

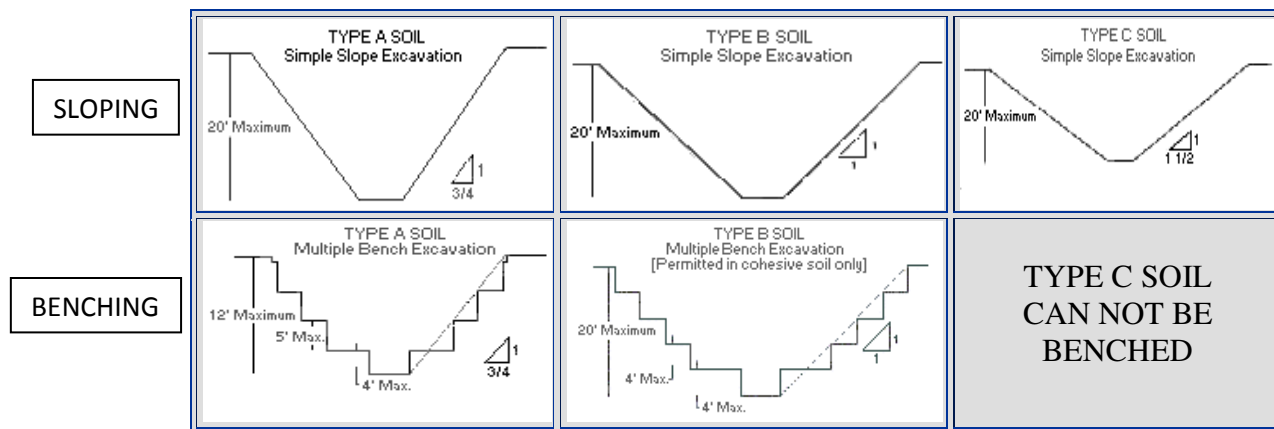
Excavations are recognized as one of the most hazardous operations in the construction industry. Excavation cave-ins can cause serious and often fatal injuries to employees. In addition to the hazards related to cave-ins, excavations are of particular concern on campus due to the University's complex underground utility infrastructure. OSHA places very strict regulations governing the design of an excavation, cave-in prevention methods, and employee training. Cornell employees working in or around excavations need to be knowledgeable of safety requirements.

### REQUIREMENTS FOR ALL EXCAVATIONS

- An underground utility survey must be conducted prior to the start of any excavation. Call 255-5322.
- All employees working in an excavation must receive initial training.
- A **competent person** must be clearly identified for all excavations. This person must be knowledgeable in assessing soil conditions, the use of protective systems, and OSHA requirements.
- The **Daily Trenching/Excavation Log** must be completed, and a copy must remain on site.
- The soil type must be identified by the competent person on site:
  - Type A - clay, silty clay, sandy clay, clay loam and cemented soils (hardpan)
  - Type B - angular gravel, silt, silt loam, and sandy loam
  - Type C - gravel, sand, and loamy sand
- Excavated material must be placed at least 2 feet from the edge of any excavation.
- Precautions must be taken to ensure vibrating equipment/vehicular traffic does not cause a cave-in.
- No employee shall enter an excavation that contains standing or seeping water.
- Access (ladder/ramp) must be provided and located so no worker must travel more than 25 feet to exit.
- Employees at the edge of an excavation 6 feet or more in depth shall be protected from falling.
- If conditions change in or around the excavation, employees must exit the excavation and a competent person must re-inspect and give approval for employees to re-enter.

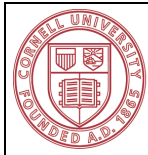
### EXCAVATIONS 5 FEET OR GREATER IN DEPTH

- Sloping, benching, or other approved cave-in protection systems must be utilized.
- Trench boxes/shoring must be a designed and approved system.
- The trench box should extend at least 18 inches above the surrounding ground surface.
- Excavations greater than 20 feet must be designed by an engineer.



Environmental Health & Safety  
 Facilities Safety & Health Section  
 395 Pine Tree Rd. Suite 210  
 Ithaca, NY 14850  
 607.255.8200

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 Environmental Health & Safety for  
 recordkeeping.



Cornell University

### Toolbox Safety Talk Excavation Safety

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Location: \_\_\_\_\_

Presenter Name: \_\_\_\_\_

PRINT NAME	NET ID	DEPARTMENT	SIGNATURE

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