SAFETY BULLETIN #11

November 25, 2024

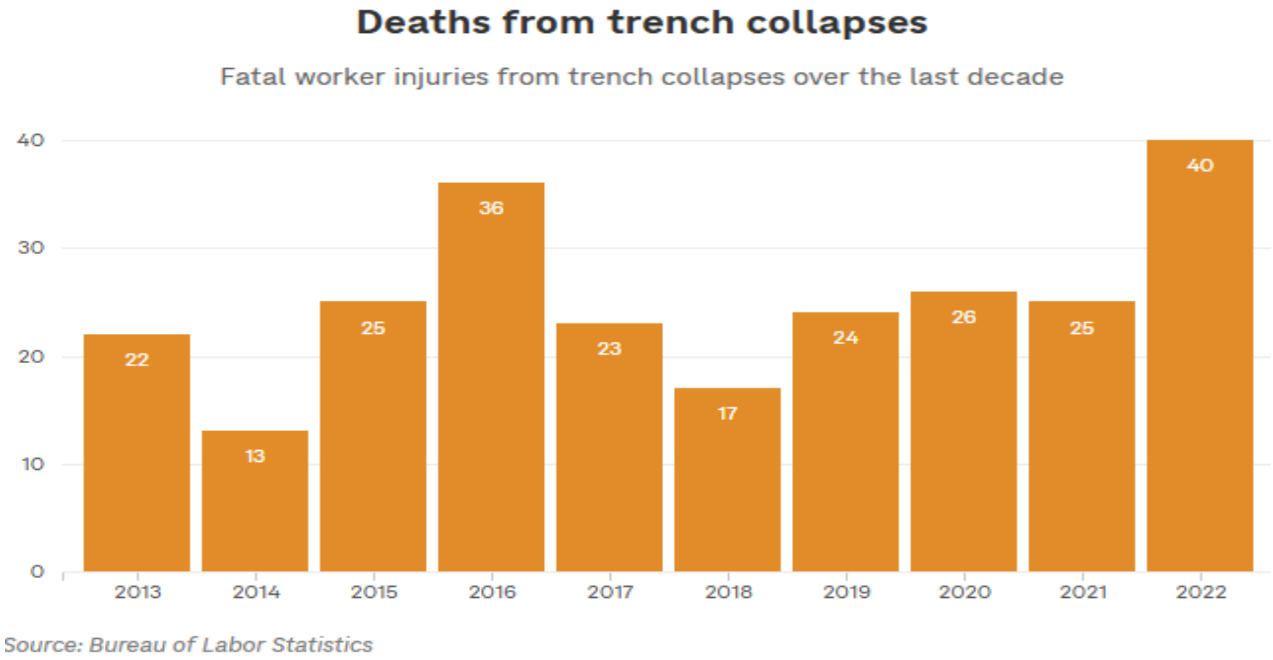
Excavation & Trench Safety - Part 1

Excavation and Trenching

- ★ Excavation and Trenching are common construction activities at Steep Creek and they affect nearly every team member.
- ★ One of the deadliest hazards related to these operations is the risk of a cave-in. Cave-ins can be the result of unsafe work habits, changes in weather that affect soil stability, and/or vibrations caused by construction.
- ★ OSHA and the Bureau of Labor Statistics compiled 10 years worth of data related to trench deaths. The results are alarming and show an average of 2 workers are killed every month in trench collapses!!

Ways to protect yourself and team members

- ★ Keep material, equipment, and spoils at least 2 feet back from the edge of all excavations & trenches
- ★ Remove any accumulation of water in the excavation or trench
- ★ Provide ladders, stairway, or ramps for all excavations that are 4 feet deep or greater
- ★ A safe way to exit must be provided within 25 feet of team members in a trench. Use multiple entry/exit methods to ensure no travel distance is greater than 25 lateral feet.
- ★ Do not enter the excavated area or trench until protective systems are in place and the Superintendent (Competent Person) determines it is safe to enter. (check conditions multiple times a day too)
- ★ Make sure proper sloping, benching, or shoring is utilized in excavations of 5 feet or greater in depth.
- ★ Be aware of different soil conditions and the correct sloping for each type of soil classification (more detail to come in December).



Discussion Points/Quiz:

- ★ Vibrations from nearby road traffic can affect the stability of a trench? True or False
- ★ There is usually some type of warning before an unstable trench wall collapses, giving team members plenty of time to get out safely? True or False
- ★ Shoring is required for all trenches 5 feet or greater in depth? True or False
- ★ At a minimum, how far back from the edge of an excavation should the soil be kept?
    - ○ 2 feet,
    - ○ 3 feet, or
    - ○ 4 feet
- ★ A contractor wishes to use ladders, when necessary, to establish a means of entry and egress from his trench. At what depth are ladders, ramps, and stairways mandatory?
    - ○ 6 feet,
    - ○ 5 feet, or
    - ○ 4 feet
- ★ What is the maximum allowable lateral distance an employee can travel to reach a ladder or other acceptable means of egress in a trench excavation?
    - ○ 10 feet
    - ○ 25 feet, or
    - ○ 50 feet

- ★ Answer Key: True; False; True; 2’; 4’; 25’
- ★ Egress is 4’; Shoring is 5’