



NAXSA

North American
Excavation Shoring Association

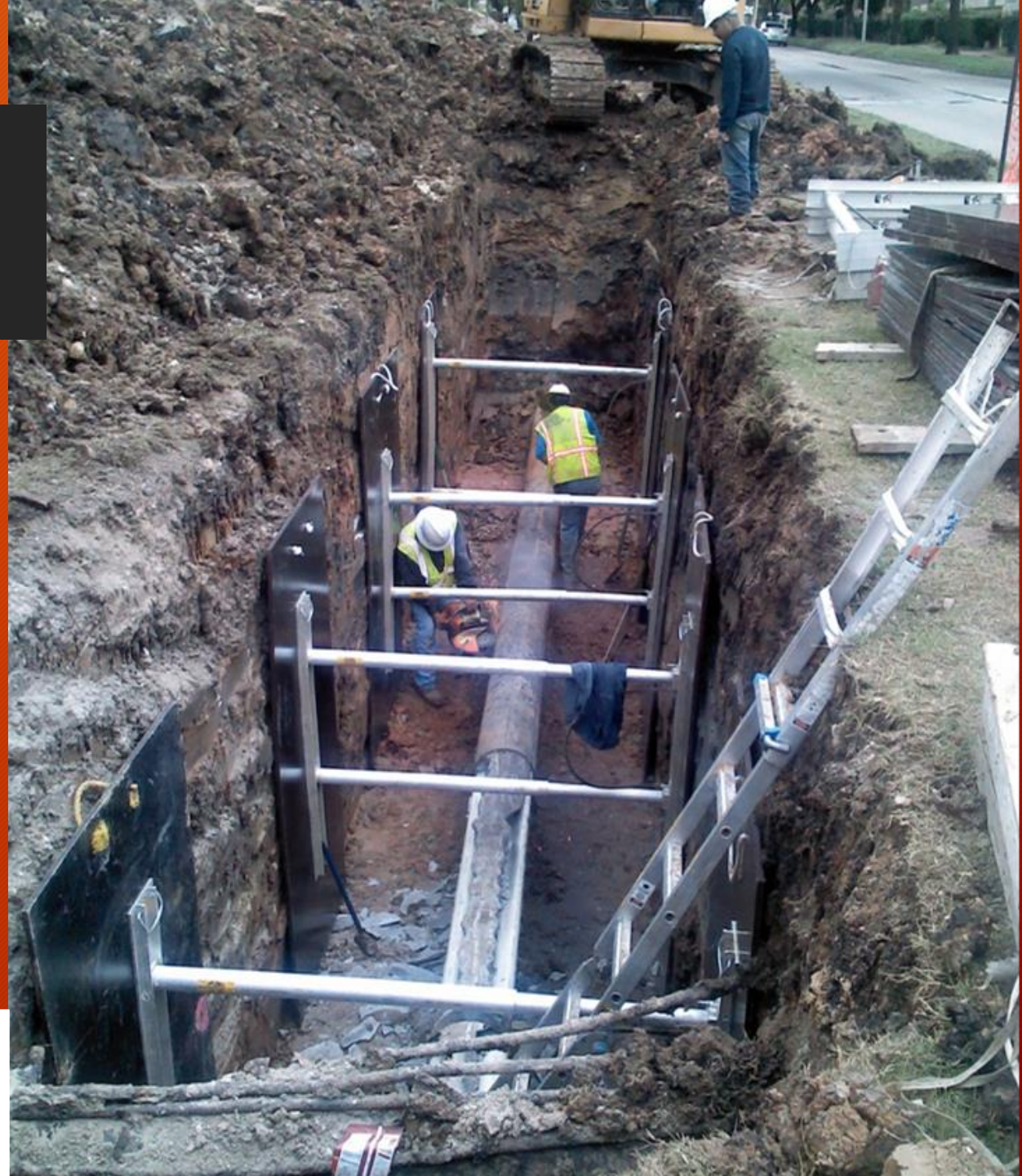
Proper Use of Hydraulic Vertical Shores

OSHA 29 CFR 1926- Subpart P - EXCAVATIONS

Hydraulic Shores Summary

Improper excavation procedures may cause injury or death.

All personnel shall be trained in correct excavation procedures, proper use of the protective system, and all safety precautions.

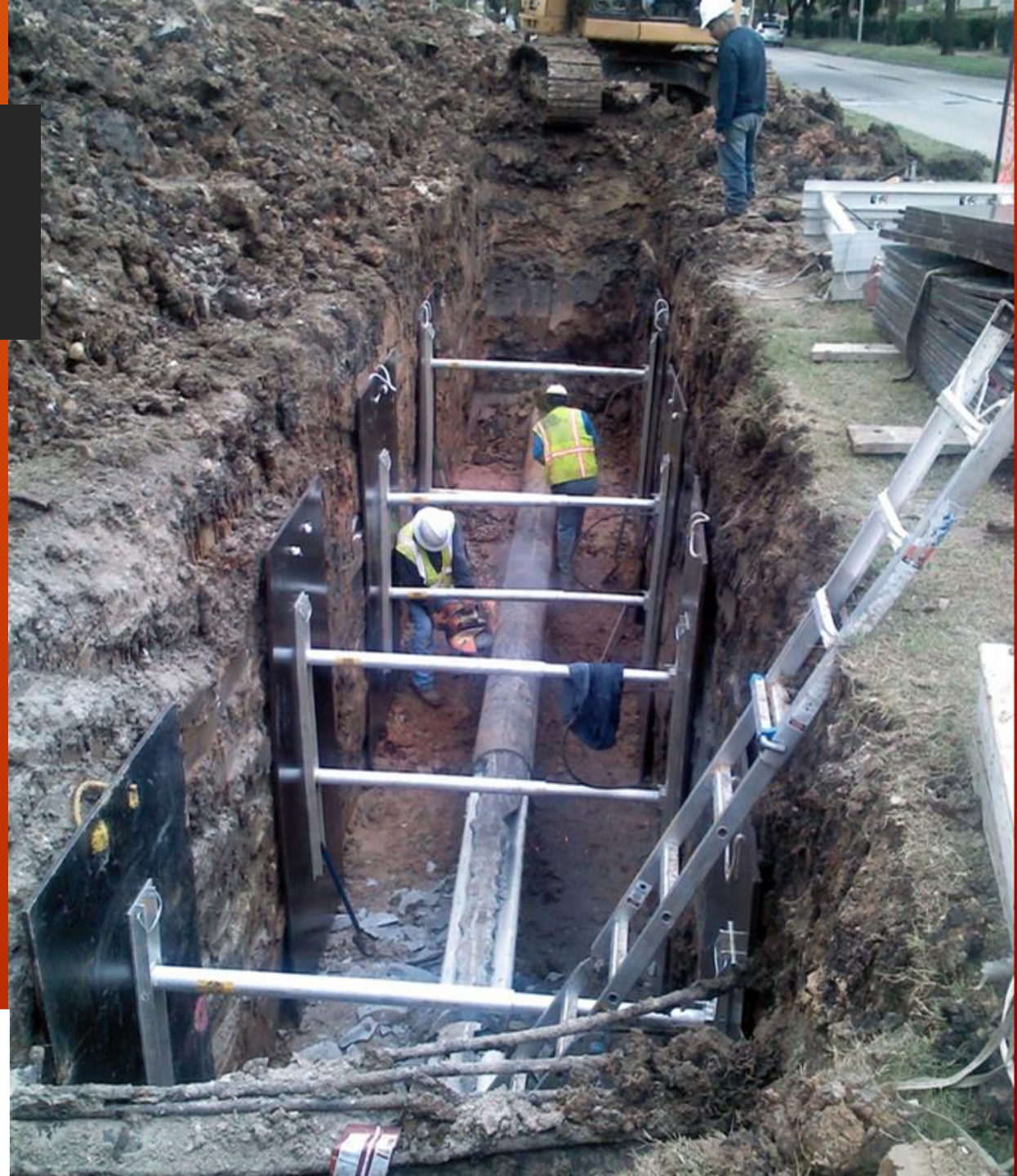


Hydraulic Shores Summary

Surcharge load in tab data equal to 2–3-foot-high spoil pile at a distance equal to the trench.

Shores may not be subject to any lateral loads or used as a ladder.

Trench shall be free of water while using vertical shores.



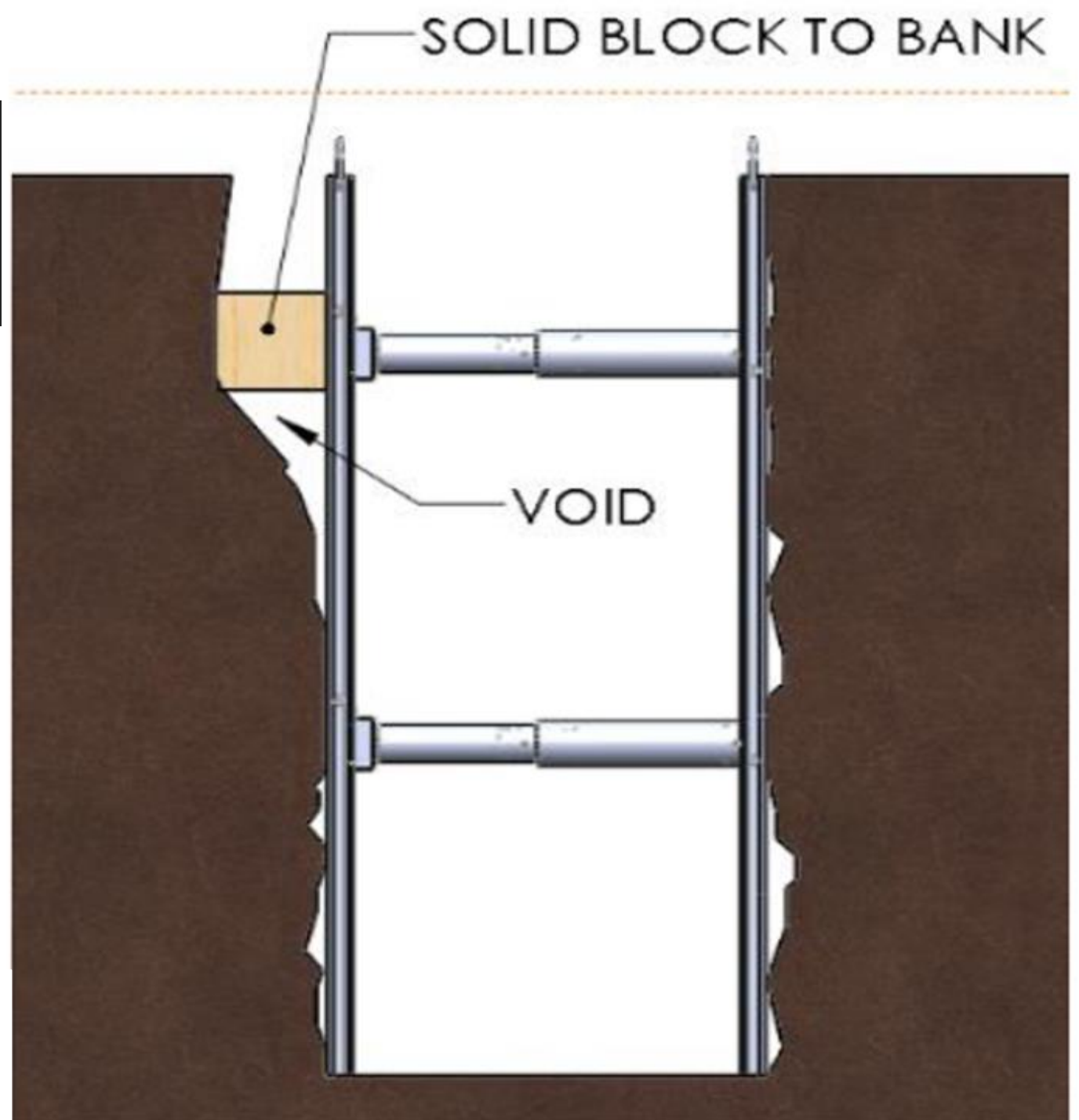
Hydraulic Shores Summary

Must be installed/removed from above ground.

Must be in contact with the excavation face.

Blocking is OK.

Never back-to-back



Hydraulic Shores Summary

Rails may be orientated any way BUT consider handles +/- for removal from top.

Minimum 2 shores in-line for safe space.

Entry and Exit from inside protected area.

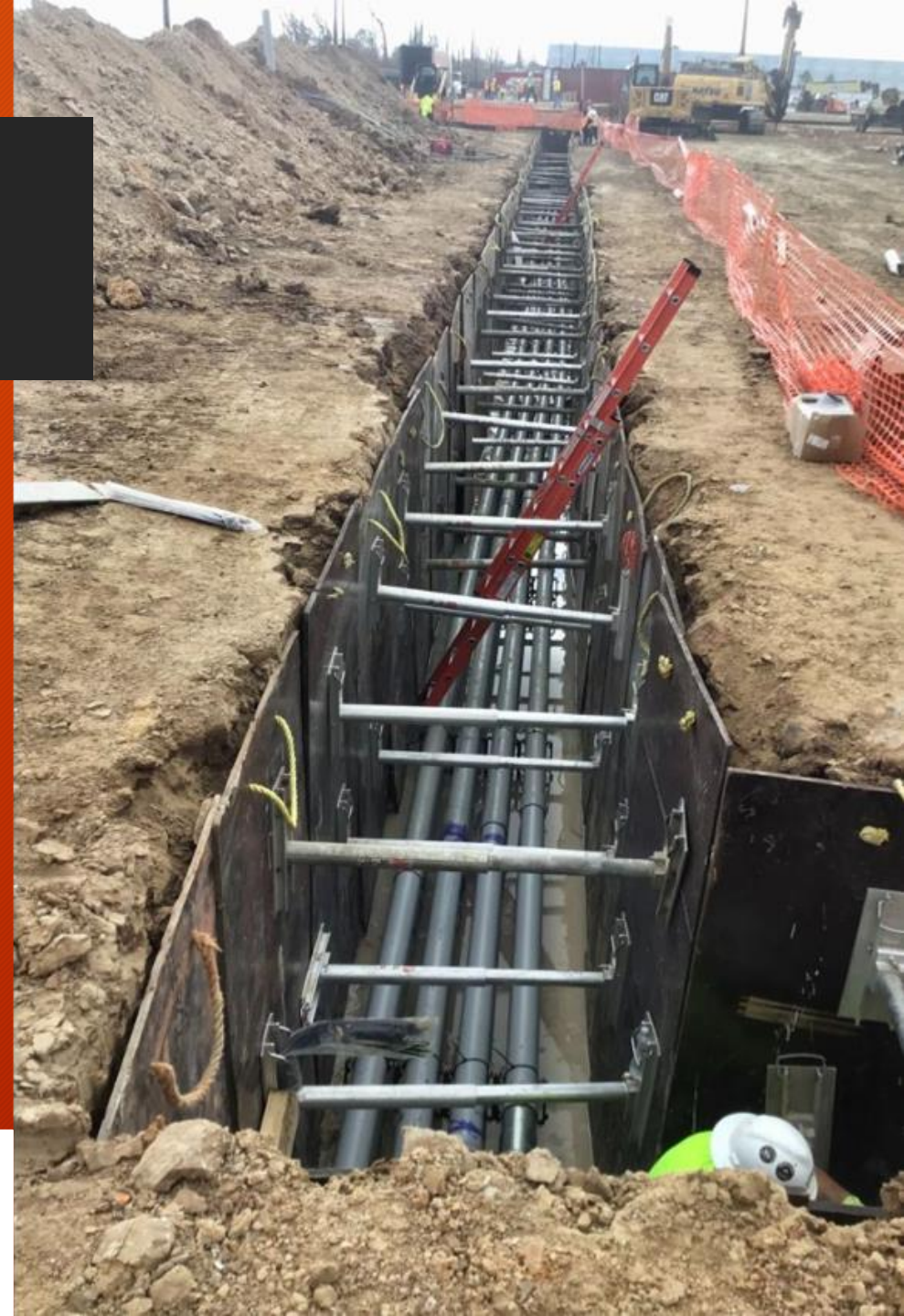


Hydraulic Shores Specifications for Use

Be certain all cylinders are engaged with the wall.

Cylinders must be pressurized to 750 PSI.

In trenches 6-feet-deep or less, a single cylinder is required in a vertical plane.

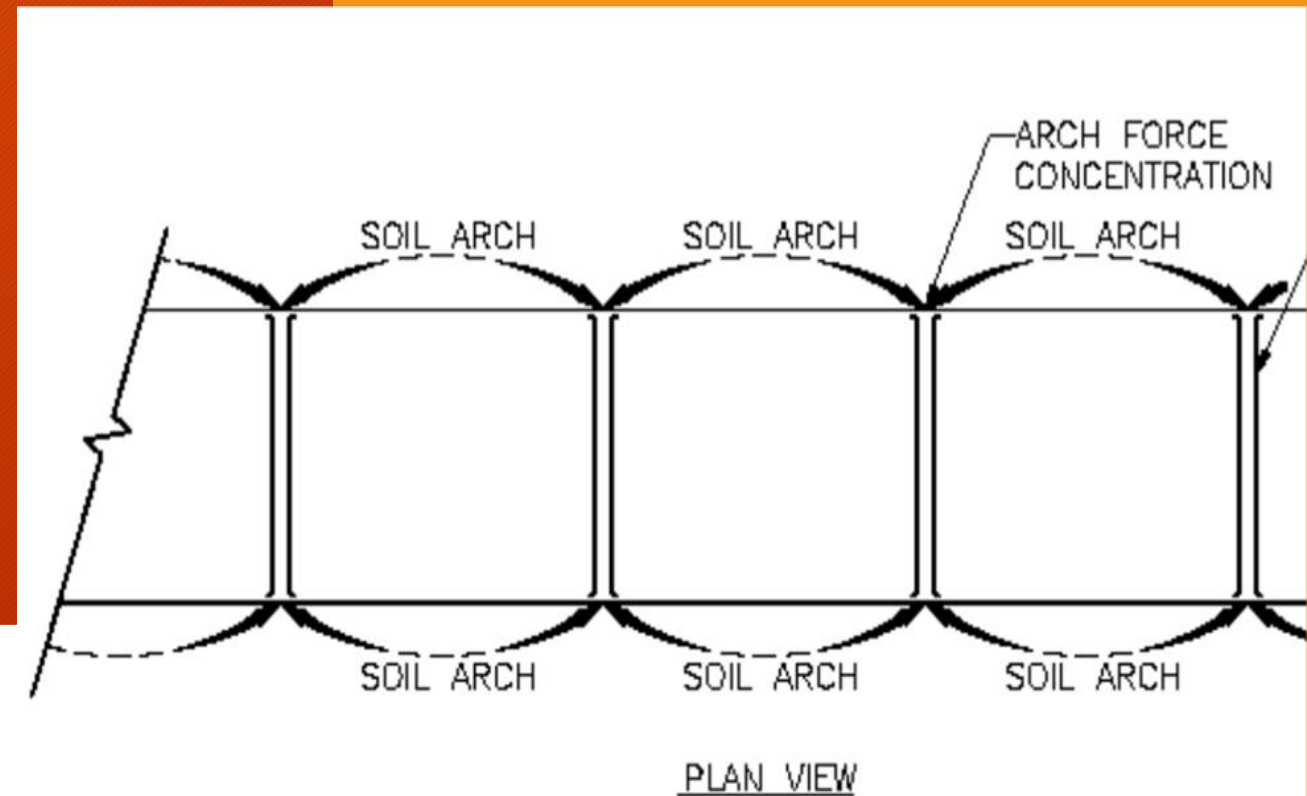


Hydraulic Shores Specifications for Use - Arch Effect

Shores work by applying pressure to the soil and preventing movement.

An arch-force concentration is created.

When pressure is released, there is the highest likelihood of trench wall collapse.



OSHA Tables Do Not Provide for Shores in Type C-(80) Soils

Type "C60" Soils

Depth of Excavation	Excavation Width	Maximum Vertical Spacing Of Struts	Maximum Horizontal Spacing Of Struts	Sheeting Required	Steel <u>Oversleeve</u> Required
0 ft - 15ft	0 ft - 8ft	4ft	6ft	Yes	No
	8 ft - 12ft			Yes	No
	12ft - 15ft			Yes	Yes
15ft - 25 ft	0 ft - 8ft	4ft	4ft	Yes	No
	8 ft - 12ft			Yes	Yes
	12ft - 15ft			Yes	Yes



Entry and Exit

Entry and exit must be done from inside the protective area.

Approved sheeting is $\frac{3}{4}$ -inch Finn Form or equivalent or (2) layers CDX plywood.

Do not stand on the edge of an unshored section of trench.



Inspections

An inspection shall be conducted by the Competent Person prior to the start of work and as needed throughout the shift.

Inspections shall also be made after every rainstorm or other hazard-increasing occurrence.

These inspections are only required when employee exposure can be reasonably anticipated.



You have the right to a safe workplace.

You have the right to ask the Excavation Competent Person or Supervisor to explain how the protective systems in use are adequate for the trench or excavation and safe for entry.

OSHA's Whistleblower Protection Program enforces protections for employees who suffer retaliation for engaging in protected activities under more than 20 federal laws.

Find out more at: (<https://whistleblowers.gov>).