (978-374-2335). The Engineering Division will provide the excavator with Sewer and Storm Water location information, but it is the excavator’s responsibiltiy to locate such in the field.

Trench is defined as an excavation which is narrow in relation to its length, made below the ground surface in excess of 3-feet below grade and the depth of which is, in general, greater than the width, but the width of the trench, as measured at the bottom, is no greater than 15-feet.

The typical utility service Permit will require a to-scale sketch of the proposed work, which may be done at Engineering using the City GIS map. Any proposed work that includes the installation, extension, or relocation of a main shall require a plan stamped by a Professional Engineer, which has been reviewed and approved by the City Engineer. All work equipment, material and activities shall conform and comply with all applicable Federal, State and City standars and requirements.

After issuance of a Permit, associated work shall not commence until:

1. 24-hours advance notice is given to the Engineering Office (978-374-2335) and the Right-of-Way & Trench Permit Inspector (contact info available at Engineering).
2. 24-hours advance notice is given to the Haverhill Police Department (978-373-1212).
3. In the case where lane or roadway shutdown is required, 24-hours advance notice is also given to the Haverhill Fire Department (978-373-3833). Roadway shutdown will also require a Detour Plan approved by Engineering, Police and Fire Departments.

Failure to provide proper notices may result in Project shut-down. Approval of the City Engineer is required to recommence work.

Other conditions:

- When lane or roadway shutdown is required, The Haverhill Fire Department shall also be notified when this condition is complete.

- When Emergency Repairs are required, Permit Application shall be made the following business day.
- If all work cannot be completed by the Completion Date on the Permit, an extension of time can be requested.
- Work within the right-of-way shall require warning signs in each direction to properly alert the public.
- Permits shall be at the job site at all times, and available for review by City personnel.

Breaking Through The Public Right-Of-Way Surface

- All Excavation on paved street surfaces shall be made in straight lines.
- Excavations made within 24-inches of the face of curb shall extend the pavement repair to the curb.
- When the separation between two excavations is less than 3-feet, the pavement between the excavations shall be removed so the area can be repaved as one uniform excavation pavement repair.
- The maximum length of open excavations permissible at any time shall be 100-feet.
- Where the use of steel plates is approved, the plates shall be anchored, shimmed where necessary, and the edge facing traffic protected by bituminous mix ramp.
- All permanent pavement markings damaged or removed shall be replaced in-kind.
- All sidewalks damaged or removed shall be replaced in-kind. Please note that repairs to existing cement concrete sidewalks shall extend to nearest joint or score line of closest undamaged panel. All City Standards shall be followed, including but not exclusive to the slope to meet ADA, expansion joints as deemed necessary, minimum 4,000-psi strength for cement concrete with microfiber and additional thickness with reinforcing mesh at driveway areas.
- All curbing disturbed or damaged shall be properly reset or replaced in-kind per City determination and standards.
- All grass, lawn or vegetated areas that are disturbed or damaged shall be replaced in-kind per City determination and standards.
- At the end of each day throughout a project the roadway shall be left safe and passable.
- Excavation backfilling shall not begin until Engineering Office or the Right-of-Way & Trench Permit Inspector has been notified and have given the go ahead to proceed. **Failure to follow this requirement may result in Project shut-down.**
- Excavation backfilling is to consist of the following, from the bottom:
 - From minimum 4-inches below pipe, ¾-inch (max.) stone or proper bedding material per pipe manufacturer recommendation.

- Surrounding the pipe and extending to 1-foot above the top of the pipe shall be 1½-inch minus, utility requirements or per pipe manufacturers recommendation (the most stringent shall apply).
- Approved compactable material with maximum stone size of 6-inches (note: wet or clay material, asphalt or concrete pieces and any other deleterious debris is specifically NOT approvable), compacted in lifts not greater than 1-foot.
- Minimum 18-inches of compacted processed gravel, 2-inch minus.
- 2-inches State ¾-inch bituminous concrete binder course.
- 2-inches State ½-inch bituminous concrete finish course.
- Prior to paving, the surrounding pavement shall be sawcut back a minimum 1-foot in all directions and at least to undisturbed/undamaged pavement, to minimum depth of 4-inches.
- Paving shall only be performed when the temperature is minimum 40-degrees fahrenheit and rising. A tack coat shall be applied to the vertical faces of the existing pavement before placing the excavation paving.
- Upon completion of work, the Excavator shall be responsible for the excavation and surface repair for a period of 5-years, and shall make repairs as deemed necessary by the City Engineer for defects such as but not limited to cracking, settlement, pavement deterioration, etc.

Failure to follow these guidelines, can result is rejection of application, project shutdown, inability to obtain future permits and/or recommendation to Mayor and City Council to revoke Drainlayer’s License.

CONDITIONS AND REQUIREMENTS PURSUANT TO G.L.C.82A AND 520 CMR 7.00 et seq. (as amended)

By signing the application, the applicant understands and agrees to comply with the following:

- i. No trench may be excavated unless the requirements of sections 40 through 40D of chapter 82, and any accompanying regulations, have been met and this permit is invalid unless and until said requirements have been complied with by the excavator applying for the permit including, but not limited to, the establishment of a valid excavation number with the underground plant damage prevention system as said system is defined in section 76D of chapter 164 (DIG SAFE);
- ii. Trenches may pose a significant health and safety hazard. Pursuant to Section 1 of Chapter 82 of the General Laws, an excavator shall not leave any open trench unattended without first making every reasonable effort to eliminate any recognized safety hazard that may exist as a result of leaving said open trench unattended. Excavators should consult regulations promulgated by the Department of Public Safety in order to familiarize themselves with the recognized safety hazards associated with excavations and open trenches and the procedures required or recommended by said department in order to make every reasonable effort to eliminate said safety

- hazards which may include covering, barricading or otherwise protecting open trenches from accidental entry.
- iii. Persons engaging in any in any trenching operation shall familiarize themselves with the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CFR 1926.650 et.seq., entitled Subpart P “Excavations”.
 - iv. Excavators engaging in any trenching operation who utilize hoisting or other mechanical equipment subject to chapter 146 shall only employ individuals licensed to operate said equipment by the Department of Public Safety pursuant to said chapter and this permit must be presented to said licensed operator before any excavation is commenced;
 - v. By applying for, accepting and signing this permit, the applicant hereby attests to the following: (1) that they have read and understands the regulations promulgated by the Department of Public Safety with regard to construction related excavations and trench safety; (2) that he has read and understands the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CFR 1926.650 et.seq., entitled Subpart P “Excavations” as well as any other excavation requirements established by this municipality; and (3) that he is aware of and has, with regard to the proposed trench excavation on private property or proposed excavation of a city or town public way that forms the basis of the permit application, complied with the requirements of sections 40-40D of chapter 82A.
 - vi. This permit shall be posted in plain view on the site of the trench.

For additional information please visit the Department of Public Safety’s website at www.mass.gov/dps

Summary of Excavation and Trench Safety Regulation (520 CMR 14.00 et seq.)

This summary was prepared by the Massachusetts Department of Public Safety pursuant to G.L.c.82A and does not include all requirements of the 520 CMR 14.00. To view the full regulation and G.L.c.82A, go to www.mass.gov/dps
Pursuant to M.G.L. c. 82, § 1, the Department of Public Safety, jointly with the Division of Occupational Safety, drafted regulations relative to trench safety. The regulation is codified in section 14.00 of title 520 of the Code of Massachusetts Regulations. The regulation requires all excavators to obtain a permit prior to the excavation of a trench made for a construction-related purpose on public or private land or rights-of-way. All municipalities must establish a local permitting authority for the purpose of issuing permits for trenches within their municipality. Trenches on land owned or controlled by a public (state) agency requires a permit to be issued by that public agency unless otherwise designated.

In addition to the permitting requirements mandated by statute, the trench safety regulations require that all excavators, whether public or private, take specific precautions to protect the general public and prevent unauthorized access to unattended trenches. Accordingly, unattended trenches must be covered, barricaded or backfilled. Covers must be road plates at least ¾” thick or equivalent; barricades must be fences at least 6’ high with no openings greater than 4” between vertical supports; backfilling must be sufficient to eliminate the trench. Alternatively, excavators may choose to attend trenches at all times, for instance by hiring a police detail, security guard or other attendant who will be present during times when the trench will be unattended by the excavator.

The regulations further provide that local permitting authorities, the Department of Public Safety, or the Division of Occupational Safety may order an immediate shutdown of a trench in the event of a death or serious injury; the failure to obtain a permit; or the failure to implement or effectively use adequate protections for the general public. The trench shall remain shutdown until re-inspected and authorized to re-open provided, however, that excavators shall have the right to appeal an immediate shutdown. Permitting authorities are further authorized to suspend or revoke a permit following a hearing. Excavators may also be subject to administrative fines issued by the Department of Public Safety for identified violations.

Summary of 1926 CFR Subpart P -OSHA Excavation Standard

This is a worker protection standard, and is designed to protect employees who are working inside a trench. This summary was prepared by the Massachusetts Division of Occupational Safety and not OSHA for informational purposes only and does not constitute an official interpretation by OSHA of their regulations, and may not include all aspects of the standard. For further information or a full copy of the standard go to www.osha.gov.

- **Trench Definition per the OSHA standard:**

- An excavation made below the surface of the ground, narrow in relation to its length.
- In general, the depth is greater than the width, but the width of the trench is not greater than fifteen feet.
- **Protective Systems** to prevent soil wall collapse are always required in trenches deeper than 5', and are also required in trenches less than 5' deep when the competent person determines that a hazard exists. Protection options include:
 - Shoring. Shoring must be used in accordance with the OSHA Excavation standard appendices, the equipment manufacturer's tabulated data, or designed by a registered professional engineer.
 - Shielding (Trench Boxes). Trench boxes must be used in accordance with the equipment manufacturer's tabulated data, or a registered professional engineer.
 - Sloping or Benching. In Type C soils (what is most typically encountered) the excavation must extend horizontally 1 ½ feet for every foot of trench depth on both sides, 1 foot for Type B soils, and ¾ foot for Type A soils.
 - A registered professional engineer must design protective systems for all excavations greater than 20' in depth.
- **Ladders** must be used in trenches deeper than 4'.
 - Ladders must be inside the trench with workers at all times, and located within 25' of unobstructed lateral travel for every worker in the trench.
 - Ladders must extend 3' above the top of the trench so workers can safely get onto and off of the ladder.
- **Inspections** of every trench worksite are required:
 - Prior to the start of each shift, and again when there is a change in conditions such as a rainstorm.
 - Inspections must be conducted by the competent person (see below).
- **Competent Person(s) is:**
 - Capable (i.e., trained and knowledgeable) in identifying existing and predictable hazards in the trench, and other working conditions which may pose a hazard to workers, and
 - Authorized by management to take necessary corrective action to eliminate the hazards. Employees must be removed from hazardous areas until the hazard has been corrected.
- **Underground Utilities** must be:
 - Identified prior to opening the excavation (e.g., contact Digsafe).
 - Located by safe and acceptable means while excavating.
 - Protected, supported, or removed once exposed.
- **Spoils** must be kept back a minimum of 2' from the edge of the trench.
- **Surface Encumbrances** creating a hazard must be removed or supported to safeguard employees. Keep heavy equipment and heavy material as far back from the edge of the trench as possible.
- **Stability of Adjacent Structures:**
 - Where the stability of adjacent structures is endangered by creation of the trench, they must be underpinned, braced, or otherwise supported.
 - Sidewalks, pavements, etc. shall not be undermined unless a support system or other method of protection is provided.
- **Protection from water accumulation hazards:**
 - It is not allowable for employees to work in trenches with accumulated water. If water control such as pumping is used to prevent water accumulation, this must be monitored by the competent person.
 - If the trench interrupts natural drainage of surface water, ditches, dikes or other means must be used to prevent this water from entering the excavation.
- **Additional Requirements:**
 - For mobile equipment operated near the edge of the trench, a warning system such as barricades or stop logs must be used.
 - Employees are not permitted to work underneath loads. Operators may not remain in vehicles being loaded unless vehicles are equipped with adequate protection as per 1926.601(b)(6).
 - Employees must wear high-visibility clothing in traffic work zones.
 - Air monitoring must be conducted in trenches deeper than 4' if the potential for a hazardous atmosphere exists. If a hazardous atmosphere is found to exist (e.g., O₂ <19.5% or >23.5%, 20% LEL, specific chemical hazard), adequate protections shall be taken such as ventilation of the space.
 - Walkways are required where employees must cross over the trench. Walkways with guardrails must be provided for crossing over trenches > 6' deep.
 - Employees must be protected from loose rock or soil through protections such as scaling or protective barricades.



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Permit No. _____
Date Issued _____
Permit Fee _____
Expiration Date _____

RIGHT OF WAY & TRENCH PERMIT

Pursuant to City Code Chapter 208, G.L. c. 82A §1 and 520 CMR 7 and 14 et seq.
(as amended)

Permit for:

Excavation _____ Obstruction _____ Driveway _____ Boring/Well _____ Trench _____ Other _____

LOCATION INFORMATION

Applicant/Contractor:

Phone

Address

Email

Property Owner:

Phone

Address

Email

Dig Safe #:

Sketch attached Yes () No ()

Description, location and purpose of proposed work:

Licensed & Bonded Drainlayer: Yes _____ No _____

Name and Contact Information of Insurer:

Policy Expiration Date:

Name of Competent Person (as defined by 520 CMR 7.02):

Massachusetts Hoisting License #

License Grade:

Expiration Date:

BY SIGNING THIS FORM, THE APPLICANT/EXCAVATOR AND OWNER ALL ACKNOWLEDGE AND CERTIFY THAT THEY ARE FAMILIAR WITH, OR, BEFORE COMMENCEMENT OF THE WORK, WILL BECOME FAMILIAR WITH, ALL LAWS AND REGULATIONS APPLICABLE TO WORK PROPOSED, INCLUDING OSHA REGULATIONS, G.L. c. 82A, 520 CMR 7.00 et seq., AND ANY APPLICABLE MUNICIPAL ORDINANCES, BY-LAWS AND REGULATIONS AND THEY COVENANT AND AGREE THAT ALL WORK DONE UNDER THE PERMIT ISSUED FOR SUCH WORK WILL COMPLY THEREWITH IN ALL RESPECTS AND WITH THE CONDITIONS SET FORTH BELOW.

THE UNDERSIGNED OWNER AUTHORIZES THE APPLICANT/EXCAVATOR TO APPLY FOR THE PERMIT AND THE EXCAVATOR TO UNDERTAKE SUCH WORK ON THE PROPERTY OF THE OWNER, AND ALSO, FOR THE DURATION OF CONSTRUCTION, AUTHORIZES PERSONS DULY APPOINTED BY THE MUNICIPALITY TO ENTER UPON THE PROPERTY TO MONITOR AND INSPECT THE WORK FOR CONFORMITY WITH THE CONDITIONS ATTACHED HERETO AND THE LAWS AND REGULATIONS GOVERING SUCH WORK.

THE UNDERSIGNED APPLICANT, OWNER AND EXCAVATOR AGREE JOINTLY AND SEVERALLY TO REIMBURSE THE MUNICIPALITY FOR ANY AND ALL COSTS AND EXPENSES INCURRED BY THE MUNICIPALITY IN CONNECTION WITH THIS PERMIT AND THE WORK CONDUCTED THEREUNDER, INCLUDING BUT NOT LIMITED TO ENFORCING THE REQUIREMENTS OF STATE LAW AND CONDITIONS OF THIS PERMIT, INSPECTIONS MADE TO ASSURE COMPLIANCE THEREWITH, AND MEASURES TAKEN BY THE MUNICIPALITY TO PROTECT THE PUBLIC WHERE THE APPLICANT OWNER OR EXCAVATOR HAS FAILED TO COMPLY THEREWITH INCLUDING POLICE DETAILS AND OTHER REMEDIAL MEASURES DEEMED NECESSARY BY THE MUNICIPALITY.

THE UNDERSIGNED APPLICANT, OWNER AND EXCAVATOR AGREE JOINTLY AND SEVERALLY TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE MUNICIPALITY AND ALL OF ITS AGENTS AND EMPLOYEES FROM ANY AND ALL LIABILITY, CAUSES OR ACTION, COSTS, AND EXPENSES RESULTING FROM OR ARISING OUT OF ANY INJURY, DEATH, LOSS, OR DAMAGE TO ANY PERSON OR PROPERTY DURING THE WORK CONDUCTED UNDER THIS PERMIT.

APPLICANT/CONTRACTOR SIGNATURE

_____ **DATE:** _____

EXCAVATOR SIGNATURE

_____ **DATE:** _____

OWNER'S SIGNATURE (IF DIFFERENT)

_____ **DATE:** _____

PERMIT APPROVED BY
PERMITTING AUTHORITY: Engineering Division
CONDITIONS OF APPROVAL