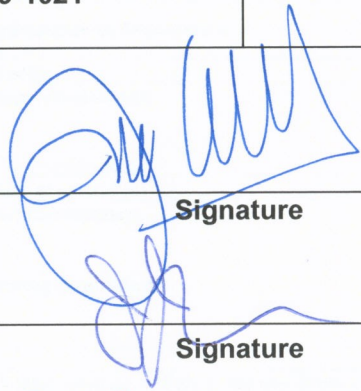

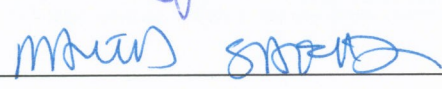
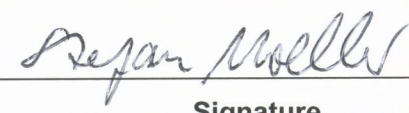
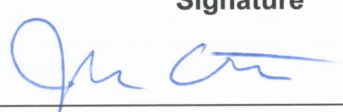
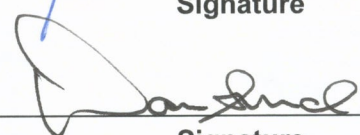


LCLS Room Data Sheet #	1.9-1021	Near Experimental Hall - WET LAB	Revision 2
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Javier A. Sevilla Owner / Editor		8/12/05
	Signature	Date
Jim Welch System Physicist		8/15/05
	Signature	Date
David Saenz Conventional Facilities System Manager		8/12/05
	Signature	Date
Stefan Moeller X-R Endstations WBS Manager		8/12/05
	Signature	Date
John Arthur Photon Beam System Manager		8-12-05
	Signature	Date
Darren Marsh Quality Assurance Manager		8/15/05
	Signature	Date

REVISION INFORMATION

Rev 2. Change 110 v, 20 A, added layout, clarifications about light switching for cabinets, include cabinets

ROOM DATA SHEETS

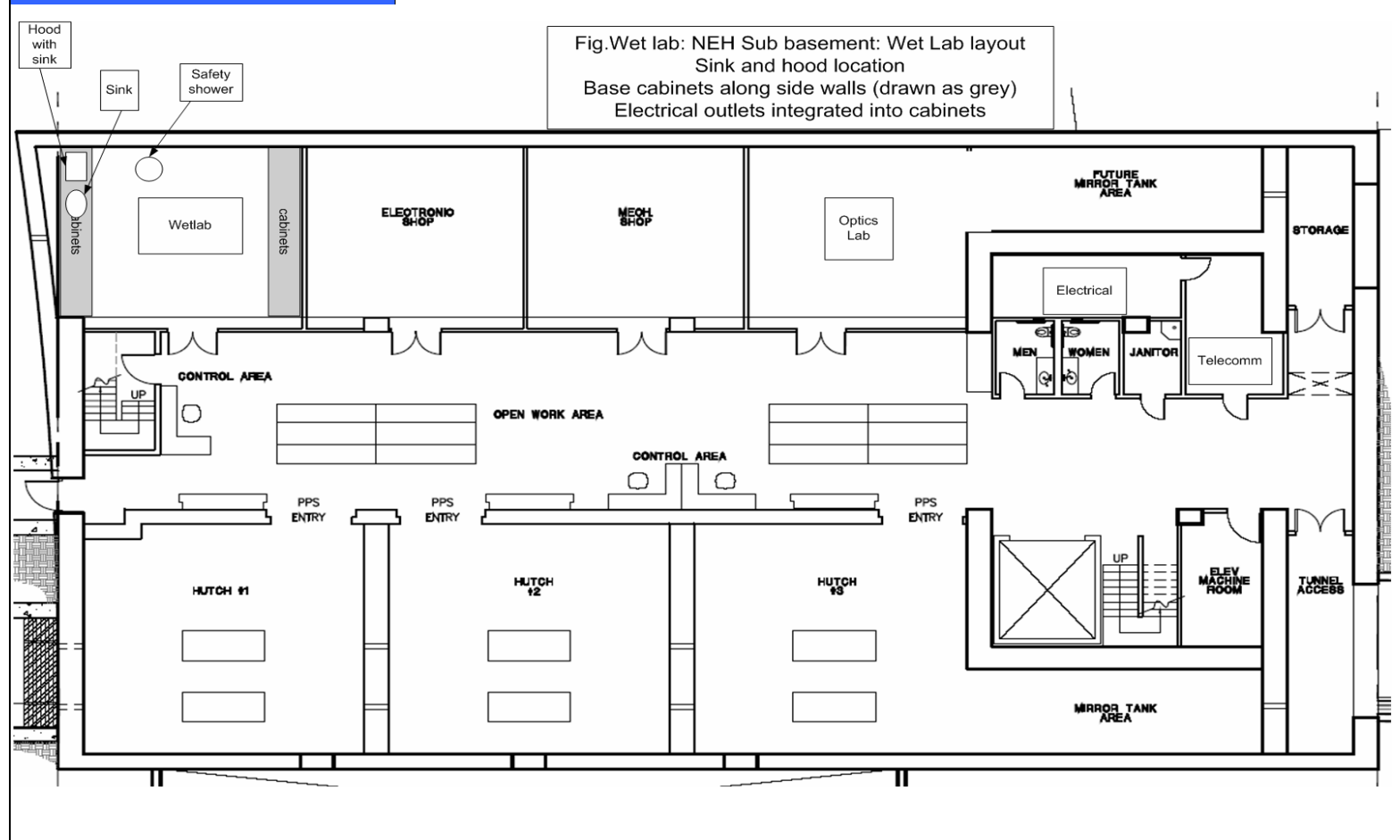
System Manager: Stefan Moeller/John Arthur

Rev 2

FACILITY COMPONENT	WET LAB (NEH) - ROOM DATA SHEET																											
	<table border="1" style="width: 100%;"> <tr> <td style="width: 30%;">Name of Building</td> <td colspan="2">NEH- Wet Lab</td> </tr> <tr> <td>Organization or Department</td> <td colspan="2">SLAC, Stanford University</td> </tr> <tr> <td>Net area</td> <td>60.7 sq. meters</td> <td>653 sf</td> </tr> <tr> <td rowspan="3">Critical dimensions</td> <td>H:</td> <td>3.04m 10'-0"</td> </tr> <tr> <td>W:</td> <td>8.2 m 26'-11"</td> </tr> <tr> <td>L:</td> <td>7.4 m 24'-4"</td> </tr> <tr> <td>Hours of operation</td> <td colspan="2">Normal business hours</td> </tr> <tr> <td>Users/Occupancy</td> <td colspan="2">Laboratory reseachers utilizing wet chemistries in support of the experiments being conducted in the X-ray hutches.</td> </tr> <tr> <td>Building orientation</td> <td colspan="2">Wet lab is located on the sub-basement level directly adjacent to the Open Work area.</td> </tr> </table>			Name of Building	NEH- Wet Lab		Organization or Department	SLAC, Stanford University		Net area	60.7 sq. meters	653 sf	Critical dimensions	H:	3.04m 10'-0"	W:	8.2 m 26'-11"	L:	7.4 m 24'-4"	Hours of operation	Normal business hours		Users/Occupancy	Laboratory reseachers utilizing wet chemistries in support of the experiments being conducted in the X-ray hutches.		Building orientation	Wet lab is located on the sub-basement level directly adjacent to the Open Work area.	
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FUNCTIONAL OBJECTIVE	1- A room devoted entirely to the use of wet chemistries in support of the experiments being conducted in the X-Ray Hutches.																											
PLANNING CONSIDERATIONS & CRITICAL FACTORS	1- Wet lab will have one 4'-0" Fume hood connected to process exhaust ducts 2- Types and amounts of chemicals in use and in storage within the wet lab are below the threshold amount allowed by Code. 3- Provide with built-in cabinets as indicated on the layout																											
FINISHES	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Wall</td> <td colspan="2">Concrete and gypsum wall board -Painted (semi-gloss finish)</td> </tr> <tr> <td>Ceiling</td> <td colspan="2">Mylar wrapped acoustic tile panels within suspended ceiling assembly.</td> </tr> <tr> <td>Floor</td> <td colspan="2">Concrete with epoxy finish</td> </tr> <tr> <td>Base</td> <td colspan="2">Rubber base</td> </tr> <tr> <td>Doors</td> <td colspan="2">Pair of doors with window- 3'-0" x7'-0" and card reader access</td> </tr> <tr> <td>Fenestrations</td> <td colspan="2">NA</td> </tr> <tr> <td>Acoustical</td> <td colspan="2">NA</td> </tr> </table>			Wall	Concrete and gypsum wall board -Painted (semi-gloss finish)		Ceiling	Mylar wrapped acoustic tile panels within suspended ceiling assembly.		Floor	Concrete with epoxy finish		Base	Rubber base		Doors	Pair of doors with window- 3'-0" x7'-0" and card reader access		Fenestrations	NA		Acoustical	NA					
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BUILT-IN CABINERY	Upper and Lower cabinets	Refer to diagram for layout of cabinets and sink Acid resistant cabinet construction due to "wet" chemicals used in the labs.
APPLICABLE STANDARDS	29 CFR Part 1910 Occupational Safety and Health Standards Dept of Labor, 29 CFR Part 1926 Safety and Health Regulations for Construction Dept of Labor, Uniform Building Code (UBC) 1997 including appendixes, National Electric Code (NEC) 2002, 2003 Uniform Mechanical Code (UMC) including appendixes, 2003 Uniform Plumbing Code (UPC) 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, 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 and SLAC LOTO	

VIEWS & SCHEMATICS (N. T. S.)



MECHANICAL REQUIREMENTS	HVAC	<input checked="" type="checkbox"/> Heating system	Temp:	<input type="checkbox"/>	Mechanical humidification
		<input checked="" type="checkbox"/>	Temp: 72 degrees F ± 2 degree F	<input checked="" type="checkbox"/>	Direct exhaust system - Fume Hood only.
		<input type="checkbox"/>		<input type="checkbox"/>	Positive pressure system
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Negative pressure system-Slightly	
		<input type="checkbox"/>	<input type="checkbox"/>	Standard registers	
		<input checked="" type="checkbox"/>	Temperature sensors connected to DDC systems	<input type="checkbox"/>	Requirement for gases
		Centralized Mechanical Utilities: Clean dry compressed air 20S CFM, 100psig provide with shut-off valve and gauge. One location-See diagram			
	Communications	<input checked="" type="checkbox"/>	Telephone- 2 phone/location-see diagram	<input type="checkbox"/>	PA speakers
		<input checked="" type="checkbox"/>	Dataport- 2 outlet/location-see diagram	<input type="checkbox"/>	PA station
		<input type="checkbox"/>	Payphone	<input type="checkbox"/>	CCTV camera
		<input checked="" type="checkbox"/>	Fire alarm station	<input type="checkbox"/>	CCTV monitor
		<input type="checkbox"/>	Intercom	<input type="checkbox"/>	
		Comments:			

	Plumbing/Fire Protection	<input checked="" type="checkbox"/> Hot water system	<input type="checkbox"/> Electric watercooler
		<input checked="" type="checkbox"/> Cold water system	<input type="checkbox"/> Drinking fountain
		<input type="checkbox"/> Tempered water	<input checked="" type="checkbox"/> Smoke detection system
		<input checked="" type="checkbox"/> Waste drain - acid resistant	<input checked="" type="checkbox"/> Wet sprinkler System
		<input checked="" type="checkbox"/> Floor drain- Acid resistant	<input checked="" type="checkbox"/> Eye wash / safety shower
		<input type="checkbox"/> Trench drain	
		Comments: 1- Provide an acid-resistant drain line in the plumbing core to accommodate the chemistry used in the lab. 2- Provide sink in fume hood to handle acids and one (1) additional sink next to hood (see figure). 3-Process Cooling water: 15 GPM, 15 PSI at 68F. Provide shut off valve and pressure gauge. 4- see figure for location of eyewash, shower (has floor drain), hood, sink.	
ELECTRICAL REQUIREMENTS	Power supply	<input type="checkbox"/> 208 V 1ph outlets	<input type="checkbox"/> Uninterrupted power supply
		<input checked="" type="checkbox"/> 110V, 1ph Double duplex outlets, 20 amps locate at 10ft apart on all walls.- GFCI	<input type="checkbox"/> Special electric Type:
		<input type="checkbox"/> Emergency power	
		Comments:	
	Lighting	<input checked="" type="checkbox"/> Light fixtures - 2 x 4 recessed	<input type="checkbox"/> Remote lighting control
		<input type="checkbox"/> Fixture type I: Downlight	<input checked="" type="checkbox"/> Light switches
		<input type="checkbox"/> Fixture type II: Bollard (exterior)	Lighting level FC: 75
		<input checked="" type="checkbox"/> Emergency lighting	<input checked="" type="checkbox"/> Under-cabinet lights
		Comments: 1- Separate lighting controls for overhead and under-cabinet lights. Switches shall be built-into the cabinets	
RADIATION/SEISMIC/VIBRATIONS ISSUES	Comments:		
SPECIAL REQUIREMENTS FOR EQUIPMENT	Comments: 1- 4 ft Fume hood to be ducted into the process exhaust system (4'x3' sash opening at velocity of 120FPM, constant volume exhaust). 2- Chemicals are to be stored in chemical storage cabinet located within the lab, according to safety regulations.		
CHEMICALS / GASES	CHEMICALS		SPECIALTY GASES
	#	Chemical Type	Quantity
ENVIRONMENTAL NEEDS			