Excavation ≥ 5 ft in depth OR an Engulfment Hazard? Requires Dig Permit
http://www.wright.edu/administration/construction/digpermit.html

Is there potential for cave-in?

NO

Excavation may be made with vertical sides

YES

Excavation MUST be
1.) Sloped, 2.) Shored, or
3.) Shielded

NO

Is the excavation entirely in stable rock?

YES

NO

FIGURE 1 – PRELIMINARY DECISIONS

When Sloping is selected as method of protection,
Will soil classification be made in accordance with 1926.652(b)?

YES

NO

Excavation must comply with 1 of 3 options:

Option 1:
Section 1926.652 (b) (3) which requires Appendices A and B to be followed

Option 2:
Section 1926.652 (b) (3) which requires other tabulated data (see definition to be followed)

Option 3:
Section 1926.652 (b) (4) which requires the excavation to be designed by registered PE

Figures:

FIGURE 2 – SLOPING

NOTE: PROTECTIVE SYSTEMS FOR USE IN EXCAVATIONS MORE THAN 20' IN
DEPTH MUST BE DESIGNED BY A REGISTERED PE 1926.652 (b) & (c)

Excavation must comply with 1926.652(b)(1) requiring a slope of 1 ½ H:1V (34 degrees)
Trenching and excavation work is the most dangerous work performed by our Construction Trades Personnel. Changing Weather, Soil Conditions, Underground Utilities, Confined Spaces, and Heavy Equipment all present specific hazards while trades are working around heavy equipment and below grade and specific oversight is required by OSHA [http://www.osha.gov/SLTC/trenchingexcavation/index.html](http://www.osha.gov/SLTC/trenchingexcavation/index.html).

For Trenching and Excavation activities by WSU personnel, contact EHS for trained Competent OSHA personnel oversight. This individual is required to inspect trench activities, re-inspect when conditions change, make corrective action where required, and has the authority to halt unsafe work activities.

If work is performed by non-WSU personnel, a contractor is responsible for an on-site OSHA competent person as required by 1926.652. Contractors may have one competent person with site responsibilities for all contractors OR each contractor can have their own competent person. Ultimately, the primary contractor is responsible for site and excavation operations regardless of number of competent persons assigned to the job-site.

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IF 2.) Shoring or 3.) Shielding selected as the method of protection;

Soil Classification is required when shoring or shielding is used. The excavation must comply with 1 of 4 options:

**Option 1:**
Section 1926.652(c)(1) which requires Appendices A and C to be followed (e.g. timber shoring)

**Option 2:**
Section 1926.652(c)(2) which requires manufacturer’s data to be followed (e.g. hydraulic shoring, trench jacks, air shores, shields)

**Option 3:**
Section 1926.652(c)(3) which requires tabulated data (see definition) to be followed (e.g. any system as per the tabulated data)

**Option 4:**
Section 1926.652(c)(4) which requires the excavation to be designed by a registered PE (e.g. any designed system)