

CLIENT NAME: STANFORD UNIVERSITY		PROJECT NAME: LCLS	
SURVEY CONDUCTED BY: Gautam Guha	TELEPHONE # 714-503-3643	PROJECT NUMBER	
		Jacobs: F1-W151-01	Client:
PROJECT START DATE: January 13, 2004		DATE OF SURVEY: January 15, 2004	

CLIENTS' REPRESENTATIVES:**Jacobs PM: Steve Hill****Persons Interviewed:****Mr. Mark Reichanadter****Mr. Dave Saenz****Mr. John Galayda****JACOBS PARTICIPANTS: Steve Hill, Tim Haley, Nick Varrone, and Gautam Guha****Introduction:**

Jacobs Quality Program includes understanding our Client's objectives and then building a project team and approach to meet those objectives. The following questions were discussed with the client team for establishment of the project expectation.

A. Safety during Design:

- Does your organization have specified safety procedure that Jacobs needs to follow?
- What are the goals of you organizations' Safety program?
- Are there critical safety in design requirements beyond the areas of Radiation, Alarm system, and Interlocking?
- How do you envision Jacobs' safety role during the site investigation/study and CD's?

COMMENTS:

RFP mentions SLAC's safety procedures. Follow that. For SLAC's safety objective review SLAC's Hazard operability report and training activation process. Look at SLAC's website for more safety needs. DOE is pushing "zero" lost time accident rate (1's acceptable). The critical safety needs: Radiation Control, Alarm System, Interlocking, Seismic requirements, Oxygen deficiency issues, Fire Safety and Life Safety. All Jacobs's staff on the project and visiting site would be required to receive SLAC safety training and general radiation training. They would have to study SLAC's evacuation plan. In general, all Jacobs' staff needs to be, escorted by SLAC Staff. Also, traffic during construction in an issue. SLAC would like to receive Jacob's IPP (Injury and Illness prevention plan/IIPP Federal OSHA applies, CAL OSHA.

FEED FORWARD:

B. Project Strategy/Scoping/Project Planning

- Do you feel that Jacobs' scope of work has been fully defined?
- Do you have any special advise (lessons learned) on similar project planning from past projects?
- Are there any issues that have not been identified that could cause the project to be stopped or delayed?
- Are there any issues that keep you up at night regarding this project?
-

COMMENTS:

Scope of work is not fully defined yet. There are recent changes. There is a plan to add 30K Sq. ft. lab and office space in the FEL center. This has increased cost also. SLAC site has been designed. Planned lot of explaining on Architecture impacts of newer campus. Please study the Long Range Planning document to learn more. Today's plan is of right concept, but expandability is a real issue. Also study the Environmental Assessment Report. Project schedule and overall budget, could be showstopper. Sure is eager to make it as appealing architecturally as possible. Talk to Campus Architect. Temperature control in undulated part of tunnel, vibration requirements, and differential settlement issues are critical.

FEED FORWARD:

C. Communications/Public Relations

- How do you want Jacobs to communicate within SLAC team and the DOE?
- Who are the user group for the proposed facility and are there any special instruction on how to interact with the user groups?
- How would like Jacobs to handle, if at all, communications from the community and the press?

COMMENTS:

SLAC would to have weekly meeting and Bi-Weekly meeting and project report. For finalization of any additional work request must be approved through Dave Saenz. For Community and press questions work through public affairs' office of SLAC.

FEED FORWARD:

D. Technical Services – Design and Estimating

- Are there any specific technologies that Jacobs needs to be focusing during the design stage?
- Who are the decision-making technology specialists in your organization and how can we meet during planning stage?

COMMENTS:

Follow SLAC's Drawing numbering systems. Design needs to include vibration technique/mitigation; Radiation control, Site survey, seismic review and control. Provide SLAC your document control system details and Project Management Plan. SLAC used Microstation 8.1 They can handle Auto CADD/14. But they have problems with Auto CADD 2004. But they would check to see if they could accommodate Auto CADD 2000.

FEED FORWARD:

E. Schedule

- Does the submitted schedules have adequate detail and in acceptable format?
- What are your schedule constraints?
- At what frequency would you like to see schedule updated?
- Are there ways that you feel we can use to help you expedite the project schedule?

COMMENTS:

Make sure SLAC milestones are in the project schedule. Variance analysis and recovery plan need to be completed and submitted to SLAC.

FEED FORWARD:

F. Cost

- Is there any specific format that Jacobs needs to follow for presenting project estimate?
- Jacobs has a Value plus system to document project cost savings and cost avoidance. Would be willing to participate in that?
- What specific format and protocol should be followed for submitting project invoice to you?

COMMENTS:

Title I needs to have SLAC go through EIR. WBS codes need to be used for different activity. Check with Bruce Pattan on estimate format and details. Cost reports showed show dollars to be spent by year to year. Invoice should be straightforward and travel should be in invoiced separately.

FEED FORWARD:

G. Management and Home Office Support

- Our Regional Manager would like to meet with you on a periodic basis. Would you like to meet with him to provide us feedback?

COMMENTS:

O.K. for regional manager to make quarterly visit/and meet SLAC management team.

FEED FORWARD:

H. Quality

- What is your expectation on design quality assurance and quality control?
- Does Jacobs need to submit the deliverables to any other entities for review?
- Would you be willing to participate in Jacobs' quarterly client survey process?

COMMENTS:

No fixed QA audit. To be determined later. Currently AIA audit requirements apply. SLAC will inform the number of copies of documents that need to be submitted.

FEED FORWARD:

I. Confidentiality

- Please describe any confidentiality issues that you may have.
- Does Jacobs' need to be aware of any specific security issues/needs?

COMMENTS:

No classified documents in SLAC campus. Stanford federal confidentiality applies.

FEED FORWARD:

J. Clients Internal Requirements

- Are there any special internal SLAC requirements in the execution of this contract?

COMMENTS:

Follow SLAC WBS requirements. Look at SLAC environmental assessment report. Negotiate input to storm drain with Environmental and Health and Safety. Also, follow local jurisdiction guidelines.

FEED FORWARD:

CLIENT	Stanford University – LCLS	NOTE NO.	002
PROJECT	SLAC	PROJECT NO.	F1W115101
		FILE NO.	505
CONFIRMATION OF <input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD 1/20/04 DATE ISSUED 1/21/04 RECORDED BY G. Guha PLACE Cypress, CA Conf. Rm. 2F		
SUBJECT Internal Kick-Off Meeting			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Client:	Jacobs: Steve Hill Gautam Guha Andrew Cupples Nick Varrone Gil Hulden	Paul LoNigro Sourojit Dhar Michael Thav Mike Feroz Kirk Warnock Tim Haley	Bob Turner * Jim Pan * * Part Time
ADDITIONAL DISTRIBUTION			
File 6.3			
	ITEM	ACTION REQ'D BY	DATE REQ'D
1.0	<u>Safety Minute</u> Steve Hill stated that SLAC subcontract language says site has radiation. So, we need a badge from SLAC when we visit site. Feb 10, 2004 is the upcoming SLAC's safety training. People need to attend. Carry your own PPE also while visiting site. Steve will coordinate with SLAC regarding Safety Training for Jacobs' staff.	SH	
2.0	<u>Quality Minute</u> Gautam Guha stated this is a multi-office executed project. So individual office would complete their discipline QA/QC prior to overall squad checking. Gautam and discipline leads need to determine the best way to perform the squad checking. Preferred way is to perform is series.	GG	



Project Note 002

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ITEM		ACTION REQ'D BY	DATE REQ'D
3.0	<p><u>Contract Summary</u></p> <p>NTP has been received for Title I. Contract is received, duly signed by SLAC. Jacobs is reviewing the contract prior to signing the same. So far only \$350K has been funded, which is half of Title I value.</p>		
4.0	<p><u>Scope of Work</u></p> <p>Current released scope is for providing Title I services (schematic Design and parametric estimate). In addition demolition design will also be performed. Steve Hill to obtain existing drawings for facilities to be demolished.</p>	SH	
5.0	<p><u>Deliverable in Title I</u></p> <p>Arch: Overall site layout; entire site profile/ sections; site blowups (yard modifications, crossovers, Near Hall, FEL); Radiation details; overall building layout; typical building cross sections; exterior elevation (buildings that are not buried)</p> <p>Civil/Structural: Crossover Bridge or tunnel plan and section (typical and a typical; Transition (longitudinal) storm water system investigation;</p> <p>MEP: Single line (electrical); primary distribution/; HVAC (control diagnoses)- Undulator Hall, Thermal breaks, hutches, clean rooms; pressure line schematics.</p> <p>All disciplines: Room data sheets; written information (outline specifications-section 1 of each), life cycle analysis; design criteria.</p> <p>Demolition: Site plan</p> <p>For details of the Deliverables please see the attached Excel spreadsheet.</p>		
6.0	<p><u>Schedule</u></p> <p>The project schedule is very tight. Title I design needs to be completed by April 16, 2004. However internally every effort must be made to complete the Title I deliverable as early as possible. That would help the overall project to remain on schedule.</p>		
7.0	<p><u>Budget:</u></p> <p>The budget is standard in accordance with Jacobs' proposal. Total fees for Title I \$631K, but only \$350K has been released so far.</p>		



Project Note 002

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ITEM		ACTION REQ'D BY	DATE REQ'D
8.0	<u>Project Procedure Plan:</u> Copy of Project Procedure Plan manual was distributed for review. Comments to be returned to Steve Hill by January 23, 2004. Gautam Guha to complete the Quality Plan by Jan. 26, 2004		
9.0	<u>Staffing Plan:</u> Existing infrastructure at the involved offices are sufficient to support the project. Design leads of individual offices are to inform Steve Hill the names of staff working in the project.		
10.0	<u>Critical Project Startup Activities/Design Verification Plan:</u> All design leads are to submit the plans to Gautam Guha by Jan 27, 2004.	GH MF KW PL	
11.0	<u>Project Coordination Meeting:</u> Meeting will be held on every Tuesday from 9 a.m. to 10 a.m. Mayra Ulrich to set call in number, set a conference room in Cypress and inform Project Team members. The first meeting will be on February 3 rd .		
	<u>Client Expectation Meeting:</u> An expectation survey has been completed. Gautam will provide report on Jan. 26, 2004.		
<p><i>The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.</i></p>			

Project Manager



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Project Note 003

CLIENT	Stanford University – LCLS	NOTE NO.	003
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	2/11/04
		DATE ISSUED	
		RECORDED BY	Kirk Warnock
		PLACE	Stanford
SUBJECT			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Client: Scott DeBarger David Saenz	Jacobs: K. Warnock S. Chandramouli		
ADDITIONAL DISTRIBUTION			
Steve Hill Kirk Warnock CJ Chang S. Chandramouli Gil Hulden	Mike Feroz		
ITEM		ACTION REQ'D BY	DATE REQ'D
1.0	If Jacobs used occupancy category 1 or 2 for seismic design with response spectra from Specification for Seismic Design of Buildings, Structures, Equipment and Systems at SLAC, figures 1 and 2, SLAC will have considered Jacobs to meet all of the seismic criteria.		
2.0	Scott will clarify and furnish response spectrum for Magnitude 7.5 (M_w) event.	S. DeBarger	2/25/04
3.0	Scott will check on the wind exposure level to be used for wind design.	S. DeBarger	2/25/04
4.0	It would be beneficial if Jacobs can contuse ground water levels for the Undulator Hall.	M. Feroz	
5.0	Jacobs needs to consult with Syed Rockni in regards to getting increased radiation shielding levels for different types of materials.		



Project Note 003

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ITEM		ACTION REQ'D BY	DATE REQ'D
6.0	The time vs. concrete shrinkage curve needs to be evaluated vs. SLAC's schedule on installing the beam cell. Jacobs should discuss with David Saenz.		
7.0			
8.0			
9.0			
10.0			
11.0			

The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.

Steve Hill Project Manager



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Project Note 004

CLIENT	Stanford University – LCLS	NOTE NO.	004
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input checked="" type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	2/17/04
		DATE ISSUED	2/23/04
		RECORDED BY	Gautam Guha
		PLACE	Phone Conference
SUBJECT			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Client: Scott DeBarger David Saenz	Jacobs: K. Warnock S. Chandramouli		
ADDITIONAL DISTRIBUTION			
Steve Hill Kirk Warnock CJ Chang S. Chandramouli Gil Hulden	Mike Feroz		
	ITEM	ACTION REQ'D BY	DATE REQ'D
1.0	Safety Note: Good safety training at SLAC. Get people trained as necessary. If you are going to radiological area let Steve Hill know.		
2.0	Quality Minute: Keep an eye on each discipline checking and overall squad check.		
3.0	Status from last Charrette. (Two-weeks look ahead) Two weeks from now all drawing sheet should be started. All technical design criteria should be tied down except for FEL. At the Charrette it was decided (scheme wise) to proceed with caverning scheme, as opposed to preferred scheme of cut and cover. We need to do another study for the head house.		
4.0	Mike Feroz to provide dimensions of proposed tunnel. There could be a connecting tunnel between existing building and Far hall. There should be two exits from Far hall.		



Project Note 004

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	ITEM	ACTION REQ'D BY	DATE REQ'D
5.0	Beam transfer hall will be designed based on no-occupancy. Use of gases would be approved by SLAC Safety Committee.		
6.0	<p>Look at all option for future master planning. Kevin to update drawings.</p> <p>Where should we point a new overhead crossing. Also look at two road options for crossing the yard. Do a conceptual design or the road. Not a full road design. We need schematic only. Make sure we have taken into consideration the turning radius for fire trucks. Show how the fire lanes are working. One road option for low buoy and the other without.</p> <p>We need to study where the service building goes. SLAC to provide the information. Ideally the top of near hall would be best for service hall.</p> <p>In two weeks most architectural drawings to be started. In four weeks all engineering information need most to be laid over.</p> <p>Need to study near hall with 0° and +2° beams.</p>		
7.0	Rob to start thinking about FEL. Think about space needs. It is a Lab and Office. Need parking space also.		
8.0	Tunnel to start from Near hall and go both ways. They do not work tunneling to start from the yard.		
9.0	Kirk to think about what we can do when we cross the underground utility tunnels. Civil also to look into what drawings they need to keep package as schematic.		
10.0	Mid title I Review: March 11, 12		
11.0	<p>This week mini Charrette on-site. Participants Steve Hill, Sourojit Dhar, David Hughes, Mechanical, Electrical Staff. So review Concepts, data sheets.</p> <p>All data sheets are in Project Wise. Please review them and provide comments to Sourojit.</p> <p>Greg Owen is building space requirements for mechanical equipment in four buildings. BTH, Undulator, Beam dump, X-ray tunnel, far experimental hall in the cavern.</p> <p>Gil to provide a drawing list of what they are producing.</p> <p>Basis of Design format to be provided to Gill and Kirk.</p>		
<p><i>The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.</i></p>			



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Project Note 005

CLIENT	Stanford University – LCLS	NOTE NO.	005
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input checked="" type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	2/24/04
		DATE ISSUED	2/25/04
		RECORDED BY	Gautam Guha
		PLACE	Phone Conference
SUBJECT			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Steve Hill	Mike Feroz	Bruce Engman	
David Hughes	Kevin Jennings	Surojit Dhar	
Paul LoNigro	Kirk Warnock	Gil Hulden	
Gautam Guha	Mike McMillan	Michael Mills	
Andy Cupples	Paul LoNigro	Rob Lowe	
ADDITIONAL DISTRIBUTION			
CJ Chang			
S. Chandramouli			
Michael Thav			
	ITEM	ACTION REQ'D BY	DATE REQ'D
1.0	Safety Note: During the survey of the research Yard staffs worked around the RF area but were not sure if the RF was operational. Also, the Dosimeter issued by SLAC needs to be kept onsite with Steve Hill. Portland staffs need to be trained on SLAC safety. Best time would be at the start of the Title II work.		
2.0	Quality Minute: During conversion of the drawings from Auto CADD to Micro Station and vice-a -versa lots of information are lost. For the Title I all drawings would be prepared in Auto CADD. Steve to continue the discussion with SLAC for Title II and beyond.		
3.0	One week from now all drawing sheet should be started. All technical design criteria should be tied down except for FEL. Gil Hulden to provide all MEP drawing list.	All leads GH	2/28/04 2/28/04
4.0	Mike Feroz to provide dimensions of proposed tunnel. There could be a connecting tunnel between existing building and Far hall. There should be two exits from Far hall.	MF	Complete



Project Note 005

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ITEM		ACTION REQ'D BY	DATE REQ'D
5.0	Beam transfer hall will be designed based on no-occupancy. Use of gases would be approved by SLAC Safety Committee.	SH	2/28/04
6.0	<p>Look at all option for future master planning. Kevin to update drawings.</p> <p>Mike Feroz to see where should we point a new overhead crossing. Also, look at two road options for crossing the yard. Do a conceptual design for the road. Not a full road design. We need schematic only. Make sure we have taken into consideration the turning radius for fire trucks. Show how the fire lanes are working. One road option for low buoy and the other without. Also the scheme needs to show the traffic circulation. Tunnel to start from Near hall and go both ways. SLAC does not want tunneling to start from the yard.</p> <p>Steve would provide Mike Feroz the Cavern Lay out. Mike needs to study the same.</p>	SD KJ MF SH	3/5/04 2/28/04 2/28/04 2/28/04
7.0	FEL would be located above the NEH. The FEL includes office space, laboratory, and workstations. Needs parking space also. FEL basement is the laser lab for the NEH. Rob and Surojit to confirm if additional 30K sq.ft. would have to be added to the FEL. Rob to provide conceptual scheme for the FEL.	RL	2/28/04
8.0	The head-house needs to be studied with two options. One for immediate (use for $\pm 0^\circ$ beam) and the other for the future expansion for $\pm 2^\circ$, and $\pm 4^\circ$ beams. Also, the head-house would be used for inserting the undulator magnets into the undulator during construction. There would be a Tune-up dump beyond the BTH and before the Undulator hall. In the Tune up dump there would be block of Copper. Steve Hill needs to obtain the dimensions of the Copper block.	KJ SH	2/24/04
9.0	Kirk to think about what we can do when we cross the underground utility tunnels. Civil also to look into what drawings they need to keep package as schematic.	KW	2/28/04
11.0	<p>In one week most architectural drawings to be started. In three weeks all engineering information need most to be laid over.</p> <p>All data sheets are in Project Wise and are being revise currently. They would be ready for internal use by 2/28/04.</p> <p>Greg Owen is building space requirements for mechanical equipment in four buildings. BTH, Undulator, Beam dump, X-ray tunnel, far experimental hall in the cavern. Gil to provide a drawing list of what they are producing.</p> <p>Basis of Design format to be provided to Gill and Kirk.</p>	GH GG	2/28/04 Complete
10.0	Mid title I Review: March 11, 12		
<p><i>The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.</i></p>			



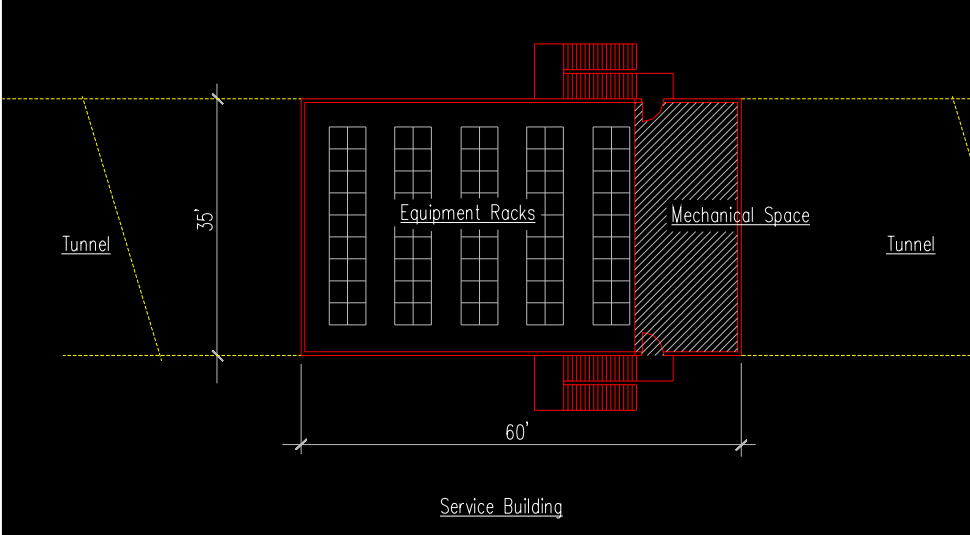
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Project Note 006

CLIENT	Stanford University – LCLS	NOTE NO.	006
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input checked="" type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	2/19/04
		DATE ISSUED	2/25/04
		RECORDED BY	Sourjit Dhar/David Hughes
		PLACE	Phone Conference/Site Meeting
SUBJECT General Notes From 2/19/04 SLAC telephone conferences/Site Meeting			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
SLAC Jim Welch Eric Bong David Saenz Jo Beth Folger John Arthur		Jacobs Steve Hill Sourojit Dhar Paul LoNigro David Hughes Gil Hulden	
		Greg Owen Kirk Warnock	
ADDITIONAL DISTRIBUTION			
Jacobs Project File 505 Gautam Guha			
ITEM			ACTION REQ'D BY
Undulator Hall: <ul style="list-style-type: none"> • Jim Welch asked, "What defines the Undulator Hall?" He seemed displeased that the length of the hall (175m + 40m) had not been determined. Eric Bong and Sourojit explained that the required distance of the undulator hall could flex along the beam centerline as required and that the Tune-Up Dump was a new addition. • Jim Welch wondered which parts of the tunnel would be buried and which would be exposed. Jacobs explained that buried or exposed the construction of the 3 tunnels would be the same. • Jim Welch asked how the beam dump would be constructed and Jacobs said that it would be excavated. • The final definition of what comprised the Undulator Hall was "Thermal Barrier to Thermal Barrier and it did not want to be "In the yard, but under the hill." 			
			DATE REQ'D



ITEM	ACTION REQ'D BY	DATE REQ'D
<ul style="list-style-type: none">• Discussion of the Undulator Hall turned to “positive air pressure.” A slight positive air pressure must be maintained. Jim suggested a plastic air curtain at each end – Eric thought these would deteriorate over time due to radiation and was not the best solution (plastic is also a combustible material.) Anything made of wood would also deteriorate due to radiation and be a source of combustible material in the tunnel. Gypsum board over metal stud walls was determined to be suitable construction to close the ends of the Undulator Hall to maintain the constant positive air pressure. This construction would not contribute fuel to a fire and would withstand long-term effects of radiation.• Constant temperature was also outlined: 20C set-point (75°F) Plus-minus. (Portland should have this number.)• Discussion followed about maximum door opening width in the ends of the Undulator Hall. A 4'-0” wide door with closer is about the maximum width that will not obstruct the beam path on each side of the tunnel. Above the door head would be the light source for the tunnel (not fluorescent due to heat gain – use fiber optic) and cable trays. The end closures evolved into “Buffers” and these are air locks constructed of gypsum board over metal studs. The buffers would better ensure the positive pressure in the tunnel during the use of the doors at either end than would a single wall. <p>Service Buildings:</p> <ul style="list-style-type: none">• Discussion of Service Buildings followed the Undulator Hall. Much concern exists about the distance apart of the buildings. Cable length was on everyone’s mind – 300 LF seems to be the agreed-upon maximum distance a cable can be and maintain conductivity. The distance of the drop from the cable tray to equipment in the tunnel also needs to be calculated. A service building on top of the hill could be 50’ or more above the tunnel and leave only 250’ of cable to connect.• Can these buildings be relatively open like the Klystron Gallery? At first it seemed so but a relatively constant temperature is desired – between 70°F and 80°F. so an enclosed and conditioned building is required.• Primary equipment housed in Service Buildings includes banks of equipment racks containing electronic monitoring devices. These racks can be configured to fit a building of almost any shape. This was a concern of Steve Hill since at least one of these buildings is now envisioned to sit on top of the tunnel rather than adjacent to it. (Andy Cupples has a different vision.)• Utilities in the Service Buildings include hot water and chilled water plus power. Fire protection is also required.		

ITEM	ACTION REQ'D BY	DATE REQ'D
<ul style="list-style-type: none"> Vibration and radiation shielding are also concerns.  <p>A hypothetical Service Building above the tunnel Near Hall – Basement:</p> <ul style="list-style-type: none"> The hutches adjacent to the tunnel will require HVAC for temperature control and a lay-in suspended ceiling to prevent the build-up of dust. Plumbing is required as is an isolated floor in each of the hutches to eliminate vibration. Vibration control is critical since the beams are split at the end of the third downstream hutch. The minimum clear ceiling height is 15'-0" with a 3'-0" +/- plenum above for HVAC ducts, fire sprinklers, and lay-in fluorescent lighting. The concrete structure is an additional 2'-0" for a total floor-to-floor height of the first two stories of 20'-0". There needs to be a means to transfer heavy equipment in and out of the hutches. Equipment can weigh hundreds of pounds and be up to 10'-0" long. A hoist way would be one solution. Any elevator should be isolated from the building structure so that vibration will not be a problem. Preparation areas also need to be reconfigured and will require a means to change-out heavy or awkward equipment. SLAC does not require experimental hutches on the north side of the beam and does not want to pay for them. If the foundation or configuration of the FEL requires them as part of the deal then additional (future) halls would be acceptable. There can be as many as 60 to 70 researchers in the adjacent monitoring and preparation areas. 		



ITEM	ACTION REQ'D BY	DATE REQ'D
<p>Near Hall – Floor above basement:</p> <ul style="list-style-type: none">• This floor houses the laser labs and should be constructed exactly like the floor below with 20' floor-to-floor height. The laser rooms are also high bay spaces. Safety is paramount and requires an entry vestibule large enough for five persons with interlocked entry doors. Entering an operating laser lab at could be disastrous since some equipment is mounted at eye-level.• There needs to be a sliding wall or large pair of doors to allow a fork lift to enter the laser lab to rearrange or change out the heavy 4'x10' optic tables. There also needs to be a location for the forklift to reside when not in use.• The room needs to be an up gradable class 10,000 with no air turbulence and a stable temperature within one-degree, plus or minus.• The Laser Lab needs to straddle all three hutches below and be interconnected with each hutch with an 8" diameter hole. One hole at each end of the lab and the third roughly in the center.• Fluorescent lighting is acceptable in the Lab, 2 telephone outlets and 6 data ports are required. A fire suppression system is required as is a packaged 120 V. chiller unit. Provide a wall mounted First-Aid cabinet. <p>Near Hall – Top two floors:</p> <ul style="list-style-type: none">• These are office floors and can be 12' plus – minus with standard 9' lay-in ceilings. These are the floors where researchers work in teams. Team spaces are roughly divided into half office space and half open office systems space. For planning purposes consider teams to be comprised of 10-12 persons. This ratio or private offices is required to entice top researchers from around the globe. Not every office can have a window with this ratio of open space to offices so there will be a hierarchy with the plan.• Maximize the amount of collegial meeting spaces.• Parking has been severely understated at 70 spaces. Recent numbers account for 240 – 260 persons including visitors. Considering the number of people working nights or second shift, weekends, on vacation, sick, whatever the actual number of surface parking stalls might be reduced by 25% or 180 – 195 - say 200.		



ITEM	ACTION REQ'D BY	DATE REQ'D
<p>X-Ray Tunnel:</p> <ul style="list-style-type: none"> • Lighting: Fluorescent lighting – shut off while not in use. • Phone: Wireless (Antenna Array) has been requested but not budgeted for. • All tunnels: Electric convenience outlets at each alcove and mid-point between. Approximately 16 - 20' o.c. • Cable trays: Jacobs provides supports – SLAC requires 12" wide tray each side of the tunnel. • Smooth concrete floor. • Tunnel ceilings (where no suspended ceiling is used) should be painted white. Improves light reflectance at little cost. <p>Beam Transport Hall:</p> <ul style="list-style-type: none"> ▪ 4:1 Ratio Concrete to Steel. ▪ 8" Diameter sleeve (Option) ▪ Temperature Control only, no humidity controls. ▪ Tunnel ceiling should be painted white. ▪ Fluorescent lighting. ▪ Low-conductivity cooling water for the hollow copper conductors. ▪ Aluminum block at beam dump. Needs to be pulled-out, changed periodically. Need a sliding or rolling track door to allow heavy equipment into tunnel if possible. <p>Beam Tune-Up Dump:</p> <p>Nothing – Except “buffer” with 4' wide door.</p>		
<p>10.0 Mid title I Review: March 11, 12</p>		

The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.



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Project Note 007

CLIENT	Stanford University – LCLS		NOTE NO.	007
PROJECT	SLAC		PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes		FILE NO.	505
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING	DATE HELD	2/19/04	
	<input type="checkbox"/> TELECON	DATE ISSUED	2/26/04	
	<input type="checkbox"/> OTHER	RECORDED BY	Paul LoNigro	
		PLACE	SLAC Office	
SUBJECT	Life Safety			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)				
SLAC	Jacobs			
David Saenz	Steve Hill			
Bob Reek	Paul LoNigro			
Ian Evans				
Jay Fry				
Joe Kennedy				
ADDITIONAL DISTRIBUTION				
Mark Reichanadter	Mike Feroz	Medi Givechian	Jacobs Project File 505	
	Gil Hulden	Bruce Engmann		
	Gautam Guha	Van Ai		
		Don Pastrana		
ITEM			ACTION REQ'D BY	DATE REQ'D
1.0	Tunnels are to be considered as unoccupied space. Exiting travel distances per code are 300' for unsprinklered space and 400' for sprinklered space. SLAC Authorities (Bob Reek) indicated that sprinklers will not be required for either tunnel.		Information	
1.1	X-Ray tunnel exiting distance should be kept to 500' maximum. This will require that a firewall with passage doors on hold opens be constructed at the mid-point of the tunnel.		Jacobs	
1.2	While not required by B. Reek it is recommended and requested that a Very Early Smoke Detection Appliance (VESDA) system be installed in both tunnels. This system will be connected to the fire alarm system.		Jacobs	
1.3	Since Tunnels are considered unoccupied, requirements (Rise & Run) for private stairs can be used for stair access.		Info.	



Project Note 007

Page 2 of 2

	ITEM	ACTION REQ'D BY	DATE REQ'D
2.0	All buildings are to have conventional fire suppression systems (either sprinkler or FM 200) based upon occupancy and equipment. NFPA 101 is the standard to be used.	Info.	
3.0	There are no hazardous materials to be considered by the design team.	Info	
4.0	Pedestrian access from one side of yard to the other can be by stair. No need for elevator access. ADA compliance will be through the use of client provided vehicles.	Jacobs	
5.0	Jacobs design team must consider how to get people to a public way after existing through the emergency stair at East End of Far Hall (daylights on down slope of hill)	Jacobs	
6.0	Building 113 should be assumed by team to be demolished. David Saenz will get final confirmation from Jerry Hastings.	Info.	
7.0	It was recommended that David Saenz do a Hazard Analysis to present to D.O.E. as justification for Life Safety decisions in the tunnels.	D. Saenz	
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Project Note 008

CLIENT	Stanford University – LCLS	NOTE NO.	008
PROJECT	SLAC	PROJECT NO.	F1W15101
	Weekly Staff Meeting	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	March 2, 2004
		DATE ISSUED	March 3, 2004
		RECORDED BY	Steve Hill
		PLACE	Menlo Park
SUBJECT	Weekly Staff Meeting		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Jacobs			
Kirk Warnock	Mike McMillan		
Steve Hill	Mike Feroz		
Gil Hulden	Sourojit Dhar		
Gautam Guha	Kevin Jennings		
Andy Cupples			
ADDITIONAL DISTRIBUTION			
	ITEM	ACTION REQ'D BY	DATE REQ'D
1.0	<u>Safety Minute</u> The Safety Minute was driving safely in winter conditions	SH	
2.0	<u>Quality Minute</u> The Quality minute was a comment by Gautam to have more conference call to keep everyone up on changes and progress. Steve will try to add a short meeting on Thursdays for a while.	GG/SH	
3.0	<u>Structural</u> Kirk was concerned that the contours and the facilities on the SLAC were incorrect. Steve Hill to follow up the client and get a new drawing to check out the possible error. Kirk needs data on soils to do some analysis. Steve Hill to follow up with the client and see when we can expect information. Kirk is still looking for the RSY elevations. He was told that SLAC has done a recent survey of the yard. Steve will follow up with client. We have received yard elevation drawing about two weeks ago. Gautam needs to get copies to Kirk	SH/GG	
4.0	<u>Civil</u> Civil is going well. Steve asked Mike to look at the North entry road. We will need a profile for the Mid-Title I review. The road may need to be widened and the curves taken out. Also the grade needs to be looked at. Mike will look at lowering the tunnel heights but he is not sure we can save any money.	MF	



Project Note 008

Page 2 of 2

	ITEM	ACTION REQ'D BY	DATE REQ'D
5.0	<p><u>Architectural</u></p> <p>We discussed the location of the Tune-up Dump. Andy wants to move it to the west of the tunnel headwall. Steve felt that this would add cost but did give additional space in the Undulator Hall. Andy has asked that a list of the drawing for the Mid-Title I review be put together. Steve noted that we need to have the Design Basis document ready also. A discussion was held on the height of the tunnels. Steve is trying to hold the tunnel height to 12'-6". Gil has laid out the Undulator Hall and needs 14'-6". Gil to send layouts to Steve to review. Mike Feroz stated that they want to keep a circle shape and that lowering the ceiling height may not save and money.</p>	AC/SH/GH	
6.0	<p><u>MEP</u></p> <p>Mike McMillan has laid out the space requirement for the HVAC equipment. He is planning on Smoke Exhaust Systems for the tunnel. This is what the code requires. Steve to check with the client if they require smoke exhausts or smoke purge. This will make a big difference in cost and design time. Gil is still looking for information on the cabling requirements. Steve is not sure he has the questions. Gil will resend to Steve.</p>	SH	
7.0	<p><u>Schedule</u></p> <p>The next major milestone is the Mid-Title I review on March 11th and 12th. The review will start at 1:00 pm to give us time to fly into San Jose in the morning and get ready. We will plan on staying until 4:00pm on Friday the 12th.</p> <p><u>Attendees:</u> The Following people should plan on attending the Mid-Title I review Steve Hill Andy Cupples Gautam Guha Mike Feroz Kirk Warnock Mike McMillan David Hughes Sourojit Dhar</p> <p>Others may be added</p>		
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Project Note 009

CLIENT	Stanford University – LCLS	NOTE NO.	009
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	2/11/04
		DATE ISSUED	3/02/04
		RECORDED BY	Jim Pan
		PLACE	SLAC Office
SUBJECT	Life Safety		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
SLAC Derrick Britt Olaf Muller Merle Cramar	Jacobs Jim Pan		
ADDITIONAL DISTRIBUTION			
Steve Hill	Gautam Guha		
ITEM		ACTION REQ'D BY	DATE REQ'D
1	While not required by the contract agreement, it is recommended and requested by SLAC that Jacobs translate the AutoCAD 2002 drawings to MicroStation V8. David Saenz of SLAC and Steve Hill of Jacobs will decide and agree on who will be responsible for the translation of the drawings.	SLAC/ Jacobs	
2	David Saenz is the Point of Contact for Jacobs LCLS project team. Derrick Britt, SLAC Facility Manager, should be copied on and validate all electronic file transmittals, including email attachments and CDs, from SLAC to Jacobs. Either the drawings are certified as correctly issued documents or some kind of disclaimer be appended to the drawings if the data on the drawings has not been verified by SLAC.	SLAC	
3	SLAC Facility Department should have at least one copy of AutoCAD 2002, so that SLAC can check the translated drawings on its native application before sending them to Jacobs.	SLAC	
4	Agreed that drawing conversion should base on the Master unit of feet (FT).	SLAC/ Jacobs	



Project Note 009

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	ITEM	ACTION REQ'D BY	DATE REQ'D
5	Derrick Britt, Olaf Muller, and Merle Cramar did not recognize or send the "site_topo 6-20-03.dwg" and "lcls beamline.dwg" files that Jacobs received and used as the basis or background/XREF for all the drawings. Jim Pan pointed out the problems with those drawings and requested that SLAC send the latest and correct site plan and topographic drawings.	SLAC	
6	Jim Pan requested that a target point be identified and verified on the site plan that all drawing coordinates will be aligned with.	SLAC/ Jacobs	
7	Derrick Britt did receive the request for Area utility drawings, and was preparing them for David Saenz to send.	SLAC	
8	<p>SLAC was working on the CAD standards and gave Jim Pan a preliminary copy of the Generic and Architectural Layering Scheme. SLAC also received Jacobs CAD standards. Jacobs will continue to use Jacobs CAD standards until David Saenz and Steve Hill decide otherwise. Derrick Britt indicated the layer scheme is the most important item of the standards. In case Project Management decides that Jacobs should follow SLAC CAD Standards and will have budget for the changes,</p> <p>8.1 Jacobs Engineering disciplines should use the SLAC "Discipline layering scheme" and then use "Generic Layering scheme". If the required layer name cannot be found in either scheme, then add a new layer and include it in the drawing deliverables.</p> <p>8.2 Use AutoCAD standard fonts.</p> <p>8.3 Convert AutoCAD XREF files to Microstation reference files.</p> <p>8.4 Deliver all drawings in both AutoCAD and Microstation formats.</p>	SLAC/ Jacobs	
9	Transmittals of all electronic drawing files from SLAC to Jacobs should include both the original MicroStation files and the translated AutoCAD files.	SLAC	

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Project Note 010

CLIENT	Stanford University – LCLS	NOTE NO.	010
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	3/09/04
		DATE ISSUED	3/11/04
		RECORDED BY	Gautam Guha
		PLACE	Telephone Conference
SUBJECT	Life Safety		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
SLAC Derrick Britt Olaf Muller Merle Cramar	Jacobs Jim Pan		
ADDITIONAL DISTRIBUTION			
Steve Hill	Gautam Guha		
ITEM		ACTION REQ'D BY	DATE REQ'D
<p>Safety Minute: Weather is getting warm. Be sure to take plenty of fluids and use of sun screen. Confined space entry is very critical if you need to enter one do not enter unless you have training and a SPA is completed.</p> <p>Quality Minute: Discipline check needs to be done before package preparation. Make sure the drawings and specifications do not duplicate.</p> <p>Package: Drawings (Plan and elevation) generally complete. The additional 30,000 Sq. Ft. Ultra fast center need to be programmed and started soon after midterm review.</p> <p>Total 40- 45 sheets for full package for tunnel. Except for FEL buildings all buildings are drawn. Sections as required have been completed.</p>			



Project Note 010

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ITEM	ACTION REQ'D BY	DATE REQ'D
<p>Mike Feroz to verify sections with Michael Thav. Mike Feroz wanted to know how to show to FEH, Steve mentioned to not show the road in the drawings.</p> <p>Specifications: MEP is in typing, to be Qe'd on March 10, 2004 Architectural SPECS are being typed. Civil SPECS are complete.</p> <p>Basis of Design: Generally all basis of design completed. Sourojit has mentioned some discrepancy. He would talk to GG to sort things out.</p> <p>Drawings: NEH-look at plan. There was a reset room that has been moved. Steve to check for corrections with clients needs.</p> <p>We need to revisit the drawing numbering system. Steve to check with David Saenz.</p> <p>All fire fighting is with wet pipe system.</p> <p>On the electrical grounding system. They have equipment for bonding system in addition to grounding Bob Kirsh to discuss with Frank during midterm review.</p> <p>Sector 20 is in progress. All specifications on tunnel project would be used for sector 20 package for Mid term. A mid term review of sector 20 specifications would be verified.</p> <p>Going to room data sheet: Please watch room requirements for HVAC system. Disciplines are to check basis of design and room data sheet for consistency.</p>		
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Project Note 011

CLIENT	Stanford University – LCLS	NOTE NO.	011
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
CONFIRMATION OF	<input type="checkbox"/> MEETING <input checked="" type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	3/9/04
		DATE ISSUED	3/17/04
		RECORDED BY	Creighton Burgher
		PLACE	Audio Bridge
SUBJECT Instrumentation Cabling and Tray			
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
SLAC Mario Ortega Wayne Weinberger	Jacobs Greg Owen Bob Kirsch Creighton Burgher		
ADDITIONAL DISTRIBUTION			
Steve Hill Gil Hulden	Gautam Guha Tom Goldsmith		
ITEM		ACTION REQ'D BY	DATE REQ'D
1.0	Purpose of the meeting was to provide insight into cable management techniques utilized in other locations on site, and any special shielding/grounding requirements for those systems, which may be used as models for this facility.	Info	
1.1	M. Ortega and W. Weinberger are mostly involved with LINEAC and LTU, not necessarily the Undulator hall. The suggestion was made by M. Ortega and W. Weinberger for JE to tour the FFTB facility on our next site visit.	Jacobs	
1.2	Current FFTB facility has 2 surface buildings, #406 and 407. These are to remain. Current plan for these buildings: house between 20 and 24 control racks, and between 20 and 24 power supply racks.	Info	
1.3	Design shall assume that all instrument cabling to be “home run” from instrument to surface structures. No requirement exists for marshaling enclosures or data acquisition equipment within tunnel alcoves. For exceptions, see 2.2 below.	Jacobs	



Project Note 011

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	ITEM	ACTION REQ'D BY	DATE REQ'D
2.0	Current instrumentation design (by SLAC) has not progressed to the point of detailing the quantity and type of instruments in specific tunnel and building areas. Jacobs design will plan for generic cable tray arrangement to allow for maximum flexibility.	Jacobs	
2.1	Position of surface buildings should be based upon maximum design lengths for most sensitive instrument. Current installations are limited by BPMs (Beam Position Monitors). Current installations keep BPM cable distances to less than 250 lineal feet; some installations limit BPM cable distances to under 125 lineal feet. Target approximately 200 lineal feet.	Jacobs	
2.2	Recent site design and installation direction has been to follow nationally recognized and implemented standards and codes; e.g., NEC, NFPA, IBC, etc. Direction has been to move towards plenum-rated tray cable. However, this cable is mostly Teflon, which doesn't perform well within 12 inches of the beam line. Preference has been to utilize RAD-resistant cabling, such as Reynolds type 44A. AHJ has been willing to give dispensation for non-PLTC where required.	Jacobs	
2.3	Several devices require in-line amplifiers or signal conditioners, which are RAD sensitive. Current installations place these sensitive devices/equipment within small pits in the concrete floor under steel plates. Jacobs to follow this example. SLAC to provide example of existing in-floor arrangements.	Jacobs SLAC	
3.0	Current installations utilize 6"x6" wireway (gutter) for Vacuum Ion Pump lines. Plan for similar installation.	Info	
3.1	Current installations utilize 6 feet of lateral space for cable tray installation. Typically 2 cable trays x 36" wide, with 6" side rails one above the other, are used. Both above the beam line. Tray is typically supported by all-thread to channels imbedded into tunnel ceiling concrete. Trays to be in exposed tunnel spaces. Plan to model project instrumentation cable tray installation after this arrangement.	Jacobs	
3.2	Current planning allows for future beam line in tunnel adjacent to new beam line. Allow space for future cable tray installations to match the new tray installations.	Jacobs	
4.0	Standard for fire detection within tunnels is VESDA. This is contrary to the direction provided by the SLAC Project Manager (David Saenz). Jacobs has been previously directed to fully sprinkler the tunnels in lieu of VESDA. Jacobs is proceeding with a sprinkler approach unless directed otherwise by Mr. Saenz.	Jacobs	



Project Note 011

Page 3 of 3

ITEM		ACTION REQ'D BY	DATE REQ'D
5.0	Miscellaneous Discussions.	Info	
5.1	Plan for phones on the tunnel walls as opposed to a wireless system. Phones shall be spaced at approximately 20' intervals.	Jacobs	
5.2	Plan for standard 2-way radios. Plan for passive radio antennae.	Jacobs	
5.3	Problem with EMP used to emanate from the kickers (process equipment) and was at 120Hz. Current kickers don't have this issue. Jacobs requires further information.	SLAC	
5.4	The Argonne facility is responsible for details of Undulator Hall instrumentation design. A contact name will be provided to Jacobs for follow-up.	SLAC	

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Project Note 012

CLIENT	Stanford University – LCLS	NOTE NO.	012
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	3/23/04
		DATE ISSUED	3/23/04
		RECORDED BY	Gautam Guha
		PLACE	Telephone Conference
SUBJECT	Weekly Meeting		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Jacobs Steve Hill Gautam Guha Mike Feroz Kevin Jennings	Michael Thav Moe Siggih Gil Hulden Mike McMillian Mayra Ulrich		
ADDITIONAL DISTRIBUTION			
ITEM			ACTION REQ'D BY
			DATE REQ'D
<p>Safety Minute: When driving it is not safe to use a cell phone. New GPS are creating as bad distractions also.</p> <p>Quality Minute: There are concerns with ProjectWise. The data sheets on the report are not the same in ProjectWise.</p> <p>Tunnel Issue: Finalizing support for equipment in Undulator hall. A 2ft. slab would be floated at the bottom for equipment support. This brings a question if tunnel is 15" or 20"?</p> <p>Steve Hill to resolve with Dave Saenz. A project note will be issued once the height is decided.</p> <p>Next formal submittal is April 22, 23. Drawings must be out by April 20.</p> <p>We need to draw floor plan for FEL and UFC. That would help us resolve area issues. The plan should show all dimensions in the Far hall.</p>			SH
			ALL



Project Note 012

Page 2 of 2

ITEM	ACTION REQ'D BY	DATE REQ'D
<p>After April 23 we should be done with Title I documents.</p> <p>Architerural: Design comments have been reviewed and are being incorporated. Undulator Thermal barriers and door need to be shown.</p> <p>Mech.: Civil to take care of interface in the yard for utility supplies.</p> <p>We need to prepare a document resolution sheet. We will meet on March 25, at 10:00 AM. on conference call to discuss drawing list and SLAC comment responses.</p> <p>The title block comments need to be looked into narrow it down to one common title block. Make sure the Title block for all drawings should be by area A-1, A-2.</p> <p>Need a comprehensive list of all drawings. Michael Thav to have draft ready by March 25, 2004.</p> <p>Issue: Gil H. SLAC Electrical. Show all sources of power in one line. JS 406/407 going to be demolished? Michael Thav to check with Steve Hill.</p> <p>Look at Mark up drawings for SLAC. Send to discipline the copies.</p> <p>Mike Thav and Mike Feroz to make sure drawings match.</p> <p>Mike Feroz to provide name of a Certified VE facilitator.</p> <p>All disciplines to provide ideas to Steve Hill for any ideas that is driving cost up.</p>	<p>KW</p> <p>MT</p> <p>MT/MF</p>	

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Project Note 013

CLIENT	Stanford University – LCLS	NOTE NO.	013
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	3/25/04
		DATE ISSUED	3/25/04
		RECORDED BY	Gautam Guha
		PLACE	Telephone Conference
SUBJECT	Weekly Meeting		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Jacobs Steve Hill Gautam Guha Mike Feroz Kevin Jennings	Michael Thav Gil Hulden Mike McMillan Mayra Ulrich		
ADDITIONAL DISTRIBUTION			
ITEM		ACTION REQ'D BY	DATE REQ'D
To resolve the drawing numbering system by 3/25/04.		MT	
Drawing name to be finalized by discipline by 3/25/04.		GU	
Item No. 12 from SLAC sketch for title looked into for file name.			
Document name to follow same principle.			
Comments from SLAC:			
Architectural :			
<ul style="list-style-type: none"> Different scale in one drawings –keep as is Landscaping drawing- SH to verify. Road demolition – Feroz to decide. Coordinate caissons with utilities. To fix to comments with numbers in excel spreadsheet. Feroz to reschedule micro tunneling comments. 		SH MF KW MU MF	



Project Note 013

Page 2 of 2

ITEM	ACTION REQ'D BY	DATE REQ'D
<p>Mechanical:</p> <ul style="list-style-type: none"> • Issue on item XRTDT system design. It is an Arch item – MT to resolve <p>Electrical: Will comply Plumbing: No Comments</p> <p>Need to follow only on background file. Don't change file name every time you modify the drawings. Each discipline should print their file for production.</p>	<p>MT</p> <p>All Leads</p>	

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Project Note 014

CLIENT	Stanford University – LCLS	NOTE NO.	014
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505

Project Manager.	Steve Hill
------------------	------------

CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING	DATE HELD	3/30/04
	<input type="checkbox"/> TELECON	DATE ISSUED	4/01/04
	<input type="checkbox"/> OTHER	RECORDED BY	Gautam Guha
		PLACE	Telephone Conference

SUBJECT **Weekly Meeting**

PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)

Jacobs Gautam Guha Mike Feroz Kevin Jennings	Michael Thav Gil Hulden Mike McMillan Kirk Warnock Bob Lehman	
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ADDITIONAL DISTRIBUTION Steve Hill			
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ITEM	ACTION REQ'D BY	DATE REQ'D
<ul style="list-style-type: none"> Michael Thav has completed the drawing list, discipline to submit additional drawings (if any) by April 2, 2004. Drawing numbering system has been created. Steve Hill to get approval from SLAC. Issue on different scale in one drawing remains. Steve Hill to get approval from SLAC. Michael Thav has developed schemes for Landscape design; Michael Thav to coordinate with Mike McMillan to resolve any interference with equipment to be placed outside of building. Michael Feroz has generated road demolition plan and new road schemes. Steve Hill to obtain comments from SLAC. Michael Thav has developed a typical section for caissons. Michael to share the section drawing with Mike Feroz. Currently the undulator section is in ProjectWise. For the utility main sizing in yard/ or to check existing capacity available, Gil Hulden to provide Kirk Warnock the tentative utility needs. There are still some difficulties in opening drawings in ProjectWise. Bob Lehman to look into it. 	All Disc. SH SH MT SH MT GH BL	



Project Note 014

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ITEM	ACTION REQ'D BY	DATE REQ'D
<ul style="list-style-type: none">• MEP and tunnel related package comments on Jacobs; Midterm package has been addressed. Architecture and civil to complete response to the comments by April 2, 2004.• Team decided that the squad checking would be held April 13th and 14th. It will start 8:00 a.m. on April 13th. The review would be conducted over Smartboard. Cypress, Portland, and Walnut Creek to complete internal QA/QC by April 7th.• All discipline to follow the e-mail regarding name changes to some units and name drawings.• Michael Thav mentioned that the ceiling height in FEH should be 13' for lifting equipment. Kirk needs to discuss the issue with Steve Hill.	KW	

The foregoing conveys our understanding of the conversations and decisions reached during this meeting. We shall assume the above to be a reasonably correct and accurate representation unless written notice to the contrary is received by this office within seven working days of receipt of these meeting minutes.



Jacobs Facilities, Inc.
 1340 Treat Blvd., Suite 208
 Walnut Creek, CA 94597
 1.925.256.7500 Fax 1.925.256.7999

Project Note 015

CLIENT	Stanford University – LCLS	NOTE NO.	015
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	04/06/04
		DATE ISSUED	4/13/04
		RECORDED BY	Gautam Guha
		PLACE	Telephone Conference
SUBJECT	Weekly Meeting		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Jacobs Gautam Guha Mike Feroz Kevin Jennings	Michael Thav Gil Hulden Mike McMillan Kirk Warnock Bob Lehman		
ADDITIONAL DISTRIBUTION			
Steve Hill			
ITEM		ACTION REQ'D BY	DATE REQ'D
<p>Safety note: While in office/seating for a long time- go stretch a little.</p> <p>Only while working in ProjectWise take time to check documents in and out.</p> <ul style="list-style-type: none"> Disciplines are to keep records of all out scope that they way have completed. Then submit the records to Steve Hill. The schedule has been published. All discipline drawings/write ups need to be QA/QC'ed, ready for squad check by COB April 14, 2004. All disciplines need to send a note to Mayra after their sets are ready for squad checking. 			

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Project Note 016

CLIENT	Stanford University – LCLS	NOTE NO.	016
PROJECT	SLAC	PROJECT NO.	F1W15101
	Meeting Minutes/Project Notes	FILE NO.	505
		Project Manager.	Steve Hill
CONFIRMATION OF	<input checked="" type="checkbox"/> MEETING <input type="checkbox"/> TELECON <input type="checkbox"/> OTHER	DATE HELD	04/13/04
		DATE ISSUED	4/13/04
		RECORDED BY	Gautam Guha
		PLACE	Telephone Conference
SUBJECT	Weekly Meeting		
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)			
Jacobs Gautam Guha Mike Feroz Kevin Jennings	Michael Thav Gil Hulden Mike McMillan Kirk Warnock Bob Lehman		
ADDITIONAL DISTRIBUTION			
Steve Hill			
ITEM		ACTION REQ'D BY	DATE REQ'D
<p>Safety Note: When you make site visits take special note of walking surface unevenness, slippery, other hazards and note them in the project SPA.</p> <p>Quality Note: All documents (deliverables) are to be checked internally (discipline) prior to placing them for squad checking.</p> <p>Landscaping: Michel Thav mentioned that the landscape drawings would be black and white for Title I for squad checking. After that color rendering will be completed. The drawings will include names of plants. The landscape scheme has been verified with mechanical group for interference.</p> <p>Kirk stated that the undulator hall section will be a “horse –shoe” instead of a circle. This will make construction easier. The height of ceiling will remain same. Feroz to see that the upper dome radius is reviewed- see if it can be reduced and adjust sidewall accordingly.</p>			

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Project Note 016

Page 2 of 2

ITEM	ACTION REQ'D BY	DATE REQ'D
<p>Project Squad checking to be completed by April 16th. SLAC will be in Cypress on April 19th for an over the shoulder review.</p> <p>Final client review would be in SLAC office on April 26th; Steve Hill will prepare an agenda for April 26th review and list of attendees.</p> <p>Each discipline is to make 6 copies of (11X17) final drawings sets and submit to Mayra in Cypress after Squad Check comments are incorporated.</p> <p>Mayra is to ensure that 6 copies of document Basis of Design, Drawings, Specifications) are made. The book should be in three ring binder (8 ½ X11). The drawing should be 11X17 and folded. Additional copies of package to be prepared for Cypress office copy, Portland office, copy Walnut Creek office, copy Cypress-Civil.</p> <p>Mechanical and Electrical to prepare a (cross-section (each) typical to show duct/cables crossing concrete.</p>		

JFI_

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