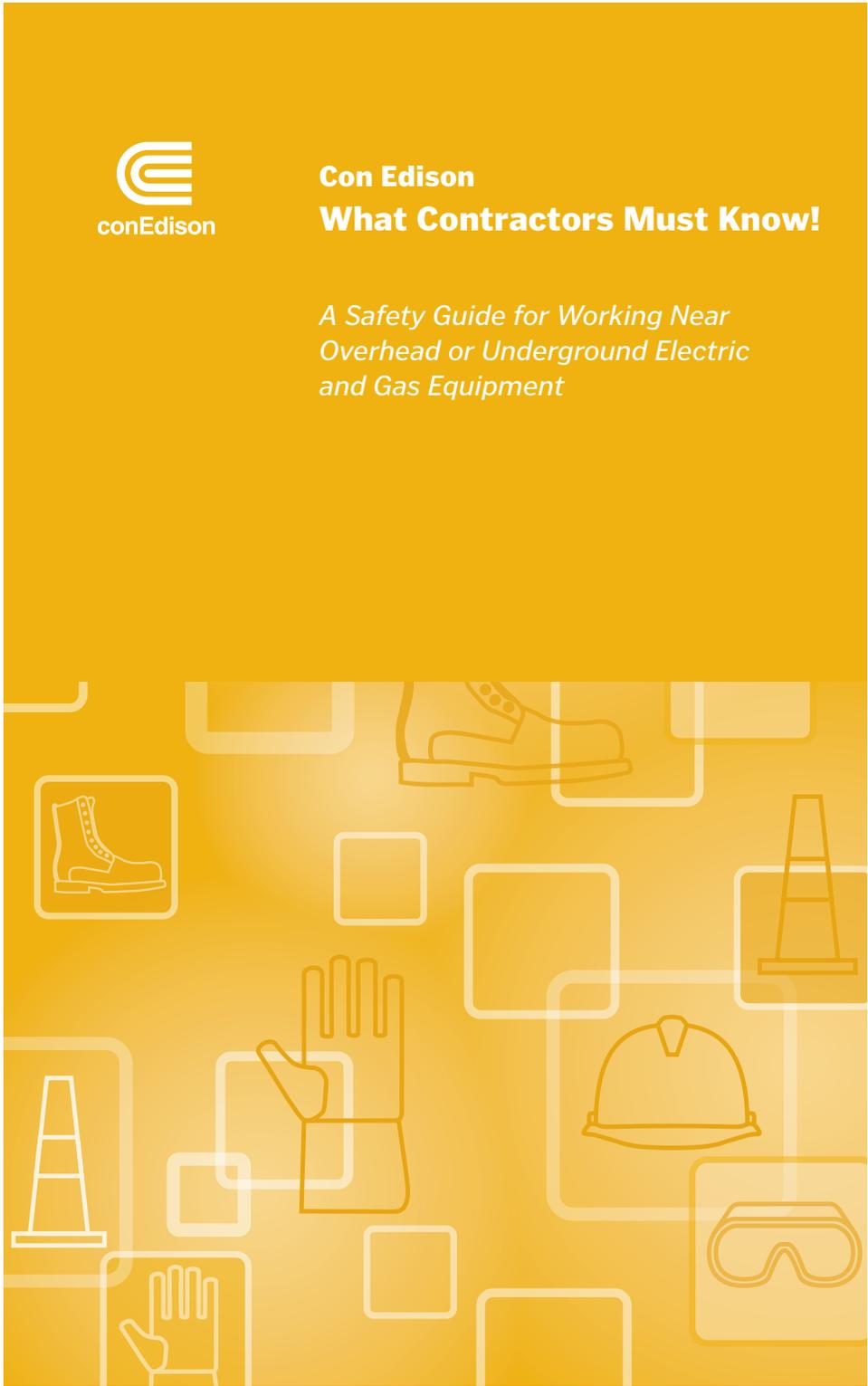




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April 2014



Con Edison What Contractors Must Know!

*A Safety Guide for Working Near
Overhead or Underground Electric
and Gas Equipment*

A Safety Guide for Developers, Equipment Operators, and other Contractors

The energy that metropolitan New York relies on is delivered by complex, sophisticated electric and gas systems.

These same systems can make construction, excavating, and other building-related or outdoor work more difficult and dangerous. And, anyone working near overhead or underground electric or natural gas services must obey New York State and Federal laws that help ensure worker and public safety and protect energy systems — **and that responsibility includes notifying the appropriate power company before work begins.**

This brochure is provided for informational purposes only and does not constitute legal advice. The New York State laws and regulations reproduced herein are current as of this document's publication (April 2014). This reproduction is not intended to include all statutory and regulatory provisions that may apply to work near overhead or underground facilities. Contractors are responsible for knowing and complying with all laws that apply to the work they perform, including but not limited to any applicable federal laws or municipal codes. Questions concerning the law should be directed to the reader's own attorney.

Overhead Power Lines

Let Us Know Anytime You Are Within 10 Feet of Our Lines

Before you start work near overhead power lines, you must submit a work request at coned.com/es. You must submit your request no less than five working days before the job begins.

You cannot start work until Con Edison tells you it is safe to work in the area.

To submit a work request:

- Go to coned.com/es.
- Click on *Launch Project Center*.
- After logging in, select *Create New Request*.
- Under *Request Type*, select *Non Service Request*.
- Under *Utility*, choose *Electric*, then click *Next*.
- Select *Overhead Facilities Protection*, then click *Next*.
- Enter all your information, including *Scope of Work*.

Once you submit your request, you will receive a confirmation e-mail, and a Con Edison representative will contact you.

Stay safe when working near overhead power lines:

- Avoid direct and indirect contact with power lines.
- Stay **a minimum of 10 feet away** from all unprotected lines.
The law requires that 10 foot minimum, known as the “danger zone.”
- Always assume that a power line is “live” or energized. Only Con Edison can verify that an electrical line has been de-energized.
- Ladders, scaffolds, or any other equipment that places a person near a power line create special hazards.
- Never extend a tool within 10 feet of a power line.
- Keep vehicles and heavy machinery out of the danger zone.
- **If you experience a power-line-related emergency, call 1-718-222-7175.**

Beware of Underground Lines: Call Before You Dig

Much of the Con Edison equipment that transmits and delivers energy is under the ground, including more than 4,300 miles of natural gas pipelines. We work diligently to keep our systems safe and our excellent safety record demonstrates that commitment. New York State law requires anyone planning to dig or excavate to call a one-call center two to 10 days in advance.

The one-call center will contact Con Edison on your behalf to obtain the necessary clearances, including the locations of all in-ground electrical and natural gas lines near your job site.

To reach the one-call center, call 811.

- **Call seven days a week, 24 hours a day**
- **Call at least two working days ahead of time**

This single, toll-free call will help protect you and your workers from injury and help you avoid costly repair bills from damaged utility equipment.

Stay safe when working near underground pipelines:

- Call 811 before you dig.
- Wait for confirmation from the appropriate utility.
- Once the excavation markings are set, respect them.
- Know the signs of a gas leak: rotten-egg smell, hissing or whistling sound, white fog.
- If you damage a gas pipeline, go to a safe area and call 1-800-75-CONED (1-800-752-6633).

Overhead

New York Labor Law § 202-h

Chapter 31. of the Consolidated Laws

Article 7. General Provisions

§ 202-h. High-voltage proximity (excerpts)

1. This section may be known as the “high-voltage proximity act.”

2. **Definitions.** For the purpose of this section:

(a) “High-voltage lines” means electrical conductors installed above ground and having a voltage differential in excess of six hundred volts between any pair of conductors or between any conductor and ground. In the case of alternating current, the voltage shall be measured in R.M.S. value. This definition shall not include approved armored cable used to supply power to portable equipment and insulated power cables enclosed in approved metallic raceways.

(b) “Dangerous proximity” means a distance within ten feet of high-voltage lines, or within such greater distances as are set forth in the current editions and any subsequent revisions of the regulations of the United States Occupational Safety and Health Administration (29 CFR parts 1910 and 1926), the New York industrial code (12 NYCRR part 23) and the national electrical safety code.

3. **Prohibited activity.**

(a) No employer or supervising agent of an employer shall require or permit an employee to, and no self-employed individual, independent contractor having no employees or homeowner shall, participate in the operation, erection, transportation, handling, or storage of any tools, machinery, equipment, supplies, materials or apparatus, or the moving of any building, if in the course of such operation, erection, transportation, handling, storage or moving it is possible for such tools, machinery, equipment, supplies, materials, apparatus or building, to come within dangerous proximity of a high-voltage line; or participate in any activity which would cause the employee, self-employed individual, independent contractor or homeowner to come within dangerous proximity of a high-voltage line; unless precautionary action has been taken to protect against the danger from contact with such high-voltage line, either by de-energizing such high-voltage line and grounding it where necessary, or other effective methods or devices which have been approved in advance by the owner or person in charge of such high-voltage lines for the particular case and for the particular location.

(b) Employers whose employees operate, erect, transport, handle or store any tools, machinery, equipment, supplies, materials or apparatus, or move any building, which in the course of such operation, erection, transportation, handling, storing or moving might come within dangerous proximity of a high-voltage line, shall advise such employees of the dangers inherent in such work, highlight precautions which are to be taken under such circumstances and encourage employees to communicate with and advise employers or their supervising agents of conditions which would require precautionary action by the employer as required by paragraph (a) of this subdivision.

(c) In no case shall the required clearance be provided by moving or displacing any conductor, except where the same is temporarily relocated pursuant to arrangements made with the owner or person in charge of the high-voltage line, and such actions are performed by such owner or person in charge.

(d) All high-voltage lines shall be considered as energized high-voltage lines until assurance has been given that they are otherwise by qualified representatives of the owners or persons in charge of such lines...

Codes, Rules and Regulations of the State of New York

Title 12. Department of Labor

Chapter I. Industrial Board of Appeals

Subchapter A. The Industrial Code

Part 57. High Voltage Proximity

Section 57.1 Title and citation.

Within and for the purposes of the Department of Labor, this Part (rule) may be known as Industrial Code Rule No. 57, relating to hazards to untrained persons working or moving materials or equipment in proximity to high-voltage power lines. It may be cited as Code Rule 57 High Voltage Proximity as an alternative and without prejudice to its designation and citation established by the Secretary of State.

Section 57.2 Purpose and intent of Part (rule).

(a) **Legislative findings.** The Legislature has found that untrained persons working or moving materials or equipment in proximity to high-voltage power lines are endangered in the absence of suitable precautions, and that the quality of electrical service is likewise endangered by the absence of such precautions.

(b) **Purpose and intent.** It is the purpose and intent of this Part (rule) to reduce the risks to untrained persons working or moving materials or equipment in proximity to high-voltage power lines, and to help insure the quality of electrical service by requiring compliance by said persons with certain procedures that will insure reasonable protection to said persons and to the high-voltage power lines in proximity to work locations or where materials or equipment are moved.

Section 57.3 Application.

(a) This Part (rule) shall apply throughout the State of New York to any employer, any agent of an employer who supervises employees, self-employed individuals, independent contractors having no employees and homeowners, subject to the exceptions set forth in subdivision (b) of this section.

(b) The provisions of this Part (rule) shall not apply to:

(1) The construction, reconstruction, operations, and maintenance of overhead electrical conductors and their supporting structures and associated equipment by authorized and qualified electrical workers;

(2) The authorized and qualified employees of any person engaged in the construction, reconstruction, operation, and maintenance of overhead electrical circuits or conductors and their supporting structures and associated equipment of rail transportation systems or electrical generating, transmission, distribution, and communication systems; and

(3) Motor vehicle transportation across or along a public road or highway where the combined vehicle and load is not at such time in excess of 13-1/2 feet high and 13 feet wide.

Note: The exception set forth in paragraph (b)(2) of this section, when applied to railway systems, shall be construed as permitting operation of standard rail equipment, which is normally used in the transportation of freight or passengers or both and the operation of relief trains, or other equipment in emergencies, or in maintenance of way service, within dangerous proximity of any high-voltage conductor of such railway system. Normal repair or construction operations within dangerous proximity of any high-voltage conductor shall be prohibited under this Part unless performed by properly qualified and authorized persons or employees under the direct supervision of an authorized person familiar with the hazards involved, unless there has been compliance with the safety provisions set forth in this Part.

Section 57.4 Definitions.

As used in or in connection with this Part (rule) the following terms shall mean:

(a) **High-voltage lines.** Electrical conductors installed above ground and having a voltage differential in excess of 600 volts between any pair of conductors or between any conductor and ground. In the case of alternating current, the voltage shall be measured in R.M.S. value. All high-voltage lines shall be considered as energized high-voltage lines until assurance has been given that they are otherwise by qualified representatives of the owners or persons in charge of such lines.

Exception: This definition shall not include approved armored cable used to supply power to portable equipment and insulated power cables enclosed in approved metallic raceways.

(b) **Dangerous proximity.** As defined in Labor Law, section 202-h, dangerous proximity shall be the distance within 10 feet of high-voltage lines, or within such greater distances as are set forth in the 1990 edition of the regulations of the United States Occupational Safety and Health Administration (29 CFR parts 1910 and 1926), the New York Industrial Code (12 NYCRR Part 23) and the National Electrical Safety Code, 1990 edition, published by the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.

(c) **R.M.S. value.** The greatest effective difference of potential between any two conductors of the circuit concerned.

(d) **Prohibited activity.** The operation, erection, transportation, handling, or storage of any tools, machinery, equipment, supplies, material or apparatus, or the moving of any building, if in the course of such operation, erection, transportation, handling, storage or moving of such objects it is possible to come within dangerous proximity of a high-voltage line.

Section 57.5 Precautionary action.

No individual covered by the provisions of this Part (rule) shall engage in, or require a person employed by him/her to engage in any prohibited activity unless precautionary action has been taken to protect against the danger from contact with a high-voltage line, either by de-energizing such high-voltage line and grounding it where necessary, or by other effective methods or devices which have been approved in advance for the particular case and for the particular location by the owner or persons in charge of such high-voltage lines.

Section 57.6 Employee information.

(a) Before allowing any employee to engage in prohibited activity, employers subject to the provisions of this Part (rule) shall:

(1) Advise such employee of the dangers inherent in the operation, erection, transportation, handling, storage or moving of any tools, machinery, equipment, supplies, materials, apparatus or building in dangerous proximity to high-voltage lines;

(2) Highlight precautions which are to be taken prior to or in conjunction with engaging in such prohibited activity;

(3) Encourage employees to communicate with and advise employers or their supervising agents of conditions which would involve precautionary action by the employer as required under section 57.5 of this Part (rule).

(b) The information required under paragraphs (a)(1) and (3) of this section shall be provided to the employee in writing and shall be clear, concise and easily understood. Such written information shall contain the location and phone number where the employer or his/her supervising agent may be reached for the purpose of reporting conditions which would involve precautionary action.

(c) The information required under paragraph (a)(2) of this section shall be provided to the employee verbally or in writing and shall be related to the specific circumstances of the prohibited activity involved.

Section 57.7 High-voltage line proximity procedure.

(a) At any site where any person or equipment may possibly come within dangerous proximity of a high-voltage line, such approach shall not be made until the following procedure has been complied with:

(1) The employer, contractor or other person making such approach or who is responsible for such activity, shall promptly notify the owner or person in charge of such high-voltage line in writing at least five normal work days before such approach is to be made. If the notification is made by regular mail, three extra days notice shall be given.

Exception: In any emergency situation involving imminent danger to the life, health or safety of any person, the person responsible for such activity is not required to comply with this provision.

(2) Within three normal working days following the receipt of such written notice, the owner or person in charge of the high-voltage line shall respond to the person making such approach or who is responsible for such activity of the procedure to be followed prior to performing any work in dangerous proximity to such high-voltage line.

(3) The owner or person responsible for the high-voltage line shall perform all necessary precautionary actions to be taken to protect against the danger from contact with such high-voltage line, either by de-energizing such high-voltage line and grounding it where necessary, or by approving in advance other effective methods or devices for the particular cases and for the particular locations.

(4) The employer, contractor or other person responsible for the activity within dangerous proximity of such high-voltage line shall be responsible for all costs incurred in connection with such precautionary action including determining what precautionary measures are necessary and preparations for implementing them whether or not such precautionary measures are actually implemented.

Section 57.8 Warning signs.

(a) The owner, agent, lessee, bailee, user, or employer responsible for the operations of equipment capable of coming within dangerous proximity of a high-voltage line in the course of its operation, shall post and maintain in plain view of the operator on each piece of such equipment, an approved durable warning sign legible at a distance of 12 feet. Every such warning sign shall bear the following legend in black letters on a yellow background:

DANGER
Unlawful to Operate Any Part of This Equipment Within 10 Feet
of High-Voltage Lines

(b) All posted warning signs shall specify the actual distance by which the term “dangerous proximity” is defined for the particular case and location to which this Part (rule) applies.

(c) Additional warning signs shall be placed on various parts of the equipment and at the work site providing similar warnings to others in the vicinity of the high-voltage lines.

(d) If for any reason and for any time period, the operator of the equipment is unable to assess visually the clearance of the equipment from overhead high-voltage lines, a second person shall be designated to observe the clearance and provide timely warning to the equipment operator.

Section 57.9 Civil penalty.

Any person violating any of the provisions of this section shall be liable for a penalty of not less than \$100 nor more than \$1,000 to be collected in a civil action by a summary proceeding. Any violation of this section by an officer, agent or employee shall be a violation by the employer if such employer had knowledge of and actual control over the cause of such violation. Where the violation is of a continuing nature, each day during which it continues shall constitute an additional, separate and distinct offense.

Section 57.10 Severability.

If any provision of this Part (rule) or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Part (rule) which can be given effect without the invalid provisions or applications and to this end the provisions of this Part (rule) are declared to be severable.

Underground

Codes, Rules and Regulations of the State of New York

Title 16. Department of Public Service

Chapter VII. Provisions Affecting Two or More Kinds of Public Service

Subchapter F. Miscellaneous

Part 753. Protection of Underground Facilities

Subpart 753-3. Duties of Excavators

Section 753-3.1 Timing of notice for excavation or demolition.

(a)(1) Before commencing or engaging in any nonemergency excavation or demolition, each excavator shall provide notice of the location and date of the planned excavation or demolition to the one-call notification system serving the vicinity in which the excavation or demolition is to take place.

(2) Such notice shall be served at least two but not more than 10 working days, not including the date of the call, before the commencement date of the excavation or demolition.

(b) Excavation or demolition which is required to be performed promptly as a result of an emergency, disaster or to correct an immediate hazard may proceed immediately without prior notification to operators, if the situation is so serious that the excavation or demolition cannot reasonably be delayed. However, excavators shall notify the one-call notification system as soon as possible that such excavation or demolition is commencing or is under way. Extreme caution shall be employed by the excavator to prevent damage to existing underground facilities and to avoid endangering persons and property.

(c) At least seven working days in advance of the commencement date of a demolition, the excavator shall request a pre-demolition conference, through the one-call notification system, with all member operators who have underground facilities at or near the demolition area. A pre-demolition conference may encompass one or more demolition(s) in the project area. A request for a pre-demolition conference is not a substitute for the notice of intent to perform demolition work required by this section.

(d) Whenever an excavator cancels an excavation or demolition, he or she shall promptly communicate the cancellation to facility operators utilizing the one-call notification system.

(1) Whenever an excavator postpones the commencement date for 10 or less working days, no call to the one-call notification system or operators is required.

(2) Whenever an excavator postpones an excavation or demolition more than 10 working days, the same requirements for notice shall pertain to the revised commencement date as listed in subdivision (a) of this section.

(e) Information requested from an operator for design purposes shall not be a substitute for the notice of intent to perform excavation or demolition as required by this Subpart.

Section 753-3.2 Detailed notice requirements.

(a) Every notice provided by an excavator to the one-call notification system concerning planned excavation or demolition shall contain at least the following information:

- (1) Name of the person serving such notice;
 - (2) Name, address and telephone number of the excavator or excavator's company;
 - (3) Excavator's field telephone number, if one is available;
 - (4) Name of the field contact person, if any;
 - (5) Address and exact location as well as the approximate extent and dimensions of the planned work area;
 - (6) Means of excavation or demolition and whether or not explosives are to be used;
 - (7) Brief description of the planned excavation or demolition;
 - (8) Date and time the excavation or demolition is planned to commence.
- (b) When necessary for adequate identification, or as determined by mutual agreement of the operator and excavator the excavator shall delineate the work area with white paint, white stakes or other suitable white markings.

Section 753-3.3 Commencement of excavation or demolition.

(a) The excavator may proceed with excavation or demolition on the stated date of commencement if, prior thereto, he or she has received notification from each and every operator notified by the one-call notification system that:

- (1) Such operator has no underground facility located in or within 15 feet of the work area; or
 - (2) That any underground facility located in or within 15 feet of the work area has been staked, marked or otherwise designated in accordance with the provisions of Subpart 753-4 of this Part.
- (b) The excavator shall not commence the excavation or demolition on the stated commencement date if he or she has been notified by an operator that the staking, marking or other designations of an underground facility located in or within 15 feet of the work area will not be completed on the stated commencement date. In such case, the operator is required promptly to report such fact to the excavator and to inform the excavator of a prompt and practicable completion date, which in no case shall be more than two working days after the excavator's stated commencement date, unless a longer period is agreed to by both parties.
- (c) The excavator may proceed with excavation or demolition prior to the stated date of commencement once he or she has received notification from each and every operator notified by the one-call notification system that each operator has no underground facilities located in or within 15 feet of the work area.

Section 753-3.4 Staking, marking or other designation.

(a) Every excavator shall be familiar with the provisions of this Part, especially those relating to size and depth indications, color coding, center line or offset staking or marking and the location of underground facilities by designations other than staking or marking.

(b) Whenever the excavator determines that a review of the staking, marking or other designation is necessary or that additional information is required, he or she shall so notify the operator or the one-call notification system.

Section 753-3.5 Preservation of stakes, markings or other designations.

Starting on the stated commencement date given in the excavator's notice to the one-call notification system, the excavator shall be responsible for protecting and preserving the staking, marking or other designation until no longer required for proper and safe excavation or demolition work at or near the underground facility.

Section 753-3.6 Verification of underground facilities.

Where an underground facility has been staked, marked or otherwise designated by the operator and the tolerance zone overlaps with any part of the work area, or the projected line of a bore/directional drill intersects the tolerance zone, the excavator shall verify the precise location, type, size, direction of run and depth of such underground facility or its encasement. Verification shall be completed before the excavation or demolition is commenced or shall be performed as the work progresses.

(a) Powered or mechanized equipment may be used within the tolerance zone for removal of pavement or masonry but only to the depth of such pavement or masonry.

(1) Below the depth of pavement or masonry, powered equipment may be used in the tolerance zone prior to the verification of the location of facilities when agreed to in writing by the affected operator(s).

(2) Operators, or their agents and contractors working under their direction, may use powered equipment to locate their own facilities within the tolerance zone.

(b) The verification of underground facilities furnishing gas or liquid petroleum products shall be accomplished by the excavator by exposing the underground facility or its encasement to view by means of hand dug test holes at one or more points where the work area and tolerance zone overlap, or more points as designated by the operators of such facilities.

(c) The verification of underground facilities other than those furnishing gas or liquid petroleum products shall be performed at one or more points for each such underground facility as may be required by the operator. Verification shall be accomplished by exposing the underground facility or its encasement to view by hand dug test holes or by other means mutually agreed to by the excavator and operator.

Section 753-3.7 Unverifiable underground facilities.

If the precise location of an underground facility cannot be verified by the excavator after diligent search at a reasonable depth within the tolerance zone as staked, marked or otherwise designated by the operator, the excavator shall so notify such operator as soon as possible. The operator shall respond in accordance with section 753-4.10 of this Part.

Section 753-3.8 Powered excavating equipment limitations.

After verifying the location of an underground facility, the excavator shall not employ powered or mechanical excavating equipment closer than four inches in any direction from the staked, marked or otherwise designated or known outside diameter or perimeter of such facility or its protective coating unless agreed to in writing by the operator of the affected underground facility. Any such written agreement shall be furnished to the excavator by the operator, upon request.

Section 753-3.9 Discovery of unknown underground facilities.

Where an undesignated or otherwise unknown underground facility is discovered within a work area, the excavator shall report such discovery as follows:

(a) If the identity of the operator of the discovered underground facility is known or is obvious, the excavator shall report the discovery to such operator. The operator shall respond immediately and, in accordance with section 753-4.9(d) of this Part, take any necessary action and advise the excavator as to whether he or she may proceed in the immediate area.

(b)(1) If the identity of the operator of the discovered underground facility is not known or obvious, the excavator shall report the discovery to the one-call notification system and each operator notified by the one-call notification system shall respond immediately and, in accordance with section 753-4.9(d) of this Part, determine whether or not such discovered facility is his or hers.

(2) While awaiting a determination of ownership, the excavator may proceed with the excavation or demolition taking reasonable care to protect and prevent damage to such underground facility.

Section 753-3.10 Requirements concerning contact and damage to underground facilities.

(a) Excavators shall take all reasonable precautions to prevent contact or damage to underground facilities and their protective coatings, including but not limited to, compliance with any reasonable directions or accepted engineering practices given by affected underground facility operators.

(b) In the event of contact with or damage to an underground facility, the excavator shall immediately notify the operator of the facility.

(c) All excavation or demolition in the immediate vicinity of the contacted or damaged portion of the underground facility shall be suspended until such portion is repaired and the operator advises the excavator that excavation or demolition may proceed.

(d) No backfilling shall be done by the excavator in the vicinity of the contact or damage until the operator conducts an inspection and makes any necessary repairs; and, the excavator shall undertake no repairs unless and until authorized by the operator.

Section 753-3.11 Requirements concerning underground facilities in danger of failing.

(a) An excavator who by removing the surrounding materials exposes an underground facility which in his or her judgment appears to have failed or to be in potential danger of failing from corrosion or other causes shall immediately report such condition to the operator of such underground facility.

(b) The excavator shall delay any further work in the immediate vicinity of such underground facility which could jeopardize it but may proceed in areas not affecting the questionable facility.

(c) The excavator may proceed in such immediate vicinity after the operator responds and takes necessary action in regard thereto and advises the excavator that he or she may proceed.

Section 753-3.12 Required support and protection for underground facilities.

(a) An excavator shall provide prompt and adequate support and protection for every underground facility located in the work area as is reasonably specified by the operator of any such facility.

(b) In the absence of any specifications by the operator, the excavator shall provide support and protection in accordance with generally accepted engineering practice, including but not limited to shoring and bracing.

(c) Support shall be at least equivalent to the previously existing support and shall protect the underground facility against freezing and against traffic and other loads.

(d) Support shall be maintained during excavation, during backfilling and, if necessary, after backfilling is completed.

(e) The operator may, in agreement with the excavator, provide such support.

Section 753-3.13 Backfilling requirements.

(a) An excavator performing excavation or demolition at an underground facility shall backfill such excavation with materials and in such manner as specified by the operator or, in the absence of such specifications, with suitable materials and in such manner as will avoid damage to, and provide proper support for, such underground facility and its protective coating both during and after backfilling operations.

(b) The excavator shall not place large rock, frozen earth, rubble, debris or other heavy or sharp materials or objects which could cause damage to or scraping against any underground facility.

(c) The backfill beneath and around any underground facility shall be properly compacted in accordance with generally accepted engineering practice.

(d) Heavy loads and excessive forces shall not be imposed on any exposed underground facility at any time during backfilling operations.