



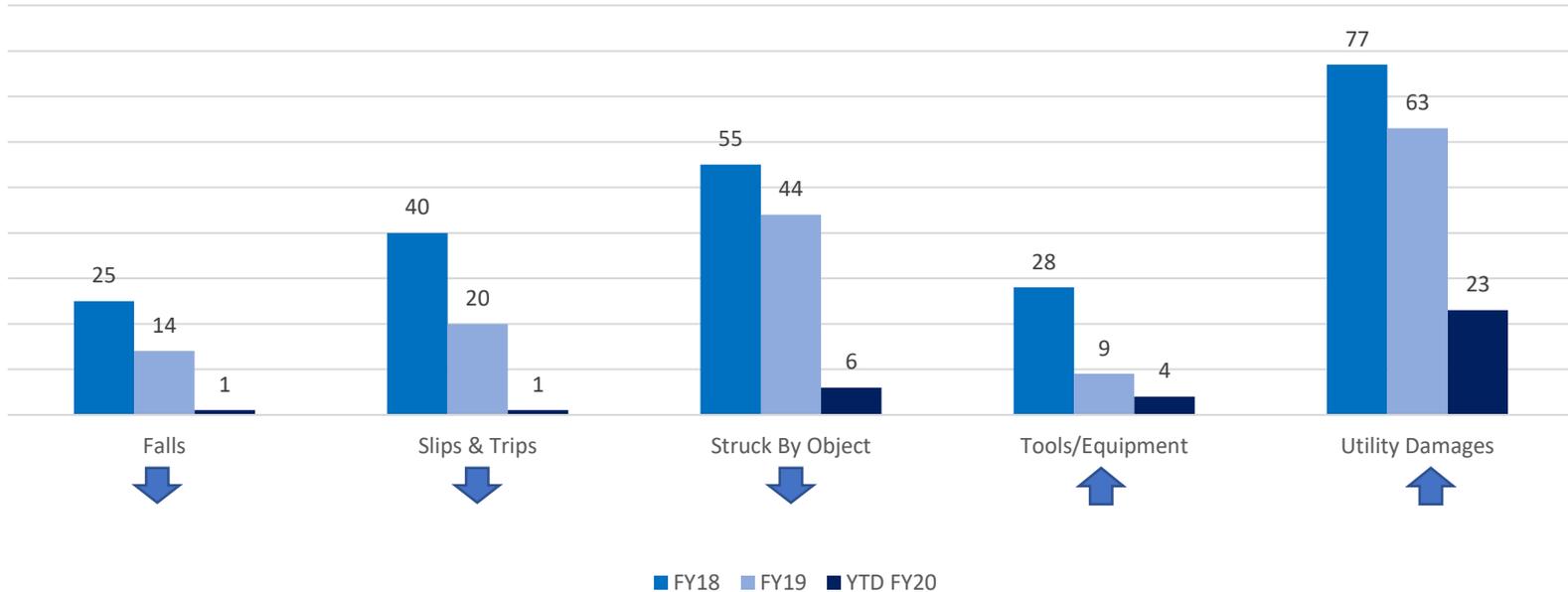
Department of
Design and Construction

SAFETY & SITE SUPPORT DIVISION

**CODE RULE 753
CALL BEFORE YOU DIG**

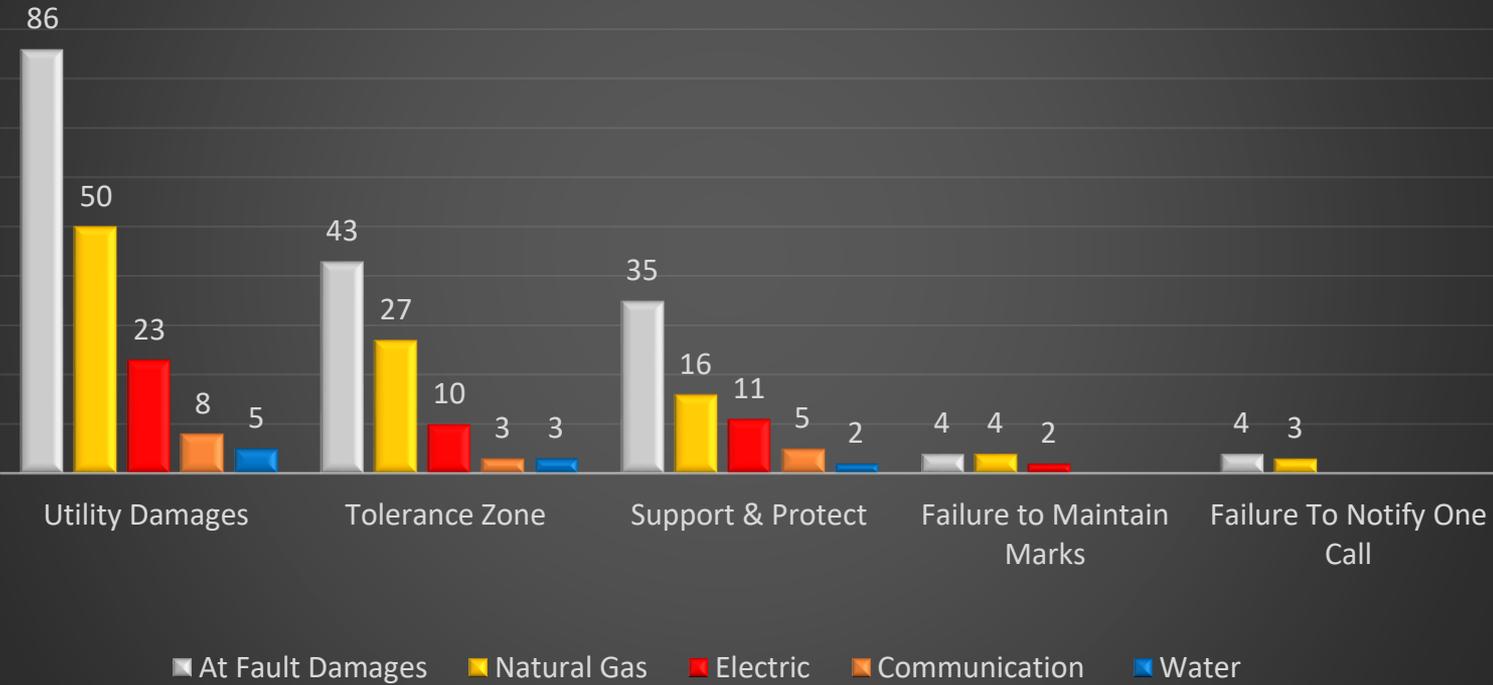
Jean M. Jean-Louis, LEED AP BD+C, ENV SP
Assistant Commissioner

Leading Accident/Incident Categories



FOCUS: Reduction of Incidents Related to Utility Damages

At Fault Utility Damages Per Category FY 19 & FY 20 YTD





HOW TO PREVENT UTILITY DAMAGES

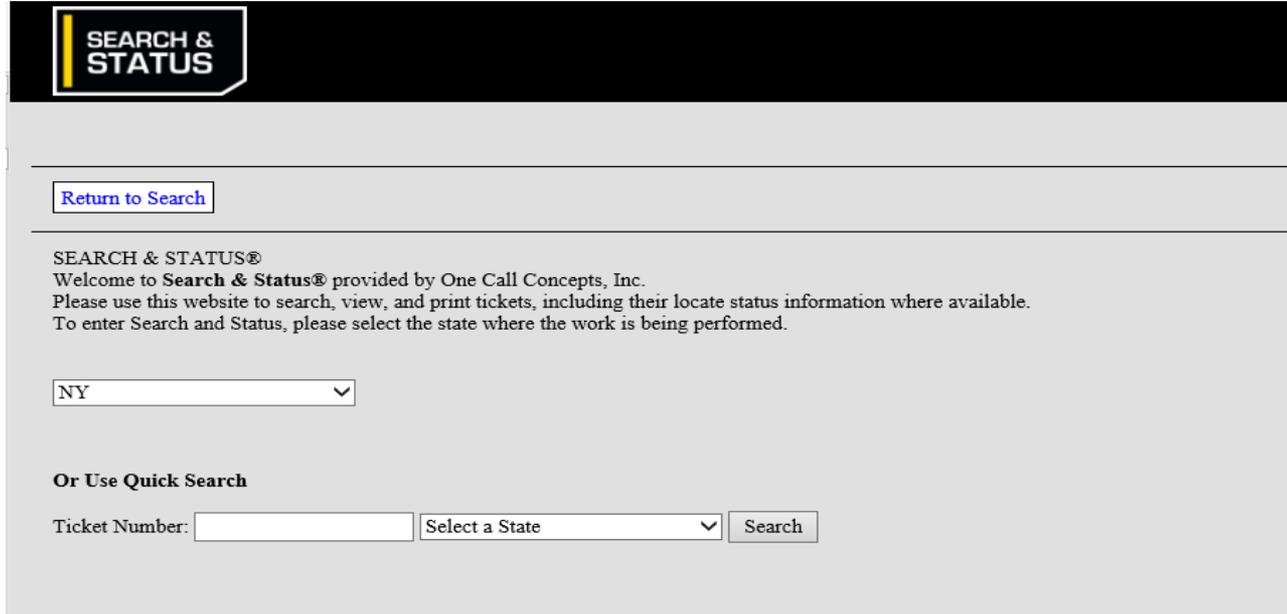
Preventing Utility Damages

- **ALL** At Fault Utility Damages can be prevented.
- Project Staff must ensure the Contractor:
 - has notified the One Call Center
 - confirmed utilities have been marked
 - and received positive confirmation prior to the start of excavation.



Preventing Utility Damages

<https://www.searchandstatus.com>



The screenshot shows the top section of the Search & Status website. It features a black header with the 'SEARCH & STATUS' logo in white. Below the header is a light gray navigation bar with a 'Return to Search' link. The main content area is white and contains the following text: 'SEARCH & STATUS®', 'Welcome to Search & Status® provided by One Call Concepts, Inc.', 'Please use this website to search, view, and print tickets, including their locate status information where available.', and 'To enter Search and Status, please select the state where the work is being performed.' Below this text is a dropdown menu with 'NY' selected. Further down, there is a section titled 'Or Use Quick Search' with a form containing a 'Ticket Number' input field, a 'Select a State' dropdown menu, and a 'Search' button.

SEARCH & STATUS

[Return to Search](#)

SEARCH & STATUS®
Welcome to **Search & Status®** provided by One Call Concepts, Inc.
Please use this website to search, view, and print tickets, including their locate status information where available.
To enter Search and Status, please select the state where the work is being performed.

NY

Or Use Quick Search

Ticket Number:

Preventing Utility Damages

- As a best practice, Project Staff should walk the site with the contractor (and utility representative if present) to identify all marked and potentially unmarked subsurface utilities. Preferably the morning of.
- Within the Tolerance Zone, Contractor/Excavator shall verify the precise location, type, size, direction of run and depth of such underground facility or its encasement by means of **HAND EXCAVATION**.
- All overhead utilities that maybe impacted should be identified, and a spotter provided to alert and guide excavator operator.
- Precaution must be taken to protect exposed and visible utilities within an excavation.

Amended Code Rule 753

- NYS Code Rule 753 was amended to require any municipality or operator, that engages in excavation work, to mandate its excavator operators to complete a **training and education program** offered by their local New York 811 - One Call Notification Center.
- Any contractor engaged in excavation related work on DDC Projects must comply with the new law. DDC Project Staff must ensure that contractor excavator operators are properly trained, and documentation to demonstrate completion of training is provided.
- Refresher training and education shall be required at least every five years.
- Under this newly enacted law, completing the New York 811 Excavator Training and Education Program will constitute compliance with the law.

Removal of Abandoned Gas Facilities

Determination of Operating Status of Gas Facilities

- The contractor shall notify facility operator, as required by New York State Code 16 NYCRR Part 753 “Protection of Underground Facilities”.
- Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal.
- The Resident Engineer shall rely on facility operator’s certification.



Excavator Training & Education Program



New York 811 Excavator Training & Education Program

- INTRODUCTION & OVERVIEW
- LESSON 1: HISTORY & FACTS (REVIEW, Q&A, QUIZ)
- LESSON 2: PLANNING (REVIEW, Q&A, QUIZ)
- LESSON 3: CONTACTING 811 (REVIEW, Q&A, QUIZ)
- LESSON 4: LOCATE & MARKING (REVIEW, Q&A, QUIZ)
- LESSON 5: EXCAVATION (REVIEW, Q&A, QUIZ)
- COURSE COMPLETION Q & A
- SPEAKER



Know what's below. Call or Click  before you dig.

NEW YORK 811 – WHO WE ARE & WHAT WE DO



Roger Sampson, Executive Director

DAMAGE PREVENTION NOTIFICATION CENTER SERVICING

The 5 Boroughs of New York City, Nassau & Suffolk Counties

ONE CALL CONCEPTS (OCC):

Responsible for the day-to-day, one call operations of New York 811

GOVERNED BY OPERATOR MEMBER BOARD OF DIRECTORS:



BUCKEYE PARTNERS, L.P.

nationalgrid

CABLEVISION

EMPIRE CITY



verizon

OYSTER BAY WATER DISTRICT



Know what's below. Call or Click  before you dig.

Goals & Objectives

- Achieve and realize a “Zero” damage ratio and injuries as a result of Underground excavation activity
- Achieve “Total Participation” of all owners of underground facilities throughout all of NYC and Long Island in the One Call Notification System
- Public safety
- Have New York 811 readily and widely recognized as the leader in damage prevention and 811 as the go-to number before starting any excavation.



Know what's below. Call or Click  before you dig.

Important Definitions

Excavator: Any person involved in a trade or business that includes excavation or demolition work.

Facility: An underground or submerged pipe, or conductor used to provide electric or communications service; or an underground or submerged pipe used to provide gas, oil or oil product, sewage, storm drainage, water, or other liquid service. Many utility company facilities are located underground—out of sight.

Markout: The process of marking underground utility lines with paint or flags. The term “markout” is also used to refer to the actual paint lines or flags on a property (i.e. “There were three markouts on the property.”)

Work Area: The area of the ground or equivalent surface that will be disturbed, removed or affected by excavation or demolition work.



Know what's below. Call or Click  before you dig.

THIS IS WHY YOU CONTACT NEW YORK 811 BEFORE YOU DIG



NEW YORK 811

Lesson 1: History & Facts



LESSON 1: HISTORY & FACTS REVIEW

- In 1990 NY State labor law created “Code 53” AN “UNENFORCEABLE” Code that compelled some 11 major utilities in the New York City, Long Island area to work together to protect underground facilities but it was “optional” for excavators to participate in the process.
- In 1994, the new York state public service commission was transferred code 53 responsibility and established Code Rule 753. A New York City & Long Island One Call Center was officially established as the PSC law required all operators of underground facilities be part of the one call notification system. Excavators were also “mandated” to participate in the system and the law was “enforceable” by the PSC.
- The name of the Notification center for New York City & Long Island was the “New York City & Long Island One Call User’s Council.”
- In 2008 **811** was established as the official telephone number to connect excavators to an **Authorized Notification Center**.
- In 2012 the current website was established: NewYork-811.com (note the dash)



Know what's below. Call or Click  before you dig.

LESSON 1: HISTORY & FACTS REVIEW

16 NYS PART 753



Department of Public Service

Rules that establish procedure for the protection of underground facilities in order to assure public safety and prevent damage to public and private property as required by general business law article 36 and public service law section 119-b.



All owners and operators of underground facilities are required to be part of a NY 811 Notification system.

NOTE: Although all facility owners are required to be part of an 811 Notification Center, NOT all are.



Rules apply to Notification Centers, all operators of underground facilities, and all excavators.



Know what's below. Call or Click  before you dig.

National Underground Damage Prevention Picture



Common Ground Alliance (CGA)

Established in 2000, a 1,700 member driven association with 240 organizations and companies representing every facet of the underground utility industry in an effort to reduce damages to North America's underground infrastructure through shared responsibility among all stakeholders.



811

Established in 2008 by the Federal Communications Commission as the mandated three-digit number to be called prior to excavation anywhere in the country.



Know what's below. Call or Click  before you dig.

Who Should Call 811?

Everyone planning to dig.

EXAMPLES OF WHEN TO CALL BEFORE YOU DIG:

- ✓ Planting a Tree
- ✓ Mailbox
- ✓ Fencing & Dog Fence
- ✓ Sidewalks, Curbs
- ✓ Moving Dirt
- ✓ Pest Control
- ✓ Sprinkler
- ✓ Stump Removal
- ✓ Saw Cutting
- ✓ Demolition
- ✓ Grading
- ✓ Digging
- ✓ Auguring
- ✓ Backfilling
- ✓ Drilling
- ✓ Grading
- ✓ Jack Hammering
- ✓ Trenching



Know what's below. Call or Click  before you dig.

LESSON 1: HISTORY & FACTS REVIEW



By not calling, you risk:

- Costly property and environmental damage
- Explosion or fire
- Power or utilities services interruptions
- Legal problems
- Job delays
- Injury or even death



Know what's below. Call or Click  before you dig.

NEW YORK 811

Lesson 2: Planning



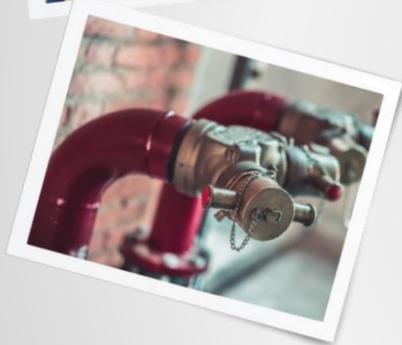
Excavation Safety is a Shared Responsibility



Knowing what's below during the planning and design phase of a project helpful in **saving valuable time and expense**, while also reducing the **potential for interference of facilities**, and most importantly, **unexpected dangers to excavators**.



Know what's below. Call or Click  before you dig.



Design Phase Planning

Architects and designers benefit greatly in knowing what's below during the planning and design phase of a project.

Excavators should review the site for aboveground indications of underground facilities, including:

- Permanent signs or markers
- Manhole covers
- Vent pipes
- Pad-mounted devices
- Pad-mounted devices
- Riser poles
- Power & communication pedestals
- Valve covers.



Know what's below. Call or Click  before you dig.

Utility Coordination Committees

(Or Councils), help with larger projects and planning by meeting to discuss:



- Recently Paved Roadways
- Disruption of Essential Facility Services
- Location of Utility Facilities
- Environmental Impact of Damages to Utilities,
- Permit Procedures
- Right-of-way access controls,
- Underground Facility Damage Prevention.



Know what's below. Call or Click  before you dig.



PRE-MARKING: WHITE PAINT

Marking Recommendation:

- CGA best practices recommends excavators mark the total work area that will be excavated in **WHITE** before contacting the Notification Center to help increase the accuracy in locating the facilities within your proposed excavation area.
- When contacting the Notification Center, provide the location of the white marks.
- If multiple areas are marked, number each and provide all site numbers and locations.



Know what's below. Call or Click  before you dig.

HOW LINES ARE MARKED



Know what's below. Call or Click  before you dig.

Required Information Needed Before You Call 811:

Note: The more information you can provide on a markout ticket request, the more efficiently the facility can execute your markout.

1. County ✓
2. Address ✓
3. Nearest Intersection ✓
4. Other Intersection ✓
5. Type of Work ✓
6. Extent of Work ✓
7. Who You Are Working For ✓
8. Excavator or Homeowners Information ✓



Know what's below. Call or Click  before you dig.

Ticket Types

A Routine Ticket: Typical ticket for non-emergency work. Start date set between 2-10 full business days from the date of the call, not including the day of the call.

An Emergency Ticket: Is a ticket specifically designated for emergencies with any abnormal condition which presents an immediate danger to life or property including the discontinuance of a vital utility service necessary for the maintenance of public health and safety.

A Short-notice Ticket: Non-emergency work where the contractor is requesting a start date greater than 24 hours from the time of the call, but earlier than the two business days required by law. Facility Operators still have the option to process the ticket within the 2 business day window required by law.

A Priority Ticket: Non-emergency work where the contractor is requesting a start date within 24 hours of the time of the call. Facility Operators have the option to process the ticket within the 2 business day window required by law.

A Dig-up Ticket: To report a damage or disturbance of an underground facility to New York 811.

A Design Ticket: For excavators that need a physical locate for a project that is still in the design phases, with no immediate plan for excavation. A Routine ticket must still be called in when excavation is ready to commence.

A Demolition Ticket: For excavators that need to request a pre-demolition conference/meeting with affected Facility Operators to safeguard workers and the surrounding areas.



Know what's below. Call or Click  before you dig.



Recommended Information & Best Practices

For questions about excavation best practices, laws and safety information, excavators should contact your Notification Centers and/or The Common Ground Alliance.

- Preplanning
- Pre-mark Proposed Excavation Site with White Paint
- Municipality
- Detailed Remarks/Comments
- Reliable Onsite Contact Information



Know what's below. Call or Click  before you dig.

NEW YORK 811

Lesson 3: Contacting 811



Two New York Damage Prevention Centers



New York 811

The New York 811 Damage Prevention Center covers the five boroughs of New York City and Long Island and can be contacted by calling or clicking 811, **24 hours a day, 7 days a week, any day of the year.**



Dig Safely New York

Dig Safely New York covers upstate New York, outside New York City and Long Island, and can be contacted by calling or clicking 811.



Know what's below. Call or Click  before you dig.

Why New York 811 Does What It Does

- Reinforce safety of those working around underground facilities and the general public
- Maintain continuity of vital public services provided by underground facilities to businesses, public services, residences and the general public.
- Educate operators, excavators, contractors, homeowners, municipalities and organizations about the importance of safe digging and the protection of underground facilities.



Know what's below. Call or Click  before you dig.

Ways to process markout requests



Call 811

Speak directly with a customer service representative.



Online Remote Entry (ITIC)

Excavators can enter their request using the web service known as ITIC (Internet Ticketing). Internet Ticketing gives you the ability to enter and check your tickets online.

Visit newyork-811.com to register for ITIC



Know what's below. Call or Click  before you dig.

LESSON 3: CONTACTING 811 REVIEW



Contact New York 811,
7 days a week, 24 hours a day,
365 days a year.

Call or **811** or
Click **newyork-811.com**



Know what's below. Call or Click  before you dig.

LESSON 3: CONTACTING 811 REVIEW

PLAN AHEAD:

Call or click 811 two to ten working days before your proposed date of excavation.

NOTE: By law, the markout of an excavation site can be delayed by the Facility Operator a maximum of two additional days. Any more time would have to be approved by the excavator.



- Contractors have the option to dig on Saturday or Sunday
- Any request received at the Notification Center on Holidays, Saturdays/Sundays (weekends) and the date of contact **do NOT count** in the allowed time for markout
- Any request received at the Notification Center on a Holiday/Weekend or after 5pm on a business day, is considered requested the next business day



Know what's below. Call or Click  before you dig.

LESSON 3: CONTACTING 811 REVIEW

PLAN AHEAD: The locate request timeline does not include the date of your call, weekends and holidays:

New Year's Day

Labor Day

Martin Luther King Jr. Day

Columbus Day

Presidents Day

Veterans Day

Memorial Day

Thanksgiving Day

Independence Day

Christmas Day



Know what's below. Call or Click  before you dig.

Who marks the lines ???

- The facility operators/owners are responsible to mark out their facilities or utility lines.
- Often facility operators hire a third party to execute their markouts.
- Privately owned facilities are the responsibility of the facility owner.
- Facility operators are only responsible for marking out their own facilities.



Know what's below. Call or Click  before you dig.

APR- Automated Positive Response

Ticket Check® (APR) was established by New York 811 to create a single point of contact between member facility operators and excavators for the purpose of communicating the status of an excavation location request/markout as provided by the facility operators.

New York 811			
Ticket No:	182951428	ROUTINE	
Original Call Date:	10/22/18	Time: 11:48 AM	CALL
Start Date:	10/25/18	Time: 7:00 AM	Lead Time: 2D
Caller Information:			
Company:	NEW YORK 811	Type:	CONTRACTOR
Contact Name:	TOMAS SCHMIDT	Contact Phone:	(111)511-1111
Field Contact:	TOMAS SCHMIDT	Alt. Phone:	(111)511-1111
Best Time:		Address:	1 MAIN ST, SLIP, NY 11111
Address:		Email Address:	ny@ocinc.com
Dig Site Information			
Type of Work:	NEW BUILDING ADDITION		
Type of Equipment:	BACKHOE, SHOVELS, PICKS		
Work Being Done For:	NEW YORK 811		
In Street:	On Sidewalk:	Private Property:	X Other:
Front: X	Rear: X	Side: X	
Dig Site Location			
State:	NY	County:	NEW YORK
Place:	MANHATTAN	Address:	1
Dig Street:	BROADWAY		
Nearest Intersecting Street:	BATTERY PL.		
Second Intersecting Street:	MORRIS ST		
Location of Work:	MARK THE ENTIRE PROPERTY		
Remarks:			
Map Coord NW Lat:	40.691185	Lon: -74.047285	SE Lat: 40.688542 Lon: -74.043513
Operators Notified:			
Link To Map for C EMAIL			
EXCAVATOR RESPONSIBILITIES			
IMPORTANT NOTE: YOU MUST CONTACT ANY OTHER UTILITIES DIRECTLY.			
Did you know that you can submit your tickets online?			
- Eliminate hold times.			
- Immediately receive a ticket number.			
- View, Search, Update, and Print tickets.			
Click the link below to Register for ITIC and start submitting your tickets on line today!			
New York 811			
EXCAVATOR MUST CONFIRM ALL POSITIVE RESPONSES BEFORE COMMENCING WORK			

All facility owners are responsible for providing a positive response to excavators indicating that their lines have been marked OR that there are no underground lines within 15 feet of the proposed work site.

It is the excavator's responsibility to check to see if they have received an Automated Positive Response (APR) from each affected facility BEFORE excavation. If the excavator does not receive an email or fax, they must retrieve the status of the ticket/markout before you dig!



Know what's below. Call or Click  before you dig.

Help from your Notification Center
& your on site locate markouts are



Calling **811** or using **ITIC** gets your utility lines
marked and helps protect you from potential injury
and unnecessary expense.



Know what's below. Call or Click  before you dig.

NEW YORK 811

Lesson 4: Locating and Marking



LESSON 4: LOCATING AND MARKING REVIEW

In New York State it's unlawful and dangerous to dig anywhere in the state without first contacting your Notification Center for a mark out.

Even if you are excavating on private property you are still are REQUIRED TO CONTACT 811 for a location markout!



It's the Law!



Know what's below. Call or Click  before you dig.

LESSON 4: LOCATING AND MARKING REVIEW



After you have contacting your Notification Center with your intent to excavate and waited the required time...

Excavators must check your **Automated Positive Response (APR)**.



SEARCH & STATUS

ONE CALL CONCEPTS
When safety is on the line.

ISITE Home Contact Help Chat

District	Company Name	Phone Number	Status	Status History
CBLHP01	CABLEVISION OF HAUPPAUGE	800-262-8600	Not yet responded	
LIL	NATIONAL GRID	800-262-8600	Not yet responded	
LIPA01	LONG ISLAND POWER AUTHORITY	800-262-8600	Not yet responded	
SCDPW01	SUFFOLK COUNTY DPW SEWER DIST.	631-852-4187	No Locate - Locator/Utility Owner Requests Meeting with Excavator.	
SCWA01	SUFFOLK COUNTY WATER AUTHORITY	800-262-8600	Not yet responded	
TWNIS01	TOWN OF ISLIP	631-224-5610	Marked	
VZL	VERIZON COMMUNICATIONS	855-661-6323	Marked	



Know what's below. Call or Click  before you dig.

Automated Positive Responses (APRs)

- **Code 1: Clear/No Conflict**
Facilities are not in conflict with the excavation site.
- **Code 2: Marked**
Facilities have been marked according to the excavation location.
- **Code 3: Marked – Critical Facilities in Area**
Critical Facilities are in the area of your excavation site.
- **Code 4: 48-Hour Delay**
Member is requesting a 48 hour locate extension.
- **Code 5: Not Complete/In Progress**
Facility Owner has spoken with the Excavator and has agreed to this message.
- **Code 9: Marked Up To Privately Owned Utility**
Facility has been marked up to the privately owned property or utility.
- **Code 10: Incorrect Address Information**
Address information provided is not correct, call the center to reschedule.
- **Code 11: Installation, Maps or Other Documentation Has Been Provided.**
Maps or other documentation has been provided to the excavator.
- **Code 12: Locator Could Not Gain Access to Property.**
Arrange with Locator/Utility Owner to provide access to excavation site.
- **Code 13: No Locate – Contractor Work Completed.**
Contractor work was complete before the mark out was completed.
- **Code 14: No Locate – Locator/Utility Owner Requests Meeting with Excavator.**



Know what's below. Call or Click  before you dig.

Automated Positive Responses (APRs)

If an affected facility has not responded to your locate request before the excavation start date, **it is the excavator's responsibility to reach out to the facility or the Notification Center for more information.**

 GAS LINE	<input checked="" type="checkbox"/>	
 INTERNET/TV LINE	<input checked="" type="checkbox"/>	
 ELECTRICAL LINE	<input type="checkbox"/> ?	
 WATER LINE	<input checked="" type="checkbox"/>	
 SEWAGE LINE	<input checked="" type="checkbox"/>	



Know what's below. Call or Click  before you dig.

LESSON 4: LOCATING AND MARKING REVIEW

After the locating process has been completed, a visual inspection of the site by the excavator is needed, before you dig. This inspection includes checking that all facilities are marked in accordance to the scope of the locate request.

Evidence of a facility not on record may include, but is not limited to:

- Poles
- Dips
- Enclosures
- Pedestals
- Valves
- Meters
- Risers
- Manholes



Know what's below. Call or Click  before you dig.

COLOR CODE GUIDE

Facility operators must be marked in accordance with the designated color code:

PROPOSED EXCAVATION
EXCAVACIÓN PROPUESTA

TEMPORARY SURVEY MARKING
MARCACIÓN DE INSPECCIÓN TEMPORAL

ELECTRIC, POWER LINES
LÍNEAS DE TRANSMISIÓN ELÉCTRICAS

GAS, OIL, STEAM, CHEMICAL
GAS, PETROLEO, VAPOR, QUÍMICOS

CABLE, COMMUNICATION
CABLE, COMUNICACIONES

SEWER, STORM DRAIN
CLOACA, DRENAJE DE TORMENTA

RECLAIMED WATER
AGUA REGENERADA

POTABLE WATER
AGUA POTABLE

Note: Facility operators will only markout facilities they are responsible for.



Know what's below. Call or Click  before you dig.

LESSON 4: LOCATING AND MARKING REVIEW

Private Utilities Defined: Private underground utilities can be located anywhere including private property and right-of-ways. They typically are underground lines that extend beyond the meter or are lines that aren't connected to a meter that serve other areas on the property.

Public facility owners are NOT responsible for marking out privately owned utilities/facilities BUT excavators should be aware of these underground interferences and review potential safety and damage issues that could arise. It is recommended that privately owned facilities be marked out by 3rd party providers as well.

Residential Private Utilities Examples:

- These can be apartment complexes, mobile home parks, gated sub-division communities.
- Electric to sheds, garages or electric fences & gates
- Landscape lighting
- Sprinkler & irrigation lines, septic systems
- Propane or gas lines to grills & swimming pool heaters

Commercial Private Utilities Examples:

- Can be located in schools, hospitals, industrial areas, government facilities, airports & military
- Parking lot lighting
- Fire mains
- Building to building utilities



Know what's below. Call or Click  before you dig.

LESSON 4: LOCATING AND MARKING REVIEW

GUIDE TO MARKS: Code 753 Markout Examples



Typical Electric Pipe Type Mark:
Includes Size, Material &
Quantity of Pipes When Known
– **Always Red**



Typical Cable
TV/Communication Mark:
– **Always Orange**



Typical Electric Mark: Same for
Both Mains & Services – **Always
Red**



Typical Fiber Optic Mark:
May include L3 = Level 3,
GC = Global Crossing,
LT = Light Tower, LIFE = LI Fiber –
Always Orange



Typical Reclaimed Water Mark:
NO Size or Material, Unless
Known, Ex: BNL = Brookhaven
National Lab – **Always Purple**



Typical Offset Mark: **(APWA
Color Code)** Includes
Utility, Measurement & Direction
of the Measurement
Ex: Electric 4' from the Line
Direction Arrow Indicates



Know what's below. Call or Click  before you dig.

LESSON 4: LOCATING AND MARKING REVIEW

What should I do if there are visible signs that a utility is in my work area and it was not marked?

- **Call the Facility Operator** to inquire about the missing marks.
- **If the Facility Operator contact information is not known, call the Notification Center** with your original ticket number and advise the customer service representative of the company that did not markout.

DO NOT excavate a work area that has not been marked.



Know what's below. Call or Click  before you dig.

NEW YORK 811

Lesson 5: Excavating





IMPORTANT THINGS TO KNOW:

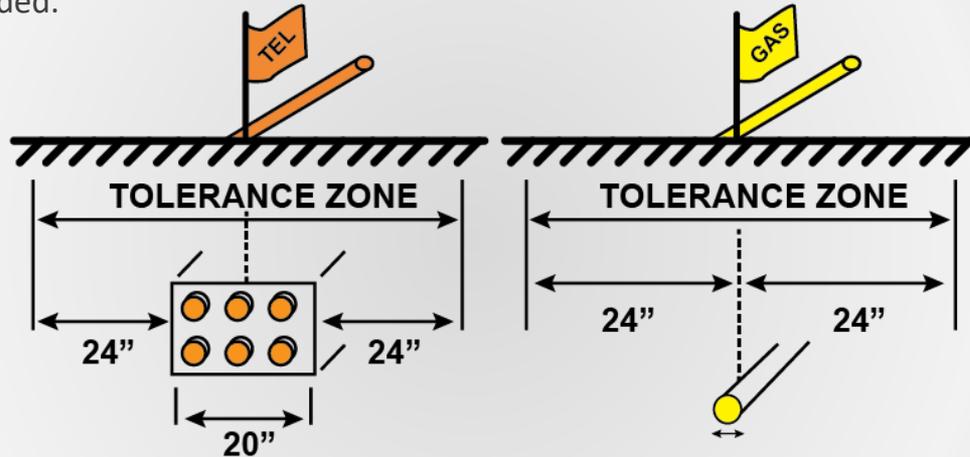
- ✓ All excavators must have their own mark out request
- ✓ Must provide physical location of dig site
- ✓ Call 2 business days ahead, but not more than 10 business days
- ✓ Excavators must verify their location, dig date and should have a copy of request (ticket) on site
- ✓ Commence excavation within 10 business days or locate request (ticket) is no longer valid
- ✓ **Excavator must protect and preserve marks until no longer necessary or contact the Notification Center to refresh the marks**
- ✓ It is the excavator who is responsible for contacting the Notification Center when excavating on private property



Know what's below. Call or Click  before you dig.

TOLERANCE ZONE IS DEFINED AS:

- 2 feet (24") on either side of the designated center line of facility if the diameter is not provided.



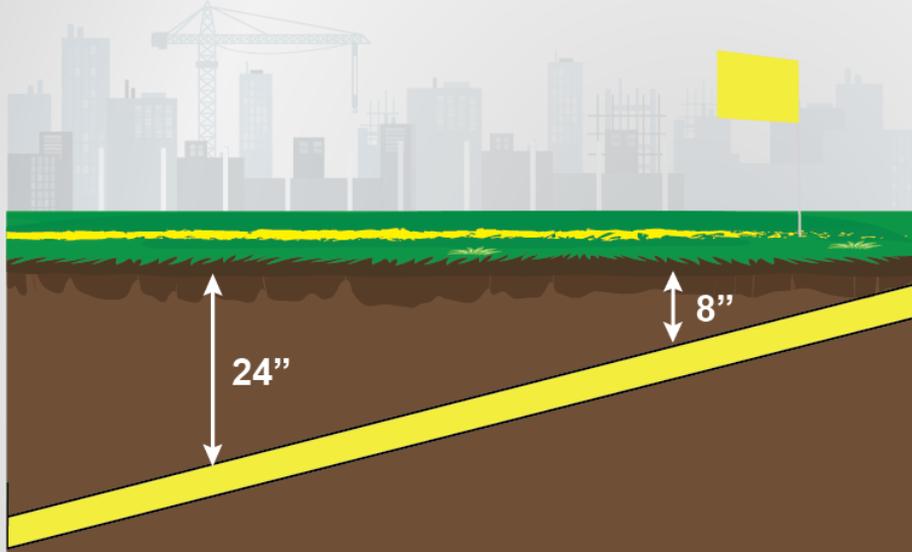
- Or, 2 feet (24") from each outside edge if the diameter is provided.



Know what's below. Call or Click  before you dig.

TOLERANCE ZONE

NOTE: The depth of an underground facility can fluctuate. Do NOT assume depth is the same.



Proceed with caution.
Do not assume buried utilities are at a certain depth—grade changes, erosion or other factors may affect the location of the utility within the tolerance zone.



Know what's below. Call or Click  before you dig.

TOLERANCE ZONE



NOTE: If the excavation is going to cross a tolerance zone, the excavator should dig a test hole to expose the facility at the point of crossing.



Know what's below. Call or Click  before you dig.

TOLERANCE ZONE

Powered or mechanized equipment be used within the tolerance zone to remove asphalt and cement road base but extra care should be employed when removing these layers to prevent making contact with a live utility. After removal of asphalt/cement, continue excavating by hand digging.

A good practice is to have a crew perform “test pits” or “pot hole” the area ahead of the excavation crew to verify the location of the buried utility. By taking this precaution, you'll be providing a greater margin of safety and issues can be resolved in time to minimize interference with the excavation.



Know what's below. Call or Click  before you dig.



THINGS TO KNOW

- Plan the excavation or demolition with care to avoid damages
- Use reasonable care during excavation or demolition to avoid damages. Protect facilities from traffic and other hazards
- Hand dig within 24 inches from the ends of the facility marks to uncover buried facility , before operation of any mechanized equipment



Know what's below. Call or Click  before you dig.

LESSON 5: EXCAVATING REVIEW



When working with natural gas, propane and petroleum lines, it is important to learn how to recognize and respond to leaks.

A gas leak is usually recognized by smell, sight, or sound.



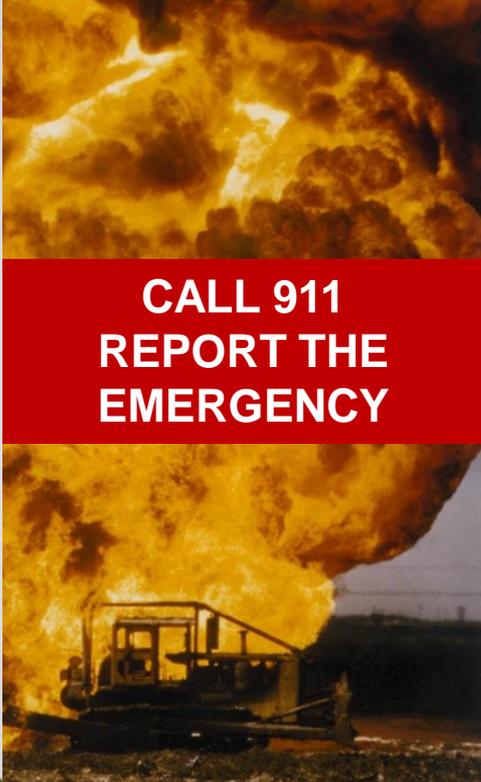
- Natural gas is colorless and odorless, but a distinctive, pungent chemical is usually added so it is possible to recognize the smell of this odor as the presence of gas.
- Other indicators of a leak include seeing a **white cloud, mist, fog, bubbles in standing water, or vegetation that appears to be dead or dying, for no apparent reason.**
- Also, listen for an unusual noise like **roaring, hissing, or whistling.**

Like all forms of energy, handling natural gas, propane and petroleum demands the highest level of respect and care. A leak of any kind, caused by damage to a pipeline may pose a hazard and has the potential to ignite.



Know what's below. Call or Click  before you dig.

LESSON 5: EXCAVATING REVIEW



**CALL 911
REPORT THE
EMERGENCY**

If you **BREAK** a natural gas, petroleum or propane line **follow these steps...**

- **CALL 911**
- **STOP WORK AND EVACUATE THE SITE**
- **CALL THE APPROPRIATE FACILITY OPERATOR**
- **DON'T DO ANY THING THAT CAN CAUSE A SPARK**
(Including ringing doorbells, knock instead.)
- **ALERT EVERYONE ON THE PREMISES**
- **KEEP THE PUBLIC AND THE TRAFFIC AWAY**
- **TAPE, ROPE, OR PLACE CONES AROUND THE AREA**
- **STAY UPWIND OF THE BLOWING WIND**
- **DO NOT TRY TO FIX A DAMAGED PIPE**
- **DO NOT TRY TO EXTINGUISH A BURNING FIRE**

Immediately notify the local police and fire department and the operator of the affected facility, the exact location, nature of the emergency and the underground facility that has been affected.



Know what's below. Call or Click  before you dig.

By not calling, you risk:

- Costly property and environmental damage
- Legal problems
- Job delays
- Injury or even death
- Explosion or fires
- Power or utilities services interruptions

Call **811** Before You Dig. It's **FREE** & **It's THE LAW**



Know what's below. Call or Click  before you dig.

- **Call or Click Before You Dig**
- **Wait The Required Time**
- **Confirm Utility Response**
- **Respect The Marks**
- **Dig With Care**



Know what's below. Call or Click  before you dig.

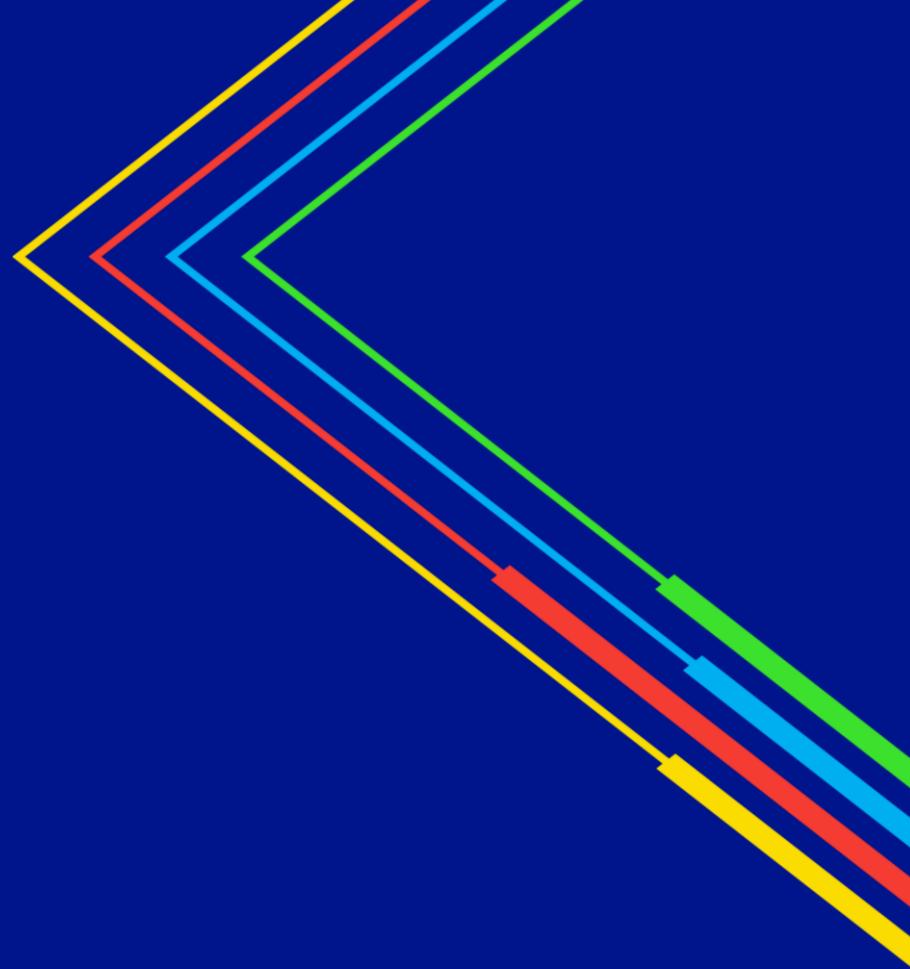
THANK YOU



National Grid Damage Prevention

**Safe Excavating Around Gas
Facilities**
November 2019

national**grid**



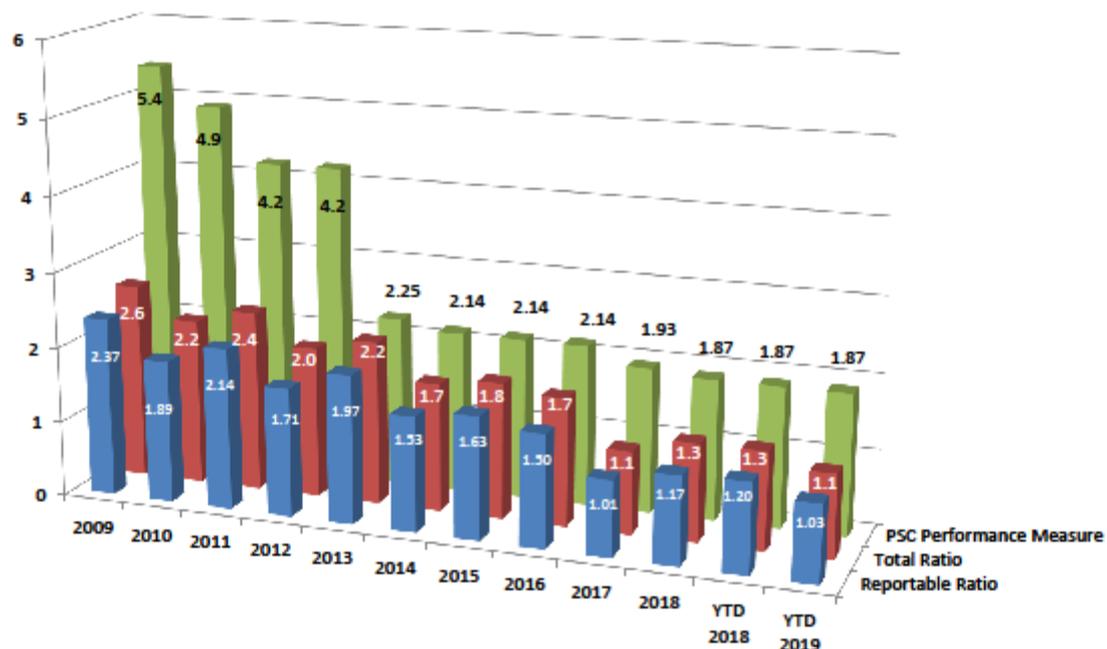
When Hand Digging Comes In Handy

Please enjoy this short video:

<https://ngridssafety.com/when-hand-digging-comes-in-handy/>

NYC Damage Ratio History

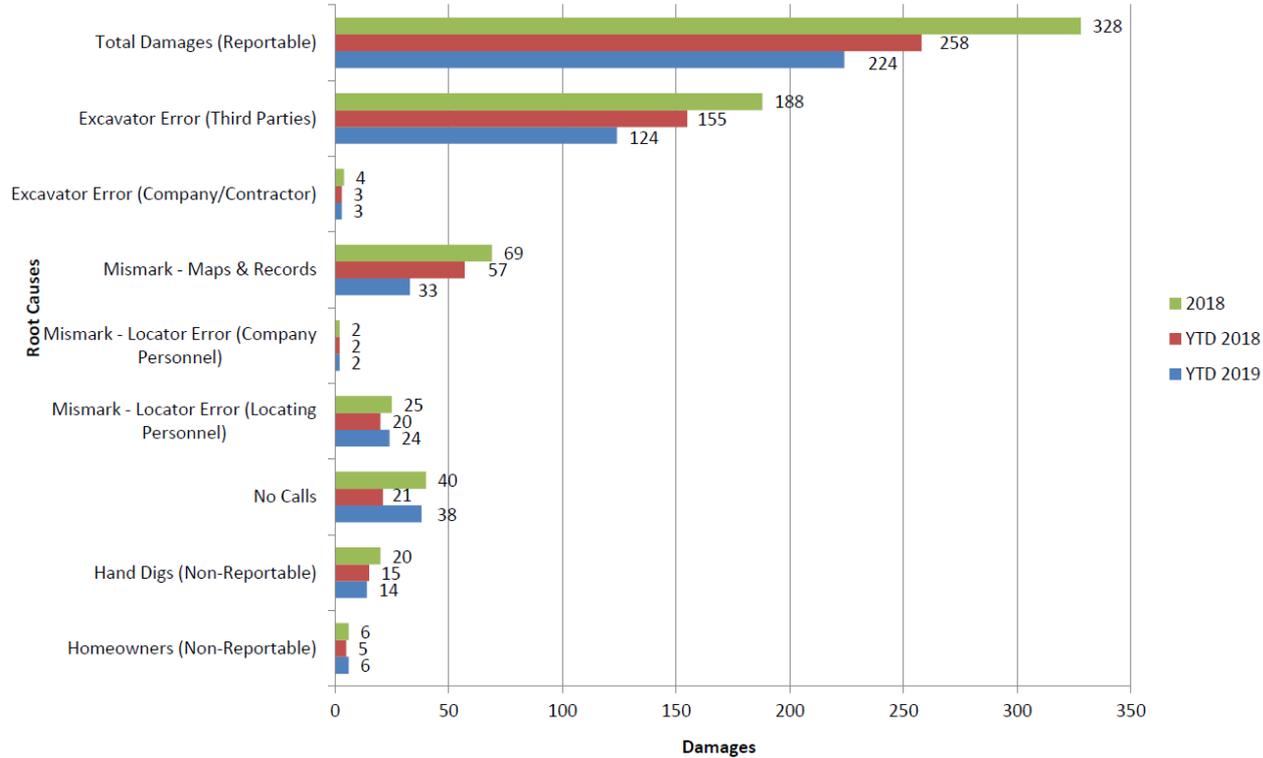
NYC Damage Ratio History
YTD September 2019



Damage Rate: Overall Damages per 1,000 One Call Tickets

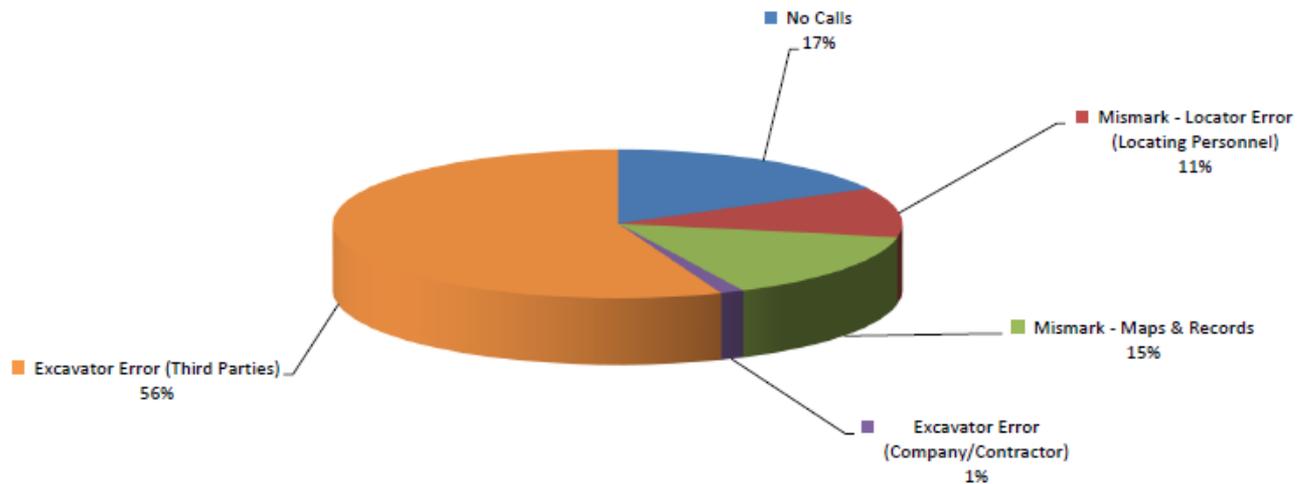
NYC Root Cause

NYC Damages Root Cause Report YTD September 2019

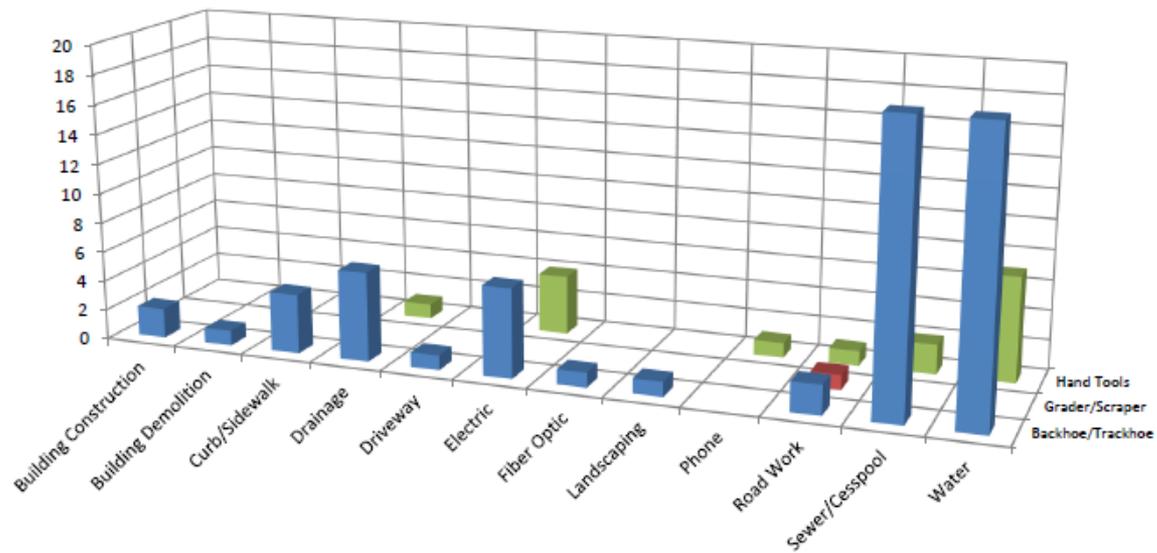


NYC Root Cause

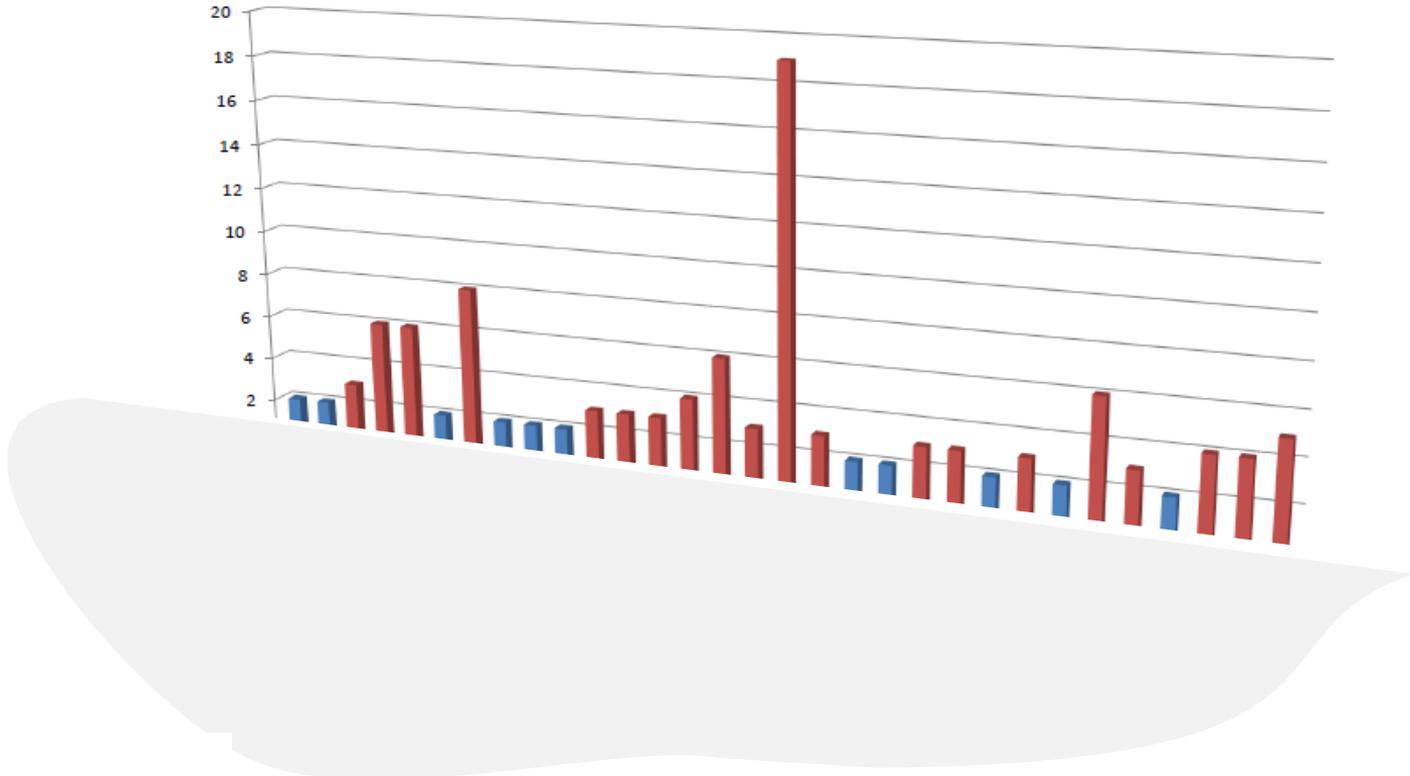
NYC Root Cause Breakdown
YTD September 2019



**Segmentation of NYC "Excavator Error Damages"
by Type of Equipment and Type of Work
Rolling 12 Months September 2019**



NYC Repeat Offenders
Excavator At-Fault Damages
Rolling 12 Months
September 2019



Electric & Gas Overview Safety

Pete Corredor – Con Edison

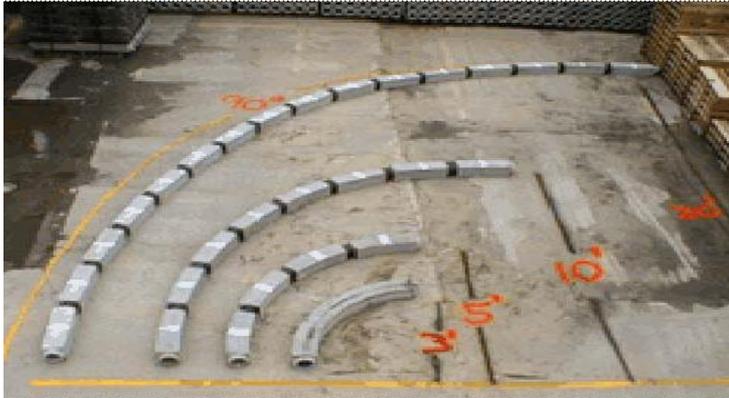


**Know what's below.
Call before you dig.**

Electric Markout



Types of Electric Conduits

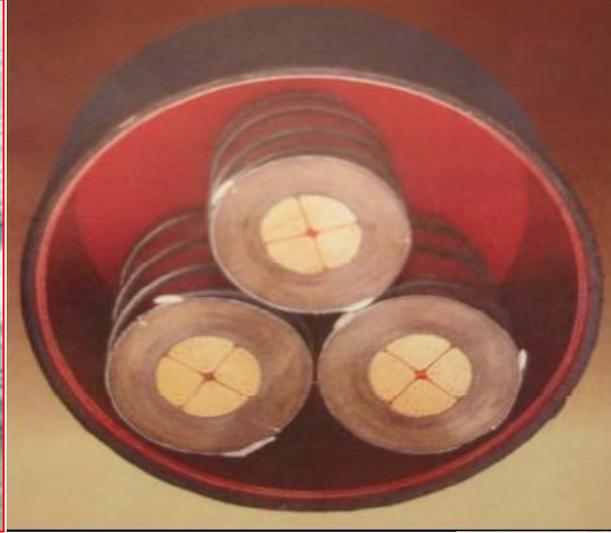


Other Types

- Transit Ducts
- Wooden Ducts

Ducts contain Primary, Secondary or Services

Electric Conduit – Electric Transmission



- Oil Filled Feeder - Coated Steel pipe
- Solid Dielectric - Nitrogen cooled - Steel or Fiber Pipe
- 5", 6" 8" or 10" in diameter
- 69KV, 138KV, 345KV

Excavation Safety – Electric

- Primarily 24” of cover (not a guarantee)
- Hand Dig to expose electric facilities within the tolerance zones
- Once exposed, support and protect
- Try to keep water out of the excavation
- If the Electric Facility is damaged, exit and clear the excavation safely and contact the utility operator

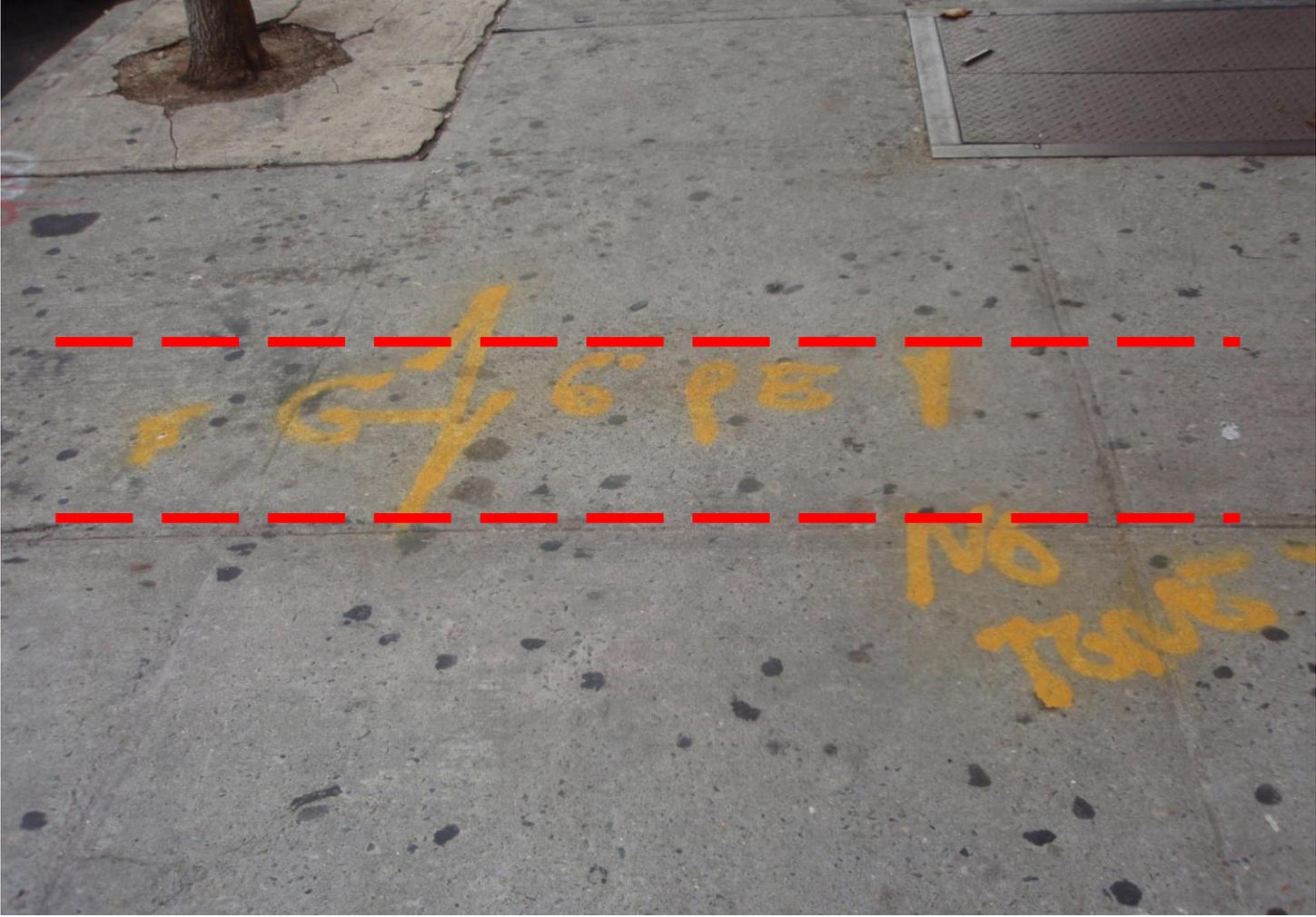


Types of Gas Mains



Other Types

- Wrought Iron
- Uncoated Steel



16 PE 1

NO TUNE



Pipeline Marker and Regulator Stations



- Gas Pipeline Marker
- Gas Transmission – 350PSI Or higher



- Gas Regulator Station
- Pressure Reducer with Control lines/piping



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Q & A



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Thank you