



Excavators

Damage Prevention Guide

A user's guide to safe digging practices in Connecticut.

Regular business hours

Monday-Friday 7:00AM to 5:00PM

After-hours service is available during all non-business hours including weekends and observed holidays

After-hours call center answers for **EMERGENCY EXCAVATIONS ONLY**

Online E-Ticket program
accepts **routine and emergency**
tickets anytime.



Always contact **811** or visit **CBYD.com** to file an E-Ticket **before** you dig.

This manual has been prepared for excavators and operators as a reference tool for the usage of CBYD 811. The Manual reflects the policies of the Board of Directors at CBYD 811. It is not a rule and it does not have the force and effect of law; the governing law is; section 16-345 to 16-357 of the Connecticut General Statutes and section 16-345 of the Regulations of Connecticut State Agencies. Pipeline Safety Improvement Act of 2002; Federal Pipeline Safety Act; National Electric Safety Code ANSI C-2; and OSHA standard 1926.651.

Every effort has been made to accurately reproduce the law, but CBYD 811, its officers, employees and agents make no representations or warranties as to the accuracy of this reproduction. This manual is not intended to alter the requirements of the law and it should not be used as a legal reference document. Persons seeking interpretations of the law should contact their own attorneys. While familiarity with the manual is recommended for all excavators and member operators, their responsibilities are as provided by law.

This manual does not have a copyright. The manual has been updated for use in January 2022.




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Who is Call Before You Dig and what do we do?

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 Public Utilities Regulatory Authority (PURA) oversees CBYD. The organization is administered by a board of annually elected directors representing various public and private utilities.

The purpose of CBYD is to function as a statewide, one-call notification system providing excavators, including the general public, with the ability to inform multiple owners and operators of underground facilities during proposed excavations. This is accomplished with a phone call to a toll free number or submitting an E-Ticket on the CBYD website (www.cbyd.com).

Callers should note that as part of standard operating procedures, all conversations are voice recorded. CBYD must be notified first, prior to excavating or requesting application for permits from any public agency.



Call center hours

Local Call Center Hours of Operation:

CBYD Call Center operates 7:00 AM to 5:00 PM Monday through Friday.

After-Hours Call Center:

CBYD after-hours call center operates 5:00 PM to 7:00 AM Monday through Friday, 24-hour service Saturday and Sunday and all observed holidays. See list of holidays on Page 11.

Only emergency calls are accepted after hours. By state regulation, it is the responsibility of the excavator to call each utility directly for an emergency mark-out.

Why contact CBYD?

1. It is the law!

2. You must submit a locate request at least two full working days but not more than 30 days before any excavation starts. (Excluding holidays & weekends). Sec. 16-345-4(a)1-2.
3. You must submit locate requests regardless of whether the location of the excavation is public or private property. You must call even if it is on private property, out in the middle of a field, or on a street that has no name.
4. You must submit locate requests if you are using mechanized equipment even if you are only excavating a few inches or just surface grading. If you move material, or plan to drill or drive anything into the ground ... you must contact CBYD.
5. Do NOT rely on old marks or faulty information ... Submit an E-Ticket or call CBYD for your own locate request.
6. Before submitting an E-Ticket or calling CBYD, you must pre-mark the area you plan to excavate with white paint, flags, or white tipped stakes. Sec. 16-345-4(a)E.
7. When investigators from the Public Utilities Regulatory Authority (PURA) inspect an excavation site or investigate damage, they will check to see if you have a valid locate request. Remember, locate requests expire 30 days from the date it was created.
8. Emergency situations require an emergency CBYD ticket. An emergency is: a situation involving danger to life, health, or property, interrupting the operation of a major industrial plant, or disrupting the continuity of public utility service. Sec. 16-345-4(a)2.
9. In an emergency, submit a ticket online or call CBYD with the location and details of the emergency excavation as soon as possible. The excavator or responsible party is required to notify all utilities listed on the ticket directly. Sec. 16-345-4(a)B.
- 10. To protect yourself, others working around you, the community residents and the underground assets.**

The Process for Safe Excavation

1. EXCAVATOR submits LOCATE Request to CBYD via online E-Ticket or a call to the CBYD call center.

2. CBYD Center identifies and transmits LOCATE request to facility operators that might have buried facilities in the proposed excavation site.



4. EXCAVATOR verifies all utilities listed on the CBYD ticket are accounted for before beginning to excavate. If all utilities are NOT marked, they MUST contact the utilities directly before starting. Excavator digs with care with respect to the marks.

3. FACILITY OWNERS either mark the facilities in the area or give a positive response to the excavator that the site is clear.

Call Before You Dig locate request ticket process

- Gather all pertinent information regarding the proposed excavation. This includes the type of work, type of excavation, method of work, start date, estimated job completion date, who the excavator is, whether the area being excavated is private/public (or both) property, street address of excavation, nearest intersection street and specific location remarks including footage/compass direction/landmarks.
- The CBYD Locate Request Ticket is processed automatically through the system, transmitting out notifications to the utilities in the area via email. The list of utilities is directly connected to the registered data supplied from the CBYD member utilities.
- After transmitting to the utilities, the system emails a CBYD Confirmation Ticket to your email supplied during registration. Your Confirmation Ticket is a crucial document as it has your excavation details including your CBYD ticket number and the list of utilities in the area with their contact numbers.
(See example of a confirmation ticket on page 9. It is your responsibility to verify you have received the Confirmation Ticket and that the information on it is accurate. If you do not receive the emailed Confirmation, there could be an issue with the ticket. Please contact the call center as soon as possible.)
- You must wait the required minimum two full working days or until your designated start date to begin excavating to allow the utilities to respond to the request and make the appropriate markings.
- Before starting excavation, verify all utilities have marked the appropriate area. Refer to the confirmation ticket with the list of notified utilities in the area. Contact them directly if you do not have any markings or received a positive response from them. You must wait the required minimum two full working days or until your designated start date to begin excavating to allow the utilities to respond to the request and make the appropriate markings.
- **Call Before You Dig Locate Request Process:** Only after verifying all the utility operators have marked the area or given a positive response to you directly should you begin excavating. It is your responsibility as the excavator to verify the mark-out is complete.

What is an excavation?

Connecticut State Law, Chapter 293. Sec. 16-345(5); “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, tunneling, dredging, reclamation processes and milling; excluding the tilling of soil for agricultural purposes. For the purposes of this subdivision, dredging does not include dredging associated with the production and harvesting of aquaculture crops.

Excavations include, but are not limited to:

- Demolition of Structures
- Cable/Pipe Plowing or Driving
- Setting Poles
- Driving Survey Pins
- Installing Sign Poles
- Boring Holes for Percolation Tests
- Ditching
- Auguring
- Moving Earth
- Backfilling
- Plowing in
- Jackhammering
- Milling
- * Tree Root Removal/Stump grinding:
- Drilling
- Grading
- Trenching
- Digging
- Scraping
- Razing
- Dredging
- Tunneling
- Wrecking
- Saw Cutting
- Pulling in
- Fence Post or Pile Driving
- Pile Driving
- Boring

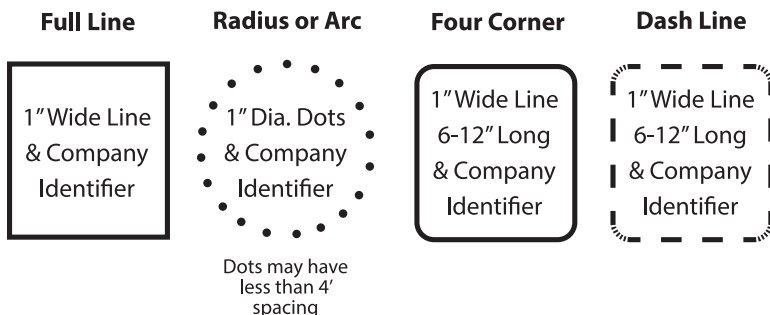


Guidelines for Pre-Marking

The following is only a guideline. Refer to the current Common Ground Alliance (CGA) Best Practices for complete details (www.commongroundalliance.com).

These illustrations are examples of how excavators should mark the area of proposed excavation. Use white marking products (paint, flags, stakes, whiskers or combination) to identify the excavation site. Connecticut regulations require the excavator to “designate” or “white line” the proposed excavation area, or to conduct a preconstruction meeting with all affected operators.

Single point excavation markings



Mark with white paint the proposed area of excavation by using: a continuous line, dots marking a radius or arc, dashes marking the four corners of a project or dashes outlining the excavation project. Make the dash about 6" to 12" in length and 1" in width. Space them between 4' to 50' apart. Make the marks close together enough to be seen by the Operator's locators. Dots of about 1" in diameter are typically used to define arcs or radii and can be placed at closer intervals instead of dashes. Sec. 16-345-5 Surface Markings.

What information is required for a CBYD locate request?

- Every user must have their own account with Call Before You Dig. This requires the following information: first and last name, company name, postal address, contact phone number, alternate phone number, email address, industry of work and class of work. You will be required to setup a username, password and one security question.
- Must have the following information available to create a CBYD Locate Request:
 - Type of ticket; routine or emergency.
 - Type of work; electric, gas, water, etc.
 - Excavation Activity; pole install/replacement, gas service repair, water main, etc.
 - Excavation Method; hand excavation, auguring, drilling, machine, milling, etc.
 - Job Start Date; we cannot provide your start date for you.
 - Job Completion Date; this is for data collecting purposes.
 - Excavator Doing Work; auto populates your information unless designated to a sub-contractor.
 - Location of Workplace; private property, roadway or both.
 - Is the area pre-marked; yes/no?
 - Search location; address of excavation location, nearest intersection, latitude/longitude coordinates.
 - Confirm the searched area is the correct and designate the excavation site with one of the mapping tools.
 - Confirm the Excavation address, town and nearest intersecting street.
 - Add all important details to the Remarks field; footage, compass direction, landmarks, description of the site and any other pertinent information necessary for utility operator locators to locate the area of excavation.

Sec. 16-345-4(a)A-G

E-Ticket internet notification

An E-Ticket is a locate request created and entered into the CBYD Center's database through the internet by an excavator at a remote location. CBYD's interactive website can process routine, emergency, and renewal locate requests. All you need:

- Internet with updated web browser
- E-mail address
- User Name and Password

Entering an E-Ticket

- When entering an E-Ticket you need the same information stated on page 7.
- Once the E-Ticket has been submitted, you will receive an email Excavator Confirmation Sheet (see example on page. 9). Check your email for the confirmation sheet to review the excavation details are correct. The confirmation sheet contains important information about the Locate Request.
- After the Locate Request is submitted to CBYD, the information is transmitted to all the utility operators in the area. When submitting and EMERGENCY ticket, it is the excavator's responsibility to contact all the utilities on the Locate Request directly. Failure to do so is a violation of the regulations.
- Once the E-Ticket has been completed a chance to review the locate request and make additions, changes or corrections is available prior to confirming that the data is correct. Upon review the E-Ticket is transmitted into the system for distribution to facility operators with underground facilities in the dig site area.

Advantages of an E-Ticket

- Excavators can now create their own mark-out request on the internet at the CBYD Center's website - www.cbyd.com
- This service is available 24 hrs. a day, 7 days a week, 365 days a year!
- A printed copy of the E-Ticket for the excavation is available for your records. It lists the facility operators that have been notified of the dig.
- After you have completed your first E-Ticket, all your significant company information will be automatically entered on each subsequent E-ticket, saving time.
- No waiting on the telephone during peak periods.
- Verbal transcription errors can be eliminated.
- Self-paced tutorials are available at our website under the HELP button.
- ***The E-Ticket service is FREE!***

Excavator confirmation sheet

After submitting a CBYD Locate Request, check your email inbox for the Excavator Confirmation Sheet. This sheet includes all of the excavation details including important start date, time and **expiration date** of the ticket. It also includes the mapped area you designated and a **list of the utilities** in the area with **contact numbers** for your convenience.



Confirmation and Mark out Check-list

Call Before You Dig CT
www.ct.gov/cbyd
Call 811

Ticket #	Excavator Details	Caller Id:
20165000016	Contact: Mr Anthony Willemain Address: 2040 Whitney Ave Hamden Email: anthony.willemain@pelicancorp.com	Ph: 203-248-5502 Cell: Not Supplied Fax: Not Supplied

Dig Site and Ticket Details	
	Ticket Type
	Emergency
	User Reference
	Not Supplied
	Ticket Date
	12/15/2016 11:37:06
	Work Start Date
	12/15/2016 04:00
Ticket Expiry	
01/14/2017	
Address	2040 Whitney Ave, HAMDEN
Type of work	Construction Curbing Hand Exc.
Location of Workplace	Private Property
Location in Road	Not Supplied
Excavator	Pelicancorp
Is Pre-marked	YES
Cross-Street	Skiff ST
Notes / Description of works	Side of road, 10ft off the curb. 10ft radius around the pole.

WARNING: Check that the map location and the details contained in this document are correct. If not please contact the call center to make the necessary corrections. Some utilities may not be able to make changes to be sure your "marker" are as descriptive as possible. CT regulations require the proposed dig site must be pre-marked in white paint, white flags or white tipped stakes before the location request can be made.

Your Responsibilities

- Do not proceed with any excavation until all Public Utility owners listed have marked out their facilities or have contacted you directly.
- Ensure you adhere to any State legislative requirements regarding safe digging requirements.
- If you damage an underground Public Utility you MUST advise the Public Utility owner immediately.

For more information on safe excavation practices, visit www.ct.gov/cbyd

Utility Owner Details

The Public Utility owners listed below have been requested to mark out the location of their facilities. Please note they may contact you directly to clarify any aspects of your ticket.

Check List	Phone	After Hours	Status	Response Date
FIBERTECH NETWORKS	1-585-697-5117	800-497-5578	NOTIFIED	Y/N
FRONTIER COMMUNICATIONS	1800-598-0628	# 860-354-5561 OR 203-579-8011	NOTIFIED	Y/N
GREATER NEW HAVEN WPCA	203-466-5263	203-466-5260	NOTIFIED	Y/N
ON-TARGET LOCATING SVC	1-800-598-0628	800-598-0628	NOTIFIED	Y/N
REGIONAL WATER AUTHORITY	203-401-2626/2581		NOTIFIED	Y/N
SOUTHERN CONN GAS CO	203-795-7781		NOTIFIED	Y/N
TOWN OF HAMDEN	203-287-7040	203-466-5260	NOTIFIED	Y/N
TOWN OF NORTH HAVEN	203-234-2190	866-266-4059	NOTIFIED	Y/N
UNITED ILLUMINATING COMPANY	915-2547 CELL#	203-926-4540	NOTIFIED	Y/N

END OF UTILITIES LIST

**“Provide
communication
and education
to improve
safety when
excavating.”**

- Call Before You Dig, Inc.



Wait the required time

- 1.** Before you begin any non-emergency excavation you must contact CBYD and submit a locate request, at least two full days, but not more than 30, before your excavation begins (not including the date of you contacting CBYD). This will give the facility operators at least two full days to respond.
- 2.** Do not start excavating before your stated start date and time!
- 3.** Weekends and holidays are not marking days and are not included in the two full working days required for your site to be marked out (See holidays below).
- 4.** It is a violation to NOT begin excavating within 30 days of the day the ticket is submitted. If you are no longer excavating in that time, please contact the center to cancel your request.
- 5.** If your excavation has not started within 30 days of the contact date, your mark-out request will no longer be valid, and a new mark-out request will have to be submitted.

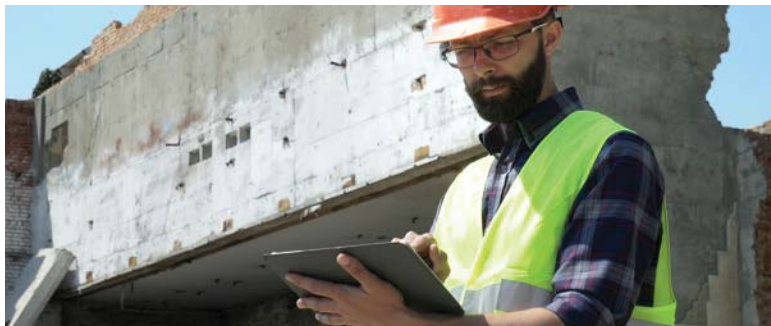
Observed holidays

New Year's Day - January 1st*
Martin Luther King Day
President's Day
Good Friday
Memorial Day
Juneteenth - June 19
Independence Day - 4th of July*
Labor Day
Indigenous People's Day
Veteran's Day - November 11th*
Thanksgiving Day & Following Day
Christmas Day - December 25th*

** Holidays that could fall on a weekend day (Saturday or Sunday) will be observed either the Friday before or the following Monday. Please see the Start Date Request Calendar on Page 22 to see how holidays affect Locate Request.*

Confirm the utility response

1. Each utility identified on your locate request is required to mark-out the area of proposed excavation or advise you that the area is clear. Each utility identified on your locate request ticket is required to have a Positive Response, which means they must respond to your ticket.
2. The response from the utility operator will be one of the following:
 - Location of underground facilities marked.
 - Marks on site stating 'NO {utility name}'.
 - A phone call or email from the utility operator stating they have no facilities in your area of proposed excavation.
3. Some utility member will respond with the Positive Response tool accessible through your E-Ticket account page. Please visit CBYD.com for more information.
4. If the area is not marked, or you did not hear from the facility operators listed on the locate request before your stated commencement date, you are required to contact the utility directly. This is your responsibility as the excavator. Do NOT contact 811 CBYD. You must contact the utility directly.
5. It is important for you to provide an accurate contact phone number when registering your CBYD account.



Respect the marks

- 1.** The excavator is responsible for maintaining the marks set down by utility operators at your site.
- 2.** Before excavation begins, walk-through the site to familiarize yourself with the markings and the locations of buried utilities. Document the markings with pictures.
- 3.** Pay special attention to any changes in direction that the underground facilities take.
- 4.** If your excavation will cause the removal/disturbance of markings, establish offset marks in order to maintain a reference point for those underground facilities.
- 5.** Make sure that everyone involved in your excavation is aware of any offsets that have been established, any marks that have been compromised, or any other information regarding facility locations.
- 6.** Don't put spoil piles over markings. Avoid driving machinery over stakes and flags. Paved areas should be swept periodically so that painted marks remain visible.
- 7.** If marks have faded or been compromised to the point where proper and safe excavation is no longer possible, call the CBYD Center and make a request for a new mark-out ticket.
- 8.** If you refresh the markings at your site, make sure that you use the uniform color code and identification letters to avoid any confusion. See color code on page 23.



Excavating with care

- 1.** Before using mechanized equipment within the approximate location of any marked utility facility you should:
 - Verify the location, type, size, direction of run and depth of facility.
- 2.** Mechanized equipment may be used for removing pavement:
 - Care and good judgment should be used when removing pavement.
 - Avoid starting the pavement break directly over the marked facility.
 - Wherever possible, start a few feet away from the marks and attempt to 'peel' off the pavement or break it into small chunks for removal.
- 3.** Verification by a hand dug test hole requires the facility to be exposed to view. If after a diligent search the facility cannot be verified in this manner, notify the facility operator.
- 4.** If you are using trenchless excavation (boring, tunneling, drilling, vibratory plowing, etc.), you must expose all utility facilities which you cross or encroach upon in the location where you cross or encroach upon, to ensure the facilities do not get damaged.
- 5.** Do not assume that buried facilities will be at a certain depth. Facilities may have been originally installed at a prescribed depth, but later erosion or grade changes cause them to now have shallow or deep cover.
- 6.** If you find an unmarked or unknown facility and you cannot tell who the facility owner is, refer to the list of utilities on the confirmation sheet, and contact the utilities directly.



Excavation after verification

1. When excavating close to an underground facility, it is a good practice to have a spotter assist and guide the machine operator.
2. No powered or mechanical excavation within 18" of the combustible or hazardous fluid or gas lines.
3. If the excavation work requires significant spans of the facility to be exposed, it is the excavator's responsibility to support them to prevent sagging or collapse as needed. Contact the utility operator for support, guidance or assistance.
4. Take care not to damage the conduit or protective coating of a facility. If you do, leave the damaged facility exposed and immediately call the utility operator.

Hand dig near gas lines

If you need to dig within the approximate location of a combustible, hazardous fluids or gas line (natural gas, propane or gasoline), **YOU MUST HAND DIG OR USE SOFT EXCAVATION METHODS ONLY!**

All excavation, except the removal of bituminous or concrete road surfaces, within 18" on either side of a hazardous fuel line must be done with hand tools or soft excavation only.

Use of mechanized equipment within 18" on either side of the approximate location of hazardous or fuel lines is a violation of Connecticut law. Sec 16-345-4(c)5.

Approximate location

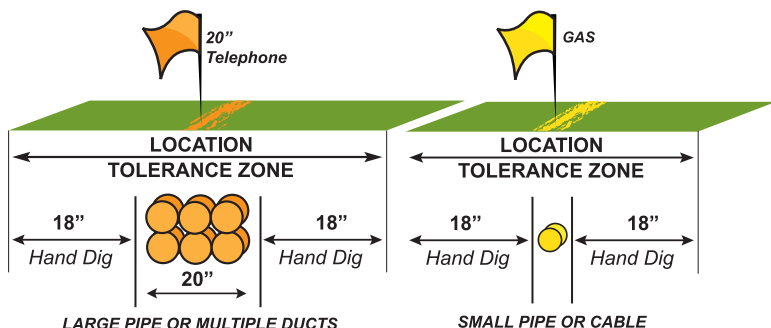
The approximate location is defined as:

The Approximate Location is defined by: Connecticut State Law, Chapter 293. Sec. 16-345(8); "Approximate location of an underground utility facility" means a strip of land not more than three feet wide centered on the actual location of an underground utility facility or a strip of land extending not more than one and one-half feet on either side of the actual location of an underground utility facility.

This means by example 18" on either side.

For example:

Measuring the Approximate Location



The facility at left is marked as being 20 inches wide. So, 18 inches on each side, plus half the width of the facility (10 inches) gives us an Approximate Location of an Underground Facility of 56 inches. $18+10+10+18=56$

The facility at right is marked with its location, but shows no width. So, 18" on each side, gives us an Approximate Location of 36".

If you break a natural gas, petroleum, propane or other combustible hazardous liquid or gas line, follow these steps

- 1.** Stop work and evacuate everyone to a safe location away from the damage.
- 2.** Call 911.
- 3.** Call the appropriate utility operator.
- 4.** Don't do anything that could cause a spark.
- 5.** Alert everyone on the premises.
- 6.** Keep the public and traffic away.
- 7.** Tape, rope or place cones around the area.
- 8.** Stay upwind of blowing gas.
- 9.** Do not try to fix a gas pipe. Do not operate any valves.
- 10.** Do not try to extinguish a gas burning fire, unless there is a threat to life.



If a facility is contacted or damaged

1. If gas or other hazardous liquid is escaping from the damage, clear the area of any person to a safe distance away from the damage.
2. Contact 911 immediately and then the utility directly. You should keep the emergency number of your local facility operators at hand. (See Page 18 for our own use)
3. If you are in doubt about whose facility it is, refer to the Excavator Confirmation sheet for list of utilities. Contact the utilities directly for clarification or contact Call Before You Dig for further assistance.
4. Do NOT attempt to repair a damage yourself. This is tampering with utilities. Contact utility directly for the proper authority to do repair.
5. Under no circumstances should you BURY A DAMAGED FACILITY. Even a minor scrape, nick, cut, tear, break, or dent should be reported to the facility owner immediately. If not promptly repaired, it could result in a future leak, service outage, explosion, accident, injury, or death.
6. Document the situation and file a report online using CBYD's DamageAccess. (www.cbyd.com/damage-reporting)

Damage Reporting - Call Before You Dig Connecticut

Home Excavator Utility Home Owner Resources **Damage Reporting** News & Events Contact

CBYD 811

DAMAGE REPORTING TOOL

Damage Reporting Tool

DamageAccess is the web based tool that allows anyone to report both damages to underground utility facilities and violations of safe excavating practices that did not result in event damage. Each report must be approved by a supervisor from the reporting company to confirm the accuracy of the content, before being submitted to PURA for their review.

Completed reports must be received by PURA within 30 days of the incident occurrence. A user guide is available here for download to help guide you through the process as a new user. Please see the link below to read the released memorandum from PURA -- Re: Changes in reporting requirements for underground utility damages and violations of Connecticut Call Before You Dig laws.

Learn more about how Call Before You Dig transformed the damage reporting process in CT working with PURA and One Call solutions provider, *FalconCorps*.

Video Link on YouTube: <https://youtu.be/V90QW4tEg>

DamageAccess

LOGIN REGISTER

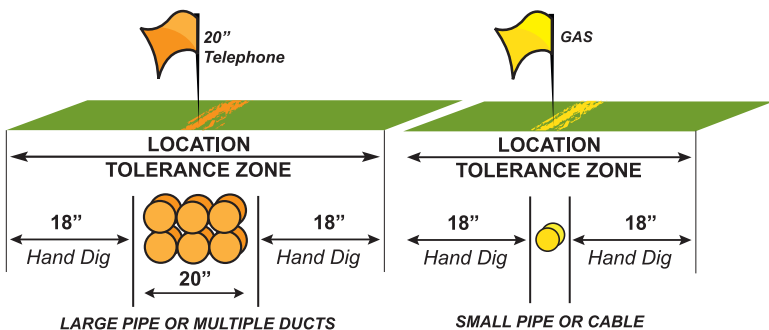
Suggestions and reminders

- Any person responsible for excavating, demolition or blasting must submit a locate request and provide at least two full working days notice, excluding Saturdays, Sundays and holidays, before excavation begins.
- You **MUST** white line, unless the area exceeds 1,000 linear feet. If the excavation is larger than 1,000 linear feet, you can organize a 'pre-construction' meeting with the utilities in the area with copies of maps and a prepared plan of excavation.
- For routine tickets, if a utility doesn't respond to a Locate Request, you must not excavate and must notify the utility directly. (see Excavator Confirmation Sheet for utility's contact numbers)
- Use prudent judgement when all facilities are not identified. Considerations of proceeding are potential hazard to life, property and facility damage. Unless it is an emergency, calls should be made to the affected utilities if the area is not marked or confirmed clear.
- 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, 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, not the start date. 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.
- Don't work under anyone else's locate request.

Color Code for Utility Locations

Gas/Oil/Petroleum	Sewer
Water	Reclaimed Water
Internet/Communication/TV	Temporary Survey
Electric	Proposed Excavation

Tolerance Zones



Start date request calendar

START DATE REQUEST CALENDAR											
MON	TUES	WED	THURS	FRI	SAT	SUN	MON	TUES	WED	THURS	
Submit Ticket	DAY 1	DAY 2	DIG								
	Submit Ticket	DAY 1	DAY 2	DIG							
		Submit Ticket	DAY 1	DAY 2	DIG						
			Submit Ticket	DAY 1	Not a Marking Day	Not a Marking Day	DAY 2	DIG			
				Submit Ticket	Not a Marking Day	Not a Marking Day	DAY 1	DAY 2	DIG		
					Submit Ticket	Not a Marking Day	DAY 1	DAY 2	DIG		
						Submit Ticket	DAY 1	DAY 2	DIG		
							Submit Ticket	DAY 1	DAY 2	DIG	

***Note**
Holidays can fall on any work day, M-F. Holidays are NOT counted as marking days.



PelicanCorp is the provider of the Call Before You Dig service and software solutions.

PelicanCorp is the **Global Leader in Damage Prevention Solutions** built specifically for the protection of essential infrastructure. PelicanCorp connects people, applications, and devices through a unified platform to help industry professionals manage risk and build quality projects - safely, on time, and within budget.

[Learn more at pelicancorp.com](https://pelicancorp.com)

Regulation of the

Public Utilities Regulatory Authority
Concerning

**Excavation Near Underground Utility
Facilities**

Regulations adopted after July 1, 2013, become effective upon posting to the Connecticut eRegulations System, or at a later date if specified within the regulation.

Posted to the Connecticut eRegulations System on **August 2, 2016**

EFFECTIVE DATE
August 2, 2016

Approved by the Attorney General on
May 9, 2016

Approved by the Legislation Regulation Review Committee on
July 26, 2016

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on
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Excavation Near Underground Utility Facilities

Sec. 16-345-1. Definitions

As used in sections 16-345-1 to 16-345-9, inclusive, of the regulations of Connecticut state agencies:

(1) "Excavator" means a person, public utility or public agency, directly performing or engaged in the act of excavation or demolition;

(2) "Public agency" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means the state or any political subdivision thereof, including any governmental agency*);

(3) "Public utility" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means the owner or operator of underground facilities for furnishing electric, gas, telephone, telegraph, communications, pipeline, sewage, water, community television antenna, steam, traffic signal, fire signal or similar service, including a municipal or other public owner or operator. A public utility does not include the owner of facilities for utility service solely for such owner's private residence.*);

(4) "Central clearinghouse" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means the organization organized and operated by public utilities pursuant to section 16-348, as amended by this act, for the purposes of receiving and giving notice of excavation, discharge of explosives and demolition activity within the state.*);

(5) "Excavation" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*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, tunneling, dredging, reclamation processes and milling; excluding the tilling of soil for agricultural purposes. For the purposes of this subdivision, dredging does not include dredging associated with the production and harvesting of aquaculture crops.*);

(6) "Demolition" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means the wrecking, razing, rending, moving or removing of any structure.*);

(7) "Damage" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*includes, but is not limited to, the substantial weakening of structural or lateral support of a utility facility such that the continued integrity of such utility facility is imperiled, penetration or destruction of any utility facility protective coating, housing or other protective device or the severance, partial or complete, of any utility facility.*);

(8) "Approximate location" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means a strip of land not more than three feet wide centered on the actual location of an underground utility facility or a strip of land extending not more than one and one-half feet on either side of the actual location of an underground utility facility.*);

(9) "Authority" means the Public Utilities Regulatory Authority or its successor;

(10) "Designated area" means the area of proposed excavation or demolition designated in accordance with subsection (e) of section 16-345-4 of the Regulations of Connecticut State Agencies;

(11) "Area of continual excavation" means a location where excavation is part of the normal business of that location, including, but not limited to, cemeteries, quarries, and farms;

(12) "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, 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;

(13) "Registered" when used in connection with a public utility's facilities, includes such facilities known to the central clearinghouse to the extent that the central clearinghouse has sufficient information to provide notification service as required by section 16-349 of the Connecticut General Statutes;

(14) "Emergency excavation" means an excavation or demolition without explosives that is necessary to correct an emergency involving danger to life, health, or property, the interruption of operation of a major industrial plant, or to assure the continuity of public utility service;

(15) "Emergency blasting" means the use of explosives to correct an emergency involving an immediate and substantial danger of death or serious personal injury;

(16) "Soft digging" means a nonmechanical and nondestructive process used to excavate and evacuate soils at a controlled rate, using high pressure water or air jet to break up the soil, often in conjunction with a high power vacuum unit to extract the soil without damaging the facilities;

(17) "Person" has the same meaning as provided in section 16-345 of the Connecticut General Statutes (*means an individual, partnership, corporation, limited liability company or association, including a person engaged as a contractor by a public agency but excluding a public agency*);

(18) "Responsible party" is a person, public agency or public utility that has direct knowledge and oversight of an excavation or demolition that will be performed on its behalf;

(19) "Contact" means the striking, scraping or denting, however slight, of any underground utility facility, including any underground utility facility protective coating, housing or other protective device;

(20) "Notify the central clearinghouse" means to provide the information required by section 16-345-4 of the Regulations of Connecticut State Agencies to the central clearinghouse about a proposed excavation or demolition by calling the designated telephone number, utilizing the designated website, or otherwise providing notice to the central clearinghouse in a manner established by the central clearinghouse; and

(21) "Ticket" means a notification provided by the excavator to the central clearinghouse.

(Effective October 25, 1988; Amended March 21, 1997; Amended August 23, 2000; Amended August 2, 2016)

Sec. 16-345-2. Central clearinghouse

(a) The central clearinghouse shall be Call Before You Dig, Inc., a corporation established under the Connecticut Non stock Corporation Act, membership which is open to all public utilities which file with it the information required by sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies.

(b) The certificate of incorporation, bylaws and written operating procedures of the central clearinghouse shall be subject to the approval of the Authority, and any changes to these shall be approved by the Authority prior to implementation of such changes.

(c) The central clearinghouse shall maintain 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 tickets to public utilities;

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

(3) advising the caller to contact individual public utilities which the caller suspects might be affected by emergency excavations or emergency blasting, and making available the emergency contact telephone numbers for the affected utilities;

(4) retaining records of all tickets to the central clearinghouse for a reasonable time period;

(5) establishing and maintaining a standard mapping system;

(6) providing for the institution of advertisement and educational programs to advise excavators, public agencies and public utilities affected by Chapter 293 of the Connecticut General Statutes, of the central clearinghouse's terms and requirements; encouraging educational programs for the benefit of excavators and public utilities; and encouraging public and private agencies planning or undertaking construction projects to require design engineers to obtain underground utility information, identify such data on drawings, resolve facility conflicts with public utilities, and design projects to minimize adverse effects on facilities;

(7) confirming tickets as being processed by issuing a ticket number at the end of the excavator requesting a ticket from the central clearinghouse;

(8) providing for processing of emergency excavation or emergency blasting tickets during the hours when the central clearinghouse is not in operation;

(9) receiving, handling and dispatching tickets of areas of continual excavation; and

(10) such other actions as the Authority shall deem necessary to carry out the objectives of Chapter 293 of the Connecticut General Statutes and to protect public safety.

(d) No less than 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 central clearinghouse; and

(2) be calculated so that the central clearinghouse shall neither make a profit nor suffer a loss, but may include reasonable reserves in accordance with standard accounting practices to address unforeseen circumstances, 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 maintain a current list of public utilities that participate in the central clearinghouse's service, and from time to time, as the Authority may require, file with the Authority the list, 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 tickets of proposed excavations or demolitions;

(2) the business address of such employee;

(3) the normal business hours 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 email address to be used to contact such employee or representative during normal business hours;

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

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

(f) The central clearinghouse shall maintain a list of registered utilities, contact persons or departments, and telephone contact numbers, for the purpose of providing information about underground utility facility locations related to the design of new facilities, surveying, bid preparation and other activities where excavation or demolition is not planned to commence within thirty (30) days or where final construction designs have not been completed such that it is premature to notify the central clearinghouse of a proposed excavation or demolition. Upon request by any parties engaged in design activities, the

central clearinghouse shall determine which public utilities are registered in the area of a proposed project and make available the contact information of such public utilities.

(g) 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 sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies.

(h) The central clearinghouse shall, from time to time, file with the Authority, such information that the Authority may require.

(Effective October 25, 1988; Amended August 23, 2000; Amended August 2, 2016)

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

(a) Each public utility shall:

(1) Register the geographic areas in which it owns or operates underground facilities within the State of Connecticut, including new facilities, by reference to the central clearinghouse's standard mapping system and maintain a current file containing the information listed in subsection (e) of section 16-345-2 of the Regulations of Connecticut State Agencies with the central clearinghouse;

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

(3) Report to the central clearinghouse, in accordance with the requirements established by the Authority, any excavation or demolition of which it is aware which has occurred at or near any of its facilities in violation of sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies or Chapter 293 of the Connecticut General Statutes;

(4) Report to the central clearinghouse, in accordance with the requirements established by the Authority, any damage to the utility's underground facilities which resulted from, or which the public utility suspects resulted from any excavation or demolition conducted by any excavator;

(5) File with the central clearinghouse such other information which the central clearinghouse or the Authority shall deem necessary to carry out the objectives of Chapter 293 of the Connecticut General Statutes and the public safety;

(6) Report to the Authority, as soon as possible, any excavator whose actions or frequency of damage incidents indicates a situation that may require particular attention;

(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 mapping system maintained by the central clearinghouse. The record shall be sufficiently detailed in order to allow the central clearinghouse to identify such previously unrecorded or inaccurately recorded facilities within its standard mapping system;

(8) Maintain records of all existing underground utility facility locations, including without limitation, facilities abandoned in place and interconnections to all utility users;

(9) Receive tickets from the central clearinghouse;

(10) Provide, and promptly update, all information required in subsections (e) and (f) of section 16-345-2 of the Regulations of Connecticut State Agencies to the central clearinghouse; and

(11) Provide, and promptly update a current listing of emergency contact telephone numbers with the central clearinghouse, for the purposes of the central clearinghouse making available the emergency contact phone number to those requesting tickets for emergency excavation or emergency blasting.

(b) Each public utility shall:

(1) By the end of the second full day, (excluding Saturdays, Sundays and holidays) after the day of notification to the central clearinghouse of a proposed excavation or demolition, or by the date on which excavation or demolition is scheduled to commence as reported in the notification to the central clearinghouse, whichever is later:

(A) Except for an area of continual excavation, in the event that the public utility determines that it has underground facilities in the designated area, 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 the Regulations of Connecticut State Agencies, in such a manner that will enable the excavator to establish the actual 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 excavator. 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 the Regulations of Connecticut State Agencies, 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 or demolition 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;

(B) Notwithstanding subparagraph (A) of this subdivision, 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 those standard and repeating facilities, provided that maps indicating the approximate location are supplied to the excavator 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;

(C) In the event that the public utility determines that it has no underground facilities in the designated area, make reasonable effort to so inform the excavator and document such efforts, or mark this information in accordance with subsection (l) of section 16-345-5 of the Regulations of Connecticut State Agencies; and

(D) Upon receipt of a ticket of an area of continual excavation, the public utility shall contact the party requesting the ticket, and provide it information or maps indicating the location of facilities in the area of continual excavation;

(2) Upon receipt of information that the excavator, after reasonable attempt to locate the underground facilities, is unable to locate the actual location of the underground facilities after the approximate location of an underground utility facility has been marked by the public utility, provide such further on-site assistance as may be needed to determine the actual 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 location or locations of test holes by the excavator. An excavator, who has failed to make a reasonable attempt to locate the facilities within the approximate location as marked out by the public utility prior to calling the public utility for on-site assistance, shall reimburse the public utility for all costs incurred in the further location of such facilities. If the actual location of the facility is found to be within the approximate location as marked out by the public utility, it shall constitute a failure by the excavator to have made a reasonable attempt to locate;

(3) Immediately upon receipt of a ticket of an emergency excavation, dispatch personnel to determine the effect of the excavation or demolition on any facility it may have in the area and to mark the approximate location of facilities in the designated area;

(4) Immediately upon receipt of a ticket of emergency blasting, dispatch personnel to

determine the effect of the blasting on any facility it may have in the area and to mark the approximate location of facilities in the designated area; and

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

(c) A public utility may identify, in accordance with subsection (k) of section 16-345-5 of the Regulations of Connecticut State Agencies, 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 any inaccuracy in 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 underground facilities and to minimize the potential detriment to public safety attendant with damage to underground facilities. Upon request by any excavator planning an excavation 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 preconstruction meetings of which it has knowledge related to excavation or demolitions which might affect its facilities for the purpose of addressing special or particular issues related to public safety as well as other issues related to the proposed excavation or demolition.

(f) Each public utility shall, where practicable, install a warning tape located above the facility, and keep appropriate records thereof for all new underground facilities. For all repairs, replacements or modifications involving an exposure of existing underground facilities at least one hundred (100) feet in length that does not already have warning tape installed and 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 twelve (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 subsection (i) of section 16-345-5 of the Regulations of Connecticut State Agencies and durably imprinted with an appropriate warning or message.

(g) Each public utility shall, during the installation of new underground facilities, mark the approximate location of such new facilities in accordance with section 16-345-5 of the Regulations of Connecticut State Agencies for such newly installed facilities as they are backfilled or installed.

(h) For all new non-metallic utility facilities, the utility shall install a means of locating the facility using electronic locating equipment, such as tracing wire.

(i) Any person who locates and marks the location of underground facilities on behalf of a public utility shall be trained in applicable locating industry standards and practices equal or superior to the National Utility Locating Contractors Association's locator training standards and practices. Each person's training shall be documented, and such documents shall be maintained by the public utility.

(Effective October 25, 1988; Amended March 21, 1997; Amended August 23, 2000; Amended August 2, 2016)

Sec. 16-345-4. Responsibilities of excavators and responsible parties

(a) Any excavator performing excavation or demolition within the State of Connecticut, or the responsible party for the excavation or demolition, shall:

(1) Except as provided in subdivision (2) of this subsection, at least two full days, excluding Saturdays, Sundays and holidays, but not more than thirty (30) days before commencing such excavation or demolition obtain a ticket by notifying the central clearinghouse of:

(A) The specific location of the designated area. Should field conditions or other circumstances require the excavation or demolition to be expanded outside the originally designated area established in accordance with subsection (e) of section 16-345-4 of the Regulations of Connecticut State Agencies, a separate notification shall be made and said notification shall be in accordance with the time requirements as provided in this subdivision;

(B) The name, address and telephone number of the excavator actually performing the proposed excavation or demolition;

(C) The date on which such proposed excavation or demolition will commence. The date shall be at least two full days, excluding Saturdays, Sundays and holidays, after the ticket is provided to the central clearinghouse, but not more than thirty (30) days after the ticket has been provided to the central clearinghouse. If the excavator or responsible party reasonably expects that the scope of the project is such that it will involve excavation or demolition at multiple locations or over a period of time greater than thirty (30) days, the excavator or responsible party shall provide separate notifications for each separate location and only for such locations in which the excavation or demolition is expected to occur within the thirty (30) day period following the notification;

(D) The type of such proposed excavation or demolition;

(E) The method used to identify or designate the area of proposed excavation or demolition. The excavator or responsible party shall identify and mark the designated area prior to notifying the central clearinghouse;

(F) If it is an emergency, the exact reason why the situation is an emergency as defined in subsections (14) and (15) of section 16-345-1 of the Regulations of Connecticut State Agencies; and

(G) Such other information as the central clearinghouse or the Authority shall deem necessary to carry out the objectives of Chapter 293 of the Connecticut General Statutes and to protect public safety;

(2) In the event of an emergency excavation or an emergency blasting:

(A) immediately provide the notice required by subdivision (1) of this subsection to the central clearinghouse for the purpose of determining the public utilities with facilities located at or near the site of the excavation or demolition;

(B) immediately provide the notice required by subdivision (1) of this subsection directly to the affected public utilities prior to the excavation or demolition; 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.

(b) In addition to the requirements of subsection (a) of this section, a responsible party shall:

(1) Provide the name and phone number of the excavator to any public utility requesting such information;

(2) provide the information contained in the ticket to the excavator prior to excavation or demolition; and

(3) in the event that any information or special conditions regarding the location of excavation or demolition is received by any responsible party, transmit such information to the excavator prior to the commencement of any excavation or demolition.

(c) Any excavator performing excavation or demolition within the State of Connecticut shall:

(1) Use prudent judgment in determining whether to proceed with the excavation or demolition prior to the identification of any or all of the facilities in the event of emergency excavation or emergency blasting. In exercising such judgment, the excavator shall consider, among other things, the

potential hazard to life and property while awaiting public utility personnel to locate all the facilities, the need for 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;

(2) 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 or damage to underground facilities; adequate training of employees in executing their assignments to ensure protection of utility facilities and the public; maintaining necessary liaison with public utilities; sponsoring preplanning and preconstruction meetings as necessary, and complying with all applicable laws and regulations;

(3) Use proper care when utilizing trenchless excavation. If the excavator is utilizing trenchless excavation, and such excavation is expected to cross or encroach within the approximate location of underground facilities either horizontally or vertically, the excavator shall:

(A) Determine the actual location of such underground facilities expected to be so crossed or encroached prior to crossing or encroaching the underground facilities by:

(i) excavating and exposing the utility at the location of the crossing or encroachment; or

(ii) if the trenchless excavation is crossing a sanitary or storm drain, performing a visual inspection of adjacent manholes or catch basins to measure the depth of the facilities and determine the actual location of the facilities. The crossing or encroachment can be made without exposing the utility if the crossing or encroachment is expected to have a clearance of at least three (3) feet; and

(B) If the trenchless excavation has the possibility of crossing privately owned sanitary sewer laterals, take reasonable steps to identify the location of such laterals before proceeding with the trenchless excavation. Reasonable steps shall include, but not be limited to, inspecting the structure served by the lateral to identify the location of the sewer lateral connection, inspecting manholes to identify the discharge point of the lateral, or the use of locating sondes. The use of trenchless excavation around privately owned sewer laterals shall follow the same amount of care as required for public utilities in this subsection;

(4) In the event that underground facilities of a public utility are likely to be exposed by such excavation or demolition, provide such support or protection, or both, as may be necessary to protect such facilities from damage;

(5) 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 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, use mechanical equipment solely for the purpose of 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 public utility exposing its own underground facilities, shall employ hand digging or soft digging methods only;

(6) In the event that the excavator, after reasonable attempt, is unable to locate the actual location of an underground facility after the approximate location of an underground facility has been marked, the excavator shall request such further assistance from the public utility as may be needed to determine the actual location of the underground facility;

(7) Avoid the covering or removal of surface markings, flags or stakes indicating underground facilities during construction activity prior to the actual excavation or demolition in the vicinity of the located

facilities. If such surface markings, flags or stakes are to be covered or removed during the excavation or demolition activity, the excavator shall make all reasonable efforts to maintain the location of the underground facilities by use of offset marks or maps. If surface markings, flags or stakes are disturbed to the extent that the excavator cannot identify the approximate location of underground utility facilities, the excavator shall contact the utilities to request that the utilities re-mark the approximate location of the underground utility facilities; and

(b) Immediately request assistance from the public utility in the event an excavator has reason to believe there are underground facilities of a public utility in the designated area that have not been marked by the public utility in accordance with section 16-345-5 of the Regulations of Connecticut State Agencies.

(d) A ticket given pursuant to subsection (a) of this section shall expire at the end of thirty (30) days from the date such ticket is given to the clearinghouse.

(e) The designated area shall be identified or marked by the excavator or responsible party prior to notifying the central clearinghouse in such a manner as to enable the public utilities to know the outer boundaries of the designated area. The designated area shall be identified or marked as follows:

(1) Except as provided in subdivision (2) of this subsection, in accordance with section 16-345-5 of the Regulations of Connecticut State Agencies and shall clearly indicate the outer limits of where possible excavation or demolition activities may occur;

(2) If the designated area is one thousand (1,000) feet or more longitudinally on or adjacent to an existing highway, surface markings pursuant to section 16-345-5 of the Regulations of Connecticut State Agencies are not required if a preconstruction meeting is held by the excavator or responsible party and all affected public utilities are informed of such meeting, and the designated area is identified by clear and appropriate markings on a plan map which was originally prepared by a licensed surveyor or competent employee of a public utility and delivered to the public utilities whose underground facilities may be affected; and

(3) If the area of proposed excavation or demolition is designated by surface markings, flags or stakes which are not clearly visible from the public street, the excavator or responsible party shall include, in the ticket to the central clearinghouse, directions to the designated area from the nearest public street.

(f) When any contact is made with or damage is done to any underground facility of a public utility, the excavator responsible for the operations causing such contact or damage shall:

(1) Immediately and directly report the contact or damage to the affected public utility, but such excavator shall not tamper with or attempt to repair such facility except when and to the extent authorized by the public utility. The excavator performing the excavation or demolition shall use prudent judgment taking into account minimizing the potential detriment to public safety in determining whether to cease activities pending the arrival of qualified public utility personnel; and

(2) When such contact or damage 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 or demolition involved in such damage shall also alert all persons within the danger area, shall alert police, fire, or other emergency personnel, and take all feasible steps, including, where applicable, 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.

(g) At all times when excavation or demolition is in progress there shall be a representative of the excavator present in overall charge of the operation who shall be knowledgeable regarding the operation being performed, sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies

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 requirements of sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies have been met, such as the ticket number from the central clearinghouse on site at all times.

(h) Each excavator involved in excavation or demolition shall post a summary of the requirements of sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies 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 or demolitions frequent, including field offices and similar locations.

(i) 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 or demolition activity and shall provide satisfactory evidence to any entity, including a public 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 sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies.

(j) Excavators performing excavation in areas of continual excavation, as defined in section 16-345-1(11) of the Regulations of Connecticut State Agencies, shall notify the central clearinghouse of their existence, and such notice shall be valid for a period of one calendar year. For excavation at areas of continual excavation, notification to the central clearinghouse in accordance with section 16-345-4(a)(1) of the Regulations of Connecticut State Agencies is not required. Excavators performing excavation in areas of continual excavation shall consult with any public utilities that own or operate facilities in such area regarding the location of the facilities, shall maintain records regarding the location of such facilities, and any excavation in proximity of the utility facilities shall be done with the same standard of care as required in this section.

(k) Any excavator shall file such other information which the central clearinghouse or the Authority shall deem necessary to carry out the objectives of Chapter 293 of the Connecticut General Statutes and to protect public safety.

(Effective October 25, 1988; Amended March 21, 1997; Amended August 23, 2000; Amended August 2, 2016)

Sec. 16-345-5. Surface markings

(a) All surface markings, stakes and flags indicating the approximate location of an underground facility 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) Stakes shall be made of wood or any other suitable material, and flags shall be a minimum of three inches on each side of the designated utility color in accordance with subsection (i) of this section, made of any suitable material.

(d) Surface markings for the identification of the approximate location of an underground utility facility shall be located, where possible, at the centerline of the underground facility.

(e) Where center-line marking is impractical, the approximate location of an underground utility facility may be indicated by means of offset surface markings.

(f) When marking via staking or flagging, stakes and flags shall be placed in an upright position directly above the facility and:

(1) Exposed above the ground a minimum of eighteen (18) inches for stakes and a minimum of twelve (12) inches for flags; and

(2) Inserted below ground to adequately support the stake or flag in the upright position.

(g) In areas where surface markings cannot be utilized, or in areas where the use of flags or stakes would be superior to surface markings, flagging or staking shall be employed for identification of the approximate location of an underground utility facility or for designating areas of proposed excavation or demolition. Flags and stakes shall normally be located above the center line of the underground facility. Flags or stakes shall not be used for offset locations unless surface marking or center line flagging or staking is inadequate or inappropriate:

(1) In areas of grass, dirt, or other non-durable surfaces, stakes or flags shall be used unless frost conditions prevent their installation.

(2) In active construction sites where there is continual movement of equipment and supplies, stakes and flags appropriate to withstand site conditions shall be used.

(h) Surface markings, flags or stakes shall be located at the outer limits of the designated area and at such appropriate intervals, not greater than twenty (20) feet between marks, as is necessary to clearly indicate the location and course of the underground facility.

(i) With the exception of normal traffic control markings, all markings on public streets, sidewalks and rights-of-way, and all surface marking, flagging and staking of public utility locations and designated areas of excavation or demolition 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— Reclaimed water, irrigation and slurry lines;

(7) White— Designated area of proposed excavation or demolition; and

(8) Pink—Survey markings.

(j) All surface marking, flagging and staking utilized for the location of underground facilities shall contain:

(1) The name of the public utility or a commonly recognized abbreviation;

(2) The material of the facility in accordance with the following (where applicable):

(A) CI – Cast Iron

(B) CU – Copper

(C) PL – Plastic

(D) ST – Steel

(E) WI – Wrought Iron

(F) RCP – Reinforced Concrete Pipe; and

(G) TD – Tile Duct; and

(3) Special descriptors of the facilities (where applicable):

(A) CDT – Conduit

(B) INS – Inserted

(C) DB – Direct buried

(D) HH – Hand hole

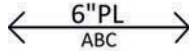
(E) MH – Manhole

(F) VLT – Vault.

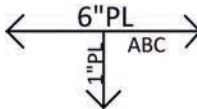
(k) All surface marking, flagging and staking shall be in accordance with the following:

(1) Markings for pipes shall appear as follows ("ABC" (which represents the name of the public utility or commonly recognized abbreviation), pipe size, material type and any special descriptors shall also be shown in sufficient quantities to be visible from any point in the designated area):

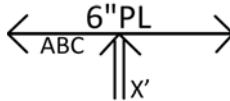
(A) Surface marking for a run of pipe;



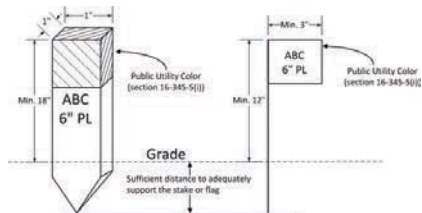
(B) Surface markings for a point where a pipe tees off;



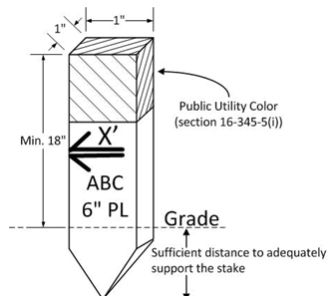
(C) Surface markings for an offset mark for run of pipe where X' represents the distance, in feet, from the reference line to the underground facility;



(D) Staking or flagging for a run of pipe; and



(E) Staking for an offset mark for a run of pipe where X' represents the distance, in feet, from the reference stake to the underground facility;

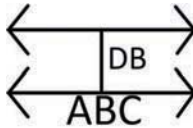


(2) Markings for cable or wire shall be as follows ("ABC" (which represents the name of the public utility or commonly recognized abbreviation) and any applicable special descriptors shall also be shown in sufficient quantities to be visible from any point in the designated area):

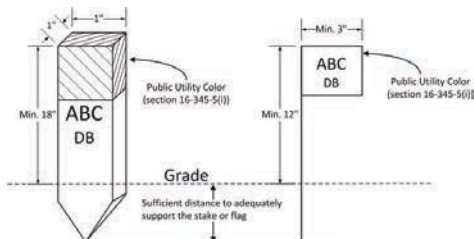
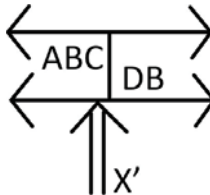
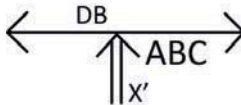
(A) Surface markings for a single run of cable or wire;



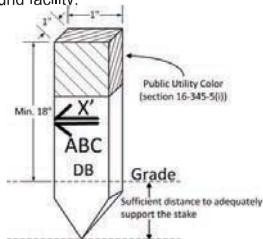
(B) Surface markings for multiple buried cables or wires;



(C) Surface markings for an offset mark for single run of cable or wire where X' represents the distance, in feet, from the reference line to the underground facility;

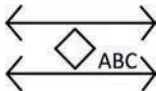


(F) Staking for an offset for cable or wire where X' represents the distance, in feet, from the reference stake to the underground facility:

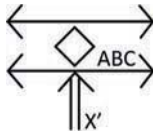


(3) Markings for a duct bank (multiple duct structure) shall be as follows ("ABC" (which represents the name of the public utility or commonly recognized abbreviation) and any applicable special descriptors shall also be shown in sufficient quantities to be visible from any point in the designated area):

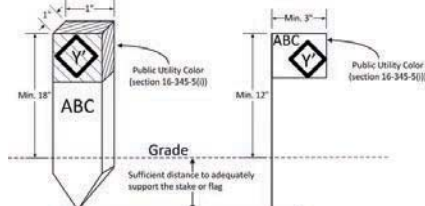
(A) Surface markings for a duct bank, where the width of the markings shall be the width of the duct bank;



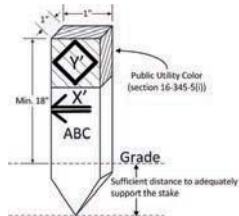
(B) Surface markings for an offset mark for a duct bank, where "X" represents the distance, in feet, from the reference line to the underground facility, and where the width of the markings shall be the width of the duct bank;



(C) Staking or flagging for a duct bank where either the diamond symbol with the width of the duct bank shall be shown ('Y' represented here), or where sets of stakes or flags, without the diamond symbol, shall show the outer edges of the duct bank; and



(D) Staking for an offset mark for a duct bank where X' represents the distance, in feet, from the reference stake to the centerline of the duct bank, and Y' represents the width of the duct bank;



(4) Surface markings for underground structures such as manholes, vaults and handholes shall be as follows ("ABC" represents the name of the public utility or commonly recognized abbreviation; any applicable special descriptors shall also be shown);



(5) Markings for special features of utility facilities shall be as follows ("ABC" represents the name of the public utility or commonly recognized abbreviation; any applicable special descriptors shall also be shown):

(A) End point of facility, such as a stub or facility that has been cut off; and

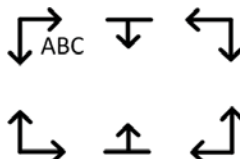


(B) Utility feature that extends to surface, such as a gas drip riser, purge riser, or blowoff.

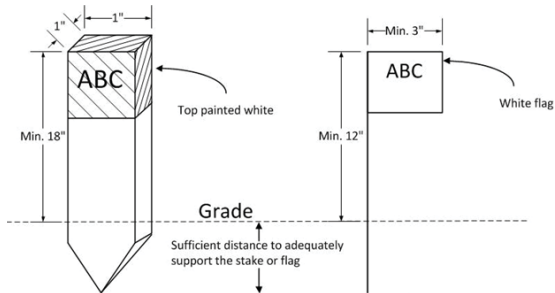


(6) Except as provided in section 16-345-4(e)(2) of the Regulations of Connecticut State Agencies, the excavator shall identify the designated area of excavation or demolition in one of the methods as follows ("ABC" represents the name of the excavator or commonly recognized abbreviation);

(A) Surface markings consisting of brackets identifying the outer limits of the designated area;



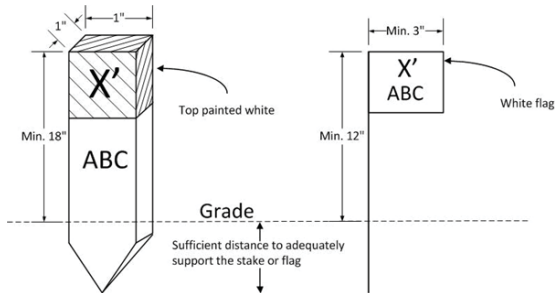
(B) Stakes or flags identifying the outer corners and boundaries of the designated area;



(C) A single point with a radius can be identified with the following surface marking, where 'X' represents the radius of the circle, in feet, around the surface marking; and



(D) A single point with a radius can be identified with a white stake or flag, where 'X' represent the radius of the circle, in feet, around the stake or flag.



(I) A public utility may, in accordance with the provisions of subsection (c) of section 16-345- of the Regulations of Connecticut State Agencies, identify the approximate location of a facility connector 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 subsections (a) to (j), inclusive, of this section, except that surface markings shall be dotted or broken line instead of a solid line.

(m) A public utility may signify that it has no facilities in the designated area by writing "NO" plus the name of the public utility or commonly recognized abbreviation in letters at least six inches high using the uniform color code as described in subsection (i) of this section.

(Effective October 25, 1988; Amended March 21, 1997; Amended August 23, 2000; Amended August 2 2016)

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

Any permit issued by a public agency for excavation or demolition shall require satisfactory evidence of compliance with Chapter 293 of the Connecticut General Statutes and sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies such as the central clearinghouse ticket number. Satisfactory evidence shall not be required when the permit is requested by a public utility that will not be performing the actual excavation nor shall it be required when the permitting agency determines that the permit approval process will take longer than thirty (30) days. The central clearinghouse may provide notification of each ticket to each municipality's permit issuing department for proposed excavations and demolitions within the municipality's jurisdiction.

(Effective October 25, 1988; Amended August 23, 2000; Amended August 2, 2016)

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

Except as provided in section 16-345-6 of the Regulations of Connecticut State Agencies, sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies 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 Connecticut General Statutes and said sections. A permit from a public agency shall not relieve any person from responsibility for complying with the provisions of Chapter 293 of the Connecticut General Statutes and said sections. The failure of any person who has been granted a permit to comply with the provisions of Chapter 293 of the Connecticut General Statutes and said sections shall not be deemed to impose any liability upon the public agency issuing the permit.

(Effective October 25, 1988; Amended August 23, 2000; Amended August 2, 2016)

Sec. 16-345-8. Enforcement proceedings

(a) If the Authority has reason to believe that a violation has occurred for which a civil penalty has been established for violations of Chapter 293 of the Connecticut General Statutes, as provided in section 16-356 of the Connecticut General Statutes, or of any provisions of sections 16-345-1 to 16-345-9, inclusive, of the Regulations of Connecticut State Agencies, the Authority may send to the alleged violator by certified mail, return receipt requested, or by personal service, a notice which shall include:

- (1) A reference to the section of the statute, regulation or order involved;
- (2) A short and plain statement of the matters asserted or charged;
- (3) A statement of the amount of the civil penalties proposed to be imposed after notice and opportunity for a hearing; and

(4) A statement of the alleged violator's right to a hearing.

(b) The alleged violator to whom the notice is addressed may, no later than thirty (30) days from the date of receipt of the notice, deliver to the Authority a written application for a hearing. If a hearing is requested then, after a hearing, and upon a finding that a violation has occurred, the Authority may issue a final order assessing a civil penalty under this section which is not greater than the maximum penalty allowed by law and shall be so stated in the notice. If such a hearing is not so requested, or if such a request is later withdrawn, then the notice shall, on the first day after the expiration of such thirty day period or on the first day after the withdrawal of such request for hearing whichever is later, become a final order of the Authority and the matters asserted or charged in the notice shall be deemed admitted.

(c) All hearings under this section shall be conducted pursuant to sections 4-177 to 4-184, inclusive, of the Connecticut General Statutes. The final order of the Authority assessing a civil penalty

shall be subject to appeal under section 4-183 of the Connecticut General Statutes. No challenge to a final order of the Authority assessing a civil penalty pursuant to section 16-345-9 of the Regulations of Connecticut State Agencies shall be allowed as to any issue which could have been raised by a timely request for a hearing pursuant to subsection (b) of this section. Any civil penalty authorized by this section shall become due and payable upon the final decision becoming a final order pursuant to subsection (b) of this section.

(d) A civil penalty assessed in a final order of the Authority under this section may be enforced in the same manner as a judgment of the superior court. The final order shall be delivered to the respondent by personal service or by certified mail, return receipt requested.

(Effective October 25, 1988; Amended August 23, 2000; Amended August 2, 2016)

Sec. 16-345-9. Assessment of civil penalties

(a) Any person, excavator, public agency, public utility or the central clearinghouse which the Authority finds to have violated any provision of Chapter 293 of the Connecticut General Statutes, or any regulations promulgated thereunder, may be fined, after notice and opportunity for a hearing as provided in section 16-345-8 of the Regulations of Connecticut State Agencies. In such case, such person, excavator, public agency, public utility or the central clearinghouse shall forfeit and pay to the state a civil penalty in accordance with the following schedule of penalties:

(1) For violations which do not involve personal injury, death or property damage:

(A) A minimum civil penalty of two hundred dollars (\$200) for a first violation; and

(B) A civil penalty of not more than five thousand dollars (\$5,000) for a second violation and up to the statutory maximum thereafter;

(2) For violations which result in property damage:

(A) Where the amount of property damage sustained is not greater than three thousand dollars (\$3,000), a civil penalty not to exceed twelve thousand dollars (\$12,000);

(B) Where the amount of property damage sustained is greater than three thousand dollars (\$3,000), but not more than twenty thousand dollars (\$20,000), a civil penalty not to exceed twenty thousand dollars (\$20,000); and

(C) Where the amount of property damage sustained is greater than twenty thousand dollars (\$20,000), a civil penalty not to exceed the maximum civil penalty allowed under Chapter 293 of the Connecticut General Statutes;

(3) For a violation which results in personal injury or death, a civil penalty not to exceed the maximum civil penalty allowed under Chapter 293 of the Connecticut General Statutes;

(4) For any violation where a person, excavator, public agency or public utility knowingly comes in contact with an underground public utility facility during the course of an excavation or demolition and fails to notify the owner of the public utility facility as soon as possible thereafter, or tampers with or attempts an unauthorized repair of a damaged utility facility, a civil penalty not to exceed the maximum civil penalty allowed under Chapter 293 of the Connecticut General Statutes; and

(5) Notwithstanding subdivisions (1) to (4), inclusive, of this subsection, the Authority may assess a civil penalty of up to the maximum civil penalty allowed under Chapter 293 of the Connecticut General Statutes based upon the degree of threat to the public safety, the degree of public inconvenience caused as a result of the violation, or the past history of the violator.

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

(1) The number and nature of past violations as well as any previous decisions of the Authority regarding prior violations;

(2) The degree of compliance with other requirements of Chapter 293 of the Connecticut General Statutes, and any regulations promulgated thereunder, especially notification to the utility in the event of damage. In particular, the Authority shall consider whether or not the violator has notified the utility pursuant to the provisions of sections 16-345-4(a)(1) to 16-345-4(a)(2), inclusive, and section 16-345-4(f) of the Regulations of Connecticut State Agencies;

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

(4) The plans and procedures to ensure compliance with the statutes and regulations in the future;

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

(6) The nature and severity of the violation, the degree of threat to the 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, excavator, public agency or public utility regularly engaged in such activity;

(8) Circumstances beyond the control of the violator, including, but not limited to, weather and, for violations based on the failure to timely mark the approximate location of an underground utility facility, lack of timely access to the site; and

(9) Such other factors as are in the public interest.

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

(Effective October 25, 1988; Amended August 23, 2000; Amended February 1, 2006; Amended August 2, 2016)

[illegible]



Color Code for Utility Locations

Gas/Oil/Petroleum	Sewer
Water	Reclaimed Water
Internet/Communication/TV	Temporary Survey
Electric	Proposed Excavation

Tolerance Zone

