



Trench and Shore Safety

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I. PURPOSE

The purpose of this section is to establish safety and health guidelines for personnel involved in projects that will involve trenching and shoring-up excavations. It will follow 29 CFR 1926.650 requirements with respect to excavation safety.

II. PROCEDURES

- A. Employees shall not work in or adjacent to an excavation site until that work has been approved by the Office of Environmental Health and Safety (EH&S). EH&S will make certain that no conditions exist exposing University employees to injury from loose rocks, dirt, etc.
- B. Employees should determine whether underground installations, i.e., sewer, electrical lines, etc., will be encountered prior to opening an excavation.
- C. The walls of all excavations 5 ft or more in depth, which employees will enter, shall be guarded by a shoring system, sloping of the ground, or other equivalent means.
- D. A shoring system will consist of wood timbers or equivalent with sheathing as needed. The shoring should be properly designed and installed to sustain all existing and expected loads. Wood sheathing or uprights shall not be less than 2 inches in nominal thickness, except that 3/4 inch thick plywood panels may be used in addition to the 2 inch material as an aid in holding loose material. In lieu of the above shoring system, the use of properly maintained hydraulic metal jack shoring units with equivalent strength is acceptable.
- E. The sides or walls of an excavation may be sloped in lieu of a shoring system. The sloping shall be maintained at a 1 horizontal to 1 vertical ratio.

- F. Excavation work will at all times be under the supervision of someone qualified to modify the shoring system or work methods. This person shall examine the excavation site and improve the shoring or sloping as necessary to ensure the protection of workmen from moving ground.
- G. Excavation material shall be prevented from falling back into the excavation. In no case shall the excavation material be placed closer than 2 ft from the edge of the excavation.
- H. Safe means shall be provided for workers to enter and leave the excavation area. A standard stairway, ladder, or ramp securely fastened in place is suitable for this purpose.
- I. No excavation shall take place below the level of the base of an adjacent foundation, retaining wall, or other structure until a supervisor has determined that such excavation will in no way create a hazard or until adequate safety measures have been taken. If sidewalks are to be undermined, they shall be supported to carry a minimum live load of 125 lbs/ft². Lighted barrier physical protection shall be provided at all excavations. All wells, pits, shafts, etc., shall be barricaded or covered upon completion of exploration and similar operations. Temporary walls, pits, shafts, etc., shall be backfilled.

