



CBYD Excavator Manual

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PREFACE

This booklet has been prepared by Call Before You Dig, (CBYD) to assist excavators, public agencies, and public utilities to understand and comply with the State of Connecticut Public Act NO. 87-71 and Section 16-345 of the Regulations of Connecticut State Agencies.

In addition to describing the CBYD regulations and the responsibilities of excavators, public agencies, and public utilities under the regulations, the booklet also provides helpful information on how the CBYD center operates and how excavators can make the calling process easy.

A complete copy of Section 16-345-1 to Section 16-345-9 of the CBYD regulations is posted for your information.

The stated purpose of Public Act 87-17 is to protect the public safety with regard to excavations near underground utility facilities.

CBYD offers excavator workshops and safety seminars at our facility. These education programs and a personal tour through the operations center can be arranged by calling **1-800 922-4455**. Please provide one (1) weeks notice for us to accommodate your request.

Call Before You Dig, Inc.

SECTION I: DETERMINING WHO AND WHEN TO CALL

Public Act 87-71 of the Connecticut State statute requires individuals who use power or mechanized equipment for the purpose of disturbing the sub-surface of the earth to provide advance notice of **at least two full working days** to the "Call Before You Dig" central clearinghouse prior to commencing proposed excavations (see Section VIII for definition of excavation/excavator)

Call Before You Dig, Inc., (CBYD) is a state regulated, nonprofit organization comprised of all public utilities and municipalities within the state of Connecticut. The organization is administrated and served by a board of eighteen annually elected directors. The purpose of CBYD is to function as a statewide, one-call notification system that provides excavators and the general public with the ability to inform multiple owners and operators of underground facilities of proposed excavation. This is accomplished via a single telephone call to an interstate toll free number. Callers should note that as part of standard operating procedures, all conversations are voice recorded. **CBYD must be called first, prior to excavating or requesting application for permits from any public agency.**

CBYD should **NOT** be contacted for any of the following reasons:

- To report damage to any type of facilities
- To report any type of service outage
- To resolve any type of third party billing
- To report any excavation outside the state of Connecticut
- To request any type of facility removal or relocation (including meter removals prior to demolition of a building)
- To request initiation/shut-off of any type of utility service
- To request markouts for design / preplanning construction or bidding purposes.
- To request appointments with utility representatives for pre-construction meetings
- To provide maps, plans or drawings of proposed excavations

To resolve these items, contact the facility owner directly.

CBYD is open daily from 7a.m. to 5p.m., excluding Saturdays, Sundays and Holidays. During or after these times, CBYD offers an after-hours emergency notification service.

Holidays include:

New Years Day
Martin Luther King Day
Presidents Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans Day
Thanksgiving Day/Day After
Christmas Day

SECTION II: TYPES OF CALLS HANDLED BY CBYD

CBYD can process only two types of location requests. They are:

- a. Routine calls: excavation, demolition or blasting that will NOT commence before the two full working day legal requirement.
- b. Emergency calls: situations that warrant excavation, demolition or blasting to commence within two full working days.

1. Routine Calls

Routine location requests are the most common calls taken at the central clearinghouse. Routine calls are planned excavation activities that allow affected public utilities two full working days, or by the date excavation is to begin, to visit the job site and markout their underground plant. The caller is required to pre-mark the site in white paint or stakes prior to notifying the center. Should the excavation expand beyond the initial notice, a separate notification must be made.

2. Emergency Calls

Emergency location requests are situations that warrant immediate attention by the center and affected utilities (see Section VIII for definition of emergency). The term "emergency" is narrowly defined and must meet at least one of the following

A situation involving:

1. Endangerment to life
2. Endangerment to health
3. Endangerment to property
4. The interruption of operation of a major plant or
5. A situation that would assure the continuity of public utility service.

The caller is informed that a civil penalty or fine may be imposed if the proposed emergency excavation does not meet at least one of the above criteria. The center records the information and provides the names of the affected utilities, however, by state regulation, it is the responsibility of the caller to notify the individual utilities directly.

3. After-hour Emergency Calls

CBYD has an "after-hours" emergency notification service. This service is in effect weekdays from 5pm. to 7am., and all day on Saturdays, Sundays and holidays. **The center will accept and process only those calls deemed "emergency"** (refer to Section VIII for definition of emergency.) The center records the information and provides the names of the affected utilities, however, by state regulation, it is the responsibility of the caller to notify the individual utilities directly.

SECTION III: GUIDELINES FOR PREPARING TO NOTIFY CBYD

CBYD operators are professionally trained to obtain specific information concerning location requests. The operators enter information into a computer terminal and, therefore, the order of the questions is preset. There is a definite reason for every question asked. This section will provide a brief explanation of the reason for each.

Location request processing is very easy if the caller is "prepared" to answer all questions. Preparation is the key. The best way to prepare to make a call is obtain a "ticket format" pad. This pad is available at no cost and can be obtained from the CBYD center upon request. The following is a sample of a blank ticket format.

Below is a brief explanation of each question asked by the CBYD operators. The numbers correspond to the line numbers listed on the ticket form.

**CALL before
you DIG**



TO INSURE SAFE TROUBLE-FREE EXCAVATING

**TO LOCATE UNDERGROUND UTILITY PIPE AND
CABLE ANYWHERE IN CONNECTICUT**

**CALL TWO FULL WORKING DAYS IN ADVANCE
1-800-922-4455 Toll Free For CT**

1 CONTRACTOR # _____ **2** DATE: _____ **3** TIME: _____
4 NAME OF CALLER: _____
COMPANY NAME _____
PHONE # _____ BEST CALLBACK TIME: _____
5 LOCATION: _____
City/Town _____ Street _____
6 NEAREST STREET: _____
7 TYPE OF WORK: _____
8 REMARKS: _____

9 START DATE: _____ START TIME: _____
10 EXCAVATOR DOING WORK: _____
11 REQUEST NUMBER: _____
12 UTILITIES NOTIFIED: _____

- 1. Contractor number:** Callers who frequently notify the clearinghouse may wish to acquire a contractor number. This caller identification number designated by CBYD, immediately identifies the Company making the request, including the address and telephone number of the company, and the caller's name.
- 2. Date:** The date the location request is given to the center.
- 3. Time:** The time the location requests is taken by the center.
- 4. Company:** The caller's name, company name, address, telephone number and callback time are taken in order to maintain records of all location requests. This information is

also helpful in the event that utility representatives find it necessary to contact someone for further information.

5. **Location:** The town and street name or route/highway number, and the house number or lot number (if applicable) for the proposed excavation.
6. **Nearest Street:** The nearest street must be an intersecting or cross street to the actual location of the proposed excavation. The nearest intersecting street in conjunction with the street location, formulates a "grid". This standard grid system is the method in which all participating members register their underground facilities with the center.
7. **Type of work:** Field locators need to know the extent and nature of the job. Operators, therefore, need to identify the specific reason for the work as compared to the work method. For example, "installation of a sanitary sewer lateral" is much more helpful than "digging for a sewer
8. **Remarks:** The caller must be able to provide as accurately as possible the location of the proposed excavation. Footage and compass direction from the intersecting streets, house numbers or landmarks are all essential in helping utilities find the work location. Reference to pole numbers alone are not acceptable. Most importantly, by state regulation, the proposed dig site must be pre-marked in white paint, or white tipped stakes before the location request can be made. Designated marking can only be avoided if the excavation is at least one-thousand feet in distance and if the caller has performed a pre-construction meeting or if detailed maps of the excavation have been distributed to the affected utilities.
9. **Start Date and Time:** It is very important not to begin work prior to the legal start date and time. Beginning work before the start date can result in civil penalties or fines being imposed by the Department of Public Utility Control. Start dates must be at least two full working days from the date of notice. Location requests are valid for a period of thirty days from the date notice is provided, NOT by the actual start date. If excavation does not commence within thirty days, a new location request is required. Likewise, if the job continues beyond 30 days, the location request must be "renewed".
10. **Excavator Doing Work:** The caller must specify the company that is actually performing the excavation. If it is unknown, the caller must re-notify CBYD when the excavator is determined. An excavator is not in compliance of state statute or regulation if his company name does not appear on the location request.
11. **Location Request Number:** The location request number is a nine digit number that is assigned to each location request made by a caller. This number references the caller with the details of the proposed excavation and is helpful when contacting a public utility for further assistance. Additionally, this number must be available at all times on job sites to prove compliance with the state statute requiring that you "call before you dig".
12. **Utilities Notified:** The CBYD operator will inform the caller of those entities that the center will notify. Callers are only required to notify public utilities directly if the location request is an emergency.

SECTION IV: WHAT HAPPENS AFTER THE CALL IS MADE

After the CBYD operator completes the location request, the ticket is processed by the computer at the center. The computer analyzes the information on the ticket and identifies which members have elected to receive the information. The computer transmits the message to the members via auto-dial or direct dial communication links. Members receive the information on designated teleprinters. Some members receive the information through a direct phone conversation with the staff at the center or by facsimile.

The information is received at the member's mapping or screening department. Trained personnel review the location request and compare it with their maps and records. It is their job to determine whether or not the location of the work site is close to existing underground facilities. If a conflict is not anticipated, the utility must mark the site indicating clearance of their own plant or by contacting the excavator directly.

SECTION V: RESPONSIBILITIES OF PUBLIC UTILITIES

Section V serves only as a guideline as to responsibilities and state mandated requirements. Refer to the state regulations, Section VIII for specifics.

Owners & operators of buried facilities must;

- Maintain a current file with the central clearinghouse all of its underground facilities including previously unrecorded or abandoned facilities.
- Upon notice from the central clearinghouse, respond within two full working days, excluding Saturdays, Sundays and holidays or by the date excavation is scheduled to commence. The utility must mark the approximate location of its underground facility or notify the caller that a conflict does not exist.
- A public utility may identify the location of a facility connected to its facility, but not owned and operated by the public utility, as a helpful guide. This identification shall not be deemed to impose any liability upon the utility for accuracy.
- Each utility shall maintain a program to educate excavators, either individually or through their organizations, in order to minimize the possibility of damage incidents.
- Each utility shall attend all pre-construction meetings, of which it has knowledge of, where excavation may effect its facilities.
- Each utility shall notify the central clearinghouse monthly of any damage to its facilities which resulted from, or which the public utility suspects resulted from, any excavation, discharge of explosives or demolition conducted by any other person or public agency.
- As of January 1, 1989, all new underground plant installed repaired, replaced or modified involving exposure of 100 feet or more, must have a warning tape installed twelve inches above the facility. The tape shall be of the color assigned to the type of the facility and imprinted with an appropriate warning message.

SECTION VI: RESPONSIBILITIES OF EXCAVATORS

Section VI serves only as a guideline as to responsibilities and state mandated requirements. Refer to the state regulations, Section VIII for specifics.

Any person responsible for excavating, demolition or blasting must notify CBYD and provide at least two full working days notice, excluding Saturdays, Sundays and holidays, before excavation begins.

- Designate the work area with white paint or white tipped stakes. If the work area exceeds 1000 feet and the excavator determines that it is not practical to designate the proposed excavation, a pre-construction meeting involving the affected utilities or planned maps provided to the affected utilities is required.
- **Use prudent judgement when all facilities are not identified.** Considerations of proceeding are potential hazard to life, property and facility damage.
- Exercise reasonable care when working in proximity to underground facilities. This includes, appropriate construction methods, proper backfilling and shoring techniques, proper equipment and explosives, adequate training of personnel, and sponsoring pre-construction meetings.
- **Hand digging** is required when dangerous fluids or gas are likely to be exposed. Mechanical equipment is limited to removing concrete or bituminous surfaces only.
- Avoid the covering or removal of surface markings or stakes indicating the underground location of facilities during construction.
- **Excavation notices expire at the end of 30 days from the date notice was provided. If excavation is not completed in 30 days, a renewal notice is required.**
- If contact is made with any underground facility, the affected public utility must be notified. If contact occurs involving gas, the excavator must notify police, fire and emergency personnel, and evacuate employees and general public. **No attempt should be made to tamper with or correct the damaged facility.** The repair of protective coatings may only be done when authorized by the owner of the facility.

SECTION VII: SURFACE MARKINGS

With the exception of normal traffic control markings, all markings on public streets, sidewalks and right-of-way, and all surface markings and stakings, of public utility locations shall be in accordance with, and shall not conflict with, the following uniform color code:

YELLOW : Gas, oil petroleum products, steam, compressed air, compressed gases and all other hazardous materials.

RED: Electric power lines, electric power conduits and other electric power facilities.

ORANGE: Communication lines or cables, including but not limited to telephone, telegraph, fire signals, cable television, civil defense data systems, and electronic controls.

BLUE: Water.

GREEN: Storm and sanitary sewers and drainage systems including force mains and other non-hazardous materials.

BROWN: Other.

All surface markings and staking utilized for the location of underground facilities shall contain letter designations which clearly identify the type of facility marked or staked.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-1. Definitions

(a) "Excavator" means a person, partnership, corporation or association, including a public utility or a person engaged as a contractor by a public utility or public agency, directly performing or engaged in the act of excavation, demolition or discharge of explosives.

(b) "Public agency" means the state or any political subdivision thereof, including any governmental agency.

(c) "Public utility" means the owner or operator of underground facilities for furnishing electric, gas, telephone, telegraph, communications and pipeline (whether for hire or not), sewage (including storm sewers, sanitary sewers and drainage systems, or parts thereof), water, community television antenna, steam, traffic signal, fire signal or similar service, including a municipal or other public owner or operator, but excluding facilities owned by the owner of a private residence for utility service solely for such residence, regardless of whether such owner or operator is otherwise subject to the jurisdiction of the Authority. (An "excavator" or "public agency" may also be a "public utility").

(d) "Central clearinghouse" means the single organization established by the public utilities pursuant to section 16-348 of the General Statutes for the purpose of receiving and giving notice of excavation activity within the state.

(e) "Excavation" means an operation for the purposes of movement or removal of earth, rock or other materials in or on the ground, or otherwise disturbing the subsurface of the earth, by the use of powered or mechanized equipment, including but not limit to digging, blasting, auguring, back filling, test boring, drilling, pile driving, grading, plowing-in , hammering, pulling-in , trenching and tunneling; excluding the movement of earth by tools manipulated only by human or animal power and the tilling of soil for agricultural purposes.

(f) " Demolition" means the wrecking, razing, rending, moving or removing of any structure.

(g) "Damage" includes but is not limited to the substantial weakening of structural or lateral support of a utility line, penetration or destruction of any utility line protective coating, housing or other protective device or the severance, partial or complete, of any utility line and "contact" includes, without limitation, the striking, scraping or denting, however slight, of any underground utility facility including any underground utility line protective coating, housing or other protective device, or any significant weakening or disturbance of the structural or lateral support of any underground utility facility.

(h) " Approximate location of underground facilities" means a strip of land not more than three feet wide or a strip of land extending no more than one and one-half feet on either side of the underground facilities.

(i) "Authority" means the Public Utilities Control Authority of the State of Connecticut.

(j) "At or Near" "means within the same subsection of a section in the standard grid system established or to be established pursuant to these regulations, when such term is used in connection with a proposed excavation, discharge of explosives or demolition.

(k) "Standard grid system" means a grid system established or to be established by the central clearinghouse and approved by the Authority."

(l) "Facilities" means any wire, cable, pipe, vault, storage tank, transformer, or other similar property or equipment owned by public utilities for furnishing electric, gas, telephone, telegraph, communications and pipeline (whether for hire or not), sewage (including storm sewers, sanitary sewers and drainage systems, or parts thereof), water, community television antenna, steam, traffic signal, fire signal or similar service, regardless of whether such property or equipment is located on land owned by a person or public agency or whether it is located within an easement or right of way, but excluding such property or equipment owned by the owner of a private residence for utility service solely for such residence.

(m) "Registered" when used in connection with a public utility's facilities, includes such facilities known to the Authority and the central clearinghouse to the extent that the central clearinghouse has sufficient information to provide notification service as required by Section 16-345(d) of Chapter 293 of the General Statutes.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-2. Central clearinghouse

(a) Call Before You Dig, Inc. , a corporation established under the Connecticut Non-stock Corporation Act, membership in which corporation is open to all public utilities which file with it the information required by these regulations, shall be the central clearinghouse.

(b) The certificate or incorporation and Bylaws of the central clearinghouse shall be subject to the approval of the Authority.

(c) The central clearinghouse shall establish and submit to the Authority for its approval written operating procedures, which shall detail the days and hours during which the notification system will be in full operation, and which also shall include procedures for:

(1) receiving, handling and promptly dispatching messages, to public utilities and permit issuing public agencies described in Section 16-345-7 of these regulations,

(2) determining the size of the proposed excavation or demolition that may be included as one notification,

(3) advising the caller to contact individual public utilities which the caller suspects might be affected by emergency excavations, discharges of explosives or demolitions during non-operation hours,

(4) retaining record of all messages for a reasonable time period,

(5) establishing and maintaining a standard grid system,

(6) providing for the institution of advertisement and educational program to advise persons, public agencies and public utilities affected by Chapter 293 of The General Statutes, of its terms and requirements; encouraging educational programs for the benefit of persons, public agencies and public utilities who excavate and the owners of underground utility facilities; and encouraging public and private agencies planning or undertaking construction project to require design engineers to obtain under ground utility information, identify such date on drawings, resolve facility conflicts with public utilities, and design projects to minimize adverse effects on facilities, and

(7) Such other provisions as the Authority shall deem necessary to carry out the objectives of chapter 293 of The General Statutes and the public safety.

(d) At least two months prior to the beginning of each fiscal year, the central clearinghouse shall propose to the Authority for approval an annual budget which shall:

(1) include billing rates that shall equitably allocate the costs of operating the notification system to those public utilities whose facilities are registered with the Authority, and

(2) be calculated so that the central clearinghouse shall neither make a profit nor suffer a loss, provided that if such a profit or loss does occur during any year, the budget for the next year shall be adjusted accordingly.

(e) The central clearinghouse shall, from time to time, as the Authority may require, file with the Authority a current list of public utilities that participate in the central clearinghouse's service, which list shall include for each such public utility:

(1) the name and title of the public utility's employee or representative responsible for receiving notice of proposed excavations, discharges of explosives or demolitions,

(2) the business address of such employee,

(3) the normal hours and days of the week ("business hour") during which such employee may be contacted at the public utility.

(4) the "business hours" telephone number where such employee or representative may be reached

(5) an emergency telephone number to be used to contact such employee or representative during a non-business hours emergency, and

(6) such other information about each such public utility as the Authority shall deem necessary to carry out the objectives of Chapter 293 of the General Statutes and the public safety.

(f) The central clearinghouse shall, from time to time, as the Authority may require, file with the Authority a list of the public utilities actually known to the central clearinghouse which have not filed with it the information required to be filed by the public utilities pursuant to these regulations.

(g) The central clearinghouse shall, from time to time as the Authority may require, file with the Authority, a summary list of all violations and damage reported to it pursuant to Section 16-345-3 (a) (3) and Section 16-345-3 (a) (4) of these regulations.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-3. Responsibilities of public utilities

(a) Each public utility shall:

(1) Maintain a current file, including new facilities, with the central clearinghouse containing the information listed in Section 16-345-2 (e) of these regulations and containing the locations, related to the standard grid system, of all its underground facilities within the State of Connecticut,

(2) Reimburse the central clearinghouse, in accordance with billing rates set by the Authority as part of the central clearinghouse's budget,

(3) Notify the central clearinghouse monthly of any excavation, discharge of explosives or demolition of which it is aware these regulations or Chapter 293 of the General Statutes. Additionally, each public utility shall file a report in January of each year indicating the number of damage incidents, by month, or that no such damage incidents occurred to its facilities, for the prior calendar year,

(4) Notify the central clearinghouse monthly of any damage to its facilities which resulted from, or which the public utility suspects resulted from, any excavation, discharge of explosive or demolition conducted by any other person or public agency,

(5) File with the central clearinghouses such other information which the central clearinghouse or the Authority shall deem necessary to carry out the objective of Chapter 293 of the General States and the public safety,

(6) Notify the central clearinghouse as soon as possible of any person or public agency whose actions of frequency of damage incidents indicates a situation that may require particular attention; provided however, that in deciding whether or not to make such a report, the public utility need not make or report any conclusion as to whether the reported condition or conditions represent a violation of any law or duty.

(7) Upon the exposure of previously unrecorded or inaccurately recorded facilities in the course of excavation or demolition activities and of which it has knowledge of such exposure, verify and modify existing records as necessary, and promptly make all necessary modifications, if needed, within the standard grid system maintained by the clearinghouse. The records shall be sufficiently detailed in order to allow the central clearinghouse to identify such previously unrecorded or inaccurately recorded facilities within its standard grid system, and

(8) Maintain records of all existing underground utility facility locations, including facilities abandoned in place.

(b) Each public utility shall:

(1) By the end of the second full day, (excluding Saturday, Sundays and holidays) after the day of notification to the central clearinghouse of a proposed excavation, discharge of explosives or demolition at or near any of its facilities was received by the central clearinghouse, or by the date on which excavation is scheduled to commence as reported in the notification to the central clearinghouse, whichever is later:

(A) in the event that it determines that it has underground facilities in the immediate vicinity of the specific site, mark the approximate location of such facilities using commercially available advanced proven techniques, methods and equipment appropriate to the circumstances, in accordance with Section 16-345-5 of these regulations, in such a manner that will enable the party giving such notice to establish the precise location of the underground facilities so marked, or if it is not practical to so mark the location of such facilities, identify the approximate location of such facilities in a manner mutually agreeable to the public utility and the party giving such notice. Any interconnections between facilities of the public utility and others, such as tees connecting mains to customer owned facilities, shall be clearly marked and labeled in accordance with Section 16-345-5 of these regulations. Whenever feasible, the public utility shall also provide information to the excavator as to any special requirements for excavation at or near its facilities including, without limitation, any special considerations regarding structural or lateral support or the use of heavy equipment over public utility facilities.

However, the public utility that has a standard and repeating layout and which is connected by facilities visible on the surface (such as certain storm sewers) need not mark out those standard and repeating facilities provided that maps indicating the approximate location are supplied to the person or public agency within the specified time limit. Facilities that are attached to a standard and repeating layout but do not conform to the standard and repeating layout shall be marked unless an alternate mutually agreeable location method is used.

(B) In the event that it determines that it has no underground facilities in the immediate vicinity of the specific site, make reasonable effort to so notify the excavator giving such notice and document such efforts, and may mark this information in accordance with Section 16-345-5 of these regulations.

(2) Upon receipt of notice that the excavator, after reasonable attempt to locate the underground facilities, is unable precisely to locate the underground facilities after the approximate location of the underground facilities has been marked by the public utility, provide such further on-site assistance as may be needed to determine the precise location of the underground facilities. The assistance may be in the form of location detection equipment, or technical advice. Such technical advice may include, without limitation, the need for and advice concerning placement location(s) of test holes by the excavator at the excavator's expense. An excavator, who has failed to make a reasonable attempt to locate the facilities within the approximate area as marked out by the owner prior to calling the owner for on site assistance, shall reimburse the facility owner for all costs incurred in the further location of such facilities. The location of the facility within the approximate area as marked out by the facility owner shall constitute failure by the excavator to have used reasonable effort to locate.

(3) Immediately upon receipt of notice that a proposed excavation or demolition without explosives is necessary to: (A) Correct an emergency involving danger to life, health or property or involving the interruption of the operation of a major industrial plan, or (B) assure the continuity of public utility service, dispatch personnel as soon as is reasonably possible to determine the effect of the excavation or demolition on any facility it may have in the area; and if the excavation or demolition has not already occurred, to assist in establishing the location of such facilities.

(4) Upon receipt of notice that a proposed discharge of explosives is necessary immediately to correct an emergency involving an immediate and substantial danger of death or serious personal injury, dispatch personnel as soon as is reasonably possible to determine the effect of the

discharge on any facility it may have in the area; and if the discharge has not already occurred, to assist in establishing the location of such facilities.

(5) Upon receipt of notice that contact involving its underground facilities has occurred, dispatch qualified personnel as soon thereafter as is reasonably possible to effect temporary or permanent repairs and to protect the public from any potential danger resulting from the contact to its facilities.

(c) A public utility may identify, in accordance with Section 16-345-5 (k) of these regulations, the location of a facility connected to its facilities, but not owned or operated by the public utility, as a helpful guide to an excavator. Said identification shall not be deemed to impose any liability upon the public utility for the accuracy of said identification.

(d) Each public utility individually and through appropriate utility organizations, shall maintain a program designed to educate excavators in order to minimize the possibility of damage incidents to facilities and to minimize the potential detriment to public safety attendant with damage to underground facilities. Upon request by any excavator or any person, public agency or public utility planning an excavation, discharge of explosive or demolition, each public utility shall provide basic instruction concerning the hazards associated with its underground facilities and specific precautions necessary when working at or near those facilities.

(e) Each public utility shall attend all pre-construction meetings of which it has knowledge related to excavation, discharge of explosives or demolitions which might affect its facilities for the purpose of addressing special or particular issues related to public safety as well as others issues related to the proposed excavation, discharge or demolition.

(f) For all new underground facilities installed after January 1, 1989 which is practicable and of all repairs, replacements or modifications involving an exposure of existing underground facilities at least 100 feet longitudinally after January 1, 1989, of which the utility has knowledge of such exposure, the utility shall install a warning tape located above the facility, and keep appropriate records thereof. The minimum separation between the facility and the warning tape shall be 12 inches unless the depth, other underground facilities or other engineering considerations make the minimum separation infeasible. The warning tape shall be durable, designed to withstand extended underground exposure, be of the color assigned the type of facility for surface markings in Section 16-345-5 (h) and durably imprinted with an appropriate warning or message.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-4. Responsibilities of excavators

(a) Any excavator responsible for excavating or discharging explosives at or near the location of public utility underground facilities or demolishing a structure containing any public utility facilities shall:

(1) Except as provided in Section 16-345-4 (a) (2) and Section 16-345-4 (a) (3) of these regulations, at least two full days, excluding Saturday, Sundays and holidays, but not more than thirty days before commencing such excavation, discharge of explosives or demolition at or near the location of such public utilities, notify the central clearinghouse of:

(A) The specific location of the site of the proposed excavation, discharge of explosives or demolition. Should field conditions or other circumstances require the excavation, discharge of explosives or demolition to be expanded outside the originally designated area established in accordance with Section 16-345-4c of these regulations, a separate notification shall be made and said notification shall be in accordance with the time requirements provided in section 16-345-4 (a) (l).

(B) The name address and telephone number of the entity giving the notice.

(C) The name address and telephone number of the excavator actually performing the proposed excavation discharge of explosives or demolition and the name address and telephone number of the person, public agency or public utility for whom the activity is being performed, except where the work is being performed by a public or municipal utility for the benefit of a utility customer, the customer's name, address and telephone number does not have to be provided.

(D) The date on which such proposed excavation, discharge of explosives or demolition will occur. The date shall be at least two full days, excluding Saturday, Sundays and holidays, after the notice is provided to the central clearinghouse, or after the area of proposed excavation, demolition or discharge of explosives is designated in accordance with Section 16-345-4 (d) whichever is later, but not more than thirty days after the notice has been provided to the central clearinghouse.

(E) The type of such proposed excavation, discharge of explosives or demolition.

(F) The method to be used to identify or designate the area of proposed excavation, discharge of explosives or demolition and the date by which the designation will be made, where the designation is not already shown on reconstruction plan.

(G) If it is an emergency, the basis for the emergency.

(H) Such other information as the central clearinghouse or the authority shall deem necessary to carry out the objectives of Chapter 293 of General Statutes and the public safety.

(2) In the event that an excavation or demolition without explosives is necessary to correct an emergency involving danger to life, health or property or the interruption of operation of a major industrial plant, or to assure the continuity of public utility service:

(A) immediately provide the notice required by Section 16-345-4 (a) (1) of these regulations to the central clearinghouse if it is during hours when the central clearinghouse is open for the purpose of determining the public utilities with facilities located at or near the site of the demolition unless the public utilities whose facilities may be affected are already known from a prior notification for excavation.

(B) immediately provide the notice required by Section w16-0345-4 (a) (1) of these regulations directly to the involved utilities, and

(C) notify the central clearinghouse by telephone of the emergency and response taken as soon as reasonably possible if such notice was not given immediately prior to the excavation or demolition.

(3) In the event that the use of explosives is necessary to correct an emergency involving an immediate and substantial danger of death or serious personal injury, immediately:

(A) provide the notice required by Section 16-345-4 (a) (1) of these regulations to the central clearinghouse if it is during hours when the central clearinghouse is open for the purpose of determining the public utilities with facilities located at or near the site of the discharge unless the affected public utilities are already known from a prior notification for excavation;

(B) immediately provide the information required by Section 16-345-4 (a) (1) of these regulations directly to the affected public utilities prior to discharge of the explosives; and

(C) provide notice directly to the central clearinghouse as soon as possible after the discharge if such notice was not given immediately prior to the discharge.

(4) Use prudent judgement in determining whether to proceed with the excavation, discharge of explosives or demolishing prior to the identification of any or all of the facilities in the event covered by Section 16-345-4 (a) (2) and Section 16-345-4 (a) (3) of the regulations. In exercising such judgement, the excavator shall consider, among other things, the potential hazard to life and property while awaiting public utility personnel to locate the facilities having the greatest potential for detriment to the public safety and the potential hazards that could result from proceeding without having located the facilities and potential damage to those facilities.

(5) Exercise reasonable care when working in proximity to the underground facilities of any public utility. Reasonable care shall include, without limitation, the use of construction methods appropriate to ensure the integrity of existing utility facilities and their man-made temporary and permanent support including but not limited to adequate and proper shoring and proper backfill methods and techniques; the selection of equipment and explosives capable of performing the work with the minimum reasonable likelihood of disturbance to underground facilities; adequate supervisory personnel to ensure proper actions; proper understanding by the personnel on the job site of the authority of all parties involved in the activity so that prompt action can be taken in the event of unanticipated contact with underground facilities; adequate training of employees in executing their assignments to ensure protection of utility facilities and the public; maintaining necessary liaison with owners of underground facilities; sponsoring preplanning and pre-construction meetings as necessary, and complying with all applicable laws and regulations.

(6) In the event that underground facilities of a public utility are likely to be exposed by such excavating, discharging of explosives or demolishing, provide such support or protection, or both,

as may be necessary to protect such facilities from damage. Where underground facilities containing combustible or hazardous fluids or gases (such as natural gas, propane, jet fuel or chlorine) are likely to be exposed or where the proposed excavation, discharge of explosives or demolition is to occur within the approximate location of such facilities or affecting such facilities, except for excavations performed in connection with the need to expose such underground facilities by the owner of such facilities, an excavator may use mechanical equipment solely for the purpose for removing the bituminous and concrete road surface. In such circumstances, other than for the removal of a bituminous or concrete road surface, an excavator, other than the owner exposing its own underground facilities, shall employ hand digging only.

(7) In the event that the excavator, after reasonable attempt, is unable to precisely locate the underground facilities after the approximate location of the underground facilities have been marked, the excavator must notify the public utility requesting such further assistance as may be needed to determine the precise location of the underground facility.

(8) Avoid the covering or removal of surface markings or stakes indicating underground facilities during construction activity prior to actually excavating, discharging explosives or demolishing in the vicinity for the located facilities.

(b) When any contact is done to any underground facility of a public utility, the excavator responsible for the operations causing such contact shall immediately and directly notify the public utility which owns or operates such facility of the contact, but such person, public agency or public utility shall not tamper with or attempt to repair such facility except to repair protective coatings when authorized by the owner of the facility.

(c) An excavation notice given pursuant to Section 16-345 (a) (1) of these regulations, shall expire at the end of thirty days from the date such notice is given to the clearinghouse. Whether or not an excavation, demolition or discharge of explosives has commenced pursuant to a valid notification at any time within the prior thirty days, if such activity has not been completed or is expected to last beyond the 30 day period, a renewal notice must be provided before the expiration of the thirty day period by the excavator. The renewal shall not be applicable for areas not designated in the prior notification. If excavation, demolition or discharge of explosives was not commenced pursuant to a valid notification at any time during the prior thirty day period following the date which the notice was originally given, notice shall be given again in accordance with Section 16-345-4 (a) (1) of these regulations by the excavator. Where any excavation, discharge or demolition activity has remained dormant for a period of thirty days from the date of the last notice given pursuant to Section 16-345-4 (a) (1) of these regulations, an additional notice shall be given before commencing such activity by the excavator.

(d) The area of proposed excavation, discharge of explosives or demolition shall be designated by the excavator on such a manner as to enable the public utility or owner of underground facilities to know the approximate boundaries of the proposed excavation. The area shall be designated as follows:

(1) if the area of proposed excavation is less than 1000 feet longitudinally along an existing highway, only surface margin in accordance with Section 16-345-5 of these regulations may be used;

(2) if surface marking pursuant to Section 16-345-5 of these regulations are not used, designation must be by clear and appropriate markings on a plan map which was originally prepared by a licensed surveyor or competent employee of a public utility company or municipal utility and delivered to the public utility whose underground facilities may be affected, if the area is 1000 feet or more longitudinally on or adjacent to an existing highway and a preconstruction meeting is held

by the person or public agency performing the excavation, discharge or demolition activity and all affected public utilities are notified of such meeting.

(3) the designation of the area shall include the maximum depth of excavation at a sufficient number of points to ensure an accurate profile unless detailed profile maps are provided. The depth information provided shall reasonably reflect the anticipated actual depth.

(e) When any contact is made with any underground facility a public utility, the excavator responsible for the operations causing such contact shall:

(1) Immediately and directly notify the public utility which owns or operates such facility of the contact, but such excavator shall not tamper with or attempt to repair such facility except to repair protective coating when authorized by the owner of the facility. The excavator performing the excavation, discharge of explosives or demolition shall use prudent judgement taking into account minimizing the potential detriment so public safety in determining whether to cease activities pending the arrival of qualified public utility personnel.

(2) When such contact includes the occurring of a serious electrical short circuit or the escaping of combustible or hazardous fluids or gases (such as natural gas, propane, jet fuel or chlorine) or any other event endangering the public, the excavator responsible for the excavation, demolition or discharge involved in such damage shall also alert all persons within the danger areas and take all feasible steps, including, where applicable, notifying police, fire and other emergency personnel, eliminating sources of ignition and evacuating employees and the general public from the affected area, but excluding tampering with or attempting to repair the damaged facility, to insure the public safety pending arrival of the appropriate public utility personnel.

(f) At all times when excavation, discharge or explosives or demolition are in progress there shall be a representative of the excavator present in overall charge of the operation who shall be knowledgeable reading the operation being performed and the legal name and address of the entity that is directly responsible for the performance of the operation. This person shall have satisfactory evidence that the notification requirement of these regulations have been met, such as the ticket number from the central clearinghouse on site at all times.

(g) Each person, or public agency involved in excavation, discharge of explosives and demolitions shall post a summary of the requirements of Sections 16-345-1 through 16-345-9 of these regulations in construction workplaces. Construction workplaces shall include, without limitation, offices of the entity performing the work in a location where persons directly involved in excavation, discharge of explosives and demolition frequent, field offices and similar locations.

(h) The representative of the excavator shall provide the legal name and address of the entity that is directly responsible for the performance of the excavation activity and shall provide satisfactory evidence to any entity, including a publicly agency or public utility requesting such information. Such representative shall also be an agent for service of notice or process in any matter related to compliance with these regulations.

(i) Except as provided in Section 16-345-4 (a) (3) of these regulations, explosives may not be discharged unless such discharge was disclosed in the original notification or upon six hours notice to all public utilities which have facilities at or near the proposed discharge location, including those that were previously indicated to have facilities at or near the proposed discharge but not in the immediate vicinity, except that on Saturday, Sundays and holidays, eight hour notice shall be provided.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-5. Surface markings

(a) All surface markings and public utility locations stakings shall be made in accordance with this section.

(b) Surface markings shall consist of paint or equivalent material. The paint or material should have sufficient lasting properties so as to stand up to wear and tear of traffic; but should be sufficiently degradable so as not to be permanent, unless the marking is intended to be permanent.

(c) Surface markings for the identification of the location of underground facilities shall be located preferably at the center line of the underground facility and at the outer limits of this proposed excavation, discharge or explosives or demolition activity.

(d) Where center-line marking is impractical, the location of the facility may be indicated by means of offset surface markings.

(e) Staking shall consist of the use of stakes made of wood or any other suitable material. The minimum sizes of a stake shall be one inch by one inch by twenty-four inches (1" x 1" x 24") (nominal size). Approximately one-fourth of the length of the stake shall be buried below the ground and the remainder of the stake shall be exposed above the ground in a upright position directly above facility. The top six (6) inches of the exposed portion of the stake shall be of the designated public utility color in accordance with Section 16-345-5 (h) of these regulations. The stake shall also be identified by one (1) inch minimum size letters in black color, having the designated public utility identification abbreviation, in accordance with Section 16-345-5 (l) of these regulations and the facility size, if applicable, on all four sides of the exposed portion of the stake.

(f) In areas where surface marking cannot be utilized, or in areas where the use of stakes would be superior to surface markings, staking may be employed for locating facilities or for designating areas of proposed excavation, demolition or discharge of explosives. Stakes shall normally be located above the center line of the underground facility and at the outer limits of the proposed excavation, demolition or discharge of explosives activity. Stakes shall not be used for offset location unless surface marking or center line staking is inadequate or inappropriate.

(g) Surface markings or stakes shall be located at such appropriate intervals as is necessary to clearly indicate the location and course of the underground facility.

(h) With the exception of normal traffic control markings, all markings on public streets, sidewalks and right-of-way, and all surface marking and stakings of public utility locations and areas of proposed excavation, demolition or discharge of explosives shall be in accordance with, and shall not conflict with, the following uniform color code.

(1) Yellow-Gas, oil petroleum products, steam, compressed air, compressed gases and all other hazardous materials except water.

(2) Red-Electric power lines, electric power conduits and other electric power facilities.

(3) Orange-Communication lines or cables, including but not limited to telephone, telegraph, fire signals, cable television, civil defense, data systems, electronic controls and other instrumentation.

(4) Blue-Water.

(5) Green -Storm and sanitary sewers and drainage systems including force mains and other non-hazardous materials.

(6) Purple-Radioactive materials.

(7) White-Proposed working area of excavation, discharge of explosive or demolition; survey markings.

(8) Brown-Other.

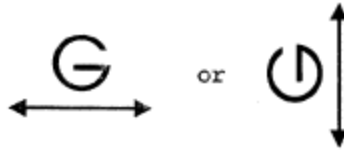
(9) Unpainted stakes with orange, red or yellow flags-survey markings.

(i) All surface marking and staking utilized for the location of underground facilities shall contain letter designations which clearly identify the type of facility so marked or staked. Such letters shall be legible and shall be used in accordance with the following.

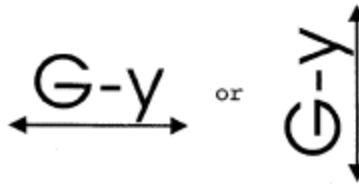
1. C-Communication facilities other than telephone company facilities.
2. CH- Chemicals.
3. CTV-Cable television.
4. E-Electric power.
5. FS-Fire signals.
6. G-Gas.
7. HPW-High-pressure water over 125 PSIG.
8. P-Petroleum.
9. PP-Petroleum products (naphtha, gasoline, kerosene and similar products).
10. S-Sewer.
11. ST-Steam.
12. T-Telephone company facilities.
13. TC- Traffic control signals.
14. W-Water.
15. O-All other facilities.

(j) All surface markings and staking shall be in accordance with the following. ("G" is represented below, but specific product identification use shall be in accordance with Section 16-345-5 (i) of these regulations.)

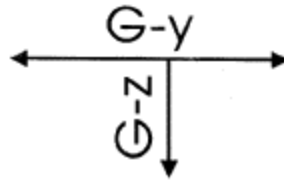
(1) Approximate location is a strip of land extending not more than one and one-half feet on either side of the markout line. The arrow indicated the direction of run. The length of the mark shall be approximately eighteen inches (18").



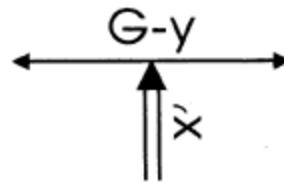
(2) Approximate location is a strip of land extending not more than one and one-half feet plus $y/2$ inches on either side of the markout line, where y is the size of the facility (e.g., y inch pipe, y inch conduit). The arrow indicated the direction of run. The length of the mark shall be approximately eighteen inches (18").



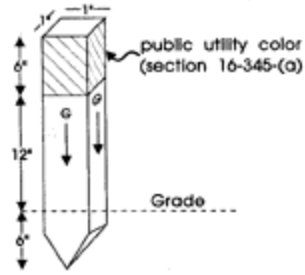
(3) A point where a facility tees off. y and z may or may not be present y and z are the size of the respective facilities (e.g., y inch pipe, z inch conduit).



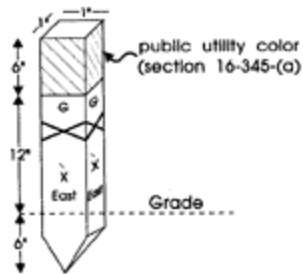
(4) Offset mark for run of pipe where X' represents the distance, in feet, from the reference line to the underground facility. y may or may not be present. y is the size of the facility (e.g., y inch pipe, y inch conduit).



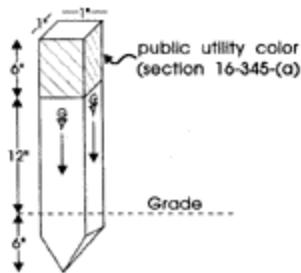
(5) Approximate location is a strip of land extending not more than one and one-half feet on either side of the line established by the series of stakes.



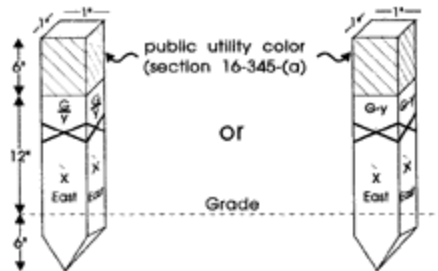
(6) Approximate location is as strip of land extending not more than one and one-half feet plus $y/2$ inches on either side of the line established by the series of stakes, where y is the size of the facility (e.g., y inch pipe, y inch conduit.)



(7) Approximate location is a strip of land extending not more than one and one-half feet on either side of, and X' in the direction indicated from the line established by the series of stakes.



(8) Approximate location is a strip of land extending not more than one and one-half feet plus $y/2$ inches on either side of, and X' in the direction (i.e., approximate compass direction) indicated from, the line established by the series of stakes, where y is the size of the facility (e.g., y inch pipe, y inch conduit).



(k) A public utility may identify the location of a facility connected to its facility but not owned or operated by the public utility as a helpful guide to an excavator in a similar manner to Section 16-345-5 (a) through (j) of these regulations, except that surface markings shall be dotted or broken line instead of a solid line.

(l) A public utility may signify that it has no facilities in the immediate area of a proposed excavation, demolition or discharge of explosives by writing "no name of utility or commonly recognized abbreviation" in letters at least twelve inches high using the uniform color code as described in Section 16-345-5 (h) of these regulations.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-6. Permits to require compliance

Any permit, except for advance construction permits, issued by a public agency for excavation, demolition or discharge of explosives shall require satisfactory evidence of compliance with Chapter 293 of the General Statutes and these regulation such as the central clearinghouse ticket number. The central clearinghouse may provide notification of each underground location request to each municipality's permit issuing department for proposed excavations within the municipality's jurisdiction.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Section 1: Section 16-345-1 through 16-345-7, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 16-345-7. Compliance with local permit requirements

Except as provided in Section 16-345-6 of these regulations, these regulations shall not be construed to affect or impair local ordinances, charter or other provisions of law requiring permits to be obtained before excavating in a public highway or to demolish structures on private property, nor shall they be construed to grant to any person, excavator, or public agency any rights not specifically provided by Chapter 293 of the General Statutes and these regulations. A permit from a public agency shall not relieve any person from responsibility for complying with the provision of Chapter 293 of the General Statutes and these regulations. The failure of any person who has been granted a permit to comply with the provisions of Chapter 293 of the General Statutes and these regulations shall not be deemed to impose any liability upon the public agency issuing the permit.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Sec. 16-345-9 Assessment of civil penalties

(a) Any excavator, public agency or public utility which the Department finds to have violated any provisions of Section 16-345-3, 16-345-4 or 16-345-5 of these regulations, or applicable sections of Chapter 293 of the General Statutes, may be fined, after notice and opportunity for a hearing as provided in Section 16-345-8. In such case, they shall forfeit and pay to the state a civil penalty in accordance with the following schedule of penalties:

(1) For violations which result in property damage, where the amount of property damage sustained is not greater than three-thousand dollars, a civil penalty not to exceed tree-thousand dollar;

(2) For violations which result in property damage of more than tree-thousand dollars, a civil penalty not to exceed five-thousand dollars;

(3) For a violation which results in personal injury or death, a civil penalty not to exceed then-thousand dollars.

(b) In determining the amount of civil penalty to be assessed, the Department shall take into account the following criteria by way of aggravating and mitigating factors:

(1) The number of past violations within the prior two years of the date of the last violation,

(2) The degree of compliance with other requirement of Chapter 193 of the General Statutes, especially notification to the utility in the event of damage. In particular the department shall consider whether or not the violator has notified the utility pursuant to the provisions of Sections 16-345-4 (a) (1), 16-345-(a) (2) , 16-345-4 (b) (1), and 16-345-(b) (2),

(3) The "good faith "efforts of the violator to have complied with the statutes and regulations,

(4) The plans and procedures to insure compliance with the statutes and regulations in the future,

(5) The amount of damage caused to underground facilities.

(6) The degree of threat to the public safety, and degree of public safety, and degree of public inconvenience caused as a result of the violation,

(7) Whether the activity was performed in the course of business by a person or public agency regularly engaged in such activity.

(c) Where the Department has issued a penalty after a hearing, the Department shall specify the factors used in deter mining the penalty by way of mitigation or aggravation.

(d) Any excavator, public agency or public utility which the Department, finds has violated any of the provisions of Sections 16-345-3, 16-345-4 or 16-345-5 of these regulations, or applicable sections of Chapter 293 of the General Statutes, where there has not occurred any property

damage or personal injury, may be fined, after notice and opportunity for a hearing as provided in Section 16-345-8 of these regulations. The fines shall, at a minimum, be according to the following schedule taking into account the number past violations:

One hundred (\$100.00) dollars for a first violation, two hundred (\$200.00) dollars for the second violation and three hundred (\$300.00) dollars for a third violation and up to the statutory maximum thereafter.

(e) Where an excavator or public agency knowingly comes into contact with an underground facility during the course of excavation , demolition or discharge activity, and fails to notify the owner of the facility as soon as reasonably possible thereafter, the Department may impose a civil penalty, taking into account the amount of property damage or occurrence of personal injury or death, in accordance with the schedule of fines as stated in Section 16-345-9 (a) of these regulations.

Statement of purpose: To comply with the requirements of Public Act 87-71 to ensure compliance with Chapter 293 of the General Statutes. These regulations are designed to protect the public agencies and public utilities with respect to excavating, discharging explosives or demolition in proximity to any public utility underground facility and extends the penalty provisions and procedures to cover those who violate any of the provisions of Chapter 293 or the regulations.

Be it known that the foregoing regulations are amended as here and above stated by the aforesaid agency pursuant to Sec. 16-6b of the General Statutes, and Public Act No. 87-71 of the Public Acts, after publication in the Connecticut Law Journal on September 22, 1987, of the notice of proposal to amend such regulations, and the holding of an advertised public hearing on the 4th day of November, 1987.

Wherefore, the forgoing regulations are hereby amended as hereinabove stated, effective when filed with the Secretary of the State. In Witness Whereof: April 6, 1988, Peter G. Boucher, Chairperson. Approved by the Attorney General as to legal sufficiency in accordance with Sec. 4-169, as amended, General Statutes: May 3, 1988.

Approved by the Legislative Regulation Review Committee in accordance with Sec. 4-170, as amended, of the General Statutes: October 18, 1988.

Two certified copies received and filed, and one such copy forwarded to the Commission on Official Legal Publications in accordance with Sec. 4-172, as amended, of the General Statutes, Secretary of the State: October 25, 1988.

SECTION VIII: CONNECTICUT STATE REGULATIONS

DEPARTMENT OF PUBLIC UTILITY CONTROL

Excavation Near Underground Utility Facilities

Sec. 16-345-9 Assessment of civil penalties

(a) Any excavator, public agency or public utility which the Department finds to have violated any provisions of Section 16-345-3, 16-345-4 or 16-345-5 of these regulations, or applicable sections of Chapter 293 of the General Statutes, may be fined, after notice and opportunity for a hearing as provided in Section 16-345-8. In such case, they shall forfeit and pay to the state a civil penalty in accordance with the following schedule of penalties:

(1) For violations which result in property damage, where the amount of property damage sustained is not greater than three-thousand dollars, a civil penalty not to exceed tree-thousand dollar;

(2) For violations which result in property damage of more than tree-thousand dollars, a civil penalty not to exceed five-thousand dollars;

(3) For a violation which results in personal injury or death, a civil penalty not to exceed then-thousand dollars.

(b) In determining the amount of civil penalty to be assessed, the Department shall take into account the following criteria by way of aggravating and mitigating factors:

(1) The number of past violations within the prior two years of the date of the last violation,

(2) The degree of compliance with other requirement of Chapter 193 of the General Statutes, especially notification to the utility in the event of damage. In particular the department shall consider whether or not the violator has notified the utility pursuant to the provisions of Sections 16-345-4 (a) (1), 16-345-(a) (2) , 16-345-4 (b) (1), and 16-345-(b) (2),

(3) The "good faith "efforts of the violator to have complied with the statutes and regulations,

(4) The plans and procedures to insure compliance with the statutes and regulations in the future,

(5) The amount of damage caused to underground facilities.

(6) The degree of threat to the public safety, and degree of public safety, and degree of public inconvenience caused as a result of the violation,

(7) Whether the activity was performed in the course of business by a person or public agency regularly engaged in such activity.

(c) Where the Department has issued a penalty after a hearing, the Department shall specify the factors used in deter mining the penalty by way of mitigation or aggravation.

(d) Any excavator, public agency or public utility which the Department, finds has violated any of the provisions of Sections 16-345-3, 16-345-4 or 16-345-5 of these regulations, or applicable sections of Chapter 293 of the General Statutes, where there has not occurred any property

damage or personal injury, may be fined, after notice and opportunity for a hearing as provided in Section 16-345-8 of these regulations. The fines shall, at a minimum, be according to the following schedule taking into account the number past violations:

One hundred (\$100.00) dollars for a first violation, two hundred (\$200.00) dollars for the second violation and three hundred (\$300.00) dollars for a third violation and up to the statutory maximum thereafter.

(e) Where an excavator or public agency knowingly comes into contact with an underground facility during the course of excavation, demolition or discharge activity, and fails to notify the owner of the facility as soon as reasonably possible thereafter, the Department may impose a civil penalty, taking into account the amount of property damage or occurrence of personal injury or death, in accordance with the schedule of fines as stated in Section 16-345-9 (a) of these regulations.

Statement of purpose: To comply with the requirements of Public Act 87-71 to ensure compliance with Chapter 293 of the General Statutes. These regulations are designed to protect the public agencies and public utilities with respect to excavating, discharging explosives or demolition in proximity to any public utility underground facility and extends the penalty provisions and procedures to cover those who violate any of the provisions of Chapter 293 or the regulations.

Be it known that the foregoing regulations are amended as here and above stated by the aforesaid agency pursuant to Sec. 16-6b of the General Statutes, and Public Act No. 87-71 of the Public Acts, after publication in the Connecticut Law Journal on September 22, 1987, of the notice of proposal to amend such regulations, and the holding of an advertised public hearing on the 4th day of November, 1987.

Wherefore, the forgoing regulations are hereby amended as hereinabove stated, effective when filed with the Secretary of the State. In Witness Whereof: April 6, 1988, Peter G. Boucher, Chairperson. Approved by the Attorney General as to legal sufficiency in accordance with Sec. 4-169, as amended, General Statutes: May 3, 1988.

Approved by the Legislative Regulation Review Committee in accordance with Sec. 4-170, as amended, of the General Statutes: October 18, 1988.

Two certified copies received and filed, and one such copy forwarded to the Commission on Official Legal Publications in accordance with Sec. 4-172, as amended, of the General Statutes, Secretary of the State: October 25, 1988.

REVISIONS TO SECTION 16-345 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES REGARDING CALL BEFORE YOU DIG AND EXCAVATION NEAR UNDERGROUND UTILITY SYSTEMS

Section 1. Subsection (e) of Section 16-345-1 of the Regulations of Connecticut State Agencies is amended to read as follows:

(e) "Excavation" means an operation for the purposes of movement or removal of earth, rock or other materials in or on the ground, or otherwise disturbing the subsurface of the earth, by the use of powered or mechanized equipment, including but not limited to digging, blasting, auguring, back filling, test boring, drilling, pile driving, grading, plowing-in, hammering, pulling-in, trenching, [and] tunneling, RECLAMATION PROCESSES, AND MILLING; excluding the movement of earth by tools manipulated only by human or animal power and the tilling of soil for agricultural purposes.

Section 2. Subsection (8) of Section 16-345-3(a) of the Regulations of Connecticut State Agencies is amended to read as follows:

(8) Maintain records of all existing underground utility facility locations, including, WITHOUT LIMITATION, facilities abandoned in place AND INTERCONNECTIONS TO ALL UTILITY USERS.

Section 3. Subsection (1) of Section 16-345-3(b) is amended to read as follows:

(1) By the end of the second full day, (excluding Saturday, Sundays, and holidays) after the day of notification to the central clearinghouse of a proposed excavation, discharge of explosives or demolition at or near any of its facilities was received by the clearinghouse, or by the date on which excavation is scheduled to commence as reported in the notification to the central clearinghouse, whichever is later.

(A) In the event that it determines that it has underground facilities in the immediate vicinity of the specific site, mark the approximate location of such facilities using commercially available advanced proven techniques, methods and equipment appropriate to the circumstances, in accordance with Section 16-345-5 of these regulations, in such a manner that will enable the party giving such notice to establish the precise location of the underground facilities so marked, or if it is not practical to so mark the location of such facilities, identify the approximate location of such facilities in a manner mutually agreeable to the public utility and the party giving such notice. Any interconnections between facilities of the public utility and others, such as tees connecting mains to customer-owned facilities, shall be clearly marked and labeled BY THE UTILITY PROVIDING SERVICE TO THE INTERCONNECTION in accordance with Section 16-345-5 of these regulations, PROVIDED HOWEVER, THAT SUCH UTILITY SHALL NOT BE REQUIRED TO MARK THE LOCATION OF CUSTOMER OWNED FACILITIES, EXCEPT AT THE IMMEDIATE LOCATION OF THE INTERCONNECTION OR TEE. Whenever feasible, the public utility shall also provide information to the excavator as to any special requirements for excavation at or near its facilities including, without limitation, any special considerations regarding structural or lateral support or the use of heavy equipment over public utility facilities.

However, the public utility that has a standard and repeating layout and which is connected by facilities visible on the surface (such as certain storm sewers) need not mark out those standard and repeating facilities provided that maps indicating the approximate location are supplied to the person or public agency within the specified time limit. Facilities that are attached to a standard

and repeating layout but do not conform to the standard and repeating layout shall be marked unless an alternate mutually agreeable location method is used.

(B) In the event that it determines that it has no underground facilities in the immediate vicinity of the specific site, make reasonable effort to so notify the excavator giving such notice and document such efforts, [and may] OR mark this information in accordance with section 16-345-5 of these regulations.

Section 4. Subsection (c) of Section 16-345-3 of the Regulations of Connecticut State Agencies is amended to read as follows:

(c) A public utility may identify, in accordance with Section 16-345-5(k) of these regulations, the location of a facility connected to its facilities BEYOND THE POINT OF THE INTERCONNECTION OR TEE, but not owned or operated by the public utility, as a helpful guide to an excavator. Said identification shall not be deemed to impose any liability upon the public utility for [the accuracy] ANY INACCURACY [of] IN said identification.

Section 5. Subsection (f) of Section 16-345-3 of the Regulations of Connecticut State Agencies is amended to read as follows:

(f) For all new underground facilities installed after January 1, 1989, [which is practicable] and for all repairs, replacements or modifications involving an exposure of existing underground facilities at least 100 feet longitudinally after January 1, 1989, of which the utility has knowledge of such exposure, the utility shall, WHERE PRACTICABLE, install a warning tape located above the facility, and keep appropriate records thereof. The minimum separation between the facility and the warning tape shall be 12 inches unless the depth, other underground facilities or other engineering considerations make the minimum separation unfeasible. The warning tape shall be durable, designed to withstand extended underground exposure, be of the color assigned to the type of facility for surface markings in Section 16-345-5(h) and durable imprinted with an appropriate warning or message.

Section 6. Subsection (5) of Section 16-345-4(a) of the Regulations of Connecticut State Agencies is amended as follows:

(5) Exercise reasonable care when working in proximity to the underground facilities of any public utility. Reasonable care shall include, without limitation, the use of construction methods appropriate to ensure the integrity of existing utility facilities and their man-made temporary and permanent support including but not limited to adequate and proper shoring and proper backfill methods and techniques; the selection of equipment and explosives capable of performing the work with the minimum reasonable likelihood of disturbance to underground facilities; adequate supervisory personnel to ensure proper actions; proper understanding by the personnel on the job site of the authority of all parties involved in the activity so that prompt action can be taken in the event of unanticipated contact with underground facilities; adequate training of employees in executing their assignments to ensure protection of utility facilities and the public; maintaining necessary liaison with owners of underground facilities; sponsoring preplanning and preconstruction meetings as necessary, and complying with all applicable laws and regulations. IF THE EXCAVATOR IS UTILIZING TRENCHLESS EXCAVATION, THE EXCAVATOR SHALL, IF SUCH EXCAVATION IS EXPECTED TO CROSS OR ENCROACH WITHIN THE APPROXIMATE LOCATION OF UNDERGROUND FACILITIES EITHER HORIZONTALLY OR VERTICALLY, PRIOR TO THE CROSSING OR ENCROACHING, DETERMINE THE PRECISE LOCATION OF SUCH UNDERGROUND FACILITIES EXPECTED TO BE SO CROSSED OR ENCROACHED.

Section 7. Subsection (e) of Section 16-345-5 of the Regulations of Connecticut State Agencies is amended to read as follows:

(e) Staking shall consist of the use of stakes made of wood or any other suitable material. [The minimum size of a stake shall be one inch by one inch by twenty-four inches (1" x 1" x 24") (nominal size). Approximately one-fourth of the length of the stake shall be buried below the ground and the remainder of the stake shall be exposed above the ground in an upright position directly above the facility. The top six (6) inches of the exposed portion of the stake shall be of the designated public utility color in accordance with section 16-345-5(h) of these regulations. The stake shall also be identified by one (1) inch minimum size letters in black color, having the designated public utility identification abbreviation, in accordance with section 16-345-5(i) of these regulations and the facility size, if applicable, on all four sides of the exposed portion of the stake.] SUCH STAKES SHALL BE PLACED IN AN UPRIGHT POSITION DIRECTLY ABOVE THE FACILITY AND BE EXPOSED ABOVE THE GROUND A MINIMUM OF EIGHTEEN (18) INCHES. THE TOP OF THE STAKE SHALL BE CLEARLY MARKED WITH BOTH THE DESIGNATED UTILITY COLOR AND IDENTIFICATION ABBREVIATION IN ACCORDANCE WITH SECTIONS 16-345-5(h) AND 16-345(i) OF THESE REGULATIONS.

Section 8. Subsection (h) of Section 16-345-5 of the Regulations of Connecticut State Agencies is amended to read as follows:

(h) With the exception of normal traffic control markings, all markings on public streets, sidewalks and right-of-way, and all surface markings and staking of public utility locations and areas of proposed excavation, demolition or discharge of explosives shall be in accordance with, and shall not conflict with, the uniform color code.

YELLOW: Gas, oil petroleum products, steam, compressed air, compressed gases and all other hazardous materials except water.

RED: Electric power lines, electric power conduits and other electric power facilities.

ORANGE: Communication lines or cables, including but not limited to telephone, telegraph, fire signals, cable television, civil defense, data systems, electronic controls and other instrumentation.

BLUE: Water.

GREEN: Storm and sanitary sewers and drainage systems including force mains and other non-hazardous materials.

PURPLE: Radioactive materials.

White: Proposed working area of excavation, discharge or explosive or demolition; survey markings.

BROWN: Other

Unpainted stakes with [orange, red, or yellow flags] COLORED RIBBON: survey markings

Section 9. Subsection (k) of Section 16-345-5 of the Regulations of Connecticut State Agencies is amended to read as follows:

(k) A public utility may IN ACCORDANCE WITH PROVISIONS OF SECTION 16-345-3(c), identify the location of a facility connected to its facility BEYOND THE POINT OF THE INTERCONNECTION OR TEE, but not owned or operated by the public utility as a helpful guide to an excavator in a similar manner to Section 16-345-5(a) through (j) of these regulations, except that surface markings shall be dotted or broken line instead of a solid line.

(1) A public utility may signify that it has no facilities in the immediate area of a proposed excavation, demolition or discharge of explosives by writing "no name of utility or commonly recognized abbreviation" in letters at least twelve inches high using the uniform color code as described in section 16-345-5(h) of these regulations.