Statement of Work

FEH Optics Lab Construction

SLAC National Accelerator Laboratory

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Revision History

Revision	Date Released	Description of Change
00	June 2,2026	Original release.

Document Approval

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Project Management Manager: Informed by: Kevin McCarthy
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LCLS Facilities: Informed by: Building Manager – Cibil Zachariah
LCLS: Informed by: HARP Director – Rebecca Armenta

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1 Introduction

The SLAC National Accelerator Laboratory (SLAC) is operated by Stanford University as a contractor for the United States Department of Energy (DOE) Office of Science. SLAC supports a large national and international community of scientific users performing cutting-edge research in support of the DOE mission.

Project Location:

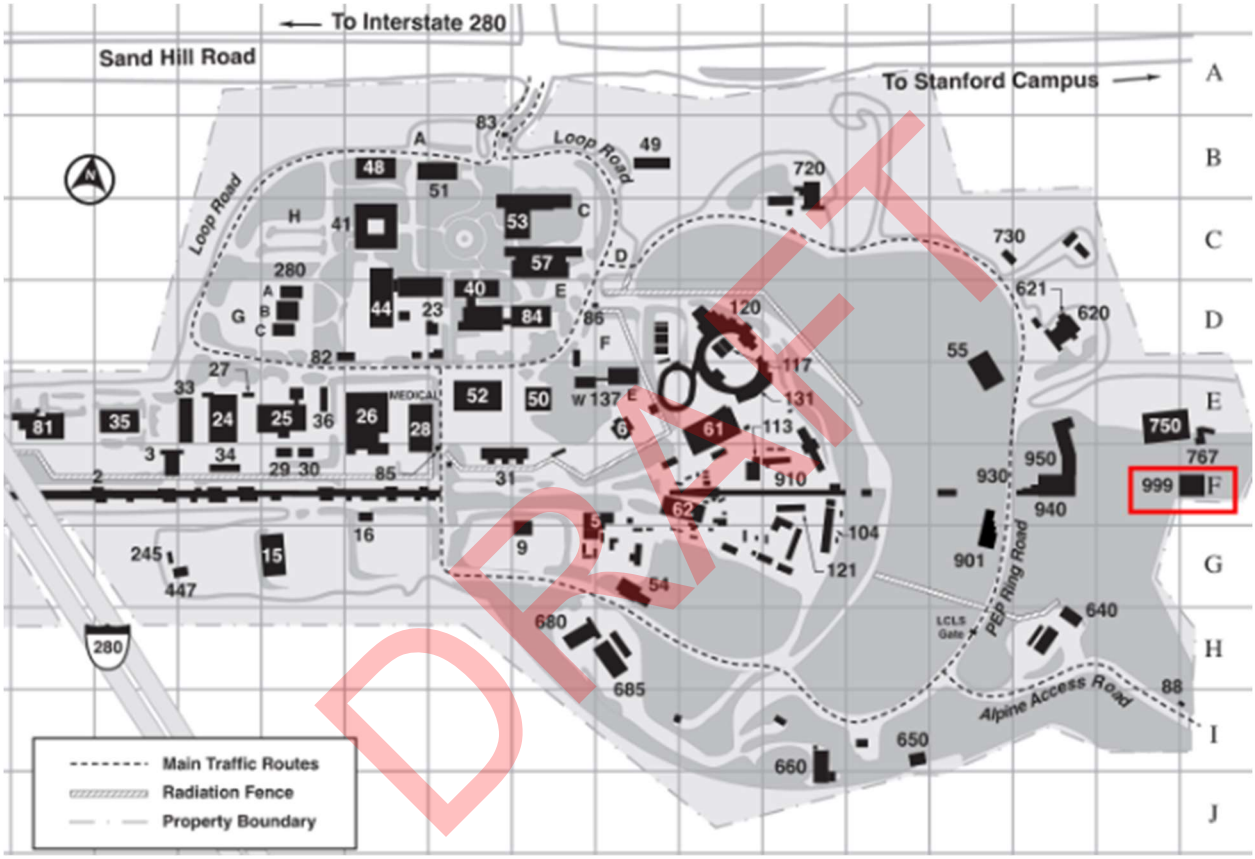

Figure 1. LCLS FEH Location Diagram

2 Scope

The FEH Optics Lab Project will be delivered through a firm-fixed-price contract. The base scope includes demolition, new architectural (framing, doors, ceiling, flooring, CSF wall), new power distribution, new light fixtures, new HVAC system, new process piping (with insulation inside the room), controls, leak detection system, fire protection system, cable trays, etc. See construction documents for details.

The Subcontractor shall provide all construction services necessary to deliver this project's scope. The Subcontractor shall emphasize cost-effectiveness throughout the project while maintaining high-quality standards and meeting contract requirements.

The Subcontractor shall attend weekly OAC meetings throughout the duration of the work and provide progress updates, scheduling information, and address any issues relevant to the scope. The Subcontractor shall provide electrical demolition plan as part of SLAC electrical readiness review process.

3 Schedule

The Subcontractor shall provide a baseline schedule within 5 business days after Notice to Proceed. Once the Subcontractor's baseline schedule is accepted by SLAC, any subsequent changes to cost or schedule must be approved by SLAC prior to implementation.

While this Statement of Work includes the following Period of Performance as a guideline, should the Subcontractor identify a shorter Period of Performance within their proposal, the revised Period of Performance will be incorporated into the subcontract at the time of award. All scope, including commissioning, final inspection, and acceptance, shall be completed within the period of performance.

Subcontractor shall include a project schedule in the bid, including SLAC coordination activities, which will identify at what point which SLAC coordination is anticipated. Subcontractor shall include any long lead material and the estimated lead time in the project schedule as a part of the proposal.

Construction duration: 12 weeks.

All construction activities that are disruptive to LCLS beamline operations shall happen during the LCLS Summer Downtime (7/20/26 – 9/11/26). See Attachment A. Please coordinate construction schedule with SLAC Building Manager and Construction Manager.

4 Site Logistics

The Subcontractor shall coordinate site logistics with SLAC at a minimum of 2 weeks before construction starts. The site logistics plan shall include staging area, waste bin locations for contractor use, contractor parking & trailer location (if applicable), temporary power and water for construction trailer (if applicable) and construction usage.

5 Commissioning Requirement

The Subcontractor is responsible for coordination of the systems commissioning with the SLAC representative. The Subcontractor shall ensure the systems are ready to commission and shall coordinate the schedule with SLAC in advance.

The Subcontractor and Designer of Record shall coordinate closely with SLAC to commission all applicable systems in scope prior to the final Certificate of Occupancy.

6 Onsite Safety Requirements

The safety of SLAC and Subcontractors personnel onsite is paramount. The Subcontractor's personnel shall obtain a valid and current SLAC badge for site access, with proof of course completion required for issuance of badges when necessary.

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- All workers must complete SLAC safety training course 375 (Construction Safety Orientation). This course takes 1 hour to complete.
- Appropriate PPE must be worn by all Subcontractor personnel as specified by the SLAC Area Manager before entering any designated project areas or performing work. Minimum Requirements include hard hat, safety glasses, hard toe shoes, gloves, and a reflective vest.
- Workers must complete SLAC trainings for radiation, elevated work areas, pressure testing, GERT, RWT1, etc. as applicable.

7 Environment, Safety, and Health

Safety is the priority for all work conducted at SLAC. SLAC's goal ZERO INCIDENTS. The Subcontractor and each sub-tier subcontractor's line management are expected to promote and model this concept and develop, implement, and enforce a safety and health program that will result in a safe work environment. Safety is not to be compromised for production and shall be considered an integral part of the work planning process.

All work performed by the Subcontractor and its Sub-Subcontractors shall be in accordance with the applicable Federal, State, and local environmental laws, codes, standards, and regulations. Additionally, the Subcontractor and all sub-tier subcontractors shall perform all work under this contract in accordance with ESH Manual - Chapter 42: Subcontractor Safety.

8 Quality Control

The Subcontractor shall maintain complete responsibility for quality management of the entire scope under this Subcontract. The Subcontractor shall ensure that all approved quality control and quality assurance processes are applied to all work activities, construction methods, and deliverables. All work shall comply with the project quality standards and be subject to documented quality verification procedures.

9 Closeout Requirement

Operations & Maintenance (O&M) equipment, materials, redline drawings and finishes manuals shall be provided by the Subcontractor in advance of the implementation of the commissioning effort. The manuals will be used by SLAC to evaluate and understand the systems as well as aid in commissioning development, review, and sign-off efforts.

The Subcontractor must provide all required training to SLAC on the various systems as part of the transition to operations effort. The O&M manuals will be required in advance of the owner training.

10 Definitions

Term	Definition
A/E	Architect Engineer
BIO	Building Inspection Office

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CHW	Chilled Water
BSOICS	Beam Shut-Off Ion Chamber System
DOE	U.S. Department of Energy
ES&H	Environmental Safety & Health
FEH	Far Experimental Hall
HVAC	Heating, Ventilation, Air Conditioning
I&C	Instrumentation & Control
ISO	International Organization for Standardization
LSS	Laser Safety System
MCC	Main Control Center
NFPA	National Fire Protection Association
OH&P	Overhead and Profit
PCW	Process Cooling Water
PPS	Personnel Protection Systems
QA/QC	Quality Assurance/Quality Control
WSHP	Worker Safety & Health Program

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11 Building Inspection Office Criteria

The Contractor shall comply with all Building Inspection Office Adopted Codes and Standards as identified in the attached reference documents. In addition, the Contractor is required to follow the BIO Review and Authorization Manual, which outlines requirements for plan submission and review, inspections, and project closeout.

Where differences exist between codes and standards, the one with the most stringent requirement, as determined by the ES&H Building Inspection Office shall apply, except those conflicts between NFPA Standards and the California Building and Fire Codes will be brought by SLAC Representative to the SLAC Building Official and Fire Marshal for resolution.

11.1 Adopted Codes and Standards

This manual describes acceptable methods for verifying construction project compliance with required building codes and standards, external mandates, and SLAC Policies. The purpose of this manual is to promote uniform plan review criteria and to guide the evaluation of SLAC construction projects for compliance with Users of this manual should bring-conflicts between overlapping codes to the attention of the SLAC Building Code Official, cognizant SLAC AHJ or responsible external mandate SME for interpretation and resolution. (In general, a more specific or stringent requirement shall be selected)

Table 2 - Codes and Standards Adopted by SLAC effective Jan 1, 2023
Updated 1/1/2025

BIO Adopted Codes and Standards	Responsible Person	Edition

DOE Order 420.1C, Facility Safety, Attachment II, Facility Safety Requirements, Chapter 2, Fire Protection	S. Coleman	Chg. 3 (LtdChg) (11/14/2019)
DOE Standard 1066-2016, Fire Protection	S. Coleman	2016
California Building Code	M. Matthews	2022
California Plumbing Code	M. Matthews	2022
California Mechanical Code	M. Matthews	2022
Architectural Barriers Act Accessibility Guidelines (ABA), Section 504 of the Rehabilitation Act of 1973, where applicable, Chapter 11 of CBC, 2010 ADA Standards for Accessible Design.	Kevin Brenton	2010 ADA & ABA & CBC Chapter 11
California Energy Code (aka T24 Energy standards)	R. Atapattu	2022
California Fire Code	S. Coleman	2022
NFPA 1, Fire Code	S. Coleman	2024
NPFA 101, Life Safety Code	S. Coleman	2024
NFPA 70, National Electric Code	D. Stickney	2023
NFPA 70E, Electrical Safety in the Workplace	K. Jobe	2024
All Other NFPA Standards Concerning Fire Protection and Emergency Management table note 2. Does not include NFPA 70B	S. Coleman	Most recent published edition, up to 2023
Subset of Title 8 (Cal/OSHA Regulations), as per ESH Manual Chapters	ESH Division Director or Designee	Current
SLAC ESH Manual, with referenced standards	Various Program Owners	Current
SLAC-1-720-0A24E-001 Seismic Design Specifications for Buildings, Structures Equipment, and Systems	Bryson Brunette	Current

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11.1.1 Table 2 Notes

- As contractually adopted through SLAC 2021 Site Compliance Plan for Order 420.1C, Change 3. SLAC also operates directly under the legal requirements of 10CFR 851, as modified by the RWG contract.
- NFPA Fire Protection and Emergency Management standards not listed above are applied as of the January 1st of the year of the Edition, except for NFPA 5000 (NFPA Building Code), which is not adopted by SLAC.
- Applicable standards cited in the SLAC ESH Manual are included in the review process.
- Note that referenced standards cited in CBC Chapter 35 are used at SLAC in addition to the ones cited in the SLAC ESH Manual (and this document). Where conflicts arise, the SLAC reference takes precedence.
- NEC is primary, and the California Electrical Code is secondary. The most stringent requirement shall apply.

Codes of Record. Editions of required building codes and standards in effect at SLAC at the time project design criteria are approved determines the codes of record for that project. For long duration projects that bridge code cycles, more recent editions of specific codes can be substituted upon mutual

agreement of SLAC Building Official, the responsible AHJ, and the PM or Project Director. Al other projects must meet current codes and standards listed above. The Building Official shall maintain a list of codes of record for major projects, including those for which the codes of record have been frozen. See the Project Codes of Record summary on this webpage:

12 Responsibilities

All procurement-related questions should be directed to the Procurement Specialist. In addition, the following SLAC personnel will be interacting with subcontractor and their responsibilities are defined below:

Person(s) or Areas Responsible	Define Responsibility
SLAC PM	Provide project oversight and management for the project. Review project schedule and any contract/scope changes.
SLAC QA	Provide Quality Assurance compliance review for the project.
SLAC Construction Manager	Oversee and manage construction activities, ensuring projects are delivered safely, on time, within scope, and in compliance with DOE and SLAC standards.
SLAC BIO	Provide review design and shop drawings, field inspections and acceptance.

13 Attachments

Attachment A – SLAC Preliminary Schedule

Attachment B – Construction Documents

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