

Digging and Excavations Permit procedure

Permits are required on JLAB property for any mechanized excavations or excavations using hand tools that penetrate the ground greater than 12 inches.

A permit does not guarantee that a utility is not present. All precautions need to be taken to safe guard individuals during the digging or excavation activity.

Policy:

Excavation, digging, boring into soil or demolition at Jefferson Lab shall be performed only after utilities have been located and marked by a competent person except for the use of hand tools less than 12 inches into the ground.

Instructions:

1. Obtain and print a copy of the instructions and permit from the Facilities web page:
<http://www.jlab.org/fm> under **“Fillable Forms”**
2. Filling out **Page 1**
 - a. At the top of the page enter the date the permit is required.
 - b. In section “I. Requester”
 - i. Fill in the Company or JLab group that is going to be performing the work
 - ii. The contact phone number for the Company or JLab group
 - iii. The location of the Dig & short description of work including depth of excavation
 - iv. Desired start date of work
 - v. Purpose of digging or excavation
 - vi. The supervisor of the dig or excavation work and a contact phone number
 - vii. If a work order was submitted, add the number in the appropriate box
 - viii. Provide a Project title
 - ix. If applicable, provide an account code
 - x. How to Identify work:
 1. Print a view from the Basic Site Plan PDF file (available from the Facilities Management [“Handy Links”](#) web page) that shows the area of excavation. Contact Facilities Management Drafting (or call 5430) if you are unable to download the drawing or don’t understand use of the Utility Layers. Clearly indicate where the work is to occur.
 2. Attach the drawing to the back of the permit request
3. Filling out **Page 2**
 - a. Subject Matter Experts Approval- section II
 - i. System Matter Experts must review and sign off on the permit prior to having a locating company contacted to mark the utilities.
 - ii. If work is to be done within the Accelerator site a signature from Accelerator OPS is required. See page three of the permit request for authorized individuals
 - iii. If work is to be done within the Accelerator site or a surface that functions as a physical barrier to a radiologically-controlled area a signature from RADCON is required. See page three of the permit request for authorized individuals
 - iv. For all permit requests, authorized Facilities Subject Matter Experts signatures are required

for Electrical, Chilled, Cooling, Low Conductivity Water, Potable Water, Sewer, Communications and Data lines, Stormwater, Fire Protection and Life Safety Systems and Natural Gas systems. See page three of the permit request for authorized individuals.

- v. For Building and Support structures an authorized Facilities Structural Expert signature is required. See page three of the permit request for authorized individuals.
 - vi. If interruption or a potential of interruption to building operations, the appropriate Building Manager's signature is required.
 - vii. A Building Manager's signature is required if building operations are impacted.
- b. Locator – section III
- i. Fill out Company Name and Technician Name fields
 - ii. Check appropriate box indicating consistency of field observation with Basic Site Plan sketch (also see paragraph “vi” below)
 - iii. Enter equipment specifics as indicated
 - iv. A sketch produced from the latest version of the BASIC SITE PLAN (“BSP”) file will be provided to the locator and must be used to show verified locations found in the field.
 - v. Enter date of field work
 - vi. Check “Yes” in the “Additional Location or Verification Required” field if inconsistencies between observation and provided information were noted (also see paragraph “ii” above)
- c. TR, Project Mgr, Inspector or Subcontractor Information – section IV
- i. A JLab TR or contact name and phone number must be entered.
 - ii. After the locator has returned the annotated dig permit sketch to the TR the TR shall “Walk Down the Marks”
 - iii. If there are any inconsistencies found then the TR shall investigate and resolve the conflicts to the point that he/she feels that excavation may proceed safely and check the appropriate box on the Dig Permit Form.
 - iv. If no inconsistencies are found and the TR is confident that the marks are fully consistent with the BSP then he/she shall check the appropriate box on the Dig Permit.
 - v. Facilities will notify the requester after the final approval signature is obtained.

4. Filling out Page 3 - Final Approval – section V.

- i. Check page 3 to verify the Director of Facilities or designee has signed and dated the permit. Also read and communicate any comments added to the signature area.
 - ii. Do not use mechanized equipment within 2 feet of utility markings. Hand digging is required. If hand digging is not possible, see facilities TR for alternative methods.
- b. If facilities assisted in the permit process, the TR, Project Manager, Inspector must field verify the utilities with the requester after the locating company has marked the utilities and prior to excavation.
- c. After work is completed.

Return entire permit to Facilities Drafting (SSC Building, room 75) after completion of digging/excavating activities. If additional utilities are located or encountered (or marked utilities are not found in their expected locations) then the Requester shall provide an “as-built” sketch to Facilities Drafting precisely detailing the location(s) of all utilities that were found to not be in the location expected.



DIGGING AND EXCAVATING PERMIT REQUEST

Permits are required on JLab property for: any mechanized excavations or any excavation using hand tools that penetrate the ground greater than 12 inches.

Submit request to Facilities Management **at least seven days before needed start date.**

This permit is valid for 14 days from the approval date or for the duration of the project when the group performing the work has maintained continuous possession of the site, and the original location markings are intact and there have been no changes to the proposed excavation location; changes require a new permit.

DO NOT start work until you have received a signed, approved copy of this document.

I. Requester			
Company or JLab Group performing work:	<input type="text"/>	Phone number:	<input type="text"/>
Location of dig	<input type="text"/>	Desired start date:	<input type="text"/>
Purpose of digging	<input type="text"/>		
Supervisor of dig:	<input type="text"/>	Phone number:	<input type="text"/>
Work Order Number	<input type="text"/>	Project Title:	<input type="text"/>
		Account Code:	<input type="text"/>

For exterior work underground, obtain a Basic Site Plan drawing from Facilities with known utilities overlaid on the aerial photo. Mark on this drawing or use project drawings to show area of excavation.

II. SME Approval

System	Comment	Reviewed/Approved By	Date
Accelerator OPS	Required for any work within the accelerator fence		
RADCON	Required for any work within the accelerator fence and on any structure or surface that functions as a physical barrier to a radiological-controlled area		
Electrical	All Permits		
Chilled, Cooling, Low Conductivity Water	All Permits		
Potable Water	All Permits		
Sewer	All Permits		
Communications/Data	All Permits		
Stormwater	All Site		
Structural	Within structures		
Fire Protection/Life Safety Systems	All Permits		
Natural Gas	All Permits		
Other – Bldg Manager	If Applicable		

Comments:

III. Locator

Name of locate service used:

Technician name: (first, last)

Technician (check 1):

☐ Field observation *are* consistent with provided sketch ____ (initial)

☐ Field observation *are not* consistent with provided sketch; TR notified ____ (initial)

Locating equipment used:

Make/Model

Serial Number:

Calibration Due Date:

Site or building drawing(s) used:

Date utilities located & marked:

Additional location or verification required?

☐ Yes

☐ No

IV. TR, Project Manager, Inspector or Subcontractor

JLab TR/contact

Phone number:

TR has “walked down the marks” and (check 1):

☐ The marks are consistent with the Basic Site Plan ____ (initial) or;

☐ Inconsistencies were noted and have been resolved as indicated on the sketch ____ (initial)

Comments/Notes

V. Facilities Management. Approval

Date:

Comments:

Do not use mechanized equipment within 2 feet of utility line markings. If you need to excavate near a marked utility line, carefully expose the utility line by hand digging and keep mechanized equipment at least 2 feet away from the line at all times. If this cannot be done, you must obtain TR approval before deviating from this requirement.

Non-Hand Dig Method: _____

TR Approval: _____ Date: _____

A copy of the Signed Permit is to be provided to Facilities Drafting (Bldg 28, room 75)
Permit and As-Built Drawings (if any) Returned to Facilities Management Drafting

By: _____ Date: _____

Authorized SMEs

System	SME Department	SMEs
Accelerator OPS	Accelerator OPS	Shawn Frierson/Daniel Moser
RADCON	Required for any work within the accelerator fence and on any structure or surface that functions as a physical barrier to a radiologically-controlled area	Adam Stavola/Pavel Degtiarenko/David Hamlette
Electrical	Facilities – FMENG-E	Jason Willoughby/Paul Powers
Chilled, Cooling, Low Conductivity Water	Facilities - FMENG-M	Carroll Jones/Mike Sprouse
Potable Water	Facilities - FMENG-S	Tony Risk/Mike Sprouse
Sewer	Facilities - FMENG-M	Tony Risk/Mike Sprouse
Communications/Data	Facilities - FMENG-E	Jason Willoughby/Paul Powers
Stormwater	Facilities - FMENG-S	Tony Risk/Joel Dolbeck
Structural	Facilities - FMENG-S	Suresh Chandra/Tom Renzo
Fire Protection/LLS	Facilities - FMFS	Robert Myles
Natural Gas	Facilities - FMENG-M	Carroll Jones/Mike Sprouse

APWA Uniform Color Code

WHITE	Proposed excavation
Pink	Temporary survey marking
Red	Electric power cable or conduit
Yellow	Gas, oil, petroleum, gaseous materials

Orange	Telecommunications, data, alarm cables
Blue	Potable water
Purple	Irrigation water
Green	Sewers & drains