

EXCAVATION PERMIT

Greater Los Angeles Healthcare System

Safety Office Building 218, Room 310

RETURN PERMIT TO SAFETY OFFICE AT
COMPLETION OF JOB



Department of Veterans Affairs

All Sections shall be filled out (PLEASE PRINT).

****Check with Engineering M&O Shop for any possible underground utilities****

Date: _____

Permit Number: _____

Applicant:

Name of Company Performing Work: _____

Address: _____

City – State – Zip Code: _____

Contact Name: _____

Phone Number: _____

Work Description: _____

Projected Completion Date of Excavation: _____

Specific Location: _____

Reason for Excavation: _____

VA Project Engineer: _____ **Date:** _____

Company Representative Signature: _____ **Date:** _____

VA Safety Officer Signature: _____ **Date:** _____

Excavation/Trench Inspection and Entry Authorization Form

Please return to Safety Office each day, Building 218, Room 310

This form will be completed by the Competent Person daily (at a minimum) or when site conditions change. The completion of this form is mandatory prior to work in any excavations or trenches 4' in depth or greater. A corresponding Excavation/Trenching Plan must be accepted by the VA prior to work in any excavations/trenches 5' in depth or greater.

PRIME CONTRACTOR:				SUBCONTRACTOR:			
COMPETENT PERSON:				LOCATION:			
DATE:		TIME:		NUMBER OF CREW MEMBERS:			
Dimensions	Depth =	Min.	Max.	Soil Type		Manual Test Measurement	
	Top =	Width	Length	Solid Rock	Type B	Penetrometer	
	Bottom =	Width	Length	Type A	Type C	Thumb Penetration	
HAZARDOUS CONDITIONS* (Visual Checks)			Yes	No	PERIMETER CONSIDERATIONS		Yes No n/a
Saturated soil/standing or seeping water?					Spoils located at least 2' away from edge?		
Bulging walls?					Materials located at least 2' away from edge?		
Rapid drying / shrinkage?					Class 1, 2, or 3 perimeter protection in place?		
Vibration from equipment / traffic?					Backhoe located at end of trench?		
Cracked or fissured walls?					Spotter working with the backhoe?		
Undercutting?					Exposed to the general public?		
Floor heaving?					MPM requirements completed?		
Super imposed loads?					LADDER/EGRESS LOCATION		Yes No n/a
Exposed utilities?					Located within protected area?		
Atmospheric testing required?					Located within 25 feet of safe travel?		
Structures adjacent to trench?					Extends 36" above landing and secured in place?		
Trees or roots in the work area?					Maximum ramp angle without cleats 25°?		
*If the hazards listed above result in a fall hazard or confined space, a corresponding Site Specific Fall Protection and Prevention Plan (SSFPPP) or Confined Space Plan (CSP) must be developed and accepted before work can commence.							
SHORING			Yes	No	COLOR CODE FOR UTILITY MARKING based on ANSI Z-53.1		
Manufacturer tabulated data sheets on site?					PROPOSED EXCAVATION		WHITE
Shoring inspected for defects/damage?					ELECTRIC POWER LINES, CONDUITS, LIGHTING CABLES		RED
Trench shield in use?					POTABLE WATER		BLUE
Speed shores in use?					GAS, STEAM, CONDENSATE, OIL COMPRESSED AIR		YELLOW
Speed shores pumped to design pressure?					TELECOMMUNICATIONS, ALARM OR SIGNAL LINE		ORANGE
Plywood or sheeting to be used?					TEMPORARY SURVEY MARKINGS		PINK
SLOPING					SEWER AND STORM DRAINS		GREEN
Type A soils at a minimum of 3/4:1 (53°)?					RECLAIMED WATER, IRRIGATION, CHILLED LINES		PURPLE
Type B soils at a minimum of 1:1 (45°)?					OTHER		LIGHT BLUE
Type C soils at a minimum of 1 1/2:1 (34°)?					EXCAVATION/TRENCH COMPETENT PERSON SIGNATURE <div style="font-size: 2em; font-weight: bold;">X</div>		
BENCHING							
Type A and B soils benched? (NO Type C)							
Max height of Type B soil bench 4'?							

Names of personnel authorized to enter the excavation/trench:

Summary of 1926 CFR Subpart P -OSHA Excavation Standard

• Trench Definition per the OSHA standard:

In 29 CFR Part 1926 Subpart P, §1926.650(b) defines the term "excavation" as follows:

"Excavation" means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

An excavation made below the surface of the ground, narrow in relation to its length. In general, the depth is greater than the width, but the width of the trench is not greater than fifteen feet.

• **Protective Systems** to prevent soil wall collapse are always required in trenches deeper than 5', and are also required in trenches less than 5' deep when the competent person determines that a hazard exists. Protection options include:

Shoring. Shoring must be used in accordance with the OSHA Excavation standard appendices, the equipment manufacturer's tabulated data, or designed by a registered professional engineer.

Shielding (Trench Boxes). Trench boxes must be used in accordance with the equipment manufacturer's tabulated data, or a registered professional engineer.

Sloping or Benching. In Type C soils (what is most typically encountered) the excavation must extend horizontally 1 ½ feet for every foot of trench depth on both sides, 1 foot for Type B soils, and ¾ foot for Type A soils.

A registered professional engineer must design protective systems for all excavations greater than 20' in depth.

• **Ladders** must be used in trenches deeper than 4'.

Ladders must be inside the trench with workers at all times, and located within 25' of unobstructed lateral travel for every worker in the trench.

Ladders must extend 3' above the top of the trench so workers can safely get onto and off of the ladder.

• **Inspections** of every trench worksite are required:

Prior to the start of each shift, and again when there is a change in conditions such as a rainstorm.

Inspections must be conducted by the competent person (see below).

• **Competent Person(s) is:**

Capable (i.e., trained and knowledgeable) in identifying existing and predictable hazards in the trench, and other working conditions which may pose a hazard to workers, and

Authorized by management to take necessary corrective action to eliminate the hazards. Employees must be removed from hazardous areas until the hazard has been corrected.

• **Underground Utilities** must be:

Identified prior to opening the excavation (e.g., contact Dig-Safe).

Located by safe and acceptable means while excavating.

Protected, supported, or removed once exposed.

• **Spoils** must be kept back a minimum of 2' from the edge of the trench.

• **Surface Encumbrances** creating a hazard must be removed or supported to safeguard employees. Keep heavy equipment and heavy material as far back from the edge of the trench as possible.

• **Stability of Adjacent Structures:**

Where the stability of adjacent structures is endangered by creation of the trench, they must be underpinned, braced, or otherwise supported.

Sidewalks, pavements, etc. shall not be undermined unless a support system or other method of protection is provided.

• **Protection from water accumulation hazards:**

It is not allowable for employees to work in trenches with accumulated water. If water control such as pumping is used to prevent water accumulation, this must be monitored by the competent person.

If the trench interrupts natural drainage of surface water, ditches, dikes or other means must be used to prevent this water from entering the excavation.

• **Additional Requirements:**

For mobile equipment operated near the edge of the trench, a warning system such as barricades or stop logs must be used.

Employees are not permitted to work underneath loads. Operators may not remain in vehicles being loaded unless vehicles are equipped with adequate protection as per 1926.601(b) (6).

Employees must wear high-visibility clothing in traffic work zones.

Air monitoring must be conducted in trenches deeper than 4' if the potential for a hazardous atmosphere exists. If a hazardous atmosphere is found to exist (e.g., $O_2 < 19.5\%$ or $> 23.5\%$, 20% LEL, specific chemical hazard), adequate protections shall be taken such as ventilation of the space.

Walkways are required where employees must cross over the trench. Walkways with guardrails must be provided for crossing over trenches > 6' deep.

Employees must be protected from loose rock or soil through protections such as scaling or protective barricades.