

## Chapter 11: [Excavation Safety](#) Excavation Permit Form

Product ID: [134](#) | Revision ID: 2281 | Date Published: 23 June 2021 | Date Effective: 23 June 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/excavationsFormPermit.pdf> | [docx](#)

### ENVIRONMENT, SAFETY & HEALTH DIVISION

#### Instructions

This form must be completed for *excavations* (including *ground disturbance* activities) in which contact with soil is expected – such as trenching, drilling, removing, or penetrating soil – that meet any of these conditions at any time:

1. Depth is one foot or more
2. Power tools will be used
3. Utilities are identified
4. Soil will be disturbed as a result of asphalt and/or concrete removal
5. Any hazardous condition is likely to be encountered

The following activities are exempt:

- Sampling soil, concrete, and asphalt from bins, hoppers, or stockpiles using hand tools
- Replacing existing sign posts in and around SLAC roads, parking areas, and pathways, provided sleeves are used

The form must be completed, approved, and kept with work planning and control (WPC) documentation at the work site for the duration of the described excavation. (See [Excavation Safety: Excavation Procedures](#) [SLAC-I-730-0A23C-001].) The excavation safety program manager maintains the record copies of all closed permits.

#### Important

The conditions and hazard mitigations listed below must be included in the appropriate job safety analysis (JSA) and pre-work/tailgate briefing.

#### Scheduling

- Allow 10 working days for required reviews.
- If soil testing is required, allow an extra 2 weeks after the sampling date.
- Permitted work must be initiated within 3 months of original submission. If it is not initiated the permit must be resubmitted to confirm in-field survey accuracy.

#### Emergency Excavation

There may be times when an excavation needs to begin before the permit is fully approved. The excavation safety program manager can authorize beginning an excavation while the permit is going through the approval process. Before the start of excavation, a review of utility location must be performed, including a review of drawings and a utility survey when possible. Once utilities have been identified, the excavation can begin in conjunction with the permit going through the approval process.

#### Multiple Excavations within the Same Work Site

Multiple excavations within the same work site require additional documentation and survey in instances where an excavation permit is completed for an initial large excavation and later additional smaller excavations may be needed in areas not covered by the existing excavation permit. Additional utility surveys will need to be conducted in locations that had not been surveyed previously or if a new utility had been installed since the original excavation permit was issued. For each additional excavation location needed on the site, Section A of the excavation permit form must be completed by the FCM and approved by a Safety Services representative.

Initiated by:		Phone:		Date:	
PM or FCM:		Phone:		Service request #:	
PM or FCM:		Phone:		PO #:	
Competent person:		Phone:		Estimated start date:	
Subcontractor:		Phone:		Estimated end date:	
Project location <i>(include grid coordinates)</i> :				Nearest building:	

**Attach a detailed sketch or drawing** (include location, dimensions of work to be completed, and grading plans for cut-and-fill work)

Are there utilities within the excavation area (*confirm after utility survey, Section B*)? If yes ☐ No ☐

1 All known utilities must be located before digging. If the excavation will be within three feet of a utility, the exact location (horizontal and vertical position and depth below surface) of the utility must be determined by potholing and recorded on the as-builts.

2 Use of heavy machinery is not allowed within an *exclusion zone* (the width of the utility plus 18 inches in all directions) around the utility.

3 All utilities in the area must be de-energized/de-pressurized and locked and tagged before digging unless an exception is approved by the Facility and Operations division director. Is an exception requested? Yes ☐ No ☐ Explain:

**Important:** these hazard mitigations must be included in the JSA and pre-work/tailgate briefing for the days digging will occur.

## B Utility Drawing Review

Completed by the facilities engineer

The following utilities are present in the excavation/ground disturbance area (*check all that apply*):

- |                                      |   |   |  |   |
|--------------------------------------|---|---|--|---|
| <input type="checkbox"/> Electrical  | <input type="checkbox"/> Process piping | <input type="checkbox"/> Control cables | <input type="checkbox"/> Water                       | <input type="checkbox"/> Sanitary sewer |
| <input type="checkbox"/> Natural gas | <input type="checkbox"/> Compressed air | <input type="checkbox"/> Telephone      | <input type="checkbox"/> Groundwater monitoring well | <input type="checkbox"/> Storm drain    |

☐ Other:

Refer to drawing  
number(s):

### Important

An in-field utility line location is required for all excavations that require a permit; a completed [Excavation Safety: Utility Line Location Results Form](#) must be attached to this form.

Updated as-builts required upon completion? Yes ☐ No ☐

Name (*print*):

Signature:

Date:

☐ No additional RPFO requirements

☐ Additional requirements apply as follows:

- Name (*print*):

Signature:

Date:

☐ No special requirements apply.

☐ Additional requirements apply as follows:

Name (*print*):

Signature:

Date:

## D Environmental Review

Completed by the Environmental Protection (EP) Department

Soil reuse requirements:			
Chemical data for WM use:			
Other requirements:			
Name ( <i>print</i> ):			
Signature:		Date:	

## E Waste Management Review

Completed by the Waste Management (WM) Group

Waste classification of excavated material:			
Other requirements:			
Contact the Waste Management Group for any disposal coordination and containers by means of the <a href="#">Hazardous Waste Pick Up and Disposal Form</a> . Allow 3-5 days for container delivery.			
Name ( <i>print</i> ):			
Signature:		Date:	

## F Approvals

Completed by the excavation safety program manager

I have reviewed this permit and work may proceed.			
Name <i>(print)</i> :			
Signature:		Date:	

*Completed by the Facilities and Operations division director, if excavation over active utilities is required.*

<input type="checkbox"/> No special requirements apply. <input type="checkbox"/> Additional requirements apply as follows:	
Name ( <i>print</i> ):	
Signature:	

## G Scope Change / Additions to Project Excavation

The PM or FCM must notify the excavation safety program manager of any scope of work changes or additions to excavations not included in the initial excavation permit. The excavation safety program manager will determine if the permit must be revised and reapproved. (Examples of a scope change include encountering unexpected conditions or an increase in the size of the excavation.)

*For additional excavations not covered in the permit, complete Section A of this form and attach to the permit as an addendum. Based on the time lapsed from original permit and the location of new excavations, additional utility survey may be required.*

Describe scope change:

Name (print):		
Signature:		Date:

*Completed by the excavation safety program manager*

I have reviewed the scope change / additions to the initial excavation permit and work may proceed.

Name (print):		
Signature:		Date:

## H Close Out

*Completed by the project manager (PM) or field construction manager (FCM)*

As-built drawings and utility line location results were verified in the field, the drawings were delivered to the facility engineer as required, and the excavation has been completed according to the permit conditions.

Name (print):		
Signature:		Date:

*Completed by the excavation safety program manager*

RP, EP, WM, and the facilities engineer have been notified that the permit has been closed.

Name (print):		
Signature:		Date: