





## Ohio Utilities Protection Service

2014 Safety Presentation

# Ohio Utilities Protection Service is the call before you dig notification center for the state of Ohio.

O.U.P.S. is the communication link between those who own and operate underground utility facilities and those with a desire to excavate.











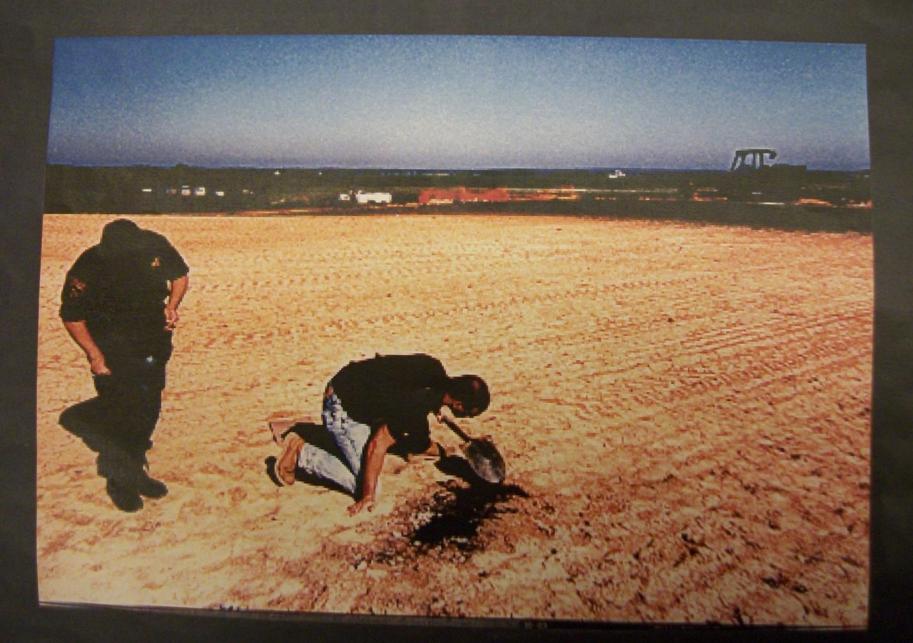
## Lancaster, Ohio August 1992



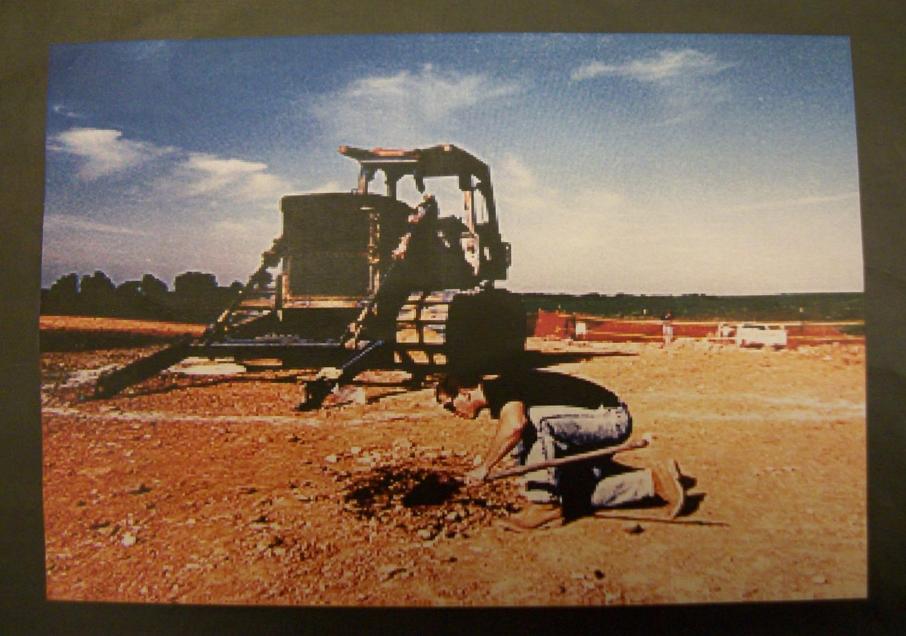
## Pipe Section Thrown From Accident Site in Background



## Remains of Spotter



## Remains of Operator







## Objectives

- O.U.P.S.
- Excavator Responsibilities
- Utility Owner Responsibilities
- The Marks
- Types of Excavation Activities
- Things to Remember

### O.U.P.S.

- 40+ years old
- Not-For-Profit
- Free Service
- 24/7 365 days a year
- Protection Service O.U.P.S. does not mark lines
- OGPUPS Ohio Oil & Gas Producers Underground Protection Service - 1-614-715-2984

## **Excavator Responsibilities**

- Definition of an Excavation
  - "...penetrate or bore or drill into the earth..."
     ORC 3781.25(I) Excavator Manual Page 4
- Plan Work
- Premarking in White Excavator Manual Page 13
- Click, Call or Tap the App Excavator Manual Page 8
  - "... at least forty-eight hours but not more than 10 working days before commencing excavation, the excavator shall notify a protection service of the location of the excavation site..." ORC 3781.28(A)
- Each Excavator Has to Have Their Own Ticket
  - "...the person or persons responsible for making the actual excavation" ORC 3781.25(K)
- Locate Work Order Excavator Manual Page 9

## Excavator Responsibilities Cont.

- CSR Verification Listen Closely
- Ticket Number
- We Notify Our Members But Not All Utilities Are Members With O.U.P.S.
- Wait 48 Hours Before You Begin Excavation
- Check Positive Response Excavator Manual Page 11
  - Excavator has an obligation to check positive response
  - **800-445-3894**
- Perform Site Assessment
- Dig With Care

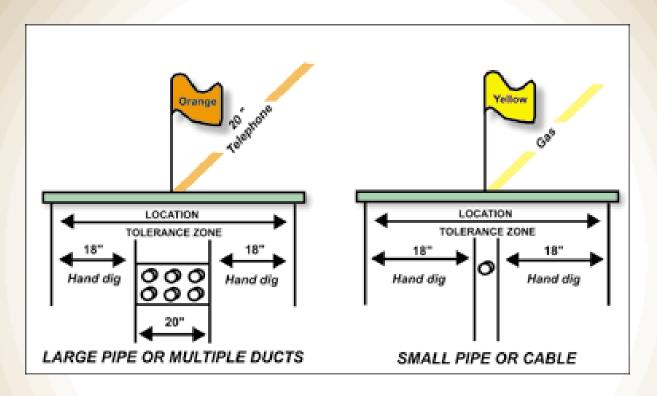
## Facility Owner Responsibilities

- Required To Be A Member Of A Protection Service
- Required To Mark The Approximate Location Within 48
   Hours
  - Respond To Design Tickets in 10 Days
- Required To Provide Positive Response Within 48 Hours

### The Marks

- Tolerance Zone
  - "...the site of the underground utility facility including the width of the underground utility facility plus eighteen inches on each side of the facility." ORC 3781.25(E) — Excavator Manual Page 26
- Color Code Excavator Manual Page 12
- Faded Or Marks That Are No Longer Visible
- Marking Standards "All underground facilities shall be marked in accordance with the Ohio universal marking standards..." ORC 3781.29(2)(C) – Excavator Manual Page 12

### **Tolerance Zone**



Ohio law requires that the excavator observe the tolerance zone during excavation... - Excavator Manual Page 26

## **Color Codes**

Red	Electric power lines, power conduits, lighting cables, and other energized wires, such as traffic signals
Orange	Telecommunication lines, fiber optic cables, alarm or signal lines, cable TV or conduits
Yellow	Natural gas, oil, steam, liquid petroleum, or other gaseous or flammable material
Green	Sewers and drain lines
Blue	Drinking / potable water
Purple	Reclaimed water, irrigation, and slurry lines
Pink	Temporary survey markings
White	Proposed excavation

## Ohio's Universal Marking Standards

#### WHITE LINING (Continued)

For a single point excavation, such as installing poles, pedestals, or planting a tree, mark (with white paint) the area by using dashes to show the owners/locators the area of excavation.





For continuous excavation, such as trenching, boring, etc., mark the center line of excavation with dashes in white paint. Excavation width (In feet) shall be indicated on either side of the center line in legible figures.

White flags or stakes may be used in place of white paint and, in some situations, may be more practical.

#### **EXCESSIVE MARKS**

Markers used to identify underground facilities should not be excessive or overstzed.

#### CABLES

Underground utility lines of the same type in the same trench owned by the same company shall be marked individually.

A. If a single underground facility is present, it shall be marked by placing a single mark over the approximate center of the facility. It is recommended that this mark be a minimum of 1" wide and 12" in length.



B. If multiple underground facilities are present, they shall be marked by placing a single mark over the approximate center of each underground facility. It is recommended that this mark be a minimum of 1"wide and 12" in length.



Marks shall be placed at the beginning and the end of the locate and at a minimum interval of two feet but not more than fifty feet throughout the locate as needed to clearly identify the route of the underground utility.

#### PIPELINES

A. Pipelines 2 inches and smaller (nominal size): The physical location of a pipeline shall be represented by a single mark.



B. Pipelines larger than 2 inches (nominal size): The physical location of a pipeline shall be represented by a single mark. The nominal size shall be noted.



#### For all pipelines:

- The owner/operator shall be identified. Flags, as well as paint, shall be deemed acceptable as identifying the owner/operator.
- When known, the material type of the pipeline shall be indicated using the "material type" abbreviation index.
- 3. When the facility is installed in casing the facility shall be marked as follows: "diameter and material type / casing diameter and material type". If the casing size or material is unknown it shall be indicated by "UNKN" and, the excavator, designer, or engineer should contact the facility owner. All parties involved shall work jointly to establish accurate information.

#### **PIPELINES**

#### 4" STL CG/12"DI 4" STL CG/UNKN

- 4. Marks shall be placed at the beginning and the end of the locate and at a minimum interval of two feet but not more than fifty feet (50') throughout the locate as needed to clearly identify the owner/operator, pipeline location, material, and width.
- 5. All numbers identifying width shall be in inches.

#### CONDUIT/DUCT BANK

The term "conduit" shall be used for a single enclosure containing one or more facilities; the term "duct bank" shall be used for a structure containing two or more conduits.

- A. For banks constructed with ducts sized 2 inches or less, the following information will be provided:
  - 1. A single mark is used.
  - 2. A diamond is placed within the mark.
  - The number of small-diameter ducts shall be indicated within the diamond symbol.



### OFFSET MARKS

In areas prone to the frequent destruction of marks, offset marks may be used in conjunction with the marks placed at the actual location of a facility. They are intended to be used as a supplemental means of marking.

- A line is placed in conjunction with an arrow and a measurement (stated in feet), which specifies the distance from the reference line to the actual location of the facility.
- The arrow indicates the direction from the reference line to the actual location of the facility.
- 3. The arrow shall be oriented at 90 degrees to the reference line.
- The distance to the actual location of the facility, from the reference line, shall be placed on one side of the arrow.
- The locator shall provide all of the necessary information which adequately identifies the specific facility in accordance with the marking standards. This information shall be placed on the side of the arrow which is not utilized for the "distance" information.









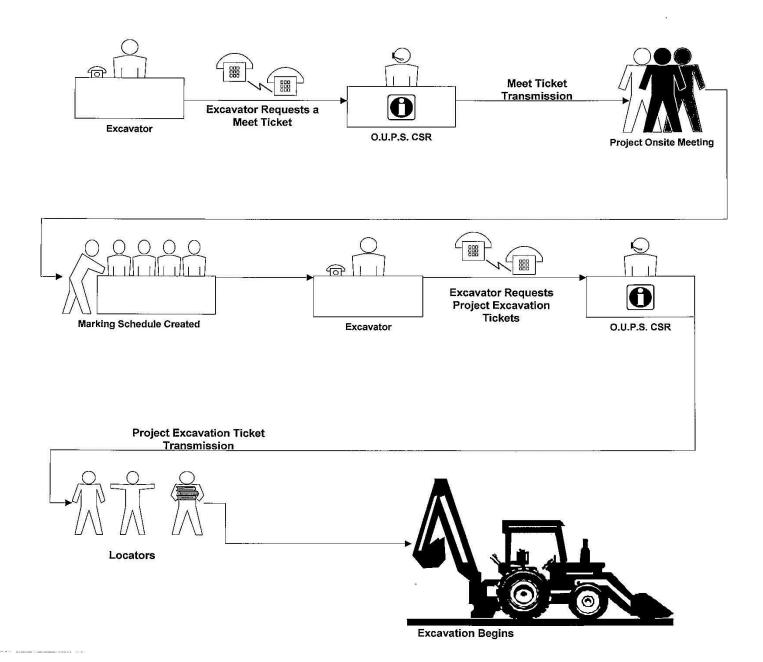
## Types of Excavation Activities

- Emergencies Excavator Manual Page 6
- Design
  - Facility Owners Have 10 Working Days To Respond
- Use of Trenchless Technologies Excavator Manual Page 5
  - When Utilizing Trenchless Excavation Methods, The Excavator Must Comply With The Following Requirements:
    - Expose all underground utility facilities at each crossing point to the installation depth of the new facility.
    - Expose all parallel facilities at the beginning and end. If in the tolerance zone, facility shall be exposed every 100 ft.
    - Maintain the proper clearances of existing facilities.

## Types of Excavation Activities Cont.

- Large Project
  - A large project is one that may progress over an extended period of time and/or be complex in size/scope and work type
    - Process:
      - Excavator calls O.U.P.S. to request a large project/joint meet ticket
      - Excavator and facility owner/representatives meet
      - A mutually agreed upon marking schedule is created
      - Excavator calls O.U.P.S. with project excavation tickets in accordance with mutually agreed upon marking schedule
      - Locator marks underground facilities as project excavation tickets are received
      - Excavation begins

#### **ONE CALL PROCESS FOR LARGE EXCAVATION PROJECTS**



## One Call Process for Large Excavation Projects

- A large project is one that may progress over an extended period of time and/or be complex in size, scope and work type. Not all large excavation projects may need a Large Project Meet Ticket.
- The purpose of a Large Project Meet Ticket is to coordinate an onsite meeting/communication between the excavator and facility owner representative(s) so that a marking schedule can be set for the project. A large project meet ticket is not a dig ticket.
- Examples of a Large Project Meet Ticket may include, but are not limited to, cross-country pipeline installation, seismic testing and large site development.

## One Call Process for Large Excavation Projects

- To ensure that such projects are approached with understanding among all parties involved, please review the recommendations for each phase of the process below:
- Prior to Placing Your Call to O.U.P.S.... o Know the counties, cities, and townships the project involves.
- Know bounded by areas or locations of the project with starting and ending points.
- Know the date, time and the location of the project meeting and meeting contacts.
- It is suggested that you allow at least one weeks time between placing the call to O.U.P.S. and the date of the requested meeting.

## One Call Process for Large Excavation Projects

- When You Place Your Call to O.U.P.S. for a Large Project Meet Ticket...
- In addition to contact information, the contractor should provide the scope of the project, including the work type and who the work is being done for. All subcontractors working on project should also be included
- The information will be entered and a dig notification will be created on the map by the CSR to determine which member facility owners could be affected.
- Description Example: This is a 85 mile 12 inch natural gas pipeline project will be starting in Seneca County 636 feet north of the intersection of Twp Rd 129 & Twp Rd 120 just west of Twp Rd 129 will continue through Seneca County and crossing Huron, Ashland, Medina and Wayne Counties and ending 19 feet south and 38.5 feet east of the intersection of Whitman Rd and S R 172 in Wayne County.

## One Call Process for Large Excavation Projects



## One Call Process for Large Excavation Projects

- When the Excavator and Facility Owner Representatives Meet...
- All contractors involved in the project should attend the meeting.
- Bring any maps, drawings or shape files available for the project.
- Assign a project name and determine phases for the project.
- Set up the mutually agreed upon marking schedule for each phase of the project.
- Example: Phase 1 The south side of U S 224 approximately 1200 ft southeast of S R 53 starting at a point approximately 600 ft south of U S 224 and going crossing S R 100, continuing through Clinton Township and ending at S R 19, approximately 2700 feet south of U S 224.

## One Call Process for Large Excavation Projects

- Placing Your Call to O.U.P.S. for Mdig Ticket (Dig Ticket requesting markings)...
- Mdig tickets should be requested for each phase of the project, according to the mutually agreed upon marking schedule. They should be requested at least 48 hours (excluding weekends and legal holidays) prior to beginning that phase of the excavation.
- When calling to request Mdig Tickets, always reference the original large project meet ticket number first. It is important that all of the subsequent phases are associated with this ticket number.
- Each phase will be given an Mdig ticket number. Keep this ticket number for your records.
- NOTE: Large excavation projects in which the work will begin within 48 hours (excluding weekends and legal holidays), or the work will be completed within 10 working days from the date of the call, are considered normal dig tickets.
   Normal dig tickets may sometimes include an onsite meeting.

## Things To Remember

- Contact O.U.P.S. 48 hours before you dig
- Check Positive Response
- Preserve And Protect The Marks
- Don't Work Off Someone Else's Ticket
- Not All Utilities Are Registered With O.U.P.S.
- Utilities May Not Run In A Straight Line
- Do Not Assume Depth
- Report All Damages

### O.U.P.S. Contact Information

- Call 811
- Call 800-362-2764
- O.U.P.S. Mobile App
- www.oups.org
- Remote Ticket Entry
  - i-dig
  - e-dig



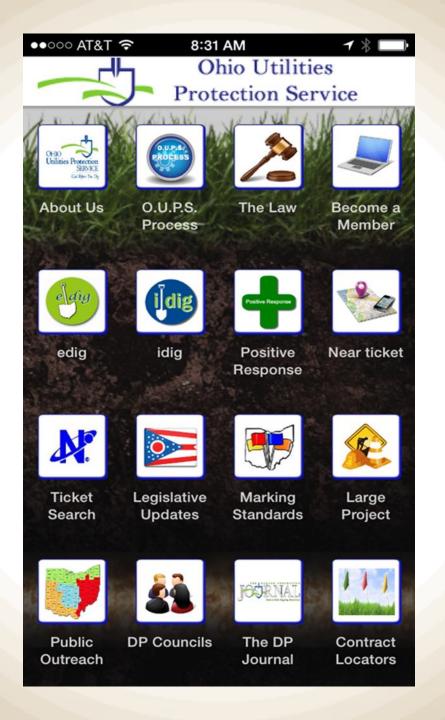












### Certifications

- EPA Certified for (1) CEU hour for water and wastewater employees – OEPA-B294884-X
- Personal Development Hours (PDH) for surveyors and engineers
- Excavator Training (ORC 3781.261)

George Gillespie
Public Awareness / Services Coordinator

Office: 614-889-6238

Cell: 614-747-2012

E-mail: georgeg@oups.org