

An excavation is any man-made cut, cavity, **trench**, or depression in the earth surface formed by earth removal. A trench is simply a narrow excavation in relation to its length. A trench is less than 15 feet wide and deeper than the overall width.

What is an excavation competent person?

An excavation competent person is a dedicated person who is capable of identifying existing and predictable hazards or working conditions that are hazardous, unsanitary, or dangerous to workers through training and experience of excavation standards and regulations. This person needs to have knowledge of protective systems and have the authority to take prompt corrective actions to eliminate hazards, up to and including, stopping work. A competent person must perform daily documented inspections before work begins ([Daily Checklist](#)), as needed based on the hazards, and whenever conditions change, such as after a rainstorm.

General Rules for all Excavations and Trenches:

- A competent person is required on all job sites with an excavation deeper than 4 feet. Contact an excavation competent person to evaluate shallower excavations if there is a presumed hazard.
- Contact JULIE to locate underground utilities at least 2 working days prior to beginning excavation work.
- All material and equipment, including spoils, must be placed at least 2 feet from the edge of the excavation.
- At a minimum, class 2 high visibility apparel must be worn. Class 3 high visibility apparel is required for work at night and for work near traffic above 50 mph.
- Barricades, guardrails, or fences must be provided to protect the public from walking too close to the excavation.
- No employee is allowed to be underneath lifting or digging equipment.
- Type C soil type is assumed for all University excavations, unless a competent person determines by a recognized standard or analysis by an accredited laboratory determines that the soil is of Type A or B.

Specific Rules for Excavations and Trenches 4 feet or deeper:

- A safe *physical* means of entering and exiting must be provided (e.g. ladders, stairs, ramps).
- When a hazardous atmosphere can be reasonably expected to exist the atmosphere must be tested before employees can enter the excavation.

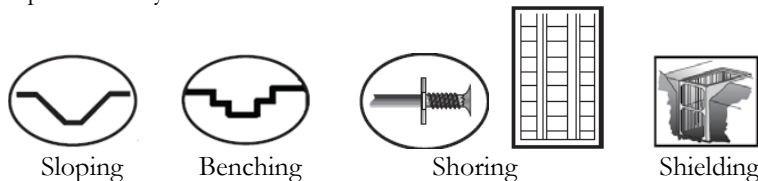
Specific Rules for Excavations and Trenches 5 feet or deeper:

- A protective system is required on all excavations and trenches 5 feet or deeper. The competent person may require a protective system on an excavation or trench less than 5 feet based on the hazards.

What is a protective system?

A protective system is a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures.

There are four types of protective systems:



1. *Sloping* involves cutting back the wall at an angle inclined away from the excavation. Slopes must be no steeper than 1½ :1 for Type C soil.
2. *Benching* involves cutting back the excavation to form one or a series of horizontal levels or steps usually with vertical or near vertical surfaces between levels. **Benching is not allowed with Type C soil.**
3. *Shoring* requires installing aluminum hydraulic or other types of supports to prevent soil movement and cave-ins.
4. *Shielding* protects workers by using trench boxes or other types of supports to prevent soil cave-ins.

This fact sheet is provided for general awareness of Excavations and in no means, an exhaustive list of Excavation rules and regulations. For more information regarding Excavations, please contact Safety and Compliance.