

Near Experimental Hall (NEH) -**Revision 2** LCLS Room Data Sheet # 1.9-1014 **Open Work Area (Basement)** Javier A. Sevilla 7/28/05 Signature Owner / Editor **Date** Jim Welch System Physicist David Saenz Conventional Facilities System Date **Signature** Manager 8/11/07 Date Stefan Moeller X-R Endstations WBS Manager 8-12-05 John Arthur Photon Beam System Manager **Signature** Darren Marsh Signature Quality Assurance Manager

REVISION INFORMATION

Rev 2, changed amps for outlets, clarifications for lighting and switching. Changed room temperature stability requirements

Updated Standards and Codes- Updated ceiling height and requirements for cable trays.

FACILITY COMPONENT	OPEN WORK AREA	A (NEH BASEMENT)	- ROOM	I DATA SHEET				
	Name of Building			Open Work Area- NEH Sub Basement				
	Organization or Department	SLAC, Stanford University						
	Net area		100.3	sq. meters	1080 sf			
	Critical dimensions	H:	6.1 m	20'				
		W: L:	4.57 m 21.95 m	15'-0" 72'-0"				
	Hours of operation		s open 24/7/365 for users	12-0				
	Users/Occupancy	Laboratory workers utilize this central area as a common work area. "B" occupancy group.						
	Building orientation	The Open Work Area is located directly adjacent and between the Laser Bay and the Offices on the NEH basement level.						
FUNCTIONAL OBJECTIVE	Provide a centrally common wo	rk area for Laboratory workers to	o perform pl	lanning and staging of expε	erimental equipment			
PLANNING CONSIDERATIONS & CRITICAL FACTORS	Centrally located on the NEH basement. This area will accommodate up to 5 persons.							
FINISHES	Wall	Painted reinforced concrete f	ramed gyns	sum hoard assembly				
TIMISTIES	Ceiling	Painted reinforced concrete, framed gypsum board assembly Reinforced concrete, painted surface. 12'-0"high.						
	Floor	Sealed concrete with epoxy coating						
	Base	Rubber base						
	Doors	Limited to perimeter and exterior access						
	Fenestrations	None						
	Acoustical	Typical laboratory decibel level required. NC=35						
APPLICABLE STANDARDS	29 CFR Part 1910 Occupational Safety and Health Standards Dept of Labor, 29 CFR Part 1926 Safety and Health Regulations for Constructions Dept of Labor, Uniform Building Code (UBC) 1997 including appendixes, National Electric Code (NEC) 2002, Uniform Mechanical Code (UMC) 2003 including appendixes, Uniform Plumbing Code (UPC) 2003 including appendixes, Uniform Fire Code (UFC) 1997 including appendixes, California Code of Regulations Title 8 Industrial Safety, Title 19 Public Safety, NFPA 70 National Fire Codes, National electrical Safety Code ANSI C2, Occupational Safety and Health Act (OSHA), General Services Administration 41 CFR part 101-19, American with Disabilities Act, Environmental Protection Agency 40 CFR Parts 264 and 265, SLAC Environmental Safety & Health Manual, General Industrial Activities Storm Water Permit (SLAC Permit), NFPA 101 life Safety Code, Title 24-Energy Code, DOE standard 10 CFR Part 435, ASHRAE/IES Standards 90.1, NFPA Standard 13 and SLAC Fire Marshal requirements, LCLS Cabling Standard, SLAC LOTO							
VIEWS & SCHEMATICS (N. T. S.)		N	ONE					

Check the LCLS Project website to verify that this is the correct version prior to use.

MECHANICAL REQUIREMENTS	HVAC		Heating avetem	Temp:		Mechanical humidification			
MECHANICAL REQUIREMENTS	HVAC	X	Heating system	Temp: 72					
			Air conditioning	degrees F <u>+/-</u> 2 degree F		Direct exhaust system - for experiment enclosures or	nly.		
			Direct supply	•		Positive pressure system			
			Indirect supply			Negative pressure syster	n		
						Standard registers			
		×	Temperature Control connected to DDC system			Requirement for gases			
			omments: Control area has no c quirements	leanliness					
	Communications	▼ Telephone- 2 phone lines/location-see diagram			PA speakers				
		×	Dataport, 2 jacks/location-see			PA station			
		Payphone			CCTV camera				
		X	Fire alarm station			CCTV monitor			
		Comments: 1) Cable trays should be made from galvanized steel. Provide each cable tra bare copper wire for grounding.							
Plumbing/Fire Pro			Hot water system			Electric watercooler			
			Cold water system			Drinking fountain			
			Tempered water		×	Smoke detection system			
		П	☐ Waste drain		×	Standard sprinkler heads			
				Eye wash / Safety shower					
				Lye maen reality eneme	,,				
		Comments:							
ELECTRICAL REQUIREMENTS	Power supply		208V 3ph outlets			Uninterrupted power supp	oly		
		\boxtimes	110V 1ph outlets			Special electric	Type:		
		Comments: 1- Double duplex outlets (110V, 1 phase, 20 amps) shall be limited to convenience outlets along perimeter walls. 2 - Provide power poles (110V) at 10' spacing centrally located in the Work Area.							
	Lighting		Light fixtures			Remote lighting control			
				,	×	Light switches	T=0 =-		
			Fixture type II: Bollard (exterio	r)		Lighting level	FC: 75		
			Emergency lighting						
		Comments: 1- All conduits are surface mounted.							
RADIATION/SEISMIC/VIBRATIONS ISSUES	Comments: 1- All equipment and systems are to be seismically braced and restrained per Code.								
SPECIAL REQUIREMENTS FOR EQUIPMENT	Comments:								
CHEMICALS / GASES		CHE	CHEMICALS SPECIALTY GASES						
			Chemical Type	Quantity	#	Gas Type	Quantity		

Check the LCLS Project website to verify that this is the correct version prior to use.

3 of 3

1.9-1014-r2_NEH_Open_Work_Area_Basement