

Excavation & Trenching Safety

October 2026 Crew Brief

Estimated Time: 15 – 30 Minutes

Why This Matters

Fall is a busy digging season: utility repairs, drainage, footings, and line work that has to get done before winter. A trench wall gives no warning when it fails, and one cubic yard of soil can weigh as much as a car. A worker caught in a collapse often can't be dug out in time. Trench collapses are preventable with three things: a protective system, a real daily inspection, and a way out.

Excavation vs. Trench, and When Protection Is Required

OSHA's excavation standard (29 CFR 1926, Subpart P) covers any work that cuts into the ground, whether your crew calls it a hole, a pit, a ditch, or a bell hole.

- **Excavation:** any man-made cut, cavity, trench, or depression in the earth's surface formed by removing earth.
- **Trench:** a narrow excavation, generally deeper than it is wide, and no more than 15 feet wide at the bottom.
- **5 feet or deeper:** a protective system is required unless the excavation is entirely in stable rock.
- **Under 5 feet:** still needs protection if the competent person sees signs of a possible cave-in.
- **20 feet or deeper:** the protective system must be designed by a registered professional engineer.

Who this applies to: anyone who digs. Contractors, utility crews, plant maintenance, municipal crews, and landscapers all end up in trenches.

The Four Ways to Protect a Trench

The competent person picks the system based on soil type, depth, water, and what's sitting near the edge:

- **Sloping:** cut the walls back at an angle. The weaker the soil, the flatter the slope. For excavations under 20 feet: Type A soil 3/4 to 1, Type B soil 1 to 1, Type C soil 1-1/2 to 1 (horizontal to vertical).
- **Benching:** cut the walls into a series of steps. Only allowed in certain soil types; the competent person decides.
- **Shoring:** hydraulic, timber, or aluminum supports that hold the walls in place.
- **Shielding (trench box):** protects the crew inside it if a wall does collapse. It doesn't stop the collapse; it keeps the collapse off your people. Work only inside the box.

Soil is classified as Stable Rock, Type A, Type B, or Type C (least stable). If nobody has classified the soil, the slope can be no steeper than 1-1/2 to 1, the same as Type C.

Discussion Points for Your Crew

1. Call 811 Before Anyone Digs

Utility locations have to be known before the excavation is opened. Call 811 or your state's one-call center and wait the time your state law requires. As the dig gets close to marked lines, find the exact location by hand digging or vacuum excavation, not with the bucket. **Pencil-whip alert:** an old ticket, or a ticket for a different part of the site, does not count.

2. The Competent Person Inspects Every Day, and After Every Change

A competent person must inspect the excavation, the area around it, and the protective system before work starts each day, as needed during the shift, and after every rainstorm or anything else that makes it more dangerous. If they see signs of a possible cave-in, a failing protective system, or bad air, everyone gets out until it's fixed. **Pencil-whip alert:** an inspection form signed at the truck is not an inspection. Ask your competent person what they actually looked at.

3. No Protection, No Entry

At 5 feet or deeper, nobody goes in until the protective system is in place, unless the whole excavation is in stable rock. "We'll only be in there a minute" is how people get buried. Trench walls don't crack slowly and give you time to climb out. A collapse is over in seconds. If the box isn't in, nobody is in.

4. Keep Loads and Spoil Back From the Edge

Spoil piles, tools, and materials must be kept at least 2 feet back from the edge, or held back by a retaining device. Keep trucks and heavy equipment back too; their weight and vibration load the wall. Nobody stands under a load being lifted or dug by equipment. Watch the edge for cracks, bulging walls, and soil falling in. Those are warning signs, not background noise.

5. A Way Out Within 25 Feet

Trenches 4 feet or deeper need a ladder, stairway, or ramp placed so no one has to travel more than 25 feet to reach it. Put the ladder inside the protected area, not at the open end of the trench outside the box, and extend it at least 3 feet above the top. **Pencil-whip alert:** one ladder at the far end of a long trench does not cover the whole crew.

6. Water and Air Can Kill You Too

Don't work in a trench with water collecting in it unless the water is being controlled and the competent person has checked it. Water weakens walls fast. In excavations deeper than 4 feet where bad air could build up, such as near landfills, sewer lines, fuel storage, or running engines, test the air before anyone goes in and keep testing while they're in.

7. Stop Work Authority Applies Here

Anyone on the crew can stop the job: cracks at the edge, water seeping in, a box set wrong, equipment too close, or no competent person on site. Stop, get everyone out, and call the supervisor. No schedule is worth a burial.

If a Trench Wall Collapses

Step	Action
1	DO NOT jump in to dig someone out. A second collapse often follows the first
2	Call 911. Say it is a trench collapse; give the location, depth, and number of people trapped
3	Shut down nearby equipment and traffic to cut vibration. Keep everyone back from the edge
4	Account for every worker who was in or near the trench
5	Only trained rescuers enter, and only after the trench is protected
6	Notify your supervisor and safety contact. Preserve the scene
7	Report to OSHA: a fatality within 8 hours; hospitalization, amputation, or eye loss within 24 hours

Key Regulations & References

- **29 CFR 1926, Subpart P** (1926.650 - 1926.652): Excavations
- **29 CFR 1926.651 / 1926.652**: Specific excavation requirements / Protective systems
- **Subpart P, Appendix A / Appendix B**: Soil classification / Sloping and benching
- **29 CFR 1904.39**: Reporting fatalities and severe injuries to OSHA
- **811**: Call before you dig. Your state's one-call law sets the notice time

Crew Knowledge Check (5 Questions)

1. At what depth does OSHA require a protective system, unless the excavation is entirely in stable rock?
2. Name the four ways to protect a trench.
3. How far back from the edge must spoil piles and materials be kept?
4. In a trench 4 feet or deeper, what is the farthest a worker should have to travel to reach a ladder or ramp?
5. True or False: If a coworker is buried, the fastest help is to jump in and start digging.

(Hint: What often happens right after the first collapse?)

Supervisor Sign-Off

Presented By: _____ Date: _____

Location / Site: _____ Time: _____

EMPLOYEE SIGN-IN SHEET
October 2026 — Excavation & Trenching Safety

Company: _____ Date: _____ Location: _____

#	Print Name	Signature	Company / Crew
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			