



## VA Sierra Nevada Health Care System (VASNHCS) Critical Lift Permit

A Critical Lift Permit, including all supporting documents, must be submitted to and approved by the Safety and Occupational Health Program Office 14 days prior to the planned lift. Permits must be at the lift site until the lift is complete. Permits must be reissued if conditions (equipment, weather, and/or ground) or scope of work has changed. All lifts must follow 29 CFR 1926 Subpart CC.

All lifts at the VASNHCS campus are considered critical. In addition, a critical lift is defined as any one or more of the following conditions:

Lifts involving hazardous materials  
Lifts made with more than one crane or hoist  
Hoisting Personnel  
Lifts over VASNHCS campus buildings  
Lifts involving multiple or difficult rigging

Lifts with a center of gravity that could change  
The crane will "walk" with load or with boom extended  
Loads  $\geq$  75% of rated capacity of the load chart  
Lifts without the use of outriggers using rubber tire load charts  
Lifts outside the crane operator's view

A. GENERAL			
Project Name & Number:	Contracting Officer's Representative:	Start Date/Time:	Finish Date/Time:
Crane Owner:	Crane Lift Location (Area/Building):	Qualified Person completing permit:	
Crane Operator:	Rigger:	Phone:	
Phone:	Phone:		
B. LIFT DATA			
1. Load Weight:	1a. Describe Load and Enter Total Load Weight: _____ Estimated Weight: _____ Lbs.      Actual Weight: _____ Lbs. 1b. Total load weight as a percentage of rated load capacity of crane from load chart: _____ %		
2. Rigging weight:	2a. Main Hoist Block, Auxiliary Boom Head / Headache Ball: _____ Total Block Weight: _____ Lbs. 2b. Slings, Shackles, Hardware (list all used): _____ Total Rigging Weight: _____ Lbs. 2c. Jib Weight Allowance: _____ Lbs. Check One: Erected (not used): <input type="checkbox"/> Erected (in use): <input type="checkbox"/> Jib Stowed (on boom): <input type="checkbox"/>		
3. Total Lift Weight:	3a. On Sling: $1a + 2b =$ _____ Lbs. 3b. On Crane: $1a + 2a + 2b + 2c =$ _____ Lbs.   Total Lift Weight: _____ Lbs Example Calculation: $\frac{TotalLoadWeight}{RatedLoadCapacity} * 100 = \% \quad \text{Example Calculation: } \frac{50,000lbs}{250,000lbs} * 100 = 20\%$ <p><b>*Note: Contingency = Total Lift Weight Must be <math>\leq</math> 90% of Load Chart Capacity</b></p>		



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4. Lifting Height:	Height of Load to be not greater than _____ Feet Maximum Height of Crane Boom / Extension Tip _____ Feet <input type="checkbox"/> Elevation drawing showing load height relation to crane and any obstructions is attached
5. Operating Radius:	Maximum Radius of Load to be not greater than _____ Feet <input type="checkbox"/> Plan view of load location and crane orientation attached
<b>C. CRANE DATA &amp; LIFT SET UP</b>	
1. Crane Manufacturer:	Crane Manufacturer: _____ Size: _____ Model Number: _____ Date of Last Annual Inspection: _____ Inspected by: _____
2. Verify manufacturer's load chart indicates lifting capacity at stipulated load radius and boom lengths.  Note: If boom length and/or radius is between the stipulated or posted value on the load chart select the next lesser rating capacity. The next lesser rating capacity may be the next longer or shorter boom length.	
3. Counterweight:	<input type="checkbox"/> Yes Total Weight _____ Lbs. Total Crane Weight _____ Lbs.
4. Jib / Extension: Jib Length (as extension): _____ Jib Offset: _____	
5. Main Load Block:	Capacity Size: _____ Ton _____ # Sheaves: _____ Weight _____ Lbs.
6. Auxiliary Boom Head/Ball:	Capacity Size: _____ Ton _____ # Sheaves: _____ Weight _____ Lbs.
7. Outriggers, Pads, and Tires:	<input type="checkbox"/> An engineering review has determined underground utilities and structures are not at risk <input type="checkbox"/> Outriggers Fully Extended and Set Check One: Track <input type="checkbox"/> Tires <input type="checkbox"/> <input type="checkbox"/> Total Outrigger Bearing Pressure has been Calculated and Soil Type, Ground, and Pavement has Capacity to Support the Total Imposed Load <input type="checkbox"/> Outrigger Mats are Sized to Reduce Soil Bearing Pressure to Safe PSI Levels <input type="checkbox"/> Construction Manager has provided site drawing with crane set up zone identified. <input type="checkbox"/> CM escorted utility surveyor and maintained accuracy and potential problematic areas on sketch & provided/discussed with crane firm.



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### D. RIGGING DATA

1. Sling(s)/ Shackles	Type of Sling:	Length:	Capacity (per leg):	Basket / Straight / Choker:
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
Size: _____		Capacity (ea.) _____		
Spreader Bar: _____ Feet		_____ Lbs.	Verify MFG/Eng. Stamp: _____	

### E. LIFT COMPUTATION

Minimum Boom Angle: _____	Maximum Boom Length: _____	Maximum Lift Radius: _____
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Note: Cranes equipped with computers indicating boom length, angle, and radius are *safety devices only* and should not be used in place of the operator's responsibility to actually determine the measurements required to calculate a safe lift.

Note: Accessories, Crane Capacity, Parts of Line and Rope Capacity, and the working quadrant of the crane should be considered when calculating Net Crane Capacities.

1. Crane Capacity: (Load Chart Capacity) \_\_\_\_\_ Lbs.

2. Net Crane Capacity: (Load Chart Capacity - Block, Rigging, and Accessory Weights) = \_\_\_\_\_ Lbs.

3. Load orientation prior to lift: ☐ Front ☐ Side ☐ Rear

4. Swing orientation relative to crane: ☐ Front ☐ Side ☐ Rear

### F. SPECIAL PRECAUTIONS

- ☐ Lift will not be conducted over an occupied section of a building
- ☐ Blocked exits and building evacuations require an Interim Life Safety Measure (ILSM)
- ☐ Request ILSM from Safety Section minimum of 3 days prior to planned lift
- ☐ Coordinate road blocks or closures with the police and fire services prior to the lift
- ☐ Signal Person required when swing path takes load out of crane operator's view

### G. SUBMITTALS

- ☐ Operator license
- ☐ Rigger qualifications
- ☐ Annual crane inspection
- ☐ Crane maintenance log
- ☐ Crane lift/load chart showing weight lifted, angle and main boom length
- ☐ Elevation drawing showing load height relation to crane and any obstructions
- ☐ Plan view of load location and crane orientation to building(s), swing radius, road closure & barricades.
- ☐ Narrative of sequence operations (See example on last page).



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### H. APPROVALS

*I certify the information contained on this critical lift permit is correct.*

**Qualified Person:**

**Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Contractor's Safety Specialist:**

**Name:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



## VA Sierra Nevada Health Care System (VASNHCS) Critical Lift Permit

### I. LIFT OPERATIONS

Execution of the lift shall be in accordance with OSHA 29 CFR 1926 Subpart CC.

#### LIFT SUPERVISOR TO COMPLETE THIS CHECKLIST ON THE DAY OF THE LIFT

- ☐ Interim Life Safety Measure (ILSM) obtained from Safety Section as necessary (blocked exits, evacuation, etc.)
- ☐ Lift will not be conducted over an occupied section of a building
- ☐ Crane lift site has traffic and pedestrian controls in place
- ☐ An individual has been designated to observe for obstructions and unauthorized personnel
- ☐ Confirm swing radius has been barricaded and access is limited to authorized personnel
- ☐ Confirm load weight
- ☐ Ensure load hook is directly over the load center of gravity
- ☐ Confirm boom angle, boom length, lift radius, and the crane capacity
- ☐ Ensure outrigger pads are fully extended and blocking is sufficient for the load
- ☐ Ensure tires are clear of the ground and the crane is level
- ☐ Confirm all obstacles and obstructions have been identified
- ☐ Ensure lifts in proximity to power transmission lines comply with OSHA 29 CFR 1926.1407 through 1411
- ☐ Verify a signal method has been determined between the crane operator and the signalman
- ☐ Verify the crane operator meets OSHA qualifications requirements to operate the crane
- ☐ Verify the crane boom is equipped with a safety flag and/or beacon light
- ☐ Verify a "competent person" has inspected all slings, fastenings, and attachments for damage or defects.
- ☐ Verify a "competent person" has inspected all crane safety devices and operational controls prior to and during use to ensure safe operating condition. Any deficiencies shall be repaired prior to continued use
- ☐ Ensure damaged or defective equipment is immediately removed from service
- ☐ Verify all required crane manufacturer operational control procedures are available in the crane cab
- ☐ Verify the all required inspections have been completed.
- ☐ Wind Speed: Crane is equipped with anemometer: ☐ Yes ☐ No  
Lifts when wind speed > 20 mph require reassessment.  
Lifts are not allowed when wind speed exceeds 30 mph

Wind Speed at time of lift: \_\_\_\_mph.



## VA Sierra Nevada Health Care System (VASNHCS) Critical Lift Permit

An on-site meeting on the day of the planned lift was conducted with the undersigned.

**Lift Supervisor:**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Contracting Officer's Representative:**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Licensed Crane Operator:**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Qualified Rigger:**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Signal Person**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### J. PERMIT DURATION

<b>Start Date/Time:</b>	<b>Finish Date/Time:</b>	<b>VASNHCS Safety Specialist:</b>
		Name: _____ Signature: _____
		Date: _____



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### K. LIFT SEQUENCE OF OPERATIONS [NARRATIVE EXAMPLE]

Execution of the lift shall be in accordance with OSHA 29 CFR 1926 Subpart CC.

**Company:**

**Date:**

**Customer:**

**Job Name:**

**Contact:**

**Lift Description:**

1. (Company) will access the work area on the [south] side of [street, construction entrance].
2. Crane will be backed into the position indicated on the plan view.
3. Boom and jib will be lowered across the [area outside construction entrance, front steps] for assembly.
4. Boom and jib will be raised to near vertical and walked into position indicated on the plan view.
5. Crane to perform all operations with [110'] of main boom and [30'] of jib (as indicated on elevation view) extended over [southeast corner] of building [1D] as indicated on plan view.
6. First lift will be [coil, equipment, man basket] from customer flatbed truck to roof of building [1D].
7. Second lift will be [coil, equipment] from roof of building [1D] to ground staging area.
8. Third lift: [AHU] will be moved into position by customer to the [north] side of crane set-up. [AHU] will be rigged and hoisted to approximately [75']. Crane will boom up to minimize affected area within swing radius, rotate [west] approximately [90] degrees, then lower [AHU] onto building [1D] roof top as directed by customer.
9. Break down and disassembly of the crane set-up will be in the reverse order.
10. Note: Load will not be suspended over any portion of building [1D or 12] other than the set location indicated on the plan view. All crane functions will take place within the confines of the fenced construction area with the exception of assembly and disassembly of the boom and jib which will take place in the taped off area shown on the plan view. Public access on [Burns Street] will not be obstructed during set up/break down other than to back the crane into position.



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### **L. Definitions**

Execution of the lift shall be in accordance with OSHA 29 CFR 1926 Subpart CC.

From 29 CFR Subpart CC 1926.1401

1. A/D director (Assembly/Disassembly director) means an individual who meets this subpart's requirements for an A/D director, irrespective of the person's formal job title or whether the person is non-management or management personnel.
2. Assembly/Disassembly means the assembly and/or disassembly of equipment covered under this standard. With regard to tower cranes, "erecting and climbing" replaces the term "assembly," and "dismantling" replaces the term "disassembly." Regardless of whether the crane is initially erected to its full height or is climbed in stages, the process of increasing the height of the crane is an erection process.
3. Competent person means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
4. Operator means a person who is operating the equipment.
5. Qualified person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.
6. Qualified rigger is a rigger who meets the criteria for a qualified person.

From VA Sierra Nevada Health Care System

7. Lift Supervisor means a person who is in charge of the lift, contractor, and sub-contractor personnel and who is responsible for the items on the Lift Operations Checklist, para. I. This is usually the General Contractor's Site Supervisor.