

	<b>Jobs Safety Analysis (JSA)</b>		Date 7/30/2009-8/30/2009
	JOB/ACTIVITY NAME: Alignment Network Monument Relocation		
DEPARTMENT/GROUP NAME MET / AEG	BLDG/AREA LOCATION(s): LCLS / FEH	OTHER INFORMATION:	
REQUIRED PERSONAL PROTECTIVE EQUIPMENT FOR ENTIRE JOB <input checked="" type="checkbox"/> safety glasses <input checked="" type="checkbox"/> safety shoes <input type="checkbox"/> chemical resistant gloves <input checked="" type="checkbox"/> other reflective vest <input checked="" type="checkbox"/> other flashlight <input type="checkbox"/> chemical goggles <input checked="" type="checkbox"/> hard hat <input type="checkbox"/> welding gloves <input type="checkbox"/> face shield <input type="checkbox"/> harness lanyard <input checked="" type="checkbox"/> gloves when handling tools <input checked="" type="checkbox"/> other long pants / sleeves <input type="checkbox"/> other _____ <input type="checkbox"/> welding goggles <input checked="" type="checkbox"/> hearing protection when drilling			

Basic Steps	Potential Hazards	Controls
Entering FEH	Area Specific	Contact UTR before entering the FEH, Rich Maggi or Ken Yang
<u>Install New Monuments</u> <ul style="list-style-type: none"> <li>▪ Drilling new monuments using power tools such as a hammer drills</li> <li>▪ Install new monuments; grout on floor; anchors on wall</li> </ul>	<ul style="list-style-type: none"> <li>▪ Particles flying into eyes</li> <li>▪ Noise</li> <li>▪ Exposure to electrical energy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hearing protection while drilling</li> <li>▪ Inspect hand or power tools and cords before use</li> <li>▪ Inspect power cords for any defects and use GFCIs (never daisy chain cords)</li> </ul>
<u>Set Up Equipment and Targeting</u> <ul style="list-style-type: none"> <li>▪ Set up survey instruments (includes Class 2 or 3R laser instruments)</li> <li>▪ Place targets on and around components including magnets</li> <li>▪ Plug in instruments</li> <li>▪ Use illumination if necessary</li> </ul>	<ul style="list-style-type: none"> <li>▪ Falling off ladders</li> <li>▪ Exposure to electrical energy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Full PPE is required (see checklist above)</li> <li>▪ Inspect ladders before use and never climb to the top rungs</li> <li>▪ Inspect hand or power tools and cords before use</li> <li>▪ Inspect power cords for any defects and use GFCIs (never daisy chain cords)</li> </ul>
<u>Perform Survey</u> <ul style="list-style-type: none"> <li>▪ Make measurements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Falling off ladders when moving targeting</li> <li>▪ Exposure to electrical energy</li> <li>▪ Injuries from using hand-tools improperly including cuts, eye injuries or electrical shock</li> </ul>	<ul style="list-style-type: none"> <li>▪ Full PPE is required</li> <li>▪ Do not stare continuously at a laser instrument (Class 2 lasers are safe due to natural blink reflex and Class 3R are safe with restricted beam viewing)</li> <li>▪ Inspect ladders before use and never climb to the top rungs</li> </ul>

***I understand & will adhere to the steps, hazards & controls as described in this JSA. I understand that performing steps out of sequence may pose hazards that have not been evaluated, nor authorized. I will contact my supervisor prior to continuing work, if the scope of work changes or new hazards are introduced.***  
***I understand I have the authority and responsibility to stop work I believe to be unsafe.***

<u>Worker Name (please print)</u>	<u>Signature</u>	<u>Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***I have reviewed the steps, hazards & controls described in this JSA with all workers listed above and authorize them to perform the work. Workers are qualified (i.e. licensed or certified, as required & in full compliance with SLAC training requirements) to perform this activity.***

_____	_____	_____
Supervisor	Signature	Date

***I have communicated area hazards with the supervisor or listed worker(s) for this activity and have coordinated the described activity with affected occupants. The above listed workers are released to perform described scope of work in the following area(s):*** \_\_\_\_\_

_____	_____	_____
Area or Building Manager	Signature	Date