

SAFE Work Practice Excavations and Shoring

CSAM # 6



Serious injuries and fatalities to workers continue to occur in the excavation industry. When you remove earth from the ground, you are creating a situation where extreme pressures may be generated at the face of an excavation, since there is no longer material available to support the walls of the excavation. Engineering controls and special procedures must be utilized to ensure a safe work site.

Hazards: - suffocation and crushing injuries, falls into excavations, contact injuries and overhead hazards from hoisting and mobile equipment, confined entry hazards, flooding

Do

- Notify the WSH Division of your intention to excavate.
- Notify all public utilities to determine underground utility locations.
- Appoint a supervisor and a 'top man' to be on-site.
- Identify a suitable shoring plan for the excavation work and obtain engineering design/approvals.
- Provide a safe means of access/egress.
- Install and remove shoring in the correct order and sequence.

Do Not

- Enter an unshored excavation.
- Enter an excavation without a 'top man' on site.
- Assume that frozen ground does not require shoring.
- Pile excavated material close to the edge of an excavation.
- Leave an open excavation unprotected from workers and the public.

General Safe Work Practices

1. Make sure you have contacted the WSH Division and are registered as an excavation contractor before conducting excavation work. If the excavation is over 1.5m deep and a worker is permitted or required to enter the excavation.
2. Notify the WSH Division 48 hours prior to beginning excavation work, providing all the necessary information on the excavation project.
3. Contact all public utilities before doing any digging to determine the accurate location of all underground facilities— including gas, oil, steam, water, sewer, communication and electrical.
4. Obtain any necessary engineering approvals for support structures used in excavations over 3m in depth.
5. Appoint a supervisor who remains on site when excavation work is being performed and a competent person is located at the surface for excavations when workers are in an excavation more than 1.5 m deep.
6. Conduct a hazard assessment to determine if there are potential risks associated with the work, such as water/flooding risks, hazardous atmospheres, traffic, nearby objects, mobile equipment, etc.
7. Ensure the worksite is properly guarded to protect the public, workers and traffic from potential hazards.
8. Provide a safe means of access and egress into and out of the excavation.
9. Ensure that a proper support structure such as wood or steel shoring, trench cage, or the walls of the excavation are sloped at an angle not greater than 45 degrees.
10. Ensure that shoring is installed from the top to the bottom of an excavation in descending order and removed in the reverse order from which it was installed.

Regulatory Reference:

Manitoba Regulation 217/2006 Part 26 - Excavations and Tunnels

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