## Town of Northbridge

Board of Selectmen



# Excavation & Trench Safety Regulation

Adopted by vote of the Northbridge Board of Selectmen on December 22, 2008.

All provisions of this regulation shall be in effect beginning on March 1, 2009.

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#### 520 CMR 14.00 EXCAVATION AND TRENCH SAFETY

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#### I. PERMITTING AUTHORITY AND IMPLEMENTATION

In order to protect the General Public from the hazards inherent in open, unattended trenches the Commonwealth of Massachusetts has enacted legislation in the form of Chapter 82A of the General Laws requiring a permitting process be established for opening trenches on public and private property.

This regulation is the local implementing directive for the permitting process for excavation of trenches on <u>PRIVATE PROPERTY</u> and on <u>PUBLIC PROPERTY NOT WITHIN THE LAYOUT OF a PUBLIC WAY</u>. Rules and Regulations governing work performed within the layout of public roadways are found in Chapter 197 of the Code of the Town of Northbridge, Article I, Road Opening Permit Rules and Regulations.

#### A. Authority

The authority for establishing this regulation is as follows:

- 1. Massachusetts General Laws Chapter 82A, Excavation and Trench Safety
  - §2. Each city, town or public agency shall designate 1 board or officer to issue permits for the excavation of trenches on privately owned land and for the excavation of a public way of a city or town.
- 2. 520 CMR 14.00 Excavation and Trench Safety (a copy of which is attached herewith) Compliance with the requirements of this state regulation is implicit in the issuance of a permit under this regulation.
- 3. Code of the Town of Northbridge
  - § 5-107. Fees and charges by municipal agencies.
  - A. Any municipal agency which is otherwise authorized to issue a license, certificate or permit, or to render a service or to perform work for a person or class of persons, may from time to time fix a reasonable fee for the license, certificate, permit or for rendering the service or for performing the work in the manner provided in MGL C. 40, § 22F.

#### **B.** Implementation

All provisions of these rules and regulations shall be in effect beginning on March 1, 2009 or the date of adoption by the Northbridge Board of Selectmen whichever is later.

#### C. Permitting Authority

The Department of Public Works is hereby designated the Permitting Authority for the Town of Northbridge under this regulation. The Permitting Authority is located at 11 Fletcher Street with normal office hours of Monday thru Friday, 7:00 AM to 3:00 PM.

#### II. REQUIREMENT FOR OBTAINING EXCAVATION PERMITS

#### A. Within Public Ways

Procedures for obtaining permits for work to be performed within the layout of public ways are detailed in the Code of the Town of Northbridge, CHAPTER 197, STREETS AND SIDEWALKS, ARTICLE I, Road Opening Permit Rules and Regulations, the provisions of which are incorporated herein by reference for any excavation work to be performed both on private and public property.

#### B. On Private Property or Public Property not within the layout of Public Way

Excavators who propose to construct a trench on private property or on public property not within the layout of a public way must obtain a permit from the Town. The permit application form is included in this regulation. The application must be fully completed and submitted to the Permitting Authority a minimum of three (3) business days (municipal holidays excluded) prior to the proposed start of the work.

#### III. PERMIT APPLICATION

#### A. Submission of Application:

Applicants must submit a fully completed permit application to the Permitting Authority a minimum of three (3) business days (municipal holidays excluded) prior to the proposed start of the work. In addition to the completed application, the applicant must provide a certificate of insurance with general liability coverage of \$100,000 per person and \$300,000 per claim or provide evidence of self-insurance in equal amounts.

#### **B. Permit Fee:**

Applicants must submit with their application a permit fee of \$25.00. Fee shall be paid by check made payable to "The Town of Northbridge". When work is to be performed by any department of the Town of Northbridge or their agent or contractor, the permit fee shall be waived. Additionally, the permit fee shall be waived for any public utility company governed by the rules of the Massachusetts Department of Public Utilities when the work is intended to extend, repair, replace or maintain the system of the public utility company. However, all other provisions of these rules and regulations shall apply.

#### C. Term of Permit

Permits issued under this regulation shall expire thirty (30) calendar days from the date of issue. Prior to the expiration date, they may be renewed for an additional thirty (30) calendar days without additional permit fee. Thereafter, each subsequent thirty day renewal shall require the payment of an additional permit fee.

If the construction period is anticipated to be of extended duration, the permit may be issued for the entire construction period. The permit fee for the entire period shall be calculated as follows: \$25.00 for the initial 60 calendar days and \$25.00 for each additional 30 calendar day period or portion thereof. Applicants must notify the permitting authority within three (3) calendar days when all work under the permit has been completed.

#### **D.** Posting of Permit

All permits issued pursuant to this regulation shall be posted in plain view on the site of the trench. All permits shall be made available to the permitting authority, any investigator from the Division of Occupational Safety, any inspector of the Department of Public Safety, or any other lawfully authorized authority.

#### IV. TRENCH EXCAVATION – PROTECTIONS FOR THE GENERAL PUBLIC

#### A. General:

Wherever an unattended trench exists, the operation shall be secured in a safe manner and suitable protection for the general public shall be provided. The permit holder shall secure the unattended trench to prevent unauthorized entry when work is not in progress.

#### B. Trenches at Fixed Work Sites other than on a Public Way:

Access to unattended trenches opened during construction at a fixed work site on public or private property shall be restricted by covers or portable barriers.

- 1. Where covers are used they shall be comprised of steel metal plates no less than 3/4 inches thick or equivalent. Covers shall be placed over trenches. Such covers shall be level and physically secure to prevent the creation of a hazard by inadvertent movement.
- 2. Where portable protective barriers are used, barriers of a height not less than 6 feet shall be constructed surrounding the entire perimeter of the trench.
  - a. Barriers comprised of multiple sections may allow not more than four inches between each section. Adjacent sections must be securely fastened to each other.
  - b. Openings between the ground and fence shall not exceed 4 inches.
  - c. Fence-type barriers shall be secured by vertical support members not more than ten feet apart. Fencing spaces shall not exceed 4 inches when measured as mesh size or between slats.
  - d. Solid barriers shall not contain holes or indentations larger than 4 inches.
  - e. All horizontal support members shall be located on the trench side of the barrier
  - f. The wall of a dwelling or other permanent structure of a height of not less than six feet may serve as part of the barrier, provided it complies with all of the provisions of this section.
  - g. Gates and other means of egress must:
    - (i) Comply with the size and strength provisions of this section;
    - (ii) Be securely fastened to adjacent barrier components;
    - (iii) Allow not more than four inches between gates and barrier components; and
    - (iv) Be securely locked with a padlock, combination lock, or other suitable locking device.
  - h. Barriers must be clearly marked on all sides with signs indicating "Danger Do Not Enter", "Authorized Personnel Only" or equivalent warning.

- i. Barriers shall be placed at a sufficient distance from the trench to be unaffected by changing conditions of the trench site.
- 3. The provisions of this section may be substituted by continuous personal monitoring of the unattended trench by the permit holder or by person(s) under the control and direction of the permit holder.
- 4. The provisions of this section may be substituted by backfilling the work site while unattended.
- 5. The permitting authority may require any additional, site-specific provisions it deems necessary to protect the general public as a condition to any permit issued.

#### V. UNSAFE CONDITION - IMMEDIATE SHUTDOWN

#### A. Immediate Shutdown:

Whenever the permitting authority, or an inspector from either the Department of Public Safety or the Division of Occupational Safety deems a condition at a trench site to be a threat to public safety he may order that the area around the trench be made safe for the general public and may further order the immediate shutdown of the site until such time as the condition has been corrected to the satisfaction of the authority responsible for the immediate shutdown.

#### **B.** Conditions Warranting Shutdown:

Conditions which warrant immediate shutdown of a trench site by the local permitting authority, an inspector from the Department of Public Safety or the Division of Occupational Safety may include:

- a. A fatality or serious injury to a member of the general public;
- b. Failure to use protections for the General Public in accordance with this regulation or an ineffective use of any protection for the General Public allowed by 520 CMR 14.04;
- c. Failure to obtain a permit from the permitting authority;
- d. Any other condition that constitutes a serious threat to life, limb or property of the general public as determined by the permitting authority, an inspector from the Department of Public Safety, or the Division of Occupational Safety.

### VI. FAILURE TO IMPLEMENT OR EFFECTIVELY USE ADEQUATE PROTECTIONS FOR THE GENERAL PUBLIC

#### A. Corrective Actions

In the event that the permit applicant/permittee fails to implement or effectively use adequate protection for the general public or leave a trench unattended, the permitting authority or other competent authority may take any of the following corrective actions or combinations thereof:

- 1. Post an attendant to provide continuous monitoring of the unattended trench. Attendant may be a police officer, firefighter, flagman or other individual designated by the authority.
- 2. Plate the trench as required under these regulations
- 3. Backfill the trench

#### **B.** Reimbursement of Costs

The permit applicant/permittee shall be responsible for all costs associated with the above corrective actions. Reimbursement of these costs must be made before excavating operations will be allowed to resume.

#### C. Appeals

The process to appeal shutdown of work or suspension of excavation permits is detailed in 520 CMR 14.05 the provisions of which are incorporated herein.

#### **IMPORTANT PHONE NUMBERS**

#### **Emergency Numbers**

Police/Fire or Medical Emergency:	911
NSTAR Gas (To report a leak or emergency)	1-800-572-9337
National Grid (To report an emergency)	1-800-322-3223
Massachusetts Dept. of Environmental Protection (Spill Hotline)	1-888-304-1133
Whitinsville Water Co. (To report a leak)	508-234-7358
Dig Safe	1-888-344-7233
Non-Emergency Numbers	
Permitting Authority (Northbridge Department of Public Works)	508-234-3581
Northbridge Police Department	508-234-6211
Northbridge Fire Department	508-234-8448
Department of Public Works Highway Division	508-234-3581
Department of Public Works Sewer Division	508-234-2154
Building Department	508-234-6577
Plumbing Inspector/ Electrical Inspector	508-234-6577
Board of Health	508-234-3272
Planning Department	508-234-2447
Conservation Commission	508-234-0817
Whitinsville Water Company	508-234-7358
Town Manager	508-234-2095
Town Clerk	508-234-2001



### Town of Northbridge

Department of Public Works 11 Fletcher Street, P. O. Box 88 Whitinsville, Massachusetts 01588-0088 Phone: (508)-234-3581 Fax: (508)-234-0807

Permit Number: _	
Date Issued:	
Expiration Date: _	

# TRENCH PERMIT APPLICATION Pursuant to G.L. c. 82A §1 and 520 CMR 7.00 et seq.(as amended)

THIS APPLICATION CONTAINS 5 PAGES. THEY MUST BE FULLY COMPLETED PRIOR TO SUBMISSION.

Name of Applicant/Permittee:			Phone	Cell		
Street Address						
City/Town	ST	ZIP				
Name of Excavator (if different from applicant)		Phone	Cell			
Street Address						
City/Town	ST	ZIP				
Name of Owner(s) of Property				Phone	Cell	
Street Address						
City/Town	ST	ZIP				
Other Contact  Permit Fee Received No ( ) Yes ( )					No() Yes()	
Description, location and purpose of proposed trench:  Please describe the exact location of the proposed trench and its purpose (include a description of what is (or is intended) to be laid in proposed trench (e.g.; pipes/cable lines etc.) Please use reverse side if additional space is needed.						
Insurance Certificate #:						
Name and Contact Information of Insurer:						
Policy Expiration Date:						
Dig Safe #:						

Name of Competent Person (as defined by 520 CMR 7.02):	
Massachusetts Hoisting License #	
Wassachuseus Hoisting License #	
License Grade:	Expiration Date:
BY SIGNING THIS FORM, THE APPLICANT, OWNER, AND EXC THAT THEY ARE FAMILIAR WITH, OR, BEFORE COMMENCEM WITH, ALL LAWS AND REGULATIONS APPLICABLE TO WORK G.L. c. 82A, 520 CMR 7.00 et seq., AND ANY APPLICABLE REGULATIONS AND THEY COVENANT AND AGREE THAT ALL SUCH WORK WILL COMPLY THEREWITH IN ALL RESPECT BELOW.	ENT OF THE WORK, WILL BECOME FAMILIAR PROPOSED, INCLUDING OSHA REGULATIONS, E MUNICIPAL ORDINANCES, BY-LAWS AND WORK DONE UNDER THE PERMIT ISSUED FOR
THE UNDERSIGNED OWNER AUTHORIZES THE APPLICAN EXCAVATOR TO UNDERTAKE SUCH WORK ON THE PROPE DURATION OF CONSTRUCTION, AUTHORIZES PERSONS DUENTER UPON THE PROPERTY TO MONITOR AND INSPECT CONDITIONS ATTACHED HERETO AND THE LAWS AND REGUL	ERTY OF THE OWNER, AND ALSO, FOR THE ULY APPOINTED BY THE MUNICIPALITY TO THE WORK FOR CONFORMITY WITH THE
THE UNDERSIGNED APPLICANT, OWNER AND EXCAVATOR AGREIMBURSE THE MUNICIPALITY FOR ANY AND ALL COSTS AN MUNICIPALITY IN CONNECTION WITH THIS PERMIT AND THE INCLUDING BUT NOT LIMITED TO ENFORCING THE REQUIREM THIS PERMIT, INSPECTIONS MADE TO ASSURE COMPLIANCE TO MUNICIPALITY TO PROTECT THE PUBLIC WHERE THE APPLICATION THE THE APPLICATION OF THE PUBLIC WHERE THE APPLICATION OF THE PUBLICATION OF	TO EXPENSES INCURRED BY THE WORK CONDUCTED THEREUNDER, MENTS OF STATE LAW AND CONDITIONS OF THEREWITH, AND MEASURES TAKEN BY THE CANT OWNER OR EXCAVATOR HAS FAILED TO
THE UNDERSIGNED APPLICANT, OWNER AND EXCAVATOR A INDEMNIFY, AND HOLD HARMLESS THE MUNICIPALITY AND ANY AND ALL LIABILITY, CAUSES OR ACTION, COSTS, AND E OF ANY INJURY, DEATH, LOSS, OR DAMAGE TO ANY PICONDUCTED UNDER THIS PERMIT.	ALL OF ITS AGENTS AND EMPLOYEES FROM EXPENSES RESULTING FROM OR ARISING OUT
APPLICANT SIGNATURE	
DATE	
EXCAVATOR SIGNATURE (IF DIFFERENT)	
DATE	
OWNER'S SIGNATURE (IF DIFFERENT)	
DATE:	
For Town use Do not write in	n this section
PERMIT APPROVED BY	
PERMITTING AUTHORITY Date	\$ Application Fee
CONDITIONS OF APPROVAL	-

### 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 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 CMR 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:

- o An excavation made below the surface of the ground, narrow in relation to its length.
- o 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:
  - o 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.
  - o Shielding (Trench Boxes). Trench boxes must be used in accordance with the equipment manufacturer's tabulated data, or a registered professional engineer.
  - O 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.
  - o 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:
  - o Prior to the start of each shift, and again when there is a change in conditions such as a rainstorm.
  - o Inspections must be conducted by the competent person (see below).

#### • Competent Person(s) is:

- <u>Capable</u> (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
- o <u>Authorized</u> 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:

- o 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.
- O Sidewalks, pavements, etc. shall not be undermined unless a support system or other method of protection is provided.

#### Protection from water accumulation hazards:

- o 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.
- o 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:

- o For mobile equipment operated near the edge of the trench, a warning system such as barricades or stop logs must be used.
- o 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).
- o Employees must wear high-visibility clothing in traffic work zones.
- O 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.,  $O_2$  <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.

#### 520 CMR 14.00: EXCAVATION AND TRENCH SAFETY

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#### Section 14.01 Authority, Purpose, and Scope

#### (1) Purpose and Scope.

- (a) 520 CMR 14.00 is promulgated by the Department of Public Safety in conjunction with the Division of Occupational Safety pursuant to authority granted by M.G.L. c. 82A § 1.
- (b) The purpose of 520 CMR 14.00 is to establish reasonable standards to protect the safety of the citizens of the Commonwealth from the hazards inherent in trenches and to provide for penalties for individuals who violate any provision of this regulation.

#### (2) Applicability Provision.

- (a) 520 CMR 14.00 shall apply to any excavator.
- (b) This regulation shall not be construed or enforced in a manner that directly, substantially or specifically regulates the occupation, safety or health of any employee engaged in employment covered by the Federal Occupational Safety and Health Act.
- (c) This regulation shall be read in conjunction with and shall not supersede, be construed or be enforced in a manner that contradicts 780 CMR, the Massachusetts State Building Code.
- (3) Effective Date. The enforcement of 520 CMR 14.00 shall begin on January 1, 2009 in order to provide adequate time for excavators and permitting authorities to train their employees and implement the provisions contained within these regulations.

#### Section 14.02 Definitions

Competent Person- A person or persons who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to people, and who has authorization to take prompt corrective measures to eliminate them. A competent person must be able to demonstrate that he or she has been trained in and is knowledgeable about: soil analysis, the use of protections for the General Public and the requirements of this regulation.

Emergency- An unforeseen condition in which the safety of the public is in imminent danger because of a threat to life or health or where immediate correction is required to maintain or restore essential public utility service.

Excavator – Any entity including, but not limited to, a person, partnership, joint venture, trust, corporation, association, public utility, company or state or local government body or public agency which performs excavation operations including the excavation of trenches.

General Public –All natural persons not engaged in the creation of a trench.

Permit Holder –The excavator who is responsible for acquiring a permit from the Permitting Authority.

Permitting Authority – A city, town, or public agency required to administer the provisions of 520 C.M.R. 14.03.

Public Agency— A department, agency, board, commission, authority, or other instrumentality of the Commonwealth or political subdivision of the Commonwealth or two or more subdivisions thereof.

Serious Injury - A personal injury that results in death, dismemberment, significant disfigurement, permanent loss of the use of a body organ, member, function, or system, a compound fracture, or other significant injury that requires immediate admission and overnight hospitalization and observation by a licensed physician.

Trench – An excavation which is narrow in relation to its length, made below the surface ground 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.

Unattended Trench – A trench where neither the permit holder, excavator, nor any of the people who work in or at the trench are present.

#### Section 14.03 Permitting Requirements

(1) No person shall, except in an emergency, make a trench excavation, in any public way, public property, or privately owned land until a permit is obtained from the appropriately designated permitting authority.

#### (2) Issuance of Permit.

- (a) The permit holder shall be responsible for obtaining the appropriate permit for the excavation of trenches for each project from the appropriate permitting authority.
- (b) Each city, town or regionalized entity shall designate one board or officer to issue permits for the excavation of trenches on privately owned land or land owned by a city or town. Cities or towns that regionalize or share permitting and inspection functions with other cities or towns may utilize these regionalized entities for the permitting of trenches.
- (c) Any individual or entity creating a trench on property that is owned or controlled by a public agency or that a public agency otherwise has a property interest in, including but not limited to an easement, shall obtain a permit from the public agency with care and control of the property unless the permitting authority is otherwise designated through a written

agreement. The public agency issuing the permit shall electronically notify the Department of Public Safety of the permit's issuance and shall provide the following information:

- i. The location of the excavation indicated on the permit;
- ii. The anticipated date to begin the trench operation;
- iii. The anticipated date to conclude the trench operation;
- iv. The name of the permit holder; and
- v. The name of the competent person(s).
- (d) When issuing a permit under this section, the permitting authority shall attach a summary of OSHA Regulation 1926 Subpart P-Excavations and a summary of any regulation promulgated by the Department of Public Safety in conjunction with the Division of Occupational Safety in accordance with M.G.L. c. 82A.
- (3) Permit Requirements. In order to obtain a permit, the following information must be submitted to the permitting authority:
  - (a) Completed application;
  - (b) Certificate of insurance;
  - (c) Required fee in accordance with 520 CMR 14.03 (6) where applicable.
- (4) Contents of Permit Applications. All permit applications must contain the following information:
  - (a) Digsafe number (see sample permit);
  - (b) Name and contact information of permit holder;
  - (c) Name and contact information of the excavator;
  - (d) Name of the competent person(s)
  - (e) Name of person(s) performing the excavation of the trench;
  - (f) Massachusetts Hoisting License number, license grade and expiration date of the person(s) performing the excavation of the trench;
  - (g) Permit expiration date (if applicable);
  - (h) Specific location of the trench;
  - (i) Name and contact information of insurer;
  - (j) All permit applications shall also include the following statements pursuant to M.G.L. c.82A, §3 (3) and (5) (i), (ii):
    - 1. "Persons engaging 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."
    - 2. "By applying for, accepting and signing this permit, the applicant attests to the following: (i) that he has read and understood the regulations promulgated by the Department of Public Safety with regard to trench safety; (ii) that he has read and understood the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CFR 1926.650 *et.seq.*, entitled Subpart P "Excavations".

- (5) Posting. All Permits issued pursuant to this regulation shall be posted in plain view on the site of the trench. All permits shall be made available to the permitting authority, any investigator from the Division of Occupational Safety, any inspector of the Department of Public Safety, or any other lawfully authorized authority.
- (6) Permit Fees. In accordance with Chapter 82A, § 2, the local permitting authority may charge a reasonable fee to cover the administrative costs incurred by the authority in connection with the review and processing of permits.

#### Section 14.04 Protections for the General Public

- (1) Generally. Wherever an unattended trench exists, the operation shall be secured in a safe manner and suitable protection for the general public shall be provided. The permit holder shall secure the unattended trench to prevent unauthorized entry when work is not in progress.
- (2) Trenches on public ways. Access to unattended trenches opened during construction on a public way shall be restricted by covers or barriers.
  - (a) Where covers are used they shall be comprised of steel metal plates no less than ¾ inches thick, or equivalent. Covers shall be placed over the trench. Such covers shall be level and physically secure to prevent the creation of a hazard by inadvertent movement.
  - (b) Where barriers are used they shall comply with the following provisions:
    - 1. A continuous barrier not less than six feet in height shall surround the unattended trench.
    - 2. All barriers shall be of adequate strength and shall be supported in a manner that will allow them to be seen by the motorist and provide a stable support not easily blown over by the wind or traffic.
    - 3. Trench barriers adjacent to high speed traffic may include traffic control barrels ballasted by sandbags or temporary pre-cast concrete barriers as components.
    - 4. Trench barriers comprised of multiple sections shall allow not more than four inches between each section. Adjacent sections must be securely fastened to each other.
    - 5. Any openings between the ground and barrier shall not exceed 4 inches.
    - 6. Barriers shall be at a sufficient distance from the trench to be unaffected by changing conditions of the trench site.
- (3) Trenches at fixed work sites other than on a public way. Access to unattended trenches opened during construction at a fixed work site on public or private property shall be restricted by covers or portable barriers.
  - (a) Where covers are used they shall be comprised of steel metal plates no less than ¾ inches thick or equivalent. Covers shall be placed over trenches. Such covers shall be level and physically secure to prevent the creation of a hazard by inadvertent movement.
  - (b) Where portable protective barriers are used, barriers of a height not less than 6 feet shall be constructed surrounding the entire perimeter of the trench.
    - 1. Barriers comprised of multiple sections may allow not more than four inches between each section. Adjacent sections must be securely fastened to each other.
    - 2. Openings between the ground and fence shall not exceed 4 inches.

- 3. Fence-type barriers shall be secured by vertical support members not more than ten feet apart. Fencing spaces shall not exceed 4 inches when measured as mesh size or between slats.
- 4. Solid barriers shall not contain holes or indentations larger than 4 inches.
- 5. All horizontal support members shall be located on the trench side of the barrier.
- 6. The wall of a dwelling or other permanent structure of a height of not less than six feet may serve as part of the barrier, provided it complies with all of the provisions of this section.
- 7. Gates and other means of egress must:
  - (i) Comply with the size and strength provisions of this section;
  - (ii) Be securely fastened to adjacent barrier components;
  - (iii) Allow not more than four inches between gates and barrier components; and
  - (iv) Be securely locked with a padlock, combination lock, or other suitable locking device.
- 8. Barriers must be clearly marked on all sides with signs indicating "Danger Do Not Enter", "Authorized Personnel Only" or equivalent warning.
- 9. Barriers shall be placed at a sufficient distance from the trench to be unaffected by changing conditions of the trench site.
- (4) The provisions of this section may be substituted by continuous personal monitoring of the unattended trench by the permit holder or by person(s) under the control and direction of the permit holder.
- (5) The provisions of this section may be substituted by backfilling the work site while unattended.
- (6) The permitting authority may require any additional, site-specific provisions it deems necessary to protect the general public as a condition to any permit issued.

### Section 14.05 Suspension and Revocation of Permits; Assessment of Fines; Immediate Shut-Down; Appeals

- (1) Scope 520 CMR 14.05 establishes the suspension and revocation procedures for all permits, establishes the penalty structure for the assessment of administrative penalties and sets forth the procedure for immediate shut down of the site.
- (2) Revocation and Suspension of Permit by Permitting Authority. The permitting authority may, after a hearing, suspend or revoke a permit issued pursuant 520 CMR 14.03. All hearings under this section shall be held in accordance with G.L. c. 30A and 801 CMR 1.02. Each permitting authority shall have the discretion to establish the grounds consistent with this regulation for a suspension or revocation however such suspension or revocation shall not be imposed in a manner which directly, substantially or specifically regulates the occupational safety or health of any employee engaged in employment covered by the Federal Occupational Safety and Health Act.
- (3) Assessment of Fines by the Department of Public Safety

- (a) Notwithstanding any action taken by a permitting authority pursuant to 520 CMR 14.05
- (2), the Department of Public Safety may assess administrative fines against the excavator in accordance with M.G.L. c. 82A § 1.
- (b) Penalty Structure. Whenever the Department of Public Safety finds upon inspection, investigation or other information in its possession, that a violation of any provision of 520 CMR 14.00 has occurred, the Department may assess an administrative penalty not to exceed \$5,000.00 for each violation. Each day during which a violation exists shall constitute a separate offense.
- (c) Factors in determining amount of penalty. In determining the amount of the administrative penalty, the Department of Public Safety may consider one or more of the following:
  - 1. The willfulness of the violation;
  - 2. Previous violations resulting in the imposition of administrative penalties as set forth in the rules of the Department of Public Safety;
  - 3. Whether the violation resulted in an accident involving bodily injury or death to a member of the general public;
  - 4. The actual or potential danger to the public;
  - 5. Whether the excavator did everything reasonable to attempt to comply with the regulation;
  - 6. Actions, if any, taken by the permitting authority;
  - 7. Whether imposition of the administrative penalty is likely to deter future noncompliance; and
  - 8. The interests of public safety.
- (d) Notice. The Department of Public Safety shall send written notice of alleged violation(s) and intent to impose administrative penalties to the violator. The Notice shall specify:
  - 1. The specific condition(s) which constitute the violation;
  - 2. The provision(s) of the regulation with which there has been non-compliance;
  - 3. The amount that is to be assessed as a penalty for each alleged violation;
  - 4. The procedure for requesting a hearing as set forth in 520 CMR 14.05 (7).
- (e) Hearings. Written requests for a hearing must be filed with the Department of Public Safety within ten calendar days of receipt of the notice of violation issued pursuant to 520 CMR 14.05 (7).
- (4) The failure to make a timely request for a hearing shall constitute a waiver of the right to a hearing and imposition of the penalty set forth in the Notice. A hearing shall be commenced by the Department of Public Safety within a reasonable period after the request for a hearing has been received by the Department of Public Safety. Any person aggrieved by a determination of the Department of Public Safety may appeal to the Superior Court in accordance with M.G.L. c. 30A, §14.
- (5) Immediate Shutdown by State or Local Authorities
  - (a) Whenever the permitting authority, or an inspector from either the Department of Public Safety or the Division of Occupational Safety deems a condition at a trench site to be a threat to public safety he may order that the area around the trench be made safe for the general public and may further order the immediate shutdown of the site until such time as the

condition has been corrected to the satisfaction of the authority responsible for the immediate shutdown.

- (b) Conditions which warrant immediate shutdown of a trench site by the local permitting authority, an inspector from the Department of Public Safety or the Division of Occupational Safety may include:
  - 1. A fatality or serious injury to a member of the general public;
  - 2. Failure to use protections for the General Public in accordance with this regulation or an ineffective use of any protection for the General Public allowed by 520 CMR 14.04;
  - 3. Failure to obtain a permit from the permitting authority;
  - 4. Any other condition that constitutes a serious threat to life, limb or property of the general public as determined by the permitting authority, an inspector from the Department of Public Safety, or the Division of Occupational Safety.
- (6) Re-Inspection following Immediate Shutdown The trench site shall remain closed until all necessary repairs and corrections have been made to the satisfaction of the authority responsible for the immediate shutdown, provided however, that the Department of Public Safety and Division of Occupational Safety shall have concurrent jurisdiction to authorize the reopening of a trench shut down by either agency.

Reopening of the site may not occur until the site has been inspected by the authority ordering the immediate shutdown and found to be safe for reopening and operation.

- (7) Appeal from Immediate Shutdown. Any person aggrieved by the decision by the Department of Public Safety, the Division of Occupational Safety, or the permitting authority to shut down a trench site pursuant to 520 CMR 14.05 (5) may make an appeal for a hearing to the entity responsible for the immediate shutdown. The site shall remain shut down during the appeal period. Such appeal shall be made in writing within 10 calendar days. Upon receipt of the appeal, a hearing shall be scheduled promptly. All hearings under this provision shall be held in accordance with G.L. c. 30A and 801 CMR
- 1.02. Any person aggrieved by a decision after hearing may appeal to the Superior Court in accordance with G.L. c. 30A § 14.
- (8) Serious Injury/Fatality; Notification; investigation.
  - (a) Notification. An excavator shall report all serious injuries or fatalities which occur at the location of a trench to the State Police within one hour from the time the serious injury occurred.
  - (b) Investigation. In the event that a serious injury or fatality occurs, the trench site shall be immediately secured. The site surrounding the trench shall not be disturbed, cleaned, or altered in any way except by a public authority or as necessary for the preservation of life and property or the removal of the injured person(s) until receiving express authorization from an inspector of the Department of Public Safety.

#### REGULATORY AUTHORITY

M.G.L. c. 82A, §§1-5.