NULCA Utility Locating Training

CALIFORNIA SURVEYING & DRAFTING SUPPLY
A DIVISION OF ***CANSEL GROUP***

NULCA-certified training program is designed to equip participants with the knowledge and skills required to meet industry standards for utility locating professionals. The training emphasizes both theoretical understanding and practical application to ensure competency in every aspect of the job.
By adhering to NULCA's Competency Standards and CGA best practices, this program provides a comprehensive foundation for safe and efficient utility locating.

Training Overview:

NULCA Part 1: (3-4 Hours)

- Utility overview & electromagnetic field theory.
- Receivers, transmitters, and signal distortion.
- Safety and utility marking.
- Passive & Active locating methods (Direct connect, clamp, Dropbox).
- Overcoming resistance & current locating techniques.
- One Call awareness & customer relations.
- Breaks (2x 15 mins) + (30 mins Lunch break).

NULCA Part 2: (3 Hours)

Field Exercise (Signal distortion, Active locating, Passive locating and Best practices)

NULCA Part 3: Online (1-2 hours)

- Handouts & supplemental information.
- Content review & best practices.
- Evaluations/feedback.

Total hours:

Full day – Participant (8-10 students)/session
Online: 1-2 hrs

Prerequisites:

Participants bring their own locating units.

For more details about our training courses, visit our site:

E-mail: solutions@csdsinc.com | Toll-Free: 1 (800) 243-1414

Course Outline

Introduction
- Introductions
- Student register

Utility Overview
- Utility awareness
- Buried utilities
- Above ground utilities
- Challenging utilities

Electromagnetic Field Theory
- Magnetic fields
- Faraday's Law
- Creating a simple AC circuit
- Ohm's Law

E.M. Receivers (Antennas)
- Purpose
- Antennas

Signal Distortion
- Concept
- Causes
- Peak VS Null
- In-class experiment

E.M. Receivers & Transmitters
- Buttons
- Hardware
- Interface
- TX- accessories

Passive Locating
- Frequency
- Radio
- Power
- Additional passive frequencies

Utility Marking
- Utilities visual understanding
- Color codes & best practice

Safety
- Standards
- PPE
- Common hazards
- Confined spaces
- Hazard communication
- Vehicle usage

Active Locating
- Transmitters (Direct connection)
- Interface
- Procedure
- Frequencies
- Current Locating
- Quick Troubleshooting

Current Direction
- Current direction locating

Overcoming Resistance
- Frequency
- Power
- Grounding methods
- Signal spillage

One Call Awareness
- Purpose
- Process

Excavator & Customer Relations
- Construction site & equipment
- Customer relation

OIL & GAS
- Standards of operation
- Concept
- Locating pipelines