



Excavation and Stabilization

Requirements

City of Aspen Engineering Department

All projects with a shoring component must include an Excavation Stabilization Plan that has been prepared and stamped by a Colorado Professional Engineer (Refer to OSHA Department of Labor Sloping and Benching Requirements 1926 Subpart P Appendix B for guidance). This is a general list of required information. More information may be required, as each project is individually evaluated. The plan's objective is to reduce the likelihood that building excavations may damage adjacent properties or trees or cause road closures. This includes demonstrating that there will be no adverse effect (including potential deflection) on any adjacent properties.

As an alternative to the use of stabilization elements (i.e., soil nails, etc.), stabilization may be achieved using the techniques outlined in OSHA Regulations (Standards – 29 CFR), Sloping and Benching – 1926 Subpart P, App. B.

Submittal Requirements:

1. Site-specific construction drawings of excavation stabilization measures
2. Extent of the excavation
3. Cross section(s) of the excavation cut
4. Spot elevations of the top and bottom of cuts
5. Location of construction fences
6. Location and depth of utilities located within 12 feet of the proposed system
7. How service lines will be accommodated with the proposed system
8. A depiction of the surcharge restricted areas (note restricted areas can not include alleys or areas receiving traffic)
9. Monitoring plan for adjacent properties
10. Stabilization utilizing the existing foundation system needs to account for additional bracing of the existing foundation being used
11. Plan must demonstrate a maximum deflection of .003 foot per foot of depth at the ROW. No deflection is permitted adjacent to private property unless permission is received from neighboring property.
12. Micropiles on property line shall be capped at existing grade. There shall be no vertical cut with potential for sloughing on the property line.
13. Temporary shoring requires a minimum Factor of Safety of 1.3 and a minimum design life of 12 weeks
14. If excavation will be phased, please provide an interim excavation/stabilization plan
15. Necessary erosion control measures
16. Shoring systems greater than 20' in height shall provide full shoring calculations in the permit submittal
17. Micropiles are not permitted for depths greater than 20'.



The Contractor must comply with the neighbor notification requirements stated in Section 3307 of the International Building Code.

Stabilization elements may be allowed in the ROW and are subject to Sec. 2.12.140 of the Aspen Municipal Code.

Stabilization elements (i.e., soil nails, etc.) are allowed in setbacks, but they must be covered.

